

PBW

PASTOR, BEHLING & WHEELER, LLC

ENGINEERING & ENVIRONMENTAL CONSULTING SERVICES

2201 Double Creek Drive
Suite 4004
Round Rock, TX 78664
Tel (512) 671-3434
Fax (512) 671-3446

June 23, 2017

PBW Project No. 1358

VIA HAND DELIVERY

Ms. Karen Scott
Industrial & Hazardous Waste Permits Section
Texas Commission on Environmental Quality
P.O. Box 13087, MC-130
Austin, Texas 78711-3087

RECEIVED

JUN 26 2017

**WASTE PERMITS DIVISION
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY**

**Re: Response to 3rd Technical Notice of Deficiency
Permit Renewal/Compliance Plan with Major Amendment
Union Pacific Railroad Company – Houston Wood Preserving Works
Houston, Harris County, Texas
Permit/Compliance Plan Number: 50343/ ISWR No. 31547
CN600131098/RN100674613**

Dear Ms. Scott:

Please find attached with this cover letter the Response to the 3rd Technical Notice of Deficiency (NOD) on the Permit Renewal/Compliance Plan with Major Amendments for the facility listed above. The responses were prepared to address the NODs listed in the Texas Commission on Environmental Quality (TCEQ) letter to Mr. Geoffrey Reeder dated April 10, 2017. The Technical NOD listed several technical deficiencies in the renewal application and requested that UPRR provide certain additional information to complete the application. The attached table lists each deficiency identified in April 2017 letter as well as UPRR's response indicating how each deficiency has been addressed.

An original and three copies of the application revisions, including updated signature pages, are included as part of this submittal. These revisions have been prepared as replacement pages to be submitted in the original application with a revision number and date indicated on each page. In addition, a red-line strike out version of the revised permit sections is also enclosed.

Ms. Karen Scott
Response to 3rd Technical Notice of Deficiency
Union Pacific Railroad Company – Houston Wood Preserving Works
Houston, Harris County, Texas
Permit/Compliance Plan Number: 50343/ ISWR No. 31547
Page 2

If you have any questions or comments, please feel free to call Mr. Geoffrey Reeder, Site Remediation Manger, UPRR at 281-350-7197 or me at 512-671-3434.

Sincerely,

PASTOR, BEHLING & WHEELER, LLC



Eric Matzner, P.G.
Associate Hydrogeologist

cc: Mr. Geoffrey Reeder, Union Pacific Railroad
Ms. Maureen Hatfield, TCEQ

Signature Page

I, Reed Doerr, VP Safety,
(Operator) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: [Handwritten Signature] Date: 6/21/2017

To Be Completed By The Operator If The Application Is Signed By An Authorized Representative For The Operator

I, Reed Doerr, hereby designate _____,
(Print or Type Name) (Print or Type Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Printed or Typed Name of Operator or Principal Executive Officer

Signature

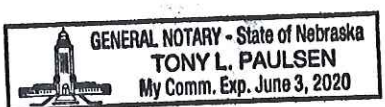
SUBSCRIBED AND SWORN to before me by the said TONY L. PAULSEN

On this 21st day of June, 2017

My commission expires on the 3rd day of June, 2020

Notary Public in and for Douglas County, Nebraska
[Handwritten Signature]

(Note: Application Must Bear Signature & Seal of Notary Public)



Application Deficiencies – Technical NOD #3

ID ¹	App. Part	App. Section	Location ²	Citation	Error Type	Deficiency Description/Resolution	Response
T23(2)	B	Sections VI, XI.D	Sections VI, XI.A. through XI.D, Vol I & II, RAP Worksheets and Attachments	30 TAC §350 and §335.167		Based on further evaluation of the information contained in Section VI regarding the Geology Report and Section XI.A-XI.D of the December 5, 2014 Permit Renewal application, and associated revisions dated November 3, 2015, and July 29, 2016, the TCEQ concurs with Class 2/Class 3 groundwater divide. Thus, revise Sections XI.A through XI.D and associated tables and attachments of the Permit Renewal application to incorporate the Class 2/Class 3 groundwater divide approval.	Using Class 3 Groundwater PCLs east of the hydrogeologic boundary between units B-TZ and B-CZ, the Off-Site Plume Management Zone (PMZ) was modified. As a result, UPRR revised the following figures and attachments included under Sections VI (Geology), Section XI. Compliance Plan, and Section XI.A through XI.D (Response Action Plan (RAP)): <ul style="list-style-type: none"> • Compliance Plan, Attachment A (2 of 7), Attachment A (4 of 7), Attachment A (5 of 7), Attachment A (6 of 7), and Attachment A (7 of 7). • RAP Section 2.1, Attachment 2A-2, Attachment 2B-1, Attachment 2D-1, Attachment 2D-2, Attachment 2D-3, Attachment 3A, Attachment 5A.
T-27(2)	B	Section IX, XI.A.	Sections IX.A, and XI.A.3 and CP Table II	30 TAC §335.167, & §305.45(a)(8)(C)	Incomplete/inconsistent	UPRR submitted a Response Action Completion Report (RACR) dated July 18, 2016 documenting the completion of response action for the surface and subsurface soil protective concentration level exceedance (PCLE) zones. The RACR was submitted in response to June 2, 2016 2nd Technical Notice of Deficiency (NOD), Comment No. T41(2). Therefore, revise Section IX.to reflect the completion of soil response actions for SWMUs 2, 4, 5, 6, 7 8, 9 10 and 11; and AOCs 1, 4, 6, and 7, respectively. Corrective action for contaminated groundwater will be addressed under Permit Section XI, Compliance Plan. For consistency, the corrective action status for CP Table II SWMUs/AOCs should be updated to reflect completion of soil response action objectives as documented in the RACR. Therefore, revise the language in the far right hand column of CP Table II to state, “ <i>Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.</i> ”	Pages in Section IX (IX-6, IX-12, IX-14, IX-15, IX-17, IX-19, IX-20, IX-21, IX-22, IX-24, IX-27, IX-29, and IX-30) have been updated to reflect the soil response actions. CP Table II has been revised to reflect the revised language suggested by the TCEQ.
T34(3), T55(3), and T56 (3)	B	Sections XI.B, & XI.D	Section XI.B, XI.D, XI.D.1, Vol I & II, RAP Worksheets	30 TAC §350	Inconsistent/Incomplete	Changes were made to CP Tables III and IIIA, and CP Attachment A maps to include the proposed boundary of the City of Houston-owned right-of-way (ROW) PMZ. Even though the above changes were made to the application, the TCEQ cannot authorize the off-site plume management zone (PMZ) until UPRR obtains written consent from the City of Houston in the form of a signed deed notice and restrictive covenant (RC) pursuant to 30 TAC §350.111 (c) and (e).	The signed restrictive covenants (executed by the City of Houston and UPRR) for the City of Houston-owned ROWs are provided within this submittal in the response and in Appendix 5 of the RAP.

¹ Deficiency ID – Key: A#=Administrative deficiency (ex. A12); T#=Technical deficiency (ex. T10); C#=Comment only (ex. C1); Number in parenthesis (n) = nth instance of same deficiency (ex. T1(2) is the second instance of deficiency T1 originally identified in previous NOD).

² Location of deficiency in submittal/application. Items in square brackets [] refer to applicant’s supplemental information submitted as attachments to the application form.

ID ¹	App. Part	App. Section	Location ²	Citation	Error Type	Deficiency Description/Resolution	Response
T35(3)	B		Section XI.D, XI.D.1, Vol I & II, RAP Worksheets, and Appendix 4; and Attachment A, RACR Appendix 3	30 TAC §350.94, §350.95 and §350.111	Inconsistent/Incomplete	<p>The Permit Renewal application contains two RCs for the City of Houston ROW: RC1 for soils is provided in RACR, Appendix 3; and, RC 2 for the groundwater PMZ is provided in RAP, Appendix 4. The TCEQ has the following comments on the RC1 and RC2:</p> <p>1. RC1 for soil contains language that is different than the template language in the TRRP Guidance RG366-TRRP16. Page 1 of the RC, the Commercial/Industrial Land use description should be revised to follow the language in Appendix B, Insert A of the TRRP Guidance RG366-TRRP16.</p> <p>2. RC2 the Plat maps in Exhibit A-2 require certification by a registered professional land surveyor so registered in the State of Texas, 30 TAC § 350.111(a)(3).</p>	<p>Through conversations between the TCEQ Law Division, City of Houston representatives, and legal representatives for UPRR, the language in the RC1 was revised to meet the TRRP Guidance RG-366-TRRP16 requirements. The signed (by UPRR and the City of Houston) restrictive covenants are provided in Appendix 5 of the revised RAP.</p> <p>Certification on Exhibit A-2 for RC2 by a registered professional land surveyor is provided in Appendix 5 of the revised RAP.</p>
T41(3)	B	Section XI.D	Section XI.D, Vol I & II, RAP Worksheets Attachment A, RACR	30 TAC §335.167 §350.94, 350.33(a)(1), 350.31(g), and §350.95	Incomplete	<p>Revise the July 18, 2016 RACR, the RACR to incorporate the following comments:</p> <ol style="list-style-type: none"> 1. Checklist for report Completion will need to be updated with respect to proposed PMZ. 2. On RACR Worksheet 1.0, Page 3, UPRR explains of the constituents of concern (COCs) identified in soil at the site, benzo(a)anthracene, Benzo(a)pyrene and pentachlorophenol were most prevalent in soils across the site. These PCLE zones are further identified in Attachment A.1 of the RACR. Since the RACR is a standalone document and as supplemental information, UPRR should include PCLE zone maps for the other COCs listed Page 3, RACR Worksheet 1.0. UPRR should include PCLE zone maps provided in the Affected Property Assessment Report. 3. Please clarify if response actions were completed at the following sampling locations identified in RACR Attachment A.1 Figures: <ul style="list-style-type: none"> • Figure 1A-2, soil sample location SB-60, north of Area A (SWMU 11) benzo(a)pyrene exceeds critical PCL. • Figure 1A-19, soil sample location SB-165, pentachlorophenol exceed critical PCL. • Figure 1A-20 indicates that soil at SB-176 and SB-181, has a pentachlorophenol concentration exceeding critical PCL for surface soil requires a response action. 4. Explain why SB-57, SB-59, SB-60, SB-61, SB-62, SB-111 depicted on Attachment A. 1, Figures 1A-2, IA-3, 1A-7, 1A-8 1A-12, 1A-13 and 1A-16 were not sampled for COCs. 5. Explain why some of the soil boring sample locations depicted in Attachment A. 1, Figures 1A-22, 1A-23, IA-24 and IA-26 for arsenic confirmation samples are marked as "NA". 6. Appendix 3, Deed Notice for UPRR property soils only: 	<p>The response to comments are as follows:</p> <ol style="list-style-type: none"> 1. The Checklist for Report Completion for the RACR has been updated and provided with the Revised RACR with this submittal 2. Maps showing the other COCs listed on RACR Worksheet 1.0 (page 3) are provided with the Revised RACR (as Attachments 1A-1-1 through 1A-1-13). For benzo(a)anthracene and benzo(a)pyrene, the most recent Residential and Commercial/Industrial PCLs (March 2017) were used to update the Affected Property and PCLE Zones on those maps. 3. Below are responses to clarify the comments on the Attachment A.1 Figures: <ul style="list-style-type: none"> • With the TCEQ's recent revision to benzo(a)pyrene PCLs, the sample location SB-60 no longer contains benzo(a)pyrene concentrations above the Residential PCL (now 4.1 mg/kg). The Affected Property and PCLE Zone for benzo(a)pyrene in surface soils was significantly reduced in size with the updated PCLs (see Attachment 1-A-1-6). • Pentachlorophenol (PCP) concentrations at SB-165 (0.8 mg/kg), SB-176 (1.0 mg/kg), and SB-181 (0.14 mg/kg) exceed the ^{GW}Soil_{ing} PCL of 0.12 mg/kg. PCP concentrations in surface soils have been detected in about 20 samples across the Site (see Attachment 1A-1-10) above the ^{GW}Soil_{ing} PCL. Groundwater data collected from the monitoring wells completed in the A-TZ indicates that PCP is not a significant COC in groundwater, with no detections of PCP in the A-TZ during the last site-wide groundwater sampling event in July 2014. Of the 27 A-TZ wells completed at the Site, only one well (MW-31A) has had PCP concentrations detected above the ^{GW}GW_{ing} PCL (0.001 mg/L) during the last four years (2011-2014) of groundwater sampling (2011 and 2012 concentrations ranged from 0.076 to 0.11 mg/L, but decreased to less than 0.0006U mg/L in February 2013). In addition, A-TZ monitoring well MW-5 located near and downgradient of SB-176 and SB-181 (shown on Attachment 1A-1in the RACR) has not have any PCP detections in groundwater samples collected from 2011 through 2014. This evidence supports that the concentrations are protective of groundwater. <p>As detailed under 30 TAC §350.75(i)(7)(C) and discussed in TRRP-12 <i>Affected Property Assessment Requirements Guidance Document</i> (March 2004), a soil leachate-to-groundwater PCL may not be required to be established when a "weight of evidence" demonstration can be made</p>

ID ¹	App. Part	App. Section	Location ²	Citation	Error Type	Deficiency Description/Resolution	Response
						<ul style="list-style-type: none"> The Plat maps in Exhibits A, C-1, C-2 and C-3 require certification by a registered professional land surveyor so registered in the State of Texas, 30 TAC § 350.111(a)(3). Update the Maintenance and Monitoring requirements in the Deed Notice to indicate that UPRR will submit annual reports to the TCEQ (unless this frequency is modified by subsequent TCEQ correspondence) documenting the physical control conditions, maintenance, repair, replacement, and the continued effectiveness of the remedy. 30 TAC § 350.111(a)(6). 	<p>justifying that the soils will attain the soil response objectives for groundwater protection. The demonstration that the soils are adequately protective shall be based on soil and groundwater data, length of time since the release occurred, adequate identification of source areas, appropriate leachate test results, or other hydrogeologic or property-specific information.</p> <p>In the case of the timing of the release at the Site, the HWPW facility has not operated since the mid-1980s, as discussed in the APAR. Therefore, releases of COCs to surface soil likely occurred over 30 years ago allowing ample time to migrate to the shallow groundwater if the concentrations were not protective of groundwater. In addition, as discussed previously, PCP concentrations in groundwater from 2011 through 2014 have only been detected above the PCL in one A-TZ well, MW-31A, located within the Original Process Area (SWMU 5). During the last site-wide groundwater sampling event 2014, none of the A-TZ wells sampled had PCP detections above the method detection limit (MDL).</p> <p>Therefore, based on the time since the release and that the uppermost GWBU A-TZ is not impacted with PCP, the ^{GW}Soil_{ing} pathway is considered incomplete for that COC and groundwater is not threatened by the concentrations in the soil samples SB-164, SB-176, and SB-181. Based on this weight of evidence demonstration, no response action is necessary to address the PCP concentrations in the listed soil borings.</p> <p>4. Based on a review of the project files, soil borings SB-57, SB-59, SB-60, SB-61, SB-62, SB-111 were sampled and analyzed for specific COCs for lateral delineation purposes. Borings SB-57, SB-59, SB-60, SB-61, and SB-62 were conducted in April and August 2006 by ERM Southwest, Inc. The objective of the borings was to laterally delineate specific COCs in surface soils. As an example, samples from SB-57, SB-59, and SB-62 were only analyzed for PCP to delineate the COC based the results from SB-52 and SB-53 collected in December 2003. Soil samples from SB-60 and SB-61 were analyzed for PCP, benzo(a)pyrene, and benzo(a)anthracene to evaluate just those COCs. Therefore, some of the borings are presented on the RACR attachments as not sampled (“NS”) for that specific COC if it was not analyzed for that COC. Upon review, there are no data gaps associated with these sampling points for the site-related COCs in surface soils.</p> <p>5. Arsenic was not evaluated as a COC during the earlier phases of the RI. Arsenic in soils were initially evaluated in 2013 as part of a soil assessment within the Englewood Intermodal Yard. Subsequent soil assessments within the HWPW site included arsenic as a COC. Therefore, soil samples collected prior to 2013 at the Site were not analyzed (“NA”) for arsenic, as presented on the RACR Attachment A.1, Figures 1A-22, 1A-23, 1A-24 and 1A-26.</p> <p>6. Plat maps in Exhibits A, C-1, C-2 and C-3 have been updated with the certification by a registered professional land surveyor in accordance with 30 TAC § 350.111(a)(3). The updated exhibits are provided in the revised RAP Appendix 4 and revised RACR Appendix 3.</p> <p>Exhibit D “Maintenance and Monitoring of the Physical Controls for Soils” was amended to include annual reporting. The updated deed notice for the</p>

ID ¹	App. Part	App. Section	Location ²	Citation	Error Type	Deficiency Description/Resolution	Response
							UPRR property is included in Appendix 4 of the revised RAP and revised RACR Appendix 3.
T42(3)	B	Section XI.D, XI.D.1,	Section XI.D, XI.D.1, Vol I & II, RAP Worksheets CP Attachment D and RAP Attachment 2G	30 TAC §335.167, §350.33(f) and §350.94	Incomplete	<p>Based on review of UPRR response to the July 29, 2016, 2nd Technical NOD regarding the RAP Technical Impracticability (TI) Worksheets 2.1 and 2.3 and Attachment 2G, the TCEQ has the following comments:</p> <p>In general, the TCEQ Remediation Division shall not approve UPRR TI waiver because it does not meet the requirements pursuant to 30 TAC §350.33(f)(3)(E). Thus, UPRR should pursue conventional plum management zone (PMZ) in accordance with 30 TAC §350.33(f)(4). Further, the extent of the off-site PMZ shall be the entire off-site affected area conditioned on UPRR receiving signed restrictive covenants for all of the affected properties and filing any newly signed RC's, a revised map, and a finalized PMZ. Furthermore, failure to file these documents would result in the RC's being declared void. Revise the RAP to include a condition on the PMZ boundary, changes to the groundwater monitoring program [e.g. alternate point-of-exposure (APOE) wells, etc.,] and changes to associated Tables and attachments in Section XI of the Permit Renewal application. UPRR proposes to install additional nine (9) APOE wells: 1 in the A-TZ; 5 in the B-TZ; and, 3 in the C-TZ units. The number and location of the proposed APOE wells shall need to be re-evaluated by TCEQ as part of the revised PMZ boundary.</p> <p>The RAP should also include a contingency plan for implementing a defined remedy for those properties without an RC, since the PMZ will be limited to properties with signed RCs.</p> <p>Specific comments regarding TI waiver are provided in the attached December 13, 2016, TCEQ Interoffice Memorandum.</p>	<p>UPRR will continue to evaluate the TI waiver for the Site. The weight of evidence for the HWPW Site suggests that “it is not feasible from a physical perspective using currently available remediation technologies due either to hydrogeologic or chemical-specific factors to reduce the concentration of COCs throughout all or a portion of the groundwater PCLE zone to the applicable critical groundwater PCLs within a reasonable time frame”, per 30 TAC §350.33(f)(3)(A). The rule cited by the TCEQ for not approving the TI for the Site addresses the prevention of COC concentrations above the GW PCLs from expanding beyond the existing GW PCLE zone boundaries. It's important to note that the groundwater modeling demonstration provided in Attachment 2G indicated that the PCLE Zone for naphthalene would not migrate outside of the proposed On-Site PMZ over the 250 years represented in the model (estimated that the edge of the plume would move approximately 250 over 100 years (2.5 ft/yr), but within the overall On-Site PMZ).</p> <p>UPRR plans to initiate the site-wide groundwater monitoring program as detailed in the RAP. Data collected over time from the point of exposure (POE) wells, attenuation monitoring points (AMPs), and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E). Since the Site operations ceased over 30 years ago (and that NAPL sources have been removed for some time), and with the on-going DNAPL recovery efforts, we anticipate stable or decreasing trends will continue, with occasional fluctuations as a result of temporal changes (i.e. significant wet or dry periods). Therefore, groundwater with COC concentrations exceeding the cPCL will not likely migrate beyond the existing boundary of the groundwater PCLE Zone because of natural attenuation and thereby satisfying 30 TAC§350.33(f)(3)(E). The anticipated continuation of these decreasing trends will be monitored throughout the post-closure care period for the Site.</p> <p>The off-site PMZ noted on the applicable attachments in the revised RAP reflect the extent of the affected properties where UPRR has acquired signed Restrictive Covenants (copies are provided in Appendix 5 of the revised RAP) and the properties where UPRR has conducted an extensive and diligent inquiry to locate the landowners but was unable to locate the landowner. UPRR requested TCEQ Law Division review on June 14, 2017 for the unavailable property owners to concur if the level of effort matched the TCEQ TRRP-16 Guidance; however, UPRR has not received a response as of the date of this submittal.</p> <p>For the Off-Site PMZ, this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. Currently, UPRR has acquired 30 signed restrictive covenants from private landowners (RAP Appendix 5) throughout the proposed Off-Site PMZ and the signed restrictive covenant from the City of Houston for the Off-Site PMZ City of Houston ROW. Three additional property owners have recently agreed verbally with the restrictive covenant and UPRR is a waiting signature. For 11 properties within the Off-site PMZ, UPRR has conducted an extensive and diligent inquiry to locate a landowner who can legally sign the restrictive covenant per 30 TAC §350.111(c)(3) (Appendix 4). UPRR proposes to file a deed notice for those properties. The remaining nine properties within the proposed PMZ are for properties where UPRR has located the landowner but has not received signed restrictive covenants or filed deed notices. UPRR will</p>

ID ¹	App. Part	App. Section	Location ²	Citation	Error Type	Deficiency Description/Resolution	Response
							continue to work with the landowners to secure the restrictive covenants for these properties and establish the PMZ for the entire groundwater PCLE Zone. In the interim, UPRR proposes to monitor groundwater in wells that are within the proposed Off-Site PMZ area as part of the corrective action groundwater monitoring. Data collected from the monitoring wells within this area will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ. Pertinent sections of the RAP have been revised to address T42(3). The revised RAP (Revision 3) is provided.
T43(2) and T48(2)	B	Section XI.D,	Section XI.D, XI.D.1, Vol I & II, RAP Worksheets Attachments 2A-2, 2B-1, 2D-1 through 2D-3; and CP Attachment A maps Sheets 4 through 7	30 TAC §335.167 §350.94(g)	Incomplete	Some of the corrective action system (CAS) wells designations shown on the July 15, 2016, RAP (Revision 2), Attachment 2A-2 map and Section XI.D CP Attachment A maps Sheets 4 through 7 are not legible. The wells that are designated as CAS wells for DNAPL source controls should include A-TZ wells (MW-57A and MW78A) and B-TZ/C-TZ wells (MW-12B, MW-32B, MW-41B, MW-70B, MW-75B, MW-23C, MW-44C, MW-45C and 46C). UPRR should verify these are the correct CAS wells. The maps should also be revised so the designation of all the CAS wells is legible.	The labels on the referred attachments have been revised to be more legible. The updated attachments are provided in the RAP (Revision3).
T44(3) and T45(3)	B	Section XI.D	XI.D, XI.D.1, Vol I & II, RAP Worksheets Attachments 2A-2, 2B-1, 2D-1 through 2D-3, and Appendix 5	30 TAC §335.167 §350.94, and §350.111	Inconsistent/ Incomplete	As previously mentioned in comment T42(3) and as discussed in the February 16, 2017 meeting, the TCEQ Remediation Division shall not approve UPRR TI waiver because it does not meet the requirements pursuant to 30 TAC §350.33(f)(3)(E). Revised the applicable Section XI.D and the RAP to include a conventional PMZ in accordance with 30 TAC §350.33(f)(4) and as previously described in Comment T42(3).	See response to T43(3).

RESPONSE TO COMMENTS T23(2), T27(2), T43(2), AND T48(2)

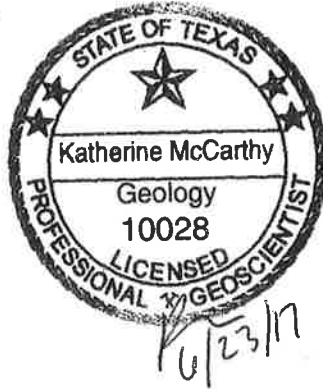
SECTION VI. GEOLOGY REPORT

**SECTION IX. RELEASES FROM SOLID WASTE UNITS AND CORRECTIVE
ACTION**

SECTION XI. COMPLIANCE PLAN (CP), CP TABLES, CP ATTACHMENTS

PROFESSIONAL CERTIFICATIONS

This report has been prepared by Pastor, Behling & Wheeler, LLC under the professional supervision of Katherine J. McCarthy, P.G. and Eric Matzner, P.G. based on information previously developed by others. The findings, recommendations, and/or professional opinions presented in this report have been prepared in accordance with generally accepted professional practices and within the scope of the project.



Katherine J. McCarthy, P.G.
Project Geologist
Pastor, Behling & Wheeler, LLC



Eric Matzner, P.G.
Associate Hydrogeologist
Pastor, Behling & Wheeler, LLC

Texas Geoscience Firm No. 50248
Texas Engineering Firm No. 4760

transitional boundary where the B-TZ pinches out into the B-CZ with some hydraulic connection between the more transmissive sands to the southwest and the carbonate seams encountered in MW-35B. Generally east of MW-35B, the B-CZ is considered a Class 3 Groundwater Classification as approved by the TCEQ in a letter dated April 10, 2017.

Based on the potentiometric elevations within the A-TZ and B-TZ, there appears to be communication between the two GWBUs on the west side of the Site as shown with the relatively similar groundwater elevations shown for the two units on Figures VI.J.1 for the A-TZ wells, and Figure VI.J.2 for the B-TZ/B-CZ wells. Groundwater elevations in the B-CZ on the east side of the Site are generally higher relative to the groundwater elevations in the A-TZ, indicating an upward vertical gradient between the B-CZ and the A-TZ.

Transmissive Zone C-TZ

Groundwater in the C-TZ flows from northeast to southwest across the Site (Figure VI.J.3) at a gradient ranging from 0.0006 ft/ft to 0.0009 ft/ft. Groundwater elevations measured in 2014 ranged from a high of approximately 28.12 feet (MW-53C, July 2014) to 22.60 feet (MW-45C, January 2014). This flow pattern has been consistent at the Site since 2004. There does not appear to be significant communication between the upper A-TZ/B-TZ/CZ and C-TZ with the groundwater flow direction significantly different and potentiometric elevations 10 to 15 feet deeper than the upper zones.

Transmissive Unit D-TZ

Groundwater in the D-TZ appears to flow from the southeast to northwest (Figure VI.J.4) at a gradient of 0.002 ft/ft (January 2014) to 0.003 ft/ft (July 2014). Groundwater elevations range from a high of -38.82 feet HVD (MW-59D, Jan 2014) to a low of -41.60 feet HVD (MW-36D, July 2014).

Aquifer testing in MW-36D resulted in an average hydraulic conductivity of 3×10^{-5} cm/sec (PBW, 2011). However, yield is likely greater at the other D-TZ where the sand unit is thicker relative to MW-36D.

VI.B.2.f. Analysis of Most Likely Pathways of Migration

An on-site field survey and water-well data search was conducted and indicated that there were no water wells (that were not plugged and abandoned) that would act as a conduit for migration of shallow groundwater into the underlying groundwater formation. However, as discussed in the APAR Addendum (PBW, 2010), two sets of fiber optic lines, Level 3 Communications and Qwest, run along the north side of the rail main lines across the entire length of the Site. Based on conversations with both Level 3 Communications and Qwest

IX. RELEASES FROM SOLID WASTE UNITS AND CORRECTIVE ACTION

IX.A.2 PRELIMINARY REVIEW UNIT CHECKLIST – NOR 002/SWMU 7

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: 002/SWMU 7

B. Description: Tank Car Storage Area, S02

C. Dates of Operation: Unknown

II. Wastes Managed: Sap wastewater and tank bottoms

III. Evidence of Release: Surface spillage documented

IV. Pollutant Dispersal Pathways: Soil

V. Summary: The tank car storage area was located in the northeast corner of the facility in the vicinity of the AST (SWMU 8). Two tank cars, each having a capacity of 12,500 gallons, were located on the tracks near Liberty Road. The cars were removed from the facility.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.7 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 2

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 2

B. Description: Northern and Southern Drainage Ditches, D99

C. Dates of Operation: Unknown

II. Wastes Managed: Creosote-contaminated wastewater and residual naphtha

III. Evidence of Release: The ditches released creosote contaminants to the soil and the inactive wastewater lagoon.

IV. Pollutant Dispersal Pathways: Soil and surface water (historically, when in operation)

V. Summary: The Northern Drainage Ditch (NDD) is located at the northwest corner of the SI and runs northward toward Ranch and Kashmere Streets. The Southern Drainage Ditch (SDD) was a wood-lined trench which was formerly located along the south side of the process area. The SDD paralleled railroad tracks from the eastern to western side of the facility and began near the AST area (SWMU 8). Near the southwest corner of the facility, the ditch was routed below railroad tracks via PVC piping. The piping led to a natural drainage ditch and low-lying area near the southwest corner of the SI, known as the inactive wastewater lagoon (AOC 6). The natural drainage ditch flowed off site to the west eventually into Buffalo Bayou (>8,500 feet from the Site). For the purpose of worker safety, the facility filled in the wood-lined portion of the ditch along the southern facility boundary. The PVC piping was plugged below the tracks at the southwestern end of the facility. While surface water was historically identified as a release pathway in the RCRA Facility Assessment (PRC, 1984), it is no longer considered a pollutant dispersal pathway since the Facility is no longer in operation and these areas have been dismantled and/or regraded.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.9 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 4

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 4

B. Description: Recent Process Area, T04

C. Dates of Operation: Started sometime between 1955 and 1962 until mid-1980s

II. Wastes Managed: Naphtha, creosote and extenders (bunker C, diesel fuel, styrene tar and used vehicle oil)

III. Evidence of Release: Visible staining of area soils and surface water were documented by TWC. Elevated levels of phenols, pH and oil and grease were released to the sanitary sewer. Air quality violations related to the retort cylinders were cited from 1978 to 1980.

IV. Pollutant Dispersal Pathways: Soils, surface water and air

V. Summary: The recent process area was used by the facility from the early 1960s until the early to mid-1980s. The area occupied about 3 acres in the northeast section of the facility. It consisted of (1) a process building that measured 150 by 50 feet, (2) four retort cylinders that measured about 125 by 12 feet, (3) one retort cylinder that measured about 60 by 12 feet, located next to the process building that is on the west side, and (4) a drip area next to the western side of the retorts. According to facility representatives, the retort cylinders were housed in a slightly depressed area that was covered with gravel. The retort cylinders were braced and kept above ground by concrete brackets. Crossties were brought in and out of the process area via railroad tracks. No structures currently exist in the process area. The area was regraded with limestone or caliche gravel and used as a laydown yard for steel and PVC piping and treated crossties until the early 1990s. A concrete foundation was observed in the vicinity of the former process building during the RCRA Facility Assessment (PRC, 1993). The west side of the foundation appeared to have contained a subsurface sump or work area. The remains of a concrete retaining wall (part of SWMU 8), about 3 feet tall by 1 foot wide, were observed around the southern and eastern ends of the process area.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.10 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 5

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 5

B. Description: Original Process Area, T04

C. Dates of Operation: 1911 through sometime between 1955 and 1962

II. Wastes Managed: Specific waste listing was not available but wastes would likely have been similar to those generated at the recent process area (SWMU 4) which include naphtha, creosote and extenders (bunker C, diesel fuel, styrene tar and used vehicle oil)

III. Evidence of Release: Subsurface soil contamination discovered during excavation of UST No. 44-023-05 (SWMU 9) was determined to have originated from this area. Staining observed below diesel storage tank (AOC 1) indicated historical releases within this area.

IV. Pollutant Dispersal Pathways: Soil

V. Summary: The original process area was located in the south-central portion of the facility west of the recent process area. The original process area consisted of (1) one retort cylinder, about 150 by 12 feet, located in a covered shed at the north side of the area, and (2) three retort cylinders, each about 125 by 12 feet, located in a covered shed at the south side of the area. Located between the two retort sheds were, from east to west, (1) the former power house building, (2) a 5 by 41 foot cylinder, three underground brick tanks (42, 43, and 46 feet in diameter), and two 20-foot diameter steel ASTs used for product storage and mixing operations. A 15-foot-diameter AST and a 10-by-20-foot sump were located north of the large retort shed. A 9 by 150 foot concrete catch basin was located on the east side of the large retort shed. According to SPTCo representatives, the original process area was in operation from about 1911 until 1955 or 1962. The original process area is now a gravel-covered area containing a train track, and former diesel storage tank (AOC 1), former location of UST No. 44-023-05 (SWMU 9), Oil Drum Storage Building (SWMU 3), and current Container Storage Area (NOR 004).

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.11 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 6

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 6

B. Description: Water Treatment and Boiler System, T80

C. Dates of Operation: Unknown

II. Wastes Managed: Boiler and cooling tower blow-down

III. Evidence of Release: The following releases were documented from this unit: (1) Boiler condensate (ran off-site via surface runoff), (2) oily storm sewer discharge, and (3) discharges of boiler and cooling tower blowdown into the storm sewer.

IV. Pollutant Dispersal Pathways: Soil and surface water (historically when in operation)

V. Summary (PRC, 1993): SPTCo used the water treatment and boiler system to (1) treat and distill municipal water, and (2) generate steam used in heating the wood-treatment retort cylinders. Steam and heated water from the retort cylinders were cooled in a cooling tower prior to discharge. SPTCo representatives did not have specific information concerning the design or processes of the system, and the system is now inactive. According to SPTCo representatives, some of the buildings and equipment associated with the system have been removed and the area has been re-graded with gravel. During the VSI, PRC observed the treatment building, the former location of a water storage AST, and the former location of the boiler equipment. No other structures pertaining to the system were observed during the VSI. The treatment building is located north of the retort area (SWMU 4). It consisted of a metal building, about 40 by 20 feet with concrete flooring. The building was open along the south side and wooden pallet debris was observed covering the floor. According to SPTCo representatives, the building may have been used to house pump equipment.

Next to and east of the treatment building was a concrete tank enclosed in a metal building. The tank was rectangular, measuring about 30 by 15 feet. The tank was above ground. It had cinder block walls, about 3 feet tall by 1 foot wide. The tank opening was covered with wooden planking; rolls of chain-link fencing were stored on top. The view inside the tank was obscured, but standing water and wood debris were observed inside the tank. PRC could not determine whether the tank extended below grade. A 2- to 4-inch diameter pipe was observed extending from the south wall of the tank. A hard, white, granular accumulation of an unknown substance was observed around the open end of the pipe. SPTCo

representatives did not know the nature or cause of the accumulation and did not have any information concerning the function of the tank in the water treatment system.

A circular concrete foundation, about 25 feet in diameter, was observed next to and west of the treatment building. SPTCo representatives assumed that this was the location of a former water storage AST used in the treatment system. A rectangular concrete foundation, partially covered with gravel, was observed about 20 feet east of the treatment building. According to SPTCo representatives, this was the former location of the boiler equipment and building. The cooling tower was formerly located in the AST area east of the wood-treatment facility. SPTCo representatives had no specific information concerning the construction or operation of the cooling tower. The cooling tower was removed and the area re-graded with gravel (PRC, 1993).

While surface water was historically identified as a release pathway in the RCRA Facility Assessment (PRC, 1984), it is no longer considered a pollutant dispersal pathway since the Facility is no longer in operation and these areas have been dismantled and/or regraded.

- VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.12 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 8

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 8

B. Description: Aboveground Storage Tank Area, S02

C. Dates of Operation: Unknown

II. Wastes Managed: Tank bottoms (K001), creosote, extender mix and naphtha

III. Evidence of Release: A naphtha spill and a working tank explosion were documented

IV. Pollutant Dispersal Pathways: Soil, surface water (historically when in operation, groundwater

V. Summary: The AST area was formerly located east of the recent process area (SWMU 4) in the northeast corner of the facility. The area housed 14 ASTs and a below-grade product drop tank used to store creosote and extenders. In addition, a series of aboveground pipes and manifolds was used to transfer product and wastes between tanks and the process area retort cylinders. A 1981 site diagram of the wood-preserving works indicated that six of the tanks were classified as working tanks containing creosote and extenders pumped to and from the retort cylinders. The tanks, which were about 20 feet in diameter, were located next to the wood-treatment building. Three tanks classified as storage tanks were located along the south side of the recent process area. These tanks, which were about 30 feet in diameter, were used to store creosote pumped into the working tanks.

An AST, about 30 feet in diameter, and four naphtha storage tanks, about 10 feet in diameter, were located north of the working tanks. The naphtha tanks were used in the process of removing sap and moisture from untreated ties.

The product drop tank was a concrete tank, about 35 by 20 feet, located at the northeast corner of the AST area. SPTCo representatives stated that the tank was constructed of concrete and was about 12 feet deep. SPTCo representatives stated that the product drop tank was used for the off-loading of creosote and extenders from the railway prior to storage in the ASTs. The cooling tower was also located in the AST area.

Secondary containment consisted of a concrete retaining wall about 4 feet high by 1 foot wide. The facility

installed the wall to prevent surface water runoff into the storm sewers. Three circular concrete foundations were observed in the vicinity of the three creosote storage tanks. Remnants of the concrete retaining wall were also observed at the southeast and southwest corners of the AST area. The ASTs have been removed from the area and the area has been re-graded with gravel. Piping and commercially treated wood ties were observed being stored in the area.

While surface water was historically identified as a release pathway in the RCRA Facility Assessment (PRC, 1984), it is no longer considered a pollutant dispersal pathway since the Facility is no longer in operation and these areas have been dismantled and/or regraded.

- VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.13 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 9

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 9

B. Description: Location of Former UST No. 44-023-05, S02

C. Dates of Operation: Unknown – removed June 1992

II. Wastes Managed: Gasoline

III. Evidence of Release: Visible contamination was observed in the tank pit during removal. Samples collected below the tank indicated TPH levels above TWC action levels.

IV. Pollutant Dispersal Pathways: Soil

V. Summary: UST 44-023-05 was a 2000-gallon capacity steel tank located at the south side of the facility, in the vicinity of the original process area (SWMU 5). The tank was 5.5 feet in diameter and 12 feet long. The UST has been removed and the area has been re-graded with gravel. The tank was reported to be empty and contain no holes when it was removed (SPTCo, 1993b).

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.14 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 10

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 10

B. Description: Location of Former Sap Water Treatment Tank, T01

C. Dates of Operation: Unknown

II. Wastes Managed: Wastewater containing naphtha, creosote residue and extender

III. Evidence of Release: No evidence of a release was discovered.

IV. Pollutant Dispersal Pathways: Soil

V. Summary: The sap water treatment tank was formerly located next to the AST area (SWMU 8) in the northeast corner of the facility property. SPTCo representatives had no information regarding the construction or capacity of the tank. A 1981 site diagram of the wood-treatment facility indicated that the tank was about 25 by 10 feet. Several concrete corner pads were observed in the vicinity of the tank location. The pads were identified as the tank foundation.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.15 PRELIMINARY REVIEW UNIT CHECKLIST – SWMU 11

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: SWMU 11

B. Description: Oil Water Separators, T04

C. Dates of Operation: 1979-1984

II. Wastes Managed: Wastewater containing naphtha, creosote residue and extender

III. Evidence of Release: Discharge of wastewater into the sanitary sewer was reported to exceed allowable levels of phenols, pH, temperature and oil and grease. Permit was not renewed.

IV. Pollutant Dispersal Pathways: Surface water

V. Summary: Two oil/water separators were located in the northeast portion of the facility site. The southern separator was located next to the location of the former sap wastewater treatment tank (SWMU 10). The northern separator was located north of the AST area (SWMU 8) in the vicinity of the northern fence boundary. Both separators were subsurface structures, measuring about 6 by 4 by 3 to 4 feet deep. Both were constructed of concrete with a three-compartment design.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.17 PRELIMINARY REVIEW UNIT CHECKLIST – AOC 1

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: AOC 1

B. Description: Diesel Storage Tank, S02

C. Dates of Operation: Unknown

II. Wastes Managed: Diesel fuel

III. Evidence of Release: Stains and discoloration on underlying gravel observed during the VSI.

IV. Pollutant Dispersal Pathways: Soil

V. Summary: The diesel storage tank (DST) was an AST located in the south-central portion of the facility, in the vicinity of the original process area (SWMU 5). The DST was used by the facility to store diesel fuel for equipment use. It was of steel construction and supported above ground by steel bracing. SPTCo representatives did not know the age or capacity of the DST. The DST was surrounded by a concrete retaining wall, about 3 feet high and 1 foot thick. The bottom of the retaining area was covered with gravel. According to SPTCo representatives native soils were located below the gravel cover.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.20 PRELIMINARY REVIEW UNIT CHECKLIST – AOC 4

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: AOC 4

B. Description: Location of Former Incinerator, T03

C. Dates of Operation: between 1955 and 1976

II. Wastes Managed: Untreated lumber remnants

III. Evidence of Release: No known release

IV. Pollutant Dispersal Pathways: NA

V. Summary: An incinerator was formerly located on the facility about 75 feet west of the adzing plant. According to SPTCo representatives the incinerator was used to dispose of untreated lumber remnants generated by the framing mill and adzing plant. The facility had no information concerning the construction or operation of the incinerator.

VI. Recommended Action: This unit has not managed hazardous wastes or wastes containing hazardous substances and no evidence of a release was reported. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.22 PRELIMINARY REVIEW UNIT CHECKLIST – AOC 6

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: AOC 6

B. Description: Inactive Wastewater Lagoon, S99

C. Dates of Operation: NA

II. Wastes Managed: Sap wastewater and surface water runoff (historically when in operation) containing creosote residue

III. Evidence of Release: In 1979, a fire exposed the presence of creosote-contaminated soils. The contamination was determined to have resulted from pooling of facility wastewater in this area.

IV. Pollutant Dispersal Pathways: Soil and surface water

V. Summary: The inactive wastewater lagoon is a low-lying area, next to the inactive SI (SWMU 1). This area was periodically flooded and received discharges of sap wastewater and surface water runoff via the SDD (SWMU 2). In 1979, a fire in the area may have resulted from soil contamination within the area. The uppermost layer of soils in the lagoon area were scraped off and disposed of in the SI. The SDD was plugged to prevent further discharge into the area. The inactive wastewater lagoon was considered to be inactive following these actions. While surface water was historically identified as a release pathway in the RCRA Facility Assessment (PRC, 1984), it is no longer considered a pollutant dispersal pathway since the Facility is no longer in operation and these areas have been dismantled and/or regraded.

VI. Recommended Action: No further action recommended. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

IX.A.23 PRELIMINARY REVIEW UNIT CHECKLIST – AOC 7

Facility: Houston Wood Preserving Works

City: Houston, Texas

ISW Reg No: 31547

Date: August 27, 2014

Permit No: 50343

Reviewer:

EPA ID No: TXD000820266

I. Waste Management Unit:

A. NOR No: AOC 7

B. Description: Location of Former UST 44-023-21, S02

C. Dates of Operation: NA

II. Wastes Managed: Gasoline

III. Evidence of Release: Total benzene, toluene, ethyl benzene, and xylene (BTEX) levels below the TWC action limit of 30 ppm were detected in soils sampled during tank removal.

IV. Pollutant Dispersal Pathways: Soil

V. Summary: UST 44-023-21 was formerly located next to the access road northeast of the existing diesel storage tank (DST) (AOC 1). The capacity of the tank was 200 gallons. It was used to store gasoline used by the facility. Details concerning the construction activities and installation date are unknown. According to SPTCo, TWC certified closure in 1990. Information on waste management practices was unavailable. However, analytical results of samples taken during the UST closure indicate that a release may have occurred from this UST. PRC has not received the closure report requested from SPTCo.

VI. Recommended Action: No further action. Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.

XI. COMPLIANCE PLAN

a sufficient number of independent samples are required to be utilized with an approved and appropriate statistical method. For guidance on the statistical methods consult, Statistical Analysis of Groundwater Data at RCRA Facilities-Unified Guidance, U.S. EPA, March 2009, and any subsequent updates to this document.

Not applicable.

Practical Quantitation Limits (PQLs) or Method Quantitation Limits (MQLs) are utilized in lieu of background values unless a background demonstration establishes concentrations for naturally occurring constituents. The PQL or MQL is defined in the footnote of CP Tables III and IV.

No PQLs or MQLs are used on CP Table III except for constituents that have GWPSs below the typical laboratory MQL using the appropriate analytical method. MQLs as determined by the analytical methods of the EPA SW-846 most recent edition, are provided for the Compliance Monitoring constituents on CP Table IV with associated footnotes.

- b. Primary and Secondary Maximum Contaminant Levels (MCLs) - Maximum permissible level of a contaminant in water which is delivered to any user of a public water system (40 CFR Part 141 and 143, Federal Safe Drinking Water Act).

See Compliance Plan Table III (Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) and associated footnotes.

- c. Alternate Concentration Limits (ACLs) determined in accordance with 30 TAC 335.160(b) and are defined in footnote of CP Tables III and IV.

As discussed in the RAP (Attachment XI.D), TCEQ Protective Concentration Levels (PCLs) are the regulatory standards that apply at groundwater alternate points of exposure (POEs) for a particular groundwater exposure pathway, as set in the Title 30 Texas Administrative Code Chapter 350 Texas Risk Reduction Program (TRRP). Therefore, for this compliance plan, the proposed ACLs shall be based on TRRP PCLs (^{GW}GW_{Ing}). The PCLs may change as updates to the TRRP Rule are promulgated.

ACLs apply at the proposed alternate POEs. Where the groundwater POE is located at a distance from the plume management zone (PMZ), the ACL considers COC attenuation along the groundwater flow path between the Attenuation Monitoring Points (AMPs) and POE locations. These attenuation-based ACLs are referred to as attenuation action levels under TRRP. In the cases of PMZs, applicable PCLs under Remedy Standard B will be used to also verify compliance at POEs. Since groundwater impacts are both on-site and off-site, PMZs have been established for on-site (Main and West) using the commercial/industrial PCL for Class 2 (and Class 3 for the B-CZ Unit) groundwater ingestion (^{GW}GW_{Ing}), and for off-site (including City of Houston right of way (ROW)) using the residential PCL for Class 2 (and Class 3 for the B-CZ Unit) groundwater ingestion (^{GW}GW_{Ing}).

See Compliance Plan Table III (Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) for the list of constituents and groundwater ACLs, and associated footnotes.

1. Establishing the Groundwater Protection Standard (GWPS)
 - a. If background, PQL or MQLs are proposed for the GWPS, the applicant must list all constituents (i.e., detected and degradational constituents) for which a GWPS is being applied for and the appropriate concentration limits. This information shall be submitted in the format of CP Tables III, and IV.

The GWPS are the regulatory groundwater standard(s) for a COC that establish compliance and apply at POE wells as part of the PMZ. In the cases of PMZs and POEs, PCLs will be used to verify compliance.

See Compliance Plan Table III (Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) for the GWPS (PCLs).

- b. Alternate Concentration Limits (ACLs) - ACLs are established at the point of compliance (POC) for a regulated or solid waste management unit (SWMU). All concentration values or limits listed in Section XI.B.1.c. are considered ACLs. ACLs are evaluated in accordance with the provisions of 30 TAC 335.160(b) and other regulations acceptable to the executive director. If an ACL is requested on the basis of Section XI.B.1.c. (MCLs), then no ACL demonstration is necessary. The ACL demonstration must establish constituent concentrations in groundwater in accordance with regulations acceptable to the executive director. This information shall be submitted in the format of CP Tables III and IV. Note that depending upon the rule employed [i.e., 30 TAC 335 Subchapter S – Risk Reduction Rules (RRR) or 30 TAC 350 – Texas Risk Reduction Program (TRRP)], the applicant should determine the GWPS for the point of compliance and point of exposure, as applicable, in accordance with the remedy standard being utilized.

If the contaminant plume discharges or has a potential to discharge into surface water, then the facility must also comply with 30 TAC Chapter 307 (Texas Surface Water Quality Standards) unless other regulatory requirements acceptable to the executive director are requested.

See Compliance Plan Table III (Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) for list of ACLs.

See Compliance Plan Table IVa (Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Quantitation Limits) for SWMU 1 ACLs for POC wells.

“Attachment A” of this Compliance Plan Application provides a summary of regulatory requirements for an ACL demonstration in accordance with 30 TAC 335.160(b).

Proposed ACLs are based on the TRRP PCLs as described above in XI.B.1.c. Where the POE is at a distance from the POC (i.e., edge of the groundwater PCLE Zone), TRRP PCLs directly apply at the POE. See CP Attachment XI.A (Alternate Concentration Levels) for additional discussion.

C. COMPLIANCE MONITORING PROGRAM

As required by 30 TAC 335.165, an owner or operator must monitor the groundwater to determine whether Regulated Units are in compliance with the Groundwater Protection Standard (GWPS) under 30 TAC 335.158. The applicant must provide the following information when proposing a compliance monitoring program.

The one regulated unit, Closed Surface Impoundment (SWMU 1), received a “no further action” from the TCEQ Corrective Action Division in a letter dated August 5, 2015. SWMU 1, which was closed in 1984, achieved the response action objectives for Remedy Standard A requirements under 30 Texas Administrative Code (TAC) §350.32. With the NFA from Corrective Action Monitoring, the regulated unit will be monitored through the Compliance Monitoring Program.

The other SWMUs and AOCs will be addressed through the facility-wide Corrective Action Monitoring Program (see Section XI.D).

a. Groundwater Monitoring Program Description

Describe the proposed groundwater monitoring system to be used to monitor compliance with the GWPS which includes the following information.

- (1) Changes, if applicable, from the current detection monitoring system or compliance monitoring system groundwater monitoring program at the waste management unit that will be required to comply with the compliance monitoring program described in 30 TAC 335.165. This description should address changes concerning:

Not applicable, the regulated unit (SWMU 1) is transitioning from Corrective Action Monitoring to Compliance Monitoring as part of this permit renewal. Since there is no information in the current Permit detailing Compliance Monitoring, this permit renewal only contains the proposed Compliance Monitoring activities as discussed in Section XI.C.a.2.

- (a) Geological and/or hydrogeological information differences since the submittal of the previous application [must submit an updated Geologic and Hydrogeologic Report required by Section XI.A.4];

No changes for SWMU 1, see Permit Section VI. Geology Report

- (b) Waste management areas/units;

Solid Waste Management Unit (SWMU) 1

- (c) Construction details for monitor wells to evaluate compliance with “Attachment B” well specification requirements;

See Table XI.C.a.1.c in Attachment B.

- (d) The number and locations of additional monitor wells [also see Section XI.C.1.b.(2)];

Not applicable, no new wells planned for the SWMU 1.

- (e) Sample handling, chain of custody, and analytical procedures (also see “Attachment C”);

See CP Attachment XI.C (Sampling and Analysis Plan)

- (f) Frequency of monitoring;

The parameters listed in CP Table IV and CP Table IVA (Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard) will be monitored on an annual and semi-annual basis, respectively.

- (g) Monitoring parameters;

The parameters listed in CP Table IV and CP Table IVA (Compliance

Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard) will be monitored on an annual and semi-annual basis, respectively.

- (h) Evaluation of compliance with GWPS (Statistical Methods);

Evaluation of compliance will be conducted using either direct comparison to GWPS listed on CP Table IVA or using statistical procedures, as discussed below:

- **Directly compare the value of each constituent to the respective concentration limit of CP Table IVA and determine if it is less than, equal to, or greater than the listed value. If the values for all the constituents are less than or equal to the respective concentration limits of CP Table IVA, then the well shall be considered compliant with the GWPS for the sampling event. If one or more constituent value is greater than the respective concentration limit, then the well will be considered non-compliant with the GWPS for the sampling event. However, it is important to note that this method is susceptible to a high rate of false positives**
- **Statistical approach using the Confidence Interval Procedure for the mean concentration based on a normal, log-normal, or non-parametric distribution. The 95 percent confidence coefficient of the t-distribution will be used in constructing the confidence interval (Chapter 21 of Statistical Analysis of Groundwater Data at RCRA Facilities-Unified Guidance, U.S. EPA, March 2009), and subsequent updates acceptable to the Executive Director. The confidence interval lower limit (LCL) for each constituent will be compared with the corresponding concentration limit in CP Table IVA for compliance monitoring. To be considered in compliance, the confidence interval lower limit for a well in question must not exceed the tabled concentration limit. A confidence interval lower limit above the tabled concentration limit shall be considered as evidence of statistically significant contamination and the well will be considered non-compliant with the GWPS for the sampling event.**
- **As part of the evaluation of compliance, a verification resampling procedure will also be employed at the facility whenever an unverified, initial exceedance is detected either through direct comparison or statistical evaluation. The verification resampling will follow a “pass 1 of 2” verification scheme where the initial exceedance will be considered verified if the constituent is measured above the GWPS in both verification resamples.**

- (i) Other Sampling and Analysis Plan information to be compliant with “Attachment C”;

See CP Attachment XI.C (Sampling and Analysis Plan)

- (j) Compliance period as defined in Section XI.E.1.c. of the application;

See CP Table VI

- (k) Financial assurance (see Section XI.E.); and

See Section XI.E (Cost Estimates for Financial Assurance)

- (1) An ACL variance under 30 TAC 335.160(b), if applicable (also see “Attachment A”).

See Section XI Attachment A (Alternate Concentration Levels)

- (2) The number, depth and location of all monitor wells (Background Wells, Point of Compliance Wells, Observation Wells, Piezometers, etc.). Complete CP Table V – Designation of Wells by Function and make changes as applicable to plans referenced in Section XI.C.1.b.

See Table XI.C.a.1.c in Attachment B and Compliance Plan Table V (designation of Wells by Function).

- (3) The proposed hazardous constituent monitoring list which is based on constituents that were monitored during detection monitoring (if applicable), constituents detected in accordance with 30 TAC 335.164, and degradational constituents identified in Table CP IV accordingly to develop the constituent list for the Compliance Monitoring Program. Also, list the PQL, MQL, or background concentration for each constituent in CP Table IV. CP Table IV shall become part of the final Compliance Plan to be analyzed at least annually as required by 30 TAC 335.165(7).

See Compliance Plan Table IV (Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Quantitation Limits) for SWMU 1.

- (4) The proposed indicator parameter monitoring list. From the list of constituents and GWPS identified in CP Table IV., complete CP Table IVA – Compliance Monitoring Program, Table of Detected Hazardous Constituents and the Groundwater Protection Standard for Compliance Monitoring, accordingly. CP Table IVA shall become part of the final Compliance Plan to be analyzed at least semiannually as required by 30 TAC 335.165(6).

See Compliance Plan Table IVA (Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard) for SWMU 1.

- (5) Monitoring frequency.

Semi-annual monitoring frequency from the SWMU 1 POC and Background Wells to be conducted within 30 days of the beginning of the first and third quarters of each year.

- (6) Provisions for reporting of groundwater data at least on an annual basis.

Compliance Monitoring data will be reported annually in the Annual Groundwater Compliance Monitoring Report. Reporting schedule is provided in CP Table VIII.

- (7) Annual determination of contamination plume rate and direction of migration.

As will be presented in the Annual Groundwater Corrective Action/Compliance Monitoring Report, contaminant plume rate and direction of migration will be estimated.

- (8) Compliance period. Calculate the compliance period as required by 30 TAC 335.162 and 335.165(1)(d). Include calculations and complete CP Table VI – Compliance Period for

RCRA-Regulated Units which shall become part of the final Compliance Plan.

See CP Table VI.

- b. Submit the following plans and reports.
- (1) Current Sampling and Analysis Plan - The Sampling and Analysis Plan must include information required by 30 TAC 335.163(4) and 335.163(5) and 40 CFR Subpart 270.30(j). For guidance, please see “Attachment C” to the application.

See CP Attachment XI.C (Sampling and Analysis Plan)

- (2) Monitoring System Plan - If the applicant is proposing a monitoring well or a monitoring system in the application, the applicable well installation specifications outlined in “Attachment B” of this application should be followed. All new monitoring wells must be installed in accordance with the specifications outlined in “Attachment B”, unless an alternative design is approved by the agency prior to installation. If the applicant proposes as part of the monitoring system, any well (existing or proposed) that does not meet or exceed the requirements outlined in “Attachment B”, then the proposed alternative design must be described in detail in the Monitoring System Plan and must be submitted with this application. The Monitoring System Plan must include:
 - (a) Monitoring System Design and Specifications - Certified by a qualified engineer and/or geologist which provides detailed plans and specifications on the monitoring system design; and
 - (b) Well Drilling and Well Casing Specifications - Certified by a qualified engineer and/or geologist which provides details on well casing specification, drilling logs and reports.

See CP Attachment XI.B (Well Design and Construction Specifications). No alternative designs are proposed as part of this application.

- (3) Current Geologic and Hydrogeologic Report - Provide a report per Section X.I.A.4 of this application discussing the geologic and hydrogeologic conditions of the facility and the specific area affected by the waste management areas. This report should include the most up-to-date information from which the design of the groundwater monitoring system was based.

See CP Attachment XI.D – Response Action Plan – Attachment 1A for up-to-date geologic and hydrogeologic information used to develop the groundwater monitoring system.

1. Waste Management Units Monitored

- a. Delineate and identify the following for each waste management unit in the proposed groundwater monitoring program.
 - (1) Boundary of the waste management unit and, if applicable, the proposed waste management area which includes more than one waste management unit (identify all waste

management units which are included in the waste management area). These waste management units subject to compliance monitoring should be listed in CP Table I – Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring which shall become part of the final Compliance Plan.

The WMU to be monitored under the Compliance Monitoring Program is SWMU 1, listed on CP Table 1 and shown on CP Attachment A, Sheet 3 of 6 – Compliance Monitoring Well Network, SWMU 1.

- (2) The proposed point of compliance (30 TAC 335.161) and point of exposure wells.

Shown on CP Attachment A, Sheet 3 of 6 – Compliance Monitoring Well Network, SWMU 1.

- (3) Any other proposed monitor wells such as supplemental wells, observation wells, background wells, etc. If appropriate the groundwater monitoring system should have a sufficient number of wells be designated to monitor the downgradient extent of the plume.

Shown on CP Attachment A, Sheet 3 of 6 – Compliance Monitoring Well Network, SWMU 1.

- (4) Features which may serve as conduits for subsurface contamination.

Not Applicable

- b. For each waste management unit/area in the proposed groundwater monitoring system, submit the locations of individual waste management unit/area monitor wells (existing or proposed) and any soil borings (plugged and unplugged) specifically drilled for assessment of contamination. These individual monitor wells shall be identified by respective well number on a plan view drawing and only the background, point of compliance and/or point of exposure wells should be indicated in CP Table V – Designation of Wells by Function. The plan view map depicting the location of individual monitoring wells for compliance monitoring should be labeled as “CP Attachment A, sheet xx of xx” in the text box. The title box should also include reference to the facility name, Permit/Compliance Plan Number, Solid Waste Registration Number, Unit Description or name with Notice of Registration (NOR) Unit No. 0000. The “CP Attachment A” map(s) and CP Table V shall also become part of the final Compliance Plan.

Shown on CP Attachment A, Sheet 3 of 6 – Compliance Monitoring Well Network, SWMU 1.

2. Implementation Schedule

Itemize and discuss, in detail, the estimated time schedule necessary for any testing and assessments, system design, construction and installation, and final implementation of the groundwater monitoring program for each Regulated Unit and solid waste management unit. If the schedule of implementation for items are not completed at the time of the application, or are not completed at the time of issuance of the final draft Permit/Compliance Plan, then the items should be added to the CP Table VIII - Compliance Schedule of the application.

No additional wells are needed. See CP Table VIII for the compliance schedule.

D. CORRECTIVE ACTION PROGRAM

As required by 30 TAC 335.166, the owner or operator must take corrective action to ensure that Regulated Units are in compliance with the Groundwater Protection Standards (GWPS) under 30 TAC 335.158. As required under 30 TAC 335.167, all releases of hazardous constituents from any solid waste management unit at the facility must also be addressed. For existing corrective action programs which have been approved by the TCEQ, the applicant shall provide a copy of the TCEQ corrective action system approval letter, design system specifications and any updates as requested in Section XI.D.3.a.(1) of this section. The applicant must provide the information requested below when proposing a corrective action program which has not been previously approved by the TCEQ including a detailed description of a corrective action or a combination of corrective actions that will remedy the groundwater contamination at the waste management unit and a proposed plan for a monitoring program that will demonstrate the effectiveness of the corrective action.

The owner or operator may also apply for a the Facility Operations Area (FOA) pursuant to the requirements of 30 TAC 350.131 - 350.135 of the Texas Risk Reduction Program (TRRP) rules, provided the applicant meets the FOA pre-approval process steps 1 through 3 approved by the Commission.

Also, the owner or operator may apply for alternative groundwater Corrective Action Program pursuant 30 TAC 335.151, 335.156 and 30 TAC 350, where there are commingled releases from RCRA-regulated unit from one or more SWMUs, PCO, and/or AOC.

As detailed in the RAP (CP Attachment XI.D,) the goal of the corrective action program is to comply with TRRP-based GWPS at the alternate point of exposure (POE) wells at the plume management zone (PMZ) boundary using the facility-wide corrective action approach. A modified Remedy Standard B groundwater response action objective (RAO) will be conducted at the Site through control using a PMZ. Monitored natural attenuation (MNA) is proposed as a control response to address the PCLE Zones within the PMZs. For the Off-Site PMZ area that is pending approval subject to receiving the required institutional controls, UPRR proposes to monitor groundwater in wells within the Off-Site PMZ properties as part of the corrective action groundwater monitoring program. Data collected from the monitoring wells near the properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ. Within and outside the PMZ, the NAPL response endpoint for the creosote DNAPL will be through the recovery endpoint. The response objective will be to recover the creosote DNAPL by physical (recovery from monitoring wells with DNAPL present) or natural means (natural source-zone depletion through biodegradation) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met.

1. Type of Corrective Action Proposed

From the list below, indicate the type of groundwater corrective action proposed for each hazardous waste unit/area. Discuss in detail if more than one corrective action is to be used in a waste management area. Submit the discussion and descriptions as an attachment to the application.

- a. Groundwater well recovery with surface treatment
- b. Groundwater well recovery/surface treatment/re-injection
- c. Groundwater well recovery and disposal
- d. Vapor extraction system
- e. Interceptor trench recovery and disposal
- f. Interceptor trench recovery and surface treatment

- g. In-situ treatment – bioreclamation
- h. In-situ treatment – chemical reaction
- i. Barrier walls/encapsulation
- j. Permeable treatment beds
- k. Other, please describe

As discussed in the RAP (CP Attachment XI.D), UPRR initiated a 24-month pilot study in February 2013 through January 2015 to evaluate DNAPL recovery at the Site by conducting tests on selected monitoring wells where DNAPL had been observed. Details of the scope of work for the pilot test were submitted to the TCEQ in a letter dated February 5, 2013 (PBW, 2013). A copy of the scope of work is provided in Appendix 3 of the RAP. The pilot test procedures consist of measuring the depth to groundwater surface, the depth to the groundwater/DNAPL interface, and the total depth of the well relative to the top of well casing prior to DNAPL recovery. Using a peristaltic pump, DNAPL is pumped from the bottom of the monitoring well until groundwater is returned in the pump discharge. The volume of recovered DNAPL is estimated from each well, and the well is gauged to measure the total depth of the well and depth to residual DNAPL following pumping. Recovered DNAPL is temporarily stored at the Containment Storage Area. PBW submitted to the TCEQ in a letter dated April 9, 2105 the results of the 24-month pilot test. A copy of the letter is also provided in Appendix 3 of the RAP. The conclusions from the pilot test included that once per month DNAPL recovery activities are resulting in an overall stable DNAPL thickness trend in the wells tested, and current monthly recovery frequency appears to be effective with total DNAPL volume recovered becoming stable in the wells over time. More frequent DNAPL recovery would not likely be effective at the Site. The report indicated that monthly DNAPL recovery activities following the procedures listed in the pilot test work plan would continue at the Site. DNAPL recoverability, including recovery frequency and wells included in the DNAPL Recovery Activities will be evaluated on an annual basis as part of the post-response action care reporting.

2. Program Description

Attach a technical report providing a detailed description of a complete corrective action system including above and below ground equipment/facilities. Include discussions on the following concerns for each type of corrective action as applicable.

See RAP (CP Attachment XI.D).

a. Recovery Wells

Not Applicable

- (1) Indicate on a plan view of the waste management area the anticipated location of Recovery Well(s) which would optimize the extraction of the groundwater contaminants.
- (2) Indicate on a plan view the estimated radius of influence of each Recovery Well.
- (3) Indicate the optimum pumping rate of each Recovery Well determined from the aquifer pump test.
- (4) Describe the design of the Recovery Wells and pump system including diameter, construction material, gravel packing, screen slot sizes and patterns, type of pumps and maintenance requirements.
- (5) Describe the collection and storage of the contaminated groundwater which is classified hazardous waste (on-site storage of hazardous waste shall require compliance with the applicable regulations):
 - (c) Less than 90-day tanks (see 40 CFR 262.34/40 CFR 265 Subpart J);

- (d) Permitted Tanks (see 40 CFR 264 Subpart J);
 - (e) Less than 90-day Container Storage Area (see 40 CFR 262.34/40 CFR 265 Subpart I);
 - (f) Permitted Container Storage Area (see 40 CFR 264 Subpart I); and
 - (g) Temporary Units (see CFR 264.553).
- (6) Describe the treatment and/or final disposition of the hazardous and nonhazardous contaminated groundwater.

b. Vapor Extraction System

Not Applicable

- (1) Indicate on a plan view of the waste management area the anticipated location of the vapor extraction system which would optimize the extraction of hazardous constituents from the vadose zone.
- (2) Describe the construction design of the vapor extraction system in detail, including all diagrams and drawings.
- (3) Describe the emission control equipment used to comply with air quality regulations.
- (4) Provide the anticipated volatile contaminants to be remediated along with information on the expected effectiveness of the vapor extraction system at the waste management unit.
- (5) Provide established treatability data for the proposed design.
- (6) Specify the hazardous constituents affected by this type of treatment.

c. Interceptor Trenches

Not Applicable

- (1) Indicate on a plan view of the waste management area the anticipated location of the interceptor trench.
- (2) Provide the construction design.
- (3) Describe the procedure for construction.
- (4) Describe the liquid removal and collection system.
- (5) Describe the surface storage and/or treatment of the contaminated groundwater.
- (6) Describe the final disposition of the contaminated groundwater.

d. In-situ Treatment – Chemical Reaction

Not Applicable

- (1) Characterize the chemical agents to treat the contaminated groundwater and/or soils in the vadose zone.
- (2) Provide laboratory treatability data.
- (3) Specify the hazardous constituents affected by this type of treatment.
- (4) Specify the reaction by-products produced during the chemical reactions.
- (5) Indicate degradation time for each treated hazardous constituent and any resulting chemical reaction by-products.
- (6) Describe the potential health risks caused by human exposure to the reaction by-products.
- (7) Describe potential damage to wildlife, crops, vegetation and physical structures caused by exposure to reaction by-products.
- (8) Describe the persistence and permanence of the potential effects of the reaction

by-products.

- (9) Describe the method of chemical reactant injection and other important aspects of the system design.

e. In-situ Treatment – Bioreclamation

Not Applicable

- (1) Describe the type of bacteria most appropriate for the degradation of the hazardous constituents present in the groundwater and/or soil in the vadose zone.
- (2) Describe the nutrients necessary and application frequency to encourage effective bioreclamation.
- (3) Provide laboratory data from treatability studies utilizing the contaminated groundwater and describe any potential hazardous by-products.
- (4) Indicate the degradation time for each hazardous constituent affected by this treatment.
- (5) Describe the method of injecting the bacteria and nutrients and describe the delivery system design.

f. Barrier Walls

Not Applicable

- (1) Provide laboratory permeability data using the actual contaminated groundwater.
- (2) Describe the barrier wall materials.
- (3) Summarize construction design and installation procedures.

g. Permeable Treatment Beds

Not Applicable

- (1) Provide laboratory data of treatability simulations using actual contaminated groundwater in combination with the material proposed to be used in treatment beds.
- (2) Discuss the properties of the treatment material which would make it effective for use at this site.
- (3) Indicate which hazardous constituents will be affected by this treatment. Indicate the reactions which will take place and the resulting reactant by-products. Discuss the anticipated lifetime of the permeable treatment beds.
- (4) Provide the construction design and installation procedures.

h. Other

Discuss in detail, any other corrective action (soils and groundwater) not included above which is proposed for use at the affected waste management area(s).

Soils

As detailed in the RAP (CP Attachment XI.D – Worksheet 1.0), the RAOs for surface and subsurface soil PCLE Zones is to control exposure through Remedy Standard B using physical barriers such that commercial/industrial workers will not be exposed to concentrations of COCs in excess of the critical human health PCLs (cPCLs) (§350.33(a)(1)). In addition, COC

concentrations in the surface and subsurface soils will not create a leachate that will lead to cPCL exceedances at the point of exposure wells within the proposed PMZ. For surface soils, the Remedy Standard B RAOs will include the following approaches based on the area of the Site:

- ***Former HWPW area:*** *Using the Area of Contamination (AOC) policy, surface soils with cPCL exceedances in the Inactive Wastewater Lagoon (AOC 6), near the Location of the Former Incinerator (AOC 4), surrounding the Tank Car Storage Area (SWMU 7), Oil/Water Separators (SWMU 11), areas north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), and AST Area (SWMU 8) will be consolidated in the area of SWMUs 4, 5, and 8. As allowed under the EPA AOC policy, soils may be consolidated within the AOC (defined at the Site as the "Affected Property") and not be considered to be removed from the land or generated. Soil removed from the proposed areas will be conducted under Remedy Standard A assuming commercial/industrial land use. The removal action has been designed to remove surface soils containing COCs at concentrations exceeding the critical PCLs (primarily ^{Tot}Soil_{Comb} PCLs) as shown on Attachment 2A-1a and 2A-1b of the RAP (CP Attachment XI.D)). The surface soils will be excavated to the vertical extent of the PCLE zone, estimated to be a maximum of approximately 3 feet deep (no greater than 5 feet deep). Soils will be placed within the AOC near SWMU 4, 5 and 8 and covered with an engineered soil cap (Attachment 2A-1a of the RAP (CP Attachment XI.D)). Based on the current areas delineated, the estimated volume of soil to be consolidated is approximately 9,800 cubic yards. The AOC approach was approved by the TCEQ in a letter dated November 5, 2015 (a copy of the letter is provided in Appendix 3).*

To protect on-site commercial/industrial receptors, a vapor barrier with geotextile fabric, and an engineered soil cap (12-in clayey soil, 6-in topsoil) will be constructed to cover the consolidated soil and surface soil PCLE Zone on the former HWPW area (Attachment 2A-1a of the RAP (CP Attachment XI.D)). The soil cap will be vegetated (with a pollinator /grass mix to attract pollinators in the area) and sloped to minimize infiltration over the surface/subsurface soil PCLE Zone. The vegetated cap will be maintained under the post-response action care. In the areas where surface soils will be removed, subsurface soils do not appear to be impacted above cPCLs. The subsurface soil PCLE Zone within the HWPW area appears to be only in the areas where the proposed engineered soil cap with vapor barrier will be constructed. The proposed vapor barrier will address the ^{Air}Soil_{Inh-v} PCLE Zone for naphthalene detected in the subsurface soils within and near SWMU 5. Engineering details for the soil cap are provided in Attachment 2A-3 of the RAP (CP Attachment XI.D) (Engineering Drawings of the HWPW Soil Cap and Roadway Improvements).

For the SDD (SWMU 2) along the southern boundary of the HWPW (Attachment 2A-1a of the RAP (CP Attachment XI.D)), UPRR will construct an asphalt roadway to protect on-site commercial/industrial receptors in this area. Currently, a gravel service road used by UPRR is present in this area. Construction of the asphalt road will consist of grading the existing road material, compacting and stabilizing the existing road material, and applying a hot mix asphalt (2-inches minimum) cover. The asphalt road will be maintained under the post-response action care.

In addition, underground tanks listed as SWMU 11 (Oil/Water Separators) will be removed, properly disposed of, and the excavation backfilled with clean soil.

- ***City of Houston ROW:*** *The off-site area immediately north of the AST Area (SWMU No. 8) within the City of Houston right of way (ROW) between the UPRR property boundary and*

Liberty Road (approximately 6 feet wide and 550 feet long) will be addressed through a combination of soil excavation (as part of the AOC to be placed within the capped area) and construction of a concrete sidewalk (+/-800 linear feet) to restrict exposure to the surface soil PCLE zone. A large diameter (8-in) gas utility line is present in the ROW within the top five feet of soil. To limit disturbance of the gas utility line, UPRR will excavate the top 9 inches of soil within the surface soil PCLE Zone off-site and construct a reinforced concrete sidewalk and side slope to serve as a physical barrier in the area. Details of the concrete sidewalk construction are provided in Attachment 2A-3. The concrete sidewalk will be routinely inspected as part of the post-response action care. An institutional control will be placed on the City of Houston ROW to maintain the physical control on surface soils (Appendix 5 of the RAP (CP Attachment XI.D)).

- ***Englewood Intermodal Yard area:*** *The surface and subsurface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact with impacted soils for on-site workers. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be routinely inspected to ensure on-site worker protection. Attachment 2A-1a shows the Surface Soil Affected Property and its location beneath the concrete parking lot on the Site. In addition, storm drains within the proposed response action area will be inspected and sediment in the drains if present will be sampled to evaluate if COCs from surface soils have migrated into the storm water drainage system.*
- ***UPRR Main Lines Ballast Area:*** *The area between the former HWPW area and the Englewood Intermodal Yard (approximately 100 feet width) is covered with railroad ballast, ties, and rail. UPRR proposes to use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area. The railroad ballast area will be maintained as part of normal railroad operations. The track is owned and controlled by UPRR. In the event construction activities are necessary within the railroad ballast area, a health and safety plan will be implemented to ensure worker protection from COCs in the surface soils and a soil management plan will be developed if soils are excavated as part of the construction activities.*

The Affected Property (including the entire HWPW and Englewood Intermodal Yard Area) will also be deed restricted for commercial-industrial land use and for the use of a physical controls on surface and subsurface soil in accordance with §350.31(g). Institutional controls will also be used to prevent exposure to the COCs in the surface and subsurface soils. Deed restriction of the Site to commercial-industrial use will limit future use and document the use of the physical barrier for surface soils. The PCLE zones for surface and subsurface soils are in an area with restricted property access.

Groundwater

The response action design for the groundwater PCLE Zones will be to implement the modified Remedy Standard B groundwater response action by establishing PMZs (On-Site (Main and West), Off-Site, and Off-Site City of Houston ROW) for the groundwater PCLE Zones in the A-TZ, B-CZ, B-TZ, and C-TZ (discussed in Worksheet 2.1 of the RAP (CP Attachment XI.D)).

For the PMZ, MNA will be used for the physical control mechanism, which has shown to be a control for migration of the COC groundwater plumes. An evaluation of historical groundwater monitoring data and data trends for the Site indicates that natural attenuation of COCs in groundwater is occurring (Attachments 1A (evaluation of recent groundwater data) and 1B

(concentration versus time graphs) of the RAP (CP Attachment XI.D)). Site-specific COCs will be monitored to ensure the levels of these constituents remain stable and below cPCLs at the point of exposure (POE) wells as well as below the attenuation action levels (AAL) at the attenuation monitoring points (AMP) (Attachment 2A-2 of the RAP (CP Attachment XI.D)). Groundwater monitoring will be used to confirm the continued natural attenuation of COCs to concentrations below cPCLs throughout the PCLE zone; however, this will not likely be achieved in a reasonable timeframe given the presence of creosote DNAPL. Groundwater monitoring will be performed on a semi-annual basis. For the purposes of this RAP submittal, there will be four overall PMZ areas:

- 1. On-Site PMZ (Main) – The on-site PMZ (Main) will include the cumulative groundwater PCLE Zone within the UPRR-owned property from the center to the east portion of the Site.*
- 2. On-Site PMZ (West) – The on-site PMZ (West) will include the B-CZ/B-TZ PCLE Zone on the west side of the Site within the UPRR-owned property.*
- 3. Off-Site PMZ [pending] – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site, but not including land designated as City of Houston ROW. The proposed off-site PMZ will require institutional controls for up to 53 individual properties.*
- 4. Off-Site PMZ City of Houston ROW – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site within the land designated as City of Houston ROW.*

The On-Site PMZs (Main and West, including the former HWPW, Englewood Intermodal Yard) will be deed restricted to commercial-industrial land use and to restrict future use of groundwater on-site, as well as restrictions on soil excavation activities within the surface soil PCLE Zone on the UPRR-owned property. The Off-Site PMZ City of Houston ROW will be deed restricted to restrict future use of groundwater on-site, as well as restrictions on soil excavation activities within the surface soil PCLE Zone along a portion of the northern boundary of the Site.

For the Off-Site PMZ (excluding the Off-Site PMZ City of Houston ROW), this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. Currently, UPRR has acquired 30 signed restrictive covenants from private landowners and the signed restrictive covenant from the City of Houston for ROW throughout the proposed Off-Site PMZ. Three additional property owners have recently agreed verbally with the restrictive covenant and UPRR is a waiting signature. For 11 properties within the Off-site PMZ, UPRR has conducted an extensive and diligent inquiry to locate the landowner who can legally sign the restrictive covenant per 30 TAC §350.111(c)(3), but has not been able to locate the proper landowner for signature (details in Appendix 4). UPRR proposes to file a deed notice for those properties pending TCEQ approval. For the remaining nine properties within the proposed Off-Site PMZ, UPRR has located the landowners but has not received signed restrictive covenants or filed deed notices at this time. UPRR will continue to work with the landowners to secure the restrictive covenants for these properties and establish the PMZ for the entire groundwater PCLE Zone. In the interim, UPRR proposes to monitor groundwater in wells within the Off-Site PMZ properties as part of the corrective action groundwater monitoring program. Data collected from the monitoring wells near the properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

To address the NAPL present in the GWBUs, the NAPL response action objectives and endpoints using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ, B-CZ/B-TZ, and C-TZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells. However, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of complex hydrogeology and physical nature of creosote (discussed in Worksheet 2.3 of the RAP (CP Attachment XI.D)). UPRR is currently conducting monthly DNAPL Recovery Activities to evaluate the recoverability of the DNAPL at the Site. The DNAPL recovery consists of monthly pumping events from wells with sufficient volumes of DNAPL that can be recovered. DNAPL recovery will continue on a monthly basis, but the recovery frequency and wells included in the DNAPL Recovery Activities will be evaluated on an annual basis for DNAPL recoverability and effectiveness.

Institutional controls as detailed in §350.31(g) through deed recordation (UPRR-owned property) and restrictive covenants/deed notices (off-site properties) within the PMZ and restricting the use of groundwater will be used at the Site to prevent future exposure risk until groundwater concentrations achieve critical PCLs. Landowners for some properties within the Off-Site PMZ were not locatable. In accordance with 30 TAC §350.111(c)(3), documentation of the extensive and diligent inquiry to locate those landowners are provided in Appendix 5 of the RAP (CP Attachment XI.D). Following approval from the TCEQ Executive Director, deed notices on those properties will be placed detailing the Off-Site PMZ.

3. Groundwater Monitoring and Corrective Action Program Description

a. Describe the proposed groundwater monitoring system to be used to monitor corrective action and compliance with the GWPS which includes the following information.

(1) Changes, if applicable, from the current groundwater monitoring program at the waste management unit that will be required to comply with the corrective action monitoring program described in 30 TAC 335.166. This description should address changes concerning:

(a) Geological and/or hydrogeological information differences since the submittal of the previous application [must submit a Geologic and Hydrogeologic Report in accordance with Section XI.A.4;

See Permit Section VI. Geology Report and CP Attachment XI.D – Response Action Plan – Attachment IA for additional geologic and hydrogeologic information since previous permit application.

(b) Waste management areas/units;

The regulated unit SWMU I, which was previously monitored under the Corrective Action Program, will be monitored under the Compliance Monitoring Program. For the other SWMUs and AOCs, groundwater monitoring and corrective action program was designed for the facility-wide corrective action as detailed in the RAP (CP Attachment XI.D).

(c) Construction details for monitor wells to evaluate compliance with “Attachment B” well specification requirements;

See RAP, Worksheet 3.1, Attachment 3A – Table 1 (CP Attachment XI.D) for list of alternate point of exposure (APOE) wells and attenuation monitoring points (AMP) wells to be incorporated into the Corrective Action Monitoring through the Plume Management Zone (PMZ). Some of the wells listed in the RAP, Worksheet 3.1, Attachment 3A – Table 1 (CP Attachment XI.D) pre-date the well specification requirements or were RFI investigation wells and may not be in compliance with Attachment B of Section XI. Well completion logs for the POE and AMP wells are provided in Section VI, Appendix VI.B. Any wells constructed after issuance of the Compliance Plan will meet the requirements of the CP Attachment B, unless an alternate well design is approved by the Executive Director.

- (d) The number and locations of additional monitor wells [must submit the Monitoring System Plan/Report required by Section XI.D.3.c.(2);

See RAP, Worksheet 3.1, Attachment 3A – Table 2 (CP Attachment XI.D) for the list of additional monitoring wells (i.e., Corrective Action Observation Wells) for the facility. This includes monitoring wells within the proposed Off-Site PMZ that will be phased out once the deed recordation has been finalized.

- (e) Sample handling, chain of custody, and analytical procedures (also see “Attachment C”);

See CP Attachment XI.C (Sampling and Analysis Plan).

- (f) Frequency of monitoring;

The APOE and AMP wells will be monitored semiannually. UPRR will evaluate the sampling frequency annually as part of the Annual Groundwater Monitoring Reporting and recommended changes if needed.

- (g) Monitoring parameters;

The parameters listed in Compliance Plan Tables IIIA (Table of Indicator Parameters and the Groundwater Protection Standard) will be monitored. As indicated on CP Table III, selected monitoring wells will also be evaluated for vinyl chloride based on sampling results from the Affected Property Assessment Report (APAR). The source of the vinyl chloride is not from a degradation of a parent chlorinated hydrocarbon, but rather it is likely from a contaminant in a creosote extender used in the late 1970s based on historical records for the Site.

- (h) Evaluation of compliance with GWPS (statistical methods);

Evaluation of compliance with GWPS or other ACLs will include assessing the groundwater monitoring data from two sets of wells: Alternate Point of Exposure (APOE) wells and Attenuation Monitoring Points (AMPS). With the Plume Management Zones (PMZs), TRRP requirements in 30 TAC §350.33(f)(4)(D) specify that: “The person shall establish groundwater attenuation monitoring points beginning at an appropriate hydraulically upgradient location within the groundwater PCLE zone and continuing down the approximate central flow path of the COCs to the downgradient extent of the PMZ.” Attenuation Action Levels (AALs) have been established for AMPs within the A-TZ, B-CZ-B-TZ, and C-TZ PMZs in order for the critical groundwater PCLs to not be exceeded at the APOE

wells, as specified in 30 TAC §350.33(f)(4)(D)(ii). Details on AAL development are provided in Attachment 2E of Section XI, CP Attachment D, Response Action Plan (RAP)).

Since some natural attenuation of COCs have been observed at the Site (as indicated by the stable/declining concentration trends discussed in CP Attachment D) and future natural attenuation of these COCs is anticipated, proposed AALs were developed based on the procedures described in Section 3.2.1 of TRRP-33 Guidance. Specifically, the “Method One” approach (a graphical technique based on empirical data from previous monitoring events) provided in that guidance document was used. This approach involves plotting COC concentrations against distance from the COC source to the groundwater POE using existing monitoring data. A first-order curve is then fitted from a point near the source area (after accounting for natural variability) to the POE. The concentrations represented by this line at the identified AMPs are calculated as AALs. As noted in TRRP-33: “The data used to develop the curves should be selected so that the method accounts for routine variations in the data due to seasonal effects or sampling variability, such as by: 1) using the upper range of historical data to construct the AAL first order line; or 2) accounting for some level of exceedances; or 3) using a moving average over the long-term monitoring data in each well; or 4) some other method.”

In a typical evaluation, as described in TRRP-33, AALs are then selected from the AAL line to correspond to the distance that the AMP is located from the source (or in regards to the HWPW where DNAPL is present). The natural logarithm (\ln) of the y-coordinate at each of these points is then calculated to establish the AAL at each AMP. The calculated AALs for each GWBU and each primary COC (benzene, 2,4-dimethylphenol, 2-methylnaphthalene, dibenzofuran, and naphthalene) are shown on the following:

- A-TZ – CP Attachment D, RAP Attachments 2E-1 thorough 2E-5;
- B-CZ – CP Attachment D, RAP Attachments 2E-6 thorough 2E-7 (benzene and 2,4-dimethylphenol only); and
- C-TZ – CP Attachment D, RAP Attachments 2E-11 thorough 2E-15.

Groundwater data will then be either directly compared to the GWPS listed on CP Table IIIA or using statistical procedures, as discussed below:

- *Directly compare the value of each constituent to the respective concentration limit of CP Table IIIA and determine if it is less than, equal to, or greater than the listed value (either the GWPS for the APOE wells or the AAL for the AMPs). If the values for all the constituents are less than or equal to the respective concentration limits of CP Table IIIA (or CP Attachment D, RAP, Attachment 2E), then the well shall be considered compliant with the GWPS or AAL for the sampling event. If one or more constituent values (after verification resampling) are greater than the respective concentration limit, then the well will be considered non-compliant with the GWPS for the sampling event. However, it is important to note that this method is susceptible to a high rate of false positives.*
- *Statistical approach using the Confidence Interval Procedure for the mean concentration based on a normal, log-normal, or non-parametric distribution. The 95 percent confidence coefficient of the t-distribution will be used in constructing the confidence interval (Chapter 21 of Statistical Analysis of Groundwater Data at RCRA Facilities-Unified Guidance, U.S. EPA, March 2009), and subsequent*

updates acceptable to the Executive Director. The confidence interval upper limit (UCL) for each constituent will be compared with the corresponding concentration limit in CP Table IIIA. To be considered in compliance, the confidence interval upper limit for a well in question must not exceed the table concentration limit depending on the objective of the well (i.e., APOE compared to AMP). A verified (after resampling) confidence interval upper limit above the table concentration limit shall be considered as evidence of statistically significant contamination and the well will be considered non-compliant with the GWPS for the sampling event.

- **As part of the evaluation of compliance with the GWPS, a verification resampling procedure will also be employed at the facility whenever an unverified, initial exceedance is detected either through direct comparison or through statistics. The verification resampling will follow a “pass 1 of 2” resamples to verify an initial exceedance of the GWPS.**
- **Groundwater data will also be evaluated using trend analysis. See RAP, Appendix 7 Statistical Methodology regarding trend analysis (CP Attachment XI.D).**

- (i) Other Sampling and Analysis Plan information to be in compliance with “Attachment C”;

See CP Attachment XI.C (Sampling and Analysis Plan).

- (j) Compliance period as defined in Section XI.E.1.c. of the application;

See Section XI.E.1.c.

- (k) Financial assurance; and

See Section XI.E (Cost Estimates for Financial Assurance).

- (l) An ACL variance under 30 TAC 335.160(b), if applicable (also see “Attachment A”).

See Section XI Attachment A (Alternate Concentration Levels).

- (2) The number, depth and location of all monitor wells (Background Wells, Point of Compliance Wells, Corrective Action Observation Wells, Supplemental Wells, piezometers, etc.) and all Recovery Wells and complete CP Table V – Designation of Wells by Function. Also, make revisions as applicable to plans referenced in Section XI.D.3.c.

See the following tables for monitoring wells at the facility to be incorporated into the Corrective Action Monitoring Program:

- **RAP, Worksheet 3.1, Attachment 3A – Table 1 (CP Attachment XI.D) for the list of PMZ Monitoring Well Network (i.e., APOE and AMP Wells).**
- **RAP, Worksheet 3.1, Attachment 3A – Table 2 (CP Attachment XI.D) for the list of additional monitoring wells (i.e., Corrective Action Observation Wells).**
- **RAP, Worksheet 3.1, Attachment 3A – Table 3 (CP Attachment XI.D) for the list of additional DNAPL recovery wells (i.e., Corrective Action System**

Wells).

See Compliance Plan Table V (Designation of Wells by Function) and associated sheets.

- (3) The proposed hazardous constituent monitoring list which is based on constituents that were monitored during detection monitoring (if applicable), constituents detected in accordance with 30 TAC 335.164, and degradational constituents identified in CP Table III accordingly to develop the constituent list for the Corrective Action Monitoring Program. CP Table III shall become part of the final Compliance Plan.

See Compliance Plan Table III (Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard).

- (4) The proposed indicator parameter monitoring list. From the list of constituents and GWPS identified in CP Table III complete CP Table IIIA – Corrective Action Program Table of Indicator Parameters and the Groundwater Protection Standard, accordingly. CP Table IIIA shall become part of the Compliance Plan to be analyzed at least semiannually as required by 30 TAC 335.166(7).

See Compliance Plan Table IIIA (Table of Indicator Parameters and the Groundwater Protection Standard).

- (5) Monitoring frequency.

The parameters listed in Compliance Plan Table IIIA (Table of Indicator Parameters and the Groundwater Protection Standard) will be monitored semiannually.

- (6) Provisions for semiannual reporting of groundwater data.

As detailed in the RAP (CP Attachment XI.D), the parameters listed in Compliance Plan Tables III (Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) or Table IIIA (Table of Indicator Parameters and the Groundwater Protection Standard) will be reported annually in the Annual Groundwater Corrective Action Monitoring Report (details provided in the RAP, Worksheet 6.0 of the CP Attachment XI.D).

- (7) Annual determination of contamination plume rate and direction of migration.

As will be presented in the Annual Groundwater Corrective Action Monitoring Report, contaminant plume rate and direction of migration will be determined at a minimum annually and will be discussed in the annual reports for groundwater data.

- (8) Compliance period. Calculate the compliance period as required by 30 TAC 335.162 and 335.165(1)(d). Include calculations and complete CP Table VI – Compliance Period for RCRA-Regulated Units which shall become part of the final Compliance Plan.

The only Regulated Unit, SWMU 1, was certified closed by a Registered Texas Professional Engineer in the closure letter dated April 1984. Groundwater monitoring of the SWMU 1 was initiated in August 1984 (quarterly), and entered Corrective Action Monitoring when the initial RCRA Permit was issued in 1994 and renewed in 2005. The SWMU 1 groundwater (in the A-TZ and B-TZ) has achieved Remedy Standard A RAOs and the TCEQ issued a No Further Action letter for corrective action in August 2015. SWMU 1 will be monitored

under the Compliance Monitoring Program.

- b. Proposed methods of evaluating the effectiveness of the corrective action in the saturated and vadose zone.

The effectiveness of the corrective action in the saturated zone will ultimately be evaluated by compliance with the TRRP-based GWPS at the alternate POE wells as part of the PMZ. The GWPS and PCLs are listed in Compliance Plan Tables III (Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) or Table IIIA (Table of Indicator Parameters and the Groundwater Protection Standard).

- c. Submit the following plans and reports.

- (1) Current Sampling and Analysis Plan - The Sampling and Analysis Plan must include information required by 30 TAC 335.163(4) and 335.163(5) and 40 CFR Subpart 270.30(j). For guidance, please see “Attachment C” to the application.

See CP Attachment XI.C (Sampling and Analysis Plan).

- (2) Groundwater Recovery and Monitoring System Plan - At a minimum, the plan must include:

- (a) Recovery System Plan - The applicant should propose a recovery system design that will achieve the performance requirement to protect human health and the environment. The plan should provide detailed plans, information and specifications on the recovery system’s design and well installation specifications. All new recovery wells must be installed in accordance with applicable specifications outlined in “Attachment B”, unless an alternative well design is approved by the agency prior to installation of the well. The Recovery System Plan must include Recovery System Design and Specifications - Certified by a Texas Registered Professional Engineer. The certification must be sealed by a licensed Professional Engineer, with current license, along with the Registered Engineering Firm’s name and Registration Number as required by the Texas Engineering Practice Act.;

Not Applicable

- (b) Monitoring System Plan - If the applicant is proposing a monitoring well or a monitoring system in the application, the applicable well installation specifications outlined in “Attachment B” of this application should be followed. All new monitoring wells must be installed in accordance with the specifications outlined in “Attachment B”, unless an alternative design is approved by the agency prior to installation. If the applicant proposes as part of the monitoring system, any well (existing or proposed) that does not meet or exceed the requirements outlined in “Attachment B”, then the proposed alternative design must be described in detail in the Monitoring System Plan and must be submitted with this application. The Monitoring System Plan must include:

- i. Monitoring System Design and Specifications - Certified by a qualified engineer and/or geologist which provides detailed plans and specifications on the monitoring system design; and
- ii. Well Drilling and Well Casing Specifications - Certified by a qualified engineer and/or geologist which provides details on well casing specification, drilling logs and reports.

See CP Attachment XI.B (Well Design and Construction Specifications). No alternative designs are proposed as part of this application.

- (3) Current Geologic and Hydrogeologic Report - Provide a report per Section XI.A.4 of this application discussing the geologic and hydrogeologic conditions of the facility and the specific area affected by the waste management areas. This report should include the most up-to-date information from which the design of the groundwater monitoring system was based.

See CP Attachment XI.D – Response Action Plan – Attachment 1A for up-to-date geologic and hydrogeologic information used to develop the groundwater monitoring system.

4. Waste Management Units/Areas Monitored Under Corrective Action Programs

- a. Delineate and identify the following for each waste management unit/area in the proposed groundwater monitoring and corrective action programs.
 - (1) Boundary of the waste management unit and, if applicable, the proposed waste management area which includes more than one waste management unit (identify all waste management units which are included in the waste management area). These waste management units/areas subject to corrective action pursuant to 30 TAC 335.166 and 335.167 should be listed in CP Table I – Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring. CP Table I shall become part of the final Compliance Plan.

The corrective action program covers a facility-wide approach with the soil Affected Property or the PCLE zone defining the Area of Contamination and the PCLE Zones defining the areas subject to corrective actions. See CP Attachment A, Sheet 1 of 5, Figures XI.A.2.1, XI.A.2.2, and XI.A.2.3 for maps showing the SWMUs and AOCs under the Corrective Action Program.

- (2) The proposed point of compliance (30 TAC 335.161), point of exposure wells, or alternate point of exposure wells.

As part of the facility-wide corrective action program that incorporates the Plume Management Zone (PMZ) for the GWBUs, see Section XI.D.6 and Compliance Plan Table V (Designation of Wells by Function) and associated sheets for the list of APOE wells.

- (3) Any proposed monitor wells such as supplemental wells, observation wells, background wells, etc. If appropriate the groundwater monitoring system should have a sufficient number of wells to monitor the downgradient extent of the plume.

See the following tables for monitoring wells at the facility to be incorporated into the Corrective Action Monitoring Program as part of the PMZ (see Section XI.D.6):

- ***RAP, Worksheet 3.1, Attachment 3A – Table 2 (CP Attachment XI.D) for the list of additional monitoring wells (i.e., Corrective Action Observation Wells).***
- ***RAP, Worksheet 3.1, Attachment 3A – Table 3 (CP Attachment XI.D) for the list of additional DNAPL recovery wells (i.e., Corrective Action System***

Wells).

- (4) Features which may serve as conduits for subsurface contamination.

As discussed in the RAP, Worksheet 2.1 (A-TZ) (see CP Attachment XI.D), an on-site field survey and water-well data search was conducted, indicating no potential water wells were located that could act as a conduit for migration of shallow groundwater into the underlying groundwater formation. However, as discussed in the APAR Addendum (PBW, 2009), two sets of fiber optic lines, Level 3 Communications and Qwest, run along the north side of the rail main lines across the entire length of the Site (Attachment 1A, Figure 5A-1). Based on conversations with both Level 3 Communications and Qwest representatives, the fiber lines run underneath SWMUs 2, 5, 4, 8, and 10/11. The fiber lines run directly underneath the drainage ditch southwest of the Site and under the southern drainage ditch (SDD) about 3 to 5 feet bgs. The Level 3 Communications line reportedly was directionally bored to a depth of 40 to 45 feet bgs underneath the Original and Recent Process Areas (SWMU Nos. 5 and 4, respectively) and under the aboveground storage tank (AST) Area (SWMU No. 8). The Qwest fiber line reportedly runs 10 to 15 feet northwest and parallel of the main rail line, and is about 5 to 10 feet bgs through the Site. Just east of SWMU No. 8, the both fiber lines return to approximately 4 to 6 feet below grade and continue running northeast parallel to the rail main line. The Level 3 Communications line may act as an artificial penetration since the reported depths of the line go through both the A-TZ and into the B-CZ immediately below the primary source areas. Given the depth of the fiber optic line is below the A-TZ and likely below the B-TZ (or carbonate seams within the B-CZ), monitoring well MW-19C will continue to be monitored as a Corrective Action Observation Well to evaluate if the directional bored fiber optic lines are creating a preferential pathway for COCs to migrate to the C-TZ GWBU.

In addition to the fiber lines, three City of Houston utilities were identified in the previous APAR (PBW, 2009) that cut across the Site oriented north-south just west of the Lockwood Street Bridge: 1) 60-in wastewater line, 2) 84-in water line, and 3) a 42-in storm sewer line (PBW, 2009). Through a review of the utility drawing files obtained from the City of Houston Public Works Survey Department, two of the underground utility lines (the 60-in sanitary sewer line and the 84-in water line) appear to be at depths that potentially intersect the uppermost GWBU A-TZ. The estimated depths of the utilities based on the city drawings are shown on the Geologic Cross Sections A-A', B-B', and C-C' (CP Attachment XI.D, RAP, Attachment 1A, Figure 4C-1). The estimated base depth of the 60-in wastewater line and the 84-in water line where Cross Section B-B' crosses the utility lines is approximately 23 feet bgs (approximate elevation of 26 feet HVD). It is highly unlikely that A-TZ groundwater is seeping into the 84-in water line, given the line is under pressure (flow is south to north), constructed with welded steel pipe, and is relatively new (constructed in 2000). Sampling of the 60-in sanitary sewer line was conducted in 2010. Of the three samples collected in 2010, the only sample with concentrations greater than PCLs was the upgradient sample SSW1 that had a detection of bis(2-ethylhexyl)phthalate (0.0092 mg/L) above the ^{GW}GW_{ing} PCL of 0.006 mg/L; however, bis(2-ethylhexyl)phthalate is a common laboratory contaminant (as cited in 30 TAC§350.71(k)(2)(B)). The sanitary sewer sample analytical results suggest that there is not a significant mass loading of COCs from groundwater into the sanitary sewer.

- (5) Corrective action system.

See RAP, Worksheet 2.0 (CP Attachment XI.D). UPRR will continue monthly DNAPL recovery activities from the wells where DNAPL has been detected and recovered (see RAP, Worksheet 3.1, Attachment 3A – Table 3 (CP Attachment XI.D) for the list of DNAPL

recovery wells (i.e., Corrective Action System Wells)). The results from the 24-month DNAPL recovery pilot test completed in January 2015 (PBW, 2015) indicated the following:

- **Once per month DNAPL recovery activities are resulting in an overall stable DNAPL thickness trend in the wells tested.**
 - **The current monthly recovery frequency appears to be effective with total DNAPL volume recovered becoming stable in the wells over time.**
- b. For each waste management unit/area in the proposed groundwater monitoring system, submit the locations of individual waste management unit/area monitor wells (existing or proposed) and any soil borings (plugged and unplugged) specifically drilled for assessment of contamination. These individual monitor wells shall be identified by respective well number on a plan view drawing and only the background, point of compliance, point of exposure wells and/or alternate point of exposure wells should be indicated in CP Table V – Designation of Wells by Function. The plan view map depicting the location of individual monitoring wells for corrective action monitoring should be labeled as “CP Attachment A, sheet xx of xx” in the text box. The title box should also include reference to the facility name, Permit/Compliance Plan Number, Solid Waste Registration Number, Unit Description or name with Notice of Registration (NoR) Unit No. 0000. The “CP Attachment A” map(s) and CP Table V shall also become part of the final Permit/Compliance Plan.

The following maps show the monitoring wells proposed as part of the Corrective Action Monitoring Program for the facility-wide approach using PMZs:

- ***CP Attachment A, Sheet 3 of 5 – PMZ Boundary Map, A-TZ***
- ***CP Attachment A, Sheet 4 of 5 – PMZ Boundary Map, B-CZ/B-TZ***
- ***CP Attachment A, Sheet 5 of 5 – PMZ Boundary Map, C-TZ***

See Compliance Plan Table V (Designation of Wells by Function) and associated sheets.

5. Waste Management Units/Areas Addressed Under Other Corrective Action Programs -Facility Operations Area (FOA), specific to the requirements of 30 TAC 350.131 - 350.135. The Permittee should also complete Sections XI.D.4. for other units not addressed by the FOA that may require corrective action outside the FOA boundary. For other units not addressed by the FOA, either within the FOA or outside the FOA which may require compliance monitoring, the Permittee should complete Section XI.C. of this application accordingly.

Not Applicable

- a. Provide an approved version of the FOA Qualifying Criteria Checklist and evidence that Steps 1 through 3 of the FOA pre-approval process has been approved by the Commission.
- b. Provide a discussion on exceptions to the TRRP rule requested.
- c. Provide a summary of the SWMUs/AOCs that will be addressed within the FOA boundary and a discussion of the multiple sources of COCs present and how FOA will better address these sources.
- d. Provide maps of appropriate scale depicting the following (maps may be combined where appropriate):
 - (1) The number, location and type of monitoring points in each stratigraphic unit to be monitored individual monitoring wells should be identified by respective well number on a plan view drawing, to include the background, Point of Compliance (POC), Point of Exposure (POE), FOA Boundary of Compliance wells, FOA piezometers or supplemental wells, Corrective Action Observation ((CAO), Corrective Action System (CAS) wells that are applicable for FOA monitoring program should be labeled as “CP Attachment A, sheet

no xx of xx” in the title box. The title box should also include reference to the facility name, Permit/Compliance Plan Number (00000), TCEQ Solid Waste Registration Number and Unit Description or Name. The “CP Attachment A” map(s) shall become part of the final Permit/Compliance Plan.

- (2) HWMUs/SWMUs/AOCs addressed
 - (3) Surrounding land use
 - (4) FOA lateral boundaries
 - (5) Potential source areas
 - (6) Potentiometric surface of all relevant transmissive units
 - (7) Surrounding water wells
 - (8) Extent of known contamination in each transmissive unit
 - (9) Areas of potential ecological impact
 - (10) Known occurrences of NAPL or DNAPL in each transmissive units
 - (11) FOA access control components
- e. Provide cross-sections in accordance with Section XI.A.4. depicting the following (maps may be combined where appropriate);
- (1) The vertical boundaries of the FOA;
 - (2) The vertical extent of contamination;
 - (3) Groundwater level elevations for each transmissive unit.
- f. Provide tabulated information for;
- (1) Results of Appendix IX GW sampling.
 - (2) Proposed PCLs for each hazardous constituent and principal degradational constituent for each monitoring point with supporting documentation (including a discussion of exposure pathways) should be listed in CP Table III – CORRECTIVE ACTION PROGRAM Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard. CP Table III shall become part of the final Compliance Plan.
 - (3) The proposed indicator parameter monitoring list. From the list of constituents and GWPS identified in CP Table IIIA. CP Table IIIA shall become part of the Compliance Plan to be analyzed at least semiannually as required by 30 TAC 335.166(7).
 - (4) Only the background, POC, POE, FOA Boundary of Compliance wells should be listed in CP Table V which shall become part of the final Permit/Compliance Plan.
- g. Provide a discussion of the types of corrective action that will be employed to address contaminated media.
- h. Provide detailed descriptions of GW recovery and other remedial technologies such as vapor extraction, interceptor trenches, hydraulic containment, barrier walls, etc., including radius of influence, estimated optimum recovery rates, location of collection, storage or disposal facilities.
- i. Provide a detailed description of the ground water monitoring system including placement of monitoring wells, hydrogeologic characteristics of monitored units and well completion details.
- j. Provide a Sampling and Analysis plan for the proposed FOA that includes development of COCs to be monitored, sampling methodology, sample handling procedures, sampling frequency and statistical procedures for evaluating analytical results (Appendix C).
- k. Propose a methodology for evaluating the effectiveness of remedial measures and potential remedial system enhancements.
- l. Propose a reporting schedule to provide updated information on the installation and operation of remedial and monitoring systems.

- m. Provide Financial Assurance in accordance with Section XI.E.
 - n. Provide draft language intended to comply with the deed notification requirements of 30 TAC 350.111 and 350.135(a)(11).
 - o. Provide a summary of the approved workers protection plan.
 - p. Provide a discussion of areas of ecological impact, if any, and development of associated Protective Concentration Limits (PCLs).
 - q. Provide a discussion of how NAPL occurrences, if any, will be addressed inside and outside the FOA.
 - r. Provide a schedule of implementation for items not completed at the time of application See also Section XI.D.8.
6. Waste Management Units/Areas Monitored Under Corrective Action Programs - Plume Management Zone (PMZ)
- a. Please provide a summary of the HWMUs and SWMUs/AOCs that will be addressed within the PMZ boundary.

See RAP in CP Attachment XI.D, and see response to XI.6.b below.

- b. Please provide a discussion of the multiple sources of COCs present and how PMZ will better address these sources.

See RAP in CP Attachment XI.D. The Site has been used for creosoting operations since 1899 with numerous operations at the Site over that time period. Historical material and waste handling practices have resulted in releases to soil and groundwater. These releases have resulted in commingled creosote-derived COC PCLE zones and creosote non-aqueous phase liquid (NAPL) that are not attributable to specific waste management units or areas of concern. In order to effectively manage the corrective action process at the UPRR HWPW Facility, a comprehensive site-wide approach to corrective action is proposed. The cumulative PMZ will include all or portions of the SWMUs and AOCs, except for AOC 4 and 6. Portions of AOC 4 and 6 will be closed and No Further Action requested following soil excavation (under the Area of Contamination approach). No groundwater impacts were noted for the shallow groundwater near AOC 6.

- c. Please provide maps of appropriate scale depicting the following (maps may be combined where appropriate);
 - (1) HWMUs/SWMUs/AOCs addressed

See Figures XI.A.2, XI.A.2.1, XI.A.2.2, and XI.A.2.3 – Locations of Former Waste Management Units and SWMUs/AOCs Under Corrective Action..

- (2) surrounding land use

See Figure XI.A.1a - Facility Site Map.

- (3) PMZ lateral boundaries

See the following maps for PMZ lateral boundaries proposed as part of the Corrective Action Monitoring Program for the facility-wide approach:

- ***CP Attachment A, Sheet 3 of 5 – PMZ Boundary Map, A-TZ***

- **CP Attachment A, Sheet 4 of 5 – PMZ Boundary Map, B-CZ/B-TZ**
- **CP Attachment A, Sheet 5 of 5 – PMZ Boundary Map, C-TZ**

For the Off-Site PMZ (excluding the Off-Site PMZ City of Houston ROW), this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. UPRR proposes to monitor groundwater in wells within the Off-Site PMZ properties as part of the corrective action groundwater monitoring program. Data collected from the monitoring wells near the properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

(4) potential source areas

See RAP in CP Attachment XI.D, Attachment 1A (Figure 1A) and Figure XI.A.2.

(5) Potentiometric surface of all relevant transmissive units

See RAP in CP Attachment XI.D, Attachment 1A (Figures 5A-1 through 5A-4)), and Permit Section VI. Geology Report – Figures VI.J.1 through VI.J.4.

(6) Surrounding water wells

See Permit Section VI. Geology Report – Figure VI.H

(7) extent of known contamination in each transmissive unit

See RAP in CP Attachment XI.D, Attachment 1A (Figures 5B-1 through 5B-22))

(8) number, location and type of monitoring points in each stratigraphic unit to be monitored

See RAP in CP Attachment XI.D, Worksheet 3.0 and Attachment 3A, Tables 1, 2, and 3

(9) Areas of potential ecological impact

None, no potential ecological impacts as discussed in the APAR (PBW, 2009).

(10) known occurrences of LNAPL or DNAPL in each transmissive unit

See RAP in CP Attachment XI.D, Attachment 1A (Figures 5A-5 through 5A-7))

d. Please provide sufficient cross-sections depicting the following (maps may be combined where appropriate);

- (1) The vertical boundaries of the PMZ;
- (2) The vertical extent of contamination;
- (3) potentiometric surfaces for each transmissive unit.

See RAP in CP Attachment XI.D, Attachment 1A (Figures 4C-1 through 4C-5)), and Permit Section VI. Geology Report – Figures VI.E.1 through VI.E.5.

e. Please provide tabulated information for;

- (1) history of all relevant units or AOCs;

See CP Table XI.A.1. – Facility History for Waste Management Units.

- (2) summary of hydrogeologic data for each affected transmissive unit;

See RAP in CP Attachment XI.D, Attachment IA and Permit Section VI. Geology Report

- (3) results of Appendix IX GW sampling;

Appendix IX Groundwater sampling results are not available. The list of potential contaminants of concern was established in the RCRA Facility Investigation (RFI) Work Plan dated October 1994. The list of chemicals of concern (COCs) for the Site were developed by reviewing current and historical process operations, a list of standard chemicals associated with creosote operations, and groundwater monitoring results.

- (4) proposed PCLs for each constituent for each monitoring point (Point of Exposure wells, alternate point of exposure wells, etc) with supporting documentation (including a discussion of exposure pathways). This should also include the designation/establishment of sufficient number of Attenuation Monitoring Points (AMPs) beginning at an appropriate hydraulically upgradient location within the groundwater protective concentration level exceedence (PLCE) zone and continuing down the approximate central flow path of the constituent of concern (COC) in the downgradient extent of the Plume Management Zone(s) in accordance with 30 TAC 350.33(f)(4)(D).

Details of the proposed PCLs and attenuation action levels (AALs) for the AMPs are provided in the RAP (CP Attachment XI.D). Also see Compliance Plan Table III (Table of Detection Hazardous and Solid Waste Constituents and the Groundwater Protection Standard) for list of PCLs for the alternate POE wells. See Compliance Plan Table IIIA (Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard) and associated footnotes.

- (5) Establish/Calculate Attenuation Action Levels (AALs) (critical PCLs) for each attenuation monitoring point in accordance with 30 TAC 350.33(f)(4)(D)(ii). The established AALs (critical PCLs) for each AMP well should be graphically presented in table format on the plan view map depicting the location of individual monitoring wells (including AMP wells) for corrective action monitoring labeled “CP Attachment A, Sheet xx of xx”, referenced in XI.D.4.b.

Details of the proposed AALs for the AMPs are provided in the RAP (CP Attachment XI.D). See the following maps for AMPs proposed as part of the PMZ and Corrective Action Monitoring Program for the facility-wide approach:

- CP Attachment A, Sheet 4 of 6 – PMZ Boundary Map, A-TZ
- CP Attachment A, Sheet 5 of 6 – PMZ Boundary Map, B-CZ/B-TZ
- CP Attachment A, Sheet 6 of 6 – PMZ Boundary Map, C-TZ

- f. Please provide a discussion of the types of corrective action that will be employed to address contaminated media.

See RAP in CP Attachment XI.D, Executive Summary:

The objective of the RAP is to develop responses to protect current and future pathways from exposure to the PCLE Zones in surface soil, subsurface soil, and groundwater. The following response actions are proposed at the Site to achieve this objective:

- *Surface/subsurface soil – The surface/subsurface soil PCLE Zones at the Site will be addressed as follows:*
 1. *Former HWPW Area: Remedy Standard B closure through consolidating impacted soils within the Area of Contamination (AOC) and implementing Physical Control through an engineered soil cap and asphalt roadway. Periodic inspections and maintenance of the cap and roadway will be implemented;*
 2. *Englewood Intermodal Yard: Remedy Standard B closure by implementing Physical Control using the existing concrete pavement as a cap. Periodic inspections and maintenance of the cap will be implemented;*
 3. *Railroad mainlines and siding tracks: The response action for the operational area between the Former HWPW area and the Englewood Intermodal Yard will be Remedy Standard B closure using the existing railroad ballast as a protective barrier; and*
 4. *City of Houston ROW along Liberty Road: Remedy Standard B closure through limited excavation of surface soils, consolidating impacted soils within the AOC, and implementing Physical Control through an engineered concrete sidewalk. Periodic inspections and maintenance of the cap and roadway will be implemented.*
- *Groundwater – Remedy Standard B closure using a Plume Management Zone (PMZ) with monitored natural attenuation (MNA) for control as the response action for the groundwater PCLE Zones within the Affected Property. For the purposes of this RAP submittal, there will be four PMZ areas:*
 1. *On-Site PMZ (Main) - The on-site PMZ (Main) will include the cumulative groundwater PCLE Zone within the UPRR-owned property from the center to the east portion of the Site.*
 2. *On-Site PMZ (West) - The on-site PMZ (West) will include the B-CZ/B-TZ PCLE Zone on the west side of the Site within the UPRR-owned property and a small portion of undeveloped City of Houston ROW.*
 3. *Off-Site PMZ [pending] - The off-site PMZ includes the cumulative groundwater PCLE Zone that extends off-site to the north of the Site, but not including City of Houston ROW. The proposed off-site PMZ will require institutional controls for up to 88 individual properties.*
 4. *Off-Site PMZ City of Houston ROW - The off-site PMZ includes the cumulative groundwater PCLE Zone that extends off-site to the north of the Site within the City of Houston ROW.*

Groundwater monitoring is proposed to be performed as part of the PMZ to confirm that the lateral extent of COC concentrations greater than their respective cPCLs continue to remain within the boundaries of the PMZ. Groundwater monitoring will be initiated for the on-site PMZ, off-site PMZ City of Houston ROW, and within the proposed Off-Site PMZ [pending approval following deed recordation] following approval of the RAP. During the acquisition of landowner consent for the off-site PMZ, groundwater monitoring will be conducted concurrently with the on-site PMZ monitoring requirements. DNAPL will be recovered from monitoring wells on a periodic basis through pumping to recover the readily recoverable NAPL for the GWBUs to satisfy requirements of the “no growth” PMZ and TI Zone.

- g. Please provide detailed descriptions of GW recovery and other remedial technologies such as

vapor extraction, interceptor trenches, hydraulic containment, barrier walls, etc., including radius of influence, estimated optimum recovery rates, location of collection, storage or disposal facilities.

As discussed in the RAP, Worksheet 2.0 (CP Attachment XI.D), UPRR initiated a 24-month pilot study in February 2013 through January 2015 to evaluate DNAPL recovery at the Site by conducting tests on selected wells where DNAPL had been observed. Details of the scope of work for the pilot test were submitted to the TCEQ in a letter dated February 5, 2013 (PBW, 2013). A copy of the scope of work is provided in Appendix 3 of the RAP (CP Attachment XI.D). The pilot test procedures consists of measuring the depth to groundwater surface, the depth to the groundwater/DNAPL interface, and the total depth of the well relative to the top of well casing prior to DNAPL recovery. Using a peristaltic or diaphragm pump, DNAPL is pumped from the bottom of the well until groundwater is returned in the pump discharge. The volume of recovered DNAPL is estimated from each well, and the well is gauged to measure the total depth of the well and depth to residual DNAPL following pumping. Recovered DNAPL is temporarily stored at the Containment Storage Area. PBW submitted to the TCEQ in a letter dated April 9, 2015 the results of the 24-month pilot test. A copy of the letter is also provided in Appendix 3 of the RAP (CP Attachment XI.D). The conclusions from the pilot test included that once per month DNAPL recovery activities are resulting in an overall stable DNAPL thickness trend in the wells tested, and the current monthly recovery frequency appears to be effective with total DNAPL volume recovered becoming stable in the wells over time. More frequent DNAPL recovery would not likely be effective at the Site. The report indicated that monthly DNAPL recovery activities following the procedures listed in the pilot test work plan would continue at the Site. DNAPL recoverability, including recovery frequency and wells included in the DNAPL Recovery Activities will be evaluated on an annual basis as part of the post-response action care reporting.

- h. Please provide a detailed description of the groundwater monitoring system including placement of monitoring wells, hydrogeologic characteristics of monitored units and well completion details.

See RAP in CP Attachment XI.D, Worksheet 2.1 and Attachment 3A – Tables 1, 2, and 3.

- i. Please provide a Sampling and Analysis plan for the proposed PMZ that includes development of COCs to be monitored, sampling methodology, sample handling procedures, sampling frequency and statistical procedures for evaluating analytical results.

See the Sampling and Analysis Plan (SAP) in CP Attachment XI.C, RAP in CP Attachment XI.D, Worksheet 3.1 and Attachment 3A, and Appendix 7 (Statistical Methodology).

- j. Please propose a methodology for evaluating the effectiveness of remedial measures and potential remedial system enhancements.

See RAP in CP Attachment XI.D, Worksheet 3.0:

Surface/Subsurface Soils

The effectiveness of the response action for the impacted soils within the PCLE Zone to be excavated and relocated within the Area of Contamination will be demonstrated by confirmation sampling from the excavation that indicates COC concentrations in remaining soils are below critical PCLs (commercial/industrial $T_{ot}Soil_{Comb}$). During excavation activities, measures will be conducted to ensure migration of impacted soils do not leave the Area of Contamination (Soil Affected Property). These measures will include silt fencing, dust monitoring and control, and adequate storm water protection and management during the construction activities.

Performance measures for the capped areas (soil cap and asphalt roadway) will include routine cap and roadway inspections to ensure that these areas have not been eroded and thereby exposing soils with COC concentrations greater than cPCLs. Vegetation on the cap will be maintained, with the intent of cultivating vegetation attractive to pollinators. Performance measures for the Englewood Intermodal Yard and City of Houston ROW sidewalk will include routine inspections of the concrete sidewalk or pavement to ensure cracks have not developed in the pavement. Cracks will be repaired in the pavement. Performance measures for the railroad mainlines and sidetracks will be maintained as part of normal railroad operations in the area. These operations will include track and tie maintenance, as well as maintenance of the ballast material for the functions of the rail lines. Inspections of the ballast will assess if areas of exposed soil are present within the soil PCLE Zone.

An inspection and maintenance program for the soil cap, asphalt roadway, Englewood Intermodal Yard pavement, City of Houston ROW sidewalk concrete, and railroad ballast area will be conducted to maintain the integrity of the physical controls and to ensure that they continue to meet the performance objectives. See RAP Worksheet 3.2. (CP Attachment XI.D).

Groundwater

Groundwater monitoring will be performed in conjunction with the PMZ (Standard B) response action proposed for the groundwater PCLE zone. Confirmation that the downgradient extent of the PCLE Zone does not expand outside the boundaries of the on-site and off-site PMZs will be provided by comparing concentrations of these COCs to the AALs or exceedance of a cPCL at an alternate POE well as specified in RAP Worksheet 2.1 (CP Attachment XI.D). In the event that a GWPS concentration in an alternate POE well is exceeded in an initial monitoring sample, a second confirmation sample will be collected within 60 days from the monitoring well where the initial unverified exceedance was observed and analyzed for the specific COC that exceeded its GWPS. If the COC concentration in the second sample is greater than the GWPS, a confirmed exceedance will be concluded and further action will be required, unless an alternate source demonstration can explain the detection. Possible further actions for the Site following a confirmed GWPS exceedance may include modifications to the monitoring frequency or monitoring locations (e.g., installation of additional monitoring locations), re-evaluation of concentration trends in existing monitoring wells, or evaluation of the COC data trends (see CP Attachment XI.D, Appendix 7 for Statistical Methodology). The TCEQ will be promptly notified of any verified exceedances at alternate POE wells.

NAPL Recovery

UPRR will continue monthly DNAPL recovery activities from the wells where DNAPL has been detected and recovered. The results from the 24-month DNAPL recovery pilot test completed in January 2015 (PBW, 2015) indicated the following:

- *Once per month DNAPL recovery activities are resulting in an overall stable DNAPL thickness trend in the wells tested.*

- ***The current monthly recovery frequency appears to be effective with total DNAPL volume recovered becoming stable in the wells over time.***

Performance measures for DNAPL recovery will be no significant DNAPL thickness increase compared to the maximum pre-test thickness in the wells pumped, and no migration of DNAPL to wells that had no previous indication of DNAPL present (in-well observations as well as NAPL noted in the boring log in the GWBU). DNAPL recovery performance and effectiveness will be evaluated annually as part of the post-response action care reporting.

- k. Please propose a reporting schedule to provide updated information on the installation and operation of remedial and monitoring systems.

See RAP in CP Attachment XI.D, Worksheet 6.0.

- l. Please provide a thorough detailed description of an estimate of all costs that will be incurred by implementing, operating, and maintaining the corrective action and monitoring systems addressed by the compliance plan.

See Section XI.E (Cost Estimates for Financial Assurance).

- m. Please provide draft language intended to comply with the deed notification requirements of 350.111, and schedule to verify compliance with institutional control requirements in accordance with 30 TAC 350.31(g) which provides notice of the existence and location of the PMZ and which prevents exposure to groundwater from this zone until such a time as constituents of concern may be reduced to below the GWPS.

See RAP in CP Attachment XI.D Appendix 4.

- n. Schedule for notification requirements if an unexpected event occurs, or a condition is detected, during post-response action care period which indicates that additional response actions will be required at an affected property pursuant to 30 TAC 350.33(k).

See RAP in CP Attachment XI.D, Worksheet 6.0.

- o. Please provide a summary of the approved soil response action plan.

Details of the soil response are provided in the RAP (CP Attachment XI.D). However, implementation of the proposed corrective action for surface soils discussed in the RAP will be initiated prior to approval of the RCRA Permit Renewal.

- p. Please provide a discussion of areas of ecological impact, if any, and development of associated PCLs.

As discussed in the APAR Addendum (dated July 2009 (PBW, 2009)), no areas of ecological

impact were identified, except at AOC 6. To address the human health PCLE zone for surface soils in the area of AOC 6, the proposed response action will be soil removal, which is detailed in the RAP (CP Attachment XI.D). Through this action, the proposed remediation to address human health risk will coincidentally address ecological risk by eliminating the ecological exposure pathways. Therefore, to address the PCLE zone for surface soils in the drainage ditch and AOC 6, no additional ecological risk evaluation will be necessary under the reasoned justification clause (30 TAC §350.77).

- q. Please provide a discussion of how NAPL occurrences, if any, will be addressed inside the PMZ.

See RAP in CP Attachment XI.D, Worksheet 2.1:

To address the NAPL in the PMZs and TI Zone for the three GWBUs (A-TZ, B-CZ/B-TZ, and C-TZ), the NAPL response action objectives and endpoints using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ, B-CZ/B-TZ, and C-TZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of the complex hydrogeology and physical nature of creosote. Readily recoverable NAPL will be recovered from wells on a monthly basis in order to control potential migration from the PMZ. In addition, institutional controls on groundwater use will be implemented to protect exposure to residual NAPL in the GWBUs.

- r. Please provide a schedule of implementation for items not completed at the time of application {See also Section XI.D.8.}

See RAP in CP Attachment XI.D, Worksheet 6.0 and Section XI.D.8.

7. Waste Management Units/Areas Monitored Under Alternative Corrective Action Program for Co-mingled plumes Alternative groundwater Corrective Action Program apply, pursuant 30 TAC 335.151, 335.156 and 350, for commingled release from RCRA-regulated unit and from one or more SWMUs and/or AOC.

Not Applicable

- a. Complete Sections XI.D.1. through 4.;
- b. In addition to the CP Attachment A maps in Section XI.D.4.b., CP Attachment A maps should clearly depict those waste management unit or areas of the facility which have commingled plumes and the alternative corrective action applies.
- c. Please provide a schedule of implementation for items not completed at the time of application {See also Section XI.D.8.}

8. Implementation Schedule

Itemize and discuss, in detail, the estimated time schedule necessary for any testing and assessments, system design, construction and installation, and final implementation of the groundwater monitoring program for each Regulated Unit and solid waste management unit. If the schedule of implementation for items are not completed at the time of the application, or are not completed at the time of issuance of the final draft Compliance Plan, then the items should be added to the CP Table VIII - (Compliance Schedule) of the application.

See Compliance Plan Table VIII (Compliance Schedule).

E. COST ESTIMATES FOR FINANCIAL ASSURANCE

As required by 30 TAC 335.156 and 335.167, the applicant must provide cost estimates for groundwater monitoring and corrective action to determine the amount of financial assurance. Please complete the applicable parts of this form. Cost estimates should be filled out for each proposed corrective action/monitoring system at the site; or any additional corrective action system not covered in this Part. Please note, the Executive Director may request from the applicant documentary evidence for cost estimates.

If an item is not applicable, please mark it NA.

General Information

1. For each Waste Management Area (WMA) list the following:

- a. A description of the waste management unit(s) in the WMA (e.g., landfill, surface impoundment, land treatment);

See Compliance Plan Table I Waste Management Units Subject to Groundwater Corrective Action and Compliance Monitoring. However, the Corrective Action will be conducted on a facility-wide approach, not WMA by WMA.

- b. The NoR unit number(s) in the WMA; and

See Compliance Plan Table I Waste Management Units Subject to Groundwater Corrective Action and Compliance Monitoring

- c. The compliance period for the WMA listed above: Year(s) = 30
(The compliance period is the number of years equal to the active life of the waste management area as defined in 30 TAC 335.162).

- d. In instances where the compliance period is equal to or exceeds 30 years, the maximum amount of financial assurance required will be based on 30 years because the required post-closure care period to perform corrective action and groundwater monitoring is 30 years. In instances where the compliance period is less than 30 years, the financial assurance for corrective action or compliance monitoring will be based on the longest time frame established by one of the following criteria:
(1) the duration of your compliance plan;

- (2) the time frame for clean-up based on model projections and historical data as approved by the Executive Director; or
- (3) the compliance period for the unit/area.

**TOTAL YEARS USED TO CALCULATE THE FINANCIAL ASSURANCE FOR THE
CORRECTIVE ACTION AND/OR COMPLIANCE MONITORING PROGRAM**

YEAR(S) = 30

2. Please complete Table XI.E.1. – Corrective Action Program Cost Estimate.
3. Please complete Table XI.E.2. – Groundwater Monitoring Cost Estimate.
4. Please complete Table XI.E.3. – Financial Assurance Summary

TABLES

CP Table I: Waste Management Units and Areas Subject to Groundwater Corrective Action and Compliance Monitoring

A. Corrective Action¹ (30 TAC §335.166)

RESERVED

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵

B. Compliance Monitoring¹ (30 TAC §335.165)

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵
RCRA Regulated - SWMU 1	Closed Surface Impoundment	NOR 001	Corrective Action Monitoring Program will be terminated and Unit will be subject to Compliance Monitoring upon issuance of the December 10, 2014 Permit Renewal.

C. Corrective Action² (30 TAC §335.167)

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵
SWMU 7 (On-site PMZ)	Tank Car Storage Area	002	<i>Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.</i>
(On-site PMZ)	Sub-surface Tank	003	
(On-site PMZ)	Container Storage Area	004	
(On-site PMZ)	Waste Pile	005	
(On-site PMZ)	Miscellaneous Storage Containers	006	
SWMU 2 (On-site PMZ)	Northern and Southern Drainage Ditches		
SWMU 3 (On-site PMZ)	Oil Drum Storage (ODS) Building		
SWMU 4 (On-site PMZ)	Recent Process Area		
SWMU 5 (On-site PMZ)	Original Process Area		
SWMU 6 (On-site PMZ)	Water Treatment and Boiler System		
SWMU 8 (On-site PMZ)	Aboveground Storage Tank Area		
SWMU 9 (On-site PMZ)	Location of Former UST No. 44-023-05		
SWMU 10 (On-site PMZ)	Location of Former Sap Water Treatment Tank		
SWMU 11 (On-site PMZ)	Oil Water Separators		
SWMU 12 (On-site PMZ)	Railroad Tie Storage Area		

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵
AOC 1 (On-site PMZ)	Diesel Storage Tank		<i>Completion of soil response action objectives are documented in the RACR and approved upon issuance of the December 5, 2014 Permit Renewal application, and as revised November 3, 2015, and July 29, 2016.</i>
AOC 2 (On-site PMZ)	Hose House		
AOC 3 (On-site PMZ)	Contaminated Portion of City Water Line		
AOC 4 (On-site PMZ)	Location of Former Incinerator		
AOC 5 (On-site PMZ)	City Storm Sewer		
AOC 6 (On-site PMZ)	Inactive Wastewater Lagoon		
AOC 7 (On-site PMZ)	Location of Former UST No. 44-023-21		

D. Alternative Corrective Action³ (30 TAC §335.151)

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵
RESERVED			

E. Facility Operations Area (FOA)⁴ (30 TAC §335.156 and Chapter 350)

Unit Type ⁵	Unit Name	Notice of Registration (NOR) Number, if applicable	Date Program Requirement and Remedy Standard Completed ⁵
RESERVED			

Note: “Reserved” if a specific program (referenced in CP Table I.A., I.B., I.C., I.D., and/or I.E.) is not applicable. More than one program may apply to a facility.

Foot Note:

1. Program applies to RCRA-regulated units only.
2. Program applies to releases from solid waste management units (SWMUs) and/or areas of concern (AOCs).
3. Program applies to commingled releases from RCRA-regulated unit and from one or more SWMUs and/or AOCs.
4. List SWMUs, additional units/areas of Investigation, AOCs, RCRA-regulated units within the FOA that are subject to corrective action. For RCRA units, SWMUs and/ or AOC outside the FOA boundary for which compliance monitoring and/ or corrective action applies should be listed separately in Items A, B or C as appropriate.
5. Specify the date of Commissions No Further Action approval letter for program requirement and remedy standard completed for all media of concern.

CP Table II: Solid Waste Management Units and/or Areas of Concern for which Corrective Action applies pursuant to 30 TAC 335.167

Unit Number ¹	Unit Name	Notice of Registration (NOR) Number, if applicable	SWMU or AOC	Media Affected ²	Date Program Requirement and Remedy Standard Completed ³
1.	Closed Surface Impoundment	001	SWMU 1	None	Corrective Action Monitoring Program will be terminated and Unit will be subject to Compliance Monitoring upon issuance of the December 10, 2014 Permit Renewal.
2.	Tank Car Storage Area	002	SWMU 7	Soil	
3.	Sub-surface Tank	003		None	
4.	Container Storage Area	004		None	
5.	Waste Pile	005		None	
6.	Miscellaneous Storage Containers	006		None	
7.	Northern and Southern Drainage Ditches		SWMU 2	Soil	
8.	Oil Drum Storage (ODS) Building		SWMU 3	None	
9.	Recent Process Area		SWMU 4	Soil	
10.	Original Process Area		SWMU 5	Soil	
11.	Water Treatment and Boiler System		SWMU 6	Soil	
12.	Aboveground Storage Tank Area		SWMU 8	Soil	
13.	Location of Former UST No. 44-023-05		SWMU 9	Soil	
14.	Location of Former Sap Water Treatment Tank		SWMU 10	None	
15.	Oil Water Separators		SWMU 11	None	
16.	Railroad Tie Storage Area		SWMU 12	Soil	
17.	Diesel Storage Tank		AOC 1	Soil	
18.	Hose House		AOC 2	Soil	
19.	Contaminated Portion of City Water Line		AOC 3	Soil	
20.	Location of Former Incinerator		AOC 4	None	
21.	City Storm Sewer		AOC 5	Soil	
22.	Inactive Wastewater Lagoon		AOC 6	Soil	
23.	Location of Former UST No. 44-023-21		AOC 7	Soil	

Foot Note:

SWMU = Solid Waste Management Unit

AOC = Area of Concern

- For sites with FOA Authorization, list SWMUs and/or AOCs that were not included in the FOA, and are subject to corrective action.
- Specify affected media groundwater, soils, etc.
- Specify the date of Commissions No Further Action approval letter for program requirement and remedy standard completed for all media of concern.

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

On-Site PMZ (Main and West)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN C Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (APOE) ^{GW} GW _{ing} (mg/l) (C/I)
On Site – Site Wide PMZ	1,2-Dichloroethane	NE	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Benzene	A-TZ – 1.5 ^{AAL} B-CZ/B-TZ – 38.45 ^{AAL} C-TZ – 0.13 ^{AAL}	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Chlorobenzene	NE	A-TZ/B-TZ/C-TZ - 1.0E-01 ^{MCL/PCL} B-CZ - 1.0E+01 ^{MCL/PCL}
	Ethylbenzene	NE	A-TZ/B-TZ/C-TZ - 7.0E-01 ^{MCL/PCL} B-CZ - 7.0E-01 ^{MCL/PCL}
	Methylene Chloride	NE	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Toluene	NE	A-TZ/B-TZ/C-TZ - 1.0E+00 ^{MCL/PCL} B-CZ - 1.0E+02 ^{MCL/PCL}
	Xylenes (total)	NE	A-TZ/B-TZ/C-TZ - 1.0E+01 ^{MCL/PCL} B-CZ - 1.0E+03 ^{MCL/PCL}
	Vinyl Chloride (selected well)*	NE	A-TZ/B-TZ/C-TZ - 2.0E-03 ^{MCL/PCL} B-CZ - 2.0E-01 ^{MCL/PCL}
	1,2-Diphenylhydrazine	NE	A-TZ/B-TZ/C-TZ - 2.6E-03 ^{PCL} B-CZ - 2.6E-01 ^{PCL}
	2,4-Dimethylphenol	A-TZ – 24 ^{AAL} **B-CZ - 150 ^{PCL} B-TZ – 72 ^{AAL} C-TZ – 9.74 ^{AAL}	A-TZ/B-TZ/C-TZ - 1.5E+00 ^{PCL} B-CZ - 1.5E+02 ^{PCL}
	2,4-Dinitrotoluene	NE	A-TZ/B-TZ/C-TZ - 3.0E-03 ^{PCL} B-CZ - 3.0E-01 ^{PCL}
	2,6-Dinitrotoluene	NE	A-TZ/B-TZ/C-TZ - 3.0E-03 ^{PCL} B-CZ - 3.0E-01 ^{PCL}
	2-Chloronaphthalene	NE	A-TZ/B-TZ/C-TZ - 5.8E+00 ^{PCL} B-CZ - 5.8E+02 ^{PCL}
	2-Methyl-4,6-dinitrophenol	NE	A-TZ/B-TZ/C-TZ - 7.3E-03 ^{PCL} B-CZ - 7.3E-01 ^{PCL}
	2-Methylnaphthalene	A-TZ – 1.5 ^{AAL} **B-CZ - 29 ^{PCL} B-TZ – 2.4 ^{AAL} C-TZ – 28 ^{AAL}	A-TZ/B-TZ/C-TZ - 2.9E-01 ^{PCL} B-CZ - 2.9E+01 ^{PCL}
	4-Nitrophenol	NE	A-TZ/B-TZ/C-TZ - 1.5E-01 ^{PCL} B-CZ - 1.5E+01 ^{PCL}

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

On-Site PMZ (Main and West) (cont.)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN C Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (APOE) ^{GW} GW _{ing} (mg/l) (C/I)
	Acenaphthene	NE	A-TZ/B-TZ/C-TZ - 4.4E+00 ^{PCL} B-CZ - 4.4E+02 ^{PCL}
	Acenaphthylene	NE	A-TZ/B-TZ/C-TZ - 4.4E+00 ^{PCL} B-CZ - 4.4E+02 ^{PCL}
	Anthracene	NE	A-TZ/B-TZ/C-TZ - 2.2E+01 ^{PCL} B-CZ - 2.2E+03 ^{PCL}
	Benzo(a)anthracene	NE	A-TZ/B-TZ/C-TZ - 2.8E-03 ^{PCL} B-CZ - 2.8E-01 ^{PCL}
	Benzo(a)pyrene	NE	A-TZ/B-TZ/C-TZ - 2.0E-04 ^{MCL/PCL} B-CZ - 2.0E-02 ^{MCL/PCL}
	bis(2-chloroethoxy)methane	NE	A-TZ/B-TZ/C-TZ - 1.9E-03 ^{PCL} B-CZ - 1.9E-01 ^{PCL}
	bis(2-ethylhexyl)phthalate	NE	A-TZ/B-TZ/C-TZ - 6.0E-03 ^{MCL/PCL} B-CZ - 6.0E-01 ^{MCL/PCL}
	Chrysene	NE	A-TZ/B-TZ/C-TZ - 2.8E-01 ^{PCL} B-CZ - 2.8E+01 ^{PCL}
	Dibenzofuran	A-TZ – 0.52 ^{AAL} **B-CZ - 29 ^{PCL} B-TZ – 0.65 ^{AAL} C-TZ – 46 ^{AAL}	A-TZ/B-TZ/C-TZ - 2.9E-01 ^{PCL} B-CZ - 2.9E+01 ^{PCL}
	Di-n-butyl Phthalate	NE	A-TZ/B-TZ/C-TZ - 7.3E+00 ^{PCL} B-CZ - 7.3E+02 ^{PCL}
	Fluoranthene	NE	A-TZ/B-TZ/C-TZ - 2.9E+00 ^{PCL} B-CZ - 2.9E+02 ^{PCL}
	Fluorene	NE	A-TZ/B-TZ/C-TZ - 2.9E+00 ^{PCL} B-CZ - 2.9E+02 ^{PCL}
	Naphthalene	A-TZ – 26.16 ^{AAL} **B-CZ - 150 ^{PCL} B-TZ – 87.86 ^{AAL} C-TZ – 83 ^{AAL}	A-TZ/B-TZ/C-TZ - 1.5E+00 ^{PCL} B-CZ - 1.5E+02 ^{PCL}
	Nitrobenzene	NE	A-TZ/B-TZ/C-TZ - 1.5E-01 ^{PCL} B-CZ - 1.5E+01 ^{PCL}

**CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste
 Constituents and the Groundwater Protection Standard**

On-Site PMZ (Main and West) (cont.)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN C Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (APOE) ^{GW} GW _{ing} (mg/l) (C/I)
	n-Nitrosodiphenylamine	NE	A-TZ/B-TZ/C-TZ - 4.2E-01 ^{PCL} B-CZ - 4.2E+01 ^{PCL}
	Pentachlorophenol	NE	A-TZ/B-TZ/C-TZ - 1.0E-03 ^{PCL} B-CZ - 1.0E-01 ^{PCL}
	Phenanthrene	NE	A-TZ/B-TZ/C-TZ - 2.2E+00 ^{PCL} B-CZ - 2.2E+02 ^{PCL}
	Phenol	NE	A-TZ/B-TZ/C-TZ - 2.2E+01 ^{PCL} B-CZ - 2.2E+03 ^{PCL}
	Pyrene	NE	A-TZ/B-TZ/C-TZ - 2.2E+00 ^{PCL} B-CZ - 2.2E+02 ^{PCL}

Note:

^{GW}GW_{ing} Protective Concentration Levels (PCLs), Commercial/Industrial assuming Class 2 Groundwater for A-TZ, B-TZ, and C-TZ GWBU, Class 3 Groundwater for B-CZ GWBU, March 31, 2017; Table 3.

AAL – Attenuation Action Levels established in CP Attachment XI.D, value listed is maximum AAL for the GWBU PMZ

NE – Not established (see CP Attachment XI.D)

AMP – Attenuation Monitoring Point, established for each groundwater-bearing unit (GWBU) (A-TZ, B-CZ/B-TZ, and C-TZ) where Plume Management Zones (PMZ) are established (see CP Attachment XI.D)

* Vinyl Chloride shall be sampled in accordance with the schedule specified in CP Table VIII.

** - Class 3 Groundwater PCLs used for Groundwater Protection Standards at AMPs instead of calculating AALs. AAL was not calculated since no groundwater PCL exceedance (PCLE) zone was observed in the B-CZ for the given COC.

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

Off-Site PMZ (City of Houston-owned ROW and Non-UPRR owned Properties)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN B Groundwater Protection Standards (GWPS) at Point of Exposure (POE) ^{GW} GW _{ing} (mg/l) (Res)
Off Site PMZ	1,2-Dichloroethane	NE	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Benzene	A-TZ – 1.5 ^{AAL} B-CZ/B-TZ – 38.45 ^{AAL} C-TZ – 0.13 ^{AAL}	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Chlorobenzene	NE	A-TZ/B-TZ/C-TZ - 1.0E-01 ^{MCL/PCL} B-CZ - 1.0E+01 ^{MCL/PCL}
	Ethylbenzene	NE	A-TZ/B-TZ/C-TZ - 7.0E-01 ^{MCL/PCL} B-CZ - 7.0E-01 ^{MCL/PCL}
	Methylene Chloride	NE	A-TZ/B-TZ/C-TZ - 5.0E-03 ^{MCL/PCL} B-CZ - 5.0E-01 ^{MCL/PCL}
	Toluene	NE	A-TZ/B-TZ/C-TZ - 1.0E+00 ^{MCL/PCL} B-CZ - 1.0E+02 ^{MCL/PCL}
	Xylenes (total)	NE	A-TZ/B-TZ/C-TZ - 1.0E+01 ^{MCL/PCL} B-CZ - 1.0E+03 ^{MCL/PCL}
	Vinyl Chloride (selected wells)*	NE	A-TZ/B-TZ/C-TZ - 2.0E-03 ^{MCL/PCL} B-CZ - 2.0E-01 ^{MCL/PCL}
	1,2-Diphenylhydrazine	NE	A-TZ/B-TZ/C-TZ - 1.1E-03 ^{PCL} B-CZ -
	2,4-Dimethylphenol	A-TZ – 24 ^{AAL} B-CZ/B-TZ – 72 ^{AAL} C-TZ – 9.74 ^{AAL}	A-TZ/B-TZ/C-TZ - 4.9E-01 ^{PCL} B-CZ - 4.9E+01 ^{PCL}
	2,4-Dinitrotoluene	NE	A-TZ/B-TZ/C-TZ - 1.3E-03 ^{PCL} B-CZ - 1.3E-01 ^{PCL}
	2,6-Dinitrotoluene	NE	A-TZ/B-TZ/C-TZ - 1.3E-03 ^{PCL} B-CZ - 1.3E-01 ^{PCL}
	2-Chloronaphthalene	NE	A-TZ/B-TZ/C-TZ - 2.0E+00 ^{PCL} B-CZ - 2.0E+02 ^{PCL}
	2-Methyl-4,6-dinitrophenol	NE	A-TZ/B-TZ/C-TZ - 2.4E-03 ^{PCL} B-CZ - 2.4E-01 ^{PCL}
	2-Methylnaphthalene	A-TZ – 1.5 ^{AAL} **B-CZ-9.8 ^{PCL} B-TZ – 2.4 ^{AAL} C-TZ – 28 ^{AAL}	A-TZ/B-TZ/C-TZ - 9.8E-02 ^{PCL} B-CZ - 9.8E+00 ^{PCL}

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

Off-Site PMZ (City of Houston-owned ROW and Non-UPRR owned Properties) (cont.)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN B Groundwater Protection Standards (GWPS) at Point of Exposure (POE) ^{GW} GW _{ing} (mg/l) (Res)
	4-Nitrophenol	NE	A-TZ/B-TZ/C-TZ - 4.9E-02 ^{PCL} B-CZ - 4.9E+00 ^{PCL}
	Acenaphthene	NE	A-TZ/B-TZ/C-TZ - 1.5E+00 ^{PCL} B-CZ - 1.5E+02 ^{PCL}
	Acenaphthylene	NE	A-TZ/B-TZ/C-TZ - 1.5E+00 ^{PCL} B-CZ - 1.5E+02 ^{PCL}
	Anthracene	NE	A-TZ/B-TZ/C-TZ - 7.3E+00 ^{PCL} B-CZ - 7.3E+02 ^{PCL}
	Benzo(a)anthracene	NE	A-TZ/B-TZ/C-TZ - 1.3E-03 ^{PCL} B-CZ - 1.3E-01 ^{PCL}
	Benzo(a)pyrene	NE	A-TZ/B-TZ/C-TZ - 2.0E-04 ^{MCL/PCL} B-CZ - 2.0E-02 ^{MCL/PCL}
	bis(2-chloroethoxy)methane	NE	A-TZ/B-TZ/C-TZ - 8.3E-04 ^{PCL} B-CZ - 8.3E-02 ^{PCL}
	bis(2-ethylhexyl)phthalate	NE	A-TZ/B-TZ/C-TZ - 6.0E-03 ^{MCL/PCL} B-CZ - 6.0E-01 ^{MCL/PCL}
	Chrysene	NE	A-TZ/B-TZ/C-TZ - 1.3E-01 ^{PCL} B-CZ - 1.3E+01 ^{PCL}
	Dibenzofuran	A-TZ – 0.52 ^{AAL} **B-CZ - 9.8 ^{PCL} B-TZ – 0.65 ^{AAL} C-TZ – 46 ^{AAL}	A-TZ/B-TZ/C-TZ - 9.8E-02 ^{PCL} B-CZ - 9.8E-00 ^{PCL}
	Di-n-butyl Phthalate	NE	A-TZ/B-TZ/C-TZ - 2.4E+00 ^{PCL} B-CZ - 2.4E+02 ^{PCL}
	Fluoranthene	NE	A-TZ/B-TZ/C-TZ - 9.8E-01 ^{PCL} B-CZ - 9.8E+01 ^{PCL}
	Fluorene	NE	A-TZ/B-TZ/C-TZ - 9.8E-01 ^{PCL} B-CZ - 9.8E+01 ^{PCL}
	Naphthalene	A-TZ – 26.16 ^{AAL} **B-CZ - 49 ^{PCL} B-TZ – 87.86 ^{AAL} C-TZ – 83 ^{AAL}	A-TZ/B-TZ/C-TZ - 4.9E-01 ^{PCL} B-CZ - 4.9E+01 ^{PCL}
	Nitrobenzene	NE	A-TZ/B-TZ/C-TZ - 4.9E-02 ^{PCL} B-CZ - 4.9E+00 ^{PCL}

CP Table III: Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard

Off-Site PMZ (City of Houston-owned ROW and Non-UPRR owned Properties) (cont.)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{Ing} (mg/l)	COLUMN B Groundwater Protection Standards (GWPS) at Point of Exposure (POE) ^{GW} GW _{Ing} (mg/l) (Res)
	n-Nitrosodiphenylamine	NE	A-TZ/B-TZ/C-TZ - 1.9E-01 ^{PCL} B-CZ - 1.9E+01 ^{PCL}
	Pentachlorophenol	NE	A-TZ/B-TZ/C-TZ - 1.0E-03 ^{PCL} B-CZ - 1.0E-01 ^{PCL}
	Phenanthrene	NE	A-TZ/B-TZ/C-TZ - 7.3E-01 ^{PCL} B-CZ - 7.3E+01 ^{PCL}
	Phenol	NE	A-TZ/B-TZ/C-TZ - 7.3E+00 ^{PCL} B-CZ - 7.3E+02 ^{PCL}
	Pyrene	NE	A-TZ/B-TZ/C-TZ - 7.3E-01 ^{PCL} B-CZ - 7.3E+01 ^{PCL}

Note:

^{GW}GW_{Ing} Protective Concentration Levels (PCLs), Residential assuming Class 2 Groundwater for A-TZ, B-TZ, and C-TZ GWBU, Class 3 Groundwater for B-CZ GWBU, March 31, 2017; Table 3.

AAL – Attenuation Action Levels established in CP Attachment XI.D, value listed is maximum AAL for the GWBU PMZ

NE – Not established (see CP Attachment XI.D)

AMP – Attenuation Monitoring Point, established for each groundwater-bearing unit (GWBU) (A-TZ, B-CZ/B-TZ, and C-TZ) where Plume Management Zones (PMZ) are established (see CP Attachment XI.D)

* Vinyl Chloride shall be sampled in accordance with the schedule specified in CP Table VIII.

** - Class 3 Groundwater PCLs used for Groundwater Protection Standards at AMPs instead of calculating AALs. AAL was not calculated since no groundwater PCL exceedance (PCLE) zone was observed in the B-CZ for the given COC.

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard

On-Site PMZ (Main and West)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN C Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (APOE) ^{GW} GW _{ing} (mg/l) (C/I)
A-TZ	Benzene	1.5 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	24 ^{AAL}	1.5 ^{PCL}
	2 Methyl-naphthalene	1.5 ^{AAL}	0.29 ^{PCL}
	Dibenzofuran	0.52 ^{AAL}	0.29 ^{PCL}
	Naphthalene	26.16 ^{AAL}	1.5 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}
B-CZ**	Benzene	38.45 ^{AAL}	0.5 ^{MCL/PCL}
	2,4-Dimethylphenol	NE	150 ^{PCL}
	2 Methyl-naphthalene	NE	29 ^{PCL}
	Dibenzofuran	NE	29 ^{PCL}
	Naphthalene	NE	150 ^{PCL}
	Vinyl Chloride*	NE	0.2 ^{MCL/PCL}
B-TZ	Benzene	38.45 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	72 ^{AAL}	1.5 ^{PCL}
	2 Methyl-naphthalene	2.4 ^{AAL}	0.29 ^{PCL}
	Dibenzofuran	0.65 ^{AAL}	0.29 ^{PCL}
	Naphthalene	87.86 ^{AAL}	1.5 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}
C-TZ	Benzene	0.13 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	9.74 ^{AAL}	1.5 ^{PCL}
	2 Methyl-naphthalene	28 ^{AAL}	0.29 ^{PCL}
	Dibenzofuran	46 ^{AAL}	0.29 ^{PCL}
	Naphthalene	83 ^{AAL}	1.5 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}

Note:

^{GW}GW_{ing} Protective Concentration Levels (PCLs), Commercial/Industrial assuming Class 2 Groundwater for A-TZ, B-TZ, and C-TZ GWBU, **Class 3 Groundwater for B-CZ GWBU, March 31, 2017; Table 3.

AAL – Attenuation Action Levels established in CP Attachment XI.D, value listed is maximum AAL for the GWBU PMZ

NE – Not established (see CP Attachment XI.D)

AMP – Attenuation Monitoring Point, established for each groundwater-bearing unit (GWBU) (A-TZ, B-CZ/B-TZ, and C-TZ) where Plume Management Zones (PMZ) are established (see CP Attachment XI.D)

* Vinyl Chloride shall be sampled in accordance with the schedule specified in CP Table VIII.

** - Class 3 Groundwater PCLs used to develop GWPS for B-CZ GWBU.

CP Table IIIA: Corrective Action Program Table of Indicator Parameters and Groundwater Protection Standard

Off-Site PMZ (City of Houston-owned ROW and Non-UPRR Owned Properties)

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standards at Attenuation Monitoring Point (AMP) ^{GW} GW _{ing} (mg/l)	COLUMN C Groundwater Protection Standards (GWPS) at Point of Exposure (POE) ^{GW} GW _{ing} (mg/l) (Res)
A-TZ	Benzene	1.5 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	24 ^{AAL}	0.49 ^{PCL}
	2 Methyl-naphthalene	1.5 ^{AAL}	0.098 ^{PCL}
	Dibenzofuran	0.52 ^{AAL}	0.098 ^{PCL}
	Naphthalene	26.16 ^{AAL}	0.49 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}
B-CZ**	Benzene	38.45 ^{AAL}	0.5 ^{MCL/PCL}
	2,4-Dimethylphenol	72 ^{AAL}	49 ^{PCL}
	2 Methyl-naphthalene	NE	9.8 ^{PCL}
	Dibenzofuran	NE	9.8 ^{PCL}
	Naphthalene	NE	49 ^{PCL}
	Vinyl Chloride*	NE	0.2 ^{MCL/PCL}
B-TZ	Benzene	38.45 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	72 ^{AAL}	0.49 ^{PCL}
	2 Methyl-naphthalene	2.4 ^{AAL}	0.098 ^{PCL}
	Dibenzofuran	0.65 ^{AAL}	0.098 ^{PCL}
	Naphthalene	87.86 ^{AAL}	0.49 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}
C-TZ	Benzene	0.13 ^{AAL}	0.005 ^{MCL/PCL}
	2,4-Dimethylphenol	9.74 ^{AAL}	0.49 ^{PCL}
	2 Methyl-naphthalene	28 ^{AAL}	0.098 ^{PCL}
	Dibenzofuran	46 ^{AAL}	0.098 ^{PCL}
	Naphthalene	83 ^{AAL}	0.49 ^{PCL}
	Vinyl Chloride*	NE	0.002 ^{MCL/PCL}

Note:

^{GW}GW_{ing} Protective Concentration Levels (PCLs), Commercial/Industrial assuming Class 2 Groundwater for A-TZ, B-TZ, and C-TZ GWBU, **Class 3 Groundwater for B-CZ GWBU, November 12, 2014; Table 3.

AAL – Attenuation Action Levels established in CP Attachment XI.D, value listed is maximum AAL for the GWBU PMZ

NE – Not established (see CP Attachment XI.D)

AMP – Attenuation Monitoring Point, established for each groundwater-bearing unit (GWBU) (A-TZ, B-CZ/B-TZ, and C-TZ) where Plume Management Zones (PMZ) are established (see CP Attachment XI.D)

*Vinyl Chloride shall be sampled in accordance with the schedule specified in CP Table VIII.

** - Class 3 Groundwater PCLs used to develop GWPS for B-CZ GWBU.

CP Table IV: Compliance Monitoring Program Table of Hazardous and Solid Waste Constituents and Quantitation Limits

Solid Waste Management Unit (SWMU) 1

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Quantitation Limits (mg/l)
SWMU 1 A-TZ	Acenaphthene	ND (0.01)
	Acenaphthylene	ND (0.01)
	Anthracene	ND (0.01)
	bis(2-ethylhexyl)phthalate	ND (0.01)
	Dibenzofuran	ND (0.01)
	Fluoranthene	ND (0.01)
	Fluorene	ND (0.01)
	2-Methylnaphthalene	ND (0.01)
	Naphthalene	ND (0.01)
	Phenanthrene	ND (0.01)
Pyrene	ND (0.01)	
SWMU 1 B-TZ	Acenaphthene	ND (0.01)
	Acenaphthylene	ND (0.01)
	Anthracene	ND (0.01)
	bis(2-ethylhexyl)phthalate	ND (0.01)
	Dibenzofuran	ND (0.01)
	Di-n-butyl phthalate	ND (0.01)
	Fluoranthene	ND (0.01)
	Fluorene	ND (0.01)
	Naphthalene	ND (0.01)
	Phenol	ND (0.01)
Pyrene	ND (0.01)	

Note:

ND – Not detectable at the method quantitation limit (MQL), which is defined in §350.4(54) as “The lowest non-zero concentration standard in the laboratory’s initial calibration curve and is based on the final volume of extract (or sample) used by the laboratory.” Values listed above from SW-846 Update V, Revision 5 (July 2014), Lower Limits of Quantitation.

CP Table IVA: Compliance Monitoring Program Table of Detected Hazardous Constituents and the Groundwater Protection Standard

Solid Waste Management Unit (SWMU) 1

Unit Name	COLUMN A Hazardous Constituents	COLUMN B Groundwater Protection Standard (^{GW} GW _{ing}) (mg/l)
SWMU 1 A-TZ	Acenaphthene	1.5 ^{PCL}
	Acenaphthylene	1.5 ^{PCL}
	Anthracene	7.3 ^{PCL}
	bis(2-ethylhexyl)phthalate	0.006 ^{MCL/PCL}
	Dibenzofuran	0.098 ^{PCL}
	Fluoranthene	0.98 ^{PCL}
	Fluorene	0.98 ^{PCL}
	2-Methylnaphthalene	0.098 ^{PCL}
	Naphthalene	0.49 ^{PCL}
	Phenanthrene	0.73 ^{PCL}
	Pyrene	0.73 ^{PCL}
SWMU 1 B-TZ	Acenaphthene	1.5 ^{PCL}
	Acenaphthylene	1.5 ^{PCL}
	Anthracene	7.3 ^{PCL}
	bis(2-ethylhexyl)phthalate	0.006 ^{MCL/PCL}
	Dibenzofuran	0.098 ^{PCL}
	Di-n-butyl phthalate	2.4 ^{PCL}
	Fluoranthene	0.98 ^{PCL}
	Fluorene	0.98 ^{PCL}
	Naphthalene	0.49 ^{PCL}
	Phenol	7.3 ^{PCL}
	Pyrene	0.73 ^{PCL}

Note:
^{GW}GW_{ing} Protective Concentration Levels (PCLs), Residential land use assuming Class 2 Groundwater, November 12, 2014; Table 3.

CP Table V: Designation of Wells

Point of Compliance Wells: (SWMU 1 Only)

- A-TZ POC wells: MW-01A, MW-02, MW-07, MW-10A, and MW-11A;
- B-TZ POC wells: MW-10B, MW-11B, and P-10.

Point of Exposure Wells:

NONE

Alternate Point of Exposure Wells (PMZ Wells):

1. A-TZ
MW-15A, MW-25A, *MW-26A, MW-28A, *MW-35A, *MW-36A, MW-50A, MW-59A, MW-60A, MW-61A, MW-69A, MW-77A
2. B-TZ
*MW-36B, MW-38B, MW-39B, MW-42B, MW-59B, MW-62B, *MW-63B, MW-80B, MW-81B, P-11, **PMW-83B, **PMW-84B
3. C-TZ
MW-15C, MW-28C, MW-47C, MW-48C, MW-54C, **PMW-83C, **PMW-85C, **PMW-87C, **PMW-88C

Background Wells (SWMU 1):

1. A-TZ
MW-8
2. B-TZ
P-12

FOA Boundary of Compliance Wells Background Wells:

Exposure Pathway: (e.g. SWGW - Groundwater to surface water PCL for Brazos River or Barge Canal, etc)

NONE

Note: Wells that are not listed in this table are subject to change, upon approval by the Executive Director, without modification to the Compliance Plan.

* - Proposed APOE Wells for the Off-Site PMZ, pending deed recordation, will be corrective action observation wells pending PMZ approval.

** - Proposed well, will be installed following approval of the Response Action Plan (see CP Attachment XI.D)

CP Table VI: Compliance Period for RCRA-Regulated Units

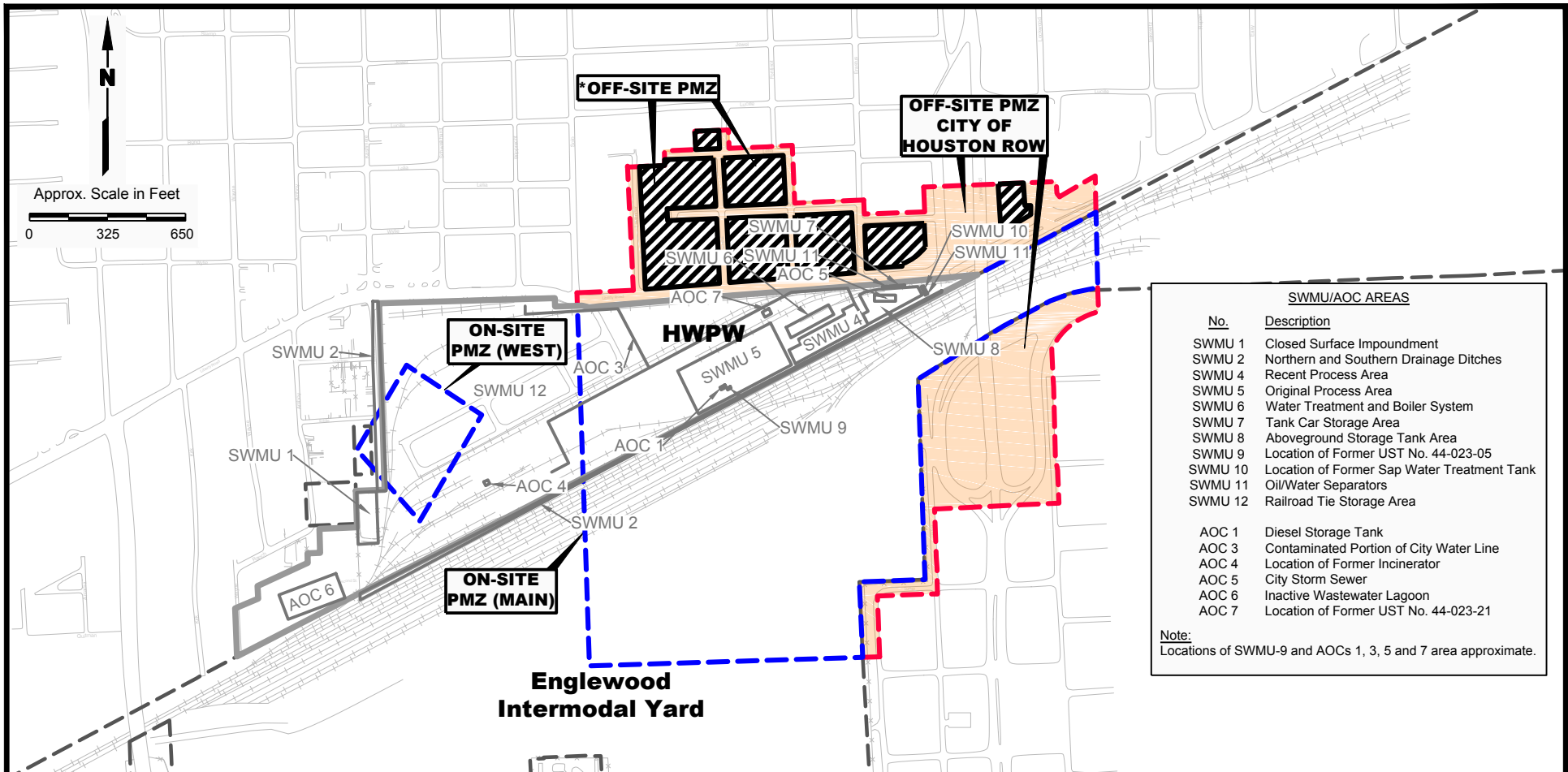
SWMU 1	Year or Number of Years
Year Waste Management Activities Initiated	1979
Year Closed (Certified Closed)	1984 (April 18)
Compliance Period	5 Years
Compliance Period Began	1994
Compliance Period Remaining	0 Years (2009)

CP Table VIII: Compliance Schedule

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
A.	60	Compliance Plan	Submit to the Executive Director a schedule summarizing all activities required by the Compliance Plan. The schedule shall list the starting dates of all routine activities. The Permittee shall include an updated schedule in the report required by Compliance Plan CP Table VII – Reporting Requirements. The schedule shall list the activity or report, the Compliance Plan Section which requires the activity or report and the calendar date the activity or report it to be completed or submitted (if this date can be determined).
B.	120 days from Compliance Plan Issuance	30 TAC §350.31(g)	Submit to the Executive Director proof of compliance with institutional control requirements in accordance with which provides notice of the existence and location of the Plume Management Zone (PMZ) and which prevents exposure to groundwater from this zone until such a time as constituents of concern may be reduced to below the Groundwater Protection Standards of CP Table III – Corrective Action Program Table of Detected Hazardous and Solid Waste Constituents and the Groundwater Protection Standard. <ul style="list-style-type: none"> • Filing of deed recordation for UPRR-owned properties requiring commercial/industrial land use and prohibiting groundwater use. Deed recordation will also restrict excavation activities over capped areas. • Filing of restrictive covenants prohibiting groundwater use for off-site PMZ.
C.	Notify within 30 days	30 TAC §350.33(k)	After an unexpected event occurs, or a condition is detected, during post-response action care period which indicates that additional response actions will be required at an affected property.
D.	Within 60 Days of Compliance Plan Issuance		DNAPL recovery will continue monthly on the portion of the site in which DNAPLs is recoverable in the Corrective Action System Wells.
E.	Within 60 Days of Compliance Plan Issuance		Collect groundwater sample from MW-66D to evaluate for benzo(a)pyrene concentrations
F.	During Second and Fourth Quarters of each year	30 TAC §350.33(4)(D)	Conduct groundwater monitoring events for those units listed in CP Table I that are subject to Compliance and Corrective action monitoring.
G.	Annually in accordance with CP Table VII		The Groundwater monitoring report required by CP Table VII shall include the results of all remediation and post-response action activities at the site, including Post Response Action Care Reports, and DNAPL recovery activities.

Item	Compliance Schedule (from the date of issuance of the Compliance Plan unless otherwise specified)	Regulatory Citation	Requirement
H.	During Second and Fourth Quarters of each year		Off-site MW-33BR and On-site wells MW-18A and MW-17C shall be sampled for vinyl chloride.

CP ATTACHMENT A



SWMU/AOC AREAS	
No.	Description
SWMU 1	Closed Surface Impoundment
SWMU 2	Northern and Southern Drainage Ditches
SWMU 4	Recent Process Area
SWMU 5	Original Process Area
SWMU 6	Water Treatment and Boiler System
SWMU 7	Tank Car Storage Area
SWMU 8	Aboveground Storage Tank Area
SWMU 9	Location of Former UST No. 44-023-05
SWMU 10	Location of Former Sap Water Treatment Tank
SWMU 11	Oil/Water Separators
SWMU 12	Railroad Tie Storage Area
AOC 1	Diesel Storage Tank
AOC 3	Contaminated Portion of City Water Line
AOC 4	Location of Former Incinerator
AOC 5	City Storm Sewer
AOC 6	Inactive Wastewater Lagoon
AOC 7	Location of Former UST No. 44-023-21

Note:
Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.

EXPLANATION

- UPRR Property Boundary
 - Road, Parking Lot, Sidewalk
 - *-*- Fence
 - +—+ Railroad
 - UPRR Facility Boundary
- Proposed Cumulative PMZ
(A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
 - - - Off-Site PMZ*
 - Off-Site PMZ City of Houston ROW
 - *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.

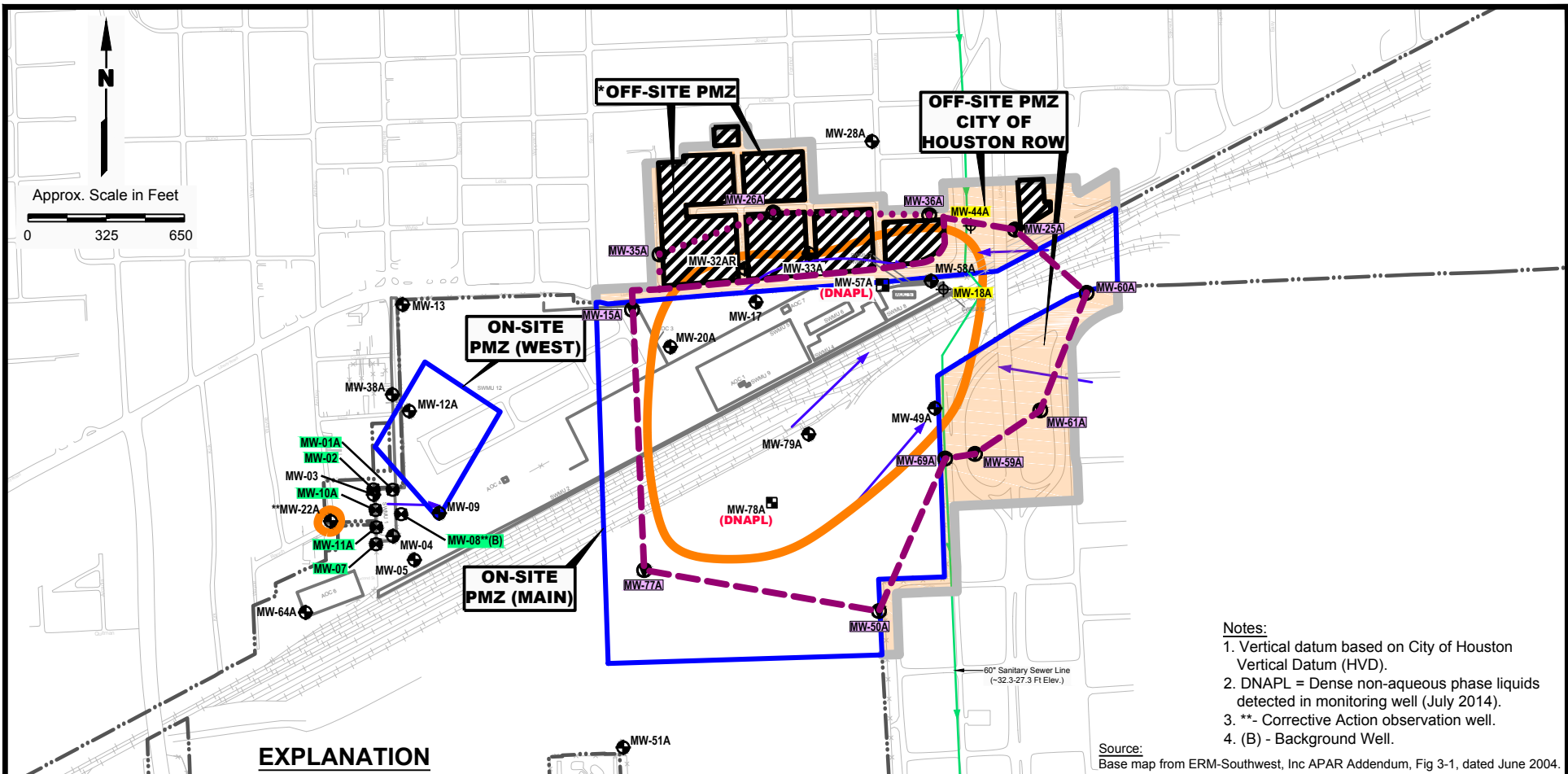
HOUSTON WOOD PRESERVING WORKS

CP Attachment A, Sheet 2 of 7

SOLID WASTE MANAGEMENT UNITS (SWMU)/AREAS OF CONCERN (AOC) LOCATION MAP

PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	Rev 4 - June 2017

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS



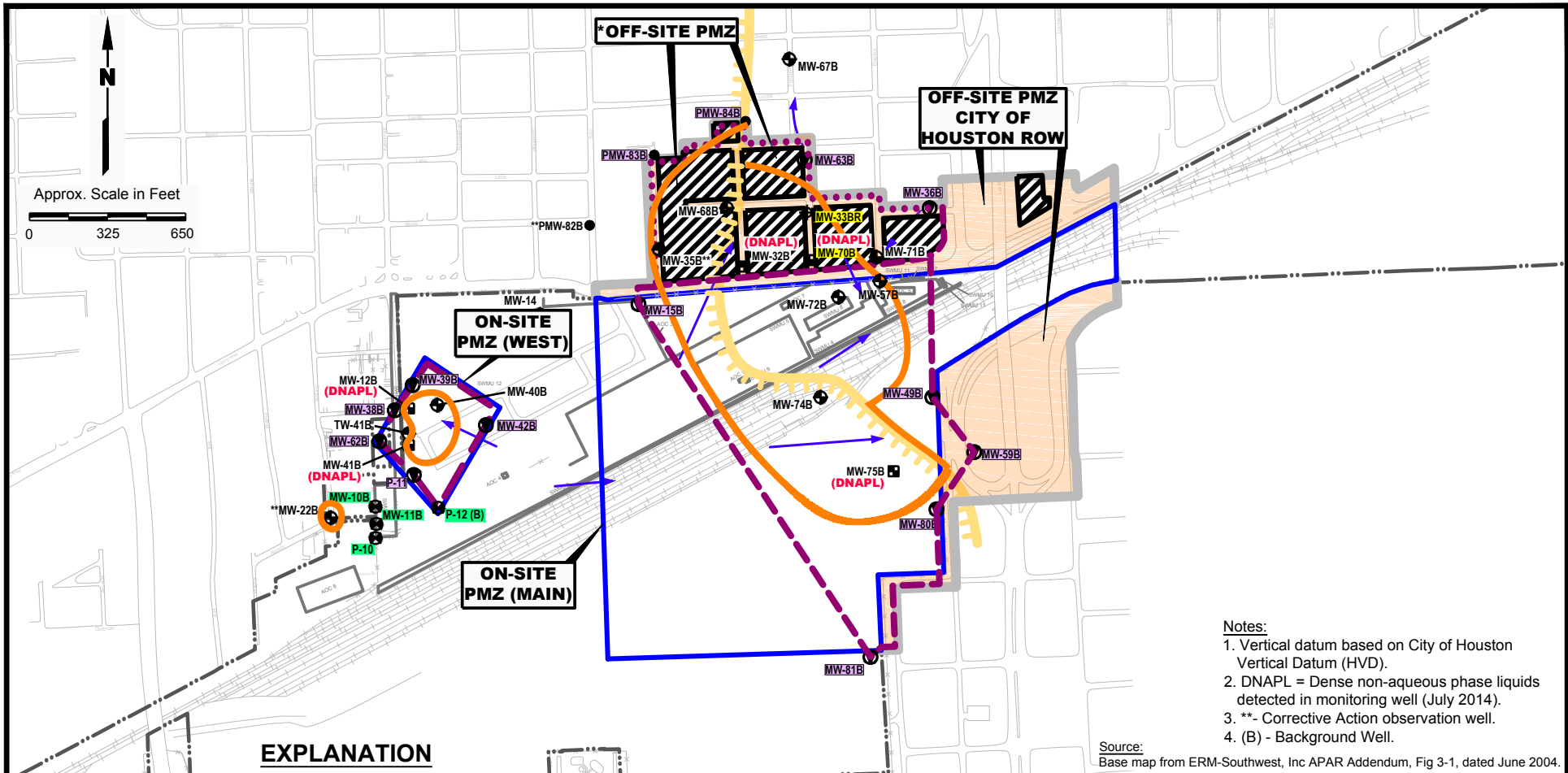
- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

EXPLANATION

<ul style="list-style-type: none"> --- UPRR Property Boundary — Road, Parking Lot, Sidewalk --- Fence --- Railroad ⊕ A-TZ Monitoring Well Location ⊠ A-TZ Corrective Action System Wells (DNAPL Recovery) ○ PCLE Zone — A-TZ PMZ Boundary ⋯ A-TZ PMZ Boundary (proposed - Off-Site PMZ) ● Proposed Monitoring Well 	<ul style="list-style-type: none"> MW-26A ⊕ Alternate Groundwater Point of Exposure (POE) MW-18A ⊕ Attenuation Monitoring Point (AMP) MW-01A ⊕ RCRA Unit No. 1 Point of Compliance (POC) Well ↙ Inferred Groundwater Flow Direction — Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ) — On-Site PMZ — Off-Site PMZ* — Off-Site PMZ City of Houston ROW ⊠ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation
--	--

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
CP Attachment A, Sheet 4 of 7		
PMZ BOUNDARY MAP A-TZ		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	Rev 4 - June 2017
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



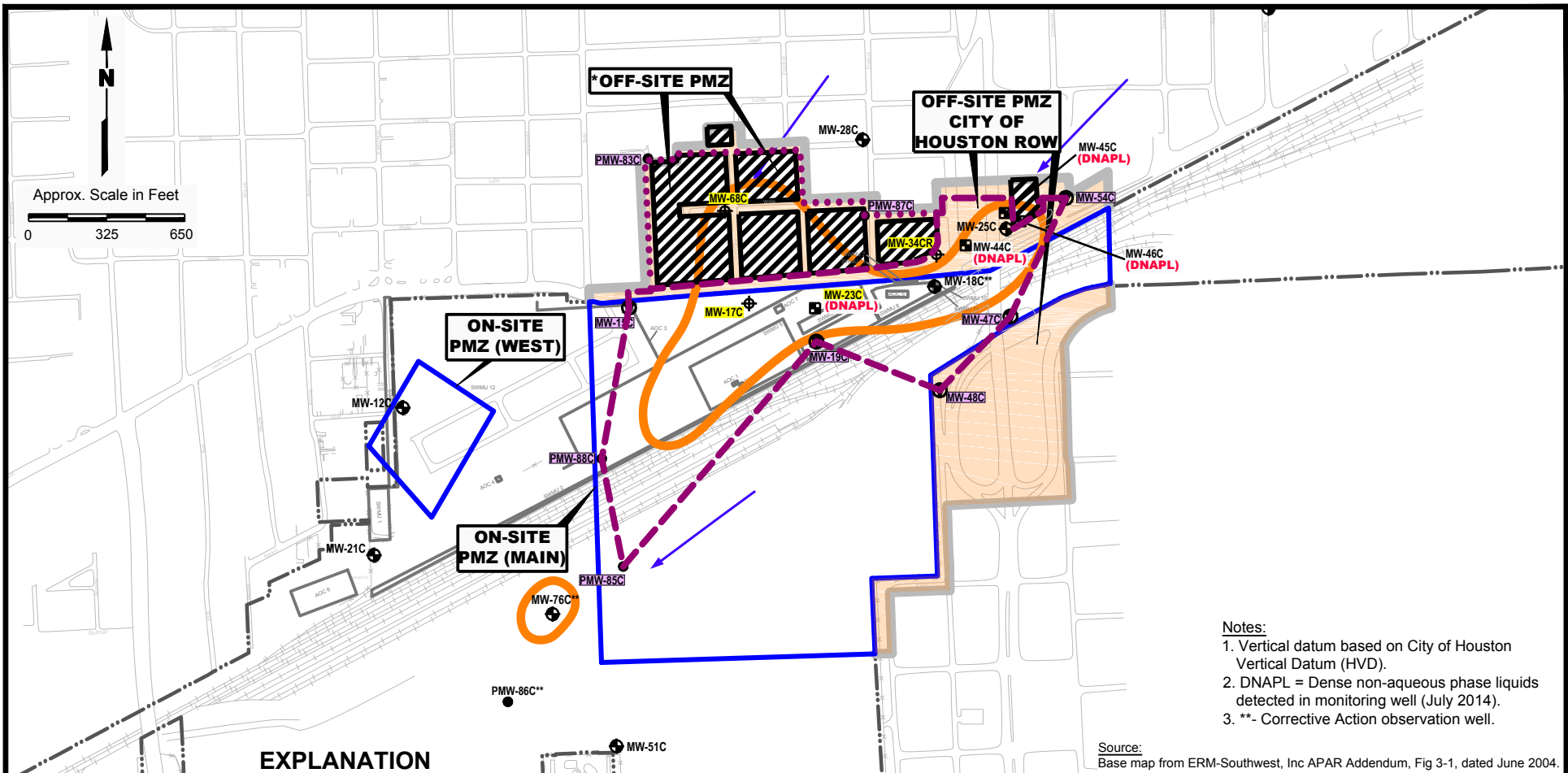
- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

EXPLANATION

--- UPRR Property Boundary	MW-15B Alternate Groundwater Point of Exposure (POE)	B-CZ/B-TZ Boundary
— Road, Parking Lot, Sidewalk	MW-70B Attenuation Monitoring Point (AMP)	
- - - Fence	MW-11B RCRA Unit No. 1 Point of Compliance (POC) Well	
— Railroad	← Inferred Groundwater Flow Direction	
⊕ B Unit Monitoring Well Location	Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)	
⊕ B Unit Corrective Action System Wells (DNAPL Recovery)	— On-Site PMZ	
○ PCLE Zone	— Off-Site PMZ*	
— B-CZ/B-TZ PMZ Boundary	— Off-Site PMZ City of Houston ROW	
— B-CZ/B-TZ PMZ Boundary (proposed - Off-Site PMZ)	▨ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation	
● Proposed Monitoring Well		

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS CP Attachment A, Sheet 5 of 7		
PMZ BOUNDARY MAP B-CZ/B-TZ		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	Rev 4 - June 2017
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



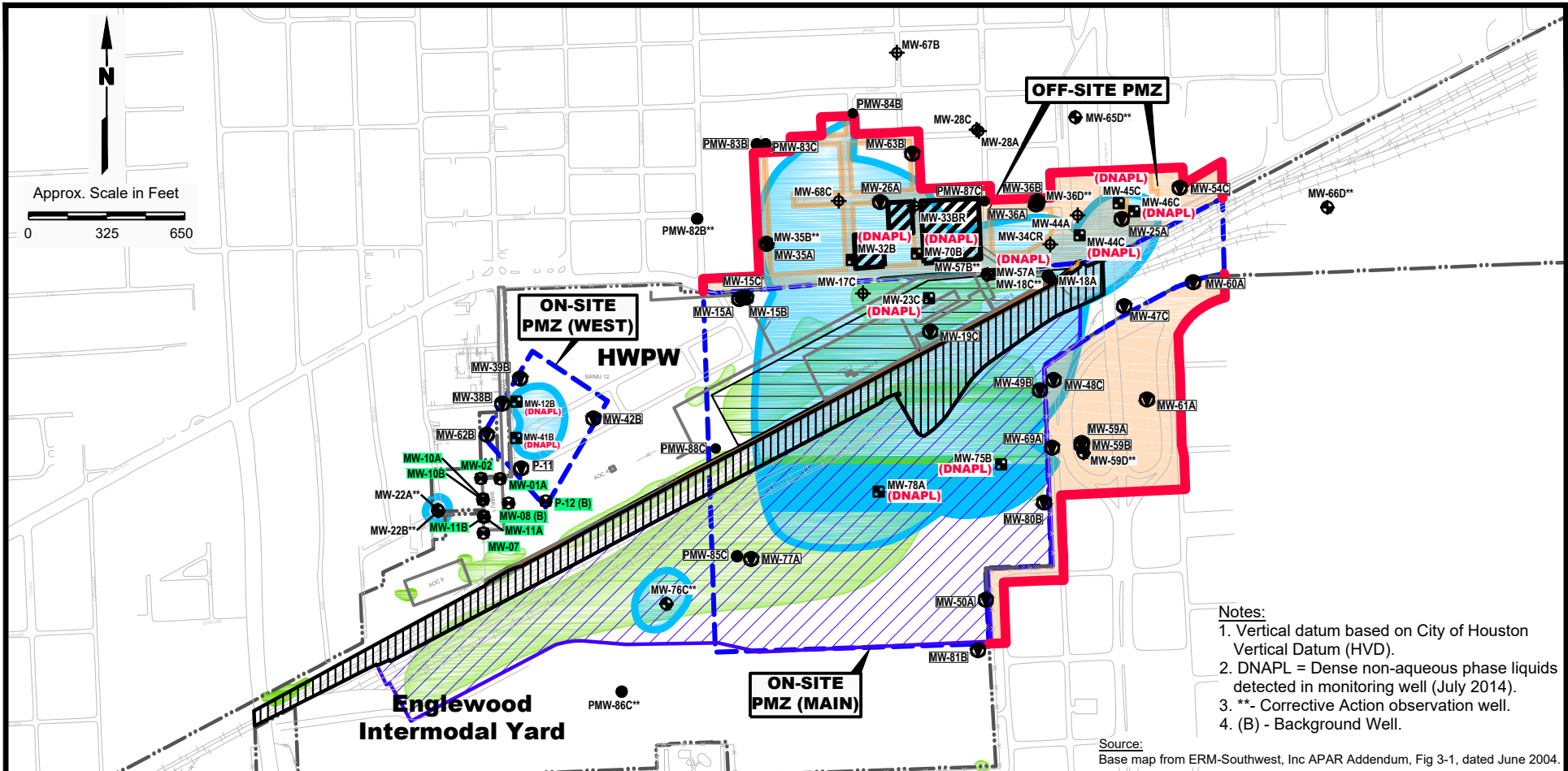
- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

EXPLANATION

--- UPRR Property Boundary	MW-15C	Alternate Groundwater Point of Exposure (POE)
— Road, Parking Lot, Sidewalk	MW-23C	Attenuation Monitoring Point (AMP)
- - - Fence		Inferred Groundwater Flow Direction
—+—+—+ Railroad		On-Site PMZ
C-TZ Monitoring Well Location		Off-Site PMZ*
C-TZ Corrective Action System Wells (DNAPL Recovery)		Off-Site PMZ City of Houston ROW
PCLE Zone		*Off-Site PMZ - Currently Proposed, Pending Deed Recordation
C-TZ PMZ Boundary		
C-TZ PMZ Boundary (proposed - Off-Site PMZ)		
Proposed Monitoring Well		

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
CP Attachment A, Sheet 6 of 7		
PMZ BOUNDARY MAP C-TZ		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	Rev 4 - June 2017
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



- Notes:
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

EXPLANATION

- UPRR Property Boundary
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- Monitoring Well Location
- Corrective Action System Well (DNAPL Recovery)

- Soil Affected Property
- Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- Alternate Groundwater Point of Exposure (POE)
- Attenuation Monitoring Point (AMP)
- RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well

- Railroad Ballast Cap Area
- Asphalt Cap Area
- Soil Cap
- Concrete Cap Area
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- Properties Not Included in the PMZ

UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

CP Attachment A, Sheet 7 of 7

POST-RESPONSE ACTION CARE WELL LOCATION MAP

PROJECT: 1358	BY: AJD	REVISIONS Rev 4 - June 2017
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

**RESPONSE TO COMMENTS T23(2), T34(3), T35(3),T42(3), T43(2), T44(3), T45(3),
T48(2), T55(3), AND T56 (3)**

**COMPLIANCE PLAN ATTACHMENT XI.D – RESPONSE ACTION PLAN –
REVISION 3**

**RCRA PART B APPLICATION
COMPLIANCE PLAN ATTACHMENT XLD – VOL I**

RESPONSE ACTION PLAN – Revision No. 3

**UNION PACIFIC RAILROAD
HOUSTON WOOD PRESERVING WORKS
HOUSTON, TEXAS**

JUNE 24, 2017

Prepared for:

**Mr. Geoffrey Reeder, P.G.
UNION PACIFIC RAILROAD COMPANY**

24125 Aldine Westfield Road
Spring, Texas 77373

Prepared by:

PASTOR, BEHLING & WHEELER, LLC

2201 Double Creek Drive, Suite 4004
Round Rock, Texas 78664
(512) 671-3434

Texas Geoscience Firm No. 50248

PBW Project No. 1358



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Response Action Plan

Cover Page

Regulatory ID number (Solid waste registration number, VCP ID number, etc) SWR No. 31547
check one: Initial submittal for this on-site property Subsequent submittal for this on-site property
Report date: June 24, 2017 – Rev 3 TCEQ Region No.: 12

TCEQ Program (check one)

<input checked="" type="checkbox"/> Corrective Action (Mail Code 127)	<input type="checkbox"/> Superfund PRP Lead (Mail Code 143)
<input type="checkbox"/> Voluntary Cleanup Program (Mail Code 221)	<input type="checkbox"/> Municipal Solid Waste Permits (Mail Code 124)
<input type="checkbox"/> RPR Section (Mail Code 137)	

On-Site Property Information

On-Site Property Name: Union Pacific Railroad Houston Wood Preserving Works Site
Street no. 4910 Pre dir: Street name Liberty Street type: Road Post dir:
City: Houston County: Harris County Code: 101 Zip: 77007
Nearest street intersection or location description: Site is located south of Liberty Rd. between Kashmere St. and Lockwood St, and north of Lee St.

Latitude: Decimal Degrees (circle one) North 29.787413
Longitude: Decimal Degrees (circle one) West 95.321062

Off-Site Affected Property Information


Off-Site Affected Property Name: See Appendix 5 for Off-Site Affected Property information
Physical Address: NA
Street no. Pre dir: Street name Street type: Post dir:
City: County: County Code: Zip:

Check if no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: Union Pacific Railroad
Contact Person: Geoffrey Reeder Title: Manager, Site Remediation
Mailing Address: 24125 Aldine Westfield
City: Spring State: TX Zip: 77373 E-mail address gbreeder@up.com
Phone: 281-350-7197 Fax: 402-233-2351

By my signature below, I acknowledge the requirement of §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person  Name, print: Geoffrey Reeder Date: 062217

RAP Executive Summary

ID No.: SWR No. 31547

Report Date: June 24, 2017 – Rev 3

Use this worksheet to summarize the report. Be sure to complete and submit the Checklist for Report Completeness. **Attach a chronology of activities associated with the affected property.**

Briefly describe the affected property and PCLE zones, the conclusions from the assessment activities, identify any affected or threatened receptors, and describe any other major considerations taken into account when developing this response action plan. If any portion of the response action is necessitated due to an aesthetic or nuisance condition, identify the nature of that condition and identify that portion of the response action proposed to address it. If any media that contains a PCLE zone is not addressed in this RAP, provide justification.

Property Location, Land Use, and Operations

The Union Pacific Railroad (UPRR) Houston Wood Preserving Works (HWPW) Facility at 4910 Liberty Road, Houston, Harris County, Texas (the Site) is located within unoccupied industrial land and also includes the Englewood Intermodal Yard, which is to the south of the former HWPW facilities. The Englewood Intermodal Yard is used for the transfer of box containers from rail cars to truck trailers and vice-versa. UPRR mainline rail and siding rails lie between the former HWPW and the Englewood Intermodal Yard. The Site will remain commercial/industrial for the foreseeable future. The Site was first developed for creosoting operations in 1899, and operated various creosoting operations until 1984 when operations ceased. The facility was dismantled in the early 1990s. Details of the history and previous operations at the Site have been discussed in detail in the previously submitted Affected Property Assessment Report (APAR) (ERM, 2000) and Revised APAR (ERM, 2004), as well as the RCRA Facility Assessment (RFA) Report (PRC, 1993).

The surrounding properties within a 500-foot radius of the Site, including the Englewood Intermodal Yard, consist of residential to the northwest, north, southeast, and south. The UPRR Englewood Classification Yard, commercial/industrial property, is located to the east of the Site. An area of undeveloped land and abandoned houses are located west of the Site. The 500-foot radius field survey demonstrated no current potential groundwater receptors within the residential neighborhood. No water wells, water tanks, cisterns, or windmills, or surface water bodies were encountered. The nearest surface water body is Buffalo Bayou, located approximately 1.6 miles southwest of the Site. The potential for lateral migration of groundwater from the Site to the southwest approximately 8,500 feet to Buffalo Bayou is not likely.

Assessment Results

The initial APAR prepared for the Site was submitted to the TCEQ dated June 10, 2000 (ERM, 2000). A revised APAR was submitted to the TCEQ dated June 10, 2004. Pastor, Behling & Wheeler, LLC (PBW) prepared the APAR Addendum dated July 2009 (PBW, 2009). Following comments from the TCEQ, PBW submitted the Updated APAR Addendum dated October 2010, with response to comments dated March 29, 2011. The TCEQ approved the APAR in a letter dated April 13, 2011.

As detailed in the APARs and subsequent submittal, the Affected Property consists of surface soils, subsurface soils, and groundwater affected by chemical of concern (COC) at the Site: The soil and groundwater exposure pathways were evaluated as part of the Site assessments are considered to be complete and/or anticipated to be complete.

Site stratigraphy from the ground surface to a depth of approximately 135 feet is separated into the following units: Fill Material (0 to 5 feet thick); A-Cohesive Zone (A-CZ) (8 to 15 feet thick); A-Transmissive Zone (A-TZ) (4 to 21 feet thick); B-Cohesive Zone (B-CZ) (6 to 19 feet thick); B-Transmissive Zone (B-TZ) (discontinuous, where present, 3 to 10 feet thick); C-Cohesive Zone (C-CZ) (8 to 20 feet thick); C-Transmissive Zone (C-TZ) (10 to 13 feet thick); D-Cohesive Zone (D-CZ) (17 to 36 feet thick); and D-Transmissive Zone (D-TZ).

As detailed in the Updated APAR Addendum (PBW, 2010), target COCs in soil and groundwater media were evaluated using the March 2010 TCEQ TRRP Residential PCLs, or Residential Assessment Levels (RALs) to establish the Affected Property. Surface and subsurface soil data collected from 1997 through June 2010, with subsequent sampling in 2013 and 2014, were evaluated to assess the Affected Property and Protective Concentration Level (PCL) Exceedance (PCLE) Zone in surface and subsurface soils. Groundwater data from the most recent sampling event (July/August 2014) were evaluated to assess COC exceedances in groundwater.

PCLE Zones

Soils

The soil critical PCLs were established for the Site by using the lower commercial/industrial PCLs for on-site soils and residential PCLs for off-site soils for the following pathways:

- $^{Tot}Soil_{Comb}$ (Tier 1);
- $^{Air}Soil_{Inh-v}$ (Tier 1); and
- $^{GW}Soil_{Ing}$ (Tier 1 or 2).

Although the former wood preserving works portion of the Site is partially covered with crushed gravel and soil, the $^{Tot}Soil_{Comb}$ pathway was evaluated as potentially complete since potential future construction activities could occur at the Site. Most of the Englewood Intermodal Yard has a concrete pavement cover, and the rail area between the HWPW and the Englewood Intermodal Yard is covered with railroad ballast, which both prevents exposure to surface and subsurface soils in the area.

Comparing the surface and subsurface soil analytical data to the appropriate critical PCLs, concentrations of 15 COCs exceeded their respective critical PCLs:

Surface Soils

- 1,2-Diphenylhydrazine
- 2,4-Dinitrotoluene
- 2-Methylnaphthalene
- Benzene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Dibenzofuran
- Naphthalene
- Pentachlorophenol
- Arsenic
- Lead

Subsurface Soils

- 2-Methylnaphthalene
- Benzene
- Naphthalene
- Pentachlorophenol

The surface soil PCLE zone extends across the Original Process Area (SWMU 5) and Recent Process Area (SWMU 4), down the South Drainage Ditch (SDD) (SWMU 2), and across the Former Inactive Wastewater Lagoon (AOC 6). The PCLE zone was primarily defined by the concentrations of benzo(a)anthracene, benzo(a)pyrene, naphthalene, and pentachlorophenol in surface soils. Additional soil sampling conducted in 2013 indicates that the surface soil PCLE Zone extends into the Englewood Intermodal Yard. Additional soil sampling in 2014 indicated that the surface soil PCLE Zone (benzo(a)pyrene and pentachlorophenol) extended north beyond the fence to the edge of Liberty Road, but was delineated along the northeast side of the Site. Arsenic and lead were detected at concentrations greater than cPCLs in surface soil in the Englewood Intermodal Yard.

For subsurface soils, the PCLE zones for 2-methylnaphthalene, naphthalene (more mobile COCs in soils), and pentachlorophenol were extrapolated using available subsurface soil data and applying the surface PCLE zone for those two COCs to the subsurface. By using the surface PCLE zone, this assumes the PCLE zone extends from the surface to the top of the uppermost GWBU (i.e. A-TZ). However for pentachlorophenol, none of the groundwater samples from A-TZ wells collected during the July/August 2014 groundwater monitoring event had detected pentachlorophenol concentrations above the RAL, suggesting the concentrations in surface and subsurface soils are protective of groundwater. The subsurface PCLE zone is confined to the area around the Original and Recent Process Areas (SWMUs 4 and 5), with a small area of naphthalene subsoil PCLE Zone in the Englewood Intermodal Yard area.

Groundwater

A total of 106 groundwater monitoring wells have been installed on and off-site in the GWBUs A-TZ, B-CZ/B-TZ, C-TZ, and D-TZ. Groundwater in A-TZ and B-TZ generally flows across the Site to the east; groundwater flow in the C-TZ flows from northeast to southwest, and groundwater flow in the D-TZ appears to flow to the northwest.

Based on the maximum groundwater analytical data from the July/August 2014 groundwater sampling event, concentrations of the following 23 target COCs exceeded their respective RALs where detected or had a SDL greater than the cPCL (>SDL) for COCs with no detections:

VOCs

- Benzene (A-TZ, B-TZ, C-TZ)
- Ethylbenzene (B-CZ only)
- Methylene Chloride (A-TZ, B-TZ/B-CZ, & C-TZ)
- Toluene (B-CZ only)
- Vinyl Chloride (A-TZ and B-TZ)

SVOCs

- 2,4-Dimethylphenol (A-TZ, B-TZ, C-TZ)
- 2,6-Dinitrotoluene (B-TZ & C-TZ)
- 2-Methylnaphthalene (A-TZ, B-CZ/B-TZ, & C-TZ)
- Acenaphthene (C-TZ only, one well*)
- Anthracene (C-TZ only, one well*)
- Benzo(a)anthracene (A-TZ, B-CZ, & C-TZ)
- Benzo(a)pyrene (A-TZ, C-TZ, and D-TZ)
- Bis(2-chloroethoxy)methane (A-TZ & C-TZ*)
- Chlorobenzene (A-TZ only, one well)
- Chrysene (C-TZ only, one well*)
- Dibenzofuran (A-TZ, B-CZ/B-TZ, & C-TZ)
- Fluoranthene (C-TZ only, one well*)
- Fluorene (C-TZ only, one well*)
- Naphthalene (A-TZ, B-CZ/B-TZ, & C-TZ)
- Pentachlorophenol (C-TZ)
- Phenanthrene (C-TZ only, one well*)
- Phenol (A-TZ, B-CZ, & C-TZ)
- Pyrene (C-TZ only, one well*)

* - COC only detected in wells with DNAPL present

As noted above, SVOCs acenaphthalene, anthracene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene were detected above cPCLs in only one well, MW-23C, which contained dense nonaqueous phase liquids (DNAPL) during the sampling event. These concentrations may overestimate the dissolved fraction in the groundwater; however, these COCs were included in the PCLE COC list.

The location and extent of the groundwater PCLE zones were determined by COCs present in groundwater at concentrations that exceed the critical PCL ($^{GW}GW_{ing}$) using the most recent groundwater data. Groundwater PCLE Zones were mapped for the three upper GWBUs: A-TZ, B-CZ/B-TZ, and C-TZ. One COC benzo(a)pyrene has been detected in the D-TZ GWBU during the most recent groundwater sampling event. A resample from the well confirmed the initial result. UPRR will evaluate further investigation of the D-TZ following the next sampling event.

No affected or threatened receptors are associated with the groundwater PCLE zone. Groundwater supply wells are not located in the affected area and drinking water in the area is provided by a municipal water supply (City of Houston).

Creosote DNAPL has been detected in the GWBUs A-TZ, B-CZ, B-TZ, and C-TZ as noted in soil borings and monitoring wells. The sources of DNAPL observed at the Site are likely from spills and drippings at the Site over the 80+ years of wood treating operations, with most of the releases likely occurring prior to 1984. The wood treating facility was shut down and dismantled in the early 1990s; thus, the DNAPL sources were removed over 20 years ago. UPRR completed a DNAPL Recovery Pilot Study for 24 months ending January 2015 to evaluate the effectiveness of DNAPL recovery through monthly DNAPL pumping events for 24 months. The results of the pilot test indicated that monthly DNAPL recovery activities are effective with DNAPL recovery and with overall DNAPL thicknesses either decreasing or becoming stable in the wells.

Response Action Plan

The objective of this RAP is to develop responses to protect current and future pathways from exposure to the PCLE Zones in surface soil, subsurface soil, and groundwater. The following response actions are proposed at the Site to achieve this objective:

- Surface/subsurface soil – The surface/subsurface soil PCLE Zones at the Site will be addressed as follows:
 - 1) Former HWPW Area: Remedy Standard B closure through consolidating impacted soils within the Area of Contamination (AOC) and implementing Physical Control through an engineered soil cap and asphalt roadway. Periodic inspections and maintenance of the cap and roadway will be implemented;
 - 2) Englewood Intermodal Yard: Remedy Standard B closure by implementing Physical Control using the existing concrete pavement as a cap. Periodic inspections and maintenance of the cap will be implemented;
 - 3) Railroad mainlines and siding tracks: The response action for the operational area between the Former HWPW area and the Englewood Intermodal Yard will be Remedy Standard B closure using the existing railroad ballast as a protective barrier.
 - 4) City of Houston ROW along Liberty Road: Remedy Standard B closure through limited excavation of surface soils, consolidating impacted soils within the AOC, and implementing Physical Control through an engineered concrete sidewalk. Periodic inspections and maintenance of the cap and roadway will be implemented.

- Groundwater – Remedy Standard B closure using a Plume Management Zone (PMZ) with monitored natural attenuation (MNA) for control as the response action for the groundwater PCLE Zones within the Affected Property. For the purposes of this RAP submittal, there will be four PMZ areas:
 - 1) On-Site PMZ (Main) - The on-site PMZ (Main) will include the cumulative groundwater PCLE Zone within the UPRR-owned property from the center to the east portion of the Site.

RAP Executive Summary

ID No.: SWR No. 31547

Report Date: June 24, 2017 – Rev 3

- 2) On-Site PMZ (West) - The on-site PMZ (West) will include the B-CZ/B-TZ PCLE Zone on the west side of the Site within the UPRR-owned property.
- 3) Off-Site PMZ *[pending]* - The off-site PMZ includes the cumulative groundwater PCLE Zone that extends off-site to the north of the Site, but not including City of Houston ROW. The proposed off-site PMZ will require institutional controls for up to 53 individual properties.
- 4) Off-Site PMZ City of Houston ROW - The off-site PMZ includes the cumulative groundwater PCLE Zone that extends off-site to the north of the Site within the City of Houston ROW.

For the Off-Site PMZ, this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. Currently, UPRR has acquired 30 signed restrictive covenants from private landowners (Appendix 5) throughout the proposed Off-Site PMZ and the signed restrictive covenant from the City of Houston for the Off-Site PMZ City of Houston ROW. Three additional property owners have recently agreed verbally with the restrictive covenant and UPRR is a waiting signature. For 11 properties within the Off-site PMZ, UPRR has conducted an extensive and diligent inquiry to locate a landowner who can legally sign the restrictive covenant per 30 TAC §350.111(c)(3), but has not been able to locate the proper landowner for signature (details in Appendix 5). UPRR proposes to file a deed notice for those properties. The remaining nine properties within the proposed PMZ are for properties where UPRR has located the landowner but has not received signed restrictive covenants or filed deed notices. UPRR will continue to work with the landowners to secure the restrictive covenants for these properties and establish the PMZ for the entire groundwater PCLE Zone. In the interim, UPRR proposes to monitor groundwater in wells that are within the proposed Off-Site PMZ area as part of the corrective action groundwater monitoring. Data collected from the monitoring wells within this area will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

Groundwater monitoring is proposed to be performed as part of the PMZ to confirm that the lateral extent of COC concentrations greater than their respective cPCLs continue to remain within the boundaries of the PMZ. Groundwater monitoring will be initiated for both the On-Site PMZs and Off-Site PMZs following approval of the RAP. During the acquisition of landowner consent for the off-site PMZ, groundwater monitoring will be conducted concurrently with the on-site PMZ monitoring requirements. DNAPL will be recovered from wells on a periodic basis through pumping to recover the readily recoverable NAPL for the GWBUs to satisfy requirements of the PMZ.

What is the selected remedy standard for this affected property? A B

List all media that contains a PCLE zone and specify the proposed response action for each media. Indicate the type of removal, decontamination, physical control and/or institutional control action that is proposed.

Media	COCs ¹	Removal	Decontamination	Control			
				Physical Control	Modified Groundwater Response Objective ²		
					PMZ	WCU	TI
Surface Soil	Benzene, SVOCs, metals			X			
Subsurface Soil	SVOCs			X			
Groundwater	Benzene, SVOCs				X		

Is there a media that contains a PCLE zone that is not addressed in this RAP? yes **X** no

If yes, provide justification for not addressing the PCLE zone in this RAP.

On-site land use: Residential Commercial/Industrial
Off-site land use: Residential Commercial/Industrial (check all that apply)

Is this a re-submittal or revision of a previous RAP? Yes No
If yes, explain why the RAP is being revised or resubmitted.

This RAP is being submitted with revisions based on the TCEQ 3rd Technical Notice of Deficiency (NOD) dated April 10, 2017 on the UPRR Houston Wood Preserving Works Permit Renewal/Compliance Plan with Major Amendment, Permit/Compliance Number 50343, ISWR 31547.

Were all the appropriate notifications made in accordance with §350.55? Yes No
If no, explain why notifications were not made:

¹ Specify either a specific COC or, if the response action is the same for all COCs in one type, specify the type of COC (for example, VOCs, SVOCs, metals).
² If a modified groundwater response objective is proposed, check the type(s) of proposed modifications.

CHRONOLOGY

Below is a summary of the site investigation and regulatory chronology at the UPRR Former Houston Wood Preserving Works facility (listed in reverse order).

Date	Description
May 2017	Meeting with Union Pacific Railroad (UPRR), Pastor, Behling & Wheeler (PBW), Baker-Wotring and the Texas Commission on Environmental Quality (TCEQ) (Corrective Action and Law Division) on May 31, 2017 discussing the 3 rd Technical Notice of Deficiency (NOD) Letter dated April 10, 2017 on the RCRA Part A and B Permit Renewal Application and Response Action Plan (RAP), specifically for issues regarding the restrictive covenants/deed notices for the off-site properties.
April 2017	UPRR receives the 3 rd Technical NOD Letter dated April 10, 2017 on the RCRA Part A and B Permit Renewal Application (Revision No. 3) and RAP (Revision 2) from the TCEQ.
February 2017	Meeting with UPRR, PBW, Baker-Wotring and the TCEQ (Corrective Action and Law Division) on February 16, 2017 discussing the draft comments on the RAP (Revision 2) and restrictive covenants for the off-site properties.
January 2017	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2016 Second Semi-Annual Event dated January 17, 2017; PBW conducts 2017 first semi-annual groundwater monitoring event for the SWMU No. 1
July 2016	UPRR submits the RCRA Part A and B Permit Renewal Application (Revision No. 3) with RAP (Revision No. 2) to the TCEQ dated July 2016 in response to the Technical NOD Letter dated June 2, 2016. This includes submitting the Response Action Completion Report (RACR). PBW submits to the TCEQ the Corrective Action Monitoring Report: 2016 First Semi-Annual Event dated July 12, 2016; PBW conducts 2016 second semi-annual groundwater monitoring event for the SWMU No. 1
June 2016	UPRR receives Technical NOD Letter dated June 2, 2016 on the RCRA Part A and B Permit Renewal Application and Response Action Plan from the TCEQ.
May 2016	UPRR completes the response actions authorized under the Area of Contamination to address the surface and subsurface soil Protective Concentration Level Exceedance (PCLE) Zones as detailed in the updated Response Action Plan (RAP) dated December 7, 2015.
February 2016	TCEQ approves the request to extend the termination date for the Area of Contamination from February 15, 2016 to March 7, 2016 in a letter dated February 22, 2016
January 2016	Begin response actions (excavation/placement and cap construction) activities to address surface soil PCLE Zones. PBW conducts 2016 first semi-annual groundwater monitoring event for the Solid Waste Management Unit (SWMU) 1. PBW submits on behalf of UPRR a request to extend the termination date from

Date	Description
	February 15, 2015 to March 7, 2016 for the Area of Contamination set by the TCEQ.
December 2015	Union Pacific Railroad (UPRR) submits the RCRA Part A and B Permit Renewal Application (Revision No. 2) with Response Action Plan (RAP) (Revision No. 1) to the TCEQ dated December 7, 2015. Remediation contractor begins site preparation for response actions under the Area of Contamination.
November 2015	Union Pacific Railroad (UPRR) receives the Texas Commission on Environmental Quality (TCEQ) letter dated November 5, 2015 detailing the agency's review of the September 18, 2015 submittal titled Additional Information for Clean Closure Equivalence Demonstration. The TCEQ Industrial and Hazardous Waste (I&HW) Permits Section was unable to accept the request for discontinuing post-closure care of the former surface impoundment, Solid Waste Management Unit (SWMU) 1.
November 2015	Meeting with UPRR, Pastor, Behling & Wheeler (PBW), and the TCEQ on November 4, 2015 discussing the October 23, 2015 technical comment letter from the TCEQ.
October 2015	UPRR receives additional technical comments from the TCEQ in a letter dated October 23, 2015 on the Response Action Plan (RAP) regarding the Plume Management Zones and Technical Impracticability Demonstration provided in the Response Action Plan.
September 2015	PBW submits to the TCEQ the Additional Information for Clean Closure Equivalence Demonstration dated September 18, 2015 that included historical data and letters from 1983, 1984, and 1991 to demonstrate clean closure of the soils under the former surface impoundment (SWMU 1). The letter also included a request to cease the post-closure care for SWMU 1.
August 2015	UPRR receives Technical Notice of Deficiency (NOD) Letter dated August 5, 2015 on the RCRA Part A and B Permit Renewal Application and Response Action Plan from the TCEQ.
July 2015	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2015 First Semi-Annual Event dated July 16, 2015; PBW conducts 2015 second semi-annual groundwater monitoring event for the SWMU No. 1.
April 2015	PBW submits to the TCEQ newspaper tear sheets and affidavits that public notice was published in English and Spanish in the <i>Houston Chronicle</i> on April 2 and <i>La Subasta</i> on March 31, respectively as required once the RCRA Permit Renewal/Compliance Plan with Major Amendment was administratively complete.
March 2015	TCEQ issues a letter dated March 13, 2015 declaring the RCRA Permit Renewal/Compliance Plan with Major Amendment was administratively complete on March 13, 2015.

Date	Description
February 2015	PBW submits a response letter to the TCEQ dated February 13, 2015 for the TCEQ Administrative NOD on the RCRA Part A and B Permit Renewal Application.
January 2015	PBW submits to the TCEQ the Corrective Action Monitoring Report: 2014 Second Semi-Annual Event dated January 15, 2015; PBW conducts 2015 first semi-annual groundwater monitoring event for the SWMU No. 1.
December 2014	UPRR submits the RCRA Part A and B Permit Renewal Application with Response Action Plan (RAP) to the TCEQ dated December 10, 2014. UPRR receives the TCEQ Administrative NOD Letter dated December 17, 2014.
November 2014	RCRA Permit Pre-Application Meeting with UPRR, PBW, and TCEQ dated November 6, 2014.
September 2014	UPRR holds public meeting with residents near the Site to detail institutional controls for off-site groundwater Plume Management Zone (PMZ).
July/August 2014	PBW conducts site-wide groundwater sampling event.
May 2014	PBW oversees installation of seven new monitoring wells (MW-51C, MW-76C, MW-77A, MW-78A, MW-79A, MW-80B, and MW-81B) in the Englewood Intermodal Yard to evaluate DNAPL extent and extent of chemicals of concern (COCs) in the B-CZ unit to the southeast, and one replacement well MW-34CR to replace MW-34C. Soil samples also collected from City of Houston right of way (ROW) along north perimeter of the Site.
January 2014	PBW conducts site-wide groundwater sampling event.
July 2013	PBW conducts site-wide groundwater sampling event.
February/March 2013	PBW conducts cone penetrometer testing (CPT)/rapid optical screening tool (ROST) and soil investigation at the Englewood Intermodal Yard adjacent to the UPRR Houston Wood Preserving Works (HWPW) site.
January/February 2013	PBW conducts site-wide groundwater sampling event (95 wells). PBW submits Proposed DNAPL Recovery Pilot Test letter to TCEQ dated February 5, 2013, and initiates monthly DNAPL recovery from on-site and off-site wells (10-12 wells) (planned for 24 months).
November 2012	Meet with TCEQ regarding proposed CPT/ROST investigation of Englewood Intermodal Yard based on DNAPL detected from the December 2011 investigation.
July 2012	PBW conducts site-wide groundwater sampling event.
January 2012	PBW conducts site-wide groundwater sampling event.

Date	Description
July 2012	PBW conducts site-wide groundwater sampling event.
December 2011	PBW installs additional monitoring wells in the cohesive zone B-CZ to evaluate extent of DNAPL in the B-CZ.
July 2011	PBW conducts site-wide groundwater sampling event.
April 2011	TCEQ approves the Affected Property Assessment Report (APAR) (including updates and addendums).
March 2011	PBW submits the Revised Updated APAR Addendum to the TCEQ. UPRR repairs fence around site.
January 2011	PBW conducts site-wide groundwater sampling event.
December 2010/ January 2011	UPRR/PBW submits Off-Site Notification Letters to off-site properties indicating Notice of Information Availability for the site, as required with the submittal of the Updated APAR Addendum (Oct 2012) .
October 22, 2010	PBW submits the Updated APAR Addendum to the TCEQ.
June/July 2010	PBW conducts additional soil (along northeast portion of Site) and groundwater investigation (A-TZ, B-CZ, C-TZ and D-TZ wells); including site-wide groundwater monitoring event.
February 16, 2010	UPRR Response to TCEQ Comment Letter dated November 18, 2009.
January 2010	PBW conducts site-wide groundwater sampling event; selected wells are analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8620.
November 18, 2009	TCEQ Comment Letter on Revised APAR.
July 2009	PBW submits APAR Addendum to TCEQ.
January 2009	PBW conducts additional soil and groundwater investigation.
July 2008	PBW conducts additional CPT-ROST and groundwater investigation
January 2007	PBW conducts additional soil and groundwater investigation
August 2006	ERM-Southwest, Inc. (ERM) conducted additional soil and groundwater investigation
April 2006	ERM conducted additional soil and groundwater investigation
September 6, 2005	UPRR Response to TCEQ Response Letter dated August 1, 2005
August 2005	TCEQ Response to UPRR Response Letter dated June 9, 2005

Date	Description
June 9, 2005	UPRR Response to TCEQ Letter dated April 15, 2005
April 15, 2005	TCEQ Response to UPRR Response Letter dated November 19, 2004
November 19, 2004	UPRR Response to October 8, 2004 TCEQ Letter
October 8, 2004	TCEQ Comment Letter on Revised APAR
June 10, 2004	Revised APAR submitted to the TCEQ by ERM, Inc. on behalf of UPRR
November 7, 2001	Texas Natural Resources Conservation Commission (TNRCC) provides comments to July 5, 2001 response letter.
July 5, 2001	Follow-up response to November 6, 2000 TNRCC comment letter on the On-Site APAR submitted to TNRCC on behalf of UPRR.
January 9, 2001	Initial response to November 6, 2000 TNRCC comments.
November 6, 2000	TNRCC provides comments to On-Site APAR.
July 10, 2000	Affected Property Assessment Report for On-Site Property (On-Site APAR) submitted to TNRCC on behalf of UPRR by ERM.
February 20, 2000	Letter submitted to the TNRCC regarding proposed Phase 2-C investigation for further delineation of off-site areas
September 10, 1999	Phase 2-B RFI/EOC Investigation Report submitted to TNRCC on behalf of UPRR by ERM
April 27, 1998	Interim Stabilization Measures Report – Southern Drainage Ditch, submitted to TNRCC on behalf of UPRR by ERM.
February 13, 1998	Phase 2-A RFI/EOC Investigation Report submitted to TNRCC on behalf of UPRR by ERM.
January 13, 1997	RFI portion of the Phase 1 RFI/EOC Investigation Report approved by TNRCC
November 26, 1996	EOC portion of the Phase 1 RFI/EOC Investigation Report approved by TNRCC
May 23, 1996	Phase 1 RFI/EOC Report submitted on behalf of Southern Pacific Transportation Company (SPTCo) by Terranext
October 16, 1995	RFI Work Plan approved by TNRCC
September 29, 1995	EOC Work Plan approved by TNRCC
January 10, 1995	Operation and Maintenance Plan approved by TNRCC

Date	Description
November 3, 1994	Revised Compliance Schedule approved by TNRCC
October 14, 1994	RCRA Facility Investigation (RFI) Work Plan submitted on behalf of SPTCo
September 16, 1994	Extent of Contamination (EOC) Work Plan submitted on behalf of SPTCo
September 7, 1994	Revised Compliance Schedule submitted on behalf of SPTCo
August 19, 1994	Operation and Maintenance Plan and Compliance Schedule submitted on behalf of SPTCo
June 20, 1994	Permit No. HW-50343-000 and Compliance Plan CP-50343-000 issued by TNRCC.
October 1993	RCRA Facility Assessment completed on behalf of U.S. EPA by PRC Environmental Management, Inc.
May 13, 1991	RCRA Permit Application submitted by SPTCo

Note: Not all groundwater sampling events are listed in the chronology

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.

				Report Contents
	Required		Cover Page	<input checked="" type="checkbox"/>
	Required		Executive Summary	<input checked="" type="checkbox"/>
	Required		Checklist for Report Completeness	<input checked="" type="checkbox"/>
	Required		Worksheet 1.0 Response Action Objectives	<input checked="" type="checkbox"/>
No <input checked="" type="checkbox"/>		<input type="checkbox"/> Yes	Attachment 1A* Maps and Cross Sections	<input type="checkbox"/>
			Attachment 1B* Graphs of Concentration versus Time	<input type="checkbox"/>
	Required		Worksheet 2.0 Response Action Design	<input type="checkbox"/>
	Required		Attachment 2A* Response Action Diagrams and Component/Equipment Descriptions	<input checked="" type="checkbox"/>
	Required		Attachment 2B* Proposed Well Design	<input checked="" type="checkbox"/>
No <input checked="" type="checkbox"/>		<input type="checkbox"/> Yes	Attachment 2C* ESA and Compensatory Restoration Plan	<input type="checkbox"/>
No <input type="checkbox"/>		<input checked="" type="checkbox"/> Yes	Worksheet 2.1 Plume Management Zone	<input checked="" type="checkbox"/>
			Attachment 2D* Plume Management Zone Map	<input checked="" type="checkbox"/>
			Attachment 2E* Attenuation Action Levels Determination	<input type="checkbox"/>
No <input checked="" type="checkbox"/>		<input type="checkbox"/> Yes	Worksheet 2.2 Waste Control Unit	<input type="checkbox"/>
			Attachment 2F* Map of Waste Control Unit	<input type="checkbox"/>
No <input type="checkbox"/>		<input checked="" type="checkbox"/> Yes	Worksheet 2.3 Technical Impracticability	<input type="checkbox"/>
			Attachment 2G* Map of Technical Impracticability Area	<input type="checkbox"/>

				Report Contents
No <input type="checkbox"/>	Is the response action a remedy standard B?	<input checked="" type="checkbox"/> Yes	→	<input type="checkbox"/>
		Required	→	<input type="checkbox"/>
		Required	→	<input checked="" type="checkbox"/>
		Required	→	<input checked="" type="checkbox"/>
		Required	→	<input type="checkbox"/>
		Required	→	<input type="checkbox"/>
		Required	→	<input type="checkbox"/>
No <input type="checkbox"/>	Is the response action a Remedy Standard B?	<input checked="" type="checkbox"/> Yes	→	<input type="checkbox"/>
			→	<input checked="" type="checkbox"/>
			→	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Does the person, who is a small business, desire to modify the financial assurance requirement?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>
		Required	→	<input type="checkbox"/>
		Required	→	<input type="checkbox"/>
No <input type="checkbox"/>	Was any data collected that was not previously reported?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>
No <input type="checkbox"/>	Were any studies or tests conducted?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>
No <input type="checkbox"/>	Is the response action a Remedy Standard B?	<input checked="" type="checkbox"/> Yes	→	<input checked="" type="checkbox"/>
No <input type="checkbox"/>	Are any institutional controls proposed/required on property not owned by the person?	<input checked="" type="checkbox"/> Yes	→	<input checked="" type="checkbox"/>
No <input type="checkbox"/>	Are any of the sample collection or handling procedures different from those reporting in the APAR or other previously submitted report?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>
No <input type="checkbox"/>	Are statistics or geostatistics proposed to be used as part of the response action?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Was approval received from the TCEQ regarding the use of different rules to address a media?	<input type="checkbox"/> Yes	→	<input type="checkbox"/>

Form contents marked with an asterisk (*) are not included in the blank form.

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page 1 of 10	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 - Rev 3

Use this worksheet to describe the objectives for the response action in each media.

Response Action Objectives

List the environmental media to which this applies

Surface Soils (0 – 5 feet bgs)/Subsurface Soils (>5 feet bgs)

Repeat this section for each medium that has a different response action objective.

State the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33 as applicable. Explain how the response action is appropriate based on the hydrogeologic characteristics, COC characteristics, and potential unprotective conditions that could continue or result during the remedial period.

The Response Action Objectives (RAO) for the surface and subsurface soil PCLE Zones is to control exposure through physical barriers such that commercial/industrial workers will not be exposed to concentrations of COCs in excess of the critical human health PCLs (§350.33(a)(1)). The surface soil PCLE zone extends across the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), Water Treatment and Boiler System (SWMU 6), Aboveground Storage Tank Area (SWMU 8), Oil/Water Separators (SWMU 11), down the Southern Drainage Ditch (SDD) (SWMU 2), and across the Former Inactive Wastewater Lagoon (Area of Concern (AOC) 6). The surface soil PCLE Zone also extends north of the Site onto the City of Houston right of way (ROW) and south across the UPRR main lines and into the Englewood Intermodal Yard (Attachment 1A-Figure 4A).

Three key approaches will be implemented to protect commercial/industrial workers from exposure to COCs in surface and subsurface soils:

- **Former HWPW area:** Using the Area of Contamination (AOC) approach, surface soils with cPCL exceedances in the Inactive Wastewater Lagoon (AOC 6), and areas north of the AST Area (SWMU No. 8) will be consolidated in the area of SWMUs 4, 5, and 8. This area will then be covered with a vegetated soil cap to prevent human exposure to the impacted soils. The surface soil PCLE zone along the SDD (SWMU No. 2) will be capped in place using asphalt cover as part of a roadway improvement.
- **Englewood Intermodal Yard area:** The surface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact and exposure.
- **UPRR Main Lines Ballast Area:** UPRR proposes to use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area.

To address potential exposure to surface soil PCLE Zone off-Site, the following will be implemented to protect residents (i.e. occasional trespasser) from exposure to COCs in surface and subsurface soils:

- **City of Houston Right of Way (ROW):** The area immediately north of the AST Area (SWMU No. 8) within the City of Houston right of way (ROW) between the UPRR property boundary and Liberty Road (approximately 6 feet wide and 550 feet long) will be addressed through a combination of soil excavation (to be placed within the capped area) and construction of a concrete sidewalk to restrict exposure to the surface soil PCLE zone.

Response Action Objectives

Associated Information: Attachment 1A, 1B

RAP Worksheet 1.0 Page 2 of 10

ID No.: SWR ID
31547

Report Date: June 24, 2017
- Rev 3

The Affected Property (including the entire Site (HWPW and Englewood Intermodal Yard)) will also be deed restricted for commercial-industrial land use, for the use of physical controls on surface and subsurface soil, and restrictions on soil excavation within the surface and subsurface soil PCLE Zone in accordance with §350.31(g).

Explain how the COCs will be handled, treated, disposed, or transferred to another media and document that the response action will not result in any additional potential exposure conditions due to response action activities.

Surface soils from parts of AOCs 6 and 7 and SWMU Nos. 7 and 11 will be excavated and consolidated within the Area of Contamination (Affected Property) within the former HWPW area. During consolidation activities, Site workers will operate under a site-specific health and safety plan (HASP) and impacted soils will be consolidated within the surface soil Affected Property. Any equipment and tooling that comes in contact with impacted soils will be decontaminated and managed within the AOC. Storm water protection (i.e., Storm Water Pollution Prevention Plan (SWPPP), silt fencing) and fugitive dust monitoring will be conducted during remediation activities to ensure the activities will not result in additional exposure conditions. Verification sampling will be performed at the excavation areas following excavation of soils to ensure that the affected soils containing COCs at concentrations in excess of the applicable cPCLs have been removed. Upon completion of verification sampling, the excavation area will be restored by backfilling with clean fill and/or grading.

During construction of the cap, storm water management and dust monitoring will also be conducted to minimize impacting soils outside of the Affected Property during the response action.

For areas outside of the proposed excavation, COCs in soil will be left in place at the Site and exposure will be controlled by the use of institutional controls (commercial/industrial land use) and the use of physical barriers (engineered soil cap and asphalt roadway cap for the former HWPW area and concrete and railroad ballast for the Englewood Intermodal Yard).

State the proposed "reasonable time frame" and provide the justification for that time frame in the context of any potential for unprotective exposures to exist or develop, COC characteristics, hydrogeologic and affected property characteristics. If the reasonable time frame is different for the different affected media or for particular tracts of land, be sure to discuss that. Provide how the proposed response action will meet the objectives in a reasonable timeframe.

Based on preliminary approval from the TCEQ through meeting with Corrective Action Division (on November 4, 2015), UPRR began the bidding process in November 2015 for identifying the contractor to conduct the proposed response action, including the consolidation within the Area of Contamination, construction of the asphalt roadway cap, and off-site concrete sidewalk (details provided in Worksheet 2.0). It is anticipated that the response actions will be initiated in January 2016 and completed within 180 days.

For the Englewood Intermodal Yard, soils will be left in place. A physical barrier (concrete and railroad ballast/ties/rail) is already in place to prevent exposure to surface soil in that area.

For the entire Affected Property, deed restriction of the Site to commercial-industrial use will also be implemented to prevent future exposure risk. The deed notice will be filed with the Harris County

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page 3 of 10	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 - Rev 3

Clerk upon approval of the RAP. In accordance with the TCEQ regulatory guidance document *Institutional Controls Under TRRP* (RG-366/TRRP-16), proof of filing would be submitted to the TCEQ within 120 days of approval of the RAP. An example deed notice for the UPRR property is included in Appendix 4.

Response Action Objectives

Associated Information: Attachment 1A, 1B

RAP Worksheet 1.0 Page 4 of 10

ID No.: SWR ID
31547

Report Date: June 24, 2017
- Rev 3

List the environmental media to which this applies

Groundwater

Repeat this section for each medium that has a different response action objective.

State the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33 as applicable. Explain how the response action is appropriate based on the hydrogeologic characteristics, COC characteristics, and potential unprotective conditions that could continue or result during the remedial period.

The RAO to address the PCLE Zone in groundwater will be through control using a modified groundwater response objective through a plume management zone (PMZ). Per §350.33, a PMZ is proposed for the Site for the three GWBUs: A-TZ, B-CZ/B-TZ, and C-TZ, with monitored natural attenuation (MNA) as the groundwater control to meet PCLs at points of exposure (POEs) for all three GWBUs. For the purposes of this RAP submittal, the overall PMZ consists of the following four separate PMZs:

1. On-Site PMZ (Main) – The on-site PMZ (Main) will include the cumulative groundwater PCLE Zone within the UPRR-owned property from the center to the east portion of the Site.
2. On-Site PMZ (West) – The on-site PMZ (West) will include the B-CZ/B-TZ PCLE Zone on the west side of the Site within the UPRR-owned property.
3. Off-Site PMZ [*pending*] – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site, but not including land designated as City of Houston ROW. The proposed off-site PMZ will require institutional controls for up to 53 individual properties.
4. Off-Site PMZ City of Houston ROW – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site within the land designated as City of Houston ROW.

The on-site PMZs (Main and West), including the former HWPW and Englewood Intermodal Yard will be deed restricted to commercial-industrial land use and to restrict future use of groundwater on-site, as well as restrictions on soil excavation activities within the surface soil PCLE Zone on the UPRR-owned property. UPRR has proposed to file restrictive covenants with the Harris County Clerk for the off-site properties (53 off-site properties) within the proposed cumulative Off-Site PMZ (includes the three individual PMZs for the A-TZ, B-CZ/B-TZ, and C-TZ GWBUs). However, for the Off-Site PMZ (excluding the Off-Site PMZ City of Houston ROW), this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. Currently, UPRR has acquired 30 signed restrictive covenants from private landowners and the signed restrictive covenant from the City of Houston for ROW throughout the proposed Off-Site PMZ. Three additional property owners have recently agreed verbally with the restrictive covenant and UPRR is a waiting signature. For 11 properties within the Off-site PMZ, UPRR has conducted an extensive and diligent inquiry to locate a landowner who can legally sign the restrictive covenant per 30 TAC §350.111(c)(3), but has not been able to locate the proper landowner (details in Appendix 5). UPRR proposes to file a deed notice for those properties. For the remaining nine properties within the proposed Off-Site PMZ, UPRR has located the landowners but has not received signed restrictive covenants or filed deed notices at this time. UPRR will continue to work with the landowners to secure the restrictive covenants for these properties and establish the PMZ for the entire groundwater PCLE Zone. In the interim, UPRR proposes to monitor groundwater in wells that are near the Off-Site PMZ properties as part of the corrective action groundwater monitoring program. Data collected from the monitoring

Response Action Objectives

Associated Information: Attachment 1A, 1B

RAP Worksheet 1.0 Page 5 of 10

ID No.: SWR ID
31547

Report Date: June 24, 2017
- Rev 3

wells within the Off-Site PMZ area will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

UPRR proposed a TI demonstration in the RAP (Revision No.2 - Worksheet 2.3) for GWBUs where DNAPL has been observed (i.e., in soil borings and/or monitoring wells in the A-TZ, B-CZ/B-TZ, and C-TZ) per §350.33 (f) for both the on-site property and off-site properties. The TCEQ has not approved the TI waiver based on their technical memorandum dated December 13, 2016. Specifically, the TCEQ stated that the TI Demonstration did not adequately address the criteria established per 30 TAC §350.33(f)(3)(E), in which COCs at concentrations above the critical groundwater PCLs are prevented from spreading beyond the existing boundary of the groundwater PCLE zone. To address this concern, UPRR proposes to use groundwater data collected as part of the site-wide groundwater monitoring program (detailed in the RAP Worksheet 3.1). Data collected over time from the point of exposure (POE) wells, attenuation monitoring points (AMPs), and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E).

UPRR will continue to evaluate the TI waiver for areas where DNAPL has been observed. The NAPL response action objective using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ, B-CZ/B-TZ, and C-TZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of the complex hydrogeology and physical nature of creosote.

Therefore, the current response objective per the TCEQ Guidance is to ensure compliance of NAPL zone in the overall PMZ. With the PMZs established, the response objectives will include compliance with PMZ performance criteria at the NAPL zone through recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) and institutional controls (UPRR-owned property and off-site properties/City of Houston ROW) on groundwater use to protect exposure to residual NAPL and COCs in the GWBUs. As part of the evaluation for compliance with PMZ performance criteria, UPRR will continue the DNAPL recovery activities on a monthly basis, and will evaluate the effectiveness annually.

Explain how the COCs will be handled, treated, disposed, or transferred to another media and document that the response action will not result in any additional potential exposure conditions due to response action activities.

Groundwater will be sampled from the selected monitoring wells on a semi-annual basis, and purge water from sampling events will be drummed for proper disposal (waste stream currently on the Notice of Registration (NOR)), stored within the Container Storage Area (CSA) (Unit 4 on the NOR), and disposed of in accordance with state and federal regulations and requirements.

Recovered creosote DNAPL from the Corrective Action System Wells will be managed at the Site in containers (i.e. drums) within the CSA. In accordance with the RCRA Permit and Compliance Plan,

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page 6 of 10	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 - Rev 3

recovered DNAPL will be stored in the CSA, then transported and disposed of in accordance with state and federal requirements within the required timeframes.

State the proposed “reasonable time frame” and provide the justification for that time frame in the context of any potential for unprotective exposures to exist or develop, COC characteristics, hydrogeologic and affected property characteristics. If the reasonable time frame is different for the different affected media or for particular tracts of land, be sure to discuss that. Provide how the proposed response action will meet the objectives in a reasonable timeframe.

For the groundwater Remedy Standard B, the proposed response action (MNA) is currently occurring at the Site. There are no potential or unprotected exposures at the Site for groundwater since none of the properties in the area use groundwater for drinking or any other purposes; and the properties are provided drinking water by the City of Houston. None of the City of Houston groundwater supply wells are in the area of the Site. In addition, no groundwater drinking wells have been identified in the area and anticipated future use of the shallow groundwater as resource is unlikely.

A review of groundwater data for the Site indicates that COC concentrations in the three GWBUs are mostly stable or decreasing at the downgradient edges at the Site (Mann-Kendall trend analysis – Attachment 2E), supporting the use of the PMZ for the groundwater PCLE Zones. With the complex hydrogeology and the nature of the creosote contamination where DNAPL has been observed, portions of the groundwater PCLE Zones are proposed to be technically impracticable for groundwater restoration (Worksheet 2.3, Attachment 2G). Therefore, with the PMZ Zones, no exposures to groundwater above cPCLs are expected, and furthermore, groundwater exposure in the area will be restricted through institutional controls.

Institutional controls through deed recordation (UPRR-owned property – on-site PMZs) and restrictive covenants/deed notices (off-site properties – Off-Site PMZ/Off-Site PMZ City of Houston ROW) within the PMZ and restricting the use of groundwater will be used at the Site to prevent future exposure risk until groundwater concentrations achieve critical PCLs. The deed notice for the UPRR-owned property and restrictive covenants for off-site properties will be filed with the Harris County Clerk upon approval of the RAP. The deed restriction and restrictive covenants completed to date are included in Appendix 5. In accordance with the TCEQ regulatory guidance document *Institutional Controls Under TRRP* (RG-366/TRRP-16), proof of filing for the on-site PMZ will be submitted to the TCEQ within 120 days of approval of the RAP.

Landowners for some properties within the Off-Site PMZ were not locatable. In accordance with 30 TAC §350.111(c)(3), documentation of the extensive and diligent inquiry to locate those landowners are provided in Appendix 5. Following approval from the TCEQ Executive Director, deed notices on those properties will be placed detailing the Off-Site PMZ.

Soil Response Action Objectives

When using removal and/or decontamination with controls or controls only, demonstrate how that physical control or combination of measures will reliably contain COCs within and/or derived from the surface soil and subsurface soil PCLE zone materials over time.

As previously discussed, the RAOs for surface and subsurface soil PCLE Zones is to control exposure

Response Action Objectives

Associated Information: Attachment 1A, 1B

RAP Worksheet 1.0 Page 7 of 10

ID No.: SWR ID
31547

Report Date: June 24, 2017
- Rev 3

through Remedy Standard B using physical barriers such that on-site commercial/industrial and off-site residential pathways will not be exposed to concentrations of COCs in excess of the critical human health PCLs (§350.33(a)(1)). In addition, COC concentrations in the surface and subsurface soils will not create a leachate that will lead to cPCL exceedances at the alternate point of exposure wells within the proposed PMZ. Soil responses will be implemented differently depending on the location within the Site, with controls placed in the following areas:

- Former HWPW area: Once the surface soils with cPCL exceedances in the Inactive Wastewater Lagoon (AOC 6), near the Location of the Former Incinerator (AOC 4) surrounding the Tank Car Storage Area (SWMU 7) and Oil/Water Separators (SWMU 11), and areas north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5) and AST Area (SWMU 8) are consolidated within the area of SWMUs 4, 5, and 8 under the Area of Contamination policy, a vapor barrier with geotextile fabric, and an engineered soil cap will be constructed to cover the consolidated soil and remaining surface soil PCLE Zone on the former wood treating works area to contain and prevent exposure to COCs within the soil PCLE Zone at the Site. The soil cap will be vegetated and sloped to minimize infiltration to control potential leachate migration from the surface and subsurface soils to the GWBUs. The surface soil PCLE zone along the SDD (SWMU No. 2) will be capped in place using asphalt cover as part of a roadway improvement. The soil cap and asphalt cap will be maintained under the post-response action care period. In these areas where surface soils will be removed, subsurface soils do not appear to be impacted above cPCLs. The subsurface soil PCLE Zone is within the areas where the proposed engineered soil cap will be constructed. Therefore, there will be no exposure to subsurface soils as well.
- City of Houston ROW: The area immediately north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), and AST Area (SWMU No. 8) within the City of Houston right of way (ROW) between the UPRR property boundary and Liberty Road (approximately 6 feet wide and 550 feet long) will be addressed through a combination of soil excavation (to be placed within the capped area discussed above) of the top 9-inches and construction of a physical barrier (concrete sidewalk) preventing contact with surface soils and infiltration. As part of the post-response action care, the concrete sidewalk in the area of the surface soil PCLE Zone will be inspected to ensure continued residential land use protection.
- Englewood Intermodal Yard area: The surface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact and infiltration. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be inspected to ensure continued on-site worker protection.
- UPRR Main Lines Ballast Area: The area between the former wood treating works area and the Englewood Intermodal Yard (approximately 100 feet width) is covered with railroad ballast, ties, and rail. UPRR proposes to use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area. Since this area is owned and controlled by UPRR, UPRR will implement a health and safety program to restrict any construction activity in the area of the railroad lines. In the event construction activities are necessary, a health and safety plan will be implemented to ensure worker protection from COCs in the surface soils.

For the approaches, the soil cap and asphalt roadway improvement will be maintained and appropriate maintenance, repair of the concrete sidewalk area north of the Site and concrete parking area in the

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page 8 of 10	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 - Rev 3

Englewood Intermodal Yard will be performed as needed, and the railroad ballast will be maintained as part of the railroad operations.

The affected property will also be deed restricted to commercial-industrial land use and for the use of a physical control on surface soils in accordance with §350.31(g), including the City of Houston ROW.

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical surface soil and subsurface soil PCL throughout the soil PCLE zone and prevent COC concentrations above the critical soil PCLs from migrating beyond the existing boundary of the soil PCLE zone.

In the areas where surface soils will be excavated, confirmation samples will be collected to confirm that the COC concentrations in the remaining soils will be below critical soil PCLs. Excavated surface soils will be consolidated within the area of SWMUs 4, 5, and 8 under the Area of Contamination policy, and an engineered soil cap will be constructed to cover the area to prevent exposure to and migration of COCs beyond the soil PCLE Zone.

Response Action Objectives

Associated Information: Attachment 1A, 1B

RAP Worksheet 1.0 Page 9 of 10ID No.: SWR ID
31547Report Date: June 24, 2017
- Rev 3**Groundwater Response Action Objectives**

Name of groundwater-bearing unit to which this information applies

**A-TZ, B-TZ/B-CZ, C-TZ – Uppermost
Groundwater-Bearing Units**

Repeat this section for each groundwater-bearing unit for which a different response action is proposed.

Groundwater classification 1 X 2 X 3

(B-CZ)

Is a modified groundwater response action being proposed for any part of the groundwater PCLE zone (§350.33(f)(2), (3), or (4))?

 X Yes ___ No

If yes, does the affected property meet the qualifying criteria for a modified groundwater response action using a waste control unit, plume management zone, or technical impracticability?

 X Yes ___ No

If yes, complete the appropriate portions of this report.

If no to either question, complete the following:

Explain how the removal or decontamination action will reduce the concentration of COCs to the critical groundwater PCL throughout the groundwater PCLE zone and prevent COC concentrations above the critical groundwater PCL from migrating beyond the existing boundary of the groundwater PCLE zone.

A modified Remedy Standard B groundwater RAO will be conducted at the Site through control using PMZ Zones. MNA is proposed as a control response to address the PCLE Zones within the PMZs. The NAPL response action objective using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ, B-CZ/B-TZ, and C-TZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells.

Explain how the response action will prevent COCs from migrating to air at concentrations above the PCLs for air if the groundwater-to-air PCLs ($^{Air}GW_{Inh-v}$) is exceeded.

The groundwater-to-air PCLs ($^{Air}GW_{Inh-v}$) were not exceeded in any representative groundwater samples collected at the Site. Groundwater samples from wells with DNAPL present have had naphthalene concentrations detected at concentrations greater than the $^{Air}GW_{Inh-v}$ PCL; however, the samples were collected in the deeper GWBUs (i.e., B-TZ/B-CZ) where the overlying groundwater in the A-TZ had naphthalene concentrations below the $^{Air}GW_{Inh-v}$ PCL. Therefore, potential for vapor migration from groundwater is low.

Explain how the response action will prevent COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water if surface water is a factor.

Groundwater discharges to surface water are not a concern at the Site and no further action is required.

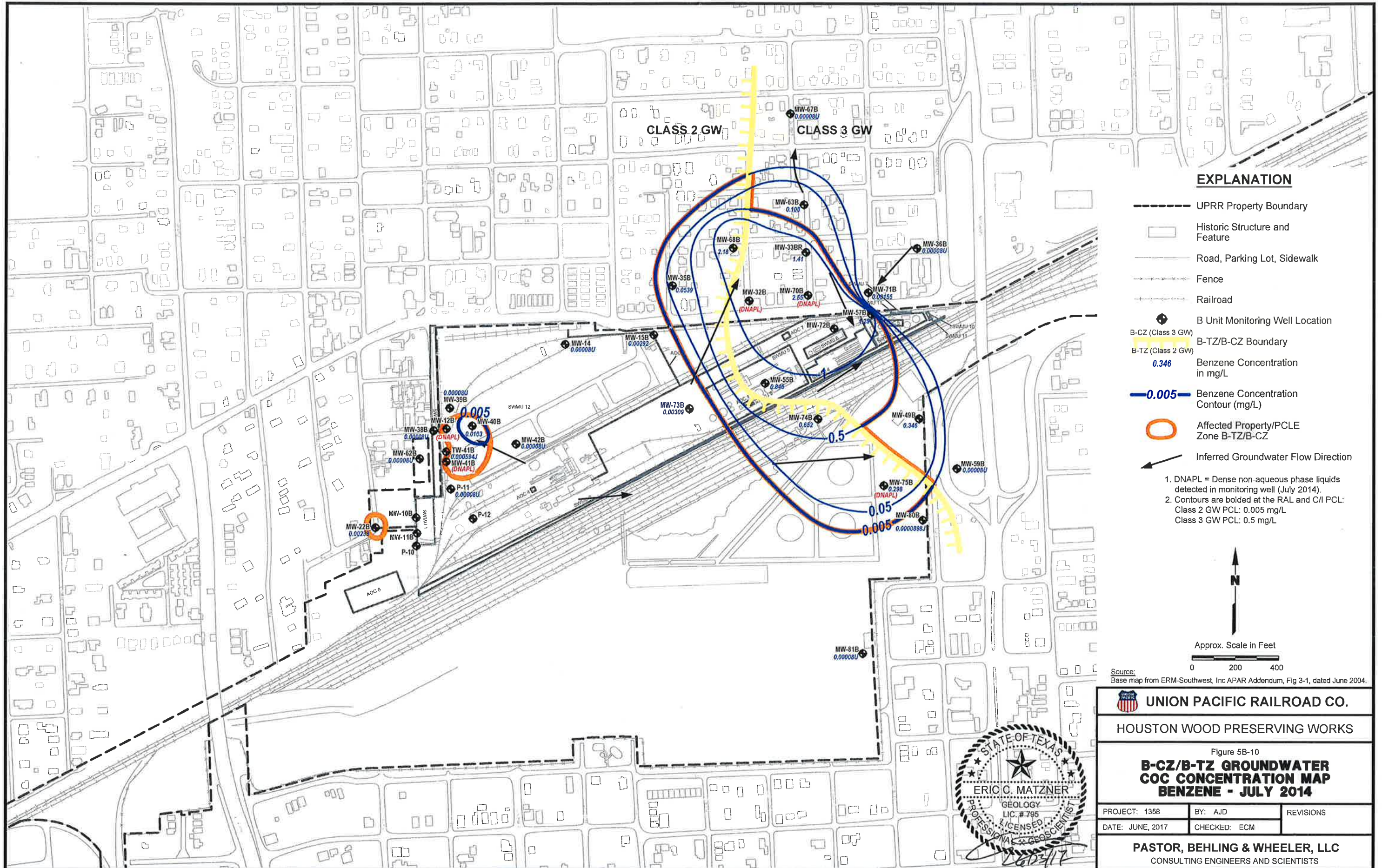
Explain how the response action will prevent human and ecological receptor exposure to the groundwater PCLE zone.

Response Action Objectives Associated Information: Attachment 1A, 1B	RAP Worksheet 1.0 Page 10 of 10	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 - Rev 3

There are no potential or unprotective human health exposures at the Site for groundwater since none of the properties in the area use groundwater for drinking; and the properties are provided drinking water by the City of Houston. For the proposed response action, implementation of the PMZ , and associated application of institutional controls, will also limit future use of shallow groundwater found within the PMZ.

In regards to ecological receptors, groundwater does not discharge to ground surface nor discharges to surface water. Therefore, there is not a complete or potentially complete pathway for ecological receptors.

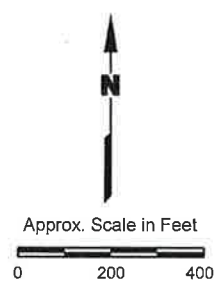
ATTACHMENT 1A
GROUNDWATER COC MAPS - B-CZ/B-TZ



EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- B-CZ (Class 3 GW)
B-TZ (Class 2 GW)
0.346 Benzene Concentration in mg/L
- 0.005 Benzene Concentration Contour (mg/L)
- Affected Property/PCLE Zone B-TZ/B-CZ
- ↖ Inferred Groundwater Flow Direction

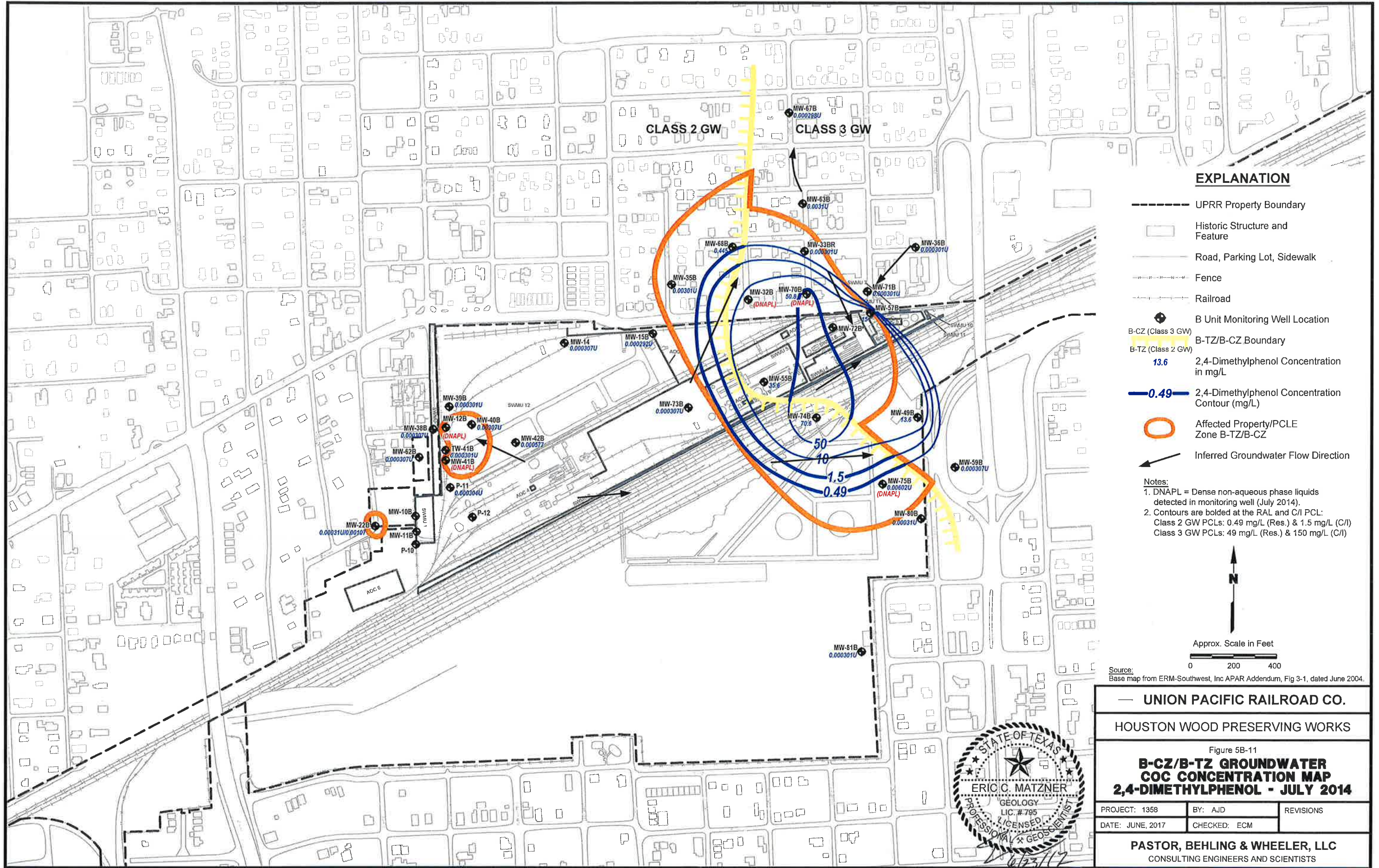
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
2. Contours are bolded at the RAL and C/I PCL:
Class 2 GW PCL: 0.005 mg/L
Class 3 GW PCL: 0.5 mg/L



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-10 B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP BENZENE - JULY 2014		
PROJECT: 1368	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		





EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - - - Fence
- +—+—+— Railroad
- ⊙ B Unit Monitoring Well Location
- B-CZ (Class 3 GW)
- B-TZ/B-CZ Boundary
- 13.6 2,4-Dimethylphenol Concentration in mg/L
- 0.49 2,4-Dimethylphenol Concentration Contour (mg/L)
- Affected Property/PCLE Zone B-TZ/B-CZ
- ↖ Inferred Groundwater Flow Direction

- Notes:**
1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.49 mg/L (Res.) & 1.5 mg/L (C/I)
 Class 3 GW PCLs: 49 mg/L (Res.) & 150 mg/L (C/I)



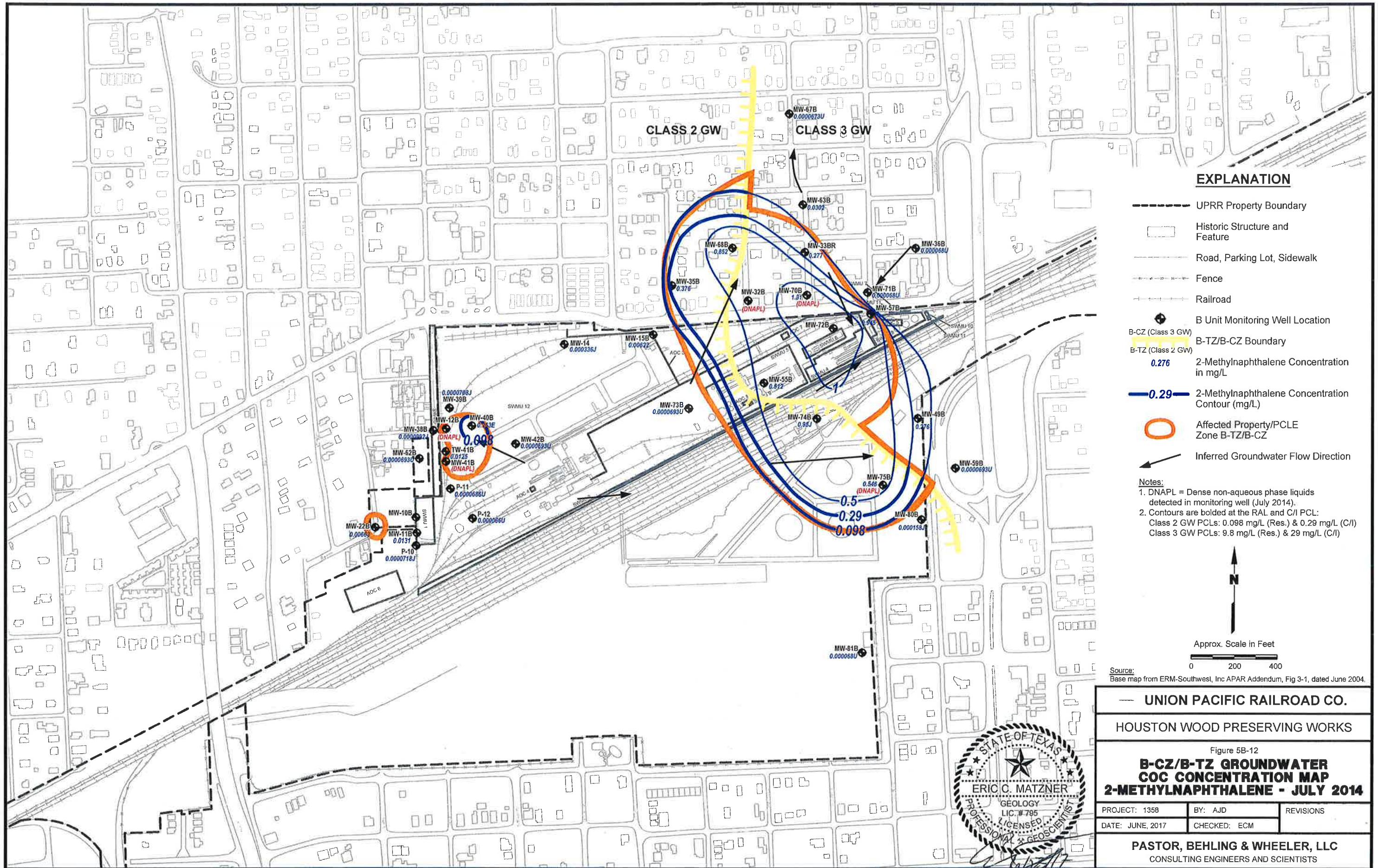
Approx. Scale in Feet



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-11		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP 2,4-DIMETHYLPHENOL - JULY 2014		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

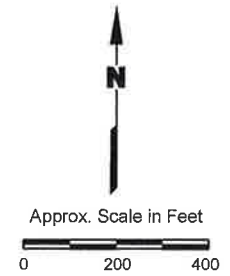




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- B Unit Monitoring Well Location
- B-CZ (Class 3 GW)
- B-TZ (Class 2 GW)
- 0.276 2-Methylnaphthalene Concentration in mg/L
- 0.29 2-Methylnaphthalene Concentration Contour (mg/L)
- Affected Property/PCLE Zone B-TZ/B-CZ
- ← Inferred Groundwater Flow Direction

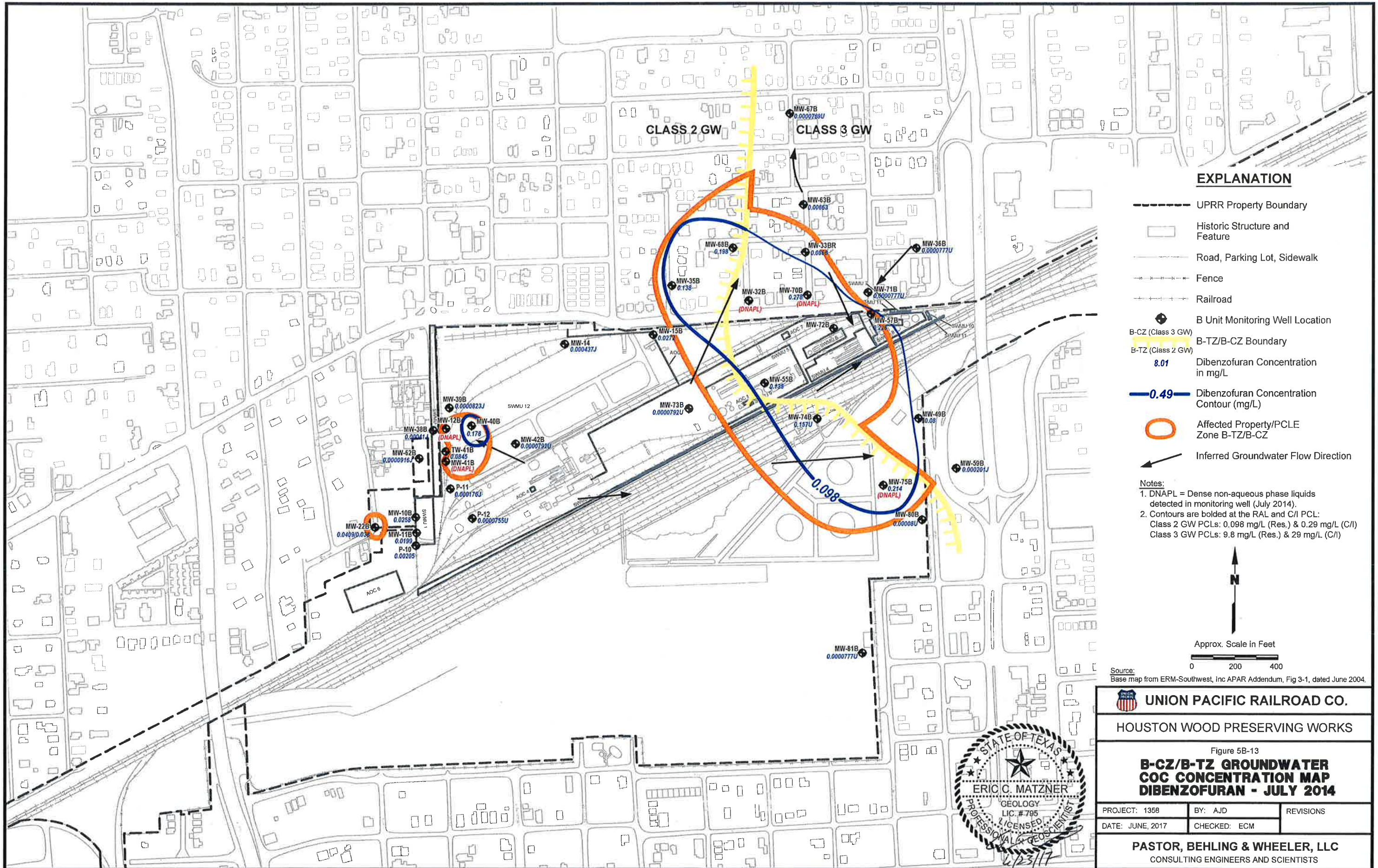
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
 Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-12		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP		
2-METHYLNAPHTHALENE - JULY 2014		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

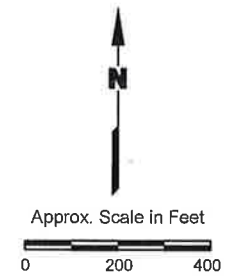




EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - - Fence
- +—+—+ Railroad
- ⊕ B Unit Monitoring Well Location
- B-CZ (Class 3 GW) B-TZ/B-CZ Boundary
- B-TZ (Class 2 GW)
- 8.01 Dibenzofuran Concentration in mg/L
- 0.49 Dibenzofuran Concentration Contour (mg/L)
- Affected Property/PCLE Zone B-TZ/B-CZ
- ↖ Inferred Groundwater Flow Direction

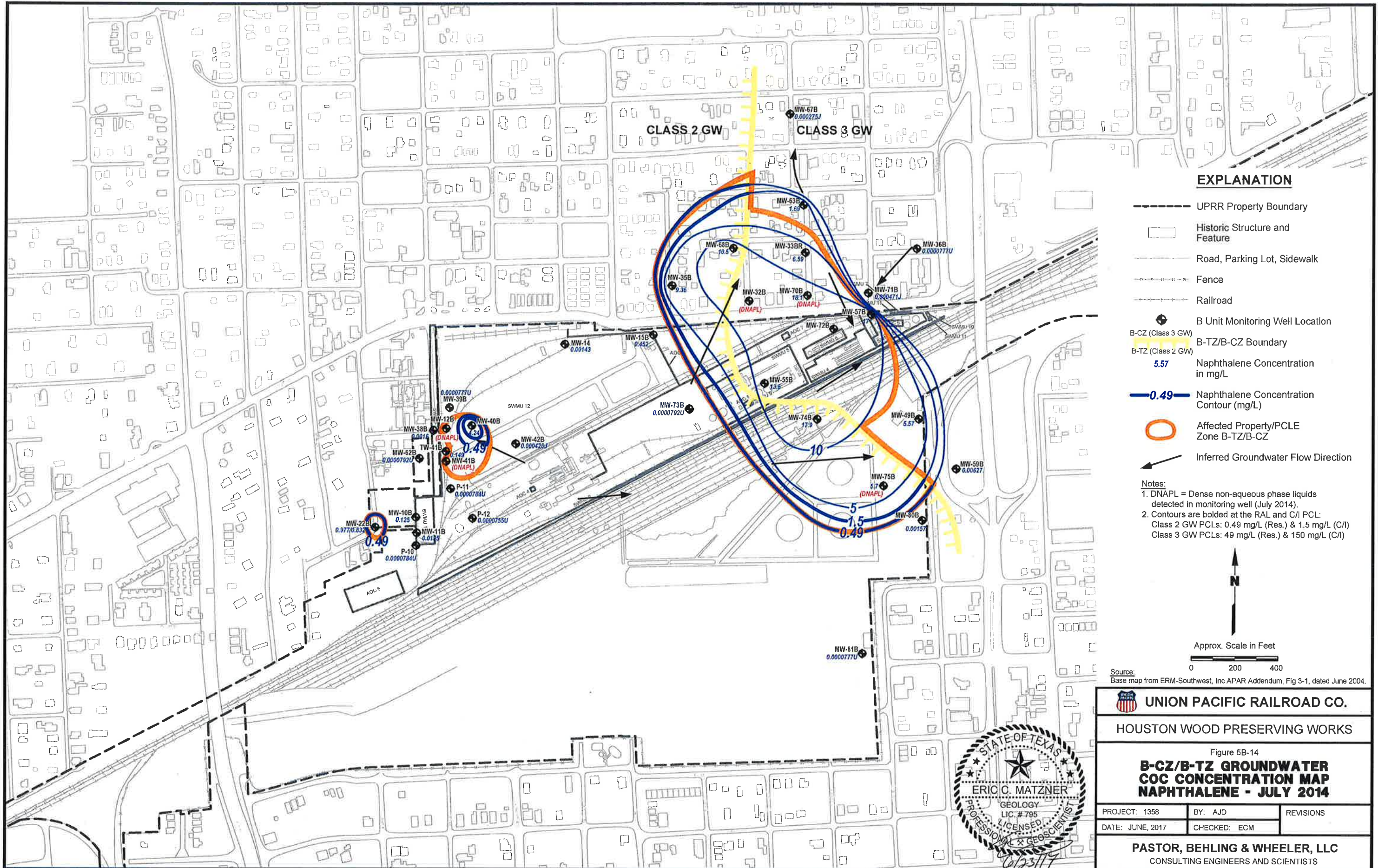
Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.098 mg/L (Res.) & 0.29 mg/L (C/I)
 Class 3 GW PCLs: 9.8 mg/L (Res.) & 29 mg/L (C/I)



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Figure 5B-13		
B-CZ/B-TZ GROUNDWATER COC CONCENTRATION MAP DIBENZOFURAN - JULY 2014		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

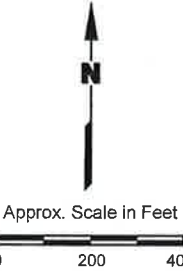




EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- Railroad
- ⊕ B Unit Monitoring Well Location
- B-CZ (Class 3 GW) B-TZ/B-CZ Boundary
- B-TZ (Class 2 GW)
- 5.57 Naphthalene Concentration in mg/L
- 0.49 Naphthalene Concentration Contour (mg/L)
- Affected Property/PCLE Zone B-TZ/B-CZ
- ↖ Inferred Groundwater Flow Direction

Notes:
 1. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 2. Contours are bolded at the RAL and C/I PCL:
 Class 2 GW PCLs: 0.49 mg/L (Res.) & 1.5 mg/L (C/I)
 Class 3 GW PCLs: 49 mg/L (Res.) & 150 mg/L (C/I)



Source:
 Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.
 HOUSTON WOOD PRESERVING WORKS

Figure 5B-14
**B-CZ/B-TZ GROUNDWATER
 COC CONCENTRATION MAP
 NAPHTHALENE - JULY 2014**

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS



Response Action Design Associated Information: Attachment 2A, 2B, 2C	RAP Worksheet 2.0 Page 1 of 4	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 – Rev 3

Response Action Design

Use this worksheet to provide detailed descriptions of the response action. Attach design and layout drawings and equipment specifications in Attachment 2A.

Media: Shallow Groundwater – A-TZ, B-CZ/B-TZ, C-TZ GWBU

List all media to which this information applies. If the response action is different for another media, complete a separate worksheet.

Provide a detailed description of the response action. Describe the removal action, decontamination, treatment system(s), and/or physical or institutional control actions that are proposed for each media and discuss the reasons for choosing the response action(s). Identify and describe any ecological services analysis and compensatory restoration plan that will be utilized (if so, include the complete ESA and compensatory restoration plan in Attachment 2C).

The response action design for the groundwater PCLE Zones will be to implement the modified Remedy Standard B groundwater response action by establishing PMZs (On-Site (Main and West), Off-Site, and Off-Site City of Houston ROW) for the groundwater PCLE Zones in the A-TZ, B-CZ, B-TZ, and C-TZ (discussed in Worksheet 2.1).

For the PMZ, MNA will be used for the physical control mechanism, which has shown to be a control for migration of the COC groundwater plumes. An evaluation of historical groundwater monitoring data and data trends for the Site indicates that natural attenuation of COCs in groundwater is occurring (Attachments 1A (evaluation of recent groundwater data) and 1B (concentration versus time graphs)). Site-specific COCs will be monitored to ensure the levels of these constituents remain stable and below cPCLs at the point of exposure (POE) wells as well as below the attenuation action levels (AAL) at the attenuation monitoring points (AMP) (Attachment 2A-2). Groundwater monitoring will be used to confirm the continued natural attenuation of COCs to concentrations below cPCLs throughout the PCLE zone; however, this will not likely be achieved in a reasonable timeframe given the presence of creosote DNAPL. Groundwater monitoring will be performed on a semi-annual basis. For the purposes of this RAP submittal, there will be four overall PMZ areas:

1. On-Site PMZ (Main) – The on-site PMZ (Main) will include the cumulative groundwater PCLE Zone within the UPRR-owned property from the center to the east portion of the Site.
2. On-Site PMZ (West) – The on-site PMZ (West) will include the B-CZ/B-TZ PCLE Zone on the west side of the Site within the UPRR-owned property.
3. Off-Site PMZ *[pending]* – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site, but not including land designated as City of Houston ROW. The proposed off-site PMZ will require institutional controls for up to 53 individual properties.
4. Off-Site PMZ City of Houston ROW – The off-site PMZ includes the cumulative groundwater PCLE Zone that is a continuation of the On-Site PMZ (Main) and extends off-site to the north of the Site within the land designated as City of Houston ROW.

The On-Site PMZs (Main and West, including the former HWPW, Englewood Intermodal Yard) will be deed restricted to commercial-industrial land use and to restrict future use of groundwater on-site, as well as restrictions on soil excavation activities within the surface soil PCLE Zone on the UPRR-owned property. The Off-Site PMZ City of Houston ROW will be deed restricted to restrict future use of

Response Action Design Associated Information: Attachment 2A, 2B, 2C	RAP Worksheet 2.0 Page 2 of 4	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 – Rev 3

groundwater on-site, as well as restrictions on soil excavation activities within the surface soil PCLE Zone along a portion of the northern boundary of the Site.

For the Off-Site PMZ (excluding the Off-Site PMZ City of Houston ROW), this area is considered pending until all the deed recordations within the Off-Site PMZ have been acquired. Currently, UPRR has acquired 30 signed restrictive covenants from private landowners and the signed restrictive covenant from the City of Houston for ROW throughout the proposed Off-Site PMZ. Three additional property owners have recently agreed verbally with the restrictive covenant and UPRR is a waiting signature. For 11 properties within the Off-site PMZ, UPRR has conducted an extensive and diligent inquiry to locate the landowner who can legally sign the restrictive covenant per 30 TAC §350.111(c)(3), but has not been able to locate the proper landowner for signature (details in Appendix 5). UPRR proposes to file a deed notice for those properties pending TCEQ approval. For the remaining nine properties within the proposed Off-Site PMZ, UPRR has located the landowners but has not received signed restrictive covenants or filed deed notices at this time. UPRR will continue to work with the landowners to secure the restrictive covenants for these properties and establish the PMZ for the entire groundwater PCLE Zone. In the interim, UPRR proposes to monitor groundwater in wells within the Off-Site PMZ properties as part of the corrective action groundwater monitoring program. Data collected from the monitoring wells near the properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

To address the NAPL present in the GWBUs, the NAPL response action objectives and endpoints using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ, B-CZ/B-TZ, and C-TZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of complex hydrogeology and physical nature of creosote (discussed in Worksheet 2.3). UPRR is currently conducting monthly DNAPL Recovery Activities to evaluate the recoverability of the DNAPL at the Site. The DNAPL recovery consists of monthly pumping events from wells with sufficient volumes of DNAPL that can be recovered. DNAPL recovery will continue on a monthly basis, but the recovery frequency and wells included in the DNAPL Recovery Activities will be evaluated on an annual basis for DNAPL recoverability and effectiveness.

Institutional controls as detailed in §350.31(g) through deed recordation (UPRR-owned property) and restrictive covenants/deed notices (off-site properties) within the PMZ and restricting the use of groundwater will be used at the Site to prevent future exposure risk until groundwater concentrations achieve critical PCLs. Landowners for some properties within the Off-Site PMZ were not locatable. In accordance with 30 TAC §350.111(c)(3), documentation of the extensive and diligent inquiry to locate those landowners are provided in Appendix 5. Following approval from the TCEQ Executive Director, deed notices on those properties will be placed detailing the Off-Site PMZ.

Describe all major treatment system components and equipment of the response action. Illustrate the response action design and provide equipment specifications in Attachment 2A.

There is no major treatment system proposed to address the groundwater PCLE. Creosote DNAPL will be recovered from selected wells (designated as Corrective Action System Well) using manual pumping (or equivalent) methods, stored on-site at the Container Storage Area (NOR 4), and disposed of in accordance with state and federal regulations within the required timeframes.

List permits or registrations needed to construct or implement the response action, including permits or registrations needed to conduct studies or tests. For VCP sites, list the permits that would be required if the site was not in the VCP (required by the VCP).

Permitting/Registration Authority	Type of permit/registration	Permit or registration number if already issued	Anticipated application date
Harris County Clerk	Deed restriction of property to commercial-industrial use and groundwater use restriction (On-Site PMZs, Off-Site PMZ, and Off-Site PMZ City of Houston ROW)	NA	Within 120 days of RAP approval
TCEQ	TCEQ Hazardous Waste (HW) Permit/Compliance Plan	SWR 31547 HW Permit: 50343 Expires June 10, 2015	HW Permit Renewal/Revision submitted December 10, 2014

Identify and discuss the results of any studies or tests, such as pilot studies, feasibility studies, technical impracticability studies, treatability studies, and/or toxicity studies conducted or proposed to be conducted at the affected property. Discuss the reason for the study or test and how it verifies the effectiveness and appropriateness of the chosen response action or documents that a particular response action is not appropriate for the affected property. Describe how the results of completed studies or tests determined the design or choice of response action. Attach any separate reports and supporting documentation in Appendix 3.

The following two studies have been conducted at the Site to evaluate the groundwater response action methods:

1. DNAPL Recovery Pilot Study; and
2. Front-end TI Demonstration Study (updated).
3. Post-Closure Care/No Further Action (NFA) Assessment for RCRA Unit 1/SWMU No. 1

PBW initiated a 24-month pilot study in February 2013 through January 2015 to evaluate DNAPL recovery at the Site by conducting tests on selected wells where DNAPL had been observed. Details of the scope of work for the pilot test were submitted to the TCEQ in a letter dated February 5, 2013 (PBW, 2013). A copy of the scope of work is provided in Appendix 3. The pilot test procedures consists of measuring the depth to groundwater surface, the depth to the groundwater/DNAPL interface, and the total depth of the well relative to the top of well casing prior to DNAPL recovery. Using a peristaltic or diaphragm pump, DNAPL is pumped from the bottom of the well until groundwater is returned in the pump discharge. The volume of recovered DNAPL is estimated from each well, and the well is gauged to measure the total depth of the well and depth to residual DNAPL following pumping. Recovered DNAPL is temporarily stored at the Containment Storage Area. PBW submitted to the TCEQ in a letter dated April 9, 2015 the results of the 24-month pilot test. A copy of the letter is also provided in Appendix 3. The conclusions from the pilot test included that once per month DNAPL recovery activities

Response Action Design Associated Information: Attachment 2A, 2B, 2C	RAP Worksheet 2.0 Page 4 of 4	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 – Rev 3

are resulting in an overall stable DNAPL thickness trend in the wells tested, and current monthly recovery frequency appears to be effective with total DNAPL volume recovered becoming stable in the wells over time. More frequent DNAPL recovery would not likely be effective at the Site. The report indicated that monthly DNAPL recovery activities following the procedures listed in the pilot test work plan would continue at the Site. DNAPL recoverability, including recovery frequency and wells included in the DNAPL Recovery Activities will be evaluated on an annual basis as part of the post-response action care reporting.

Based on the TCEQ Technical Support Section Interoffice Memorandum (IOM) dated October 14, 2015 by Mr. Paul Lewis in the TI RAP Worksheet 2.3, PBW updated the TI Demonstration (Worksheet 2.3, Attachment 2G) highlighting the factors that inhibit groundwater restoration to cPCLs at the Site within a reasonable timeframe. These include hydrogeological factors and contaminant-related factors that limit the effectiveness of any remediation approach from achieving cPCLs where DNAPL or evidence of DNAPL has been observed. The lateral extents of the TI Zone were also revised to address comments stated in the TCEQ IOM and from a follow-up meeting with the TCEQ on November 4, 2015. The updated TI Demonstration is provided in Attachment 2G. However, the TCEQ has not approved the TI waiver based on their technical memorandum dated December 13, 2016. Specifically, the TCEQ stated that the TI Demonstration did not adequately address the criteria established per 30 TAC §350.33(f)(3)(E), in which COCs at concentrations above the critical groundwater PCLs are prevented from spreading beyond the existing boundary of the groundwater PCLE zone. To address this concern, UPRR proposes to use groundwater data collected as part of the site-wide groundwater monitoring program (detailed in the RAP Worksheet 3.1). Data collected over time from the point of exposure (POE) wells, attenuation monitoring points (AMPs), and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E).

In the original RAP (Appendix 3C) submittal dated November 21, 2014, PBW prepared a report detailing the supporting documentation for requesting a No Further Action (NFA) and ceasing post-closure care for the Closed Surface Impoundment (Solid Waste Management Unit (SWMU) 1) at the Site. The groundwater monitoring activities over the past three years have shown compliance with groundwater protective standards, and have achieved the groundwater Remedy Standard A requirements under TRRP. As stated in the TCEQ Technical NOD dated August 5, 2015 for the RAP, the TCEQ stated that the TCEQ Remediation Division, Corrective Action Program concurred with UPRR’s request for the NFA (NOD T25). During a meeting between UPRR and the TCEQ to discuss the Technical NOD, it was agreed that additional research would be conducted by UPRR to assess if the historical documentation on the SWMU 1 closure activities in 1984 could support that the soils at the unit had been clean closed. PBW submitted additional information to the TCEQ on September 18, 2015 titled “Additional Information for Clean Closure Equivalence Demonstration” regarding the historical closure activities, agency correspondence, and sampling at SWMU 1.

The TCEQ issued a review comment letter dated November 5, 2015 on the September 18, 2015 submittal stating that *“the I&HW Permits Section is unable to accept the UPRR Company request to discontinue Post-Closure Care of the SWMU No. 1. Our review of the demonstration indicates that the data presented does not exclude the closed surface impoundment from either continuing to be monitored under compliance monitoring or detection monitoring.”*

ATTACHMENT 2A
RESPONSE ACTION DIAGRAMS

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- ◆ A-TZ Monitoring Well Location
- ◆ B-CZ/B-TZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location
- Corrective Action System Well (DNAPL Recovery)
- ⊗ Plugged and Abandoned
- Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- MW-78A Alternate Groundwater Point of Exposure (POE)
- MW-18A Attenuation Monitoring Point (AMP)
- MW-28A RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

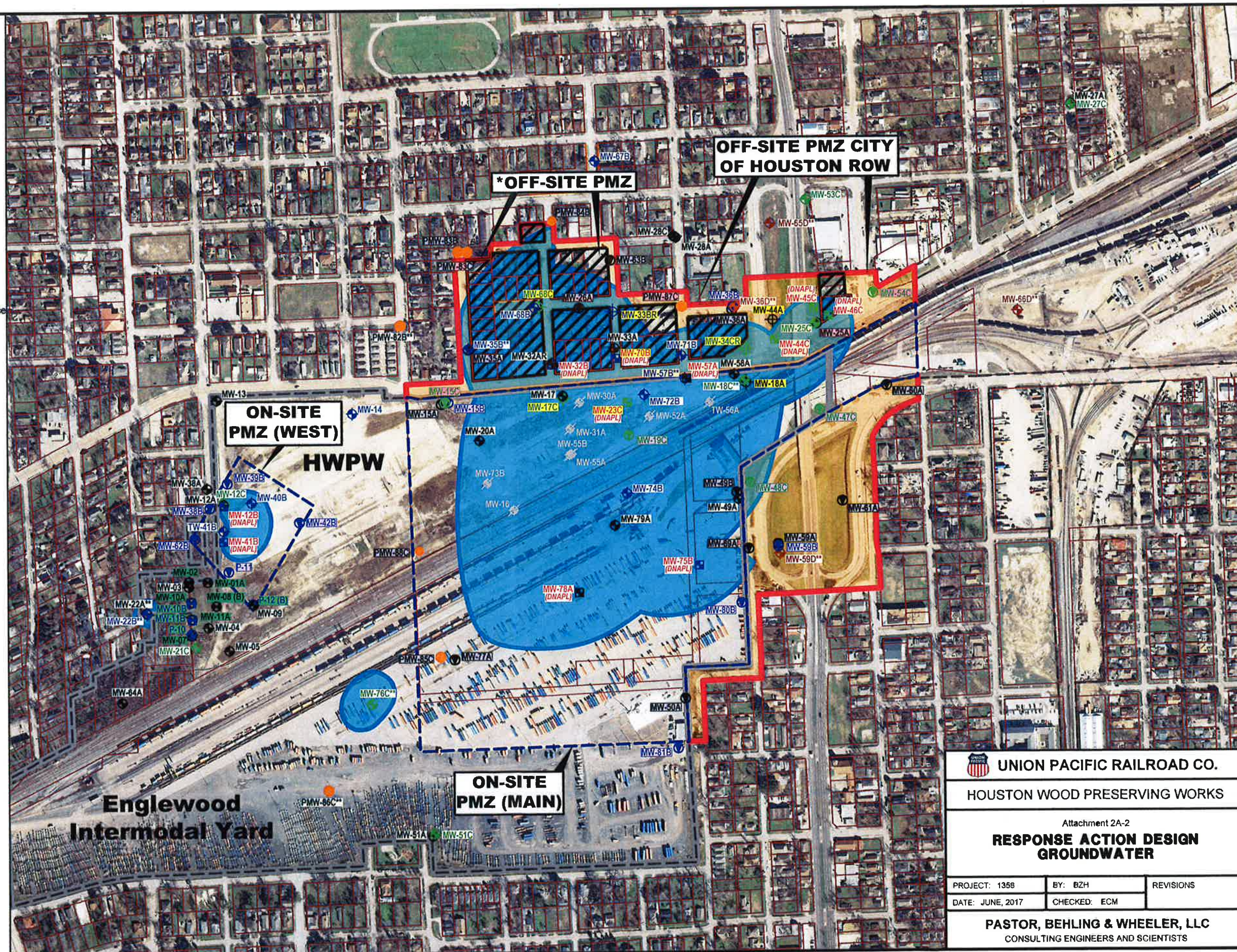


Approx. Scale in Feet
0 200 400

Source:
Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 2A-2		
RESPONSE ACTION DESIGN GROUNDWATER		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

ATTACHMENT 2B
PROPOSED WELL DESIGN

ATTACHMENT 2B

PROPOSED WELL DESIGN

Introduction

As detailed in RAP Worksheet 2.1, the following wells are proposed to be installed:

1. Point of Exposure Wells:
 - a. B-TZ/B-CZ: PMW-83B and PMW-84B
 - b. C-TZ: PMW-83C, PMW-85C, PMW-87C, and PMW-88C
2. Corrective Action Observation Wells:
 - a. PMW-82B and PMW-86C
3. Replacement Wells:
 - a. A-TZ: MW-22AR
 - b. B-TZ: MW-22BR

The proposed new wells and replacement wells are shown on Attachment 2B-1. Monitoring wells MW-22AR and 22BR are to be installed to replace damaged wells MW-22A and MW-22B, respectively. Details of the well installation are discussed below.

Permanent Monitoring Well Installation

Soil borings for monitoring wells will be advanced using hollow stem auger, mud rotary, or sonic drilling methods. Soil samples will be collected continuously from each boring and will be logged in the field for lithology and sedimentary structure. Soil headspace samples will be collected every two feet and screened in the field for total organic vapor concentrations. In addition, soil core samples will be visually inspected for contamination and non-aqueous phase liquid (NAPL) presence.

Soil borings that will be used for monitoring well installation will be advanced as necessary to identify the top and base of the targeted groundwater bearing-unit (GWBU) (i.e., A-TZ, B-TZ, C-TZ). Based on the boring logs for previous monitoring wells drilled at the Site, it is anticipated that these borings will be advanced to the following maximum depths (subject to field conditions):

- A-TZ: approximately 30 feet below ground surface (bgs)
- B-TZ/B-CZ: approximately 36 feet to 40 feet bgs
- C-TZ: approximately 70 feet bgs.

Although the proposed borings for wells below the A-TZ will be located away from areas where NAPL has been identified, surface or isolation casing (permanent isolation casing or temporary isolation casing using sonic drilling techniques) may be installed prior to penetration of any low permeability confining unit.

Permanent monitoring wells will be constructed after the total depth of the borehole is reached. Monitoring wells will be constructed using 2-inch or larger diameter, flush-joint-threaded Schedule 40 PVC casing and 0.010-inch slotted PVC screen. Other well casing and screen materials (i.e., stainless steel) may be used instead of PVC depending on the potential for exposure to NAPL. The specific well design will be determined in the field based on the observed lithology with the goal of screening the well at the base of the targeted GWBU. It is anticipated that each well screen will be approximately 10 feet in length, but shorter screen intervals may be installed for the B-CZ wells. After the boring is completed to the total depth, the casing and screen will be lowered into the borehole through the augers or sonic isolation casing.

Once the casing and screen are in place, the remaining well materials (filter sand, bentonite pellets, and cement/bentonite grout) will be added to the hole as the augers/sonic casings are slowly removed. Depths

to the top of the annular materials will be measured with a weighted, calibrated tape and recorded on the Well Completion Log. A bentonite seal layer will be installed on top of the filter sand and will be a minimum of 2 feet in thickness. The remainder of the borehole annulus will be filled with a Portland/bentonite grout (or bentonite pellets). Each well will be completed with either a flush-grade surface completion with a 2-foot by 2-foot pad or above grade within a protective casing on a 4-foot-by-4-foot concrete pad. If an above grade completion is constructed, bollards or bumper guards should be installed around the surface completion. Typical monitoring well completion details are shown on Attachment 2B-2. After construction, the position and elevation of each monitoring well will be surveyed by a licensed, professional surveyor relative to Texas State Plane Coordinates and mean sea level.

Monitoring Well Development

A minimum of 24 hours shall elapse after well construction and before well development to allow for bentonite hydration and grout set. Development will consist initially of surging and bailing or pumping; however, the specific development method will ultimately be decided by the field personnel based on the specific conditions encountered. Temperature, pH, specific conductivity, and turbidity will be monitored during purging. Development will continue until the well produces water with stable field parameter readings (i.e., temperature, pH, conductivity) and turbidity is below 10 NTU. At least five casing volumes of water will be removed from the well during development unless the well pumps dry. If the turbidity is not below 10 NTU after 10 casing volumes of water are removed from the well, then the final turbidity will be recorded and more aggressive development procedures such as air lifting may be considered.

Monitoring Well Documentation

Documentation of well installation and development will include field boring logs, monitoring well installation forms, well development forms, and any photographs. For wells installed within the City of Houston right of way (ROW), city permits will be required prior to installing the wells. Investigation-derived wastes (IDW), such as soil cuttings, decontamination fluids, or development water, generated from the drilling activities will be stored and disposed of in accordance with state and federal requirements. Documentation of the wastes disposed of as part of the well installation will be maintained.

Following installation, a certification report will be submitted to the Texas Commission on Environmental Quality (TCEQ) detailing the well installation and related documentation.

FIGURES

EXPLANATION

- UPRR Property Boundary
- ⊕ A-TZ Monitoring Well Location
- ⊕ B-CZ/B-TZ Monitoring Well Location
- ⊕ C-TZ Monitoring Well Location
- ⊕ D-TZ Monitoring Well Location
- ⊕ Corrective Action System Well (DNAPL Recovery)
- MW-24A Alternate Groundwater Point of Exposure (POE)
- MW-18A Attenuation Monitoring Point (AMP)
- MW-25A RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

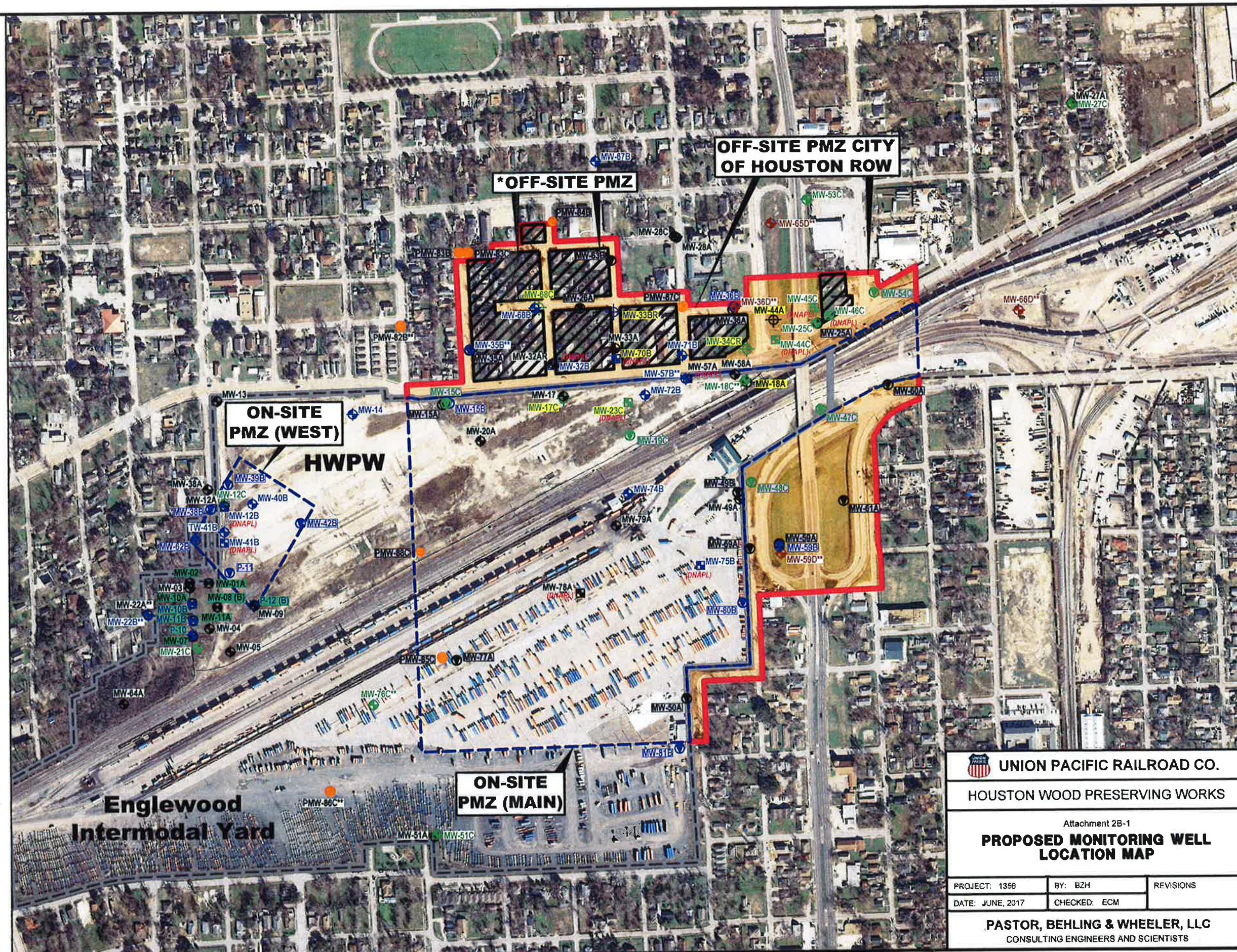


Approx. Scale in Feet
0 200 400

Source:
Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 2B-1		
PROPOSED MONITORING WELL LOCATION MAP		
PROJECT: 1366	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Plume Management Zone	RAP Worksheet 2.1 Page 1 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

Complete this worksheet when a PMZ is proposed as part of the response action. Include in Attachment 2D a map of the proposed PMZ with alternate POE(s) and attenuation monitoring points identified and the current groundwater PCLE zone. If a PMZ is not proposed, do not submit this worksheet.

Groundwater-bearing unit **A-TZ**

Repeat this worksheet for each groundwater-bearing unit for which a PMZ is proposed.

Groundwater classification X 2 3

Provide justification as to why the PMZ is appropriate in accordance with §350.33(f)(4)(A). Include supporting documentation in Attachment 2E.

The on-site and off-site PMZs proposed as a response action for the A-TZ PCLE zone (Attachment 2D-1) ensures that COCs will not pose a potential unacceptable risk to human health or the environment as long as the AALs are not exceeded at the respective AMPs, and COC concentrations less than cPCLs at the proposed Alternate POE wells. PMZs are appropriate for this PCLE zone based on a relatively low groundwater velocity, overall stable/declining COC concentrations, the proposed institutional controls (deed recordation (on-site PMZs) and restrictive covenants/deed notices (off-site PMZs)) on use of groundwater within the PCLE Zone, and the absence of any existing water supply wells within ½-mile of the Site. In addition, there are no surface water bodies at the Site or near the proposed PMZ; therefore, there is no potential for contaminating surface waters that would be hydraulically connected to groundwater. The City of Houston provides municipal water services for all properties within the Affected Property, so there is no human health complete pathway associated with this GWBU. The Site is also within the jurisdiction of the Harris-Galveston Subsidence District (HGSD), which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

The on-site and off-site PMZs proposed for the A-TZ PCLE zones consists of two components: 1) filing of institutional controls including deed recordation (UPRR-Owned properties) and restrictive covenants/deed notices (off-site properties, City of Houston ROW, and properties where land owners could not be located) prohibiting the use of groundwater within the PMZs; and 2) performance of ongoing groundwater monitoring at the proposed AMPs and POE wells. The proposed deed recordation and restrictive covenants that have been signed by the landowner, and will be filed in the Harris County deed records once executed by the TCEQ, are included in Appendix 4.

Excluding the Off-Site PMZ City of Houston ROW, the proposed Off-Site PMZ is currently considered pending (Attachment 2D-1) until the deed recordation for the properties within the Off-Site PMZ is submitted. Most of the off-site properties (30 of the 53 properties) have signed restrictive covenants. UPRR will continue to work with the landowners to secure the restrictive covenants for the properties where restrictive covenants or deed notices have not been acquired. In the interim, UPRR proposes to monitor groundwater in wells (MW-17, MW-26A, MW-32A, MW-33A, MW-35A, MW-36A, and MW-57A) that are within the proposed Off-Site PMZ as part of the corrective action groundwater monitoring program (as detailed in RAP Worksheet 3.1). Data collected from the monitoring wells will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

As detailed in Attachment 1A, the PMZs for A-TZ were established using the July/August 2014 groundwater analytical data collected from the Site, in conjunction with trend analysis for groundwater analytical data from 2010 through 2014 (10 semi-annual sampling events). Comparing the maximum groundwater analytical data from the July/August 2014 groundwater sampling event to cPCLs, concentrations of 23 target COCs exceeded their respective cPCLs in at least one of the four GWBUs. For the A-TZ, the following 12 COCs were detected above cPCLs:

VOCs

- Benzene
- Methylene Chloride
- Vinyl Chloride

SVOCs

- 2,4-Dimethylphenol
- 2-Methylnaphthalene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Bis(2-chloroethoxy)methane
- Chlorobenzene (A-TZ only, one well)
- Dibenzofuran
- Naphthalene
- Phenol

Of those COCs, benzene, 2,4-dimethylphenol, 2-methylnaphthalene, dibenzofuran, and naphthalene are the most prominent COCs where the cPCL exceedances for these COCs define the PCLE Zone in the A-TZ. Therefore, the trend analyses and attenuation action levels were calculated for these five COCs (Attachment 2E). None of the COCs listed above were detected in the A-TZ at concentrations that exceeded the ^{Air}GW_{Inh-V} PCL.

The overall groundwater flow across the Site in the A-TZ is to east, until the Lockwood Street Bridge area on the far east side of the Site. As discussed in the APAR Addendum (PBW, 2009), there is a City of Houston 60-inch sanitary sewer line that cuts across the east end of the Site (Attachment 1A, Figure 5A-1) that flows north to south just west of the Lockwood Street Bridge. Based on a review of the City of Houston engineering drawing files for the sanitary sewer line, the sewer line potentially intersects the saturated A-TZ unit, and may be affecting the groundwater potentiometric surface elevation of the A-TZ (Attachment 1A, Figure 4C-1).

PBW installed a small diameter piezometer MW-69A in June 2010 in the City of Houston ROW along the west side of the sanitary sewer line south of MW-49A (Attachment 1A, Figure 1A) to evaluate the potential for site-specific COCs affecting the sanitary sewer. The location of the piezometer was chosen to evaluate if COCs in groundwater are travelling along the west side of the sanitary sewer line. Groundwater data from monitoring well MW-59A indicates that the COCs were not detected above PCLs east of the sanitary sewer line. In addition, PBW collected grab samples of fluid from the sanitary sewer line upgradient, within the Site, and downgradient of the Site to evaluate potential discharge of site-specific COCs detected in the A-TZ into the wastewater line (PBW, 2010). Samples from the sanitary sewer were collected from three manholes using a peristaltic pump and tubing inserted through the manhole covers.

Based on the analytical results from July 2010 through July/August 2014, none of the site-specific COCs have been detected above TRRP PCLs in the groundwater samples collected from MW-69A. Also, sanitary sewer water analytical results from the three sanitary sewer samples were also compared to TRRP Tier 1 PCLs for groundwater, even though the fluid in the line is not considered groundwater. Of the three samples collected in 2010, the only sample with concentrations greater than PCLs was the

Plume Management Zone	RAP Worksheet 2.1 Page 3 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

upgradient sample SSW1 that had a detection of bis(2-ethylhexyl)phthalate (0.0092 mg/L) above the ^{GW}GW_{ing} PCL of 0.006 mg/L; however, bis(2-ethylhexyl)phthalate is a common laboratory contaminant (as cited in 30 TAC§350.71(k)(2)(B)). The sanitary sewer sample analytical results suggest that there is not a significant mass loading of COCs from groundwater into the sanitary sewer.

As discussed in Worksheet 2.3, a TI Zone was proposed to be established for areas where DNAPL has been detected in monitoring wells or observed in the soil boring log for the GWBUs on site and off site. The TCEQ has not approved the TI waiver based on their technical memorandum dated December 13, 2016. Specifically, the TCEQ stated that the TI Demonstration did not adequately address the criteria established per 30 TAC §350.33(f)(3)(E), in which COCs at concentrations above the critical groundwater PCLs are prevented from spreading beyond the existing boundary of the groundwater PCLE zone. To address this concern, UPRR proposes to use groundwater data collected as part of the site-wide groundwater monitoring program (detailed in the RAP Worksheet 3.1). Data collected over time from the point of exposure (POE) wells, attenuation monitoring points (AMPs), and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E). Details of the TI Zone are provided in Attachment 2G.

In accordance with §350.33(f)(4)(A), both PMZs for the A-TZ Unit will be actively monitored (semi-annually). MNA will be used as a control response for the Site.

Is the alternate POE proposed to be beyond the current limits of the PCLE zone? Yes No
 If yes, how far? Approximately 400 feet (§350.37(l) or (m) as applicable)
 Is it to be off-site? Yes No

On an off-site property that currently does not contain a residential-based groundwater PCLE zone?
 Yes No -

If yes and this is a Class 2 groundwater, provide the basis for concluding that this groundwater does not have a reasonably anticipated future beneficial use (§350.37(l)(3)).

The residential-based PCLE zone extends onto the off-site properties (to the north and to the east in the residential area), and on to the City of Houston ROW. The proposed PMZs extend to the closest monitoring wells where COC concentrations in groundwater are less than the cPCL based on the groundwater data collected in July/August 2014. As previously discussed, the City of Houston provides municipal water services for all properties within the Affected Property, so there is no current beneficial use for the GWBU. The Site is also within the jurisdiction of the HGSD, which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions for small domestic wells, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

Therefore, with the City of Houston providing water for the area, and financial disincentives placed on shallow groundwater use by the HGSD (which the Texas Supreme Court ruled in favor of the HGSD in 1977 to protect public welfare by limiting harmful pumping, which was causing ground subsidence of the land resulting in flooding (*Beckendorff v. Harris-Galveston Coastal Subsidence District (1977)*), the shallow groundwater does not have a reasonably anticipated future beneficial use in the area.

Plume Management Zone	RAP Worksheet 2.1 Page 4 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

Is NAPL present? X Yes No

If so, describe how the response action will achieve the performance criteria in §350.33(f)(4)(E).

§350.33(f)(4)(E) The person is required to reduce NAPLs which contain COCs in excess of PCLs within a plume management zone to the extent practicable. In the determination of adequate NAPL reduction, the executive director may consider conformance with the following criteria and other relevant factors:

- (i) readily recoverable NAPLs have been recovered;*
- (ii) the NAPLs will not generate explosive conditions as defined in §350.31(c) of this title (relating to General Requirements for Remedy Standards);*
- (iii) the NAPLs will not discharge to the ground surface, to surface waters, to structures, or to other groundwater-bearing units;*
- (iv) the vertical and lateral extent of NAPLs will not increase under natural conditions, or sufficient NAPLs have been recovered such that an active recovery system can be demonstrated to effectively control or contain migration of NAPLs (i.e., no increased NAPL extent); and*
- (v) the NAPLs will not result in the critical groundwater PCLs being exceeded at the downgradient boundary of the plume management zone or in the critical PCLs for other environmental media being exceeded at the applicable POE.*

As previously discussed, UPRR will continue to evaluate the TI waiver for areas in the A-TZ where DNAPL has been observed. In the interim, the NAPL response action objective using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the A-TZ PMZ. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZ can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of the complex hydrogeology and physical nature of creosote (discussed in Worksheet 2.3).

Wells with measurable creosote DNAPL are found within the On-Site PMZ (wells MW-57A and MW-78A (Attachment 2D-1)). Readily recoverable NAPL will be recovered from wells on a monthly basis in order to control potential migration within the PMZ. In addition, institutional controls on groundwater use will be implemented to protect exposure to residual NAPL in the GWBUs.

DNAPL recovered as part of the corrective action will be stored on-site in DOT approved drums within the CSA (Unit 4), and then disposed of in accordance with all applicable laws and regulations within the applicable timeframes.

If this is a Class 2 groundwater, explain how the response action will ensure that leachate from the surface soil and subsurface soil PCLE zones will not increase concentration of COCs greater than the current measured concentrations (at time of RAP submittal). (§350.33(a)(2))

Groundwater monitoring has been on-going at the Site since 1997. Current and historical groundwater data from the A-TZ source areas (SWMU 4, 5, 8) (Attachment 1B), especially wells with data going back to 1997, suggest that the COC concentrations in the A-TZ groundwater plume were historically higher compared to present day data. Overall the primary COC concentrations are stable or decreasing. The few wells with increasing concentrations either contain DNAPL or had DNAPL noted in the GWBU on the soil boring log. Therefore, the COCs in the vadose zone (surface and subsurface soil) have reached a

Plume Management Zone	RAP Worksheet 2.1 Page 5 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

point where the mass loading to the A-TZ has reached a state of equilibrium and continued leachate migration to groundwater from surface or subsurface soil will not cause expansion of the groundwater PCLE Zone for the A-TZ. In addition, with the proposed PMZ for the Site, groundwater monitoring as part of the PMZ will be used to confirm that any potential leachate in the surface and subsurface soils will not cause an increase in COC concentrations in groundwater at the POE in excess of the groundwater PCL.

As part of the response action for the surface and subsurface soils in the former HWPW area, the proposed response will be to construct a capped area over the surface soil PCLE Zone. Even though the cap is not designed for hydraulic control, the cap will be constructed with compacted clay and vegetation and sloped to drain storm water. The design of the cap (sloped and vegetated) will minimize infiltration across the surface soil PCLE Zone and reduce leachate migration from the vadose zone to the A-TZ.

Provide the basis that the COCs will not migrate beyond the downgradient boundary of the PMZ at concentrations above the critical PCL. Include supporting documentation in Attachment 2E.

Since the Site was first developed for creosoting operations in 1899, various releases over time likely occurred until the Site operations ceased in 1984. The facility was dismantled in the early 1990s. There have been no other operations at the former HWPW Site in over 30 years. Given the long period of time since releases have occurred at the Site, impacts to surface soils that have migrated to the A-TZ groundwater have likely reached a state of equilibrium, as discussed above. This is supported with the A-TZ groundwater analytical data that indicate the distribution of COCs dissolved in Site groundwater is relatively stable in the source areas. The concentration vs time graphs presented in Attachment 1B-1 through 1B-15 indicate that most of the groundwater COC concentrations are remaining relatively stable. This is confirmed for most of the wells with the Mann-Kendall statistical analysis included in Attachment 2E, except for the following wells:

- For wells MW-12A and MW-18A in the source areas, the Mann-Kendall trend analysis for 2-methylnaphthalene (MW-18A) and dibenzofuran (MW-12A and MW-18A) show increasing trends from 2010 to 2014. However, for both MW-12A and MW-18A, both 2-methylnaphthalene (Attachment 1B-3) and dibenzofuran (Attachment 1B-4) concentrations were greater in 2001 to 2002 compared to recent concentrations.
- An increasing trend for naphthalene in MW-15A was noted, but similar to MW-12A and MW-18A, the highest concentrations in this well were detected in 2001 to 2003 sampling events. None of the COCs were detected above cPCLs during the most recent sampling event.
- Increasing trends for 2-methylnaphthalene, dibenzofuran, and naphthalene were calculated for off-site well MW-33A (with probably increasing trends for benzene and 2,4-dimethylphenol); however, the most recent groundwater data indicate COC concentrations less than cPCLs.
- Increasing trends for benzene and 2-methylnaphthalene were calculated for off-site well MW-44A; however, the most recent groundwater data indicate COC concentrations less than cPCLs.

Therefore, the increasing trends calculated may be due to fluctuations over time rather than indicative of additional release causing the apparent increase. As shown on Attachment 1A, Figure 5B-20, the groundwater PCLE Zone for the A-TZ has remained stable over the past four years.

The downgradient boundary of the on-site and off-site A-TZ PMZ is located at monitoring wells MW-25A, MW-26A, MW-28A, MW-36A, MW-59A, MW-60A, MW-61A, and MW-69A (alternate points of exposure) (Attachment 2D-1). As previously discussed, there appears to be a groundwater divide near MW-44A on the north end and MW-49A/MW-59A on the south end just east of MW-18A (Attachment

Plume Management Zone	RAP Worksheet 2.1 Page 6 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

1A, Figure 5A-1), which lines up with the 60-inch sanitary sewer line that runs north-south. Wells MW-25A, MW-59A, MW-60A, and MW-61A appear to be east of the groundwater divide. This is supported with by the low concentrations of COCs in these wells (Attachment 1A, Figure 5B-1). Fluid samples collected from the sanitary sewer line in 2010 did not indicate a significant loading of COC concentrations into the sewer line; however, the sewer line appears to serve as the downgradient groundwater control for the PMZ. Therefore, it is not anticipated that the on-site and off-site A-TZ groundwater PCLE zone will migrate beyond the proposed A-TZ PMZ boundary.

Attenuation Action Levels (AALs) have been established for Attenuation Monitoring Points (AMPs) within the centerline of the A-TZ plume in order to ensure groundwater COC concentrations do not exceed the cPCLs at the alternate point of exposure (POE) wells. Details on AAL development are provided in Attachment 2E. However, given the complex hydrogeology in the A-TZ, the primary monitoring points for the on-site and off-site PMZs will be at the proposed alternate POE wells. The proposed POE wells are shown on Attachment 2D-1.

Currently, the Off-Site PMZ is considered pending until all of the restrictive covenants or deed notices for the properties have been received (see Attachment 2D-1). In the interim, the GW PCLE zone that extends on to these properties will be monitored as part of the corrective action monitoring program (Worksheet 3.1). Data collected from the monitoring wells near these properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending acquiring restrictive covenants and filing deed notices for the Off-Site PMZ.

Details of the monitoring plan for the A-TZ PMZ are provided in Worksheet 3.1 and Appendix 6.

Describe the methods used to determine that there are no artificial penetrations which can allow COCs to migrate from the groundwater PCLE zone to currently unaffected groundwater-bearing units. Include supporting documentation in Attachment 2E.

An on-site field survey and water-well data search was conducted, indicating no potential vertical artificial penetrations that would act as a conduit for migration of shallow groundwater into the underlying groundwater formation. However, as discussed in the APAR Addendum (PBW, 2009), two sets of fiber optic lines, Level 3 Communications and Qwest, run along the north side of the rail main lines across the entire length of the Site (Attachment 1A, Figure 5A-1). Based on conversations with both Level 3 Communications and Qwest representatives, the fiber lines run underneath SWMUs 2, 5, 4, 8, and 10/11. The fiber lines run directly underneath the drainage ditch southwest of the Site and under the SDD about 3 to 5 feet bgs. The Level 3 Communications line reportedly was directionally bored to a depth of 40 to 45 feet bgs underneath the Original and Recent Process Areas (SWMU Nos. 5 and 4, respectively) and under the AST Area (SWMU No. 8). The Qwest fiber line reportedly runs 10 to 15 feet northwest and parallel of the main rail line, and is about 5 to 10 feet bgs through the Site. Just east of SWMU No. 8, both fiber lines return to approximately 4 to 6 feet below grade and continue running northeast parallel to the rail main line. The Level 3 Communications line may act as an artificial penetration since the reported depths of the line go through both the A-TZ and into the B-CZ immediately below the primary source areas. Given the depth of the fiber optic line is below the A-TZ and likely below the B-TZ (or carbonate seams within the B-CZ), monitoring well MW-19C will continue to be monitored to evaluate if the directional bored fiber optic lines are creating a preferential pathway for COCs to migrate to the C-TZ GWBU.

Plume Management Zone	RAP Worksheet 2.1 Page 7 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

In addition to the fiber lines, three City of Houston utilities were identified in the previous APAR (PBW, 2009) that cut across the Site oriented north-south just west of the Lockwood Street Bridge: 1) 60-in wastewater line, 2) 84-in water line, and 3) a 42-in storm sewer line (PBW, 2009). Through a review of the utility drawing files obtained from the City of Houston Public Works Survey Department, two of the underground utility lines (the 60-in sanitary sewer line and the 84-in water line) appear to be at depths that potentially intersect the uppermost GWBU A-TZ. The estimated depths of the utilities based on the city drawings are shown on the Geologic Cross Sections A-A', B-B', and C-C' (Attachment 1A, Figure 4C-1). The estimated base depth of the 60-in wastewater line and the 84-in water line where Cross Section B-B' crosses the utility lines is approximately 23 feet bgs (approximate elevation of 26 feet HVD). It is highly unlikely that A-TZ groundwater is seeping into the 84-in water line, given the line is under pressure (flow is south to north), constructed with welded steel pipe, and is relatively new (constructed in 2000). Sampling of the 60-in sanitary sewer line was conducted in 2010, as previously discussed.

List the attenuation action level determined for each attenuation monitoring point. Illustrate the proposed attenuation monitoring points and the groundwater PCLE zone on the map in Attachment 2D. Include all calculations and other methods of determining the attenuation action levels in Attachment 2E.

COC	Attenuation Monitoring Point (well number)	Attenuation Action Level (mg/L)	Attenuation Action Level limited by ^{Air} GW _{Inh-V} or existing COC concentration? Y/N
Benzene	MW-18A	1.5	N
	MW-44A	0.0132	N
	MW-25A	0.005 (cPCL)	N
2,4-Dimethylphenol	MW-18A	24	NA
	MW-44A	1.251	NA
	MW-25A	0.49 (cPCL)	NA
2 Methyl naphthalene	MW-18A	1.5	NA
	MW-44A	0.189	NA
	MW-25A	0.098 (cPCL)	NA
Dibenzofuran	MW-18A	0.52	NA
	MW-44A	0.147	NA
	MW-25A	0.098 (cPCL)	NA
Naphthalene	MW-18A	26.16	N
	MW-44A	1.424	N
	MW-25A	0.49 (cPCL)	N

Note: Attenuation Action Levels were not developed for other COCs since the primary COCs listed above define the PCLE Zone.

Plume Management Zone Associated Information: Attachments 2D, 2E	RAP Worksheet 2.1 Page 9 of 21	
	ID No.: 31547	Report Date: June 24, 2017 – Rev 3

Groundwater-bearing unit **B-CZ/B-TZ**

Repeat this worksheet for each groundwater-bearing unit for which a PMZ is proposed.

Groundwater classification X 2 X 3
 (B-TZ) (B-CZ)

Provide justification as to why the PMZ is appropriate in accordance with §350.33(f)(4)(A). Include supporting documentation in Attachment 2E.

The two On-site PMZs (On-Site PMZ (Main) and On-Site PMZ (West)) and Off-Site PMZs proposed (Attachment 2D-2) as a response action for the B-CZ/B-TZ PCLE zone ensures that COCs will not pose a potential unacceptable risk to human health or the environment as long as the AALs are not exceeded at the respective AMPs and exceedances of cPCLs at the proposed alternate POE wells. Both the on-site and off-site PMZs are appropriate for this PCLE zone based on a low groundwater velocity (hydraulic conductivities are indicative of saturated soils in the B-CZ (see Attachment 1A)), overall stable/declining COC concentrations, the proposed institutional controls (deed recordation and restrictive covenants) on use of groundwater within the PCLE Zone, and the absence of any existing water supply wells within ½-mile of the Site. In addition, there are no surface water bodies at the Site or near the proposed PMZs; therefore, there is no potential for contaminating surface waters that would be hydraulically connected to groundwater. The City of Houston provides municipal water services for all properties within the Affected Property, so there is no complete human health pathway associated with this GWBU. The Site is also within the jurisdiction of the HGSD, which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

The PMZs proposed for the B-CZ/B-TZ PCLE zones consists of two components: 1) filing of institutional controls including deed recordation (UPRR-Owned properties – on-site PMZ)) and restrictive covenants/deed recordation (off-site properties – off-site PMZ/and off-site properties where land owners could not be located) prohibiting the use of groundwater within the PMZs; and 2) performance of ongoing groundwater monitoring. Deed recordation and restrictive covenants that have been signed by the landowner, and will be filed in the Harris County deed records once executed by the TCEQ, are included in Appendix 5.

Excluding the Off-Site PMZ City of Houston ROW, the proposed Off-Site PMZ is currently considered pending (Attachment 2D-2) until the restrictive covenants/deed notices are filed. Most of the off-site properties (30 of the 53 properties) have signed restrictive covenants. UPRR will continue to work with the landowners to secure the restrictive covenants for the properties where restrictive covenants or deed notices have not been acquired. In the interim, UPRR proposes to monitor groundwater in wells (MW-32B, MW-33BR, MW-35B, MW-36B, MW-63B, MW-68B, MW-70B, MW-71B and proposed wells PMW-83B and PMW-84B) that are within the proposed Off-Site PMZ as part of the corrective action groundwater monitoring program (as detailed in RAP Worksheet 3.1). Data collected from the monitoring wells will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

As detailed in Attachment 1A, the B-CZ/B-TZ on-site and off-site PMZs were established using the July/August 2014 groundwater analytical data collected from the Site, in conjunction with trend analysis for groundwater analytical data from 2010 through 2014 (10 semi-annual sampling events, Attachment 2E) and development of attenuation action levels from groundwater data collected from 2006 through 2014. Comparing the maximum groundwater analytical data from the July/August 2014 groundwater

sampling event to cPCLs, concentrations of 23 target COCs exceeded their respective cPCLs in at least one of the four GWBUs. For the B-CZ/B-TZ, the following 14 COCs were detected above cPCLs (using Class 2 groundwater PCLs for wells completed in the B-TZ and Class 3 groundwater PCLs for the wells completed in the B-CZ (see Attachment 1A for discussion on B-CZ as a saturated soil):

VOCs

- Benzene
- Methylene Chloride
- Vinyl Chloride

SVOCs

- 2,4-Dimethylphenol
- 2,6-Dinitrotoluene
- 2-Methylnaphthalene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Bis(2-chloroethoxy)methane
- Dibenzofuran
- Naphthalene
- Phenol

Similar to the A-TZ PCLE Zone, benzene, 2,4-dimethylphenol, 2-methylnaphthalene, dibenzofuran, and naphthalene are the most prominent COCs where the cPCL exceedances for these COCs define the PCLE Zone in the B-TZ. Therefore, the trend analyses were conducted for these five COCs (Attachment 2E). For the B-CZ, the Class 3 groundwater cPCL exceedances were for only for benzene and 2,4-dimethylphenol. Updated B-CZ/B-TZ groundwater concentration maps using Class 3 groundwater PCLs for the B-CZ for benzene (Figure 5B-10), 2,4-dimethylphenol (Figure 5B-11), 2-methylnaphthalene (Figure 5B-12), dibenzofuran (Figure 5B-13), and naphthalene (Figure 5B-14) are provided in Attachment 1A.

Since there are two distinct groundwater PCLE Zones further than 500 feet apart within the B-CZ and B-TZ, two separate on-site PMZs were established (Attachment 2D-2):

1. On-Site PMZ (Main)
2. On-Site PMZ (West)

As discussed in Worksheet 2.3, a TI Zone was proposed to be established for areas where DNAPL has been detected in monitoring wells or observed in the soil boring log for the GWBUs on site and off site. The TCEQ has not approved the TI waiver based on their technical memorandum dated December 13, 2016. Specifically, the TCEQ stated that the TI Demonstration did not adequately address the criteria established per 30 TAC §350.33(f)(3)(E), in which COCs at concentrations above the critical groundwater PCLs are prevented from spreading beyond the existing boundary of the groundwater PCLE zone. To address this concern, UPRR proposes to use groundwater data collected as part of the site-wide groundwater monitoring program (detailed in the RAP Worksheet 3.1) to confirm stability of the PCLE Zone. Data collected over time from the POE wells, AMPs, and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E). Details of the TI Zone are provided in Attachment 2G.

In accordance with §350.33(f)(4)(A), the on-site and off-site PMZs for the B-CZ and B-TZ Unit will be actively monitored (semi-annually). MNA will be used as a control response for these units.

Is the alternate POE proposed to be beyond the current limits of the PCLE zone? X Yes No

Plume Management Zone Associated Information: Attachments 2D, 2E	RAP Worksheet 2.1 Page 11 of 21	
	ID No.: 31547	Report Date: June 24, 2017 – Rev 3

If yes, how far? Approximately 150 feet downgradient (§350.37(l) or (m) as applicable)

Is it to be off-site? Yes No

On an off-site property that currently does not contain a residential-based groundwater PCLE zone?

Yes No

If yes and this is a Class 2 groundwater, provide the basis for concluding that this groundwater does not have a reasonably anticipated future beneficial use (§350.37(l)(3)).

The residential-based PCLE zone (Class 2 and 3 groundwater PCLs) extends onto the off-site properties (to the north and to the east in the residential area), and on to the City of Houston ROW. For the Off-Site PMZ, the B-TZ (Class 2 groundwater) is only present on the west portion of the Off-Site PMZ with the B-CZ present across the rest of the Off-Site PMZ. As detailed in RAP Attachment 1A, wells completed in the B-CZ unit have an **average** hydraulic conductivity of 2×10^{-7} cm/sec, which is considerably less than the 1×10^{-5} cm/sec threshold for saturated soils. This finding, which is supported by the well yield test results, indicates B-CZ should be classified as saturated soils rather than a GWBU. The TCEQ agreed that the B-CZ groundwater classification can be considered a Class 3 groundwater per the TCEQ April 10, 2017 Technical Notice of Deficiency (NOD) letter. With the low yield found in the B-CZ, groundwater in this unit would not have a reasonably anticipated future beneficial use.

The proposed PMZs extend to the closest monitoring wells where COC concentrations in groundwater are less than the cPCL based on the groundwater data collected in July/August 2014. As previously discussed, the City of Houston provides municipal water services for all properties within the Affected Property, so there is no current beneficial use for the GWBU. The Site is also within the jurisdiction of the HGSD, which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions for small domestic wells, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

Therefore, with the City of Houston providing water for the area, and financial disincentives placed on shallow groundwater use by the HGSD (which the Texas Supreme Court ruled in favor of the HGSD in 1977 to protect public welfare by limiting harmful pumping, which was causing ground subsidence of the land resulting in flooding (*Beckendorff v. Harris-Galveston Coastal Subsidence District (1977)*)), the shallow groundwater does not have a reasonably anticipated future beneficial use in the area.

Is NAPL present? Yes No

If so, describe how the response action will achieve the performance criteria in §350.33(f)(4)(E).

As previously discussed, UPRR will continue to evaluate the TI waiver for areas where DNAPL is present. For the B-CZ/B-TZ, evidence of DNAPL was noted for most of the area within the proposed Off-Site PMZ (see Figure 5A-6, RAP Attachment 1A (Dec 2014)). In the interim, the NAPL response action objective using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the B-TZ/B-CZ PMZs. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZs can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of the complex hydrogeology (B-CZ, being a

Plume Management Zone	RAP Worksheet 2.1 Page 12 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

Class 3 groundwater unit, consists of thin carbonate seams with average hydraulic conductivity of approximately 2×10^{-7} cm/sec (Attachment 1A)) and physical nature of creosote (discussed in Worksheet 2.3).

Wells with measurable creosote DNAPL are found within the On-Site PMZ (wells MW-12B, MW-41B, and MW-75B) and Off-Site PMZ (wells MW-32B and MW-70B (Attachment 2D-1)). Readily recoverable NAPL will be recovered from wells on a monthly basis in order to control potential migration from the PMZ. In addition, institutional controls on groundwater use will be implemented to protect exposure to residual NAPL in the GWBUs.

For the NAPL areas within the Off-Site PMZ boundary where restrictive covenants have not been acquired and thus is not currently within the Off-Site PMZ (shown on Attachment 2D-2), the preliminary NAPL response objective in accordance with TCEQ TRRP-32 Guidance for these limited areas is groundwater restoration. However, as previously discussed and detailed in Attachment 2G, achieving groundwater protection standards in any of the GWBUs where widespread creosote DNAPL has been observed at the Site is technically impracticable. The appropriate endpoint is control via TI.

Since the B-CZ wells (MW-32B and MW-70B) with DNAPL off-site are within property under the Off-Site City of Houston PMZ and near the properties that are currently not included in the PMZ, NAPL will be recovered from wells monthly in conjunction with the NAPL recovery activities for the areas within the PMZs.

DNAPL recovered as part of the corrective action will be stored on-site in DOT approved drums within the CSA (Unit 4), and then disposed of in accordance with all applicable laws and regulations within the applicable timeframes.

If this is a Class 2 groundwater, explain how the response action will ensure that leachate from the surface soil and subsurface soil PCLE zones will not increase concentration of COCs greater than the current measured concentrations (at time of RAP submittal). (§350.33(a)(2))

With the B-CZ/B-TZ underlying the A-TZ, see response to this question for the A-TZ unit.

Provide the basis that the COCs will not migrate beyond the downgradient boundary of the PMZ at concentrations above the critical PCL. Include supporting documentation in Attachment 2E.

As discussed for the A-TZ PMZs, wood treating operations began at the Site over 115 years ago and continued until about 30 years ago. Given the long period of time since releases have occurred at the Site, creosote DNAPL and related COCs has migrated from the vadose zone (surface and subsurface soils) to the A-TZ groundwater, then to the B-CZ/B-TZ. There are two main areas within the B-CZ/B-TZ where the DNAPL has migrated and resulted in a PCLE Zone:

1. On-Site PMZ (Main)/Off-Site PMZs - Centered in the northeast part of the Site near SWMUs 4, 5, and 8, onto the eastern portion of the Englewood Intermodal Yard, and extending off-site (Off-Site PMZs) to the north of the Site; and
2. On-Site (West) - On the west side of the Site near MW-12B and MW-41B.

On-Site PMZ (Main)/Off-Site PMZs (including City of Houston ROW):

For the area centered over the northeast portion of the Site, predominately off-site, DNAPL has been either observed in the monitoring well soil borings (i.e., MW-35B, MW-63B, MW-68B, and others) or has been detected in the wells (i.e., MW-32B, MW-70B, MW-75B) that fall within the B-CZ/B-TZ groundwater PCLE Zone (Attachment 1A, Figure 5A-6). The fact that the PCLE Zone in the B-CZ is

Plume Management Zone	RAP Worksheet 2.1 Page 13 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

closely tied to where NAPL was observed suggests that there is not a high rate of dissolved constituent migration beyond the DNAPL areas either on-site or off-site. Also groundwater velocities through the Class 3 groundwater unit B-CZ are very low given the low hydraulic conductivity of the carbonate gravel seams within the clay unit. Proposed POE wells MW-15B, MW-36B, MW-59B, MW-80B and MW-81B show either no detections of the COCs or relatively stable COC concentrations well below the RALs (Attachment 1B-11 through 1B-15). This is supported with the B-CZ/B-TZ groundwater analytical data that indicate the distribution of COCs dissolved in Site groundwater is relatively stable in the source areas.

For wells with concentrations near or above cPCLs (Class 2 and Class 3 GW PCLs), the concentration vs time graphs presented in Attachment 1B indicate that groundwater concentrations are remaining relatively stable, which is confirmed with the Mann-Kendall statistical analysis (Attachment 2E), except for MW-49B, MW-70B and MW-74B. Mann-Kendall trend analyses of the groundwater data from MW-49B indicate increasing trends for 2,4-dimethylphenol, 2-methylnaphthalene, and naphthalene; and probably increasing trends for benzene and dibenzofuran using data from 2010 through 2014. Benzene concentrations in well MW-70B indicate a Mann-Kendall increasing trend; however, DNAPL is present in the well. An increasing trend was noted for 2-methylnaphthalene in MW-74B. There have been only five sampling events from MW-74B; therefore, the trends may be indicative of seasonal variation rather than a true increase that will be confirmed with additional sampling. Both MW-70B and MW-74B are located within the central portion of the plume. As shown on Attachment 1A-Figure 5B-21, the overall groundwater PCLE Zone for the B-CZ/B-TZ has remained stable over the past four years.

In addition, migration of either DNAPL or dissolved-phase COCs in the Class 3 groundwater unit B-CZ is not likely to extend beyond the current impacted areas based on the very low hydraulic conductivity of the wells north of the Site (consistently less than 1×10^{-5} cm/sec as discussed in Attachment 1A).

Currently, the Off-Site PMZ is considered pending until all of the restrictive covenants or deed notices for the properties have been received (see Attachment 2D-1). In the interim, the GW PCLE zone that extends on to these properties will be monitored as part of the corrective action monitoring program (Worksheet 3.1). Data collected from the monitoring wells near these properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending acquiring restrictive covenants and filing deed notices for the Off-Site PMZ.

On-Site PMZ (West):

On the west side of the Site, the B-TZ groundwater PCLE zone appears to be confined to three wells: MW-12B, MW-40B, and MW-41B. Historically, wells MW-12B and MW-41B have had DNAPL in-well thicknesses as thick as 15 feet (MW-12B) and 22.8 feet (MW-41B). Both wells are part of the on-going DNAPL recovery activities. In 2009, monitoring well (test well) TW-41B was installed about 40 feet north of MW-41B between MW-41B and MW-12B to serve as a possible DNAPL recovery well. The well was constructed to the same general elevations and screened intervals as MW-41B (Attachment 1A, Figure 4C-3). However, no DNAPL has been detected in TW-41B, and groundwater samples from the well have been less than RALs.

The boundary of the B-TZ PMZ on the west side is located at monitoring wells MW-38B, MW-39B, MW-42B, MW-62B, P-12, and P-11 (alternate POE wells) (Attachment 2D-2). Groundwater analytical data from these west perimeter wells indicate COC concentrations less than cPCLs, and most show either no trend or decreasing trends (Attachment 1B-16 through 1B-20). Monitoring well MW-38B is located approximately 50 feet west of MW-12B. The viscosity of the DNAPL from MW-12B was tested in 2007 with a reading of 192 centipoises, indicating a relatively viscous liquid. With groundwater data less than

Plume Management Zone	RAP Worksheet 2.1 Page 14 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

cPCLs in the wells in close proximity of the wells with DNAPL, this supports the limited dissolved COC migration in the area. Therefore, it is not anticipated that the B-TZ groundwater PCLE zone will migrate beyond the proposed B-CZ/B-TZ PMZ boundary.

For the B-CZ groundwater PCLE Zone on the northeast side of the Site, AALs were established for sampling points leading from MW-70B (off-site, and contains DNAPL) to MW-63B (Attachment 2E-6 and 2E-7 for benzene and 2,4-dimethylphenol respectively) in order to ensure groundwater COC concentrations do not exceed the cPCLs at the point of exposure (MW-63B). Since these wells lie within the City of Houston ROW that is included in the PMZ, these wells were considered appropriate for establishing the AALs for the POE well. Details on AAL development are provided in Attachment 2E. POE wells for the north and east sides of the B-CZ PMZ are shown on Attachment 2D-2. Two additional B-TZ/B-CZ wells (PMW-83B, and PMW-84B) (“P” indicates proposed and will be removed from the well identification once installed) are proposed to be installed north of the Site to serve as alternate POE wells and monitor the PMZ (Attachment 2D-2). An additional corrective action observation well (PMW-82B) will be installed to the west of MW-35B. Details of the well installation are provided in Attachment 2B.

Describe the methods used to determine that there are no artificial penetrations which can allow COCs to migrate from the groundwater PCLE zone to currently unaffected groundwater-bearing units. Include supporting documentation in Attachment 2E.

The site-related contaminants and DNAPL have been detected in the B-CZ/B-TZ, and underlying C-TZ. PMZs are also proposed for the other GWBUs at the Site. Groundwater wells were installed in the underlying D-TZ, and until the July/August 2014 groundwater sampling event, Site-related COC concentrations have been below RALs in those wells.

An on-site field survey and water-well data search was conducted, indicating no potential artificial vertical penetrations that would act as a conduit for migration of shallow groundwater into the underlying groundwater formation. A discussion on underground utilities for A-TZ and possible communication with the B-CZ and deeper C-TZ is provided under the A-TZ summary (see RAP Worksheet 2.1, Page 13).

List the attenuation action level determined for each attenuation monitoring point. Illustrate the proposed attenuation monitoring points and the groundwater PCLE zone on the map in Attachment 2D. Include all calculations and other methods of determining the attenuation action levels in Attachment 2E.

COC	Attenuation Monitoring Point (well number)	Attenuation Action Level (mg/L)	Attenuation Action Level limited by AirGW _{Inh-V} or existing COC concentration? Y/N
Benzene	MW-70B	38.45	Y -23 mg/L (Res, 30-ac Source)
	MW-33BR	3.259	N
	MW-63B	0.21	N
			N
2,4-Dimethylphenol	MW-70B	72	NA
	MW-33BR	57.86	NA
	MW-63B	45.37	NA
			NA

Note: Attenuation Action Levels were not developed for other COCs since the primary COCs listed above define the PCLE Zone.

The proposed PMZ and AMPs for the B-CZ/B-TZ are shown on Attachment 2D-2.

The cPCLs are based on Class 3 groundwater classification (wells listed above are completed in the B-CZ).

Plume Management Zone Associated Information: Attachments 2D, 2E	RAP Worksheet 2.1 Page 16 of 21	
	ID No.: 31547	Report Date: June 24, 2017 – Rev 3

Groundwater-bearing unit C-TZ

Repeat this worksheet for each groundwater-bearing unit for which a PMZ is proposed.

Groundwater classification X 2 3

Provide justification as to why the PMZ is appropriate in accordance with §350.33(f)(4)(A). Include supporting documentation in Attachment 2E.

The on-site and off-site PMZs proposed (Attachment 2D-3) as a response action for the C-TZ PCLE zone ensures that COCs will not pose a potential unacceptable risk to human health or the environment as long as the AALs are not exceeded at the respective AMPs or exceeds the cPCL at the alternate POE wells. The PMZs are appropriate for this PCLE zone based on a low groundwater velocity, stable/declining COC concentrations, the proposed institutional controls (deed recordation and restrictive covenants) on use of groundwater within the PCLE Zone, and the absence of any existing water supply wells within ½-mile of the Site. In addition, there are no surface water bodies at the Site or near the proposed PMZs; therefore, there is no potential for contaminating surface waters that would be hydraulically connected to groundwater. The City of Houston provides municipal water services for all properties within the Affected Property, so there is no complete human health pathway associated with this GWBU. The Site is also within the jurisdiction of the HGSD, which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

The PMZs proposed for the C-TZ PCLE zones consists of two components: 1) filing of institutional controls including deed recordation (UPRR-Owned properties – on-site PMZ)) and restrictive covenants/deed recordation (off-site properties – Off-Site PMZ and Off-Site PMZ City of Houston ROW) and off-site properties where land owners could not be located) prohibiting the use of groundwater within the PMZs; and 2) performance of ongoing groundwater monitoring at the AMP and POE wells. The proposed deed recordation and restrictive covenant language, to be filed in the Harris County deed records, is included in Appendix 4.

Excluding the Off-Site PMZ City of Houston ROW, the proposed Off-Site PMZ is currently considered pending (Attachment 2D-3) until the restrictive covenants/deed notices are filed. Most of the off-site properties (30 of the 53 properties) have signed restrictive covenants. UPRR will continue to work with the landowners to secure the restrictive covenants for the properties where restrictive covenants or deed notices have not been acquired. In the interim, UPRR proposes to monitor groundwater in wells (MW-17C, MW-23C, MW-34CR, MW-68C and proposed wells PMW-83C and PMW-87C) that are within the proposed Off-Site PMZ as part of the corrective action groundwater monitoring program (as detailed in RAP Worksheet 3.1). Data collected from the monitoring wells will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending approval of the Off-Site PMZ.

The on-site and off-site PMZs for C-TZ were established using the July/August 2014 groundwater analytical data collected from the Site (Attachment 1A), in conjunction with trend analysis for groundwater analytical data from 2010 through 2014 (10 semi-annual sampling events) and development of attenuation action levels from groundwater data collected from 1997 through 2014. Comparing the maximum groundwater analytical data from the July/August 2014 groundwater sampling event to cPCLs, concentrations of 23 target COCs exceeded their respective cPCLs in at least one of the four GWBUs. For the C-TZ, the following 19 COCs were detected above cPCLs:

<p><u>VOCs</u></p> <ul style="list-style-type: none"> • Benzene • Methylene Chloride 	<p><u>SVOCs</u></p> <ul style="list-style-type: none"> • 2,4-Dimethylphenol • 2,6-Dinitrotoluene • 2-Methylnaphthalene • Acenaphthene (one well*) • Anthracene (one well*) • Benzo(a)anthracene • Benzo(a)pyrene • Bis(2-chloroethoxy)methane (one well*) • Chrysene (one well*) <p><u>SVOCs (cont)</u></p> <ul style="list-style-type: none"> • Dibenzofuran • Fluoranthene (one well*) • Fluorene (one well*) • Naphthalene • Pentachlorophenol • Phenanthrene (one well*) • Phenol • Pyrene (one well*)
--	---

* - COC only detected in wells with DNAPL present

Similar to the A-TZ PCLE Zone, benzene, 2,4-dimethylphenol, 2-methylnaphthalene, dibenzofuran, and naphthalene are the most prominent COCs where the cPCL exceedances for these COCs define the PCLE Zone in the C-TZ. Therefore, the trend analyses were conducted for these five COCs (Attachment 2E).

As discussed in Worksheet 2.3, a TI Zone was proposed to be established for areas where DNAPL has been detected in monitoring wells or observed in the soil boring logs for the GWBUs on site and off site. The TCEQ has not approved the TI waiver based on their technical memorandum dated December 13, 2016. Specifically, the TCEQ stated that the TI Demonstration did not adequately address the criteria established per 30 TAC §350.33(f)(3)(E), in which COCs at concentrations above the critical groundwater PCLs are prevented from spreading beyond the existing boundary of the groundwater PCLE zone. To address this concern, UPRR proposes to use groundwater data collected as part of the site-wide groundwater monitoring program (detailed in the RAP Worksheet 3.1). Data collected over time from the POE wells, AMPs, and corrective action monitoring wells will be evaluated to address the criteria established per 30 TAC §350.33(f)(3)(E).

In accordance with §350.33(f)(4)(A), the PMZ for the C-TZ Unit will be actively monitored (semi-annually). MNA will be used as a control response for this unit.

Is the alternate POE proposed to be beyond the current limits of the PCLE zone? Yes No
 If yes, how far? Approximately 100 feet (\$350.37(l) or (m) as applicable)
 Is it to be off-site? Yes No
 On an off-site property that currently does not contain a residential-based groundwater PCLE zone?
 Yes No - The residential-based PCLE zone extends onto the off-site property (to the north
 _____ and to the east).

Plume Management Zone	RAP Worksheet 2.1 Page 18 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

If yes and this is a Class 2 groundwater, provide the basis for concluding that this groundwater does not have a reasonably anticipated future beneficial use (§350.37(l)(3)).

The residential-based PCLE zone extends onto the off-site properties (to the north and to the east in the residential area), and on to the City of Houston ROW. The proposed PMZs extend to the closest monitoring wells where COC concentrations in groundwater are less than the cPCL based on the groundwater data collected in July/August 2014. As previously discussed, the City of Houston provides municipal water services for all properties within the Affected Property, so there is no current beneficial use for the GWBU. The Site is also within the jurisdiction of the HGSD, which restricts groundwater use in the area and requires a permit application prior to drilling a groundwater well. There are permitting exemptions for small domestic wells, but only in areas that do not have an alternative water supply. The HGSD rules are not a complete prohibition on the use of groundwater in the area, but rather the fees associated with the rules are “intended to operate as an economic disincentive to groundwater withdrawal” (HGSD, 2013).

Therefore, with the City of Houston providing water for the area, and financial disincentives placed on shallow groundwater use by the HGSD (which the Texas Supreme Court ruled in favor of the HGSD in 1977 to protect public welfare by limiting harmful pumping, which was causing ground subsidence of the land resulting in flooding (*Beckendorff v. Harris-Galveston Coastal Subsidence District (1977)*), the shallow groundwater does not have a reasonably anticipated future beneficial use in the area.

Is NAPL present? Yes No

If so, describe how the response action will achieve the performance criteria in §350.33(f)(4)(E).

As previously discussed, UPRR will continue to evaluate the TI waiver for areas where DNAPL was observed. In the interim, the NAPL response action objective using TCEQ Guidance TRRP-32 (Risk-Based NAPL Management) will be to “ensure compliance of NAPL zone in the PMZ” to address the NAPL within the C-TZ PMZ. Methods to meet the response action objective for the creosote DNAPL will include recovery (recover readily recoverable creosote DNAPL from wells with DNAPL present) at the NAPL source zone so that the dissolved-phase groundwater PCLE zone is stable (or shrinking) and the PCLE performance objectives for the PMZs can be met, including no cPCL exceedances at the alternate POE wells. However, as detailed in Attachment 2G, recovery of creosote DNAPL will not achieve groundwater protection standards in a reasonable timeframe (>250 years) because of the complex hydrogeology and physical nature of creosote (discussed in Worksheet 2.3).

Wells with measurable creosote DNAPL are found within the On-Site PMZ (well MW-23C) and Off-Site PMZ (wells MW-44C, MW45C, and MW-46C (Attachment 2D-3)). Readily recoverable NAPL will be recovered from wells on a monthly basis in order to control potential migration from the TI Zone. In addition, institutional controls on groundwater use will be implemented to protect exposure to residual NAPL in the GWBUs.

DNAPL recovered as part of the corrective action will be stored on-site in DOT approved drums within the CSA (Unit 4), and then disposed of in accordance with all applicable laws and regulations within the applicable timeframes.

Plume Management Zone	RAP Worksheet 2.1 Page 19 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

If this is a Class 2 groundwater, explain how the response action will ensure that leachate from the surface soil and subsurface soil PCLE zones will not increase concentration of COCs greater than the current measured concentrations (at time of RAP submittal). (§350.33(a)(2))

With the C-TZ underlying the A-TZ and the B-CZ/B-TZ, please see response to this question for the A-TZ unit (RAP Worksheet 2.1, page 11).

Provide the basis that the COCs will not migrate beyond the downgradient boundary of the PMZ at concentrations above the critical PCL. Include supporting documentation in Attachment 2E.

Wood treating operations began at the Site over 115 years ago and continued until about 30 years ago. Given the long period of time since releases have occurred at the Site, creosote DNAPL and related COCs has migrated from the vadose zone (surface and subsurface soils) to the A-TZ groundwater, to the B-CZ/B-TZ, and to the C-TZ. The PCLE Zone for the C-TZ groundwater appears to correlate well with where DNAPL was observed in the C-TZ sand in the soil borings or where DNAPL has been detected in the monitoring wells. The center of the groundwater PCLE Zone appears to be in the vicinity of MW-23C (near SWMU 4 and 6), and extends off-site to the northeast near the Lockwood Street Bridge overpass (DNAPL present in wells MW-25C, MW-44C, MW-45C, and MW-46C). Unlike the A-TZ and B-CZ/B-TZ units, groundwater flow in the C-TZ is generally to the southwest across the area.

For the off-site area northeast of the Site, DNAPL has been detected in the wells (i.e., MW-25C, MW-44C, MW-45C, and MW-46C) that fall within the C-TZ groundwater PCLE Zone (Attachment 1A, Figure 5A-7). Similar to the B-CZ/B-TZ, the PCLE Zone in the C-TZ is closely tied to where NAPL was observed. This suggests that there is not a high rate of dissolved constituent migration beyond the DNAPL areas. This is supported with the C-TZ groundwater analytical data that indicate the distribution of COCs dissolved in Site groundwater is relatively stable in the source areas, with the exception of MW-18C. The Mann-Kendall trend analysis for MW-18C groundwater data from 2010 through 2014 indicate increasing trends of 2-methylnaphthalene, dibenzofuran, and naphthalene. Well MW-18C is upgradient of MW-23C, which has higher concentrations of these COCs relative to MW-18C and also has DNAPL present in the well. MW-19C dibenzofuran concentrations from 2010 to 2014 indicate a Mann-Kendall probably increasing trend; however, concentrations in MW-19C (0.000554 mg/L) are well below the cPCL (0.29 mg/L (on-site)).

Along the edges of the PCLE Zone, concentration vs time graphs presented in Attachment 1B (1B-31 through 1B-40) indicate that groundwater concentrations are remaining relatively stable, which is confirmed with the Mann-Kendall statistical analysis included in Attachment 2E, except for MW-68C. As shown on Attachment 1A-Figure 5B-22, the groundwater PCLE Zone for the C-TZ has remained relatively stable over the past four years, with slight changes along the northeast and cross gradient side during the July 2012 and July/August 2014 events because of benzene cPCL exceedances in MW-68C. Benzene and naphthalene concentrations have been sporadic in MW-68C, where benzene concentrations exceeded the cPCL in January and July 2012, decreased below the cPCL in January 2013, then exceeded the cPCL in July/August 2014, and then decreased below the cPCL during the resampling event in September 2014 (discussed in Attachment 1A). For the purposes of this RAP, the PMZ will include MW-68C to account for the occasional benzene PCLE at that well. Newly installed well MW-76C (installed in May 2014) had a detection of pentachlorophenol (0.00272 mg/L) above the cPCL (0.002 mg/L) during the July/August 2014 sampling event. The well was resampled in September 2014, and pentachlorophenol concentrations were not detected (SDL < cPCL), but benzo(a)pyrene concentrations were detected at 0.000278 mg/L, just above the cPCL of 0.0002 mg/L. Benzo(a)pyrene concentrations were less than the cPCL during the initial sampling event. However, based on conversations with the TCEQ regarding the PMZ for the C-TZ, the On-Site PMZ (Main) in the C-TZ will not include this well,

Plume Management Zone	RAP Worksheet 2.1 Page 20 of 21	
	Associated Information: Attachments 2D, 2E	ID No.: 31547 Report Date: June 24, 2017 – Rev 3

but rather will be extended to a proposed wells (PMW-85C and PMW-88C) upgradient of MW-76C. MW-76C will be included as a Corrective Action Observation Well, along with another C-TZ monitoring well downgradient of MW-76C (Attachment 2D-3).

Proposed point of exposure wells MW-15C, MW-28C, MW-47C, MW-48C, and MW-54C show either predominantly no detections of the COCs or relatively stable COC concentrations well below the RALs (Attachment 1B-26 through 1B-30). Mann-Kendall trend analysis shows an increasing concentration for dibenzofuran from 2010 to 2014 in MW-54C (Attachment 2E); however, concentrations have been decreasing since July 2013 (Attachment 1B-39). With groundwater data less than cPCLs in the wells (MW-19C and MW-54C) in close proximity of the wells with DNAPL, this supports the limited dissolved COC migration in the area. Therefore, it is not anticipated that the C-TZ groundwater PCLE zone will migrate beyond the proposed C-TZ on-site and off-site PMZ boundary.

For the C-TZ groundwater PCLE Zone, AALs were established for sampling points leading from MW-23C (contains DNAPL) to MW-76C (Attachment 2D-3) in order to ensure groundwater COC concentrations do not exceed the cPCLs at the POE (at the proposed well PMW-85C). Once PMW-85C is installed, the well will be evaluated as the downgradient alternate POE well for the C-TZ. Details on AAL development are provided in Attachment 2E. POE wells for the C-TZ PMZ are also shown on Attachment 2D-3. With the low detections of benzene in MW-68C, one additional C-TZ well (PMW-83C) is proposed to be installed to serve as a POE well and monitor the PMZ cross gradient to the north of the Site and MW-68C (Attachment 2D-3). Details of the well installation are provided in Attachment 2B.

Currently, the Off-Site PMZ is considered pending until all of the restrictive covenants or deed notices for the properties have been received (see Attachment 2D-1). In the interim, the GW PCLE zone that extends on to these properties will be monitored as part of the corrective action monitoring program (Worksheet 3.1). Data collected from the monitoring wells near these properties will be used to evaluate possible response actions (i.e., monitored natural attenuation) to address the groundwater PCLE Zone pending acquiring restrictive covenants and filing deed notices for the Off-Site PMZ.

Describe the methods used to determine that there are no artificial penetrations which can allow COCs to migrate from the groundwater PCLE zone to currently unaffected groundwater-bearing units. Include supporting documentation in Attachment 2E.

An on-site field survey and water-well data search was conducted, indicating no potential artificial penetrations that would act as a conduit for migration of shallow groundwater into the underlying groundwater formation.

A discussion on underground utilities for A-TZ and possible communication with the C-TZ was provided under the A-TZ summary. Given the depths of the fiber optic line (reportedly as deep as 45 feet bgs) to just above the C-TZ unit, monitoring well MW-19C will be monitored as a Alternate POE Well to evaluate if the directional bored fiber optic lines are creating a preferential pathway for COCs to migrate to the deep GWBUs.

List the attenuation action level determined for each attenuation monitoring point. Illustrate the proposed attenuation monitoring points and the groundwater PCLE zone on the map in Attachment 2D. Include all calculations and other methods of determining the attenuation action levels in Attachment 2E.

COC	Attenuation Monitoring Point (well number)	Attenuation Action Level (mg/L)	Attenuation Action Level limited by ^{Air} GW _{Inh-v} or existing COC concentration? Y/N
Benzene	MW-23C	0.131	N
	MW-17	0.093	N
	MW-76C**	0.007	N
	PMW-85C**	0.005	N
2,4-Dimethylphenol	MW-23C	9.74	N
	MW-17	7.09	N
	MW-76C**	0.629	N
	PMW-85C**	0.49	N
2 Methylnaphthalene	MW-23C	28	N
	MW-17	18.22	N
	MW-76C**	0.688	N
	PMW-85C**	0.49	N
Dibenzofuran	MW-23C	46	N
	MW-17	23.94	N
	MW-76C**	0.164	N
	PMW-85C**	0.098	N
Naphthalene	MW-23C	83	***NA – 41 mg/L (>S) (Res, 30-ac Source)
	MW-17	48.13	***NA – 41 mg/L (>S) (Res, 30-ac Source)
	MW-76C**	0.753	N
	PMW-85C**	0.49	N

Note:

** - Proposed well PMW-85C (and PMW-88C) will be evaluated as the downgradient alternate POE well following installation, replacing MW-76C as the downgradient POE well.

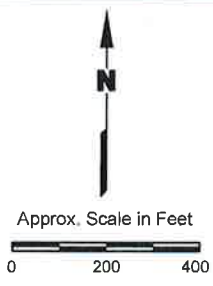
*** - ^{Air}GW_{Inh-v} PCL for naphthalene not applicable since solubility for naphthalene (31.4 mg/L) is less than ^{Air}GW_{Inh-v}. In addition, the C-TZ GWBU underlies other GWBUs, where upward vapor migration is not possible.

Attenuation Action Levels were not developed for other COCs since the primary COCs listed above define the PCLE Zone.

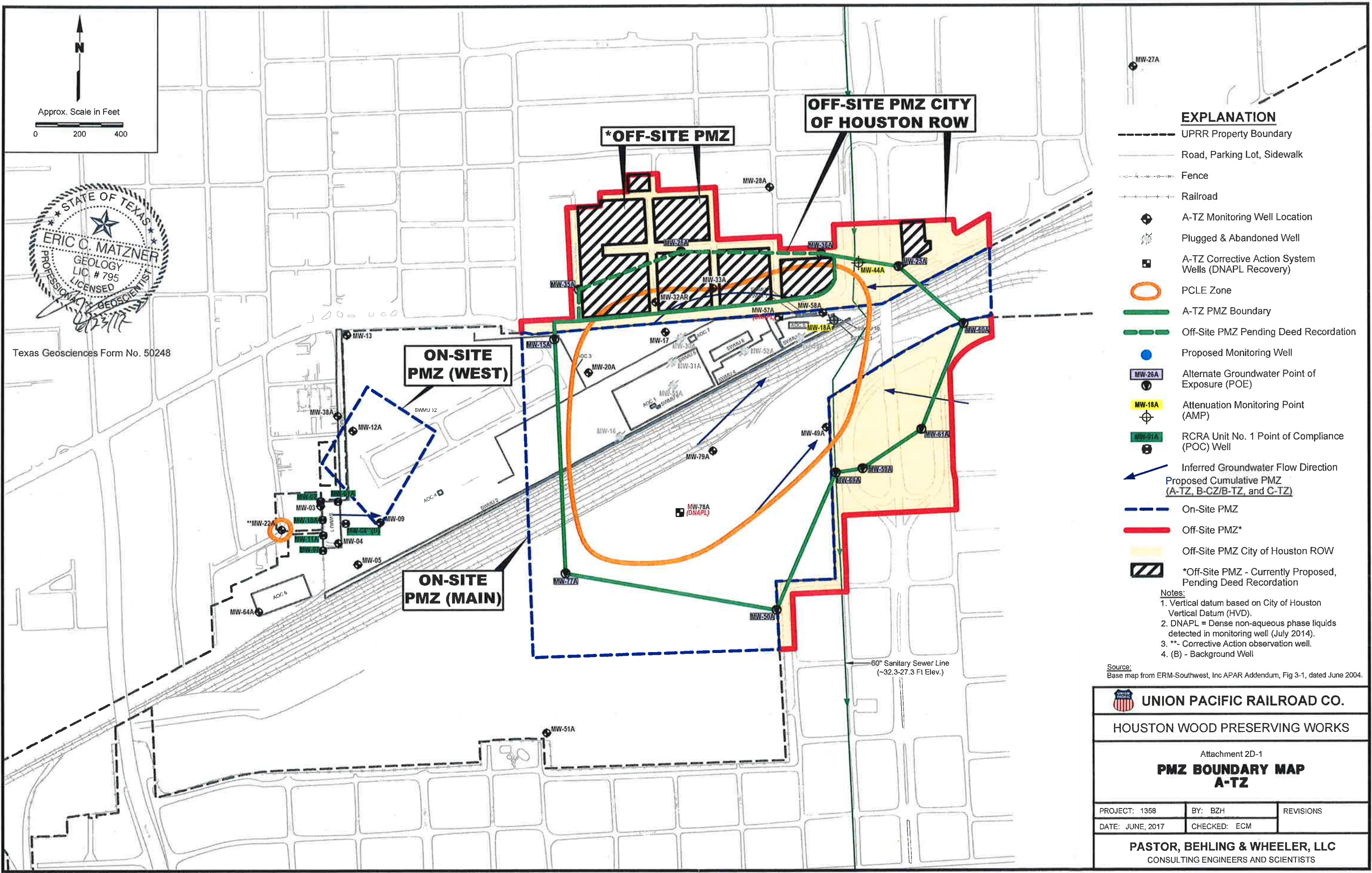
The proposed PMZ and AMPs for the C-TZ are shown on Attachment 2D-3.

ATTACHMENT 2D

PMZ MAPS



Texas Geosciences Form No. 50248



- EXPLANATION**
- UPRR Property Boundary
 - Road, Parking Lot, Sidewalk
 - - - - Fence
 - - - - Railroad
 - ⊕ A-TZ Monitoring Well Location
 - ⊖ Plugged & Abandoned Well
 - ⊕ A-TZ Corrective Action System Wells (DNAPL Recovery)
 - PCLE Zone
 - A-TZ PMZ Boundary
 - Off-Site PMZ Pending Deed Recordation
 - Proposed Monitoring Well
 - ⊖ MW-26A Alternate Groundwater Point of Exposure (POE)
 - ⊕ MW-16A Attenuation Monitoring Point (AMP)
 - ⊕ MW-51A RCRA Unit No. 1 Point of Compliance (POC) Well
 - ➔ Inferred Groundwater Flow Direction
 - Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
 - On-Site PMZ
 - Off-Site PMZ*
 - Off-Site PMZ City of Houston ROW
 - ▨ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

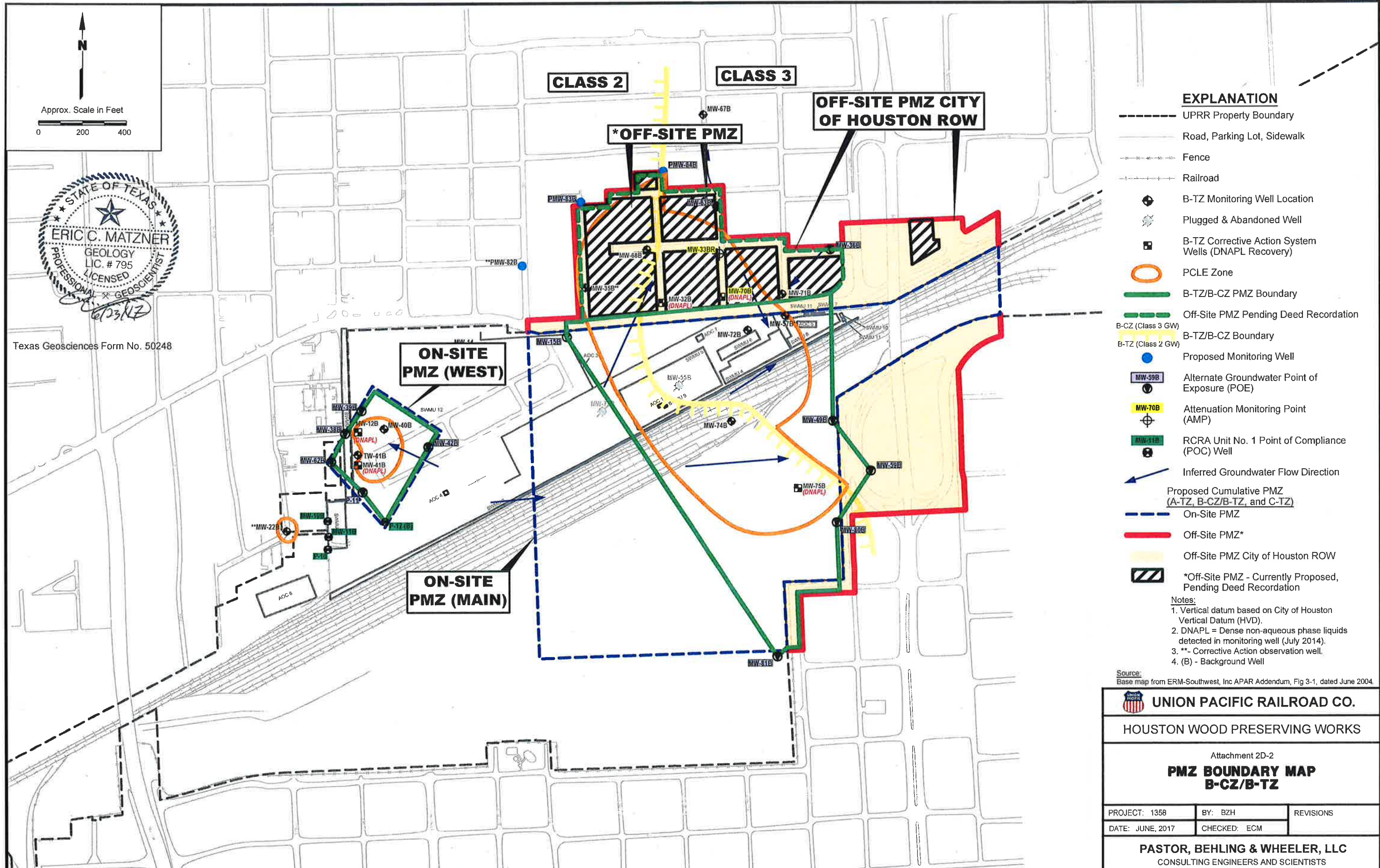
- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 2D-1		
PMZ BOUNDARY MAP		
A-TZ		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC		
CONSULTING ENGINEERS AND SCIENTISTS		



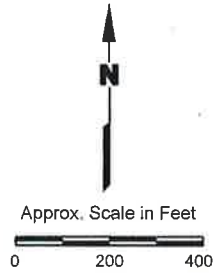
Texas Geosciences Form No. 50248



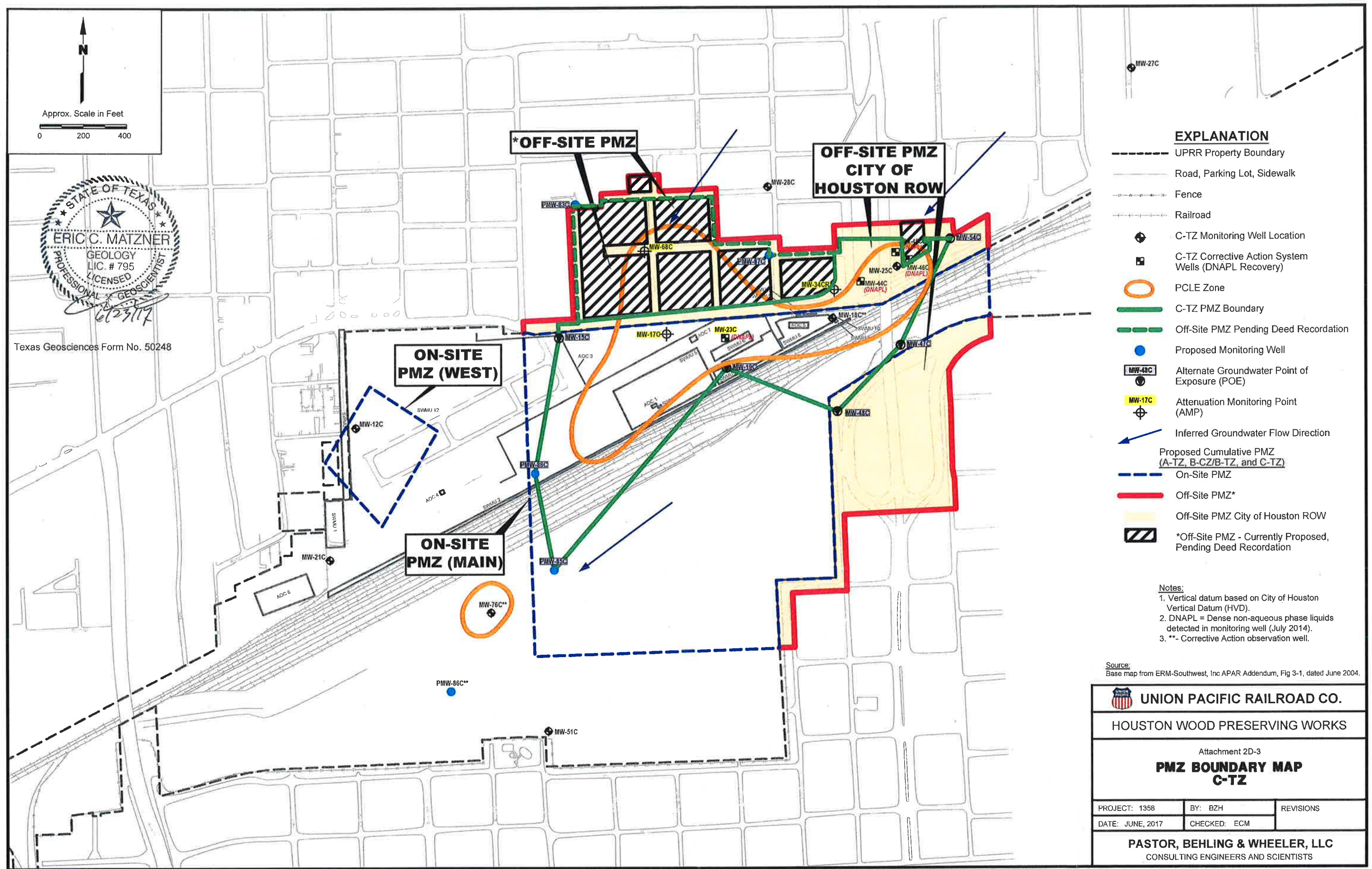
- EXPLANATION**
- UPRR Property Boundary
 - Road, Parking Lot, Sidewalk
 - - - - - Fence
 - - - - - Railroad
 - ⊕ B-TZ Monitoring Well Location
 - ⊗ Plugged & Abandoned Well
 - ⊕ B-TZ Corrective Action System Wells (DNAPL Recovery)
 - PCLE Zone
 - B-TZ/B-CZ PMZ Boundary
 - Off-Site PMZ Pending Deed Recordation
 - B-CZ (Class 3 GW)
 - B-TZ (Class 2 GW)
 - Proposed Monitoring Well
 - MW-59B Alternate Groundwater Point of Exposure (POE)
 - MW-70B Attenuation Monitoring Point (AMP)
 - MW-11B RCRA Unit No. 1 Point of Compliance (POC) Well
 - ⊕ Inferred Groundwater Flow Direction
 - Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
 - On-Site PMZ
 - Off-Site PMZ*
 - Off-Site PMZ City of Houston ROW
 - ⊕ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation
- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 2D-2		
PMZ BOUNDARY MAP B-CZ/B-TZ		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		



Texas Geosciences Form No. 50248



- EXPLANATION**
- UPRR Property Boundary
 - Road, Parking Lot, Sidewalk
 - - - - - Fence
 - - - - - Railroad
 - ⊕ C-TZ Monitoring Well Location
 - ⊕ C-TZ Corrective Action System Wells (DNAPL Recovery)
 - PCLE Zone
 - C-TZ PMZ Boundary
 - Off-Site PMZ Pending Deed Recordation
 - Proposed Monitoring Well
 - ⊕ MW-48C Alternate Groundwater Point of Exposure (POE)
 - ⊕ MW-17C Attenuation Monitoring Point (AMP)
 - ➔ Inferred Groundwater Flow Direction
 - Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
 - On-Site PMZ
 - Off-Site PMZ*
 - Off-Site PMZ City of Houston ROW
 - ▨ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.

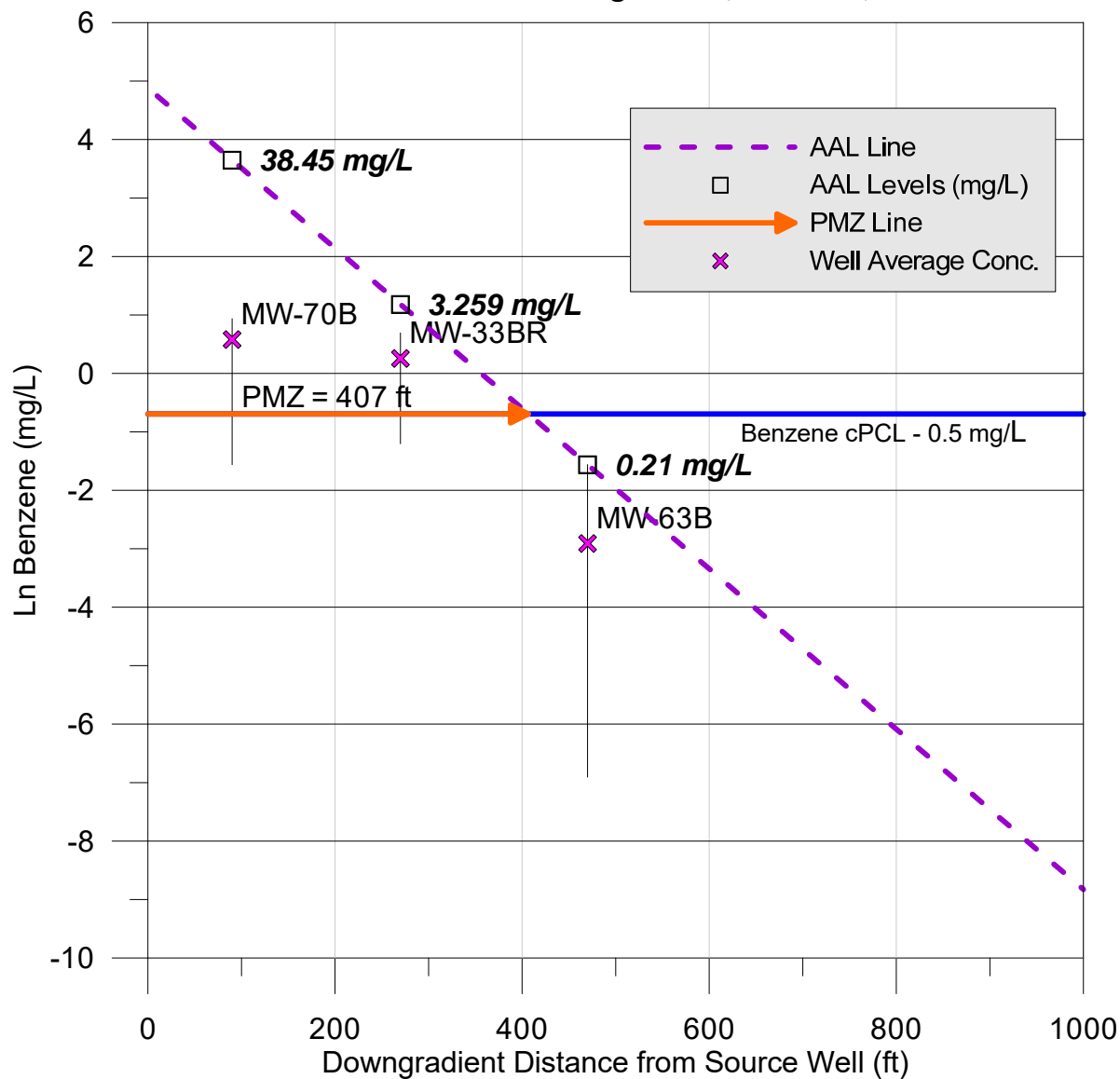
Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 2D-3 PMZ BOUNDARY MAP C-TZ		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

ATTACHMENT 2E
ATTENUATION ACTION LEVELS DETERMINATION

**ATTACHMENT 2E-6
ATTENUATION ACTION LEVELS - B-CZ BENZENE**

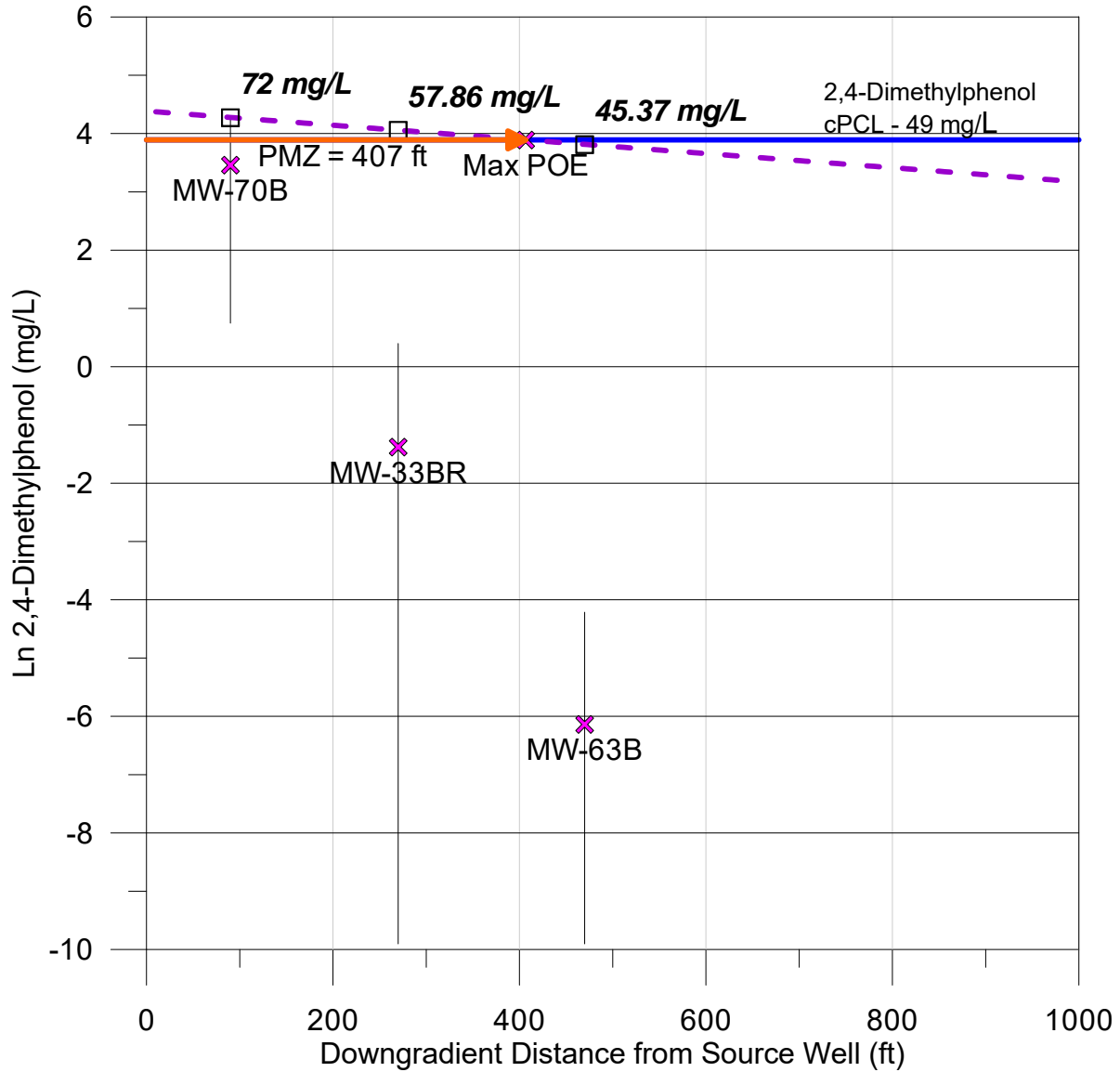
UPRR Houston Wood Preserving Works, Houston, Texas



Well	Max (mg/L)	Min (mg/L)	Avg (mg/L)	AALs (mg/L)
MW-70B	2.55	0.21	1.79	38.4498
MW-33BR	2	0.3	1.296166667	3.2591
MW-63B	0.21	0.001	0.054612	0.2100

**ATTACHMENT 2E-7
ATTENUATION ACTION LEVELS - B-CZ 2,4-DIMETHYLPHENOL**

UPRR Houston Wood Preserving Works, Houston, Texas



Well	Max (mg/L)	Min (mg/L)	Avg (mg/L)	AALs (mg/L)
MW-70B	72	2.11	31.8775	72.0000
MW-33BR	1.49	0.00005	0.252306833	57.8600
MW-63B	0.0148	0.00005	0.0021658	45.3700

Institutional Control Associated Information: Appendices 4, 5	RAP Worksheet 2.4 Page 1 of 1	
	ID No.: SWR ID 31547	Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. **Union Pacific (on-site Deed Notice) and 53 properties (plus the City of Houston right of way) (Restrictive Covenants) falling within the proposed PMZs**

Repeat this worksheet for each different property for which an institutional control will be used. (**See Appendix 5 for full list of Worksheet 2.4 for each off-site property, map of properties, and summary table*)

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))	X				X		Within 120 days of RAP approval
Document use of physical or institutional control under Remedy Standard B §350.31(g))	X	X*			X	X*	Within 120 days of RAP approval (off-site IC)
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(l))	X	X*			X	X*	Within 120 days of RAP approval (off-site PMZ)
Document the demonstration of technical impracticability (§350.33(f)(3)(F))	X	X*			X	X*	Within 120 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Monitoring and Sampling

Associated Information: Attachment 3A

RAP Worksheet 3.1 Page 1 of 2

ID No.: SWR ID
31547

Report Date: June 24, 2017 –
Rev 3

List the monitoring and sampling of COC concentrations or other parameters that will be conducted during the response action. Illustrate the monitoring or sampling locations in Attachment 3A. If statistics or geostatistics will be used, provide details in Appendix 7. If monitoring or observation wells will be constructed for the response action, provide well construction details in Attachment 2B if not previously provided.

Monitored Media	COC ¹	Other parameter (specify)	Sampling Method ²	Sampling points or locations ³	Depth/Height ⁴ (ft.)	Analytical or Field Screening Method	Sampling or Monitoring Frequency ⁵
Surface Soil	Site Specific SVOCs: Benzo(a)anthracene Benzo(a)pyrene Dibenzofuran 1,2-Diphenylhydrazine 2,4-Dinitrotoluene Fluoranthene Phenanthrene		Bulk sampling	PCLE zone excavation; and perimeter of proposed soil cap area to confirm soil PCLE zone for cap	Sidewalls and base of excavation; and near the soil cap from 0-5 feet bgs.	US EPA 8270	One time
Subsurface Soil	None						
Groundwater	Site-Specific VOCs		Same as APAR (low-flow sampling)	See Attachment 3A for list of wells	Middle of screened interval of monitoring well	US EPA 8260	Semi-Annual
	Site-Specific SVOCs		Same as APAR (low-flow sampling)	See Attachment 3A for list of wells	Middle of screened interval of monitoring well	US EPA 8270	Semi-Annual
	Arsenic, lead		Same as APAR (low-flow sampling)	See Attachment 3A for list of wells	Middle of screened interval of monitoring well	US EPA 6010/6020	One-time to evaluate metals in groundwater.

Explain the reasons for the above-listed monitoring and sampling plan.

The monitoring and sampling plan for the groundwater PCLE zone was developed in accordance with PMZ monitoring procedures provided in §350.33(f)(4)(D). As specified therein, AMPs were established at a hydraulically upgradient location within the PCLE zone for each unit (A-TZ,

¹ Specify the COCs to be monitored in this media. List either type of COC (such as VOCs, metals) if all the COCs of that type will be monitored the same way.

² Describe the sampling or monitoring methods and QC procedures in Appendix 1 unless the proposed sampling or monitoring procedure is the same as the sampling or monitoring procedure described in the APAR.

³ Specify the sampling or monitoring point, such as the specific monitor well or general sampling or monitoring location.

⁴ Specify the depth or height of the sampling or monitoring points.

⁵ Specify the frequency at which this monitoring or sampling will occur.

Monitoring and Sampling

Associated Information: Attachment 3A

RAP Worksheet 3.1 Page 2 of 2

ID No.: SWR ID
31547

Report Date: June 24, 2017 –
Rev 3

B-CZ/B-TZ, and C-TZ) and at locations continuing down the approximate central flow path to the downgradient extent of the on-site and off-site PMZ. These are the AMPs for which AALs were developed as detailed in Attachment 2E. Selected monitoring wells (i.e., corrective action observation wells) not located along the approximate central flow path will continue to be monitored to evaluate potential migration of the PCLE Zone at the upgradient, cross-gradient, and downgradient POEs. Monitoring wells (including wells proposed to be POE and AMP wells) within the Off-Site PMZ that is currently pending will be sampled along with the corrective action observation wells until the Off-Site PMZ is established. The four D-TZ monitoring wells will also be sampled to evaluate the potential for vertical migration of COCs to the underlying water-bearing zone. Semi-annual monitoring of the wells is proposed based on the stability of the PCLE zone and absence of potential receptors in the area. With the main source area proposed to be capped, most of the monitoring wells within the capped area will be plugged and abandoned. Selected monitoring wells will be modified (surface completion) following the cap construction (MW-19C and MW-23C).

Additional POE wells are proposed to be installed in the B-CZ/B-TZ off-site (two wells (PMW-83B and PMW-84B,) and in the C-TZ off-site (four well (PMW-83C, PMW-85C, PMW-87C, and PMW-88C)). Details of the well construction are provided in Attachment 2B.

ATTACHMENT 3A
MAP OF MONITORING AND SAMPLING POINTS

EXPLANATION

- UPRR Property Boundary
- ◆ A-TZ Monitoring Well Location
- ◆ B-CZ/B-TZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location
- Corrective Action System Well (DNAPL Recovery)
- Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- MW-27A Alternate Groundwater Point of Exposure (POE)
- MW-16A Attenuation Monitoring Point (AMP)
- MW-27A RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.

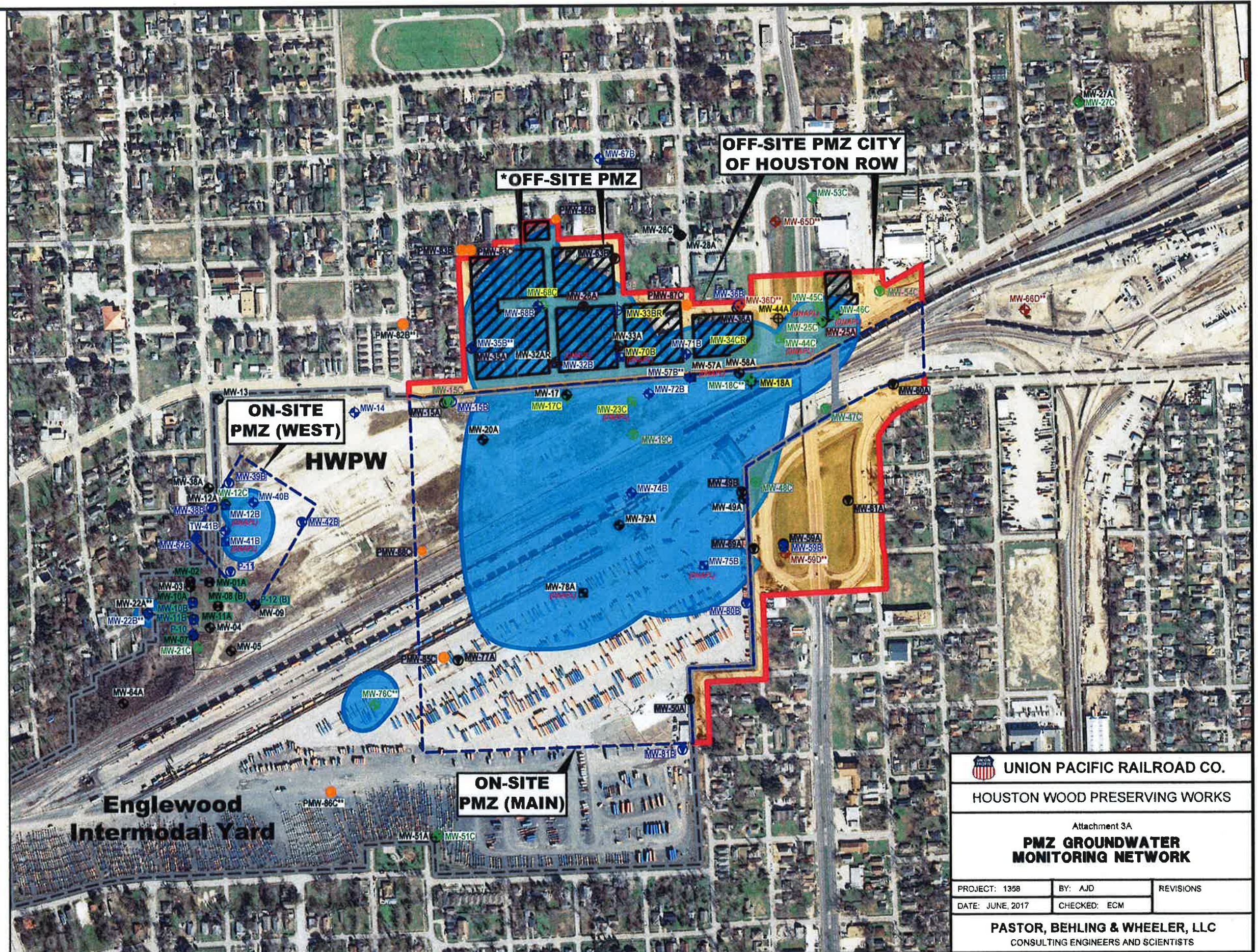


Approx. Scale in Feet
0 200 400

Source:
Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Attachment 3A PMZ GROUNDWATER MONITORING NETWORK		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

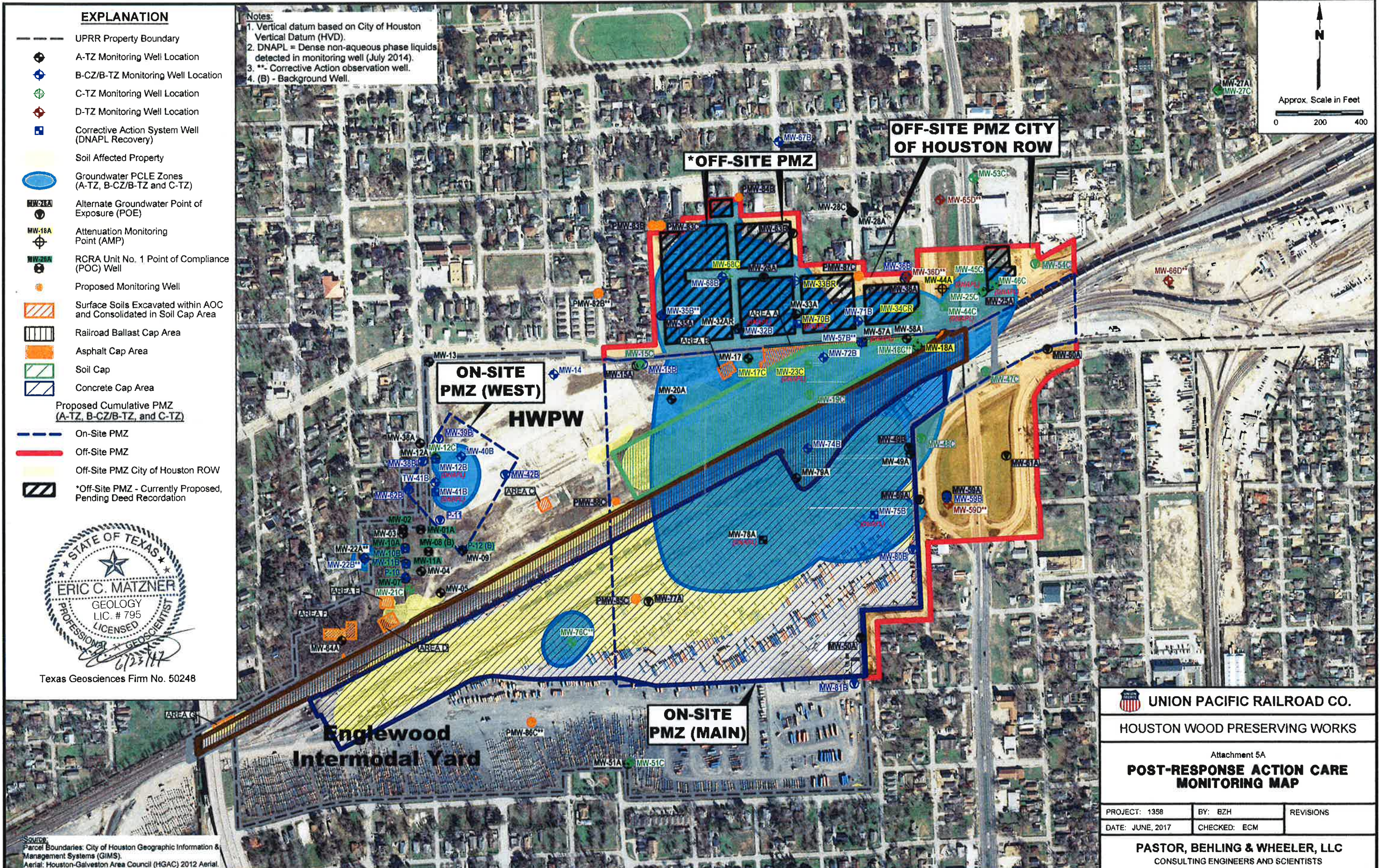
ATTACHMENT 5A

MAP OF POST-RESPONSE ACTION CARE MONITORING AND SAMPLING POINTS

EXPLANATION

- UPRR Property Boundary
- ◆ A-TZ Monitoring Well Location
- ◆ B-CZ/B-TZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location
- Corrective Action System Well (DNAPL Recovery)
- Soil Affected Property
- Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- Alternate Groundwater Point of Exposure (POE)
- Attenuation Monitoring Point (AMP)
- RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- ▨ Surface Soils Excavated within AOC and Consolidated in Soil Cap Area
- ▨ Railroad Ballast Cap Area
- ▨ Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Cap Area
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- ▨ *Off-Site PMZ - Currently Proposed, Pending Deed Recordation

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.



Texas Geosciences Firm No. 50248

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 5A		
POST-RESPONSE ACTION CARE MONITORING MAP		
PROJECT: 1358	BY: BZH	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

SOURCE:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

APPENDICIES

APPENDIX 4
PROPOSED INSTITUTIONAL CONTROLS

DEED NOTICE

STATE OF TEXAS §
COUNTY OF § KNOW ALL MEN BY THESE PRESENTS THAT:
HARRIS §

This Notice is filed to provide information concerning certain environmental conditions and/or use restrictions pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) identified as the Former Houston Wood Preserving Works (HWPW) Site (124.8360 Acres) is described by metes and bounds on Exhibit A, attached hereto and incorporated herein by reference, and depicted on the map portion of Exhibit A.. Portions of the soil and groundwater underlying the Property contain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The Affected Property is shown on Exhibit B.

As detailed in the Response Action Plan (RAP) (PBW, 2015), target chemicals of concern in soil and groundwater media were detected within the Affected Property and Protective Concentration Level (PCL) Exceedance (PCLE) Zone in surface and subsurface soils.

PCLE Zones

Soils

Comparing the surface and subsurface soil analytical data to the appropriate critical PCLs, concentrations of 15 chemicals of concern exceeded their respective critical PCLs (cPCLs):

<u>Surface Soils</u>	<u>cPCL</u> <u>(mg/kg)</u>	<u>Subsurface Soils</u>	<u>cPCL</u> <u>(mg/kg)</u>
<ul style="list-style-type: none">• 1,2-Diphenylhydrazine• 2,4-Dinitrotoluene• 2-Methylnaphthalene• Benzene• Benzo(a)anthracene• Benzo(a)pyrene• Dibenzofuran• Naphthalene• Pentachlorophenol• Arsenic• Lead	<ul style="list-style-type: none">0.230.0493780.10170177431890.12200275	<ul style="list-style-type: none">• 2-Methylnaphthalene• Benzene• Naphthalene• Pentachlorophenol	<ul style="list-style-type: none">3780.1051920.12

Groundwater

Based on the maximum groundwater analytical data detailed in the RAP, concentrations of the following 23 target chemicals of concern exceeded their cPCLs:

<u>VOCs</u>	<u>cPCL</u> <u>(mg/L)</u>	<u>SVOCs</u>	<u>cPCL (mg/L)</u>
<ul style="list-style-type: none"> • Benzene • Ethylbenzene • Methylene Chloride • Toluene • Vinyl Chloride 	0.005 0.70 0.005 1 0.002	<ul style="list-style-type: none"> • 2,4-Dimethylphenol • 2,6-Dinitrotoluene • 2-Methylnaphthalene • Acenaphthene* • Anthracene * • Benzo(a)anthracene • Benzo(a)pyrene • Bis(2-chloroethoxy)methane* • Chlorobenzene • Chrysene * • Dibenzofuran • Fluoranthene * • Fluorene * • Naphthalene • Pentachlorophenol • Phenanthrene * • Phenol • Pyrene * 	1.5 0.0013 0.29 4.4 7.3 0.0028 0.0002 0.006 0.28 0.29 2.9 2.9 1.5 0.001 2.2 7.3 2.2

* - COC only detected in wells with DNAPL present

Creosote dense non-aqueous phase liquid (DNAPL) has been detected in the groundwater bearing units A-TZ, B-CZ, B-TZ, and C-TZ as noted in soil borings and monitoring wells.

This Notice is required for the following reasons:

Commercial/Industrial Land Use

The Property (124.8360 Acres), including the Affected Property, shown on Exhibit A currently meets TRRP standards for commercial/industrial land use, as the property may not be protective for residential use. If any person desires in the future to use the Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for residential purposes. Persons contemplating a change in land use for the Property are encouraged to review the definitions for commercial/industrial and residential land use contained in TRRP as the definition of residential land use is broad.

Use of Physical Control on Soil

The Affected Property is subject to the TRRP requirements for properties containing

concentrations of chemicals of concern in soil and is subject to the requirements in 30 TAC §350.33(e)(2) to prevent exposure to soils that contain a chemical of concern in excess of the protective concentration level. The attached Exhibit C, which includes Exhibits C-1, C-2, C-3, and C-4, describes and provides the location and metes and bounds of the physical controls and extent of the soil that exceeds the TCEQ-approved critical protective concentration levels for certain chemicals of concern. Physical controls include the following:

- Former HWPW Operating Area:
 - Soil Cap Area (7.1168 Acres) (Exhibit C-1): An engineered soil cap consisting of a vapor barrier with geotextile fabric, and 12-inches of clayey soil with 6-inches of topsoil was constructed to protect on-site commercial/industrial receptors. The physical control covers the consolidated soil and surface soil PCLE Zone on the former HWPW operating area. The soil cap is vegetated and sloped to minimize infiltration over the surface/subsurface soil PCLE Zone. The soil cap will be maintained under the post-response action care period.
 - Asphalt Road Cap (1.0419 Acres) (Exhibit C-2): For the SDD (SWMU 2) along the southern boundary of the HWPW, UPRR constructed the Asphalt Cap to protect on-site commercial/industrial receptors from surface soils with chemicals of concern at concentrations above cPCLs. The Asphalt Cap construction consisted of grading the existing road material, compacting and stabilizing the existing road material, and applying a hot mix asphalt with at least 2-inches minimum cover approximately 16 feet wide over the length of the roadway. The Asphalt Cap, which will restrict infiltration, was constructed to drain storm water away from the Soil and Asphalt Cap areas. The Asphalt Cap will be maintained under the post-response action care to ensure no exposure to the soils within the soil PCLE Zone covered by the cap.
- Englewood Intermodal Yard Concrete Cap Area (41.1398 Acres) (Exhibit C-3): The surface and subsurface soil PCLE zone in the Englewood Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact with impacted soils for on-site workers. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be routinely inspected to ensure on-site worker protection.
- UPRR Railroad Ballast Cap Area (10.4702 Acres) (Exhibit C-4): The area between the former HWPW operating area and the Englewood Intermodal Yard is covered with railroad ballast, ties, and rail. The existing railroad ballast in this area will be used as an engineering control for preventing on-site worker exposure to impacted surface soils. The railroad ballast area will be maintained as part of normal railroad operations. The track is owned and controlled by UPRR.

For each of these areas described above, signs will be posted with language stating restrictions on construction activity within the capped areas. In the event construction activities are necessary within a capped area, a health and safety plan will be implemented to ensure worker

protection from chemicals of concern in the underlying surface soils and a soil management plan will be developed if soils are excavated as part of the construction activities.

The attached Exhibit D also describes the required maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification. This deed notice must not be removed or modified without prior approval from TCEQ.

Plume Management Zone

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone (PMZ). A PMZ is defined as an area of groundwater containing concentrations of COCs exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). The undersigned has established a PMZ so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit E provides the location and extent of the on-site PMZs (56.2981 Acres). The Response Action Plan (RAP) submitted for the Site describes the maintenance and monitoring required. The maintenance and monitoring is required until TCEQ approves some modification to those requirements. Exposure to groundwater within the PMZ for any purpose is not advised until such time that all of the chemicals of concern no longer exceed their respective PCLs. This deed notice must not be removed or modified without prior approval from TCEQ.

Non-Aqueous Phase Liquid

The Affected Property is subject to the TRRP requirements for the management of mobile NAPL. The attached Exhibit E provides the general location of the NAPL present at the Property. Drilling, excavation, and groundwater pumping within or into the NAPL zone is prohibited unless proper safeguards are taken to protect human health and safety from any hazards associated with the NAPL. Any NAPL removed during any future subsurface activity must be properly handled and managed in accordance with all applicable state and federal rules and regulations. This deed notice must not be removed or modified without prior approval from TCEQ.

As of the date of this notice, the record owner of fee title to the Property is

Union Pacific Railroad, 1400 Douglas Street, Omaha, Nebraska 68179.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle, Building E
Austin, TX 78753

Mail: TCEQ – MC 199
P.O. Box 13087
Austin, TX 78711-3087

TCEQ Program and Identifier No.: **SWR 31547/IHW 50343**

This Notice may be rendered of no further force or effect only by a superseding deed notice executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Notice is filed.

EXECUTED this _____ day of _____, 20_____.

Union Pacific Railroad [OWNER & RESPONDER]

By:_____

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the _____ day of _____, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this ___ day of _____, 20_____.

Notary Public in and for the State of Nebraska

County of _____

My Commission Expires: _____

EXHIBIT "A"
LEGAL DESCRIPTION OF PROPERTY

MATAGORDA COUNTY TEXAS

AYLETT C. BUCKNER LEAGUE ABSTRACT 10

OWNERSHIP TABLE

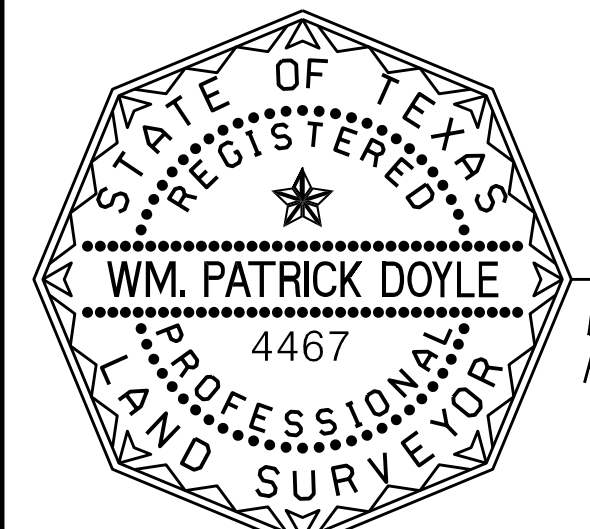
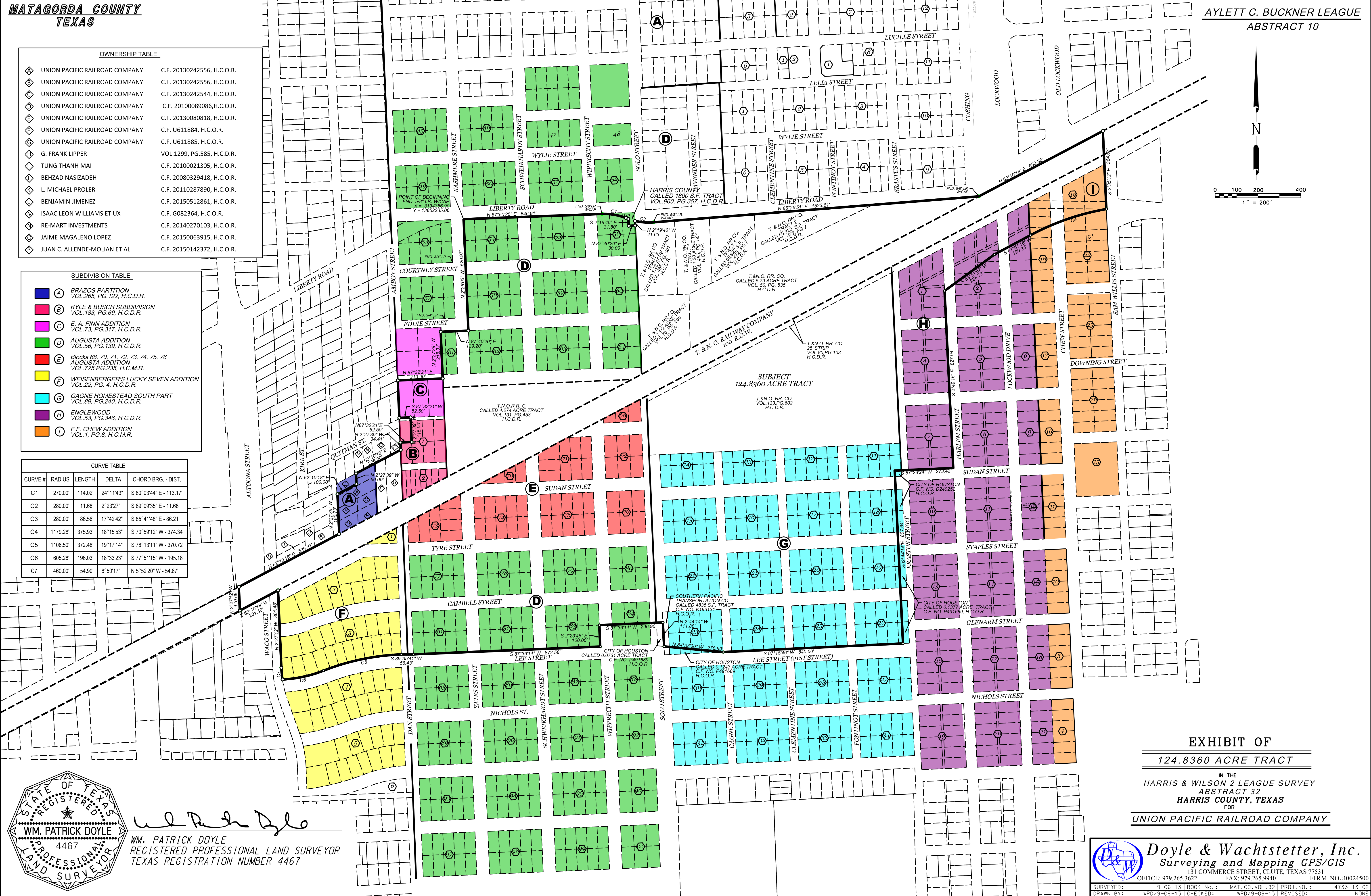
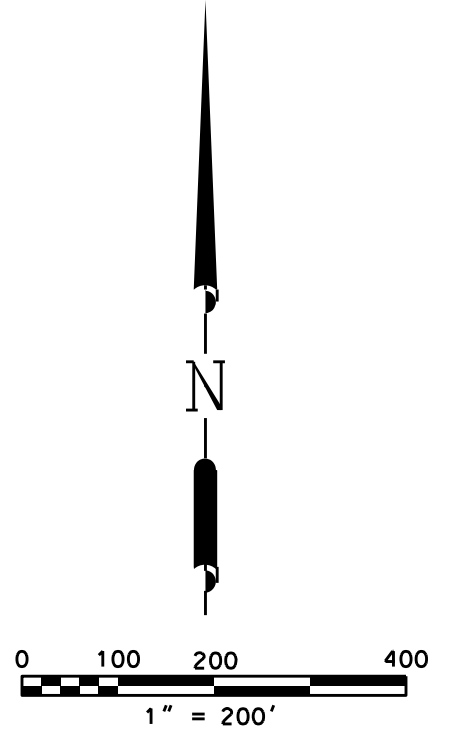
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242556, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242556, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242544, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20100089086, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130080818, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. U611884, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. U611885, H.C.O.R.
◇	G. FRANK LIPPER	VOL.1299, PG.585, H.C.D.R.
◇	TUNG THANH MAI	C.F. 20100021305, H.C.O.R.
◇	BEHZAD NASIZADEH	C.F. 20080329418, H.C.O.R.
◇	L. MICHAEL PROLER	C.F. 20110287890, H.C.O.R.
◇	BENJAMIN JIMENEZ	C.F. 20150512861, H.C.O.R.
◇	ISAAC LEON WILLIAMS ET UX	C.F. G082364, H.C.O.R.
◇	RE-MART INVESTMENTS	C.F. 20140270103, H.C.O.R.
◇	JAIME MAGALENO LOPEZ	C.F. 20150063915, H.C.O.R.
◇	JUAN C. ALLENDE-MOLIAN ET AL	C.F. 20150142372, H.C.O.R.

SUBDIVISION TABLE

Ⓐ	BRAZOS PARTITION VOL.265, PG.122, H.C.D.R.
Ⓑ	KYLE & BUSCH SUBDIVISION VOL.183, PG.69, H.C.D.R.
Ⓒ	E. A. FINN ADDITION VOL.73, PG.317, H.C.D.R.
Ⓓ	AUGUSTA ADDITION VOL.56, PG.139, H.C.D.R.
Ⓔ	Blocks 68, 70, 71, 72, 73, 74, 75, 76 AUGUSTA ADDITION VOL.725 PG.235, H.C.M.R.
Ⓕ	WEISENBERGER'S LUCKY SEVEN ADDITION VOL.22, PG. 4, H.C.D.R.
Ⓖ	GAGNE HOMESTEAD SOUTH PART VOL.89, PG.240, H.C.D.R.
Ⓗ	ENGLEWOOD VOL.53, PG.346, H.C.D.R.
Ⓘ	F.F. CHEW ADDITION VOL.1, PG.8, H.C.M.R.

CURVE TABLE

CURVE #	RADIUS	LENGTH	DELTA	CHORD BRG. - DIST.
C1	270.00'	114.02'	24°11'43"	S 80°03'44" E - 113.17'
C2	280.00'	11.68'	2°23'27"	S 69°09'35" E - 11.68'
C3	280.00'	86.56'	17°42'42"	S 85°41'48" E - 86.21'
C4	1179.28'	375.93'	18°15'53"	S 70°59'12" W - 374.34'
C5	1106.50'	372.48'	19°17'14"	S 78°13'11" W - 370.72'
C6	605.28'	196.03'	18°33'23"	S 77°51'15" W - 195.18'
C7	460.00'	54.90'	6°50'17"	N 5°52'20" W - 54.87'



WM. Patrick Doyle
WM. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467

EXHIBIT OF
124.8360 ACRE TRACT
 IN THE
HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS
 FOR
UNION PACIFIC RAILROAD COMPANY

Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS
 131 COMMERCE STREET, CLUTE, TEXAS 77531
 OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500
 SURVEYED: 9-06-13 BOOK No.: MAT. CO. VOL. 82 PROJ. NO.: 4733-13-02
 DRAWN BY: WPD/9-09-13 CHECKED: WPD/9-09-13 REVISED: NONE

USER: SPERSON
 DATE: 9/13/13
 PLOTNAME: 13



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

EXHIBIT A

UNION PACIFIC RAILROAD COMPANY

124.8360 ACRE TRACT

HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32

HARRIS COUNTY, TEXAS

PAGE 1 OF 7

BEING ALL THAT CERTAIN 124.8360 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 100 foot wide Texas and New Orleans Railroad right-of-way, All of lots 1 through 10, Block 54, all of Lots 1 through 10, Block 55, all of Lots 4 through 6 and a part of Lots 1 through 3, Block 56, all of Lots 1 through 10, Block 58, all of Lots 1 through 10, Block 59, all of Lots 1 through 6, Block 60, all of Lots 5 and 6 and part of Lots 4 and 7, Block 61, all of Lots 1 through 10, Block 62, all of Lots 1 through 10, Block 63, all of Lots 1 through 6, Block 64, all of Lots 1 through 10, Block 77, all of Lots 1 through 10, Block 78, all of Lots 1 through 10, Block 79, all of Lots 1 through 6, Block 80, all of Lots 1 through 10, Block 81, all of Lots 1 through 10, Block 82, all of Lots 1 through 10, Block 83, all of Lots 1 through 3, Block 84, all of Courtney Street (14th Street), all of Eddie Street (15th Street), all of 60 foot wide 16th Street, and all of 60 foot wide Tyre Street (19th Street), all of 60 foot wide Campbell Street (20th Street), a portion of 60 foot wide Amboy Street (Dan Street), a portion of 60 foot wide Kashmere Street (Yates Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street as shown on the map of Augusta Addition, according to the map or plat recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.); All of Lots 1 through 3, Block 68, all of Lots 1 through 3, Block 70, all of Lots 1 through 8, Block 71, all of Lots 1 through 6, Block 72, all of Lots 1 through 7, Block 73, all of Lots 1 through 10, Block 74, all of Lots 1 through 10, Block 75, all of Lots 1 through 6, Block 76, all of 60 foot wide Tunis Street (17th Street), all of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), all of 60 foot wide Yates Street (Elmer Street), all of 60 foot wide Schweikhart Street, all of 60 foot wide Wipprecht Street, all of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R.; All of Lots 5 through 7, as shown on the map of the E. A. Finn Subdivision, according to the map or plat recorded in Volume 73, Page 317 of the H.C.D.R.; All of Lots 2 through 8, Block 1, all of Lots 1 through 8, Block 2, a portion of 15 foot wide 1st Street, all of 30 foot wide 2nd Street as shown on the map of A. H. Kyle Subdivision (a.k.a. Busch and Kyle Subdivision), according to the map or plat recorded in Volume 183, Page 68 of the H.C.D.R.; All of Block 1, all of Lots 1 through 14, Block 2, all of Lots 1 through 21, Block 3, all of Tyre Street, all of Campbell Street and all of Amboy Street (Dan Street) as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R.; All of Block 5, all of Lots 1 through 10, Block 7, all of Lots 1, 2, 9 and 10, Block 8, all of Lots 1 through 5 and 7 through 10, and a portion of Lot 6, Block 11, all of Lots 1 through 10, Block 12, all of Lots 1 through 10, Block 13, all of Lots 1 through 10, Block 14, all of Lots 1 through 10, Block 15, all of Lots 1 through 10, Block 16, all of Lots 1 through 10, Block 17, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 18, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 19, all of Lots 1 through 10, Block 20, all of Lots 1 through 10, Block 21, all of Lots 1 through 10, Block 22, all of Lots 1 through 10, Block 23, all of Lots 1 through 10, Block 24, all of Lots 1 through 10, Block 25, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 26, all of 60 foot wide 16th Street, all of 60 foot wide 17th Street, all of 60 foot wide 18th Street, all of 60 foot wide 19th Street, all of 60 foot wide 20th Street, a portion of 40 foot wide Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the H.C.D.R.; All of Lots 1 through 10, Block 1, all of Lots 1 through 4, a portion of Lots 5 through 7 and a portion of Lots 15 and 16, Block 2, all of Lots 1 and 2 and a portion of Lot 3, Block 3, all of Lots 1 through 12, Block 4, all of Lots 1 through 12 Block 7, All of 60 foot wide New Orleans Avenue, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R.; All of Lots 1 through 6, Block 17, all of Lots 1 through 10, Block 18, all of Lots 1 through 3, Block 19, a portion of Lots 1 and 10, Block 22, a portion of 60 foot wide Wallisville Road, a portion of 50 foot wide Chew Avenue, as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.); All that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the H.C.D.R.; All that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the H.C.D.R.; All that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 7**

Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R.; All that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; All that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R.; all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; All that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; All of Tracts 1 through 7 and a portion of Tract 8 of the Partition of heirs of Samuel Brazos as recorded on March 10, 1911 and recorded on Volume 265, Page 122 of the H.C.D.R., and being same following described tracts: All that certain called 0.4054 acre tract of land being Tract 1 and 2 and a portion of Tract 8 of said Samuel Brazos partition, conveyed by deed recorded on May 20, 2013 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20130242556 of the Harris County Official Records (H.C.O.R.); All that certain 60' x 100' tract of land being Tract 3 of said Samuel Brazos partition, conveyed by deed recorded on May 20, 2013 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20130242544 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 4 of said Samuel Brazos partition, conveyed by deed recorded on February 21, 2013 from C. C. Cody to Union Pacific Railroad Company as recorded in Clerk's File No. 20130080818 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 5 of said partition, conveyed by deed recorded on March 8, 2010 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20100089086 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 6 of said Samuel Brazos partition, conveyed by deed recorded on August 30, 2011 from C. C. Cody to Union Pacific Railroad Company as recorded in Clerk's File No. 20110322055 of the H.C.O.R.; all that certain tract, being the West 50 feet of a called 136 foot by 223 foot tract conveyed by deed recorded on September 12, 2000 from Cousins Investment Company to Union Pacific Railroad Company as recorded in Clerk's File No. U618884 of the H.C.O.R., and all that certain tract described in deed recorded on September 12, 2000 from Cousins Investment Company to Union Pacific Railroad Company, as recorded in Clerk's File No. U618885 of the H.C.O.R.; a portion of all that certain called 4835 acre tract conveyed by deed recorded on September 6, 1985 from Lawyers Title Company of Houston to Southern Pacific Transportation Company as recorded in Clerk's File No. K193131 of the H.C.O.R., the herein described 124.8360 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at a 5/8" iron rod found marking the northwest corner of Block 54 of said Augusta Addition, located at the intersection of the southern right-of-way boundary line of Liberty Road with the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for the northwest corner of the herein described 124.8360 acre tract, at position X=31334356.21 and Y=13852234.79;

THENCE North 87°50'25" East, coincident with the southern right-of-way boundary line of said Liberty Road, a distance of 646.91 feet to a 5/8" iron rod found marking the point of curvature of a curve to the right, having a radius of 270.00 feet, at position X=3135002.60 and Y=13852259.17;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the right, having a radius of 270.00 feet, a central angle of 24°11'43", an arc length of 114.02 feet and chord bearing and distance of South 80°03'44" E - 113.17 feet to the point of curvature of a reverse curve to the left, having a radius of 180.00 feet, at position X=3135114.06 and Y=13852239.64;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the left, having a radius of 280.00 feet, a central angle of 2°23'27", an arc length of 11.68 feet and chord bearing and distance of South 69°09'35" E - 11.68 feet to a point for corner, located in the western boundary line of all that certain called 1800 square foot tract of land, conveyed by deed recorded on August 18, 1934 from Bettie J. Pullen, et al to the County of Harris, as recorded in Volume 960, Page 357 of the H.C.D.R., at position X=3135124.98 and Y=13852235.49; ;

THENCE South 2°19'40" East, coincident with the western boundary line of said County of Harris called 1800 square foot tract of land, a distance of 31.80 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3135126.27 and Y=13852203.71;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 7**

THENCE North $87^{\circ}40'20''$ East, coincident with the southern boundary line of said County of Harris called 1800 square foot tract of land, a distance of 30.00 feet to point located on the eastern boundary line of said County of Harris called 1800 square foot tract of land, same being the eastern boundary line of Lot 3, Block 56 of said Augusta Addition, for an angle corner of the herein described 124.8360 acre tract, at position $X=3135156.24$ and $Y=13852204.93$;

THENCE North $2^{\circ}19'40''$ West, coincident with the eastern boundary line of said County of Harris called 1800 square foot tract of land, same being the eastern boundary line of Lot 3, Block 56 of said Augusta Addition, a distance of 21.63 feet to a point located in the southern right-of-way boundary line of said Liberty Road, located on a curve to the left, having a radius of 280.00 feet, for an angle corner of the herein described 124.8360 acre tract, at position $X=3135155.36$ and $Y=13852226.54$;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the left, having a radius of 280.00 feet, a central angle of $17^{\circ}42'42''$, an arc length of 86.56 feet and chord bearing and distance of South $85^{\circ}41'48''$ E - 86.21 feet to a point for corner, at position $X=3135241.32$ and $Y=13852220.07$;

THENCE North $85^{\circ}26'51''$ East, coincident with the southern boundary right-of-way boundary line of said Liberty Road, same being the northern boundary line of said Texas and New Orleans Railway Company called 1.28 acre tract, said Texas and New Orleans Railway Company called 1.20 acre tract, said Texas and New Orleans Railway Company called 55,922 square foot tract (Tract 1), said Texas and New Orleans Railway Company called 55,922 square foot tract (Tract 2), said Texas and New Orleans Railway Company called 5.79 acre tract, a distance of 1523.61 feet to a point located on the northeastern right-of-way boundary line of said Texas and New Orleans Railroad Company 100 foot wide right-of-way, for an angle corner of the herein described 124.8360 acre tract, at position $X=3136759.96$ and $Y=13852340.99$;

THENCE North $62^{\circ}10'18''$ East, coincident with the southeastern right-of-way boundary line of said Liberty Road same being the northwestern boundary line of said Texas and New Orleans Railroad Company 100 foot wide right-of-way, a distance of 653.86 feet to the intersection of said southeastern right-of-way boundary line of said Liberty Road, the northwestern boundary line of said Texas and New Orleans 100 foot wide right-of-way and the northerly extension of the western right-of-way boundary line of Sam Mills Street (Berry Street) as shown on the said plat of F. F. Chew Addition, for the northeast corner of the herein described 124.8360 acre tract, at position $X=3137338.15$ and $Y=13852646.20$;

THENCE South $2^{\circ}35'12''$ East, coincident with the northerly extension of the western right-of-way boundary line of said Sam Mills Street (Berry Street) as shown on the said plat of F. F. Chew Addition, a distance of 364.63 feet to a point located in the northern right-of-way boundary line of Wallisville Road (right-of-way varies), on a curve to the left, having a radius of 1179.28 feet, for an angle corner of the herein described 124.8360 acre tract, at position $X=3137354.60$ and $Y=13852281.98$;

THENCE in a southwesterly direction, coincident with the northwestern right-of-way boundary line of said Wallisville Road along said curve to the left, having a radius of 1179.28 feet, a central angle of $18^{\circ}15'53''$, an arc length of 375.93 feet and chord bearing and distance of South $70^{\circ}59'12''$ West - 374.34 feet to a point for corner, at position $X=3137000.72$ and $Y=13852160.04$;

THENCE South $61^{\circ}51'16''$ West, coincident with the northwestern right-of-way boundary line of said Wallisville Road, a distance of 190.34 feet to an angle corner of the herein described 124.8360 acre tract, at position $X=3136832.90$ and $Y=13852070.26$;

THENCE South $53^{\circ}51'57''$ West, coincident with the northern right-of-way boundary line of said Wallisville Road, a distance of 288.79 feet to a point located on the western right-of-way boundary line of 50 foot wide Harlem Street (Baer Avenue) as shown on the map of Englewood, same being the eastern boundary line of Block 1 of said Englewood subdivision, for an angle corner of the herein described 124.8360 acre tract, at position $X=3136599.69$ and $Y=13851899.99$;

THENCE South $2^{\circ}49'16''$ East, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street (Baer Avenue), a distance of 827.94 feet to the intersection of the western right-of-way boundary line of said 50 foot wide Harlem Street and the northern right-of-way boundary line of 50 foot wide Sudan Street (Wilson St.), for the southeast corner of Block 7 of said Englewood subdivision and an angle corner of the herein described 124.8360 acre tract, at position $X=3136640.44$ and $Y=13851073.13$;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 7**

THENCE South 87°28'24" West, coincident with the northern right-of-way boundary line of 50 foot wide Sudan Street (Wilson St.), at a distance of 210.00 feet pass the West right-of-way boundary line of said Erastus Street as shown on the plat of said Englewood subdivision, same being the eastern boundary line of Block 11 of the South Part of Gagne Homestead, continuing a total distance of 273.42 feet to a point located in the western right-of-way boundary line of Erastus Street, conveyed by deed recorded on December 31, 1970 from Southern Pacific Transportation Company to the City of Houston, as recorded in Clerk's File No. D240252 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3136367.32 and Y=13851061.08;

THENCE South 2°44'14" East, coincident with the western right-of-way boundary line of Erastus Street, being a 30 foot wide strip conveyed by Southern Pacific Transportation Company to the City of Houston, as recorded in Clerk's File No. D240252 and a 30 foot wide strip conveyed by deed recorded on October 7, 1993 from Southern Pacific Transportation Company to the City of Houston in Clerk's File No. P491689 of the H.C.O.R., a distance of 807.64 feet to a point located in the northern right-of-way boundary line of 60 foot wide Lee Street, same being the southern boundary line of Block 26 of said South Part of Gagne Homestead, for an angle corner of the herein described 124.8360 acre tract, at position X=3136405.88 and Y=13850254.45;

THENCE South 87°15'46" West, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of Blocks 24, 25 and 26 of said South Part of Gagne Homestead, a distance of 840.00 feet to the southeast corner of Block 23 of said South Part of Gagne Homestead, same being the East corner of all that certain called 0.1243 acre tract of land conveyed by deed recorded on October 7, 1993 from Southern Pacific Transportation Company to the City of Houston in Clerk's File No. P491689 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3135566.93 and Y=13850214.33;

THENCE North 84°33'30" West, coincident with the northern boundary line of said City of Houston, called 0.1243 acre tract, a distance of 276.99 feet to a point located in the western boundary line of said South Pacific Transportation Company called 4835 square foot tract, same being the eastern right-of-way boundary line of Solo Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3135291.22 and Y=13850240.60;

THENCE North 2°44'14" West, coincident with the western right-of-way boundary line of said Solo Street, same being the eastern boundary line of said Southern Pacific Transportation Company called 4835 square foot tract, a distance of 111.88 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3135285.88 and Y=13850352.35;

THENCE South 87°36'14" West, at a distance of 60.00 feet pass the southeast corner of Lot 3, Block 84, at a distance of 236.90 feet pass the southwest corner of Lot 1, Block 84, continuing for a total distance of 296.90 feet to the southeast corner of Lot 5, same being the northeast corner of Lot 6, Block 83 of said Augusta Addition, located in the western right-of-way boundary line of 60 foot wide Wipprecht Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3134989.26 and Y=13850339.94;

THENCE South 2°23'46" East, coincident with the eastern boundary line of said Lot 6, Block 83 of said Augusta Addition, same being the western right-of-way boundary line of said 60 foot wide Wipprecht Street, a distance of 100.00 feet to a point located on the northern right-of-way boundary line of said 60 foot wide Lee Street, for the southeast corner of said Lot 6, Block 83 of Augusta Addition, for angle corner of the herein described 124.8360 acre tract, at position X=3134993.71 and Y=13850239.77;

THENCE South 87°36'14" West, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of Blocks 81, 82 and 83 of said Augusta Addition, a distance of 872.58 feet to southwest corner of Lot 10, Block 81 of Augusta Addition, located on the eastern right-of-way boundary line of 60 foot wide Amboy Street (Dan Street), for an angle corner of the herein described 124.8360 acre tract, at position X=3134121.72 and Y=13850203.56;

THENCE South 89°35'41" West, a distance of 56.43 feet to the southeast corner of Lot 11, Block 3 of said Weisenberger's Lucky Seven Addition, same being the northern right-of-way boundary line of said 60 foot wide Lee Street, on a curve to the left, having a radius of 1206.50 feet, for an angle corner of the herein described 124.8360 acre tract, at position X=3134065.30 and Y=13850203.16;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 5 OF 7**

THENCE in a westerly direction, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of said Block 3 of Weisenberger's Lucky Seven Addition, along said curve to the left, having a radius of 1106.50 feet, a central angle of 19°17'14", an arc length of 372.48 feet and chord bearing and distance of South 78°13'11" West - 370.72 feet to a point of reverse curve to the right, having a radius of 605.28 feet, at position X=3133702.43 and Y=13850127.48;

THENCE in a westerly direction, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of said Block 3 of Weisenberger's Lucky Seven Addition, along said curve to the right, having a radius of 605.28 feet, a central angle of 18°33'24", an arc length of 196.03 feet and chord bearing and distance of South 77°51'16" West - 195.18 feet to a the southwest corner of Lot 21, Block 3 of said Weisenberger's Lucky Seven Addition, located on the eastern right-of-way boundary line of Altoona Street (right-of-way varies) and a curve to the right, having a radius of 460.95 feet, at position X=3133511.64 and Y=13850086.42;

THENCE in a northerly direction, coincident with the eastern right-of-way boundary line of Altoona Street (a.k.a. Waco Street) (right-of-way varies), same being the western boundary line Block 3 of said Weisenberger's Lucky Seven Addition, and along said curve to the right, having a radius of 460.95 feet, a central angle of 6°50'17", an arc length of 54.90 feet and chord bearing and distance of North 5°52'20" W - 54.87 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3133506.03 and Y=13850140.99;

THENCE North 2°27'12" West, coincident with the eastern right-of-way boundary line of Altoona Street (right-of-way varies), same being the western boundary line Block 2 and 3 of said Weisenberger's Lucky Seven Addition, a distance of 361.48 feet to a point located on the southern boundary line of the Texas and New Orleans Railroad 100 foot right-of-way, same being the northern right-of-way boundary line of 50 foot wide Tyre Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3133490.55 and Y=13850502.10;

THENCE South 62°10'18" West, coincident with the southern boundary line of the Texas and New Orleans Railroad 100 foot right-of-way, a distance of 201.40 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3133312.46 and Y=13850408.09;

THENCE North 2°27'12" West, a distance of 110.68 feet to a point located on the northern boundary line of said Texas and New Orleans Railroad 100 foot right-of-way, for an angle corner of the herein described 124.8360 acre tract, at position X=3133307.73 and Y=13850518.66;

THENCE North 62°10'18" East, coincident with the northern boundary line of said Texas and New Orleans Railroad 100 foot right-of-way, same being the southern boundary line of said Reserve "A" of Abernathy Court, the southern boundary line of all that certain Tract 2 conveyed by deed recorded on January 3, 1944 from Alfred Philo Howard, Jr. to G. Frank Lipper as recorded in Volume 1299, Page 585 of the H.C.D.R., the southern boundary line of all that certain called 0.1721 acre tract, conveyed by deed recorded on January 19, 2010 from the City of Houston, et al to Tung Thanh Mai as recorded in Clerk's File No. 2010-0021305 of the H.C.O.R., the southern boundary line of all that certain called 0.1148 acre tract conveyed by deed recorded on June 24, 2008 from the City of Houston, et al to Behzad Nasizadeh as recorded in Clerk's File No. 2008-0329418 of the H.C.O.R., the southern boundary line of all that certain called 1492 acre tract, conveyed by deed recorded on July 13, 2011 from the City of Houston, et al to L. Michael Proler as recorded in Clerk's File No. 2011-0287890 of the H.C.O.R., a distance of 529.31 feet to the southwest corner of Tract 5 of said Brazos Partition, located on the eastern right-of-way boundary line of a 20 foot wide roadway (a.k.a. Wayne Street) for an angle corner of the herein described 124.8360 acre tract, at position X=3133775.77 and Y=13850765.72;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said 20 foot wide roadway (a.k.a. Wayne Street), same being the western boundary line of Tracts 5 through 8 of said Samuel Brazos partition, a distance of 185.73 feet to the southwest corner of that certain 50' x 100' tract out of Tract 8 of said Samuel Brazos partition, conveyed by deed recorded on November 10, 2015 from Harris County, et al to Benjamin Jimenez, as recorded in Clerk's File No. 2015-0512861 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3133767.80 and Y=13850951.26;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 6 OF 7**

THENCE North 62°10'18" East, coincident with the southern boundary line of said Benjamin Jimenez tract, a distance of 100.00 feet to the southeast corner of said Benjamin Jimenez tract, located on the eastern boundary line of said Tract 8, same being the western boundary line of said Tract 1 of the Samuel Brazos partition, for an angle corner of the herein described 124.8360 acre tract, at position X=3133856.23 and Y=13850997.94;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Benjamin Jimenez tract, the eastern boundary line of said Tract 8, same being the western boundary line of said Tract 1 of the Samuel Brazos partition, a distance of 50.00 feet to a point located on the southern boundary line of all that certain tract of land conveyed by deed recorded on May 16, 1979 from George Ferguson, et al to Isaac Leon Williams, et ux, as recorded in Clerk's File No. G082364 of the H.C.O.R., for the northeast corner of said Benjamin Jimenez tract and said Tract 8, the northwest corner of said Tract 1 of said Samuel Brazos partition, for an angle corner of the herein described 124.8360 acre tract, at position X=3133854.08 and Y=13851047.89;

THENCE North 62°10'18" East, coincident with the southern boundary line of said Isaac Leo William, et ux tract, the southern boundary line of all that certain tract conveyed by deed recorded on June 23, 2014 from Harris County, et al to Re-Mart Investment as recorded in Clerk's File No. 2014-0270103 of the H.C.O.R., the southern boundary line of all that certain tract of land conveyed by deed recorded on February 17, 2015 from Melbourne Street, LLC to Jaime Magdaleno Lopez as recorded in Clerk's File No. 2015-0063915 of the H.C.O.R., the southern boundary line of all that certain tract of land conveyed by deed recorded on April 7, 2015 from UrboCorp, LLC TO Juan C. Allende-Molina, et al, as recorded in Clerk's File No. 2015-0142372 of the H.C.O.R., a distance of 236.00 feet to a point located on the western boundary line of Lot 8, Block 1 of said A. H. Kyle Subdivision, for the southeast corner of said Juan C. Allende-Molina, et al tract, for an angle corner of the herein described 124.8360 acre tract, at position X=3134062.77 and Y=13851158.05 ;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Juan C. Allende-Molian et al tract, same being the western boundary line of said Lot 8, Block 1 of said A. H. Kyle Subdivision, a distance of 34.41 feet to the northwest corner of said Lot 8, Block 1, same being the southwest corner of Lot 1, Block 1 of said A. H. Kyle Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134061.29 and Y=13851192.43 ;

THENCE North 87°32'21" East, coincident with the southern boundary line of said Lot 1, Block 1, same being the northern boundary line of said Lot 8, Block 1 of said A. H. Kyle Subdivision, a distance of 52.50 feet to the common corner of Lots 1, 2, 7 and 8, Block 1 of said A. H. Kyle Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134113.73 and Y=13851194.68;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Lot 1, the western boundary line of said Lot 2, Block 1 of said A. H. Kyle Subdivision, at a distance of 100.00 feet pass the northeast corner of said Lot 1, the northwest corner of said Lot 2 of Block 1, same being the southern right-of-way boundary line of 15 foot wide 1st Street, continuing for a total distance of 115.00 feet to a point located on the northern right-of-way boundary line of 15 foot wide 1st Street, same being the southern boundary line of Lot 7 of said E. A. Finn Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134108.80 and Y=13851309.56;

THENCE South 87°32'21" West, coincident with the northern right-of-way boundary line of 15 foot wide 1st Street, same being the southern boundary line of Lot 7 of said E. A. Finn Subdivision, a distance of 52.50 feet to the southwest corner of said Lot 7, and an angle corner of the herein described 124.8360 acre tract, at position X=3134056.35 and Y=13851307.31;

THENCE North 2°27'39" West, coincident with the western boundary line of said Lot 7 of the E. A. Finn Subdivision, a distance of 174.86 feet to a point located on the southern boundary line of a 22 foot wide right-of-way, for the northwest corner of said Lot 7 and an angle corner of the herein described 124.8360 acre tract, at position X=3134048.85 and Y=13851481.99;

THENCE North 87°32'21" East, coincident with the southern boundary line of a 22 foot wide right-of-way, same being the northern boundary line of Lots 5, 6 and 7 of said E. A. Finn Subdivision, a distance of 210.00 feet to the northeast corner of said Lot 5 of the E. A. Finn Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134258.63 and Y=13851491.00;

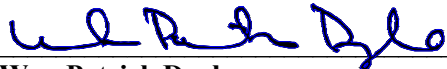
EXHIBIT A

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 7 OF 7**

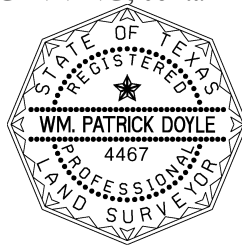
THENCE North 2°27'39" West, at a distance of 22.00 feet, pass the southeast corner of Lot 3 of said E. A. Finn Subdivision, continuing coincident with the eastern boundary line of said Lot 3 and Lot 2, a total distance of 218.32 feet to a point located on the southern right-of-way boundary line of 60 foot wide Eddie Street (15th Street), same being the northern boundary line of Block 61 of said Augusta Addition, for an angle corner of the herein described 124.8360 acre tract, at position X=3134249.26 and Y=13851709.10;

THENCE North 87°40'20" East, a distance of 129.20 feet to the northwest corner of Block 62, located on the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3134378.34 and Y=13851714.35 ;

THENCE North 2°26'03" West, coincident with the eastern right-of-way boundary line of said 60 foot wide Kashmere Street, same being the western boundary line of Blocks 54 and 58 boundary line, a distance of 520.97 feet to the **POINT OF BEGINNING**, containing 124.8360 acres of land, more or less.



Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
April 6, 2016

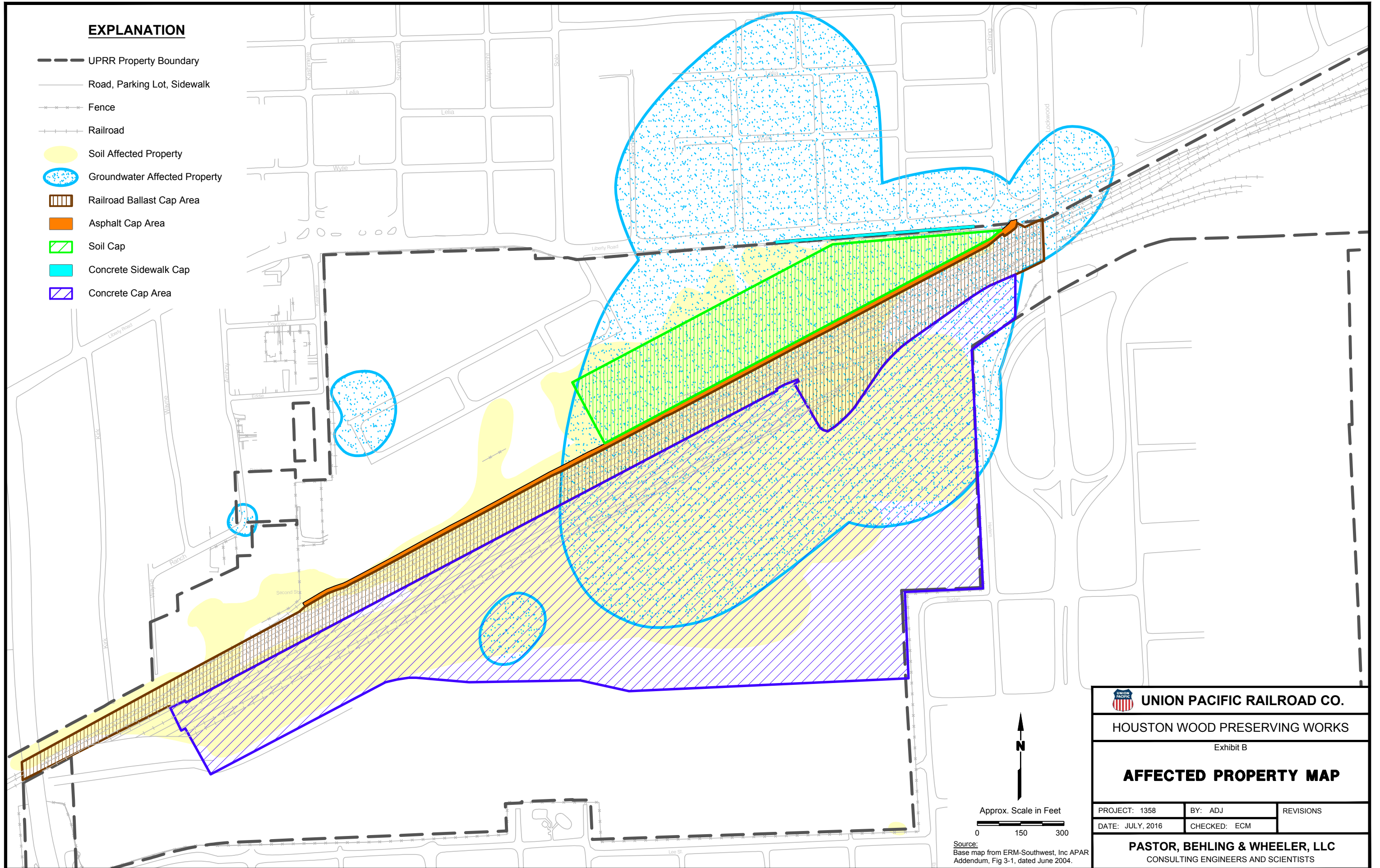


*This description is based on a survey, dated December 23, 2015 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard 124.8360 acre tract.doc*

EXHIBIT "B"
AFFECTED PROPERTY MAP

EXPLANATION

- UPRR Property Boundary
- Road, Parking Lot, Sidewalk
- *-*- Fence
- +—+ Railroad
- Soil Affected Property
- Groundwater Affected Property
- ▨ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▧ Soil Cap
- Concrete Sidewalk Cap
- ▨ Concrete Cap Area



Approx. Scale in Feet
 0 150 300

Source:
 Base map from ERM-Southwest, Inc APAR
 Addendum, Fig 3-1, dated June 2004.

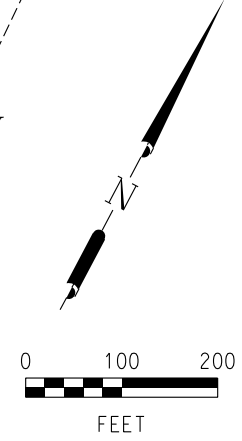
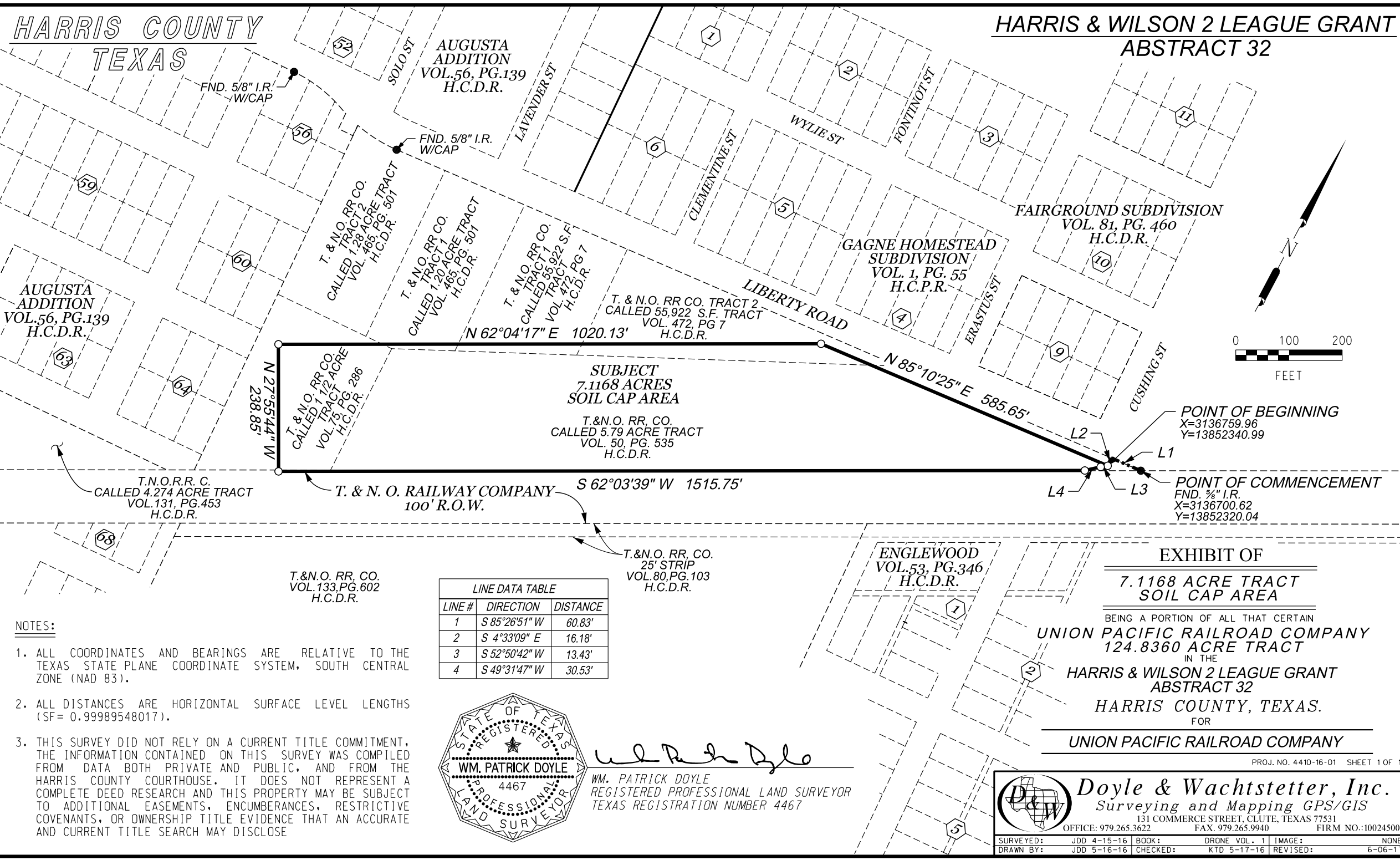
UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Exhibit B		
AFFECTED PROPERTY MAP		
PROJECT: 1358	BY: ADJ	REVISIONS
DATE: JULY, 2016	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXHIBITS "C-1, C-2, C-3, AND C-4"
LEGAL DESCRIPTIONS OF USE OF PHYSICAL CONTROLS FOR SOIL

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

USER: Untitled Workspace DATE: 6/6/2017 TIME: 4:13:11 PM G:\DON\PB&W\Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Capped Boundary\Plats\Survey Plot UPRR Soil Cap 7.1168 acres Rev1.dgn



SUBJECT
7.1168 ACRES
SOIL CAP AREA
T. & N. O. RR. CO.
CALLED 5.79 ACRE TRACT
VOL. 50, PG. 535
H.C.D.R.

T. & N. O. RAILWAY COMPANY
100' R.O.W.
S 62°03'39" W 1515.75'

LINE DATA TABLE

LINE #	DIRECTION	DISTANCE
1	S 85°26'51" W	60.83'
2	S 4°33'09" E	16.18'
3	S 52°50'42" W	13.43'
4	S 49°31'47" W	30.53'

- NOTES:
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

EXHIBIT OF
**7.1168 ACRE TRACT
SOIL CAP AREA**
BEING A PORTION OF ALL THAT CERTAIN
**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT**
IN THE
**HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32**
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	JDD 4-15-16	BOOK:	DRONE VOL. 1	IMAGE:	NONE
DRAWN BY:	JDD 5-16-16	CHECKED:	KTD 5-17-16	REVISED:	6-06-17



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
SOIL CAP AREA – 7.1168 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 7.1168 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, being a portion of all that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; all that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R.; all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 7.1168 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 60.83 feet to an angle point, at position X=3136699.34 and Y=13852336.16;

THENCE South 4°33'09" East, a distance of 16.18 feet to East corner and the **POINT OF BEGINNING** of the herein described 7.1168 acre tract, at position X=3136700.62 and Y=13852320.04;

THENCE South 52°50'42" West, a distance of 13.43 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136689.92 and Y=13852311.93;

THENCE South 49°31'47" West, a distance of 30.53 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136666.69 and Y=13852292.11;

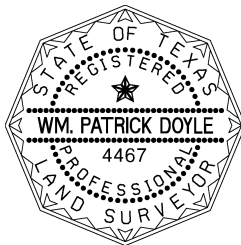
THENCE South 62°03'39" West, a distance of 1515.75 feet to the South corner of the herein described 7.1168 acre tract, at position X=3135327.75 and Y=13851582.01;

THENCE North 27°55'44" West, a distance of 238.85 feet to West corner of the herein described 7.1168 acre tract, at position X=3135215.89 and Y=13851793.02;

THENCE North 62°04'17" East, a distance of 1020.13 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136117.11 and Y=13852270.77;

THENCE North 85°10'25" East, a distance of 585.65 feet to the **POINT OF BEGINNING**, containing 7.1168 acres of land, more or less.

Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016



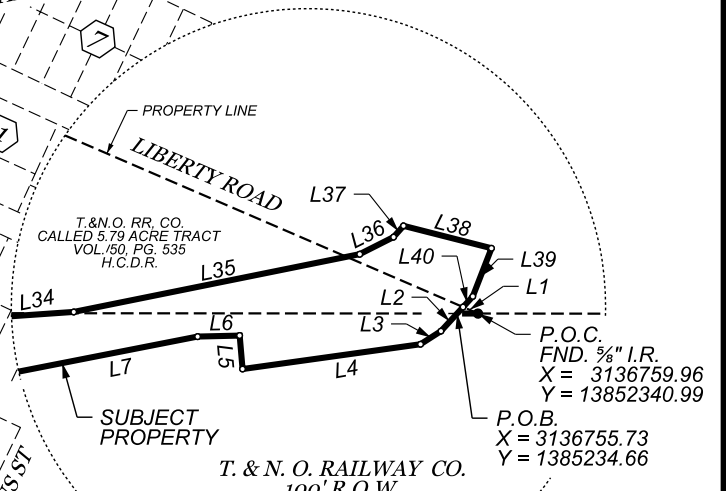
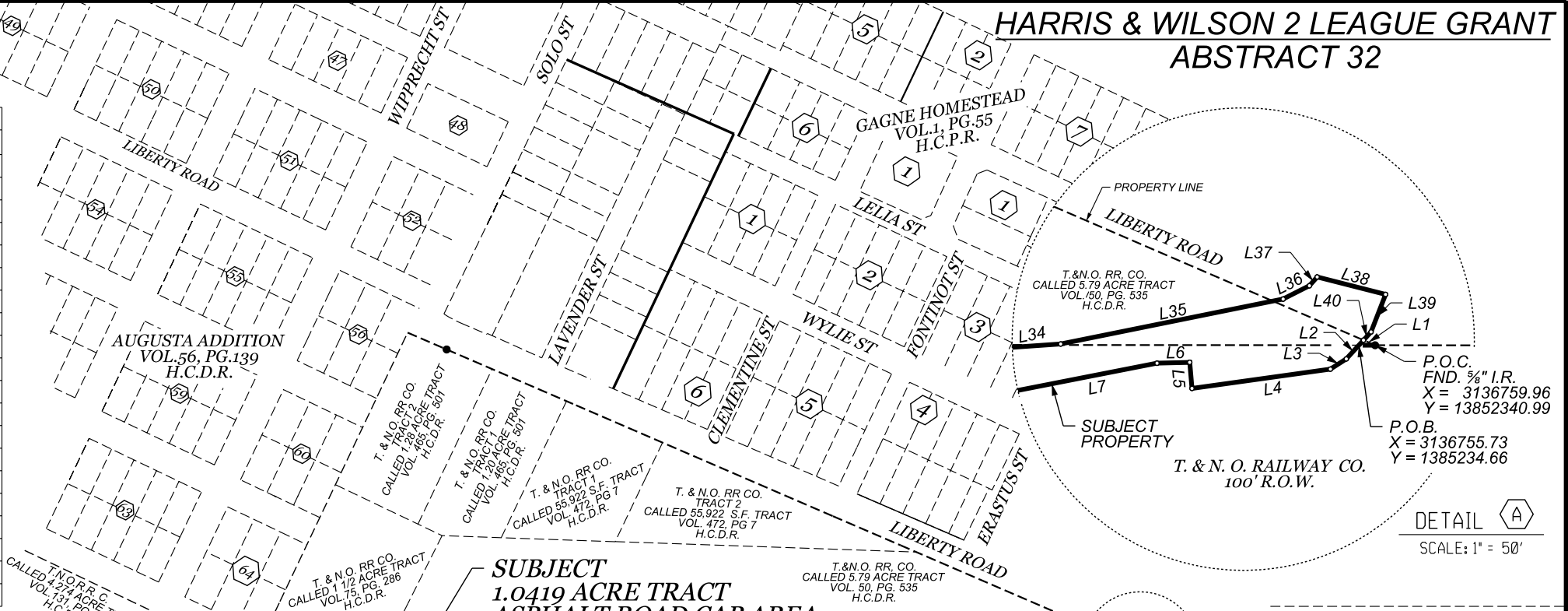
This description is based on an exhibit, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Sidewalk tract 0.1318 acre.doc

HARRIS COUNTY TEXAS

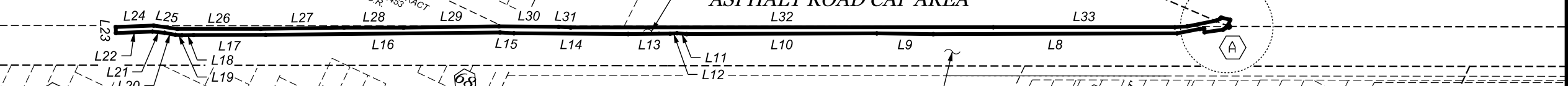
HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

LINE #	DIRECTION	LENGTH
L1	S 86°26'51" W	4.25'
L2	S 14°40'24" W	8.50'
L3	S 29°23'15" W	6.33'
L4	S 54°11'53" W	46.80'
L5	N 32°51'31" W	8.76'
L6	S 60°39'24" W	10.96'
L7	S 51°04'35" W	58.69'
L8	S 61°56'31" W	613.96'
L9	S 62°54'22" W	142.13'
L10	S 61°55'12" W	479.21'
L11	S 67°03'52" W	24.28'
L12	S 58°32'12" W	17.21'
L13	S 61°37'54" W	105.67'
L14	S 62°29'25" W	287.83'
L15	S 65°35'29" W	35.19'
L16	S 61°31'56" W	590.15'
L17	S 61°59'05" W	181.71'
L18	S 61°22'47" W	29.30'
L19	S 65°38'37" W	16.53'
L20	S 72°24'44" W	27.78'

LINE #	DIRECTION	LENGTH
L21	S 68°04'30" W	30.51'
L22	S 59°48'14" W	92.27'
L23	N 29°33'31" W	15.17'
L24	N 59°48'53" E	95.54'
L25	N 70°15'38" E	60.14'
L26	N 62°07'21" E	210.22'
L27	N 61°12'15" E	209.88'
L28	N 62°09'00" E	149.93'
L29	N 61°23'02" E	240.32'
L30	N 62°36'22" E	150.43'
L31	N 64°52'14" E	30.22'
L32	N 62°05'30" E	1064.63'
L33	N 62°08'24" E	457.12'
L34	N 58°08'18" E	30.97'
L35	N 50°42'05" E	76.01'
L36	N 35°17'11" E	9.87'
L37	N 13°31'05" E	3.91'
L38	N 76°25'52" E	23.65'
L39	S 6°43'41" E	13.45'
L40	S 14°40'24" W	3.77'



DETAIL A
SCALE: 1" = 50'



- NOTES:**
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

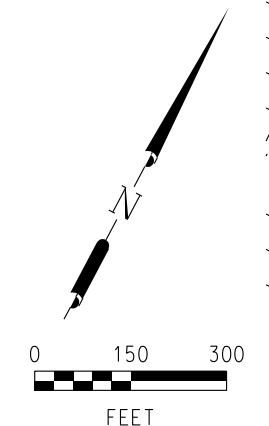


EXHIBIT OF
1.0419 ACRE TRACT ASPHALT ROAD CAP AREA
BEING A PORTION OF ALL THAT CERTAIN
UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT &
LIBERTY ROAD
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

PROJ. NO. 4410-16-01 SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED: JDD 4-15-16	BOOK: DRONE VOL. 1	IMAGE: NONE
DRAWN BY: JDD 5-16-16	CHECKED: KTD 5-17-16	REVISED: 6-06-17

USER: Untitled Workspace TIME: 3:38:47 PM DATE: 6/6/2017 G:\DON\PB&W\Environmental\UPRR Houston Wood 2016 Capped Boundary\Plats\Survey Plot\UPRR Asphalt Road 1.0419 acres Rev2.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 1.0419 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, within the Texas and New Orleans 100 foot wide railroad right-of-way, being a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R. and a portion of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the H.C.D.R., the herein described 1.0419 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 4.25 feet to the **POINT OF BEGINNING** of the herein described 1.0419 acre tract, at position X=3136755.73 and Y=13852340.66;

THENCE South 14°40'24" West, a distance of 8.50 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136753.58 and Y=13852332.43;

THENCE South 29°23'15" West, a distance of 6.33 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136750.47 and Y=13852326.92;

THENCE South 54°11'53" West, a distance of 46.80 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136712.51 and Y=13852299.54;

THENCE North 32°51'31" West, a distance of 8.76 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136707.76 and Y=13852306.90;

THENCE South 60°39'24" West, a distance of 10.96 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136698.21 and Y=13852301.53;

THENCE South 51°04'35" West, a distance of 58.69 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136652.56 and Y=13852264.66;

THENCE South 61°56'31" West, a distance of 613.96 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136110.82 and Y=13851975.91;

THENCE South 62°54'22" West, a distance of 142.13 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135984.30 and Y=13851911.18;

THENCE South 61°55'12" West, a distance of 479.21 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135561.54 and Y=13851685.64;

THENCE South 67°03'52" West, a distance of 24.28 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135539.18 and Y=13851676.18;

THENCE South 58°32'12" West, a distance of 17.21 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135524.50 and Y=13851667.19;

**UNION PACIFIC RAILROAD COMPANY
ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE South 61°37'54" West, a distance of 105.67 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135431.52 and Y=13851616.99;

THENCE South 62°29'25" West, a distance of 287.83 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135176.27 and Y=13851484.05;

THENCE South 65°35'29" West, a distance of 35.19 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135144.23 and Y=13851469.52;

THENCE South 61°31'56" West, a distance of 590.15 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134625.49 and Y=13851188.24;

THENCE South 61°59'05" West, a distance of 181.71 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134465.09 and Y=13851102.89;

THENCE South 61°22'47" West, a distance of 29.30 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134439.37 and Y=13851088.86;

THENCE South 65°38'37" West, a distance of 16.53 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134424.32 and Y=13851082.05;

THENCE South 72°24'44" West, a distance of 27.78 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134397.83 and Y=13851073.65;

THENCE South 68°04'30" West, a distance of 30.51 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134369.53 and Y=13851062.26;

THENCE South 59°48'14" West, a distance of 92.27 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134289.80 and Y=13851015.86;

THENCE North 29°33'31" West, a distance of 15.17 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134282.31 and Y=13851029.05;

THENCE North 59°48'53" East, a distance of 95.54 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134364.89 and Y=13851077.09;

THENCE North 70°15'38" East, a distance of 60.14 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134421.50 and Y=13851097.40;

THENCE North 62°07'21" East, a distance of 210.22 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134607.30 and Y=13851195.68;

THENCE North 61°12'15" East, a distance of 209.88 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134791.20 and Y=13851296.77;

THENCE North 62°09'00" East, a distance of 149.93 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134923.75 and Y=13851366.80;

THENCE North 61°23'02" East, a distance of 240.32 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135134.70 and Y=13851481.89;

THENCE North 62°36'22" East, a distance of 150.43 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135268.25 and Y=13851551.09;

THENCE North 64°52'14" East, a distance of 30.22 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135295.60 and Y=13851563.93;

**UNION PACIFIC RAILROAD COMPANY
 ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
 HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
 HARRIS COUNTY, TEXAS
 PAGE 3 OF 3**

THENCE North 62°05'30" East, a distance of 1064.63 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136236.31 and Y=13852062.18;

THENCE North 62°08'24" East, a distance of 457.12 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136640.40 and Y=13852275.77;

THENCE North 58°08'18" East, a distance of 30.97 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136666.69 and Y=13852292.11;

THENCE North 50°42'05" East, a distance of 76.01 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136725.51 and Y=13852340.25;

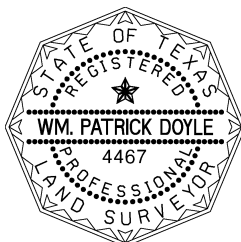
THENCE North 35°17'11" East, a distance of 9.87 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136731.21 and Y=13852348.31;

THENCE North 13°31'05" East, a distance of 3.91 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136732.13 and Y=13852352.11;

THENCE North 76°25'52" East, a distance of 23.65 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136755.11 and Y=13852357.66;

THENCE South 6°43'41" East, a distance of 13.45 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136756.69 and Y=13852344.30;

THENCE South 14°40'24" West, a distance of 3.77 feet to the **POINT OF BEGINNING**, containing 1.0419 acre of land, more or less.



Wm. Patrick Doyle

**Wm. Patrick Doyle
 Registered Professional Land Surveyor
 Texas Registration Number 4467
 June 23, 2016**

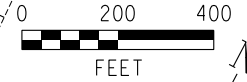
*This description is based on a plat, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
 V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Asphalt Road tract 1.0419 acres Rev1.doc*

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

NOTES:

1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



X = 3 136 759.96
Y = 13 852 340.99

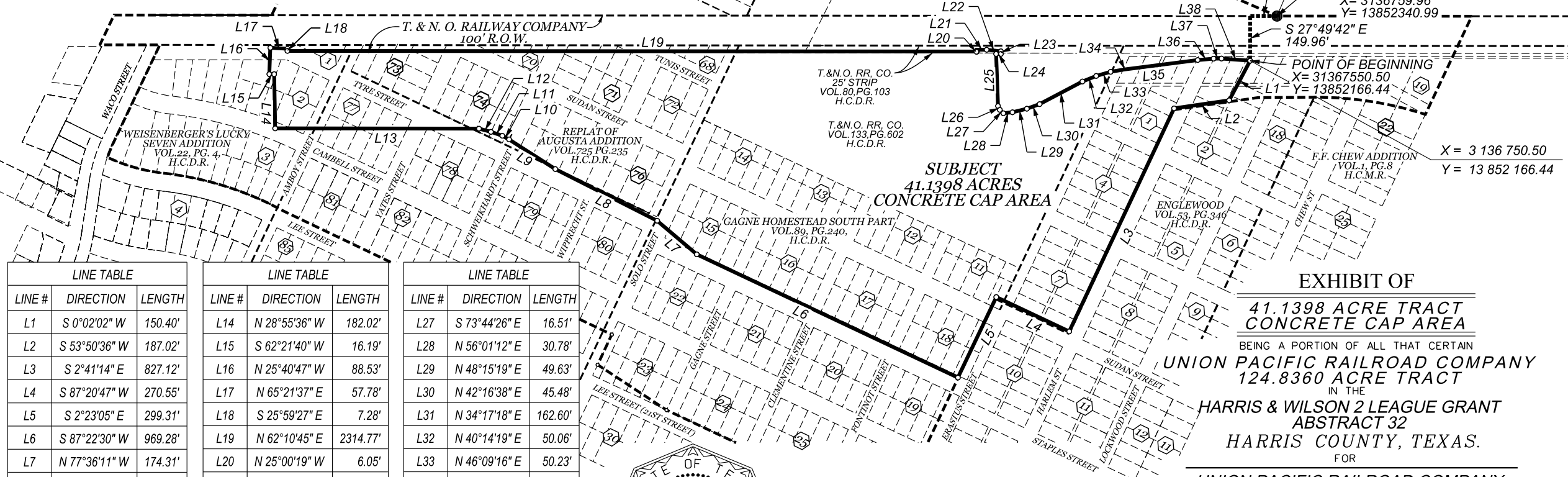
S 62°10'18" W
89.87'

POINT OF COMMENCEMENT
FND. 5/8" I.R. W/CAP
X= 3136759.96
Y= 13852340.99

S 27°49'42" E
149.96'

POINT OF BEGINNING
X= 31367550.50
Y= 13852166.44

X = 3 136 750.50
Y = 13 852 166.44



LINE #	DIRECTION	LENGTH
L1	S 0°02'02" W	150.40'
L2	S 53°50'36" W	187.02'
L3	S 2°41'14" E	827.12'
L4	S 87°20'47" W	270.55'
L5	S 2°23'05" E	299.31'
L6	S 87°22'30" W	969.28'
L7	N 77°36'11" W	174.31'
L8	S 89°01'46" W	383.56'
L9	N 85°15'27" W	184.19'
L10	N 89°19'03" W	25.74'
L11	S 81°05'07" W	40.48'
L12	S 77°12'08" W	41.52'
L13	S 62°11'46" W	684.47'

LINE #	DIRECTION	LENGTH
L14	N 28°55'36" W	182.02'
L15	S 62°21'40" W	16.19'
L16	N 25°40'47" W	88.53'
L17	N 65°21'37" E	57.78'
L18	S 25°59'27" E	7.28'
L19	N 62°10'45" E	2314.77'
L20	N 25°00'19" W	6.05'
L21	N 62°13'44" E	32.41'
L22	N 68°12'09" E	47.98'
L23	S 26°46'44" E	9.01'
L24	S 62°08'04" W	15.88'
L25	S 29°58'59" E	174.76'
L26	S 53°20'30" E	14.15'

LINE #	DIRECTION	LENGTH
L27	S 73°44'26" E	16.51'
L28	N 56°01'12" E	30.78'
L29	N 48°15'19" E	49.63'
L30	N 42°16'38" E	45.48'
L31	N 34°17'18" E	162.60'
L32	N 40°14'19" E	50.06'
L33	N 46°09'16" E	50.23'
L34	N 52°33'35" E	47.88'
L35	N 54°46'14" E	247.27'
L36	N 57°15'43" E	53.32'
L37	N 61°04'08" E	26.55'
L38	N 66°28'12" E	96.58'

EXHIBIT OF

41.1398 ACRE TRACT CONCRETE CAP AREA

BEING A PORTION OF ALL THAT CERTAIN

UNION PACIFIC RAILROAD COMPANY 124.8360 ACRE TRACT

IN THE

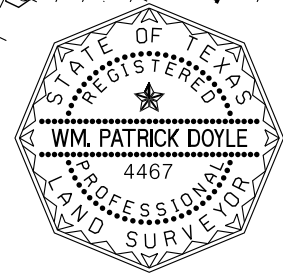
HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

HARRIS COUNTY, TEXAS.

FOR

UNION PACIFIC RAILROAD COMPANY

PROJ. NO. 4410-16-01
SHEET 1 OF 1



WM. Patrick Doyle

WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467



Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	JDD 4-15-16	BOOK:	DRONE VOL. 1	IMAGE:	NONE
DRAWN BY:	JDD 5-16-16	CHECKED:	KTD 5-17-16	REVISED:	6-06-17

USER: Untitled Workspace DATE: 6/6/2017 3:19:17 PM
 C:\DGN\PB&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Capped Boundary\Plots\Survey plot UPRR Concrete Cap 41.1398 acres Rev2.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
CONCRETE CAP AREA – 41.1398 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 41.1398 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the Harris County Deed Records (H.C.D.R.), a portion of all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., a portion of Lots 1 through 4 and all of Lots 5 through 10, Block 1, a portion of Lots 1, 2 and 3 and a portion of Lot 15 and 16 through 4, Block 2, all of Lots 1 through 6 and a portion of Lots 7 through 12, Block 4, all of Lots 1 through 6 and a portion of Lots 7 through 12, Block 7, a portion of Eratus Street and a portion of 50 foot wide Harlem Street (Baer Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R., all of Lots 1 through 4 and Lots 7 through 10, and a portion of Lots 5 and 6, Block 11, all of Lots 1 through 10, Block 12, all of Lots 1 through 10, Block 13, all of Lots 1 through 10, Block 14, all of Lots 1 through 8 and a portion of Lot 9 and 10, Block 15, all of Lots 1 through 10, Block 16, all of Lots 1 through 10, Block 17, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 18, all of 60 foot wide 16th Street, all of 60 foot wide 17th Street, all of 60 foot wide 18th Street, a portion of 60 foot wide 19th Street, a portion of 40 foot wide Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the H.C.D.R., a portion of Lots 1 through 3, Block 68, a portion of Lots 1 through 3, Block 70, a portion of Lots 1, 4, and 5, all of Lots 2 and 3, all of Lots 6, 7 and 8, Block 71, all of Lots 1 through 6 Lot 72, a portion of Lots 1 through 5 and all of Lot 6 and 7, Block 73, a portion of Lots 6, 7 and 8, all of Lots 1 through 5 and all of Lots 9 and 10, Block 74, all of Lots 1 through 7 and a portion of Lots 8, 9 and 10, Block 75, all of Lots 1 through 6, Block 76, a portion of 60 foot wide Tunis Street (17th Street), a portion of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R., a portion of Lots 3, 4 and 5, a portion of Lots 8, 9 and 10, all of Lots 1 and 2, Block 77, a portion of Lot 1, Block 78, a portion of 60 foot wide Tyre Street, a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), f as shown on the map of Augusta Division, as recorded in Volume 56, Page 139 of the H.C.D.R., a portion of Block 1, a portion of Lots 8, 9, 10, 13 and 14, all of Lots 11 and 12, Block 2, a portion of 50 foot – 60 foot wide Tyre Street and a portion of 60 foot wide Campbell Street, as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R., the herein described 41.1398 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being on the southeastern boundary line of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 62°10'18" West, coincident northern boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre, a distance of 89.87 to an angle point at position X=3136680.50 and Y=13852299.04;

THENCE South 27°49'42" East, a distance of 149.96 feet to the North corner and the **POINT OF BEGINNING**, of the herein described 41.1398 acre tract, at position X=3136750.50 and Y=13852166.44

THENCE South 0°02'02" West, a distance of 150.40 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136750.41 and Y=13852016.05;

**UNION PACIFIC RAILROAD COMPANY
CONCRETE CAP AREA – 41.1398 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE South 53°50'36" West, a distance of 187.02 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136599.42 and Y=13851905.72;

THENCE South 2°41'14" East, a distance of 827.12 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136638.20 and Y=13851079.60;

THENCE South 87°20'47" West, a distance of 270.55 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136367.96 and Y=13851067.08;

THENCE South 2°23'05" East, a distance of 299.31 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136380.41 and Y=13850768.06;

THENCE South 87°22'30" West, a distance of 969.28 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135412.26 and Y=13850723.67;

THENCE North 77°36'11" West, a distance of 174.31 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135242.03 and Y=13850761.09;

THENCE South 89°01'46" West, a distance of 383.56 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134858.57 and Y=13850754.59;

THENCE North 85°15'27" West, a distance of 184.19 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134675.03 and Y=13850769.82;

THENCE North 89°19'03" West, a distance of 25.74 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134649.30 and Y=13850770.13;

THENCE South 81°05'07" West, a distance of 40.48 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134609.31 and Y=13850763.85;

THENCE South 77°12'08" West, a distance of 41.52 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134568.82 and Y=13850754.66;

THENCE South 62°11'46" West, a distance of 684.47 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133963.44 and Y=13850435.42;

THENCE North 28°55'36" West, a distance of 182.02 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133875.41 and Y=13850594.72;

THENCE South 62°21'40" West, a distance of 16.19 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133861.07 and Y=13850587.21;

THENCE North 25°40'47" West, a distance of 88.53 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133822.71 and Y=13850666.99;

THENCE North 65°21'37" East, a distance of 57.78 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133875.22 and Y=13850691.08;

THENCE South 25°59'27" East, a distance of 7.28 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133878.41 and Y=13850684.53;

THENCE North 62°10'45" East, a distance of 2314.77 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135925.40 and Y=13851764.75;

THENCE North 25°00'19" West, a distance of 6.05 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135922.84 and Y=13851770.23;

THENCE North 62°13'44" East, a distance of 32.41 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135951.51 and Y=13851785.32;

THENCE North 68°12'09" East, a distance of 47.98 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135996.06 and Y=13851803.14;

**UNION PACIFIC RAILROAD COMPANY
 CONCRETE CAP AREA – 41.1398 ACRE TRACT
 HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
 HARRIS COUNTY, TEXAS
 PAGE 3 OF 3**

THENCE South 26°46'44" East, a distance of 9.01 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136000.12 and Y=13851795.10;

THENCE South 62°08'04" West, a distance of 15.88 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135986.08 and Y=13851787.68;

THENCE South 29°58'59" East, a distance of 174.76 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136073.41 and Y=13851636.32;

THENCE South 53°20'30" East, a distance of 14.15 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136084.76 and Y=13851627.87;

THENCE South 73°44'26" East, a distance of 16.51 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136100.60 and Y=13851623.25;

THENCE North 56°01'12" East, a distance of 30.78 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136126.12 and Y=13851640.45;

THENCE North 48°15'19" East, a distance of 49.63 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136163.15 and Y=13851673.50;

THENCE North 42°16'38" East, a distance of 45.48 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136193.74 and Y=13851707.15;

THENCE North 34°17'18" East, a distance of 162.60 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136285.34 and Y=13851841.47;

THENCE North 40°14'19" East, a distance of 50.06 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136317.67 and Y=13851879.68;

THENCE North 46°09'16" East, a distance of 50.23 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136353.89 and Y=13851914.48;

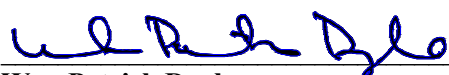
THENCE North 52°33'35" East, a distance of 47.88 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136391.91 and Y=13851943.58;

THENCE North 54°46'14" East, a distance of 247.27 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136593.87 and Y=13852086.21;

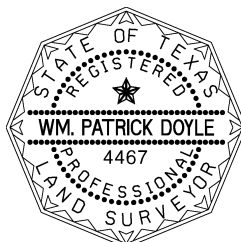
THENCE North 57°15'43" East, a distance of 53.32 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136638.72 and Y=13852115.04;

THENCE North 61°04'08" East, a distance of 26.55 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136661.95 and Y=13852127.88;

THENCE North 66°28'12" East, a distance of 96.58 feet to the **POINT OF BEGINNING**, containing 41.1398 acres of land, more or less.

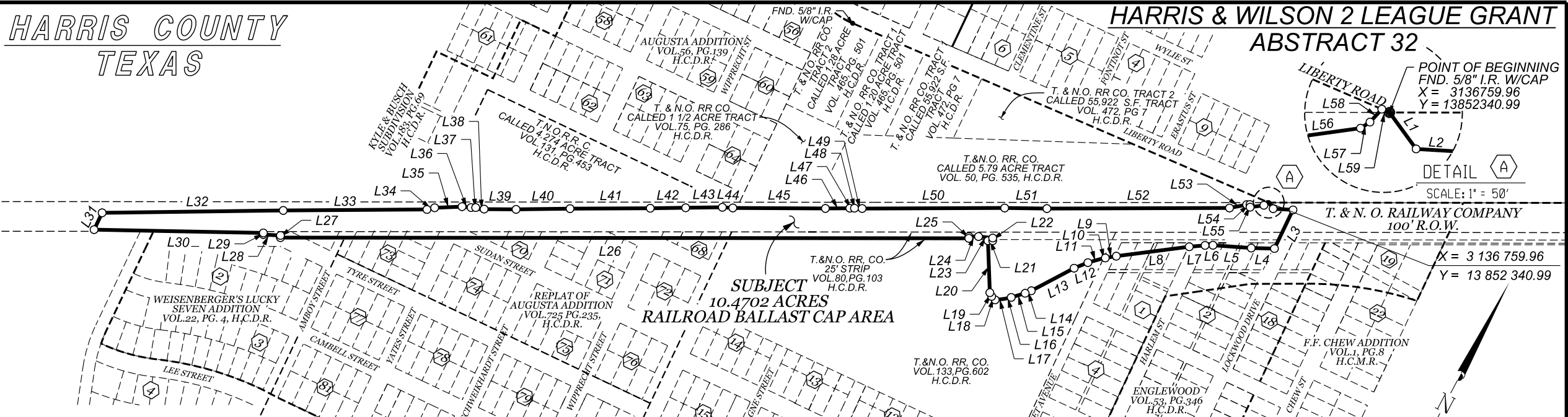


Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016

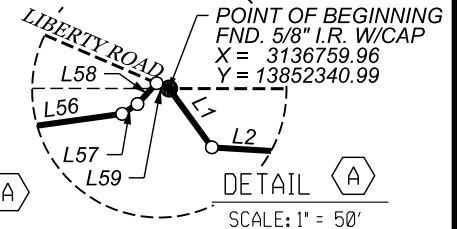


HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32



SUBJECT
10.4702 ACRES
RAILROAD BALLAST CAP AREA



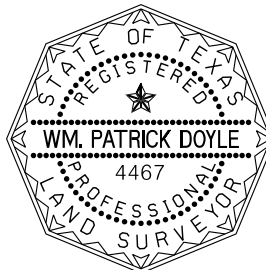
LINE #	DIRECTION	LENGTH
L1	S 63°55'58" E	25.27'
L2	N 65°31'24" E	66.87'
L3	S 2°12'59" E	144.33'
L4	S 63°23'00" W	77.90'
L5	S 66°18'08" W	129.20'
L6	S 61°04'08" W	26.55'
L7	S 57°15'43" W	53.32'
L8	S 54°46'14" W	247.27'
L9	S 52°55'52" W	37.51'
L10	S 51°13'07" W	10.38'
L11	S 46°09'16" W	50.23'
L12	S 40°14'19" W	50.06'
L13	S 34°17'18" W	162.60'
L14	S 40°06'28" W	22.40'
L15	S 45°29'36" W	48.88'
L16	S 50°09'24" W	23.89'
L17	S 56°01'12" W	30.78'
L18	N 73°44'26" W	16.51'
L19	N 53°20'30" W	14.15'
L20	N 29°58'59" W	174.76'

LINE #	DIRECTION	LENGTH
L21	N 62°08'04" E	15.88'
L22	N 26°46'44" W	9.01'
L23	S 68°12'09" W	47.98'
L24	S 62°13'44" W	32.41'
L25	S 25°00'19" E	6.05'
L26	S 62°10'45" W	2314.77'
L27	N 25°59'27" W	7.28'
L28	S 65°21'37" W	57.78'
L29	N 25°40'47" W	5.37'
L30	S 63°14'08" W	569.28'
L31	N 02°27'12" W	62.75'
L32	N 61°23'11" E	609.08'
L33	N 61°44'19" E	483.24'
L34	N 49°23'57" E	26.50'
L35	N 59°48'14" E	92.27'
L36	N 68°04'30" E	30.51'
L37	N 72°24'44" E	27.78'
L38	N 62°42'50" E	16.52'
L39	N 62°36'31" E	107.46'
L40	N 61°20'35" E	181.43'

LINE #	DIRECTION	LENGTH
L41	N 61°49'55" E	269.76'
L42	N 61°23'11" E	119.07'
L43	N 61°22'49" E	123.43'
L44	N 65°35'29" E	35.19'
L45	N 62°26'43" E	311.23'
L46	N 61°33'27" E	82.27'
L47	N 52°35'58" E	6.67'
L48	N 66°04'19" E	18.88'
L49	N 65°03'41" E	15.97'
L50	N 61°55'12" E	479.21'
L51	N 62°54'22" E	142.13'
L52	N 61°56'31" E	613.96'
L53	N 51°04'35" E	58.69'
L54	N 60°39'24" E	10.96'
L55	S 32°51'31" E	8.76'
L56	N 54°11'53" E	46.80'
L57	N 29°23'15" E	6.33'
L58	N 14°40'24" E	9.82'
L59	N 85°26'51" E	4.71'

NOTES:

- ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
- ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.999989548017).
- THIS EXHIBIT DID NOT RELY ON A CURRENT TITLE COMMITMENT THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.



WM. PATRICK DOYLE
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467



EXHIBIT OF
10.4702 ACRE TRACT RAILROAD BALLAST CAP AREA
BEING A PORTION OF ALL THAT CERTAIN
UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

PROJ. NO. 4410-16-01
SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED: JDD 4-15-16	BOOK: DRONE VOL. 1	IMAGE: NONE
DRAWN BY: JDD 5-16-16	CHECKED: KTD 5-17-16	REVISED: 6-06-17

USER: Untitled Workspace TIME: 3:13:39 PM DATE: 6/6/2017 G:\DGN\FB&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Copped Boundary\Plots\Survey Plot UPRR Railroad Ballast Cap Area 10.4702 acres Rev1.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 4**

BEING ALL THAT CERTAIN 10.4702 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the Texas and New Orleans 100 foot wide railroad right-of-way, being a portion of that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the Harris County Deed Records (H.C.D.R.), a portion of all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., a portion of Lots 1 through 4, Block 1, a portion of Lots 1 through 4, Block 2, a portion of Sunset Avenue, a portion of 50 foot wide Harlem Street (Baer Avenue), and a portion of 50 foot wide Lockwood Drive, as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R.; a portion of Lots 1 through 3, Block 68, a portion of Lots 1 through 3, Block 70, a portion of Lots 1 and 5, Block 71, a portion of Lots 1 through 5, Block 73, a portion of 60 foot wide Tunis Street (17th Street), a portion of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R., all of Block 1 and a portion of Tyre Street, as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R., the herein described 10.4702 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Beginning being located at Texas State Plane coordinate position X=3136759.96 and Y=13852340.99;

THENCE South 63°55'58" East, a distance of 25.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136782.66 and Y=13852329.89;

THENCE North 65°31'24" East, a distance of 66.87 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136843.51 and Y=13852357.59;

THENCE South 2°12'59" East, a distance of 144.33 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136849.09 and Y=13852213.39;

THENCE South 63°23'00" West, a distance of 77.90 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136779.46 and Y=13852178.49;

THENCE South 66°18'08" West, a distance of 129.20 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136661.16 and Y=13852126.57;

THENCE South 61°04'08" West, a distance of 26.55 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136637.92 and Y=13852113.72;

THENCE South 57°15'43" West, a distance of 53.32 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136593.08 and Y=13852084.89;

THENCE South 54°46'14" West, a distance of 247.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136391.12 and Y=13851942.27;

THENCE South 52°55'52" West, a distance of 37.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136361.19 and Y=13851919.66;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 4**

THENCE South 51°13'07" West, a distance of 10.38 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136353.10 and Y=13851913.16;

THENCE South 46°09'16" West, a distance of 50.23 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136316.88 and Y=13851878.37;

THENCE South 40°14'19" West, a distance of 50.06 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136284.54 and Y=13851840.16;

THENCE South 34°17'18" West, a distance of 162.60 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136192.95 and Y=13851705.83;

THENCE South 40°06'28" West, a distance of 22.40 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136178.52 and Y=13851688.70;

THENCE South 45°29'36" West, a distance of 48.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136143.67 and Y=13851654.44;

THENCE South 50°09'24" West, a distance of 23.89 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136125.33 and Y=13851639.14;

THENCE South 56°01'12" West, a distance of 30.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136099.81 and Y=13851621.94;

THENCE North 73°44'26" West, a distance of 16.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136083.96 and Y=13851626.56;

THENCE North 53°20'30" West, a distance of 14.15 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136072.61 and Y=13851635.01;

THENCE North 29°58'59" West, a distance of 174.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135985.29 and Y=13851786.36;

THENCE North 62°08'04" East, a distance of 15.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135999.32 and Y=13851793.78;

THENCE North 26°46'44" West, a distance of 9.01 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135995.27 and Y=13851801.82;

THENCE South 68°12'09" West, a distance of 47.98 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135950.72 and Y=13851784.01;

THENCE South 62°13'44" West, a distance of 32.41 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135922.05 and Y=13851768.91;

THENCE South 25°00'19" East, a distance of 6.05 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135924.60 and Y=13851763.43;

THENCE South 62°10'45" West, a distance of 2314.77 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133877.61 and Y=13850683.22;

THENCE North 25°59'27" West, a distance of 7.28 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133874.42 and Y=13850689.76;

THENCE South 65°21'37" West, a distance of 57.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133821.91 and Y=13850665.67;

THENCE North 25°40'47" West, a distance of 5.37 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133819.59 and Y=13850670.51;

THENCE South 63°14'08" West, a distance of 569.28 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133311.35 and Y=13850414.18;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 4**

THENCE North 2°27'12" West, a distance of 62.75 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133308.67 and Y=13850476.86;

THENCE North 61°23'11" East, a distance of 609.08 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133843.30 and Y=13850768.52;

THENCE North 61°44'19" East, a distance of 483.24 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134268.89 and Y=13850997.30;

THENCE North 49°23'57" East, a distance of 26.50 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134289.00 and Y=13851014.54;

THENCE North 59°48'14" East, a distance of 92.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134368.74 and Y=13851060.95;

THENCE North 68°04'30" East, a distance of 30.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134397.04 and Y=13851072.34;

THENCE North 72°24'44" East, a distance of 27.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134423.52 and Y=13851080.73;

THENCE North 62°42'50" East, a distance of 16.52 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134438.20 and Y=13851088.30;

THENCE North 62°36'31" East, a distance of 107.46 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134533.60 and Y=13851137.74;

THENCE North 61°20'35" East, a distance of 181.43 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134692.79 and Y=13851224.73;

THENCE North 61°49'55" East, a distance of 269.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134930.58 and Y=13851352.06;

THENCE North 61°23'11" East, a distance of 119.07 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135035.10 and Y=13851409.08;

THENCE North 61°22'49" East, a distance of 123.43 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135143.44 and Y=13851468.20;

THENCE North 65°35'29" East, a distance of 35.19 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135175.47 and Y=13851482.74;

THENCE North 62°26'43" East, a distance of 311.23 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135451.37 and Y=13851626.70;

THENCE North 61°33'27" East, a distance of 82.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135523.71 and Y=13851665.88;

THENCE North 52°35'58" East, a distance of 6.67 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135529.01 and Y=13851669.93;

THENCE North 66°04'19" East, a distance of 18.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135546.26 and Y=13851677.59;

THENCE North 65°03'41" East, a distance of 15.97 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135560.74 and Y=13851684.32;

THENCE North 61°55'12" East, a distance of 479.21 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135983.50 and Y=13851909.86;

THENCE North 62°54'22" East, a distance of 142.13 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136110.02 and Y=13851974.59;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 4**

THENCE North 61°56'31" East, a distance of 613.96 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136651.77 and Y=13852263.34;

THENCE North 51°04'35" East, a distance of 58.69 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136697.42 and Y=13852300.21;

THENCE North 60°39'24" East, a distance of 10.96 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136706.97 and Y=13852305.58;

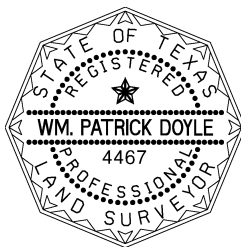
THENCE South 32°51'31" East, a distance of 8.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136711.72 and Y=13852298.22;

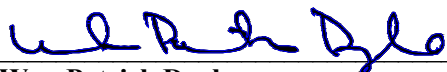
THENCE North 54°11'53" East, a distance of 46.80 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136749.68 and Y=13852325.60;

THENCE North 29°23'15" East, a distance of 6.33 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136752.79 and Y=13852331.12;

THENCE North 14°40'24" East, a distance of 9.82 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136755.27 and Y=13852340.62;

THENCE North 85°26'51" East, a distance of 4.71 feet to the **POINT OF BEGINNING**, containing 10.4702 acres of land, more or less.





**Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016**

*This description is based on an exhibit, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Railroad Ballast Cap 10.4702 acres Rev1.doc*

EXHIBIT "D"

MAINTENANCE AND MONITORING OF THE PHYSICAL CONTROLS FOR SOIL

EXHIBIT “D”

MAINTENANCE AND MONITORING OF THE PHYSICAL CONTROLS FOR SURFACE/SUBSURFACE SOIL

The cap inspection and maintenance program will be developed to ensure the integrity of the cap and vegetative cover. UPRR will submit annual reports to the TCEQ (unless this frequency is modified by subsequent TCEQ correspondence) documenting the physical control conditions, maintenance, repair, replacement, and the continued effectiveness of the remedy. The maintenance program will consist of the following:

I. Soil Cap Area - HWPW

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis and after all major storms. The inspections will focus on the following major issues:

- 1) Erosion of the cap (gullies, rills, or other erosional features on the cap surface or in drainages)
- 2) Sideslope sloughing (slippage)
- 3) Settling/subsidence
- 4) Vegetation deterioration
- 5) Damage from animals (i.e., rodents)
- 6) Groundwater monitoring equipment (wells) (semi-annual basis)

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE COVER AND VEGETATION

The cover and vegetation will be maintained by:

- 1) Preventing ponding
- 2) Maintaining design slopes and grades
- 3) Fertilizing, as necessary
- 4) Mowing, as necessary
- 5) Replanting, as necessary
- 6) Controlling animals (rodents, hogs) and insects

Routine repairs of the cover and maintenance of the slopes and grades will be performed to prevent ponding and drainage problems. Vegetation may require periodic application of fertilizer, mulch or seed. Vegetation will target pollinator seed mixes to attract pollinator species. Mowing will be performed as needed but less frequently than a grass covered cap and only periodically to promote the growth of desired vegetation and to block the growth of trees or shrubs which could penetrate the cover soil with their roots.

EROSION CONTROL

Maintenance of the drainage and diversion portions of the cap will be performed. Erosion of soil by water and/or wind will be repaired as soon as practicable.

II. Asphalt Road Cap – HWPW

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Erosion of the asphalt roadway (potholes, exposed soils)

- 2) Settling/subsidence
- 3) Cracks in asphalt roadway

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE ASPHALT CAP

The asphalt cover will be maintained by:

- 1) Crack repair/sealing;
- 2) Pothole patching; and
- 3) Controlling vegetation.

III. Concrete Pavement – Englewood Intermodal Yard (On-Site)

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Step separation in the concrete;
- 2) Settling/subsidence;
- 3) Cracks in the concrete; and
- 4) Openings in the pavement.

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE CONCRETE PAVEMENT

The concrete pavement will be maintained by:

- 1) Crack repair/sealing;
- 2) Replacing panels as needed; and
- 3) Controlling vegetation growing through cracks/along edges of sidewalk.

IV. Railroad Ballast Area – (HWPW/Englewood Intermodal Yard)

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Ballast removed with exposed soil.

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE RAILROAD BALLAST

The railroad ballast will be maintained by:

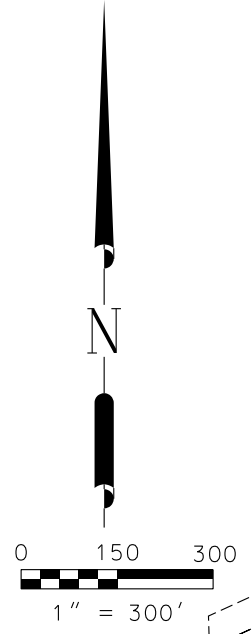
- 1) Adding railroad ballast where areas of soil are exposed;
- 2) Controlling vegetation.

The ballast areas will be maintained in accordance with UPRR Engineering Standards for Roadbase Section for Wood Tie Track Construction (UPRR, 2006).

EXHIBIT "E"
LEGAL DESCRIPTION OF EXTENT OF PMZ AND NAPL AREAS

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE SURVEY ABSTRACT 32



I, Wm. PATRICK DOYLE, REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE ABOVE AND FOREGOING PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND, AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY, EXCEPT AS SHOWN HEREON.
DATE SURVEYED: JANUARY 12, 2016.

- NOTES:
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

EXHIBIT OF
**ONSITE PMZ TRACTS
52.4295 ACRE TRACT &
3.8686 ACRE TRACT**
IN THE
**HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS**
FOR
UNION PACIFIC RAILROAD COMPANY

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	1-12-16	BOOK:	BOOK	IMAGE:	NONE
DRAWN BY:	JAM	CHECKED:	JAM	REVISED:	

USER: Untitled Workspace TIME: 7:27:36 AM
 DATE: 6/30/2016
 G:\DGN\B&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2015 PMZ Bndy\Survey plot UPRR -Onsite PMZ.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 52.4295 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 100 foot wide Texas and New Orleans Railroad right-of-way; a portion of Block 11 and Block 18, all of Block 12, 13, 14, 15, 16 and 17, a portion of Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the Harris County Deed Records (H.C.D.R.), a portion of Block 2, all of Block 1, Block 4 and Block 7, all of 60 foot wide New Orleans Avenue, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R., a portion of Block 18 and Block 22 and all of Block 19, a portion of 60 foot wide Wallisville Road, a portion of 50 foot wide Chew Avenue, as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.), all that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the H.C.D.R., all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., all that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R., all that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R., all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; All that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 52.4295 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, for an interior corner of the herein described 52.4295 acre tract, said Point of Beginning being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE North $62^{\circ}10'18''$ East, coincident with the southeastern right-of-way boundary line of said 60 foot wide Liberty Road, same being the northwestern boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 653.86 feet to an angle point at the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northern extension of the western right-of-way boundary line of 50 foot wide Sam Willis Street, for the northeast corner of the herein described 52.4295 acre tract, at position $X=3137338.15$ and $Y=13852646.20$;

THENCE South $2^{\circ}35'12''$ East, coincident with the northern extension of the western right-of-way boundary line of said 50 foot wide Sam Willis Street, a distance of 364.63 feet to a point located on the eastern boundary line of said Block 22 of the F. F. Chew Addition, to the point of curvature of a non-tangent curve to the left, having a radius of 1179.16 feet, at position $X=3137354.60$ and $Y=13852281.98$;

THENCE in an westerly direction, along said curve to the left, having a radius of 1179.28 feet, an arc length of 375.93 feet, a central angle of $18^{\circ}15'53''$, and a chord bearing and distance of South $70^{\circ}59'12''$ West – 374.34 feet to an angle corner of the herein described 52.4295 acre tract, at position $X=3137000.72$ and $Y=13852160.04$;

THENCE South $61^{\circ}51'16''$ West, a distance of 190.34 feet to an angle corner of the herein described 52.4295 acre tract, at position $X=3136832.90$ and $Y=13852070.26$;

THENCE South $53^{\circ}51'57''$ West, a distance of 288.79 feet to a point located on the western right-of-way boundary line of 50 foot wide Harlem Street, same being the eastern boundary line of said Block 1 of Englewood Subdivision for an interior corner of the herein described 52.4295 acre tract, at position $X=3136599.69$ and $Y=13851899.99$;

THENCE South $2^{\circ}49'16''$ East, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street, same being the eastern boundary line of Block 1, Block 4 and Block 7 of said Englewood Subdivision, a distance of 827.94 feet to a point at the intersection of said western right-of-way boundary line of said Harlem Street with the northern right-of-way boundary line of 50 foot wide Sudan Street, for the southeast corner of said Block 7, for an exterior corner of the herein described 52.4295 acre tract, at position $X=3136640.44$ and $Y=13851073.13$;

THENCE South $87^{\circ}28'24''$ West, coincident with northern right-of-way boundary line of said 50 foot wide Sudan Street, same being the southern boundary line of said Block 7 of Englewood Subdivision, a distance of 273.42 feet to a point located on the western right-of-way boundary line of Erastus Street, right-of-way varies, located within Block 11 of said Subdivision of the South Part of the Gagne Homestead, for an interior corner of the herein described 52.4295 acre tract, at position $X=3136367.32$ and $Y=13851061.08$;

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 3**

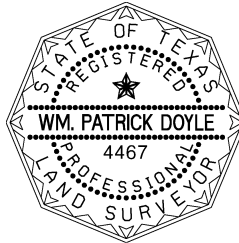
THENCE South 2°44'14" East, coincident with the western right-of-way boundary line of said Erastus Street, a distance of 287.64 feet to a point at the intersection of the western right-of-way boundary line of said Erastus Street and the northern right-of-way boundary line 19th Street, same being the southern boundary line of Block 18 of said Subdivision of the South Part of the Gagne Homestead, for the southeast corner of the herein described 52.4295 acre tract, at position X=3136381.05 and Y=13850773.80;

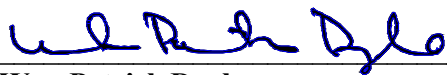
THENCE South 87°18'14" West, coincident with the northern right-of-way boundary line of said 19th Street, same being the southern boundary line of Block 18, Block 17, Block 16 and Block 15 of said Subdivision of the South Part of the Gagne Homestead, a distance of 1115.27 feet to a point located in Solo Street, right-of-way varies, for the southwest corner of the herein described 52.4295 acre tract, at position X=3135267.13 and Y=13850721.35;

THENCE North 2°44'14" West, coincident with the western boundary line of said Subdivision of the South Part of the Gagne Homestead, the western boundary line of said T. & N. O. Rail Road Company tract, recorded in Volume 133, Page 602, of the H.C.D.R., the western boundary line of said T. & N. O. Rail Road Company 25 foot wide strip, the western boundary line of said T. & N. O. Rail Road Company called 1.5 acre tract and the western boundary line of said T. & N. O. Rail Road Company called 1.28 acre tract, a distance of 1500.71 feet to a point located on the southern right-of-way boundary line of said 60 foot wide Liberty Road, on a curve to the left, having a radius of 280.00 feet, at position X=3135195.47 and Y=13852220.19;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, along said curve to the left, having a radius of 280.00 feet, an arc length of 45.91 feet, a central angle of 9°23'40" and a chord bearing and distance of South 89°51'19" East – 45.86 feet to a found 5/8" iron rod, at position X=3135241.32 and Y=13852220.07;

THENCE North 85°26'51" East, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 1523.61 feet to the **POINT OF BEGINNING**, containing 52.4295 acres of land, more or less





Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
3.8686 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 2**

BEING ALL THAT CERTAIN 3.8686 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the Harris County Deed Records (H.C.D.R.), a portion of Block 58, Block 59, Block 6, Block 62 and Block 63, a portion of 60 foot wide 16th Street, a portion of 60 foot wide of Eddie Street (15th Street), a portion of 60 foot wide Kashmere Street (Yates Street), a portion of 60 foot wide Schweikhart Street, as shown on the map of Augusta Addition, according to the map or plat recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.), the herein described 3.8686 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at a 5/8" iron rod found marking the northwest corner of Block 54 of said Augusta Addition, located at the intersection of the southern right-of-way boundary line of Liberty Road with the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for the northwest corner of the herein described 124.8360 acre tract, said Point of Commencement being at Texas State Plane coordinate position X=31334356.21 and Y=13852234.79;

THENCE South 2°26'03" East, coincident with the eastern right-of-way boundary line of said 60 foot wide Kashmere Street, same being the western boundary line of Block 54 and Block 58 of said Augusta Addition, a distance of 476.71 feet to the **POINT OF BEGINNING** of the herein described 3.8686 acre tract, a position X=3134376.46 and Y=13851758.56;

THENCE North 30°35'22" East, a distance of 257.68 feet to the North corner of the herein described 3.8686 acre tract, at position X=3134507.57 and Y=13851980.36;

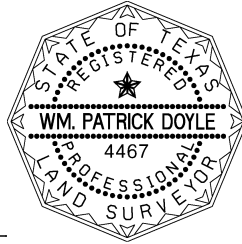
THENCE South 56°11'48" East, a distance of 367.00 feet to the East corner of the herein described 3.8686 acre tract, at position X=3134812.50 and Y=13851776.20;

THENCE South 29°37'41" West, a distance of 503.41 feet to the South corner of the herein described 3.8686 acre tract, at position X=3134563.66 and Y=13851338.66;

THENCE North 42°09'52" West, a distance of 392.51 feet to the West corner of the herein described 3.8686 acre tract, at position X=3134300.21 and Y=13851629.57;

**UNION PACIFIC RAILROAD COMPANY
3.8686 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 2**

THENCE North 30°35'22" East, a distance of 149.86 feet to the **POINT OF BEGINNING**, containing 3.8686 acres of land, more or less.



A handwritten signature in blue ink, appearing to read "Wm. Patrick Doyle", is written over a horizontal line.

**Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016**

*This description is based on a plat, dated June 29, 2016, is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard ONSITE PMZ 3.8686 acre tract.doc*

APPENDIX 5
LANDOWNER CONCURRENCE

APPENDIX 5

**APPENIDX 5 – SIGNED RESTRICTIVE COVENANTS
WORKSHEET 2.4 - OFF-SITE LANDOWNER SUMMARY TABLES
SIGNED RESTRICTIVE COVENANTS**

**APPENDIX 5A – CORRESPONDENCE LOGS FOR EXTENSIVE AND DILIGENT
INQUIRY – OFF-SITE PMZ
FIGURE 1 – PROPOSED OFF-SITE PROPERTIES FOR RESTRICTIVE
COVENANTS
INDIVIDUAL LANDOWNERS – INSTITUTIONAL CONTROL RAP WORKSHEET
2.4**

APPENDIX 5B – CITY OF HOUSTON RESTRICTIVE COVENANTS – SIGNED

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 0 Wylie St, Houston, TX 77026 (Map ID 3, HCAD ID 014144000001)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5006 Wylie St, Houston, TX 77026 (Map ID 4, HCAD ID 014144000002)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5010 Wylie, Houston, TX 77026 (Map ID 5, HCAD ID 014144000003)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2906 Lavender St, Houston, TX 77026 (Map ID 6, HCAD ID 0402660100003)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2904 Lavender St, Houston, TX 77026 (Map ID 7, HCAD ID 0402660100001)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 505 Liberty, Houston, TX 77026 (Map ID 8, HCAD ID 014144000004)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5119 Wylie St, Houston, TX 77026 (Map ID 9, HCAD ID 014140000006)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2820 Clementine St, Houston, TX 77026 (Map ID 10, HCAD ID 014143000001)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5117 Liberty Rd, Houston, TX 77026 (Map ID 16, HCAD ID 014143000006)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5301 Liberty Rd, Houston, TX 77026 (Map ID 23, HCAD ID 014041000007)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5118 Lelia St, Houston, TX 77026 (Map ID 28, HCAD ID 014140000004)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5105 Wylie St, Houston, TX 77026 (Map ID 33, HCAD ID 014140000009)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2901 Clementine St, Houston, TX 77026 (Map ID 34, HCAD ID 0141390000005)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5007 Wylie St, Houston, TX 77026 (Map ID 36, HCAD ID 0141390000007)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5005 Wylie St, Houston, TX 77026 (Map ID 37, HCAD ID 014139000008)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2924 Lavender St, Houston, TX 77026 (Map ID 39, HCAD ID 0402660100022)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2922 Lavender St, Houston, TX 77026 (Map ID 40, HCAD ID 0402660100005)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2806 Erastus St, Houston, TX 77026 (Map ID 42, HCAD ID 014041000006)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5304 Wylie St, Houston, TX 77026 (Map ID 43, HCAD ID 014041000013)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5304-1/2 Wylie St, Houston, TX 77026 (Map ID 44, HCAD ID 0140410000005)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5008 Lelia St, Houston, TX 77026 (Map ID 57, HCAD ID 0141390000001)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. **5014 Leila, Houston, TX 77026 (Map ID 59, HCAD ID 0141390000003)**

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2421 Clementine, Houston, TX 77026 (Map ID 60, HCAD ID 0141390000004)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 0 Lelia St, Houston, TX 77026 (Map ID 61, HCAD ID 0141390000009)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5116 Lelia St, Houston, TX 77026 (Map ID 63, HCAD ID 014140000002)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5112 Lelia St, Houston, TX 77026 (Map ID 64, HCAD ID 014140000003)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2938 Lavender St, Houston, TX 77026 (Map ID 76, HCAD ID 0402660100019)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 2934 Lavender St, Houston, TX 77026 (Map ID 77, HCAD ID 0402660100021)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 0 Lelia St, Houston, TX 77026 (Map ID 81, HCAD ID 0522570000008)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

Institutional Control

Associated Information: Appendices 4, 5

RAP Worksheet 2.4

ID No.: SWR ID 31547

Page 1

Report Date: June 24, 2017 – Rev 3

Complete this worksheet if an institutional control will be used as part of the response action. Include a draft of the proposed institutional controls in Appendix 4. Provide a list of landowners from whom landowner concurrence will be requested, as necessary, in Appendix 5.

Specify the property for which this applies. 5015 Lelia St, Houston, TX 77026 (Map ID 82, HCAD ID 052257000009)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ¹				Property Ownership		Anticipated Filing Date ²
	Deed Notice	Restrictive Covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g))		X				X	Within 720 days of RAP approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))		X				X	Within 720 days of RAP approval
Document the demonstration of technical impracticability (§350.33(f)(3)(F))		X				X	Within 720 days of RAP approval
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							

¹ Check the appropriate box(es) to indicate the type of institutional control required for the proposed response action.

² Specify date or amount of time after RAP approval.

MAP ID - 3

HCAD ID - 0141440000001

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 1, In block 6 of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Vol.1 page 55 of the Map Records of Harris County, Texas.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater Mount Nebo Baptist Church (Owner) with an address of 3819 Harland Dr., Houston, Texas 77092. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 19th day of February, 2015.

Greater Mount Nebo Baptist Church
By: Charles L. Allen, Jr.
Name: Charles L. Allen, Jr.
Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 19th day of February, 2015, personally appeared Charles L. Allen, Jr., Pastor, of Greater Mount Nebo Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of February, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires: **PAUL A SHANKLIN**
My Commission Expires
December 11, 2018



Executed this 14th day of June, 20 17.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 20 17 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 20 17.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

Greater Mount Nebo Missionary Baptist Church

Rev. Charles L. Allen, Jr., Pastor

February 11, 2015

To Whom It May Concern:

This letter is to inform you that Charles L. Allen, Jr., is an authorized signer of the Greater Mount Nebo Missionary Baptist Church. He is authorized to represent the church in any and all legal and financial matters.

Thanks in advance for your cooperation in this matter.

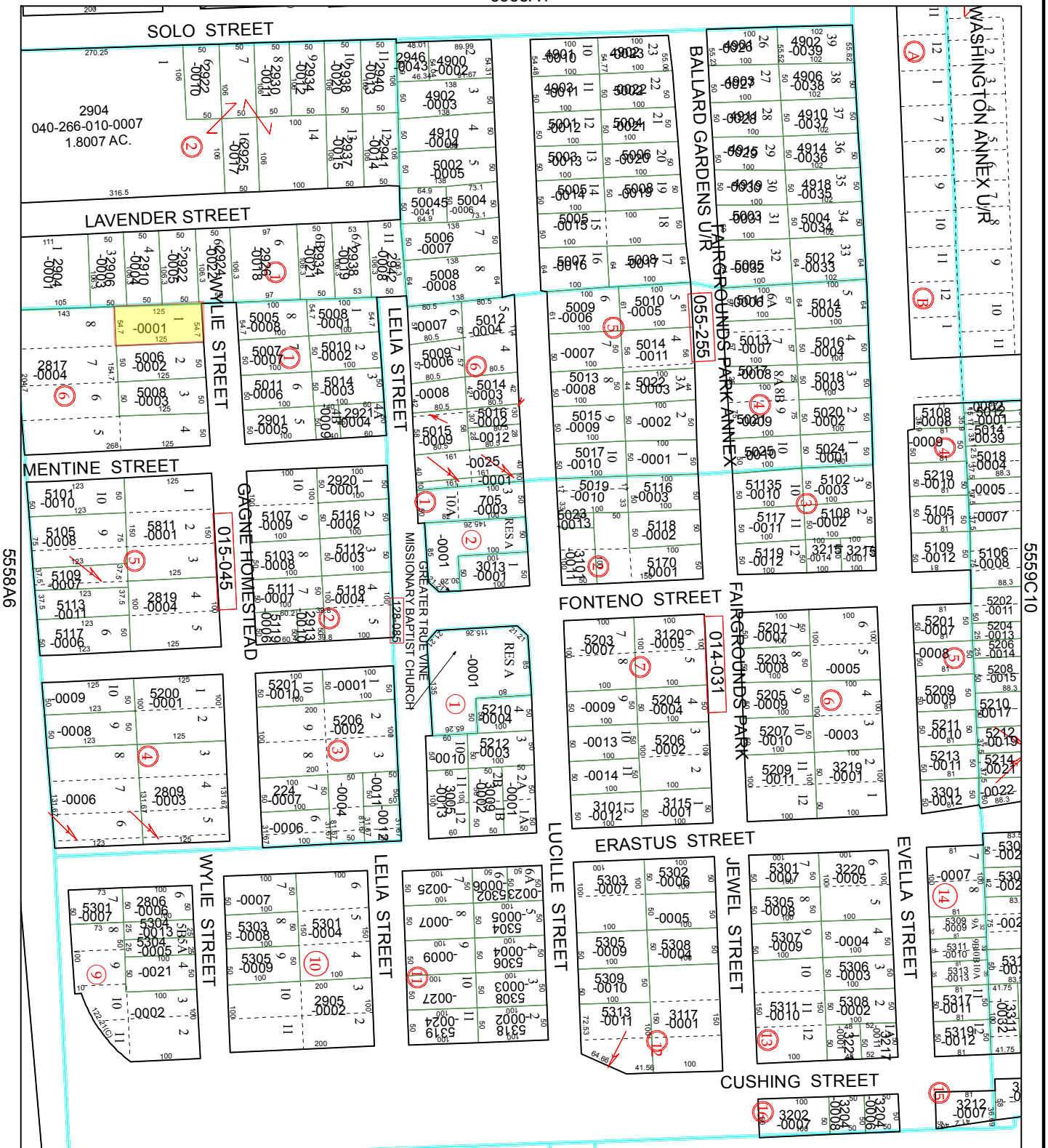

Treasurer


Secretary

5005 Liberty Road * P.O. Box 21522 * Houston, TX 77226-1522
Church: 713-676-910 * Office: 713-675-0344 * Fax: 713-671-2680

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION



5558A6

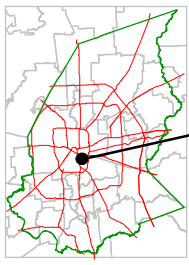
5558C10

Harris County Appraisal District



Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12



PUBLICATION DATE: 1/29/2014



**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0204
Date: January 12, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of January, 2013, we find the following:

Title Vested In:

Greater Mount Nebo Baptist Church (by Deed filed for record under Harris County Clerk's File No. 20080307645)

Property Description: (Map ID# 3) (Tax ID# 014-144-000-0001)

Lot One (1), in Block Six (6), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

2
Dad

Deed under Re-sale Pursuant to Texas Tax Code §34.05

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER

(Language pursuant Section 11.008 of the Texas Property Code)

Date of Execution: February 6, 2007 (6)

Grantor: Harris County for itself and as Trustee for: AND CITY OF HOUSTON AND HOUSTON INDEPENDENT SCHOOL DISTRICT AND HOUSTON COMMUNITY COLLEGE SYSTEM AND CITY OF HOUSTON LIENS 4m

Grantee(s): Greater Mount Nebo Baptist Church 1we

Grantee(s) Mailing Address: 5005 Liberty Rd, Houston, TX 77026-0000

Consideration/High Bid: Three Thousand (\$3,000.00) Dollars

Land and Premises: LOT 1 IN BLOCK 6 OF FINN SUBDIVISION OF GAGNE HOME, A SUBDIVISION IN HARRIS COUNTY, TEXAS ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 55 OF THE MAP RECORDS OF HARRIS COUNTY, TEXAS. D

HCAD Number: 014144000001

Constable: Constable Jack F. Abercia Precinct 1, Harris County, Texas

Newspaper: Daily Court Review

Date of Re-Sale: February 6, 2007

Order of Re-Sale: That resolution, order or ordinance dated July 24, 2001 and passed and adopted by Grantor's governing body at a regularly scheduled meeting and further authorizing the re-sale of the real property described herein, previously acquired by Grantor in the following described tax foreclosure proceeding:

Cause: That case bearing Suit No. 2004-73015 filed in the 80th Judicial District of Harris County, Texas and styled HARRIS COUNTY, ET AL VS. JAMES CASH, ET AL. 1r

Date of Original Tax Foreclosure Sale: September 5, 2006

File Number of Original Tax Deed: 20060179352

That WHEREAS, Grantor's governing body requested by Order of Re-Sale that the Constable advertise for sale and sell said land and premises herein described, by having a notice of the sale published in the English language once a week for three consecutive weeks preceding the day of the sale, in the above-described Newspaper, a newspaper published in Harris County, Texas, and the first publication appearing not less than twenty-one days immediately preceding the day of the Re-Sale, containing a statement of the authority by virtue of which the re-sale is to be made, the time of levy, time and place of sale; also a brief description of the property to be sold by stating the number of acres and the original survey; if the property was located in a platted subdivision or addition the name by which the land is generally known with reference to that subdivision or addition; or by adopting the description of the land as contained in the judgment.

And WHEREAS, on the above-stated Date of Re-Sale, being the first Tuesday of the month, between the hours of ten o'clock a.m. and four o'clock p.m., I sold the above-described land and premises at public venue in the County of Harris, State of Texas, at such place as approved by Commissioner's Court and the premises hereinafter described were sold to Grantee for the above-stated

Consideration, said Grantee being the highest bidder.

And WHEREAS, as required by Section 34.015, Texas Tax Code, Grantee(s) exhibited to me an unexpired written statement issued to Grantee(s) showing that the Harris County Tax Assessor-Collector determined that: (1) there are no delinquent ad valorem taxes owed by Grantee(s) to Harris County, and (2) for each school district or municipality having territory in Harris County, there are no known or reported delinquent ad valorem taxes owed by Grantee(s) to that school district or municipality.

NOW THEREFORE, in consideration of the premises aforesaid, and of the payment of the above-stated Consideration, the receipt of which is hereby acknowledged, I, as said Constable, have granted, sold and conveyed, and by these presents do grant, sell and convey unto the said Grantee all of the estate, the right, title, and interest acquired or held by each taxing unit that was a party to the judgment foreclosing tax liens on the property which the Grantor, for itself, and as trustee for all taxing entities which established tax liens in the above referenced Suit had in and to the above-described land and premises;

To have and to hold the above described land and premises, together with all and singular the rights, privileges, and appurtenances thereto in any manner belonging unto the said Grantee, its successors, assigns forever, as fully and as absolutely as I, Constable, can convey by virtue of said Order of Re-Sale.

This conveyance is subject to any right of redemption remaining to the former owner at the time of the re-sale.

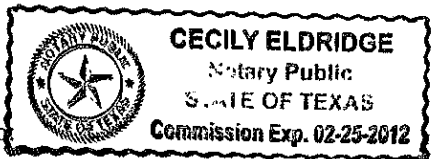
IN TESTIMONY WHEREOF, I have hereunto set my hand, this 1st day of May, 2008.

Jack F. Abercia
Constable Jack F. Abercia Precinct 1,
Harris County, Texas

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned Notary Public in and for the State of Texas, on this day personally appeared Constable Jack F. Abercia Precinct 1, Harris County, Texas, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same as Constable Jack F. Abercia Precinct 1, Harris County, Texas, for the purposes and consideration, and in the capacity therein expressed.

GIVEN under my hand and seal of office, this 1st day of May, 2008.



Cecily Eldridge
NOTARY PUBLIC, State of Texas

Return to:
LINEBARGER GOGGAN BLAIR
& SAMPSON, LLP
1301 TRAVIS, SUITE 300 (77002)
P O BOX 3064
HOUSTON, TX 77253-3064

ANY PROVISION HEREIN WHICH RESTRICTS THE SALE, RENTAL, OR USE OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW.
THE STATE OF TEXAS
COUNTY OF HARRIS
I hereby certify that this instrument was FILED in Book number Sequence on the date and at time stamped herein by me, and was duly RECORDED, in the Official Public Records of Real Property of Harris County Texas on

JUN 13 2008

Deed under order of Sale Suit No. 2004-73015

FILED FOR RECORD
8:00 AM



Carolyn B. Kaufman
COUNTY CLERK
HARRIS COUNTY, TEXAS

JUN 13 2008

Cecily A. Kaufman

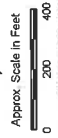
County Clerk, Harris County, Texas

EXHIBIT 2
AFFECTED PROPERTY MAP

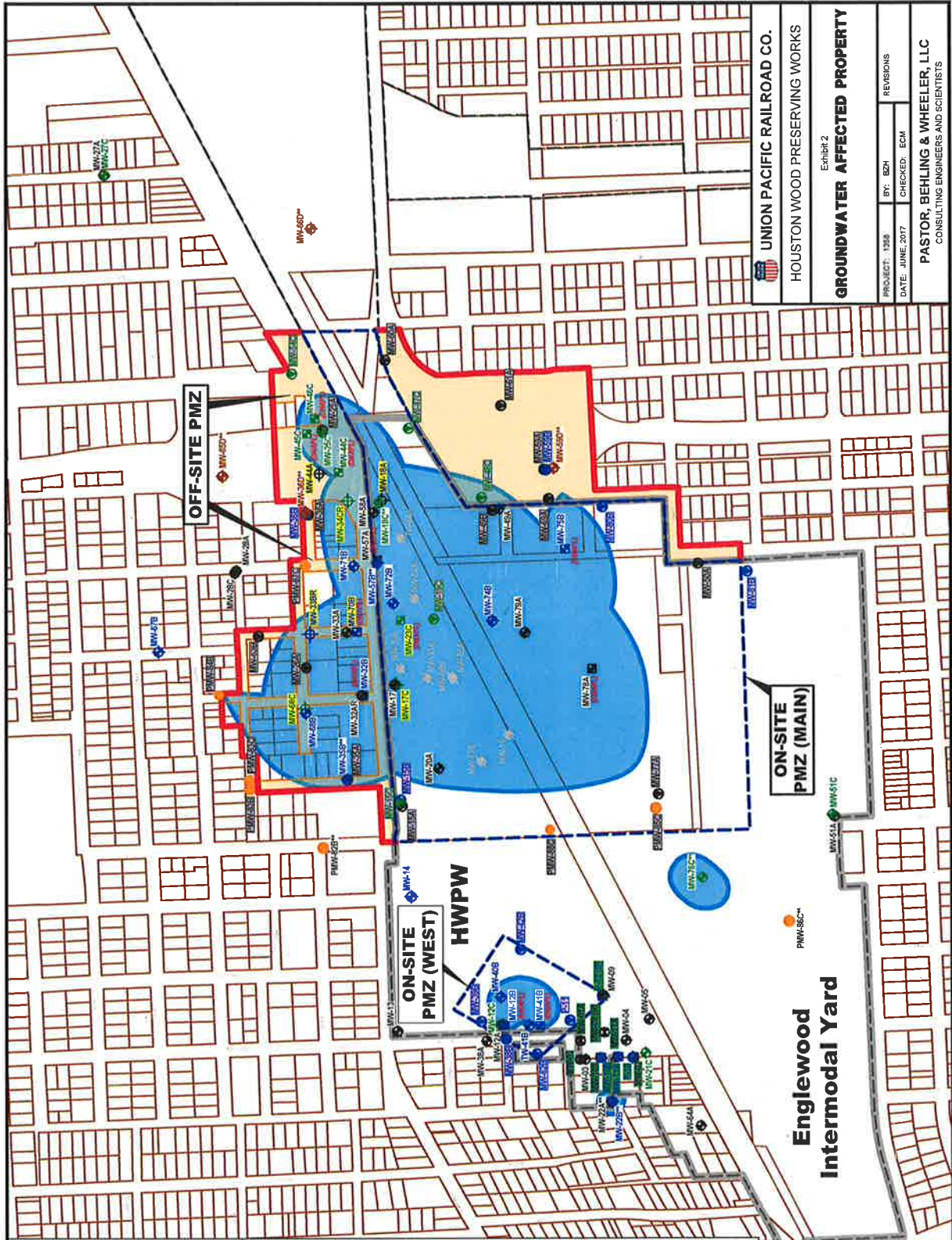
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

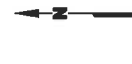
PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3
PLUME MANAGEMENT ZONE MAP

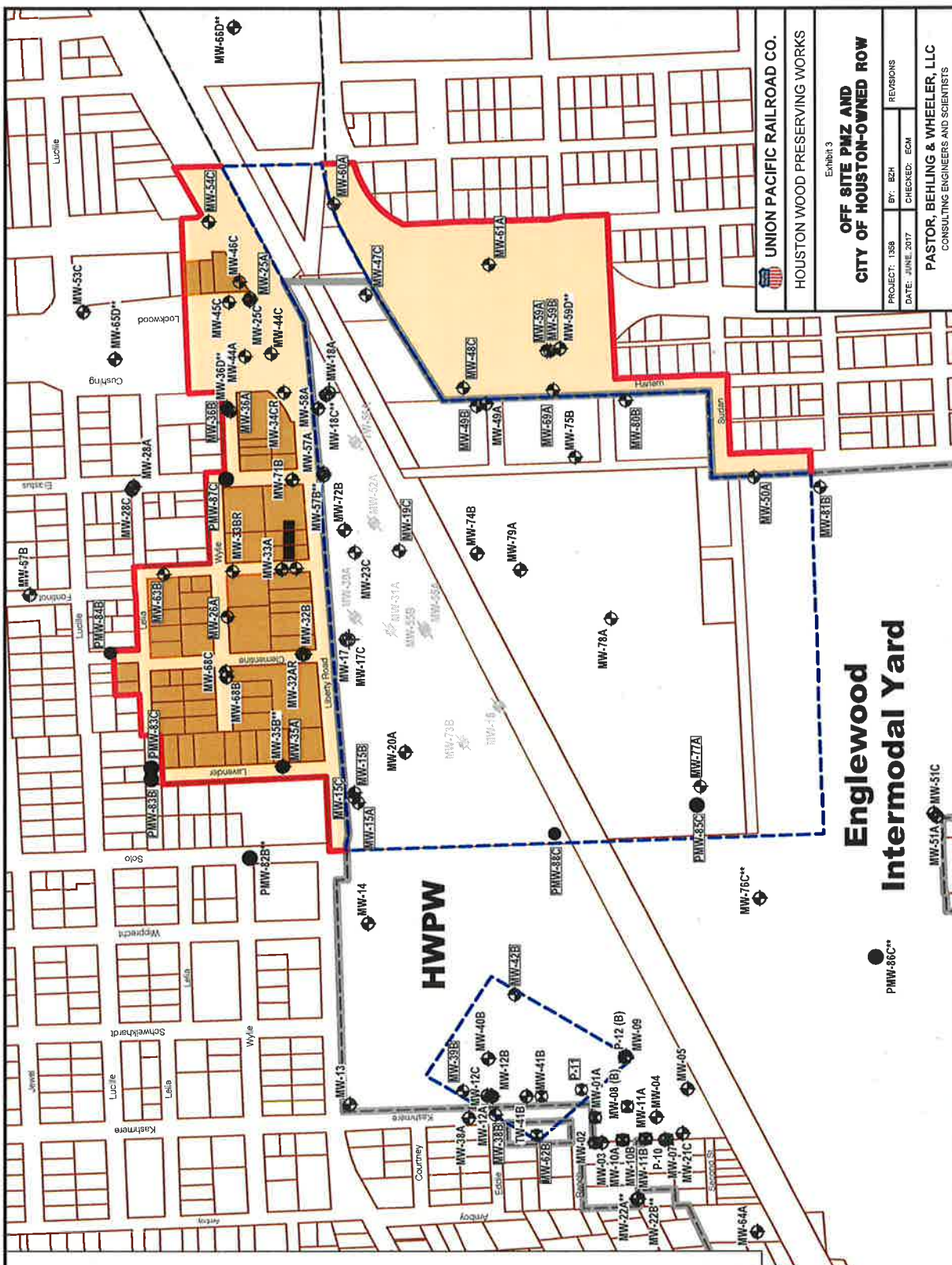
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIMS)
 - City of Houston-Owned ROW
 - Off-Site PMZ
 - Monitoring Well Location
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet

Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



Englewood Intermodal Yard

UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		Exhibit 3	
		OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH	REVISIONS	
DATE: JUNE 2017	CHECKED: ECM		
		PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 4

HCAD ID - 0141440000002

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 2, In block 6 of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Vol.1 page 55 of the Map Records of Harris County, Texas.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater Mount Nebo Baptist Church (Owner) with an address of 3819 Harland Dr., Houston, Texas 77092. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

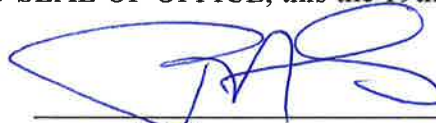
Executed this 19th day of February, 2015.

Greater Mount Nebo Baptist Church
By: Charles L. Allen, Jr.
Name: Charles L. Allen, Jr.
Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

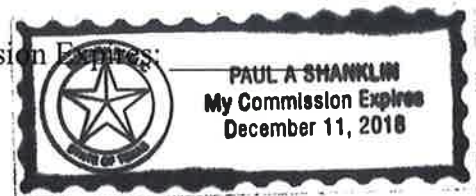
BEFORE ME, on this the 19th day of February, 2015, personally appeared Charles L. Allen, Jr., Pastor, of Greater Mount Nebo Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of February, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony K Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

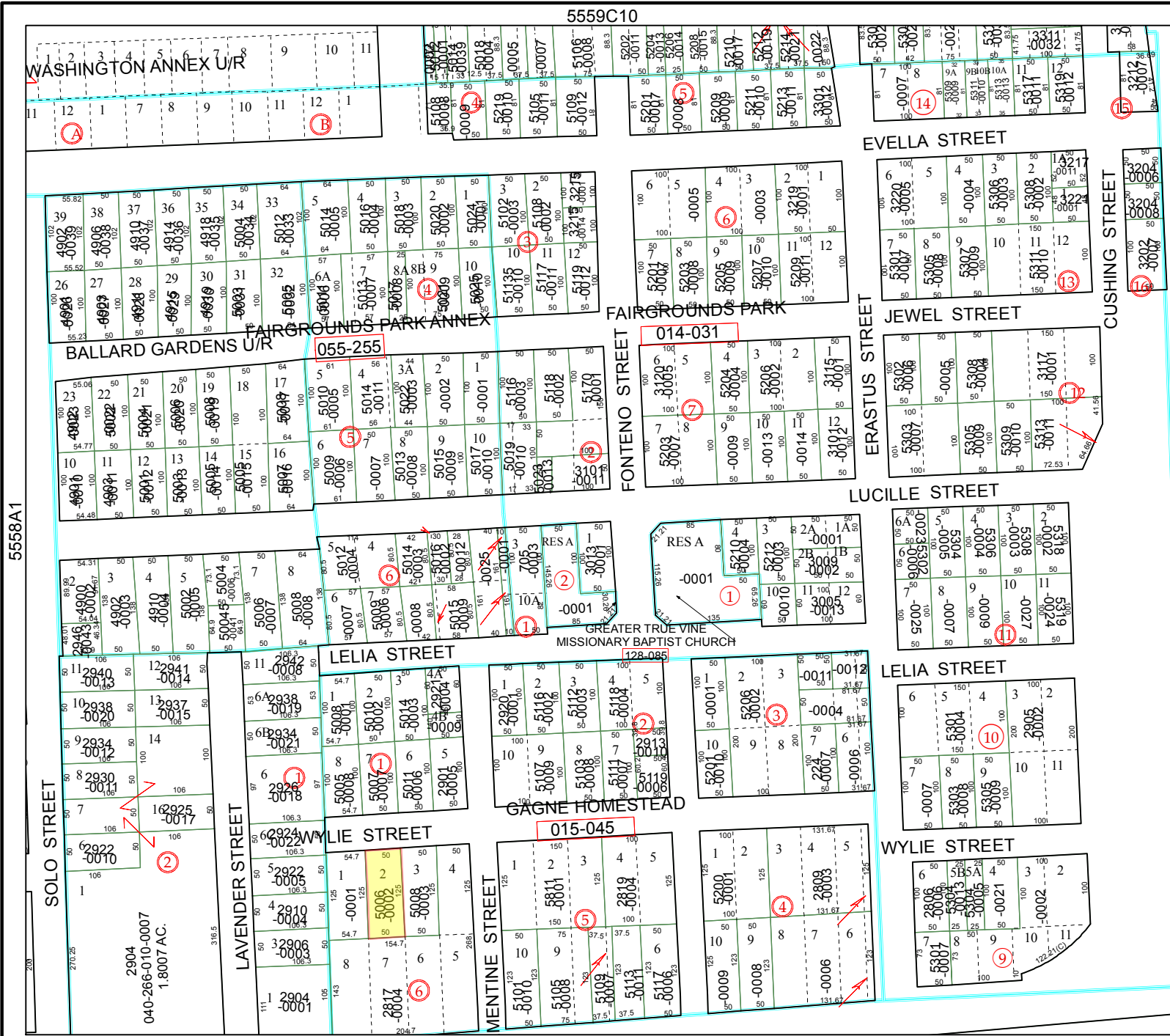
EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10

5558A6



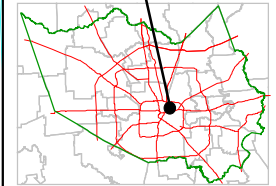
Harris County Appraisal District



PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3



**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0205
Date: January 12, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of January, 2013, we find the following:

Title Vested In:

Greater Mount Nebo Baptist Church (by Deed filed for record under Harris County Clerk's File No. Y346977)

Property Description: (Map ID# 4) (Tax ID# 014-144-000-0002)

Lot Two (2), in Block Six (6), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Notice of Public Hearing filed October 26, 2004, under Harris County Clerk's File No. Y016929, pursuant of said notice an "Order of the Hearing Official of the Planning and Development Department of the City of Houston, Texas" dated November 1, 2004 and filed for record Harris County Clerk's File No.Y037121, it was determined that subject property be posted as a dangerous building and must be either repaired or demolished.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

WD
lb
D

GENERAL CASH WARRANTY DEED

Y346977
03/24/05 200806264

\$16.00

Texas Property Code Section 11.008.
CONFIDENTIAL INFORMATION IN REAL PROPERTY RECORDS

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

Date: 3/23, 2005

Grantor: HANNAH LOUISE LOVEJOY, a single person

Grantor's Mailing Address (including county):

HANNAH LOUISE LOVEJOY
721 Herkimer St
Houston TX 77007
Harris County

Grantee: GREATER MOUNT NEBO BAPTIST CHURCH

Grantee's Mailing Address (including county):

GREATER MOUNT NEBO BAPTIST CHURCH
2602 Caplin St
Houston TX 77026
Harris County

FILED
03 MAR 24 PM 2:17
PROPERTY CLERK
HARRIS COUNTY, TEXAS

lu

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

LOT TWO (2), IN BLOCK SIX (6) OF FINN SUBDIVISION OUT OF THE GAGNE HOMESTEAD ADDITION, A SUBDIVISION IN HARRIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 89, PAGE 240 OF THE DEED RECORDS OF HARRIS COUNTY, TEXAS.

D

Reservations From and Exceptions to Conveyance and Warranty:

This conveyance is made and accepted subject to any and all existing restrictions, mineral reservations and interests, conditions, covenants, easements and rights of way, if any, applicable to and enforceable against the above described real property as now reflected by the records of the County Clerk of Harris County, Texas.

Current ad valorem taxes on the above described property as of the date hereof are assumed by grantee and grantee covenants and promises to pay the same.

650051149

03-20-2005

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty.

When the context requires, singular nouns and pronouns include the plural.

Hannah Louise Lovejoy
HANNAH LOUISE LOVEJOY

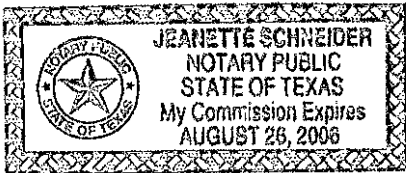
102

ACKNOWLEDGMENT

STATE OF Texas
COUNTY OF Harris

§
§
§

This instrument was acknowledged before me on March 23, 2005, by HANNAH LOUISE LOVEJOY.



Jeanette Schneider
Notary Public, State of _____

PREPARED IN THE OFFICE OF:

STEPHEN BEST
WILLIAMS, BIRNBERG & ANDERSEN, LLP
2000 Bering Drive, Suite 909
Houston, Texas 77057

AFTER RECORDING RETURN TO:

ANY PROVISION HEREIN WHICH RESTRICTS THE SALE, RENTAL, OR USE OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW THE STATE OF TEXAS COUNTY OF HARRIS

I hereby certify that this instrument was FILED in file number Sequence on the date and at the time stamped hereon by me, and was duly RECORDED. In the Official Public Records of Real Property of Harris County Texas on

MAR 24 2005

F:\WP\MHL\TATCO\650\05-1149 CWD



Dorely B. Kayman

COUNTY CLERK
HARRIS COUNTY, TEXAS

GENERAL CASH WARRANTY DEED
GF# 650-05-1149

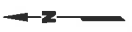
11-20-05-20-05-1149

EXHIBIT 2
AFFECTED PROPERTY MAP

- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCL Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

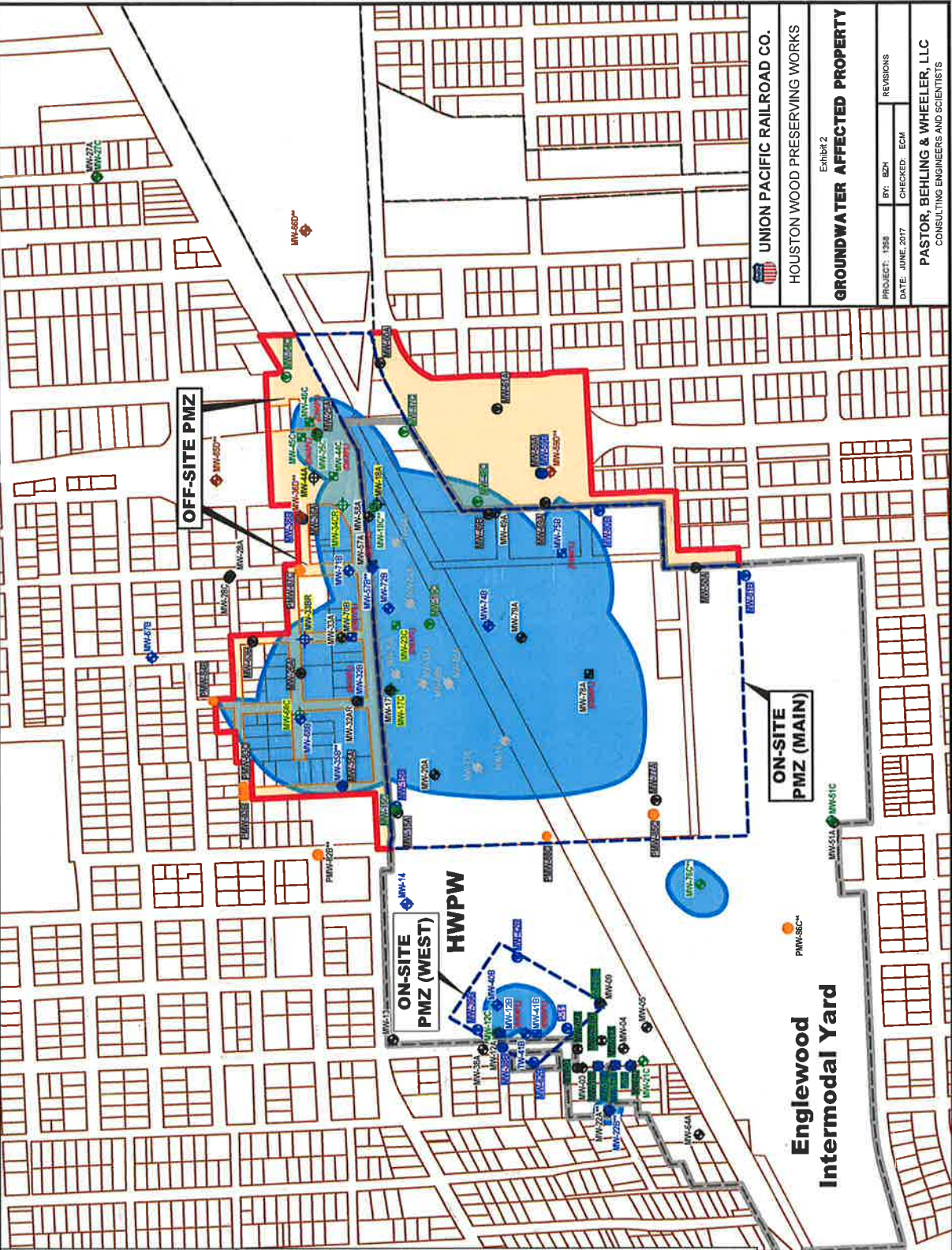
Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non-aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Approx. Scale in Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Author: Houston-DeWitt Area Council (HDAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	DY: B24	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

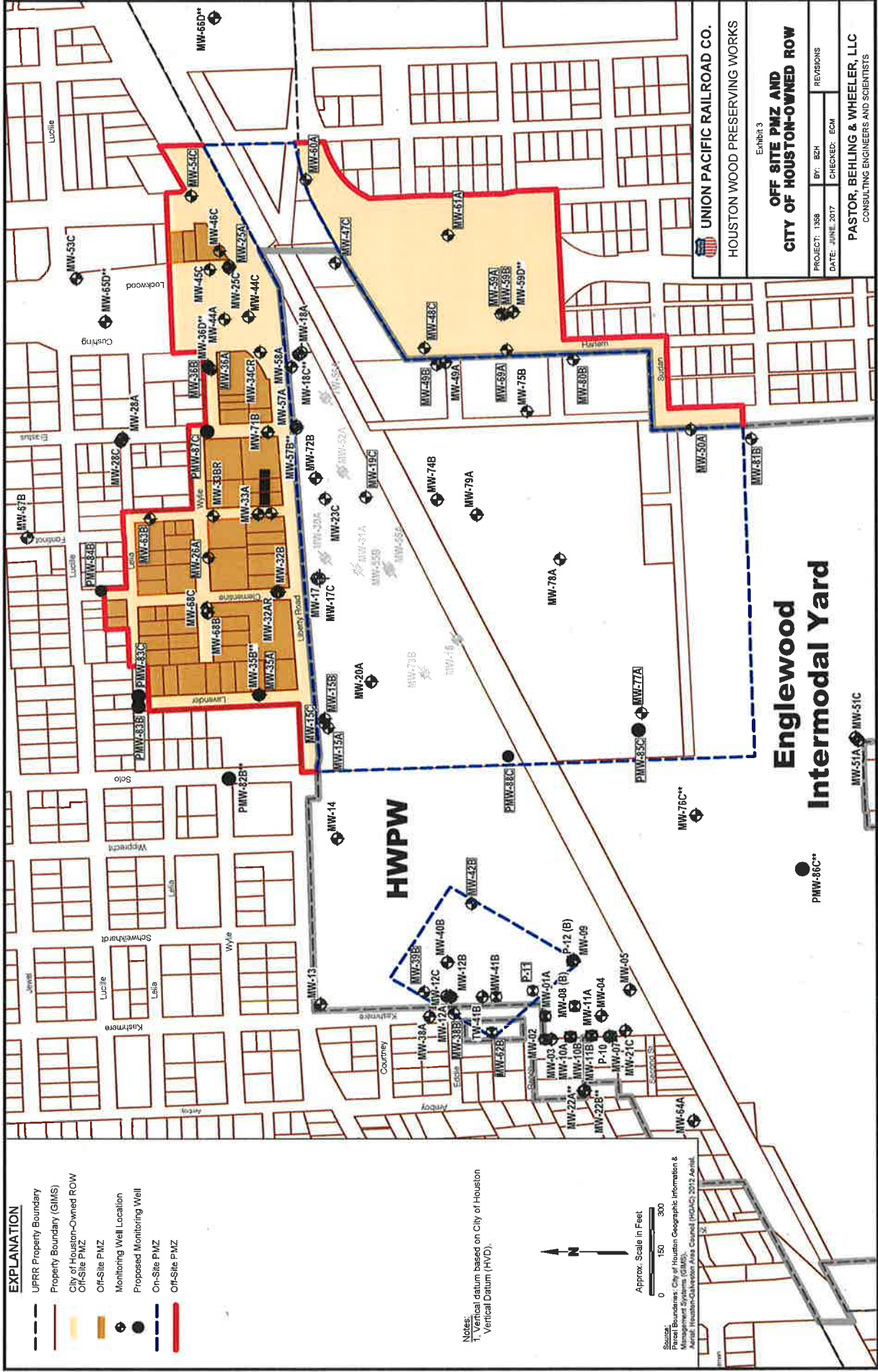


EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 5

HCAD ID - 0141440000003

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Three (3) in Block (6) six, of Finn Subdivision out of the Gagne Homestead a Subdivision, a subdivision In Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Alberta Smith (Owner) with an address of 5010 Wylie, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 24th day of March, 2015.

By: Alberta Smith
Alberta Smith

STATE OF TEXAS
HARRIS COUNTY

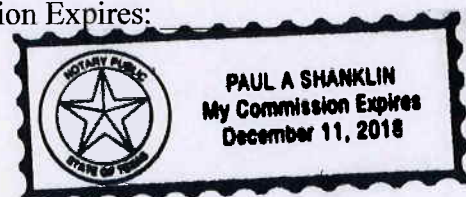
BEFORE ME, on this the 24th day of March, 2015, personally appeared Alberta Smith, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of March, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony K. Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14 day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14 day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

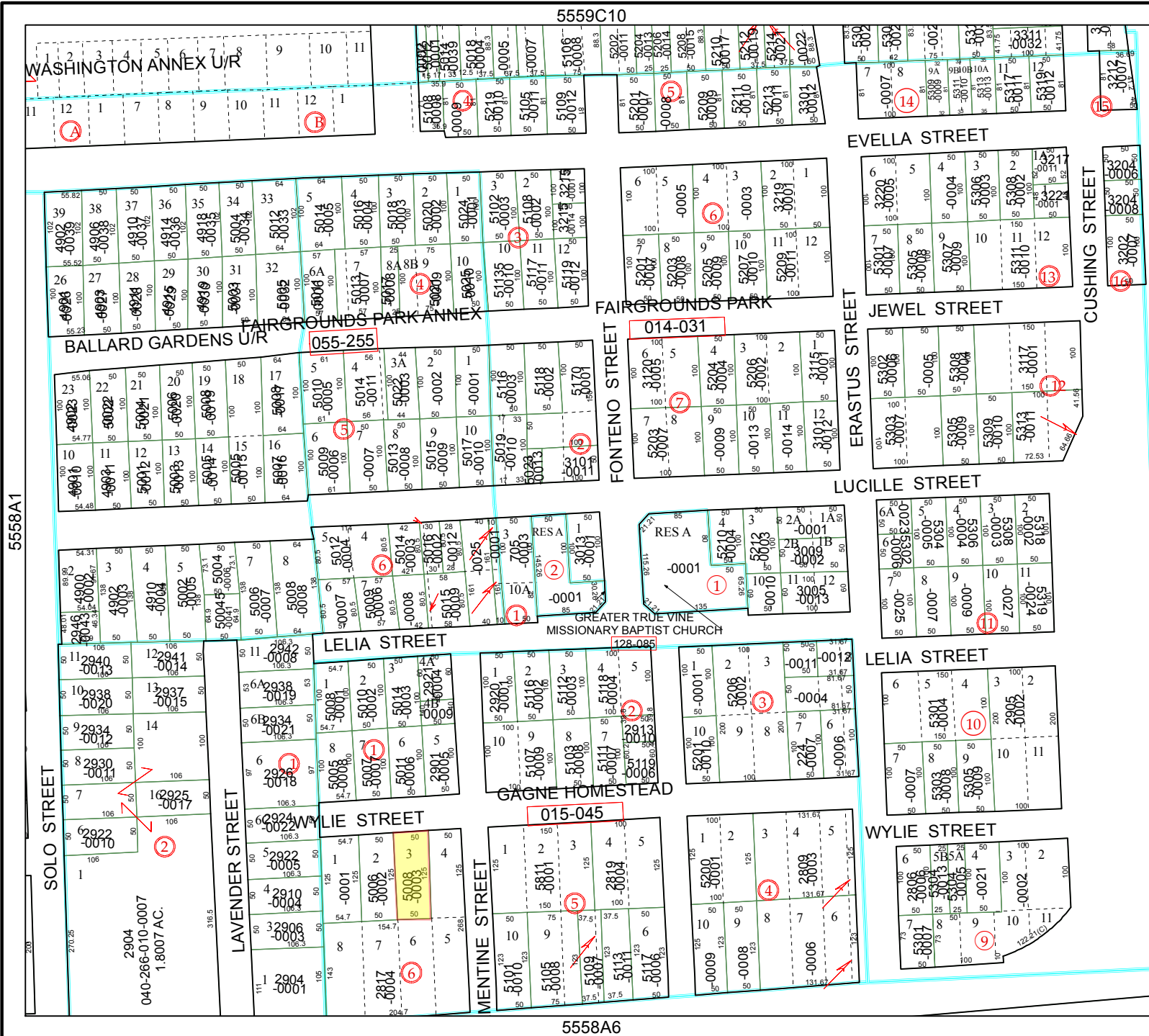
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



5558A1

5559C10

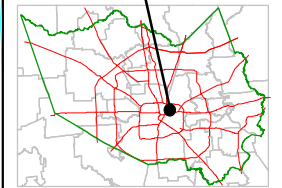
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0206

Date: January 12, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of January, 2013, we find the following:

Title Vested In:

Alberta Smith (by Deed filed for record under Harris County Clerk's File No. U845008)

Property Description: (Map ID# 5) (Tax ID# 014-144-000-0003)

Lot Three (3), in Block Six (6), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Wylie Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

- 2) Deed of Trust dated June 16, 1980, filed for record on September 4, 1980, under County Clerk's File No. G664135, in the office of the County Clerk of Harris County, Texas, executed by Alberta Smith, in favor of John Burns, as Trustee, securing the obligations as set out in that certain promissory note of even date therewith in the principal amount of \$10,000.00, payable to the order of John Burns, and subject to all terms, conditions and stipulations contained therein; including any additional indebtedness secured thereby.

- 3) Deed of Trust dated May 3, 2011, filed for record on May 19, 2011, under County Clerk's File No. 20110204413, in the office of the County Clerk of Harris County, Texas, executed by Alberta Smith, in favor of ABC Bonding Company, as Trustee, securing the obligations as set out in that certain promissory note of even date therewith in the principal amount of \$40,000.00, payable to the order of ABC Bonding Company, and subject to all terms, conditions and stipulations contained therein; including any additional indebtedness secured thereby.

Involuntary Liens:

- 1) Abstract of Judgment filed December 5, 2007, under Harris County Clerk's File No. 20070713375, styled K. D. Upadhyaya, vs. Alberta Smith, in the principal amount of \$2,690.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP

EXPLANATION

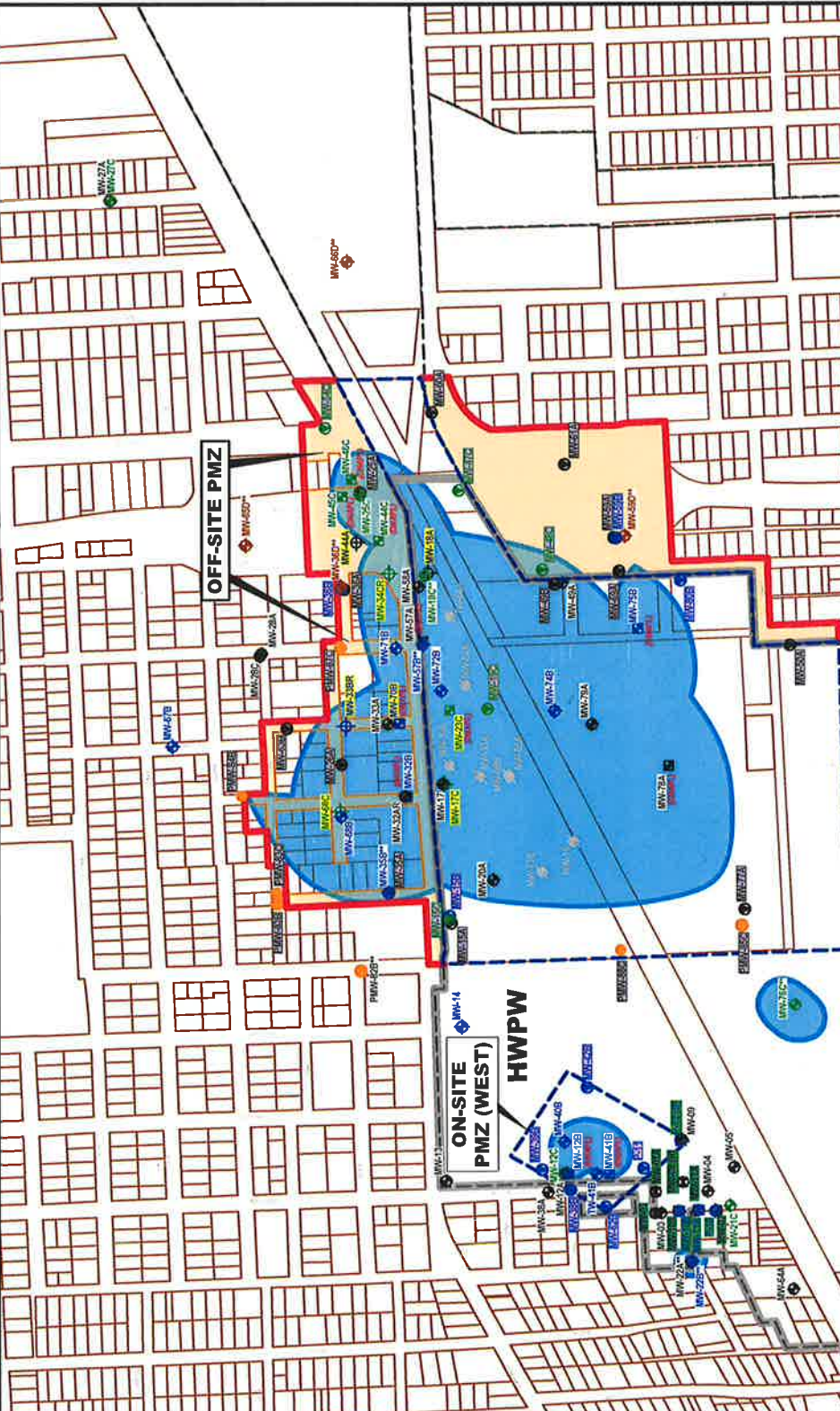
- UPRR Property Boundary
- Property Boundary (GISMS)
- A-TZ Monitoring Well Location
- B-CZ/B-TZ Monitoring Well Location
- C-TZ Monitoring Well Location
- D-TZ Monitoring Well Location
- Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- Alternate Groundwater Point of Exposure (POE)
- Attenuation Monitoring Point (AMP)
- RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.

Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery
 Aerial, Topographic, and Aerial Imagery (PAC) 2012 Aerial

Approx. Scale in Feet
 0 200 400



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1558	REVISED
DATE: JUNE, 2017	CHECKED: ECM
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

ON-SITE PMZ (MAIN)

ON-SITE PMZ (WEST)

HWPW

OFF-SITE PMZ

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

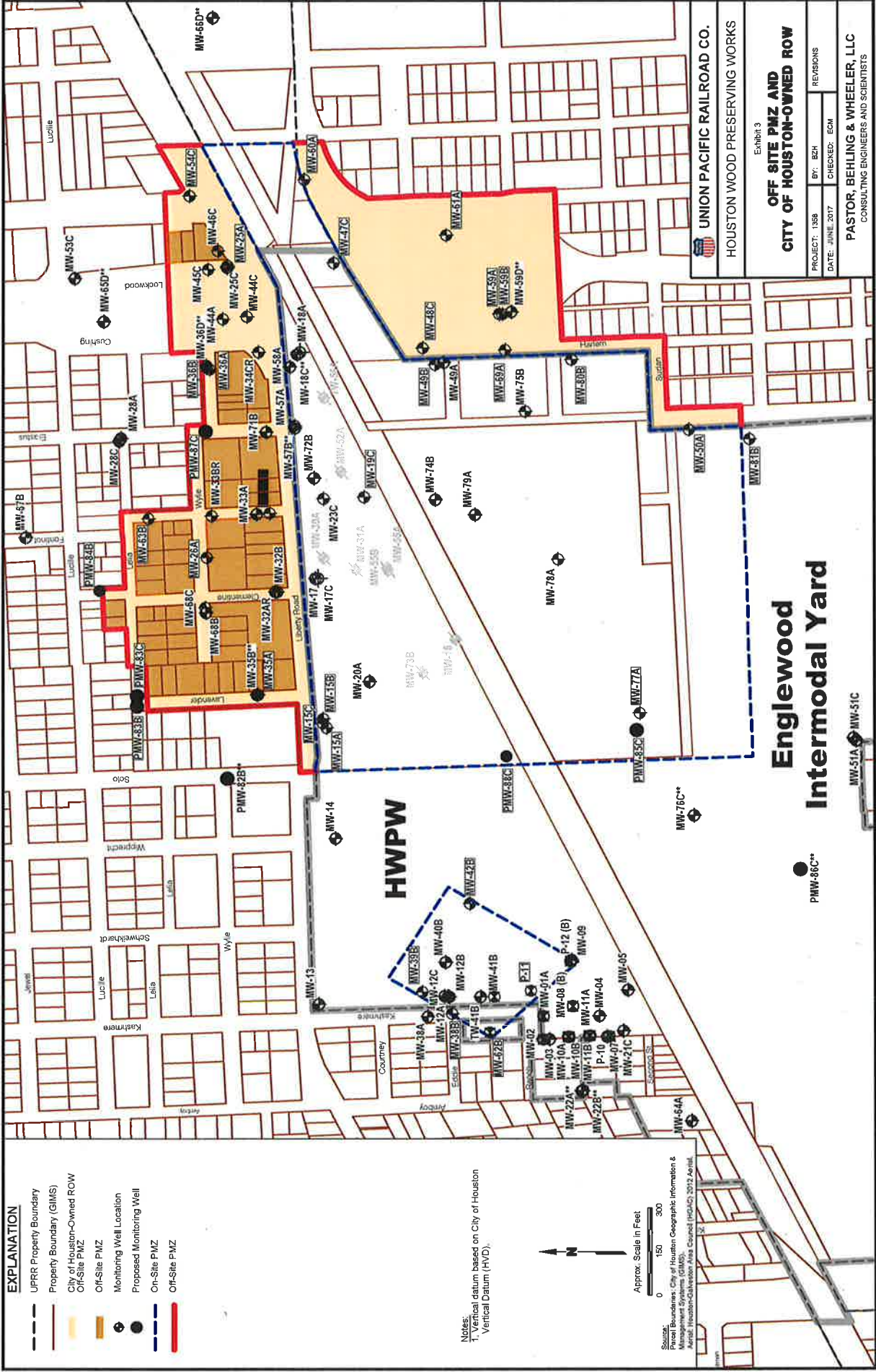
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW		
PROJECT: 158	BY: BZH	REVISIONS
DATE: JUNE 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Englewood Intermodal Yard

MW-51A MW-51C

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 6

HCAD ID - 0402660100003

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 3, In block 1 (one), of Liberty Road Estates, an unrecorded subdivision of a 5-1/4th acre tract out of Lot 8, Second Tier from Buffalo Bayou out of the Harris and Wilson Two League Grant in Harris County, Texas and being the same land conveyed to John Grado and V. Billitti by Mary Alice Alexander, et vir, by Deed Dated September 14, 1894, recorded in Vol. 79 Page 242 of the Deed Records of Harris County, Texas..

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Jesse Beal and wife, Eloise Beal. (Owner) with an address of 2906 Lavender Street, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

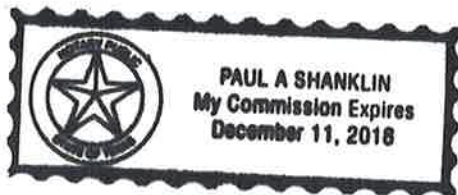
Executed this 26th day of February, 2015.

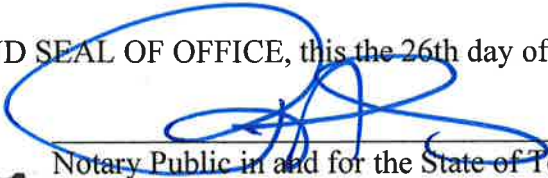
By: 
Name: Barbara Beal via POA

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 19th day of February, 2015, personally appeared Barbara Beal, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 26th day of February, 2015.




Notary Public in and for the State of Texas,
County of Harris

My Commission Expires: 12-11-18

Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

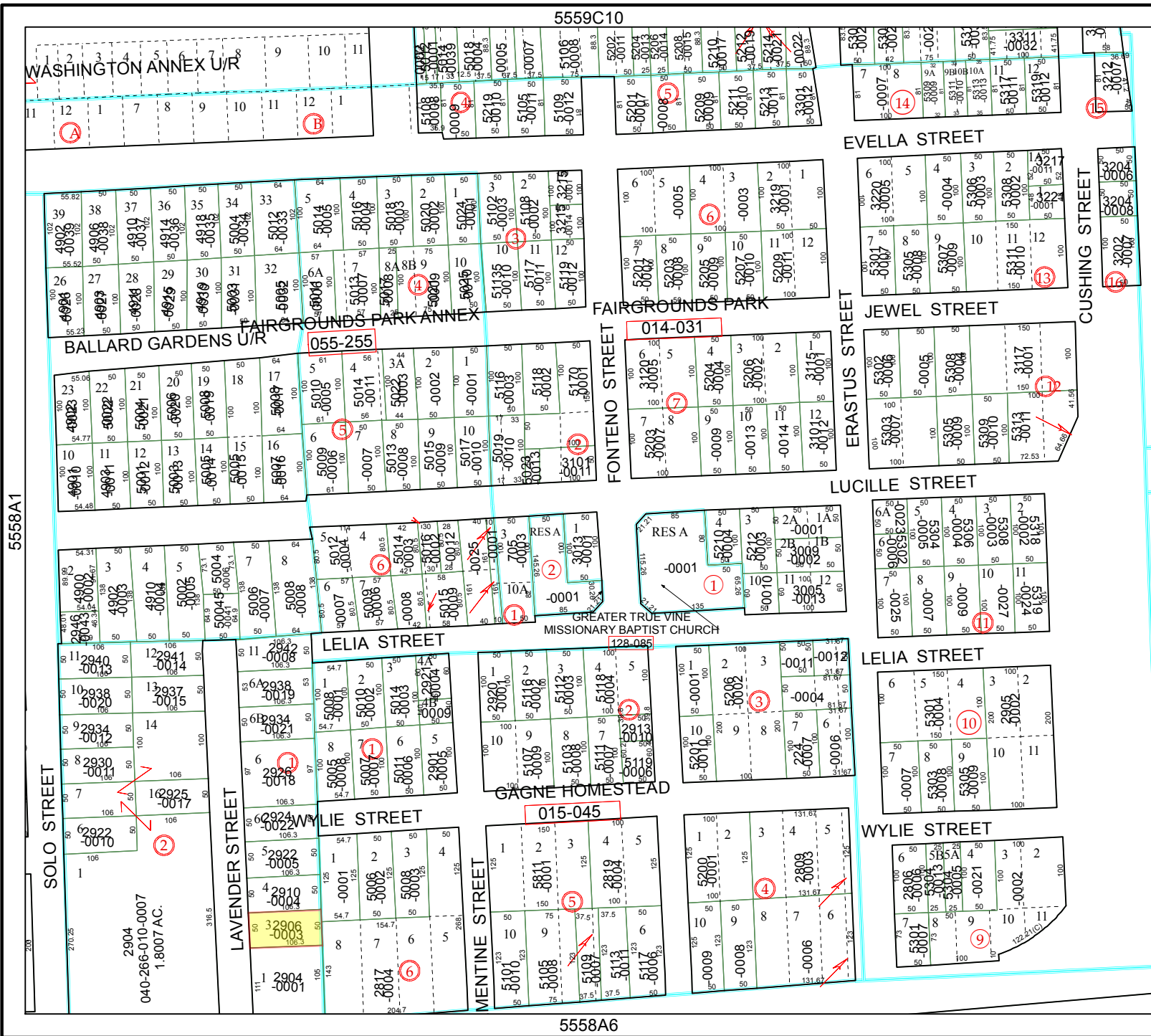
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



5558A1

5559C10

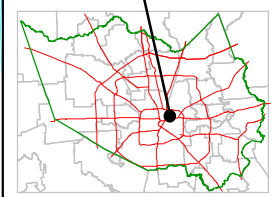
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-8479
Date: November 15, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of November, 2012, we find the following:

Title Vested In:

Jessie Beal and wife, Eloise Beal (by Warranty Deed filed for record under Volume 2344, Page 164 of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 6) (Tax ID# 040-266-010-0003)

Lot Three (3), in Block One (1), of Liberty Road Estates, an unrecorded subdivision of a 5-1/40th acre tract out of Lot 8, Second Tier from Buffalo Bayou out of the Harris and Wilson Two League Grant in Harris County, Texas and being the same land conveyed to John Grado and V. Billitti by Mary Alice Alexander, et vir, by Deed Dated September 14, 1894, recorded in Vol. 79 Page 242 of the Deed Records of Harris County, Texas, and said Lot 3, Block 1, Liberty Road Estates being more particularly described by metes and bounds as follows:

BEGINNING at the North West corner of said 5-1/40th acre tract;

THENCE East 282 feet to a point in the North line of said 5-1/40th acre tract;

THENCE South 400 feet along the East line of Lavender Street for the North West corner tract to be conveyed;

THENCE East 106.3 feet along a line parallel to the North line of said and 5-1/40th acre tract for North East corner;

THENCE South 50 feet along the East line of said 5 and 5-1/40th acre tract for South East corner;

THENCE West 106.3 feet along a line parallel to the North line of 5-1/40th acre tract for South West corner;

THENCE North 50 feet along the East line of Lavender Street for North West corner and place of beginning.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

Those as set forth by instrument(s) filed for record under Volume 2344, Page 164 of the Deed Records of Harris County, Texas.

Exceptions:

- a) Building set-back line twenty (20) feet in width along the front property line(s), as set forth by instrument(s) recorded in Volume 2344, Page 164 of the Deed Records of Harris County, Texas.
- b) Building set-back line three (3) feet in width along the side property line(s), as set forth by instrument(s) recorded in Volume 2344, Page 164 of the Deed Records of Harris County, Texas.
- c) Utility easement five (5) feet in width along the rear property line(s) as set forth and defined by instrument(s) recorded in Volume 2344, Page 164 of the Deed Records of Harris County, Texas.
- d) Sidewalk easement six (6) feet in width along the front property lines(s) as set forth and defined by instrument(s) recorded in Volume 2344, Page 164 of the Deed Records of Harris County, Texas.
- e) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's file No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lavender Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

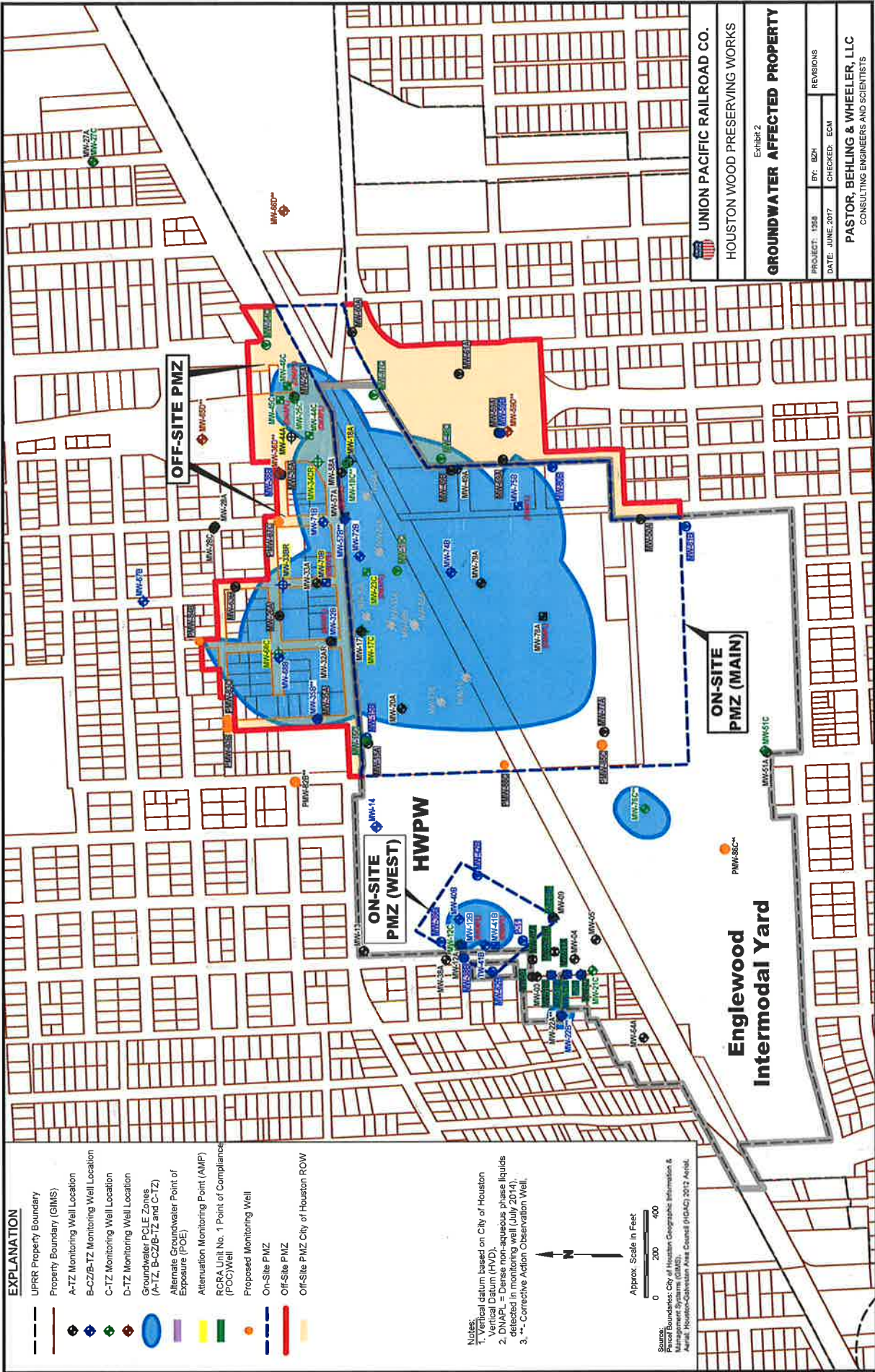
Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



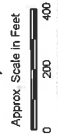
Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP



- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (DMS, 85) datum.
 2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Austin, Houston-Clouston Area Council (HAC) 2012 Aerial

UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISIONS
DATE: JUNE, 2017	DY: BZN
CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

OFF-SITE PMZ

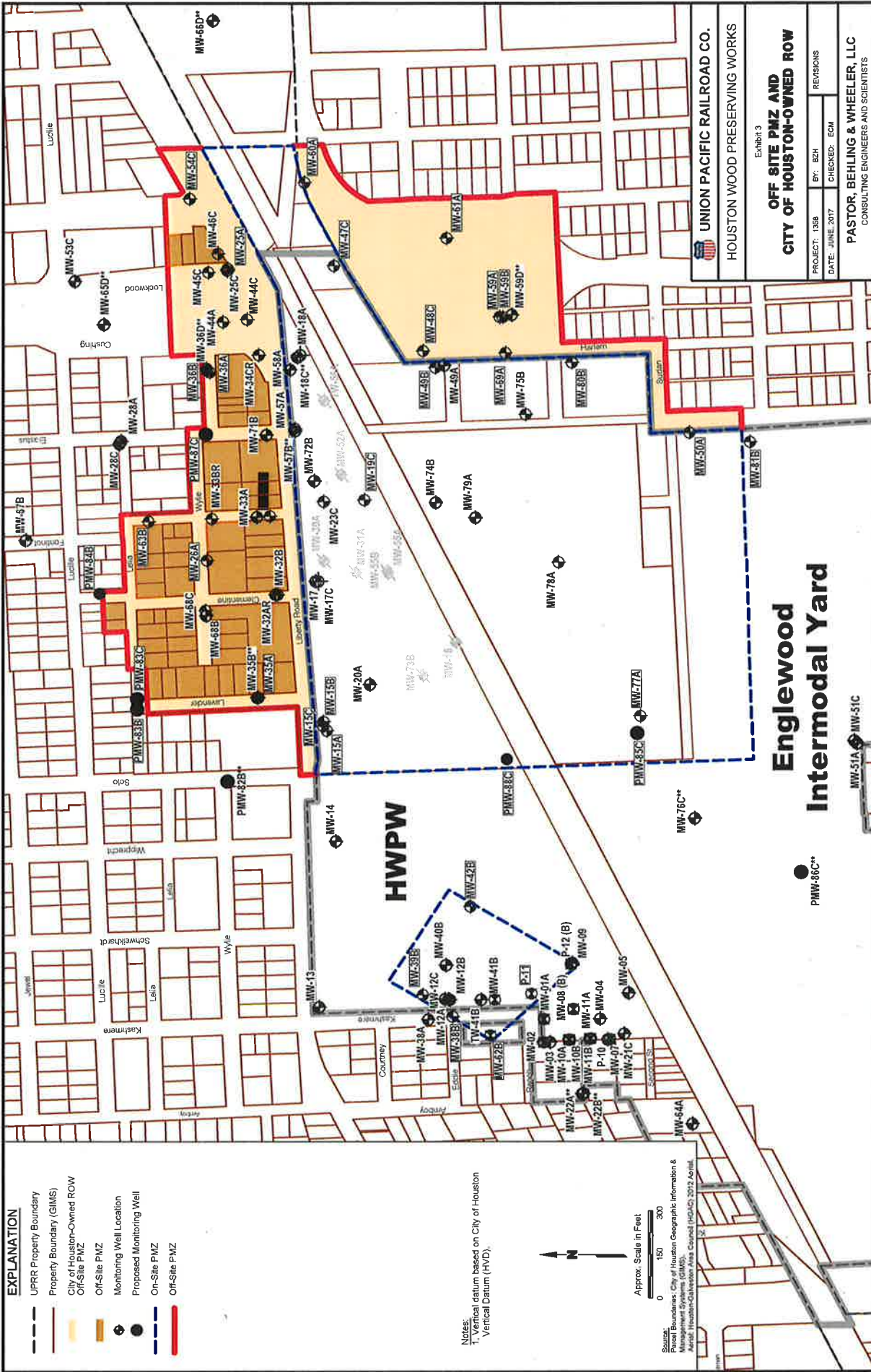
ON-SITE PMZ (MAIN)

ON-SITE PMZ (WEST)

HWPW

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP



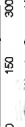
EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

Exhibit 3 UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	REVISIONS
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

**Englewood
 Intermodal Yard**

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 7A
HCAD ID - 0402660100001

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 1, in block 1 of Liberty Road Estates, an unrecorded subdivision out the Harris and Wilson Survey, Abstract No. 32, Harris County, Texas..

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater Mount Nebo Baptist Church (Owner) with an address of 3819 Harland Dr., Houston, Texas 77092. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

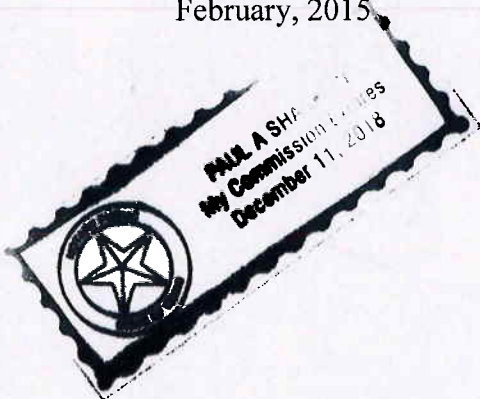
Executed this 19th day of February, 2015.

Greater Mount Nebo Baptist Church
By: Charles L. Allen, Jr.
Name: Charles L. Allen, Jr.
Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 19th day of February, 2015, personally appeared Charles L. Allen, Jr., Pastor, of Greater Mount Nebo Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

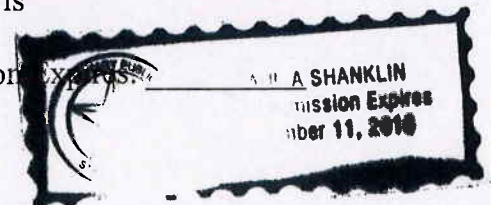
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of February, 2015.



Paul A. Shanklin

Notary Public in and for the State of Texas,
County of Harris

My Commission



Executed this _____ day of _____, 20__.

Union Pacific Railroad [RESPONDER]

By: _____

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the _____ day of _____, 20____ Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this ___ day of _____, 20____.

Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

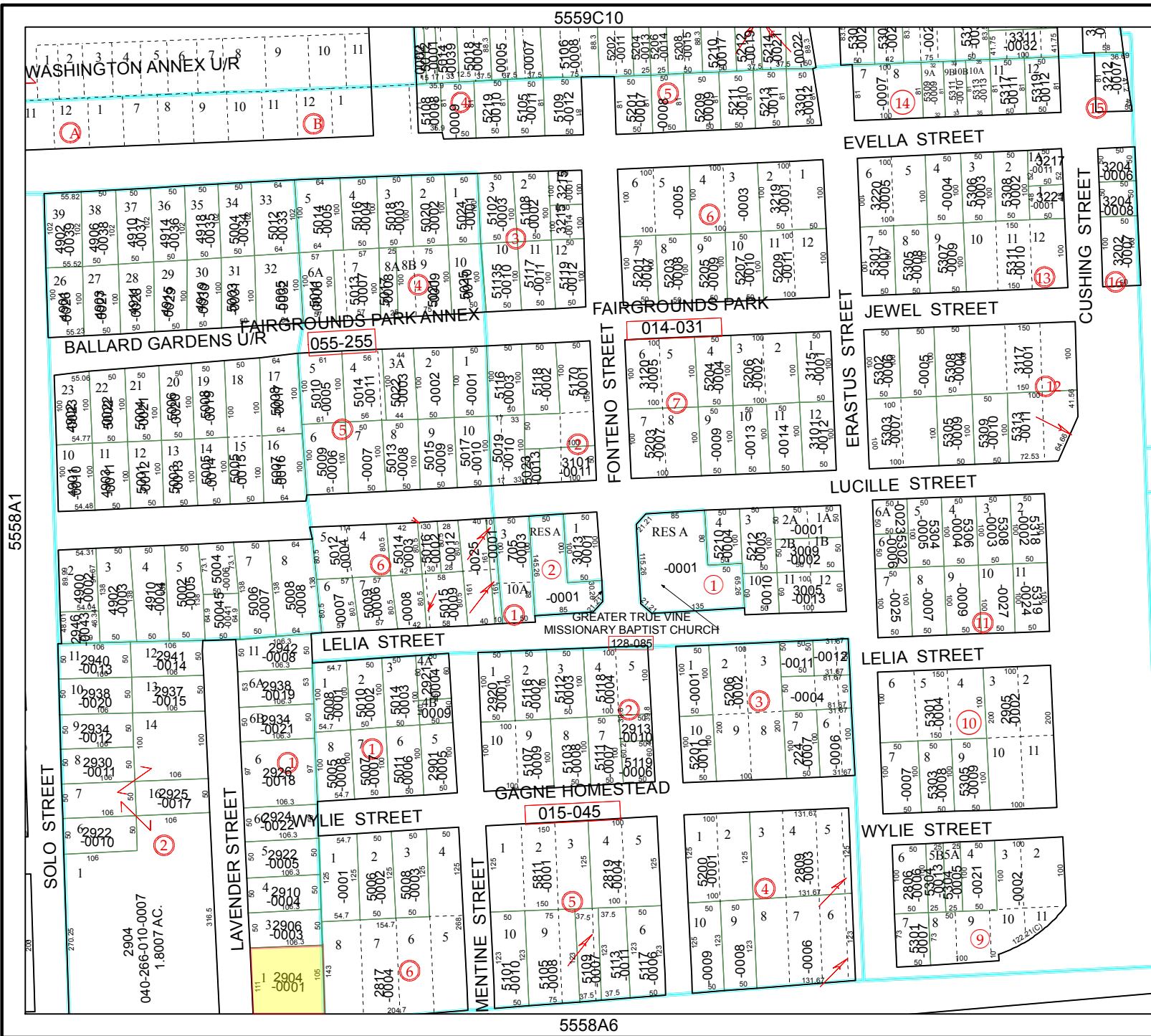
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



5558A1

5559C10

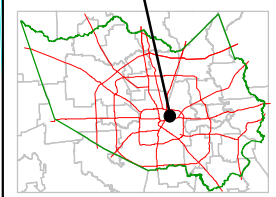
Harris County Appraisal District



0 100 200
 PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-8487
Date: November 15, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of November, 2012, we find the following:

Title Vested In:

Clark Investment Company (by Warranty Deed filed for record under Volume 2015, Page 716 of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 7) (Tax ID# 040-266-010-0001)

Lots One (1) and Two (2), in Block One (1), of Liberty Road Estates, a, unrecorded subdivision out of the Harris and Wilson Survey, Abstract No. 32 in Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's file No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lavender Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

- 1) We find reference to Cause No. 2009-46348, in the District Court of Harris County, Texas, styled Harris County, etal vs. Clark Investment Company, etal. It is assumed that said cause of action is for delinquent taxes due on subject property. Said suit includes a Final Judgment dated February 23, 2011 and an Order of Sale in Tax Suits dated October 10, 2011.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

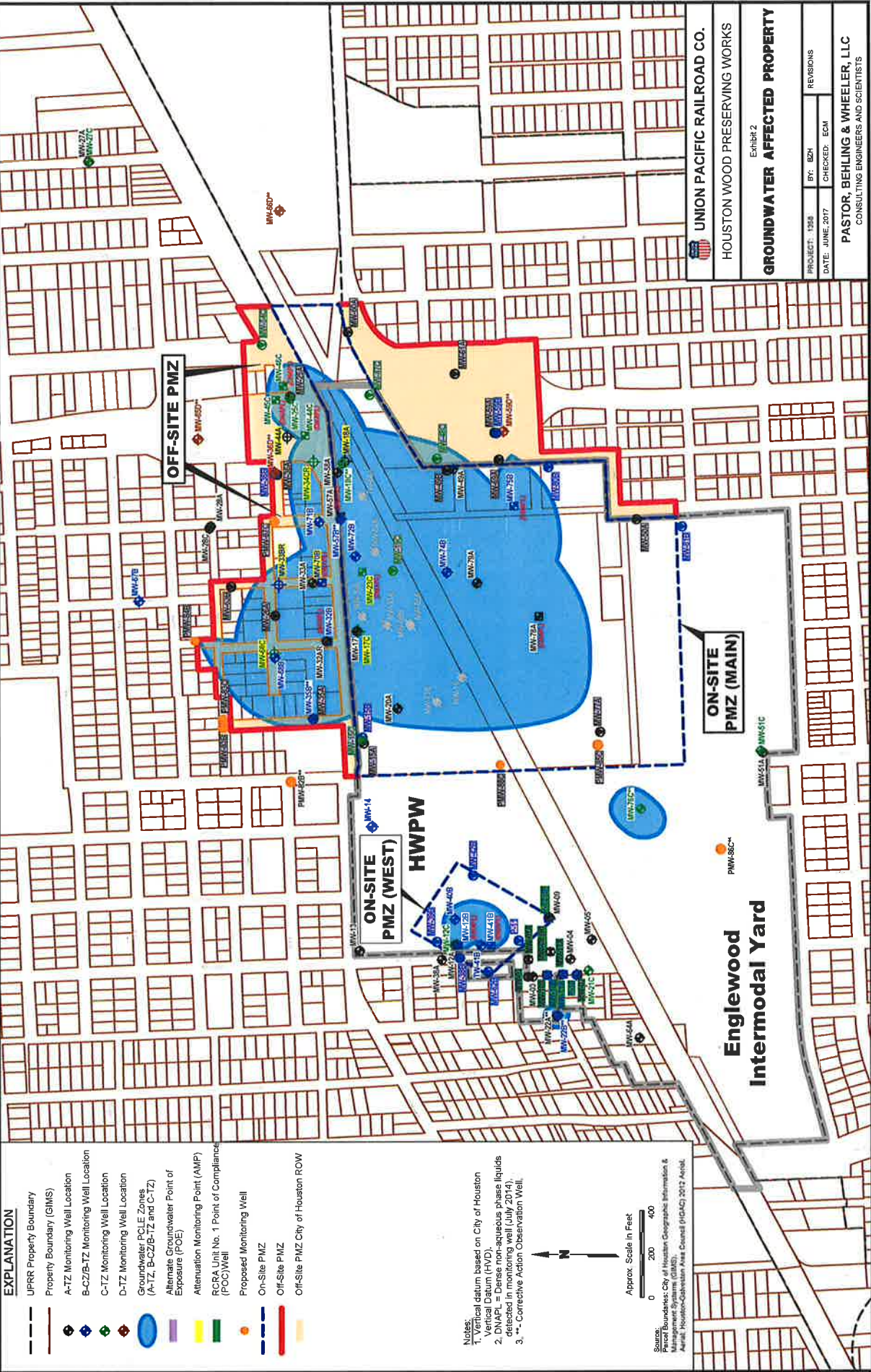
Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statue, in contract, or in tort.

Texas American Title Company



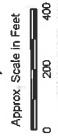
Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP



- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (POC) datum.
 2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Approx. Scale in Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Austin, Fortinet-Geospatial Area Council (FGAC) 2012 Aerial.

UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1558	REVISED:
DATE: JUNE, 2017	CHECKED: ECM
DY: BZN	REVISIONS
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- - - UPRR Property Boundary
- - - Property Boundary (GIMS)
- - - City of Houston-Owned ROW
- - - Off-Site PMZ
- - - Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

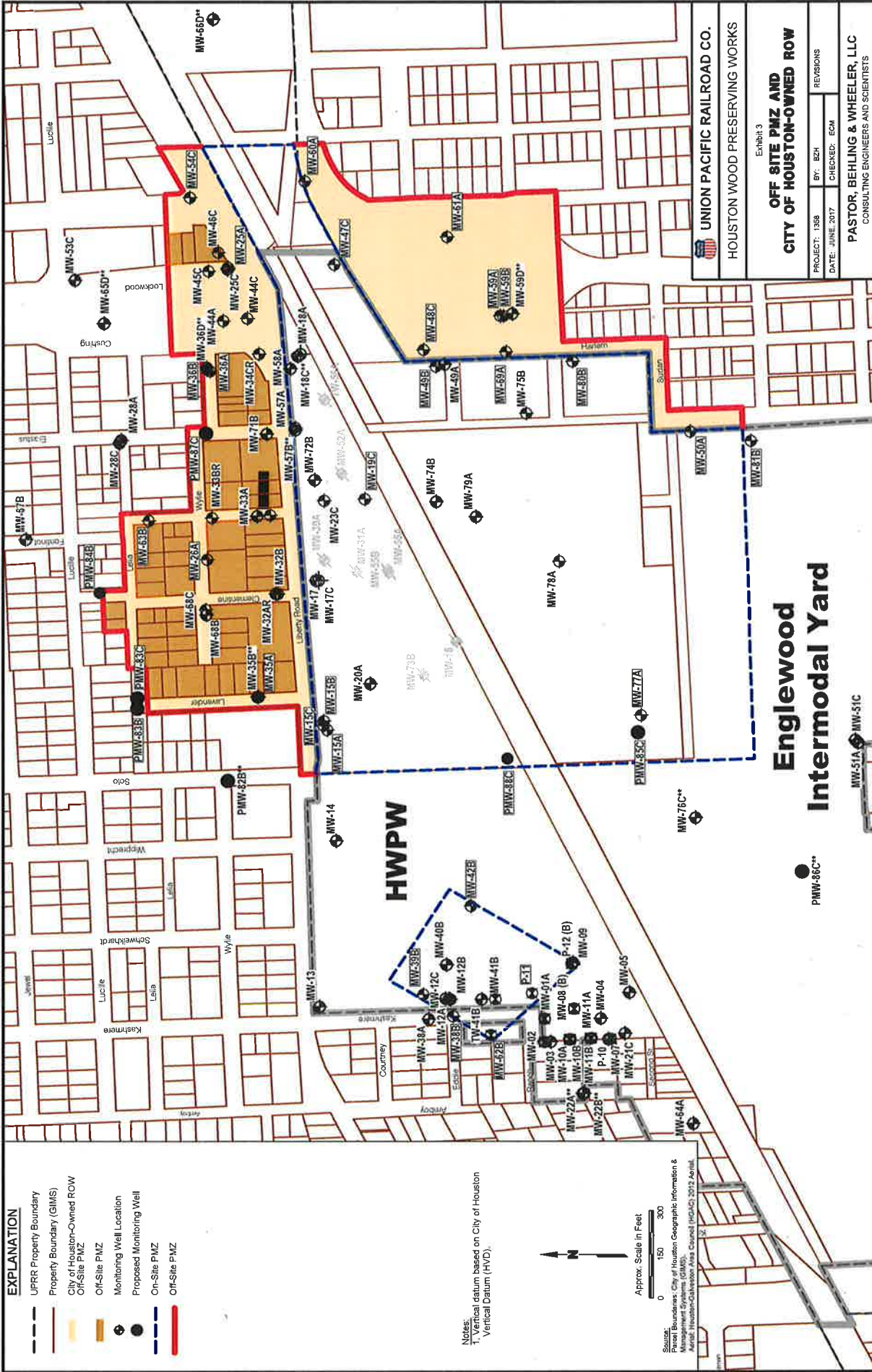
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C
 PMW-86C**
 MW-76C**

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 8

HCAD ID - 0141440000004

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 4, 5, 6, 7, and 8 In block 6 of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Vol.1 page 55 of the Map Records of Harris County, Texas.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater Mount Nebo Baptist Church (Owner) with an address of 3819 Harland Dr., Houston, Texas 77092. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 19th day of February, 2015.

Greater Mount Nebo Baptist Church
By: Charles L. Allen, Jr.
Name: Charles L. Allen, Jr.
Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

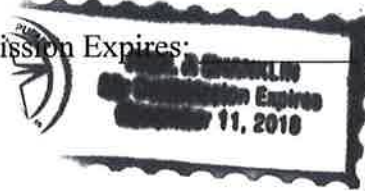
BEFORE ME, on this the 19th day of February, 2015, personally appeared Charles L. Allen, Jr., Pastor, of Greater Mount Nebo Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of February, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

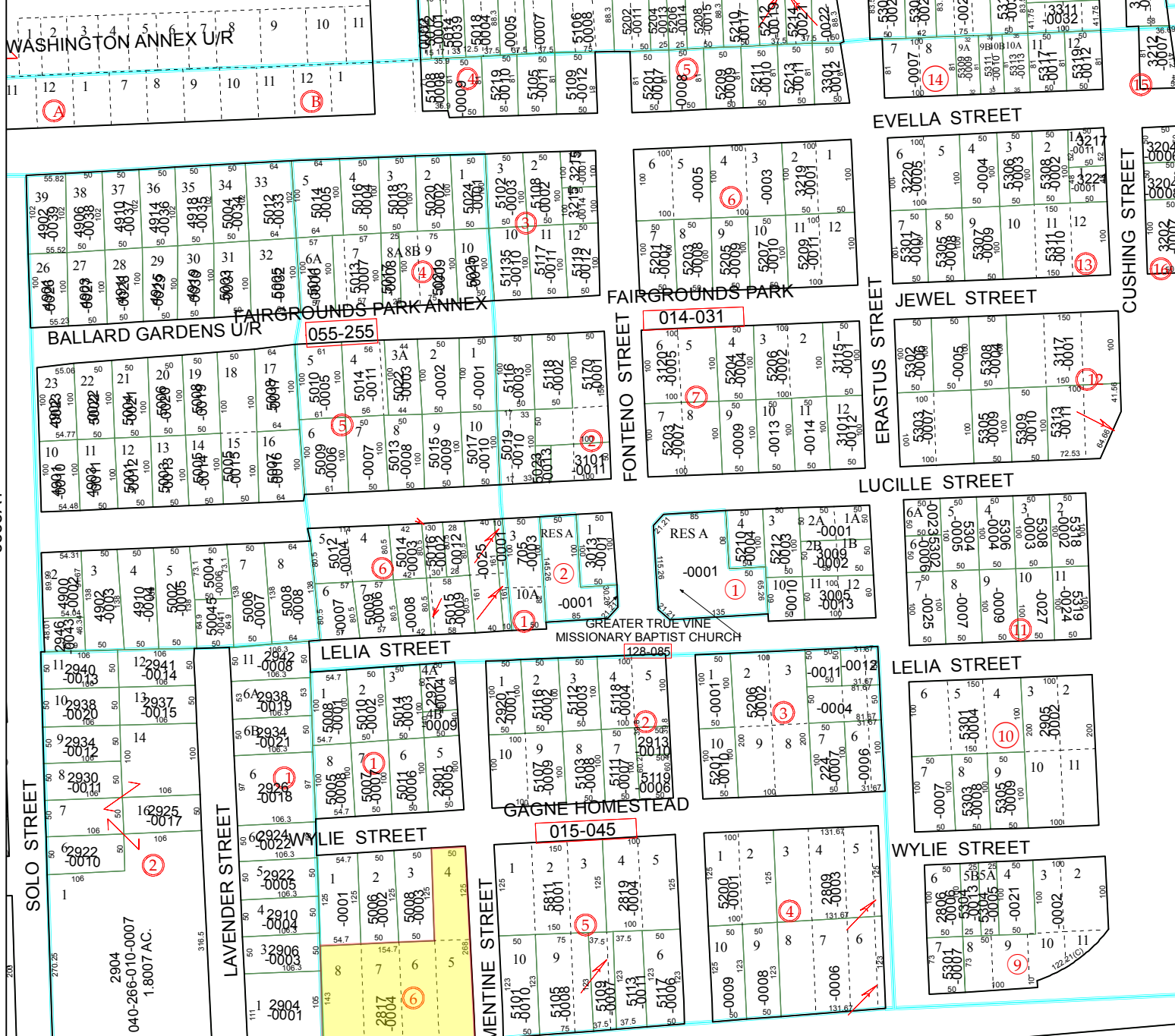
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

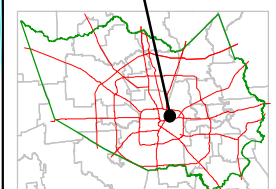
Harris County Appraisal District



0 100 200
 PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3



2904
 040-266-010-0007
 1.8007 AC.

EXHIBIT 1

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0207
Date: January 12, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of January, 2013, we find the following:

Title Vested In:

Greater Mount Nebo Baptist Church (by Deed filed for record under Harris County Clerk's File No. G189795)

Property Description: (Map ID# 8) (Tax ID# 014-144-000-004)

Lots Four (4), Five (5), Six (6), Seven (7) and Eight (8), in Block Six (6), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

EXHIBIT 1

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



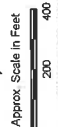
Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP

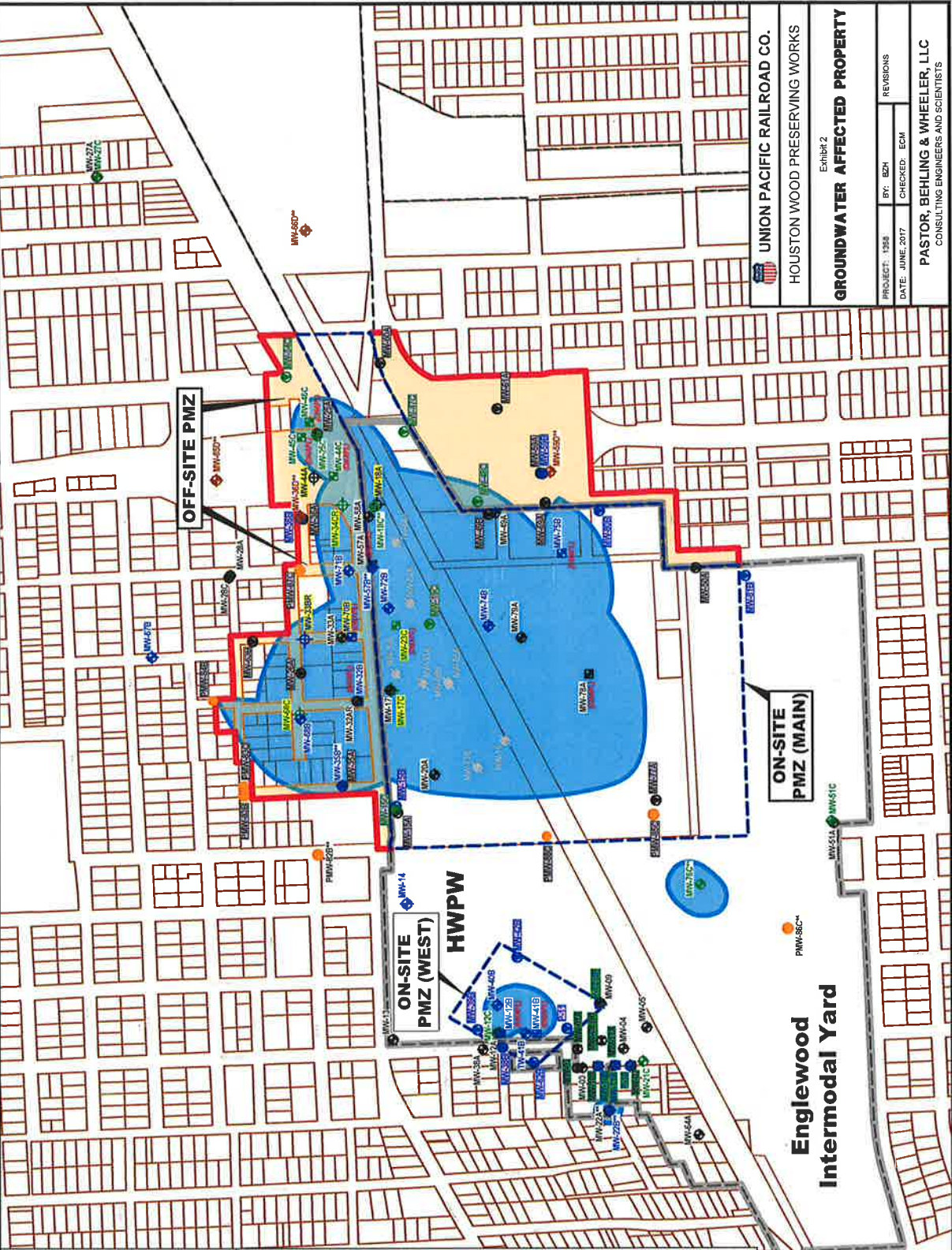
EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIS)
- A-TZ Monitoring Well Location
- B-CZ/B-TZ Monitoring Well Location
- C-TZ Monitoring Well Location
- D-TZ Monitoring Well Location
- Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- Alternate Groundwater Point of Exposure (POE)
- Attenuation Monitoring Point (AMP)
- RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (POC) well.
 2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Source:
 Parcel Boundaries: City of Houston Geographic Information & Mapping System
 Aerial: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISIONS
DATE: JUNE, 2017	BY: BZN
	CHECKED: ECM
PASTOR, BEHLING & WHEELER, LLC	
CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- - - UPRR Property Boundary
- - - Property Boundary (GIMS)
- - - City of Houston-Owned ROW
- - - Off-Site PMZ
- - - Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

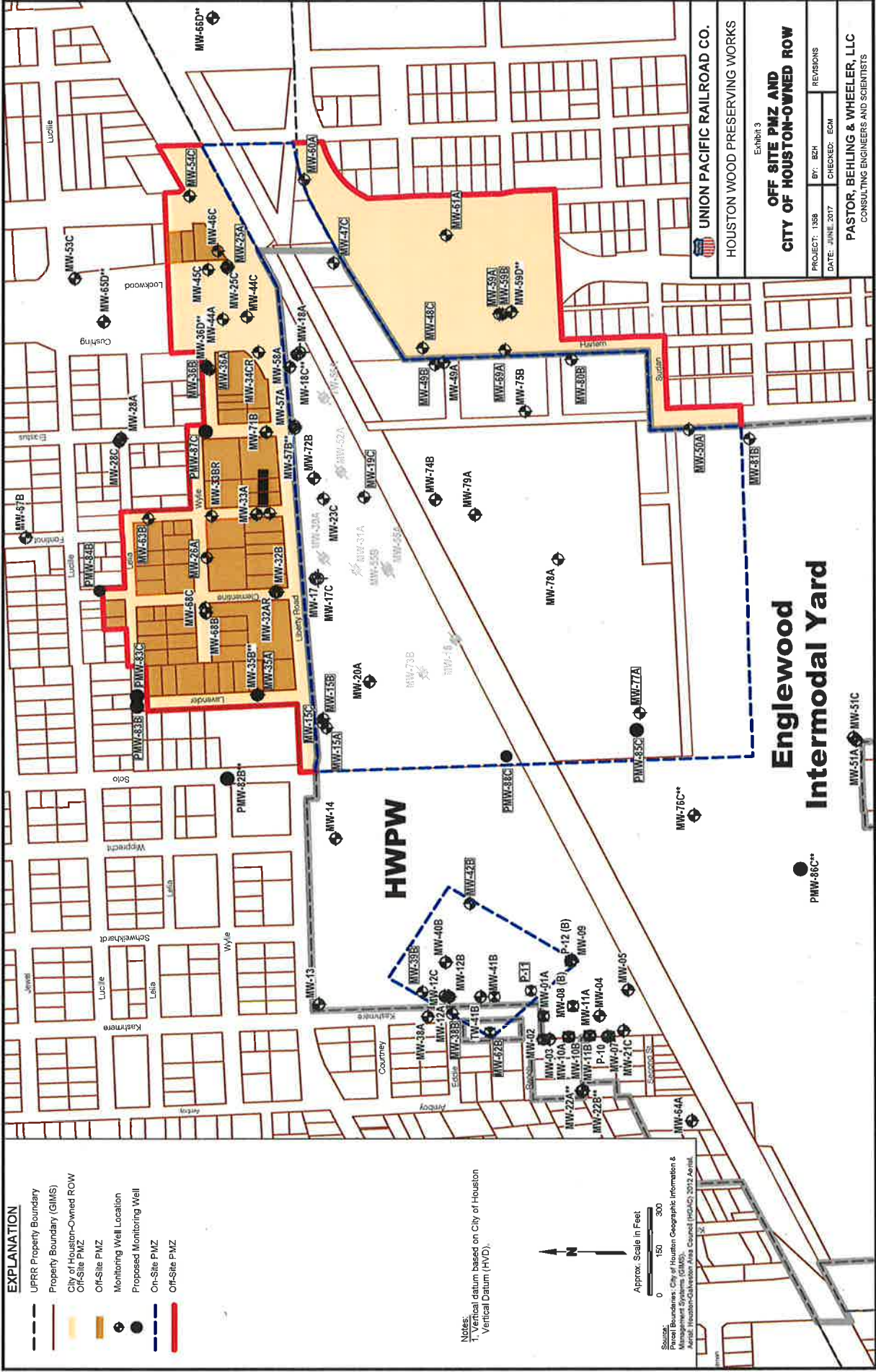
Notes:
1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3	
OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: EGM
REVISIONS	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-58C**

MW-76C**

PMW-35C MW-77A

MW-78A

MW-74B

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

MW-51A

MW-48C

MW-51A

MW-59A

MW-49A

MW-59A

MW-48C

MW-51A

MW-59D**

MW-59B

MW-48C

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 9

HCAD ID - 0141400000006

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot six (6) in Block (2) Of Finn Subdivision, A subdivision in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Martha Gilliam an address of 5119 Wylie, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 22 day of April, 2015.

[OWNER]

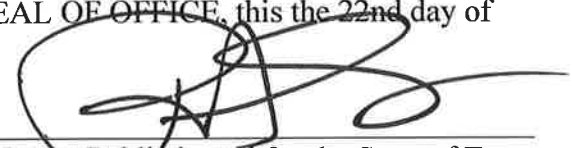
By: _____

Name: Martha Gilliam

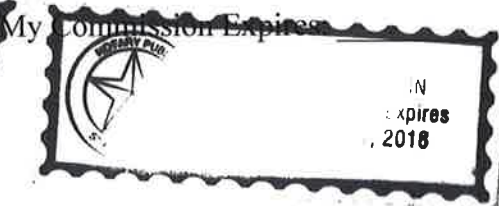
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 22nd day of April, 2015, personally appeared , Martha Gilliam, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 22nd day of April, 2015.



Notary Public in and for the State of Texas,
County of Harris



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

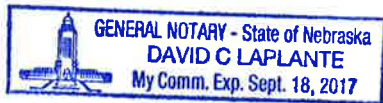
By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

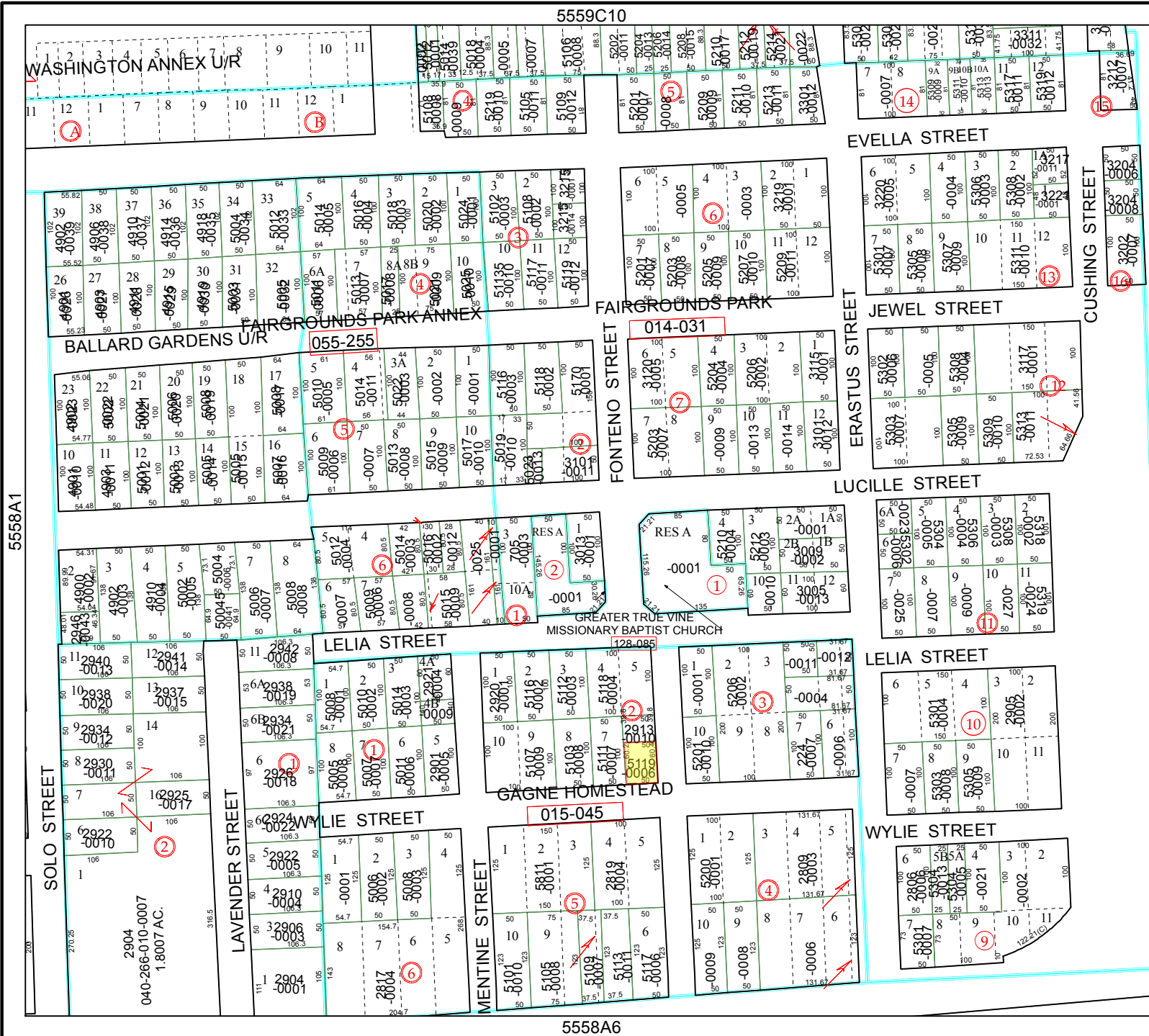
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



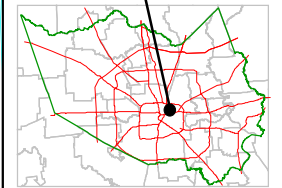
Harris County Appraisal District



0 100 200
 PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5558A6

5559C10

2904
 040-266-010-0007
 1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9443

Date: December 21, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 16th day of December, 2012, we find the following:

Title Vested In:

Martha Gilliam (by Warranty Deed filed for record under Harris County Clerk's File Nos. E690955 being refiled under E855995 and by Muniment of Title under PW# 370718)

Property Description: (Map ID#9) (Tax ID# 014-140-000-0006)

A tract of land containing 3,010.00 square feet, more or less, out of Lot 6, Block 2 out of Finn Subdivision of Shares 2 and 3, a part of the Gagne Homestead, out of Harris and Wilson two league grant in Harris County Texas, said lot as recorded in Volume 1, Page 55 of the Harris County Map Records, Harris County, Texas, being more particularly described by metes and bounds as follows:

BEGINNING at a 1/2 inch iron rod found for the southwesterly corner of Lot 6 as described above and of the tract herein described, same point also being on the northerly right-of-way of Wylie Street (60-feet R.O.W.);

THENCE, with an internal angle of 90°00'00", a distance of 60.20 feet to a 1/2 inch iron rod set for the northwesterly corner of the tract herein described;

THENCE, with an internal angle of 90°00'00", a distance of 50.00 feet to a 1/2 inch iron rod set for the northeasterly corner of the tract herein described same point being on the westerly right-of-way of Fontinot Street (40-feet R.O.W.);

THENCE, with an internal angle of 90°00'00", a distance of 60.20 feet to a 1/2 inch iron rod set for the southeasterly corner of the tract herein described;

THENCE, with an internal angle of 90°00'00", a distance of 50.00 feet to the POINT OF BEGINNING and containing 3,010.00 square feet of land, more or less.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:


None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statue, in contract, or in tort.

Texas American Title Company



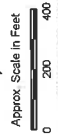
Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP

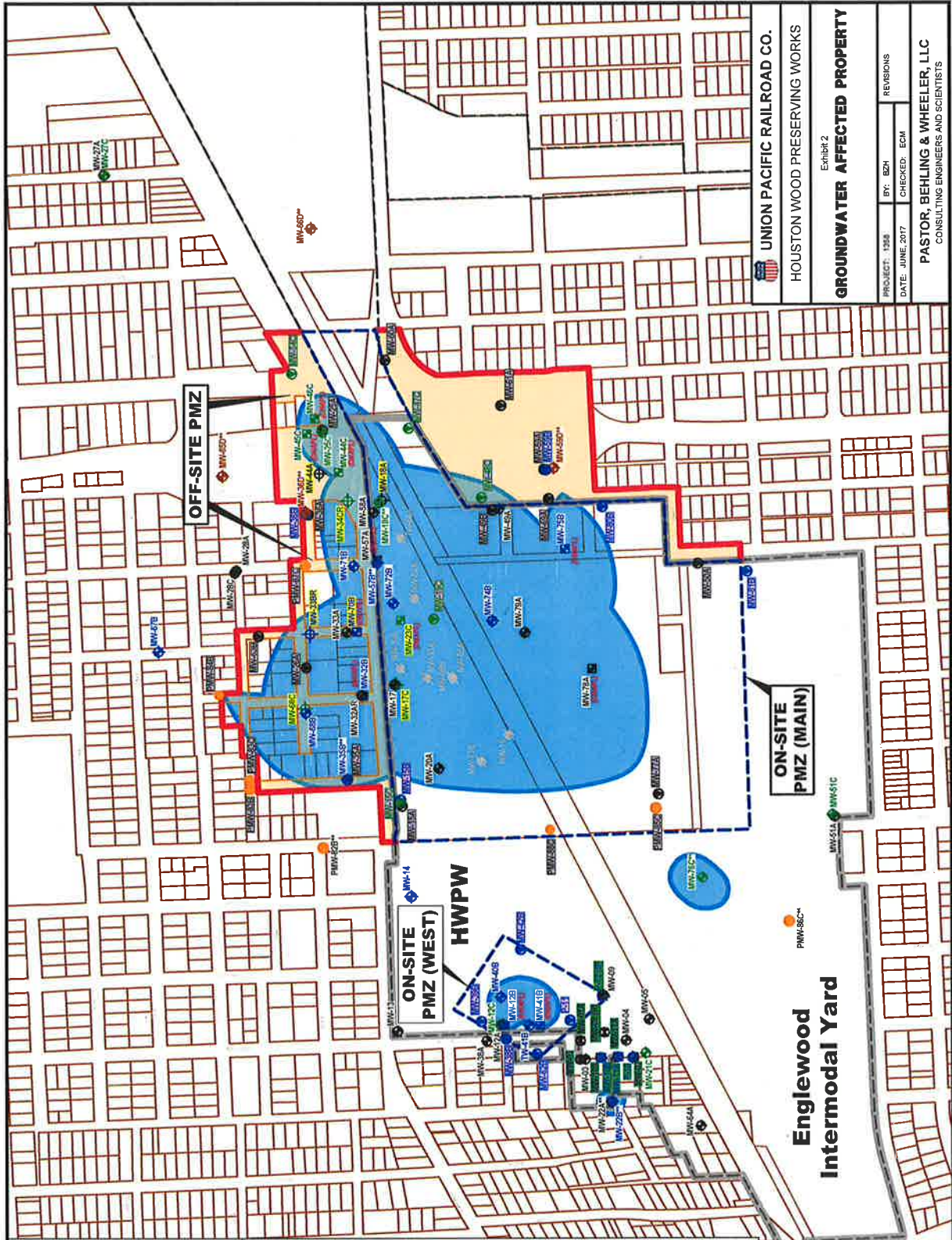
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non-aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISED:
DATE: JUNE, 2017	CHECKED: ECM
DY: BZN	REVISIONS:
PASTOR, BEHLING & WHEELER, LLC	
CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- - - UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- On-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

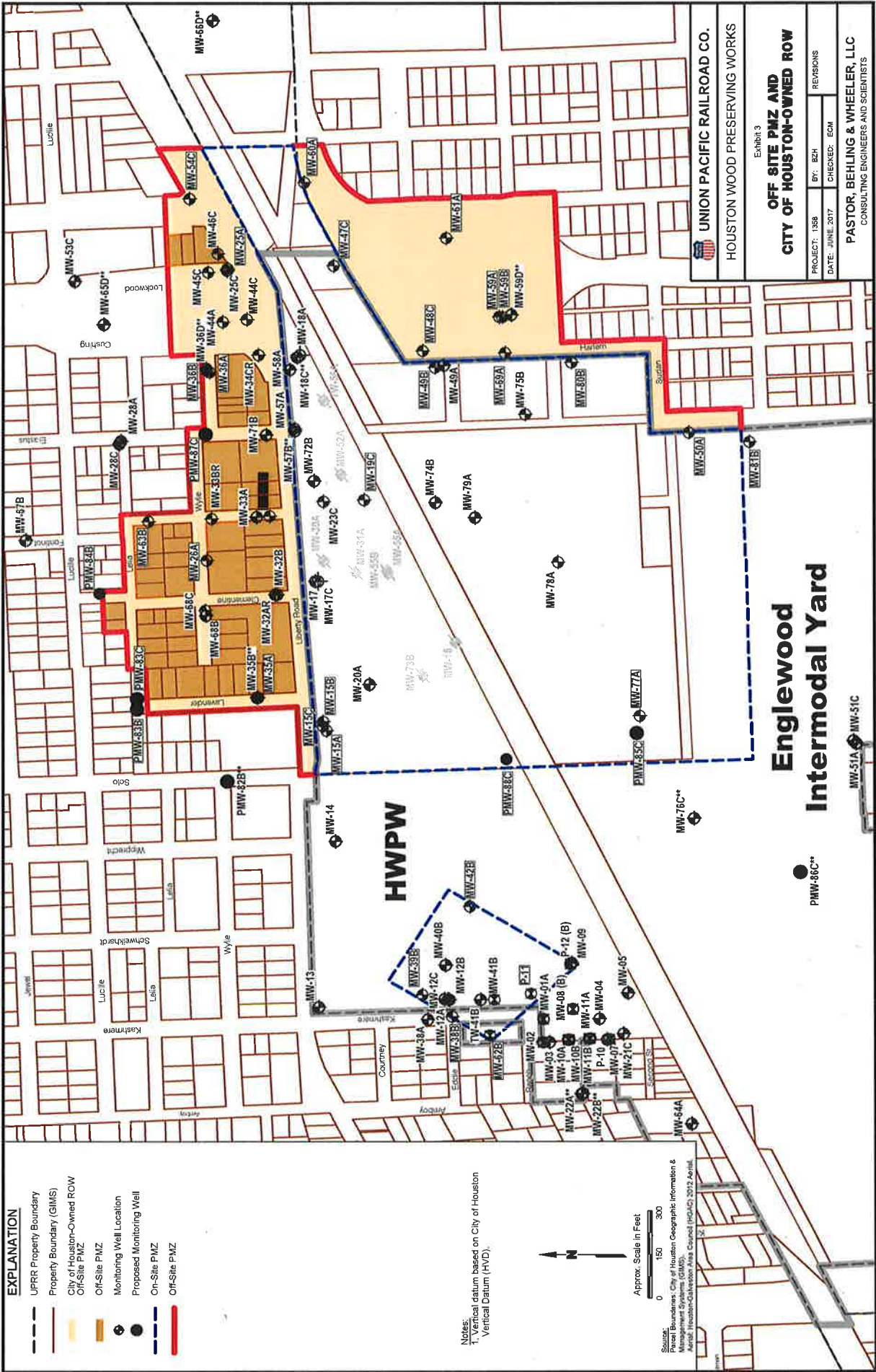
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



Englewood Intermodal Yard

UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 10

HCAD ID - 0141430000001

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot one (1), Two (2) and Three (3) in Block Fivet (5), Of Finn Subdivision, A subdivision in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Beatrice Benson, as heir and devisee of the Estate of Tillie Potts Benson with an address of 1003 Saddle Rock, Texas 77088. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

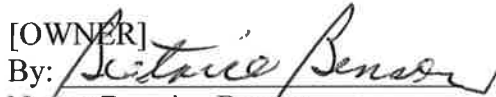
This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 22 day of April, 2015.

[OWNER]

By:

Name: Beatrice Benson,



STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 22nd day of April, 2015, personally appeared , Beatrice Benson,, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 22nd day of April, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

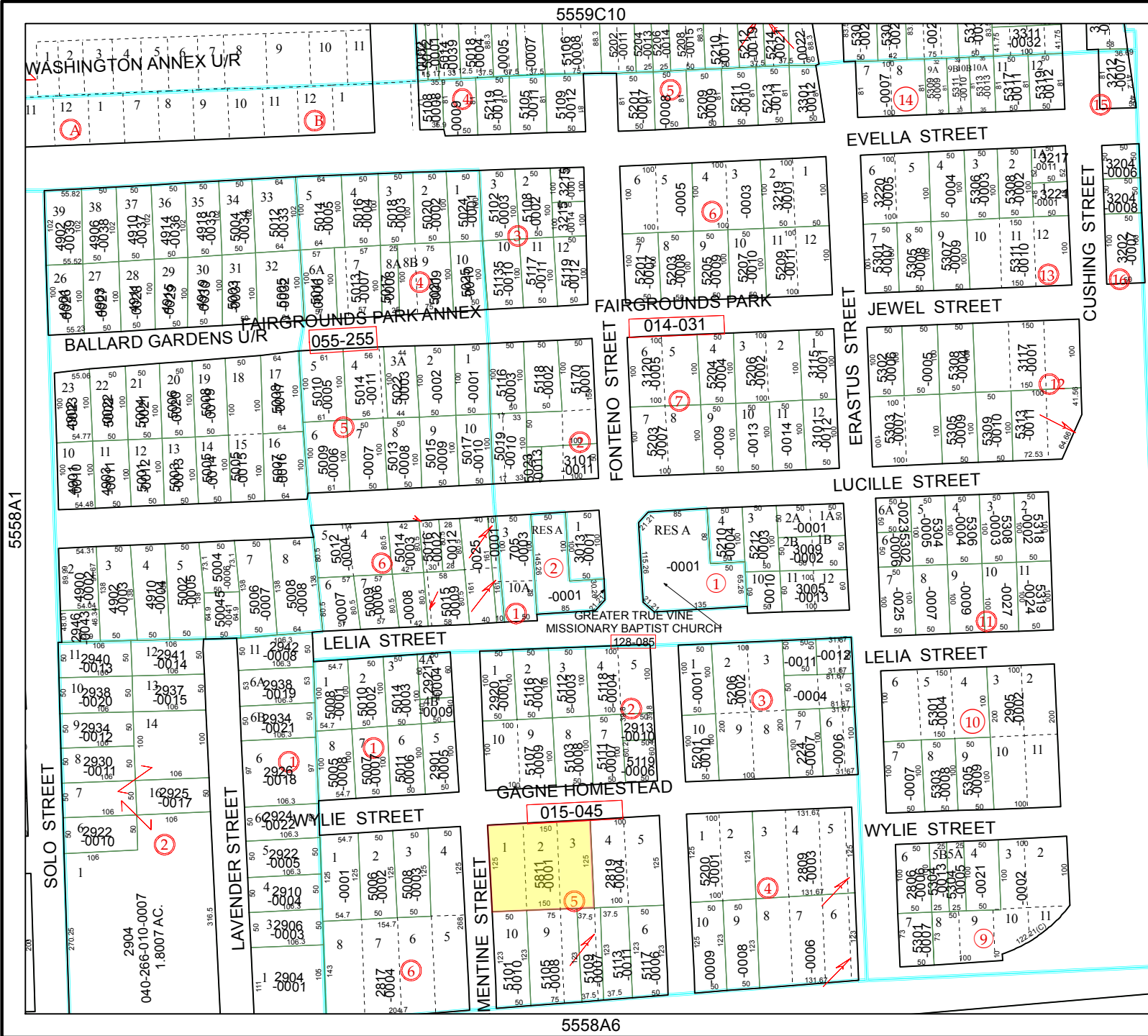
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



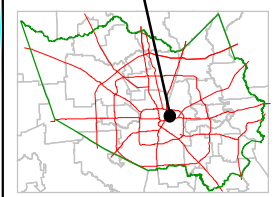
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12



**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0129

Date: January 7, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 27th day of December, 2012, we find the following:

Title Vested In:

Tillie Potts Benson (by Deed filed for record under Volume 1821, Page 313 of the Deed Records of Harris County, Texas and by the Estate of Alex Potts - Probate #48382)

Property Description: (Map ID# 10) (Tax ID# 014-143-000-0001)

Lots One (1), Two (2) and Three (3), in Block Five (5), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Wylie Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

- 2) By City of Houston, Code of Ordinances, a Notice of Public Hearing was filed under Harris County Clerk's File No. Y844718, it was determined there may be a necessity for a demolition lien against the herein described property. Further, pursuant to said ordinance, an "Order of the Hearing Official" dated November 3, 2005, recorded under Harris County Clerk's File No. Y883003.
- 3) Notice of involuntary lien in connection with demolition (city tax account No : 014-143-000-0001) filed on January 17, 2008 , under Harris County Clerk's File No. 20080027828, executed by the City of Houston, claiming a lien on the subject property, against Tillie Potts Benson, as owner, in the amount of \$1,220.00 , plus cost and interest.

Involuntary Liens:


- 1) We find reference to Cause No. 2012-47859, in the District Court of Harris County, Texas, styled Harris County, et al vs. Tillie Potts Benson. It is assumed that said cause of action is for delinquent taxes due on subject property.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

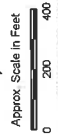
EXHIBIT 2

AFFECTED PROPERTY MAP

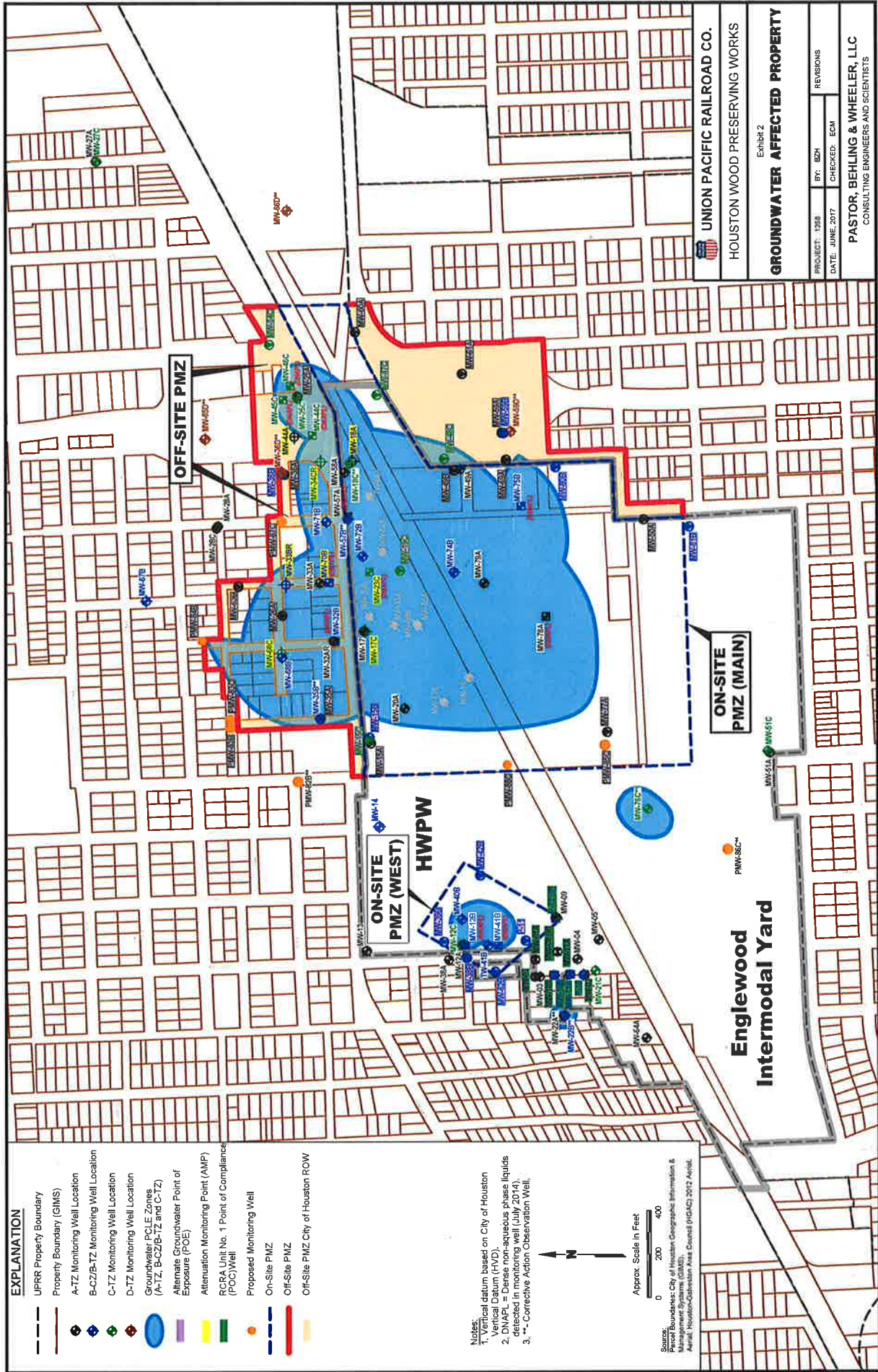
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery
 Aerial, Topographic, and Aerial Imagery (TIGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

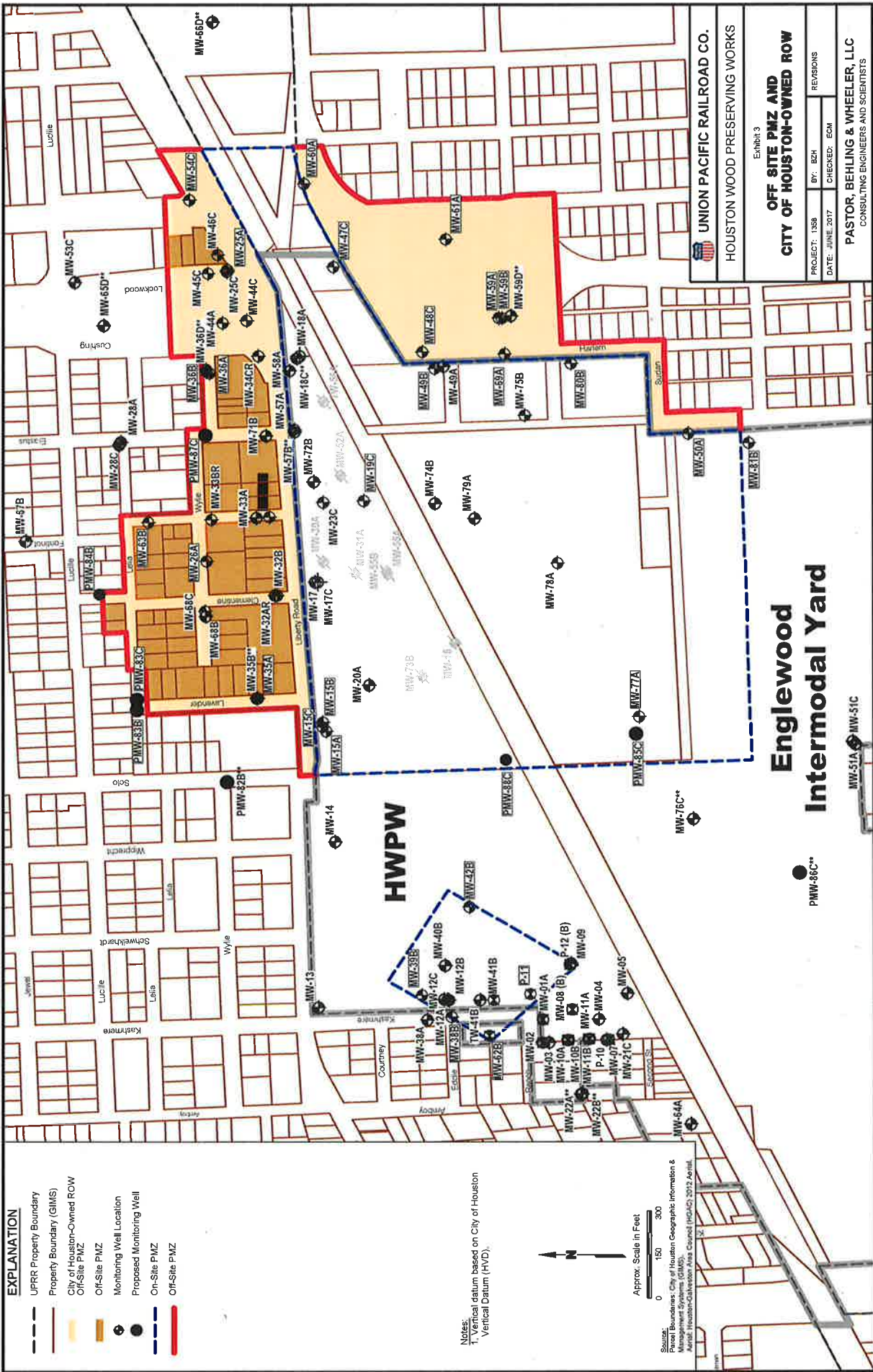
GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP



EXPLANATION

- UPRR Property Boundary
- - - Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet
 0 150 300

Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 3

OFF SITE PMZ AND
 CITY OF HOUSTON-OWNED ROW

PROJECT: 188
 DATE: JUNE 2017

BY: BZH
 CHECKED: ECM

REVISIONS

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

**Englewood
 Intermodal Yard**

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

HWPW

MW-50A MW-50B

MW-59A MW-59B MW-59D**

MW-48C MW-49A MW-49B MW-58A MW-58B MW-58C MW-58D**

MW-47C MW-47D

MW-36D** MW-36E** MW-36F** MW-36G** MW-36H** MW-36I** MW-36J** MW-36K** MW-36L** MW-36M** MW-36N** MW-36O** MW-36P** MW-36Q** MW-36R** MW-36S** MW-36T** MW-36U** MW-36V** MW-36W** MW-36X** MW-36Y** MW-36Z**

MW-35A MW-35B MW-35C MW-35D** MW-35E** MW-35F** MW-35G** MW-35H** MW-35I** MW-35J** MW-35K** MW-35L** MW-35M** MW-35N** MW-35O** MW-35P** MW-35Q** MW-35R** MW-35S** MW-35T** MW-35U** MW-35V** MW-35W** MW-35X** MW-35Y** MW-35Z**

MW-34A MW-34B MW-34C MW-34D** MW-34E** MW-34F** MW-34G** MW-34H** MW-34I** MW-34J** MW-34K** MW-34L** MW-34M** MW-34N** MW-34O** MW-34P** MW-34Q** MW-34R** MW-34S** MW-34T** MW-34U** MW-34V** MW-34W** MW-34X** MW-34Y** MW-34Z**

MW-33A MW-33B MW-33C MW-33D** MW-33E** MW-33F** MW-33G** MW-33H** MW-33I** MW-33J** MW-33K** MW-33L** MW-33M** MW-33N** MW-33O** MW-33P** MW-33Q** MW-33R** MW-33S** MW-33T** MW-33U** MW-33V** MW-33W** MW-33X** MW-33Y** MW-33Z**

MW-32A MW-32B MW-32C MW-32D** MW-32E** MW-32F** MW-32G** MW-32H** MW-32I** MW-32J** MW-32K** MW-32L** MW-32M** MW-32N** MW-32O** MW-32P** MW-32Q** MW-32R** MW-32S** MW-32T** MW-32U** MW-32V** MW-32W** MW-32X** MW-32Y** MW-32Z**

MW-31A MW-31B MW-31C MW-31D** MW-31E** MW-31F** MW-31G** MW-31H** MW-31I** MW-31J** MW-31K** MW-31L** MW-31M** MW-31N** MW-31O** MW-31P** MW-31Q** MW-31R** MW-31S** MW-31T** MW-31U** MW-31V** MW-31W** MW-31X** MW-31Y** MW-31Z**

MW-30A MW-30B MW-30C MW-30D** MW-30E** MW-30F** MW-30G** MW-30H** MW-30I** MW-30J** MW-30K** MW-30L** MW-30M** MW-30N** MW-30O** MW-30P** MW-30Q** MW-30R** MW-30S** MW-30T** MW-30U** MW-30V** MW-30W** MW-30X** MW-30Y** MW-30Z**

MW-29A MW-29B MW-29C MW-29D** MW-29E** MW-29F** MW-29G** MW-29H** MW-29I** MW-29J** MW-29K** MW-29L** MW-29M** MW-29N** MW-29O** MW-29P** MW-29Q** MW-29R** MW-29S** MW-29T** MW-29U** MW-29V** MW-29W** MW-29X** MW-29Y** MW-29Z**

MW-28A MW-28B MW-28C MW-28D** MW-28E** MW-28F** MW-28G** MW-28H** MW-28I** MW-28J** MW-28K** MW-28L** MW-28M** MW-28N** MW-28O** MW-28P** MW-28Q** MW-28R** MW-28S** MW-28T** MW-28U** MW-28V** MW-28W** MW-28X** MW-28Y** MW-28Z**

MW-27A MW-27B MW-27C MW-27D** MW-27E** MW-27F** MW-27G** MW-27H** MW-27I** MW-27J** MW-27K** MW-27L** MW-27M** MW-27N** MW-27O** MW-27P** MW-27Q** MW-27R** MW-27S** MW-27T** MW-27U** MW-27V** MW-27W** MW-27X** MW-27Y** MW-27Z**

MW-26A MW-26B MW-26C MW-26D** MW-26E** MW-26F** MW-26G** MW-26H** MW-26I** MW-26J** MW-26K** MW-26L** MW-26M** MW-26N** MW-26O** MW-26P** MW-26Q** MW-26R** MW-26S** MW-26T** MW-26U** MW-26V** MW-26W** MW-26X** MW-26Y** MW-26Z**

MW-25A MW-25B MW-25C MW-25D** MW-25E** MW-25F** MW-25G** MW-25H** MW-25I** MW-25J** MW-25K** MW-25L** MW-25M** MW-25N** MW-25O** MW-25P** MW-25Q** MW-25R** MW-25S** MW-25T** MW-25U** MW-25V** MW-25W** MW-25X** MW-25Y** MW-25Z**

MW-24A MW-24B MW-24C MW-24D** MW-24E** MW-24F** MW-24G** MW-24H** MW-24I** MW-24J** MW-24K** MW-24L** MW-24M** MW-24N** MW-24O** MW-24P** MW-24Q** MW-24R** MW-24S** MW-24T** MW-24U** MW-24V** MW-24W** MW-24X** MW-24Y** MW-24Z**

MW-23A MW-23B MW-23C MW-23D** MW-23E** MW-23F** MW-23G** MW-23H** MW-23I** MW-23J** MW-23K** MW-23L** MW-23M** MW-23N** MW-23O** MW-23P** MW-23Q** MW-23R** MW-23S** MW-23T** MW-23U** MW-23V** MW-23W** MW-23X** MW-23Y** MW-23Z**

MW-22A MW-22B MW-22C MW-22D** MW-22E** MW-22F** MW-22G** MW-22H** MW-22I** MW-22J** MW-22K** MW-22L** MW-22M** MW-22N** MW-22O** MW-22P** MW-22Q** MW-22R** MW-22S** MW-22T** MW-22U** MW-22V** MW-22W** MW-22X** MW-22Y** MW-22Z**

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 16

HCAD ID - 0141430000006

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Six (6) in Block Five (5), of Finn Subdivision out of Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Jorge D. Rivera (Owner) with an address of 5117 Liberty Road, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

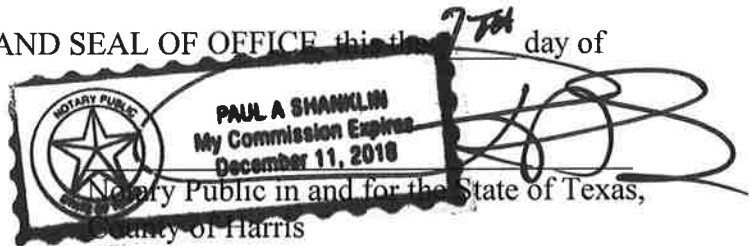
Executed this 7th day of April, 2015.

By: Jorge Rivera
Name: Jorge D. Rivera

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 7th day of April, 2015, personally appeared Jorge D. Rivera known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 7th day of April, 2015.



My Commission Expires: 12-11-2018

Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tonyk Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

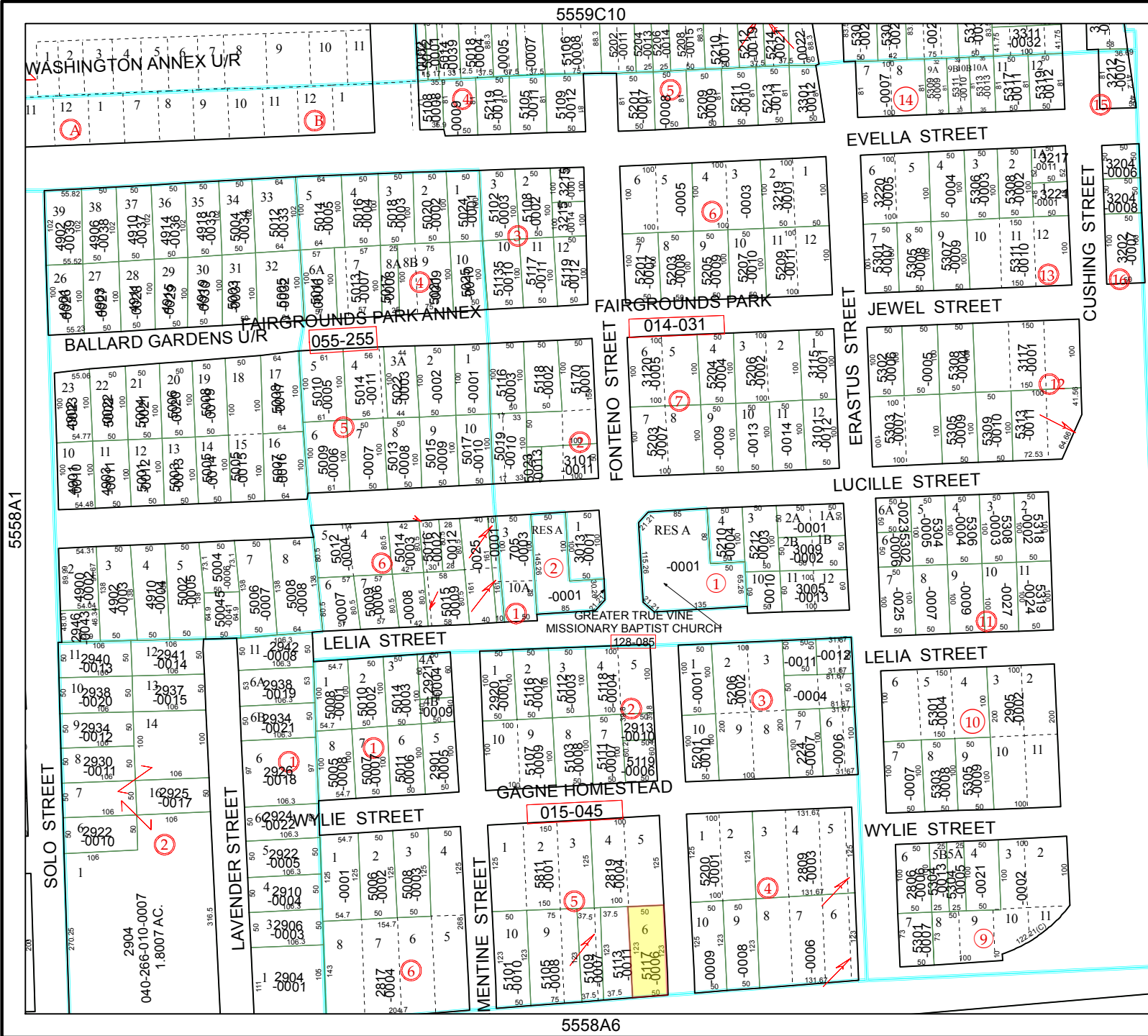
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



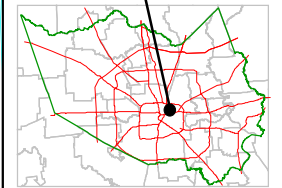
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0183

Date: January 11, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 7th day of January, 2013, we find the following:

Title Vested In:

Jorge D. Rivera (by Warranty Deed filed for record under Harris County Clerk's File No. 20070252540)

Property Description: (Map ID# 16) (Tax ID# 014-143-000-0006)

Lot Six (6), in Block Five (5), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on August 29, 1957, filed under Volume 2950, Page 38 of the Deed Records of Harris County, Texas, executed by the City of Houston, showing portions of Liberty Road, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

- 2) A Vendor's Lien was retained in Deed dated April 20, 2007, filed for record on April 26, 2007, under Harris County Clerk's File No. 20070252540, executed by Martin Halick, to Jorge D. Rivera, securing one certain promissory note of even date therewith in the principal amount of \$56,637.00, payable to the order of Crosby State Bank; said note and lien being additionally secured by Deed of Trust of even date therewith, in favor of Mark G. Mulloy, as Trustee, together with all terms, conditions and stipulations contained therein, including any additional indebtedness secured thereby, filed for record on April 26, 2007, under Harris County Clerk's File No. 20070252541.

Involuntary Liens:

- 1) Abstract of Judgment filed May 24, 2005, under Harris County Clerk's File No. Y490426, styled the State of Texas, vs. Jorge Rivera, in the principal amount of \$679.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

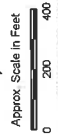
EXHIBIT 2

AFFECTED PROPERTY MAP

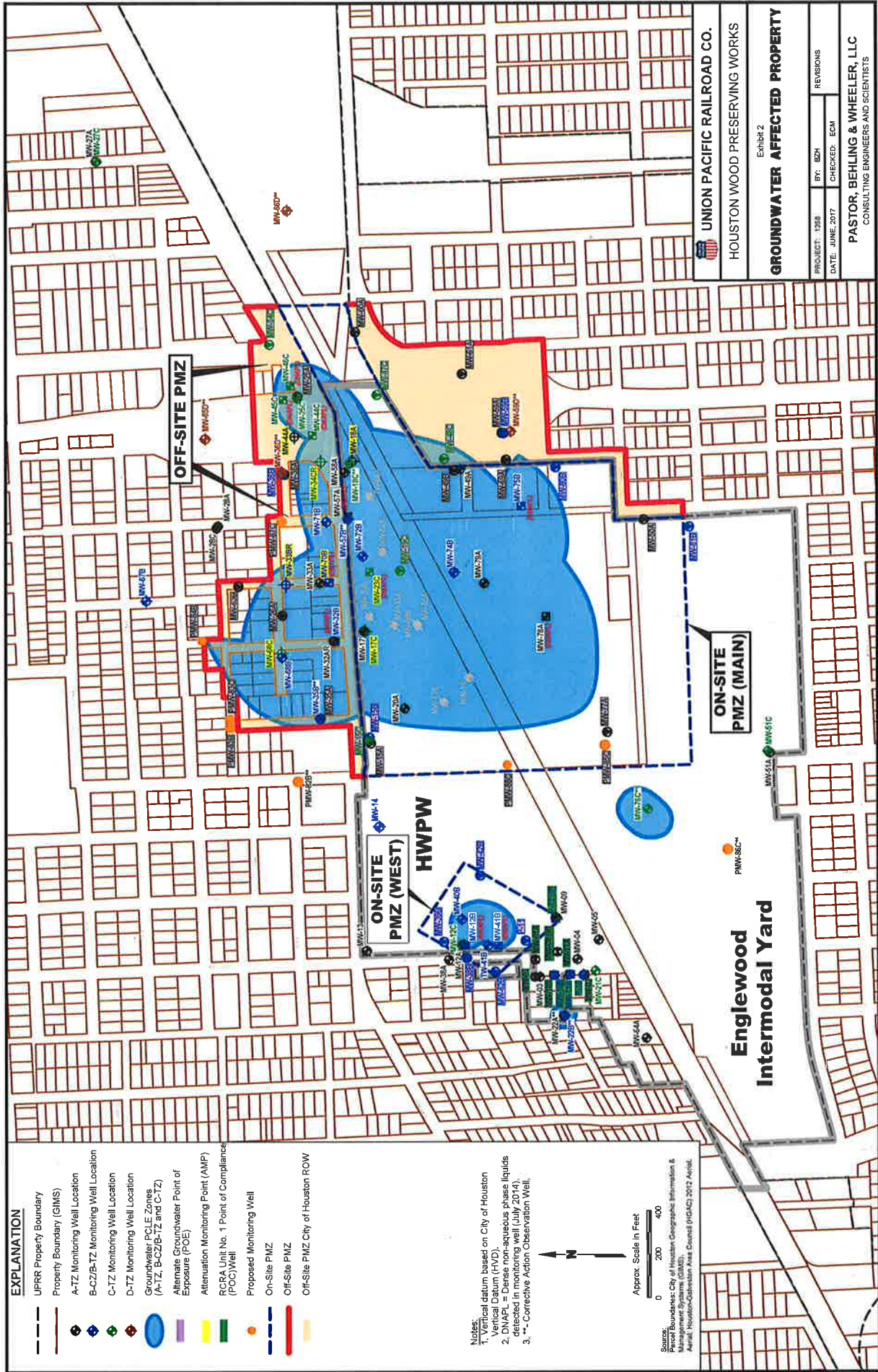
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCL E Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC) Well.
2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery
 Aerial, Topographic, and Aerial Imagery (TIGAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Exhibit 2		
GROUNDWATER AFFECTED PROPERTY		
PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 23

HCAD ID - 0140410000007

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lots Seven (7) in Block Nine (9), of Fairground Park Addition, subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 81, page 357 of the Deed Records of Harris County, Texas.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was 57so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Geneva Crump (Owner) with an address of 5301 Liberty Road, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 10th day of March, 2015.


Name: Geneva Crump, Owner

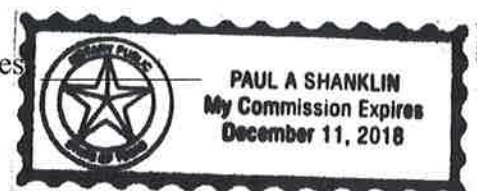
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the _ day of March, 2015, personally appeared Geneva Crump, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 10th day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

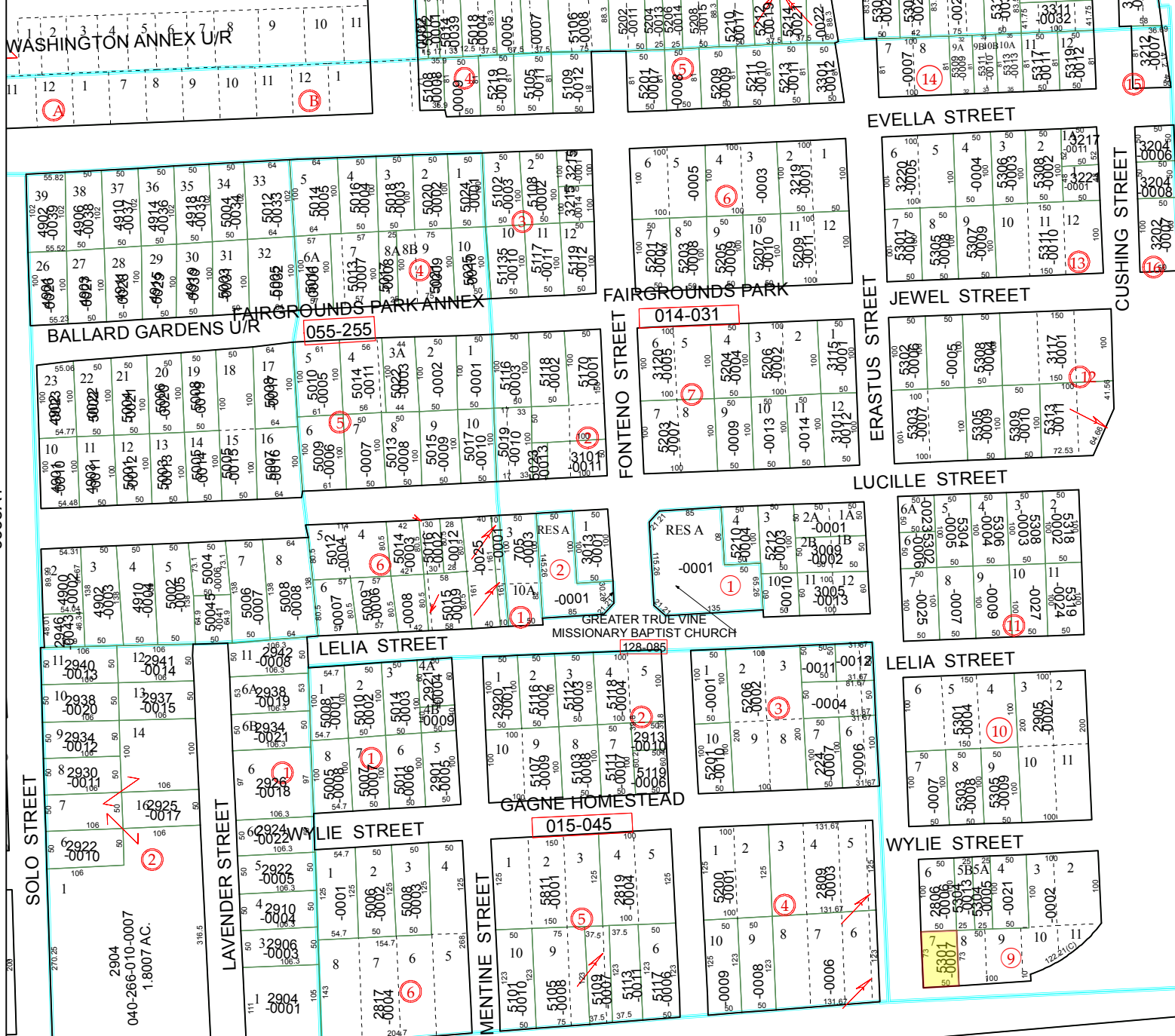
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

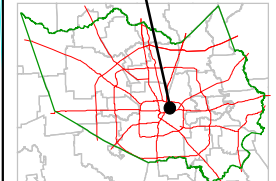
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3



2904
 040-266-010-0007
 1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9064
Date: December 5, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 3rd day of December, 2012, we find the following:

Title Vested In:

Geneva Henry, a/k/a Geneva Crump (by Deed filed for record under Harris County Clerk's File No. C159988)

Property Description: (Map ID# 23) (Tax ID# 014-041-000-0007)

Lot Seven (7), in Block Nine (9), of Fairground Park, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 81, Page 357 of the Deed Records of Harris County, Texas, SAVE AND EXCEPT the South 3 feet thereof as conveyed to Harris County by deed filed for record under Volume 959, Page 357 of the Deed Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Notice of Public Hearing filed December 12, 2011, under Harris County Clerk's File No. 20110517152, pursuant of said notice a "Building and Standards Commission Order" dated January 11, 2012 and filed for record January 13, 2012, under Harris County Clerk's file No. 20120018233, it was determined that subject property be posted as a dangerous building and must be either repaired or demolished. Pursuant thereto, the following: Notice of Intent to File Lien in connection with demolition, filed on August 28, 2012 , under Harris County Clerk's file No. 20120395123.

Involuntary Liens:

- 1) We find reference to Cause No. 2009-42807, in the District Court of Harris County, Texas, styled Houston ISD, etal vs. Geneva Henry, etal. It is assumed that said cause of action is for delinquent taxes due on subject property.
- 2) Abstract of Judgment filed May 12, 2009, under Harris County Clerk's File No. 20090200226, styled Reed Credit Union, vs. Geneva Crump, in the principal amount of \$4,012.00, plus cost, interest and attorney's fees.
- 3) Abstract of Judgment filed December 22, 2010, under Harris County Clerk's File No. 20100543048, styled Houston ISD, etal, vs. Geneva Henry, in the principal amount as set out therein, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company

Darrell Stone

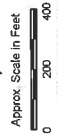
Darrell Stone
Title Examiner

EXHIBIT 2
AFFECTED PROPERTY MAP

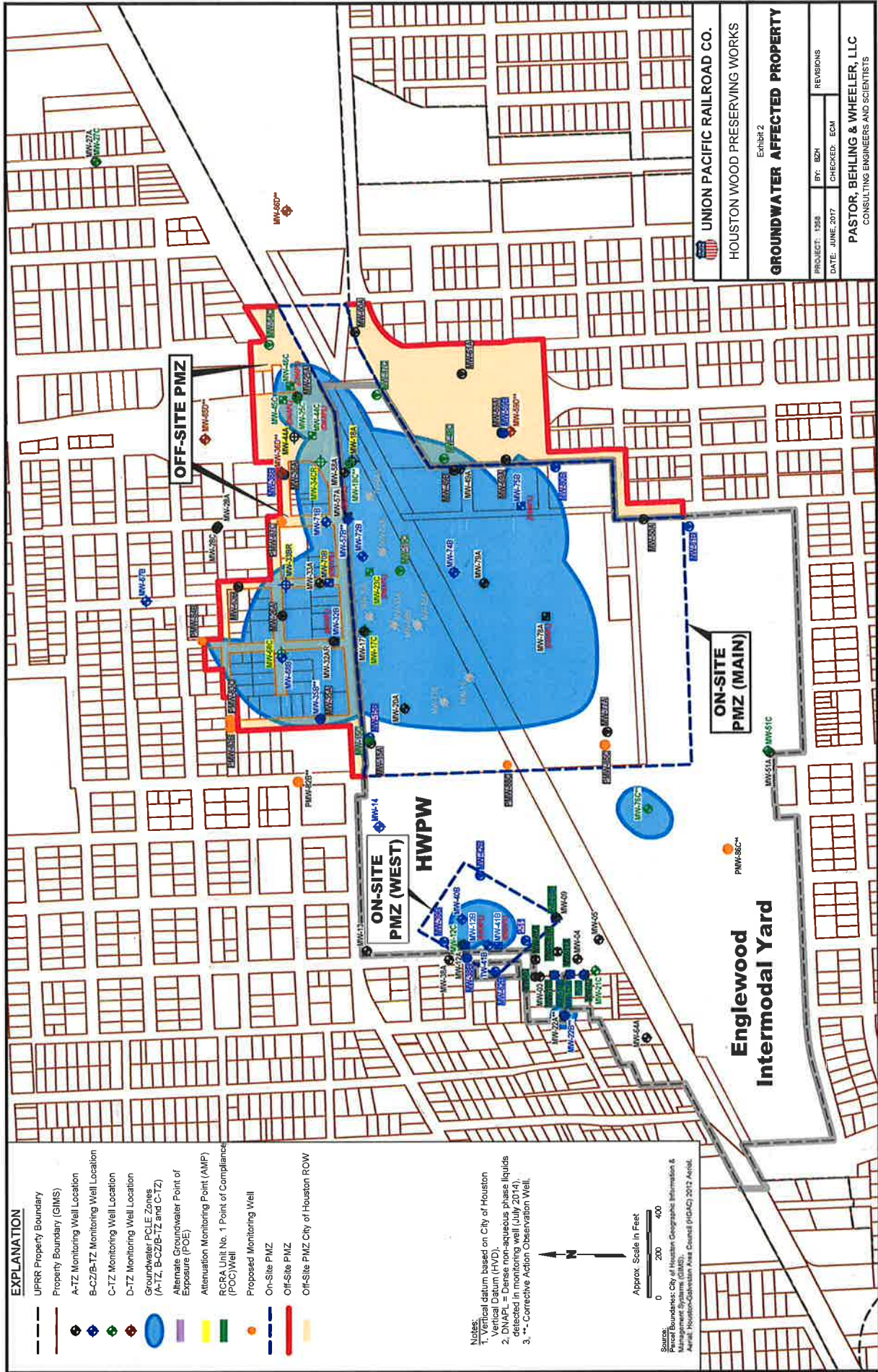
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery (2012)
 Aerial, Topographic, and Aerial Imagery (2012)



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- - - UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

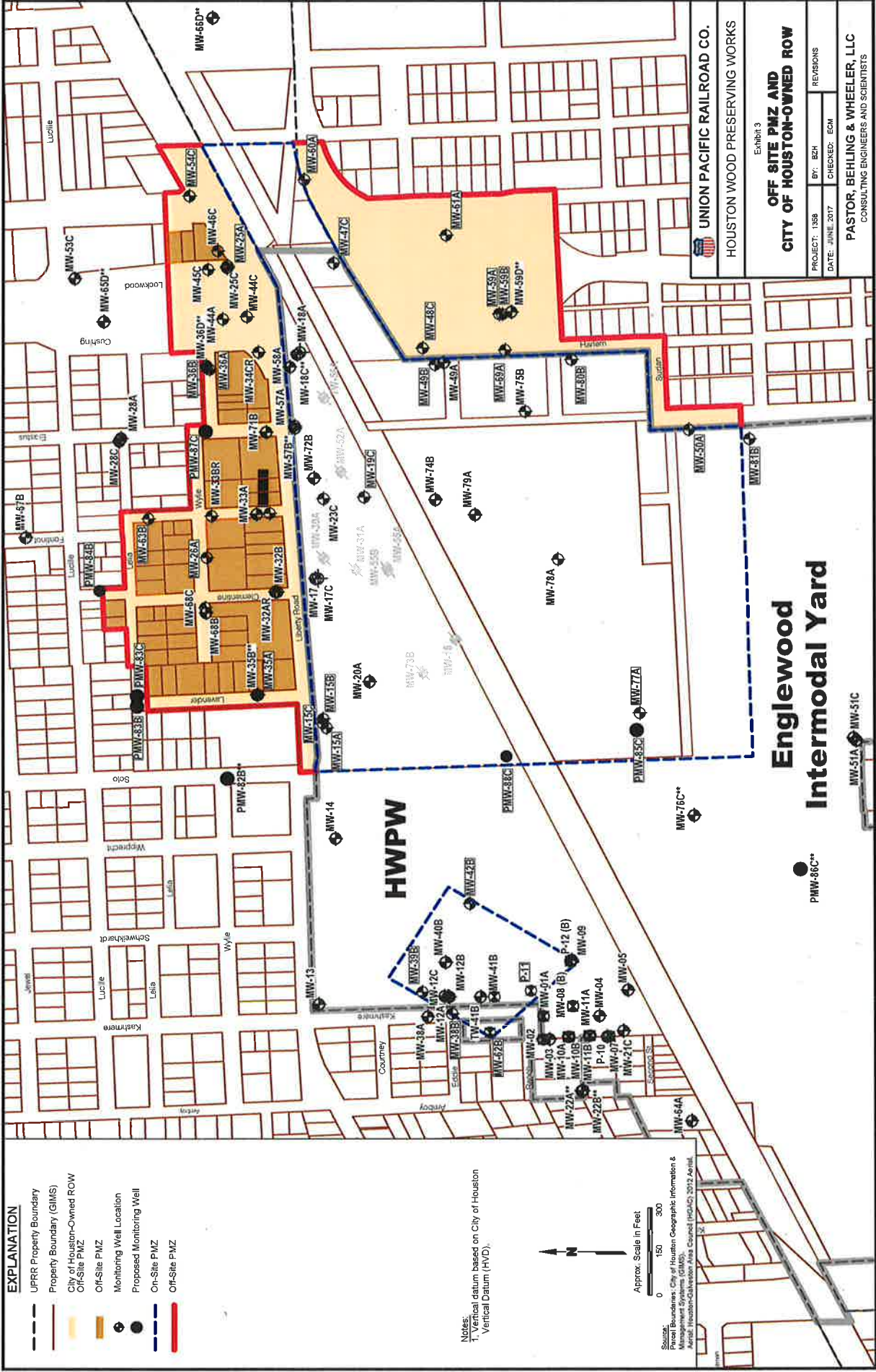
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: EGM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 28

HCAD ID - 0141400000004

Restrictive Covenant

18

STATE OF TEXAS	§
	§
COUNTY OF HARRIS	§

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 4 & 5 in block two (2) in Subdivision of Shares 2 and 3 (Firm Subdivision) of the Gagne Homestead a subdivision in Harris County, Texas, according too the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater True Vine Baptist Church (Owner) with an address of 3010 Fontitont, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 17th day of February, 2015

Greater True Vine Baptist Church

By: Matthew R. Alix Sr.

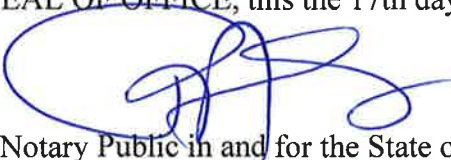
Name: Matthew R. Alix Sr.

Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 17th day of February, 2015, personally appeared Matthew R. Alix Sr., Pastor of Greater True Vine Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 17th day of February, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Sallante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

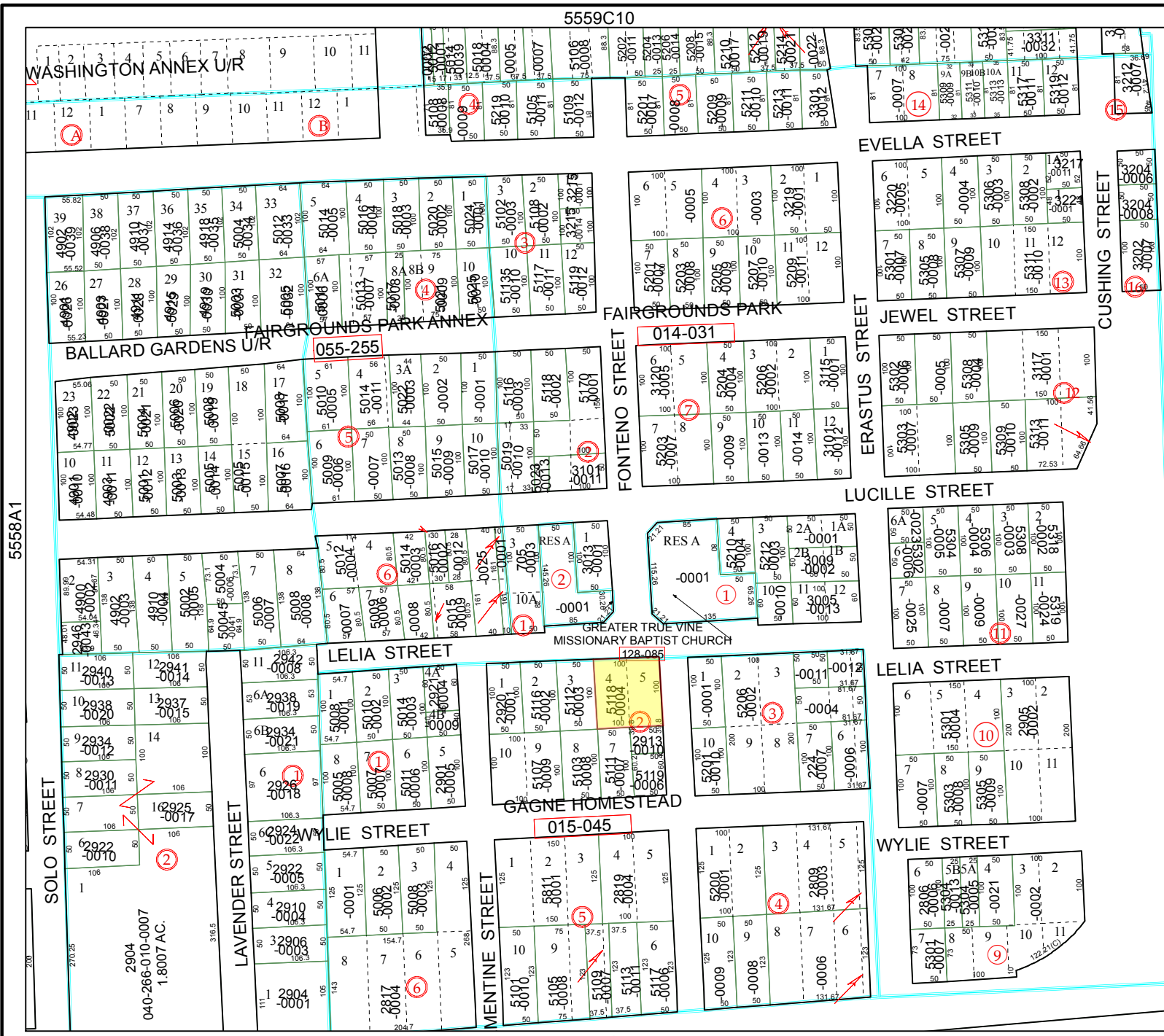
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A1

5558A6

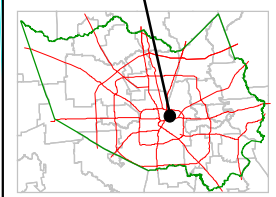
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9441
Date: December 21, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 16th day of December, 2012, we find the following:

Title Vested In:

Greater True Vine Baptist Church (by Warranty Deed filed for record under Harris County Clerk's File No. N995654)

Property Description: (Map ID#28) (Tax ID# 014-140-000-0004)

Lots Four (4) and Five (5), in Block Two (2), of Subdivision of Shares 2 and 3 (Finn Subdivision) of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

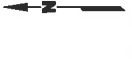
EXHIBIT 2

AFFECTED PROPERTY MAP

- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

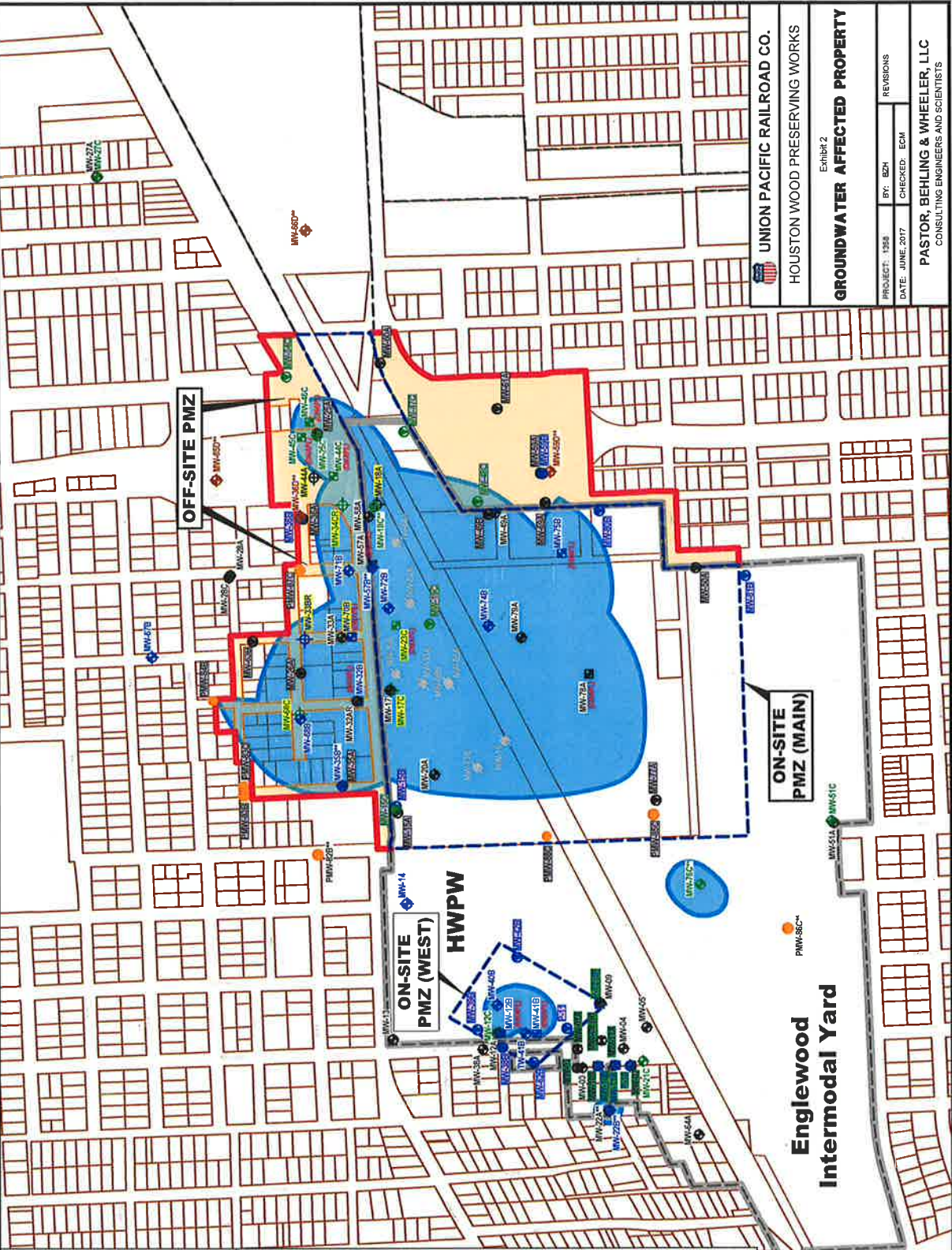
Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Approx. Scale in Feet
0 200 400

Source: City of Houston Geographic Information & Mapping System
Aerial, Topographic Data, and Groundwater Data (GWD) 2012 Aerial.



UNION PACIFIC RAILROAD CO.		Exhibit 2 HOUSTON WOOD PRESERVING WORKS	
		GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	BY: BZN	REVISIONS	
DATE: JUNE, 2017	CHECKED: ECM		
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS			

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 33

HCAD ID - 0141400000009

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Nine (9) in block two (2), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof.)

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Willie Potts, heir and devisee of Maryland Potts (Owner) with an address of 5107 Wylie Street, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 22 day of April, 2015.

By: Willie Potts
Name: Willie Potts

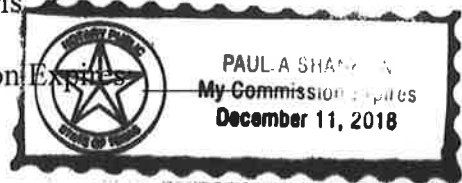
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 22 day of April, 2015, personally appeared Willie Potts Carr, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 22 day of April, 2015.

Paul A. Shank
Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

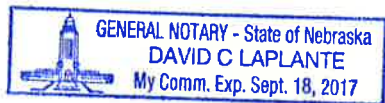
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

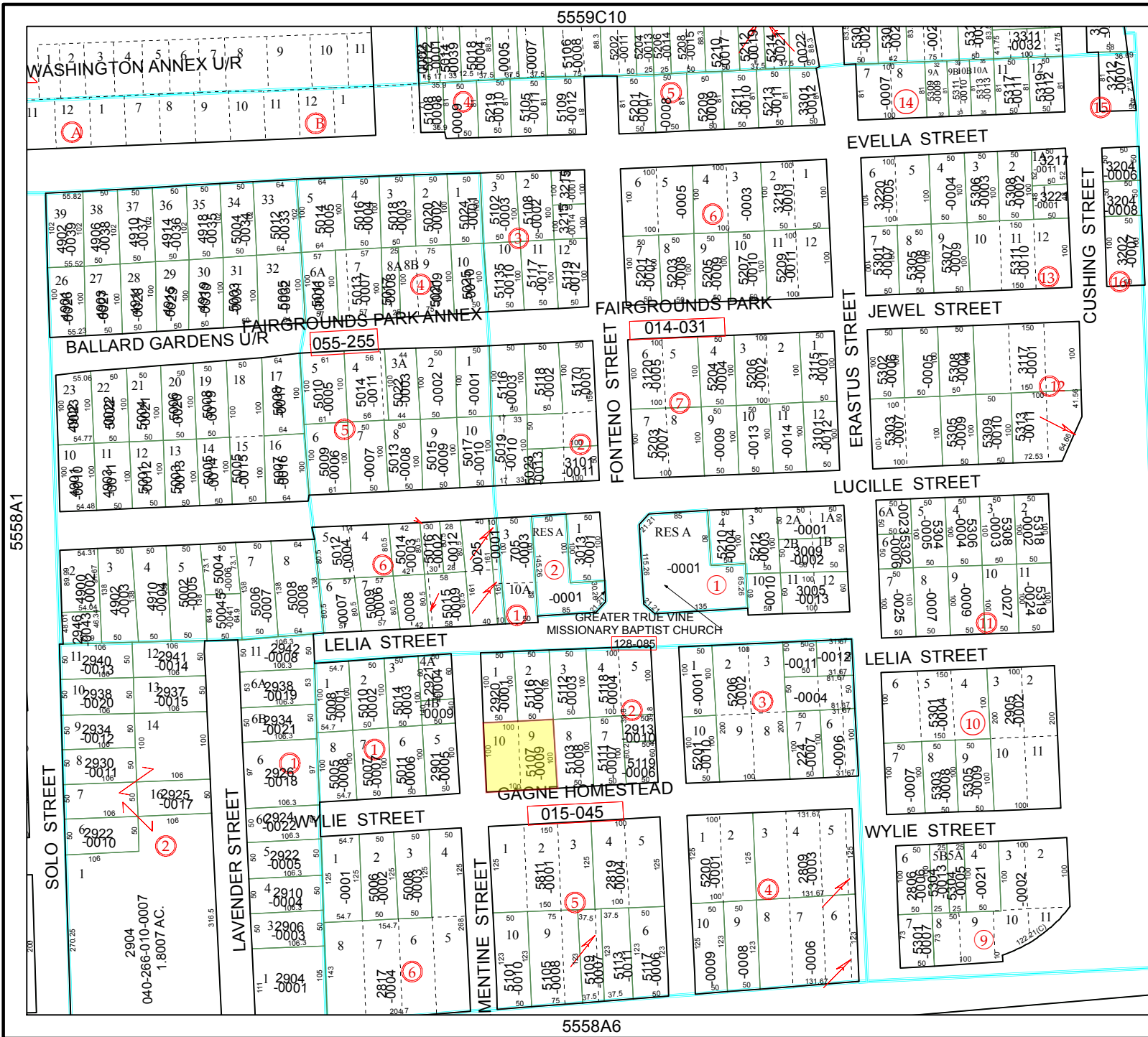
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



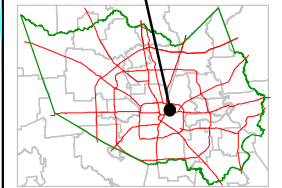
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

5558A1

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0506

Date: January 23, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

The Heirs and Devisees of the Estate of Maryland Potts, deceased (by Deeds filed for record under Volume 410, Page 518 and Volume 545, Page 368, both of the Deed Records of Harris County, Texas) (See notes)

Property Description: (Map ID# 33) (Tax ID# 041-140-000-0009)

Lots Nine (9) and Ten (10), in Block Two (2), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's file No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Wylie Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

Notes:

- We find no heirship/probate proceedings pertaining to the Estate of Maryland Potts, deceased filed of record in Harris County, Texas.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



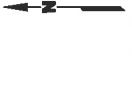
Darrell Stone
Title Examiner

EXHIBIT 2

AFFECTED PROPERTY MAP

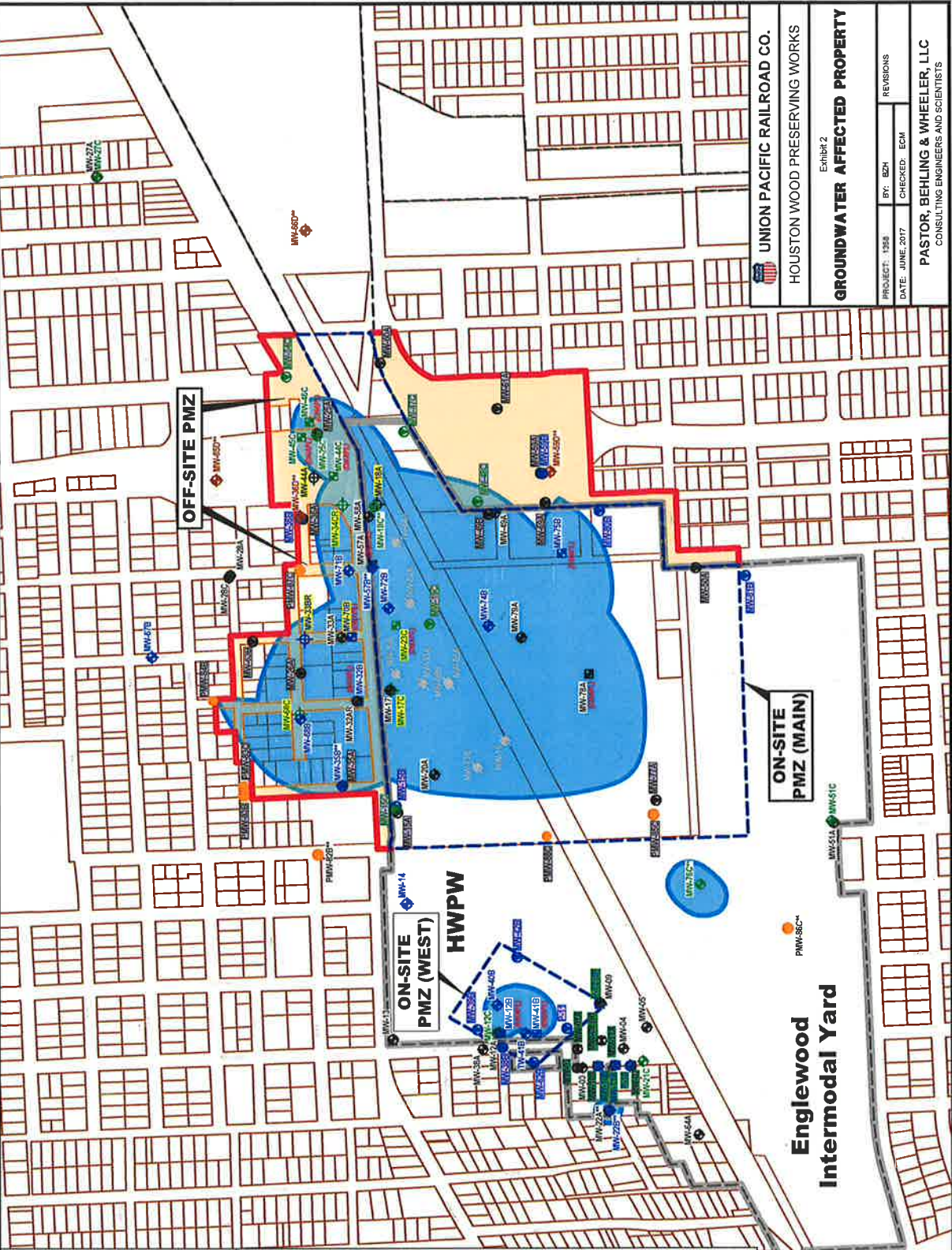
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (POC).
 2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Approx. Scale in Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Austin, Fortinet-Capitol Area Council (FACAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

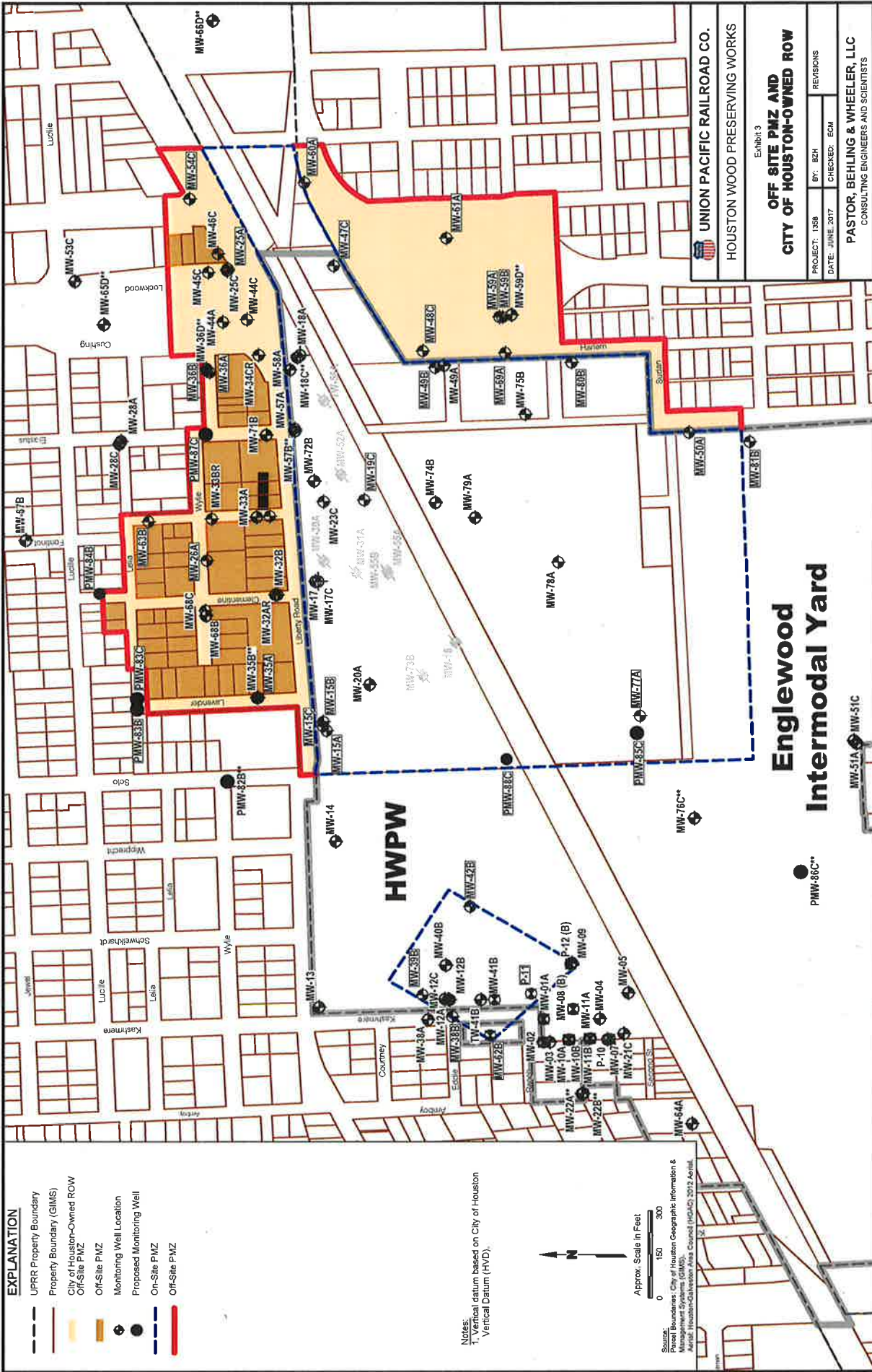


EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 34

HCAD ID - 0141390000005

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Five (5) in Block (1) one, of Finn Subdivision out of the Gagne Homestead a Subdivision, a subdivision In Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Mary Bass Ross (Owner) with an address of 5010 Wylie, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

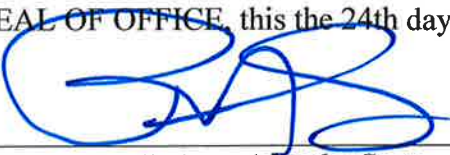
Executed this 24 day of March, 2015.

By: 
Mary Bass Ross

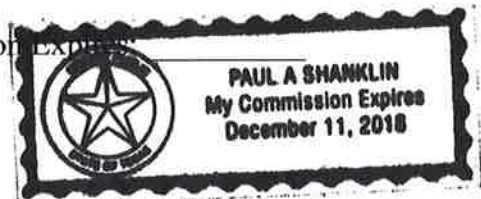
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 24th day of March, 2015, personally appeared Mary Bass Ross, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 20 17.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 20 17 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 20 17.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

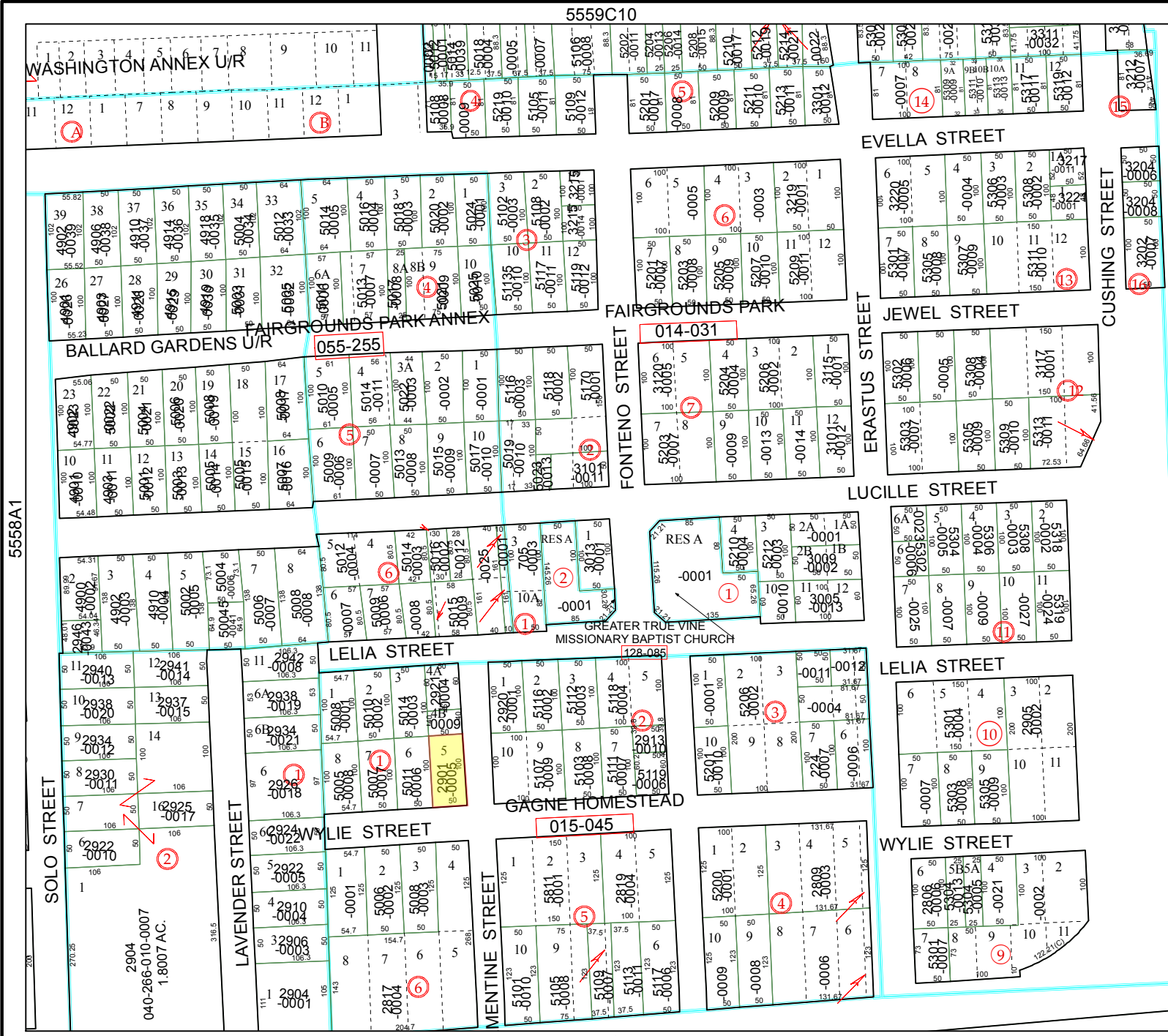
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



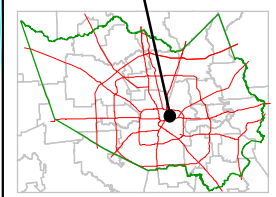
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

5558A1

5558A3

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9247
Date: December 13, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Mary Lee Bass, a/k/a Mary B. Ross, Lee Otis Jackson, Gilbert Eugene Jackson, Jr., Mary Alicia Carroll, Audrey Mae Sholars, Stella Louise Price, the Heirs and Devisees of the Estate of Johnny Lawrence Jackson, deceased and any unknown Heirs of the Estate of Gilbert Jackson, deceased, (by Warranty Deed filed for record under Harris County Clerk's File No. D262288 and Quitclaim Deeds filed for record under Harris County Clerk's File Nos. V630621 and V630622)

Property Description: (Map ID# 34) (Tax ID# 014-139-000-0005)

Lot Five (5), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) By City of Houston, Code of Ordinances, a notice of public hearing was filed under Harris County Clerk's File No. P925381, it was determined there may be a necessity for a demolition lien against the herein described property. Further, pursuant to said ordinance, title company finds of record an "Order of the Building Official" dated July 11, 1994, recorded under Harris County Clerk's File No. P971330.

Notes:

Title is vested as shown above by virtue of the following:

- Warranty Deed filed for record under Harris County Clerk's File No. D262288, executed by Maurice Krull to Lloyd Newman and Jane Newman.
- Subsequently, we find of record an Affidavit of Heirship regarding the estate of Lloyd Newman, deceased, filed for record under Harris County Clerk's File No. D781386, wherein Mary Jane Newman, a/k/a Jane Newman and Mary Lee Bass were purported to be the only heirs.
- We then find of record Affidavits of Heirship regarding the estate of Mary Jane Newman, a/k/a Jane Newman, deceased filed for record under Harris County Clerk's File Nos. V630623 and V630624, wherein the heirs are purported to be Mary B. Ross, a/k/a Mary Lee Bass and Gilbert Jackson, deceased. The heirs of Gilbert Jackson are therein stated as: Johnny Lawrence Jackson, deceased, "Mr. Unknown", Lee Otis Jackson, Gilbert Eugene Jackson, Jr., Gloria Jean Williams, Mary Alice Carroll, Audrey Mae Sholars, Stella Louise Price and Cynthia Diane Jean.
- We find of record a Quitclaim Deed filed for record under Harris County Clerk's File No. V630621, executed by Gloria Jean Williams to Mary B. Ross.
- We find of record a Quitclaim Deed filed for record under Harris County Clerk's File No. V630622, executed by Cynthia Diane Jean to Mary B. Ross.
- We find no probate of record as to the Estate of Johnny Lawrence Jackson, deceased.

Involuntary Liens:

- 1) Abstract of Judgment filed July 30, 2001, under Harris County Clerk's File No. V204500, styled USA, vs. Stella L. Price, in the principal amount of \$1,749.00, plus cost, interest and attorney's fees.
- 2) Notice of child support Lien filed March 25, 2003, under Harris County Clerk's File No. W526423, against Gilbert Jackson, in the principal amount of \$4,802.00, plus costs and interest.
- 3) Abstract of Judgment filed April 3, 2012, under Harris County Clerk's File No. 20120140334, styled Cach, LLC, vs. Lee Jackson, in the principal amount of \$3,582.00, plus cost, interest and attorney's fees.
- 4) The records reflect Bankruptcy proceedings filed in federal court on December 3, 2012 in Case No. 201238965 by Lee Jackson, S.S. No. xxx-xx-4712.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

EXHIBIT 2

AFFECTED PROPERTY MAP

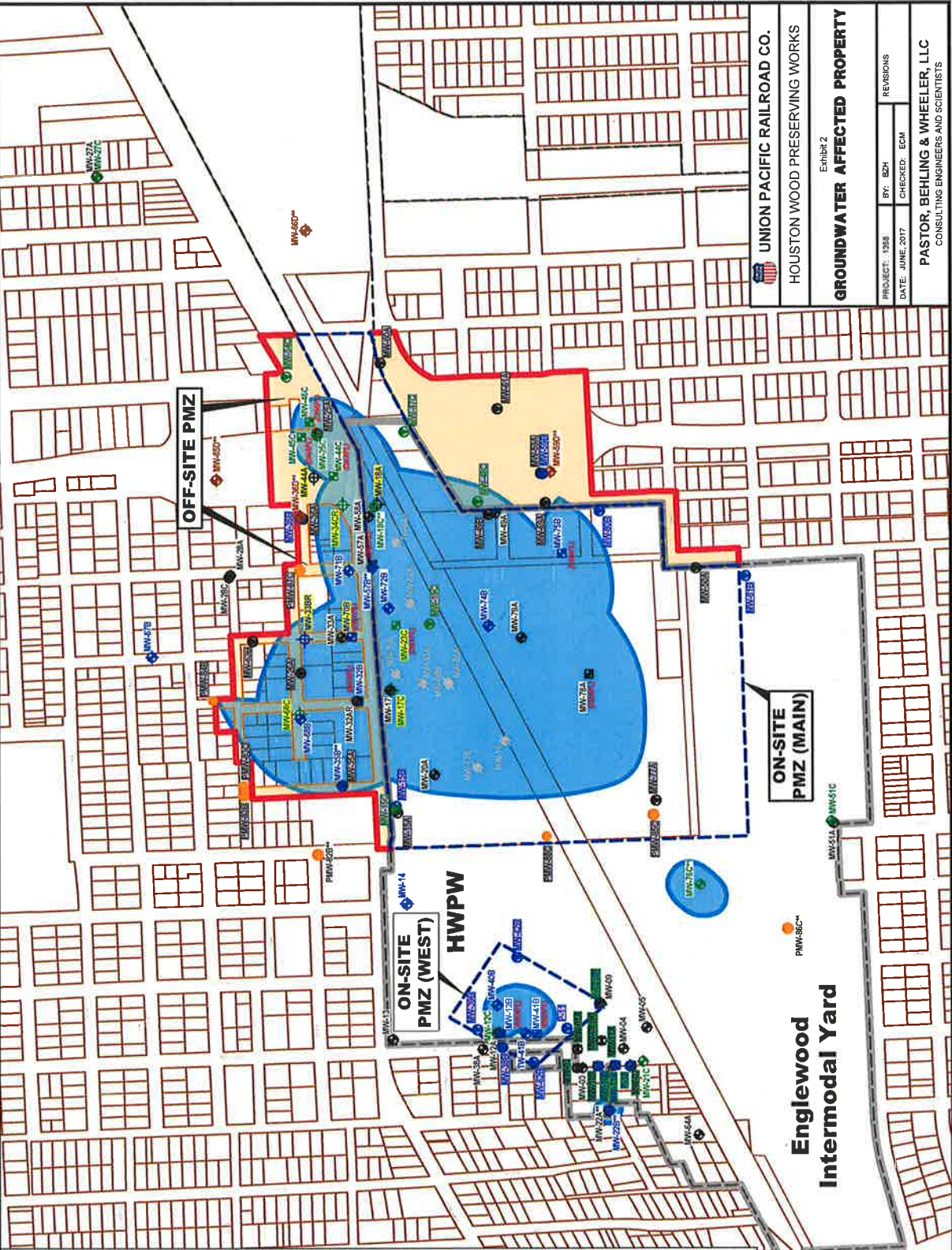
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - ◆ A-TZ Monitoring Well Location
 - ◆ B-CZ/B-TZ Monitoring Well Location
 - ◆ C-TZ Monitoring Well Location
 - ◆ D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (DMS) datum.
 2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Approx. Scale In Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery (2012)
 Aerial, Topographic, and Aerial Imagery (2012)



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

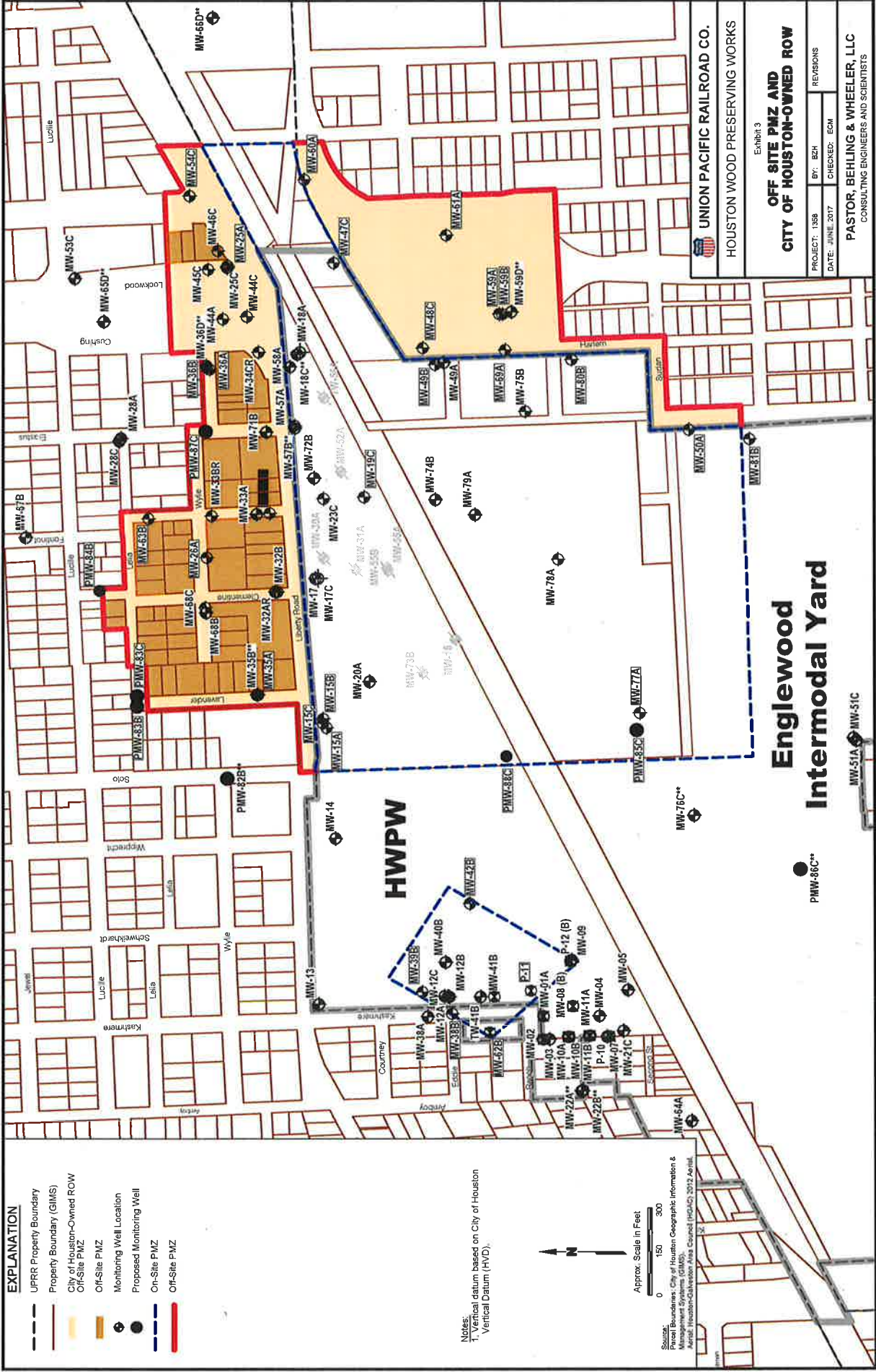
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW		
PROJECT: 158	BY: BZH	REVISIONS
DATE: JUNE 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-49A

MW-59A

MW-59B

MW-59D**

MW-66D**

MW-53C

MW-65D**

MW-45C

MW-44C

MW-36D**

MW-44A

MW-36A

MW-34C

MW-33A

MW-33B

MW-32B

MW-32A

MW-31A

MW-31B

MW-23C

MW-23A

MW-23B

MW-23D

MW-20A

MW-20B

MW-17C

MW-17A

MW-17B

MW-17D

MW-15B

MW-15A

MW-14

MW-13

MW-12B

MW-12A

MW-11B

MW-11A

MW-10B

MW-10A

MW-09

MW-08 (B)

MW-07

MW-06

MW-05

MW-04

MW-03

MW-02

MW-01A

MW-01B

MW-01C

MW-01D

MW-01E

MW-01F

MW-01G

MW-01H

MW-01I

MW-01J

MW-01K

MW-01L

MW-01M

MW-01N

MW-01O

MW-01P

MW-01Q

MW-01R

MW-01S

MW-01T

MW-01U

MW-01V

MW-01W

MW-01X

MW-01Y

MW-01Z

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 36

HCAD ID - 0141390000007

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Seven (7) in Block (1) one, of Finn Subdivision out of the Gagne Homestead, a subdivision In Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Nancy Banda-Zuniga (Owner) with an address of 5006 Wylie, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 24th day of March, 2015.

By: Nancy Banda
Name: Nancy Graciela Banda

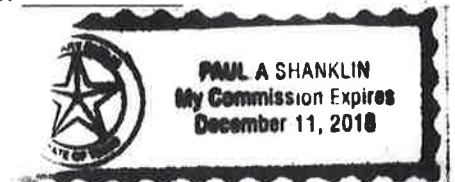
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 24th day of March, 2015, personally appeared Nancy Banda, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of March, 2015.

Notary Public in and for the State of Texas,
County of Harris

My Commission Expires: _____



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

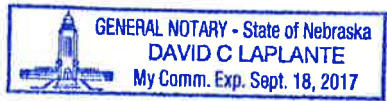
By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

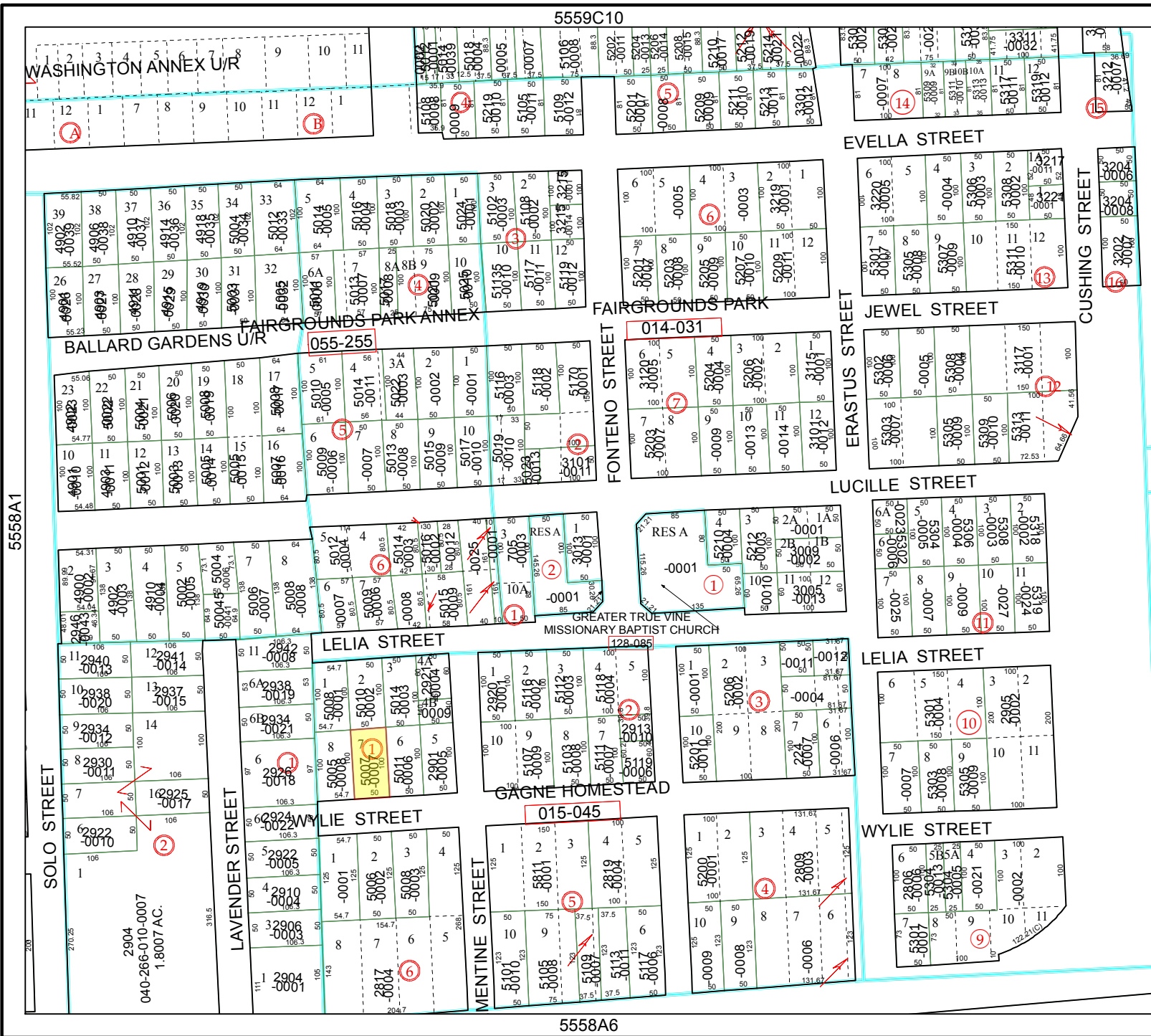
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

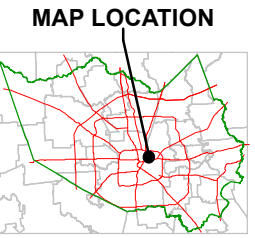


Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9249
Date: December 13, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Andrew Jerry Johnson and Rebecca Johnson (by Warranty Deed filed for record under Volume 2581, Page 379 of the Deed Records of Harris County, Texas)

Property Description:

Lot Seven (7), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

- 1) Abstract of Judgment filed September 28, 2004, under Harris County Clerk's File No. X948892, styled Millennium Insurance Company, vs. Rebecca R. Johnson, in the principal amount of \$6,954.00, plus cost, interest and attorney's fees.
- 2) Notice of child support Lien filed November 24, 1998, under Harris County Clerk's File No. T400263, against Andrew Johnson, in the principal amount of \$16,555.00, plus costs and interest.
- 3) Notice of child support Lien filed December 12, 2002, under Harris County Clerk's File No. W283262, against Andrew Johnson, in the principal amount of \$20,716.00, plus costs and interest.
- 4) Notice of child support Lien filed November 20, 2007, under Harris County Clerk's File No. 20070691000, against Andrew Johnson, in the principal amount of \$33,184.00, plus costs and interest.
- 5) Notice of Federal Tax Lien filed February 22, 2011, under Harris County Clerk's File No. 20110072127, against Andrew Johnson, in the principal amount of \$63,618.00.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

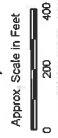
EXHIBIT 2

AFFECTED PROPERTY MAP

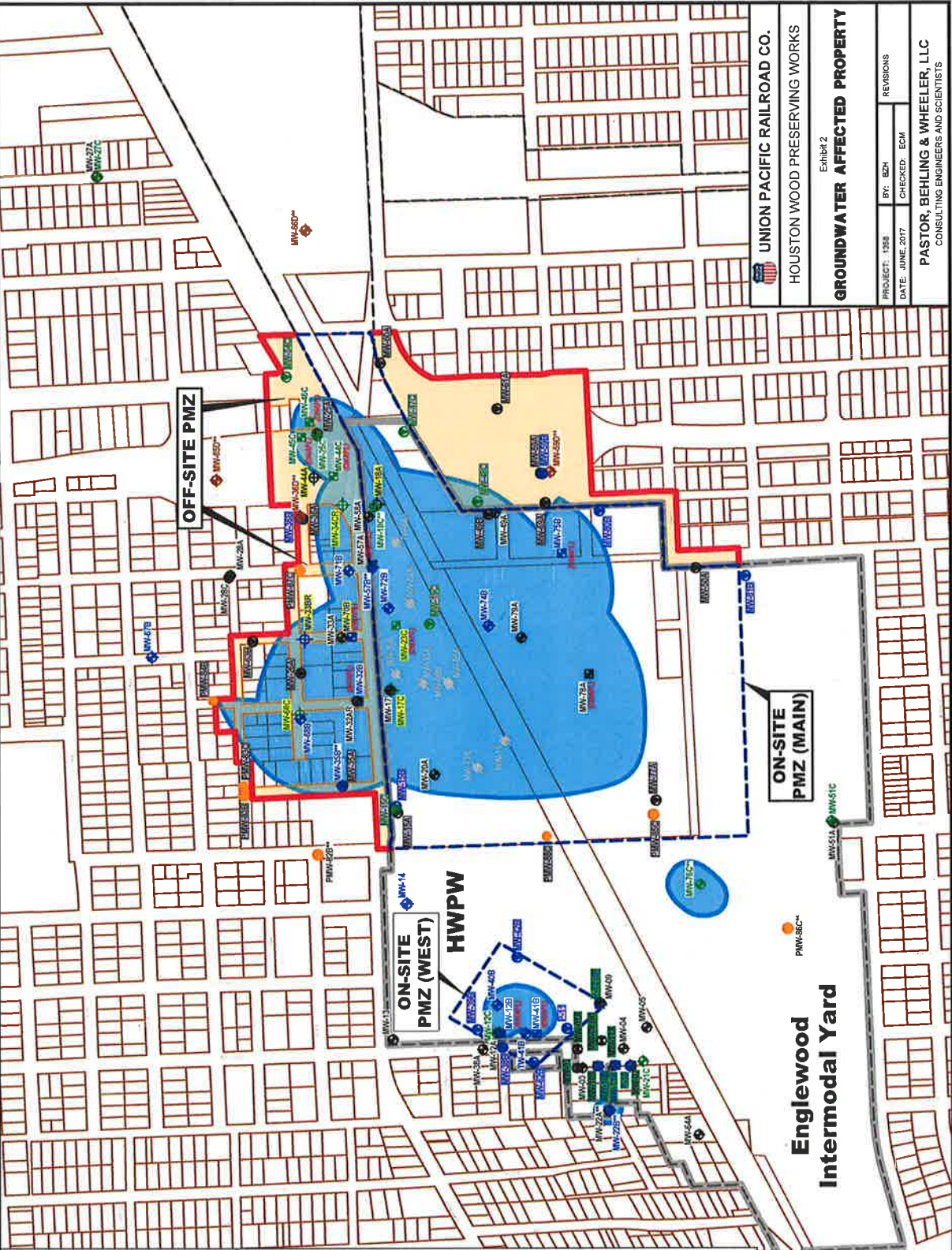
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- - - UPRR Property Boundary
- - - Property Boundary (GIMS)
- - - City of Houston-Owned ROW
- - - Off-Site PMZ
- - - Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- - - Off-Site PMZ

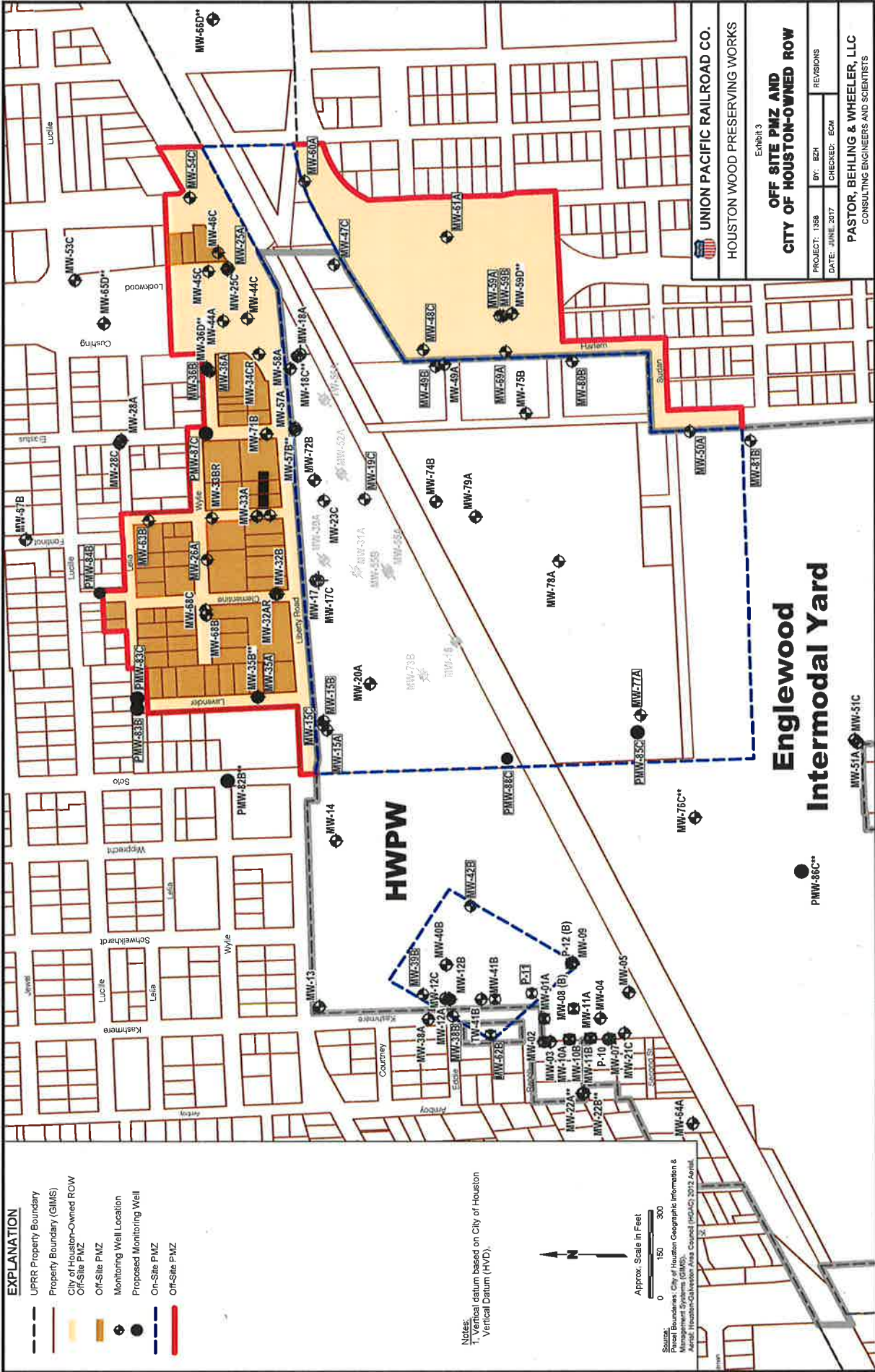
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-79A

HWPW

MW-13

MW-14

MW-15A

MW-15B

MW-15C

MW-15D

MW-15E

MW-15F

MW-15G

MW-15H

MW-15I

MW-15J

MW-15K

MW-15L

MW-15M

MW-15N

MW-15O

MW-15P

MW-15Q

MW-15R

MW-15S

MW-15T

MW-15U

MW-15V

MW-15W

MW-15X

MW-15Y

MW-15Z

MW-16A

MW-16B

MW-16C

MW-16D

MW-16E

MW-16F

MW-16G

MW-16H

MW-16I

MW-16J

MW-16K

MW-16L

MW-16M

MW-16N

MW-16O

MW-16P

MW-16Q

MW-16R

MW-16S

MW-16T

MW-16U

MW-16V

MW-16W

MW-16X

MW-16Y

MW-16Z

MW-17A

MW-17B

MW-17C

MW-17D

MW-17E

MW-17F

MW-17G

MW-17H

MW-17I

MW-17J

MW-17K

MW-17L

MW-17M

MW-17N

MW-17O

MW-17P

MW-17Q

MW-17R

MW-17S

MW-17T

MW-17U

MW-17V

MW-17W

MW-17X

MW-17Y

MW-17Z

MW-18A

MW-18B

MW-18C

MW-18D

MW-18E

MW-18F

MW-18G

MW-18H

MW-18I

MW-18J

MW-18K

MW-18L

MW-18M

MW-18N

MW-18O

MW-18P

MW-18Q

MW-18R

MW-18S

MW-18T

MW-18U

MW-18V

MW-18W

MW-18X

MW-18Y

MW-18Z

MW-19A

MW-19B

MW-19C

MW-19D

MW-19E

MW-19F

MW-19G

MW-19H

MW-19I

MW-19J

MW-19K

MW-19L

MW-19M

MW-19N

MW-19O

MW-19P

MW-19Q

MW-19R

MW-19S

MW-19T

MW-19U

MW-19V

MW-19W

MW-19X

MW-19Y

MW-19Z

MW-20A

MW-20B

MW-20C

MW-20D

MW-20E

MW-20F

MW-20G

MW-20H

MW-20I

MW-20J

MW-20K

MW-20L

MW-20M

MW-20N

MW-20O

MW-20P

MW-20Q

MW-20R

MW-20S

MW-20T

MW-20U

MW-20V

MW-20W

MW-20X

MW-20Y

MW-20Z

MW-21A

MW-21B

MW-21C

MW-21D

MW-21E

MW-21F

MW-21G

MW-21H

MW-21I

MW-21J

MW-21K

MW-21L

MW-21M

MW-21N

MW-21O

MW-21P

MW-21Q

MW-21R

MW-21S

MW-21T

MW-21U

MW-21V

MW-21W

MW-21X

MW-21Y

MW-21Z

MW-22A

MW-22B

MW-22C

MW-22D

MW-22E

MW-22F

MW-22G

MW-22H

MW-22I

MW-22J

MW-22K

MW-22L

MW-22M

MW-22N

MW-22O

MW-22P

MW-22Q

MW-22R

MW-22S

MW-22T

MW-22U

MW-22V

MW-22W

MW-22X

MW-22Y

MW-22Z

MW-23A

MW-23B

MW-23C

MW-23D

MW-23E

MW-23F

MW-23G

MW-23H

MW-23I

MW-23J

MW-23K

MW-23L

MW-23M

MW-23N

MW-23O

MW-23P

MW-23Q

MW-23R

MW-23S

MW-23T

MW-23U

MW-23V

MW-23W

MW-23X

MW-23Y

MW-23Z

MW-24A

MW-24B

MW-24C

MW-24D

MW-24E

MW-24F

MW-24G

MW-24H

MW-24I

MW-24J

MW-24K

MW-24L

MW-24M

MW-24N

MW-24O

MW-24P

MW-24Q

MW-24R

MW-24S

MW-24T

MW-24U

MW-24V

MW-24W

MW-24X

MW-24Y

MW-24Z

MW-25A

MW-25B

MW-25C

MW-25D

MW-25E

MW-25F

MW-25G

MW-25H

MW-25I

MW-25J

MW-25K

MW-25L

MW-25M

MW-25N

MW-25O

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 37

HCAD ID - 0141390000008

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Eight (8) in Block (1) one, of Finn Subdivision out of the Gagne Homestead a Subdivision, a subdivision In Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Monico Banda (Owner) with an address of 5005 Wylie, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 24 day of March, 2015.

By: Monico Banda
Monico Banda

STATE OF TEXAS
HARRIS COUNTY

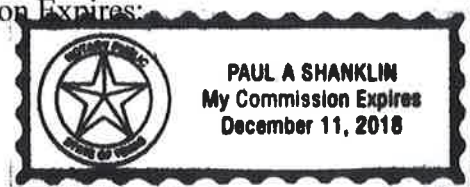
BEFORE ME, on this the 24th day of March, 2015, personally appeared Monico Banda, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of March, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 20 17.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 20 17 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 20 17.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

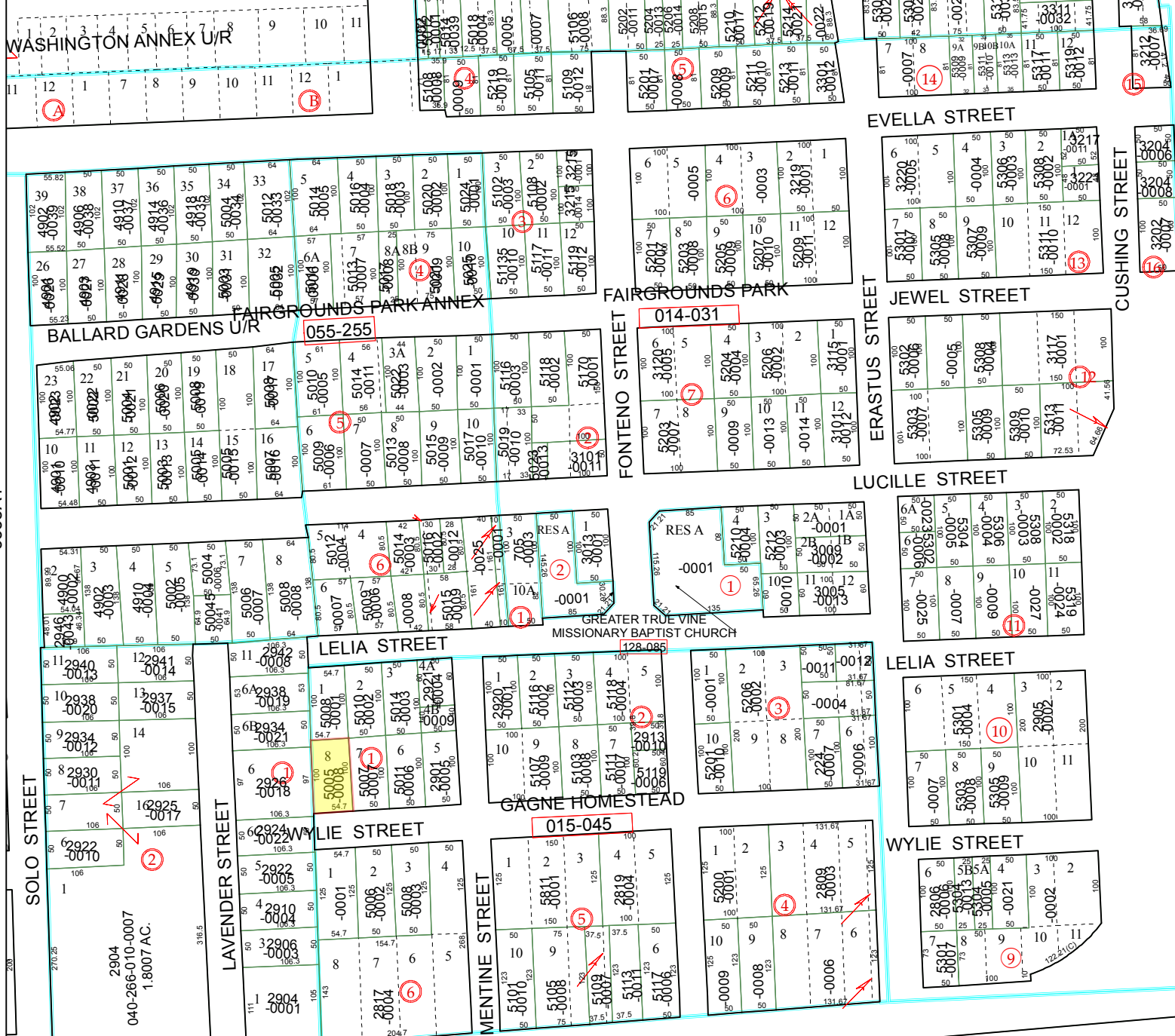
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

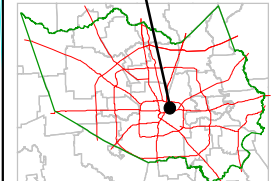
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

2904
040-266-010-0007
1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9250
Date: December 13, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Monico Duque Banda and Martha Zuniga Banda, husband and wife (by Warranty Deed filed for record under Harris County Clerk's File No. 20070330680)

Property Description: (Map ID# 37) (Tax ID# 014-139-000-0008)

Lot Eight (8), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

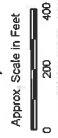
EXHIBIT 2

AFFECTED PROPERTY MAP

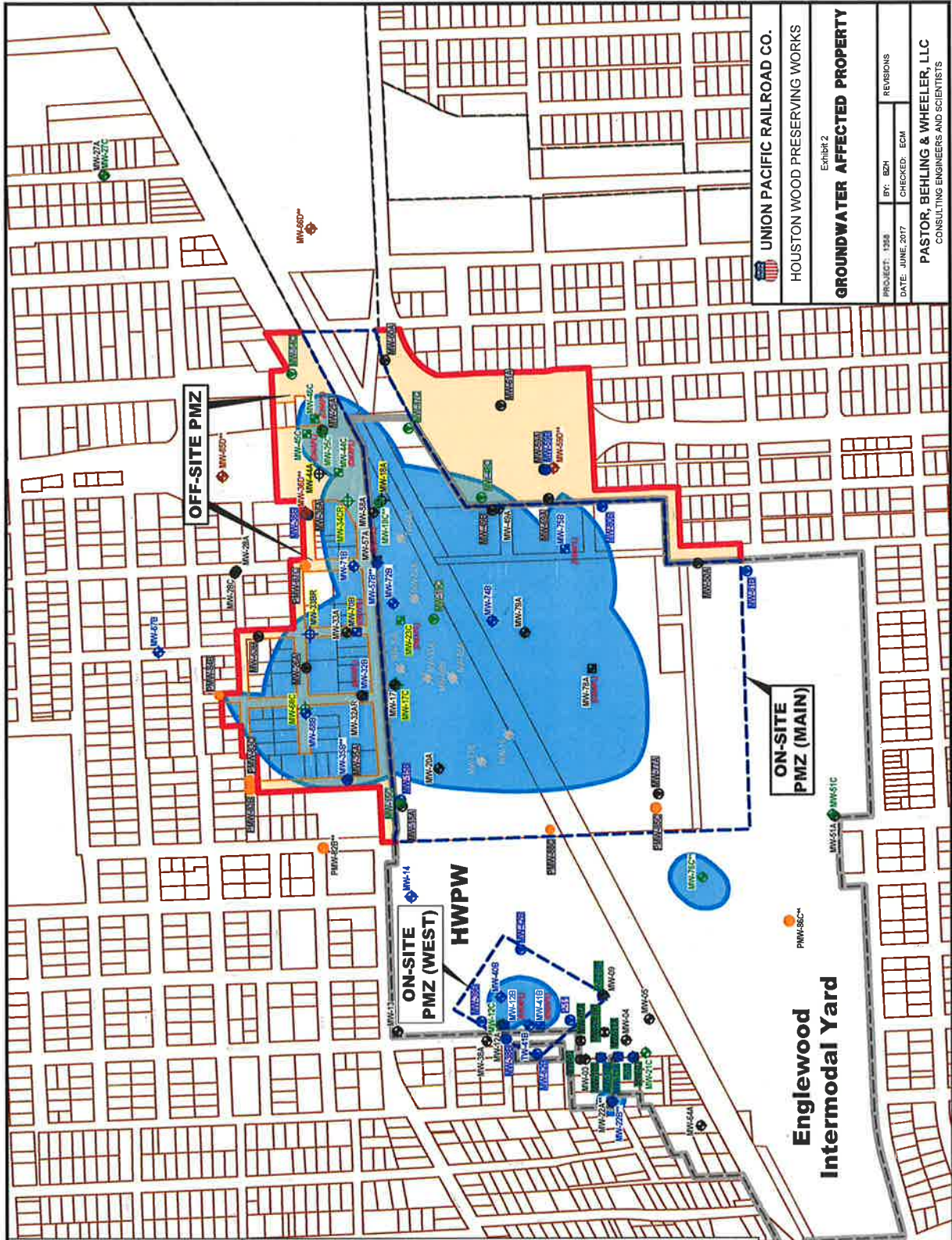
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-DeWitt Area Council (HDAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 39

HCAD ID - 0402660100022

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Tract 6(six) in Block 1 (one), of the Liberty Road Estates, an addition in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Leisa Glenn and heir and devisee of Lucille Long (Owner) with an address of 2924 Lavender, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

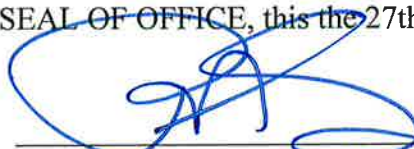
Executed this 27th day of June, 2015.

By: 
Name: Leisa Glenn

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 27th day of June, 2015, personally appeared Leisa Glenn, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 27th day of June, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires: 

PAUL A SHANKLIN
My Commission Expires
December 11, 2018

Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

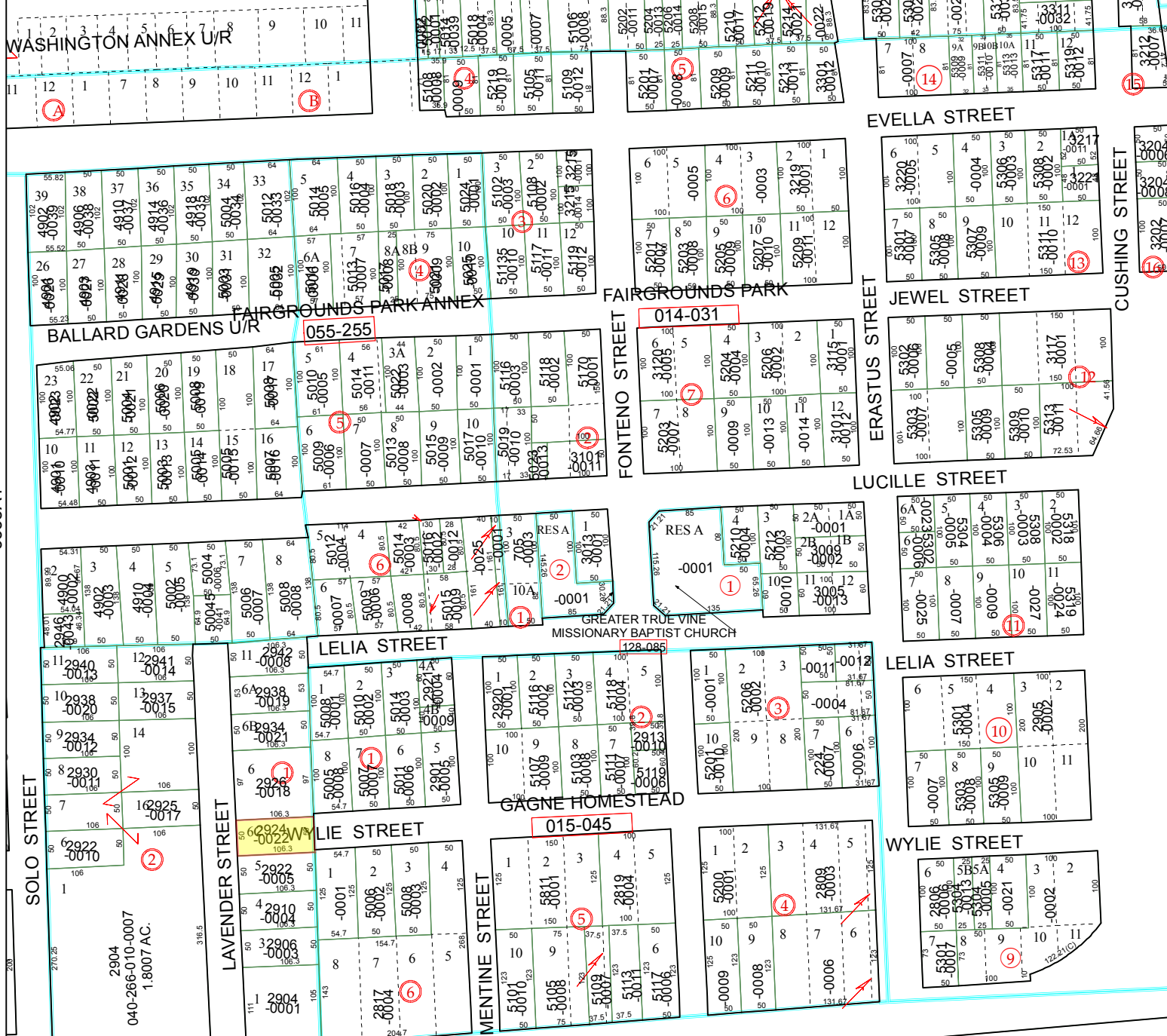
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

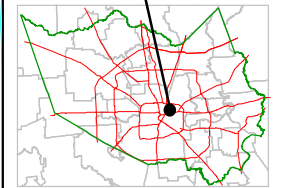
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3



2904
 040-266-010-0007
 1.8007 AC.

62924
 0022W
 106.3

015-045

014-031

055-255

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0514

Date: January 23, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Clark Investment Company (by Deeds filed for record under Volume 2034, Page 480 and Volume 2830, Page 252, both of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 39) (Tax ID# 040-266-010-0022)

Tract Six-C (6C), in Block One (1), of Liberty Road Estates, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's file No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lelia Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

Notes:

- Harris County Appraisal District describes the subject property as Tract 6C, however we find no conveyance describing same. According to the Appraisal Map, the subject property is comprised of Lot 6, in Block 1 of Liberty Road Estates, unrecorded.
- Harris County Appraisal District reflects Lucille Long as the current tax payer, however we find no conveyance out of Clark Investment Company or into Lucille Long.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY: TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

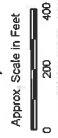
EXHIBIT 2

AFFECTED PROPERTY MAP

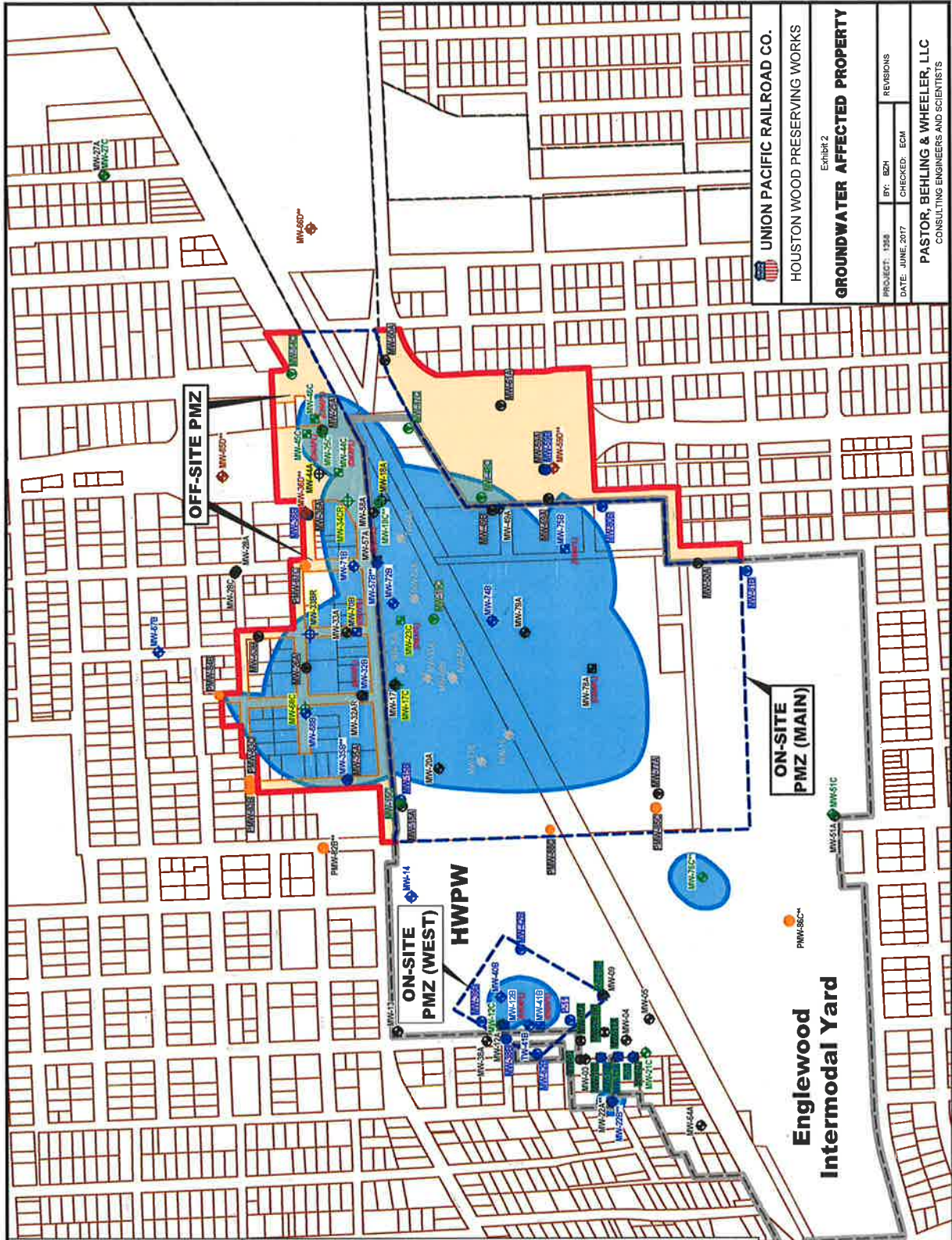
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

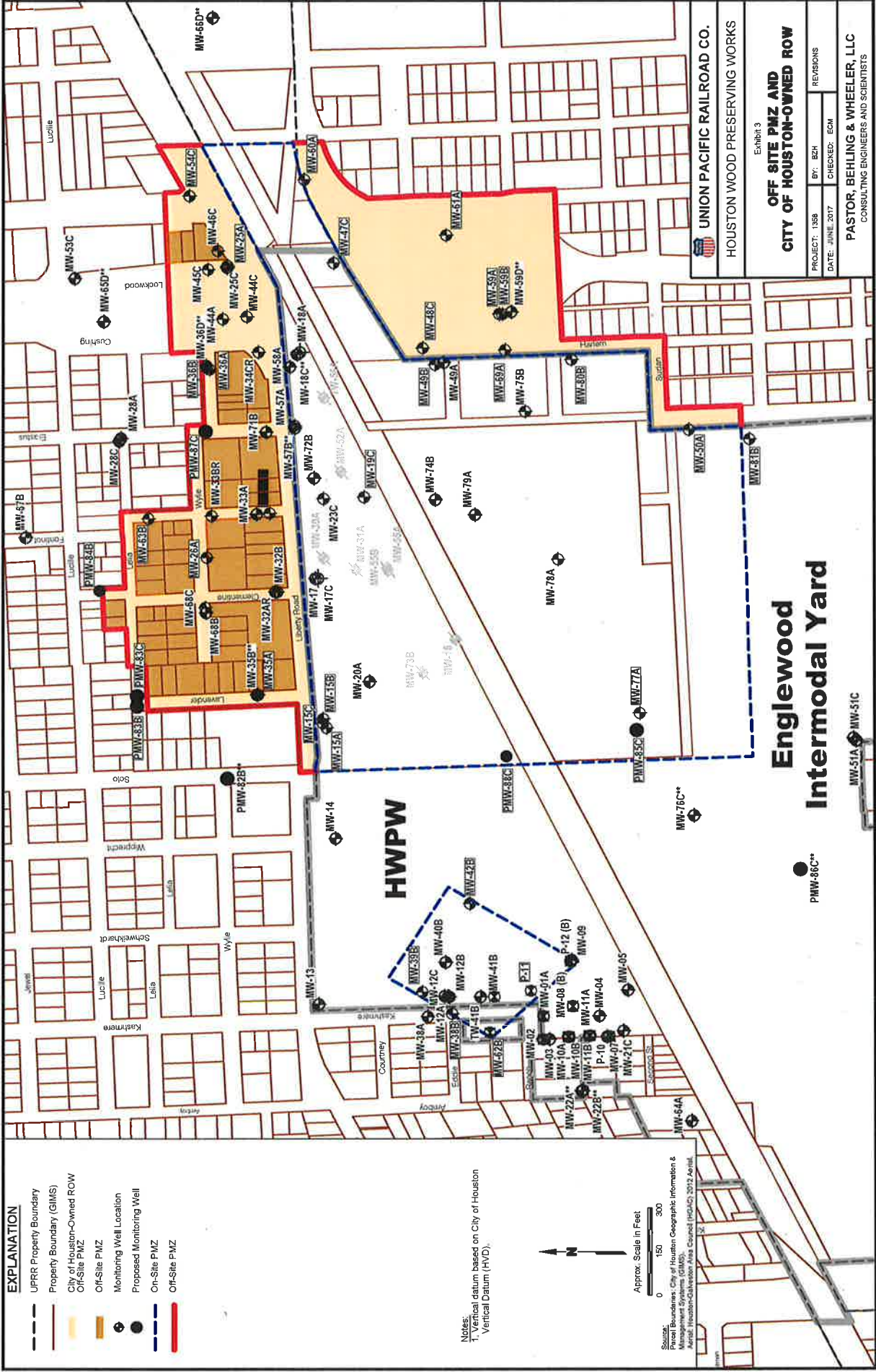
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW		
PROJECT: 158	BY: BZH	REVISIONS
DATE: JUNE 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Englewood Intermodal Yard

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 40

HCAD ID - 0402660100005

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot 5, block 1 of Liberty Road Estates, an unrecorded subdivision out the Harris and Wilson Survey, Abstract No. 32, Harris County, Texas..

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Greater Mount Nebo Baptist Church (Owner) with an address of 3819 Harland Dr., Houston, Texas 77092. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 19th day of February, 2015.

Greater Mount Nebo Baptist Church
By: Charles L. Allen, Jr.
Name: Charles L. Allen, Jr.
Title: Pastor

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 19th day of February, 2015, personally appeared Charles L. Allen, Jr., Pastor, of Greater Mount Nebo Baptist Church, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 19th day of February, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

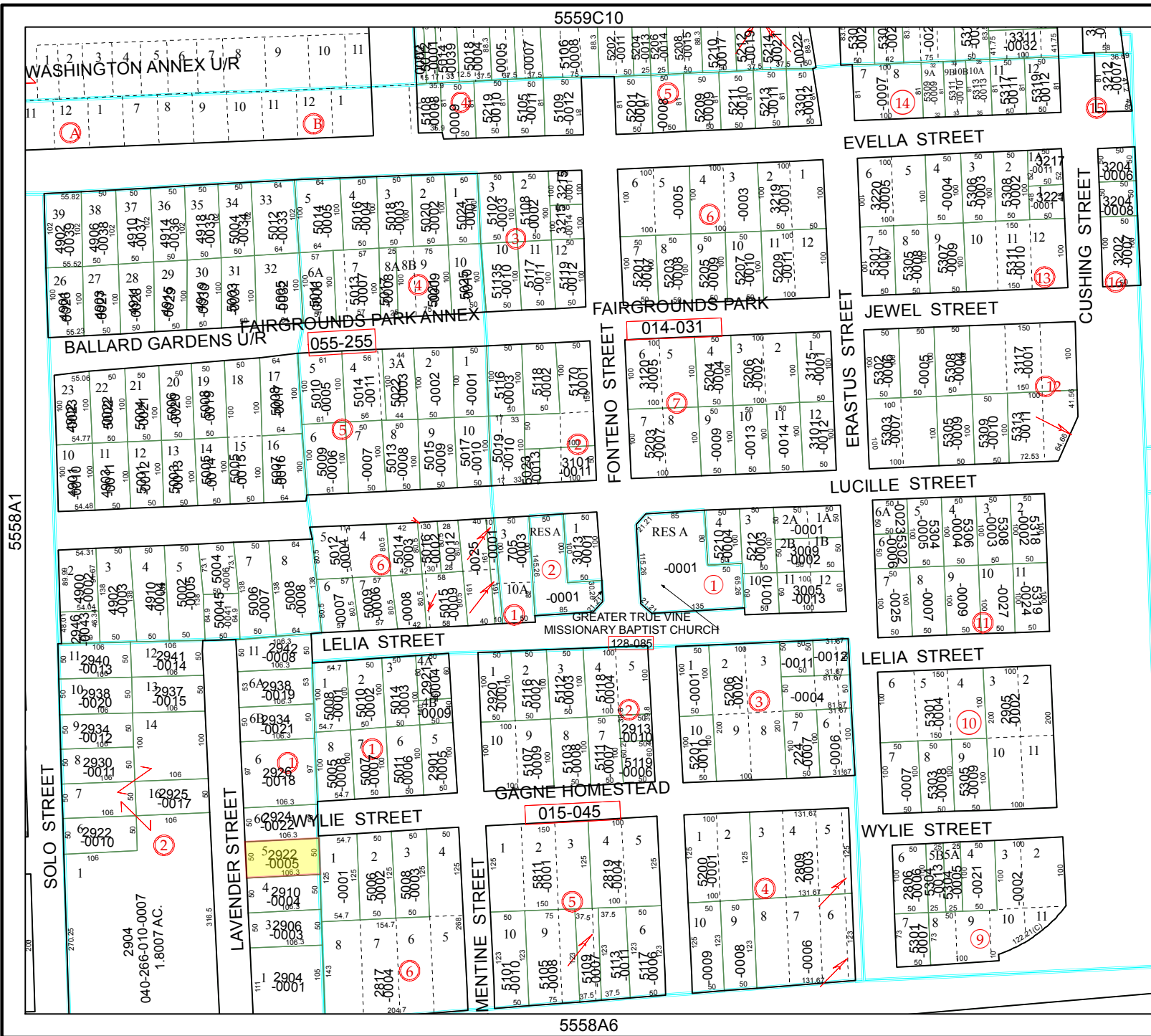
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



5558A1

5559C10

5558A6

Harris County Appraisal District

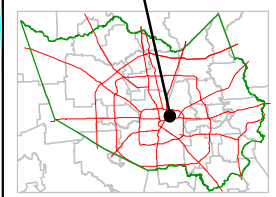


0 100 200

PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0480
Date: January 22, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Greater Mt. Nebo Baptist Church (by Deed filed for record under Harris County Clerk's File No. 20110083443)

Property Description: (Map ID# 40) (Tax ID# 040-266-010-0005)

Lot Five (5), in Block One (1), of Liberty Road Estates, an unrecorded subdivision out of the Harris and Wilson Survey, Abstract No. 32, Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

Those as set forth by instrument(s) filed for record under Volume 1881, Page 268 of the Deed Records of Harris County, Texas.

Exceptions:

- a) Building set-back line 20 feet in width along the front property line(s), as set forth by instrument(s) recorded in Volume 1881, Page 268 of the Deed Records of Harris County, Texas.
- b) Building set-back line 3 feet in width along the side property line(s), as set forth by instrument(s) recorded in Volume 1881, Page 268 of the Deed Records of Harris County, Texas.
- c) Utility easement 5 feet in width along the rear property line, as reserved by instrument(s) filed for record under Volume 1881, Page 268 of the Deed Records of Harris County, Texas.
- d) Sidewalk easement 6.3 feet in width along the front property line, as reserved by instrument(s) filed for record under Volume 1881, Page 268 of the Deed Records of Harris County, Texas.

- e) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

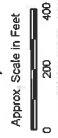
EXHIBIT 2

AFFECTED PROPERTY MAP

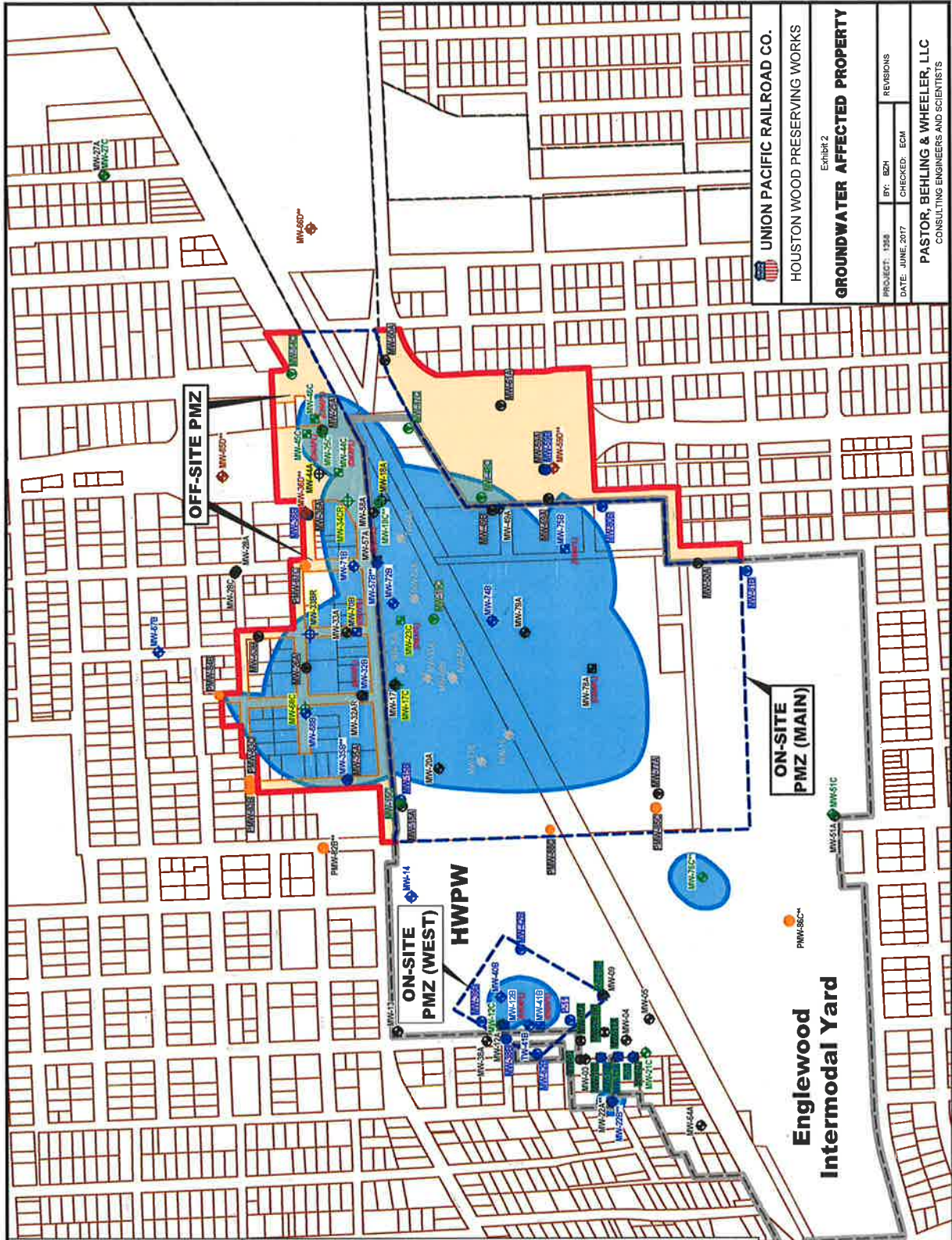
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

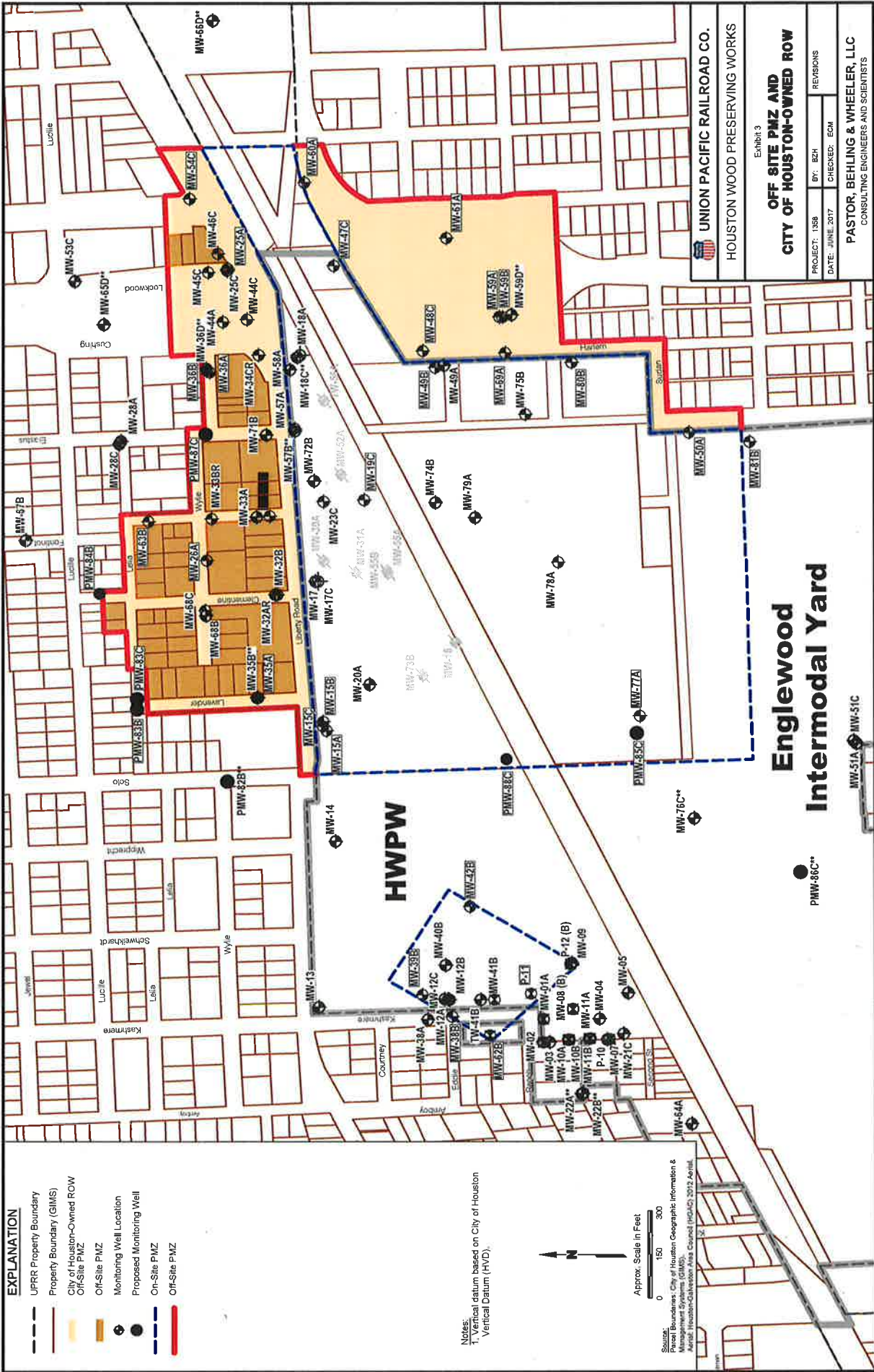
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: EGM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-48C

MW-59A MW-59B MW-59D**

MW-51A MW-51B

MW-53C MW-65D**

MW-66D**

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 42

HCAD ID - 0140410000006

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Six (6) in Block (9) one, of Fairground Park a Subdivision, a subdivision I n Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Clara Scruggs (Owner) with an address of 5151 CR 181, Alvin, Texas 77511. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 7th day of April, 2015.

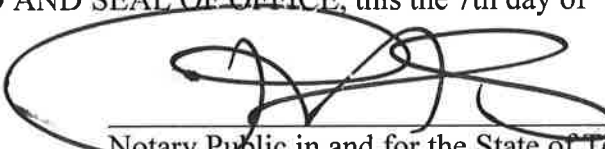
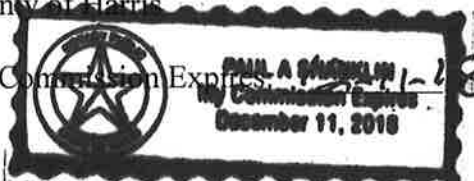
By:


Clara Scruggs

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 7th day of April, 2015, personally appeared Clara Scruggs, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 7th day of April, 2015.


Notary Public in and for the State of Texas,
County of Harris
My Commission Expires

PAUL A. SAMULIN
My Commission Expires
December 11, 2018

Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

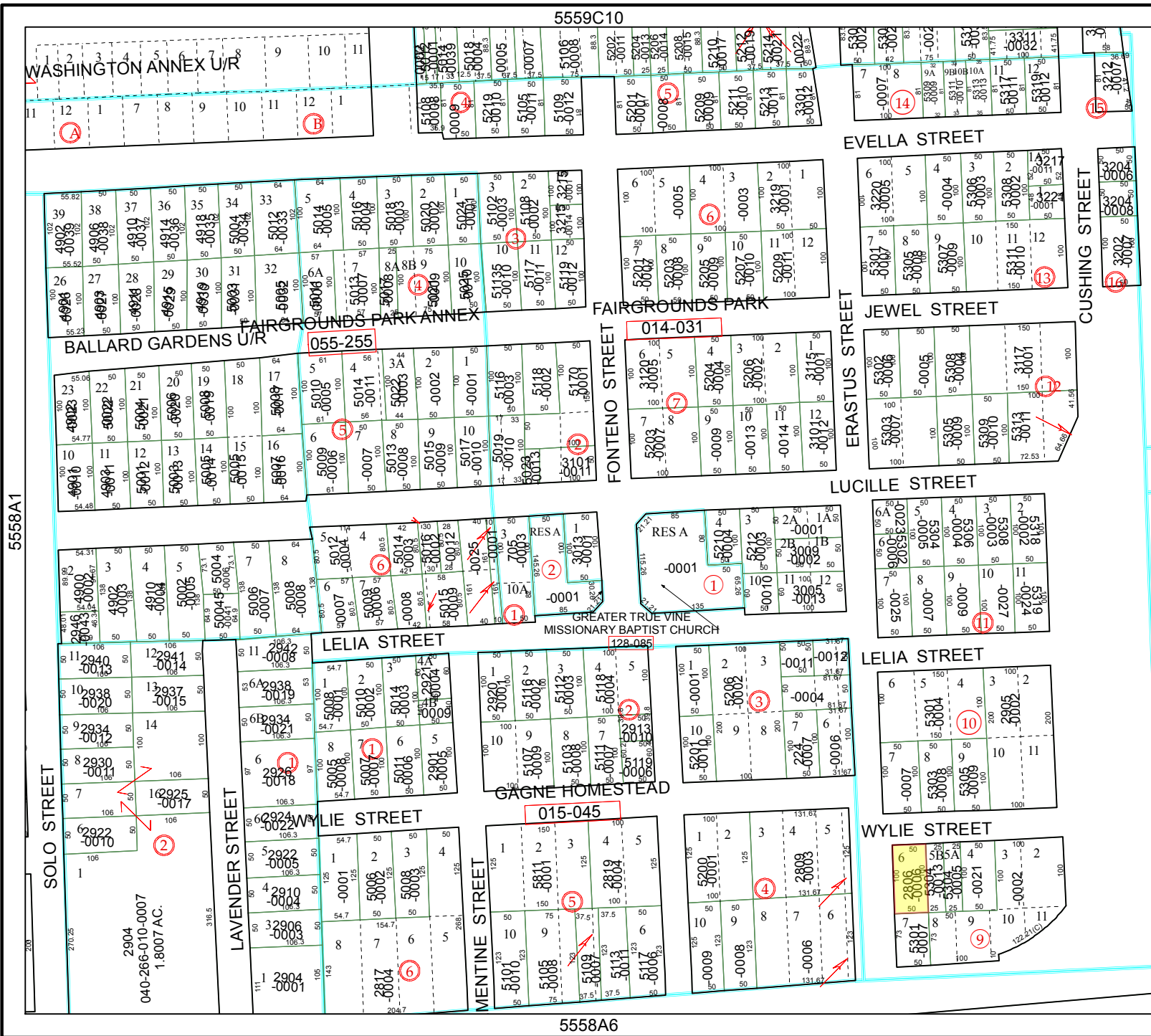
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

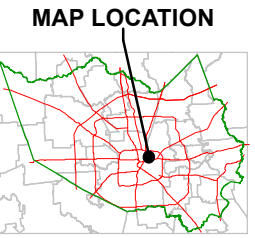


Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5559C10

5558A6

2904
 040-266-010-0007
 1.8007 AC.

015-045

014-031

055-255

128-085

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9065

Date: December 5, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 3rd day of December, 2012, we find the following:

Title Vested In:

Margaret Roberts, Clara Scruggs, Leroy Mock and Charles Mock (by Warranty Deed filed for record under Harris County Clerk's File No. U754245)

Property Description: (Map ID# 42) (Tax ID# 014-041-000-0006)

Lot Six (6), in Block Nine (9), of Fairground Park, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 81, Page 460 of the Deed Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

- 1) We find reference to Cause No. 2011-14300, in the District Court of Harris County, Texas, styled Harris County, etal vs. Margaret Roberts, Clara Scruggs, Leroy Mock and Charles Mock. It is assumed that said cause of action is for delinquent taxes due on subject property. Said suit includes a Final Judgment dated December 13, 2011.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statue, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

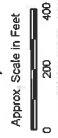
EXHIBIT 2

AFFECTED PROPERTY MAP

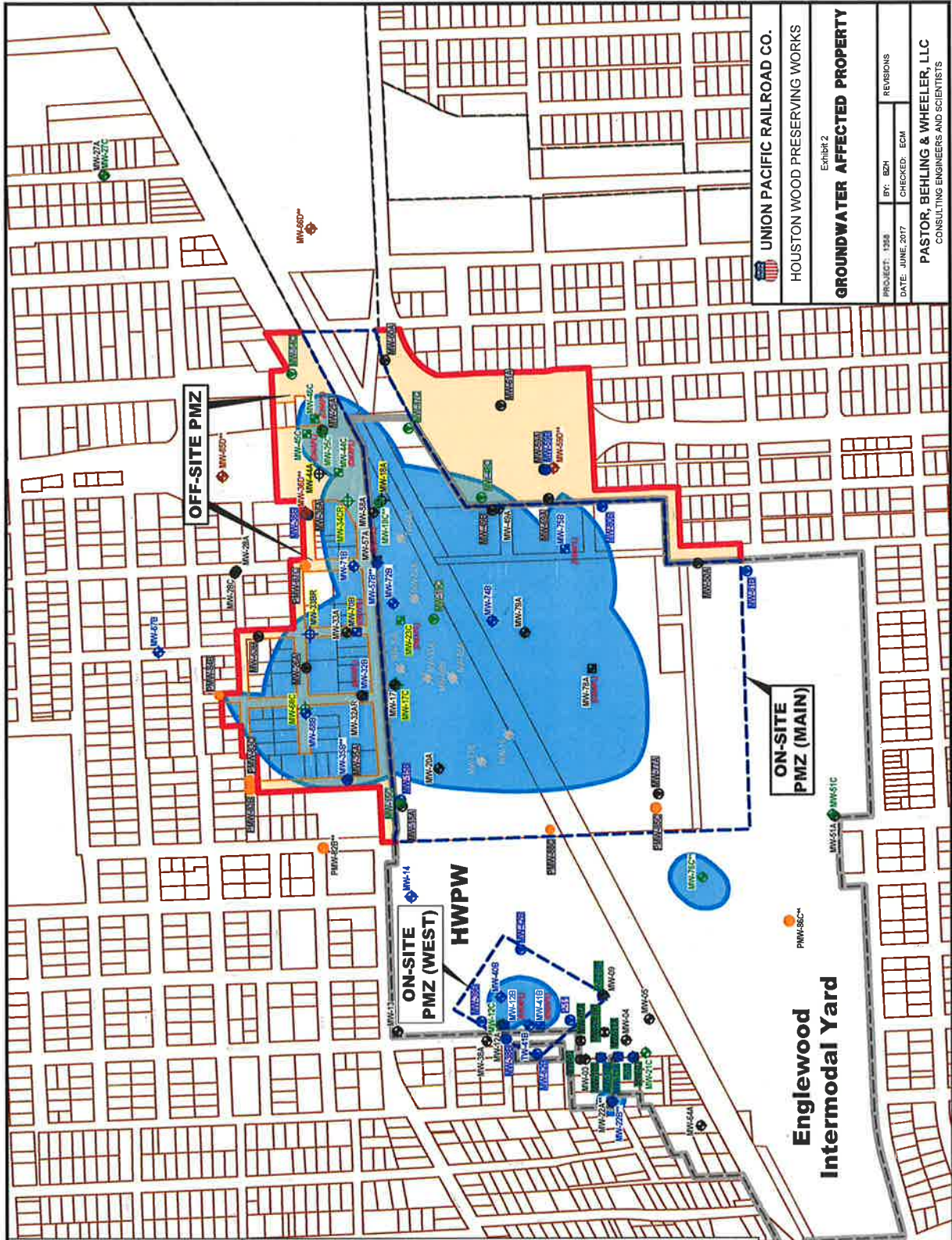
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

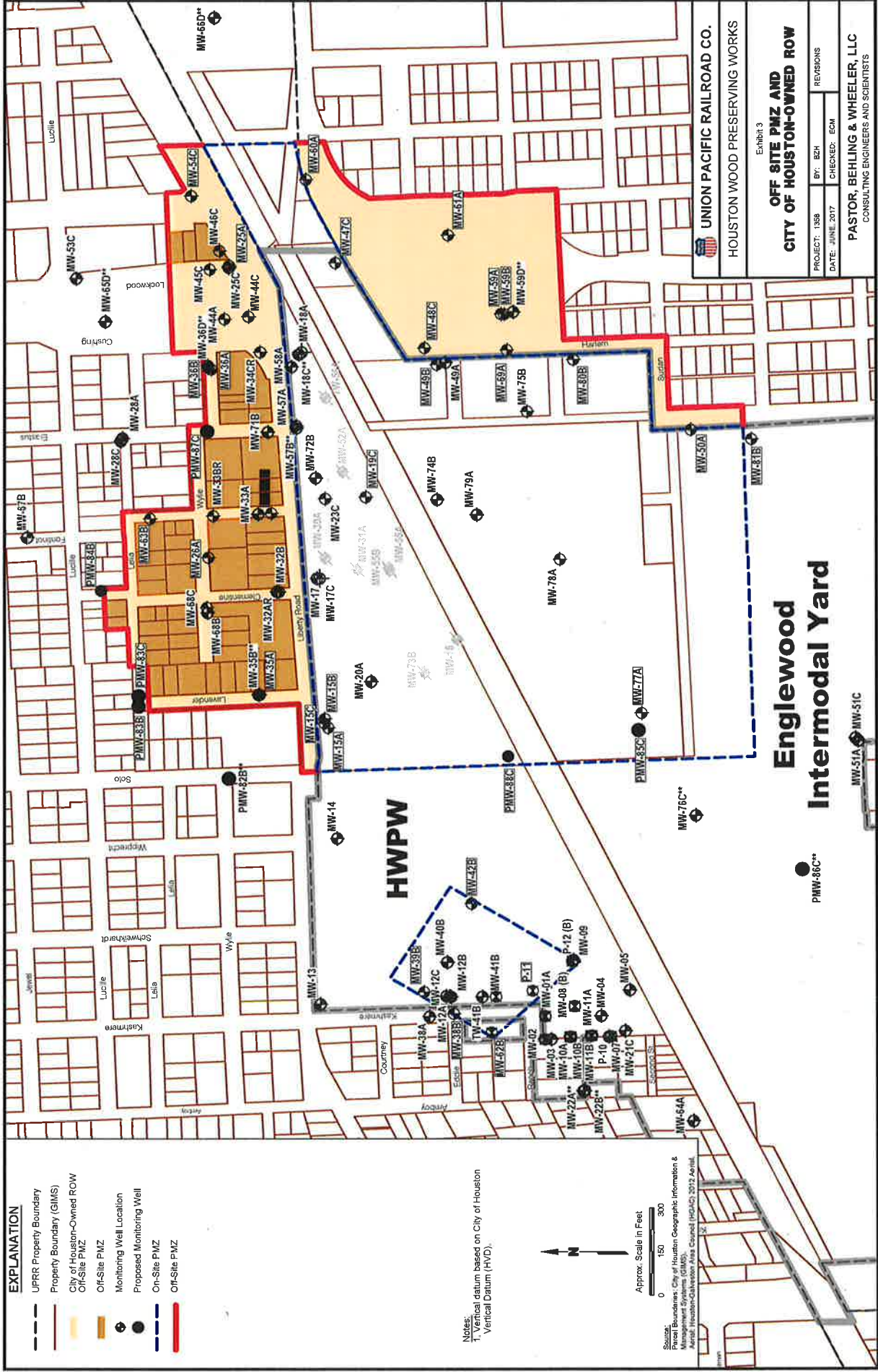
PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP



Englewood Intermodal Yard

HWPW

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 43

HCAD ID - 0140410000013

Restrictive Covenant

STATE OF TEXAS §

§

COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

The West One half (W-1/2) of Lot Five (5) in Block Nine (9), Of Fairground Park a Subdivision, a subdivision in Harris County, Texas, according to the Map or plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Irene Juarez (Owner) with an address of 5304 Wylie Street, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 31st day of March, 2015.


By: Irene Juarez
Name: Irene Juarez

STATE OF TEXAS

HARRIS COUNTY

BEFORE ME, on this the 31st day of March, 2015, personally appeared Irene Juarez, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31st day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

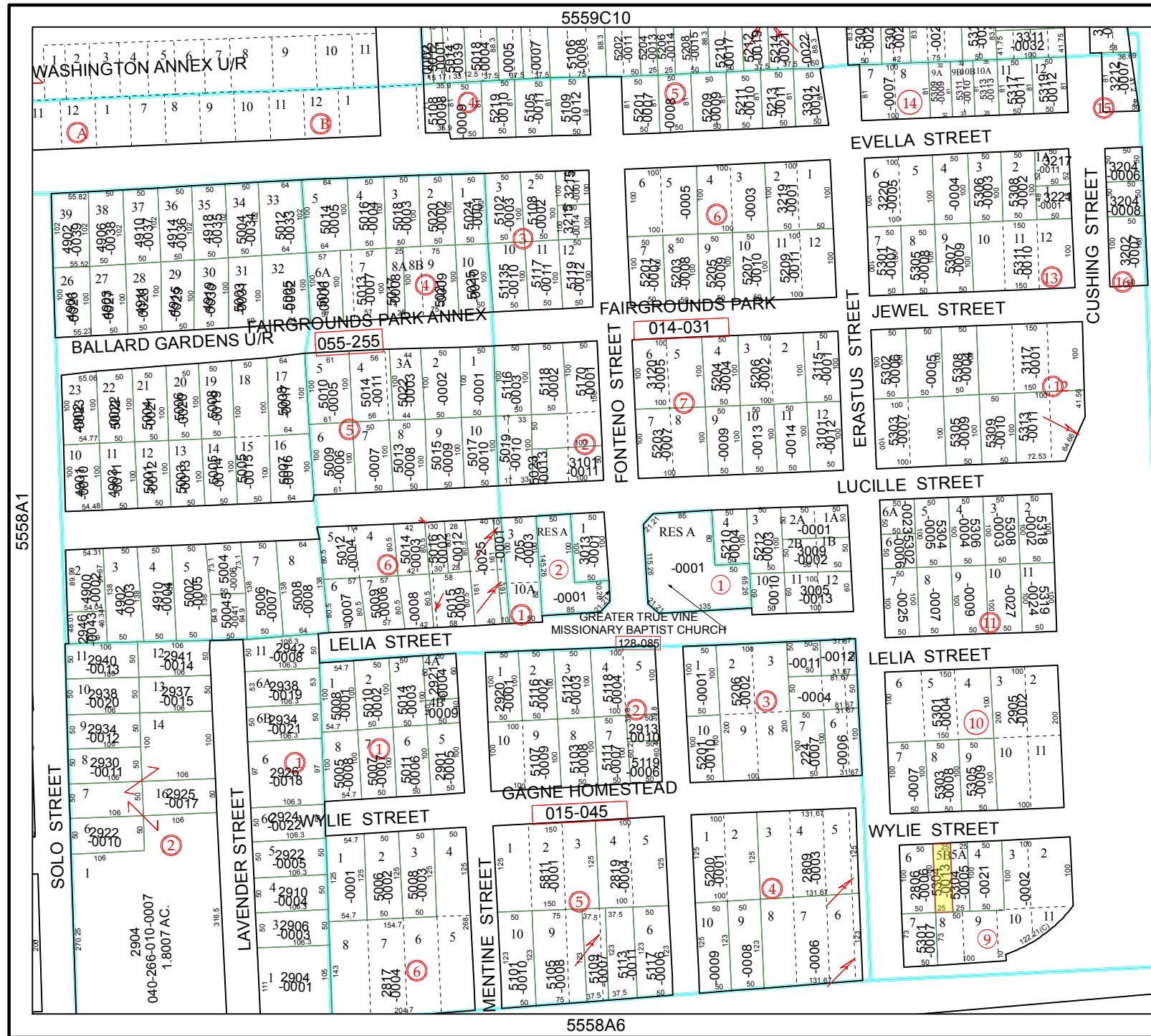
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



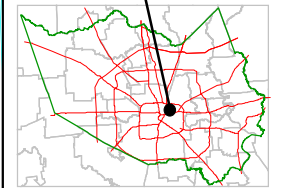
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

5558A1

5558A3

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9210
Date: December 5, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 3rd day of December, 2012, we find the following:

Title Vested In:

Irene Perez Juarez (by Warranty Deed filed for record under Harris County Clerk's File No. L292177)

Property Description: (Map ID# 43) (Tax ID# 014-041-000-0013)

The West One-half (W ½) of Lot Five (5), in Block Nine (9), of Fairground Park, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 81, Page 461 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by City of Houston, showing portions of Wylie Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

- 1) Abstract of Judgment filed November 24, 2009, under Harris County Clerk's File No. 20090534997, styled Freddy's Auto Sales, vs. Irene Juarez, in the principal amount of \$1,225.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

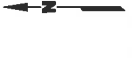
EXHIBIT 2

AFFECTED PROPERTY MAP

- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCL E Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

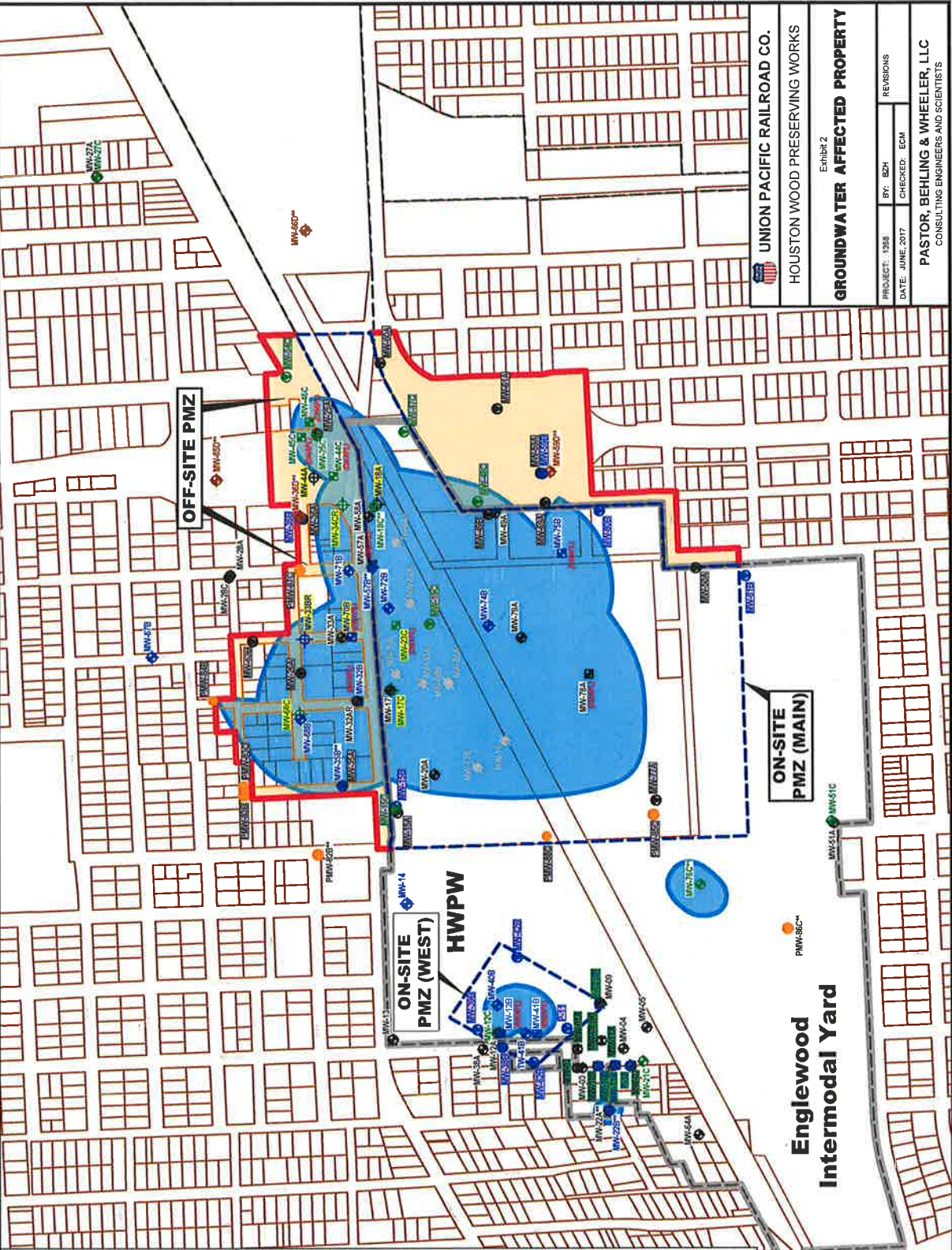
Notes:

1. Vertical datum based on City of Houston (POC) datum.
2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Approx. Scale in Feet
0 200 400

Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Annual



UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISED:
DATE: JUNE, 2017	CHECKED: ECM
BY: BZN	REVISIONS:
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

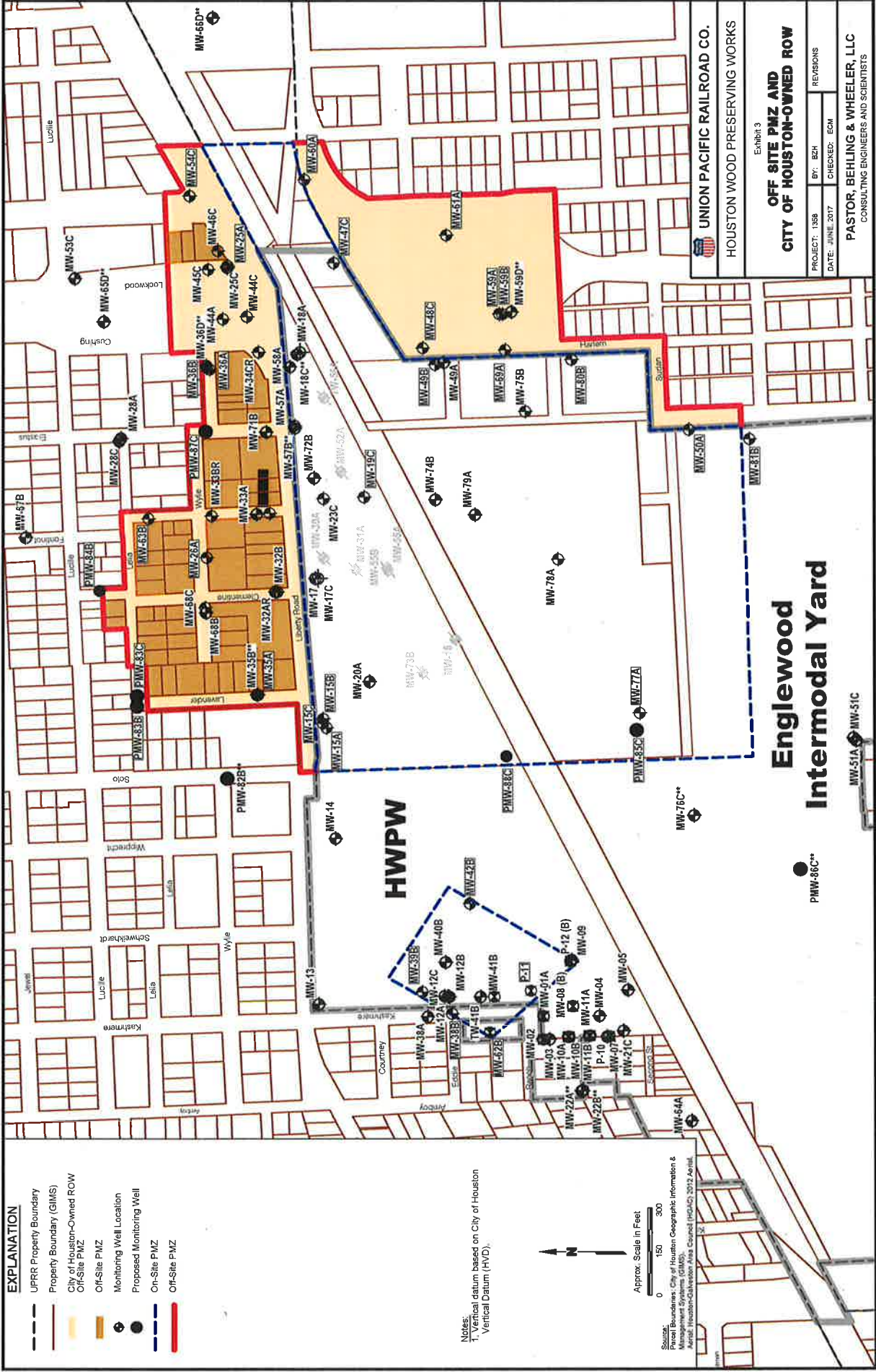
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet

0 150 300

Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158 DATE: JUNE 2017	BY: BZH CHECKED: ECM
REVISIONS	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 44

HCAD ID - 0140410000005

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

The East one half (E1/2) of Lot five Of Fairground Park Addition Subdivision, A subdivision in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Ernest I. Delgado heir and devisee of the estate of Susie Delgado with an address of 5304 ½ Wylie, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 22 day of April, 2015.

[OWNER]

By: _____

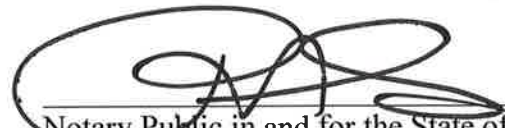
Ernest I. Delgado

Name: Ernest I. Delgado

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 22nd day of April, 2015, personally appeared , Ernest I. Delgado, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 22nd day of April, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires _____



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

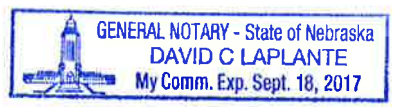
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Solante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

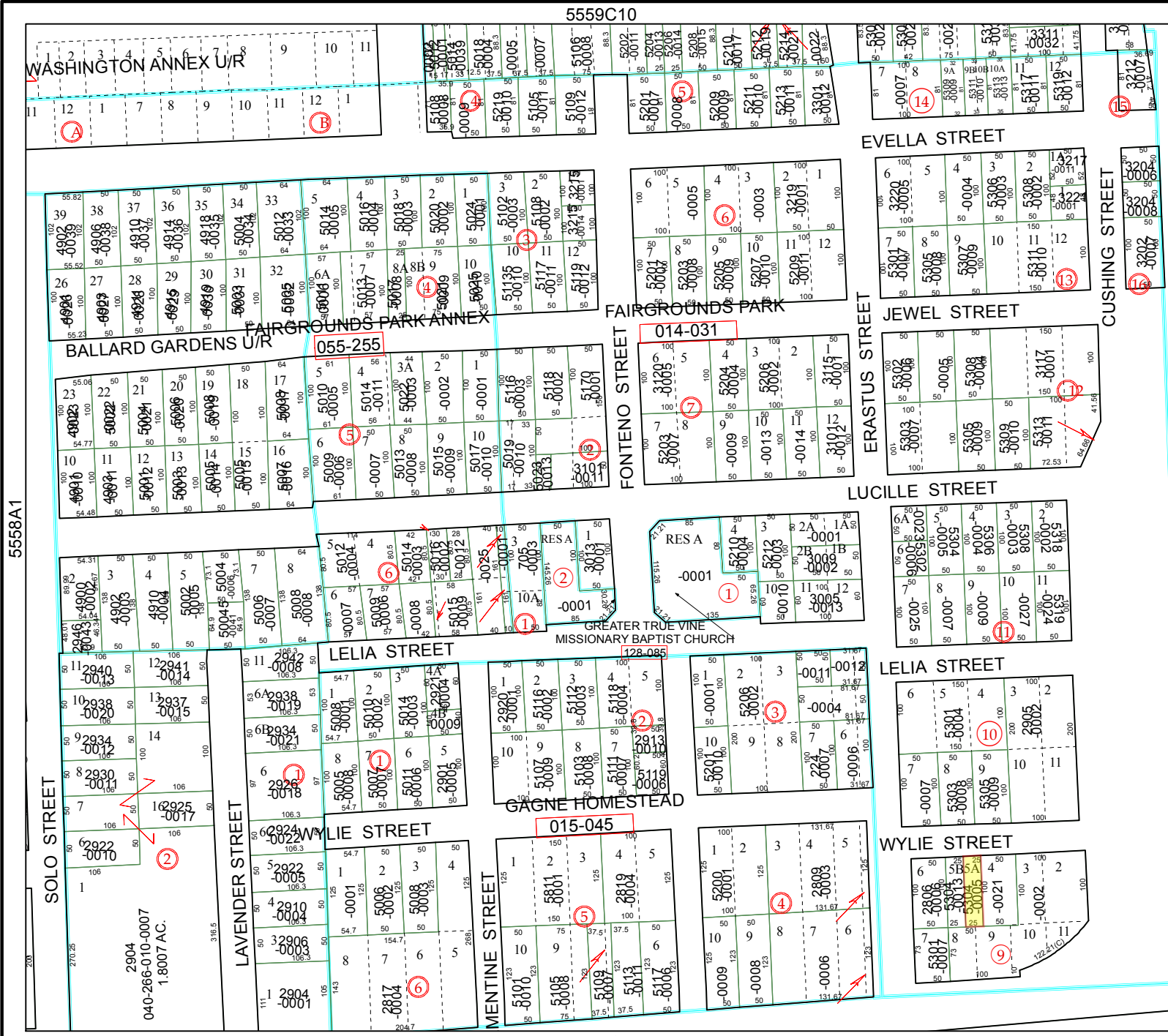
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



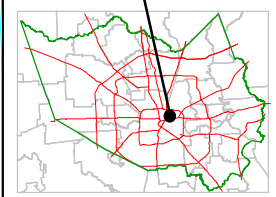
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9211
Date: December 5, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 3rd day of December, 2012, we find the following:

Title Vested In:

Saturnino P. Delgado and wife, Susie Delgado (by Warranty Deed filed for record under Harris County Clerk's File No. C769798)

Property Description: (Map ID# 44) (Tax ID# 014-041-000-0005)

The East One-half (E ½) of Lot Five (5), in Block Nine (9), of Fairground Park, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 81, Page 461 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by City of Houston, showing portions of Wylie Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

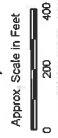
EXHIBIT 2

AFFECTED PROPERTY MAP

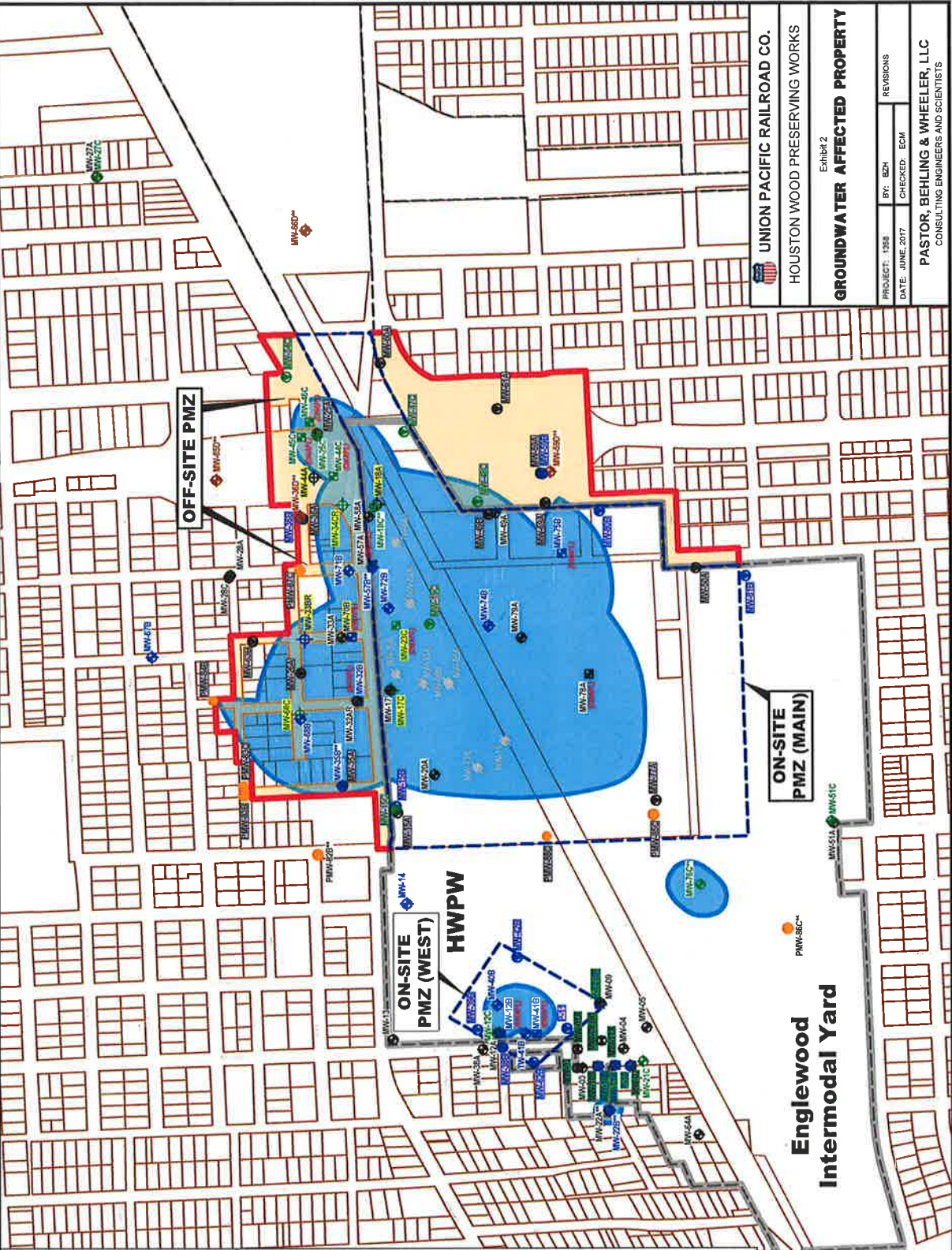
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 57

HCAD ID - 0141390000001

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot One (1), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map and plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Mildred Holmes Wilder, heir and devisee of the estate of Emmitt Holmes (Owner) with an address of 5008 Lelia Street, Houston, Texas 770226. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

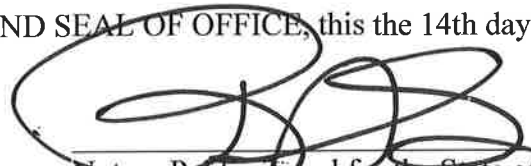
Executed this 14th day of April, 2015.

By: Mildred Holmes Wilder
Name: Mildred Holmes Wilder

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 14th day of April, 2015, personally appeared Mildred Holmes Wilder, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 14th day of April, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

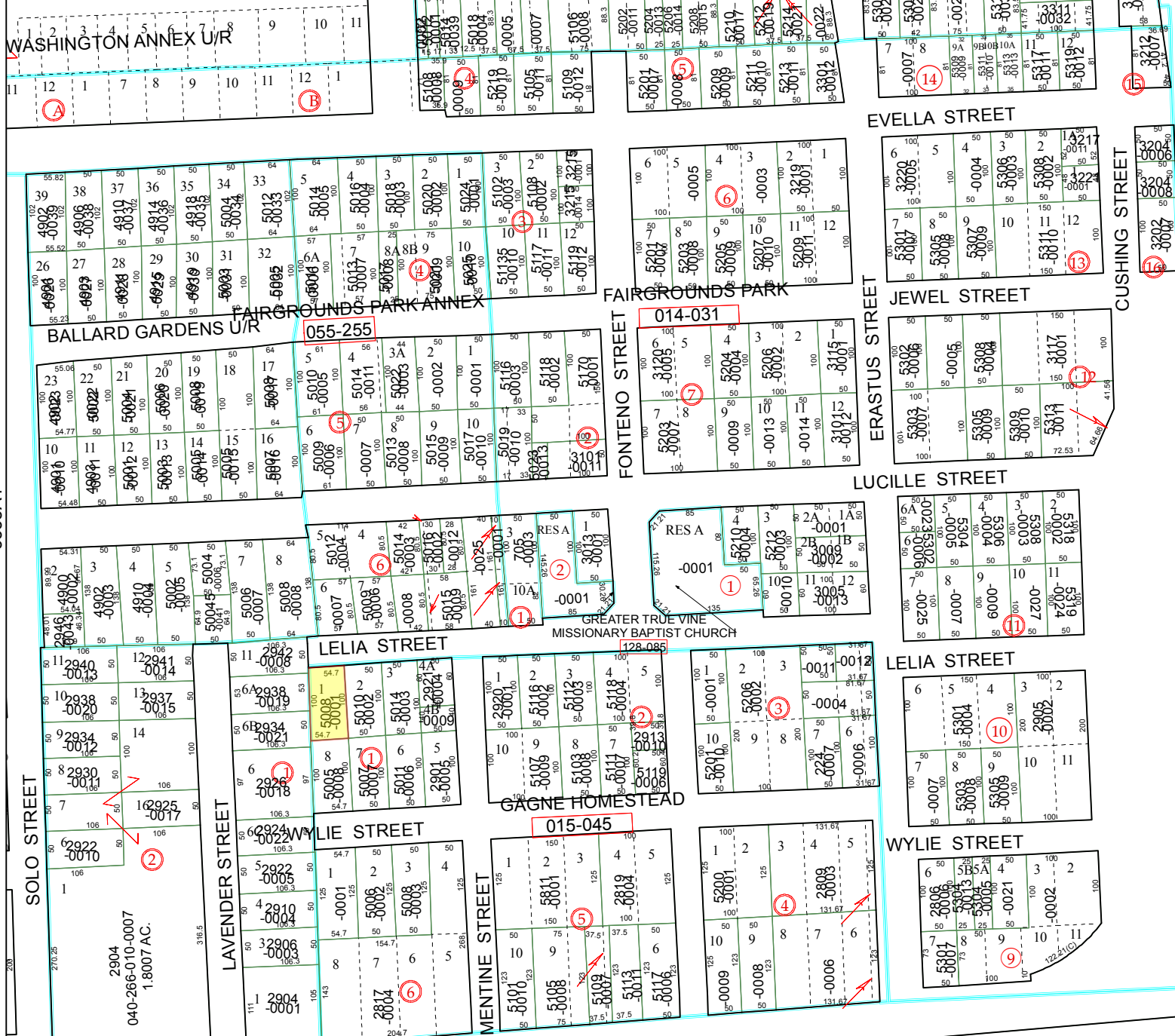
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

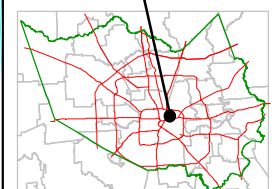
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

2904
040-266-010-0007
1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9230

Date: December 12, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Emmitt Holmes (by Warranty Deed filed for record under Volume 2863, Page 484 of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 57) (Tax ID# 014-139-000-0001)

Lot One (1), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Notice of Lien for work or improvements, filed January 23, 1979 by Health Officer, City of Houston, in the Office of the County Clerk of Harris County, Texas, under Clerk's File No. F939063, to secure the repayment of the sum of \$25.00 plus interest and costs, for cutting weeds, clearing and cleaning of the subject property.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

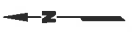
EXHIBIT 2

AFFECTED PROPERTY MAP

EXPLANATION

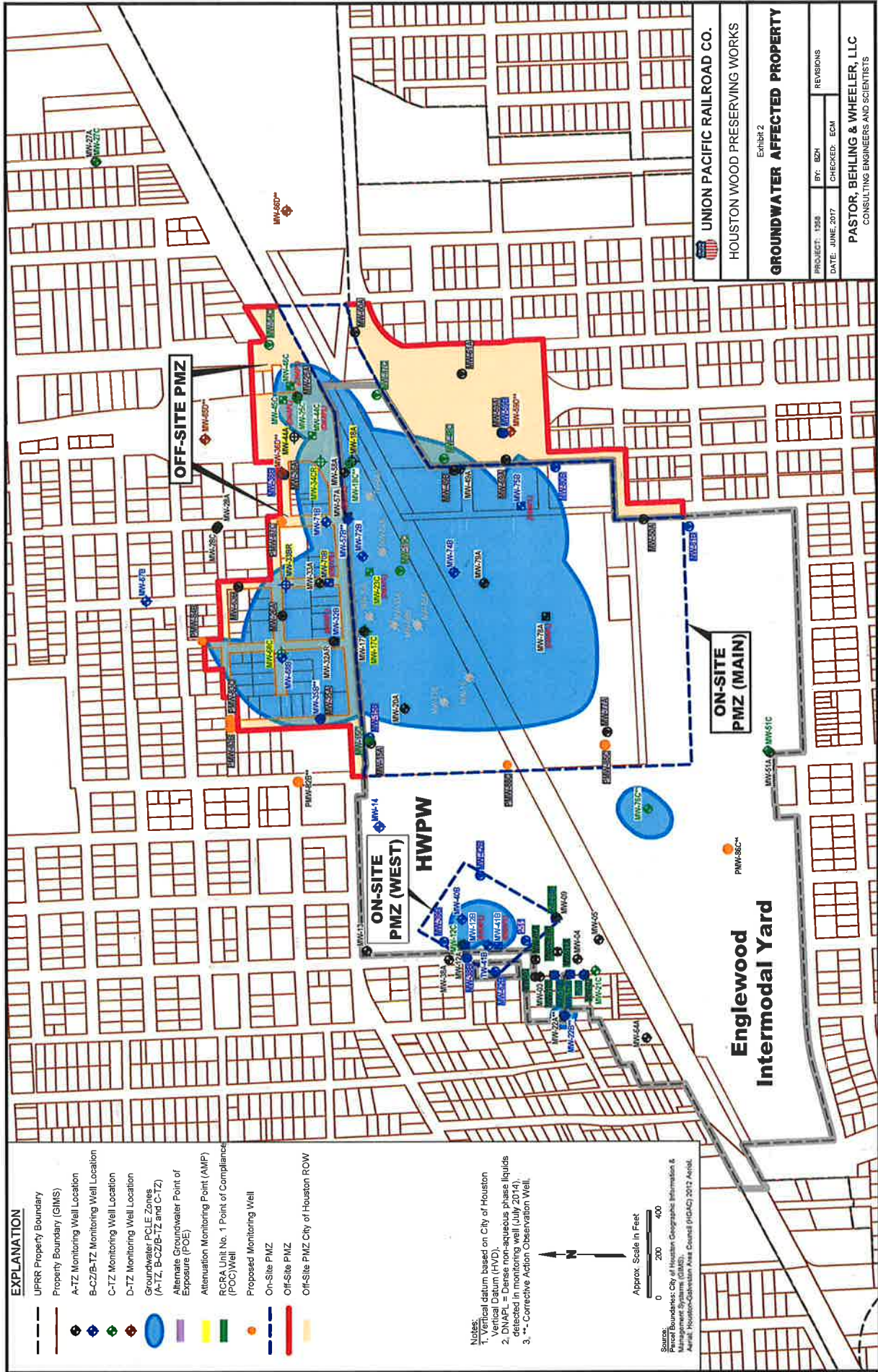
- UPRR Property Boundary
- Property Boundary (GIS)
- A-TZ Monitoring Well Location
- B-CZ/B-TZ Monitoring Well Location
- C-TZ Monitoring Well Location
- D-TZ Monitoring Well Location
- Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- Alternate Groundwater Point of Exposure (POE)
- Attenuation Monitoring Point (AMP)
- RCRA Unit No. 1 Point of Compliance (POC) Well
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (DMS) datum.
 2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Approx. Scale In Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery (2012)
 Aerial, Topographic, and Aerial Imagery (2012)



UNION PACIFIC RAILROAD CO.

Houston Wood Preserving Works
 Exhibit 2
GROUNDWATER AFFECTED PROPERTY

PROJECT: 1358	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
 CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 59

HCAD ID - 0141390000003

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Three (3), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map and plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Guadalupe Rivera Jr. (Owner) and devisee of the estate Johnnie Ellis with an address of 5014 Lelia, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 31st day of March, 2015.


Name: Guadalupe Rivera Jr.

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 31st day of March, 2015, personally appeared Guadalupe Rivera Jr. [owner], known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31 day of February, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

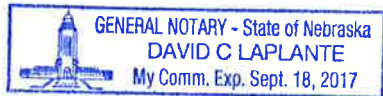
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

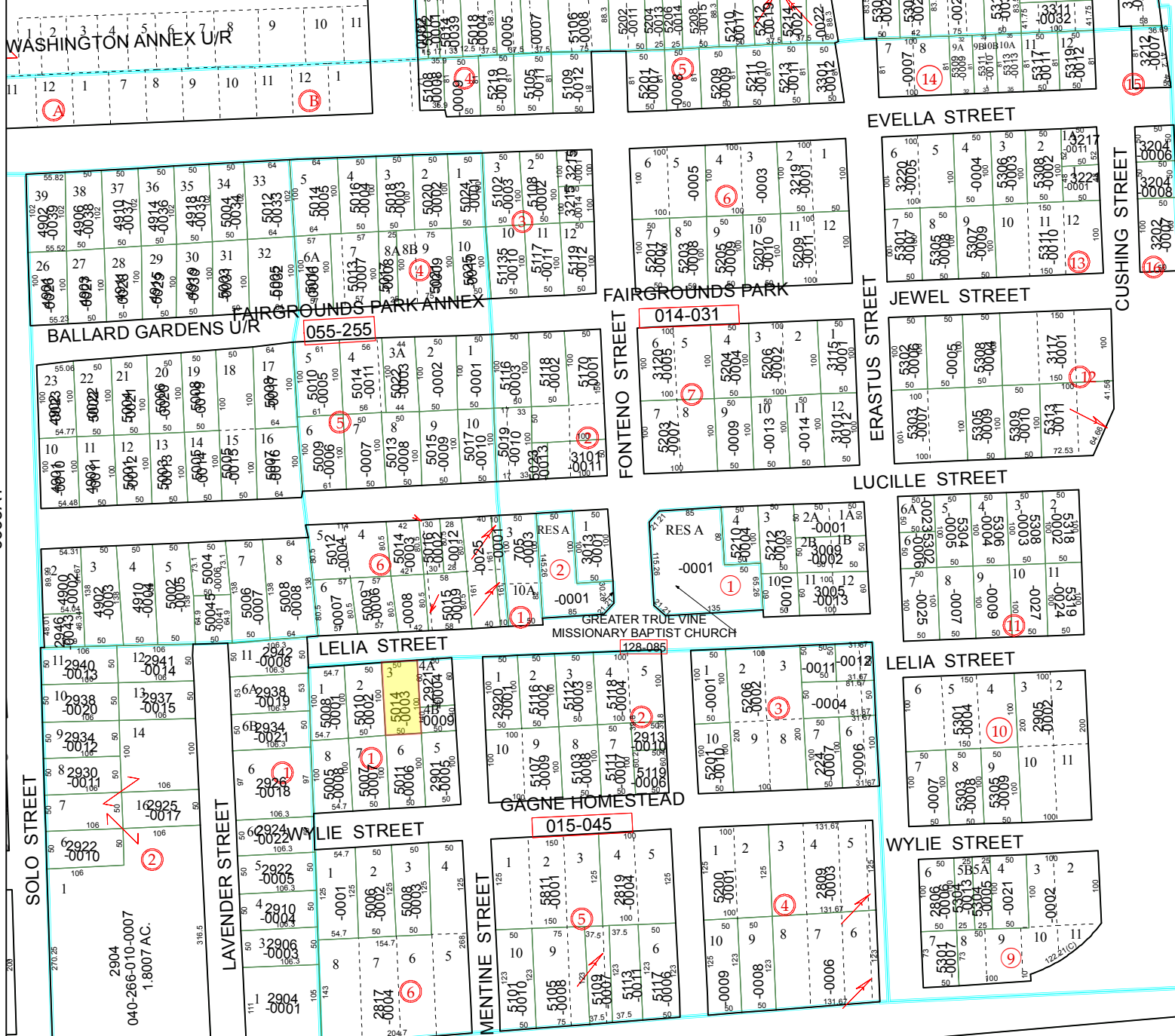
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

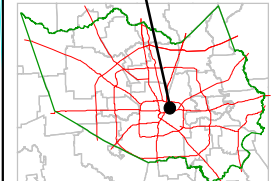
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

2904
040-266-010-0007
1.8007 AC.

2924
00224
0005

015-045

014-031

055-255

5558A3



**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9234

Date: December 12, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Guadalupe Rivera, Jr. and Flor Estela Rivera (by Warranty Deed filed for record under Harris County Clerk's File No. 20110426670)

Property Description: (Map ID# 59) (Tax ID# 014-139-000-0003)

Lot Three (3), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

- 1) Abstract of Judgment filed December 24, 2008, under Harris County Clerk's File No. 20080612026, styled State Farm, vs. Flor Rivera, in the principal amount of \$4,479.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

EXHIBIT 2

AFFECTED PROPERTY MAP

- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (POC) well.
 2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



Approx. Scale in Feet
 0 200 400

Source: City of Houston Geographic Information & Mapping System
 Austin, Fortinet-Clouston Area Council (FACAC) 2012 Aerial

UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1558	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

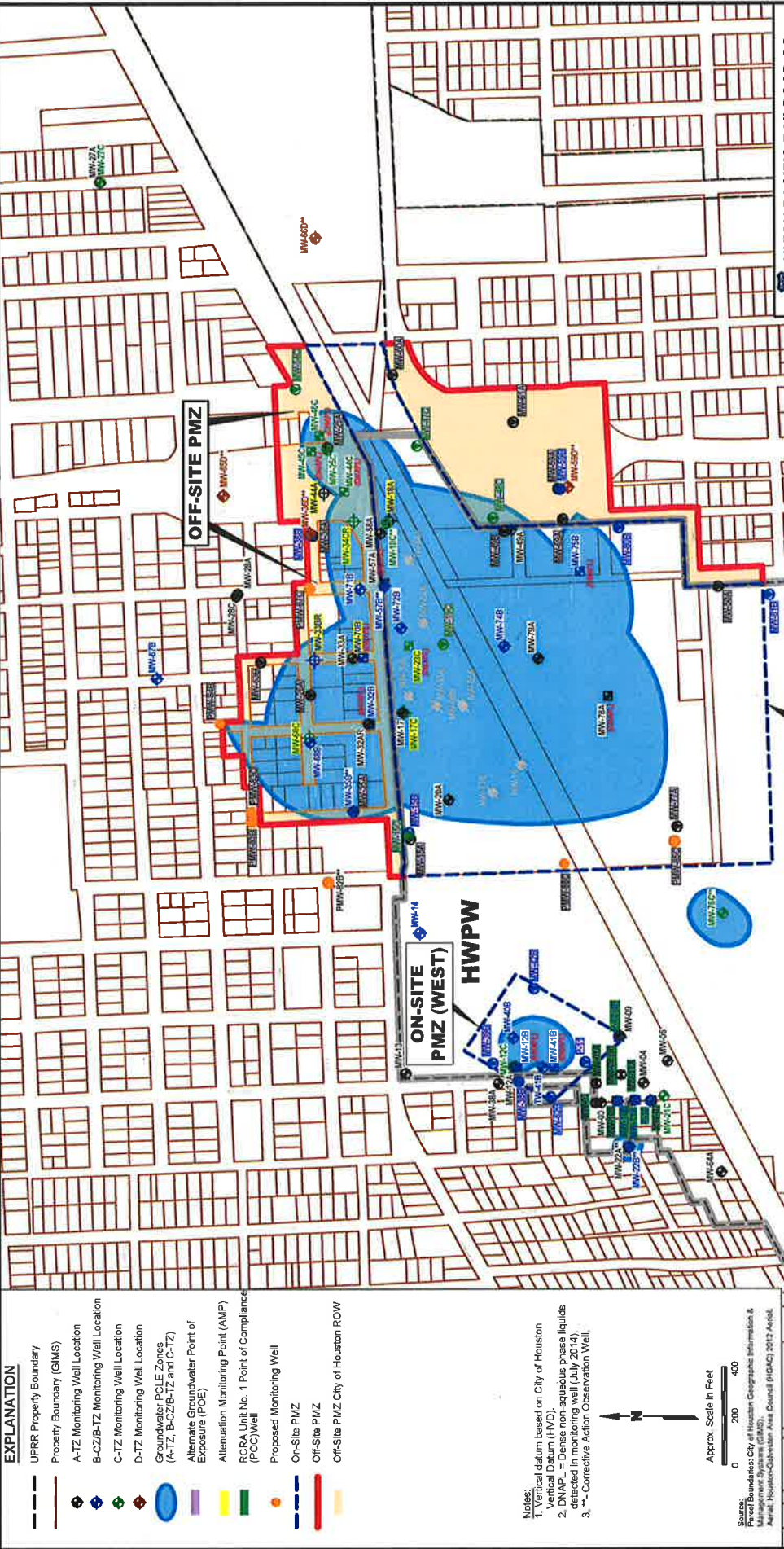


EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 60

HCAD ID - 0141390000004

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 31st day of March, 2015.

By: Rogelio Pineda
Name: ~~Olivia~~ Pineda
ROGELIO PINEDA


STATE OF TEXAS

HARRIS COUNTY

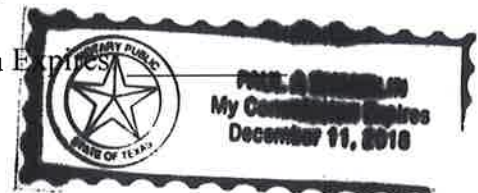
ROGELIA PINEDA

BEFORE ME, on this the 31st day of March, 2015, personally appeared ~~Olivia Pineda~~, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31st day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

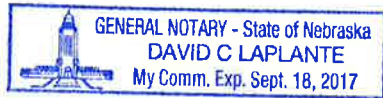
By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

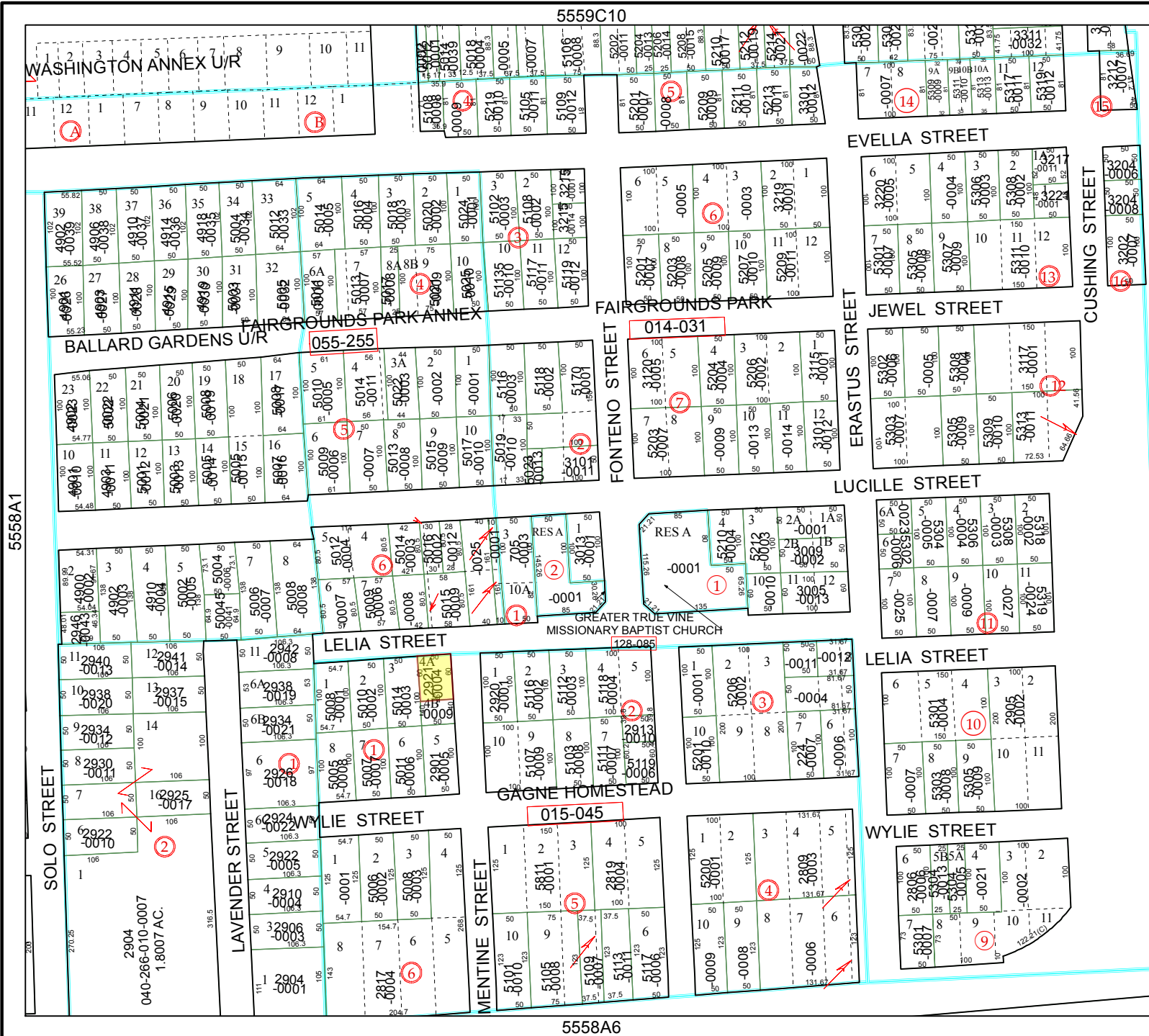
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



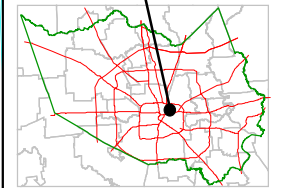
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9239
Date: December 13, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Rogelio Ruiz Pineda and Olivia Pineda, husband and wife (by Warranty Deed filed for record under Harris County Clerk's File No. M698759)

Property Description: (Map ID# 60) (Tax ID# 014-139-000-0004)

The North sixty feet (N 60') of Lot Four (4), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Order of the Building Official of the City of Houston dated January 30, 1990, filed for record under Harris County Clerk's File No(s). M555328, determining that the building(s) are posted as dangerous in accordance with Section 10-326 of the Code of Ordinances, and requiring the owner to take the corrective measures described therein; or the City will demolish said building(s) and place a lien for the expenses incurred.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

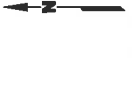
EXHIBIT 2

AFFECTED PROPERTY MAP

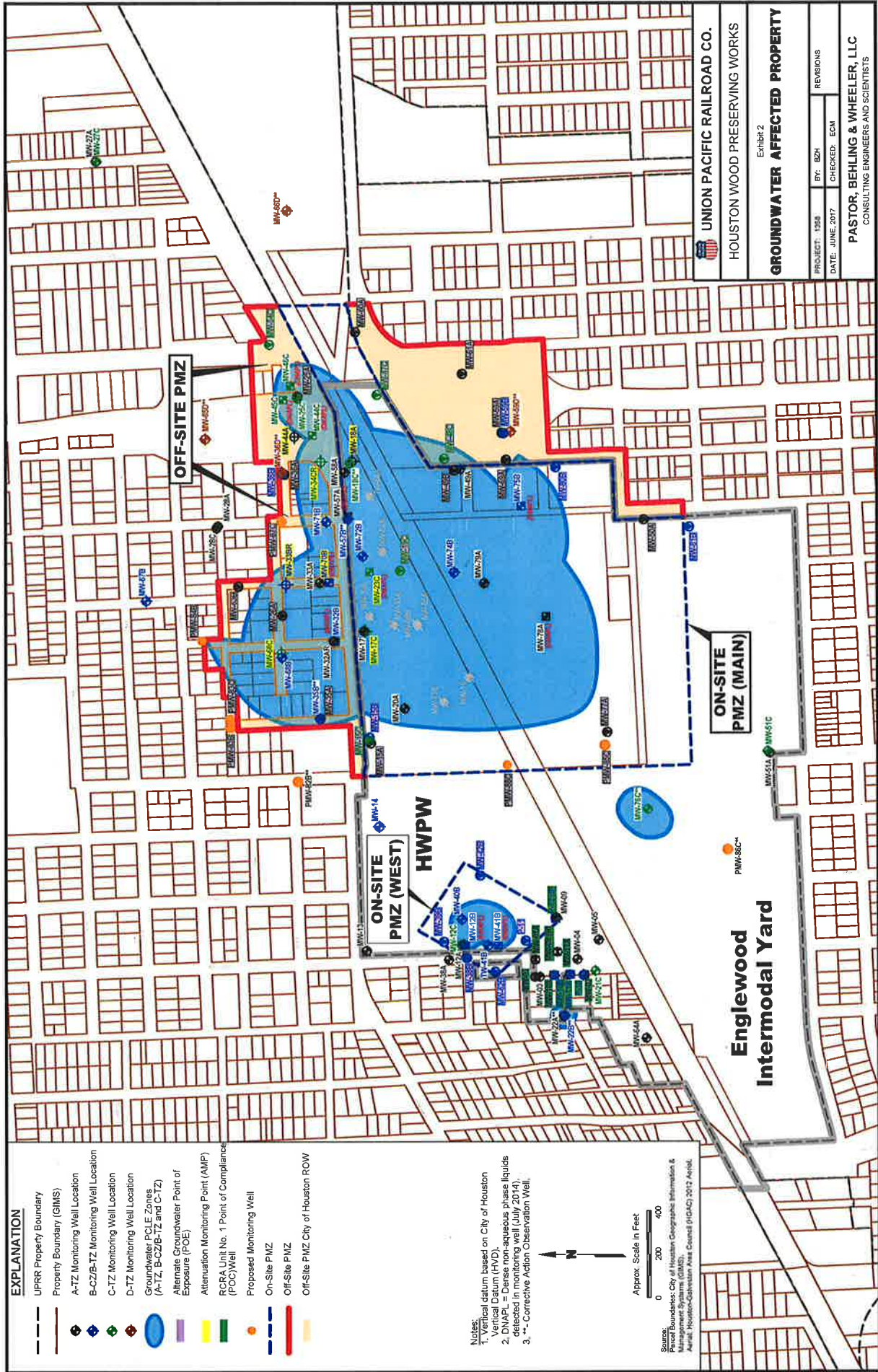
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non-aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Austin, Fortinet-Clouston Area Council (FACAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 61

HCAD ID - 0141390000009

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

The South Forty feet (S 40') of Lot Four (4), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map and plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Guadalupe Rivera (Owner) and devisee of the estate Johnnie Ellis with an address of 3401 Erastus, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

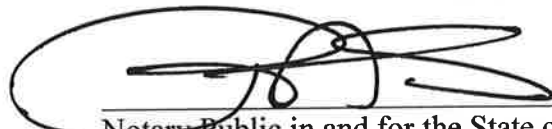
Executed this 31st day of March, 2015.


Name: Guadalupe Rivera

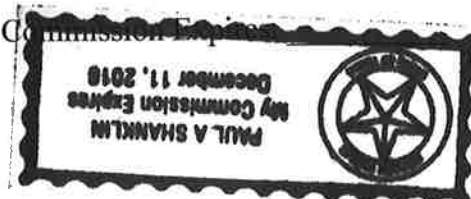
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 31st day of March, 2015, personally appeared Guadalupe Rivera [owner], known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31 day of February, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

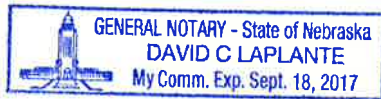
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

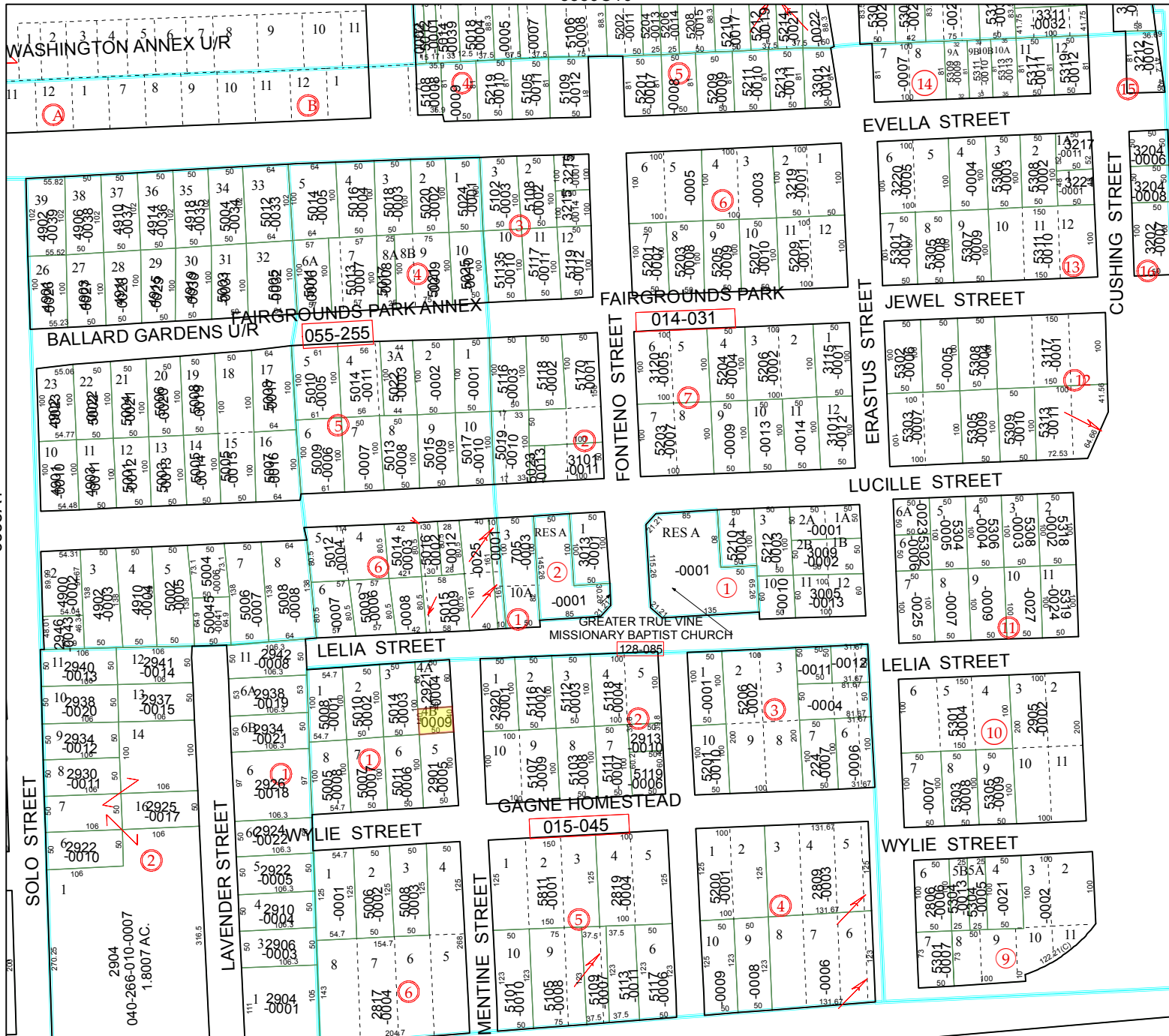
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



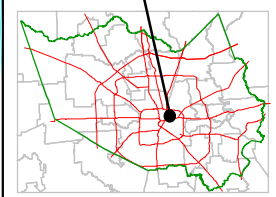
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

5558A1

5558A3



2904
040-266-010-0007
1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9243
Date: December 13, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 5th day of December, 2012, we find the following:

Title Vested In:

Guadalupe Rivera and wife, Alicia Rivera (by Warranty Deed filed for record under Harris County Clerk's File No. R478026)

Property Description: (Map ID# 61) (Tax ID# 014-139-000-0009)

The South forty feet (S 40') of Lot Four (4), in Block One (1), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

None of record.

Involuntary Liens:

- 1) Abstract of Judgment filed April 26, 2010, under Harris County Clerk's File No. 20100166073, styled Cach, LLC, vs. Alicia Rivera, in the principal amount of \$3,564.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



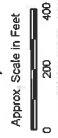
Darrell Stone
Title Examiner

EXHIBIT 2

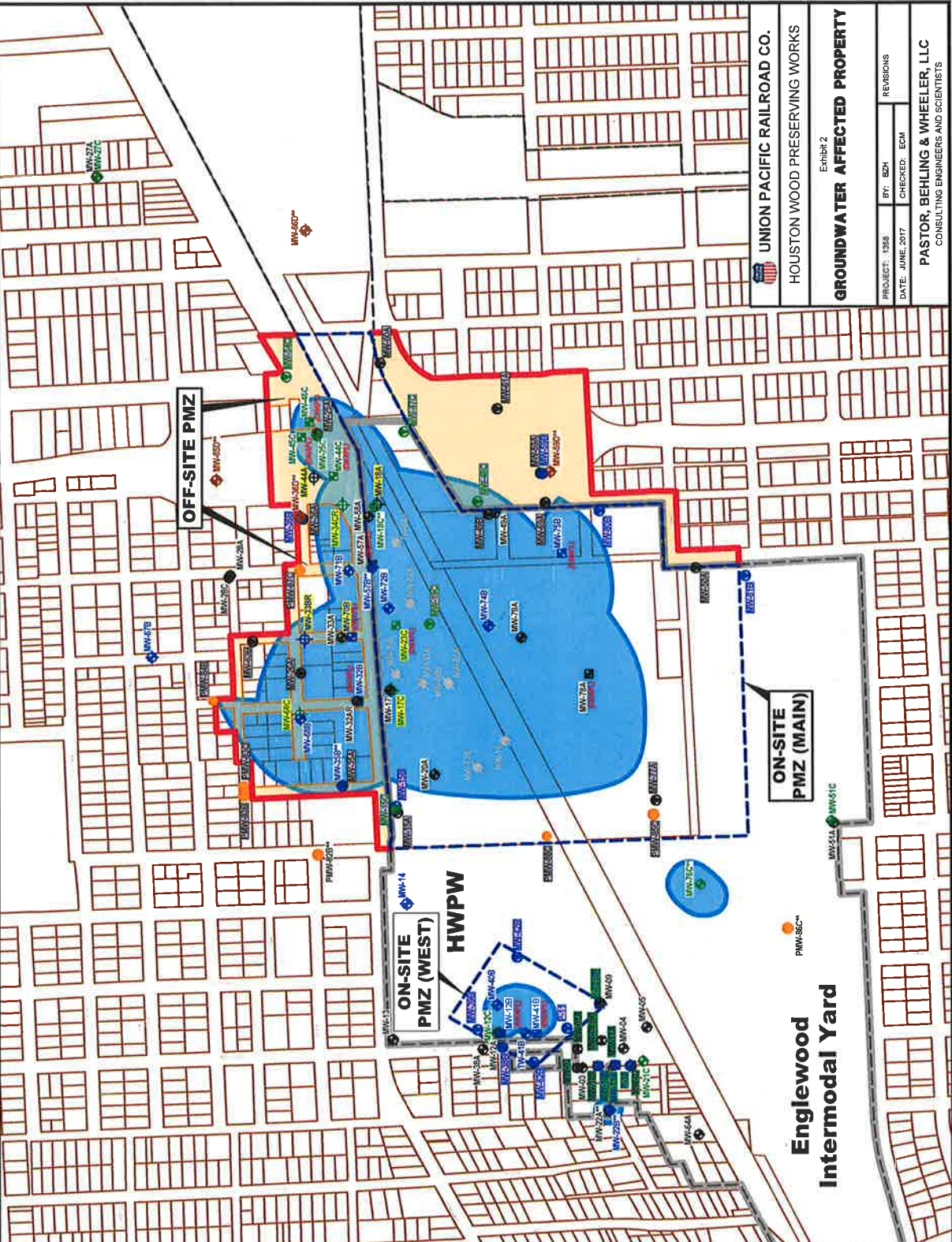
AFFECTED PROPERTY MAP

- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:
 1. Vertical datum based on City of Houston (POC) Well.
 2. DNAPL = Dense non aqueous phase liquids detected in monitoring well (July 2014).
 3. **, Corrective Action Observation Well.



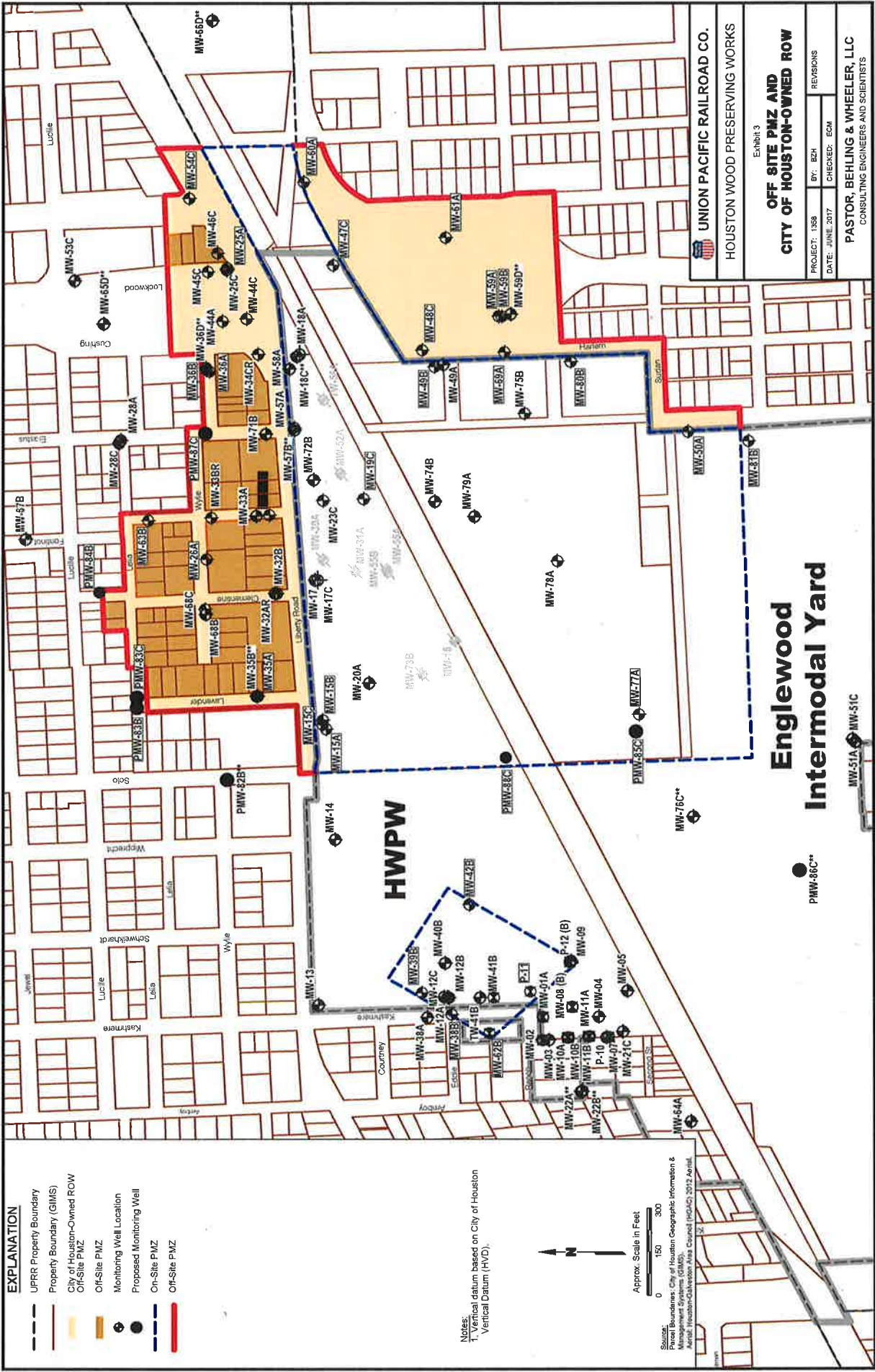
Source:
 Parcel Boundaries: City of Houston Geographic Information & Mapping System
 Aerial Imagery: Google Earth
 Aerial, Topographic Data: Area Council (TIGAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.		
Exhibit 2 GROUNDWATER AFFECTED PROPERTY		
PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).

Approx. Scale in Feet
 0 150 300

Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 63

HCAD ID - 0141400000002

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 31st day of March, 2015.


By: 
Name: Elizabeth Thomas

STATE OF TEXAS

HARRIS COUNTY

BEFORE ME, on this the 31st day of March, 2015, personally appeared Elizabeth Thomas, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31st day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

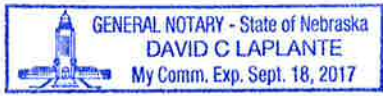
By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

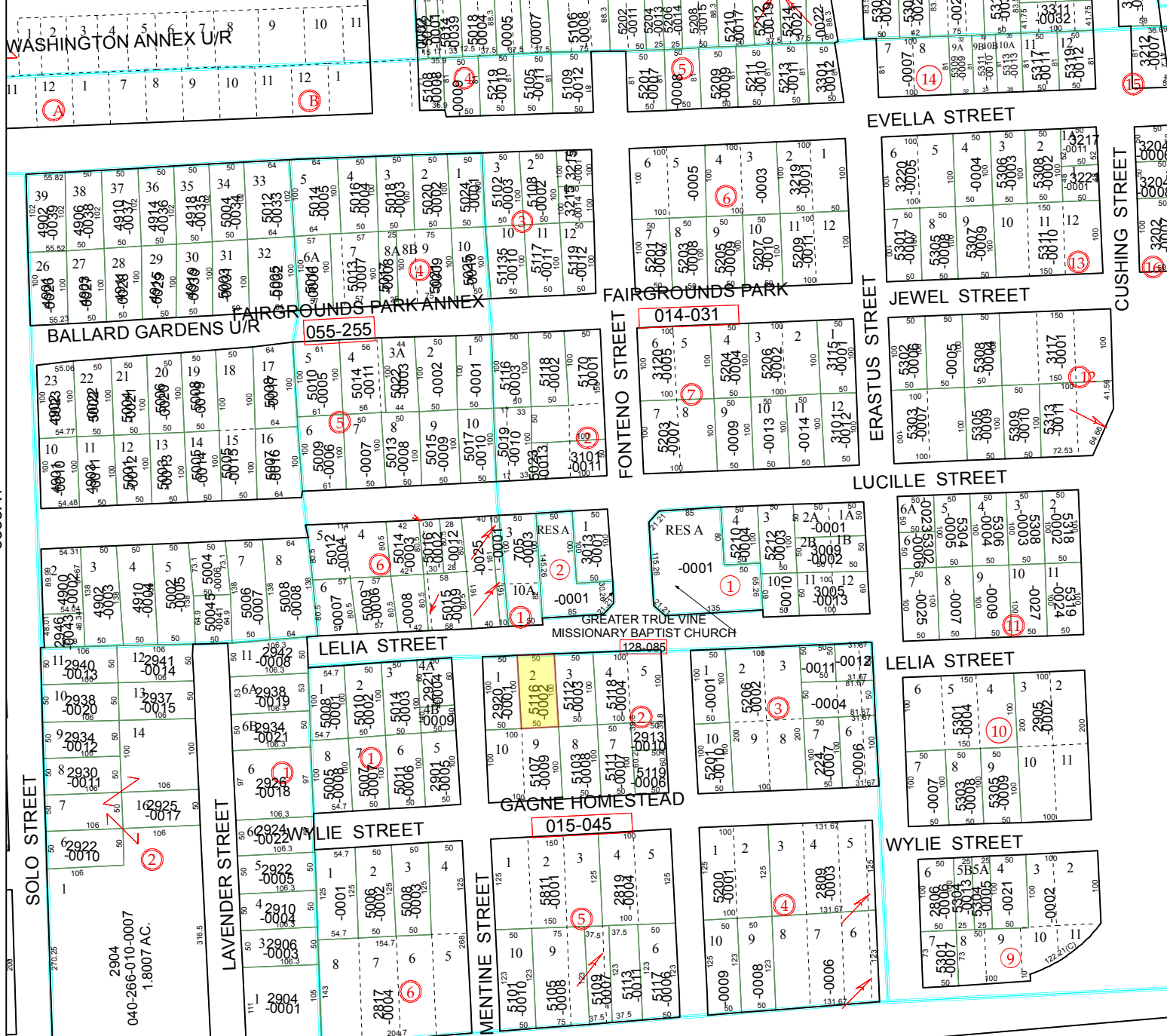
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

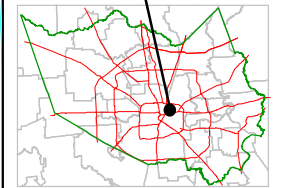
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3



**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9274
Date: December 15, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of December, 2012, we find the following:

Title Vested In:

Elizabeth Thomas (by Warranty Deed filed for record under Harris County Clerk's File No. E525502)

Property Description: (Map ID# 63) (Tax ID# 014-140-000-0002)

Lot Two (2), in Block Two (2), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lelia Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

- 1) Abstract of Judgment filed March 18, 2005, under Harris County Clerk's File No. Y334139, styled USA, vs. Elizabeth Thomas, in the principal amount of \$1,337.00, plus cost, interest and attorney's fees.
- 2) Abstract of Judgment filed January 18, 2006, under Harris County Clerk's File No. Z34499, styled CACV of Colorado, vs. Elizabeth Thomas, in the principal amount of \$2,156.00, plus cost, interest and attorney's fees.
- 3) Abstract of Judgment filed July 9, 2008, under Harris County Clerk's File No. 20080360210, styled Texas Dow Employees Credit Union, vs. Elizabeth Thomas, in the principal amount of \$21,784.00, plus cost, interest and attorney's fees.

NOTES:

- The Harris County Appraisal District indicate Carter Thomas as the current tax payer of the subject property, however we find no conveyance into Carter Thomas. There are numerous probates for persons with the name of Elizabeth Thomas, however we cannot determine which, if any, apply.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

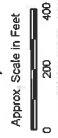
EXHIBIT 2

AFFECTED PROPERTY MAP

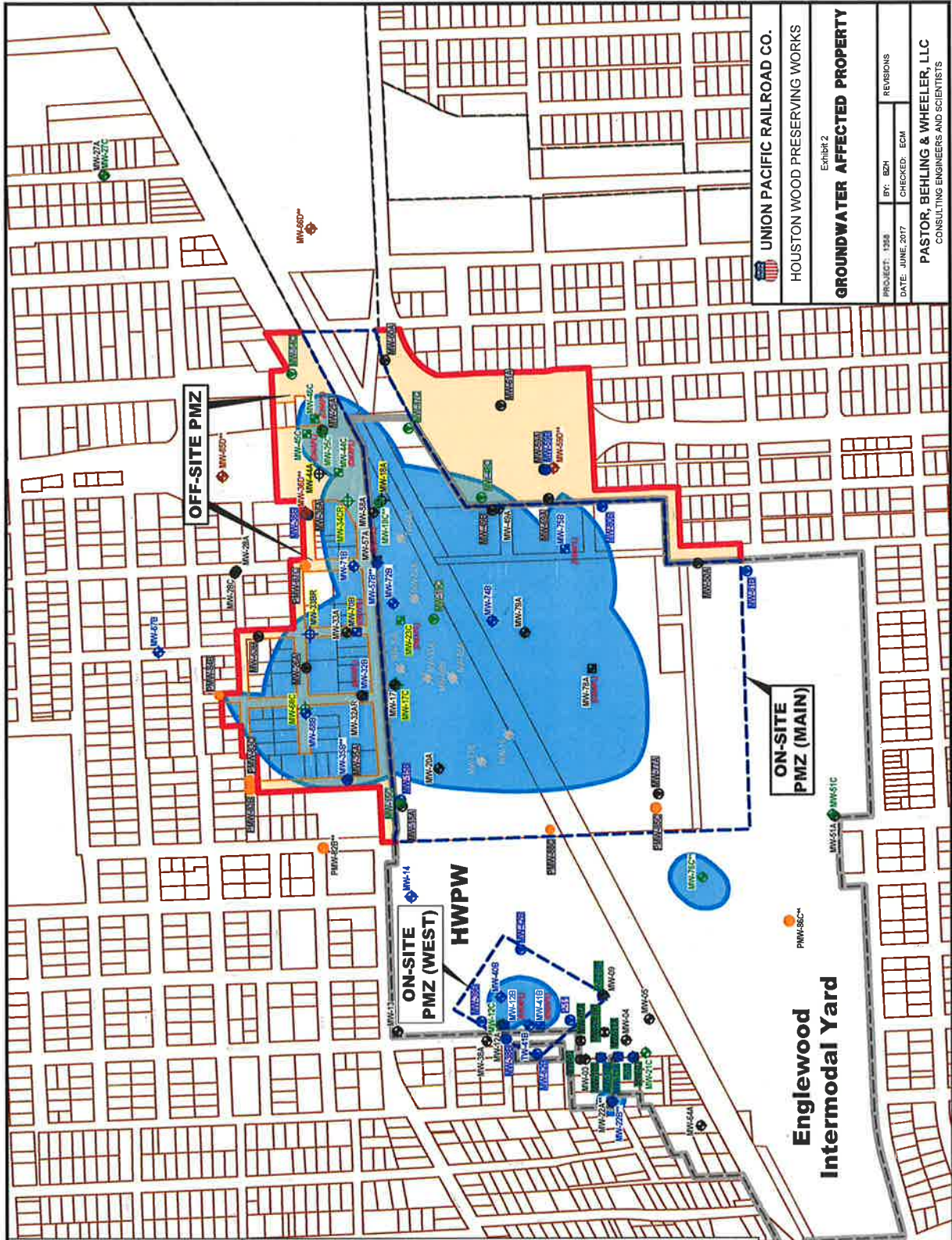
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCL Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (DMS).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



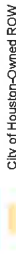







UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISED:
DATE: JUNE, 2017	CHECKED: ECM
DY: BZN	REVISIONS:
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

-  UPRR Property Boundary
-  Property Boundary (GIMS)
-  City of Houston-Owned ROW
-  Off-Site PMZ
-  Monitoring Well Location
-  Proposed Monitoring Well
-  On-Site PMZ
-  Off-Site PMZ

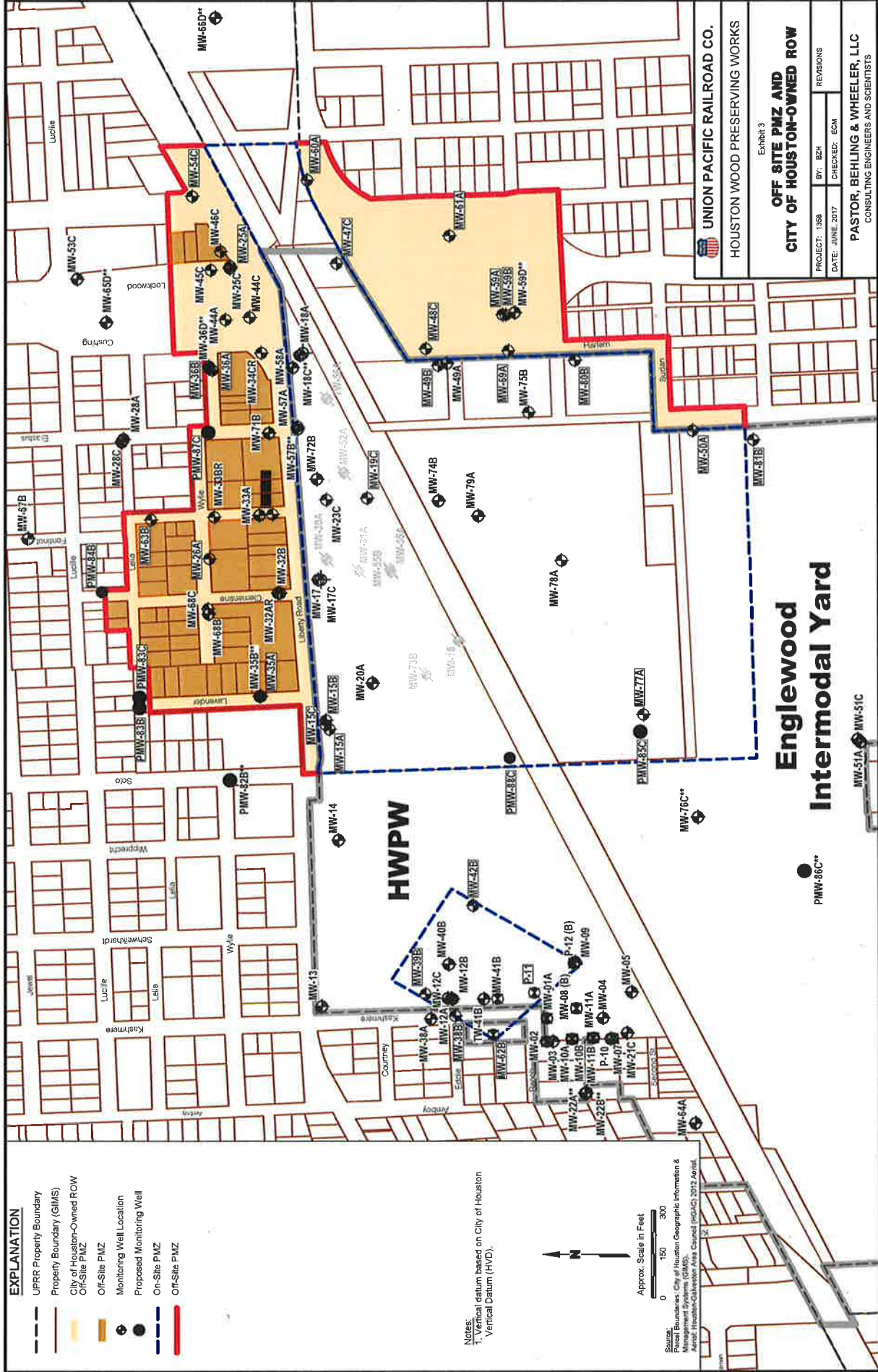
Notes:
 1. Vertical datum based on City of Houston
 Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information &
 Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.




 UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
		PROJECT: 158 DATE: JUNE 2017	BY: BSH CHECKED: EGM
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS			

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 64

HCAD ID - 0141400000003

Restrictive Covenant

STATE OF TEXAS §

§

COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Three (3) in Block two (2), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Elizabeth Thomas (Owner) with an address of 5116 Lelia Street, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 31st day of March, 2015.

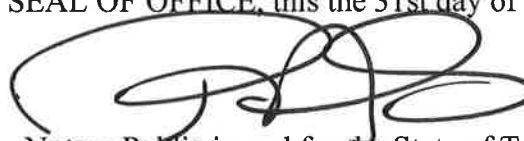
By: 
Name: Elizabeth Thomas

STATE OF TEXAS

HARRIS COUNTY

BEFORE ME, on this the 31st day of March, 2015, personally appeared Elizabeth Thomas, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31st day of March, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

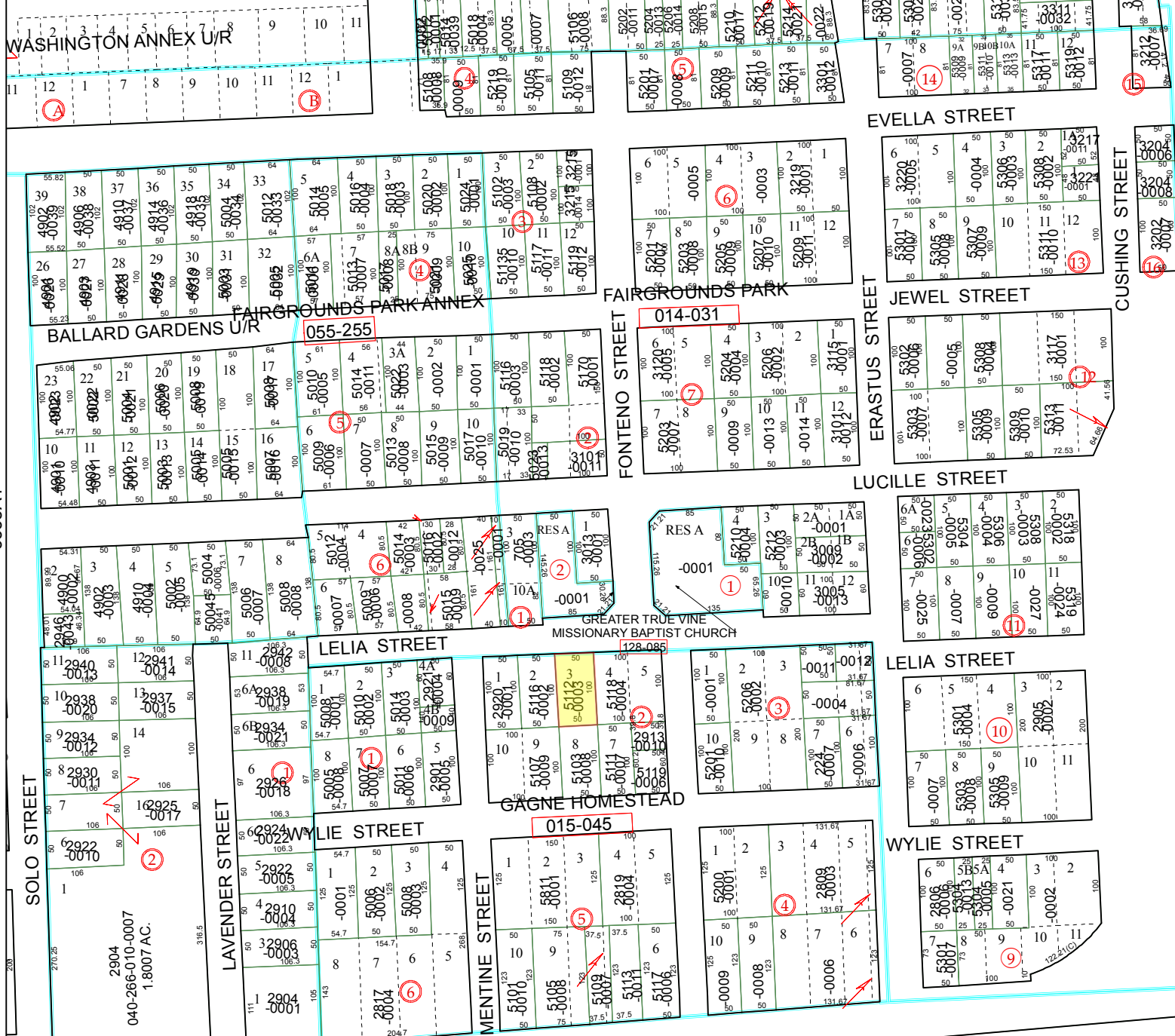
Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1

5559C10



5558A6

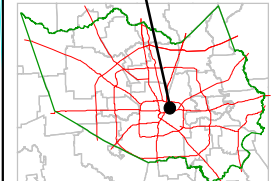
Harris County Appraisal District



0 100 200
 PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

2904
 040-266-010-0007
 1.8007 AC.

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-12-9275
Date: December 15, 2012

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of December, 2012, we find the following:

Title Vested In:

The Heirs and Devisees of the Estate of Francis Potts, deceased (by Warranty Deed filed for record under Volume 511, Page 583 of the Deed Records of Harris County, Texas)

Property Description: (Map ID#64) (Tax ID# 014-140-000-0003)

Lot Three (3), in Block Two (2), of Finn Subdivision out of the Gagne Homestead, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lelia Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

NOTES:

- The Harris County Appraisal District indicate Avie Potts as the current tax payer of the subject property, however we find no conveyance into Avie Potts. It is assumed that Francis Potts is now deceased, however we find no heirship proceedings or probates of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

EXHIBIT 2

AFFECTED PROPERTY MAP

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

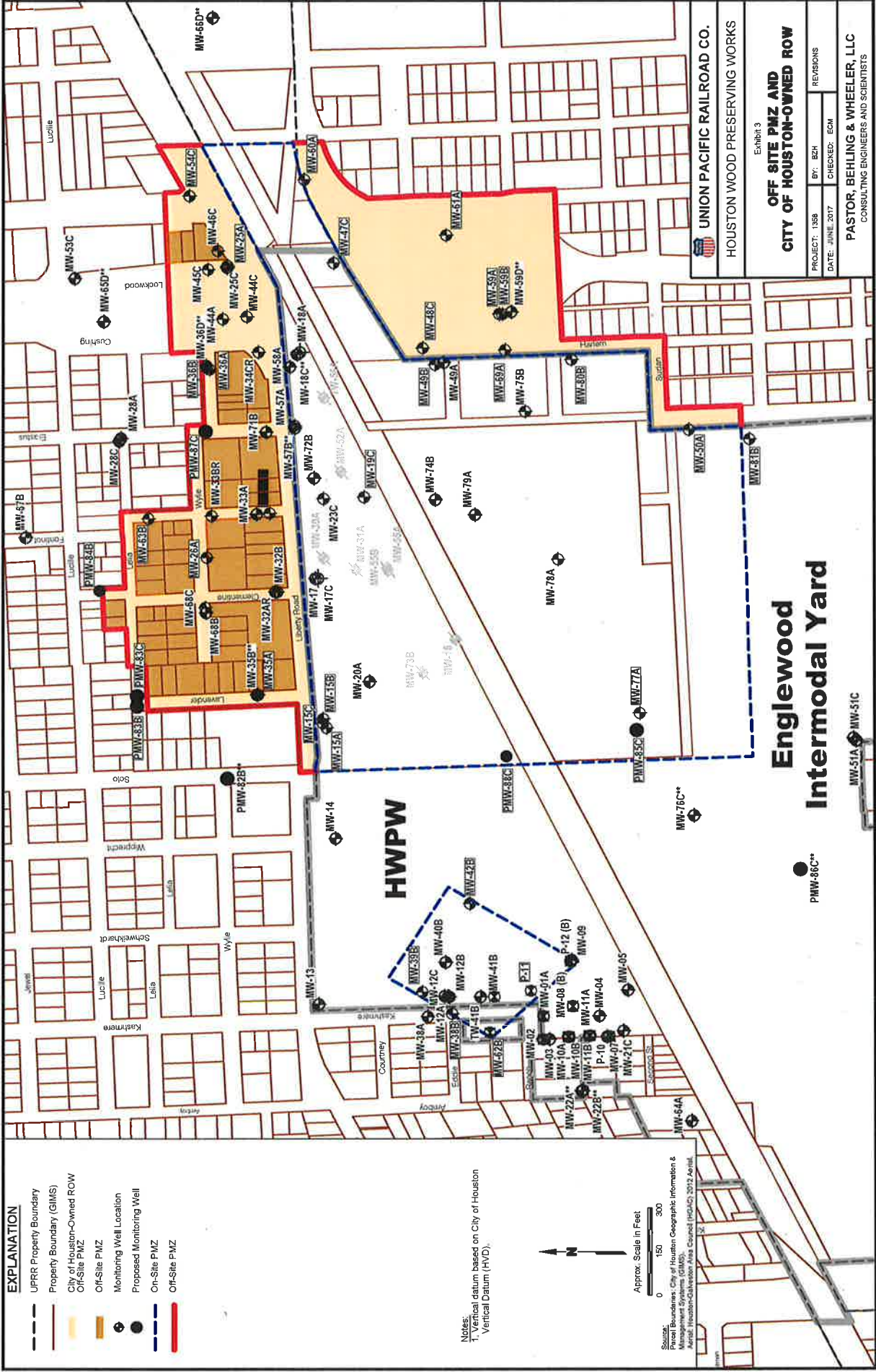
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-49A

MW-59A

MW-59B

MW-59D**

MW-66D**

MW-53C

MW-65D**

MW-45C

MW-44C

MW-36D**

MW-44A

MW-36A

MW-34CR

MW-33A

MW-32B

MW-32A

MW-23C

MW-23A

MW-23B

MW-20A

MW-17C

MW-17B

MW-17A

MW-14

MW-13

MW-12B

MW-12A

MW-11B

MW-11A

MW-10B

MW-10A

MW-09

MW-08 (B)

MW-08 (A)

MW-07

MW-06

MW-05

MW-04

MW-03

MW-02

MW-01

MW-00

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 76

HCAD ID - 0402660100019

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

Lot Ten (10), and the North Three (3) feet of Lot Nine (9), Liberty Road Estates, an unrecorded subdivision of the Northwest portion of the Gagne tract in Harris County, Texas according to the map and plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Mary D. Hutchins, daughter and sole heir of Essie Lee Hutchins (Owner) with an address of 2938 Lavender Street, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.


Executed this 7th day of April, 2015.

By: 
Name: Mary D. Hutchins

STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 7th day of April, 2015, personally appeared Mary D. Hutchins, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 22 day of April, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante

Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____



Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

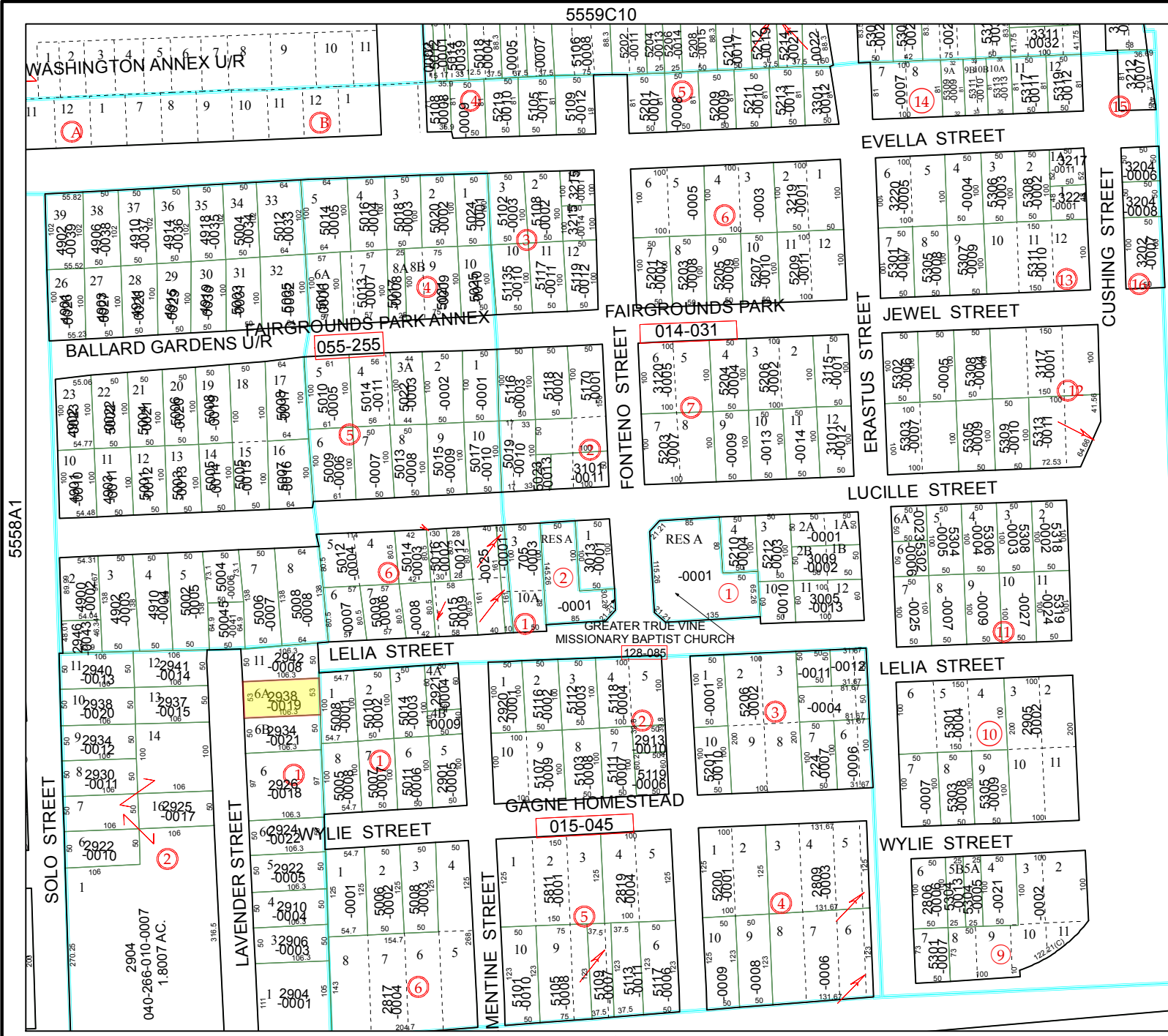
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



5558A1

5559C10

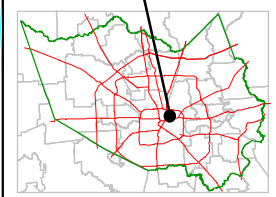
Harris County Appraisal District



0 100 200
 PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0479

Date: January 22, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Essie Lee Hutchins (by Warranty Deed filed for record under Harris County Clerk's File No. P469225)

Property Description: (Map ID# 76) (Tax ID# 040-266-010-0019)

Lot Ten (10), and the North Three (3) feet of Lot Nine (9), Liberty Road Estates, an unrecorded subdivision, same being a resubdivision of a tract of 5.140 acres out of the Northwest portion of the Gagne Tract, which is the middle portion of Lot Eight (8), Second Tier from Buffalo Bayou, out of the Harris & Wilson Two League Grant in Harris County, Texas and being the same land conveyed to John Grado and V. Billitti by Mary Alice Alexander, et vir, by deed dated September 14, 1894, recorded in Volume 79, Page 242 of the Deed Records of Harris County, Texas. Said Lot Ten (10) and North Three (3) feet of Lot Nine (9), Liberty Road Estates is further described by metes and bounds as follows to wit:

Beginning at the Northeast corner of said 5.140 acre tract;

THENCE South 50 feet for place of beginning, being the Northeast corner of the tract herein described, and at a point in the East line of the Pancamo tract;

THENCE South 53 feet along the East line of the Pancamo tract a distance of 53 feet for the Southeast corner;

THENCE West a distance of 106.3 feet to a point in the East line of Lavender Street for the Southwest corner;

THENCE North a distance of 53 feet, same being the Southwest corner of Lot 11;

THENCE East a distance of 106.3 feet to the place of beginning.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lavender Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

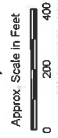
EXHIBIT 2

AFFECTED PROPERTY MAP

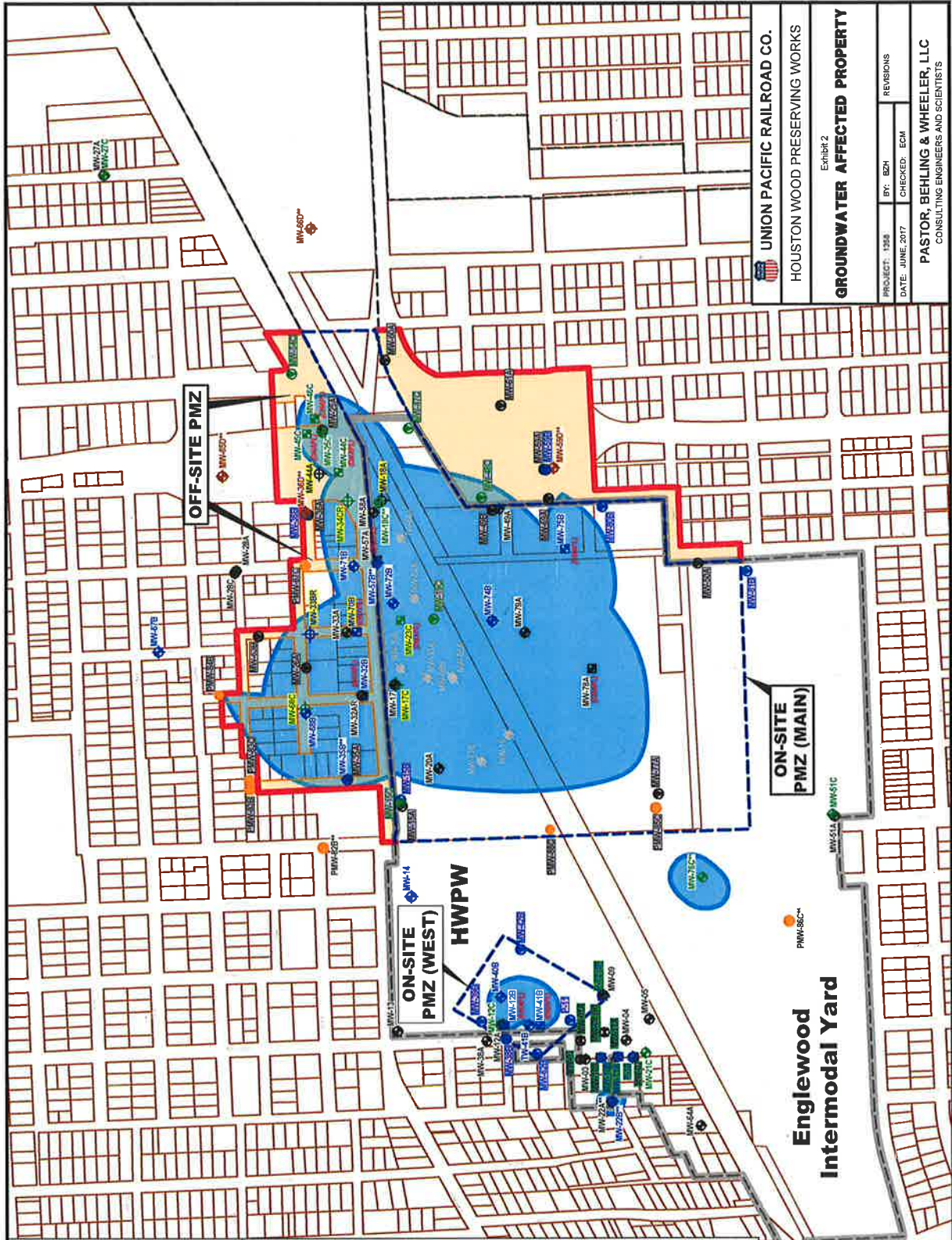
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

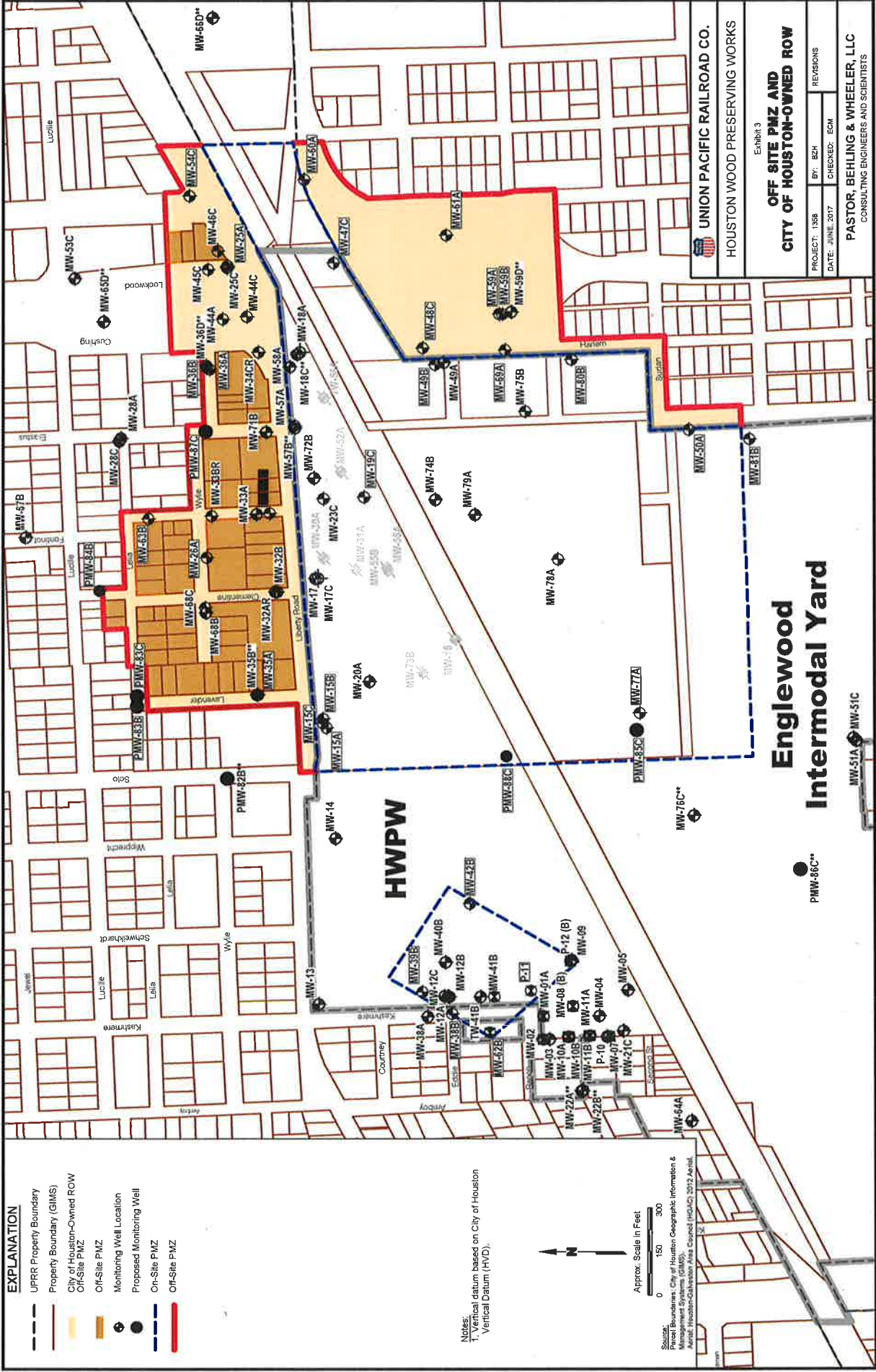
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW		
PROJECT: 158	BY: BZH	REVISIONS
DATE: JUNE 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Englewood Intermodal Yard

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 77

HCAD ID - 0402660100021

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 31st day of March, 2015.

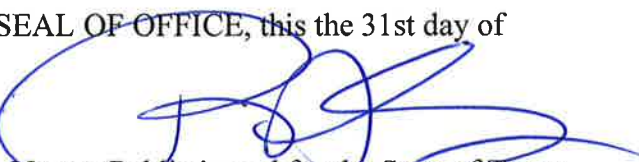
By: Zearlene Osborn
Name: Zearlene Osborn

STATE OF TEXAS

HARRIS COUNTY

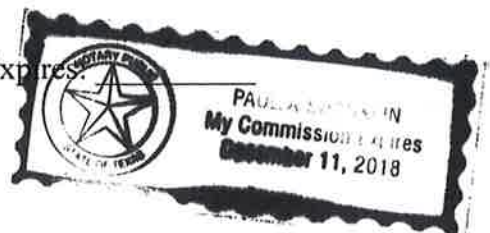
BEFORE ME, on this the 31st day of March, 2015, personally appeared Zearlene Osborn, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 31st day of March, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

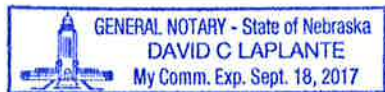
By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.
David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

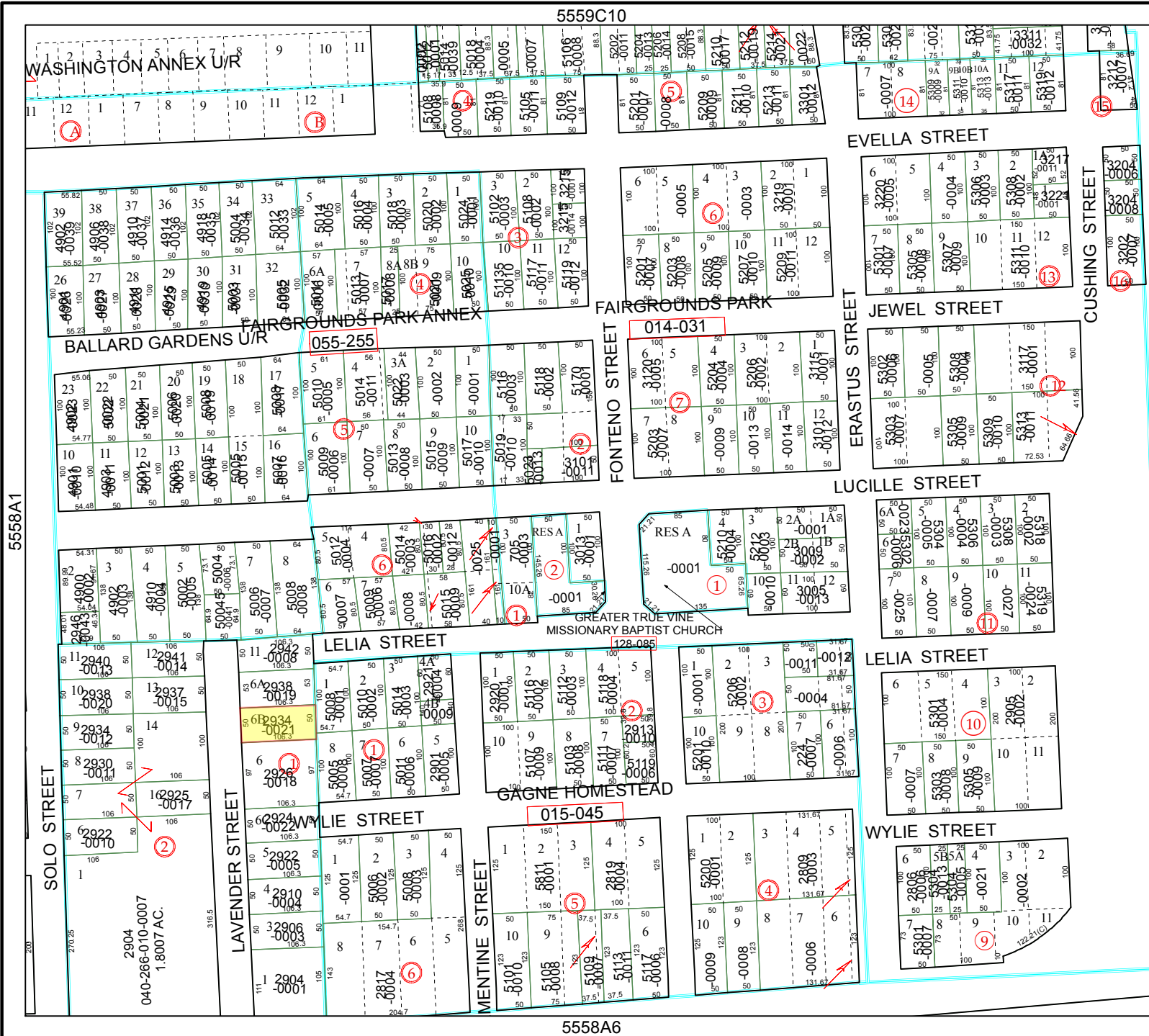
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



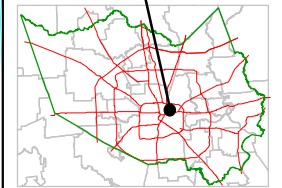
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0512

Date: January 23, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Clark Investment Company (by Deeds filed for record under Volume 2009, Page 337 and Volume 2015, Page 716, both of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 77) (Tax ID# 040-266-010-0021)

Tract Six-B (6B), in Block One (1), of Liberty Road Estates, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 1, Page 55 of the Map Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's file No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lavender Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

Notes:

- Harris County Appraisal District describes the subject property as Tract 6B, however we find no conveyance describing same. According to the Appraisal Map, the subject property is comprised of portions of Lots 8 and 9, in Block 1 of Liberty Road Estates, unrecorded.
- Harris County Appraisal District reflects Zearlene Osborn as the current tax payer, however we find no conveyance out of Clark Investment Company or into Zearlene Osborn.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

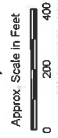
EXHIBIT 2

AFFECTED PROPERTY MAP

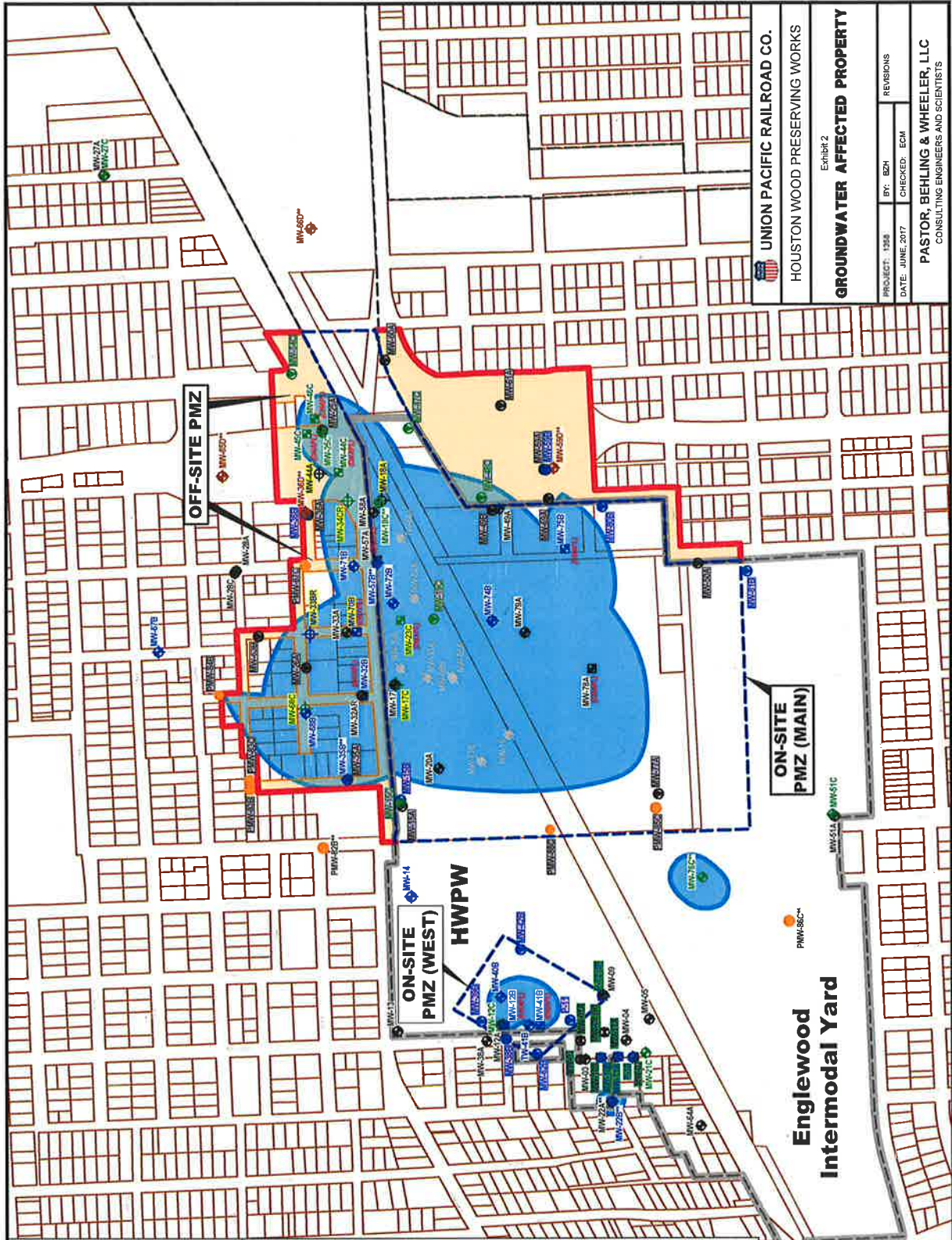
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.	
HOUSTON WOOD PRESERVING WORKS	
Exhibit 2	
GROUNDWATER AFFECTED PROPERTY	
PROJECT: 1559	REVISIONS
DATE: JUNE, 2017	BY: BZN
	CHECKED: ECM
PASTOR, BEHLING & WHEELER, LLC	
CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

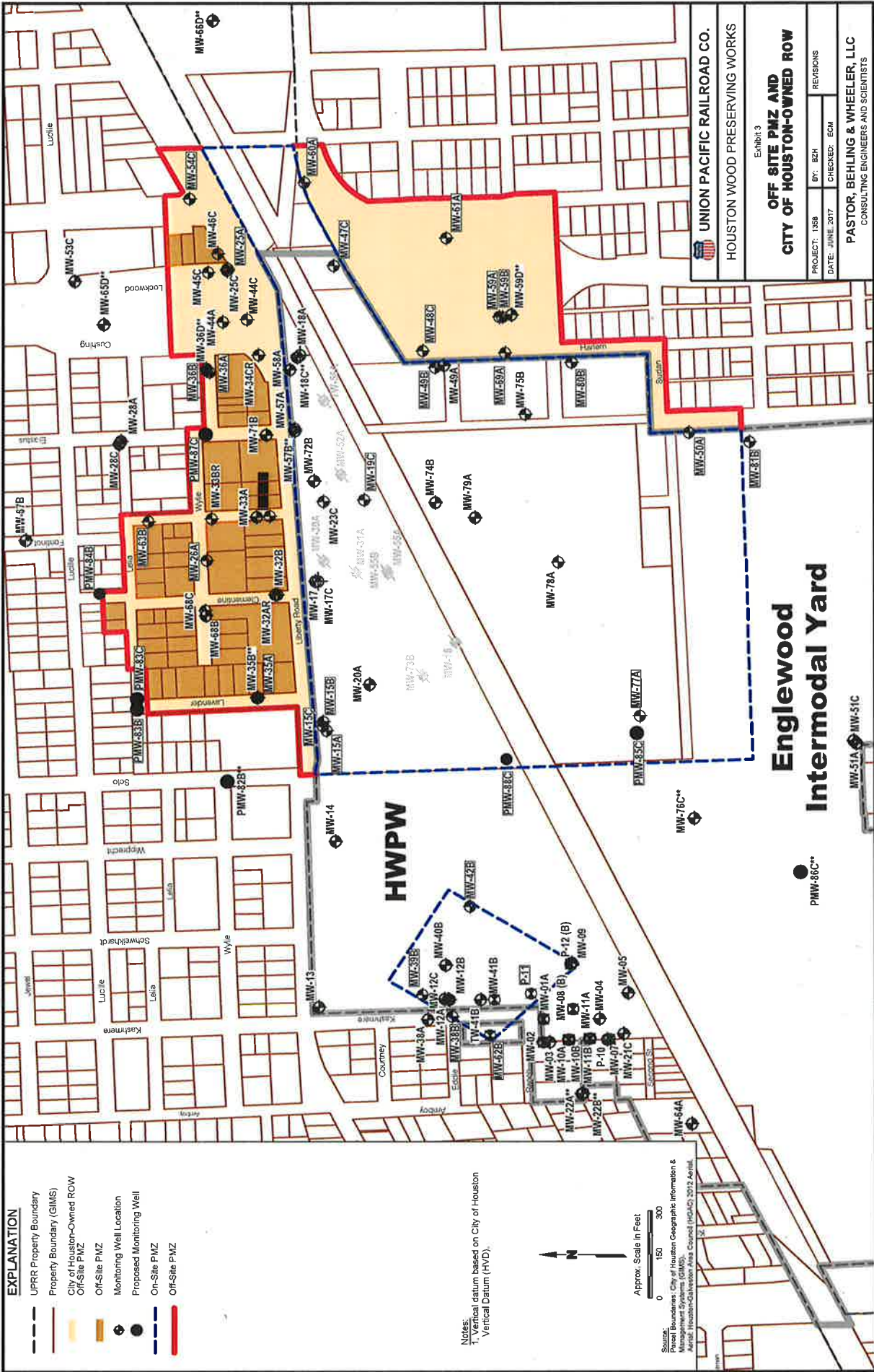
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-49A

MW-59A

MW-59B

MW-59D**

MW-51A

MW-51B

MW-51C

MW-51D

MW-51E

MW-51F

MW-51G

MW-51H

MW-51I

MW-51J

MW-51K

MW-51L

MW-51M

MW-51N

MW-51O

MW-51P

MW-51Q

MW-51R

MW-51S

MW-51T

MW-51U

MW-51V

MW-51W

MW-51X

MW-51Y

MW-51Z

MW-51AA

MW-51AB

MW-51AC

MW-51AD

MW-51AE

MW-51AF

MW-51AG

MW-51AH

MW-51AI

MW-51AJ

MW-51AK

MW-51AL

MW-51AM

MW-51AN

MW-51AO

MW-51AP

MW-51AQ

MW-51AR

MW-51AS

MW-51AT

MW-51AU

MW-51AV

MW-51AW

MW-51AX

MW-51AY

MW-51AZ

MW-51BA

MW-51BB

MW-51BC

MW-51BD

MW-51BE

MW-51BF

MW-51BG

MW-51BH

MW-51BI

MW-51BJ

MW-51BK

MW-51BL

MW-51BM

MW-51BN

MW-51BO

MW-51BP

MW-51BQ

MW-51BR

MW-51BS

MW-51BT

MW-51BU

MW-51BV

MW-51BW

MW-51BX

MW-51BY

MW-51BZ

MW-51CA

MW-51CB

MW-51CC

MW-51CD

MW-51CE

MW-51CF

MW-51CG

MW-51CH

MW-51CI

MW-51CJ

MW-51CK

MW-51CL

MW-51CM

MW-51CN

MW-51CO

MW-51CP

MW-51CQ

MW-51CR

MW-51CS

MW-51CT

MW-51CU

MW-51CV

MW-51CW

MW-51CX

MW-51CY

MW-51CZ

MW-51DA

MW-51DB

MW-51DC

MW-51DD

MW-51DE

MW-51DF

MW-51DG

MW-51DH

MW-51DI

MW-51DJ

MW-51DK

MW-51DL

MW-51DM

MW-51DN

MW-51DO

MW-51DP

MW-51DQ

MW-51DR

MW-51DS

MW-51DT

MW-51DU

MW-51DV

MW-51DW

MW-51DX

MW-51DY

MW-51DZ

MW-51EA

MW-51EB

MW-51EC

MW-51ED

MW-51EE

MW-51EF

MW-51EG

MW-51EH

MW-51EI

MW-51EJ

MW-51EK

MW-51EL

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 81

HCAD ID - 0522570000008

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

The West 42 feet of Lot 8, in Block 6, of Fairgrounds Park Annex, an addition in Harris County, Texas according to the map or plat thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Catherine Hall Lawrence (Owner) with an address of 5014 Lucille, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their

respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 29 day of April, 2015.

[OWNER]

By: Catherine Lawrence
Name: Catherine Hall Lawrence

STATE OF TEXAS
HARRIS COUNTY

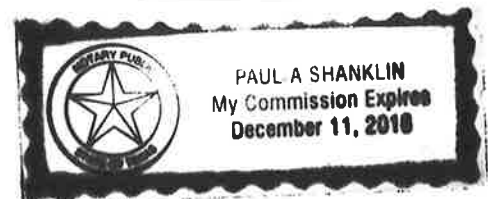
BEFORE ME, on this the 29 day of April, 2015, personally appeared Catherine Hall Lawrence, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 29 day of April, 2015.



Notary Public in and for the State of Texas,
County of Harris

My Commission Expires: _____



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [RESPONDER], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

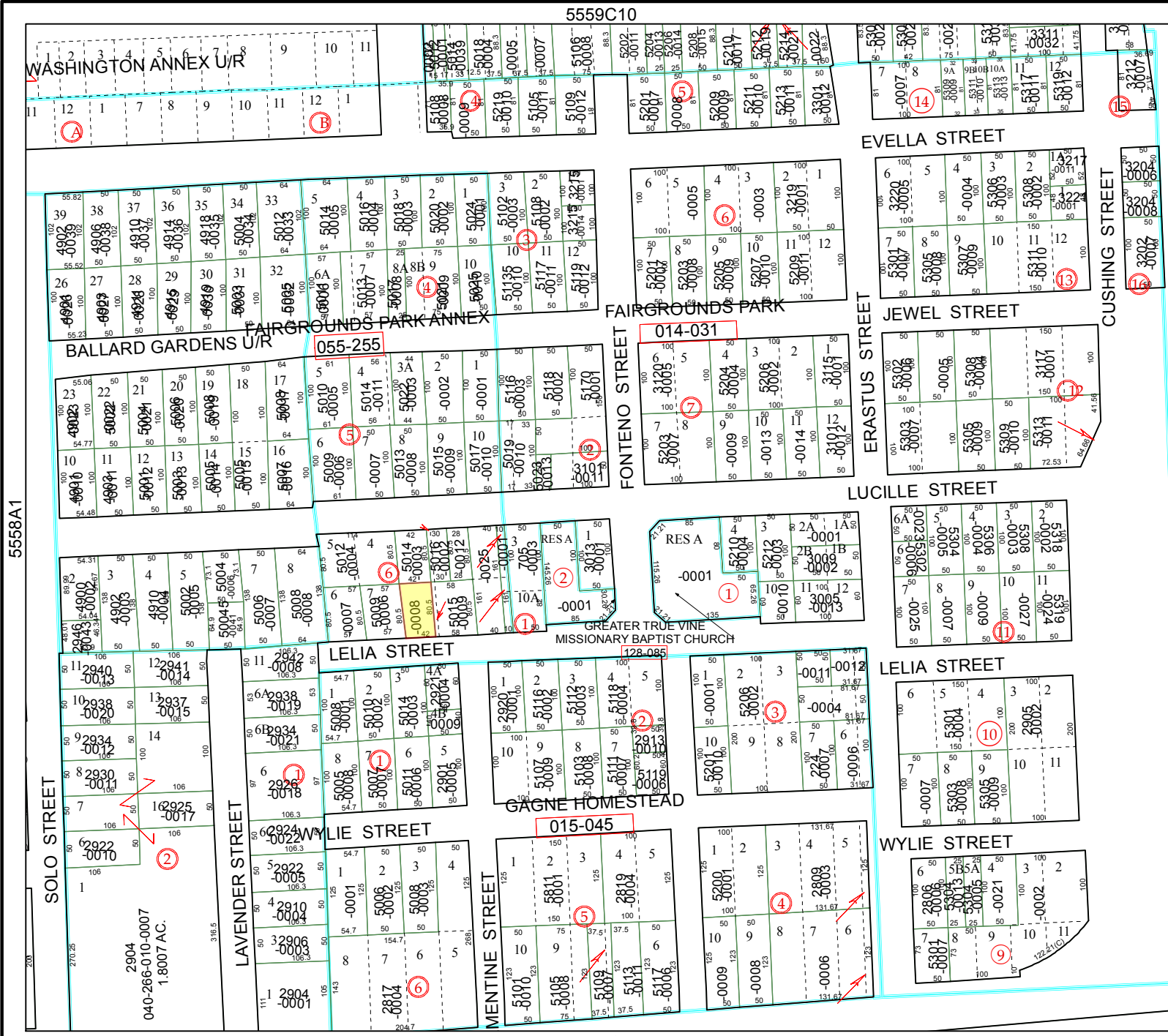
GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

EXHIBIT 1



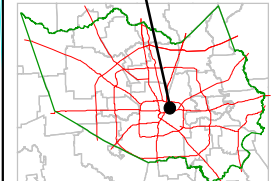
Harris County Appraisal District



0 100 200
PUBLICATION DATE:
 1/29/2014

Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes and may not be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5558A

1	2	3	4
5	6	7	8
9	10	11	12

5558A1

5558A3

5558A6

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0311

Date: January 16, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Herbert B. Hall and Nealie Hall, his wife (by Deed filed for record under Volume 2391, Page 650 of the Deed Records of Harris County, Texas)

Property Description: (Map ID# 81) (Tax ID# 052-257-000-0008)

The West 42 feet of Lot Eight (8), in Block Six (6), of Fairground Park Annex, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 499, Page 70 of the Deed Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Paving Lien Notice filed on January 31, 1977, (topping project no. 303), filed under Harris County Clerk's File No. F029142, (Film Code No. 157-20-1662), executed by the City of Houston, showing portions of Lelia Street, and assessing a portion of the cost thereof, against the owners of the property abutting thereon.

Involuntary Liens:

None of record.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

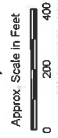
EXHIBIT 2

AFFECTED PROPERTY MAP

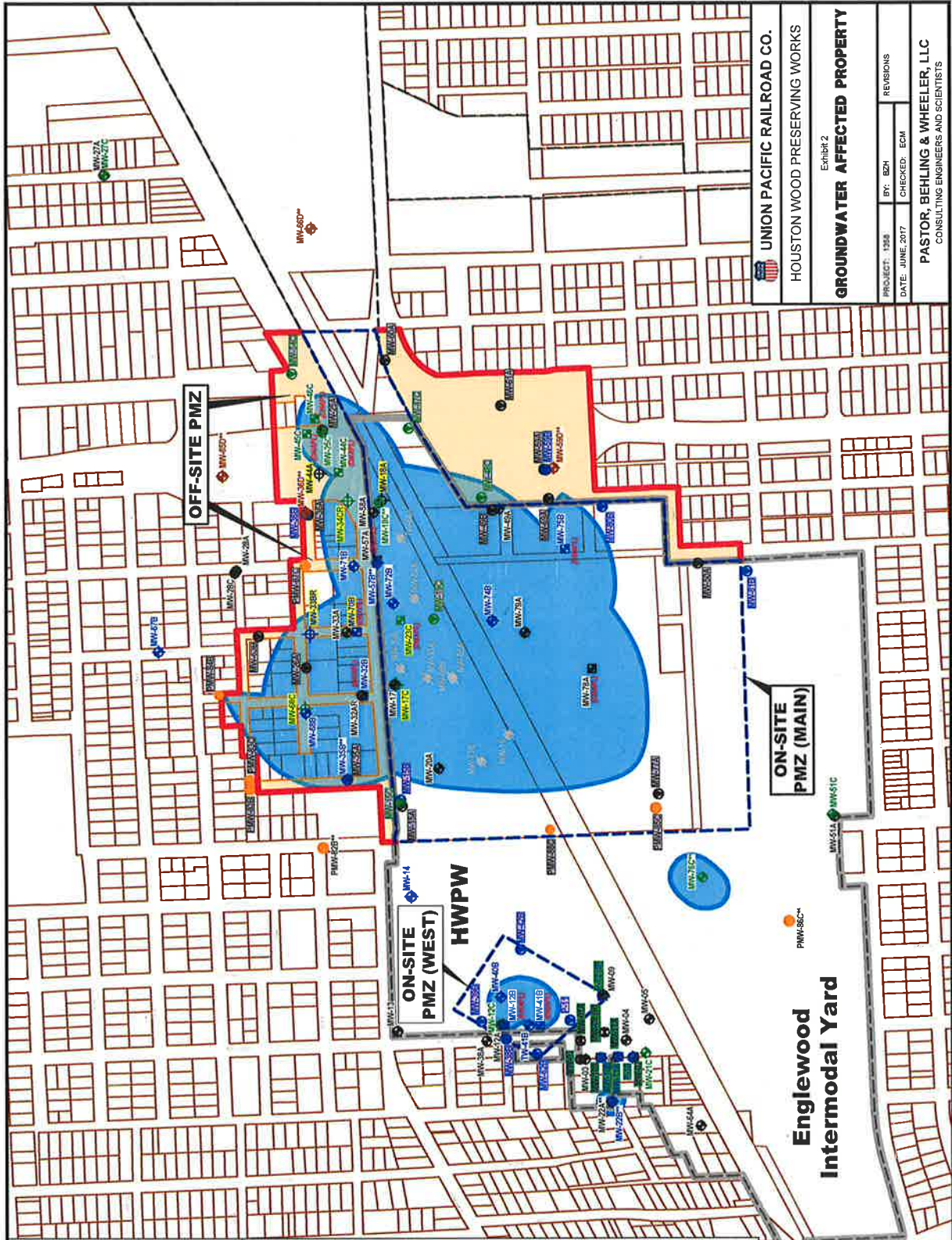
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GIS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Aerial, Topographic, and Aerial Imagery (2012)
 Aerial, Topographic, and Aerial Imagery (2012)



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

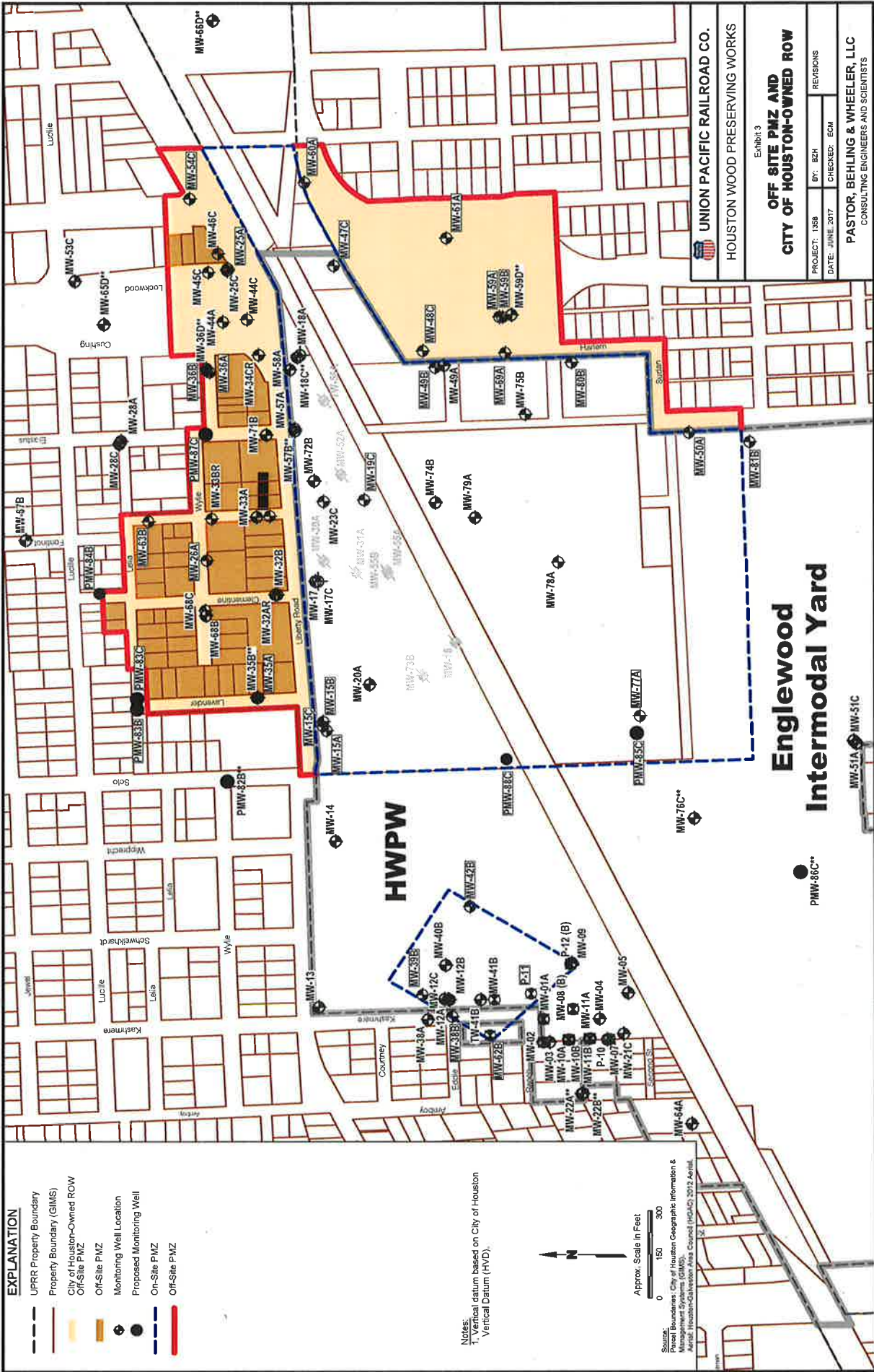
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS		
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW		
PROJECT: 158	BY: BZH	REVISIONS
DATE: JUNE 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-49A

MW-59A

MW-59B

MW-59D**

MW-51A

MW-51B

MW-51C

MW-51D

MW-51E

MW-51F

MW-51G

MW-51H

MW-51I

MW-51J

MW-51K

MW-51L

MW-51M

MW-51N

MW-51O

MW-51P

MW-51Q

MW-51R

MW-51S

MW-51T

MW-51U

MW-51V

MW-51W

MW-51X

MW-51Y

MW-51Z

MW-51AA

MW-51AB

MW-51AC

MW-51AD

MW-51AE

MW-51AF

MW-51AG

MW-51AH

MW-51AI

MW-51AJ

MW-51AK

MW-51AL

MW-51AM

MW-51AN

MW-51AO

MW-51AP

MW-51AQ

MW-51AR

MW-51AS

MW-51AT

MW-51AU

MW-51AV

MW-51AW

MW-51AX

MW-51AY

MW-51AZ

MW-51BA

MW-51BB

MW-51BC

MW-51BD

MW-51BE

MW-51BF

MW-51BG

MW-51BH

MW-51BI

MW-51BJ

MW-51BK

MW-51BL

MW-51BM

MW-51BN

MW-51BO

MW-51BP

MW-51BQ

MW-51BR

MW-51BS

MW-51BT

MW-51BU

MW-51BV

MW-51BW

MW-51BX

MW-51BY

MW-51BZ

MW-51CA

MW-51CB

MW-51CC

MW-51CD

MW-51CE

MW-51CF

MW-51CG

MW-51CH

MW-51CI

MW-51CJ

MW-51CK

MW-51CL

MW-51CM

MW-51CN

MW-51CO

MW-51CP

MW-51CQ

MW-51CR

MW-51CS

MW-51CT

MW-51CU

MW-51CV

MW-51CW

MW-51CX

MW-51CY

MW-51CZ

MW-51DA

MW-51DB

MW-51DC

MW-51DD

MW-51DE

MW-51DF

MW-51DG

MW-51DH

MW-51DI

MW-51DJ

MW-51DK

MW-51DL

MW-51DM

MW-51DN

MW-51DO

MW-51DP

MW-51DQ

MW-51DR

MW-51DS

MW-51DT

MW-51DU

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

MAP ID - 82

HCAD ID - 0522570000009

Restrictive Covenant

STATE OF TEXAS

COUNTY OF HARRIS

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit 1 attached hereto and incorporated herein by reference.

The East eight feet of Lot Eight (8) and all of the adjoining lot Nine (9), in block Six (6), of Fairground Park Annex, a Subdivision, a subdivision In Harris County, Texas according to the Map or Plat records thereof.

Portions of the soils and/or groundwater of the Property contain certain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP.

The portion considered to be Affected Property is described on Exhibit 2, which is part of the plume management zone shown in Exhibit 3 attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of chemicals of concern exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit 3 provides the location and extent of the plume management zone and describes the maintenance and monitoring required. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is Manuel Castillo (Owner) with an address of 5015 Lelia, Houston, Texas 77026. In consideration of the Response Actions by Union Pacific (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit 4 is required. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

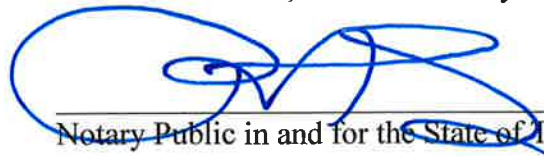
Executed this 24 day of March, 2015.

By: Manuel Castillo
Manuel Castillo

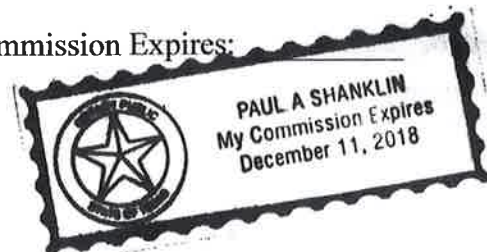
STATE OF TEXAS
HARRIS COUNTY

BEFORE ME, on this the 24th day of March, 2015, personally appeared Manuel Castillo, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of March, 2015.


Notary Public in and for the State of Texas,
County of Harris

My Commission Expires:



Executed this 14th day of June, 2017.

Union Pacific Railroad [RESPONDER]

By: Tony Love

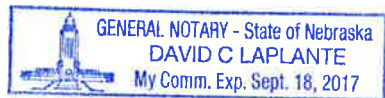
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the 14th day of June, 2017 Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation **[RESPONDER]**, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed on behalf of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 14th day of June, 2017.

David C. Laplante



Notary Public in and for the State of Nebraska
County of _____
My Commission Expires: _____

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
TRAVIS COUNTY §

BEFORE ME, on this the _____ day of _____, 20__, personally appeared _____, _____, of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this __ day of _____, 20__.

Notary Public in and for the State of Texas,
County of Travis
My Commission Expires: _____

EXHIBIT 1

PROPERTY LEGAL DESCRIPTION AND TITLE INFORMATION

**Texas American Title Company
2000 Bering, Suite 1000
Houston, Texas 77057
713-988-9999**

Title Report

GF Number: 7910-13-0314
Date: January 16, 2013

Texas American Title Company ("Title Company") certifies that a diligent search of the real property records of Texas American Title Company's title plant has been made, as to the herein described property, and as of 8:00 AM on the 9th day of January, 2013, we find the following:

Title Vested In:

Manuel M. Castillo (by Warranty Deed filed for record under Harris County Clerk's File No. Y888905)

Property Description: (Map ID# 82) (Tax ID# 052-257-000-0009)

The East 8 feet of Lot Eight (8) and all of the adjoining Lot Nine (9), in Block Six (6), of Fairground Park Annex, a subdivision in Harris County, Texas according to the map or plat thereof, recorded in Volume 499, Page 70 of the Deed Records of Harris County, Texas.

SUBJECT TO: Claims of present occupants; discrepancies in area and boundaries; unpaid bills for Labor or Material in connection with recent repairs or new improvements; Unpaid Taxes; changes in Marital or Corporate Status of owner(s) since date of purchase; Homestead Rights or Claims.

Restrictions:

None of record.

Exceptions:

- a) Subject property is located within the City of Houston or within its extra territorial jurisdiction (within 5 miles of the city limits but outside another municipality) and is subject to the terms, conditions, and provision of City of Houston Ordinance No. 85-1878 and 99-262, pertaining to, among other things the platting and re-platting of real property and to the establishment of building lines. A certified copy of said ordinance was filed of record on August 1, 1991, under Harris County Clerk's File No. N253886.

Property Liens:

- 1) Vendor's Lien retained in Deed dated November 4, 2005, filed for record on November 9, 2005, under Harris County Clerk's File No. Y888905, executed by K.A.P. Investments, Inc., to Manuel M. Castillo, securing one certain promissory note of even date therewith in the principal amount of \$71,000.00, payable to the order of Sterling Financial Investment; said note and Lien being additionally secured by Deed of Trust of even date therewith, in favor of Thomas F. Vettors, as Trustee, with all terms, conditions and stipulations contained therein; including any additional indebtedness secured thereby, as same having been filed for record November 9, 2005 under County Clerk's File No. Y888906. The note and Lien as described herein and as security for the repayment thereof, having been assigned to JPMorgan Chase Bank, N. A., in instrument filed for record under Clerk's File No. Y888907, in the Office of Real Property Records of Harris County, Texas.

Involuntary Liens:

- 1) Notice of Federal Tax Lien filed January 9, 2004, under Harris County Clerk's File No. X314847, against Manuel Castillo, in the principal amount of \$16,302.00.
- 2) Abstract of Judgment filed August 30, 2005, under Harris County Clerk's File No. Y730650, styled the State of Texas, vs. Manuel Castillo, in the principal amount of \$500.00, plus cost, interest and attorney's fees.
- 3) Abstract of Judgment filed September 20, 2012, under Harris County Clerk's File No. 20120433419, styled CACH, LLC, vs. Manuel Castillo, in the principal amount of \$3,196.00, plus cost, interest and attorney's fees.

CAUTION: PROTECTION IS AFFORDED ONLY UNDER THE TERMS OF THE PROPOSED TITLE INSURANCE POLICY. TEXAS AMERICAN TITLE COMPANY (AND ITS UNDERWRITERS OF TITLE INSURANCE) ASSUME NO LIABILITY FOR ERRORS OR OMISSIONS IN HIS REPORT OR FOR VERBAL STATEMENTS.

This is a copy of a preliminary report made for the use of Texas American Title Company only, to determine whether a title insurance policy can be issued. If a copy is furnished to the parties to the transaction, it is to facilitate preparation of the necessary instruments, to point out curative requirements, if any, and to show the results of the Company's title search (upon which only the Company may rely.) None of the information contained herein, or the absence of other information, constitutes a representation to any party, other than the Company, as to the status of the title. If a title defect or encumbrance should exist which is not disclosed hereon, the Company should not be liable by reason of furnishing this report or for any verbal statements related thereto. Neither the Company nor its underwriters shall be liable for any title defect unless a title insurance policy is issued by the Company insuring against such defect, and the applicable premium paid therefore. The liability shall then exist only under the terms of the policy (as prescribed by the State Board of Insurance of the State of Texas) and as measured and limited thereby.

Notice: Texas American Title Company disclaims any warranties, expressed or implied, concerning this information. This information is solely for the use of the party requesting it and no one else. Texas American Title Company liability for errors and/or omissions in this information shall be limited to the amount paid for this report. By accepting this form the party requesting the information agrees that the disclaimer of warranties, and liability limitation contained in this paragraph is a part of its contract with Texas American Title Company and shall cover all actions whether arising hereunder by statute, in contract, or in tort.

Texas American Title Company



Darrell Stone
Title Examiner

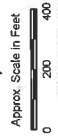
EXHIBIT 2

AFFECTED PROPERTY MAP

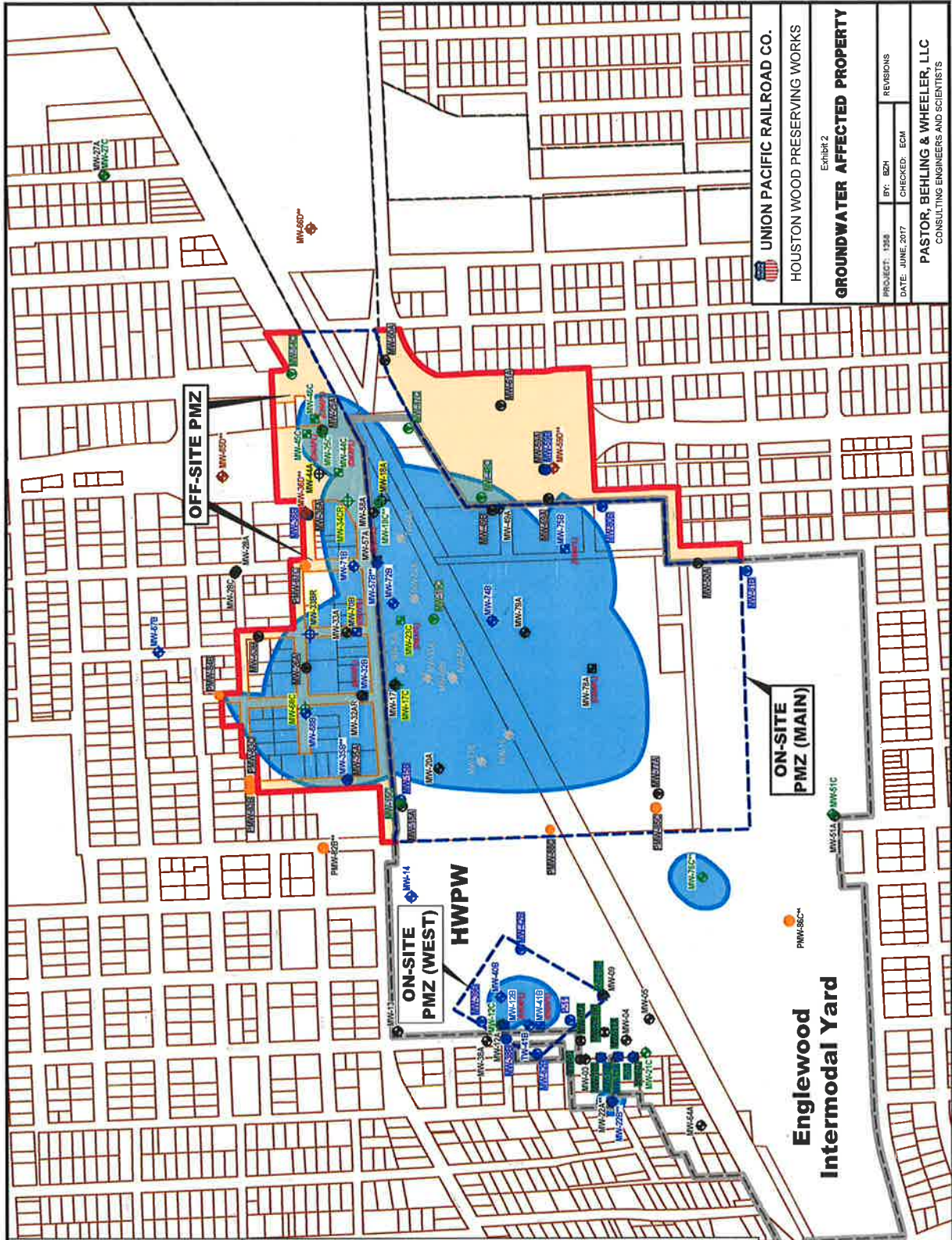
- EXPLANATION**
- UPRR Property Boundary
 - Property Boundary (GISMS)
 - A-TZ Monitoring Well Location
 - B-CZ/B-TZ Monitoring Well Location
 - C-TZ Monitoring Well Location
 - D-TZ Monitoring Well Location
 - Groundwater PCLE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
 - Alternate Groundwater Point of Exposure (POE)
 - Attenuation Monitoring Point (AMP)
 - RCRA Unit No. 1 Point of Compliance (POC) Well
 - Proposed Monitoring Well
 - On-Site PMZ
 - Off-Site PMZ
 - Off-Site PMZ City of Houston ROW

Notes:

1. Vertical datum based on City of Houston (POC).
2. DNAPL = dense non aqueous phase liquids detected in monitoring well (July 2014).
3. **, Corrective Action Observation Well.



Source: City of Houston Geographic Information & Mapping System
 Author: Houston-Clayton Area Council (HAC) 2012 Aerial



UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Exhibit 2

GROUNDWATER AFFECTED PROPERTY

PROJECT: 1559	BY: BZN	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Englewood Intermodal Yard

EXHIBIT 3

PLUME MANAGEMENT ZONE MAP

EXPLANATION

- UPRR Property Boundary
- Property Boundary (GIMS)
- City of Houston-Owned ROW
- Off-Site PMZ
- Off-Site PMZ
- Monitoring Well Location
- Proposed Monitoring Well
- On-Site PMZ
- Off-Site PMZ

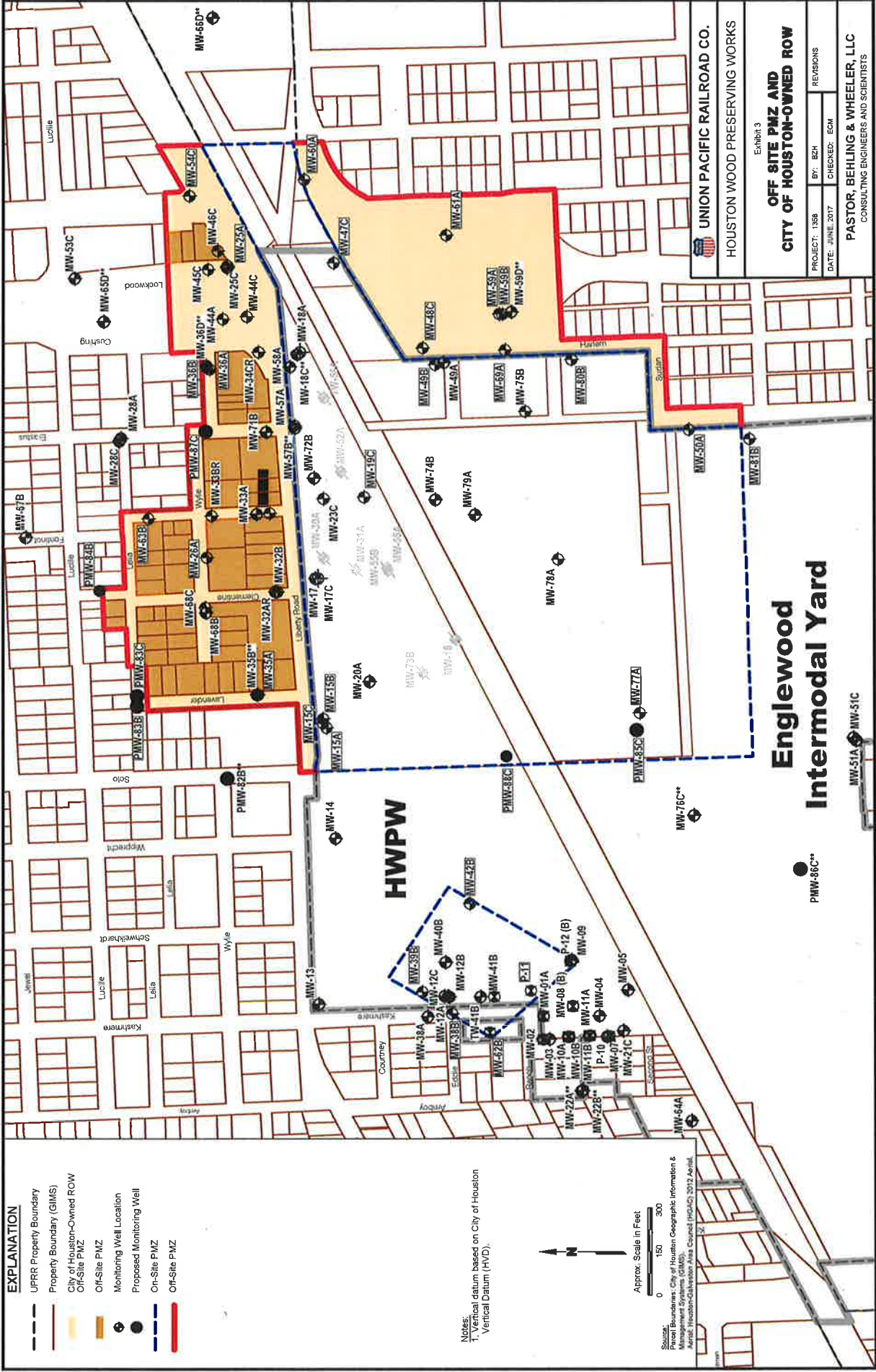
Notes:
 1. Vertical datum based on City of Houston Vertical Datum (HVD).



Approx. Scale in Feet



Source:
 Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS).
 Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.



UNION PACIFIC RAILROAD CO. HOUSTON WOOD PRESERVING WORKS	
Exhibit 3 OFF SITE PMZ AND CITY OF HOUSTON-OWNED ROW	
PROJECT: 158	BY: BZH
DATE: JUNE 2017	CHECKED: ECM
REVISIONS PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS	

Englewood Intermodal Yard

MW-51A MW-51C

PMW-86C**

MW-76C**

PMW-83C MW-77A

MW-78A

MW-74B

MW-48C

MW-59A MW-59B MW-59D**

MW-51A MW-51B

MW-53C MW-65D**

MW-66D**

EXHIBIT 4

MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "4"
MAINTENANCE AND MONITORING

Monitoring wells located near the property in the City of Houston right of way (ROW) listed in the table below will be sampled for chemicals of concern (COCs) (see Table C-1) on a semi-annual basis. At each well, the presence of light and dense non-aqueous phase liquids (LNAPL and DNAPL, respectively) will be measured using a decontaminated oil-water interface probe, or equivalent measuring device. The probe will be lowered into the well until the instrument indicates contact of the probe with the NAPL surface, if present, then the top of the water surface, and to the total depth of the well to evaluate for the presence of DNAPL. The depth to NAPL and water measurements will be referenced to the surveyed reference point at the top of the well casing. Levels will be measured to the nearest 0.01 foot and recorded on the water level measurement form. A peristaltic pump with dedicated tubing will be used to purge groundwater from each monitoring well using micro-purging techniques (anticipated purge rate of 0.1 L/min or less). Purge water will be monitored for specific conductance, pH, temperature, dissolved oxygen, oxidation-reduction potential (Redox), and turbidity. Purging will be continued until the field parameters have stabilized per the sampling plan, after which a groundwater sample will be collected for laboratory analysis. Groundwater purged from monitoring wells will be containerized and removed from the property and stored on the Union Pacific Railroad Company property at 4910 Liberty Road. Laboratory analysis will be performed for the COCs on a standard turnaround basis. Analytical results from the groundwater sampling will be submitted to the TCEQ on an annual basis.

Monitoring wells will be inspected on a semi-annual basis for signs of damage, including well pads, casing, locks, and, protective covers.

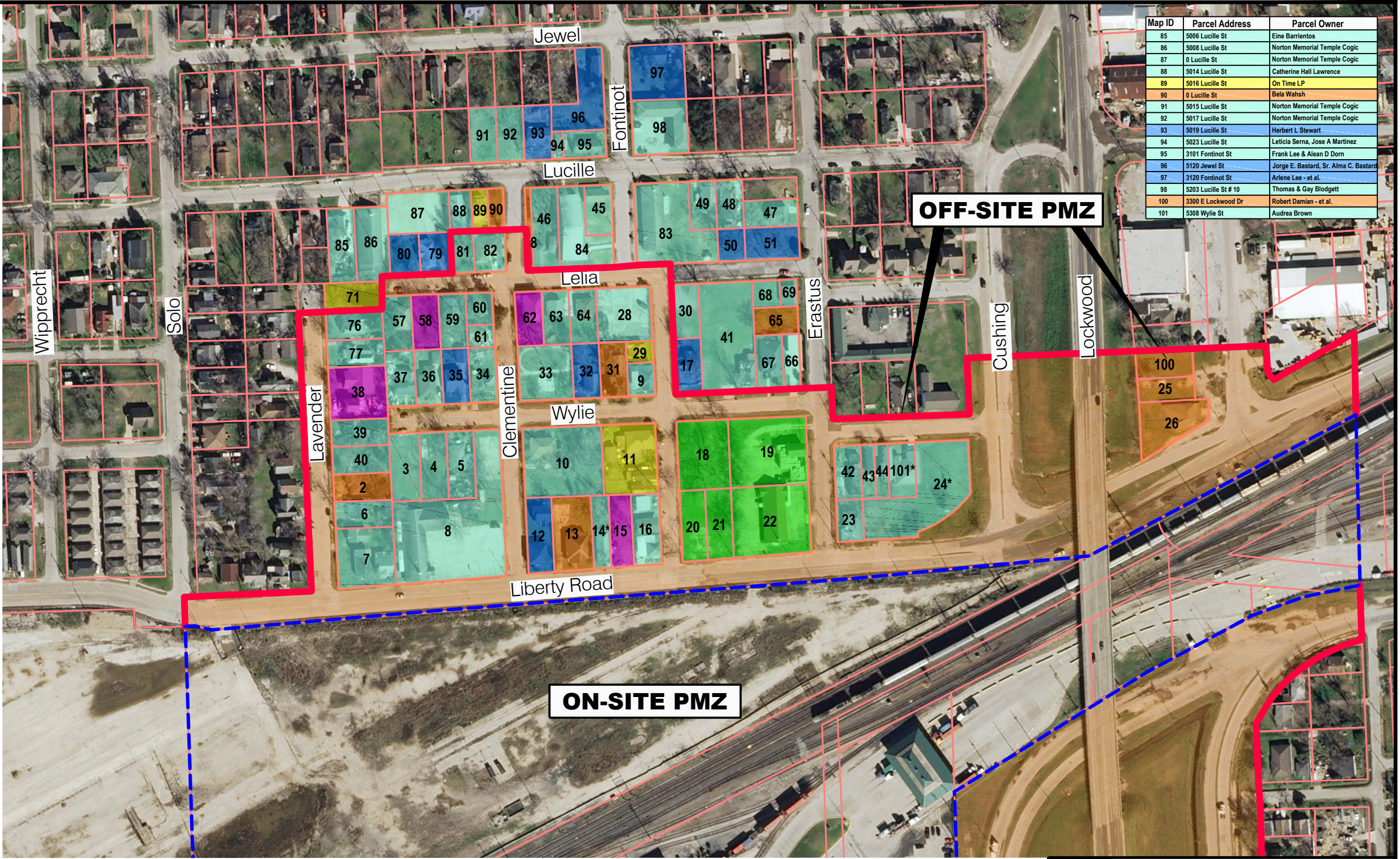
List of Monitoring Wells Located within City of Houston ROW

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-36A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-44A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-59A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-60A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-61A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-69A</i>	<i>MW-70B</i>	<i>MW-68C</i>
	<i>PMW-83B (proposed)</i>	<i>PMW-83C (proposed)</i>
	<i>PMW-84B (proposed)</i>	

**APPENDIX 5A – CORRESPONDENCE LOGS FOR EXTENSIVE AND DILIGENT
INQUIRY – OFF-SITE PMZ**

Map ID	Parcel Address	Parcel Owner
2	2910 Lavender St	Ray Carrington
3	0 Wylie St	Greater Mt Nebo Baptist Church
4	5006 Wylie St	Greater Mt Nebo Baptist Church
5	5010 Wylie	Alberta Smith
6	2906 Lavender St	Jessie and Eloise Beal
7	2904 Lavender St	Clark Investment Co
8	505 Liberty	Greater Mount Nebo Baptist Church
9	5119 Wylie St	Martha Gilliam
10	2820 Clementine St	Estate Of Tillie Potts Benson
11	2813 Fontinot St	Jose Alexander & Reina Isabel Coto
12	5101 Liberty Rd	Wallace & Janie Longoria
13	5105 Liberty Rd	Alejandro Gonzalez
14	5109 Liberty Rd	Joe H. Martinez
15	5113 Liberty Rd	Harris County Cause No 2003-22512
16	5117 Liberty Rd	Jorge D Rivera
17	5201 Wylie St	Santos Marin
18	5201 Wylie St	Charity Baptist Church
19	2809 Erastus St	Charity Baptist Church C/O Rev F W McIlveen
20	5201 Liberty Rd	Full Gospel Christian Assn.
21	5201 Liberty Rd	Charity Baptist Church
22	2809 Erastus St	Charity Baptist Church C/O Rev F W McIlveen
23	5301 Liberty Rd	Geneva Henry, aka Geneva Crump
24	5311 Liberty Rd	Elmer Preston Trust
25	3300 E Lockwood Dr	Eliuth Jimenez Damian - et al.
26	3300 E Lockwood Dr	Eliuth Jimenez Damian - et al.
28	5118 Lelia St	Greater True Vine Baptist Church
29	2913 Fontinot St	The heirs and devisees of Perez Paul M
30	0 Lelia St	Greater True Vine Missionary Baptist Church
31	5111 Wylie St	Aquiline Perez
32	5107 Wylie St	Reginald & Leticia Tolbert
33	5105 Wylie St	Maryland Potts Estate
34	2901 Clementine St	Mary Bass Ross
35	5011 Wylie St	Estate of Carrie Mae Carr
36	5007 Wylie St	Andrew Jerry & Rebecca Johnson
37	5005 Wylie St	Monico Duque & Martha Zuiga Banda
38	2926 Lavender St	Clark Investment Co
39	2924 Lavender St	Clark Investment Co
40	2922 Lavender St	Greater MT. Nebo Baptist Church
41	5202 Lelia St	Greater True Vine Mbc
42	2806 Erastus St	Margaret Roberts, Etal
43	5304 Wylie St	Irene Perez Juarez
44	5304-1/2 Wylie St	Saturnino Delgado and Susie I Delgado
45	3013 Fontinot St	Lenora Young and Clifton Scott
46	705 Lucille	Joyce Marie Taylor
47	3009 Erastus St	Mary Elizabeth Crowley
48	5212 Lucille St	Jose F & Yolanda Ruiz
49	5210 Lucille St	Alfred B & Freddie Randolph
50	0 Lelia St	Percy Vital
51	3005 Erastus St	Hugo Guerra & Margarita Morales Sanchez
57	5008 Lelia St	Ermitt Holmes
58	5010 Lelia St	Dickson Investment Company
59	5014 Lelia	Guadalupe Rivera Jr. & Flor Estela Rivera
60	2421 Clementine	Rogelio Ruiz & Olivia Pineda
61	0 Lelia St	Guadalupe Rivera
62	2920 Clementine St	Amidee Capital Group, Inc. f/k/a Amidee Capital Group, LLC
63	5116 Lelia St	Elizabeth Thomas
64	5112 Lelia St	Estate of Francis Potts
65	0 Lelia St	Mallie Pittman Jr. & Belinda Pittman
66	5211 Wylie	Sterling Trust for benefit of Charles Mock
67	0 Wylie	Sterling Trust for benefit of Charles Mock
68	0 Lelia St	Leroy Mock
69	2925 Erastus St	Leroy Mock
71	2942 Lavender St	Sandra Rena Thompson
76	2938 Lavender St	Essie Lee Hutchins
77	2934 Lavender St	Clark Investment Co
78	Lelia St	Frank Lippow
79	5009 Lelia St	Clara Christnar Humphrey
80	5007 Lelia St	Johnnie M York
81	0 Lelia St	Herbert Hall
82	5015 Lelia St	Manuel Castillo
83	3010 Fontinot	Greater True Vine Baptist Church
84	3011 Fontinot	Greater True Vine Baptist Church

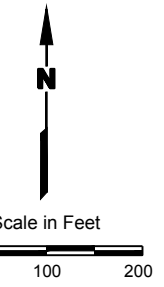
Map ID	Parcel Address	Parcel Owner
85	5006 Lucille St	Eine Barrientos
86	5008 Lucille St	Norton Memorial Temple Cogic
87	0 Lucille St	Norton Memorial Temple Cogic
88	5014 Lucille St	Catherine Hall Lawrence
89	5016 Lucille St	On Time LP
90	0 Lucille St	Bela Wahsh
91	5015 Lucille St	Norton Memorial Temple Cogic
92	5017 Lucille St	Norton Memorial Temple Cogic
93	5019 Lucille St	Herbert L. Stewart
94	5023 Lucille St	Leticia Serna, Jose A Martinez
95	3101 Fontinot St	Frank Lee & Alean D Dorn
96	5120 Jewel St	Jorge E. Bastard, Sr. Alma C. Bastard
97	3120 Fontinot St	Arlene Lee - et al.
98	5203 Lucille St #10	Thomas & Gay Blodgett
100	3300 E Lockwood Dr	Robert Damian - et al.
101	5308 Wylie St	Audrea Brown



EXPLANATION

- UPRR Property Boundary
- Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW
- Restrictive Covenant signed & received
- Restrictive Covenant not received/Reasons Why IC Not Received
- Cannot Locate Property Owner
- Cause for Delinquent Taxes/In Tax Court
- Heirship Issues/Multiple Heirs
- Church Property/Board will not Authorize Signature for IC
- Property owner unresponsive/unwilling to sign
- * Landowner Agreed with IC, Waiting for Signed Covenant

DRAFT
FOR REVIEW ONLY



UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Appendix 5 - Figure 1
PROPOSED OFF-SITE PROPERTIES FOR RESTRICTIVE COVENANTS

PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Source: Aerial photo from Harris-Galveston Area Council (HGAC), flown Jan-Feb 2012, and property information from Harris County Appraisal District (HCAD), 2014.

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	2	
HCAD ID	0402660100004	
PARCEL ADDRESS	2910 Lavender St	
PARCEL OWNER	Ray Carrington	
PARCEL OWNER ADDRESS	4102 Waterstone Street, Missouri City, Texas 77459	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Mr. Carrington detailing the request for a restrictive covenant, certified mailing to 4102 Waterstone Street, Missouri City, Texas 77459, signed by Mr. Carrington.	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/9/2015	Met with Occupants at this address. They did not know owner of property. Property was vacant when they moved in.	Paul Shanklin
3/15/2015	Made trip to 4102 Waterstone Street, Missouri City Texas to speak with listed owner of property, Occupant did not know Ray Carrington.	Paul Shanklin
11/27/2015	Visited property with and interpreter to inquire about Owner of property. Occupants were not cooperative.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Ray Carrington (by Warranty Deed filed for record under Harris County Clerk's File No. 20090369151)	Texas American Title Co./ PBW
Current Status	<i>This property is currently occupied by a squatter. Despite numerous letters and visits to titled owner's address we cannot locate the owner.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	11	
HCAD ID	0141430000004	
PARCEL ADDRESS	2813 Fontinot St	
PARCEL OWNER	Jose A & Reina I Coto	
PARCEL OWNER ADDRESS	2819 Fontinot St, Houston, TX 77026-5205	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to parcel owner detailing the request for a restrictive covenant, certified mailing to parcel address, sent back "unclaimed"	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/30/2014	Made a visit to property residents did not speak English.	Paul Shanklin
11/5/2014	Visited property with interpreter. Explained HCAD identified owner as Jose Coto. Residents were uncooperative.	Paul Shanklin
3/23/2015	Residents claimed no knowledge of Owner	Paul Shanklin
12/16/2015	Neighbors identified residents of property as Cotos. Occupants asked to be left alone.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Jose Alexander Coto and wife, Reina Isabel Coto (by Warranty Deed filed for record under Harris County Clerk's File No. W555645) (As to a 1/2 interest); and Christian Alexander Coto, a single person and Robin Harrison Coto, a single person (by Special Warranty Deed filed for record under Harris County Clerk's File No. 20150226854) (As to a 1/2 interest)	Texas American Title Co./ PBW
Current Status	<i>Owner was provided with documents but did not return the executed restrictive covenant and stopped responding to our inquiries.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	12	
HCAD ID	141430000010	
PARCEL ADDRESS	5101 Liberty Rd	
PARCEL OWNER	Janie & Wallace Longoria	
PARCEL OWNER ADDRESS	1510 Beall St, Houston, TX 77008-3444	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Mr. Longoria detailing the request for a restrictive covenant, certified mailing to parcel address, certified receipt signed by Wallace Longoria (?)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
9/11/2014	Title owners did not come to Community Meeting.	Paul Shanklin
11/2/2014	Spoke with owners and neighbors of 5109 Liberty and was advised that property owners where uncomfortable speaking with officials about the land.	Paul Shanklin
	Spoke with residents as was advised that they did not know owners of the property. Someone just came by to collect rent.	Paul Shanklin
2/2/2015	Visited 1510 Beall St, Houston, Texas to speak with Owner as per title records. Spoke with Janie Longoria who claimed no knowledge of property. Left a card and asked her husband to call me.	Paul Shanklin
3/5/2015	Call from Wallace Longoria who advised that he was not interested in the proposal and not to be called again. Advised that he has no documents as to ownership.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Robert Longoria and wife, Janie Longoria (by Deed filed for record under Harris County Clerk's File No. F607448)	Texas American Title Co./ PBW
6/3/2017	Visited property which is now vacant. Spoke to neighbors at 5109 Liberty who agreed to assist me in locating the owner or relatives. It is believed that Wallace Longoria has died.	Paul Shanklin
6/9/2017	While researching an address for Janie Longoria, PBW located an obituary that indicated Mrs. Longoria died on June 17, 2016.	Eric Matzner
6/11/2017	It was confirmed by the neighbors that Wallace Longoria has died and they told the relatives to contact me.	Paul Shanklin
Current Status	<i>Property is vacant. With the listed owners deceased, UPRR attempting to contact relatives to determine heirship for the property.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	13	
HCAD ID	0141430000008	
PARCEL ADDRESS	5105 Liberty Rd	
PARCEL OWNER	Alejandro Gonzalez	
PARCEL OWNER ADDRESS	4088 Pamela Way, Montgomery, TX 77316-2779	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Mr. Gonzales detailing the request for a restrictive covenant, certified mailing to parcel address, sent back "undeliverable"	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/16/2015	Visited property address and tenants advised advised that they were attempting to buy the property but owner cannot produce title documents. Called Mr. Gonzalez and was advised that he is not interested in signing a covenant.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Alejandro Gonzalez (by Deed filed for record under Harris County Clerk's File No. J897777).	Texas American Title Co./ PBW
6/3/2017	Visited property address and tenants have vacated the property, trash is piled up in the front of the house. Spoke with the neighbors at 5109 Liberty and I was advised that Mr. Gonzales may be in Mexico. I asked for their (Ms. Mata) assistance in contacting him.	Paul Shanklin
Current Status	<i>House on property is vacant with trash piled up in front of the house. Initially contacted landowner in 2015 who was unwilling to sign covenant. Attempts to contact in 2017 indicted Mr. Gonzales may be in Mexico. UPRR will continue attempts to contact the landowner.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	14	
HCAD ID	014143000007	
PARCEL ADDRESS	5109 Liberty Rd	
PARCEL OWNER	Joe H Martinez	
PARCEL OWNER ADDRESS	5109 Liberty Rd, Houston, TX 77026-5218	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Mr. Martinez detailing the request for a restrictive covenant, certified mailing to parcel address, signed by Guadalupe Mata (8/30/14)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
12/15/2014	Spoke with Guadalupe Mata, tenant, claims no knowledge of Joe Martinez.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Mary Jane Gonzalez, Daniel P. Martinez, Guadalupe Mata, Joe H. Martinez, Jr. and Isabel Gallegos (by Warranty Deed filed for record under Volume 1427, Page 53 of the Deed Records of Harris County, Texas and by Affidavit of Heirship filed for record under Harris County Clerk's File No. V248342)	Texas American Title Co./ PBW
12/3/2016	Spoke again with Guadalupe Mata, tenant, claims no knowledge of Joe Martinez.	Paul Shanklin
6/3/2017	Spoke with Guadalupe Mata, tenant, who now claims to be the daughter of Joe Martinez. She would not confirm whether her father is alive or dead, but she is willing to sign the covenant.	Paul Shanklin
6/11/2017	Spoke with Guadalupe Mata again and she advised me that her father had died. UPRR is working with Ms. Mata to establish the affidavit of heirship for the property to allow Ms. Mata to sign the restrictive covenant.	Paul Shanklin
Current Status	<i>Per the 10/2016 title records, Ms. Mata is listed as partial owner of the property at 5109 Liberty Road. She has agreed verbally to sign the restrictive covenant and UPRR has identified an Affidavit of Heirship (dated 05/22/2001) confirming her as an heir to the property. UPRR is awaiting her signature on the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	15	
HCAD ID	0141430000011	
PARCEL ADDRESS	5113 Liberty Rd	
PARCEL OWNER	Harris County Cause No 2003-22512	
PARCEL OWNER ADDRESS	PO Box 1525, Houston, TX 77251-1525	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Harris County detailing the request for a restrictive covenant, certified mailing to parcel address, signed by Arthur Simpson	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Harris County, for itself and for the use and benefit of the Houston Independent School District, City of Houston and Houston Community College System (by Deed under Order of Tax Sale filed for record under Harris County Clerk's File No. Y254725). We find of record an Officer's Return on Real Property Sales, filed for record under Harris County Clerk's File No. 20070127192, which claims therein that the subject property was sold at auction to Waymond Barrett. However, we find no Deed of record to support this transaction.	Texas American Title Co./ PBW
Current Status	<i>The Property has been sold for past dues taxes and title has not vested in the new owner, so there is no one currently authorized to execute the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	18	
HCAD ID	014142000001	
PARCEL ADDRESS	5201 Wylie St	
PARCEL OWNER	Charity Baptist Church	
PARCEL OWNER ADDRESS	5217 Liberty Rd, Houston, TX 77026-5313	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Charity Baptist detailing the request for a restrictive covenant, certified mailing to parcel address, signed by B. Burnside (?)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/2/2015	Met with Pastor Burnside. He cannot get authority from his board to execute documents.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Charity Baptist Church (by Warranty Deed filed for record under Harris County Clerk's File No. Z096294).	Texas American Title Co./ PBW
12/3/2016	Visited Charity Baptist Church and met with Pastor Burnside. I was introduced to a Deacon Johnson and was advised the Board was not interested in working with UP.	Paul Shanklin
Current Status	<i>Church pastor cannot get authority from his board, despite attempts to explain the nature of the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	19	
HCAD ID	014142000003	
PARCEL ADDRESS	2809 Erastus St	
PARCEL OWNER	Charity Baptist Church C/O Rev F W Mcilveen	
PARCEL OWNER ADDRESS	2809 Erastus St, Houston, TX 77026-5303	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Charity Baptist detailing the request for a restrictive covenant, certified mailing to parcel address, signed by B. Burnside (?)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/2/2015	Met with Pastor Burnside. He cannot get authority from his board to execute documents.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Charity Baptist Church (by Warranty Deed filed for record under Harris County Clerk's File No. M115393).	Texas American Title Co./ PBW
12/3/2016	Visited Charity Baptist Church and met with Pastor Burnside. I was introduced to a Deacon Johnson and was advised the Board was not interested in working with UP.	Paul Shanklin
Current Status	<i>Church pastor cannot get authority from his board, despite attempts to explain the nature of the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	20	
HCAD ID	014142000009	
PARCEL ADDRESS	5201 Liberty Rd	
PARCEL OWNER	Full Gospel Christian Assn/Charity Baptist Church	
PARCEL OWNER ADDRESS	5201 Liberty Rd, Houston, TX 77026-5313	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Full Gospel Christian Assoc. detailing the request for a restrictive covenant, certified mailing to parcel address, not delivered "unclaimed"	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/11/2015	Vacant property, no response to letters.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Charity Baptist Church, a non-profit Texas church (by Warranty Deed filed for record under Harris County Clerk's File No. N088969).	Texas American Title Co./ PBW
Current Status	<i>Church pastor cannot get authority from his board, despite attempts to explain the nature of the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	21	
HCAD ID	0141420000008	
PARCEL ADDRESS	5201 Liberty Rd	
PARCEL OWNER	Full Gospel Christian Assn/Charity Baptist Church	
PARCEL OWNER ADDRESS	5201 Liberty Rd, Houston, TX 77026-5313	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Full Gospel Christian Assoc. detailing the request for a restrictive covenant, certified mailing to parcel address, not delivered "unclaimed"	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/6/2016	Vacant Property	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Charity Baptist Church, a non-profit Texas church (by Warranty Deed filed for record under Harris County Clerk's File No. N088969).	Texas American Title Co./ PBW
Current Status	<i>The property is currently vacant. There has been no response to letters sent to titled owner and we can not find any other information regarding the owner's current location.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	22	
HCAD ID	0141420000006	
PARCEL ADDRESS	2809 Erastus St	
PARCEL OWNER	Charity Baptist Church C/O Rev F W Mcilveen	
PARCEL OWNER ADDRESS	2809 Erastus St, Houston, TX 77026-5303	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Charity Baptist detailing the request for a restrictive covenant, certified mailing to parcel address, signed by B. Burnside (?)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
3/2/2015	Met with Pastor Burnside. He cannot get authority from his board to execute documents.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Charity Baptist Church (by Warranty Deed filed for record under Harris County Clerk's File No. M115393).	Texas American Title Co./ PBW
12/3/2016	Visited Charity Baptist Church and met with Pastor Burnside. I was introduced to a Deacon Johnson and was advised the Board was not interested in working with UP.	Paul Shanklin
Current Status	<i>Church pastor cannot get authority from his board, despite attempts to explain the nature of the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

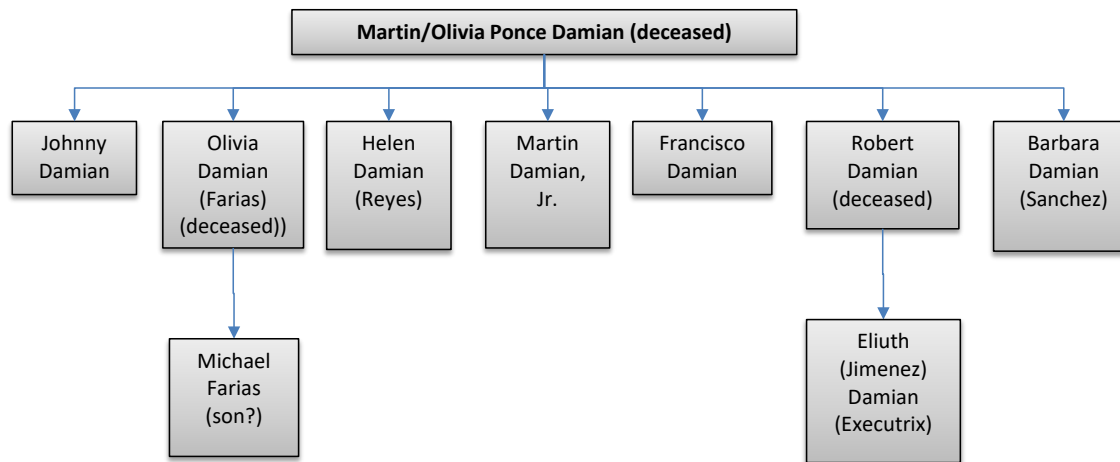
Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	24	
HCAD ID	014041000002	
PARCEL ADDRESS	5311 Liberty Rd	
PARCEL OWNER	Elmer Preston Trust	
PARCEL OWNER ADDRESS	3319 Liberty Rd , Houston, TX 77026-6238	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Elmer Preston Trust detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed")	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
1/12/2015	Meet with person who identified himself as a Trustee of the Trust. He could not produce proper documentation.	Paul Shanklin
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Elmer Preston Trust of Texas (by Warranty Deed filed for record under Harris County Clerk's File No. Y825900).	Texas American Title Co./ PBW
6/2/2017	A For Sale sign is posted on the property, called the phone number on sign and reached Mr. James Singleterry, who is a representative of the Elmer Preston Trust. After meeting in person with Mr. Singleterry, Mr. Shanklin left the restrictive covenant document with Mr. Singleterry for review and discussion with the other beneficiaries of the trust.	Paul Shanklin
6/9/2017	Mr. Shanklin met with an attorney representing the Elmer Preston Trust, who advised Mr. Singleterry to sign the restrictive covenant. UPRR anticipates receiving the signed document within the next two-three weeks.	Paul Shanklin
Current Status	<i>Representatives for the Elmer Preston Trust have verbally agreed to sign the restrictive covenant. Anticipate receiving the signed covenant within the next few weeks.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

MAP ID	25	
HCAD ID	0651290800937	
PARCEL ADDRESS	3300 E Lockwood Dr	
PARCEL OWNER	Robert Damian	
PARCEL OWNER ADDRESS	3300 E Lockwood Dr, Houston, TX 77026-1811	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Robert Damian detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed")	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Brenda Louise Damian Wilkerson, the Estate of Olivia Damian Farias, deceased, Helen Damian Reyes, Martin Damian, Jr., Francisco Damian, Barbara Damian Sanchez and Eliuth Jimenez Damian (by Deed filed for record under Harris County Clerk's File No. G222792, by Affidavit of Heirship filed for record under Harris County Clerk's File No. 20060033190 and by Deed filed for record under Harris County Clerk's File No. 20090055035). We find of record an Affidavit of Heirship filed for record under Harris County Clerk's File No. 20120204342 pertaining to the Estate of Olivia Farias, deceased. However, said affidavit is not acceptable as to form and incomplete content.	Texas American Title Co./ PBW
Current Status	<i>This property is currently occupied by a squatter. Despite numerous letters and visits to titled owner's address we cannot locate the owner. In addition, based on the Affidavits of Heirship for the property located in the deed records, there are numerous and unverified claims of ownership (clouded title). Therefore, it is unclear if there is an entity that can sign the restrictive covenant for Properties Map ID 25, 26, and 100.</i>	Paul Shanklin



Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	26	
HCAD ID	0402600000019	
PARCEL ADDRESS	3300 E Lockwood Dr	
PARCEL OWNER	Robert Damian	
PARCEL OWNER ADDRESS	3300 E Lockwood Dr, Houston, TX 77026-1811	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Robert Damian detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed")	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Brenda Louise Damian Wilkerson, the Estate of Olivia Damian Farias, deceased, Helen Damian Reyes, Martin Damian, Jr., Francisco Damian, Barbara Damian Sanchez and Eliuth Jimenez Damian (by Deed filed for record under Harris County Clerk's File No. G222792, by Affidavit of Heirship filed for record under Harris County Clerk's File No. 20060033190 and by Deed filed for record under Harris County Clerk's File No. 20090055035). We find of record an Affidavit of Heirship filed for record under Harris County Clerk's File No. 20120204342 pertaining to the Estate of Olivia Farias, deceased. However, said affidavit is not acceptable as to form and incomplete content.	Texas American Title Co./ PBW
Current Status	<i>This property is currently occupied by a squatter. Despite numerous letters and visits to titled owner's address we cannot locate the owner. In addition, based on the Affidavits of Heirship for the property located in the deed records, there are numerous and unverified claims of ownership (clouded title). Therefore, it is unclear if there is an entity that can sign the restrictive covenant for Properties Map ID 25, 26, and 100.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	31	
HCAD ID	014140000007	
PARCEL ADDRESS	5111 Wylie St	
PARCEL OWNER	Aquilina Perez	
PARCEL OWNER ADDRESS	5111 Wylie St, Houston, TX 77026-5227	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Aquilina Perez detailing the request for a restrictive covenant, certified mailing to parcel address, signed by Timothy Suing (09/15/2014)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	The Harris County Appraisal District's real property account information cites the record owner as the Estate of Aquilina Perez. However, we find no probate or heirship proceedings pertaining to same filed in Harris County, Texas.	Texas American Title Co research/PBW
Current Status	<i>Property is occupied by person who is not the owner and could not provide assistance in finding the owner. We can not find any other information regarding the owner's current location.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	32	
HCAD ID	0141400000008	
PARCEL ADDRESS	5107 Wylie St	
PARCEL OWNER	Reginald & Leticia Tolbert	
PARCEL OWNER ADDRESS	5107 Wylie St, Houston, TX 77026-5227	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Leticia Tolbert detailing the request for a restrictive covenant, certified mailing to parcel address, signed by Leticia Tolbert (08/30/2014)	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Reginald E. Tolbert and wife, Leticia Tolbert (by Warranty Deed filed for record under Harris County Clerk's File No. V781486).	Texas American Title Co./ PBW
Current Status	<i>Unresolved heirship issues prevent determination of probable heirs and rightful owner, therefore there is no one currently authorized to execute the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	35	
HCAD ID	0141390000006	
PARCEL ADDRESS	5011 Wylie St	
PARCEL OWNER	Estate Of Carrie Mae Carr	
PARCEL OWNER ADDRESS	5011 Wylie St, Houston, TX 77026-5225	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Estate of Carrie Mae Carr detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed").	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in J. C. Carr and Carrie Mae Carr (by Warranty Deed filed for record under Volume 2471, Page 134 of the Deed Records of Harris County, Texas). The Harris County Appraisal District's real property account information cites the record owner as the Estate of Carrie Mae Carr. However, we find no probate or heirship proceedings pertaining to same filed in Harris County, Texas.	Texas American Title Co./ PBW
Current Status	<i>Unresolved heirship issues prevent determination of probable heirs and rightful owner, therefore there is no one currently authorized to execute the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	38	
HCAD ID	0402660100018	
PARCEL ADDRESS	2926 Lavender St	
PARCEL OWNER	Clark Investment Co	
PARCEL OWNER ADDRESS	4901 Liberty Rd, Houston, TX 77026-5263	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Clark Investments detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed"?).	Geoffrey Reeder, UPRR
9/11/2014	Community meeting with affected landowners at Greater New Vine Baptist Church.	UPRR, Paul Shanklin, PBW
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Clark Investment Company (by Deeds filed for record under Volume 2034, Page 480 and Volume 2830, Page 252, both of the Deed Records of Harris County, Texas). We find reference to Cause No. 2007-25810, in the District Court of Harris County, Texas, styled Harris County, et al vs. D & H Land Company. Said suit has been dismissed and is referenced here for information purposes only.	Texas American Title Co./ PBW
5/27/2017	The Harris County Tax assessor website (www.hctax.net) shows Clark Investment Co. owes \$47,241.10 as of May 2017, and lists the property as "Delinquent Taxes Exist".	Eric Matzner, PBW
Current Status	<i>The Property has been sold for past dues taxes and title has not vested in the new owner, so there is no one currently authorized to execute the restrictive covenant.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	58	
HCAD ID	014139000002	
PARCEL ADDRESS	5010 Lelia St	
PARCEL OWNER	Nicholas R Alvarado/Dickson Investment Co.	
PARCEL OWNER ADDRESS	3410 Chapman St, Houston, TX 77009-5812	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Nicolas Alvarado detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed?").	Geoffrey Reeder, UPRR
1/23/2015	Property is abandoned, no structures or dwellings present.	
9/22/2016	Published in the Daily Court Review, Public Notices, Suit No. 2015-16765, in the 215th District Court of Harris County, Texas, styled City of Houston, etal vs. Dickson Investment Company, etal. The cause of action is for delinquent taxes on the subject property in the amount of \$8,353.05.	Daily Court Review - Public Notices
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Dickson Investment Company (by Deeds filed for record under Harris County Clerk's File Nos. L941044 and Y586219). There were 10 Notice of Liens issued on the property dating back to 1977. We find reference to Cause No. 2015-16765, in the District Court of Harris County, Texas, styled City of Houston, etal vs. Dickson Investment Company, etal. It is assumed that said cause of action is for delinquent taxes due on subject property.	Texas American Title Co./ PBW
5/27/2017	The Harris County Tax assessor website (www.hctax.net) shows Nicholas Alvarado owes \$16,110.20 as of May 2017, and lists the property as "Taxes under Suit".	Eric Matzner, PBW
Current Status	<i>This Property is currently abandoned with no structures on the property. Despite numerous letters to titled owner's address we cannot locate the owner and the property is under suit for unpaid taxes.</i>	

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	62	
HCAD ID	014140000001	
PARCEL ADDRESS	2920 Clementine St	
PARCEL OWNER	Amidee Capital Group, LLC	
PARCEL OWNER ADDRESS	13018 Happy Lane, Cypress, TX 77429-2068	
Date	Comment	Person
12/15/2012	Texas American Title Company researches the owner information regarding this property. The owner is listed as Amidee Capital Group, LLC (by Deed under Order of Sale in Tax Suits filed for record under Harris Clerk's File No. Y376238). The title report listed that a Notice of Federal Tax Lien filed November 2009 against Amidee Capital Group, Inc. in the amount of \$27,540.	Eric Matzner, PBW
8/29/2014	Initial letter from UPRR to Jack Perkins detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed") (09/14/14)	Geoffrey Reeder, UPRR
10/17/2016	Texas American Title Company reviewed the owner information again in 2016 regarding this property. Amidee Capital Group, LLC is still listed as the owner, and the following notes were provided on the title report: Title Vested In Amidee Capital Group, Inc. f/k/a/ Amidee Capital Group, LLC (by Deed under Order of Sale in Tax Suits filed for record under Harris Clerk's File No. Y376238 and by Corporate Resolution filed for record under Harris County Clerk's File No. 20100468656). The title report listed that a Notice of Federal Tax Lien filed November 2009 against Amidee Capital Group, Inc. in the amount of \$27,540. The records reflect bankruptcy proceedings filed in federal court on January 17, 2010 in Case No. 2010-20041 by Amidee Capital Group, Inc.	Eric Matzner, PBW
5/27/2017	The Harris County Tax assessor website (www.hctax.net) shows Amidee Capital Group, LLC owes \$38,818.49 as of May 2017, and lists the property as "Taxes under Suit".	Eric Matzner, PBW
Current Status	<i>Resident claims not to be the owner but pays the taxes. He refuses to cooperate in locating the owner to get the restrictive covenant signed and we have no further information regarding the owner's current location.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

Union Pacific Railroad - Houston, TX - Wood Preserving Works
Off-Site Landowner Contact Log

Updated 06/12/2017

MAP ID	100	
HCAD ID	0651290800938	
PARCEL ADDRESS	3300 E Lockwood Dr	
PARCEL OWNER	Robert Damian	
PARCEL OWNER ADDRESS	3300 E Lockwood Dr	
Date	Comment	Person
8/29/2014	Initial letter from UPRR to Robert Damian detailing the request for a restrictive covenant, certified mailing to parcel address, undeliverable ("unclaimed")	Geoffrey Reeder, UPRR
10/17/2016	Texas American Title Co. researches the property, identifies title vested in Brenda Louise Damian Wilkerson, the Estate of Olivia Damian Farias, deceased, Helen Damian Reyes, Martin Damian, Jr., Francisco Damian, Barbara Damian Sanchez and Eliuth Jimenez Damian (by Deed filed for record under Harris County Clerk's File No. G222792, by Affidavit of Heirship filed for record under Harris County Clerk's File No. 20060033190 and by Deed filed for record under Harris County Clerk's File No. 20090055035). We find of record an Affidavit of Heirship filed for record under Harris County Clerk's File No. 20120204342 pertaining to the Estate of Olivia Farias, deceased. However, said affidavit is not acceptable as to form and incomplete content.	Texas American Title Co./ PBW
Current Status	<i>This property is currently occupied by a squatter. Despite numerous letters and visits to titled owner's address we cannot locate the owner. In addition, based on the Affidavits of Heirship for the property located in the deed records, there are numerous and unverified claims of ownership (clouded title). Therefore, it is unclear if there is an entity that can sign the restrictive covenant for Properties Map ID 25, 26, and 100.</i>	Paul Shanklin

DRAFT - SUBJECT TO REVISIONS

APPENDIX 5B – CITY OF HOUSTON RESTRICTIVE COVENANTS – SIGNED

RESTRICTIVE COVENANT

STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the **City of Houston Right-of-Way (ROW) (Property)** presented in Exhibits A-1 and A-2 attached hereto and incorporated herein by reference.

Portions of the groundwater underlying the Property contain certain identified chemicals of concern (COCs) causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The portion considered to be Affected Property and plume management zone, as those terms are defined in the TRRP, is shown on Exhibit B attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

Plume Management Zone

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of COCs exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the COCs in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit B provides the location and extent of the plume management zone. Exhibit C describes the maintenance and monitoring required and Table C-2 lists the COCs that exceed the TCEQ's Protective Concentration Levels. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the City of Houston with an address of 901 Bagby Street, Houston, Texas 77002 owns municipal right-of-way easements over the Property. Fee title underlying the easements is owned by the abutting property owners. In consideration of the Response Actions by Union Pacific Railroad (Responder) at the Former Houston Wood Preserving Works Site at 4910 Liberty Road, Houston, Texas, approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City of Houston has agreed, to the extent of its ownership interest, to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit C is required to be performed by the Responder. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.
2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

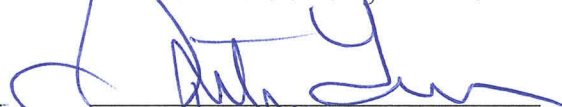
Executed this 9th day of June, 2017.

ATTEST:



Anna Russell
City Secretary

CITY OF HOUSTON, TEXAS



Sylvester Turner
Mayor of the City of Houston

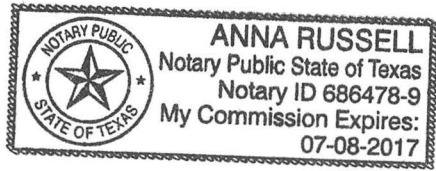
APPROVED AS TO FORM:



Phillip M. Goodwin, P.G.
Assistant City Attorney
LD#067-1600017-001

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 9th day of June, 2017, by **Sylvester Turner, Mayor** of the **CITY OF HOUSTON, TEXAS**, a municipal corporation, on behalf of said corporation.



(Notary Seal)

Notary Public, State of Texas

Union Pacific Railroad Company [RESPONDER]

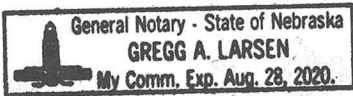
By: Tony Love
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §

DOUGLAS COUNTY §

BEFORE ME, on this the 25th day of May, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [**responder**], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25th day of May, 20 17.



Gregg A. Larsen
Notary Public in and for the State of Nebraska
County of Douglas
My Commission Expires: August 28, 2020

Accepted as Third Party Beneficiary this _____ day of _____, 20____.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
(_____) COUNTY §

BEFORE ME, on this the ____ day of _____, _____ personally appeared _____
[name], _____ [title], of The Texas Commission of Environmental Quality,
known to me to be the person whose name is subscribed to the foregoing instrument, and they
acknowledged to me that they executed the same for the purposes and in the capacity herein
expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20____.

Notary Public in and for the State of Texas,
County of _____
My Commission Expires: _____

EXHIBIT A -1

SURVEY PLAT AND LEGAL DESCRIPTION OF CITY OF HOUSTON RIGHT-OF-WAY INSTITUTIONAL CONTROL BOUNDARY – EASTERN PROPERTY



Doyle & Wachtstetter, Inc
Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 10.7152 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Block 2 and Block 3, all of Block 5 and Block 6, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), and a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the Harris County Deed Records (H.C.D.R.) a portion of Block 22, a portion of 50 foot wide Chew Avenue, and a portion of 50 foot wide Tunis Street (Jones Street), as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.), and a portion of Block 11 and Block 18 as shown of the map of the Subdivision of the South Part of the Gagne Homesteads, according to the map or plat thereof recorded in Volume 89, Page 240 of the H.C.D.R., the herein described 10.7152 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R., said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE North 62°10'18" East, coincident with the southeastern right-of-way boundary line of said 60 foot wide Liberty Road, same being the northwestern boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 653.86 feet to an angle point at the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northern extension of the western right-of-way boundary line of 50 foot wide Sam Willis Street, at position X=3137338.15 and Y=13852646.20;

THENCE South 2°35'12" East, coincident with the northern extension of the western right-of-way boundary line of said 50 foot wide Sam Willis Street, a distance of 364.63 feet to a point located on the eastern boundary line of said Block 22 of the F. F. Chew Addition, for the northeast corner and the **POINT OF BEGINNING** of the herein described 10.7152 acre tract, at position X=3137354.60 and Y=13852281.98;

THENCE South 2°35'12" East, coincident with the western right-of-way boundary line of said 50 foot wide Sam Willis Street, same begin the eastern boundary line of said Block 22 of the F. F. Chew Addition, a distance of 85.45 feet to the point of curvature of a non-tangent curve to the left, having a radius of 269.72 feet, at position X=3137358.46 and Y=13852196.62;

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE in an southwesterly direction, along said curve to left, having a radius of 269.72 feet, an arc length of 246.03 feet, a central angle of $52^{\circ}15'51''$, a chord bearing and distance of South $54^{\circ}47'15''$ West – 237.59 feet to a point for corner, located on the eastern right-of-way boundary line of 60 foot wide Chew Street, same being the western boundary line of said Block 22 of the F. F. Chew Addition, for an angle corner of the herein described 10.7152 acre tract, at position X=3137164.36 and Y=1385259.64;

THENCE South $2^{\circ}36'08''$ East, coincident with the eastern right-of-way boundary line of 60 foot wide Chew Street, same being the western boundary line of said Block 22, Block 25 and Block 26 of the F. F. Chew Addition, a distance of 662.55 feet to a point at the intersection of the eastern right-of-way boundary line of said 60 foot wide Chew Street with easterly extension of the southern boundary line of 55 foot wide Tunis Street (not open), for the southeast corner of the herein described 10.7152 acre tract, at position X=3137194.44 and Y=13851397.84;

THENCE South $87^{\circ}28'24''$ West, coincident with the southern right-of-way boundary line of said 55 foot wide Tunis Street (not open), same being northern boundary line of Block 16 of said F. F. Chew Addition, the northern boundary line of Block 9 and Block 8 of said Englewood Subdivision, a distance of 517.83 feet to a point located on the eastern right-of-way boundary line of said 50 foot wide Harlem Street, for the northwest corner of said Block 8 of said Englewood Addition and an interior corner of the herein described 10.7152 acre tract, at position X=3136677.16 and Y=13851375.01;

THENCE South $2^{\circ}31'36''$ East, coincident with the eastern right-of-way boundary line of said 50 foot wide Harlem Street, same being the western boundary line of said Block 8 of said Englewood Subdivision, a distance of 350.00 feet to the intersection of the eastern boundary line of said 50 foot wide Harlem Street with the southern right-of-way boundary line of 50 foot wide Sudan Street, for the northwest corner of Block 11 of said Englewood Subdivision, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136692.59 and Y=13851025.39;

THENCE South $87^{\circ}28'24''$ West, coincident with the southern right-of-way boundary line of said 50 foot wide Sudan Street, the northern boundary line of Block 10 of said Englewood Subdivision, a distance of 260.00 feet to a point located on the eastern right-of-way boundary line Erastus Street, right-of-way varies, for an interior corner of the herein described 10.7152 acre tract, at position X=3136432.87 and Y=13851013.93;

THENCE South $2^{\circ}31'36''$ East, coincident with the eastern right-of-way boundary line Erastus Street, right-of-way varies, same being the western boundary line of said Block 10 of said Englewood Subdivision, a distance of 237.41 feet to a point at the intersection of the easterly extension of the southern boundary line of Block 18 of said Subdivision of the South Part of the Gagne Homestead, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136443.34 and Y=13850776.78;

THENCE South $87^{\circ}15'46''$ West, a distance of 62.36 feet to a point located on western right-of-way boundary line of said Erastus Street, right-of-way varies and the southern boundary line of said Block 18 of the said Subdivision of the South Part of the Gagne Subdivision, for an the southwest corner of the herein described 10.7152 acre tract, at position X=3136381.05 and Y=13850773.80;

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 3**

THENCE North 2°44'14" West, coincident with the western right-of-way boundary line of said Erastus Street, right-of-way varies, a distance of 287.64 feet to a point located within Block 11 of said Subdivision of the South Part of the Gagne Homestead, at the intersection of the western right-of-way boundary line of said Erastus Street with the northern right-of-way boundary line of said 50 foot wide Sudan Street, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136367.32 and Y=13851061.08;

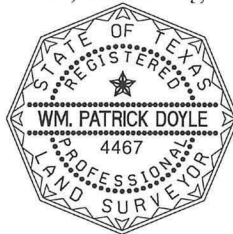
THENCE North 87°28'24" East, coincident with the northern right-of-way boundary line of said 50 foot wide Sudan Street, same being the southern boundary line of said Block 7 of said Englewood Subdivision, a distance of 273.42 feet to a point located on the western right-of-way boundary line of said 50 foot wide Harlem Street, for the southeast corner of said Block 7 and an interior corner of the herein described 10.7152 acre tract, at position X=3136640.44 and Y=13851073.13;

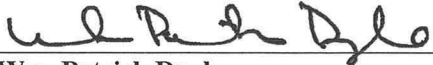
THENCE North 2°49'16" West, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street, same being the eastern boundary line of Block 7, Block 4 and Block 1, of said Englewood Subdivision, a distance of 827.94 feet to the northwest corner of the herein described 10.7152 acre tract, at position X=3136599.69 and Y=13851899.99;

THENCE North 53°51'57" East, a distance of 288.79 feet to the a angle corner of the herein described 10.7152 acre tract, at position X=3136832.90 and Y=13852070.26;

THENCE North 61°51'16" East, a distance of 190.34 feet to an angle corner of the herein described 10.7152 acre tract, located on curve to the right, having a radius of 1179.16 feet, at position X=3137000.72 and Y=13852160.04;

THENCE in an easterly direction, along said curve to the right, having a radius of 1179.16 feet, an arc length of 375.93 feet, a central angle of 18°15'53", and a chord bearing and distance of North 70°59'12" East – 374.34 feet to the **POINT OF BEGINNING**, containing 10.7152 acres of land, more or less.




Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016

*This description is based on plat dated June 28, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard Offsite PMZ 10.7152 acre tract.doc*

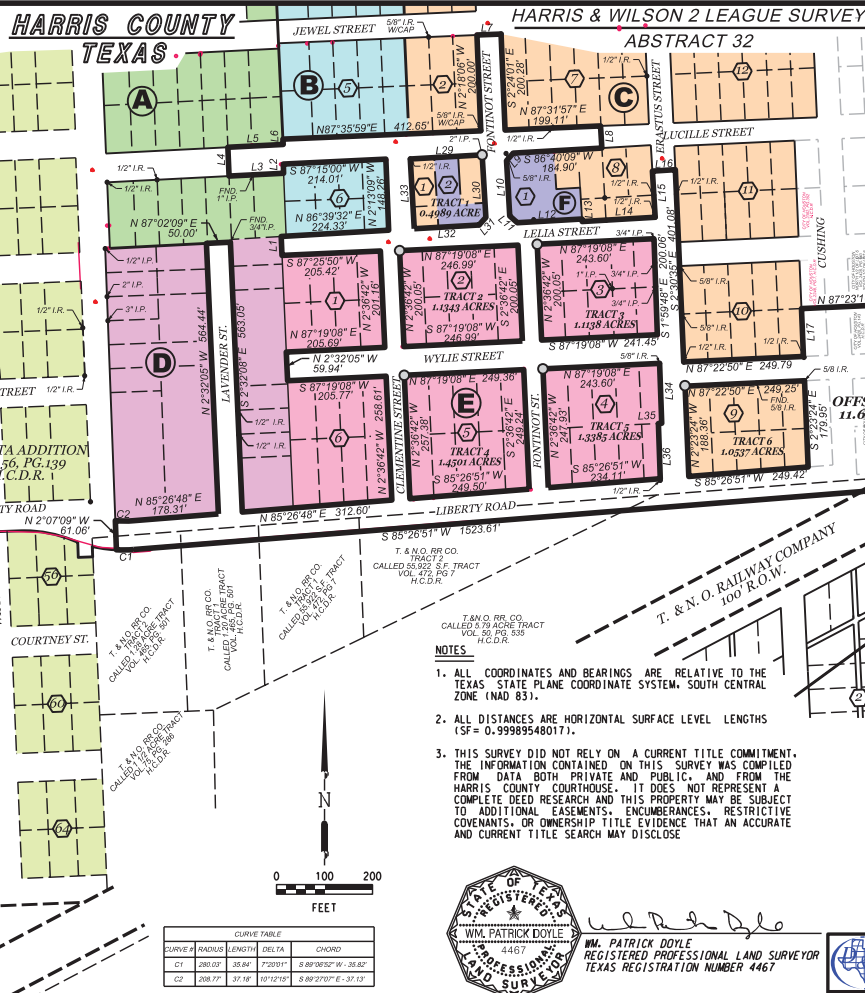
EXHIBIT A - 2

SURVEY PLAT AND LEGAL DESCRIPTION OF CITY OF HOUSTON RIGHT-OF-WAY INSTITUTIONAL CONTROL BOUNDARY – NORTHERN AND WESTERN PROPERTIES

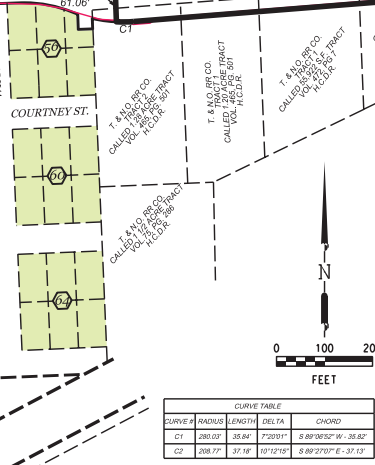
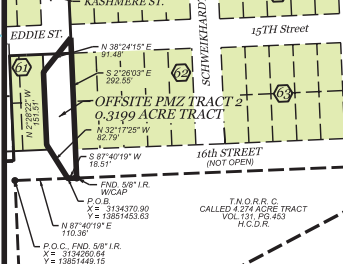
SUBDIVISION LEGEND

- (A) BALLARD GARDENS VOL. 1528, PG. 725, H.C.D.R.
- (B) FAIRGROUND PARK ANNEX VOL. 499, PG. 70, H.C.D.R.
- (C) FAIR GROUNDS PARK ADDITION VOL. 81, PG. 460, H.C.D.R.
- (D) LIBERTY ROAD ESTATES UNRECORDED
- (E) GAGNE HOMESTEAD VOL. 1, PG. 5, H.C.M.R.
- (F) GREATER TRUE VINE MISSIONARY BAPTIST CHURCH F.C. 599251, H.C.M.R.
- (G) KASHMERE GARDENS ANNEX VOL. 998, PG. 606, H.C.D.R.

LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L1	N 2°32'05" W	39.80	L22	S 89°43'40" W	30.63
L2	S 2°13'09" E	19.17	L23	N 2°32'15" W	92.46
L3	S 87°04'51" W	114.00	L24	N 87°23'53" E	131.87
L4	N 2°13'09" W	60.00	L25	S 2°48'39" E	51.59
L5	N 87°04'51" W	115.34	L26	S 19°53'48" E	12.60
L6	N 2°36'44" W	11.18	L27	N 62°25'37" E	145.44
L7	N 87°48'32" E	50.40	L28	S 2°50'20" E	111.49
L8	S 3°23'23" E	45.11	L29	N 86°45'15" E	149.97
L9	S 41°40'02" W	21.21	L30	S 3°20'56" E	130.37
L10	S 3°20'11" E	115.26	L31	S 41°35'58" W	21.21
L11	S 48°20'07" E	21.21	L32	S 86°38'32" W	135.28
L12	N 86°39'53" E	135.00	L33	N 3°13'55" W	145.64
L13	S 3°32'04" E	5.22	L29	N 86°45'10" E	149.97
L14	N 86°39'22" E	152.41	L30	S 3°20'56" E	130.37
L15	N 3°28'13" W	86.31	L31	S 41°35'58" W	21.21
L16	N 86°39'22" E	48.05	L32	S 86°39'32" W	135.28
L17	N 2°23'24" W	100.05	L33	N 3°13'55" W	145.64
L18	S 10°38'10" E	5.08	L34	S 1°59'48" E	125.01
L19	S 2°06'20" E	101.23	L35	S 87°19'08" W	7.04
L20	N 62°01'40" E	145.35	L36	S 1°59'48" E	115.29
L21	N 1°22'20" W	20.77			



LESS & EXCEPT TRACTS	POINT OF BEGINNING X =	POINT OF BEGINNING Y =
TRACT 1 0.4989 ACRE	3135967.82	13853042.55
TRACT 2 1.1343 ACRES	3135795.90	13852842.99
TRACT 3 1.1138 ACRES	3136082.54	13852856.42
TRACT 4 1.4501 ACRES	3135805.06	13852583.18
TRACT 5 1.3385 ACRES	313604.07	13852596.71
TRACT 6 1.0537 ACRES	3136390.09	13852561.66



- NOTES**
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.999895480171).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

EXHIBIT OF
CITY OF HOUSTON
INSTITUTIONAL CONTROL
BOUNDARY

IN THE
HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS
 108
UNION PACIFIC RAILROAD COMPANY

WM. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467

CURVE TABLE

CURVE #	RADIUS	LENGTH	DEFLA	CHORD
C1	280.03	35.80	7°20'51"	S. 89°18'52" W - 35.62'
C2	208.77	31.18	10°12'15"	S. 89°27'01" E - 31.13'

Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/CIS
 151 COMMERCIAL STREET, CLUTE, TEXAS 77531
 OFFICE: 979.265.1627 FAX: 979.265.0600 TDEM NO. B0034500
 SURVEYED: 1-12-16 BOOK: 1098 IMAGE: 1915-16-03
 DRAWN BY: JAW/1-14-16 CHECKED: WPD/2-20-16 TRK/1-15-16



**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 13**

BEING ALL THAT CERTAIN 11.6378 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Liberty Road, right-of-way varies, all of 30 foot wide Lelia Street (11th Street), all of 60 foot wide Wylie Street (12th Street), all of 40 foot wide Clementine Street and all of 40 foot wide Fontinot Street, as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records (H.C.M.R.), a portion of 60 foot wide Lucille Street, as shown on the map of Ballard Gardens Addition, according to the map or plat thereof recorded in Volume 1528, Page 725 of the Harris County Deed Records (H.C.D.R.), a portion of 50 foot wide Lucille Street and a portion of 50 foot wide Clementine Street (formerly Lots 1 and 10, Block 6) as shown on the map of Fairgrounds Park Annex according to the map or plat thereof recorded in Volume 499, Page 70 of the H.C.D.R., a portion of 50 foot wide Lucille Street, a portion of 50 foot wide Fontinot Street, and a portion of 50 foot wide Erastus Street as shown on the Map of Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the H.C.D.R., a portion of Old Lockwood Drive (right-of-way varies) as shown on the map of Kashmere Gardens Annex, according to the map or plat thereof recorded in Volume 996, Page 606 of the H.C.D.R., a portion of Cushing Street, a portion of Lockwood Drive, all of Lavender Street conveyed by deed recorded on May 24, 1948 from Carl S. Smith, et al to Harris County, as recorded in Volume 1740, Page 359 of the H.C.D.R., a portion of all that certain called 1.28 acre tract and a portion of all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; a portion of all that certain called 55,922 square foot tract of land and a portion of all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R., and a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R., the herein described 11.6378 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said Liberty Road, right-of-way varies, with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Beginning being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern boundary line of said Liberty Road, right-of-way varies, a distance of 1523.61 feet to a 5/8" iron rod found marking the point of curvature of a curve to the right, having a radius of 280.03 feet;

THENCE in a westerly direction, coincident with the southern boundary line of said Liberty Road, right-of-way varies, along said curve to the right, having a radius of 280.03 feet, an arc length of 35.84 feet, a central angle of 7°20'01", a chord bearing and distance of South 89°06'52" West – 35.82 feet to the southwest corner of the herein described 11.6378 acre tract;

THENCE North 2°07'09" West, crossing said Liberty Road, right-of-way varies, a distance of 61.06 feet to a point located on the northern right-of-way boundary line of said Liberty Road, right-of-way varies, for the southwest corner of Tract 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, being the same tract conveyed by deed recorded on March 27, 2014 from Harris County, et al to 2013 Cottage, LLC, as recorded in Clerk's File No. 20140123340 of the H.C.O.R., located on a curve to the left, having a radius of 208.77 feet, for an angle corner of the herein described 11.6378 acre tract,

UNION PACIFIC RAILROAD COMPANY

**11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 13**

THENCE in an easterly direction, coincident with northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, along said curve to the left, having a radius of 208.77 feet, an arc length of 37.18 feet, a central angle of $10^{\circ}12'15''$, a chord bearing and distance of South $89^{\circ}27'07''$ East – 37.13 feet to a point for corner;

THENCE North $85^{\circ}26'48''$ East, coincident with northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1, Block of the unrecorded subdivision of Liberty Road Estates, a distance of 178.31 feet to the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, and the western right-of-way boundary line of said Lavender Street, for the southeast corner of said Lot 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $2^{\circ}32'05''$ West, coincident with the western right-of-way boundary line of said Lavender Street, same being the eastern boundary line of Tract 1, the eastern boundary line of Lot 16, being the same tract conveyed by deed recorded on July 2, 1952 from Clark Investment Company to John Ellis, et ux as recorded in Volume 2458, page 665 of the H.C.D.R., the eastern boundary line of Tract 14, being the same tract conveyed by deed recorded on March 27, 2014 from Harris County, et al to 2013 Cottage, LLC, as recorded in Clerk's File No. 20140123340 of the H.C.O.R., the eastern boundary line of Tract 13, being the same tract conveyed by deed recorded on May 11, 2001 from Larry Charles Wyatt to Francis A. Wyatt, as recorded in Clerk's File No. V045715 of the H.C.O.R., and the eastern boundary line of Tract 12, being the same tract conveyed by deed recorded on February 16, 1950 from Clark Investment Company to Arthur Brooks, et ux as recorded in Volume 2035, Page 571 of the H.C.D.R., all being out of Block 2, of the unrecorded subdivision of Liberty Road Estates, a distance of 564.44 feet to a point located on the southern boundary line of Lot 5 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $87^{\circ}02'09''$ East, coincident with the southern boundary line of Lot 5 and Lot 6 of said Ballard Gardens Addition, a distance of 50.00 feet to the northwest corner of Tract 11 of the unrecorded subdivision of Liberty Road Estates, being the same tract conveyed by deed recorded on January 28, 2003 from Harris County, et al to Sandra Rena Thompson, as recorded in Clerk's File NO. W386946 of the H.C.O.R., for an angle corner of the herein described 11.6378 acre tract;

THENCE South $2^{\circ}32'08''$ East, coincident with the eastern right-of-way boundary line of said 50 foot wide Lavender Street, same being the western boundary line of said Tract 11, Tract 6A, being the same tract conveyed by deed recorded on September 24, 1993 from Clark Investment Company, Inc. to Essie Lee Hutchins as recorded in Clerk's File No. P469225 of the H.C.O.R., Tract 6B, in the name of Zearlene Osborne, recordation information not found, Tract 6 and Tract 6C, in the name of Lucille Long, recordation information not found, Tract 5, being the same tract conveyed by deed recorded on March 1, 2011 from Constable Jack F. Abercia, Precinct 1, Harris County, Texas to Greater Mount Nebo Baptist Church as recorded in Clerk's File No. 2011-083443 of the H.C.O.R., Tract 4, being the same tract conveyed by deed recorded on August 14, 2009 from Jack Anthony Coachman to Ray Carrington as recorded in Clerk's File No. 2009-0369151 of the H.C.O.R., Tract 3, being the same tract described in deed recorded on November 22, 1951 from Clark Investment Company to Jessie Beal, et al, as recorded in Volume 2344, Page 164 of the H.C.D.R., and Tract 1, being the same tract conveyed by deed recorded on August 5, 2013 from Constable Alan Rosen Precinct 1, Harris County, Texas to Greater Mount Nebo Missionary Baptist Church, as recorded in Clerk's File No. 2013-0394211 of the H.C.O.R., all being out of Block 2 of the unrecorded subdivision of Liberty Road Estates, a distance of 563.05 feet to the intersection of the eastern right-of-way boundary line of said 50 foot wide Lavender Street with the northern right-of-way boundary line Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $85^{\circ}26'48''$ East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1 of the unrecorded subdivision of Liberty Road Estates and the southern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 312.60 feet to the southeast corner of said Block 6, same being the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the western right-of-way boundary line of 40 foot wide Clementine Street, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 13**

THENCE North 2°36'42" West, coincident with the western right-of-way boundary line of said 40 foot wide Clementine Street, same being the eastern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 258.61 feet to the northeast corner of said Block 6, same being the intersection of said western right-of-way boundary line of 40 foot wide Clementine Street with the southern right-of-way boundary line of 60 foot wide Wylie Street (12th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°19'08" West, coincident with the southern right-of-way boundary line of 60 foot wide Wylie Street (12th Street), same being the northern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.77 feet to the northwest corner of said Block 6, located on the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°32'05" West, coincident with the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, a distance of 59.94 feet to the southwest corner of Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, located on the northern boundary line of said 60 foot wide Wylie Street (12th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°19'08" East, coincident with the northern boundary line of said 60 foot wide Wylie Street (12th Street), same being the southern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.69 feet, to the southeast corner of said Block 1, at the intersection of the northern right-of-way boundary line of said Wylie Street (12th Street) with the western right-of-way boundary line of said 40 foot wide Clementine Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°36'42" West, coincident with the western right-of-way boundary line of said 40 foot wide Clementine Street, same being the eastern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 201.16 feet to the northeast corner of said Block 1, at the intersection of the western boundary line of said 40 foot wide Clementine Street with the southern right-of-way boundary line of called 30 foot wide Lelia Street (11th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°25'50" West, coincident with the southern right-of-way boundary line of called 30 foot wide Lelia Street (11th Street), same being the northern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.42 feet, to the northwest corner of said Block 1, located on the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°32'05" West, coincident with the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, a distance of 39.50 feet, to a point located on the northern right-of-way boundary line of said called 30 foot wide Lelia Street (11th Street), same being the southern boundary line of Lot 8 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'32" East, coincident with the northern right-of-way boundary line of said called 30 foot wide Lelia Street (11th Street), same being the southern boundary line of said Lot 8 of Ballard Gardens Subdivision and the southern boundary line of Block 6 of said Fairgrounds Park Annex, a distance of 224.33 feet to the intersection of the northern right-of-way boundary line of said called 30 foot wide Lelia Street with the western right-of-way boundary line 50 foot wide Clementine Street, formerly Lots 1 and 10, Block 6, Fairgrounds Park Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°13'09" West, coincident with the western right-of-way boundary line 50 foot wide Clementine Street, a distance of 148.26 feet, to a point located at the intersection of the western right-of-way boundary line of said 50 foot wide Clementine Street with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 6 of said Fairground Park Annex, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 13**

THENCE South 87°15'00" West, coincident with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 6 of said Fairground Park Annex, a distance of 214.01 feet, to the northwest corner of said Block 6 of Fairground Park Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°13'09" East, coincident with the western boundary line of said Block 6 of Fairground Park Annex, a distance of 19.17 feet, to the northeast corner of Lot 8 of said Ballard Gardens Addition, located on the southern right-of-way boundary line of 60 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°04'51" West, coincident with the southern right-of-way boundary line of 60 foot wide Lucille Street, same being the northern boundary line of Lot 8 and Lot 7 of said Ballard Gardens Addition, a distance of 114.00 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°13'09" West, a distance of 60.00 feet to a point located on the northern right-of-way boundary line of said 60 foot wide Lucille Street, same being the southern boundary line of Lot 15 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°04'51" East, coincident with the northern right-of-way boundary line of said 60 foot wide Lucille Street, same being the southern boundary line of Lots 15 and 16 of said Ballard Gardens Addition, a distance of 115.34 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°36'44" West, coincident with the eastern boundary line of said Lot 16 of Ballard Gardens Addition, a distance of 11.16 feet to the southwest corner of Block 5 of said Fairgrounds Park Annex, located on the northern right-of-way boundary line of said 50 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°35'59" East, coincident with the northern right-of-way boundary line of said 50 foot wide Lucille Street, same being the southern boundary line of Block 5 of said Fairgrounds Park Annex and the southern boundary line of Block 2 of Fair Ground Park Addition, a distance of 412.65 feet to the southeast corner of said Block 2 of said Fair Ground Park Addition at the intersection of the northern right-of-way boundary line of said 50 foot wide Lucille Street with western right-of-way boundary line of 50 foot wide Fontinot Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°18'06" West, coincident with the western right-of-way boundary line of said 50 foot wide Fontinot Street, same being the eastern boundary line Block 2 of said Fair Ground Park Addition, a distance of 200.00 feet, to the intersection of the western right-of-way boundary line of said 50 foot wide Fontinot Street with the southern right-of-way boundary line of 50 foot wide Jewel Street, for angle corner;

THENCE North 87°48'32" East, coincident with the southern right-of-way boundary line of 50 foot wide Jewel Street, a distance of 50.40 feet, to a point located at the intersection of the southern right-of-way boundary line of said 50 foot wide Jewel Street with the eastern right-of-way boundary line of 50 foot wide Fontinot Street, for the northwest corner of Block 7 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°24'01" East, coincident with the eastern right-of-way boundary line of 50 foot wide Fontinot Street, same being the western boundary line of Block 7 of said Fair Ground Park Addition, a distance of 200.28 feet to the southwest corner of said Block 7, at the intersection of the eastern right-of-way boundary line of 50 foot wide Fontinot Street with the northern right-of-way boundary line of said 50 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°31'57" East, coincident with the northern right-of-way boundary line of 50 foot wide Lucille Street, same being the southern boundary line of Block 7 of said Fair Ground Park Addition, a distance of 199.11 feet to an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 5 OF 13**

THENCE South 3°23'23" East, a distance of 46.11 feet, to a point located southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 8 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 86°40'09" West, coincident with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 8 of said Fair Ground Park Addition, and the northern boundary line of Block 1 as shown on the map of the Greater True Vine Missionary Baptist Church recorded in Film Code 599251 of the H.C.M.R., a distance of 184.90 feet the north corner of a cutback at the intersection of the southern right-of-way boundary line of said 50 foot wide Lucille Street with the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 41°40'02" West, coincident with the said cutback, a distance of 21.21 feet, to a point located on the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, same being the western boundary line of Block 1 of said Greater True Vine Missionary Baptist Church, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 3°20'11" East, coincident with the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, same being the western boundary line of Block 1 of said Greater True Vine Missionary Baptist Church, a distance of 115.26 feet, to a point located at the North corner of a cutback at the intersection of the eastern right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of 50 foot wide Lelia Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 48°20'07" East, coincident with said cutback, a distance of 21.21 feet, to the intersection of the eastern right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of 50 foot wide Lelia Street, located on the southern boundary line of said Block 1 of said Greater True Vine Missionary Baptist Church, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'53" East, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary line of said Block 1 of said Greater True Vine Missionary Baptist Church, a distance of 135.00 feet, to a point located on the western boundary line of Lot 3, Block 8 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 3°32'04" East, coincident with the western boundary line of said Lot 3, Block 8 of Fair Ground Park Addition, a distance of 5.22 feet, to a point located on the northern right-of-way boundary line of called 30 foot wide Lelia Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'22" East, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary line of Block 8, Fair Ground Park Addition, a distance of 152.41 feet to the southeast corner of said Block 8, located at the intersection of the northern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of called 50 foot wide Erastus Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 3°28'13" West, coincident with the western right-of-way boundary line of called 50 foot wide Erastus Street, same being the eastern boundary line of Block 8 of Fair Ground Park Addition, a distance of 96.31 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'22" East, a distance of 48.05 feet, to a point located on the eastern right-of-way said called 50 foot wide Erastus Street, same being the western boundary line of Block 11 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 6 OF 13**

THENCE South 2°30'35" East, coincident with the eastern right-of-way of said called 50 foot wide Erastus Street, the western boundary line of Block 11 and the western boundary line of Block 10 of said Fair Ground Park Addition, a distance of 401.08 feet, to the southwest corner of said Block 10, located at the intersection of the eastern right-of-way boundary line of said called 50 foot wide Erastus Street with the northern boundary line of 50 foot wide Wylie Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°22'50" East, coincident with the northern right-of-way boundary line of said 50 foot wide Wylie Street, same being the southern boundary line of said Block 10, Fair Ground Park Addition, a distance of 249.79 feet, to a point located on the western right-of-way boundary line of Cushing Street, located on the eastern boundary line of Lot 11, Block 10 of Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°23'24" West, coincident with the western boundary right-of-way boundary line of said Cushing Street, same being the eastern boundary line of Lot 11, Block 10 of Fair Ground Park Addition, a distance of 100.05 feet, to the northeast corner of said Lot 11, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°23'16" East, crossing said Cushing Street and Lockwood Drive, a distance of 304.42 feet, to a point located on the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of Lot 1939 of Kashmere Gardens Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 10°38'10" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of said Lot 1939 of Kashmere Gardens Annex, a distance of 5.08 feet, to the southwest corner of the residual of said Lot 1939 and the northwest corner of the residual of Lot 1938, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 6°16'50" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of said Lot 1938 of Kashmere Gardens Annex, and the western boundary line of all that certain called 0.3790 acre tract conveyed by deed recorded on August 31, 1979 from Larry Edward, et al to Martin Damian, Sr., et al as recorded in Clerk's File No. G222792 of the H.C.O.R., a distance of 75.22 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°06'20" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 101.23 feet, to a point located on the northern right-of-way boundary line of said Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 62°01'40" East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 145.35 feet to the southeast corner of said Martin Damian, Sr., et al called 0.3790 acre tract, located at the intersection of the northern right-of-way boundary line of said Liberty Road with the western right-of-way boundary line of Old Lockwood Drive, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 1°22'20" West, coincident with the western right-of-way boundary line of Old Lockwood Drive, right-of-way varies, same being the eastern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 20.77 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 89°43'40" West, coincident with the northern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 30.03 feet, to a point located on the western right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 7 OF 13**

THENCE North 2°32'15" West, coincident with the western right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the eastern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract and the residual of said Lot 1938 of Kashmere Gardens Annex, a distance of 92.46 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°23'53" East, crossing said Old Lockwood Drive, right-of-way varies, a distance of 131.87 feet, to a point located on the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of all certain called 1.0467 acre tract, conveyed by deed recorded on October 20, 2006 from Elmer Preston, trustee to Rosendo H. Hernandez ass recorded in Clerk's File No. 2006-0140564 of the H.C.O.R., for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°48'39" East, coincident with the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 51.59 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 19°53'48" East, coincident with the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 12.60 feet to the southwest corner of said Rosendo H. Hernandez called 1.0467 acre tract, at the intersection of the eastern right-of-way boundary line of said Old Lockwood Drive right-of-way varies, with the northern right-of-way boundary line of Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 62°25'57" East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 145.44 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°50'20" East, crossing said Liberty Road, right-of-way varies, a distance of 111.49 feet, to a point located on the southern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the northern right-of-way boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 62°10'18" West, coincident with the southern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the northern right-of-way boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 629.98 feet to the **POINT OF BEGINNING**, containing within this description 18.2271 acres of land, less and except the following tracts, being more particularly described as follow: Tract 1 – 0.4989 acre tract, Tract 2 – 1.1343 acre tract, Tract 3 – 1.1138 acre tract, Tract 4 – 1.4501 acre tract, Tract 5, 1.3385 acre tract, Tract 6 – 1.0537 acre tract, leaving a net acreage of 11.6378 acres, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 8 OF 13**

LESS & EXCEPT TRACT 1 – 0.4989 ACRE

BEING ALL THAT CERTAIN 0.4989 ACRE tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Lot 1 and all of Lot 3 of Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the Harris County Deed Records (H.C.D.R.), and being all of Block 2 of the Greater True Vine Missionary Baptist Church according to the map or plat thereof recorded in Film Code 599251 of the Harris County Map Records, the herein described 0.4989 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the southeast corner of Block 2 of said Fair Ground Park Addition, located on the intersection of the northern right-of-way boundary line 50 foot wide Lucille Street and the western boundary line of 50 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135965.22 and Y=13853093.15;

THENCE South 2°57'04" East, crossing said 50 foot wide Lucille Street, a distance of 50.68 feet to the northeast corner of said Block 1 Fair Grounds Park Addition for the northeast corner and the **POINT OF BEGINNING** of the herein described 0.4989 acre tract, at position X=3135967.82 and Y=13853042.55;

THENCE South 3°20'56" East, coincident with the western boundary line of said 50 foot wide Fontinot Street, same being the eastern boundary line of said Block 1, Fair Ground Park Addition, and the eastern boundary line of said Block 2 of the subdivision of the Greater True Vine Missionary Baptist Church, a distance of 130.37 feet to the North corner of a cutback at the southeast corner of said Block 2, located at the intersection of the western boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of Lelia Street, for an angle corner of the herein described 0.4989 acre tract;

THENCE South 41°35'58" West, coincident with said cutback, a distance of 21.21 feet to the intersection of the western right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of called 30 foot wide Lelia Street, for an angle corner of the herein described 0.4989 acre tract;

THENCE South 86°39'32" West, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary of said Block 2 of the subdivision of the Greater True Vine Missionary Baptist Church and the southern boundary line of Block 1 of said Fair Ground Park Addition, a distance of 135.28 feet to the southwest corner of said Block 1 of said Fair Ground Park, located at the intersection of the northern right-of-way boundary line of said called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 50 foot wide Clementine Street, for the southwest corner of the herein described 0.4989 acre tract;

THENCE North 3°13'55" West, coincident with the eastern right-of-way boundary line of 50 foot wide Clementine Street, a distance of 145.64 feet to the northwest corner of Block 1 of Fair Ground Park Addition, located at the intersection of the eastern right-of-way boundary line of said 50 foot wide Clementine Street with the southern right-of-way boundary line of said 50 foot wide Lucille Street, for the northwest corner of the herein described 0.4989 acre tract;

THENCE North 86°45'15" East, coincident with the southern right-of-way boundary line of said 50 foot wide Lucille Street, a distance of 149.97 feet to the **POINT OF BEGINNING**, containing 0.4989 acre of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 9 OF 13**

LESS & EXCEPT TRACT 2 – 1.1343 ACRE TRACT

BEING ALL THAT CERTAIN 1.1343 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 2 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.1343 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 40 foot wide Clementine Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135755.89 and Y=13852842.23;

THENCE North 88°54'44" East, crossing said 40 foot wide Clementine Street, a distance of 40.01 feet to the northwest corner of said Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of 40 foot wide Clementine Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.1343 acre tract, at position X=3135795.90 and Y=13852842.99;

THENCE North 87°19'08" East, coincident with the southern boundary line of said called 30 foot wide Lelia Street, same being the northern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 246.99 feet to the northeast corner of said Block 1, at the intersection of the southern boundary line of said called 30 foot wide Lelia Street, with the western boundary line of 40 foot wide Fontinot Street, for the northeast corner of the herein described 1.1343 acre tract

THENCE South 2°36'42" East, coincident with the western boundary line of 40 foot wide Fontinot Street, same being the eastern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the southeast corner of said Block 1, located at the intersection of the western boundary line of 40 foot wide Fontinot Street with the northern right-of-way boundary line 50 foot wide Wylie Street, for the southeast corner of the herein described 1.1343 acre tract

THENCE South 87°19'08" West, coincident with the northern right-of-way boundary line 50 foot wide Wylie Street, same being the southern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 246.99 feet to the southwest corner of said Block 1, at the intersection of the northern right-of-way boundary line of said 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Clementine Street, for the southwest corner of the herein described 1.1343 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Clementine Street, same being the western boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the **POINT OF BEGINNING**, containing 1.1343 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 10 OF 13**

LESS & EXCEPT TRACT 3-1.1138 ACRE TRACT

BEING ALL THAT CERTAIN 1.1138 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 3 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.1138 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 2 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3136042.59 and Y=13852854.55;

THENCE North 87°19'08" East, crossing said 40 foot wide Fontinot Street, a distance of 40.00 feet to the northwest corner of said Block 3 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of 40 foot wide Fontinot Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.1138 acre tract, at position X=3136082.54 and Y=13852856.42;

THENCE North 87°19'08" East, coincident with the southern boundary line of said called 30 foot wide Lelia Street, same being the northern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 243.60 feet to the northeast corner of said Block 3, at the intersection of the southern boundary line of said called 30 foot wide Lelia Street, with the western boundary line of Erastus Street, right-of-way varies, for the northeast corner of the herein described 1.1138 acre tract

THENCE South 1°59'48" East, coincident with the western boundary line of Erastus Street, right-of-way varies, same being the eastern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.06 feet to the southeast corner of said Block 3, located at the intersection of the western boundary line of Erastus Street, right-of-way varies, with the northern right-of-way boundary line 50 foot wide Wylie Street, for the southeast corner of the herein described 1.1138 acre tract

THENCE South 87°19'08" West, coincident with the northern right-of-way boundary line 50 foot wide Wylie Street, same being the southern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 241.45 feet to the southwest corner of said Block 3, at the intersection of the northern right-of-way boundary line of said 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, for the southwest corner of the herein described 1.1138 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, same being the western boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the **POINT OF BEGINNING**, containing 1.1138 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 11 OF 13**

LESS & EXCEPT TRACT 4- 1.4501 ACRE TRACT

BEING ALL THAT CERTAIN 1.4501 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 5 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.4501 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Clementine Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135767.79 and Y=13852581.43;

THENCE North 87°19'08" East, crossing said 40 foot wide Clementine, a distance of 37.63 feet to the northwest corner of said Block 5 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of 40 foot wide Clementine Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.4501 acre tract, at position X=3135805.06 and Y=13852583.18;

THENCE North 87°19'08" East, coincident with the southern boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.36 feet to the northeast corner of said Block 5, at the intersection of the southern boundary line of said 50 foot wide Wylie Street, with the western boundary line of 40 foot wide Fontinot Street, for the northeast corner of the herein described 1.4501 acre tract;

THENCE South 2°36'42" East, coincident with the western boundary line of 40 foot wide Fontinot Street, same being the eastern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.24 feet to the southeast corner of said Block 5, located at the intersection of the western boundary line of 40 foot wide Fontinot Street with the northern right-of-way boundary line Liberty Road, right-of-way varies, for the southeast corner of the herein described 1.4501 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.50 feet to the southwest corner of said Block 5, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of 40 foot wide Clementine Street, for the southwest corner of the herein described 1.4501 acre tract;

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Clementine Street, same being the western boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 257.38 feet to the **POINT OF BEGINNING**, containing 1.4501 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 12 OF 13**

LESS & EXCEPT TRACT 5 – 1.3385 ACRE TRACT

BEING ALL THAT CERTAIN 1.3385 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 4 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.3385 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 5 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3136054.43 and Y=13852594.86;

THENCE North 87°19'08" East, crossing said 40 foot wide Fontinot Street, a distance of 39.68 feet to the northwest corner of said Block 4 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of 40 foot wide Fontinot Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.3385 acre tract, at position X=3136094.07 and Y=13852596.71;

THENCE North 87°19'08" East, coincident with the southern right-of-way boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 243.60 feet to the northeast corner of Lot 5 of said Block 4, at the intersection of the southern right-of-way boundary line of said 50 foot wide Wylie Street, with the western right-of-way boundary line of Erastus Street, right-of-way varies, for the northeast corner of the herein described 1.3385 acre tract

THENCE South 1°59'48" East, coincident with the western right-of-way boundary line of Erastus Street, right-of-way varies, same being the eastern boundary line of said Lot 5, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 125.01 feet to an angle point;

THENCE South 87°19'08" West, coincident with the southern boundary line of said Lot 5, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 7.04 feet to a point located in the northern boundary line of said Lot 6, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, for an angle corner of the herein described 1.3385 acre tract,

THENCE South 1°59'48" East, coincident with the western right-of-way boundary line of Erastus Street, right-of-way varies, a distance of 115.29 feet to a point located on the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Lot 6, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, for the southeast corner of the herein described 1.3385 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 234.11 feet to the southwest corner of said Block 4, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of Fontinot Street, right-of-way varies, for the southwest corner of the herein described 1.3385 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, same being the western boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 247.93 feet to the **POINT OF BEGINNING**, containing 1.3385 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 13 OF 13**

LESS & EXCEPT TRACT 6 – 1.0537 ACRE TRACT

BEING ALL THAT CERTAIN 1.0537 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Block 9 as shown on the map of the Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the Harris County Deed Records, the herein described 1.0537 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the southwest corner of Block 10 of said Fair Ground Park Addition, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, said Point of Commencement being located at Texas State Plane coordinate position X=3136388.03 and Y=13852610.99;

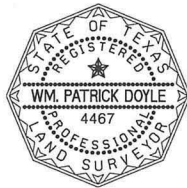
THENCE South 2°09'23" East, crossing said 50 foot wide Wylie Street, a distance of 50.54 feet to the northwest corner of said Block 9 of said Fair Ground Park Addition, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of Erastus Street, right-of-way varies, for the northwest corner and the **POINT OF BEGINNING** herein described 1.0537 acre tract, at position X=3136390.09 and Y=13852561.66;

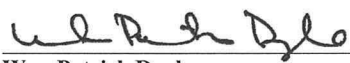
THENCE North 87°22'50" East, coincident with the southern boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 249.25 feet to the northeast corner of Lot 5 of said Block 9, at the intersection of the southern boundary line of said 50 foot wide Wylie Street, with the western boundary line of Cushing Street, right-of-way varies, for the northeast corner of the herein described 1.0537 acre tract

THENCE South 2°23'24" East, coincident with the western boundary line of Cushing Street, right-of-way varies, same being the eastern boundary line of said Lots 2 and 11, Block 9 of said Fair Ground Park Addition, a distance of 179.95 feet to a point located on the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 9 of said Fair Ground Park Addition, for the southeast corner of the herein described 1.0537 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 249.42 feet to the southwest corner of said Block 9, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, for the southwest corner of the herein described 1.0537 acre tract

THENCE North 2°23'24" West, coincident with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, same being the western boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 188.36 feet to the **POINT OF BEGINNING**, containing 1.0537 acres of land, more or less.




Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
September 10, 2016
Revised September 14, 2016



Doyle & Wachtstetter, Inc
Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
0.3199 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT 2
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 0.3199 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of 60 foot wide Kashmere Street, a portion of 60 foot wide 15th Street and 60 foot wide 16th Street, as shown on the plat of Augusta Addition, according to the map or plat thereof recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.), the herein described 0.3199 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at a 5/8" iron rod found marking the northwest corner of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901, from Ida Japhet to Texas and New Orleans Rail Road Company as recorded in Volume 131, Page 453 of the H.C.D.R., located on the northern boundary line of 60 foot wide 16th Street (not open), said Point of Commencement being located at Texas State Plane coordinate position X=3134260.64 and Y=13851449.15;

THENCE North 87°40'19" East, coincident with the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street, a distance of 110.36 feet to the southwest corner and the **POINT OF BEGINNING**, of the herein described 0.3199 acre tract, at position X=3134370.90 and Y=13851453.63;

THENCE North 32°17'25" West, a distance of 82.79 feet to a point located on the eastern boundary line of Block 61 of said Augusta Addition, same being the western right-of-way of said 60 foot wide Kashmere Street, for an angle corner of the herein described 0.3199 acre tract;

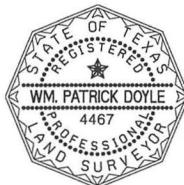
THENCE North 2°28'22" West, coincident with the eastern boundary line of Block 61 of said Augusta Addition, same being the western right-of-way of said 60 foot wide Kashmere Street, a distance of 151.51 feet to an angle corner of the herein described 0.3199 acre tract;

THENCE North 38°24'15" East, a distance of 91.48 feet to a point located on the eastern right-of-way of said 60 foot wide Kashmere, within the right-of-way of said 60 foot wide 15th Street (Eddie Street), for the northeast corner of the herein described 0.3199 acre tract;

THENCE South 2°26'03" East, coincident with the eastern right-of-way of said Kashmere Street and the western boundary line of Block 62 of said Augusta Addition, a distance of 292.55 feet to a point located on the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street for the southeast corner of the herein described 0.3199 acre tract;

THENCE South 87°40'19" West, coincident with the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street, a distance of 18.51 feet to the **POINT OF BEGINNING**, containing 0.3199 acre of land, more or less.

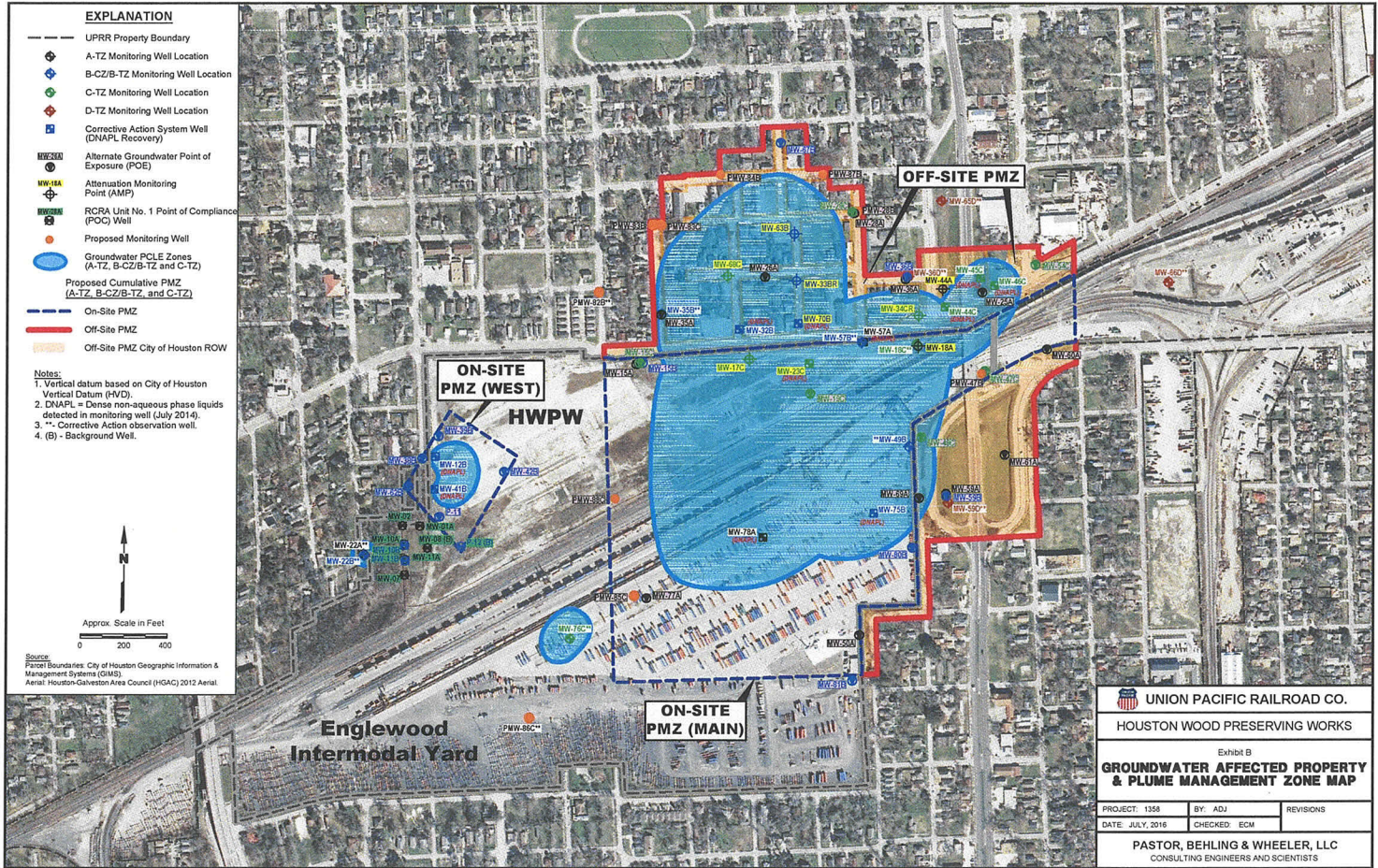
Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
September 15, 2016



This description is based on a plat dated June 30, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard OffSite PMZ C.O.H. Right-of-way 0.3199 acre.doc

EXHIBIT B

AFFECTED PROPERTY AND PLUME MANAGEMENT ZONE MAP



UNION PACIFIC RAILROAD CO.
HOUSTON WOOD PRESERVING WORKS

Exhibit B
GROUNDWATER AFFECTED PROPERTY & PLUME MANAGEMENT ZONE MAP

PROJECT: 1358	BY: ADJ	REVISIONS
DATE: JULY, 2016	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXHIBIT C

PLUME MANAGEMENT ZONE MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "C"
MAINTENANCE AND MONITORING REQUIRMENTS

Union Pacific Railroad (UPRR), listed as the Responder under this Restrictive Covenant, will conduct regular sampling of monitoring wells located within the City of Houston Right-Of-Way and listed in the table below (Table C-1) for chemicals of concern (COCs) (see Table C-2) in accordance with the groundwater monitoring requirements established under the Texas Commission on Environmental Quality (TCEQ) Hazardous Waste Permit/Compliance Plan No. 50343. Monitoring and reporting activities are detailed in the Groundwater Sampling and Analysis Plan (SAP) and related compliance tables within the TCEQ Hazardous Waste Permit/Compliance Plan No. 50343.

Monitoring wells listed below will be inspected for signs of damage, including well pads, casing, locks, and, protective covers. Repairs will be made as necessary to ensure the integrity of the monitoring wells.

TABLE C-1

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-28A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-35A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-36A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-44A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-59A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-60A</i>	<i>MW-70B</i>	<i>MW-68C</i>
<i>MW-61A</i>	<i>PMW-28B (proposed)</i>	<i>PMW-83C (proposed)</i>
<i>MW-69A</i>	<i>PMW-82B (proposed)</i>	
	<i>PMW-83B (proposed)</i>	
	<i>PMW-84B (proposed)</i>	
	<i>PMW-87B (proposed)</i>	

Note: Additional monitoring wells may be added or subtracted from the list above as necessary to satisfy the TCEQ Plume Management Zone (PMZ) monitoring requirements. Any changes to the list of monitoring wells, sampling procedures, and management of investigation-derived wastes (IDW) as part of the Groundwater SAP will be provided to the TCEQ as part of the annual reporting requirements.

EXHIBIT "C"
MAINTENANCE AND MONITORING REQUIRMENTS

TABLE C-2

Chemicals of Concern (COCs)	Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (POE) ^{GW} GW _{Ing} (mg/L) (Res)
Benzene	0.005 ^{PCL}
2,4-Dimethylphenol	0.49 ^{PCL}
2 Methylnaphthalene	0.098 ^{PCL}
Dibenzofuran	0.098 ^{PCL}
Naphthalene	0.49 ^{PCL}
Vinyl Chloride	0.002 ^{PCL}

Note:

^{GW}GW_{Ing} Protective Concentration Levels (PCLs), Residential land use assuming Class 2 Groundwater.

The list of COCs may be revised as necessary to satisfy the Plume Management Zone (PMZ) monitoring requirements and will be provided to the TCEQ as part of the annual reporting requirements.

RESTRICTIVE COVENANT

STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the **City of Houston Right-of-Way - 0.1318 Acre Tract located within the Harris and Wilson 2 League Grant, Abstract 32 in Harris County, Texas** (Property) described in Exhibit A attached hereto and incorporated herein by reference.

Surface soil underlying the Property, which is presently covered in its entirety by a concrete sidewalk cap, contains certain identified chemicals of concern (COCs) causing the Property to be considered Affected Property as that term is defined in the TRRP.

This Restrictive Covenant is required for the following reasons:

Use of Physical Control on Soil

The Affected Property is subject to the TRRP requirements for properties containing concentrations of COCs in soil and is subject to the requirements in 30 TAC §350.33(e)(2) to prevent exposure to soils that contain a COC in excess of the protective concentration level. The attached Exhibit A describes and provides the location of the physical control and extent of the soil that exceeds the TCEQ-approved protective concentration levels for certain COCs. The attached Exhibit B lists the COCs that exceed the TCEQ's Protective Concentration Levels, provides the reason the physical control must remain in place, and describes the required maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification.

As of the date of this Restrictive Covenant, the City of Houston with an address of 901 Bagby Street, Houston, Texas 77002 owns a municipal right-of-way easement over the Property. Fee title underlying the easement is owned by the abutting property owner(s). In consideration of the Response Actions by Union Pacific Railroad (Responder) at the Former Houston Wood Preserving Works Site at 4910 Liberty Road, Houston, Texas (TCEQ SWR No. 31547), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City of Houston has agreed, to the extent of its ownership interest, to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The removal or modification of the physical control on the Affected Property within the City of Houston ROW described in Exhibit A is prohibited without prior approval

from TCEQ and the physical control must be maintained and monitored by the Responder as described in Exhibit B. Removal or modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547 [Union Pacific Railroad Houston Wood Preserving Works]

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

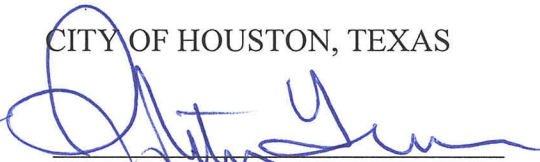
Executed this 9th day of June, 2017.

ATTEST:

CITY OF HOUSTON, TEXAS



Anna Russell
City Secretary



Sylvester Turner
Mayor of the City of Houston

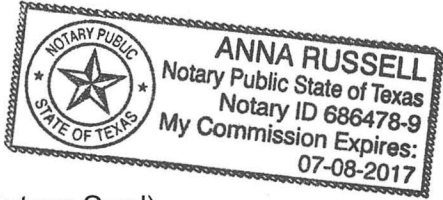
APPROVED AS TO FORM:



Phillip M. Goodwin, P.G.
Assistant City Attorney
LD#067-1600017-001

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 9th day of June, 2017, by **Sylvester Turner, Mayor** of the **CITY OF HOUSTON, TEXAS**, a municipal corporation, on behalf of said corporation.



(Notary Seal)

Anna Russell
Notary Public, State of Texas

Executed this 25th day of May, 2017.

Union Pacific Railroad Company [RESPONDER]

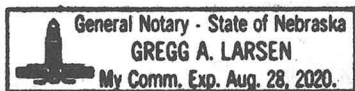
By: Tony Love
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §

DOUGLAS COUNTY §

BEFORE ME, on this the 25th day of May, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [**responder**], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25th day of May, 2017.



Gregg A. Larsen
Notary Public in and for the State of Nebraska
County of Douglas
My Commission Expires: August 28, 2020

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____

Name: _____

Title: _____

STATE OF TEXAS §
(_____) COUNTY §

BEFORE ME, on this the ___ day of _____, _____ personally appeared _____
[name], _____ [title], of The Texas Commission of Environmental Quality,
known to me to be the person whose name is subscribed to the foregoing instrument, and they
acknowledged to me that they executed the same for the purposes and in the capacity herein
expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20__.

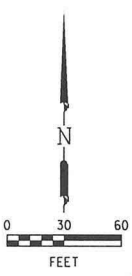
Notary Public in and for the State of Texas,
County of _____
My Commission Expires: _____

EXHIBIT A

**CITY OF HOUSTON ROW PROPERTY SURVEY PLAT AND
DESCRIPTION (0.1318 ACRE PLAT)**

HARRIS COUNTY
TEXAS

HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32



FONTINOT STREET
(40' WIDE R.O.W.)
(30' WIDE ASPHALT PAVING)

GAGNE HOMESTEAD SUBDIVISION
VOL. 1, PG. 55
H.C.P.R.

ERASTUS STREET
(R.O.W. VARIES)
(30' WIDE ASPHALT PAVING)

FAIRGROUND SUBDIVISION
VOL. 81, PG. 460
H.C.D.R.

POINT OF COMMENCEMENT
FND. 5/8" I.R.
X=3136766.24
Y=13852368.70

LIBERTY ROAD (60' R.O.W.)
(1/2" WIDE CONCRETE PAVING)

N 85°28'45" E 690.36'
CONCRETE SIDEWALK
S 85°26'51" W 690.57'

SUBJECT
0.1318 ACRE TRACT

POINT OF BEGINNING
X = 3136615.16
Y = 13852356.67

TEXAS AND NEW ORLEANS
RAIL ROAD COMPANY
(100' R.O.W.)

T. & N. O. R. R. CO.
CALLED 55,922 S.F. TRACT
TRACT 2
VOL. 472, PG. 7
H.C.D.R.

T. & N. O. R. R. CO.
CALLED 5.79 ACRE TRACT
VOL. 50, PG. 535
H.C.D.R.

SURVEY PLAT OF
0.1318 ACRE TRACT

BEING A PORTION OF ALL THAT CERTAIN
CITY OF HOUSTON
60' WIDE LIBERTY ROAD
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

LINE DATA TABLE

#	BEARING	DISTANCE
1	N 1°54'53" W	8.51'
2	S 3°16'02" E	8.12'

I, Wm. PATRICK DOYLE, REGISTERED PROFESSIONAL LAND SURVEYOR,
DO HEREBY CERTIFY THAT THE ABOVE AND FOREGOING PLAT IS A TRUE
REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND,
AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY,
EXCEPT AS SHOWN HEREON.
DATE SURVEYED: APRIL 15, 2016.

NOTES:

1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.99989548017).
3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

PROJ. NO. 4410-16-01 SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCIAL STREET, CLEVELAND, TEXAS 77331
OFFICE: 979.265.7622 FAX: 979.265.9940 FIRM NO.: 10025500

SURVEYED: JDD 4-15-16 BOOK: DRAWN: VDL-11 IMAGE: NONE
DRAWN BY: JDD 5-18-16 CHECKED: JAN 6-20-16 REVISED:

USER: \\unlinc\w\p\doyle\4467\16-01-01.dwg DATE: 4/15/16 4:13:13 PM PLOT: 4410-16-01.dwg Environmental LPRR Houston Wood Pararivmg 4900 Liberty/UPRR Houston Wood 2016 Copied Boundary\1975-16-01-2 Concrete Sidewalk 2 .jpg



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY/CITY OF HOUSTON RIGHT-OF-WAY
0.1318 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 0.1318 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, being a portion of all that certain called 55,922 square foot tract of land (Tract 2) conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R. and a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 0.1318 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136766.24 and Y=13852360.25;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 151.57 feet to the southeast corner and the **POINT OF BEGINNING** of the herein described 0.1318 acre parcel, at position X=3136615.16 and Y=13852356.67;

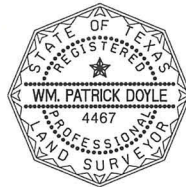
THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 690.57 feet to the southwest corner of the herein described 0.1318 acre tract, at position X=3135926.84 and Y=13852301.86;

THENCE North 1°54'53" West, a distance of 8.51 feet to a point for the northwest corner of the herein described 0.1318 acre tract, at position X=3135926.56 and Y=13852310.37;

THENCE North 85°28'45" East, a distance of 690.36 feet to a point for the northeast corner of the herein described 0.1318 acre tract, at position X=3136614.70 and Y=13852364.78;

THENCE South 3°16'02" East a distance of 8.12 feet to the **POINT OF BEGINNING**, containing 0.1318 acre of land, more or less.

Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 20, 2016



*This description is based on a survey, dated June 20, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Sidewalk tract 0.1318 acre.doc*

EXHIBIT B

PHYSICAL CONTROL MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "B"
MAINTENANCE AND MONITORING

Through the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP), a Remedy Standard B remediation of the Property as detailed in the Response Action Plan (RAP) for the Union Pacific Railroad (UPRR) Houston Wood Preserving Works site (TCEQ SWR No. 31547/IHW Permit No. 50343) was implemented that included construction of a physical control using a concrete sidewalk cap (location detailed in Exhibit A). The concrete sidewalk was constructed following City of Houston Department of Public Works and Engineering Concrete Sidewalk Details for Streets with Curbs (07-01-2010). The concrete sidewalk will serve as a permanently placed cap atop contaminated soil present on the Property as defined in Exhibit A. The contaminated soil contains concentrations of chemicals of concern (COCs) benzo(a)pyrene and pentachlorophenol that exceed the TCEQ's Protective Concentration Levels. The concrete sidewalk cap will provide protection to human health and the environment throughout the post-closure care period.

UPRR will implement an inspection and maintenance program for the concrete sidewalk within the Property as shown on Exhibit A. The inspection and maintenance shall be conducted according to the Response Action Plan (RAP) dated November 21, 2014 (revised December 7, 2015) for the site or subsequently approved reports or TCEQ permits or written correspondence. Inspections will be performed by UPRR on a quarterly basis. The inspections will focus on evaluating the sidewalk for cracks or damage. If cracks are identified that allow exposure to the underlying soils, the cracks will be repaired and sealed in a manner consistent with the original plans and specifications following City of Houston guidelines for sidewalk construction. UPRR will submit annual reports to the TCEQ (unless this frequency is modified by subsequent TCEQ correspondence) documenting the inspections and any necessary repairs, maintenance, and/or replacement activities conducted to ensure the integrity of the physical control is being maintained and to ensure the continued effectiveness of the remedy.

RESPONSE TO COMMENT T34(3), T35(3), T55(3), AND T56 (3)

CITY OF HOUSTON RESTRICTIVE COVENANTS

RESTRICTIVE COVENANT

STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the **City of Houston Right-of-Way (ROW) (Property)** presented in Exhibits A-1 and A-2 attached hereto and incorporated herein by reference.

Portions of the groundwater underlying the Property contain certain identified chemicals of concern (COCs) causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The portion considered to be Affected Property and plume management zone, as those terms are defined in the TRRP, is shown on Exhibit B attached hereto and incorporated herein by reference.

This Restrictive Covenant is required for the following reasons:

Plume Management Zone

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone. A plume management zone is defined as an area of groundwater containing concentrations of COCs exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). A plume management zone was established so that the COCs in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit B provides the location and extent of the plume management zone. Exhibit C describes the maintenance and monitoring required and Table C-2 lists the COCs that exceed the TCEQ's Protective Concentration Levels. This maintenance and monitoring is required until TCEQ approves some modification of those requirements.

As of the date of this Restrictive Covenant, the City of Houston with an address of 901 Bagby Street, Houston, Texas 77002 owns municipal right-of-way easements over the Property. Fee title underlying the easements is owned by the abutting property owners. In consideration of the Response Actions by Union Pacific Railroad (Responder) at the Former Houston Wood Preserving Works Site at 4910 Liberty Road, Houston, Texas, approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City of Houston has agreed, to the extent of its ownership interest, to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. Exposure to groundwater underlying the Affected Property for any purpose is prohibited until such time when all of the chemicals of concern no longer exceed their respective protective concentration levels. The maintenance and monitoring described in Exhibit C is required to be performed by the Responder. Any modification of this restrictive covenant is prohibited without prior approval of TCEQ.
2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

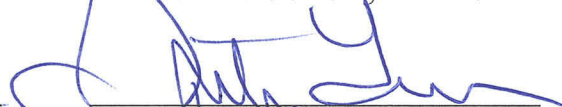
Executed this 9th day of June, 2017.

ATTEST:



Anna Russell
City Secretary

CITY OF HOUSTON, TEXAS



Sylvester Turner
Mayor of the City of Houston

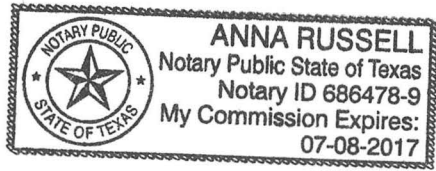
APPROVED AS TO FORM:



Phillip M. Goodwin, P.G.
Assistant City Attorney
LD#067-1600017-001

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 9th day of June, 2017, by **Sylvester Turner, Mayor** of the **CITY OF HOUSTON, TEXAS**, a municipal corporation, on behalf of said corporation.



(Notary Seal)

Notary Public, State of Texas

Union Pacific Railroad Company [RESPONDER]

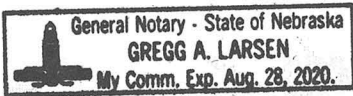
By: Tony Love
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §

DOUGLAS COUNTY §

BEFORE ME, on this the 25th day of May, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [**responder**], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25th day of May, 20 17.



Greg A. Larsen
Notary Public in and for the State of Nebraska
County of Douglas
My Commission Expires: August 28, 2020

Accepted as Third Party Beneficiary this _____ day of _____, 20____.

Texas Commission on Environmental Quality

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
(_____) COUNTY §

BEFORE ME, on this the ____ day of _____, _____ personally appeared _____
[name], _____ [title], of The Texas Commission of Environmental Quality,
known to me to be the person whose name is subscribed to the foregoing instrument, and they
acknowledged to me that they executed the same for the purposes and in the capacity herein
expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20____.

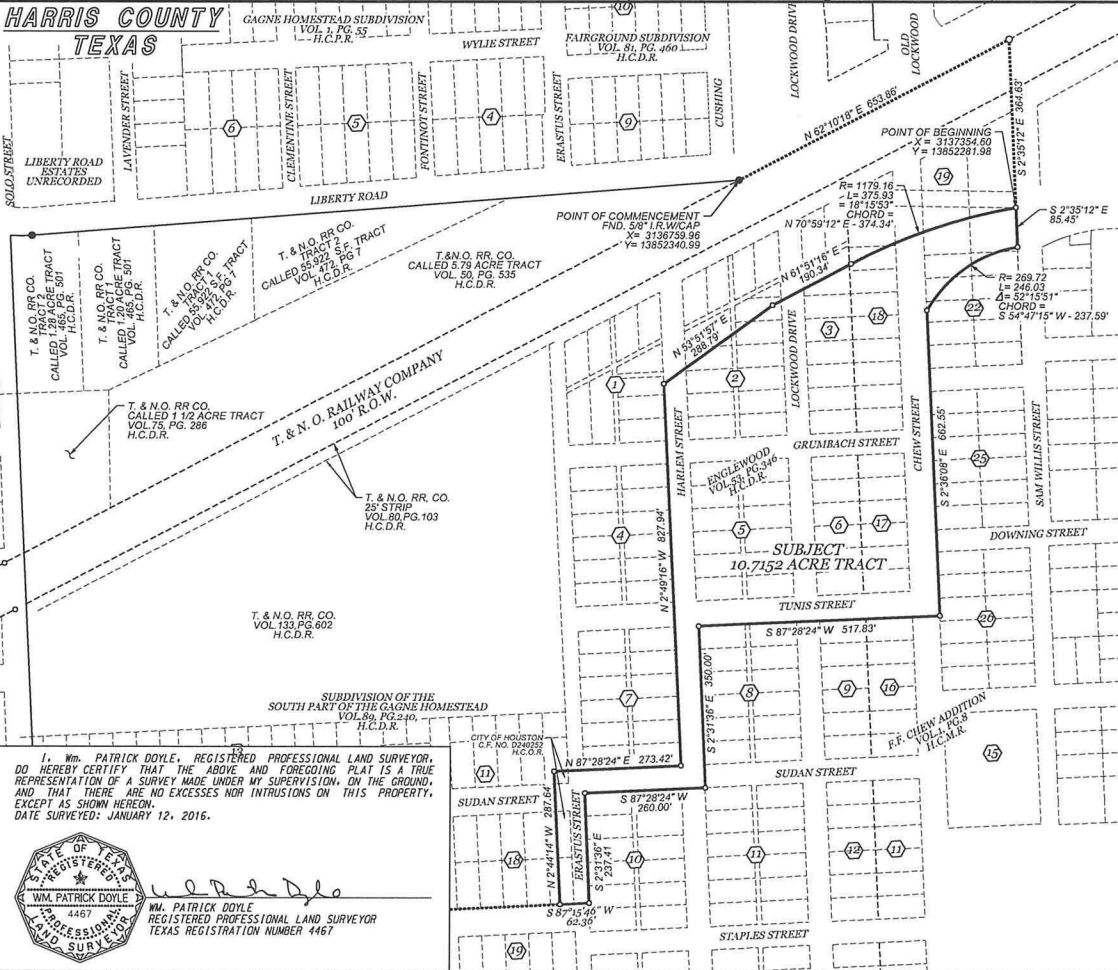
Notary Public in and for the State of Texas,
County of _____
My Commission Expires: _____

EXHIBIT A -1

**SURVEY PLAT AND LEGAL DESCRIPTION OF CITY OF HOUSTON RIGHT-OF-
WAY INSTITUTIONAL CONTROL BOUNDARY – EASTERN PROPERTY**

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32



- NOTES:
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.



EXHIBIT OF OFFSITE PMZ 10.7152 ACRE TRACT
 IN THE HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32 HARRIS COUNTY, TEXAS FOR UNION PACIFIC RAILROAD COMPANY

I, Wm. Patrick Doyle, Registered Professional Land Surveyor, do hereby certify that the above and foregoing plat is a true representation of a survey made under my supervision, on the ground, and that there are no excesses nor intrusions on this property, except as shown hereon.
 DATE SURVEYED: JANUARY 12, 2016.



Wm. Patrick Doyle
 Wm. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467

Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS
 131 COMMERCE STREET, CLUTE, TEXAS 77531
 OFFICE: 409.344.8612 FAX: 409.346.0948 ITEM: 803.10021590
 SURVEYED: JAW (CHECKED) BOOK: JAW (REVISOR) NONE
 DRAWN BY: JAW (CHECKED) BOOK: JAW (REVISOR) NONE

USER: \\harris\doyle\pdoyle 2/13/16 10:45 AM
 D:\USERS\pdoyle\Projects\GIS\Harris\Harris & Wilson 2 League Grant 2016 PMZ 10.7152 Acre Tract.dwg - OFFICE PMZ 10.7152.dwg
 4/8/2016 10:45 AM
 Wm. Patrick Doyle
 Registered Professional Land Surveyor



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 10.7152 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Block 2 and Block 3, all of Block 5 and Block 6, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), and a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the Harris County Deed Records (H.C.D.R.) a portion of Block 22, a portion of 50 foot wide Chew Avenue, and a portion of 50 foot wide Tunis Street (Jones Street), as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.), and a portion of Block 11 and Block 18 as shown of the map of the Subdivision of the South Part of the Gagne Homesteads, according to the map or plat thereof recorded in Volume 89, Page 240 of the H.C.D.R., the herein described 10.7152 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R., said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE North 62°10'18" East, coincident with the southeastern right-of-way boundary line of said 60 foot wide Liberty Road, same being the northwestern boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 653.86 feet to an angle point at the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northern extension of the western right-of-way boundary line of 50 foot wide Sam Willis Street, at position X=3137338.15 and Y=13852646.20;

THENCE South 2°35'12" East, coincident with the northern extension of the western right-of-way boundary line of said 50 foot wide Sam Willis Street, a distance of 364.63 feet to a point located on the eastern boundary line of said Block 22 of the F. F. Chew Addition, for the northeast corner and the **POINT OF BEGINNING** of the herein described 10.7152 acre tract, at position X=3137354.60 and Y=13852281.98;

THENCE South 2°35'12" East, coincident with the western right-of-way boundary line of said 50 foot wide Sam Willis Street, same begin the eastern boundary line of said Block 22 of the F. F. Chew Addition, a distance of 85.45 feet to the point of curvature of a non-tangent curve to the left, having a radius of 269.72 feet, at position X=3137358.46 and Y=13852196.62;

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE in an southwesterly direction, along said curve to left, having a radius of 269.72 feet, an arc length of 246.03 feet, a central angle of $52^{\circ}15'51''$, a chord bearing and distance of South $54^{\circ}47'15''$ West – 237.59 feet to a point for corner, located on the eastern right-of-way boundary line of 60 foot wide Chew Street, same being the western boundary line of said Block 22 of the F. F. Chew Addition, for an angle corner of the herein described 10.7152 acre tract, at position X=3137164.36 and Y=1385259.64;

THENCE South $2^{\circ}36'08''$ East, coincident with the eastern right-of-way boundary line of 60 foot wide Chew Street, same being the western boundary line of said Block 22, Block 25 and Block 26 of the F. F. Chew Addition, a distance of 662.55 feet to a point at the intersection of the eastern right-of-way boundary line of said 60 foot wide Chew Street with easterly extension of the southern boundary line of 55 foot wide Tunis Street (not open), for the southeast corner of the herein described 10.7152 acre tract, at position X=3137194.44 and Y=13851397.84;

THENCE South $87^{\circ}28'24''$ West, coincident with the southern right-of-way boundary line of said 55 foot wide Tunis Street (not open), same being northern boundary line of Block 16 of said F. F. Chew Addition, the northern boundary line of Block 9 and Block 8 of said Englewood Subdivision, a distance of 517.83 feet to a point located on the eastern right-of-way boundary line of said 50 foot wide Harlem Street, for the northwest corner of said Block 8 of said Englewood Addition and an interior corner of the herein described 10.7152 acre tract, at position X=3136677.16 and Y=13851375.01;

THENCE South $2^{\circ}31'36''$ East, coincident with the eastern right-of-way boundary line of said 50 foot wide Harlem Street, same being the western boundary line of said Block 8 of said Englewood Subdivision, a distance of 350.00 feet to the intersection of the eastern boundary line of said 50 foot wide Harlem Street with the southern right-of-way boundary line of 50 foot wide Sudan Street, for the northwest corner of Block 11 of said Englewood Subdivision, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136692.59 and Y=13851025.39;

THENCE South $87^{\circ}28'24''$ West, coincident with the southern right-of-way boundary line of said 50 foot wide Sudan Street, the northern boundary line of Block 10 of said Englewood Subdivision, a distance of 260.00 feet to a point located on the eastern right-of-way boundary line Erastus Street, right-of-way varies, for an interior corner of the herein described 10.7152 acre tract, at position X=3136432.87 and Y=13851013.93;

THENCE South $2^{\circ}31'36''$ East, coincident with the eastern right-of-way boundary line Erastus Street, right-of-way varies, same being the western boundary line of said Block 10 of said Englewood Subdivision, a distance of 237.41 feet to a point at the intersection of the easterly extension of the southern boundary line of Block 18 of said Subdivision of the South Part of the Gagne Homestead, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136443.34 and Y=13850776.78;

THENCE South $87^{\circ}15'46''$ West, a distance of 62.36 feet to a point located on western right-of-way boundary line of said Erastus Street, right-of-way varies and the southern boundary line of said Block 18 of the said Subdivision of the South Part of the Gagne Subdivision, for an the southwest corner of the herein described 10.7152 acre tract, at position X=3136381.05 and Y=13850773.80;

**UNION PACIFIC RAILROAD COMPANY
10.7152 ACRE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 3**

THENCE North 2°44'14" West, coincident with the western right-of-way boundary line of said Erastus Street, right-of-way varies, a distance of 287.64 feet to a point located within Block 11 of said Subdivision of the South Part of the Gagne Homestead, at the intersection of the western right-of-way boundary line of said Erastus Street with the northern right-of-way boundary line of said 50 foot wide Sudan Street, for an exterior corner of the herein described 10.7152 acre tract, at position X=3136367.32 and Y=13851061.08;

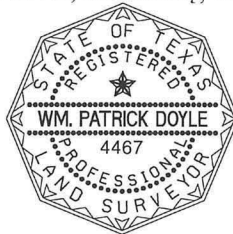
THENCE North 87°28'24" East, coincident with the northern right-of-way boundary line of said 50 foot wide Sudan Street, same being the southern boundary line of said Block 7 of said Englewood Subdivision, a distance of 273.42 feet to a point located on the western right-of-way boundary line of said 50 foot wide Harlem Street, for the southeast corner of said Block 7 and an interior corner of the herein described 10.7152 acre tract, at position X=3136640.44 and Y=13851073.13;

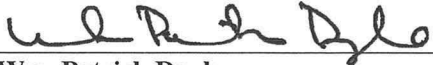
THENCE North 2°49'16" West, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street, same being the eastern boundary line of Block 7, Block 4 and Block 1, of said Englewood Subdivision, a distance of 827.94 feet to the northwest corner of the herein described 10.7152 acre tract, at position X=3136599.69 and Y=13851899.99;

THENCE North 53°51'57" East, a distance of 288.79 feet to the a angle corner of the herein described 10.7152 acre tract, at position X=3136832.90 and Y=13852070.26;

THENCE North 61°51'16" East, a distance of 190.34 feet to an angle corner of the herein described 10.7152 acre tract, located on curve to the right, having a radius of 1179.16 feet, at position X=3137000.72 and Y=13852160.04;

THENCE in an easterly direction, along said curve to the right, having a radius of 1179.16 feet, an arc length of 375.93 feet, a central angle of 18°15'53", and a chord bearing and distance of North 70°59'12" East – 374.34 feet to the **POINT OF BEGINNING**, containing 10.7152 acres of land, more or less.




Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016

*This description is based on plat dated June 28, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard Offsite PMZ 10.7152 acre tract.doc*

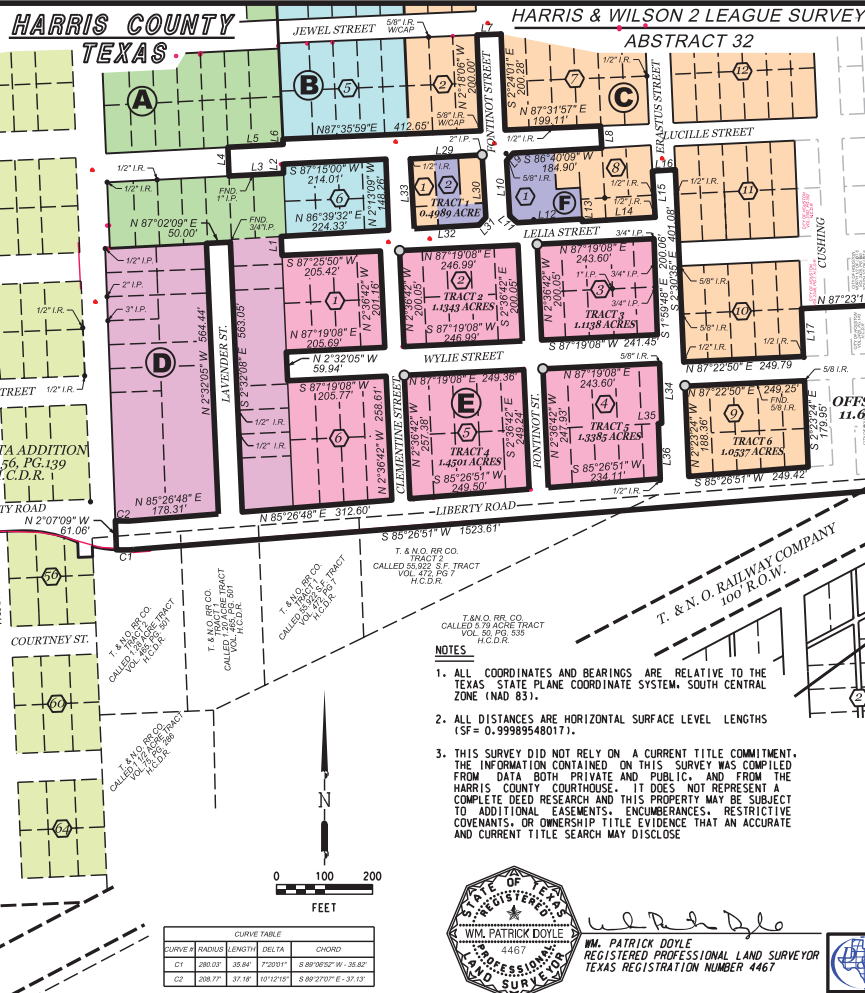
EXHIBIT A - 2

**SURVEY PLAT AND LEGAL DESCRIPTION OF CITY OF HOUSTON RIGHT-OF-
WAY INSTITUTIONAL CONTROL BOUNDARY – NORTHERN AND WESTERN
PROPERTIES**

SUBDIVISION LEGEND

- (A) BALLARD GARDENS VOL. 1528, PG. 725, H.C.D.R.
- (B) FAIRGROUND PARK ANNEX VOL. 499, PG. 70, H.C.D.R.
- (C) FAIR GROUNDS PARK ADDITION VOL. 81, PG. 460, H.C.D.R.
- (D) LIBERTY ROAD ESTATES UNRECORDED
- (E) GAGNE HOMESTEAD VOL. 1, PG. 5, H.C.M.R.
- (F) GREATER TRUE VINE MISSIONARY BAPTIST CHURCH F.C. 599251, H.C.M.R.
- (G) KASHMERE GARDENS ANNEX VOL. 998, PG. 606, H.C.D.R.

LINE #	DIRECTION	LENGTH	LINE #	DIRECTION	LENGTH
L1	N 2°32'05" W	39.50	L22	S 89°43'40" W	30.63
L2	S 2°13'09" E	19.17	L23	N 2°32'15" W	92.46
L3	S 87°04'51" W	114.00	L24	N 87°23'53" E	131.87
L4	N 2°13'09" W	60.00	L25	S 2°48'39" E	51.59
L5	N 87°04'51" W	115.34	L26	S 19°53'48" E	12.60
L6	N 2°36'44" W	11.18	L27	N 62°25'37" E	145.44
L7	N 87°48'32" E	50.40	L28	S 2°50'20" E	111.49
L8	S 3°23'23" E	45.11	L29	N 86°45'15" E	149.97
L9	S 41°40'02" W	21.21	L30	S 3°20'56" E	130.37
L10	S 3°20'11" E	115.26	L31	S 41°35'58" W	21.21
L11	S 48°20'07" E	21.21	L32	S 86°38'32" W	135.28
L12	N 86°39'53" E	135.00	L33	N 3°13'55" W	145.64
L13	S 3°32'04" E	5.22	L29	N 86°45'10" E	149.97
L14	N 86°39'22" E	152.41	L30	S 3°20'56" E	130.37
L15	N 3°28'13" W	86.31	L31	S 41°35'58" W	21.21
L16	N 86°39'22" E	48.05	L32	S 86°39'32" W	135.28
L17	N 2°23'24" W	100.05	L33	N 3°13'55" W	145.64
L18	S 10°38'10" E	5.08	L34	S 1°59'48" E	125.01
L19	S 2°06'20" E	101.23	L35	S 87°19'08" W	7.04
L20	N 62°01'40" E	145.35	L36	S 1°59'48" E	115.29
L21	N 1°22'20" W	20.77			



LESS & EXCEPT TRACTS	POINT OF BEGINNING X =	POINT OF BEGINNING Y =
TRACT 1 0.4989 ACRE	3135967.82	13853042.55
TRACT 2 1.1343 ACRES	3135795.90	13852842.99
TRACT 3 1.1138 ACRES	3136082.54	13852856.42
TRACT 4 1.4501 ACRES	3135805.06	13852583.18
TRACT 5 1.3385 ACRES	313604.07	13852596.71
TRACT 6 1.0537 ACRES	3136390.09	13852561.66

OFFSITE PMZ TRACT 2 0.3199 ACRE TRACT

P.O.B. FND. 58°1'R
X = 3134290.94
Y = 13851449.15

T. & N.O. RR. CO. CALLED 0.79 ACRE TRACT VOL. 52 PG. 535 H.C.D.R.

T. & N.O. RR. CO. CALLED 0.79 ACRE TRACT VOL. 52 PG. 535 H.C.D.R.

T. & N.O. RR. CO. CALLED 0.79 ACRE TRACT VOL. 52 PG. 535 H.C.D.R.

CURVE TABLE

CURVE #	RADIUS	LENGTH	DEFLA	CHORD
C1	280.03	35.80	7°20'51"	S. 89°18'52" W - 35.62
C2	208.77	37.18	10°12'10"	S. 89°27'01" E - 37.13

- NOTES**
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.999895480171).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

EXHIBIT OF
CITY OF HOUSTON
INSTITUTIONAL CONTROL
BOUNDARY
 IN THE
HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS
 106
UNION PACIFIC RAILROAD COMPANY

STATE OF TEXAS
REGISTERED PROFESSIONAL LAND SURVEYOR
WM. PATRICK DOYLE
 4467
WM. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/CIS
 OFFICE: 979.265.1627 FAX: 979.265.0600
 131 COMMERCIAL STREET, CLUTE, TEXAS 77531
 SURVEYED: 1-12-16 BOOK: 1068 IMAGE: 1915-16-03
 DRAWN BY: JAW/1-14-16 CHECKED: WPD/2-20-16 TRK/1-15-16



**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 13**

BEING ALL THAT CERTAIN 11.6378 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Liberty Road, right-of-way varies, all of 30 foot wide Lelia Street (11th Street), all of 60 foot wide Wylie Street (12th Street), all of 40 foot wide Clementine Street and all of 40 foot wide Fontinot Street, as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records (H.C.M.R.), a portion of 60 foot wide Lucille Street, as shown on the map of Ballard Gardens Addition, according to the map or plat thereof recorded in Volume 1528, Page 725 of the Harris County Deed Records (H.C.D.R.), a portion of 50 foot wide Lucille Street and a portion of 50 foot wide Clementine Street (formerly Lots 1 and 10, Block 6) as shown on the map of Fairgrounds Park Annex according to the map or plat thereof recorded in Volume 499, Page 70 of the H.C.D.R., a portion of 50 foot wide Lucille Street, a portion of 50 foot wide Fontinot Street, and a portion of 50 foot wide Erastus Street as shown on the Map of Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the H.C.D.R., a portion of Old Lockwood Drive (right-of-way varies) as shown on the map of Kashmere Gardens Annex, according to the map or plat thereof recorded in Volume 996, Page 606 of the H.C.D.R., a portion of Cushing Street, a portion of Lockwood Drive, all of Lavender Street conveyed by deed recorded on May 24, 1948 from Carl S. Smith, et al to Harris County, as recorded in Volume 1740, Page 359 of the H.C.D.R., a portion of all that certain called 1.28 acre tract and a portion of all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; a portion of all that certain called 55,922 square foot tract of land and a portion of all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R., and a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R., the herein described 11.6378 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said Liberty Road, right-of-way varies, with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Beginning being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern boundary line of said Liberty Road, right-of-way varies, a distance of 1523.61 feet to a 5/8" iron rod found marking the point of curvature of a curve to the right, having a radius of 280.03 feet;

THENCE in a westerly direction, coincident with the southern boundary line of said Liberty Road, right-of-way varies, along said curve to the right, having a radius of 280.03 feet, an arc length of 35.84 feet, a central angle of 7°20'01", a chord bearing and distance of South 89°06'52" West – 35.82 feet to the southwest corner of the herein described 11.6378 acre tract;

THENCE North 2°07'09" West, crossing said Liberty Road, right-of-way varies, a distance of 61.06 feet to a point located on the northern right-of-way boundary line of said Liberty Road, right-of-way varies, for the southwest corner of Tract 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, being the same tract conveyed by deed recorded on March 27, 2014 from Harris County, et al to 2013 Cottage, LLC, as recorded in Clerk's File No. 20140123340 of the H.C.O.R., located on a curve to the left, having a radius of 208.77 feet, for an angle corner of the herein described 11.6378 acre tract,

UNION PACIFIC RAILROAD COMPANY

**11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 13**

THENCE in an easterly direction, coincident with northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, along said curve to the left, having a radius of 208.77 feet, an arc length of 37.18 feet, a central angle of $10^{\circ}12'15''$, a chord bearing and distance of South $89^{\circ}27'07''$ East – 37.13 feet to a point for corner;

THENCE North $85^{\circ}26'48''$ East, coincident with northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1, Block of the unrecorded subdivision of Liberty Road Estates, a distance of 178.31 feet to the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, and the western right-of-way boundary line of said Lavender Street, for the southeast corner of said Lot 1, Block 2 of the unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $2^{\circ}32'05''$ West, coincident with the western right-of-way boundary line of said Lavender Street, same being the eastern boundary line of Tract 1, the eastern boundary line of Lot 16, being the same tract conveyed by deed recorded on July 2, 1952 from Clark Investment Company to John Ellis, et ux as recorded in Volume 2458, page 665 of the H.C.D.R., the eastern boundary line of Tract 14, being the same tract conveyed by deed recorded on March 27, 2014 from Harris County, et al to 2013 Cottage, LLC, as recorded in Clerk's File No. 20140123340 of the H.C.O.R., the eastern boundary line of Tract 13, being the same tract conveyed by deed recorded on May 11, 2001 from Larry Charles Wyatt to Francis A. Wyatt, as recorded in Clerk's File No. V045715 of the H.C.O.R., and the eastern boundary line of Tract 12, being the same tract conveyed by deed recorded on February 16, 1950 from Clark Investment Company to Arthur Brooks, et ux as recorded in Volume 2035, Page 571 of the H.C.D.R., all being out of Block 2, of the unrecorded subdivision of Liberty Road Estates, a distance of 564.44 feet to a point located on the southern boundary line of Lot 5 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $87^{\circ}02'09''$ East, coincident with the southern boundary line of Lot 5 and Lot 6 of said Ballard Gardens Addition, a distance of 50.00 feet to the northwest corner of Tract 11 of the unrecorded subdivision of Liberty Road Estates, being the same tract conveyed by deed recorded on January 28, 2003 from Harris County, et al to Sandra Rena Thompson, as recorded in Clerk's File NO. W386946 of the H.C.O.R., for an angle corner of the herein described 11.6378 acre tract;

THENCE South $2^{\circ}32'08''$ East, coincident with the eastern right-of-way boundary line of said 50 foot wide Lavender Street, same being the western boundary line of said Tract 11, Tract 6A, being the same tract conveyed by deed recorded on September 24, 1993 from Clark Investment Company, Inc. to Essie Lee Hutchins as recorded in Clerk's File No. P469225 of the H.C.O.R., Tract 6B, in the name of Zearlene Osborne, recordation information not found, Tract 6 and Tract 6C, in the name of Lucille Long, recordation information not found, Tract 5, being the same tract conveyed by deed recorded on March 1, 2011 from Constable Jack F. Abercia, Precinct 1, Harris County, Texas to Greater Mount Nebo Baptist Church as recorded in Clerk's File No. 2011-083443 of the H.C.O.R., Tract 4, being the same tract conveyed by deed recorded on August 14, 2009 from Jack Anthony Coachman to Ray Carrington as recorded in Clerk's File No. 2009-0369151 of the H.C.O.R., Tract 3, being the same tract described in deed recorded on November 22, 1951 from Clark Investment Company to Jessie Beal, et al, as recorded in Volume 2344, Page 164 of the H.C.D.R., and Tract 1, being the same tract conveyed by deed recorded on August 5, 2013 from Constable Alan Rosen Precinct 1, Harris County, Texas to Greater Mount Nebo Missionary Baptist Church, as recorded in Clerk's File No. 2013-0394211 of the H.C.O.R., all being out of Block 2 of the unrecorded subdivision of Liberty Road Estates, a distance of 563.05 feet to the intersection of the eastern right-of-way boundary line of said 50 foot wide Lavender Street with the northern right-of-way boundary line Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North $85^{\circ}26'48''$ East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Tract 1 of the unrecorded subdivision of Liberty Road Estates and the southern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 312.60 feet to the southeast corner of said Block 6, same being the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the western right-of-way boundary line of 40 foot wide Clementine Street, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 13**

THENCE North 2°36'42" West, coincident with the western right-of-way boundary line of said 40 foot wide Clementine Street, same being the eastern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 258.61 feet to the northeast corner of said Block 6, same being the intersection of said western right-of-way boundary line of 40 foot wide Clementine Street with the southern right-of-way boundary line of 60 foot wide Wylie Street (12th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°19'08" West, coincident with the southern right-of-way boundary line of 60 foot wide Wylie Street (12th Street), same being the northern boundary line of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.77 feet to the northwest corner of said Block 6, located on the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°32'05" West, coincident with the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, a distance of 59.94 feet to the southwest corner of Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, located on the northern boundary line of said 60 foot wide Wylie Street (12th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°19'08" East, coincident with the northern boundary line of said 60 foot wide Wylie Street (12th Street), same being the southern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.69 feet, to the southeast corner of said Block 1, at the intersection of the northern right-of-way boundary line of said Wylie Street (12th Street) with the western right-of-way boundary line of said 40 foot wide Clementine Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°36'42" West, coincident with the western right-of-way boundary line of said 40 foot wide Clementine Street, same being the eastern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 201.16 feet to the northeast corner of said Block 1, at the intersection of the western boundary line of said 40 foot wide Clementine Street with the southern right-of-way boundary line of called 30 foot wide Lelia Street (11th Street), for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°25'50" West, coincident with the southern right-of-way boundary line of called 30 foot wide Lelia Street (11th Street), same being the northern boundary line of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 205.42 feet, to the northwest corner of said Block 1, located on the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°32'05" West, coincident with the eastern boundary line of said unrecorded subdivision of Liberty Road Estates, a distance of 39.50 feet, to a point located on the northern right-of-way boundary line of said called 30 foot wide Lelia Street (11th Street), same being the southern boundary line of Lot 8 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'32" East, coincident with the northern right-of-way boundary line of said called 30 foot wide Lelia Street (11th Street), same being the southern boundary line of said Lot 8 of Ballard Gardens Subdivision and the southern boundary line of Block 6 of said Fairgrounds Park Annex, a distance of 224.33 feet to the intersection of the northern right-of-way boundary line of said called 30 foot wide Lelia Street with the western right-of-way boundary line 50 foot wide Clementine Street, formerly Lots 1 and 10, Block 6, Fairgrounds Park Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°13'09" West, coincident with the western right-of-way boundary line 50 foot wide Clementine Street, a distance of 148.26 feet, to a point located at the intersection of the western right-of-way boundary line of said 50 foot wide Clementine Street with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 6 of said Fairground Park Annex, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 13**

THENCE South 87°15'00" West, coincident with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 6 of said Fairground Park Annex, a distance of 214.01 feet, to the northwest corner of said Block 6 of Fairground Park Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°13'09" East, coincident with the western boundary line of said Block 6 of Fairground Park Annex, a distance of 19.17 feet, to the northeast corner of Lot 8 of said Ballard Gardens Addition, located on the southern right-of-way boundary line of 60 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 87°04'51" West, coincident with the southern right-of-way boundary line of 60 foot wide Lucille Street, same being the northern boundary line of Lot 8 and Lot 7 of said Ballard Gardens Addition, a distance of 114.00 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°13'09" West, a distance of 60.00 feet to a point located on the northern right-of-way boundary line of said 60 foot wide Lucille Street, same being the southern boundary line of Lot 15 of said Ballard Gardens Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°04'51" East, coincident with the northern right-of-way boundary line of said 60 foot wide Lucille Street, same being the southern boundary line of Lots 15 and 16 of said Ballard Gardens Addition, a distance of 115.34 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°36'44" West, coincident with the eastern boundary line of said Lot 16 of Ballard Gardens Addition, a distance of 11.16 feet to the southwest corner of Block 5 of said Fairgrounds Park Annex, located on the northern right-of-way boundary line of said 50 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°35'59" East, coincident with the northern right-of-way boundary line of said 50 foot wide Lucille Street, same being the southern boundary line of Block 5 of said Fairgrounds Park Annex and the southern boundary line of Block 2 of Fair Ground Park Addition, a distance of 412.65 feet to the southeast corner of said Block 2 of said Fair Ground Park Addition at the intersection of the northern right-of-way boundary line of said 50 foot wide Lucille Street with western right-of-way boundary line of 50 foot wide Fontinot Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°18'06" West, coincident with the western right-of-way boundary line of said 50 foot wide Fontinot Street, same being the eastern boundary line Block 2 of said Fair Ground Park Addition, a distance of 200.00 feet, to the intersection of the western right-of-way boundary line of said 50 foot wide Fontinot Street with the southern right-of-way boundary line of 50 foot wide Jewel Street, for angle corner;

THENCE North 87°48'32" East, coincident with the southern right-of-way boundary line of 50 foot wide Jewel Street, a distance of 50.40 feet, to a point located at the intersection of the southern right-of-way boundary line of said 50 foot wide Jewel Street with the eastern right-of-way boundary line of 50 foot wide Fontinot Street, for the northwest corner of Block 7 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°24'01" East, coincident with the eastern right-of-way boundary line of 50 foot wide Fontinot Street, same being the western boundary line of Block 7 of said Fair Ground Park Addition, a distance of 200.28 feet to the southwest corner of said Block 7, at the intersection of the eastern right-of-way boundary line of 50 foot wide Fontinot Street with the northern right-of-way boundary line of said 50 foot wide Lucille Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°31'57" East, coincident with the northern right-of-way boundary line of 50 foot wide Lucille Street, same being the southern boundary line of Block 7 of said Fair Ground Park Addition, a distance of 199.11 feet to an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 5 OF 13**

THENCE South 3°23'23" East, a distance of 46.11 feet, to a point located southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 8 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 86°40'09" West, coincident with the southern right-of-way boundary line of 50 foot wide Lucille Street, same being the northern boundary line of Block 8 of said Fair Ground Park Addition, and the northern boundary line of Block 1 as shown on the map of the Greater True Vine Missionary Baptist Church recorded in Film Code 599251 of the H.C.M.R., a distance of 184.90 feet the north corner of a cutback at the intersection of the southern right-of-way boundary line of said 50 foot wide Lucille Street with the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 41°40'02" West, coincident with the said cutback, a distance of 21.21 feet, to a point located on the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, same being the western boundary line of Block 1 of said Greater True Vine Missionary Baptist Church, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 3°20'11" East, coincident with the eastern right-of-way boundary line of said 50 foot wide Fontinot Street, same being the western boundary line of Block 1 of said Greater True Vine Missionary Baptist Church, a distance of 115.26 feet, to a point located at the North corner of a cutback at the intersection of the eastern right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of 50 foot wide Lelia Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 48°20'07" East, coincident with said cutback, a distance of 21.21 feet, to the intersection of the eastern right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of 50 foot wide Lelia Street, located on the southern boundary line of said Block 1 of said Greater True Vine Missionary Baptist Church, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'53" East, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary line of said Block 1 of said Greater True Vine Missionary Baptist Church, a distance of 135.00 feet, to a point located on the western boundary line of Lot 3, Block 8 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 3°32'04" East, coincident with the western boundary line of said Lot 3, Block 8 of Fair Ground Park Addition, a distance of 5.22 feet, to a point located on the northern right-of-way boundary line of called 30 foot wide Lelia Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'22" East, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary line of Block 8, Fair Ground Park Addition, a distance of 152.41 feet to the southeast corner of said Block 8, located at the intersection of the northern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of called 50 foot wide Erastus Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 3°28'13" West, coincident with the western right-of-way boundary line of called 50 foot wide Erastus Street, same being the eastern boundary line of Block 8 of Fair Ground Park Addition, a distance of 96.31 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 86°39'22" East, a distance of 48.05 feet, to a point located on the eastern right-of-way said called 50 foot wide Erastus Street, same being the western boundary line of Block 11 of said Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 6 OF 13**

THENCE South 2°30'35" East, coincident with the eastern right-of-way of said called 50 foot wide Erastus Street, the western boundary line of Block 11 and the western boundary line of Block 10 of said Fair Ground Park Addition, a distance of 401.08 feet, to the southwest corner of said Block 10, located at the intersection of the eastern right-of-way boundary line of said called 50 foot wide Erastus Street with the northern boundary line of 50 foot wide Wylie Street, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°22'50" East, coincident with the northern right-of-way boundary line of said 50 foot wide Wylie Street, same being the southern boundary line of said Block 10, Fair Ground Park Addition, a distance of 249.79 feet, to a point located on the western right-of-way boundary line of Cushing Street, located on the eastern boundary line of Lot 11, Block 10 of Fair Ground Park Addition, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 2°23'24" West, coincident with the western boundary right-of-way boundary line of said Cushing Street, same being the eastern boundary line of Lot 11, Block 10 of Fair Ground Park Addition, a distance of 100.05 feet, to the northeast corner of said Lot 11, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°23'16" East, crossing said Cushing Street and Lockwood Drive, a distance of 304.42 feet, to a point located on the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of Lot 1939 of Kashmere Gardens Annex, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 10°38'10" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of said Lot 1939 of Kashmere Gardens Annex, a distance of 5.08 feet, to the southwest corner of the residual of said Lot 1939 and the northwest corner of the residual of Lot 1938, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 6°16'50" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of the residual of said Lot 1938 of Kashmere Gardens Annex, and the western boundary line of all that certain called 0.3790 acre tract conveyed by deed recorded on August 31, 1979 from Larry Edward, et al to Martin Damian, Sr., et al as recorded in Clerk's File No. G222792 of the H.C.O.R., a distance of 75.22 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°06'20" East, coincident with the eastern right-of-way boundary line of Lockwood Drive, same being the western boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 101.23 feet, to a point located on the northern right-of-way boundary line of said Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 62°01'40" East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 145.35 feet to the southeast corner of said Martin Damian, Sr., et al called 0.3790 acre tract, located at the intersection of the northern right-of-way boundary line of said Liberty Road with the western right-of-way boundary line of Old Lockwood Drive, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 1°22'20" West, coincident with the western right-of-way boundary line of Old Lockwood Drive, right-of-way varies, same being the eastern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 20.77 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 89°43'40" West, coincident with the northern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract, a distance of 30.03 feet, to a point located on the western right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 7 OF 13**

THENCE North 2°32'15" West, coincident with the western right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the eastern boundary line of said Martin Damian, Sr., et al called 0.3790 acre tract and the residual of said Lot 1938 of Kashmere Gardens Annex, a distance of 92.46 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE North 87°23'53" East, crossing said Old Lockwood Drive, right-of-way varies, a distance of 131.87 feet, to a point located on the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of all certain called 1.0467 acre tract, conveyed by deed recorded on October 20, 2006 from Elmer Preston, trustee to Rosendo H. Hernandez ass recorded in Clerk's File No. 2006-0140564 of the H.C.O.R., for an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°48'39" East, coincident with the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 51.59 feet to an angle corner of the herein described 11.6378 acre tract;

THENCE South 19°53'48" East, coincident with the eastern right-of-way boundary line of said Old Lockwood Drive, right-of-way varies, same being the western boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 12.60 feet to the southwest corner of said Rosendo H. Hernandez called 1.0467 acre tract, at the intersection of the eastern right-of-way boundary line of said Old Lockwood Drive right-of-way varies, with the northern right-of-way boundary line of Liberty Road, right-of-way varies, for an angle corner of the herein described 11.6378 acre tract;

THENCE North 62°25'57" East, coincident with the northern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the southern boundary line of said Rosendo H. Hernandez called 1.0467 acre tract, a distance of 145.44 feet, to an angle corner of the herein described 11.6378 acre tract;

THENCE South 2°50'20" East, crossing said Liberty Road, right-of-way varies, a distance of 111.49 feet, to a point located on the southern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the northern right-of-way boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, for an angle corner of the herein described 11.6378 acre tract;

THENCE South 62°10'18" West, coincident with the southern right-of-way boundary line of said Liberty Road, right-of-way varies, same being the northern right-of-way boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 629.98 feet to the **POINT OF BEGINNING**, containing within this description 18.2271 acres of land, less and except the following tracts, being more particularly described as follow: Tract 1 – 0.4989 acre tract, Tract 2 – 1.1343 acre tract, Tract 3 – 1.1138 acre tract, Tract 4 – 1.4501 acre tract, Tract 5, 1.3385 acre tract, Tract 6 – 1.0537 acre tract, leaving a net acreage of 11.6378 acres, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 8 OF 13**

LESS & EXCEPT TRACT 1 – 0.4989 ACRE

BEING ALL THAT CERTAIN 0.4989 ACRE tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Lot 1 and all of Lot 3 of Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the Harris County Deed Records (H.C.D.R.), and being all of Block 2 of the Greater True Vine Missionary Baptist Church according to the map or plat thereof recorded in Film Code 599251 of the Harris County Map Records, the herein described 0.4989 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the southeast corner of Block 2 of said Fair Ground Park Addition, located on the intersection of the northern right-of-way boundary line 50 foot wide Lucille Street and the western boundary line of 50 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135965.22 and Y=13853093.15;

THENCE South 2°57'04" East, crossing said 50 foot wide Lucille Street, a distance of 50.68 feet to the northeast corner of said Block 1 Fair Grounds Park Addition for the northeast corner and the **POINT OF BEGINNING** of the herein described 0.4989 acre tract, at position X=3135967.82 and Y=13853042.55;

THENCE South 3°20'56" East, coincident with the western boundary line of said 50 foot wide Fontinot Street, same being the eastern boundary line of said Block 1, Fair Ground Park Addition, and the eastern boundary line of said Block 2 of the subdivision of the Greater True Vine Missionary Baptist Church, a distance of 130.37 feet to the North corner of a cutback at the southeast corner of said Block 2, located at the intersection of the western boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of Lelia Street, for an angle corner of the herein described 0.4989 acre tract;

THENCE South 41°35'58" West, coincident with said cutback, a distance of 21.21 feet to the intersection of the western right-of-way boundary line of said 50 foot wide Fontinot Street with the northern right-of-way boundary line of called 30 foot wide Lelia Street, for an angle corner of the herein described 0.4989 acre tract;

THENCE South 86°39'32" West, coincident with the northern right-of-way boundary line of called 30 foot wide Lelia Street, same being the southern boundary of said Block 2 of the subdivision of the Greater True Vine Missionary Baptist Church and the southern boundary line of Block 1 of said Fair Ground Park Addition, a distance of 135.28 feet to the southwest corner of said Block 1 of said Fair Ground Park, located at the intersection of the northern right-of-way boundary line of said called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 50 foot wide Clementine Street, for the southwest corner of the herein described 0.4989 acre tract;

THENCE North 3°13'55" West, coincident with the eastern right-of-way boundary line of 50 foot wide Clementine Street, a distance of 145.64 feet to the northwest corner of Block 1 of Fair Ground Park Addition, located at the intersection of the eastern right-of-way boundary line of said 50 foot wide Clementine Street with the southern right-of-way boundary line of said 50 foot wide Lucille Street, for the northwest corner of the herein described 0.4989 acre tract;

THENCE North 86°45'15" East, coincident with the southern right-of-way boundary line of said 50 foot wide Lucille Street, a distance of 149.97 feet to the **POINT OF BEGINNING**, containing 0.4989 acre of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 9 OF 13**

LESS & EXCEPT TRACT 2 – 1.1343 ACRE TRACT

BEING ALL THAT CERTAIN 1.1343 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 2 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.1343 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 40 foot wide Clementine Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135755.89 and Y=13852842.23;

THENCE North 88°54'44" East, crossing said 40 foot wide Clementine Street, a distance of 40.01 feet to the northwest corner of said Block 1 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of 40 foot wide Clementine Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.1343 acre tract, at position X=3135795.90 and Y=13852842.99;

THENCE North 87°19'08" East, coincident with the southern boundary line of said called 30 foot wide Lelia Street, same being the northern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 246.99 feet to the northeast corner of said Block 1, at the intersection of the southern boundary line of said called 30 foot wide Lelia Street, with the western boundary line of 40 foot wide Fontinot Street, for the northeast corner of the herein described 1.1343 acre tract

THENCE South 2°36'42" East, coincident with the western boundary line of 40 foot wide Fontinot Street, same being the eastern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the southeast corner of said Block 1, located at the intersection of the western boundary line of 40 foot wide Fontinot Street with the northern right-of-way boundary line 50 foot wide Wylie Street, for the southeast corner of the herein described 1.1343 acre tract

THENCE South 87°19'08" West, coincident with the northern right-of-way boundary line 50 foot wide Wylie Street, same being the southern boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 246.99 feet to the southwest corner of said Block 1, at the intersection of the northern right-of-way boundary line of said 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Clementine Street, for the southwest corner of the herein described 1.1343 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Clementine Street, same being the western boundary line of said Block 1, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the **POINT OF BEGINNING**, containing 1.1343 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 10 OF 13**

LESS & EXCEPT TRACT 3-1.1138 ACRE TRACT

BEING ALL THAT CERTAIN 1.1138 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 3 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.1138 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 2 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3136042.59 and Y=13852854.55;

THENCE North 87°19'08" East, crossing said 40 foot wide Fontinot Street, a distance of 40.00 feet to the northwest corner of said Block 3 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of called 30 foot wide Lelia Street, with the western right-of-way boundary line of 40 foot wide Fontinot Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.1138 acre tract, at position X=3136082.54 and Y=13852856.42;

THENCE North 87°19'08" East, coincident with the southern boundary line of said called 30 foot wide Lelia Street, same being the northern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 243.60 feet to the northeast corner of said Block 3, at the intersection of the southern boundary line of said called 30 foot wide Lelia Street, with the western boundary line of Erastus Street, right-of-way varies, for the northeast corner of the herein described 1.1138 acre tract

THENCE South 1°59'48" East, coincident with the western boundary line of Erastus Street, right-of-way varies, same being the eastern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.06 feet to the southeast corner of said Block 3, located at the intersection of the western boundary line of Erastus Street, right-of-way varies, with the northern right-of-way boundary line 50 foot wide Wylie Street, for the southeast corner of the herein described 1.1138 acre tract

THENCE South 87°19'08" West, coincident with the northern right-of-way boundary line 50 foot wide Wylie Street, same being the southern boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 241.45 feet to the southwest corner of said Block 3, at the intersection of the northern right-of-way boundary line of said 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, for the southwest corner of the herein described 1.1138 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, same being the western boundary line of said Block 3, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 200.05 feet to the **POINT OF BEGINNING**, containing 1.1138 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 11 OF 13**

LESS & EXCEPT TRACT 4- 1.4501 ACRE TRACT

BEING ALL THAT CERTAIN 1.4501 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 5 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.4501 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 6 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Clementine Street, said Point of Commencement being located at Texas State Plane coordinate position X=3135767.79 and Y=13852581.43;

THENCE North 87°19'08" East, crossing said 40 foot wide Clementine, a distance of 37.63 feet to the northwest corner of said Block 5 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of 40 foot wide Clementine Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.4501 acre tract, at position X=3135805.06 and Y=13852583.18;

THENCE North 87°19'08" East, coincident with the southern boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.36 feet to the northeast corner of said Block 5, at the intersection of the southern boundary line of said 50 foot wide Wylie Street, with the western boundary line of 40 foot wide Fontinot Street, for the northeast corner of the herein described 1.4501 acre tract;

THENCE South 2°36'42" East, coincident with the western boundary line of 40 foot wide Fontinot Street, same being the eastern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.24 feet to the southeast corner of said Block 5, located at the intersection of the western boundary line of 40 foot wide Fontinot Street with the northern right-of-way boundary line Liberty Road, right-of-way varies, for the southeast corner of the herein described 1.4501 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 249.50 feet to the southwest corner of said Block 5, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of 40 foot wide Clementine Street, for the southwest corner of the herein described 1.4501 acre tract;

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Clementine Street, same being the western boundary line of said Block 5, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 257.38 feet to the **POINT OF BEGINNING**, containing 1.4501 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 12 OF 13**

LESS & EXCEPT TRACT 5 – 1.3385 ACRE TRACT

BEING ALL THAT CERTAIN 1.3385 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being all of Block 4 as shown on the map of the Subdivision of Shares 2 & 3 of the Gagne Homestead, according to the map or plat thereof recorded in Volume 1, Page 55 of the Harris County Map Records, the herein described 1.3385 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the northeast corner of Block 5 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, said Point of Commencement being located at Texas State Plane coordinate position X=3136054.43 and Y=13852594.86;

THENCE North 87°19'08" East, crossing said 40 foot wide Fontinot Street, a distance of 39.68 feet to the northwest corner of said Block 4 of said Subdivision of Shares 2 & 3 of the Gagne Homestead, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of 40 foot wide Fontinot Street, for the northwest corner and the **POINT OF BEGINNING** herein described 1.3385 acre tract, at position X=3136094.07 and Y=13852596.71;

THENCE North 87°19'08" East, coincident with the southern right-of-way boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 243.60 feet to the northeast corner of Lot 5 of said Block 4, at the intersection of the southern right-of-way boundary line of said 50 foot wide Wylie Street, with the western right-of-way boundary line of Erastus Street, right-of-way varies, for the northeast corner of the herein described 1.3385 acre tract

THENCE South 1°59'48" East, coincident with the western right-of-way boundary line of Erastus Street, right-of-way varies, same being the eastern boundary line of said Lot 5, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 125.01 feet to an angle point;

THENCE South 87°19'08" West, coincident with the southern boundary line of said Lot 5, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 7.04 feet to a point located in the northern boundary line of said Lot 6, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, for an angle corner of the herein described 1.3385 acre tract,

THENCE South 1°59'48" East, coincident with the western right-of-way boundary line of Erastus Street, right-of-way varies, a distance of 115.29 feet to a point located on the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Lot 6, Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, for the southeast corner of the herein described 1.3385 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 234.11 feet to the southwest corner of said Block 4, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of Fontinot Street, right-of-way varies, for the southwest corner of the herein described 1.3385 acre tract

THENCE North 2°36'42" West, coincident with the eastern right-of-way boundary line of 40 foot wide Fontinot Street, same being the western boundary line of said Block 4, of said Subdivision of Shares 2 & 3 of the Gagne Homestead, a distance of 247.93 feet to the **POINT OF BEGINNING**, containing 1.3385 acres of land, more or less.

**UNION PACIFIC RAILROAD COMPANY
11.6378 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 13 OF 13**

LESS & EXCEPT TRACT 6 – 1.0537 ACRE TRACT

BEING ALL THAT CERTAIN 1.0537 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of Block 9 as shown on the map of the Fair Ground Park Addition, according to the map or plat thereof recorded in Volume 81, Page 460 of the Harris County Deed Records, the herein described 1.0537 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at the southwest corner of Block 10 of said Fair Ground Park Addition, said point being the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, said Point of Commencement being located at Texas State Plane coordinate position X=3136388.03 and Y=13852610.99;

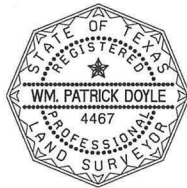
THENCE South 2°09'23" East, crossing said 50 foot wide Wylie Street, a distance of 50.54 feet to the northwest corner of said Block 9 of said Fair Ground Park Addition, at the intersection of the southern right-of-way boundary line of 50 foot wide Wylie Street, with the western right-of-way boundary line of Erastus Street, right-of-way varies, for the northwest corner and the **POINT OF BEGINNING** herein described 1.0537 acre tract, at position X=3136390.09 and Y=13852561.66;

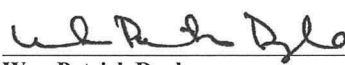
THENCE North 87°22'50" East, coincident with the southern boundary line of said 50 foot wide Wylie Street, same being the northern boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 249.25 feet to the northeast corner of Lot 5 of said Block 9, at the intersection of the southern boundary line of said 50 foot wide Wylie Street, with the western boundary line of Cushing Street, right-of-way varies, for the northeast corner of the herein described 1.0537 acre tract

THENCE South 2°23'24" East, coincident with the western boundary line of Cushing Street, right-of-way varies, same being the eastern boundary line of said Lots 2 and 11, Block 9 of said Fair Ground Park Addition, a distance of 179.95 feet to a point located on the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 9 of said Fair Ground Park Addition, for the southeast corner of the herein described 1.0537 acre tract;

THENCE South 85°26'51" West, coincident with the northern right-of-way boundary line Liberty Road, right-of-way varies, same being the southern boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 249.42 feet to the southwest corner of said Block 9, at the intersection of the northern right-of-way boundary line of said Liberty Road, right-of-way varies, with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, for the southwest corner of the herein described 1.0537 acre tract

THENCE North 2°23'24" West, coincident with the eastern right-of-way boundary line of Erastus Street, right-of-way varies, same being the western boundary line of said Block 9 of said Fair Ground Park Addition, a distance of 188.36 feet to the **POINT OF BEGINNING**, containing 1.0537 acres of land, more or less.




Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
September 10, 2016
Revised September 14, 2016



Doyle & Wachtstetter, Inc
Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
0.3199 ACRE CITY OF HOUSTON OFFSITE PMZ TRACT 2
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 0.3199 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of 60 foot wide Kashmere Street, a portion of 60 foot wide 15th Street and 60 foot wide 16th Street, as shown on the plat of Augusta Addition, according to the map or plat thereof recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.), the herein described 0.3199 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at a 5/8" iron rod found marking the northwest corner of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901, from Ida Japhet to Texas and New Orleans Rail Road Company as recorded in Volume 131, Page 453 of the H.C.D.R., located on the northern boundary line of 60 foot wide 16th Street (not open), said Point of Commencement being located at Texas State Plane coordinate position X=3134260.64 and Y=13851449.15;

THENCE North 87°40'19" East, coincident with the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street, a distance of 110.36 feet to the southwest corner and the **POINT OF BEGINNING**, of the herein described 0.3199 acre tract, at position X=3134370.90 and Y=13851453.63;

THENCE North 32°17'25" West, a distance of 82.79 feet to a point located on the eastern boundary line of Block 61 of said Augusta Addition, same being the western right-of-way of said 60 foot wide Kashmere Street, for an angle corner of the herein described 0.3199 acre tract;

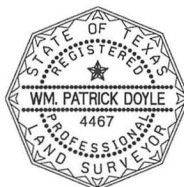
THENCE North 2°28'22" West, coincident with the eastern boundary line of Block 61 of said Augusta Addition, same being the western right-of-way of said 60 foot wide Kashmere Street, a distance of 151.51 feet to an angle corner of the herein described 0.3199 acre tract;

THENCE North 38°24'15" East, a distance of 91.48 feet to a point located on the eastern right-of-way of said 60 foot wide Kashmere, within the right-of-way of said 60 foot wide 15th Street (Eddie Street), for the northeast corner of the herein described 0.3199 acre tract;

THENCE South 2°26'03" East, coincident with the eastern right-of-way of said Kashmere Street and the western boundary line of Block 62 of said Augusta Addition, a distance of 292.55 feet to a point located on the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street for the southeast corner of the herein described 0.3199 acre tract;

THENCE South 87°40'19" West, coincident with the northern boundary line of said Texas and New Orleans Rail Road company called 4.274 acre tract, same being the southern right-of-way boundary line of said 60 foot wide 16th Street, a distance of 18.51 feet to the **POINT OF BEGINNING**, containing 0.3199 acre of land, more or less.

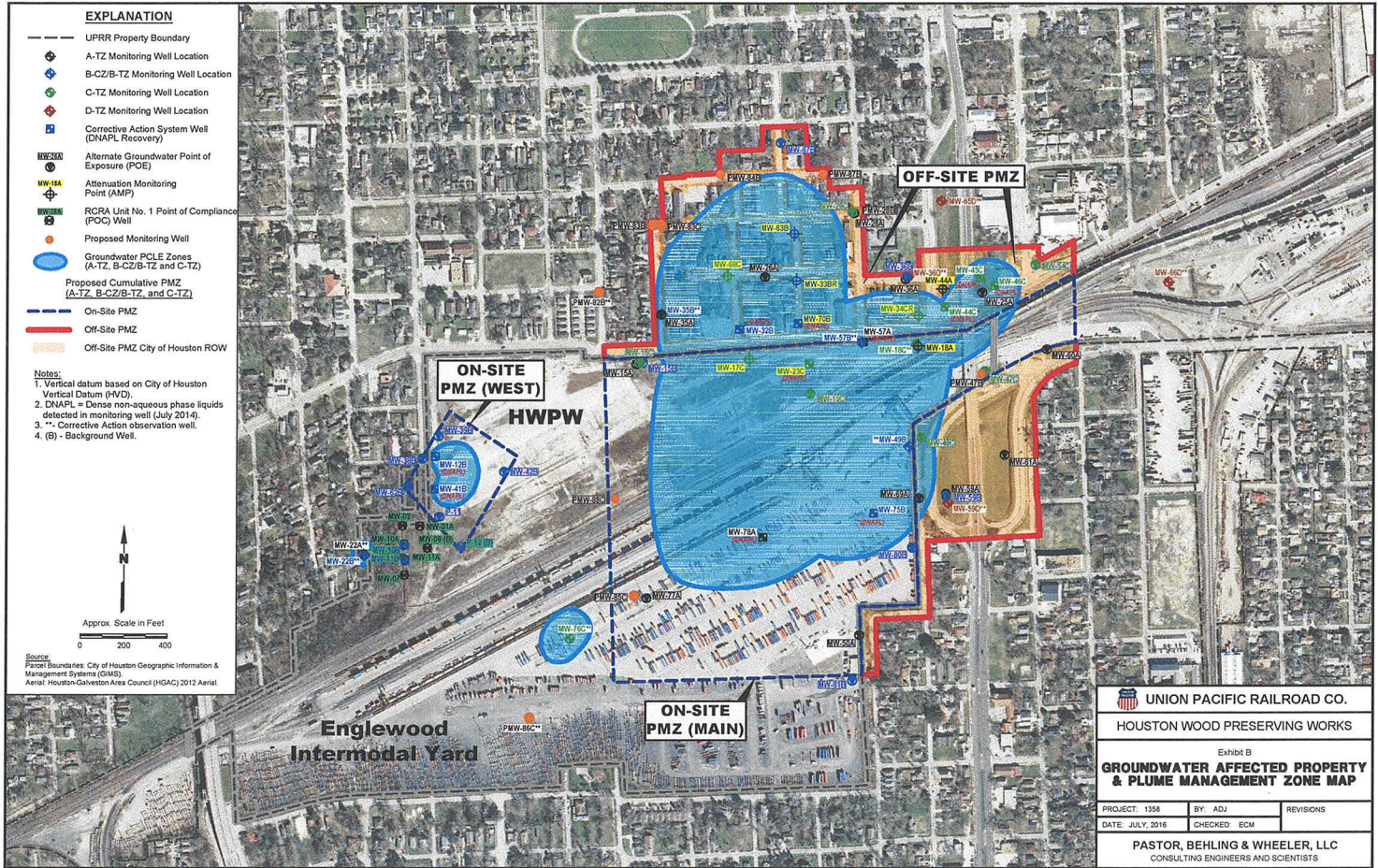
Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
September 15, 2016



This description is based on a plat dated June 30, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard OffSite PMZ C.O.H. Right-of-way 0.3199 acre.doc

EXHIBIT B

AFFECTED PROPERTY AND PLUME MANAGEMENT ZONE MAP



EXPLANATION

- UPRR Property Boundary
- ⊕ A-TZ Monitoring Well Location
- ⊕ B-CZ/B-TZ Monitoring Well Location
- ⊕ C-TZ Monitoring Well Location
- ⊕ D-TZ Monitoring Well Location
- ⊕ Corrective Action System Well (DNAPL Recovery)
- ⊕ Alternate Groundwater Point of Exposure (POE)
- ⊕ Attenuation Monitoring Point (AMP)
- ⊕ RCRA Unit No. 1 Point of Compliance (POC) Well
- ⊕ Proposed Monitoring Well
- ⊕ Groundwater PCE Zones (A-TZ, B-CZ/B-TZ and C-TZ)
- ⊕ Proposed Cumulative PMZ (A-TZ, B-CZ/B-TZ, and C-TZ)
- On-Site PMZ
- Off-Site PMZ
- Off-Site PMZ City of Houston ROW

- Notes:**
1. Vertical datum based on City of Houston Vertical Datum (HVD).
 2. DNAPL = Dense non-aqueous phase liquids detected in monitoring well (July 2014).
 3. ** - Corrective Action observation well.
 4. (B) - Background Well.



Source: Parcel Boundaries: City of Houston Geographic Information & Management Systems (GIMS). Aerial: Houston-Galveston Area Council (HGAC) 2012 Aerial.

Englewood Intermodal Yard

ON-SITE PMZ (WEST)

HWPW

ON-SITE PMZ (MAIN)

OFF-SITE PMZ

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Exhibit B GROUNDWATER AFFECTED PROPERTY & PLUME MANAGEMENT ZONE MAP		
PROJECT: 1358	BY: ADJ	REVISIONS
DATE: JULY, 2016	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXHIBIT C

PLUME MANAGEMENT ZONE MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "C"
MAINTENANCE AND MONITORING REQUIRMENTS

Union Pacific Railroad (UPRR), listed as the Responder under this Restrictive Covenant, will conduct regular sampling of monitoring wells located within the City of Houston Right-Of-Way and listed in the table below (Table C-1) for chemicals of concern (COCs) (see Table C-2) in accordance with the groundwater monitoring requirements established under the Texas Commission on Environmental Quality (TCEQ) Hazardous Waste Permit/Compliance Plan No. 50343. Monitoring and reporting activities are detailed in the Groundwater Sampling and Analysis Plan (SAP) and related compliance tables within the TCEQ Hazardous Waste Permit/Compliance Plan No. 50343.

Monitoring wells listed below will be inspected for signs of damage, including well pads, casing, locks, and, protective covers. Repairs will be made as necessary to ensure the integrity of the monitoring wells.

TABLE C-1

<i>MW-25A</i>	<i>MW-32B</i>	<i>MW-28C</i>
<i>MW-26A</i>	<i>MW-33BR</i>	<i>MW-34CR</i>
<i>MW-28A</i>	<i>MW-35B</i>	<i>MW-44C</i>
<i>MW-35A</i>	<i>MW-36B</i>	<i>MW-45C</i>
<i>MW-36A</i>	<i>MW-59B</i>	<i>MW-46C</i>
<i>MW-44A</i>	<i>MW-63B</i>	<i>MW-48C</i>
<i>MW-59A</i>	<i>MW-67B</i>	<i>MW-54C</i>
<i>MW-60A</i>	<i>MW-70B</i>	<i>MW-68C</i>
<i>MW-61A</i>	<i>PMW-28B (proposed)</i>	<i>PMW-83C (proposed)</i>
<i>MW-69A</i>	<i>PMW-82B (proposed)</i>	
	<i>PMW-83B (proposed)</i>	
	<i>PMW-84B (proposed)</i>	
	<i>PMW-87B (proposed)</i>	

Note: Additional monitoring wells may be added or subtracted from the list above as necessary to satisfy the TCEQ Plume Management Zone (PMZ) monitoring requirements. Any changes to the list of monitoring wells, sampling procedures, and management of investigation-derived wastes (IDW) as part of the Groundwater SAP will be provided to the TCEQ as part of the annual reporting requirements.

EXHIBIT "C"
MAINTENANCE AND MONITORING REQUIRMENTS

TABLE C-2

Chemicals of Concern (COCs)	Groundwater Protection Standards (GWPS) at Alternate Point of Exposure (POE) ^{GW} GW _{Ing} (mg/L) (Res)
Benzene	0.005 ^{PCL}
2,4-Dimethylphenol	0.49 ^{PCL}
2 Methylnaphthalene	0.098 ^{PCL}
Dibenzofuran	0.098 ^{PCL}
Naphthalene	0.49 ^{PCL}
Vinyl Chloride	0.002 ^{PCL}

Note:

^{GW}GW_{Ing} Protective Concentration Levels (PCLs), Residential land use assuming Class 2 Groundwater.

The list of COCs may be revised as necessary to satisfy the Plume Management Zone (PMZ) monitoring requirements and will be provided to the TCEQ as part of the annual reporting requirements.

RESTRICTIVE COVENANT

STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS THAT:
COUNTY OF HARRIS §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the **City of Houston Right-of-Way - 0.1318 Acre Tract located within the Harris and Wilson 2 League Grant, Abstract 32 in Harris County, Texas** (Property) described in Exhibit A attached hereto and incorporated herein by reference.

Surface soil underlying the Property, which is presently covered in its entirety by a concrete sidewalk cap, contains certain identified chemicals of concern (COCs) causing the Property to be considered Affected Property as that term is defined in the TRRP.

This Restrictive Covenant is required for the following reasons:

Use of Physical Control on Soil

The Affected Property is subject to the TRRP requirements for properties containing concentrations of COCs in soil and is subject to the requirements in 30 TAC §350.33(e)(2) to prevent exposure to soils that contain a COC in excess of the protective concentration level. The attached Exhibit A describes and provides the location of the physical control and extent of the soil that exceeds the TCEQ-approved protective concentration levels for certain COCs. The attached Exhibit B lists the COCs that exceed the TCEQ's Protective Concentration Levels, provides the reason the physical control must remain in place, and describes the required maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification.

As of the date of this Restrictive Covenant, the City of Houston with an address of 901 Bagby Street, Houston, Texas 77002 owns a municipal right-of-way easement over the Property. Fee title underlying the easement is owned by the abutting property owner(s). In consideration of the Response Actions by Union Pacific Railroad (Responder) at the Former Houston Wood Preserving Works Site at 4910 Liberty Road, Houston, Texas (TCEQ SWR No. 31547), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City of Houston has agreed, to the extent of its ownership interest, to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The removal or modification of the physical control on the Affected Property within the City of Houston ROW described in Exhibit A is prohibited without prior approval

from TCEQ and the physical control must be maintained and monitored by the Responder as described in Exhibit B. Removal or modification of this restrictive covenant is prohibited without prior approval of TCEQ.

2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier No.: TCEQ SWR No. 31547 [Union Pacific Railroad Houston Wood Preserving Works]

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

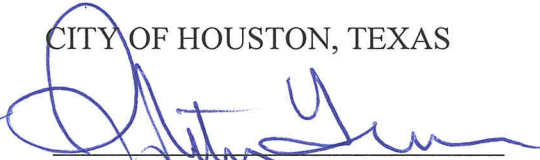
Executed this 9th day of June, 2017.

ATTEST:

CITY OF HOUSTON, TEXAS



Anna Russell
City Secretary



Sylvester Turner
Mayor of the City of Houston

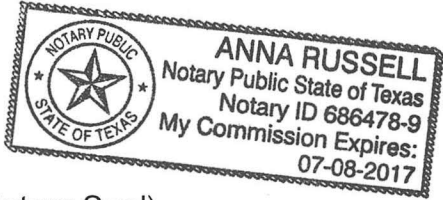
APPROVED AS TO FORM:



Phillip M. Goodwin, P.G.
Assistant City Attorney
LD#067-1600017-001

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

This instrument was acknowledged before me on the 9th day of June, 2017, by **Sylvester Turner, Mayor** of the **CITY OF HOUSTON, TEXAS**, a municipal corporation, on behalf of said corporation.



(Notary Seal)



Notary Public, State of Texas

Executed this 25th day of May, 2017.

Union Pacific Railroad Company [RESPONDER]

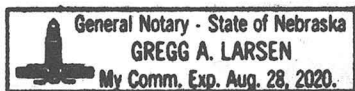
By: Tony K Love
Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §

DOUGLAS COUNTY §

BEFORE ME, on this the 25th day of May, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation [**responder**], known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25th day of May, 2017.



Gregg A. Larsen
Notary Public in and for the State of Nebraska
County of Douglas
My Commission Expires: August 28, 2020

Accepted as Third Party Beneficiary this _____ day of _____, 20__.

Texas Commission on Environmental Quality

By: _____

Name: _____

Title: _____

STATE OF TEXAS §
(_____) COUNTY §

BEFORE ME, on this the ___ day of _____, _____ personally appeared _____
[name], _____ [title], of The Texas Commission of Environmental Quality,
known to me to be the person whose name is subscribed to the foregoing instrument, and they
acknowledged to me that they executed the same for the purposes and in the capacity herein
expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20__.

Notary Public in and for the State of Texas,
County of _____
My Commission Expires: _____

EXHIBIT A

**CITY OF HOUSTON ROW PROPERTY SURVEY PLAT AND
DESCRIPTION (0.1318 ACRE PLAT)**

HARRIS COUNTY
TEXAS

HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32



FONTINOT STREET
(40' WIDE R.O.W.)
(30' WIDE ASPHALT PAVING)

GAGNE HOMESTEAD SUBDIVISION
VOL. 1, PG. 55
H.C.P.R.

ERASTUS STREET
(R.O.W. VARIES)
(30' WIDE ASPHALT PAVING)

FAIRGROUND SUBDIVISION
VOL. 81, PG. 460
H.C.D.R.

POINT OF COMMENCEMENT
FND. 5/8" I.R.
X=3136766.24
Y=13852368.70

LIBERTY ROAD (60' R.O.W.)
(1/2" WIDE CONCRETE PAVING)

N 85°28'45" E 690.36'
CONCRETE SIDEWALK
S 85°26'51" W 690.57'

POINT OF BEGINNING
X = 3136615.16
Y = 13852356.67

SUBJECT
0.1318 ACRE TRACT

TEXAS AND NEW ORLEANS
RAIL ROAD COMPANY
(100' R.O.W.)

T. & N. O. R. R. CO.
CALLED 55,922 S.F. TRACT
TRACT 2
VOL. 472, PG. 7
H.C.D.R.

T. & N. O. R. R. CO.
CALLED 5.79 ACRE TRACT
VOL. 50, PG. 535
H.C.D.R.

SURVEY PLAT OF
0.1318 ACRE TRACT

BEING A PORTION OF ALL THAT CERTAIN
CITY OF HOUSTON
60' WIDE LIBERTY ROAD
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

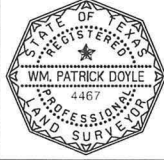
LINE DATA TABLE

#	BEARING	DISTANCE
1	N 1°54'53" W	8.51'
2	S 3°16'02" E	8.12'

I, Wm. PATRICK DOYLE, REGISTERED PROFESSIONAL LAND SURVEYOR,
DO HEREBY CERTIFY THAT THE ABOVE AND FOREGOING PLAT IS A TRUE
REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND,
AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY,
EXCEPT AS SHOWN HEREON.
DATE SURVEYED: APRIL 15, 2016.

NOTES:

1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.99989548017).
3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

PROJ. NO. 4410-16-01 SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCIAL STREET, CLEVELAND, TEXAS 77531
OFFICE: 979.265.7622 FAX: 979.265.9940 FIRM NO.: 10025500

SURVEYED: JDD 4-15-16 BOOK: DRAWN: VJL-1 IMAGE: NONE
DRAWN BY: JDD 5-18-16 CHECKED: JAN 6-20-16 REVISED:

USER: \\utmsrv01\wprstetter\jdd 4/15/16 4:13:13 PM
 C:\Users\jdd\My Documents\Environmental\UPRR Houston West\Harr-wil-2\16-01-2_Concrete Sidewalk 2.dwg



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY/CITY OF HOUSTON RIGHT-OF-WAY
0.1318 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 0.1318 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, being a portion of all that certain called 55,922 square foot tract of land (Tract 2) conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R. and a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 0.1318 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136766.24 and Y=13852360.25;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 151.57 feet to the southeast corner and the **POINT OF BEGINNING** of the herein described 0.1318 acre parcel, at position X=3136615.16 and Y=13852356.67;

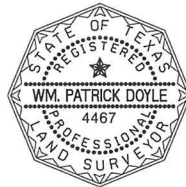
THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 690.57 feet to the southwest corner of the herein described 0.1318 acre tract, at position X=3135926.84 and Y=13852301.86;

THENCE North 1°54'53" West, a distance of 8.51 feet to a point for the northwest corner of the herein described 0.1318 acre tract, at position X=3135926.56 and Y=13852310.37;

THENCE North 85°28'45" East, a distance of 690.36 feet to a point for the northeast corner of the herein described 0.1318 acre tract, at position X=3136614.70 and Y=13852364.78;

THENCE South 3°16'02" East a distance of 8.12 feet to the **POINT OF BEGINNING**, containing 0.1318 acre of land, more or less.

Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 20, 2016



*This description is based on a survey, dated June 20, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Sidewalk tract 0.1318 acre.doc*

EXHIBIT B

PHYSICAL CONTROL MAINTENANCE/MONITORING REQUIREMENTS

EXHIBIT "B"
MAINTENANCE AND MONITORING

Through the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP), a Remedy Standard B remediation of the Property as detailed in the Response Action Plan (RAP) for the Union Pacific Railroad (UPRR) Houston Wood Preserving Works site (TCEQ SWR No. 31547/IHW Permit No. 50343) was implemented that included construction of a physical control using a concrete sidewalk cap (location detailed in Exhibit A). The concrete sidewalk was constructed following City of Houston Department of Public Works and Engineering Concrete Sidewalk Details for Streets with Curbs (07-01-2010). The concrete sidewalk will serve as a permanently placed cap atop contaminated soil present on the Property as defined in Exhibit A. The contaminated soil contains concentrations of chemicals of concern (COCs) benzo(a)pyrene and pentachlorophenol that exceed the TCEQ's Protective Concentration Levels. The concrete sidewalk cap will provide protection to human health and the environment throughout the post-closure care period.

UPRR will implement an inspection and maintenance program for the concrete sidewalk within the Property as shown on Exhibit A. The inspection and maintenance shall be conducted according to the Response Action Plan (RAP) dated November 21, 2014 (revised December 7, 2015) for the site or subsequently approved reports or TCEQ permits or written correspondence. Inspections will be performed by UPRR on a quarterly basis. The inspections will focus on evaluating the sidewalk for cracks or damage. If cracks are identified that allow exposure to the underlying soils, the cracks will be repaired and sealed in a manner consistent with the original plans and specifications following City of Houston guidelines for sidewalk construction. UPRR will submit annual reports to the TCEQ (unless this frequency is modified by subsequent TCEQ correspondence) documenting the inspections and any necessary repairs, maintenance, and/or replacement activities conducted to ensure the integrity of the physical control is being maintained and to ensure the continued effectiveness of the remedy.

RESPONSE TO COMMENT T41(3)

REVISED RESPONSE ACTION COMPLETION REPORT – REV. 1

Executive Summary	Page 1 of 4	
	ID No. SWR No. 31547	Report Date: 06/24/17 – Rev 1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Response Action Completion Report

Cover Page

Regulatory ID number (Solid waste registration number, VCP ID number, etc) SWR No. 31547
 check one: Initial RACR submittal for this on-site property Subsequent RACR submittal
 Report date: June 24, 2017 – Rev 1 TCEQ Region No.: 12

TCEQ Program (check one)

Corrective Action (Mail Code 127) Superfund PRP Lead (Mail Code 143)
 Voluntary Cleanup Program (Mail Code 221) Municipal Solid Waste Permits (Mail Code 124)
 Petroleum Storage Tank Program (Mail Code 137)

On-Site Property Information

On-Site Property Name: Union Pacific Railroad Houston Wood Preserving Works Site
 Street no. 4910 Pre dir: Street name Liberty Street type: Road Post dir:
 City: Houston County: Harris County Code: 101 Zip: 77007
 Nearest street intersection or location description: Site is located south of Liberty Rd. between Kashmere St. and Lockwood St, and north of Lee St.

Latitude: Decimal Degrees (circle one) North 29.787413
 Longitude: Decimal Degrees (circle one) West 95.321062


Off-Site Affected Property Information

Off-Site Affected Property Name:
 Street no. Pre dir: Street name: Street type: Post dir:
 City: County: County Code: Zip:
 Check if there are no off-site properties affected

Contact Person Information and Acknowledgement

Person (or company) Name: Union Pacific Railroad
 Contact Person: Geoffrey Reeder Title: Manager, Site Remediation
 Mailing Address: 24125 Aldine Westfield Road
 City: Spring State: TX Zip: 77373 E-mail address: GBREEDER@UP.COM
 Phone: 281-350-7197 Fax: 402-233-2351

By my signature below, I acknowledge the requirement of §350.2(a) that no person shall submit information to the executive director or to parties who are required to be provided information under this chapter which they know or reasonably should have known to be false or intentionally misleading, or fail to submit available information which is critical to the understanding of the matter at hand or to the basis of critical decisions which reasonably would have been influenced by that information. Violation of this rule may subject a person to the imposition of civil, criminal, or administrative penalties.

Signature of Person  Name, print: Geoffrey Reeder Date: 062217

using physical barriers such that on-site commercial/industrial and off-site residential pathways will not be exposed to concentrations of COCs in excess of the critical human health PCLs (§350.33(a)(1)). In addition, COC concentrations in the surface and subsurface soils will not create a leachate that will lead to cPCL exceedances at the alternate point of exposure wells within the proposed Plume Management Zone (PMZ) (detailed in the RAP, but not addressed in this RACR). Soil responses across the Site were implemented differently depending on the area within the Site, with controls placed in the following areas:

- Former Houston Wood Preserving Works (HWPW) Operational Areas: Surface soils with cPCL exceedances from the following Areas of Concern (AOCs) and Solid Waste Management Units (SWMUs) were excavated and consolidated within the Recent Process Area (SWMU 4), Original Process Area (SWMU 5) and AST Area (SWMU 8) under the Area of Contamination policy:
 - Inactive Wastewater Lagoon (AOC 6),
 - Location of the Former Incinerator (AOC 4),
 - Surrounding the Tank Car Storage Area (SWMU 7),
 - Oil/Water Separator (SWMU 11),
 - Areas north of the Recent Process Area (SWMU 4),
 - Areas north of the Original Process Area (SWMU 5) and
 - Areas north of the AST Area (SWMU 8)

Confirmation samples collected along the walls and base of the excavations verified that surface soil PCLE Zones were removed to cPCLs assuming commercial/industrial land use. In these areas where surface soils were excavated, the base of excavation confirmation samples also confirmed that the subsurface soils do not appear to be impacted above cPCLs. The areas excavated were backfilled with clean fill.

Two Remedy Standard B physical controls were constructed within the Former HWPW operational areas: 1) a Soil Cap and 2) an Asphalt Cap (roadway improvement). The Soil Cap construction includes installation of a vapor barrier, with geotextile fabric and placement of an engineered soil cap (12 inches of clayey soil and 6 inches of top soil) to cover the consolidated soil and remaining surface soil PCLE zone on the former operational areas. The Soil Cap is vegetated and sloped to minimize infiltration to control potential leachate migration from the surface and subsurface soils to the GWBUs. The Soil Cap serves to contain and prevent exposure to COCs above cPCLs within the surface and subsurface soil PCLE Zones at the Site.

The surface soil PCLE zone along the Southern Drainage Ditch (SDD) (SWMU No. 2), including the oil/water separator (SWMU 11) east of the former AST Area (SWMU 8), was capped in place using an asphalt cover (2.5-in thick over gravel road base) as part of a roadway improvement. The Soil Cap and Asphalt Cap will be maintained under the post-response action care period as detailed in the RAP (PBW, 2015).

- City of Houston Right-of-Way (ROW): The area immediately north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), and AST Area (SWMU No. 8) within the City of Houston right of way (ROW) between the UPRR property boundary and Liberty Road

Executive Summary

(approximately 8 feet wide and 550 feet long) was addressed through a combination of soil excavation of the top 9-inches (consolidated within the on-site soil-capped area) and construction of a physical barrier (concrete sidewalk) preventing contact with remaining surface soils and limiting infiltration. After the soils were excavated, UPRR constructed a concrete sidewalk approximately 8 feet wide and 690 feet long serving as the physical barrier covering the remaining surface soil PCLE zone within the City of Houston ROW. As part of the post-response action care detailed in the RAP (PBW, 2015), the concrete sidewalk will be inspected to ensure the physical barrier provides protection for residential receptors against exposure to the COCs above cPCLs in surface soils in this area.

- Englewood Intermodal Yard area: The surface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact with the soil PCLE Zone and infiltration. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be inspected to ensure continued on-site worker protection.
- UPRR Main Lines Ballast Area: The area between the former HWPW operational areas and the Englewood Intermodal Yard (approximately 100 feet width) is covered with railroad ballast, ties, and rail. UPRR will use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area.

The physical controls at the Site will be maintained and appropriate maintenance, repair of the caps will be performed as needed. UPRR will implement a health and safety program to restrict any construction activity within the capped areas. In the event construction activities are necessary, a health and safety plan and soil management plan will be implemented to ensure worker protection and proper management of soils with COCs above cPCLs.

Institutional controls were also implemented at the Site. The affected property was deed restricted to commercial-industrial land use and for the use of physical controls on surface soils in accordance with §350.31(g). A restrictive covenant was implemented for the concrete sidewalk cap area within the City of Houston ROW.

Checklist for Report Completeness

Checklist for Report Completeness

Use this checklist to determine the portions of the form that must be submitted for this report. Answer all questions by checking Yes or No. If the answer is Yes include that portion of the report. If the answer is No, do not complete or submit that portion of the report. All form contents that are marked "Required" must be submitted. Form contents marked with an asterisk (*) are not included in the blank form and are to be provided by the person.

Report Contents

	Required	Cover Page	<input checked="" type="checkbox"/>
	Required	Executive Summary	<input checked="" type="checkbox"/>
	Required	Checklist for Report Completeness	<input checked="" type="checkbox"/>
	Required	Worksheet 1.0 Confirmation of Response Action Objectives	<input checked="" type="checkbox"/>
	Required	Attachment 1A* Maps and Cross Sections	<input checked="" type="checkbox"/>
	Required	Attachment 1B* Graphs	<input type="checkbox"/>
	Required	Attachment 1C* Response Action Diagrams	<input type="checkbox"/>
No <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	Worksheet 2.0 Plume Management Zone	<input type="checkbox"/>
<i>Details provided in the Response Action Plan, Revision 3 – June 24, 2017</i>		Attachment 2A* Map of Plume Management Zone	<input type="checkbox"/>
No <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	Worksheet 3.0 Technical Impracticability	<input type="checkbox"/>
<i>Details provided in the Response Action Plan, Revision 3 – June 24, 2017</i>		Attachment 3A* Map of Technical Impracticability Area	<input type="checkbox"/>
No <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	Worksheet 4.0 Institutional Controls	<input checked="" type="checkbox"/>
	Required	Worksheet 5.0 Performance Measures and Problems	<input type="checkbox"/>
No <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	Worksheet 6.0 Operation and Maintenance	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	Worksheet 7.0 Post-Response Action Care	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	Appendix 1* References	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	Appendix 2* ESA and Compensatory Restoration	<input type="checkbox"/>
No <input type="checkbox"/>	<input checked="" type="checkbox"/> Yes	Appendix 3* Institutional Controls and Landowner Concurrence	<input checked="" type="checkbox"/>

Checklist for Report Completeness

ID No. SWR No. 31547

Report Date: 06/24/17
- Rev 1

Report Contents

No <input checked="" type="checkbox"/>	Is there data or boring/monitor well information not previously submitted?	<input type="checkbox"/> Yes	Appendix 4* Data Tables, Boring Logs, and Well Completions	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Did sampling procedures differ from those described in the RAP?	<input type="checkbox"/> Yes	Appendix 5* Sampling Procedures	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Has any sampling been conducted for which the analytical results were not previously submitted?	<input type="checkbox"/> Yes	Appendix 6* Laboratory Data Packages	<input type="checkbox"/>
No <input checked="" type="checkbox"/>	Were statistics or geostatistics used in the response action?	<input type="checkbox"/> Yes	Appendix 7* Statistical Methodology	<input type="checkbox"/>
No <input type="checkbox"/>	Were any wastes generated that were not reported through STEERS?	<input type="checkbox"/> Yes	Appendix 8* Waste Disposition	<input type="checkbox"/>

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 1 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

Use this worksheet to describe the attainment of the response action objectives in each media.

Response Action Objectives

What was the selected remedy standard for this affected property? A X B

List the environmental media to which this applies

Surface and subsurface soil (*groundwater to be addressed in separate RACR following approval of the RAP*)

Repeat this section for each medium that had a different response action objective.

Provide a detailed description of the response action. Describe the removal actions, decontamination actions, treatment system(s), physical or institutional control actions, and any actions for ecological considerations (ecological services analysis and compensatory restoration plans) that were conducted in each media and indicate if there were any differences between the actions taken and the actions proposed in the SIN or RAP.

The Response Action Objectives (RAO) for the surface and subsurface soil PCLE Zones is to control exposure through physical barriers such that commercial/industrial workers will not be exposed to concentrations of COCs in excess of the critical human health PCLs (§350.33(a)(1)). Prior to implementing the response action, the surface soil PCLE zone extended across the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), Water Treatment and Boiler System (SWMU 6), Aboveground Storage Tank Area (SWMU 8), Oil/Water Separators (SWMU 11), Location of the Former Incinerator (AOC 4), down the Southern Drainage Ditch (SDD) (SWMU 2), and across the Former Inactive Wastewater Lagoon (Area of Concern (AOC) 6). The surface soil PCLE Zone also extended north of the Site onto the City of Houston right of way (ROW) and south across the UPRR main lines and into the Englewood Intermodal Yard (as detailed in the Response Action Plan (RAP), PBW, 2015).

Three key approaches were implemented to protect commercial/industrial workers from exposure to COCs in surface and subsurface soils:

- Former HWPW Operation Areas: Using the Area of Contamination approach (as defined by the Affected Property (Attachment 1A-1)), surface soils with critical Protective Concentration Level (cPCL) exceedances (assuming commercial/industrial land use) near the Former Incinerator (AOC 4), in the Inactive Wastewater Lagoon (AOC 6), areas north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), and AST Area (SWMU No. 8) were excavated and consolidated in the area of SWMUs 4, 5, and 8 under the Soil Cap. The Soil Cap area was then covered with a vapor barrier with geotextile fabric and an engineered soil cap (12 inches of clayey soil and 6 inches of top soil) to prevent human exposure to the impacted soils above c PCLs. The surface soil PCLE zone along the Southern Drainage Ditch (SDD) (SWMU No. 2), including the oil/water separator (SWMU 11) east of the former AST Area (SWMU 8), was capped in place using asphalt cover (2.5-in thick over gravel road base) as part of a roadway improvement.
- Englewood Intermodal Yard area: The surface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact and infiltration. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be inspected to ensure continued on-site worker protection.
- UPRR Main Lines Ballast Area: The area between the former wood treating works area and the Englewood Intermodal Yard (approximately 100 feet width) is covered with railroad ballast, ties,

Confirmation of Response Action Objectives

RACR Worksheet 1.0

Page 2 of 16

ID No. SWR No. 31547

Report Date:
06/24/2017 – Rev 1

and rail. UPRR will use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area. Since this area is owned and controlled by UPRR, UPRR will implement a health and safety program to restrict any construction activity in the area of the railroad lines. In the event construction activities are necessary, a health and safety plan will be implemented to ensure worker protection from COCs in the surface soils.

To address potential exposure to surface soil PCLE Zone off-Site, the following will be implemented to protect residents (i.e. occasional trespasser) from exposure to COCs in surface and subsurface soils:

- **City of Houston Right of Way (ROW):** The area immediately north of the AST Area (SWMU No. 8) within the City of Houston right of way (ROW) between the UPRR property boundary and Liberty Road (approximately 7 to 8 feet wide and approximately 690 feet long) was addressed through a combination of limited soil excavation (placed within the capped area) and construction of a concrete sidewalk to restrict exposure to the surface soil PCLE zone. The soil excavation in this area was limited due to the presence of a high pressure natural gas pipeline within the ROW.

The Affected Property (including the entire Site (HWPW and Englewood Intermodal Yard)) (Attachment 1A-1) was also deed restricted for commercial-industrial land use, for the use of physical controls on surface and subsurface soil, and restrictions on soil excavation within the capped areas in accordance with §350.31(g).

Through the response actions implemented at the Site, the following SWMUs and AOCs were remediated either through surface soil excavation or capping through physical control:

SWMU	Description	AOC	Description
2	Southern Drainage Ditch	1	Diesel Storage Tank
4	Recent Process Area	4	Location of Former Incinerator
5	Original Process Area	6	Inactive Wastewater Lagoon
6	Water Treatment and Boiler System	7	Location of Former UST No. 44-023-21
7	Tank Car Storage Area		
8	Aboveground Storage Tank Area		
9	Location of Former UST No. 44-023-05		
10	Location of Former Sap Water Treatment Tank		
11	Oil/Water Separators		

Details of the response actions implemented at the Site are provided below.

Former HWPW Operation Areas

The response action for the surface soil PCLE zone at the Site was implemented through a combination of excavation and removal with consolidation and capping with a physical control (i.e., Soil Cap) under the Area of Contamination approach. The removal action was designed to remove surface soils containing chemicals of concern (COCs) at concentrations exceeding cPCLs. As detailed in the Affected Property Assessment Report (APAR), Updated Addendum dated March 2011 (PBW, 2011), on-site soil cPCLs were established for the Site by using the lowest of commercial/industrial PCLs for the following

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 3 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

pathways: $^{Tot}Soil_{Comb}$; $^{Air}Soil_{Inh-v}$ (Tier 1); and $^{GW}Soil_{Ing}$ (Tier 1 or 2). Comparing the maximum surface and subsurface soil analytical data to the critical commercial/industrial PCLs for on-site and residential PCLs for off-site, concentrations of the following COCs exceeded their respective critical PCLs (figures showing the Affected Property and PCLE Zone for each COC):

Surface Soils

- 1,2-Diphenylhydrazine (Attachment 1A-1-1)
- 2,4-Dinitrotoluene (Attachment 1A-1-2)
- 2-Methylnaphthalene (Attachment 1A-1-3)
- Benzene (Attachment 1A-1-4)
- Benzo(a)anthracene (Attachment 1A-1-5)
- Benzo(a)pyrene (Attachment 1A-1-6)
- Dibenzofuran (Attachment 1A-1-7)
- Fluoranthene (Attachment 1A-1-8)
- Naphthalene (Attachment 1A-1-9)
- Pentachlorophenol (Attachment 1A-1-10)
- Phenanthrene (Attachment 1A-1-11)
- Arsenic (Attachment 1A-1-12)
- Lead (Attachment 1A-1-13)

Of the COCs identified for surface soils, benzo(a)anthracene ($^{Tot}Soil_{Comb}$), benzo(a)pyrene ($^{Tot}Soil_{Comb}$), naphthalene ($^{Tot}Soil_{Comb}$), and pentachlorophenol ($^{GW}Soil_{Ing}$ (Tier 2)) are the most prevalent across at the Site and typically define the surface soil PCLE zones. However, with the revised PCLs issued by the TCEQ on March 31, 2017, the $^{Tot}Soil_{Comb}$ PCLs for benzo(a)anthracene and benzo(a)pyrene were significantly increased, thereby reducing the PCLE Zone that required a response action.

Prior to implementing the response action for the surface soil PCLE zone at the Site, additional soil samples were collected in April 2015 (soil borings SB-156 through SB-211) and January-February 2016 (soil borings around the perimeter of the areas to be excavated detailed below) to confirm the surface soil PCLE zones to be addressed through the response action (Appendix 4, Table 1). Based on the soil analytical data, the following surface soil PCLE zones or areas were excavated (Attachment 1A-1) as part of the Area of Contamination:

- Area A - areas north of the Recent Process Area (SWMU 4), Original Process Area (SWMU 5), and AST Area (SWMU No. 8);
- Area B – Surface soil hotspot located west of Area A;
- Area C – area with elevated COC concentrations near the Location of the Former Incinerator (AOC 4)
- Area D, E, & F – areas in the Former Inactive Wastewater Lagoon (AOC 6); and
- Area G – within the drainage ditch downgradient of the Southern Drainage Ditch (SWMU 2).

Details of the response actions conducted under the Area of Contamination are provided below. A photo log of the construction activities is provided in Appendix 1-B.

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 4 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

Site Preparation

Prior to response action activities, silt fencing was installed around the areas to-be disturbed including the areas of excavation (Areas A-G) and the Soil Cap area. The Soil Cap area was then mowed to remove the tall grass and vegetation in order to expose all structures, foundations and other debris that needed removal. The existing monitoring wells within the Soil Cap area were either plugged and abandoned by a licensed well driller or barricaded for protection if they were to remain. Several concrete structures (containment walls, foundations, footings, etc.) within the areas of excavation or Soil Cap were pulverized into smaller pieces and placed in the center of the Soil Cap area. Trees and underbrush covering Areas D, E and F on the western end of the property were shredded (mulched) down to ground level. The tree root balls were excavated with the contaminated soils and disposed of within the Soil Cap. In order to access Areas D, E and F due to wet and muddy conditions, wooden mats were purchased and placed on the haul route to eliminate mud/soil from being tracked out of the contaminated areas on the wheels and tracks of haul trucks and equipment. Plastic sheeting was also placed beneath the wooden mats in order to provide a barrier between the soil and wooden mat.

Excavation, stockpiling, and placement of impacted soils within the Soil Cap Area

The surface soils within the public right-of-way of Liberty Road (from the back of curb to the HWPW property line) were excavated to a depth of approximately 9 inches for the sidewalk and 12 inches for the side slope area in preparation for the concrete sidewalk and side-slope. The excavated soils were transported to the Site, stockpiled on the eastern portion of the Soil Cap area, and kept covered with 6-mil plastic sheeting until final placement during cap construction.

The surface soils from Areas B, C, D, E and F were excavated to the vertical extent of the PCLE zone, five feet below grade. For most of Area A, the surface soils within the top 5 feet below grade were excavated. While excavating the surface soils from Area A on the eastern portion, several cast iron water lines were encountered at a depth of approximately 3.5 feet below grade. Excavation activities in this area ceased at the top of the underground water lines. Soil samples were collected at that depth, which resulted in concentrations being below the applicable cPCLs. No additional excavation was necessary in that area of Area A. Area G consisted of a drainage ditch where the side-slopes and bottom were excavated to approximately 3 feet below grade due to excavation activities encroaching into the supporting soil for the rail main line and underlying fiber optic utilities. Soil samples were collected at that depth, which resulted in concentrations being below the applicable cPCLs. Soils from the areas of excavation were excavated, loaded into haul trucks and transported to the Soil Cap area for placement using precautionary measures in order to eliminate any loss of soil. Excavated soils that were stockpiled within the Soil Cap area were kept covered using 6-mil plastic sheeting until they could be placed (levelled and compacted) during cap construction.

Based on spot elevations and post-excavation surveys, the following volumes of soil were excavated from the individual corrective action areas:

Excavation Area	Estimated Volume (cubic yards (cyds))
City of Houston ROW	144
Area A	4,061
Area B	713
Area C	463
Area D	852
Area E	537
Area F	1,347
Area G	280

Approximately 8,400 cubic yards (in-place) of soil were placed within the Area of Contamination near SWMUs 4, 5 and 8 and covered with an engineered Soil Cap, detailed later in this section.

In addition to the eight excavation areas, surface soils were also excavated near soil boring SB-107 located south the AOC 6 to remove a small hot spot of impacted soils above cPCLs in the drainage ditch. Approximately 6 cubic yards of soil were removed from this area and placed within the Soil Cap area.

The response action also included addressing two oil/water separators (SWMU 11) (buried tank car and concrete sump) that were to be cleaned out and filled in or removed. The concrete oil/water separator near the access road was cleaned out, visually inspected for residual waste, and backfilled with clean fill material. The top portion was then capped with concrete and the asphalt surfacing of the roadway improvement (asphalt cap). The original plan for the buried railcar oil/water separator was to be cleaned out, removed from the ground and disposed of properly. Due to the proximity of the buried tank car to two CenterPoint gas lines (6-in and 8-in lines) within the Liberty Road right-of-way, the original plan was changed to close the railcar in place by removing all soil from the tank car, and then backfilling and covering. The railcar separator was cleaned out using the mini-excavator and long-reach shovels, residual soils in the tank car were sampled (Appendix 4 – Table 1), then it was backfilled with flowable fill (cement stabilized sand) (bottom 2/3rd of the tank), clean sand (top 1/3rd), and covered with clean backfill to match surrounding grade.

During the excavation of Area A, a storm water drain pipe was encountered about 4 to 5 feet below grade running parallel with the north boundary of the excavation area and sloping from west to east. Approximately 350 feet of corrugated drain pipe (24-in diameter) was removed during the excavation activities to remove the surface soil in that area. Once the drain pipe sloped to below 5 feet below grade, the remainder of the drain pipe was left in place. Following excavation activities, the drain pipe was reinstalled using new, 24-in diameter corrugated pipe and sand backfill around the pipe. In addition, a storm drain inlet was discovered within the Soil Cap area. The drain was filled with a concrete plug and covered with plastic sheeting to prevent any migration of soils into the storm drain.

During excavation activities in Areas A, B, and C, numerous railroad ties were encountered. The railroad ties were transported to the soil cap area where the soil remnants on the ties were removed. The railroad ties were then loaded into roll-off bins and transported to a licensed landfill facility for disposal (see Waste Management section for details).

Verification Sampling

Verification sampling was performed at each of the excavation areas following excavation of soils to ensure that the affected soils containing COCs at concentrations in excess of the applicable cPCLs were removed. Both sidewall and bottom of excavation samples were collected from each excavated area and analyzed for the list of site-specific semi-volatile organic compounds (SVOCs) by EPA Method 8270. Site-specific volatile organic compounds (VOCs) such as benzene were not analyzed in the confirmation samples since none of the site-specific VOCs exceeded cPCLs in the areas that were excavated. The soil response action verification samples analytical results are summarized in Appendix 4, Table 2. Laboratory data packages and data usability summaries are provided in Appendix 6. The locations of verification samples and the COC concentrations in the verification samples are shown on Attachment 1A-2 through Attachment 1A-26.

Confirmation samples from the walls of the excavations were collected using the excavator bucket where the depth of excavation was five feet or more. For the excavations where the depth was less than five feet, an excavator bucket was used if the field technician was not able to gain access to the excavation safely. The excavator operator would make sure the bucket was clean (no soils clinging to it), then would scrape the face of the excavation wall from bottom to top, collecting soil within the bucket. In order to confirm that the samples were not affected by the bucket, all soils used in the composite samples were from portions that were not in contact directly with the bucket. Based on the wall length of each excavation, multiple samples were collected in order to keep the interval distance between samples less than 50-feet (Attachment 1A-2 through Attachment 1A-26.). In two locations (southwest corners of both Areas A and B), the initial verification sample concentrations indicated that additional soil removal was required to meet response action objectives. Additional surface soil was excavated in these areas, and verification sampling was repeated to confirm that impacted soils with COC concentrations greater than cPCLs had been removed.

Bottom or floor samples from the base of the excavations were also sampled to evaluate any potential subsurface soil PCLE zones under the areas excavated. Most of the bottom samples were collected at 5 feet below grade, with exceptions in Areas A and G as previously discussed.

COC concentrations in the confirmation samples were below response action criteria in all of the verification samples collected from the original soil excavation areas, except for the southern portion of the west sidewall of Area A (Attachment 1A-2) and the western portion of the south sidewall of Area B (Attachment 1A-3). In both of these areas, additional surface soils were excavated and verification samples were collected. The additional excavation removed the surface soil PCLE Zone as confirmed with the additional confirmation soil samples collected along the excavation walls.

Clean, Fill Material for Excavations

Fill material that was free of trash, rubbish or other deleterious substances from an off-site location was used to backfill all excavated areas. Prior to bringing the material on-site, analytical testing was performed to ensure that the fill material was free from contamination. One representative soil sample was collected for every 5,000 cubic yards, or fraction thereof, of fill material from the source location. The source location's geographical coordinates (latitude/longitude) were also recorded for verification

Confirmation of Response Action Objectives

RACR Worksheet 1.0

Page 7 of 16

ID No. SWR No. 31547

**Report Date:
06/24/2017 – Rev 1**

purposes. A copy of the analytical report for the clean backfill samples is provided in Appendix 6. Subcontracted haul trucks were used to transport the material from the source location to the Site. The backfill operations were coordinated in order to have the haul trucks dump the clean fill material directly within the excavated areas or adjacent to them. A bulldozer was used to evenly spread the clean backfill material within each excavation in maximum loose lifts of 8-inches. Compaction efforts for each lift consisted of several passes of tracking/compacting by the approximately 50,000-lb bulldozer until the areas of excavation approximately matched pre-construction topographic elevations. Several inches of top soil was then placed over the backfilled areas in order to enhance the re-establishment of grass and vegetation on the disturbed areas. The backfilled areas were also sloped to allow adequate storm water draining and limit ponding in these areas.

Soil Cap Construction

The engineered Soil Cap consisted of the following construction design as detailed in the RAP (December 2015) and provided in Attachment 1C:

- Placed a 6-mil thick plastic vapor barrier over the impacted soils,
- Covered the vapor barrier with geotextile fabric to protect the barrier during construction,
- Placed a minimum of a 12-inch layer of protective (clayey) soil,
- Placed a 6-inch layer of topsoil on top of the protective layer, and
- Reseeded the topsoil with a mixture of grasses and pollinator plants.

The purpose of the Soil Cap is to provide on-site worker protection from impacted soil with COC concentrations exceeding cPCLs using a physical barrier covering the consolidated soils and materials from the excavated areas and the remaining surface soil PCLE Zones within the former HWPW SWMUs 4, 5, and 8. The first phase in the construction of the Soil Cap consisted of placing the excavated soils from the City of Houston ROW along Liberty Road and Areas A through G within the limits of the cap area. Once the soils were consolidated within the cap area, a bulldozer was used to level and compact the excavated soils, starting from the west side of the cap area and progressing eastward. The bulldozer operator utilized GPS technology to match the engineered design of the cap. After the excavated soils were graded, a 6-mil thick plastic vapor barrier was installed to cover the contaminated soils. Immediately after the installation of the vapor barrier, a geotextile fabric was placed directly on top of the plastic barrier and then both layers were held in place using sandbags and/or mounds of the protective clay material. Edges of the vapor barrier and geotextile fabric were overlapped by a minimum of 24-inches to ensure a suitable seal.

The protective clay soil and topsoil materials were both from off-site sources and required the same analytical testing and source documentation as the backfill material previously discussed. Both soil materials were free of deleterious material, materials toxic to plant growth, rocks and other debris. A subcontracted trucking company was used to transport both the protective clay soil and topsoil from each source to the project Site. The protective clay soil layer was placed in one 12-inch lift by the bulldozer to match the design elevations using GPS technology mounted on the equipment. The topsoil layer was also placed in one 6-inch lift on top of the protective soil layer by the tracked bulldozer. No direct compaction effort was required for either soil layer besides the compaction of the tracked bulldozer. The designed volume of the engineered Soil Cap was approximately 10,000 cubic yards, but the overall volume of contaminated soils removed during excavation was approximately 8,400 cubic yards. In order to match

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 8 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

the design grades of the plans on the eastern portion of the Soil Cap, the protective clay layer thickness was increased to reach the designed final grade.

Once the Soil Cap construction was completed, a topographic survey was conducted for the capped area. The post-construction topographic survey of the Soil Cap is provided in Attachment 1C-1 (As-Builts).

The south boundary of the Soil Cap was bounded by the existing concrete barriers, which were used in some areas as a retaining wall for the capping soils. Approximately 6-inch wide spaces were left between each concrete barrier and concrete blocks, filter fabric and hot mix asphalt were placed within the spaces to hold back any soils, but allow for runoff from the Soil Cap to be released.

No contaminated soils were placed within a six foot radius of each existing monitoring well that remained within the Soil Cap area. Each well was surrounded with clean backfill or protective clay and then covered with the 6-inch layer of topsoil.

Asphalt Roadway Improvements

To address the former SWMU 2 Southern Drainage Ditch, the asphalt cap was constructed over existing road base material that was already present in the area to serve as an asphalt roadway or access road for railroad personnel to signal boxes located near the UPRR rail siding track south of the SWMU 2 area. The asphalt cap construction consisted of grading, and filling as necessary, the existing gravel surface and placement of a minimum 2-inch thick, 16-foot wide hot mix asphalt surface on the access road along the south side of the former HWPW area and on the north side of the UPRR Main Line Railroad Ballast area. The grading of the access road was performed by the bulldozer in order to meet the required 2% cross slope from the north side to the south side to allow storm water to drain away from the Soil Cap area. The north side of the asphalt cap is bound by the concrete barriers that make up the south boundary of the Soil Cap. In addition to the asphalt cover, railroad ballast rock was placed along the entire length of the access road to tie the asphalt surface to the edge of railroad ballast along the UPRR rail siding track, just north of the west-bound main line rail. The asphalt roadway construction also included the installation of a concrete low water crossing near the southwest end of the asphalt cap (Attachment 1C).

Concrete Sidewalk and Side-Slope Construction – City of Houston ROW

The concrete sidewalk and concrete side-slope construction took place within the City of Houston Liberty Road right-of-way from the back of curb to the UPRR property line. The width of the area varied from 7 to 8 feet wide and the total length measured approximately 691-feet. The construction of the five foot wide concrete sidewalk consisted of excavating approximately 9-inches of soil, which was stockpiled on the eastern end of the Soil Cap area until placement. Approximately 3-inches of clean sand material sourced off-site was placed at the bottom of the excavated area and then the wooden forms and reinforcing steel were placed and concrete poured. The concrete sidewalk is approximately 6 inches thick. The concrete side-slope installed between the sidewalk and the UPRR property boundary was excavated to 12-inches in depth along the UPRR property line (beneath the chain-link fence). The excavated soil was also stockpiled and kept covered on the eastern end of the Soil Cap area until final placement during cap construction. The forms and reinforcing steel were then installed and the concrete was poured for the side-slope.

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 9 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

Security Fencing

The existing six-foot tall chain-linked security fence along Liberty Road remained in-place during the entirety of the construction project for security purposes, but a section of the fence was replaced due to damages that were not project related. Approximately 1,540-feet of new six foot tall chain-linked security fencing was installed along the west property boundary in order to restrict unauthorized access to the UPRR property. The route of the new fence along the west side of the property was heavily wooded and required clearing an approximate ten foot wide strip along the perimeter of UPRR’s property.

Site Restoration

Site restoration at the site after construction and land disturbing activities were completed consisted of seeding the Soil Cap and disturbed areas using broadcast seeding and no-till drilling methods. The Soil Cap area was seeded with a mixture of grasses (Bermuda and Millett) and pollinator plants (Cosmos and Milkweed). The areas of excavation that were backfilled were seeded with only the grass mix. All disturbed areas were then hydromulched using a mixture of water, liquid fertilizer, seed, inoculant, tackifier and cellulose fiber. Shortly after the areas were seeded in late April, the Houston area received heavy rainfall in May 2016, which allowed significant growth of the vegetation in the capped and excavated areas (see photos in Appendix 1C-2).

Describe how the response action achieved the property-specific response objectives for the PCLE zone in each media in the context of the response objectives set forth in §350.32 or §350.33, as applicable. Explain how the response action was appropriate based on the hydrogeologic and COC characteristics. Describe any unprotective conditions that continued or resulted from the remedial actions and the actions taken to mitigate unprotective conditions.

Response objectives were achieved at each surface soil PCLE Zone by physical removal of affected soil or through consolidation and capping of the impacted soils using a physical barrier within the Soil Cap Area under the Area of Contamination approach. For the seven excavation areas (Areas A through G), which were backfilled with clean import fill, surface soils PCLE zones were effectively remediated under a Remedy Standard A response objective as demonstrated through verification sampling, with the only control necessary for those areas being an institutional control limiting future land use to commercial/industrial. Except for the City of Houston ROW sidewalk area, none of the other excavated areas require a physical control.

For the Soil Cap Area, Asphalt Roadway Cap, and City of Houston ROW Sidewalk areas, the response actions achieve Remedy Standard B response objectives through physical controls to prevent exposure to concentrations of COCs in the environmental media in excess of commercial/industrial critical human health PCLs. The Soil, Asphalt, and Concrete Sidewalk caps will contain the COCs by eliminating pathways such as; dermal contact/ingestion of soils, inhalation hazards (dust), and restricting leaching of COCs to storm water or groundwater. In addition, for the Soil Cap area, a vapor barrier was installed to restrict potential migration of vapors (specifically, naphthalene concentrations in surface/subsurface soils that indicated a potential for migration to outdoor air). The Soil Cap was

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 10 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

vegetated to restrict erosion of the soil cap and resulting possible exposure to the impacted soils. The Asphalt and Concrete Sidewalk Caps were constructed to prevent erosion and exposure to impacted soils under the cap material. In addition, institutional controls will be in place to prohibit disturbance of the caps. The combination of these measures, along with long-term maintenance of the Soil, Asphalt, and Concrete Sidewalk caps, as well as the existing Railroad Ballast Cap and Englewood Intermodal Yard Concrete Cap, will reliably contain the soil COCs over time and prevent human health exposure to the COCs above critical human health PCLs.

If different from the information provided in the RAP, explain how the COCs were handled, treated, disposed, or transferred to another media and document that the response action did not result in any additional exposure conditions due to response action activities.

The response actions for the surface soil PCLE Zones detailed in the RAP were implemented at the Site, except for the removal of the oil/water separators (SWMU 11). As previously discussed, the soil within and around the sides of the buried tank car separator was excavated and placed within the Soil Cap Area. The buried tank car was then backfilled with a flowable fill, clean sand, and clayey backfill within and around the tank car. Soil within the at-grade concrete oil/water separator located east of SWMU 8 was also excavated and the concrete structure was backfilled with clean fill and covered with the Asphalt Cap.

During consolidation activities, Site workers operated under a site-specific health and safety plan (HASp) and impacted soils will be consolidated within the surface soil Affected Property. Storm water protection (i.e., Storm Water Pollution Prevention Plan (SWPPP), silt fencing) activities were conducted during remediation activities to ensure the activities did not result in additional exposure conditions. During excavation and stockpiling activities within the Soil Cap area, impacted soils were covered with plastic to limit exposure to storm water during rainfall events. Dust suppression activities (with subsequent air monitoring and sampling activities after February 10, 2016) were implemented to control the potential migration of dust from the Site. Initial air monitoring during construction activities was conducted using visual observations and a photoionization detector (PID) to evaluate occupational exposures to potential vapors encountered during the excavation activities. After discussions with the TCEQ, an Air Monitoring Sampling and Analysis Plan (SAP) dated February 9, 2016 (provided in Appendix 5) was developed to establish real-time air monitoring downwind of dust-producing operations both at the excavation site and at the perimeter of the rail yard. The purpose of this monitoring was to identify those operations, if any, with the potential to generate dust above the site-specific action levels (as outlined in the Air SAP) and implement near immediate corrective action to minimize dust generation and offsite dust migration. To supplement real-time air monitoring efforts, analytical air samples were collected for PM₁₀ and polycyclic aromatic hydrocarbons (PAHs) at locations downwind of remediation operations. In contrast to real-time methodology, analytical air samples are capable of making chemical-specific measurements (for PAHs) and are able to achieve sufficiently low limits of analytical sensitivity. Daily air samples were collected and analyzed for from February 10 through March 8, 2016. As discussed in the CTEH Air Monitoring and Sampling Report (Appendix 5), throughout the monitoring there were no action level exceedances of the TCEQ Air Monitoring Comparison Values (AMCVs) for the Site-specific PAHs (PAHs) that were tested

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 11 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

during the daily air analytical monitoring (Appendix 5). Once the handling of impacted soil was completed, the Air SAP was revised on March 8, 2016 to eliminate the air analytical sampling and to continue real-time monitoring for particulate matter (PM₁₀). The TCEQ approved the revised Air SAP and Dust Control Plan on March 9, 2016. Throughout the real-time PM₁₀ monitoring that began on February 10, 2016 and ended on April 28, 2016, there were no exceedances of the stop work action levels detailed in the Air SAP, indicating that the dust suppression activities during the remediation activities did not result in any additional exposure conditions.

During the excavation of Area A, a storm event occurred where storm water accumulated within the excavation. Approximately 9,000 gallons of storm water was removed from the excavation and was containerized in a frac tank located on site. The storm water was characterized, and determined not to contain any of the listed hazardous waste constituents related to the Site above human health levels (i.e., storm water was evaluated through the “contain-in” determination as detailed in a letter dated March 23, 2016 that was confirmed by the TCEQ Waste Permits Division in a letter dated April 1, 2016 (Appendix 8)). The containerized storm water was characterized, profiled, and properly disposed of at Republic Services McCarty Road Landfill.

Explain how the response action achieved the objectives within the reasonable time frame.

The response action achieved the response action objectives of protection of human exposure to impacted surface soils above the critical human health PCL. The construction phase of the project began in early January 2016 and was completed in early May 2016. The required deed recordation for the various capped areas was also completed, thereby finalizing the on-site soil response actions for the Site. UPRR is awaiting the restrictive covenant for the City of Houston Right of Way area capped with the concrete sidewalk.

For the Englewood Intermodal Yard and rail ballast area, surface soils were left in place. A physical barrier (concrete and/or railroad ballast/ties/rail) is already in place to prevent exposure to surface soil in that area.

For the entire Affected Property, deed restriction of the Site to commercial-industrial use will also be implemented to prevent future exposure risk. The deed notice will be filed with the Harris County Clerk upon approval of the RAP. In accordance with the TCEQ regulatory guidance document *Institutional Controls Under TRRP* (RG-366/TRRP-16), proof of filing would be submitted to the TCEQ within 120 days of approval of the RAP.

Were physical controls used as part of the response action? X Yes No
If yes, describe the type and purpose of the physical control and discuss how the physical control has proved effective.

The following physical controls were constructed or already in-place and will be effective in protecting human health and the environment at the Site:

- Former HWPW area: To protect on-site commercial/industrial receptors from the surface and subsurface soil PCLE Zone, the Soil Cap was constructed using a vapor barrier (6-mil plastic) with geotextile fabric, and an engineered soil cap (12-in clayey soil, 6-in topsoil) to cover the consolidated soil and surface and subsurface soil PCLE Zones (Attachment 1C). Approximately 19,000 cyds of clayey soil and top soil were used for the construction of the Soil Cap. The Soil Cap was then vegetated (with a pollinator /grass mix to attract pollinators in the area) and sloped to minimize infiltration over the surface/subsurface soil PCLE Zone. The vegetated cap will be maintained under the post-response action care to ensure no exposure to the soils with COC concentrations greater than cPCLs. Signs will be posted with language stating restrictions on construction activity within the capped area.

For the SDD (SWMU 2) along the southern boundary of the HWPW, UPRR constructed the Asphalt Cap to serve two purposes: 1) as a roadway for railroad operations (i.e. signals, locomotive crew change out); and 2) to protect on-site commercial/industrial receptors from surface soils with COC concentrations above cPCLs. The Asphalt Cap construction consisted of grading the existing road material, compacting and stabilizing the existing road material, and applying a hot mix asphalt with at least 2-inches minimum cover approximately 16 feet wide over the length of the roadway. The Asphalt Cap, which will restrict infiltration, was constructed to drain storm water away from the Soil and Asphalt Cap areas. The Asphalt Cap will be maintained under the post-response action care to ensure no exposure to the soils within the soil PCLE Zone covered by the cap. Signs will be posted with language stating restrictions on construction activity within the capped area.

- City of Houston ROW: The Concrete Sidewalk Cap serves as a physical barrier within the off-site area immediately north of the AST Area (SWMU No. 8) within the City of Houston ROW between the UPRR property boundary and Liberty Road (approximately 7 to 8 feet in width). The concrete sidewalk (~690 feet long and approximately 6-inches thick) restricts exposure to the remaining surface soil PCLE zone within this area. The concrete sidewalk will be routinely inspected as part of the post-response action care to ensure no exposure to the underlying soils with COC concentrations above cPCLs in this area. An institutional control will be placed on the City of Houston ROW to maintain the physical control on surface soils (Appendix 5), and signs will be posted with language stating restrictions on construction activity within the capped area.
- Englewood Intermodal Yard area: The surface and subsurface soil PCLE zone in the Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact with impacted soils for on-site workers. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be routinely inspected to ensure on-site worker protection. Attachment 1A-1 shows the Soil Affected Property and its location beneath the concrete parking lot on the Site. In addition, storm drains within the proposed response action area will be inspected and sediment in the drains if present will be sampled to evaluate if COCs from surface soils have migrated into the storm water drainage system.

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 13 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

- UPRR Main Lines Ballast Area: The area between the former HWPW area and the Englewood Intermodal Yard (approximately 100 feet width) is covered with railroad ballast, ties, and rail. UPRR will use the existing railroad ballast as an engineering control for preventing on-site worker exposure to impacted surface soils in this area. The railroad ballast area will be maintained as part of normal railroad operations. The track is owned and controlled by UPRR.

For each of these areas, signs will be posted with language stating restrictions on construction activity within the capped areas. In the event construction activities are necessary within a capped area, a health and safety plan will be implemented to ensure worker protection from COCs in the underlying surface soils and a soil management plan will be developed if soils are excavated as part of the construction activities.

Soil Response Action Objectives

When using removal and/or decontamination with controls or controls only, demonstrate that the physical control or combination of measures reliably contained COCs within and/or derived from the surface soil and subsurface soil PCLE zone materials over time.

Physical controls (various caps) in conjunction with an institutional control (deed notice/restrictive covenant) will permanently contain the COCs in the surface and subsurface soils. The Soil Cap, Asphalt Cap, Concrete Sidewalk Cap, and Englewood Intermodal Yard Concrete Cap will contain the COCs by eliminating pathways such as; dermal contact/ingestion of soils, inhalation hazards (dust), and leaching of COCs to storm water or groundwater. The UPRR Main Line Railroad Ballast Cap Area will also contain the COCs by eliminating pathways such as; dermal contact/ingestion of soils, and inhalation hazards (dust). Storm water will likely infiltrate the soils underlying the ballast material and could leach COCs into the shallow groundwater. However, with the proposed Plume Management Zone (PMZ) detailed in the RAP, the infiltration will not lead to either growth of or migration of the groundwater PCLE Zone in the shallow groundwater bearing unit (GWBU) A-TZ.

The caps will prevent erosion of the impacted soils from the Site to nearby drainage(s). The institutional control will be in place to prohibit disturbance of the caps. The combination of these measures, along with long-term maintenance of the caps detailed in the post-closure care will reliably contain the COCs over time.

Explain how the removal or decontamination action reduced the concentration of COCs to the critical surface soil and subsurface soil PCL throughout the soil PCLE zone and prevented COC concentrations above the critical soil PCLs from migrating beyond the original boundary of the soil PCLE zone.

For the excavation areas (Areas A through G), which were backfilled with clean imported fill, surface soils with COC concentrations above cPCLs were effectively reducing the COC concentrations below cPCLs in these areas under a Remedy Standard A response objective as demonstrated through verification sampling, with the only control necessary for those areas being an institutional control limiting current and future land use to commercial/industrial. During the construction activities, storm water protection activities were conducted to ensure the activities did not result in COCs in soils

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 14 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

migrating beyond the existing soil PCLE Zones. During excavation of surface soils and stockpiling activities (prior to final grading and covering) within the Soil Cap area, impacted soils were also covered with plastic to limit exposure to storm water during rainfall events. Storm water that accumulated in the excavation was containerized, characterized, and properly disposed of in accordance with stated and federal rules and regulations. Dust suppression activities were also implemented within the construction area to control the potential migration of dust from the Site, as confirmed through air monitoring activities (Appendix 5).

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 15 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

Groundwater Response Action Objectives

Name of groundwater-bearing unit to which this information applies *Will be addressed in separate RACR*

Repeat this section for each groundwater-bearing unit for which a different response action was conducted.

Groundwater classification	1	2	3	
	_____	_____	_____	

Was a modified groundwater response action used for any part of the groundwater PCLE zone (§350.33(f)(2), (3), or (4))? Yes No

If yes, complete the appropriate portions of this report.

Explain how the removal or decontamination actions reduced the concentration of COCs to the critical groundwater PCL throughout the groundwater PCLE zone and prevented COC concentrations above the critical groundwater PCL from migrating beyond the original boundary of the groundwater PCLE zone. If COC concentrations above the critical groundwater PCL ever migrated beyond the original boundary of the groundwater PCLE zone, explain the actions taken to address the increase in the PCLE zone.

Explain how the response action prevented COCs from migrating to air at concentrations above the PCLs for air if the groundwater-to-air PCLs (^{Air}GW_{Inh-V}) were exceeded.

Explain how the response action prevented COCs from migrating to surface water at concentrations above the PCLs for groundwater discharges to surface water if surface water was a factor.

Explain how the response action prevented human and ecological receptor exposure to the groundwater PCLE zone.

Confirmation of Response Action Objectives	RACR Worksheet 1.0	Page 16 of 16
	ID No. SWR No. 31547	Report Date: 06/24/2017 – Rev 1

Waste Management

Describe the volume and final disposition or reuse location of waste or environmental media that was removed from the affected property during the response action, if not previously reported under STEERS. Provide copies of all manifests, other documentation of disposition, and landowner consent for reuse of soil in Appendix 8.

The wastes generated at the Site as a result of the project included non-hazardous wastes such as weathered timber cross ties, storm water, and concrete and construction debris. The volumes of the non-hazardous wastes removed consisted of the following:

- Approximately 9,000 gallons of petroleum-affected storm water (Manifest #2971873 and #2971874). Storm water was evaluated through the “contained-in” determination as detailed in a letter prepared by PBW dated March 23, 2016 that was confirmed by the TCEQ Waste Permits Division in a letter dated April 1, 2016 (Appendix 8);
- Approximately 180 cubic yards of weathered timber cross ties (Manifest #2971859 - #2971861 and #2971867 - #2971872); and
- Approximately 20 cubic yards of concrete and construction debris (Manifest #2876428 - #2876429).

These non-hazardous wastes from the Site were transported to the nearby Republic Services’ McCarty Road Landfill by Stericycle Specialty Waste Solutions, Inc. Copies of the waste manifests and documentation are provided in Appendix 8. Other non-hazardous wastes generated during the project construction consisted of general household trash which included paper, cardboard and miscellaneous other wastes.

The hazardous wastes generated during the project included recovered creosote and water, petroleum contaminated solids, F034 soil cuttings, steel pipe with creosote residue, empty poly tote, soiled personal protective equipment (PPE), and PVC pipe. The volumes of the hazardous wastes removed consisted of the following:

- Two drums (55-gallons each) of PPE and PVC Pipe pieces (Manifest #009007780);
- Seven drums (55-gallons each) of creosote liquid waste (F034) (Manifests #009007781, #009550758 and #009004982);
- One empty poly tote that was used to temporary store creosote sludge (Manifest #009550758);
- Approximately 10 cubic yards of solid waste (F034) (Manifest #009549457);
- One drum (55-gallons) of soil and creosote (Manifest #009549679); and
- Approximately 3 cubic yards of steel pipe with creosote residue (Manifest #003182983).

All of the wastes except for the steel pipe were transported from the site to Clean Harbors’ Deer Park Incineration Facility in La Porte using Clean Harbors’ equipment and personnel. The steel pipe was transported to Chemical Waste Management’s Lake Charles Landfill by Chemical Waste Management Transportation. Copies of the waste manifests and documentation are provided in Appendix 8. The hazardous wastes will be entered into the TCEQ STEERS system under SWR No. 31457.

ATTACHMENT 1A

MAPS AND CROSS SECTIONS

Attachment 1A-1 – Affected Property Map

Attachment 1A-1-1 Surface Soil Concentration Map - 1,2-Diphenylhydrazine

Attachment 1A-1-2 Surface Soil Concentration Map - 2,4-Dinitrotoluene

Attachment 1A-1-3 Surface Soil Concentration Map - 2-Methylnaphthalene

Attachment 1A-1-4 Surface Soil Concentration Map - Benzene

Attachment 1A-1-5 Surface Soil Concentration Map - Benzo(a)anthracene

Attachment 1A-1-6 Surface Soil Concentration Map - Benzo(a)pyrene

Attachment 1A-1-7 Surface Soil Concentration Map - Dibenzofuran

Attachment 1A-1-8 Surface Soil Concentration Map - Fluoranthene

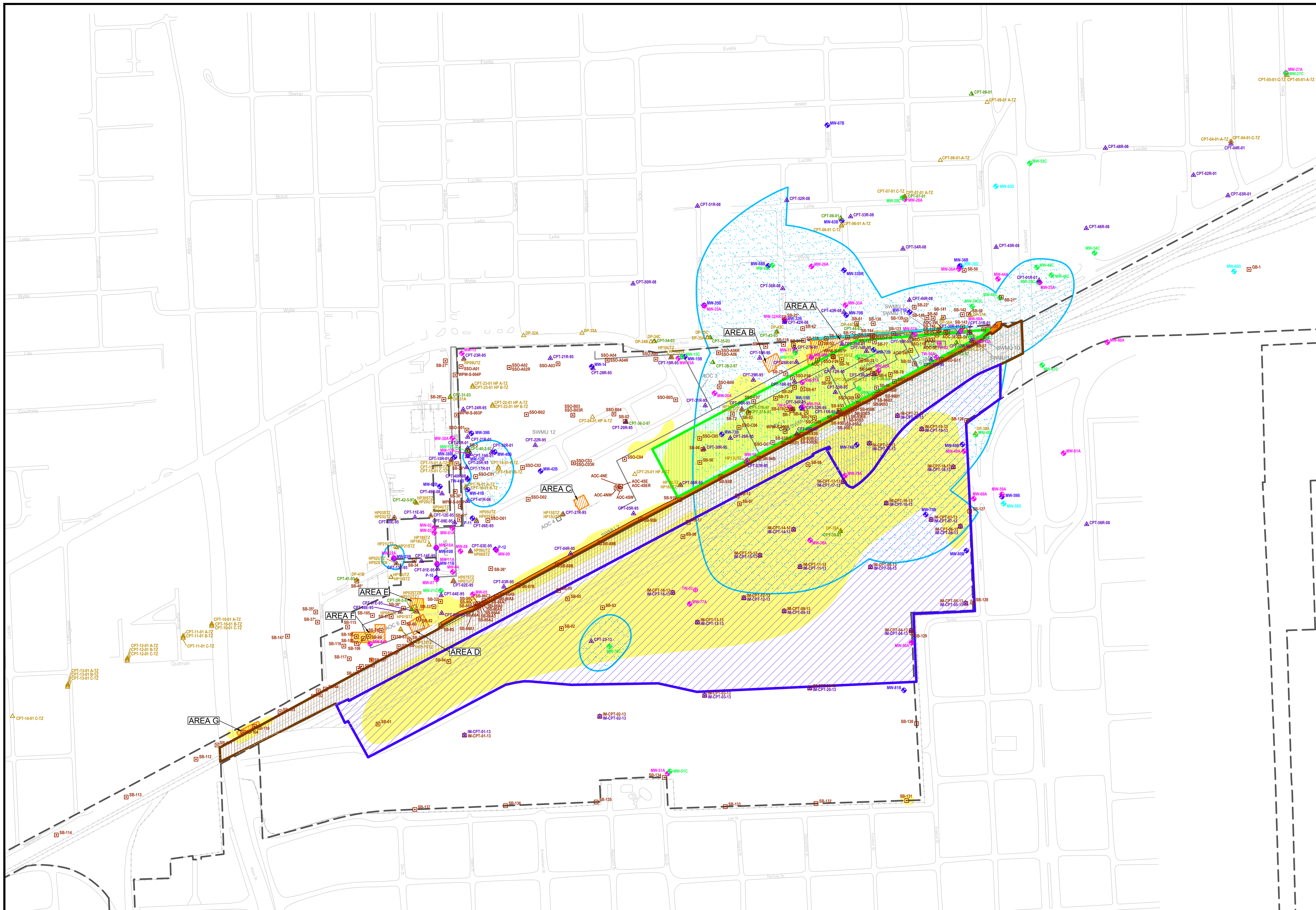
Attachment 1A-1-9 Surface Soil Concentration Map - Naphthalene

Attachment 1A-1-10 Surface Soil Concentration Map - Pentachlorophenol

Attachment 1A-1-11 Surface Soil Concentration Map - Phenanthrene

Attachment 1A-1-12 Surface Soil Concentration Map - Arsenic

Attachment 1A-1-13 Surface Soil Concentration Map - Lead



EXPLANATION

- UPRR Property Boundary
- Road, Parking Lot, Sidewalk
- - - - - Fence
- Railroad
- ◆ A-TZ Monitoring Well Location
- ◆ B-CZ/B-TZ Monitoring Well Location
- ◆ C-TZ Monitoring Well Location
- ◆ D-TZ Monitoring Well Location
- ◆ A-TZ Temporary Monitoring Well Location
- ▲ CPT with Rost Location
- ▲ CPT Location
- ▲ Hydropunch Sample Location
- Soil Boring Location
- Soil Affected Property
- Groundwater Affected Property
- ▨ Surface Soils Excavated within AOC and Consolidated in Soil Cap Area
- ▨ Railroad Ballast Cap Area
- ▨ Asphalt Cap Area
- ▨ Soil Cap
- ▨ Concrete Sidewalk Cap
- ▨ Concrete Cap Area

Note:
* Soil analytical data rejected by validator.

SWMU/AOC AREAS	
No.	Description
SWMU 1	Closed Surface Impoundment
SWMU 2	Northern and Southern Drainage Ditches
SWMU 4	Recent Process Area
SWMU 5	Original Process Area
SWMU 6	Water Treatment and Boiler System
SWMU 7	Tank Car Storage Area
SWMU 8	Aboveground Storage Tank Area
SWMU 9	Location of Former UST No. 44-023-05
SWMU 10	Location of Former Sap Water Treatment Tank
SWMU 11	Oil/Water Separators
SWMU 12	Railroad Tie Storage Area
AOC 1	Diesel Storage Tank
AOC 3	Contaminated Portion of City Water Line
AOC 4	Location of Former Incinerator
AOC 5	City Storm Sewer
AOC 6	Inactive Wastewater Lagoon
AOC 7	Location of Former UST No. 44-023-21

Note:
Locations of SWMU-9 and AOCs 1, 3, 5 and 7 area approximate.



Texas Geosciences Firm No. 50248



Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1 AFFECTED PROPERTY MAP		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

--- UPRR Property Boundary

▭ Historic Structure and Feature

— Road, Parking Lot, Sidewalk

— Fence

— Railroad

⊕ Monitoring Well Location

⊕ Temporary Monitoring Well Location

□ Soil Boring Location

1.84 1,2-Diphenylhydrazine Concentration in mg/Kg

(NS) Not Sampled

PCL EVALUATION

● Detected Surface Soil Concentration <RAL

● Detected Surface Soil Concentration >cPCL

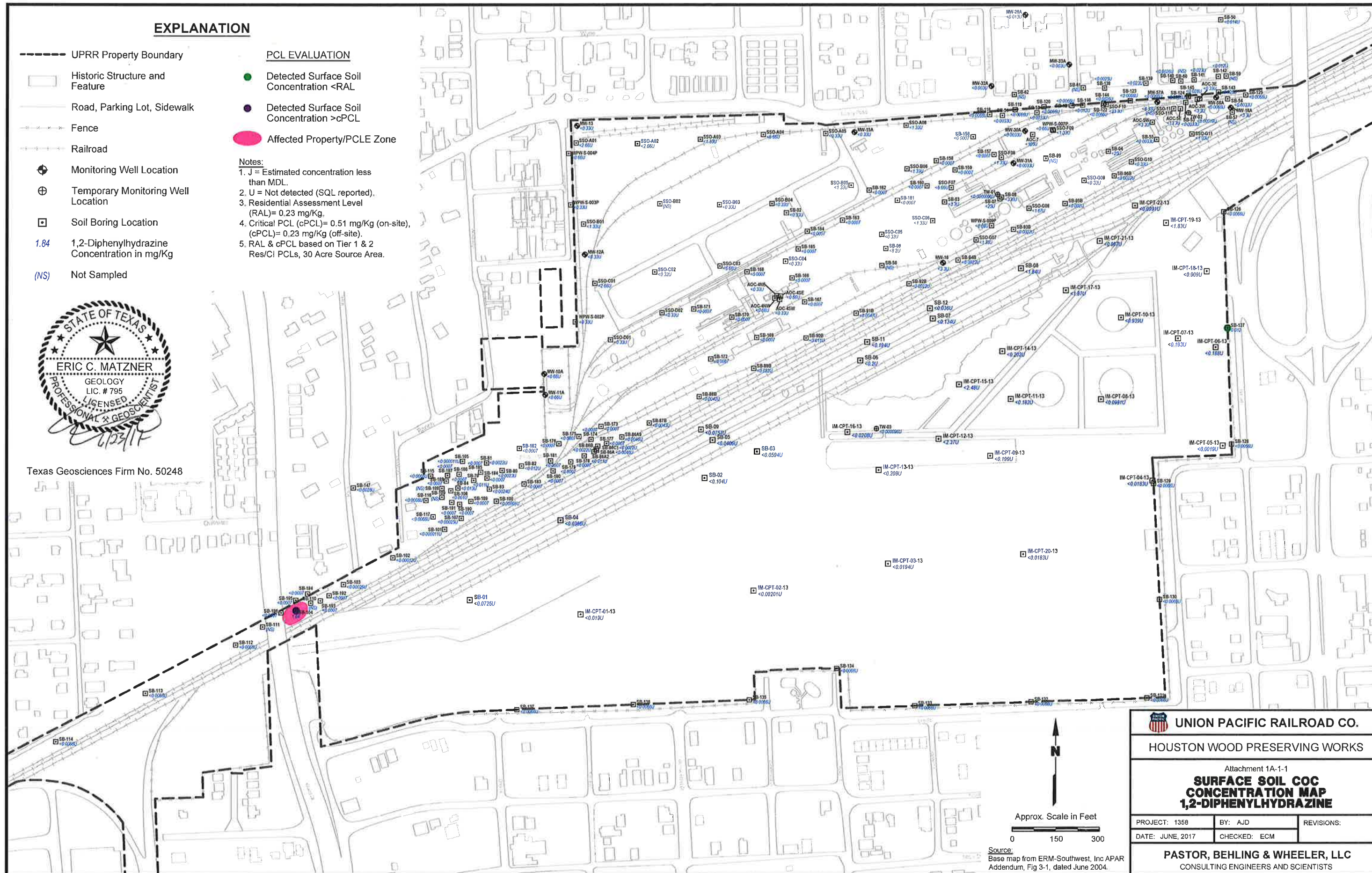
● Affected Property/PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL) = 0.23 mg/Kg.
4. Critical PCL (cPCL) = 0.51 mg/Kg (on-site), (cPCL) = 0.23 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-1		
SURFACE SOIL COC CONCENTRATION MAP		
1,2-DIPHENYLHYDRAZINE		
PROJECT: 1368	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC		
CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

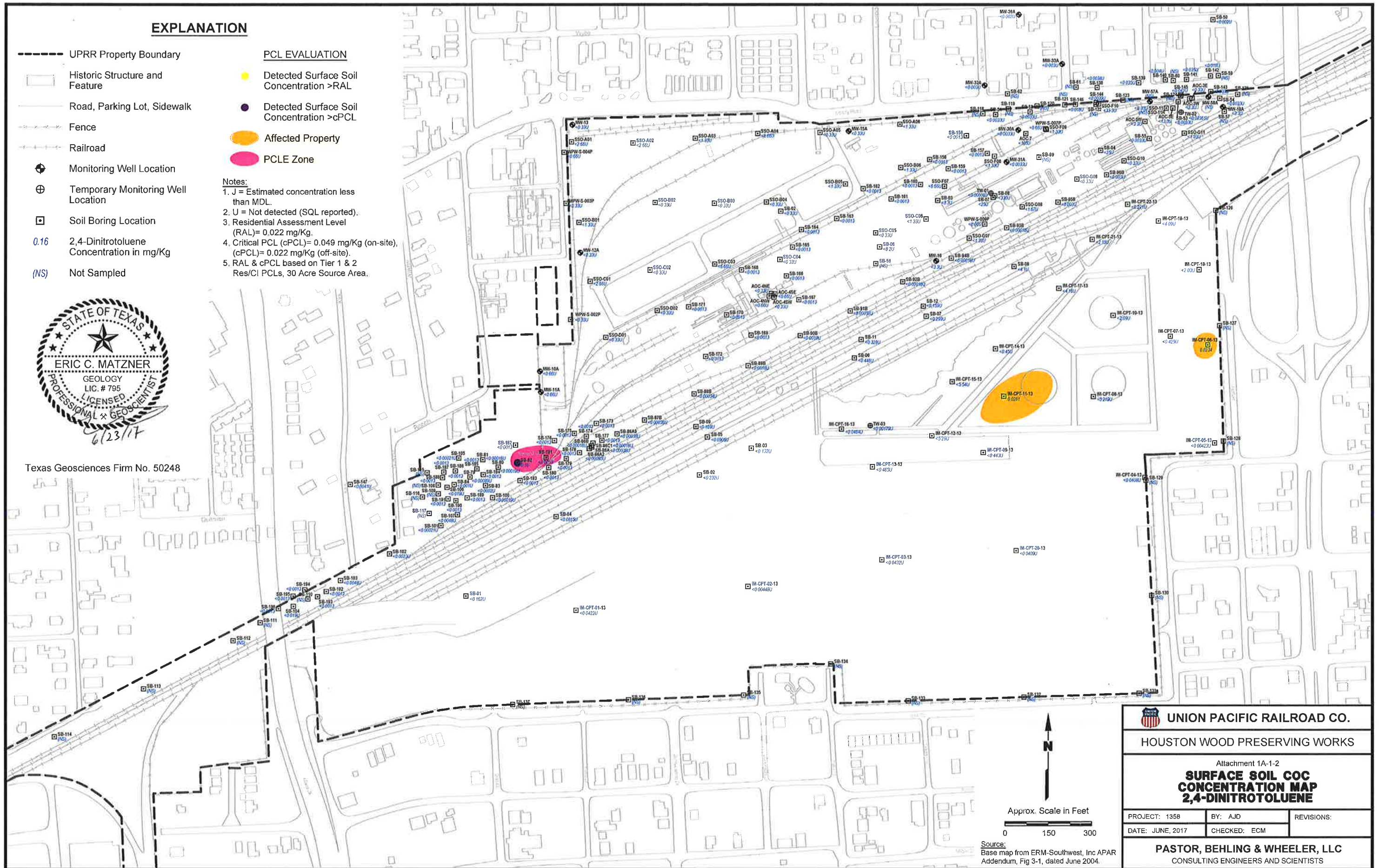
- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- Soil Boring Location
- 0.16 2,4-Dinitrotoluene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

- Detected Surface Soil Concentration >RAL
 - Detected Surface Soil Concentration >cPCL
 - Affected Property
 - PCLE Zone
- Notes:
1. J = Estimated concentration less than MDL.
 2. U = Not detected (SQL reported).
 3. Residential Assessment Level (RAL)= 0.022 mg/Kg.
 4. Critical PCL (cPCL)= 0.049 mg/Kg (on-site), (cPCL)= 0.022 mg/Kg (off-site).
 5. RAL & cPCL based on Tier 1 & 2 Res/Cl PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



Approx. Scale in Feet
0 150 300

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-2 SURFACE SOIL COC CONCENTRATION MAP 2,4-DINITROTOLUENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

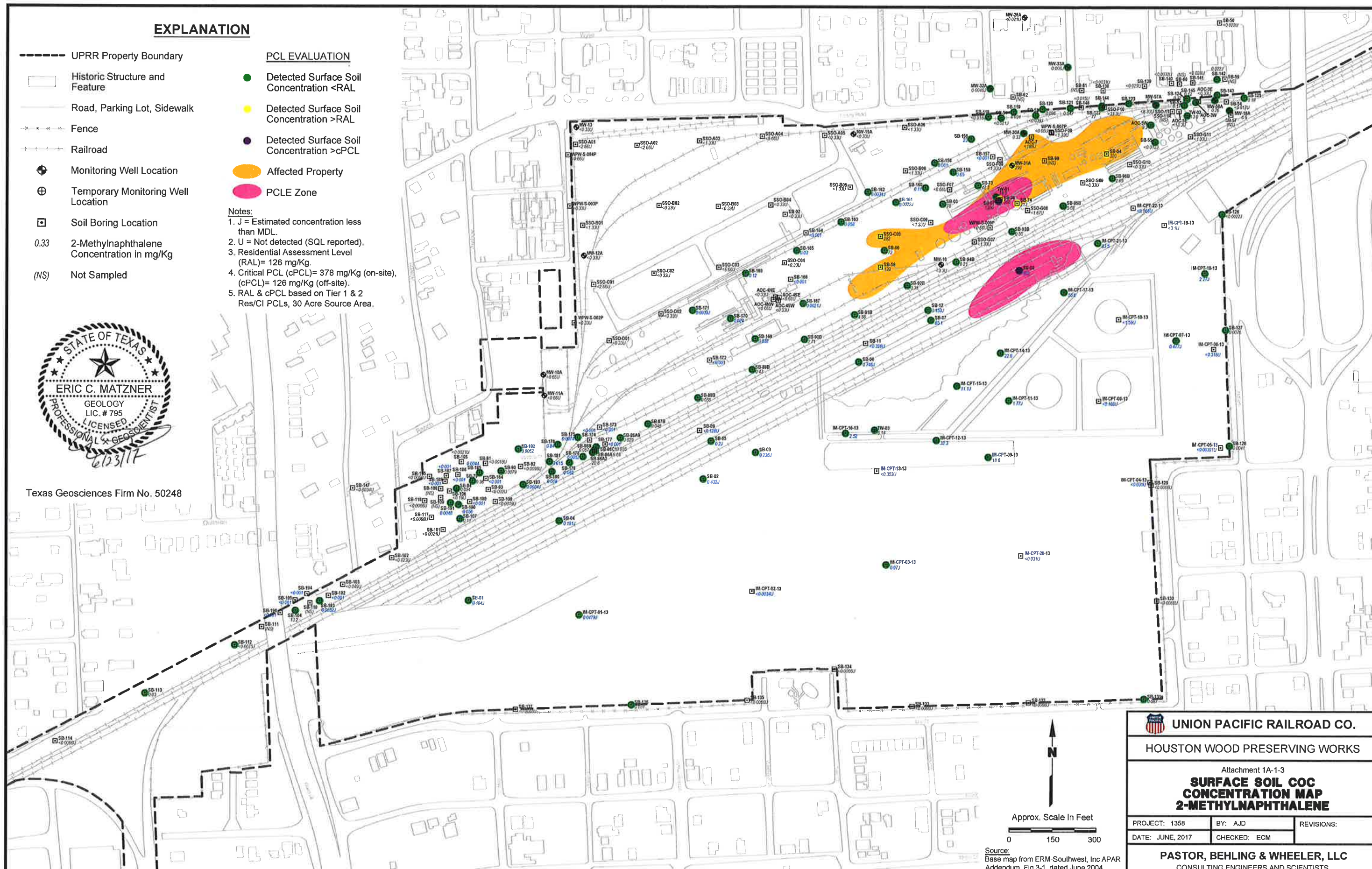
- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - - - Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- Soil Boring Location
- 0.33 2-Methylnaphthalene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

- Detected Surface Soil Concentration <RAL
 - Detected Surface Soil Concentration >RAL
 - Detected Surface Soil Concentration >cPCL
 - Affected Property
 - PCLE Zone
- Notes:
1. J = Estimated concentration less than MDL.
 2. U = Not detected (SQL reported).
 3. Residential Assessment Level (RAL)= 126 mg/Kg.
 4. Critical PCL (cPCL)= 378 mg/Kg (on-site), (cPCL)= 126 mg/Kg (off-site).
 5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-3 SURFACE SOIL COC CONCENTRATION MAP 2-METHYLNAPHTHALENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - - - Fence
- ⊕ Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- Soil Boring Location
- 0.012 Benzene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

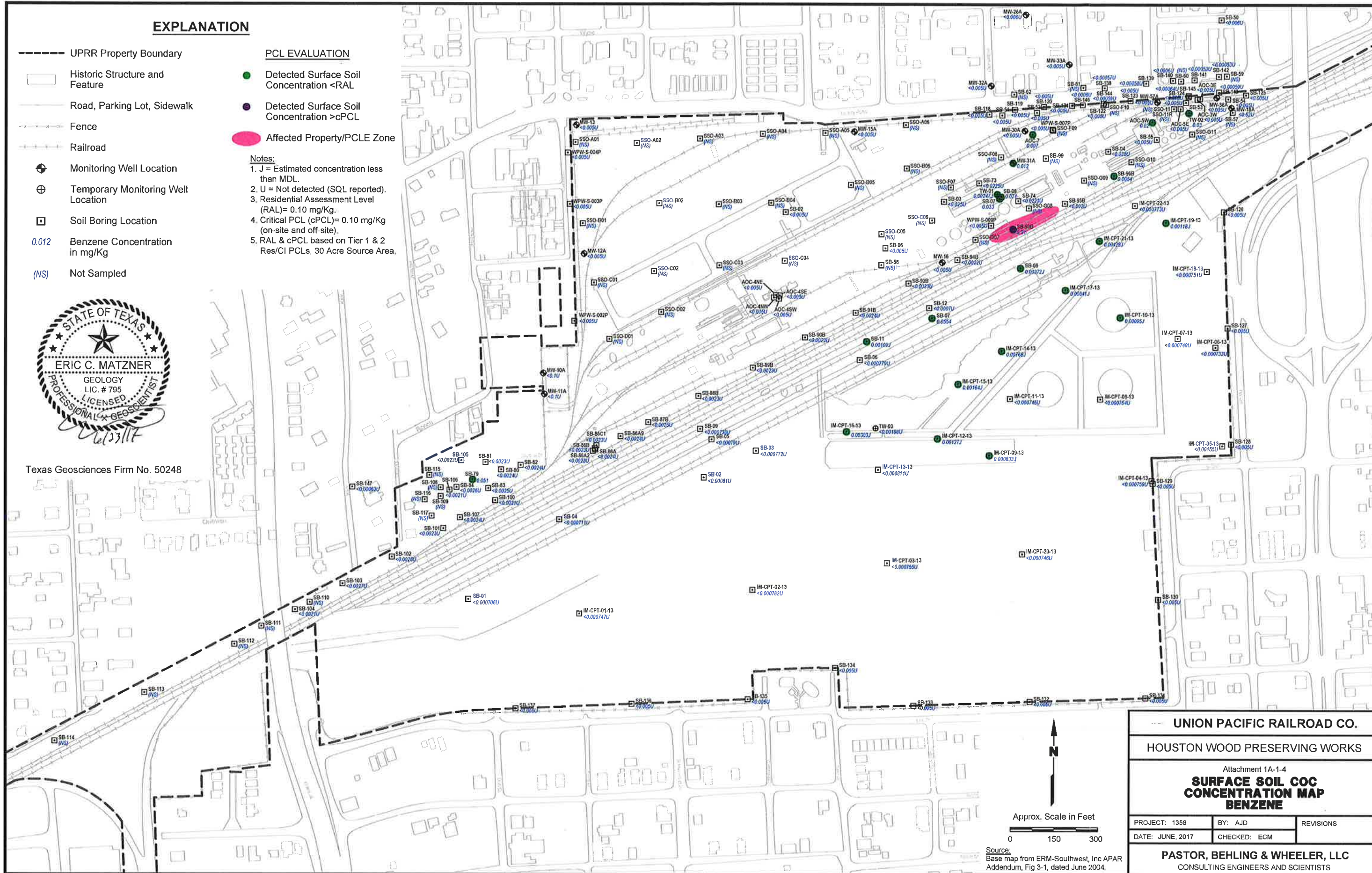
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >cPCL
- Affected Property/PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 0.10 mg/Kg.
4. Critical PCL (cPCL)= 0.10 mg/Kg (on-site and off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-4 SURFACE SOIL COC CONCENTRATION MAP BENZENE		
PROJECT: 1358	BY: AJD	REVISIONS
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- Soil Boring Location
- 2.94 Benzo(a)anthracene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

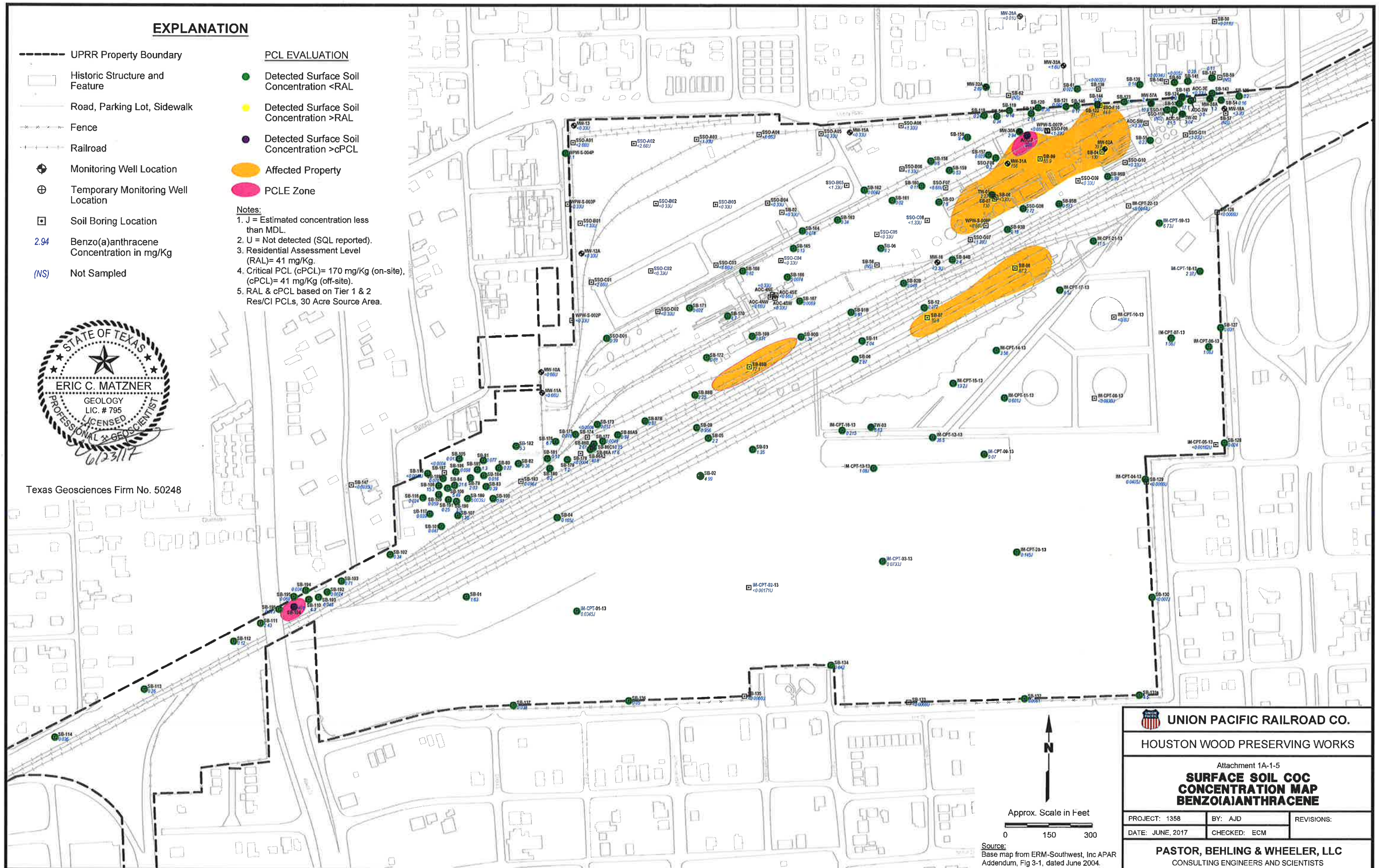
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >RAL
- Detected Surface Soil Concentration >cPCL
- Affected Property
- PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL) = 41 mg/Kg.
4. Critical PCL (cPCL) = 170 mg/Kg (on-site), (cPCL) = 41 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-5		
SURFACE SOIL COC CONCENTRATION MAP		
BENZO(A)ANTHRACENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC		
CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

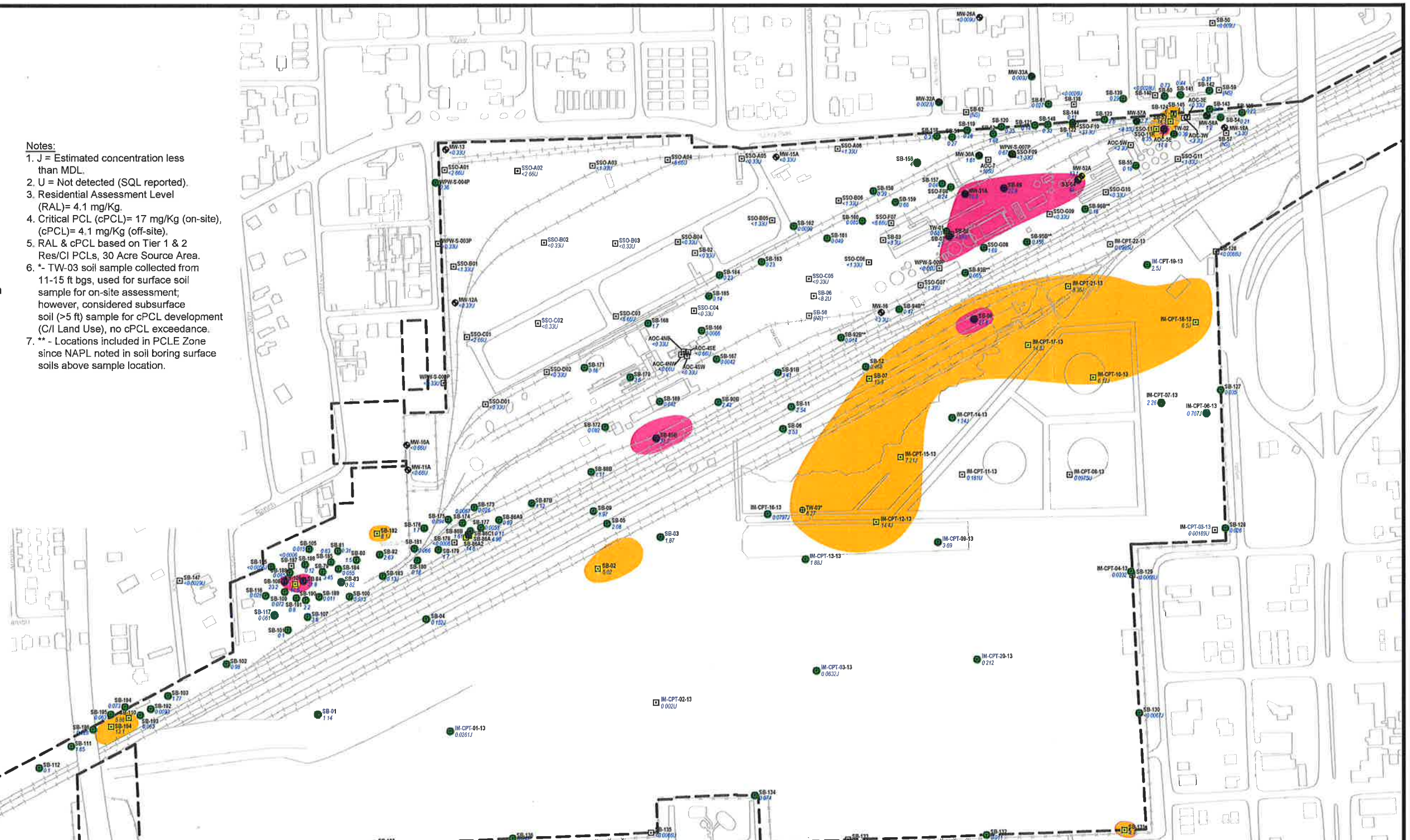
- UPRR Property Boundary
- Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- Monitoring Well Location
- Temporary Monitoring Well Location
- Soil Boring Location
- 1.61** Benzo(a)pyrene Concentration in mg/Kg
- (NS)** Not Sampled
- PCL EVALUATION**
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >RAL
- Detected Surface Soil Concentration >cPCL
- Affected Property
- PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 4.1 mg/Kg.
4. Critical PCL (cPCL)= 17 mg/Kg (on-site), (cPCL)= 4.1 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.
6. *- TW-03 soil sample collected from 11-15 ft bgs, used for surface soil sample for on-site assessment; however, considered subsurface soil (>5 ft) sample for cPCL development (C/I Land Use), no cPCL exceedance.
7. ** - Locations included in PCLE Zone since NAPL noted in soil boring surface soils above sample location.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-6		
SURFACE SOIL COC CONCENTRATION MAP BENZO(A)PYRENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Approx. Scale in Feet
0 150 300

Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- - - Fence
- ⊕ Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- ▣ Soil Boring Location
- 0.81 Dibenzofuran Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

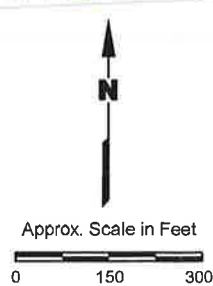
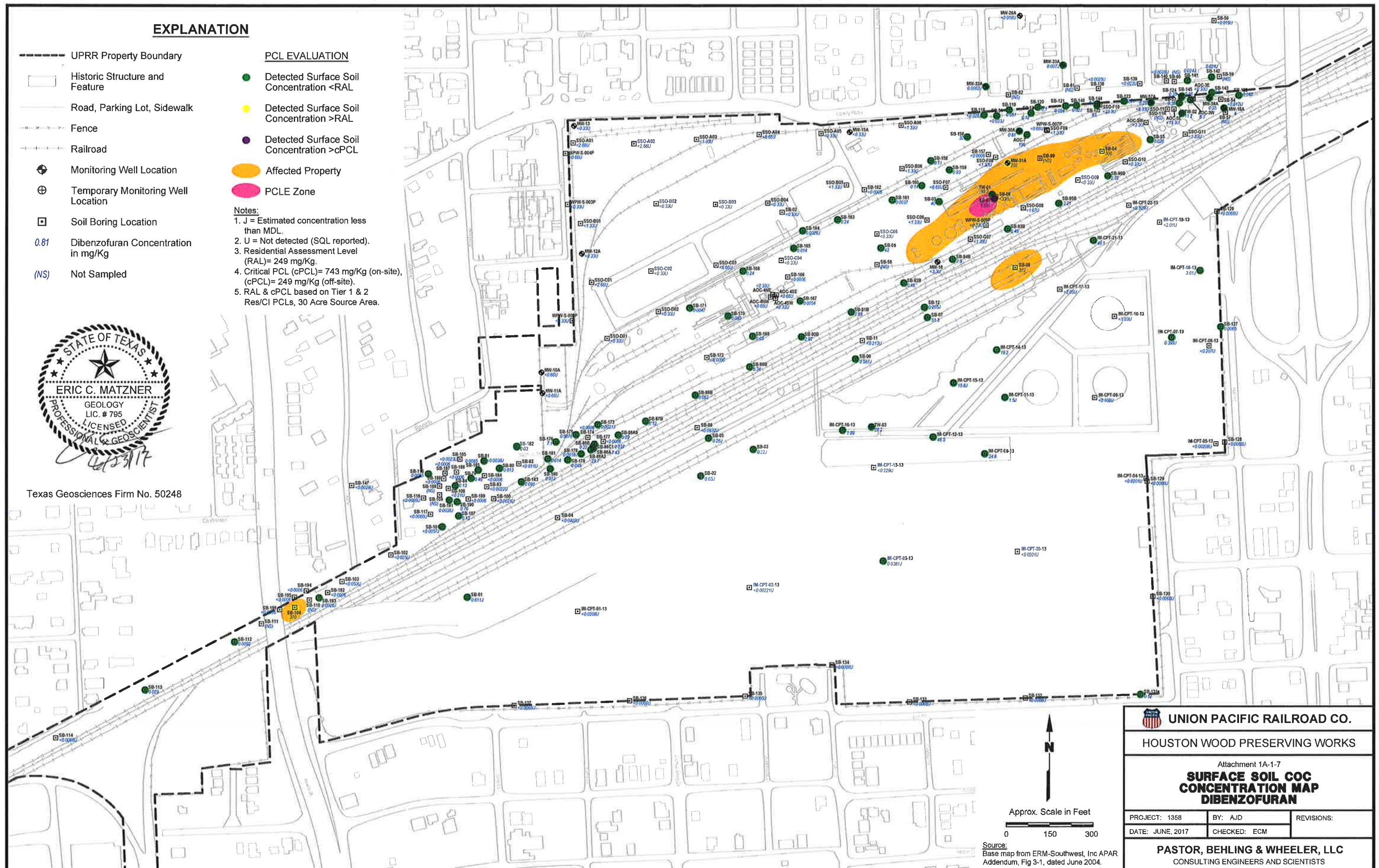
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >RAL
- Detected Surface Soil Concentration >cPCL
- Affected Property
- PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 249 mg/Kg.
4. Critical PCL (cPCL)= 743 mg/Kg (on-site), (cPCL)= 249 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



Source:
Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-7 SURFACE SOIL COC CONCENTRATION MAP DIBENZOFURAN		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- ▣ Soil Boring Location
- 2.8 Fluoranthene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

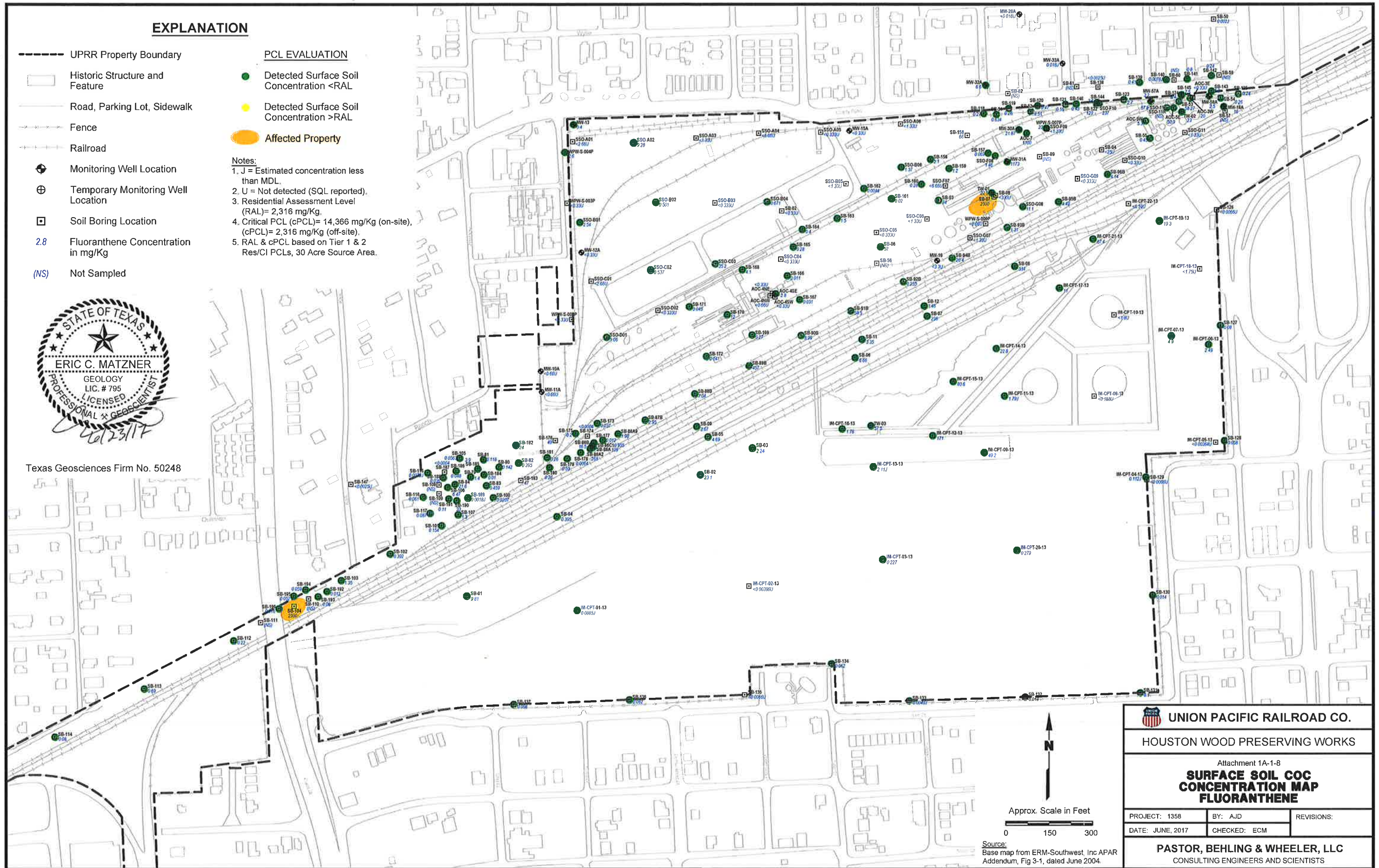
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >RAL
- Affected Property

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 2,316 mg/Kg.
4. Critical PCL (cPCL)= 14,366 mg/Kg (on-site), (cPCL)= 2,316 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-8 SURFACE SOIL COC CONCENTRATION MAP FLUORANTHENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

EXPLANATION

- UPRR Property Boundary
- ▭ Historic Structure and Feature
- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- ⊕ Monitoring Well Location
- ⊕ Temporary Monitoring Well Location
- ▣ Soil Boring Location
- 0.039 Naphthalene Concentration in mg/Kg
- (NS) Not Sampled

PCL EVALUATION

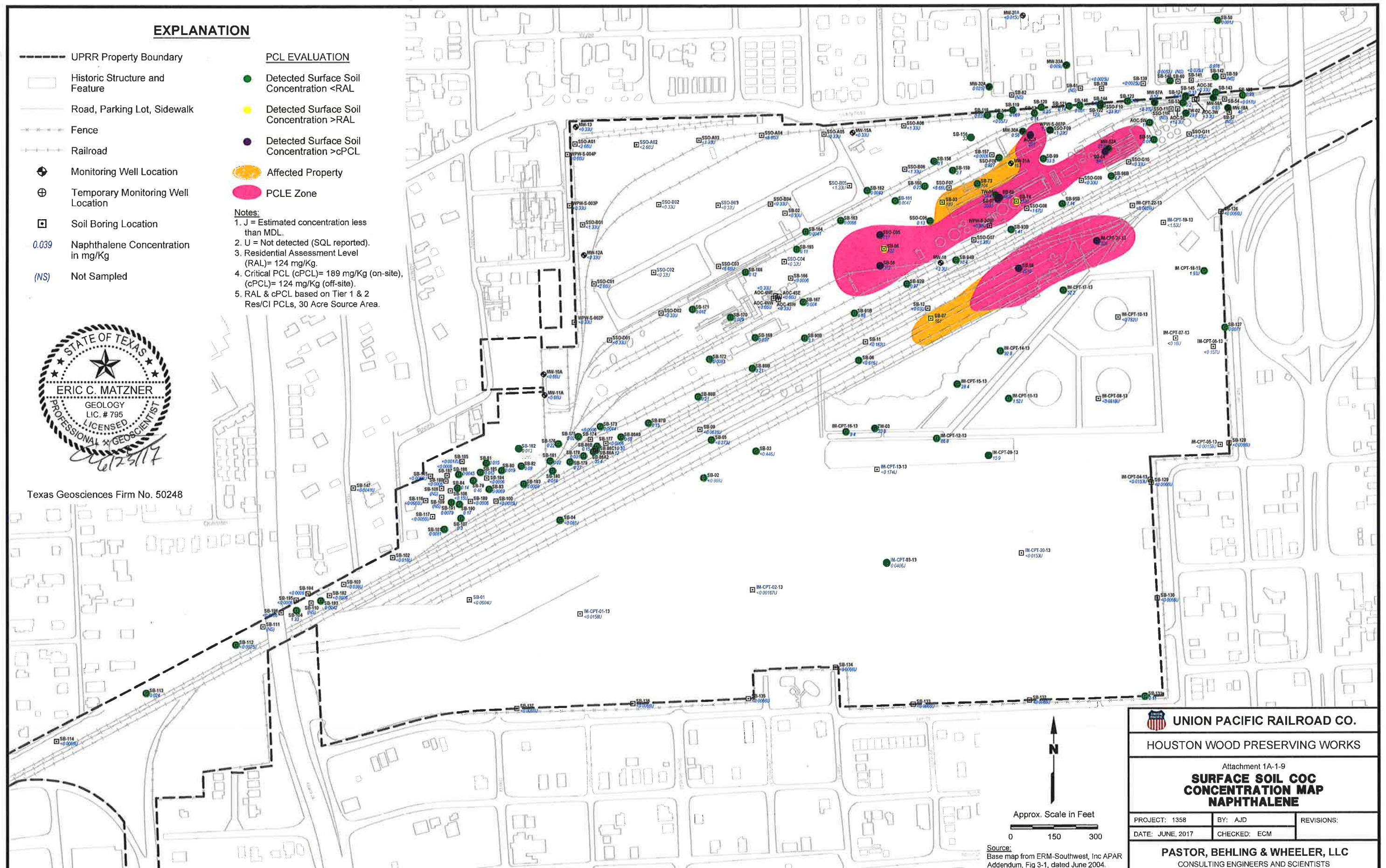
- Detected Surface Soil Concentration <RAL
- Detected Surface Soil Concentration >RAL
- Detected Surface Soil Concentration >cPCL
- Affected Property
- PCLE Zone

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 124 mg/Kg.
4. Critical PCL (cPCL)= 189 mg/Kg (on-site), (cPCL)= 124 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



Approx. Scale in Feet
0 150 300

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.

HOUSTON WOOD PRESERVING WORKS

Attachment 1A-1-9
SURFACE SOIL COC CONCENTRATION MAP NAPHTHALENE

PROJECT: 1358	BY: A/JD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

EXPLANATION

--- UPRR Property Boundary

▭ Historic Structure and Feature

— Road, Parking Lot, Sidewalk

-x-x-x-x Fence

— Railroad

⊕ Monitoring Well Location

⊕ Temporary Monitoring Well Location

□ Soil Boring Location

0.16 Phenanthrene Concentration in mg/Kg

(NS) Not Sampled

PCL EVALUATION

● Detected Surface Soil Concentration <RAL

● Detected Surface Soil Concentration >RAL

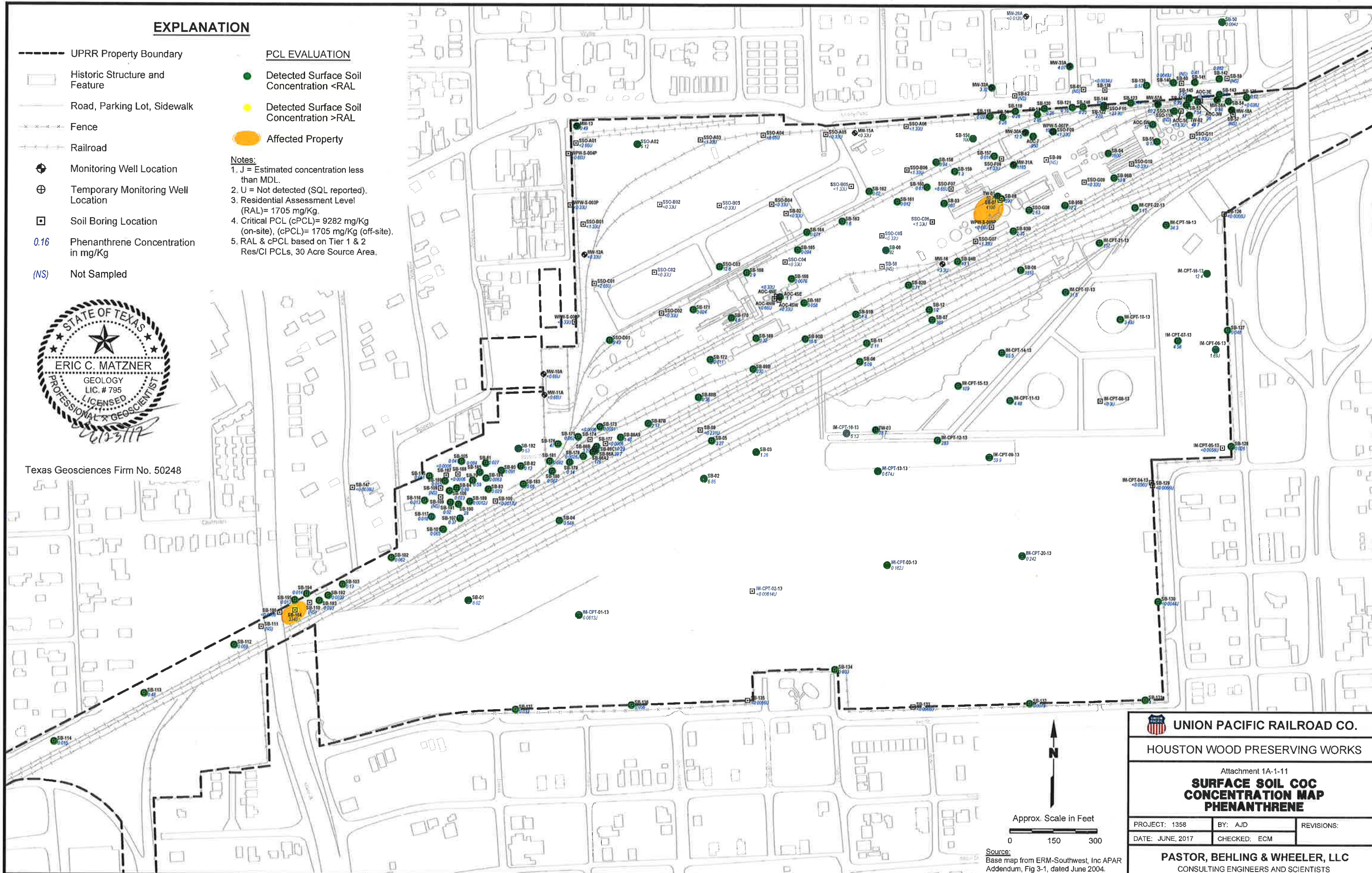
● Affected Property

Notes:

1. J = Estimated concentration less than MDL.
2. U = Not detected (SQL reported).
3. Residential Assessment Level (RAL)= 1705 mg/Kg.
4. Critical PCL (cPCL)= 9282 mg/Kg (on-site), (cPCL)= 1705 mg/Kg (off-site).
5. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248




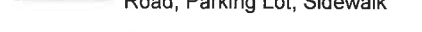

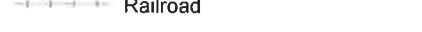
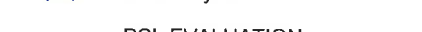
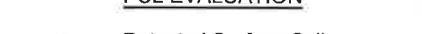
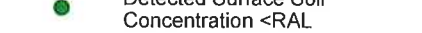


Approx. Scale in Feet
0 150 300

Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-11		
SURFACE SOIL COC CONCENTRATION MAP PHENANTHRENE		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

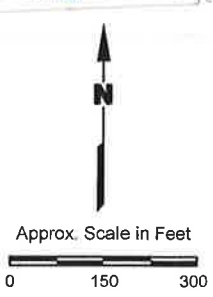
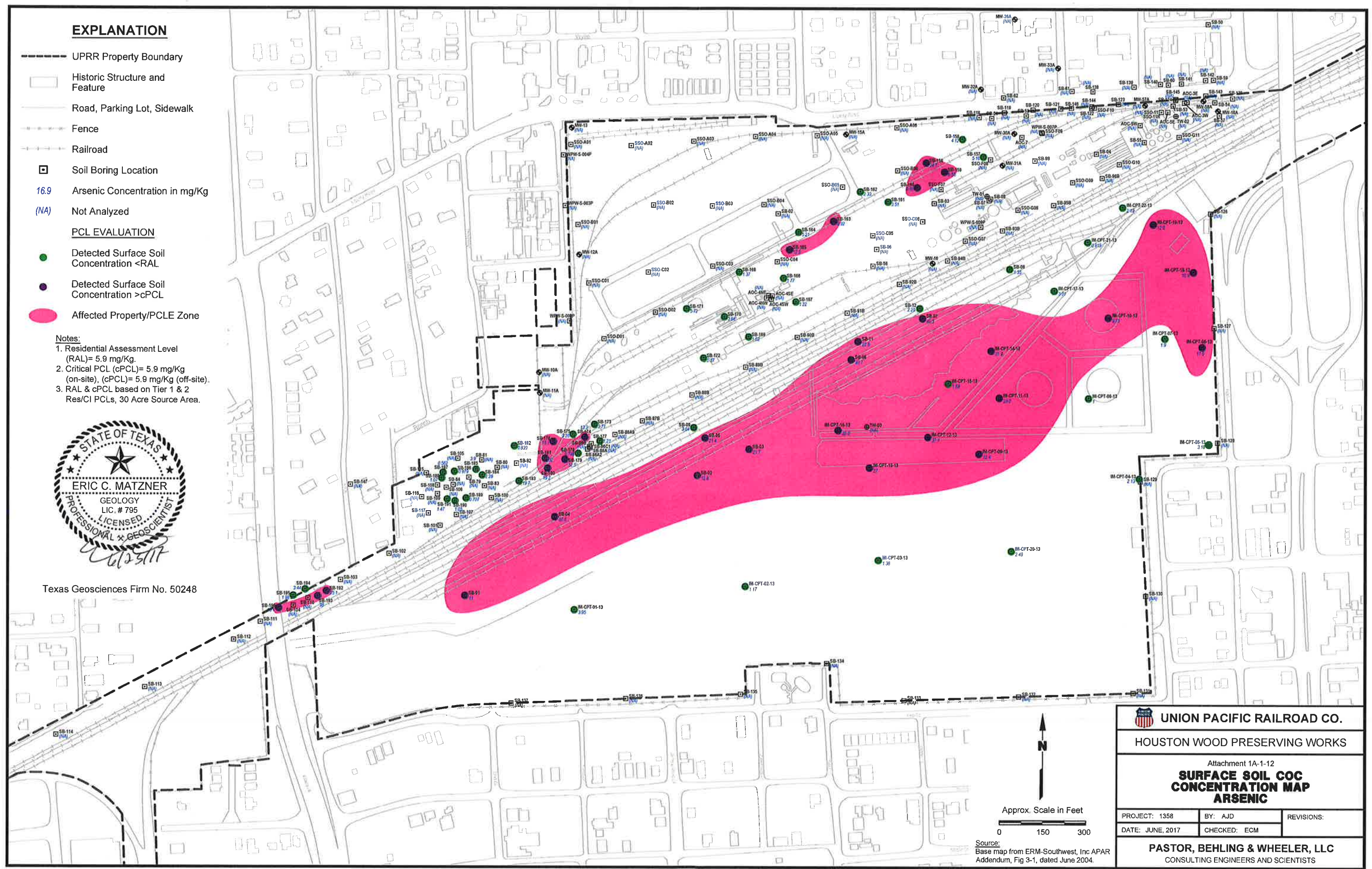
EXPLANATION

-  UPRR Property Boundary
-  Historic Structure and Feature
-  Road, Parking Lot, Sidewalk
-  Fence
-  Railroad
-  Soil Boring Location
- 16.9 Arsenic Concentration in mg/Kg
- (NA) Not Analyzed
- PCL EVALUATION**
-  Detected Surface Soil Concentration <RAL
-  Detected Surface Soil Concentration >cPCL
-  Affected Property/PCLE Zone


- Notes:**
1. Residential Assessment Level (RAL)= 5.9 mg/Kg.
 2. Critical PCL (cPCL)= 5.9 mg/Kg (on-site), (cPCL)= 5.9 mg/Kg (off-site).
 3. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



Source: Base map from ERM-Southwest, Inc APAR Addendum, Fig 3-1, dated June 2004.

 UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-12		
SURFACE SOIL COC CONCENTRATION MAP ARSENIC		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

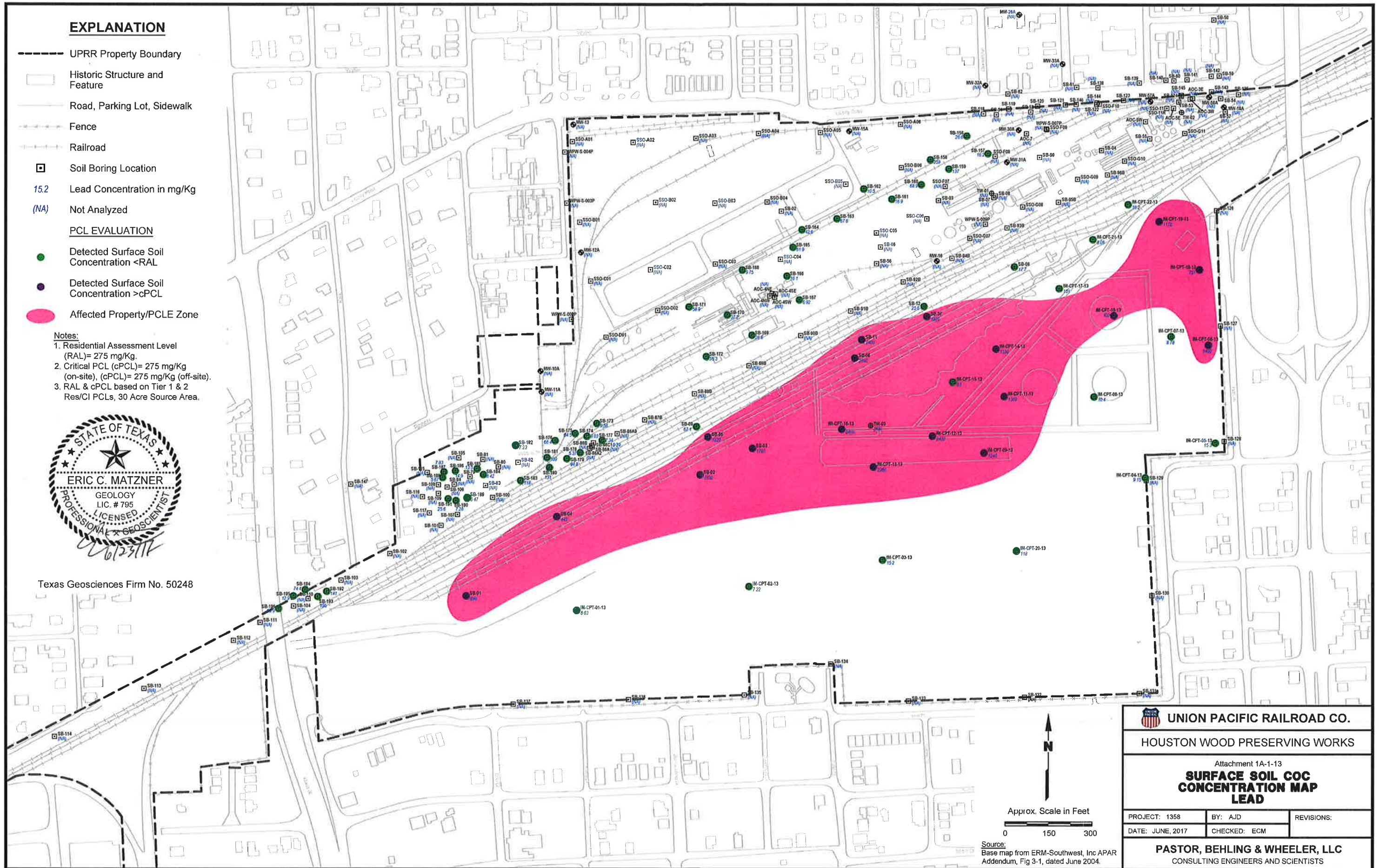
EXPLANATION

- UPRR Property Boundary
 - Historic Structure and Feature
 - Road, Parking Lot, Sidewalk
 - Fence
 - Railroad
 - Soil Boring Location
 - 15.2 Lead Concentration in mg/Kg
 - (NA) Not Analyzed
- PCL EVALUATION**
- Detected Surface Soil Concentration <RAL
 - Detected Surface Soil Concentration >cPCL
 - Affected Property/PCL Zone

- Notes:**
1. Residential Assessment Level (RAL)= 275 mg/Kg.
 2. Critical PCL (cPCL)= 275 mg/Kg (on-site), (cPCL)= 275 mg/Kg (off-site).
 3. RAL & cPCL based on Tier 1 & 2 Res/CI PCLs, 30 Acre Source Area.



Texas Geosciences Firm No. 50248



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Attachment 1A-1-13 SURFACE SOIL COC CONCENTRATION MAP LEAD		
PROJECT: 1358	BY: AJD	REVISIONS:
DATE: JUNE, 2017	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

Institutional Controls	RACR Worksheet 4.0 Page 1 of 2	
	ID No. SWR No. 31547	Report Date: 06/24/17 – Rev. 1

Complete this worksheet if an institutional control will be or has been used as part of the response action. Include in Appendix 3 copies of filed institutional controls and drafts of the proposed institutional controls, copies of landowner concurrences, and a list of landowners from whom landowner concurrence will be requested.

Specify the property for which this applies. UPRR Houston Wood Preserving Works, 4910 Liberty Road

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ³				Property Ownership		Anticipated or actual filing date ⁴
	Deed notice	Restrictive covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))	X				X		Within 120 days from RAP Approval
Document use of physical or institutional control under Remedy Standard B §350.31(g))	X				X		Within 120 days from RAP Approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))							
Document the demonstration of technical impracticability (§350.33(f)(3)(F))							
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							
Other (specify)							

³ Check the appropriate box(es) to indicate the type of institutional control required for the response action.

⁴ Specify date or amount of time after RAP approval.

Complete this worksheet if an institutional control will be or has been used as part of the response action. Include in Appendix 3 copies of filed institutional controls and drafts of the proposed institutional controls, copies of landowner concurrences, and a list of landowners from whom landowner concurrence will be requested.

Specify the property for which this applies. City of Houston ROW (Concrete Sidewalk Cap area)

Repeat this worksheet for each different property for which an institutional control will be used.

Institutional Control	Type of Institutional Control ⁵				Property Ownership		Anticipated or actual filing date ⁶
	Deed notice	Restrictive covenant	VCP Certificate of Completion	Equivalent zoning or governmental ordinance	Check if pertinent tract of land is owned by the person	Check if the pertinent tract of land is owned by an innocent owner or operator	
Document use of commercial/industrial land use (§350.31(g))							
Document use of physical or institutional control under Remedy Standard B §350.31(g)		X				X	Within 120 days from RAP Approval
Document notice of on-going long term response action (§350.31(h))							
Document use of occupational inhalation criteria as RBELs (§350.74(b)(1))							
Document variance from the default exposure factors (§350.74(j)(2)(L))							
Document the use of a non-default soil exposure area (§350.51(l)(3)&(4))							
Document WCU exclusion area (§350.33(f)(2))							
Document establishing a PMZ (§350.33(f)(4)(C)(I))							
Document the demonstration of technical impracticability (§350.33(f)(3)(F))							
Relocation of soils containing COCs for reuse (§350.36(b)(4) and (c)(4))							
Other (specify)							

⁵ Check the appropriate box(es) to indicate the type of institutional control required for the response action.

⁶ Specify date or amount of time after RAP approval.

APPENDIX 3

INSTITUTIONAL CONTROLS AND LANDOWNER CONCURRENCE

DEED NOTICE

STATE OF TEXAS §
COUNTY OF § KNOW ALL MEN BY THESE PRESENTS THAT:
HARRIS §

This Notice is filed to provide information concerning certain environmental conditions and/or use restrictions pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) identified as the Former Houston Wood Preserving Works (HWPW) Site (124.8360 Acres) is described by metes and bounds on Exhibit A, attached hereto and incorporated herein by reference, and depicted on the map portion of Exhibit A.. Portions of the soil and groundwater underlying the Property contain identified chemicals of concern causing those portions of the Property to be considered an Affected Property as that term is defined in the TRRP. The Affected Property is shown on Exhibit B.

As detailed in the Response Action Plan (RAP) (PBW, 2015), target chemicals of concern in soil and groundwater media were detected within the Affected Property and Protective Concentration Level (PCL) Exceedance (PCLE) Zone in surface and subsurface soils.

PCLE Zones

Soils

Comparing the surface and subsurface soil analytical data to the appropriate critical PCLs, concentrations of 15 chemicals of concern exceeded their respective critical PCLs (cPCLs):

<u>Surface Soils</u>	<u>cPCL</u> <u>(mg/kg)</u>	<u>Subsurface Soils</u>	<u>cPCL</u> <u>(mg/kg)</u>
<ul style="list-style-type: none">• 1,2-Diphenylhydrazine• 2,4-Dinitrotoluene• 2-Methylnaphthalene• Benzene• Benzo(a)anthracene• Benzo(a)pyrene• Dibenzofuran• Naphthalene• Pentachlorophenol• Arsenic• Lead	<ul style="list-style-type: none">0.230.0493780.10170177431890.12200275	<ul style="list-style-type: none">• 2-Methylnaphthalene• Benzene• Naphthalene• Pentachlorophenol	<ul style="list-style-type: none">3780.1051920.12

Groundwater

Based on the maximum groundwater analytical data detailed in the RAP, concentrations of the following 23 target chemicals of concern exceeded their cPCLs:

<u>VOCs</u>	<u>cPCL</u> <u>(mg/L)</u>	<u>SVOCs</u>	<u>cPCL (mg/L)</u>
<ul style="list-style-type: none"> • Benzene • Ethylbenzene • Methylene Chloride • Toluene • Vinyl Chloride 	0.005 0.70 0.005 1 0.002	<ul style="list-style-type: none"> • 2,4-Dimethylphenol • 2,6-Dinitrotoluene • 2-Methylnaphthalene • Acenaphthene* • Anthracene * • Benzo(a)anthracene • Benzo(a)pyrene • Bis(2-chloroethoxy)methane* • Chlorobenzene • Chrysene * • Dibenzofuran • Fluoranthene * • Fluorene * • Naphthalene • Pentachlorophenol • Phenanthrene * • Phenol • Pyrene * 	1.5 0.0013 0.29 4.4 7.3 0.0028 0.0002 0.006 0.28 0.29 2.9 2.9 1.5 0.001 2.2 7.3 2.2

* - COC only detected in wells with DNAPL present

Creosote dense non-aqueous phase liquid (DNAPL) has been detected in the groundwater bearing units A-TZ, B-CZ, B-TZ, and C-TZ as noted in soil borings and monitoring wells.

This Notice is required for the following reasons:

Commercial/Industrial Land Use

The Property (124.8360 Acres), including the Affected Property, shown on Exhibit A currently meets TRRP standards for commercial/industrial land use, as the property may not be protective for residential use. If any person desires in the future to use the Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for residential purposes. Persons contemplating a change in land use for the Property are encouraged to review the definitions for commercial/industrial and residential land use contained in TRRP as the definition of residential land use is broad.

Use of Physical Control on Soil

The Affected Property is subject to the TRRP requirements for properties containing

concentrations of chemicals of concern in soil and is subject to the requirements in 30 TAC §350.33(e)(2) to prevent exposure to soils that contain a chemical of concern in excess of the protective concentration level. The attached Exhibit C, which includes Exhibits C-1, C-2, C-3, and C-4, describes and provides the location and metes and bounds of the physical controls and extent of the soil that exceeds the TCEQ-approved critical protective concentration levels for certain chemicals of concern. Physical controls include the following:

- Former HWPW Operating Area:
 - Soil Cap Area (7.1168 Acres) (Exhibit C-1): An engineered soil cap consisting of a vapor barrier with geotextile fabric, and 12-inches of clayey soil with 6-inches of topsoil was constructed to protect on-site commercial/industrial receptors. The physical control covers the consolidated soil and surface soil PCLE Zone on the former HWPW operating area. The soil cap is vegetated and sloped to minimize infiltration over the surface/subsurface soil PCLE Zone. The soil cap will be maintained under the post-response action care period.
 - Asphalt Road Cap (1.0419 Acres) (Exhibit C-2): For the SDD (SWMU 2) along the southern boundary of the HWPW, UPRR constructed the Asphalt Cap to protect on-site commercial/industrial receptors from surface soils with chemicals of concern at concentrations above cPCLs. The Asphalt Cap construction consisted of grading the existing road material, compacting and stabilizing the existing road material, and applying a hot mix asphalt with at least 2-inches minimum cover approximately 16 feet wide over the length of the roadway. The Asphalt Cap, which will restrict infiltration, was constructed to drain storm water away from the Soil and Asphalt Cap areas. The Asphalt Cap will be maintained under the post-response action care to ensure no exposure to the soils within the soil PCLE Zone covered by the cap.
- Englewood Intermodal Yard Concrete Cap Area (41.1398 Acres) (Exhibit C-3): The surface and subsurface soil PCLE zone in the Englewood Intermodal Yard area is currently covered with a physical barrier (concrete pavement), preventing contact with impacted soils for on-site workers. As part of the post-response action care, the concrete pavement in the area of the surface soil PCLE Zone will be routinely inspected to ensure on-site worker protection.
- UPRR Railroad Ballast Cap Area (10.4702 Acres) (Exhibit C-4): The area between the former HWPW operating area and the Englewood Intermodal Yard is covered with railroad ballast, ties, and rail. The existing railroad ballast in this area will be used as an engineering control for preventing on-site worker exposure to impacted surface soils. The railroad ballast area will be maintained as part of normal railroad operations. The track is owned and controlled by UPRR.

For each of these areas described above, signs will be posted with language stating restrictions on construction activity within the capped areas. In the event construction activities are necessary within a capped area, a health and safety plan will be implemented to ensure worker

protection from chemicals of concern in the underlying surface soils and a soil management plan will be developed if soils are excavated as part of the construction activities.

The attached Exhibit D also describes the required maintenance and monitoring required for the physical control. This program must be implemented unless and until TCEQ approves any modification. This deed notice must not be removed or modified without prior approval from TCEQ.

Plume Management Zone

The Affected Property is subject to the TRRP requirements for properties with an area overlying a TCEQ-approved plume management zone (PMZ). A PMZ is defined as an area of groundwater containing concentrations of COCs exceeding the TCEQ-approved protective concentration levels for the site, plus any additional area allowed by the TCEQ in accordance with 30 TAC §350.33(f)(4). The undersigned has established a PMZ so that the chemicals of concern in the groundwater are managed such that human exposure is prevented and that other groundwater resources are protected. The attached Exhibit E provides the location and extent of the on-site PMZs (56.2981 Acres). The Response Action Plan (RAP) submitted for the Site describes the maintenance and monitoring required. The maintenance and monitoring is required until TCEQ approves some modification to those requirements. Exposure to groundwater within the PMZ for any purpose is not advised until such time that all of the chemicals of concern no longer exceed their respective PCLs. This deed notice must not be removed or modified without prior approval from TCEQ.

Non-Aqueous Phase Liquid

The Affected Property is subject to the TRRP requirements for the management of mobile NAPL. The attached Exhibit E provides the general location of the NAPL present at the Property. Drilling, excavation, and groundwater pumping within or into the NAPL zone is prohibited unless proper safeguards are taken to protect human health and safety from any hazards associated with the NAPL. Any NAPL removed during any future subsurface activity must be properly handled and managed in accordance with all applicable state and federal rules and regulations. This deed notice must not be removed or modified without prior approval from TCEQ.

As of the date of this notice, the record owner of fee title to the Property is

Union Pacific Railroad, 1400 Douglas Street, Omaha, Nebraska 68179.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle, Building E
Austin, TX 78753

Mail: TCEQ – MC 199
P.O. Box 13087
Austin, TX 78711-3087

TCEQ Program and Identifier No.: **SWR 31547/IHW 50343**

This Notice may be rendered of no further force or effect only by a superseding deed notice executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Notice is filed.

EXECUTED this _____ day of _____, 20_____.

Union Pacific Railroad [OWNER & RESPONDER]

By:_____

Name: Mr. Tony Love
Title: Assistant Vice President of Real Estate
Union Pacific Railroad Company, a Delaware Corporation

STATE OF NEBRASKA §
DOUGLAS COUNTY §

BEFORE ME, on this the _____ day of _____, Mr. Tony Love, Assistant Vice President of Real Estate, a representative of Union Pacific Railroad Company, a Delaware Corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this ___ day of _____, 20_____.

Notary Public in and for the State of Nebraska

County of _____

My Commission Expires: _____

EXHIBIT "A"
LEGAL DESCRIPTION OF PROPERTY

MATAGORDA COUNTY TEXAS

AYLETT C. BUCKNER LEAGUE ABSTRACT 10

OWNERSHIP TABLE

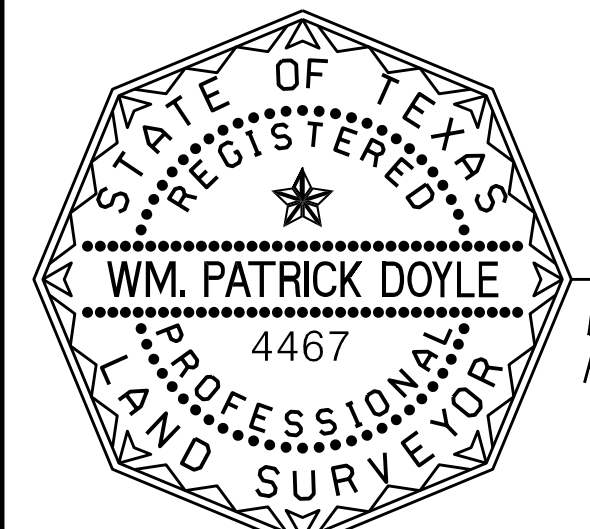
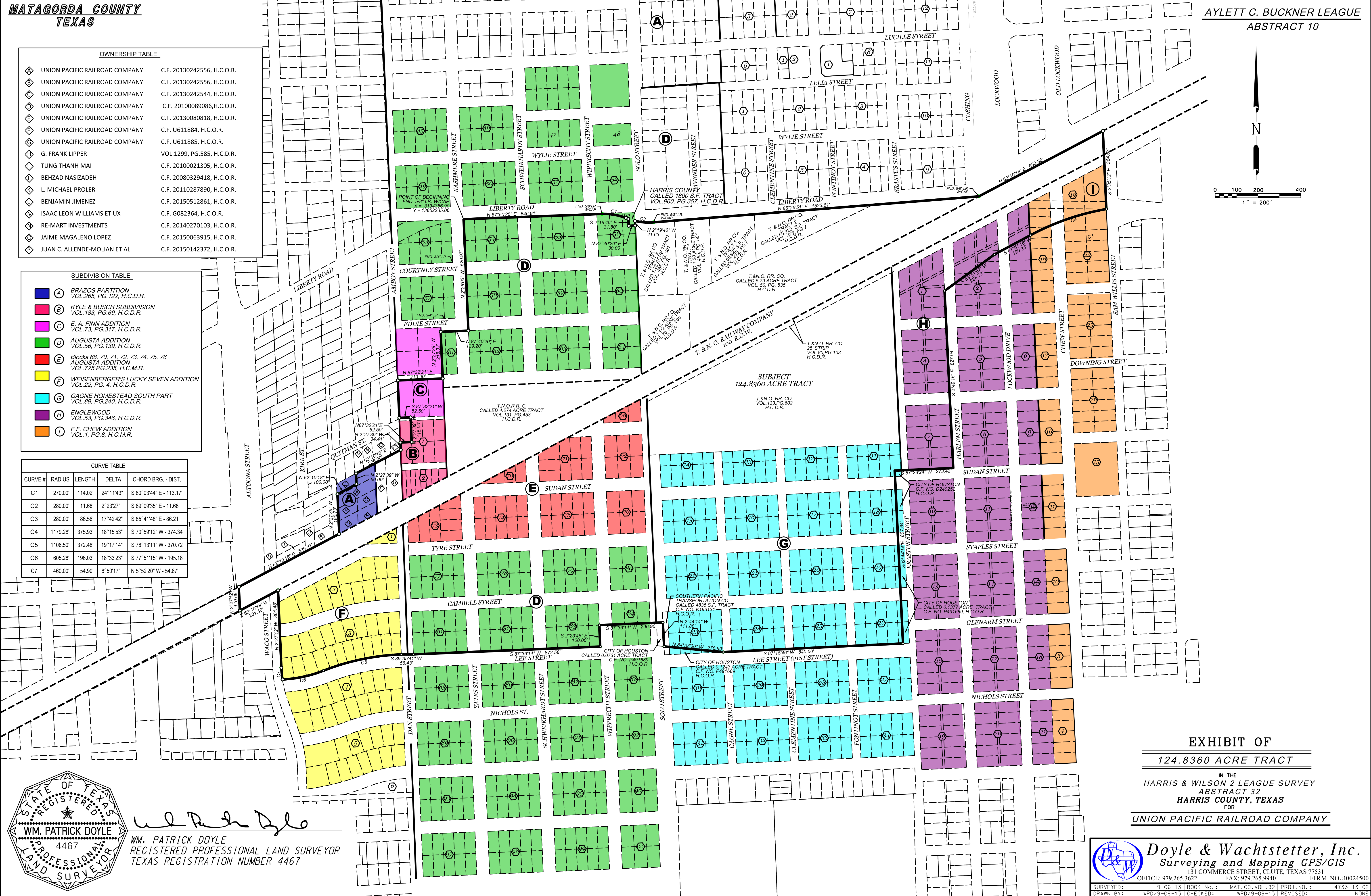
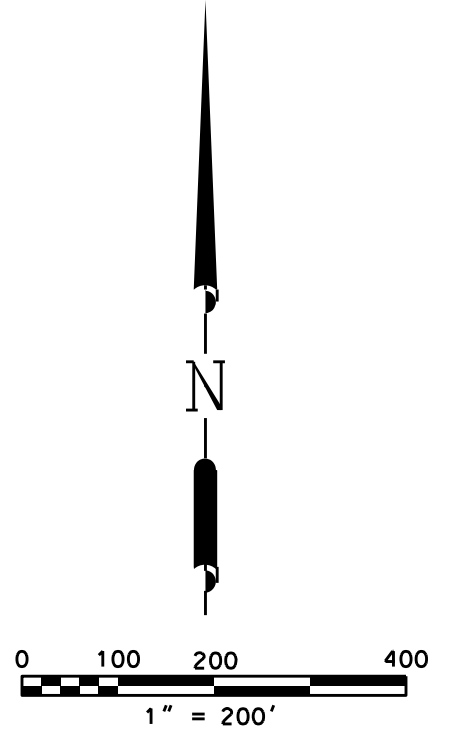
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242556, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242556, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130242544, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20100089086, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. 20130080818, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. U611884, H.C.O.R.
◇	UNION PACIFIC RAILROAD COMPANY	C.F. U611885, H.C.O.R.
◇	G. FRANK LIPPER	VOL.1299, PG.585, H.C.D.R.
◇	TUNG THANH MAI	C.F. 20100021305, H.C.O.R.
◇	BEHZAD NASIZADEH	C.F. 20080329418, H.C.O.R.
◇	L. MICHAEL PROLER	C.F. 20110287890, H.C.O.R.
◇	BENJAMIN JIMENEZ	C.F. 20150512861, H.C.O.R.
◇	ISAAC LEON WILLIAMS ET UX	C.F. G082364, H.C.O.R.
◇	RE-MART INVESTMENTS	C.F. 20140270103, H.C.O.R.
◇	JAIME MAGALENO LOPEZ	C.F. 20150063915, H.C.O.R.
◇	JUAN C. ALLENDE-MOLIAN ET AL	C.F. 20150142372, H.C.O.R.

SUBDIVISION TABLE

Ⓐ	BRAZOS PARTITION VOL.265, PG.122, H.C.D.R.
Ⓑ	KYLE & BUSCH SUBDIVISION VOL.183, PG.69, H.C.D.R.
Ⓒ	E. A. FINN ADDITION VOL.73, PG.317, H.C.D.R.
Ⓓ	AUGUSTA ADDITION VOL.56, PG.139, H.C.D.R.
Ⓔ	Blocks 68, 70, 71, 72, 73, 74, 75, 76 AUGUSTA ADDITION VOL.725 PG.235, H.C.M.R.
Ⓕ	WEISENBERGER'S LUCKY SEVEN ADDITION VOL.22, PG. 4, H.C.D.R.
Ⓖ	GAGNE HOMESTEAD SOUTH PART VOL.89, PG.240, H.C.D.R.
Ⓗ	ENGLEWOOD VOL.53, PG.346, H.C.D.R.
Ⓘ	F.F. CHEW ADDITION VOL.1, PG.8, H.C.M.R.

CURVE TABLE

CURVE #	RADIUS	LENGTH	DELTA	CHORD BRG. - DIST.
C1	270.00'	114.02'	24°11'43"	S 80°03'44" E - 113.17'
C2	280.00'	11.68'	2°23'27"	S 69°09'35" E - 11.68'
C3	280.00'	86.56'	17°42'42"	S 85°41'48" E - 86.21'
C4	1179.28'	375.93'	18°15'53"	S 70°59'12" W - 374.34'
C5	1106.50'	372.48'	19°17'14"	S 78°13'11" W - 370.72'
C6	605.28'	196.03'	18°33'23"	S 77°51'15" W - 195.18'
C7	460.00'	54.90'	6°50'17"	N 5°52'20" W - 54.87'



Wm. Patrick Doyle
WM. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467

EXHIBIT OF
124.8360 ACRE TRACT
 IN THE
HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS
 FOR
UNION PACIFIC RAILROAD COMPANY

Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS
 131 COMMERCE STREET, CLUTE, TEXAS 77531
 OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500
 SURVEYED: 9-06-13 BOOK No.: MAT. CO. VOL. 82 PROJ. NO.: 4733-13-02
 DRAWN BY: WPD/9-09-13 CHECKED: WPD/9-09-13 REVISED: NONE

USER: SPERSON
 DATE: 9/13/13
 PLOTNAME: 13



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

EXHIBIT A

UNION PACIFIC RAILROAD COMPANY

124.8360 ACRE TRACT

HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32

HARRIS COUNTY, TEXAS

PAGE 1 OF 7

BEING ALL THAT CERTAIN 124.8360 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 100 foot wide Texas and New Orleans Railroad right-of-way, All of lots 1 through 10, Block 54, all of Lots 1 through 10, Block 55, all of Lots 4 through 6 and a part of Lots 1 through 3, Block 56, all of Lots 1 through 10, Block 58, all of Lots 1 through 10, Block 59, all of Lots 1 through 6, Block 60, all of Lots 5 and 6 and part of Lots 4 and 7, Block 61, all of Lots 1 through 10, Block 62, all of Lots 1 through 10, Block 63, all of Lots 1 through 6, Block 64, all of Lots 1 through 10, Block 77, all of Lots 1 through 10, Block 78, all of Lots 1 through 10, Block 79, all of Lots 1 through 6, Block 80, all of Lots 1 through 10, Block 81, all of Lots 1 through 10, Block 82, all of Lots 1 through 10, Block 83, all of Lots 1 through 3, Block 84, all of Courtney Street (14th Street), all of Eddie Street (15th Street), all of 60 foot wide 16th Street, and all of 60 foot wide Tyre Street (19th Street), all of 60 foot wide Campbell Street (20th Street), a portion of 60 foot wide Amboy Street (Dan Street), a portion of 60 foot wide Kashmere Street (Yates Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street as shown on the map of Augusta Addition, according to the map or plat recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.); All of Lots 1 through 3, Block 68, all of Lots 1 through 3, Block 70, all of Lots 1 through 8, Block 71, all of Lots 1 through 6, Block 72, all of Lots 1 through 7, Block 73, all of Lots 1 through 10, Block 74, all of Lots 1 through 10, Block 75, all of Lots 1 through 6, Block 76, all of 60 foot wide Tunis Street (17th Street), all of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), all of 60 foot wide Yates Street (Elmer Street), all of 60 foot wide Schweikhart Street, all of 60 foot wide Wipprecht Street, all of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R.; All of Lots 5 through 7, as shown on the map of the E. A. Finn Subdivision, according to the map or plat recorded in Volume 73, Page 317 of the H.C.D.R.; All of Lots 2 through 8, Block 1, all of Lots 1 through 8, Block 2, a portion of 15 foot wide 1st Street, all of 30 foot wide 2nd Street as shown on the map of A. H. Kyle Subdivision (a.k.a. Busch and Kyle Subdivision), according to the map or plat recorded in Volume 183, Page 68 of the H.C.D.R.; All of Block 1, all of Lots 1 through 14, Block 2, all of Lots 1 through 21, Block 3, all of Tyre Street, all of Campbell Street and all of Amboy Street (Dan Street) as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R.; All of Block 5, all of Lots 1 through 10, Block 7, all of Lots 1, 2, 9 and 10, Block 8, all of Lots 1 through 5 and 7 through 10, and a portion of Lot 6, Block 11, all of Lots 1 through 10, Block 12, all of Lots 1 through 10, Block 13, all of Lots 1 through 10, Block 14, all of Lots 1 through 10, Block 15, all of Lots 1 through 10, Block 16, all of Lots 1 through 10, Block 17, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 18, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 19, all of Lots 1 through 10, Block 20, all of Lots 1 through 10, Block 21, all of Lots 1 through 10, Block 22, all of Lots 1 through 10, Block 23, all of Lots 1 through 10, Block 24, all of Lots 1 through 10, Block 25, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 26, all of 60 foot wide 16th Street, all of 60 foot wide 17th Street, all of 60 foot wide 18th Street, all of 60 foot wide 19th Street, all of 60 foot wide 20th Street, a portion of 40 foot wide Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the H.C.D.R.; All of Lots 1 through 10, Block 1, all of Lots 1 through 4, a portion of Lots 5 through 7 and a portion of Lots 15 and 16, Block 2, all of Lots 1 and 2 and a portion of Lot 3, Block 3, all of Lots 1 through 12, Block 4, all of Lots 1 through 12 Block 7, All of 60 foot wide New Orleans Avenue, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R.; All of Lots 1 through 6, Block 17, all of Lots 1 through 10, Block 18, all of Lots 1 through 3, Block 19, a portion of Lots 1 and 10, Block 22, a portion of 60 foot wide Wallisville Road, a portion of 50 foot wide Chew Avenue, as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.); All that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the H.C.D.R.; All that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the H.C.D.R.; All that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 7**

Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R.; All that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; All that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R.; all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; All that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; All of Tracts 1 through 7 and a portion of Tract 8 of the Partition of heirs of Samuel Brazos as recorded on March 10, 1911 and recorded on Volume 265, Page 122 of the H.C.D.R., and being same following described tracts: All that certain called 0.4054 acre tract of land being Tract 1 and 2 and a portion of Tract 8 of said Samuel Brazos partition, conveyed by deed recorded on May 20, 2013 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20130242556 of the Harris County Official Records (H.C.O.R.); All that certain 60' x 100' tract of land being Tract 3 of said Samuel Brazos partition, conveyed by deed recorded on May 20, 2013 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20130242544 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 4 of said Samuel Brazos partition, conveyed by deed recorded on February 21, 2013 from C. C. Cody to Union Pacific Railroad Company as recorded in Clerk's File No. 20130080818 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 5 of said partition, conveyed by deed recorded on March 8, 2010 from C. C. Cody, et al to Union Pacific Railroad Company as recorded in Clerk's File No. 20100089086 of the H.C.O.R.; All that certain 60' x 100' tract of land, being Tract 6 of said Samuel Brazos partition, conveyed by deed recorded on August 30, 2011 from C. C. Cody to Union Pacific Railroad Company as recorded in Clerk's File No. 20110322055 of the H.C.O.R.; all that certain tract, being the West 50 feet of a called 136 foot by 223 foot tract conveyed by deed recorded on September 12, 2000 from Cousins Investment Company to Union Pacific Railroad Company as recorded in Clerk's File No. U618884 of the H.C.O.R., and all that certain tract described in deed recorded on September 12, 2000 from Cousins Investment Company to Union Pacific Railroad Company, as recorded in Clerk's File No. U618885 of the H.C.O.R.; a portion of all that certain called 4835 acre tract conveyed by deed recorded on September 6, 1985 from Lawyers Title Company of Houston to Southern Pacific Transportation Company as recorded in Clerk's File No. K193131 of the H.C.O.R., the herein described 124.8360 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at a 5/8" iron rod found marking the northwest corner of Block 54 of said Augusta Addition, located at the intersection of the southern right-of-way boundary line of Liberty Road with the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for the northwest corner of the herein described 124.8360 acre tract, at position X=31334356.21 and Y=13852234.79;

THENCE North 87°50'25" East, coincident with the southern right-of-way boundary line of said Liberty Road, a distance of 646.91 feet to a 5/8" iron rod found marking the point of curvature of a curve to the right, having a radius of 270.00 feet, at position X=3135002.60 and Y=13852259.17;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the right, having a radius of 270.00 feet, a central angle of 24°11'43", an arc length of 114.02 feet and chord bearing and distance of South 80°03'44" E - 113.17 feet to the point of curvature of a reverse curve to the left, having a radius of 180.00 feet, at position X=3135114.06 and Y=13852239.64;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the left, having a radius of 280.00 feet, a central angle of 2°23'27", an arc length of 11.68 feet and chord bearing and distance of South 69°09'35" E - 11.68 feet to a point for corner, located in the western boundary line of all that certain called 1800 square foot tract of land, conveyed by deed recorded on August 18, 1934 from Bettie J. Pullen, et al to the County of Harris, as recorded in Volume 960, Page 357 of the H.C.D.R., at position X=3135124.98 and Y=13852235.49; ;

THENCE South 2°19'40" East, coincident with the western boundary line of said County of Harris called 1800 square foot tract of land, a distance of 31.80 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3135126.27 and Y=13852203.71;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 7**

THENCE North $87^{\circ}40'20''$ East, coincident with the southern boundary line of said County of Harris called 1800 square foot tract of land, a distance of 30.00 feet to point located on the eastern boundary line of said County of Harris called 1800 square foot tract of land, same being the eastern boundary line of Lot 3, Block 56 of said Augusta Addition, for an angle corner of the herein described 124.8360 acre tract, at position X=3135156.24 and Y=13852204.93;

THENCE North $2^{\circ}19'40''$ West, coincident with the eastern boundary line of said County of Harris called 1800 square foot tract of land, same being the eastern boundary line of Lot 3, Block 56 of said Augusta Addition, a distance of 21.63 feet to a point located in the southern right-of-way boundary line of said Liberty Road, located on a curve to the left, having a radius of 280.00 feet, for an angle corner of the herein described 124.8360 acre tract, at position X=3135155.36 and Y=13852226.54;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said Liberty Road, along said curve to the left, having a radius of 280.00 feet, a central angle of $17^{\circ}42'42''$, an arc length of 86.56 feet and chord bearing and distance of South $85^{\circ}41'48''$ E - 86.21 feet to a point for corner, at position X=3135241.32 and Y=13852220.07;

THENCE North $85^{\circ}26'51''$ East, coincident with the southern boundary right-of-way boundary line of said Liberty Road, same being the northern boundary line of said Texas and New Orleans Railway Company called 1.28 acre tract, said Texas and New Orleans Railway Company called 1.20 acre tract, said Texas and New Orleans Railway Company called 55,922 square foot tract (Tract 1), said Texas and New Orleans Railway Company called 55,922 square foot tract (Tract 2), said Texas and New Orleans Railway Company called 5.79 acre tract, a distance of 1523.61 feet to a point located on the northeastern right-of-way boundary line of said Texas and New Orleans Railroad Company 100 foot wide right-of-way, for an angle corner of the herein described 124.8360 acre tract, at position X=3136759.96 and Y=13852340.99;

THENCE North $62^{\circ}10'18''$ East, coincident with the southeastern right-of-way boundary line of said Liberty Road same being the northwestern boundary line of said Texas and New Orleans Railroad Company 100 foot wide right-of-way, a distance of 653.86 feet to the intersection of said southeastern right-of-way boundary line of said Liberty Road, the northwestern boundary line of said Texas and New Orleans 100 foot wide right-of-way and the northerly extension of the western right-of-way boundary line of Sam Mills Street (Berry Street) as shown on the said plat of F. F. Chew Addition, for the northeast corner of the herein described 124.8360 acre tract, at position X=3137338.15 and Y=13852646.20;

THENCE South $2^{\circ}35'12''$ East, coincident with the northerly extension of the western right-of-way boundary line of said Sam Mills Street (Berry Street) as shown on the said plat of F. F. Chew Addition, a distance of 364.63 feet to a point located in the northern right-of-way boundary line of Wallisville Road (right-of-way varies), on a curve to the left, having a radius of 1179.28 feet, for an angle corner of the herein described 124.8360 acre tract, at position X=3137354.60 and Y=13852281.98;

THENCE in a southwesterly direction, coincident with the northwestern right-of-way boundary line of said Wallisville Road along said curve to the left, having a radius of 1179.28 feet, a central angle of $18^{\circ}15'53''$, an arc length of 375.93 feet and chord bearing and distance of South $70^{\circ}59'12''$ West - 374.34 feet to a point for corner, at position X=3137000.72 and Y=13852160.04;

THENCE South $61^{\circ}51'16''$ West, coincident with the northwestern right-of-way boundary line of said Wallisville Road, a distance of 190.34 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3136832.90 and Y=13852070.26;

THENCE South $53^{\circ}51'57''$ West, coincident with the northern right-of-way boundary line of said Wallisville Road, a distance of 288.79 feet to a point located on the western right-of-way boundary line of 50 foot wide Harlem Street (Baer Avenue) as shown on the map of Englewood, same being the eastern boundary line of Block 1 of said Englewood subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3136599.69 and Y=13851899.99;

THENCE South $2^{\circ}49'16''$ East, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street (Baer Avenue), a distance of 827.94 feet to the intersection of the western right-of-way boundary line of said 50 foot wide Harlem Street and the northern right-of-way boundary line of 50 foot wide Sudan Street (Wilson St.), for the southeast corner of Block 7 of said Englewood subdivision and an angle corner of the herein described 124.8360 acre tract, at position X=3136640.44 and Y=13851073.13;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 7**

THENCE South 87°28'24" West, coincident with the northern right-of-way boundary line of 50 foot wide Sudan Street (Wilson St.), at a distance of 210.00 feet pass the West right-of-way boundary line of said Erastus Street as shown on the plat of said Englewood subdivision, same being the eastern boundary line of Block 11 of the South Part of Gagne Homestead, continuing a total distance of 273.42 feet to a point located in the western right-of-way boundary line of Erastus Street, conveyed by deed recorded on December 31, 1970 from Southern Pacific Transportation Company to the City of Houston, as recorded in Clerk's File No. D240252 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3136367.32 and Y=13851061.08;

THENCE South 2°44'14" East, coincident with the western right-of-way boundary line of Erastus Street, being a 30 foot wide strip conveyed by Southern Pacific Transportation Company to the City of Houston, as recorded in Clerk's File No. D240252 and a 30 foot wide strip conveyed by deed recorded on October 7, 1993 from Southern Pacific Transportation Company to the City of Houston in Clerk's File No. P491689 of the H.C.O.R., a distance of 807.64 feet to a point located in the northern right-of-way boundary line of 60 foot wide Lee Street, same being the southern boundary line of Block 26 of said South Part of Gagne Homestead, for an angle corner of the herein described 124.8360 acre tract, at position X=3136405.88 and Y=13850254.45;

THENCE South 87°15'46" West, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of Blocks 24, 25 and 26 of said South Part of Gagne Homestead, a distance of 840.00 feet to the southeast corner of Block 23 of said South Part of Gagne Homestead, same being the East corner of all that certain called 0.1243 acre tract of land conveyed by deed recorded on October 7, 1993 from Southern Pacific Transportation Company to the City of Houston in Clerk's File No. P491689 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3135566.93 and Y=13850214.33;

THENCE North 84°33'30" West, coincident with the northern boundary line of said City of Houston, called 0.1243 acre tract, a distance of 276.99 feet to a point located in the western boundary line of said South Pacific Transportation Company called 4835 square foot tract, same being the eastern right-of-way boundary line of Solo Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3135291.22 and Y=13850240.60;

THENCE North 2°44'14" West, coincident with the western right-of-way boundary line of said Solo Street, same being the eastern boundary line of said Southern Pacific Transportation Company called 4835 square foot tract, a distance of 111.88 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3135285.88 and Y=13850352.35;

THENCE South 87°36'14" West, at a distance of 60.00 feet pass the southeast corner of Lot 3, Block 84, at a distance of 236.90 feet pass the southwest corner of Lot 1, Block 84, continuing for a total distance of 296.90 feet to the southeast corner of Lot 5, same being the northeast corner of Lot 6, Block 83 of said Augusta Addition, located in the western right-of-way boundary line of 60 foot wide Wipprecht Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3134989.26 and Y=13850339.94;

THENCE South 2°23'46" East, coincident with the eastern boundary line of said Lot 6, Block 83 of said Augusta Addition, same being the western right-of-way boundary line of said 60 foot wide Wipprecht Street, a distance of 100.00 feet to a point located on the northern right-of-way boundary line of said 60 foot wide Lee Street, for the southeast corner of said Lot 6, Block 83 of Augusta Addition, for angle corner of the herein described 124.8360 acre tract, at position X=3134993.71 and Y=13850239.77;

THENCE South 87°36'14" West, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of Blocks 81, 82 and 83 of said Augusta Addition, a distance of 872.58 feet to southwest corner of Lot 10, Block 81 of Augusta Addition, located on the eastern right-of-way boundary line of 60 foot wide Amboy Street (Dan Street), for an angle corner of the herein described 124.8360 acre tract, at position X=3134121.72 and Y=13850203.56;

THENCE South 89°35'41" West, a distance of 56.43 feet to the southeast corner of Lot 11, Block 3 of said Weisenberger's Lucky Seven Addition, same being the northern right-of-way boundary line of said 60 foot wide Lee Street, on a curve to the left, having a radius of 1206.50 feet, for an angle corner of the herein described 124.8360 acre tract, at position X=3134065.30 and Y=13850203.16;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 5 OF 7**

THENCE in a westerly direction, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of said Block 3 of Weisenberger's Lucky Seven Addition, along said curve to the left, having a radius of 1106.50 feet, a central angle of 19°17'14", an arc length of 372.48 feet and chord bearing and distance of South 78°13'11" West - 370.72 feet to a point of reverse curve to the right, having a radius of 605.28 feet, at position X=3133702.43 and Y=13850127.48;

THENCE in a westerly direction, coincident with the northern right-of-way boundary line of said 60 foot wide Lee Street, same being the southern boundary line of said Block 3 of Weisenberger's Lucky Seven Addition, along said curve to the right, having a radius of 605.28 feet, a central angle of 18°33'24", an arc length of 196.03 feet and chord bearing and distance of South 77°51'16" West - 195.18 feet to a the southwest corner of Lot 21, Block 3 of said Weisenberger's Lucky Seven Addition, located on the eastern right-of-way boundary line of Altoona Street (right-of-way varies) and a curve to the right, having a radius of 460.95 feet, at position X=3133511.64 and Y=13850086.42;

THENCE in a northerly direction, coincident with the eastern right-of-way boundary line of Altoona Street (a.k.a. Waco Street) (right-of-way varies), same being the western boundary line Block 3 of said Weisenberger's Lucky Seven Addition, and along said curve to the right, having a radius of 460.95 feet, a central angle of 6°50'17", an arc length of 54.90 feet and chord bearing and distance of North 5°52'20" W - 54.87 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3133506.03 and Y=13850140.99;

THENCE North 2°27'12" West, coincident with the eastern right-of-way boundary line of Altoona Street (right-of-way varies), same being the western boundary line Block 2 and 3 of said Weisenberger's Lucky Seven Addition, a distance of 361.48 feet to a point located on the southern boundary line of the Texas and New Orleans Railroad 100 foot right-of-way, same being the northern right-of-way boundary line of 50 foot wide Tyre Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3133490.55 and Y=13850502.10;

THENCE South 62°10'18" West, coincident with the southern boundary line of the Texas and New Orleans Railroad 100 foot right-of-way, a distance of 201.40 feet to an angle corner of the herein described 124.8360 acre tract, at position X=3133312.46 and Y=13850408.09;

THENCE North 2°27'12" West, a distance of 110.68 feet to a point located on the northern boundary line of said Texas and New Orleans Railroad 100 foot right-of-way, for an angle corner of the herein described 124.8360 acre tract, at position X=3133307.73 and Y=13850518.66;

THENCE North 62°10'18" East, coincident with the northern boundary line of said Texas and New Orleans Railroad 100 foot right-of-way, same being the southern boundary line of said Reserve "A" of Abernathy Court, the southern boundary line of all that certain Tract 2 conveyed by deed recorded on January 3, 1944 from Alfred Philo Howard, Jr. to G. Frank Lipper as recorded in Volume 1299, Page 585 of the H.C.D.R., the southern boundary line of all that certain called 0.1721 acre tract, conveyed by deed recorded on January 19, 2010 from the City of Houston, et al to Tung Thanh Mai as recorded in Clerk's File No. 2010-0021305 of the H.C.O.R., the southern boundary line of all that certain called 0.1148 acre tract conveyed by deed recorded on June 24, 2008 from the City of Houston, et al to Behzad Nasizadeh as recorded in Clerk's File No. 2008-0329418 of the H.C.O.R., the southern boundary line of all that certain called 1492 acre tract, conveyed by deed recorded on July 13, 2011 from the City of Houston, et al to L. Michael Proler as recorded in Clerk's File No. 2011-0287890 of the H.C.O.R., a distance of 529.31 feet to the southwest corner of Tract 5 of said Brazos Partition, located on the eastern right-of-way boundary line of a 20 foot wide roadway (a.k.a. Wayne Street) for an angle corner of the herein described 124.8360 acre tract, at position X=3133775.77 and Y=13850765.72;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said 20 foot wide roadway (a.k.a. Wayne Street), same being the western boundary line of Tracts 5 through 8 of said Samuel Brazos partition, a distance of 185.73 feet to the southwest corner of that certain 50' x 100' tract out of Tract 8 of said Samuel Brazos partition, conveyed by deed recorded on November 10, 2015 from Harris County, et al to Benjamin Jimenez, as recorded in Clerk's File No. 2015-0512861 of the H.C.O.R., for an angle corner of the herein described 124.8360 acre tract, at position X=3133767.80 and Y=13850951.26;

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 6 OF 7**

THENCE North 62°10'18" East, coincident with the southern boundary line of said Benjamin Jimenez tract, a distance of 100.00 feet to the southeast corner of said Benjamin Jimenez tract, located on the eastern boundary line of said Tract 8, same being the western boundary line of said Tract 1 of the Samuel Brazos partition, for an angle corner of the herein described 124.8360 acre tract, at position X=3133856.23 and Y=13850997.94;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Benjamin Jimenez tract, the eastern boundary line of said Tract 8, same being the western boundary line of said Tract 1 of the Samuel Brazos partition, a distance of 50.00 feet to a point located on the southern boundary line of all that certain tract of land conveyed by deed recorded on May 16, 1979 from George Ferguson, et al to Isaac Leon Williams, et ux, as recorded in Clerk's File No. G082364 of the H.C.O.R., for the northeast corner of said Benjamin Jimenez tract and said Tract 8, the northwest corner of said Tract 1 of said Samuel Brazos partition, for an angle corner of the herein described 124.8360 acre tract, at position X=3133854.08 and Y=13851047.89;

THENCE North 62°10'18" East, coincident with the southern boundary line of said Isaac Leo William, et ux tract, the southern boundary line of all that certain tract conveyed by deed recorded on June 23, 2014 from Harris County, et al to Re-Mart Investment as recorded in Clerk's File No. 2014-0270103 of the H.C.O.R., the southern boundary line of all that certain tract of land conveyed by deed recorded on February 17, 2015 from Melbourne Street, LLC to Jaime Magdaleno Lopez as recorded in Clerk's File No. 2015-0063915 of the H.C.O.R., the southern boundary line of all that certain tract of land conveyed by deed recorded on April 7, 2015 from UrboCorp, LLC TO Juan C. Allende-Molina, et al, as recorded in Clerk's File No. 2015-0142372 of the H.C.O.R., a distance of 236.00 feet to a point located on the western boundary line of Lot 8, Block 1 of said A. H. Kyle Subdivision, for the southeast corner of said Juan C. Allende-Molina, et al tract, for an angle corner of the herein described 124.8360 acre tract, at position X=3134062.77 and Y=13851158.05 ;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Juan C. Allende-Molian et al tract, same being the western boundary line of said Lot 8, Block 1 of said A. H. Kyle Subdivision, a distance of 34.41 feet to the northwest corner of said Lot 8, Block 1, same being the southwest corner of Lot 1, Block 1 of said A. H. Kyle Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134061.29 and Y=13851192.43 ;

THENCE North 87°32'21" East, coincident with the southern boundary line of said Lot 1, Block 1, same being the northern boundary line of said Lot 8, Block 1 of said A. H. Kyle Subdivision, a distance of 52.50 feet to the common corner of Lots 1, 2, 7 and 8, Block 1 of said A. H. Kyle Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134113.73 and Y=13851194.68;

THENCE North 2°27'39" West, coincident with the eastern boundary line of said Lot 1, the western boundary line of said Lot 2, Block 1 of said A. H. Kyle Subdivision, at a distance of 100.00 feet pass the northeast corner of said Lot 1, the northwest corner of said Lot 2 of Block 1, same being the southern right-of-way boundary line of 15 foot wide 1st Street, continuing for a total distance of 115.00 feet to a point located on the northern right-of-way boundary line of 15 foot wide 1st Street, same being the southern boundary line of Lot 7 of said E. A. Finn Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134108.80 and Y=13851309.56;

THENCE South 87°32'21" West, coincident with the northern right-of-way boundary line of 15 foot wide 1st Street, same being the southern boundary line of Lot 7 of said E. A. Finn Subdivision, a distance of 52.50 feet to the southwest corner of said Lot 7, and an angle corner of the herein described 124.8360 acre tract, at position X=3134056.35 and Y=13851307.31;

THENCE North 2°27'39" West, coincident with the western boundary line of said Lot 7 of the E. A. Finn Subdivision, a distance of 174.86 feet to a point located on the southern boundary line of a 22 foot wide right-of-way, for the northwest corner of said Lot 7 and an angle corner of the herein described 124.8360 acre tract, at position X=3134048.85 and Y=13851481.99;

THENCE North 87°32'21" East, coincident with the southern boundary line of a 22 foot wide right-of-way, same being the northern boundary line of Lots 5, 6 and 7 of said E. A. Finn Subdivision, a distance of 210.00 feet to the northeast corner of said Lot 5 of the E. A. Finn Subdivision, for an angle corner of the herein described 124.8360 acre tract, at position X=3134258.63 and Y=13851491.00;

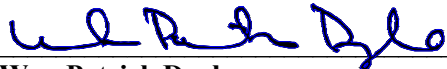
EXHIBIT A

**UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 7 OF 7**

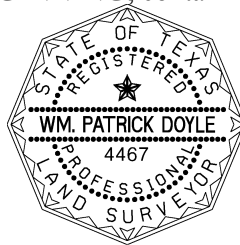
THENCE North 2°27'39" West, at a distance of 22.00 feet, pass the southeast corner of Lot 3 of said E. A. Finn Subdivision, continuing coincident with the eastern boundary line of said Lot 3 and Lot 2, a total distance of 218.32 feet to a point located on the southern right-of-way boundary line of 60 foot wide Eddie Street (15th Street), same being the northern boundary line of Block 61 of said Augusta Addition, for an angle corner of the herein described 124.8360 acre tract, at position X=3134249.26 and Y=13851709.10;

THENCE North 87°40'20" East, a distance of 129.20 feet to the northwest corner of Block 62, located on the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for an angle corner of the herein described 124.8360 acre tract, at position X=3134378.34 and Y=13851714.35 ;

THENCE North 2°26'03" West, coincident with the eastern right-of-way boundary line of said 60 foot wide Kashmere Street, same being the western boundary line of Blocks 54 and 58 boundary line, a distance of 520.97 feet to the **POINT OF BEGINNING**, containing 124.8360 acres of land, more or less.



**Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
April 6, 2016**

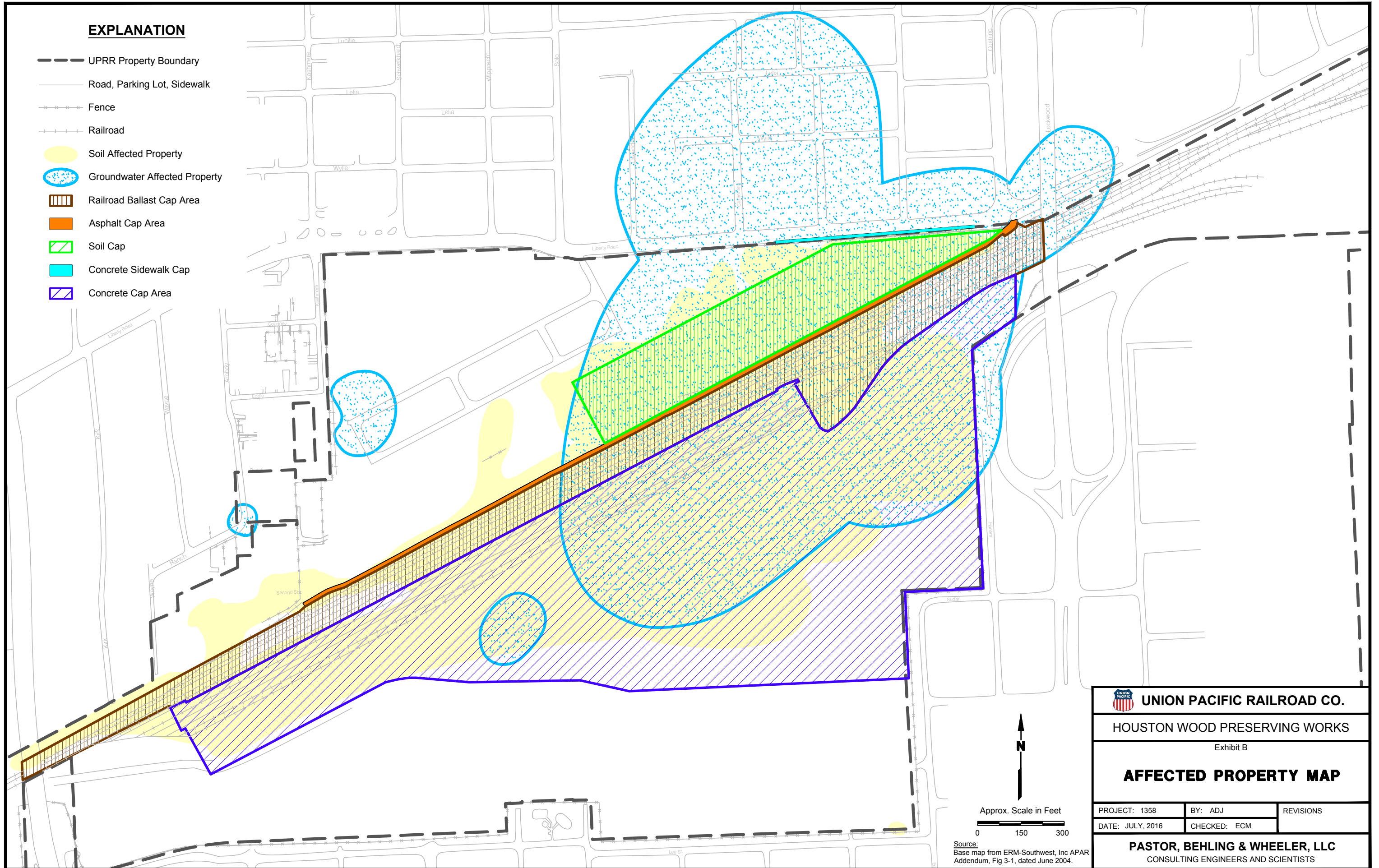


*This description is based on a survey, dated December 23, 2015 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard 124.8360 acre tract.doc*

EXHIBIT "B"
AFFECTED PROPERTY MAP

EXPLANATION

- UPRR Property Boundary
- Road, Parking Lot, Sidewalk
- *-*- Fence
- +—+ Railroad
- Soil Affected Property
- Groundwater Affected Property
- ▤ Railroad Ballast Cap Area
- Asphalt Cap Area
- ▨ Soil Cap
- Concrete Sidewalk Cap
- ▨ Concrete Cap Area



UNION PACIFIC RAILROAD CO.		
HOUSTON WOOD PRESERVING WORKS		
Exhibit B		
AFFECTED PROPERTY MAP		
PROJECT: 1358	BY: ADJ	REVISIONS
DATE: JULY, 2016	CHECKED: ECM	
PASTOR, BEHLING & WHEELER, LLC CONSULTING ENGINEERS AND SCIENTISTS		

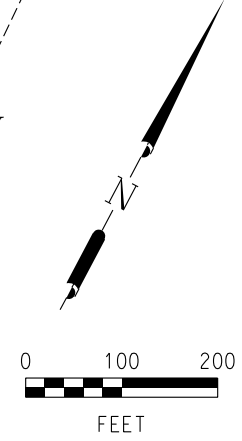
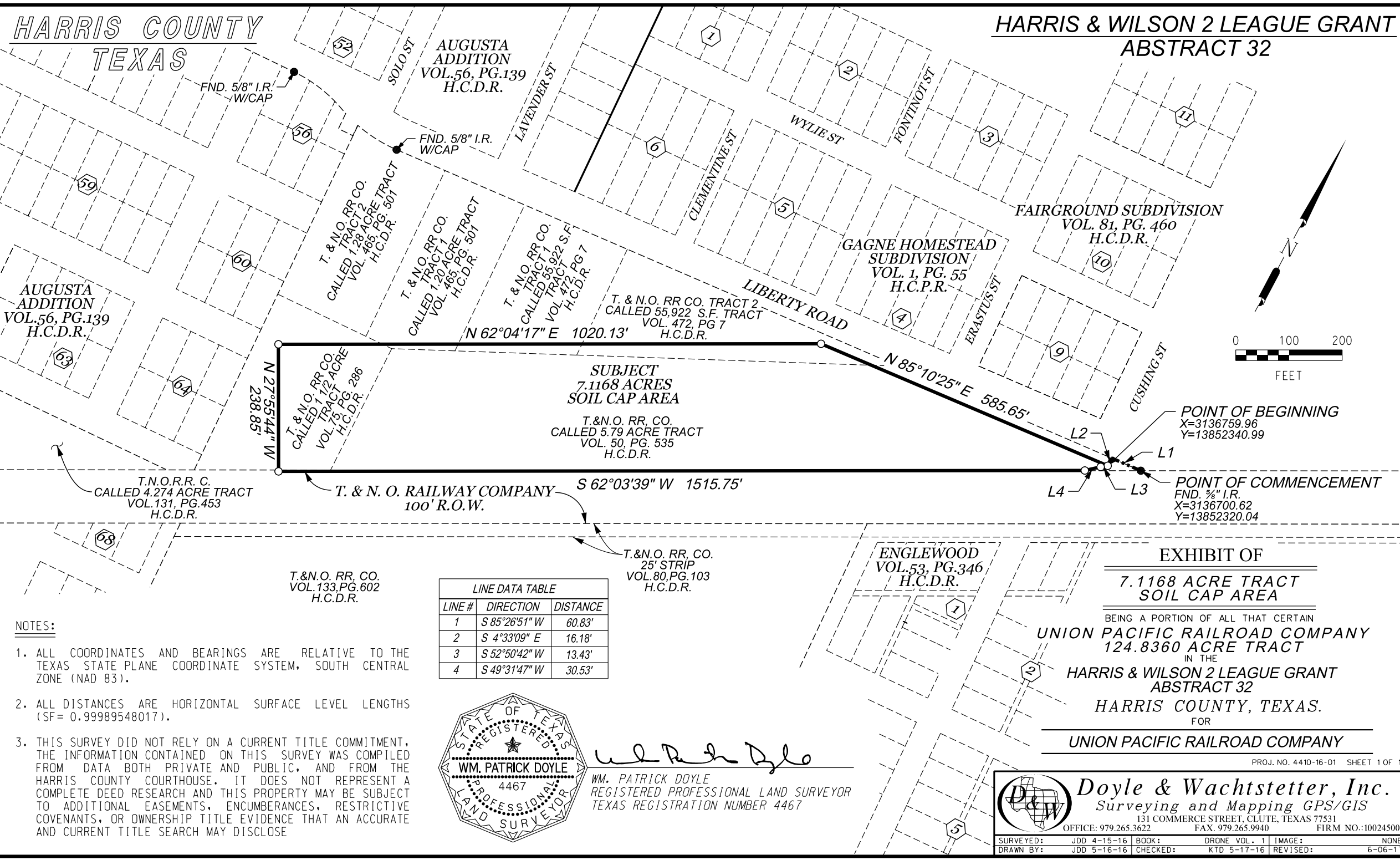
Source:
Base map from ERM-Southwest, Inc APAR
Addendum, Fig 3-1, dated June 2004.

EXHIBITS "C-1, C-2, C-3, AND C-4"
LEGAL DESCRIPTIONS OF USE OF PHYSICAL CONTROLS FOR SOIL

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

USER: Untitled Workspace DATE: 6/6/2017 G:\DON\PEB&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Capped Boundary\Plats\Survey Plat UPRR Soil Cap 7.1168 acres Rev1.dgn



SUBJECT
7.1168 ACRES
SOIL CAP AREA
T. & N. O. RR. CO.
CALLED 5.79 ACRE TRACT
VOL. 50, PG. 535
H.C.D.R.

POINT OF BEGINNING
X=3136759.96
Y=13852340.99

POINT OF COMMENCEMENT
FND. 5/8" I.R.
X=3136700.62
Y=13852320.04

T. & N. O. RAILWAY COMPANY
100' R.O.W.
S 62°03'39" W 1515.75'

T. & N. O. RR. CO.
VOL. 133, PG. 602
H.C.D.R.

T. & N. O. RR. CO.
25' STRIP
VOL. 80, PG. 103
H.C.D.R.

LINE #	DIRECTION	DISTANCE
1	S 85°26'51" W	60.83'
2	S 4°33'09" E	16.18'
3	S 52°50'42" W	13.43'
4	S 49°31'47" W	30.53'

EXHIBIT OF
7.1168 ACRE TRACT
SOIL CAP AREA

BEING A PORTION OF ALL THAT CERTAIN
UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

- NOTES:
- ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 - ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF = 0.99989548017).
 - THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	JDD 4-15-16	BOOK:	DRONE VOL. 1	IMAGE:	NONE
DRAWN BY:	JDD 5-16-16	CHECKED:	KTD 5-17-16	REVISED:	6-06-17



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
SOIL CAP AREA – 7.1168 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 1**

BEING ALL THAT CERTAIN 7.1168 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, being a portion of all that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R.; all that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R.; all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 7.1168 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 60.83 feet to an angle point, at position X=3136699.34 and Y=13852336.16;

THENCE South 4°33'09" East, a distance of 16.18 feet to East corner and the **POINT OF BEGINNING** of the herein described 7.1168 acre tract, at position X=3136700.62 and Y=13852320.04;

THENCE South 52°50'42" West, a distance of 13.43 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136689.92 and Y=13852311.93;

THENCE South 49°31'47" West, a distance of 30.53 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136666.69 and Y=13852292.11;

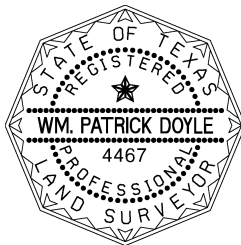
THENCE South 62°03'39" West, a distance of 1515.75 feet to the South corner of the herein described 7.1168 acre tract, at position X=3135327.75 and Y=13851582.01;

THENCE North 27°55'44" West, a distance of 238.85 feet to West corner of the herein described 7.1168 acre tract, at position X=3135215.89 and Y=13851793.02;

THENCE North 62°04'17" East, a distance of 1020.13 feet to an angle corner of the herein described 7.1168 acre tract, at position X=3136117.11 and Y=13852270.77;

THENCE North 85°10'25" East, a distance of 585.65 feet to the **POINT OF BEGINNING**, containing 7.1168 acres of land, more or less.

Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016



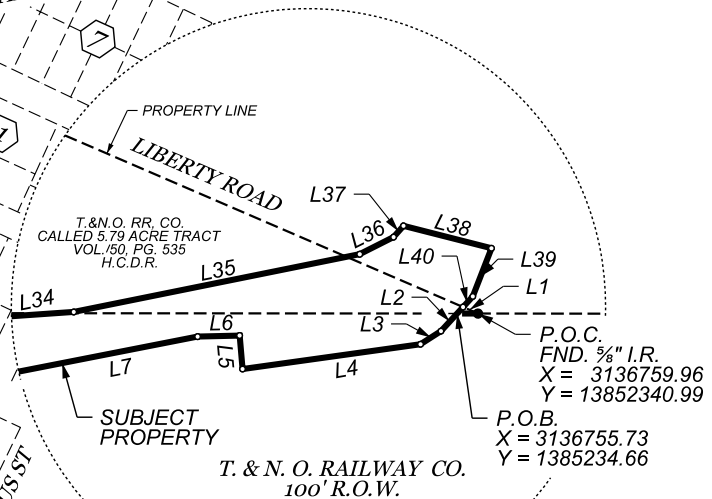
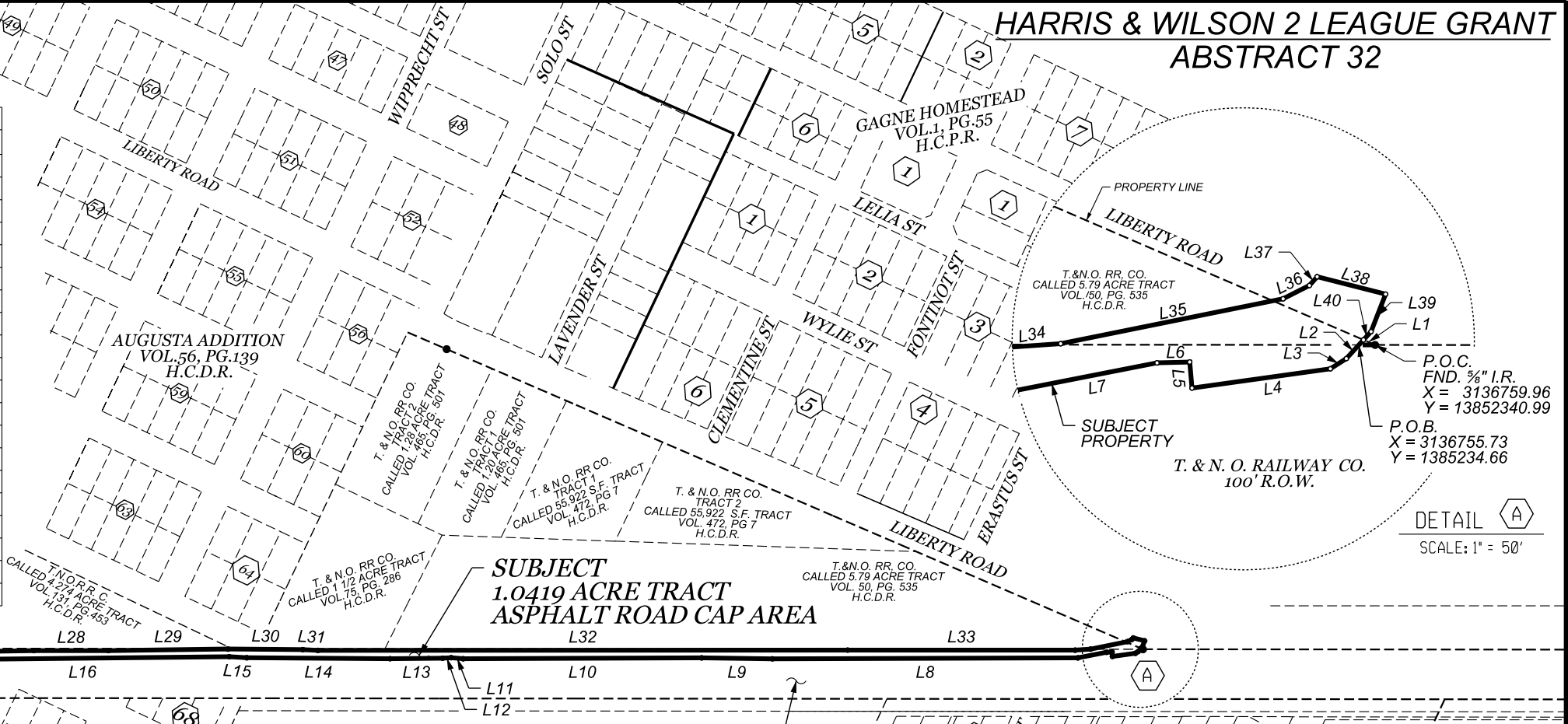
This description is based on an exhibit, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Sidewalk tract 0.1318 acre.doc

HARRIS COUNTY TEXAS

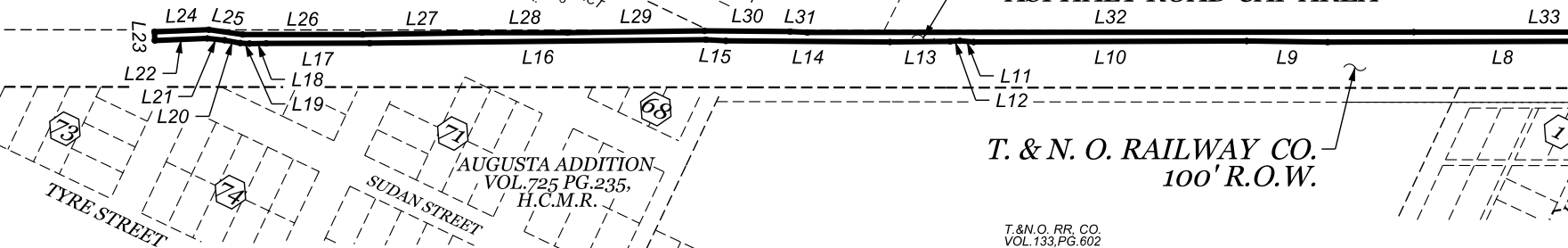
HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

LINE #	DIRECTION	LENGTH
L1	S 86°26'51" W	4.25'
L2	S 14°40'24" W	8.50'
L3	S 29°23'15" W	6.33'
L4	S 54°11'53" W	46.80'
L5	N 32°51'31" W	8.76'
L6	S 60°39'24" W	10.96'
L7	S 51°04'35" W	58.69'
L8	S 61°56'31" W	613.96'
L9	S 62°54'22" W	142.13'
L10	S 61°55'12" W	479.21'
L11	S 67°03'52" W	24.28'
L12	S 58°32'12" W	17.21'
L13	S 61°37'54" W	105.67'
L14	S 62°29'25" W	287.83'
L15	S 65°35'29" W	35.19'
L16	S 61°31'56" W	590.15'
L17	S 61°59'05" W	181.71'
L18	S 61°22'47" W	29.30'
L19	S 65°38'37" W	16.53'
L20	S 72°24'44" W	27.78'

LINE #	DIRECTION	LENGTH
L21	S 68°04'30" W	30.51'
L22	S 59°48'14" W	92.27'
L23	N 29°33'31" W	15.17'
L24	N 59°48'53" E	95.54'
L25	N 70°15'38" E	60.14'
L26	N 62°07'21" E	210.22'
L27	N 61°12'15" E	209.88'
L28	N 62°09'00" E	149.93'
L29	N 61°23'02" E	240.32'
L30	N 62°36'22" E	150.43'
L31	N 64°52'14" E	30.22'
L32	N 62°05'30" E	1064.63'
L33	N 62°08'24" E	457.12'
L34	N 58°08'18" E	30.97'
L35	N 50°42'05" E	76.01'
L36	N 35°17'11" E	9.87'
L37	N 13°31'05" E	3.91'
L38	N 76°25'52" E	23.65'
L39	S 6°43'41" E	13.45'
L40	S 14°40'24" W	3.77'



DETAIL A
SCALE: 1" = 50'



- NOTES:
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

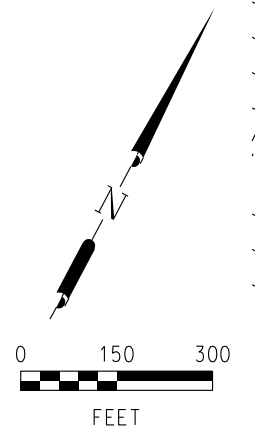


EXHIBIT OF
1.0419 ACRE TRACT ASPHALT ROAD CAP AREA
BEING A PORTION OF ALL THAT CERTAIN
UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT &
LIBERTY ROAD
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

PROJ. NO. 4410-16-01 SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED: JDD 4-15-16	BOOK: DRONE VOL. 1	IMAGE: NONE
DRAWN BY: JDD 5-16-16	CHECKED: KTD 5-17-16	REVISED: 6-06-17

USER: Untitled Workspace TIME: 3:38:47 PM DATE: 6/6/2017 G:\DON\PB&W\Environmental\UPRR Houston Wood 4910 Capped Boundary\Plats\Survey Plat\UPRR Asphalt Road 1.0419 acres Rev2.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 1.0419 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the right-of-way of 60 foot wide Liberty Road, within the Texas and New Orleans 100 foot wide railroad right-of-way, being a portion of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R. and a portion of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the H.C.D.R., the herein described 1.0419 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 85°26'51" West, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 4.25 feet to the **POINT OF BEGINNING** of the herein described 1.0419 acre tract, at position X=3136755.73 and Y=13852340.66;

THENCE South 14°40'24" West, a distance of 8.50 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136753.58 and Y=13852332.43;

THENCE South 29°23'15" West, a distance of 6.33 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136750.47 and Y=13852326.92;

THENCE South 54°11'53" West, a distance of 46.80 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136712.51 and Y=13852299.54;

THENCE North 32°51'31" West, a distance of 8.76 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136707.76 and Y=13852306.90;

THENCE South 60°39'24" West, a distance of 10.96 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136698.21 and Y=13852301.53;

THENCE South 51°04'35" West, a distance of 58.69 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136652.56 and Y=13852264.66;

THENCE South 61°56'31" West, a distance of 613.96 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136110.82 and Y=13851975.91;

THENCE South 62°54'22" West, a distance of 142.13 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135984.30 and Y=13851911.18;

THENCE South 61°55'12" West, a distance of 479.21 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135561.54 and Y=13851685.64;

THENCE South 67°03'52" West, a distance of 24.28 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135539.18 and Y=13851676.18;

THENCE South 58°32'12" West, a distance of 17.21 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135524.50 and Y=13851667.19;

**UNION PACIFIC RAILROAD COMPANY
ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE South 61°37'54" West, a distance of 105.67 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135431.52 and Y=13851616.99;

THENCE South 62°29'25" West, a distance of 287.83 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135176.27 and Y=13851484.05;

THENCE South 65°35'29" West, a distance of 35.19 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135144.23 and Y=13851469.52;

THENCE South 61°31'56" West, a distance of 590.15 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134625.49 and Y=13851188.24;

THENCE South 61°59'05" West, a distance of 181.71 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134465.09 and Y=13851102.89;

THENCE South 61°22'47" West, a distance of 29.30 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134439.37 and Y=13851088.86;

THENCE South 65°38'37" West, a distance of 16.53 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134424.32 and Y=13851082.05;

THENCE South 72°24'44" West, a distance of 27.78 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134397.83 and Y=13851073.65;

THENCE South 68°04'30" West, a distance of 30.51 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134369.53 and Y=13851062.26;

THENCE South 59°48'14" West, a distance of 92.27 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134289.80 and Y=13851015.86;

THENCE North 29°33'31" West, a distance of 15.17 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134282.31 and Y=13851029.05;

THENCE North 59°48'53" East, a distance of 95.54 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134364.89 and Y=13851077.09;

THENCE North 70°15'38" East, a distance of 60.14 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134421.50 and Y=13851097.40;

THENCE North 62°07'21" East, a distance of 210.22 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134607.30 and Y=13851195.68;

THENCE North 61°12'15" East, a distance of 209.88 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134791.20 and Y=13851296.77;

THENCE North 62°09'00" East, a distance of 149.93 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3134923.75 and Y=13851366.80;

THENCE North 61°23'02" East, a distance of 240.32 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135134.70 and Y=13851481.89;

THENCE North 62°36'22" East, a distance of 150.43 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135268.25 and Y=13851551.09;

THENCE North 64°52'14" East, a distance of 30.22 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3135295.60 and Y=13851563.93;

**UNION PACIFIC RAILROAD COMPANY
 ASPHALT ROAD CAP AREA – 1.0419 ACRE TRACT
 HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
 HARRIS COUNTY, TEXAS
 PAGE 3 OF 3**

THENCE North 62°05'30" East, a distance of 1064.63 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136236.31 and Y=13852062.18;

THENCE North 62°08'24" East, a distance of 457.12 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136640.40 and Y=13852275.77;

THENCE North 58°08'18" East, a distance of 30.97 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136666.69 and Y=13852292.11;

THENCE North 50°42'05" East, a distance of 76.01 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136725.51 and Y=13852340.25;

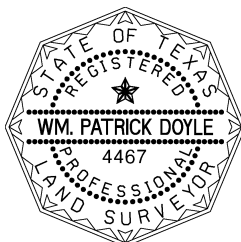
THENCE North 35°17'11" East, a distance of 9.87 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136731.21 and Y=13852348.31;

THENCE North 13°31'05" East, a distance of 3.91 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136732.13 and Y=13852352.11;

THENCE North 76°25'52" East, a distance of 23.65 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136755.11 and Y=13852357.66;

THENCE South 6°43'41" East, a distance of 13.45 feet to an angle corner of the herein described 1.0419 acre tract, at position X=3136756.69 and Y=13852344.30;

THENCE South 14°40'24" West, a distance of 3.77 feet to the **POINT OF BEGINNING**, containing 1.0419 acre of land, more or less.



Wm. Patrick Doyle

**Wm. Patrick Doyle
 Registered Professional Land Surveyor
 Texas Registration Number 4467
 June 23, 2016**

*This description is based on a plat, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
 V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Road Asphalt Road tract 1.0419 acres Rev1.doc*

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32

NOTES:

1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT. THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE

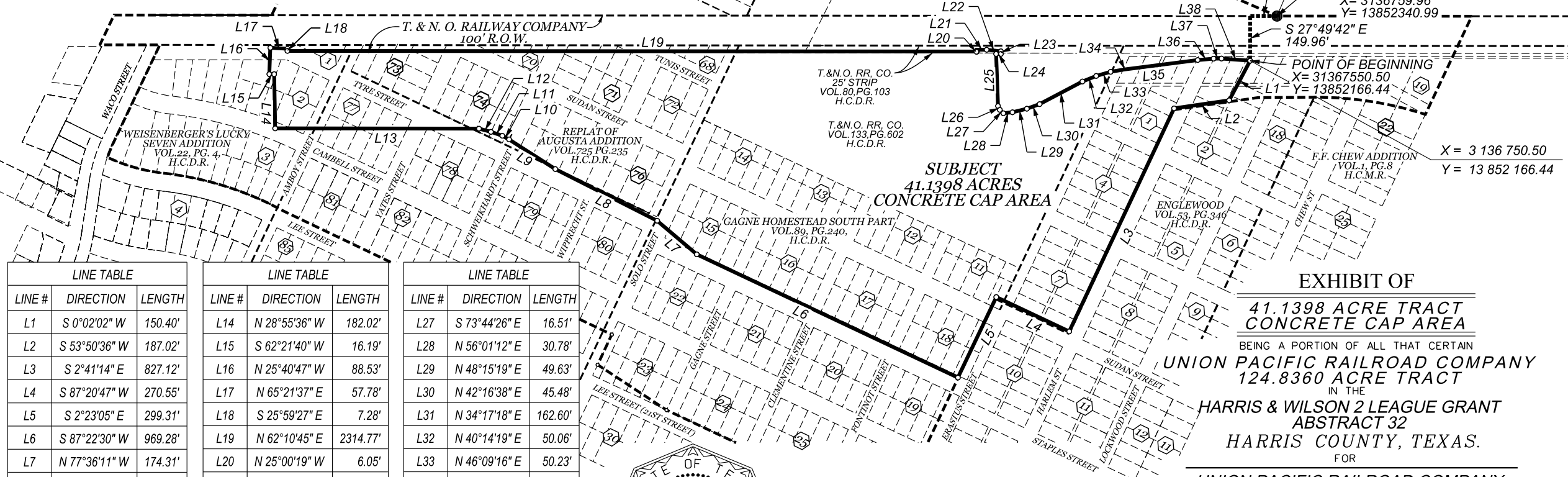


X = 3 136 759.96
Y = 13 852 340.99

S 62°10'18" W
89.87'
POINT OF COMMENCEMENT
FND. 5/8" I.R. W/CAP
X= 3136759.96
Y= 13852340.99

S 27°49'42" E
149.96'
POINT OF BEGINNING
X= 31367550.50
Y= 13852166.44

X = 3 136 750.50
Y = 13 852 166.44

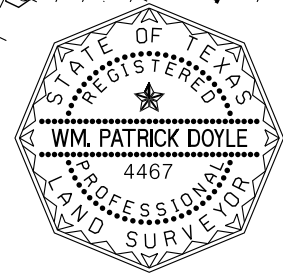


LINE #	DIRECTION	LENGTH
L1	S 0°02'02" W	150.40'
L2	S 53°50'36" W	187.02'
L3	S 2°41'14" E	827.12'
L4	S 87°20'47" W	270.55'
L5	S 2°23'05" E	299.31'
L6	S 87°22'30" W	969.28'
L7	N 77°36'11" W	174.31'
L8	S 89°01'46" W	383.56'
L9	N 85°15'27" W	184.19'
L10	N 89°19'03" W	25.74'
L11	S 81°05'07" W	40.48'
L12	S 77°12'08" W	41.52'
L13	S 62°11'46" W	684.47'

LINE #	DIRECTION	LENGTH
L14	N 28°55'36" W	182.02'
L15	S 62°21'40" W	16.19'
L16	N 25°40'47" W	88.53'
L17	N 65°21'37" E	57.78'
L18	S 25°59'27" E	7.28'
L19	N 62°10'45" E	2314.77'
L20	N 25°00'19" W	6.05'
L21	N 62°13'44" E	32.41'
L22	N 68°12'09" E	47.98'
L23	S 26°46'44" E	9.01'
L24	S 62°08'04" W	15.88'
L25	S 29°58'59" E	174.76'
L26	S 53°20'30" E	14.15'

LINE #	DIRECTION	LENGTH
L27	S 73°44'26" E	16.51'
L28	N 56°01'12" E	30.78'
L29	N 48°15'19" E	49.63'
L30	N 42°16'38" E	45.48'
L31	N 34°17'18" E	162.60'
L32	N 40°14'19" E	50.06'
L33	N 46°09'16" E	50.23'
L34	N 52°33'35" E	47.88'
L35	N 54°46'14" E	247.27'
L36	N 57°15'43" E	53.32'
L37	N 61°04'08" E	26.55'
L38	N 66°28'12" E	96.58'

EXHIBIT OF
**41.1398 ACRE TRACT
 CONCRETE CAP AREA**
 BEING A PORTION OF ALL THAT CERTAIN
**UNION PACIFIC RAILROAD COMPANY
 124.8360 ACRE TRACT**
 IN THE
**HARRIS & WILSON 2 LEAGUE GRANT
 ABSTRACT 32**
 HARRIS COUNTY, TEXAS.
 FOR
UNION PACIFIC RAILROAD COMPANY



WM. Patrick Doyle
 WM. PATRICK DOYLE
 REGISTERED PROFESSIONAL LAND SURVEYOR
 TEXAS REGISTRATION NUMBER 4467



Doyle & Wachtstetter, Inc.
 Surveying and Mapping GPS/GIS
 131 COMMERCE STREET, CLUTE, TEXAS 77531
 OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED: JDD 4-15-16	BOOK: DRONE VOL. 1	IMAGE: NONE
DRAWN BY: JDD 5-16-16	CHECKED: KTD 5-17-16	REVISED: 6-06-17

PROJ. NO. 4410-16-01
 SHEET 1 OF 1

USER: Untitled Workspace DATE: 6/6/2017 PM TIME: 3:19:17 PM
 C:\DGN\WB&W_Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Capped Boundary\Plots\Survey plot UPRR Concrete Cap 41.1398 acres Rev2.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
CONCRETE CAP AREA – 41.1398 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 41.1398 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the Harris County Deed Records (H.C.D.R.), a portion of all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., a portion of Lots 1 through 4 and all of Lots 5 through 10, Block 1, a portion of Lots 1, 2 and 3 and a portion of Lot 15 and 16 through 4, Block 2, all of Lots 1 through 6 and a portion of Lots 7 through 12, Block 4, all of Lots 1 through 6 and a portion of Lots 7 through 12, Block 7, a portion of Eratus Street and a portion of 50 foot wide Harlem Street (Baer Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R., all of Lots 1 through 4 and Lots 7 through 10, and a portion of Lots 5 and 6, Block 11, all of Lots 1 through 10, Block 12, all of Lots 1 through 10, Block 13, all of Lots 1 through 10, Block 14, all of Lots 1 through 8 and a portion of Lot 9 and 10, Block 15, all of Lots 1 through 10, Block 16, all of Lots 1 through 10, Block 17, all of Lots 1 through 4 and 7 through 10 and a portion of Lots 5 and 6, Block 18, all of 60 foot wide 16th Street, all of 60 foot wide 17th Street, all of 60 foot wide 18th Street, a portion of 60 foot wide 19th Street, a portion of 40 foot wide Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the H.C.D.R., a portion of Lots 1 through 3, Block 68, a portion of Lots 1 through 3, Block 70, a portion of Lots 1, 4, and 5, all of Lots 2 and 3, all of Lots 6, 7 and 8, Block 71, all of Lots 1 through 6 Lot 72, a portion of Lots 1 through 5 and all of Lot 6 and 7, Block 73, a portion of Lots 6, 7 and 8, all of Lots 1 through 5 and all of Lots 9 and 10, Block 74, all of Lots 1 through 7 and a portion of Lots 8, 9 and 10, Block 75, all of Lots 1 through 6, Block 76, a portion of 60 foot wide Tunis Street (17th Street), a portion of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R., a portion of Lots 3, 4 and 5, a portion of Lots 8, 9 and 10, all of Lots 1 and 2, Block 77, a portion of Lot 1, Block 78, a portion of 60 foot wide Tyre Street, a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), f as shown on the map of Augusta Division, as recorded in Volume 56, Page 139 of the H.C.D.R., a portion of Block 1, a portion of Lots 8, 9, 10, 13 and 14, all of Lots 11 and 12, Block 2, a portion of 50 foot – 60 foot wide Tyre Street and a portion of 60 foot wide Campbell Street, as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R., the herein described 41.1398 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being on the southeastern boundary line of all that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; said Point of Commencement being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

THENCE South 62°10'18" West, coincident northern boundary line of said 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre, a distance of 89.87 to an angle point at position X=3136680.50 and Y=13852299.04;

THENCE South 27°49'42" East, a distance of 149.96 feet to the North corner and the **POINT OF BEGINNING**, of the herein described 41.1398 acre tract, at position X=3136750.50 and Y=13852166.44

THENCE South 0°02'02" West, a distance of 150.40 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136750.41 and Y=13852016.05;

**UNION PACIFIC RAILROAD COMPANY
CONCRETE CAP AREA – 41.1398 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE South $53^{\circ}50'36''$ West, a distance of 187.02 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136599.42 and Y=13851905.72;

THENCE South $2^{\circ}41'14''$ East, a distance of 827.12 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136638.20 and Y=13851079.60;

THENCE South $87^{\circ}20'47''$ West, a distance of 270.55 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136367.96 and Y=13851067.08;

THENCE South $2^{\circ}23'05''$ East, a distance of 299.31 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136380.41 and Y=13850768.06;

THENCE South $87^{\circ}22'30''$ West, a distance of 969.28 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135412.26 and Y=13850723.67;

THENCE North $77^{\circ}36'11''$ West, a distance of 174.31 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135242.03 and Y=13850761.09;

THENCE South $89^{\circ}01'46''$ West, a distance of 383.56 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134858.57 and Y=13850754.59;

THENCE North $85^{\circ}15'27''$ West, a distance of 184.19 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134675.03 and Y=13850769.82;

THENCE North $89^{\circ}19'03''$ West, a distance of 25.74 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134649.30 and Y=13850770.13;

THENCE South $81^{\circ}05'07''$ West, a distance of 40.48 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134609.31 and Y=13850763.85;

THENCE South $77^{\circ}12'08''$ West, a distance of 41.52 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3134568.82 and Y=13850754.66;

THENCE South $62^{\circ}11'46''$ West, a distance of 684.47 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133963.44 and Y=13850435.42;

THENCE North $28^{\circ}55'36''$ West, a distance of 182.02 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133875.41 and Y=13850594.72;

THENCE South $62^{\circ}21'40''$ West, a distance of 16.19 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133861.07 and Y=13850587.21;

THENCE North $25^{\circ}40'47''$ West, a distance of 88.53 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133822.71 and Y=13850666.99;

THENCE North $65^{\circ}21'37''$ East, a distance of 57.78 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133875.22 and Y=13850691.08;

THENCE South $25^{\circ}59'27''$ East, a distance of 7.28 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3133878.41 and Y=13850684.53;

THENCE North $62^{\circ}10'45''$ East, a distance of 2314.77 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135925.40 and Y=13851764.75;

THENCE North $25^{\circ}00'19''$ West, a distance of 6.05 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135922.84 and Y=13851770.23;

THENCE North $62^{\circ}13'44''$ East, a distance of 32.41 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135951.51 and Y=13851785.32;

THENCE North $68^{\circ}12'09''$ East, a distance of 47.98 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135996.06 and Y=13851803.14;

**UNION PACIFIC RAILROAD COMPANY
 CONCRETE CAP AREA – 41.1398 ACRE TRACT
 HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
 HARRIS COUNTY, TEXAS
 PAGE 3 OF 3**

THENCE South 26°46'44" East, a distance of 9.01 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136000.12 and Y=13851795.10;

THENCE South 62°08'04" West, a distance of 15.88 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3135986.08 and Y=13851787.68;

THENCE South 29°58'59" East, a distance of 174.76 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136073.41 and Y=13851636.32;

THENCE South 53°20'30" East, a distance of 14.15 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136084.76 and Y=13851627.87;

THENCE South 73°44'26" East, a distance of 16.51 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136100.60 and Y=13851623.25;

THENCE North 56°01'12" East, a distance of 30.78 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136126.12 and Y=13851640.45;

THENCE North 48°15'19" East, a distance of 49.63 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136163.15 and Y=13851673.50;

THENCE North 42°16'38" East, a distance of 45.48 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136193.74 and Y=13851707.15;

THENCE North 34°17'18" East, a distance of 162.60 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136285.34 and Y=13851841.47;

THENCE North 40°14'19" East, a distance of 50.06 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136317.67 and Y=13851879.68;

THENCE North 46°09'16" East, a distance of 50.23 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136353.89 and Y=13851914.48;

THENCE North 52°33'35" East, a distance of 47.88 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136391.91 and Y=13851943.58;

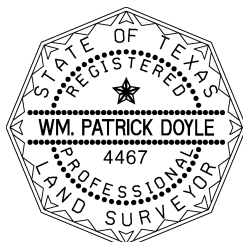
THENCE North 54°46'14" East, a distance of 247.27 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136593.87 and Y=13852086.21;

THENCE North 57°15'43" East, a distance of 53.32 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136638.72 and Y=13852115.04;

THENCE North 61°04'08" East, a distance of 26.55 feet to an angle corner of the herein described 41.1398 acre tract, at position X=3136661.95 and Y=13852127.88;

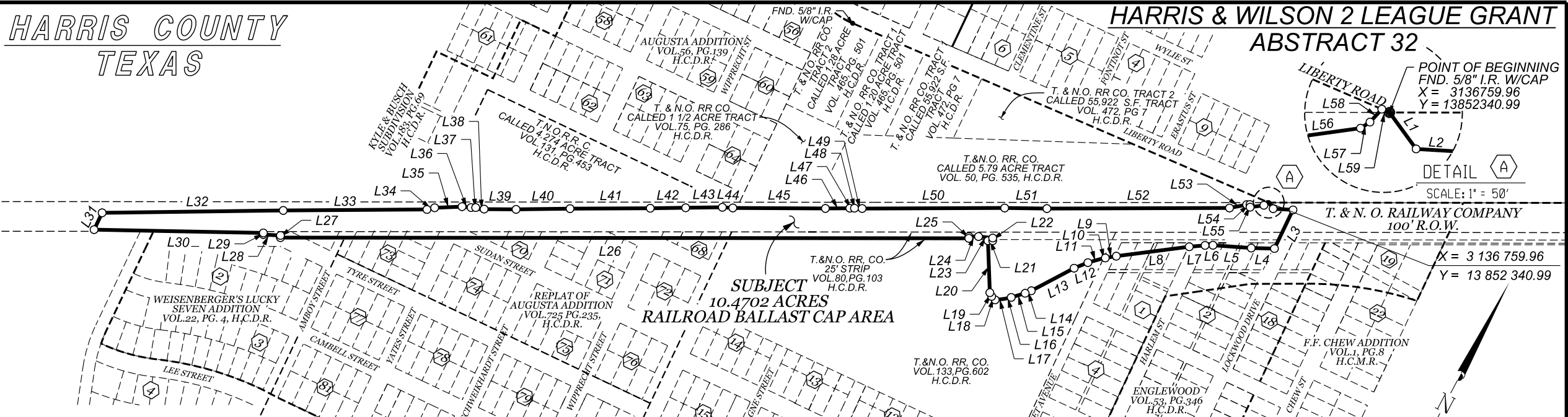
THENCE North 66°28'12" East, a distance of 96.58 feet to the **POINT OF BEGINNING**, containing 41.1398 acres of land, more or less.

Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016

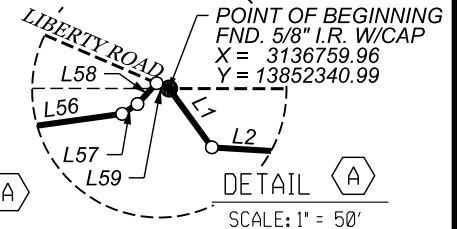


HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE GRANT ABSTRACT 32



SUBJECT
10.4702 ACRES
RAILROAD BALLAST CAP AREA



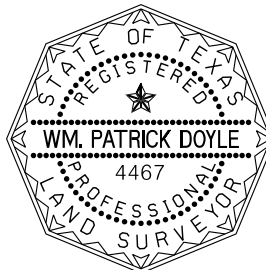
LINE #	DIRECTION	LENGTH
L1	S 63°55'58" E	25.27'
L2	N 65°31'24" E	66.87'
L3	S 2°12'59" E	144.33'
L4	S 63°23'00" W	77.90'
L5	S 66°18'08" W	129.20'
L6	S 61°04'08" W	26.55'
L7	S 57°15'43" W	53.32'
L8	S 54°46'14" W	247.27'
L9	S 52°55'52" W	37.51'
L10	S 51°13'07" W	10.38'
L11	S 46°09'16" W	50.23'
L12	S 40°14'19" W	50.06'
L13	S 34°17'18" W	162.60'
L14	S 40°06'28" W	22.40'
L15	S 45°29'36" W	48.88'
L16	S 50°09'24" W	23.89'
L17	S 56°01'12" W	30.78'
L18	N 73°44'26" W	16.51'
L19	N 53°20'30" W	14.15'
L20	N 29°58'59" W	174.76'

LINE #	DIRECTION	LENGTH
L21	N 62°08'04" E	15.88'
L22	N 26°46'44" W	9.01'
L23	S 68°12'09" W	47.98'
L24	S 62°13'44" W	32.41'
L25	S 25°00'19" E	6.05'
L26	S 62°10'45" W	2314.77'
L27	N 25°59'27" W	7.28'
L28	S 65°21'37" W	57.78'
L29	N 25°40'47" W	5.37'
L30	S 63°14'08" W	569.28'
L31	N 02°27'12" W	62.75'
L32	N 61°23'11" E	609.08'
L33	N 61°44'19" E	483.24'
L34	N 49°23'57" E	26.50'
L35	N 59°48'14" E	92.27'
L36	N 68°04'30" E	30.51'
L37	N 72°24'44" E	27.78'
L38	N 62°42'50" E	16.52'
L39	N 62°36'31" E	107.46'
L40	N 61°20'35" E	181.43'

LINE #	DIRECTION	LENGTH
L41	N 61°49'55" E	269.76'
L42	N 61°23'11" E	119.07'
L43	N 61°22'49" E	123.43'
L44	N 65°35'29" E	35.19'
L45	N 62°26'43" E	311.23'
L46	N 61°33'27" E	82.27'
L47	N 52°35'58" E	6.67'
L48	N 66°04'19" E	18.88'
L49	N 65°03'41" E	15.97'
L50	N 61°55'12" E	479.21'
L51	N 62°54'22" E	142.13'
L52	N 61°56'31" E	613.96'
L53	N 51°04'35" E	58.69'
L54	N 60°39'24" E	10.96'
L55	S 32°51'31" E	8.76'
L56	N 54°11'53" E	46.80'
L57	N 29°23'15" E	6.33'
L58	N 14°40'24" E	9.82'
L59	N 85°26'51" E	4.71'

NOTES:

- ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
- ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.999989548017).
- THIS EXHIBIT DID NOT RELY ON A CURRENT TITLE COMMITMENT THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467



EXHIBIT OF
10.4702 ACRE TRACT RAILROAD BALLAST CAP AREA
BEING A PORTION OF ALL THAT CERTAIN
UNION PACIFIC RAILROAD COMPANY
124.8360 ACRE TRACT
IN THE
HARRIS & WILSON 2 LEAGUE GRANT
ABSTRACT 32
HARRIS COUNTY, TEXAS.
FOR
UNION PACIFIC RAILROAD COMPANY

PROJ. NO. 4410-16-01
SHEET 1 OF 1

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED: JDD 4-15-16	BOOK: DRONE VOL. 1	IMAGE: NONE
DRAWN BY: JDD 5-16-16	CHECKED: KTD 5-17-16	REVISED: 6-06-17

USER: Untitled Workspace
 DATE: 6/6/2017 TIME: 3:13:39 PM
 C:\DGN\FB&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2016 Copped Boundary\Plots\Survey Plot UPRR Railroad Ballast Cap Area 10.4702 acres Rev1.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 4**

BEING ALL THAT CERTAIN 10.4702 acre tract of land, lying and situated in the Harris and Wilson 2 League Grant, Abstract 32, Harris County Texas, being located within the Texas and New Orleans 100 foot wide railroad right-of-way, being a portion of that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the Harris County Deed Records (H.C.D.R.), a portion of all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., a portion of Lots 1 through 4, Block 1, a portion of Lots 1 through 4, Block 2, a portion of Sunset Avenue, a portion of 50 foot wide Harlem Street (Baer Avenue), and a portion of 50 foot wide Lockwood Drive, as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R.; a portion of Lots 1 through 3, Block 68, a portion of Lots 1 through 3, Block 70, a portion of Lots 1 and 5, Block 71, a portion of Lots 1 through 5, Block 73, a portion of 60 foot wide Tunis Street (17th Street), a portion of 60 foot wide Sudan Street (18th Street), all of 60 foot wide Tyre Street (19th Street), a portion of Amboy Street (Dan Street), a portion of 60 foot wide Yates Street (Elmer Street), a portion of 60 foot wide Schweikhart Street, a portion of 60 foot wide Wipprecht Street, and a portion of Solo Street (Gus Street) as shown on the map of the Subdivision of Blocks 68, 70, 71, 72, 73, 74, 75, 76 Augusta Addition, according to the map or plat recorded in Volume 725, Page 235 of the H.C.D.R., all of Block 1 and a portion of Tyre Street, as shown on the map of Weisenberger's Lucky Seven Addition, according to the map or plat recorded in Volume 22, Page 4 of the H.C.D.R., the herein described 10.4702 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, said Point of Beginning being located at Texas State Plane coordinate position X=3136759.96 and Y=13852340.99;

THENCE South 63°55'58" East, a distance of 25.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136782.66 and Y=13852329.89;

THENCE North 65°31'24" East, a distance of 66.87 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136843.51 and Y=13852357.59;

THENCE South 2°12'59" East, a distance of 144.33 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136849.09 and Y=13852213.39;

THENCE South 63°23'00" West, a distance of 77.90 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136779.46 and Y=13852178.49;

THENCE South 66°18'08" West, a distance of 129.20 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136661.16 and Y=13852126.57;

THENCE South 61°04'08" West, a distance of 26.55 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136637.92 and Y=13852113.72;

THENCE South 57°15'43" West, a distance of 53.32 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136593.08 and Y=13852084.89;

THENCE South 54°46'14" West, a distance of 247.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136391.12 and Y=13851942.27;

THENCE South 52°55'52" West, a distance of 37.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136361.19 and Y=13851919.66;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 4**

THENCE South 51°13'07" West, a distance of 10.38 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136353.10 and Y=13851913.16;

THENCE South 46°09'16" West, a distance of 50.23 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136316.88 and Y=13851878.37;

THENCE South 40°14'19" West, a distance of 50.06 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136284.54 and Y=13851840.16;

THENCE South 34°17'18" West, a distance of 162.60 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136192.95 and Y=13851705.83;

THENCE South 40°06'28" West, a distance of 22.40 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136178.52 and Y=13851688.70;

THENCE South 45°29'36" West, a distance of 48.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136143.67 and Y=13851654.44;

THENCE South 50°09'24" West, a distance of 23.89 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136125.33 and Y=13851639.14;

THENCE South 56°01'12" West, a distance of 30.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136099.81 and Y=13851621.94;

THENCE North 73°44'26" West, a distance of 16.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136083.96 and Y=13851626.56;

THENCE North 53°20'30" West, a distance of 14.15 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136072.61 and Y=13851635.01;

THENCE North 29°58'59" West, a distance of 174.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135985.29 and Y=13851786.36;

THENCE North 62°08'04" East, a distance of 15.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135999.32 and Y=13851793.78;

THENCE North 26°46'44" West, a distance of 9.01 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135995.27 and Y=13851801.82;

THENCE South 68°12'09" West, a distance of 47.98 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135950.72 and Y=13851784.01;

THENCE South 62°13'44" West, a distance of 32.41 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135922.05 and Y=13851768.91;

THENCE South 25°00'19" East, a distance of 6.05 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135924.60 and Y=13851763.43;

THENCE South 62°10'45" West, a distance of 2314.77 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133877.61 and Y=13850683.22;

THENCE North 25°59'27" West, a distance of 7.28 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133874.42 and Y=13850689.76;

THENCE South 65°21'37" West, a distance of 57.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133821.91 and Y=13850665.67;

THENCE North 25°40'47" West, a distance of 5.37 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133819.59 and Y=13850670.51;

THENCE South 63°14'08" West, a distance of 569.28 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133311.35 and Y=13850414.18;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 4**

THENCE North 2°27'12" West, a distance of 62.75 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133308.67 and Y=13850476.86;

THENCE North 61°23'11" East, a distance of 609.08 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3133843.30 and Y=13850768.52;

THENCE North 61°44'19" East, a distance of 483.24 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134268.89 and Y=13850997.30;

THENCE North 49°23'57" East, a distance of 26.50 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134289.00 and Y=13851014.54;

THENCE North 59°48'14" East, a distance of 92.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134368.74 and Y=13851060.95;

THENCE North 68°04'30" East, a distance of 30.51 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134397.04 and Y=13851072.34;

THENCE North 72°24'44" East, a distance of 27.78 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134423.52 and Y=13851080.73;

THENCE North 62°42'50" East, a distance of 16.52 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134438.20 and Y=13851088.30;

THENCE North 62°36'31" East, a distance of 107.46 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134533.60 and Y=13851137.74;

THENCE North 61°20'35" East, a distance of 181.43 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134692.79 and Y=13851224.73;

THENCE North 61°49'55" East, a distance of 269.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3134930.58 and Y=13851352.06;

THENCE North 61°23'11" East, a distance of 119.07 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135035.10 and Y=13851409.08;

THENCE North 61°22'49" East, a distance of 123.43 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135143.44 and Y=13851468.20;

THENCE North 65°35'29" East, a distance of 35.19 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135175.47 and Y=13851482.74;

THENCE North 62°26'43" East, a distance of 311.23 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135451.37 and Y=13851626.70;

THENCE North 61°33'27" East, a distance of 82.27 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135523.71 and Y=13851665.88;

THENCE North 52°35'58" East, a distance of 6.67 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135529.01 and Y=13851669.93;

THENCE North 66°04'19" East, a distance of 18.88 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135546.26 and Y=13851677.59;

THENCE North 65°03'41" East, a distance of 15.97 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135560.74 and Y=13851684.32;

THENCE North 61°55'12" East, a distance of 479.21 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3135983.50 and Y=13851909.86;

THENCE North 62°54'22" East, a distance of 142.13 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136110.02 and Y=13851974.59;

**UNION PACIFIC RAILROAD COMPANY
RAILROAD BALLAST CAP AREA – 10.4702 ACRE TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 4 OF 4**

THENCE North 61°56'31" East, a distance of 613.96 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136651.77 and Y=13852263.34;

THENCE North 51°04'35" East, a distance of 58.69 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136697.42 and Y=13852300.21;

THENCE North 60°39'24" East, a distance of 10.96 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136706.97 and Y=13852305.58;

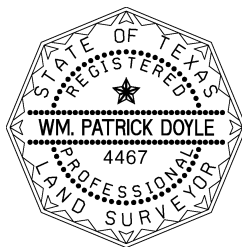
THENCE South 32°51'31" East, a distance of 8.76 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136711.72 and Y=13852298.22;

THENCE North 54°11'53" East, a distance of 46.80 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136749.68 and Y=13852325.60;

THENCE North 29°23'15" East, a distance of 6.33 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136752.79 and Y=13852331.12;

THENCE North 14°40'24" East, a distance of 9.82 feet to an angle corner of the herein described 10.4702 acre tract, at position X=3136755.27 and Y=13852340.62;

THENCE North 85°26'51" East, a distance of 4.71 feet to the **POINT OF BEGINNING**, containing 10.4702 acres of land, more or less.



Wm. Patrick Doyle

**Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 23, 2016**

*This description is based on an exhibit, dated June 23, 2016 is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Liberty Railroad Ballast Cap 10.4702 acres Rev1.doc*

EXHIBIT “D”

MAINTENANCE AND MONITORING OF THE PHYSICAL CONTROLS FOR SOIL

EXHIBIT “D”

MAINTENANCE AND MONITORING OF THE PHYSICAL CONTROLS FOR SURFACE/SUBSURFACE SOIL

The cap inspection and maintenance program will be developed to ensure the integrity of the cap and vegetative cover. UPRR will submit annual reports to the TCEQ (unless this frequency is modified by subsequent TCEQ correspondence) documenting the physical control conditions, maintenance, repair, replacement, and the continued effectiveness of the remedy. The maintenance program will consist of the following:

I. Soil Cap Area - HWPW

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis and after all major storms. The inspections will focus on the following major issues:

- 1) Erosion of the cap (gullies, rills, or other erosional features on the cap surface or in drainages)
- 2) Sideslope sloughing (slippage)
- 3) Settling/subsidence
- 4) Vegetation deterioration
- 5) Damage from animals (i.e., rodents)
- 6) Groundwater monitoring equipment (wells) (semi-annual basis)

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE COVER AND VEGETATION

The cover and vegetation will be maintained by:

- 1) Preventing ponding
- 2) Maintaining design slopes and grades
- 3) Fertilizing, as necessary
- 4) Mowing, as necessary
- 5) Replanting, as necessary
- 6) Controlling animals (rodents, hogs) and insects

Routine repairs of the cover and maintenance of the slopes and grades will be performed to prevent ponding and drainage problems. Vegetation may require periodic application of fertilizer, mulch or seed. Vegetation will target pollinator seed mixes to attract pollinator species. Mowing will be performed as needed but less frequently than a grass covered cap and only periodically to promote the growth of desired vegetation and to block the growth of trees or shrubs which could penetrate the cover soil with their roots.

EROSION CONTROL

Maintenance of the drainage and diversion portions of the cap will be performed. Erosion of soil by water and/or wind will be repaired as soon as practicable.

II. Asphalt Road Cap – HWPW

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Erosion of the asphalt roadway (potholes, exposed soils)

- 2) Settling/subsidence
- 3) Cracks in asphalt roadway

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE ASPHALT CAP

The asphalt cover will be maintained by:

- 1) Crack repair/sealing;
- 2) Pothole patching; and
- 3) Controlling vegetation.

III. Concrete Pavement – Englewood Intermodal Yard (On-Site)

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Step separation in the concrete;
- 2) Settling/subsidence;
- 3) Cracks in the concrete; and
- 4) Openings in the pavement.

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE CONCRETE PAVEMENT

The concrete pavement will be maintained by:

- 1) Crack repair/sealing;
- 2) Replacing panels as needed; and
- 3) Controlling vegetation growing through cracks/along edges of sidewalk.

IV. Railroad Ballast Area – (HWPW/Englewood Intermodal Yard)

VISUAL INSPECTIONS

Inspections will be performed on a quarterly basis. The inspections will focus on the following major issues:

- 1) Ballast removed with exposed soil.

Locations where deficiencies are found shall be marked and repaired as soon as practicable.

MAINTAINING THE RAILROAD BALLAST

The railroad ballast will be maintained by:

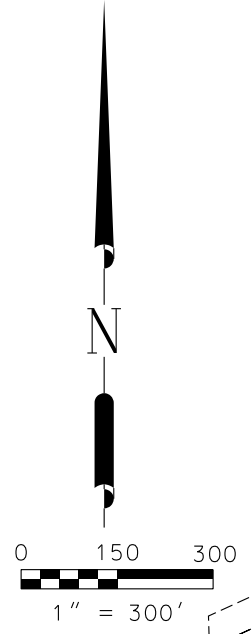
- 1) Adding railroad ballast where areas of soil are exposed;
- 2) Controlling vegetation.

The ballast areas will be maintained in accordance with UPRR Engineering Standards for Roadbase Section for Wood Tie Track Construction (UPRR, 2006).

EXHIBIT "E"
LEGAL DESCRIPTION OF EXTENT OF PMZ AND NAPL AREAS

HARRIS COUNTY TEXAS

HARRIS & WILSON 2 LEAGUE SURVEY ABSTRACT 32



I, Wm. PATRICK DOYLE, REGISTERED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE ABOVE AND FOREGOING PLAT IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY SUPERVISION, ON THE GROUND, AND THAT THERE ARE NO EXCESSES NOR INTRUSIONS ON THIS PROPERTY, EXCEPT AS SHOWN HEREON.
DATE SURVEYED: JANUARY 12, 2016.

- NOTES:
1. ALL COORDINATES AND BEARINGS ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (NAD 83).
 2. ALL DISTANCES ARE HORIZONTAL SURFACE LEVEL LENGTHS (SF= 0.99989548017).
 3. THIS SURVEY DID NOT RELY ON A CURRENT TITLE COMMITMENT, THE INFORMATION CONTAINED ON THIS SURVEY WAS COMPILED FROM DATA BOTH PRIVATE AND PUBLIC, AND FROM THE HARRIS COUNTY COURTHOUSE. IT DOES NOT REPRESENT A COMPLETE DEED RESEARCH AND THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, ENCUMBRANCES, RESTRICTIVE COVENANTS, OR OWNERSHIP TITLE EVIDENCE THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE



Wm. Patrick Doyle
WM. PATRICK DOYLE
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NUMBER 4467

EXHIBIT OF
**ONSITE PMZ TRACTS
52.4295 ACRE TRACT &
3.8686 ACRE TRACT**
IN THE
**HARRIS & WILSON 2 LEAGUE SURVEY
ABSTRACT 32
HARRIS COUNTY, TEXAS**
FOR
UNION PACIFIC RAILROAD COMPANY

Doyle & Wachtstetter, Inc.
Surveying and Mapping GPS/GIS
131 COMMERCE STREET, CLUTE, TEXAS 77531
OFFICE: 979.265.3622 FAX: 979.265.9940 FIRM NO.: 10024500

SURVEYED:	1-12-16	BOOK:	BOOK	IMAGE:	NONE
DRAWN BY:	JAM	CHECKED:	JAM	REVISED:	

USER: Untitled Workspace TIME: 7:27:36 AM
 DATE: 6/30/2016
 G:\DGN\B&W Environmental\UPRR Houston Wood Perserving 4910 Liberty\UPRR Houston Wood 2015 PMZ Bndy\Survey plot UPRR -Onsite PMZ.dgn



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 3**

BEING ALL THAT CERTAIN 52.4295 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of that certain 100 foot wide Texas and New Orleans Railroad right-of-way; a portion of Block 11 and Block 18, all of Block 12, 13, 14, 15, 16 and 17, a portion of Solo Street (Joseph Street), a portion of 40 foot wide Gagne Street, a portion of 40 foot wide Clementine Street, a portion of 40 foot wide Fontinot Street, as shown on the map of the South Part of the Gagne Homestead, according to the map or plat recorded in Volume 89, Page 240 of the Harris County Deed Records (H.C.D.R.), a portion of Block 2, all of Block 1, Block 4 and Block 7, all of 60 foot wide New Orleans Avenue, a portion of 50 foot wide Grumbach Street, a portion of 50 foot wide Tunis Street (Jones Street), a portion of Erastus Street (Sunset Avenue), a portion of 50 foot wide Harlem Street (Baer Avenue), a portion of 50 foot wide Lockwood Drive (Cushing Avenue) as shown on the map of Englewood Subdivision, according to the map or plat recorded in Volume 53, Page 346 of the H.C.D.R., a portion of Block 18 and Block 22 and all of Block 19, a portion of 60 foot wide Wallisville Road, a portion of 50 foot wide Chew Avenue, as shown on the map of F. F. Chew Addition, according to the map or plat recorded in Volume 1, Page 8 of the Harris County Map Records (H.C.M.R.), all that certain 25 foot wide strip conveyed by deed recorded on January 2, 1895 from Clementine Gagne, et al to Texas and New Orleans Railroad Company, as recorded in Volume 80, Page 103 of the H.C.D.R., all that certain tract of land conveyed by deed recorded on March 12, 1902 from H. M. Curtin to Texas and New Orleans Railroad Company, as recorded in Volume 133, Page 602 of the H.C.D.R., all that certain called 1.28 acre tract and all that certain called 1.20 acre tract of land conveyed by deed recorded on February 8, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 465, Page 501 of the H.C.D.R., all that certain called 55,922 square foot tract of land and all that certain called 55,922 square foot tract of land conveyed by deed recorded on February 7, 1921 from W. N. Reece to Texas & New Orleans Railroad Company as recorded in Volume 472, Page 7 of the H.C.D.R., all that certain called 1.5 acre tract of land conveyed by deed recorded on August 15, 1894 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 75, Page 286 of the H.C.D.R.; All that certain called 5.79 acre tract of land conveyed by deed recorded on July 24, 1890 from R. B. Baer to Texas & New Orleans Railroad Company as recorded in Volume 50, Page 535 of the H.C.D.R.; the herein described 52.4295 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

BEGINNING at 5/8" iron rod found marking the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northwestern right-of-way boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, same being the southeastern boundary line of said Texas and New Orleans Rail Road Company called 5.79 acre tract, for an interior corner of the herein described 52.4295 acre tract, said Point of Beginning being located at Texas State Plane coordinate X=3136759.96 and Y=13852340.99;

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 3**

THENCE North $62^{\circ}10'18''$ East, coincident with the southeastern right-of-way boundary line of said 60 foot wide Liberty Road, same being the northwestern boundary line of the 100 foot wide Texas and New Orleans Rail Road Company right-of-way, a distance of 653.86 feet to an angle point at the intersection of the southeastern right-of-way boundary line of said 60 foot wide Liberty Road with the northern extension of the western right-of-way boundary line of 50 foot wide Sam Willis Street, for the northeast corner of the herein described 52.4295 acre tract, at position $X=3137338.15$ and $Y=13852646.20$;

THENCE South $2^{\circ}35'12''$ East, coincident with the northern extension of the western right-of-way boundary line of said 50 foot wide Sam Willis Street, a distance of 364.63 feet to a point located on the eastern boundary line of said Block 22 of the F. F. Chew Addition, to the point of curvature of a non-tangent curve to the left, having a radius of 1179.16 feet, at position $X=3137354.60$ and $Y=13852281.98$;

THENCE in an westerly direction, along said curve to the left, having a radius of 1179.28 feet, an arc length of 375.93 feet, a central angle of $18^{\circ}15'53''$, and a chord bearing and distance of South $70^{\circ}59'12''$ West – 374.34 feet to an angle corner of the herein described 52.4295 acre tract, at position $X=3137000.72$ and $Y=13852160.04$;

THENCE South $61^{\circ}51'16''$ West, a distance of 190.34 feet to an angle corner of the herein described 52.4295 acre tract, at position $X=3136832.90$ and $Y=13852070.26$;

THENCE South $53^{\circ}51'57''$ West, a distance of 288.79 feet to a point located on the western right-of-way boundary line of 50 foot wide Harlem Street, same being the eastern boundary line of said Block 1 of Englewood Subdivision for an interior corner of the herein described 52.4295 acre tract, at position $X=3136599.69$ and $Y=13851899.99$;

THENCE South $2^{\circ}49'16''$ East, coincident with the western right-of-way boundary line of said 50 foot wide Harlem Street, same being the eastern boundary line of Block 1, Block 4 and Block 7 of said Englewood Subdivision, a distance of 827.94 feet to a point at the intersection of said western right-of-way boundary line of said Harlem Street with the northern right-of-way boundary line of 50 foot wide Sudan Street, for the southeast corner of said Block 7, for an exterior corner of the herein described 52.4295 acre tract, at position $X=3136640.44$ and $Y=13851073.13$;

THENCE South $87^{\circ}28'24''$ West, coincident with northern right-of-way boundary line of said 50 foot wide Sudan Street, same being the southern boundary line of said Block 7 of Englewood Subdivision, a distance of 273.42 feet to a point located on the western right-of-way boundary line of Erastus Street, right-of-way varies, located within Block 11 of said Subdivision of the South Part of the Gagne Homestead, for an interior corner of the herein described 52.4295 acre tract, at position $X=3136367.32$ and $Y=13851061.08$;

**UNION PACIFIC RAILROAD COMPANY
52.4295 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 3 OF 3**

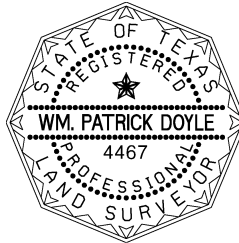
THENCE South 2°44'14" East, coincident with the western right-of-way boundary line of said Erastus Street, a distance of 287.64 feet to a point at the intersection of the western right-of-way boundary line of said Erastus Street and the northern right-of-way boundary line 19th Street, same being the southern boundary line of Block 18 of said Subdivision of the South Part of the Gagne Homestead, for the southeast corner of the herein described 52.4295 acre tract, at position X=3136381.05 and Y=13850773.80;

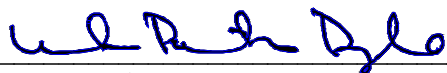
THENCE South 87°18'14" West, coincident with the northern right-of-way boundary line of said 19th Street, same being the southern boundary line of Block 18, Block 17, Block 16 and Block 15 of said Subdivision of the South Part of the Gagne Homestead, a distance of 1115.27 feet to a point located in Solo Street, right-of-way varies, for the southwest corner of the herein described 52.4295 acre tract, at position X=3135267.13 and Y=13850721.35;

THENCE North 2°44'14" West, coincident with the western boundary line of said Subdivision of the South Part of the Gagne Homestead, the western boundary line of said T. & N. O. Rail Road Company tract, recorded in Volume 133, Page 602, of the H.C.D.R., the western boundary line of said T. & N. O. Rail Road Company 25 foot wide strip, the western boundary line of said T. & N. O. Rail Road Company called 1.5 acre tract and the western boundary line of said T. & N. O. Rail Road Company called 1.28 acre tract, a distance of 1500.71 feet to a point located on the southern right-of-way boundary line of said 60 foot wide Liberty Road, on a curve to the left, having a radius of 280.00 feet, at position X=3135195.47 and Y=13852220.19;

THENCE in an easterly direction, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, along said curve to the left, having a radius of 280.00 feet, an arc length of 45.91 feet, a central angle of 9°23'40" and a chord bearing and distance of South 89°51'19" East – 45.86 feet to a found 5/8" iron rod, at position X=3135241.32 and Y=13852220.07;

THENCE North 85°26'51" East, coincident with the southern right-of-way boundary line of said 60 foot wide Liberty Road, a distance of 1523.61 feet to the **POINT OF BEGINNING**, containing 52.4295 acres of land, more or less





Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016



Doyle & Wachtstetter, Inc

Surveying and Mapping • GPS/GIS

**UNION PACIFIC RAILROAD COMPANY
3.8686 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 1 OF 2**

BEING ALL THAT CERTAIN 3.8686 acre tract of land, lying and situated in the Wilson and Harris 2 League Grant, Abstract 32, Harris County Texas, being a portion of all that certain called 4.274 acre tract conveyed by deed recorded on October 29, 1901 from Ida Japhet to Texas and New Orleans Railroad Company, as recorded in Volume 131, Page 453 of the Harris County Deed Records (H.C.D.R.), a portion of Block 58, Block 59, Block 6, Block 62 and Block 63, a portion of 60 foot wide 16th Street, a portion of 60 foot wide of Eddie Street (15th Street), a portion of 60 foot wide Kashmere Street (Yates Street), a portion of 60 foot wide Schweikhart Street, as shown on the map of Augusta Addition, according to the map or plat recorded in Volume 56, Page 139 of the Harris County Deed Records (H.C.D.R.), the herein described 3.8686 acre tract land hereby conveyed being more particularly described by metes and bounds, using survey terminology which refers to the Texas State Plane Coordinate System, South Central Zone (NAD83), in which the directions are Lambert grid bearings and the distances are surface level horizontal lengths (S.F.= 0.99989548017) as follows:

COMMENCING at a 5/8" iron rod found marking the northwest corner of Block 54 of said Augusta Addition, located at the intersection of the southern right-of-way boundary line of Liberty Road with the eastern right-of-way boundary line of 60 foot wide Kashmere Street, for the northwest corner of the herein described 124.8360 acre tract, said Point of Commencement being at Texas State Plane coordinate position X=31334356.21 and Y=13852234.79;

THENCE South 2°26'03" East, coincident with the eastern right-of-way boundary line of said 60 foot wide Kashmere Street, same being the western boundary line of Block 54 and Block 58 of said Augusta Addition, a distance of 476.71 feet to the **POINT OF BEGINNING** of the herein described 3.8686 acre tract, a position X=3134376.46 and Y=13851758.56;

THENCE North 30°35'22" East, a distance of 257.68 feet to the North corner of the herein described 3.8686 acre tract, at position X=3134507.57 and Y=13851980.36;

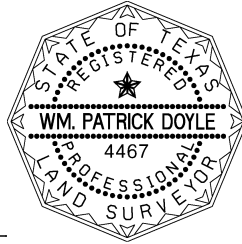
THENCE South 56°11'48" East, a distance of 367.00 feet to the East corner of the herein described 3.8686 acre tract, at position X=3134812.50 and Y=13851776.20;

THENCE South 29°37'41" West, a distance of 503.41 feet to the South corner of the herein described 3.8686 acre tract, at position X=3134563.66 and Y=13851338.66;

THENCE North 42°09'52" West, a distance of 392.51 feet to the West corner of the herein described 3.8686 acre tract, at position X=3134300.21 and Y=13851629.57;

**UNION PACIFIC RAILROAD COMPANY
3.8686 ACRE ONSITE PMZ TRACT
HARRIS AND WILSON 2 LEAGUE GRANT, ABSTRACT 32
HARRIS COUNTY, TEXAS
PAGE 2 OF 2**

THENCE North 30°35'22" East, a distance of 149.86 feet to the **POINT OF BEGINNING**, containing 3.8686 acres of land, more or less.



A handwritten signature in blue ink, appearing to read "Wm. Patrick Doyle", is written over a horizontal line.

**Wm. Patrick Doyle
Registered Professional Land Surveyor
Texas Registration Number 4467
June 29, 2016**

*This description is based on a plat, dated June 29, 2016, is on file in the office of Doyle & Wachtstetter, Inc.
V:\Pat\Pastor Behling & Wheeler\UPPR Englewood Yard Onsite PMZ 3.8686 acre tract.doc*