

Legend

- Soil Boring
- Railroad
- Property Boundary (approximate)
- SWMU/AOC Boundary

SWMU/AOCs

- 3 - Lead oxide storage silos
- 5 - Exterior former hazardous material storage area
- 7 - Poly-mixing room
- 11 - Northeastern historical former container storage area

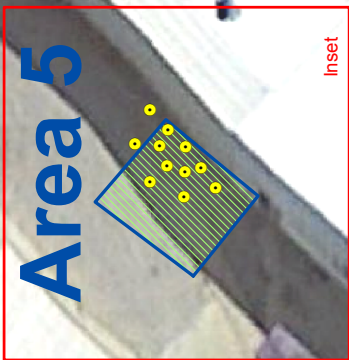
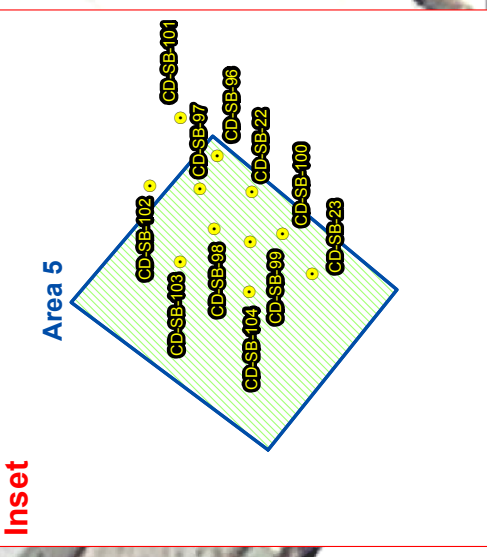


AECOM

**Figure 1-1
Areas 3, 5, 7, & 11**

C & D Technologies, Inc.
200 West Main Street
Attica, Indiana

Drawn By:	Projection:
DW	UTM_Zone 16N_NAD83_Meters
Checked By:	Source(s):
DC	Google Earth Aerial Imagery - 2015



Client Name:

C&D Technologies

Site Location:

Attica, Indiana

Project No.:

60519496

Photo No.:

1

Date:

2/2/17

Direction Photo Taken:



Description:

Representative concrete floor present in Area 3

Photo No.:

2

Date:

Direction Photo Taken:



Description:

Representative concrete floor present in Area 7



PHOTOGRAPHIC LOG

Client Name:
C&D Technologies

Site Location:
Attica, Indiana

Project No.
60519496

Photo No.
3

Date:
2/2/17

Direction Photo Taken:




Description:

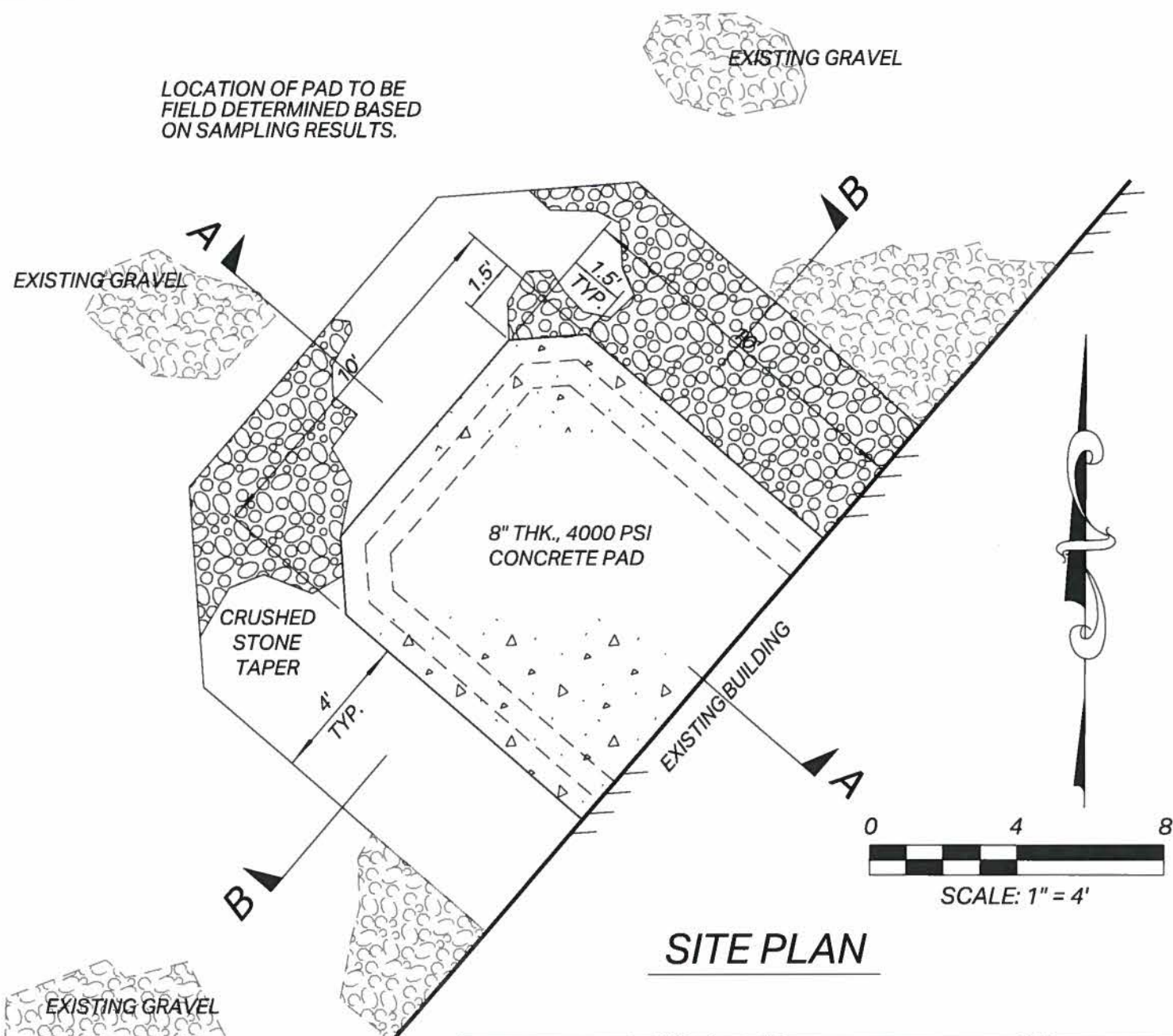
Representative
concrete floor present
in Area 7



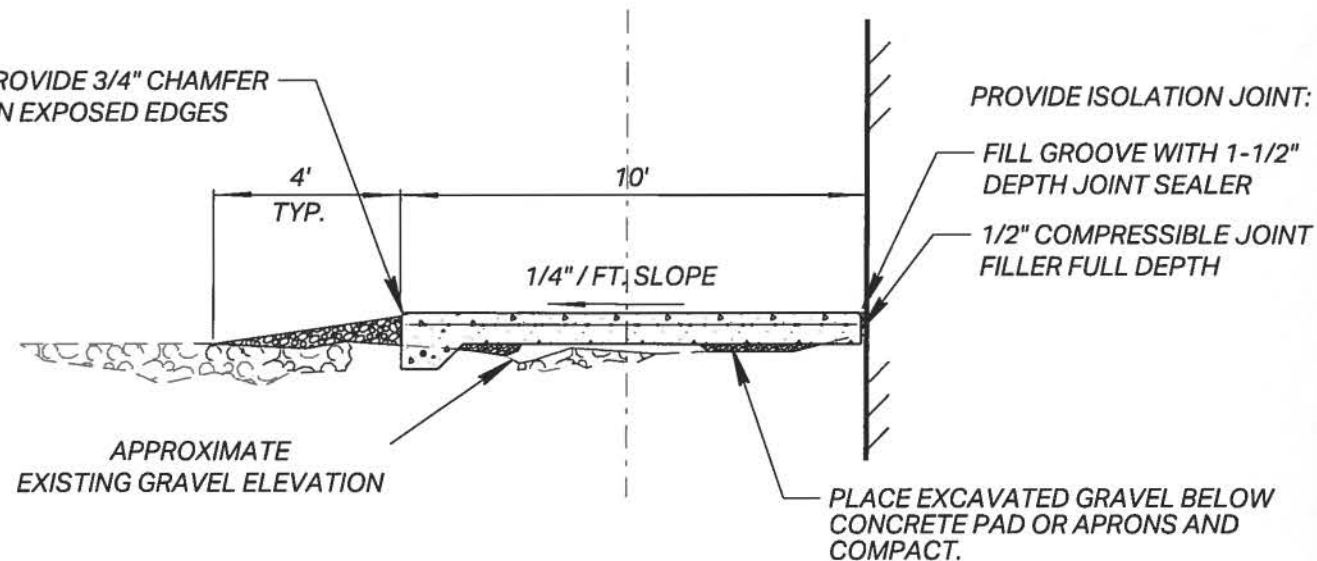
PHOTOGRAPHIC LOG

Client Name: C&D Technologies		Site Location: Attica, Indiana	Project No. 60519496
Photo No. 4	Date: 2/9/17		
Direction Photo Taken:			
Description: Representative concrete floor present in Area 11			

LOCATION OF PAD TO BE FIELD DETERMINED BASED ON SAMPLING RESULTS.

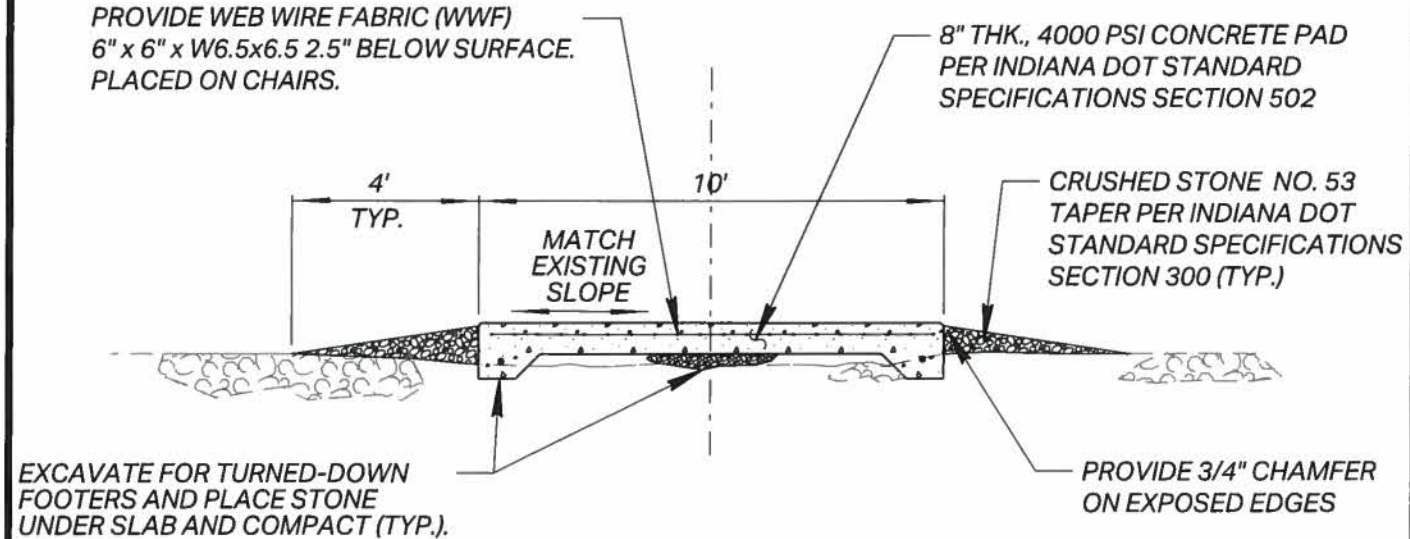


PROVIDE 3/4" CHAMFER ON EXPOSED EDGES

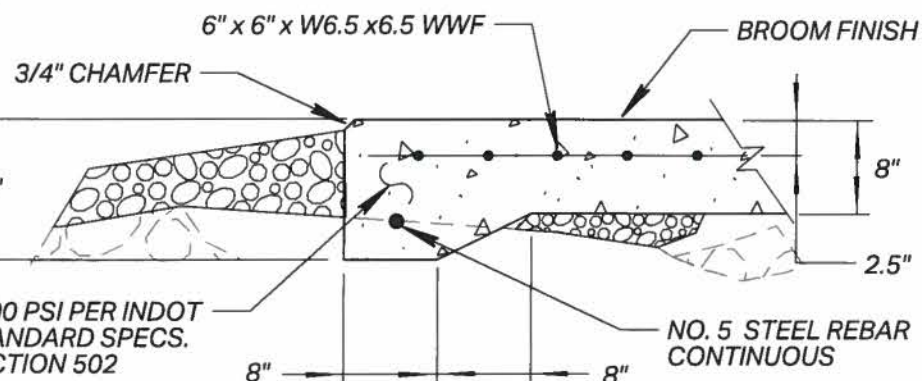


SECTION A-A

PROVIDE WEB WIRE FABRIC (WWF) 6" x 6" x W6.5x6.5 2.5" BELOW SURFACE. PLACED ON CHAIRS.



SECTION B-B



TURNED-DOWN FOOTER DETAIL



10.25.16

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FRANKLIN, TN 37067-6209
(615) 771 - 2480
www.AECOM.com

C & D TECHNOLOGIES
AREA 5 CONCRETE CAP DETAILS

DRWN.: RBH APPRVD: DC QC: JDW DATE: 25 OCT. 2016

SITE DETAILS

C1

Routine Inspection Form
 Areas 3, 5, 7, and 11
 C&D Technologies
 Attica, Indiana

Inspected By: _____ Inspection Area: _____

Inspection Date: _____

Reason for Inspection: Monthly General Visit Other

Weather at time of Inspection: _____

Weather Conditions: _____

Area of Inspection	Yes	No	Action Required
Concrete Floor (Area 3)			
Cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface Finish (signs of deterioration)	<input type="checkbox"/>	<input type="checkbox"/>	
Surface condition in high traffic areas - visible damage	<input type="checkbox"/>	<input type="checkbox"/>	

Area of Inspection	Yes	No	Action Required
Concrete Floor (Area 7)			
Cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface Finish (signs of deterioration)	<input type="checkbox"/>	<input type="checkbox"/>	
Surface condition in high traffic areas - visible damage	<input type="checkbox"/>	<input type="checkbox"/>	

Area of Inspection	Yes	No	Action Required
Concrete Floor (Area 11)			
Cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Surface Finish (signs of deterioration)	<input type="checkbox"/>	<input type="checkbox"/>	
Surface condition in high traffic areas - visible damage	<input type="checkbox"/>	<input type="checkbox"/>	

Routine Inspection Form
 Areas 3, 5, 7, and 11
 C&D Technologies
 Attica, Indiana

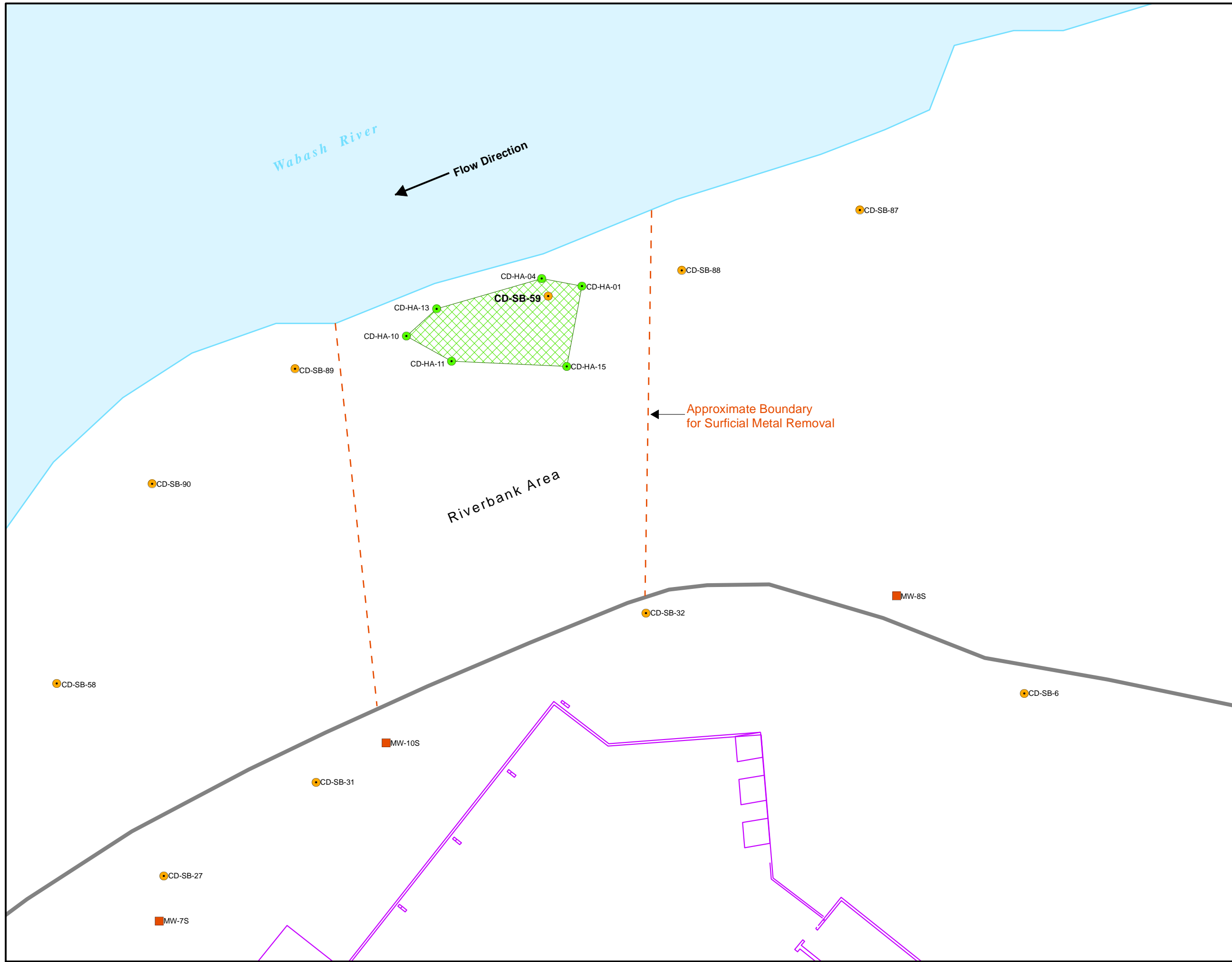
Area of Inspection	Yes	No	Action Required
Area 5			
Concrete Pad	<input type="checkbox"/>	<input type="checkbox"/>	
Surface cracks	<input type="checkbox"/>	<input type="checkbox"/>	
Cracks around edges of pad, near exterior facility wall	<input type="checkbox"/>	<input type="checkbox"/>	
Surface deterioration	<input type="checkbox"/>	<input type="checkbox"/>	
Gravel Apron (Area 5 Only)			
Evidence of wash and/or displacement of apron gravel	<input type="checkbox"/>	<input type="checkbox"/>	
Is gravel in place around apron	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion	<input type="checkbox"/>	<input type="checkbox"/>	
Visible surface erosion around gravel apron and concrete pad	<input type="checkbox"/>	<input type="checkbox"/>	

Overall Conditions/Comments	
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Coorrective Action(s) Required	Yes	No	Areas (i.e., crack repair, add gravel)
	<input type="checkbox"/>	<input type="checkbox"/>	

Corretive Action (if yes checked above)	Required Action	Completed (Date)

 Signature Date



Legend

- Hand Auger Location
- Monitoring Well Location
- Soil Boring Location
- Edge of Pavement
- River Bank
- Building/Wall
- Water
- Proposed Exposure Barrier

Note(s):
 1.) Sample locations are approximate.

CD-HA-XX
 CD-SB-XX
 SB = Soil Boring
 HA = Hand Auger
 XX = Sample Number

N

0 5 10 20 Feet

Franklin, Tennessee

Figure 3-1
Proposed Exposure Barrier
Riverbank Area (CD-SB-59)

C & D Technologies, Inc.
 200 West Main Street
 Attica, Indiana

Drawn By: DW	Projection: StatePlane Indiana West, NAD83, Feet
Checked By: DC	Source(s): URS Corporation

Client Name: C&D Technologies	Site Location: Attica, IN	Project No.: 60519496
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Photo No. 1	Date: 12/13/16
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Direction Photo Taken: West

Description:
View east of work area from facility fence/access road.



Photo No. 2	Date: 12/13/16
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Direction Photo Taken: South

Description:
Previously disturbed area restored with fall mix and straw mat.



Client Name: C&D Technologies	Site Location: Attica, IN	Project No. 60519496
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Photo No. 5	Date: 12/13/16
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Direction Photo Taken: West

Description:
View west along southern boundary of surficial metal removal towards Wabash River.



Photo No. 6	Date: 12/13/16
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Direction Photo Taken: North

Description:
View north along lower eastern boundary of the exposure barrier. Survey markers represent exposure barrier boundaries.





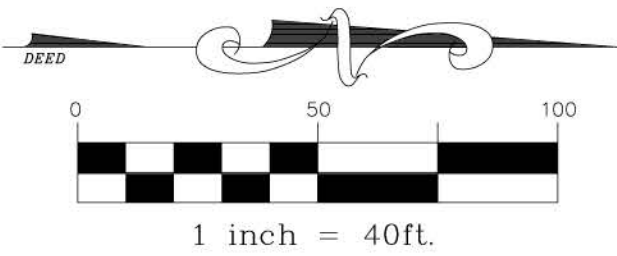
Client Name: C&D Technologies		Site Location: Attica, IN	Project No.: 60519496
Photo No.: 9	Date: 12/13/16		
Direction Photo Taken: South			
Description: View south along western portion of the exposure barrier from the upstream side. Survey markers represent exposure barrier boundaries.			

Photo No.: 10	Date: 12/13/16	
Direction Photo Taken: North		
Description: View north from north end of exposure barrier towards northern boundary of the surficial metal removal area.		

Client Name: C&D Technologies		Site Location: Attica, IN	Project No. 60519496
Photo No. 13	Date: 12/13/16		
Direction Photo Taken: Southwest			
Description: View west across exposure barrier. Survey markers represent exposure barrier boundaries.			

Photo No. 14	Date: 12/9/16	
Direction Photo Taken: Southwest		
Description: Metal debris removed from work area staged near entrance to work area.		



RECORD DRAWINGS
 THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. BARRIER SITE & BOUNDARIES OF SURFICIAL METAL REMOVAL LOCATED BY PLS USING FIELD COORDINATES SUPPLIED BY AECOM PRIOR TO CONSTRUCTION.



 DEBRIS REMOVAL

BARRIER SITE. APPROX. 880 SF +/-
 (SEE SHEET C4 FOR SITE DETAILS)

APPROXIMATE BOUNDARY OF SURFICIAL METAL REMOVAL

WABASH RIVER
 FLOW

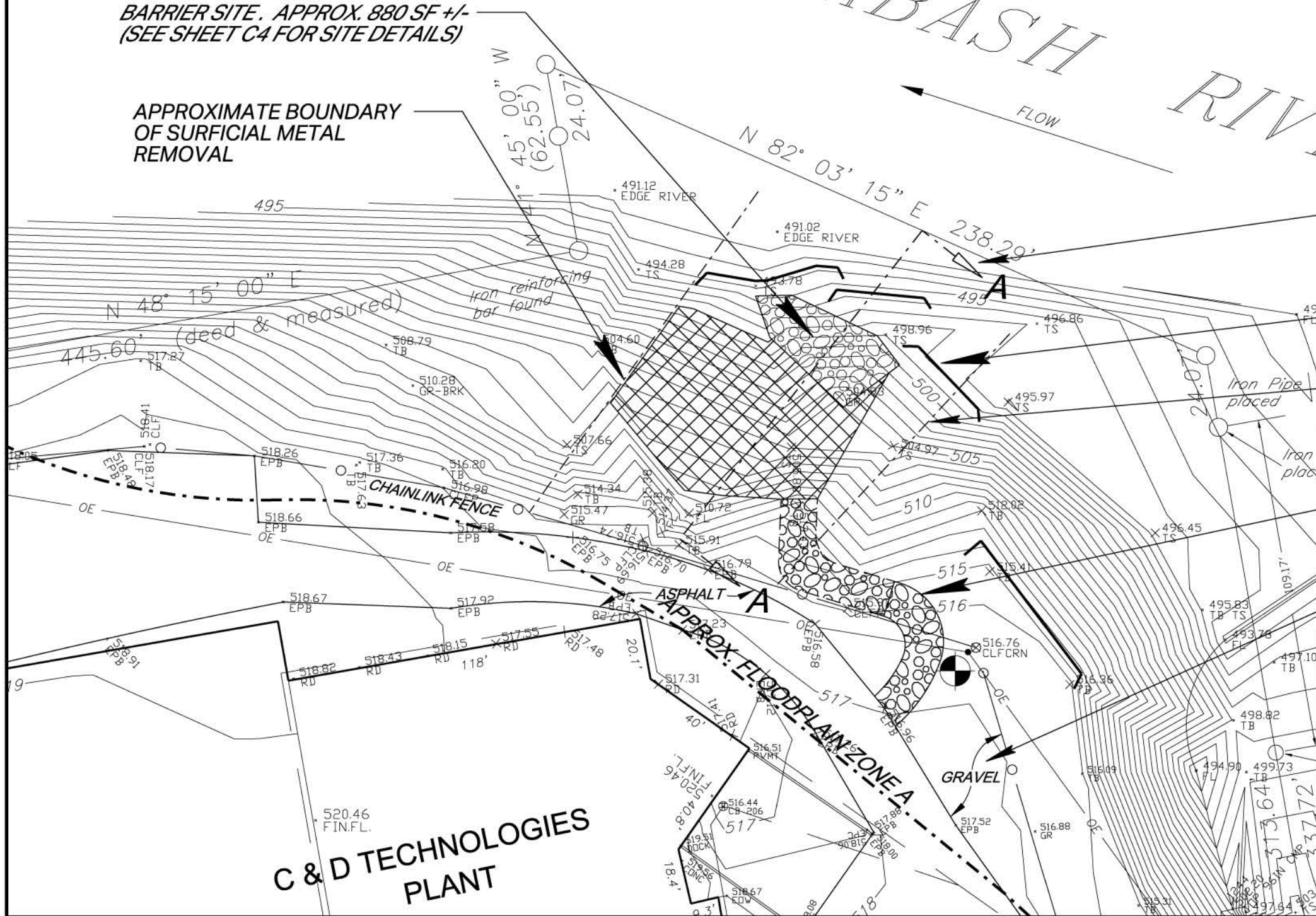
SEE SHEET C2 FOR PLAN & PROFILE AND CONSTRUCTION NOTES

PROVIDE WATTLES ON CONTOUR (TYP)
 (SEE SHEET C3 FOR DETAILS)

APPROXIMATE BOUNDARY OF SURFICIAL METAL REMOVAL

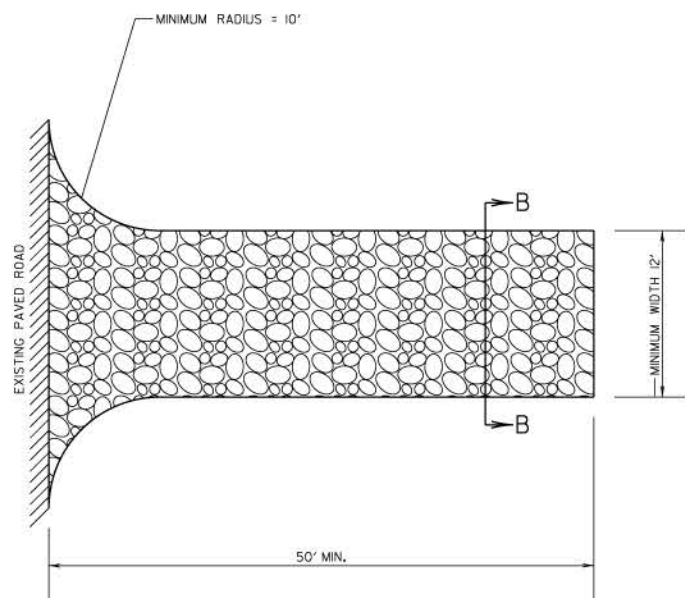
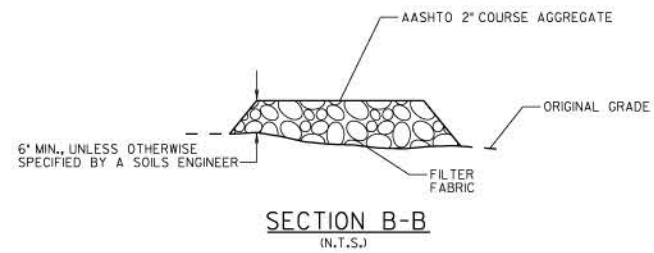
PROVIDE TEMPORARY CONSTRUCTION EXIT
 (SEE SHEET C3 FOR DETAILS)

GRAVEL LAY DOWN AREA



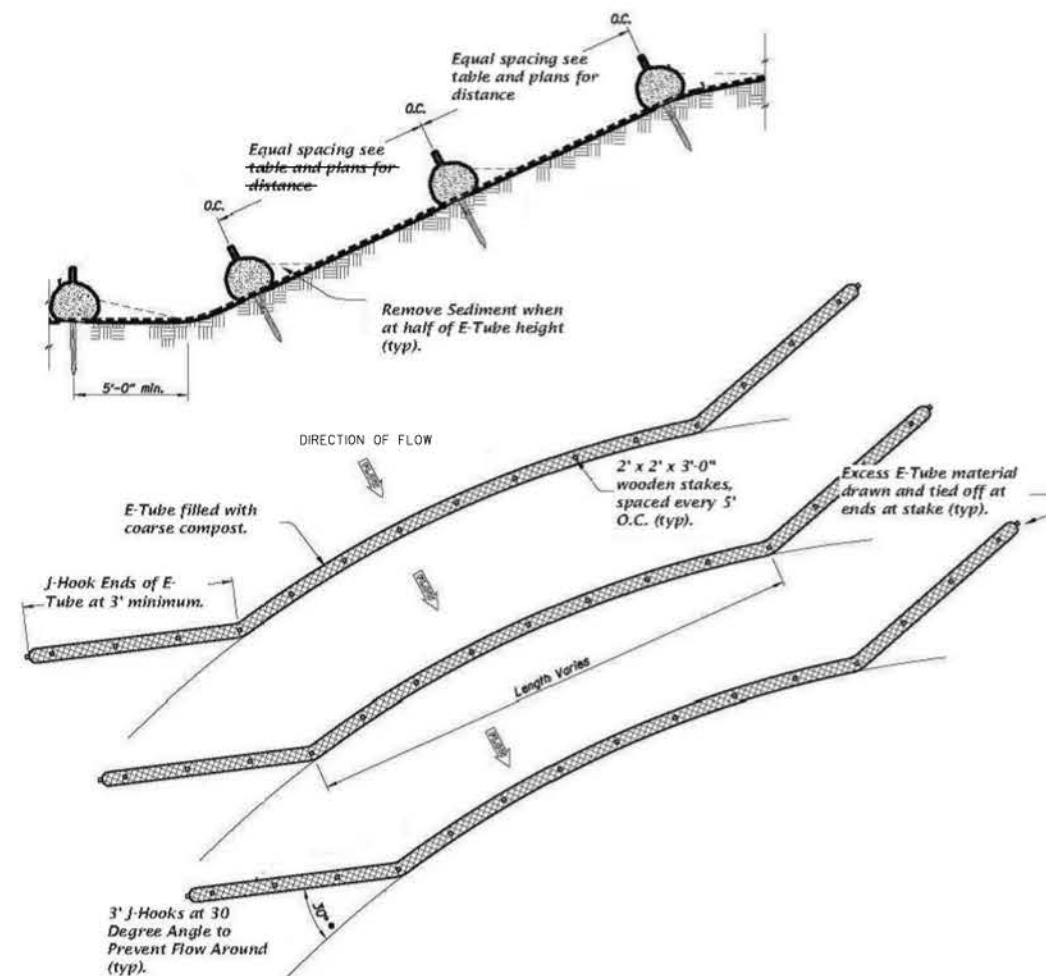
AECOM		1000 CORPORATE CENTRE DRIVE FRANKLIN, TN 37067-6209 (615) 771 - 2480 www.AECOM.com	
C & D TECHNOLOGIES RIVERBANK CORRECTIVE MEASURES			
DRWN.: NB	APPRVD: DC	QC: MM	DATE: 16 FEB. 2017
SITE PLAN			C1

C & D TECHNOLOGIES
 PLANT



TEMPORARY CONSTRUCTION EXIT

N.T.S.



TYPICAL WATTLE INSTALLATION DETAIL

N.T.S.

RECORD DRAWINGS

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Michael May
02-16-17

AECOM

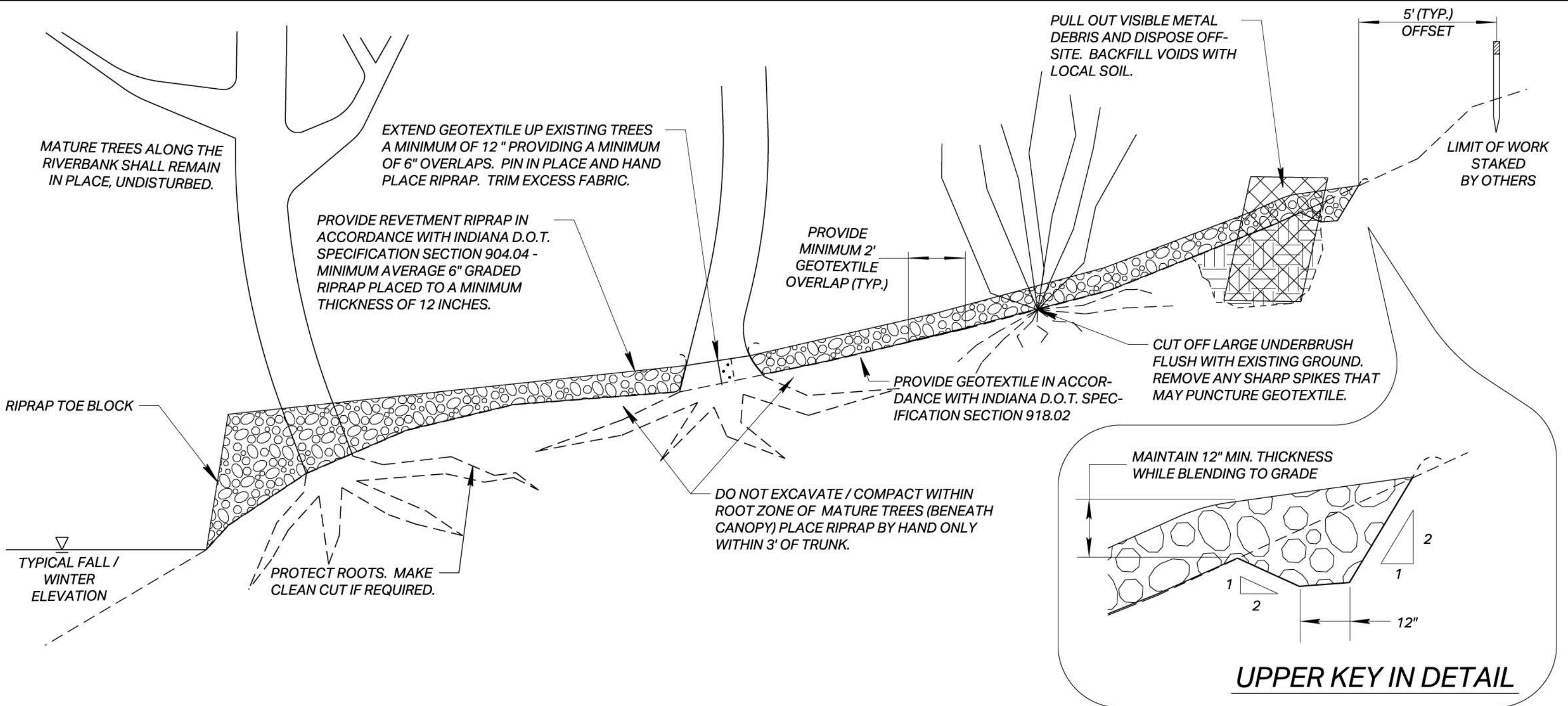
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(615) 771 - 2480
www.AECOM.com

C & D TECHNOLOGIES
RIVERBANK CORRECTIVE MEASURES

DRWN.: NB	APPRVD: DC	QC: MM	DATE: 16 FEB. 2017
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ESPC DETAILS

C3



RECORD DRAWINGS
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MICHAEL STUART MAY
 REGISTERED
 PE11200589
 STATE OF INDIANA
 PROFESSIONAL ENGINEER
Michael May
 02-16-17

AECOM		1000 CORPORATE CENTRE DRIVE FRANKLIN, TN 37067-6209 (615) 771 - 2480 www.AECOM.com	
C & D TECHNOLOGIES RIVERBANK CORRECTIVE MEASURES			
DRWN.: NB	APPRVD: DC	QC: MM	DATE: 16 FEB. 2017
SITE DETAILS			C4

Routine Inspection Form
Riverbank Area Exposure Barrier
C&D Technologies
Attica, Indiana

Inspected By: _____

Inspection Date: _____

Reason for Inspection: _____ Quarterly Flood Event Rain Event

River Elevation at Lafayette, Indiana: _____ (ft) Rain Gauge: _____ (in)

Weather Conditions:

Inspection Area	Yes	No	Action Required
Exposure Barrier	<input type="checkbox"/>	<input type="checkbox"/>	
Gate (Locked)	<input type="checkbox"/>	<input type="checkbox"/>	
Riprap	<input type="checkbox"/>	<input type="checkbox"/>	
Evidence of Wash and/or Displacement	<input type="checkbox"/>	<input type="checkbox"/>	
Surface Debris (logs, general river trash)	<input type="checkbox"/>	<input type="checkbox"/>	
Is Riprap in place on toe of slope	<input type="checkbox"/>	<input type="checkbox"/>	
Geotextile (visible)	<input type="checkbox"/>	<input type="checkbox"/>	
Are Upstream Edges Exposed	<input type="checkbox"/>	<input type="checkbox"/>	
Are Toe Edges Exposed	<input type="checkbox"/>	<input type="checkbox"/>	
Are Exposed Areas Damaged (i.e., Torn or Ripped)	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion	<input type="checkbox"/>	<input type="checkbox"/>	
Visible Surface Erosion	<input type="checkbox"/>	<input type="checkbox"/>	
Geotextile Undercut	<input type="checkbox"/>	<input type="checkbox"/>	
Scour Zones	<input type="checkbox"/>	<input type="checkbox"/>	

Overall Conditions/Comments

O&M Schedule		
Unit	Frequency	Description of Maintenance
Riverbank Area	Quarterly	Inspect riprap and geotextile fabric around the perimeter of the exposure barrier for evidence of erosion and under cutting
		Inspect geotextile liner around base of trees inside the exposure barrier footprint for visible damage and wear
		Inspect surface area of exposure barrier for missing or displaced riprap
		Inspect revegetated areas for vegetative growth and surface erosion from rainfall events.
		Clear large debris (i.e., tree limbs, flood debris, etc.) from the exposure barrier that could aid in dislodging riprap or damaging the underlying geotextile fabric.
Riverbank Area	After heavy rain/flood events	Inspect riprap and geotextile fabric around the perimeter of the exposure barrier for evidence of erosion and under cutting
		Inspect geotextile liner around base of trees inside the exposure barrier footprint for visible damage and wear
		Inspect surface area of exposure barrier for missing or displaced riprap
		Inspect revegetated areas for vegetative growth and surface erosion from rainfall events.
		Clear large debris (i.e., tree limbs, flood debris, etc.) from the exposure barrier that could aid in dislodging riprap or damaging the underlying geotextile fabric.