

ATTACHMENT A:
HIGHWAY SPECIFICATIONS AND OTHER STATE REQUIREMENTS

Federal or Widely Applicable Design Specifications or Requirements for Road Construction

- Federal and state transportation departments generally cite the Association of State Highway and Transportation Officials (AASHTO).
 - Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 7th Ed. (2018), *available at* <https://store.transportation.org/item/collectiondetail/180?AspxAutoDetectCookieSupport=1> (the Green Book).
 - AASHTO, A Policy on Design Standards – Interstate System (May 2016), *available at* <https://www.dot.state.al.us/dsweb/pdf/A%20Policy%20on%20Design%20Standards%20-%20Interstate%20System%20May%202016.pdf>.
 - U.S. Department of Transportation, Federal Highway Administration (FHWA), User Guidelines for Waste and Byproduct Materials in Pavement Construction, FHWA-RD-97-148 (last updated March 8, 2016), *available at* <https://www.fhwa.dot.gov/publications/research/infrastructure/structures/97148/cfa54.cfm>.
 - AASHTO, Center for Environmental Excellence, The Growing Need for and Importance of Waste Minimization and Recycling, subchp. 3.12.1, (last updated 2005), *available at* https://environment.transportation.org/environmental_issues/construct_maint_prac/compendium/manual/3_12.aspx.
 - Federal Highway Administration, Recycled Roadways, FHWA-HRT-05-003 (Jan/Feb 2005), *available at* <https://www.fhwa.dot.gov/publications/publicroads/05jan/02.cfm>.

Florida

Highway

- Florida Department of Transportation’s Standard Specifications For Road And Bridge Construction states roads must: (a) “[p]rovide erosion control measures where work is accomplished in conjunction with the project, to prevent erosion, pollution of water, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project;” (b) “[d]o not drive in, operate, or place construction equipment or materials in surface waters, wetlands, groundwater, or property beyond the project limits without permitted authority for permanent or temporary impacts; and (c) [d]o not allow water that does not meet state water quality standards or does not meet the permitted criteria to exit the project limits.

- Florida Department of Transportation, Standard Specifications For Road and Bridge Construction, 131 (July 2020), *available at* https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/specbooks/jul2020/7-20ebook.pdf?sfvrsn=c1f3424e_4 (Florida Spec Book).
- Specifications for the use of fly ash, slag, cement.
 - Florida, Department of Transportation, State Materials Office, Frequently Asked Questions, *available at* <https://www.fdot.gov/materials/administration/resources/library/issues-trends/recycling-faqs.shtm>.
- Some design criteria require use of geotextile material underneath the base material.
 - Florida Spec Book at 1157 (Section 985: Geosynthetic Materials)

Louisiana

Highway

- Specifications for the use of fly ash, slag, cement.
 - Louisiana Department of Transportation & Development, Louisiana Standard Specifications for Roads And Bridges, 152, 200, 392, 965 (2016), *available at* [http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Standard%20Specifications/2016%20Standard%20Specifications%20for%20Roads%20and%20Bridges%20Manual/00%20-%202016%20-%20Standard%20Specification%20\(complete%20manual\).pdf](http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Standard%20Specifications/2016%20Standard%20Specifications%20for%20Roads%20and%20Bridges%20Manual/00%20-%202016%20-%20Standard%20Specification%20(complete%20manual).pdf) (Louisiana Spec Book).
- Some design criteria require use of specific specifications to protect groundwater, including, for example, a requirement to plug and seal all abandoned water wells at the locations shown on the plans, or as directed by the engineer, in accordance with the Water Well Rules, Regulations, and Standards, State of Louisiana, State Board of Health.
 - Louisiana Spec Book at 124 (Section 202.06: Plugging or Relocating Existing Water Wells).
- “Bedding materials shall consist of stone, recycled Portland cement concrete, or a mixture of either recycled Portland cement concrete, gravel, crushed slag, or stone combined with granular material. Stone shall be from the Approved Materials List.”
 - Louisiana Spec Book at 965 (Section 1003.10: Bedding Material).
- Stone or recycled Portland cement concrete must use stone from the Approved Materials List and comply with gradation requirements.

- Louisiana Spec Book at 965 (Section 1003.10.1: Stone or Recycled Portland Cement Concrete).

North Carolina

Highway

- North Carolina allows ground granulated blast furnace slag to be used in Portland cement concrete.
 - North Carolina Department of Transportation Raleigh, Standard Specifications For Roads and Structures, 10-1 (slag), 1-43 (recycled) (2018), *available at* <https://connect.ncdot.gov/resources/Specifications/StandSpecLibrary/2018%20Standard%20Specifications%20for%20Roads%20and%20Structures.pdf> (North Carolina Spec Book).
- The North Carolina Department of Transportation emphasizes recycling and waste-reduction.
 - U.S. Department of Transportation, Federal Highway Administration (FHWA), How NCDOT Is Building A Recycling Culture, Vol. 64 No. 1 (Jul/Aut 2000), *available at* <https://www.fhwa.dot.gov/publications/publicroads/00julaug/recycnc.cfm>.
- It is the “policy of the Department to aid in reduction of materials that become a part of our solid waste stream.
 - North Carolina Spec Book at 1-43 (Section 104-13: Recycled Products or Solid Waste Materials)

Idaho

Highway

- In Idaho, using fly ash as an example, materials may be used only if provided by manufacturers approved by the state’s Quality Assurance Program (QAP), manufacturers not approved under the certification program require pre-approval before use.
 - Idaho Transportation Department, Quality Assurance Manual, §230.02.02 (2019), *available at* <https://apps.itd.idaho.gov/Apps/manuals/ManualsOnline.html>.
- Idaho has recently passed a law that requires the development of a regulatory program for PG use.
 - H.B. 367, 65th Leg., 2d Reg. Sess. (Idaho 2020) (signed by Gov. on Mar. 9, 2020, Sess. Law Chp. 51, eff. Jul. 1, 2020).