

# Materials Sampling Guide

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### Section 19

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Item or Group	Minimum Material Certificate, Test and Inspection Requirements					Note No	Page No
	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information		
<b>SECTION: 19 – Culvert Pipe, Drain, Tile, Sewer Pipe, Slope Drains and Related Materials</b>							
1) Culvert							
A) Zinc Coated Galvanized Steel, Aluminum Coated Steel, Polymer Coated Steel, Plastic		See Section VI for Applicable Joint and Coating Information	---	---	---	---	
a) Culverts (all shapes)	No	No	No	Yes	11	7	
b) Culverts (plastic)	YES – One 10' Section from each lot.	No	No	Yes	11	7	
c) Underdrains	Yes – One 24 inch sample of each size to include markings	No	No	Yes	11	7	
d) Flared End Sections	No	No	No	Yes	11	7	
e) Structural Plate Pipe	Yes – The coupon attached should be submitted for testing. If no coupon, a sample approximately 3 inches square should be submitted. The Project Manager shall advise the Materials and Research Division in writing as to the length, brand, size and heat numbers of the pipe.	No	Yes	No	---	---	
B) Concrete							
a) Culverts (all shapes)	No	No	No	No	*	*	
b) Flared End Sections	No	No	No	No	*	*	
2) Drain Tile							
A) Concrete	Yes – One-half of one percent of pipe required for a project. Minimum of one pipe section for each diameter.	No	No	No	1	1	
B) Bituminous Fiber	Yes – One-half of one percent of pipe required for a project. Minimum of one pipe section for each diameter.	No	No	No	1	1	
* See Section 29, Page 3-1 "Policy Concerning Testing, Inspection and Reporting of Reinforced Concrete Culvert and Sewer Pipe and Concrete Flared End Sections"							

<b>Minimum Material Certificate, Test and Inspection Requirements</b>						
Item or Group	Sample Required <i>(Tests to be made at Lincoln laboratory)</i>	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information	
<b>SECTION: 19 – Culvert Pipe, Drain Tile, Sewer Pipe, Slope Drains and Related Materials (continued)</b>					<b>Note No</b>	<b>Page No</b>
3) Sewer Pipe						
A) Ductile Iron Pipe & Fittings	No	No	No	Yes	---	---
B) Plastic	Yes – One sample two feet long from each size unless pipe meets requirements shown in the special provisions. If pipe is that shown in special provisions, the Project Manager should verify diameter and advise the Materials and Research Division of the pipe markings.	No	No	Yes	11	7
C) Reinforced Concrete	No	No	No	No	1 *	1 *
4) Slope Drains (Metal)	No	No	No	Yes	11	7
5) Related Materials						
A) Sealing Compound for Concrete Pipe Joints	Yes – One sample four feet long unless shipped from tested and approved stock.	Yes	No	No	---	---
B) Bituminous Plastic Cement	Yes – One five pound (1/2 gallon) sample from each lot or batch unless shipped from tested and approved stock.	No	No	No	---	---
C) Sewer Joint Compound	No	Yes	No	Yes	---	---
D) Sewer Pipe Gaskets	Yes – One gasket from each lot or batch unless shipped from tested and approved stock.	Yes	No	Yes	---	---
E) Flexible Pipe Joints	No	Yes	No	No	---	---
F) Post Applied Coatings	No	Yes	No	No	---	---
* See Section 29, Page 3-1 "Policy Concerning Testing, Inspection and Reporting of Reinforced Concrete Culvert and Sewer Pipe and Concrete Flared End Sections"						