Materials Sampling Guide

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		Minimum Materia	al Certificate, Sample	and Inspection	Requirements		
MATERIAL	TYPE OF TEST	Q.C. SAMPLING AND TESTING BY CONTRACTOR	VERIFICATION SAMPLING AND TESTING BY NDOR		LOCATION OF ADDITIONAL INFORMATION		
		Cement Concrete For Pavement, se Widening, Pavement Patching, Etc.	FIELD PERSONNEL	BRANCH LAB	LINCOLN LAB	NOTE No.	PAGE No.
1) Coarse Aggregates	Gradation & Quality		One gradation test for each 750 cubic yards of aggregate, or fraction thereof, for acceptance either at the source or on the project. One gradation test for each one-third day's operation for control. Project personnel will supply the 60 pound sample needed to perform the testing shown under the Lincoln Lab column. The sample shall be taken at the project.		One 60 pound sample for quality and gradation tests each 2,250 cubic yards., or fraction thereof.(Duplicate of sample tested in the field)	1 5 6	1 4 5
2) Fine Aggregate Sand Gravel	Gradation & Quality		One gradation test for each 750 cubic yards of aggregate, or fraction thereof, for acceptance either at the source or on the project. One gradation test for each one-third day's operation for control. Project personnel will supply the 10 and 60 pound samples needed to perform the testing shown under the Lincoln lab column. The sample shall be taken at the project.		One 60 pound sample for quality test first 1,500 cubic yards if designated on DR FORM 324 "Source of Aggregates to be Used" One 10 pound sample for gradation tests each 1,500 cubic yards, or fraction thereof, thereafter. (Duplicate of sample tested in the field)	1 4 6	1 4 5
3) All Aggregates	Moisture		Determinations as necessary for adequate control of aggregate proportions and total water content of the concrete. A minimum of one for every 1/3 day of operation.			1	1

		Minimum Material Ce	rtificate, Sample and	l Inspection Requ	irements			
MATERIAL	TYPE OF TEST	Q.C. SAMPLING AND TESTING BY CONTRACTOR	NG BY VERIFICATION SAMPLING AND TESTING BY NDOR				LOCATION OF ADDITIONAL INFORMATION	
		d Cement Concrete For Pavement, see Widening, Pavement Patching, Etc. (continued)	FIELD PERSONNEL	BRANCH LAB	LINCOLN LAB	NOTE No.	PAGE No.	
4) Mixing Water	Quality		One Gallon sample to be submitted to Lincoln Lab, when of questionable nature.		Mixing water will be tested in the Lincoln Laboratory.			
5) Plastic Concrete	Air Content		Minimum of one test each one-third day's operation, or sufficient number for proper control.			1	1 5	
6) Concrete Test Cylinders	Compressive Strength		One set of four concrete cylinders representing each days concrete placement. Cylinders will be tested in the Branch Lab or Lincoln Lab.	Cylinders will be tested in the Branch Lab or Lincoln Lab.	Cylinders will be tested in the Branch Lab or Lincoln Lab.	1 6	1 5	
7) Concrete Cores	Slab Thickness				To be sampled by the Materials & Research Division in accordance with the Standard Specifications or Special Provisions.			

		Minimum Material	Minimum Material Certificate, Sample and Inspection Requirements					
MATERIAL	TYPE OF TEST	Q.C. SAMPLING AND TESTING BY CONTRACTOR	VERIFICATI	VERIFICATION SAMPLING AND TESTING BY NDOR		ADDIT	TION OF TIONAL WATION	
		Cement Concrete For Pavement, se Widening, Pavement Patching, Etc. (continued)	FIELD PERSONNEL	BRANCH LAB	LINCOLN LAB	NOTE No.	PAGE No.	
8) PCC Pavement	Surface Smoothness	Contractor performs all QC pavement smoothness testing specified in the NDOR Standard Specifications for Highway Construction and/or Project Special Provisions.	Approximately 10 percent of contractor's results shall be randomly verified. Project personnel will submit requests for pavement smoothness verification testing to the following individuals: <u>District 1,2,4,5,6,7,8</u> Ron Bohling, Lincoln. <u>District 3</u> Kevin Domogalla, Norfolk. Submit requests at least 7 days in advance to allow for scheduling.					

	Minimum Material Certific	ate, Test and	Inspection R	equirements		
Item or Group	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	
SECTION: 15 – PORTI PATCHING, ETC. (con	LAND CEMENT CONCRETE FOR PAVEMENT, BASE Continued)	OURSE, BASE C	OURSE WIDENI	NG, PAVEMENT	Note No	Page No
9) Concrete Curing Materials						
A) Liquid Compounds	Yes – One quart sample from each lot or batch unless shipped from tested and approved stock.	No	No	No	8	6
B) Plastic Film	No	No	No	No		
C) Burlap Cloth	No	No	No	No		
10) Reinforcement Bars (Including Dowel Bars)	Yes – Two samples six foot long from every bar designation and heat number unless shipped from tested and approved stock.	No	Yes	No	9	6
11)Welded Steel Wire Fabric	Yes – One sample 36 inches square from each 75,000 square feet of fabric unless shipped from tested and approved stock.	No	No	No	9	6
12) Deformed Metal Joint Material	No – Project Manager shall check material for compliance with Standard Plans.	No	No	No		
13) Elastomeric Compression Joint Seal	No	No	No	Yes		
14) Lubricant Adhesive for Elastomeric Compression Joint Seals	No sample required. However, material should be as recommended or approved by the manufacturer for use with the joint seal.	No	No	No		
15) Epoxy Compound	No	Yes	No	Yes		
16) Joint Sealing Fillers						
A) Cold Poured Type	Yes – One five pound sample from each lot, unless shipped from tested and approved stock.	No	No	No		
B) Hot Poured Type	Yes – Either one five pound pail or the plastic wrapped portion representing each lot, unless shipped from tested and approved stock.	No	No	No		

	Minimum Material Certific	ate, Test and	Inspection R	equirements		
Item or Group	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Add	tion of itional mation
SECTION 15: PORTLA PATCHING, ETC. (con	AND CEMENT CONCRETE FOR PAVEMENT, BASE COL tinued)	URSE, BASE CO	URSE WIDENING	G, PAVEMENT	Note No	Page No
17) Load Transfer Device Assemblies for Reinforced Concrete Pavement Joints	Yes – See Standard Specifications for Highway Construction or Special Provisions.	No	No	Yes		
18) Preformed Joint Filler						
A) Non-extruding	No	Yes	No	No		
B) Bituminous	No	Yes	No	No		
C) Sponge Rubber	No	Yes	No	No		
19) Pressure Relief Joint Filler, Preformed Flexible Polyurethane	Yes – One sample five inches wide and 30 inches long from each shipment of 1000 square feet or less of each thickness and kind, unless shipped from tested and approved stock, or specified brands used	No	No	Yes		
20) Air-Entraining Agent and Concrete Admixtures.	No	Yes	No	No	7	5
21) Calcium Chloride	No	No	Yes	Yes		