

## HOW TO USE THE FIELD TESTED MATERIALS ACCEPTANCE GUIDE

This guide summarizes the testing requirements for various materials used in the construction of ODOT projects. It indicates what tests must be performed, who must perform them, and how frequently they must be performed. It includes materials which are sampled and tested in the field and materials which are field sampled but sent elsewhere for testing. When a contract requires Quality Control (QC) by the Contractor, samples that must be sent elsewhere for testing are delivered to the Project Manager along with the Sample Data Sheet (Form 734-4000). Examples of this and other test report forms are in Section 3 of this manual.

Materials in this guide are listed in the numerical order of the Standard Specifications and the project special provisions. To find the testing requirements for a particular material, first determine what it will be used for and then refer to the appropriate Specifications Section for that product. For example, to look up testing requirements for aggregate to be used in asphalt concrete paving, refer to Section 00745.

### Definitions

**SOURCE REVIEW/PRODUCT COMPLIANCE TESTING** – Refer to Section 4(A) for additional explanation. Certain QC tests on aggregates fall into this category. They are identified in this section by the words “Product Compliance.”

**SAMPLE SIZES** – Refer to Section 4(C) for guidance on material sample sizes, containers, and labeling. Although designed for the ODOT Central Materials Laboratory (ODOT-CML), it is a good guide for samples being sent to any laboratory.

**ASPHALT CONCRETE MIX DESIGNS** – If the ODOT-CML is preparing the AC mix design, submit samples of the materials shown in Section 4(C) of this manual.



## TYPES OF TESTS

The following types of tests will be performed by the Contractor or Engineer on materials and products required for contract work:

1. **Source Review** – This test type is addressed in Section 4(A) of this Manual.

The Engineer will test unprocessed material from an aggregate source, if requested by the Contractor, to provide information about the quality of material. Tests will involve degradation, soundness, and abrasion, but may involve other tests. Favorable test results do not imply that processed material from the source will comply with specifications after it is processed as required for the project.

2. **Product Compliance** – This test type is addressed in Section 4(A) of this Manual. The Engineer will test processed material if process control testing indicates that the processed material meets the contract quality requirements. Tests will involve degradation, soundness, abrasion, and lightweight pieces, but may involve other tests. The material shall not be incorporated into the project unless Product Compliance tests show favorable results.

3. **Quality Control** – The Contractor will perform quality control testing as described in Section 2 and specified in 4(D) of this Manual or as modified by the Special Provisions or Supplemental Standard Specifications.

4. **Verification** – The Engineer will perform Verification testing as described in Section 2 and specified in Section 4(D) of this Manual.  
**Note: The required 10% testing of Quality Control by the Region QA is considered a minimum frequency and testing may be increased when deemed necessary by the engineer.** These tests provide the basis for the Engineer's decision on acceptance of materials and products. If Independent Assurance is to be done on a material, a split of the Verification sample will be given to the Contractor for testing.

5. **Independent Assurance** – Where Independent Assurance involves testing, the Engineer will evaluate test results from split samples to assure that Contractor test results meet required parameters.

6. **Visual** – Visual Inspection: Examination and assessment of construction materials, by **OBSERVATION**, to determine if the materials appear to meet the contract requirements and are acceptable for incorporation into ODOT construction projects. Visual inspection, when stated in the contract, is a method generally used by the Project Inspector in lieu of normal sampling and testing of field tested materials as defined in section 00165.00 of the Standard Specifications to document quality. Supporting documentation for visual acceptance is, at a minimum, a field inspection report. Consult the construction contract for other acceptance document requirements.



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
<b>SECTION 00330 - EARTHWORK</b>											
Establishing Maximum Density (for Compaction)	Density Curve			T 99	3468						
	Bulk Specific Gravity			T 85	3468	1/Soil type			1/Project		
	Family of Curves			R 75	3468FC						
	Deflection Testing	TM 158			1793S	1 test per 3 ft. in depth					1 test per 10 QC Tests per Table 00330-1
	Nuclear Gauge Coarse Particle Correction			T 310	1793S	See Table 00330-1 Below					
Compaction	Deflection Testing	TM 158			1793S						
<b>TABLE 00330-1 Frequency of Quality Control Testing (English)</b>											
<b>Individual Areas</b>											
<b>Under 3500 yd<sup>2</sup> or yd<sup>3</sup></b>											
Existing Ground Surface											
1 test per 1000 yd <sup>2</sup>											
Embankments											
1 test per 500 yd <sup>3</sup>											
Excavations and Finished Subgrade											
1 test per 1000 yd <sup>2</sup>											
<b>Over 3500 yd<sup>2</sup> or yd<sup>3</sup></b>											
1 test per 3000 yd <sup>2</sup>											
1 test per 3000 yd <sup>3</sup>											
1 test per 3000 yd <sup>2</sup>											
Stone Embankment Material (See Sec. 330.16(a))	Gradation								Visual		
	Deflection Testing	TM 158			1793S	1 per Layer			See Section 00330.16(b)		
<b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b>											
Imported Topsoil (See Section 01040.14(b))	Compliance										
					4000	See Section 4C 1/Source & 1/Type of Soil			Submit to Lab		

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		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory				
<b>SECTION 00331 - SUBGRADE STABILIZATION</b> Aggregate backfill	Material must meet the requirements of Section 00331.10												
						Visual							
							Visual						
Water	Material must meet the requirements of Section 00340												
							Visual						
Compaction	Material must meet the requirements of Section 00331												
							Visual						
<b>SECTION 00332 - SURFACING STABILIZATION</b> Aggregate Base	Material must meet the requirements of Section 00332.10												
							Visual						
Compaction	Material must meet the requirements of Section 00332												
							Visual						
<b>SECTION 00333 - AGGREGATE DITCH LINING</b> Aggregate	Sampling Reducing Sieve Analysis												
						T 2 R 76 T 27/T 11							
							1/Project or 1/Source						
							1792						

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00344 - TREATED SUBGRADE</b>								
Granular Quicklime	Sieve Analysis Calcium Hydroxide Content in lime			T 27 T 219	4000 4000	1/Project or 1/Source	Submit to Lab	1/Project or 1/Source
Hydrated Lime Calcium Chloride Sodium Chloride	Materials must meet the requirements of Section 00344.10 and Test Results Certificate provided according to Section 00165.35(a)							
Portland Cement Water	Material must meet the requirements of Section 02010 Material must meet the requirements of Section 00340							
Establishing Maximum Density (for Compaction)	Density Curve Maximum Specific Gravity			T 99	3468	See Table 00344-1 Below for Testing Frequency		1/Project and 1 Test per 10 QC tests per Table 00344-1
	Deflection Testing Nuclear Gauge	TM 158			1793S			
Compaction	Deflection Testing Coarse Particle Correction	TM 158		T 310 T 99	1793S			
<b>TABLE 00344-1 Frequency of Quality Control Testing</b>								
<b>Individual Areas</b>					<b>Under 3500 yd<sup>2</sup></b>		<b>Over 3500 yd<sup>2</sup></b>	
Finished Subgrade					1 test per 1000 yd <sup>2</sup>		1 test per 3000 yd <sup>2</sup>	

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<b>SECTION 00360 - Drainage Blankets</b>									
Granular Drainage Blanket	Sampling Reducing Sieve Analysis			T 2 R 76 T 27/T 11	1792	1/sublot minimum 1/Source per Project	A sublot equals 1000 Tons		
Sand Drainage Blanket	Sampling Reducing Sieve Analysis			T 2 R 76 T 27/T 11	1792				
Establishing Maximum Density (for Compaction)	Density Curve			T 99	3468	1/Source and Type		1/Project	
					3468				
Compaction	Bulk Specific Gravity			T 85	1793S	1 test per 3 ft. in depth			
	Deflection Testing	TM 158		T 310 T 99	1793S	See Table 00360-1 Below			1 Test per 10 QC Tests per Table 00360-1
					1793S				
<b>TABLE 00360-1 Frequency of Quality Control Testing</b>									
<b>Individual Areas</b>					<b>Under 3500 yd<sup>2</sup></b>		<b>Over 3500 yd<sup>2</sup></b>		
Existing Ground Surface					1 test per 1000 yd <sup>2</sup>		1 test per 3000 yd <sup>2</sup>		
Finished Surfaces					1 test per 1000 yd <sup>2</sup>		1 test per 3000 yd <sup>2</sup>		



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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
<b>SECTION 00390 - RIPRAP PROTECTION</b>											
Fill Material & Riprap	Gradation See 00390.11(c-1)						Visual				
	Degradation Soundness Apparent Specific Gravity & Absorption	TM 208		T 104 T 85	4000 1825	See Section 4(A)	Submit to Lab			See Section 4(A)	
Filter Blanket	Gradation See 00390.13						Visual				
Grouted Riprap Sand	Sampling Reducing Sieve Analysis			T 2 R 76 T 27/T 11	1792	1/Project					
Portland Cement	Soundness Lightweight Pieces			T 104 T 113	4000	See Section 4(A)	Submit to Lab				See Section 4(A)
		<i>Material must meet the requirements of Section 02010</i>									

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			Materials Laboratory
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	
<b>SECTION 00396 - SHOTCRETE SLOPE STABILIZATION</b>									
Aggregate Production and Mixture									
<sup>(1)</sup> QAE may waive after 5 sublots/shifts	Sampling Reducing	TM 225		T 2 R 76 T 27/T 11 T 27/T 11	1792	1 per 10 Sublots			
<sup>(2)</sup> Coarse Aggregate (See Section 02690.20)	<sup>(3)</sup> Sieve Analysis			T 176					
<sup>(3)</sup> Fineness Modulus	<sup>(1)(2)</sup> Wood Particles			T 104 T 96	4000		Submit to Central Lab		See Section 4(A)
<sup>(3)</sup> Sand Equivalent	Soundness			T 113 T 21					
<sup>(3)</sup> Fine Aggregate (See Section 02690.30)	Abrasion			T 19	1825 1825C				
Portland Cement	Degradation			T 84 & T 85	1825				
Admixtures	Lightweight Pieces								
Mixing Water	Organics								
Production Testing (See Section 00396.14)	Gravity & Absorption								
<sup>(S)</sup> 3 Cores minimum per Panel	Strength			T 22	4000C		Submit to Central Lab		
Compression Test Cores									
<sup>(S)</sup> Material must meet the requirements of Section 02010 <sup>(S)</sup> Material must meet the requirements of Section 02040 <sup>(S)</sup> Material must meet the requirements of Section 02020									
<sup>(S)</sup> Test Panel Two Test Panels per Mix Design & Two Panels per days Production See Section 00396.14(a)2 1/Set Cores per Test panel									

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Same Frequency for all Tests (Minimums)

MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL</b>									
<b>TRENCH FOUNDATION - Excavation below grade only</b>									
Selected general backfill							Visual		
Selected granular backfill							Visual		
Selected stone backfill							Visual		
Other approved material							Visual		
Establishing Maximum Density	Density Curve			T 99	3468	1/Soil Type or Aggregate Gradation			
	Bulk Specific Gravity			T 85	3468				
	Family of Curves			R 75	3468FC				
	Nuclear Gauge Coarse Particle Correction			T 310 T 99	1793S	1 test per 300 ft. of Trench			

**Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.**



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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL (CONTINUED)</b>										
<b>Pipe Zone Material</b>										
Flexible Pipe		Use the Listed Material requirements under Bedding								
Rigid Pipe: Aggregate Base 1" - 0 or 3/4" - 0 Aggregate  (See Section 02630.10)	Sampling Reducing Sieve Analysis				T 2					
					R 76 T 27					
Rigid Pipe: Commercial 1" - 0 or 3/4" - 0 Aggregate								1/Source or Gradation		Visual
Establishing Maximum Density  ( <sup>1</sup> ) Method "A" & ODOT TM 223 for Dense Graded Base Aggregate	Density Curve				( <sup>1</sup> ) T 99					
	Bulk Specific Gravity				T 85			1/Source or Aggregate Gradation		
	Coarse Particle Correction				T 99					
Compaction	Nuclear Gauge				T 310					
								1 test per 300 ft. of Trench and every 1.5 ft. of Fill		
<p align="center"><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>										

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL (CONTINUED)</b>									
<b>Trench Backfill</b>									
Class A Backfill - Native or common Material		<i>Material must meet the requirements of Section 00330.43</i>							
Class B Backfill - 1"-0 or 3/4"-0 Granular Material		<i>Material must meet the requirements of Section 00641</i>							
Class C Backfill - Clean sand with 100% minus 1/4" material							Visual		
Class D Backfill - Pit run or bar run material with 3" maximum dimension and well graded from coarse to fine							Visual		
Class E Backfill - Controlled Low Strength Material (CLSM)		<i>Material must meet the requirements of Section 00442</i>							
Establishing Maximum Density	Density Curve			(1) T 99	3468				
	Bulk Specific Gravity			T 85	3468			1/Soil Type or Aggregate Gradation	
	Family of Curves			R 75	3468FC				
Compaction	Nuclear Gauge Coarse Particle Correction			T 310 T 99	1793S or 1793B			(C) 1 test per 300 ft. of Trench and every 1.5 ft. of Fill	
<p>(C) Density testing is based on cumulative lineal feet of pipe placement.</p> <p><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>									

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		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory			
<b>SECTION 00430 - SUBSURFACE DRAINS</b>												
Granular Drain Backfill Material	Sampling Reducing Sieve Analysis	T 2 R 76 T 27	1792	A Sublot equals 1000 Tons	1/Sublot (Minimum 1/ Project)	See Section 4A	Submit To Lab	See Section 4A				
									Abrasion Degradation	TM 208	T 96	4000
<b>SECTION 00440 - COMMERCIAL GRADE CONCRETE</b>												
Mixture	Sampling Air Content Density (Unit Weight) Yield Slump Concrete Temperature	TM 2	T 152 T 121 T 121 T 119 T 309	3573WS or 4000 C	(S) 1 per each set of cylinders							
									Modifiers	Material must meet the requirements of Section 02030		
									Admixtures	Material must meet the requirements of Section 02040		
									Portland Cement	Material must meet the requirements of Section 02010		
Structural Items	Strength	T 22 & T 23	4000C	(M)(S) 1 Set / Day Minimum								
	Strength	T 22 & T 23	4000C	(M) (S) 1 Set/20 yd <sup>3</sup> Cumulative (Maximum 1 Set/day)								
(S) 1 Set Represents a minimum of 3 Cylinders												
(M) Per Mix Design & Source												

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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	Contractor Quality Control	QUALITY ASSURANCE	
		ODOT	WAQTC	AASHTO			Independent Assurance/Verification	Region Quality Assurance
<b>SECTION 00442 - CONTROLLED LOW STRENGTH MATERIALS (CLSM)</b>								
CLSM Mixture	Mix Proportions Trial Batch Strength				4000C	1/Project or Source		
Modifiers								
Admixtures								
Portland Cement								
<b>SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE - INCLUDED WITH SECTION 00405</b>								
<b>Trench Work</b>								
Excavation, bedding, pipe zone and trench backfill								
Excavation, bedding, pipe zone and trench backfill								
Concrete Blocks								



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		ODOT	WAQTC		AASHTO	Contractor Quality Control
<b>SECTION 00450 - STRUCTURAL PLATE SHAPED STRUCTURES</b>						
Commercial Grade Concrete in appurtenances		<i>Material must meet the requirements of Section 00440</i>				
<b>Trench Work</b>						
Excavation and Backfill		<i>Operations must meet the requirements of Section 00510</i>				
<b>Trenches in Unstable Areas</b>						
Granular Structural Backfill		<i>Material must meet the requirements of Section 00510</i>				
Establishing Maximum Density ( <sup>1</sup> ) Method "A"	Density Curve			( <sup>1</sup> ) T 99	3468 B	1/Aggregate Gradation and Source
	Bulk Specific Gravity Coarse Particle Correction	TM 223		T 85		
Compaction	Nuclear Gauge			T 310	1793 B	1 Test per 100 ft. and 1 ft. of fill
Structure Backfill (Section 00450.46)		<i>Material and Operation must meet the requirements of Section 00510.48(d)</i>				
<b>SECTION 00459 - CAST IN PLACE CONCRETE PIPE</b>						
Concrete		<i>Material must meet the requirements of Section 00540, with acceptance in accordance with Section 00540.17</i>				
Backfill Material		<i>Material must meet the requirements of Section 00405.14 and be incorporated into the project in accordance with Section 00405.46</i>				

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		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00460 - PAVED CULVERT END SLOPES</b>									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
<b>SECTION 00470 - MANHOLES, CATCH BASINS AND INLETS</b>									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
Base Drain Backfill		<i>Material must meet the requirements of Section 00470.17</i>							
Excavation, Backfill and Foundation Stabilization		<i>Material must meet the requirements of Section 00405</i>							
<b>SECTION 00480 - DRAINAGE CURBS</b>									
Commercial Grade Concrete		<i>Material must meet the requirements of Section 00440</i>							
Dense Graded HMAC Mixture Level 2, (1/2")		<i>Material must meet the requirements of Section 00744</i>							

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<b>SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES</b>									
Commercial Grade Concrete		Material must meet the requirements of Section 00440							
High Early Strength Concrete		Material must meet the requirements of Section 00440, but cement contents adjusted according to 00490.11							
Backfill Operations		Backfill Excavations according to section 405							
<b>Filling Abandoned Pipes, Manholes and Catch Basins (See section 00490.44)</b>									
Backfill Operations (Roadway)		Material must meet the requirements of Section 2630							
Establishing Maximum Density ( <sup>1</sup> ) Method "A"	Density Curve				( <sup>1</sup> ) T 99				
	Bulk Specific Gravity Coarse Particle Correction	TM 223			T 85			1/Aggregate Gradation and Source	
Compaction	Nuclear Gauge				T 310			1 Test per 100 ft. and every 1.5' of Fill	
Backfill Operations Landscaped or Unimproved Roadways		Material must meet the requirements of Section 00330.13							
Top 1.0' of Backfill Region		Material must meet the requirements of Section 00330.11							
<b>SECTION 00495 - TRENCH RESURFACING</b>									
Resurfacing Materials		See Section 00495.40 for Material Requirements							

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<b>SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL</b>									
Soils, Soil/Aggregate Mixtures and Graded Aggregates									
<b>Granular Structure Backfill</b> (See Section 02630.10)	Sampling Reducing			T 2 R 76					
	<sup>(1)</sup> Sieve Analysis Fracture (Method 1) Sand Equivalent			T 27 T 335 T 176	1792	1/Sublot (Minimum 1/Project)			
Product Compliance	Abrasion Degradation	TM 208		T 96	4000	See Section 4C 1/Source	Submit to Lab		Minimum 1/Project or 1/Source
Establishing Maximum Density	Density Curve			<sup>(2)</sup> T 99	3468	1/Soil type or Aggregate Gradation			
<sup>(2)</sup> Method "A" & ODOT TM 223 for Dense Graded Base Aggregate	Bulk Specific Gravity			T 85	3468				
	Coarse Particle Correction			T 99					
Compaction	Nuclear Gauge			T 310	1793B	1/100 yd <sup>3</sup> minimum 1/project			
<p><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>									

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<b>SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL (CONTINUED)</b>								
Soils, Soil/Aggregate Mixtures and Graded Aggregates								
<b>Granular Wall Backfill</b> (See Section 02630.11)	Sampling Reducing ( <sup>1</sup> ) Sieve Analysis Fracture (Method 2)	TM 208	T 2 R 76 T 27 T 335	1792	1/Sublot (Minimum 1/Project)			
Product Compliance	Abrasion Degradation	TM 208	T 96	4000	See Section 4C 1/Source	Submit to Lab		Minimum 1/Project or 1/Source
( <sup>2</sup> ) Compaction	( <sup>2</sup> ) Deflection Testing	TM 158		1793B	1/Sublot (Minimum 1/Project)			
<b>Note: Compaction must meet the requirements of section 00330.43c</b>								
<b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b>								

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<b>SECTION 00512 - DRILLED SHAFTS</b>								
Aggregate Production	Sampling Reducing (2)/(3)/(4) Sieve Analysis (4) Fineness Modulus (1)/(3) Wood Particles (4) Sand Equivalent			T 2 R 76 T 27/T 11 T 27/T 11	1792	1/Sublot & Start of Production	1 per 10 Sublots	
(1) QAE may waive after 5 sublots/shifts				T 176	1792			
(2) Perform a minimum of 3 tests, QL's required		TM 225		T 104 T 96	4000	Submit to Lab		See Section 4(A)
(3) Coarse Aggregate (See Section 02690.20)	Soundness Abrasion Degradation Lightweight Pieces Organics	TM 208		T 113 T 21	4000			
(4) Fine Aggregate (See Section 02690.30)				T 19	1825 1825C			
Portland Cement Modifiers Admixtures	(3) Dry Rodded Unit Weight (3)/(4) Bulk Specific Gravity & Absorption			T 84 & T 85	1825	Start of production and when changes in aggregate occurs		
Drilling Slurry		Materials must meet the requirements of Section 02001.10						
		Slurry material must meet the requirements of Section 00512.14 & 00512.43(g)						
Grout		Material must meet the requirements of Section 02080						
Mixing Water		Material must meet the requirements of Section 02020						

**FIELD TESTED MATERIALS ACCEPTANCE GUIDE**

(Revised November 2017)

Same Frequency for all Tests (Minimums)

MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	QUALITY ASSURANCE						
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory			
<b>SECTION 00512 - DRILLED SHAFTS (CONTINUED)</b>												
Portland Cement Concrete	Sampling Slump Concrete Temperature Density (Unit Weight) Yield Water/Cement Ratio Strength	TM 2					QA Testing					
									(M) (S) 1 per Shaft and Test at minimum frequencies according to table 00512-1. Review specs.	<u>Projects under 100 yd<sup>3</sup> all classes</u> 1/Project representing all classes of PCC		
											<u>Projects over 100 yd<sup>3</sup> all classes</u> 1/500 yd <sup>3</sup> per class minimum 1/class	
(S) 1 Set Represents a minimum of 3 Cylinders												
(M) Per Mix Design & Source												

**TABLE 00512-1 Frequency of Quality Control Testing**

<u>Minimum frequencies per Class of concrete based on daily production records.</u>	
<u>Production</u>	<u>Frequencies</u>
0 to 100 yd <sup>3</sup> on a single day	1 Set each day
<u>Quantity Over 100 yd<sup>3</sup></u>	
100 to 600 yd <sup>3</sup> on a single day	1 Set per each 100 yd <sup>3</sup> or portion thereof
over 600 yd <sup>3</sup> on a single day	1 Set per each 200 yd <sup>3</sup> or portion thereof after reaching 600 yd <sup>3</sup>





FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)											
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	QUALITY ASSURANCE													
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory										
<b>SECTION 00540 - STRUCTURAL CONCRETE (CONTINUED)</b>																			
Portland Cement Concrete	Sampling Air Content Slump Concrete Temperature Density (Unit Weight) Yield Water/Cement Ratio  Strength	TM 2									QA Testing								
												(M) (S) Test at minimum frequencies according to table 00540-1. Review specs.	Projects under 100 yd <sup>3</sup> all classes 1/Project representing all classes of PCC						
														3573WS or 4000C	Projects over 100 yd <sup>3</sup> all classes 1/500 yd <sup>3</sup> per class minimum 1/class				
																4000C			
<p>(S) 1 Set Represents a minimum of 3 Cylinders</p> <p>(M) Per Mix Design &amp; Source</p>																			
<p><b>TABLE 00540-1 Frequency of Quality Control Testing</b></p> <p><b>Minimum frequencies per Class of concrete based on daily production records.</b></p> <table border="1"> <thead> <tr> <th>Production</th> <th>Frequencies</th> </tr> </thead> <tbody> <tr> <td>0 to 100 yd<sup>3</sup> on a single day</td> <td>1 Set each day</td> </tr> <tr> <td><b>Quantity Over 100 yd<sup>3</sup></b> 100 to 600 yd<sup>3</sup> on a single day</td> <td>1 Set per each 100 yd<sup>3</sup> or portion thereof</td> </tr> <tr> <td>over 600 yd<sup>3</sup> on a single day</td> <td>1 Set per each 200 yd<sup>3</sup> or portion thereof after reaching 600 yd<sup>3</sup></td> </tr> </tbody> </table>												Production	Frequencies	0 to 100 yd <sup>3</sup> on a single day	1 Set each day	<b>Quantity Over 100 yd<sup>3</sup></b> 100 to 600 yd <sup>3</sup> on a single day	1 Set per each 100 yd <sup>3</sup> or portion thereof	over 600 yd <sup>3</sup> on a single day	1 Set per each 200 yd <sup>3</sup> or portion thereof after reaching 600 yd <sup>3</sup>
Production	Frequencies																		
0 to 100 yd <sup>3</sup> on a single day	1 Set each day																		
<b>Quantity Over 100 yd<sup>3</sup></b> 100 to 600 yd <sup>3</sup> on a single day	1 Set per each 100 yd <sup>3</sup> or portion thereof																		
over 600 yd <sup>3</sup> on a single day	1 Set per each 200 yd <sup>3</sup> or portion thereof after reaching 600 yd <sup>3</sup>																		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)							
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-1792	Contractor Quality Control	QUALITY ASSURANCE							
		ODOT	WAQTC	AASHTO			Independent Assurance/Verification	Project Manager	Region Quality Assurance	Materials Laboratory				
<b>SECTION 00556 - MULTI-LAYER POLYMER CONCRETE OVERLAY</b>														
Aggregate Production	Sampling Reducing Sieve Analysis			T 2 R 76 T 27	1792	1/Project or 1/Source								
											Moisture Content	T 255/265	1792	Material must meet the requirements of section 00556.10
Product Compliance	Absorption Abrasion Loss Mohs Hardness Scale			T 84 T 327	4000	1/Project or 1/ Source				Submit to Central Lab				
Polymer Resin	Material must meet the requirements of section 00556.10													



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00559 - SILICA FUME AND LATEX MODIFIED CONCRETE OVERLAYS (CONTINUED)</b>								
<b>SFC AND LMC</b>	Sampling Air Content Slump Concrete Temperature Density (Unit Weight) Yield W/C Ratio	TM 2	T 152 T 119 T 309 T 121 T 121 T 121	3573WS or 4000 C	A sublot equals 1 set of tests per 50 yd <sup>3</sup>			1 per 10 Sublots
Latex Modified Concrete	Fine Aggregate Moisture		T 255/T 265	1792	See Section 00559.10			
	Mixer Calibration				See Section 00559.22			
<sup>(M)</sup> Per Mix Design & Source	Strength		T 22 & T 23	4000C	<sup>(M)</sup> <sup>(S)</sup> 1 Set Cylinders per 50yd <sup>3</sup> Minimum 1 set/shift			1 Set per 500 yd <sup>3</sup>
<sup>(S)</sup> 1 Set Represents a minimum of 3 Cylinders								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00596A - MECHANICALLY STABILIZED EARTH RETAINING WALLS</b>										
<b>Aggregate Production</b>										
Gravel Leveling Pads Backfill (See Section 02630.10)	Abrasion				4000	See Section 4A	Submit to Lab			See Section 4A
	Degradation	TM 208		T 96						
	Sampling			T 2						
	Reducing Sieve Analysis Sand Equivalent Fracture (Method 1)			R 76 T 27 T 176 T 335	1792 1792	1/Sublot 1/5 Sublots				
Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project										
<sup>(3)</sup> Modular Block Core and Drainage Backfill (Product Compliance)	Soundness			T 104 T 96	4000	See Section 4C & 02690	Submit To Lab			See Section 4C
	Abrasion									
	Degradation Lightweight Pieces	TM 208		T 113	4000					
<sup>(3)</sup> (See Section 2690.20(a) thru 2690.20(e) & 2690.20(g))										
A Sublot equals 1,000 Tons										
<sup>(3)</sup> Modular Block Core and Drainage Backfill	Sampling			T 2						
	Reducing			R 76 T 27/T 11	1792	1/Sublot				
	<sup>(2)</sup> Sieve Analysis <sup>(1)</sup> Wood Particles Fracture (Method 2) Elongated Pieces	TM 225 TM 229		T 335	1792					
<sup>(2)</sup> Perform a minimum of 3 tests, QL's required										
Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion			T 96	4000	See Section 4C	Submit To Lab			See Section 4C
	Degradation	TM 208								
	Sieve Analysis			T 27	4000	1/Sublot				
Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project										
<b>SECTION 00596A - MECHANICALLY STABILIZED EARTH RETAINING WALLS</b>										
<b>Aggregate Production</b>										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
Gabion Basket Fill (Product Compliance) (See Section 00390.11(b))	Degradation Soundness Apparent Specific Gravity & Absorption	TM 208		T 104 T 85	4000 1825	See Section 4C	Submit to Lab		See Section 4C		
	Gradation						Visual				

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Independent Assurance/Verification
<b>SECTION 00596A - MSE RETAINING WALLS</b>							
<b>Aggregate Production</b>							
MSE Granular Wall Backfill (Product Compliance) (Also reference 02630.10)	Abrasion Degradation Sieve Analysis Plasticity Index pH Resistivity Organic Content	TM 208		T 96 T 11 T 90 T 289 T 288 T 267	4000	Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project	See Section 4C
MSE Granular Wall Backfill  ( <sup>1</sup> ) Perform a minimum of 3 tests, QL's required	Sampling Reducing ( <sup>1</sup> ) Sieve Analysis Sand Equivalent Fracture (Method 1)			T 2 R 76 T 27 T 176 T 335	1792 1792	See Section 4C Submit to Central Lab	
<b>Placement</b>						A Sublot Equals 2,000 Tons	
Establishing Maximum Density  ( <sup>1</sup> ) Method A	Density Curve Bulk Specific Gravity			( <sup>1</sup> ) T 99 T 85	3468	1/Sublot	
Compaction	Coarse Particle Correction	TM 223			3468	1/Aggregate Gradation/Per Source	
	Nuclear Gauge			T 310	1793B	1/100 yd3 (Minimum 1/day)	
	Deflection Testing	TM 158			1793B	1 per layer	Visual See section 00596A.47(c-5)
<p align="center"><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE							
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory				
<b>SECTION 00596B - PREFABRICATED MODULAR RETAINING WALLS</b>													
<b>Aggregate Production</b>													
Gravel Leveling Pads Backfill (See Section 02630.10)	Abrasion Degradation	TM 208		T96	4000	See Section 4A	Submit to Lab			See Section 4A			
	Sampling Reducing Sieve Analysis Sand Equivalent			T 2 R 76 T 27 T 176									
					T 335								
		Fracture (Method 1)											
Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project													
<sup>(3)</sup> Modular Block Core and Drainage Backfill (Product Compliance)	Soundness Abrasion Degradation Lightweight Pieces	TM 208		T 104 T 96 T 113	4000	See Section 4C & 02690	Submit To Lab			See Section 4C			
			A Sublot equals 1,000 Tons										
<sup>(3)</sup> Modular Block Core and Drainage Drainage Backfill <sup>(1)</sup> QAE may waive after 5 sublots/shifts	Sampling Reducing <sup>(2)</sup> Sieve Analysis <sup>(1)</sup> Wood Particles Fracture (Method 2) Elongated Pieces	TM 225 TM 229		T 2 R 76 T 27/T 11 T 335	1792 1792	1/Sublot							
			A Sublot equals 1,000 Tons										
<sup>(2)</sup> Perform a minimum of 3 tests, QL's required Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion Degradation	TM 208		T 96	4000	See Section 4C	Submit To Lab			See Section 4C			
	Sieve Analysis			T27	4000	1/Sublot							



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE					
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory		
<b>SECTION 00596B - PREFABRICATED MODULAR RETAINING WALLS</b>											
<b>Aggregate Production</b>											
Gabion Basket Fill (Product Compliance) (See Section 00390.11(b))	Degradation Soundness Apparent Specific Gravity & Absorption	TM 208	T 104 T 85	4000 1825	See Section 4C	Submit to Lab	Visual	See Section 4C	Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project		
	Gradation										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00596B - PREFABRICATED MODULAR RETAINING WALLS</b>										
<b>Aggregate Production</b>										
Retaining Wall Granular Backfill (Product Compliance) (Also reference 02630.10)	Abrasion			T96	4000	Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project	See Section 4C	Submit to Central Lab	See Section 4C	
	Degradation Sieve Analysis Plasticity Index	TM 208		T 11 T 90	4000					
A Sublot Equals 2,000 Tons										
Retaining Wall Granular Backfill  ( <sup>1</sup> ) Perform a minimum of 3 tests, QL's required	Sampling Reducing			T 2 R 76 T 27 T 176			1/Sublot			
	Fracture (Method 1)			T 335	1792					1/5 Sublots
Placement  Establishing Maximum Density  ( <sup>1</sup> ) Method A  Compaction	Density Curve			( <sup>1</sup> ) T 99	3468		1/Aggregate Gradation/Per Source			
	Bulk Specific Gravity			T 85	3468					
	Coarse Particle Correction	TM 223		T 310	1793B					1/ 100 yd3 (Minimum 1/day)
	Nuclear Gauge				1793B					1 per layer
	Deflection Testing	TM 158						Visual See section 00596B.47(b-6)		
<p align="center"><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00596C - CAST-IN-PLACE CONCRETE RETAINING WALLS</b>										
<b>Aggregate Production</b>										
Pipe Drain Backfill (Product Compliance) (See Section 00430.11)	Abrasion Degradation Sampling Reducing Sieve Analysis	TM 208		T 96	4000	See Section 4C	Submit To Lab		See Section 4C	
					4000					1/Sublot
Testing Frequency for Product Compliance per Source 1/5,000 Tons Minimum 1/Project										
Retaining Wall Granular Backfill (Product Compliance) (Also reference 02630.10)	Abrasion Degradation Sieve Analysis Plasticity Index	TM 208		T96 T 11 T 90	4000	See Section 4C	Submit to Central Lab		See Section 4C	
					4000					
A Sublot Equals 2,000 Tons										
Retaining Wall Granular Backfill  ( <sup>1</sup> ) Perform a minimum of 3 tests, QL's required	Sampling Reducing ( <sup>1</sup> ) Sieve Analysis  Fracture (Method 1)			T 2 R 76 T 27  T 335		1/Sublot				
					1792					
					1792					1/5 Sublots

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO			Independent Assurance/Verification	Project Manager	Region Quality Assurance
<b>SECTION 00596C - CAST-IN-PLACE CONCRETE RETAINING WALLS</b>									
<b>Placement</b>									
Retaining Wall Granular Backfill  Establishing Maximum Density  ( <sup>1</sup> ) Method A   Compaction	Density Curve			( <sup>1</sup> ) T 99	3468	1/Aggregate Gradation/Per Source			
	Bulk Specific Gravity			T 85	3468				
	Coarse Particle Correction	TM 223							
	Nuclear Gauge			T 310	1793B	1/ 100 yd3 (Minimum 1/day)			
	Deflection Testing	TM 158			1793B	1 per layer			
							Visual See section 00596C.42(f)		
<p><b>Contractor must demonstrate, by compaction testing or acceptable visual means, that the material, equipment, and process used for compaction achieves the specification requirements. If the material, equipment, or process changes, or if other conditions indicate a non-specification product, the Contractor must re-demonstrate that specification requirements are being achieved.</b></p>									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory		
<b>SECTION 00635 - GRID-ROLLED AGGREGATE SUBBASE</b>											
Aggregate Subbase Grading (See 00635.10)	Abrasion			T 96	4000	1/Source	A Sublot equals 1000 Tons			See Section 4(A)	
							Submit To Central Lab				
	Sampling Reducing Sieve Analysis Sand Equivalent			T 2 R 76 T 27 T 176	1792	1/Sublot & Start of Production					

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-734-	QUALITY ASSURANCE			
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS</b>								
Aggregate Production	Abrasion			T 96	4000	See Sec. 4A	Submit To Central Lab	See Section 4(A)
Aggregate Subbase Grading (See 00641.10(b))	Sampling Reducing Sieve Analysis Sand Equivalent			T 2 R 76 T 27 T 176	1792	1/Project or 1/Source	Visual	
Aggregate Base and Shoulders	Abrasion Degradation	TM 208		T96	4000	See Section 4A	Submit to Lab	See Section 4A
Grading					A Sublot equals 2000 Tons			
Aggregate Base (See 02630)	Sampling Reducing			T 2 R 76 T 27 T 176		1/Sublot & Start of Production		1 per 10 Sublots
Aggregate Shoulder (See 02640)	(1) Sieve Analysis				1792			
Open Graded Aggregate Base (See 02630.11)	(2) Sand Equivalent							
(1) Perform at least 3 tests								
(2) May be waived by QAE	Fracture (Method 1)			T 335	1792	1/5 Sublots		
<b>Placement</b>								
Aggregate Base					A Sublot equals 2000 Tons			
Plant Mix Applications Only								
Aggregate (Mixture)	Sampling Reducing Moisture			T 2 R 76 T 255 & T 265		1/Sublot or minimum 1/Day		1 per 10 Sublots
					1792			
	Density Curve			(3) T 99	3468 B	Each Size per Source		1/Project
Establishing Maximum Density & Optimum Moisture (Mix Design)	Coarse Particle Correction	TM 223		T 85	3468 B			
(3) Method A	Bulk Specific Gravity							
Compaction	Deflection Testing	TM 158			1793B	1 per Sublot		
	Nuclear Gauge							(D) 1 (5 Tests) per 10 Sublots
(D) (Individual tests must meet Specification)				T310	1793B	(D) 5 Tests Per Sublot		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS (Continued)</b>									
Placement									
Aggregate Subbase									
Compaction	Deflection Testing	TM 158			1793 B	1 per Layer	Visual		

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00680 - STOCKPILED AGGREGATES</b>										
<b>Aggregate Base and Shoulders</b> (See Section 00641)										
(1) Perform at least 3 tests, QL's required  (2) May be waived by QAE	Abrasion Degradation	TM 208		T 96	4000	See Section 4A	Submit to Lab			See Section 4A
	Sampling Reducing			R 76 T 27 T 176	1792	1/Sublot & Start of Production			1 per 10 Sublots	
	(1) Sieve Analysis (2) Sand Equivalent				1792					
	Fracture (Method 1)			T 335	1792	1/5 Sublots				
<b>Aggregate (Sanding Aggregate)</b>										
(1) May be waived by QAE	Sampling Reducing Sieve Analysis	TM 227		T 2 R 76 T 27	1792	1/Sublot & Start of Production			1 per 10 Sublots	
	(1) Cleaness Value				1792					
	Abrasion Degradation Lightweight Pieces	TM 208		T 96 T 113	4000	See Section 4A	Submit to Lab			See Section 4A
	Fracture (Method 1) Elongated Pieces Wood Particles	TM 229 TM 225		T 335	4000	1/5 Sublots & Start of Production			1 per 10 Sublots	



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)												
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE												
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory									
<b>SECTION 00680 - STOCKPILED AGGREGATES (CONTINUED)</b>																		
<b>Emulsified AC Aggregate</b> Aggregate Production (See Sections 00705, 00706, 00710, 00711, 00712 and 00715) (1) QAE may waive after 5 sublots/shifts (2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated (3) May be waived by QAE (4) Not required for Dry Key Material (5) 1/5 Sublots & Start of Production	Abrasion Degradation Soundness Lightweight Pieces  Sampling Reducing (5) Fracture (Method 1) (1) Wood Particles (1)(4) Elongated Pieces (2) Sieve Analysis (3) Cleaness Value  Dry Rodded Unit Weight	TM 208          TM 225 TM 229  TM 227	T 96 T 104 T 113  T 2 R 76 T 335   T27/T 11   T 19	4000 4000    1792 1792  1825 1825C	A sublot equals 500 Tons. A minimum 1 per shift, whichever results in the greatest sampling frequency	See Section 4A     1/Sublot & Start of Production   Start of production and when changes in aggregate occurs	Submit to Lab	1 per 10 Sublots	See Section 4A									
										<b>Aggregate (Other)</b>								
										Use sampling and testing frequencies required for proposed end product use								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00705 - EMULSIFIED ASPHALT PRIME COAT and EMULSIFIED ASPHALT FOG COAT</b>										
Aggregate Cover Material										
Aggregate Production	Sampling Reducing Sieve Analysis			T 2 R 76 T 27	1792	1/Sublot & Start of Production	1 per 10 Sublots			
Asphalt Prime and Fog Coat	Compliance			R 66	4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
<b>SECTION 00706 - EMULSIFIED ASPHALT SLURRY SEAL SURFACING</b>										
Aggregate Production										
<sup>(1)</sup> Perform at least 3 tests, QL's required	Sampling Reducing <sup>(1)</sup> Sieve Analysis			T 2 R 76 T 27/T 11	1792	1/Sublot & Start of Production				
	Compliance				4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
A sublot equals 500 Tons. A minimum 1 per shift whichever results in the greatest sampling frequency										
<b>Emulsified Asphalt Cement Emulsified Asphalt Polymer Modified Emulsion</b>										
Additives Mineral Filler										
Material must meet the requirements of Section 00706.13										
Mixture										
Material must meet the requirements of Section 00706.16										

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)														
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE														
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory											
<b>SECTION 00710 - SINGLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT</b>																				
<b>Aggregate Production</b>																				
Abrasion Degradation Soundness Lightweight Pieces  Sampling Reducing <sup>(6)</sup> Fracture (Method 1) <sup>(1)</sup> Wood Particles <sup>(1)(4)</sup> Elongated Pieces <sup>(2)</sup> Sieve Analysis <sup>(3)</sup> Cleaness Value  Dry Rodded Unit Weight  Compliance	TM 208     TM 225 TM 229  TM 227	T 96  T 104 T 113  T 2 R 76 T 335  T27/T 11  T 19  R 66	4000  4000  1792  1792  1825 1825C	See Section 4A  1/Sublot & Start of Production  Start of production and when changes in aggregate occurs	Submit to Central Lab  1 per 10 Sublots  Submit to Lab	A sublot equals 500 Tons. A minimum 1 per shift, whichever results in the greatest sampling frequency	See Section 4A	See Section 4A	1/5 QC Samples (Random)											
										<b>Preproduced Aggregate</b>										
										Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:										
										1. Continuing production records meeting the above requirements of Section 00710.10 and 710.15. Aggregate Production.										
										2. Furnish records of testing for the entire stockpile according to Section 00710.10 and 710.15 Aggregate Production except change the sampling frequency to the following:										
a. One Per 5 sublots means "One Set of Tests Per 2500 Tons". b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. c. Provide one stockpile sample for each set of tests required above.																				

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)											
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-734-	QUALITY ASSURANCE										
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory						
<b>SECTION 00711 - PRE-COATED AGGREGATE ASPHALT SURFACE TREATMENT</b>															
<b>Aggregate Production</b>															
Abrasion Degradation Soundness Lightweight Pieces  Sampling Reducing <sup>(1)</sup> QAE may waive after 5 sublots/shifts  <sup>(2)</sup> Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated  <sup>(3)</sup> May be waived by QAE  <sup>(4)</sup> Not required for Dry Key Material <sup>(5)</sup> 1/5 Sublots & Start of Production	TM 208   TM 225 TM 229  TM 227	T 96 T 104 T 113  T 2 R 76 T 335  T27/T 11  T 19	4000  4000  1792  1792  1825 1825C	A sublot equals 500 Tons. A minimum 1 per shift whichever results in the greatest sampling frequency	See Section 4A  Submit to Central Lab  1/Sublot & Start of Production  Start of production and when changes in aggregate occurs	1 per 10 Sublots	See Section 4A  Submit to Lab  1/50 Tons Submit All  1/5 QC Samples (Random)								
								<b>Asphalt Cement</b>							
								<b>Preproduced Aggregate</b>							
								Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:							
								1. Continuing production records meeting the above requirements of Section 00711.10 and 711.15, Aggregate Production. 2. Furnish records of testing for the entire stockpile according to Section 00711.10 and 711.15 Aggregate Production except change the sampling frequency to the following:							
a. One Per 5 sublots means "One Set of Tests Per 2500 Tons". b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. c. Provide one stockpile sample for each set of tests required above.															

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00711 - PRE-COATED AGGREGATE ASPHALT SURFACE TREATMENT (CONTINUED)</b>							
<b>Mixture Acceptance</b>							
Meter Method	Readings backed by Tank Measure & Production Records Daily	TM 321 (1) TM 322			2277	1/Sublot or Min. 1/Day	
(1) Required at start of production and if meters fail to meet specification	Cold Feed Moisture		T 255/265		2043 and 2401	Daily Production	
Plant Discharge Moisture	Asphalt Mix Moist.		T 329		2277	1/Sublot or Min. 1/Day	
Asphalt Cement	Compliance		R 66		4000	1/50 Tons Submit All	1/5 QC Samples (Random)
A sublot equals 500 Tons. A minimum 1 per shift, whichever results in the greatest sampling frequency							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)									
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE								
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory				
<b>SECTION 00712 - DRY KEY EMULSIFIED ASPHALT SURFACE TREATMENT</b>													
<b>Aggregate Production</b>													
<p>Abrasion Degradation Soundness Lightweight Pieces</p> <p>Sampling Reducing</p> <p><sup>(1)</sup> Fracture (Method 1)</p> <p><sup>(2)</sup> Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated</p> <p><sup>(3)</sup> May be waived by QAE</p> <p><sup>(4)</sup> Not required for Dry Key Material</p> <p><sup>(5)</sup> 1/5 Sublots &amp; Start of Production</p> <p>Asphalt Cement (Emulsion)</p>	<p>TM 208</p> <p>TM 225</p> <p>TM 229</p> <p>TM 227</p>	<p>T 96</p> <p>T 104</p> <p>T 113</p> <p>T 2</p> <p>R 76</p> <p>T 335</p> <p>T27/T 11</p> <p>T 19</p> <p>R 66</p>	<p>4000</p> <p>4000</p> <p>1792</p> <p>1792</p> <p>1825</p> <p>1825C</p> <p>4000</p>	<p>A sublot equals 500 Tons. A minimum 1 per shift, whichever results in the greatest sampling frequency</p>			<p>See Section 4A</p> <p>1/Sublot &amp; Start of Production</p> <p>Start of production and when changes in aggregate occurs</p> <p>1/50 Tons Submit All</p>	<p>Submit to Central Lab</p> <p>1 per 10 Sublots</p> <p>Submit to Lab</p>	<p>See Section 4A</p> <p>1/5 QC Samples (Random)</p>				
				<b>Preproduced Aggregate</b>									
				<p>Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:</p>									
				<p>1. Continuing production records meeting the above requirements of Section 00712.10 and 712.15, Aggregate Production.</p>									
				<p>2. Furnish records of testing for the entire stockpile according to Section 00712.10 and 712.15 Aggregate Production except change the sampling frequency to the following:</p>									
				<p>a. One Per 5 sublots means "One Set of Tests Per 2500 Tons".</p>									
				<p>b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project.</p>									
				<p>c. Provide one stockpile sample for each set of tests required above.</p>									

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-734-	QUALITY ASSURANCE			
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00715 - MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT</b>								
Aggregate Production	Abrasion Degradation Soundness Lightweight Pieces	TM 208		T 96 T 104 T 113	4000	See Section 4A	Submit to Central Lab	See Section 4A
	(5) Fracture (Method 1)			T 335	1792	1/Sublot & Start of Production		1 per 10 Sublots
	(2) Perform at least 3 tests (QL's required), QAE may waive wet sieve after 5 sublots/shifts if a correlation to dry sieve can be demonstrated	TM 225 TM 229		T 27/T 11	1792			
	(3) May be waived by QAE	TM 227		T 19	1825 1825C	Start of production and when changes in aggregate occurs		
	(4) Not required for Dry Key Material							
	(5) 1/5 Sublots & Start of Production							
Asphalt Cement (Emulsion)	Compliance			R 66	4000	1/50 Tons Submit All	Submit to Lab	1/5 QC Samples (Random)
<b>Preproduced Aggregate</b>								
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:								
1. Continuing production records meeting the above requirements of Section 00715.10 and 715.15, Aggregate Production.								
2. Furnish records of testing for the entire stockpile according to Section 00715.10 and 715.15 Aggregate Production except change the sampling frequency to the following:								
a. One Per 5 sublots means "One Set of Tests Per 2500 Tons".								
b. One Per sublot means "One Set of Tests Per 500 Tons" with a minimum of 3 sets of Sieve Analysis tests per project.								
c. Provide one stockpile sample for each set of tests required above.								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00720 - COLD IN-PLACE RECYCLED ASPHALT CONCRETE PAVEMENT (CIR)</b>										
<b>SECTION 00721 - COLD RECYCLED EMULSIFIED ASPHALT CONCRETE PAVEMENT (CRP)</b>										
Asphalt Cement (Emulsified Recycling Agent)	Compliance			R 66	4000	See Section 4C 1/50 Tons (Submit All)	Submit to Central Lab			1/5 QC Samples (Random)
Water	Compliance				4000	See Sec.00340.10				
Aggregate Production Choke Aggregate (See 00705)	Sampling Reducing Sieve Analysis			T 2 R 76 T 27	1792	1/Sublot & Start of Production		Minimum 1/Project		
<b>SECTION 00725 - HOT IN-PLACE RECYCLED (HIR) ASPHALT CONCRETE PAVEMENT</b>										
<i>The type of recycling agent will be listed in the Special Provisions</i>										
Recycling Agent (See 00745.11)	Compliance			R 66	4000	See Section 4C	Submit to Lab			1/5 QC Samples (Random)
Recycling Agent	Compliance			R 66	4000	1/50 Tons	Submit to Lab			
Asphalt Concrete Mixture	New Asphalt Concrete mixture will meet the requirements of Section 00744									
<b>SECTION 00730 - ASPHALT TACK COAT</b>										
Tack	Compliance			R 66	4000	See Section 4C 1/50 Tons	Submit to Lab			1/50 Tons or All QC Samples



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE						
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory			
<b>SECTION 00735 - EMULSIFIED ASPHALT CONCRETE PAVEMENT</b>												
Aggregate production												
(1) Perform at least 3 tests, QL's required	Abrasion Degradation Soundness Lightweight Pieces	TM 208		T 96 T 104 T 113	4000						See Section 4A	
					4000							Submit to Lab
					A Sublot equals 1000 Tons. A minimum one per shift, whichever results in the greatest sampling frequency. (For preproduced aggregates, 1 shift shall mean 1000 Tons							
(2) May be waived by QAE	Sampling Reducing (1) Sieve Analysis (2) Cleanness Value Fracture (Method 1 & 2)	TM 227		T 2 R 76 T 27/T 11 T 335	1792						1 per 10 Sublots	
					1792							1/Sublot & Start of Production
					A Sublot equals 1000 Tons. A minimum one per shift, whichever results in the greatest sampling frequency. (For preproduced aggregates, 1 shift shall mean 1000 Tons							
(3) QAE may waive after 5 sublots/shifts	Sieve Analysis			T 27	1792						1/Sublot	1/Project
<b>Choke Aggregate</b>												



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00743 - POROUS ASPHALT CONCRETE (PAC)</b>								
<b>Aggregate Production</b>								
(1) QAE may waive after 5 sublots/shifts  (2) Not required for ATPB Mix  (3) Coarse Agg (+ No. 4)  (4) Fine Agg (- No. 4)	Soundness	TM 208			4000	See Section 4A	Submit to Lab	See Section 4A
	Abrasion							
	Degradation							
	Lightweight Pieces Plasticity Index							
	Sampling				1792	1/Sublot & Start of Production		
	Reducing							
	(3)(4) Sieve Analysis (1)(4) Sand Equivalent							
	(1)(2)(3) Elongated Pieces TM 229				1792	1/5 Sublots & Start of Production		
	(3)(4) Fracture (Method 2)							
	(1)(2)(3) Wood Particles TM 225							
<b>Preproduced Aggregate</b>								
Compliance of aggregates produced and stockpiled before the award date or notice to proceed of this contract will be determined by the following:								
1. Continuing production records meeting the above requirements of Section 00743.10 Aggregate Production.								
2. Furnish records of testing for the entire stockpile according to Section 00743.10 Aggregate Production except change the sampling frequency to the following:								
a. One Per 5 sublots means "One Set of Tests Per 5000 Tons". b. One Per sublot means "One Set of Tests Per 1000 Tons" with a minimum of 3 sets of Sieve Analysis tests per project. c. Provide one stockpile sample for each set of tests required above.								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)</b>							
<b>Mixture Acceptance - PAC with RAP</b>							
<b>Gradation</b>							
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	
Ignition method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/Day	
(Residual aggregate from AASHTO T 308)	Sieve analysis		T 30		2277	1/Sublot or Min. 1/day	
<b>Asphalt Content</b>							
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	
Ignition Method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/day	
Meter Method	Asphalt Content		T 308		2277		
	Readings backed by Tank measure & Production Records Daily	TM 321 (2) TM 322			2277	1/Sublot or Min. 1/day	
<b>(2) Required at start of production and if meters fail to meet specification</b>							
<b><u>Meter Method is required for PAC even when acceptance is by Ignition Method</u></b>							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)		Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
<b>SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)</b>										
<b>Mixture Acceptance - PAC without RAP</b>										
<b>Gradation</b>										
Cold Feed Method	Sampling Reducing Sieve Analysis		T 2 R 76 T 27/T 11		2277	A Sublot equals 1000 Tons				
						1/Sublot or Min. 1/Day				
Ignition method	Calibrate Incinerator	(1) TM 323			2327IC	1/JMF & Each Calendar Year.				
Ignition method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/Day				
(1) <b>Not required if Asphalt Content Accepted by Meter Method</b>										
(Residual aggregate from AASHTO T 308)	Sieve analysis		T 30		2277	1/Sublot or Min. 1/day				
<b>Asphalt Content</b>										
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.				
Ignition Method	Sampling Reducing Asphalt Content		T 168 R 47 T 308		2277	1/Sublot or Min. 1/day				
(2) <b>Required at start of production and if meters fail to meet specification</b>										
Meter Method	Readings backed by Tank measure & Production Records Daily	TM 321 (2) TM 322			2277	1/Sublot or Min. 1/day				
<b><u>Meter Method is required for PAC even when acceptance is by Ignition Method</u></b>					2043 and 2401	Daily Production				

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00743 - POROUS ASPHALT CONCRETE (PAC) (CONTINUED)</b>								
Mixture Acceptance - PAC with and without RAP								
Mix Design Verification Testing								
	Cold Feed Moisture			T255/T265	2277	1/Sublot or Min. 1/Day		
Plant Discharge Moisture	Asphalt Mix Moist.			T 329	2277	1/Sublot or Min. 1/Day		
<sup>(1)</sup> If applicable	<sup>(1)</sup> RAP Moisture			T 329	2277	1/Sublot or Min. 1/Day		
	Readings backed by Tank measure & Production Records Daily	TM321 <sup>(2)</sup> TM 322			2401 & 2043	Daily Production		
Asphalt Cement	Compliance			R 66	4000	1/Sublot - See section 4C	Submit to Lab	1/5 QC Samples (Random)
<sup>(2)</sup> Required at start of production and if meters fail to meet specification								

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00744 - ASPHALT CONCRETE PAVEMENT</b>							
Aggregate Production							
Mixture Acceptance							
Gradation							
See Specifications when Aggregate Testing is Required by the Agency							
A Sublot equals 1000 Tons							
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	
Ignition method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/Day	
(Residual aggregate from AASHTO T 308)	Sieve analysis		T 30		2277	1/Sublot or Min. 1/Day	
A Sublot equals 1000 Tons							
<b>Asphalt Content</b>							
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	
Ignition Method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/day	
	Asphalt Content		T 308		2277		
A Sublot equals 1000 Tons							
<b>Mix Design Verification Testing</b>							
Plant Discharge Moisture	Asphalt Mix Moist.		T 329		2277	1/Sublot	
Maximum Density Test $G_{mm}$	Max. Specific Gravity MAMD	TM 305	T 209		2050	1st Sublot Daily or Min. 1/Day	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Materials Laboratory		
<b>SECTION 00744 - ASPHALT CONCRETE PAVEMENT (CONTINUED)</b>											
Compaction	Nuclear Density				T 355						
						1793A	(D) Average 10 tests per Sublot or Min. 10/Day, See Section 00744.49				





FIELD TESTED MATERIALS ACCEPTANCE GUIDE					(Revised November 2017)					Same Frequency for all Tests (Minimums)						
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	Contractor Quality Control	QUALITY ASSURANCE			Materials Laboratory						
		ODOT	WAQTC	AASHTO			Project Manager	Region Quality Assurance	Independent Assurance/Verification							
<b>SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)</b>																
<b>Mixture Acceptance - ACP Without RAP</b>											A Sublot equals 1000 Tons					
<b>Gradation</b>																
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.				1/JMF & Each Calendar Year.						
Ignition method	Sampling Reducing			T 168 R 47		1/Sublot				1 per 10 Sublots						
(Residual aggregate from AASHTO T 308)	Sieve analysis			T 30	2277	1/Sublot				1 per 10 Sublots						
<b>Asphalt Content</b>																
<b>Mixture Acceptance - ACP Without RAP</b>											A Sublot equals 1000 Tons					
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.				1/JMF & Each Calendar Year.						
Ignition Method	Sampling Reducing Asphalt Content			T 168 R 47 T 308	2277	1/Sublot or Min. 1/day				1 per 10 Sublots						

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)</b>							
<b>Mixture Acceptance - ACP Without RAP</b>							
<b>Mix Design Verification Testing</b>							
Fabrication	Gyratory Specimen	TM 326					
Maximum Density Test	Max. Specific Gravity		T 209	2050GV 2050 *5068 *2560 *5069	1/Sublot & according to Section 00745.16 (b)-1-d		1 per 10 Sublots
Determination of $G_{mb}$	Bulk Specific Gravity		T 166				
Stripping Susceptibility	Tensile Strength Ratio		T 283	2050tsr	1/JMF See Section 00745.16 (b)-1-f		
*Cat-II complete & submit as required, See Section 745.16(b)							
Plant Discharge Moisture	Asphalt Mix Moist.		T 329	2277	1/Sublot		
Maximum Density Test $G_{mm}$	Max. Specific Gravity MAMD	TM 305	T 209	2050	1st Sublot Daily or Min. 1/Day		
Performing Control Strip	Control Strip	TM 306		2084 *5069 1793A	Develop Rolling Pattern See Specs.		(D) 1 per 10 Sublots
Compaction	Nuclear Density		T 355		(D) Average 5 tests per Sublot or Min. 1/Day, See Section 00745.49 (b)-2		
Asphalt Cement	Compliance		R 66	4000	1/Sublot See Section 4C	Submit to Lab	1 per 10 Sublots
(D) See T 355 YellowSheet for Density Test Locations							1/5 QC Samples (Random)

A Sublot equals 1000 Tons

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)</b>							
Mixture Acceptance - ACP Without RAP							
Mix Design Verification Testing						A Sublot equals 1000 Tons	
Meter Method	Readings backed by Tank Measure & Production Records Daily	TM 321 (2) TM 322			2277	1/Sublot or Min. 1/Day	1 per 10 Sublots
(2) Required at start of production and if meters fail to meet specification	Cold Feed Moisture		T 255/265		2043 and 2401	Daily Production	
Lime	Material must meet the requirements of Section 2090				2277	1/Sublot or Min. 1/Day	1 per 10 sublots
Latex	See Special Provisions for Latex Requirements						
Lime or Latex Treatment of Aggregate (Stockpile OR Mixture Production)	(3) % Hydrated Lime	TM 321 (2) TM 322			2277	1/Sublot	1 per 10 Sublots
(3) See JMF for Details	Readings backed by Tank Measure & Production Records Daily				2043 and 2401	Daily Production	
<b>Smoothness</b>							
Certification of Profiler Equipment Determining Profile Index Determining International Roughness Index		TM 769 TM 770 TM 772				See Special Provisions	
<b>Meter Method is required for ACP even when acceptance is by Ignition Method</b>							

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)</b>							
<b>Mixture Acceptance - ACP With RAP</b>							
<b>Gradation</b>							
Ignition method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	1/JMF & Each Calendar Year.
Ignition method (Residual aggregate from AASHTO T 308)	Sampling Reducing Sieve analysis		T 168 R 47 T 30		2277	1/Sublot	1 per 10 Sublots
<b>Asphalt Content</b>							
Ignition Method	Calibrate Incinerator	TM 323			2327IC	1/JMF & Each Calendar Year.	1/JMF & Each Calendar Year.
Ignition Method	Sampling Reducing		T 168 R 47			1/Sublot or Min. 1/day	1 per 10 Sublots
	Asphalt Content		T 308		2277		
RAP Percentage	Meter Method	TM 321 (1) TM 322			2277	1/Sublot or Minimum 1/Day	1 per 10 Sublots
<b>(1) Required at start of production and if meters fail to meet specification</b>	RAP Moisture Cold Feed Moisture		T 329 T255/T265		2277		
<b><u>Meter Method is required for ACP even when acceptance is by Ignition Method</u></b>	Readings backed by Tank measure & Production Records Daily	TM 321 (1) TM 322			2401 & 2043	Daily Production	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)			
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD		FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC		AASHTO	Contractor Quality Control	Project Manager
<b>SECTION 00745 - ASPHALT CONCRETE PAVEMENT - STATISTICAL ACCEPTANCE (CONTINUED)</b>							
Mixture Acceptance - ACP With RAP							
Mix Design Verification Testing							
Fabrication	Gyratory Specimen	TM 326					
Maximum Density Test	Max. Specific Gravity		T 209	2050GV 2050	1/Sublot & according to Section 00745.16 (b)-1-d		1 per 10 Sublots
Determination of $G_{mb}$	Bulk Specific Gravity		T 166	*5068 *2560 *5069			
Stripping Susceptibility	Tensile Strength Ratio		T 283	2050tsr	1/JMF See Section 00745.16 (b)-1-f		
*Cat-II complete & submit as required, See Section 745.16(b)							
Plant Discharge Moisture	Asphalt Mix Moist.		T 329	2277	1/Sublot		
Maximum Density Test $G_{mm}$	Max. Specific Gravity MAMD	TM 305	T 209	2050	1st Sublot Daily or Min. 1/Day		
Performing Control Strip	Control Strip	TM 306		2084 *5069	Develop Rolling Pattern See Specs.		
Compaction	Nuclear Density		T 355	1793A	(D) Average 5 tests per Sublot or Min. 1/Day, See Section 00745.49 (b)-2		(D) 1 per 10 Sublots
Asphalt Cement	Compliance		R 66	4000	1/Sublot See Section 4C	Submit to Lab	1 per 10 Sublots
(D) See T 355 YellowSheet for Density Test Locations							1/5 QC Samples (Random)



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MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE				
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory	
SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR										
SECTION 00755 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT										
SECTION 00756 - PLAIN CONCRETE PAVEMENT										
SECTION 00758 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR										
Aggregate Production										
(1) QAE may waive after 5 sublots/shifts	Sampling Reducing (2)(3)(4) Sieve Analysis (4) Fineness Modulus (4) Sand Equivalent	T 2 R 76 T 27/T 11	1792	1792	1792	1792	1 per 10 Sublots	Submit to Central Lab	See Section 4A	See Section 4A
(2) Perform a minimum of 3 tests, QL's required	(1)(3) Wood Particles (3) Fracture (Method 2) (1)(3) Elongated Pieces	TM 225 TM 229	1792	1792	1792	1792	1 per 10 Sublots	Submit to Central Lab	See Section 4A and 02690	See Section 4A
(4) Fine Aggregate (See Section 02690.30)	Abrasion Degradation Soundness Lightweight Pieces Organics	TM 208	4000	4000	4000	4000	1 per 10 Sublots	Submit to Central Lab	See Section 4A and 02690	See Section 4A
(3) Coarse Aggregate (See Section 02690.20)	(3) Dry Rodded Unit Weight (3)(4) Bulk Specific Gravity & Absorption	T 19 T 84 & T 85	1825	1825C	1825	1825	1 per 10 Sublots	Submit to Central Lab	See Section 4A and 02690	See Section 4A
(4) Fine Aggregate (See Section 02690.30)	Abrasion Degradation Soundness Lightweight Pieces Organics	TM 208	4000	4000	4000	4000	1 per 10 Sublots	Submit to Central Lab	See Section 4A and 02690	See Section 4A
(3) Coarse Aggregate (See Section 02690.20)	(3) Dry Rodded Unit Weight (3)(4) Bulk Specific Gravity & Absorption	T 19 T 84 & T 85	1825	1825C	1825	1825	1 per 10 Sublots	Submit to Central Lab	See Section 4A and 02690	See Section 4A



FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)				
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
SECTION 00754 - PLAIN CONCRETE PAVEMENT REPAIR SECTION 00755 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT SECTION 00756 - PLAIN CONCRETE PAVEMENT SECTION 00758 - CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR (CONTINUED)								
Mixture								A Sublot equals 1000 lane feet of slip formed pavement or 100 yd <sup>3</sup> of non-slip formed PCC
Portland Cement Modifiers Admixtures		Materials must meet the requirements of Section 02001.10						
Curing Compounds		Material must meet the requirements of Section 02050						
Mixing Water		Material must meet the requirements of Section 02020						
Mixture	Sampling Air Content Slump Density (Unit Weight) Yield Concrete Temperature Water/Cement Ratio Batching Strength		TM 2	T 152 T 119 T 121 T 121 T 309 T 121	3573WS or 4000C		1/ sublot or Minimum 1 per Day	1 per 10 Sublots
( <sup>S</sup> ) 1 Set Represents a minimum of 3 Cylinders					4000C		( <sup>M</sup> ) ( <sup>S</sup> ) 1 Set of Cylinders per Sublot or Minimum 1 set per Day	1 per 10 Sublots
( <sup>M</sup> ) Per Mix Design & Source								
<b>Smoothness</b> Certification of Profiler Equipment Determining Profile Index			TM 769 TM 770				See Special Provisions	
Thickness of Pavement			TM 775				See Specs	

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				(Revised November 2017)			Same Frequency for all Tests (Minimums)		
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS</b>									
<b>Placement Evaluation "Retroreflectivity"</b>									
<b>In-Place</b> <i>Procedure evaluates Durable and High Performance Pavement Markings</i>	<i>Evaluation of Retroreflectivity Using Hand-Operated Instrument</i>	TM 777			4101 thru 4105	See Special Provisions and Test Procedure for Testing Frequency			

FIELD TESTED MATERIALS ACCEPTANCE GUIDE				Same Frequency for all Tests (Minimums)					
MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE			
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance	Materials Laboratory
<b>SECTION 00921 - MAJOR SIGN SUPPORT DRILLED SHAFTS</b>							A Sublot equals 1,000 Tons		
Aggregate Production  (1) QAE may waive after 5 sublots/shifts  (2) Perform a minimum of 3 tests, QL's required  (3) Coarse Aggregate (See Section 02690.20)  (4) Fine Aggregate (See Section 02690.30)	Sampling Reducing (2)/(3)/(4) Sieve Analysis (4) Fineness Modulus (1)/(3) Wood Particles (4) Sand Equivalent  Soundness Abrasion Degradation Lightweight Pieces Organics  (3) Dry Rodded Unit Weight  (3)/(4) Bulk Specific Gravity & Absorption	TM 225           TM 208		T 2 R 76 T 27/T 11 T 27/T 11  T 176  T 104 T 96  T 113 T 21  T 19  T 84 & T 85	1792	1/Sublot & Start of Production	1 per 10 Sublots	Submit to Lab	See Section 4(A)
					1792				
					4000				
					4000				
					1825 1825C 1825				
Portland Cement Modifiers Admixtures	Materials must meet the requirements of Section 02001.10								
Drilling Slurry	Slurry material must meet the requirements of Section 00921.14 & 00921.43(g)								
Grout	Material must meet the requirements of Section 02080								
Mixing Water	Material must meet the requirements of Section 02020								

**FIELD TESTED MATERIALS ACCEPTANCE GUIDE**

(Revised November 2017)

Same Frequency for all Tests (Minimums)

MATERIAL AND OPERATION	DESCRIPTION OF TEST	TEST METHOD			FORM 734-	QUALITY ASSURANCE		
		ODOT	WAQTC	AASHTO		Contractor Quality Control	Project Manager	Region Quality Assurance
<b>SECTION 00921 - MAJOR SIGN SUPPORT DRILLED SHAFTS</b>								
Portland Cement Concrete								<b>QA Testing</b>
	Sampling Slump	TM 2	T 119					<b>Projects under 100 yd<sup>3</sup> all classes</b> 1/Project representing all classes of PCC
	Concrete Temperature		T 309					
	Density (Unit Weight)		T 121					
	Yield		T 121					
	Water/Cement Ratio		T 121					
	Strength	T22/23						<b>Projects over 100 yd<sup>3</sup> all classes</b> 1/500 yd <sup>3</sup> per class minimum 1/class
( <sup>S</sup> ) 1 Set Represents a minimum of 3 Cylinders								
( <sup>M</sup> ) Per Mix Design & Source								

**TABLE 00512-1 Frequency of Quality Control Testing**

<b>Minimum frequencies per Class of concrete based on daily production records.</b>	
<b>Production</b>	<b>Frequencies</b>
0 to 100 yd <sup>3</sup> on a single day	1 Set each day
<b>Quantity Over 100 yd<sup>3</sup></b>	
100 to 600 yd <sup>3</sup> on a single day	1 Set per each 100 yd <sup>3</sup> or portion thereof
over 600 yd <sup>3</sup> on a single day	1 Set per each 200 yd <sup>3</sup> or portion thereof after reaching 600 yd <sup>3</sup>