



## **Appendix C – Frequency Guide, All Phases**

# Material Quality Assurance Processes

## Admixtures for Concrete

### Plant or Product Qualification

Evaluation of Production Facility for CTD Materials			Facility Qualification
Production facility data maintained to provide a basis for qualified products.	1 per	1	Prior to Usage on Project
Evaluation of Material Product for CTD Materials			Product Qualification
Qualification of Material Product for use on State Projects.	1 per	1	Prior to Usage on Project
Material Product QC			Product Qualification
Concrete Technology Laboratory to collect and evaluate Admixture Material Samples. 1 Quart in a Screw Top Can	1 per	1	Months

## Aggregate Materials, Controlled Mixtures

### Plant or Product Qualification

Evaluation of Production Facility for SATD Materials			Facility Qualification
Qualification of Production Facility for state projects.	1 per	1	Prior to Source Request
	1 per	1	Year
Evaluation of Material Product for SATD Materials			Product Qualification
Qualification of Material Product. 35 Lbs, of final mix in a Soils Bag	3 per	1	Prior to Source Request
	1 per	2	Year
Routine SATD Production QA			Product QC/QA
Production Quality Assurance	1 per	20	Production Day
SATD Material Product QC			Product QC/QA
Producer to perform daily gradations and moisture checks on aggregate materials. 35 Lbs in a Soils Bag	1 per	1	8 Hour Shift
	1 per	1000	Ton

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

### Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify load ticket for correct JMF.	1 per	1	Placement Day
Project Site Testing			Material Sampling and Testing
Compaction and Moisture analysis performed by Project Engineer. Submit compaction report to MMD for clearance.	1 per	1	Placement Day
	1 per	1	Lane Mile per Lift

# Material Quality Assurance Processes

## Aggregate Materials, Crushed Gradations

### Plant or Product Qualification

Evaluation of Production Facility for SATD Materials			Facility Qualification
Evaluation of Crushed Aggregate producers that wish to be placed on the Aggregate Bulletin.	1 per	1	Prior to Usage on Project Year
Evaluation of Crushed Aggregate producers that do NOT require to be listed in the Aggregate Bulletin.	1 per	1	Prior to Usage on Project

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

### Material Production

SATD Material Review			Material Certification for Project Usage
Material to be sampled as Common Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	1 per	1	Prior to Usage on Project
Material to be sampled as Capping Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2 per	1	Prior to Usage on Project
Material to be sampled as Modified Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2 per	1	Prior to Usage on Project
Material to be sampled as Select Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2 per	1	Prior to Usage on Project

### Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify material product, submit Form 14.	1 per	1	Placement Day
Project Engineer to submit verification samples of Common Borrow material. 35 LBS in a Soils Bag	1 per	15000	Cubic Yard
Project Engineer to submit verification samples of Modified Borrow material. 35 LBS in a Soils Bag	1 per	15000	Cubic Yard
Project Engineer to submit verification samples of material of Select Borrow. 35 LBS in a Soils Bag	1 per	15000	Cubic Yard

Project Site Testing			Material Sampling and Testing
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# Material Quality Assurance Processes

<p><b>Compaction and Moisture analysis of Common Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.</b></p> <p>35 LBS in a Soils Bag</p> <p><b>Compaction and Moisture analysis of Capping Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.</b></p> <p>35 LBS in a Soils Bag</p> <p><b>Compaction and Moisture analysis of Modified Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.</b></p> <p>35 LBS. in a Soils Bag</p> <p><b>Compaction and Moisture analysis of Select Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.</b></p> <p>35 LBS in a Soils Bag</p> <p><b>Compaction and Moisture analysis of Select Borrow for Trench Backfill to be performed by Project Engineer. Submit Compaction report to MMD for clearance.</b></p>	<p>4 <b>per</b> 1 1 <b>per</b> 2000</p> <p>4 <b>per</b> 1 1 <b>per</b> 2000</p> <p>4 <b>per</b> 1 1 <b>per</b> 2000</p> <p>4 <b>per</b> 1 1 <b>per</b> 2000</p> <p>1 <b>per</b> 150</p>	<p>Lane Mile per Lift Cubic Yard</p> <p>Lane Mile per Lift Cubic Yard</p> <p>Lane Mile per Lift Cubic Yard</p> <p>Lane Mile per Lift Cubic Yard</p> <p>Linear Feet per 3 Foot Lift</p>
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## Aggregate Materials, High Friction Surf. Treatment

### Plant or Product Qualification

<b>Evaluation of Production Facility for SATD Materials</b>	<i>Facility Qualification</i>
1 <b>per</b> 1	Prior to Usage on Project

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>
Source of Supply Processing	1 <b>per</b> 1 Prior to Usage on Project

### Material Production

<b>SATD Certification Review</b>	<i>Material Certification for Project Usage</i>
Material Certification/Documentation to be provided by material supplier during Source Submission.	1 <b>per</b> 1 Prior to Usage on Project
<b>SATD Material Review</b>	<i>Material Certification for Project Usage</i>
Supplier to provide SATD samples of Calcined Bauxite Aggregate 45 days prior to construction. Supplier to contact SATD for delivery instructions.	2 <b>per</b> 1 Prior to Usage on Project
Supplier to provide SATD samples of Polymer Resin Binder. Supplier to contact SATD for delivery instructions	1 <b>per</b> 1 Prior to Usage on Project

### Project Construction

<b>Material Verification for SATD Materials</b>	<i>Material Verification</i>
Project Engineer to verify the coverage rate of the retained aggregate meets the required quantity of the special provision	1 <b>per</b> 1 Test Section
Project Engineer to contact the Office of Material Technology to coordinate field acceptance testing (Table 3 of Special Provision) within 60 days after Construction	1 <b>per</b> 0.1 Lane Mile

# Material Quality Assurance Processes

## Aggregate Materials, Other Stone and Sand

### Plant or Product Qualification

Evaluation of Production Facility for SATD Materials			Facility Qualification
Evaluation of Crushed Aggregate producers that wish to be placed on the Aggregate Bulletin.	1	per 1	Prior to Usage on Project
Evaluation of Crushed Aggregate producers that do NOT require to be listed in the Aggregate Bulletin.	1	per 1	Prior to Usage on Project

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify material, Submit form 14 for clearance	1	per 1	Item Completion

## Aggregate Materials, Recycled PCC Gradations

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Source Request

### Material Production

SATD Certification Review			Material Certification for Project Usage
Material Certification to be provided by material supplier during facility visit.	1	per 1	Prior to Usage on Project
SATD Material Review			Material Certification for Project Usage
Material to be sampled as Common Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per 1	Prior to Usage on Project
Material to be sampled as Modified Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per 1	Prior to Usage on Project
Material to be sampled as Select Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per 1	Prior to Usage on Project

### Project Construction

Project Sampling and Lab Testing of SATD Material			Material Verification
Project Engineer to submit verification samples of Common Borrow material. 35 LBS in a Soils Bag	1	per 15000	Cubic Yard

# Material Quality Assurance Processes

Project Engineer to submit verification samples of material of Modified Borrow. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard
Project Engineer to submit verification samples of Select Borrow material. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard

<b>Project Site Testing</b>	<i>Material Sampling and Testing</i>
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Project Engineer to verify pH of placed recycled materials.	1	per	1	Project Completion
Project Engineer to verify pH of placed material, and perform Compaction and Moisture analysis of Common Borrow. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Project Engineer to verify pH of placed recycled material, and perform Compaction and Moisture analysis of Modified Borrow.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Project Engineer to verify pH of placed material, and perform Compaction and Moisture analysis of Select Borrow. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard

## Aggregate Materials, Source Material

### Plant or Product Qualification

<b>Evaluation of Production Facility for SATD Materials</b>	<i>Facility Qualification</i>
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Qualification of Quarry	1	per	1	Prior to Source Request
	1	per	1	Year

<b>Review of Aggregate Quality</b>	<i>Product Qualification</i>
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Annual Quality of Coarse Aggregates	1	per	1	Prior to Source Request
50 Lbs (or 35 Lbs for lightweight) in a Soils Bag	1	per	1	Year
Annual Quality of Fine Aggregates.	1	per	1	Prior to Source Request
50 Lbs (40 lbs for lightweight) in a Soils Bag	1	per	1	Year

## Asphalt Additives

### Plant or Product Qualification

<b>Evaluation of Production Facility for ATD Materials</b>	<i>Facility Qualification</i>
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Production facility data maintained to track the material supply chain and provide a basis for qualified products.	1	per	1	Prior to Usage on Project
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<b>Evaluation of Material Product for ATD Materials</b>	<i>Product Qualification</i>
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Qualification of Material Product for use on State Projects	1	per	1	Prior to Usage on Project
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## Asphalt Mixtures

### Plant or Product Qualification

<b>Evaluation of Production Facility for ATD Materials</b>	<i>Facility Qualification</i>
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# Material Quality Assurance Processes

Production facility to be certified to produce material for State projects. 1 per 12 Months

## Evaluation of Material Product for ATD Materials Product Qualification

Review and Qualification of Asphalt Mixture Material Product. 1 per 1 Prior to Source Request

## SHA Acceptance Facility Visit for Asphalt Mix Production Product QC/QA

Production Quality Assurance 1 per 6000 Ton  
1 per 10 Production Day

## SHA Acceptance of Binder Component Product QC/QA

Asphalt Technology representative to witness and take possession of material sample. 1 per 10 Production Day  
1 per 1 Project Completion  
1 Quart in a Friction Top Can 1 per 6000 Ton

### Source Approval

## Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Material Production

## Notification of Production for ATD materials Production Notification

Producer to notify the Asphalt Technology Division 1 day prior to production. 1 per 1 Placement Day

### Project Construction

## Core Sampling for Asphalt Mix Density Analysis Material Sampling and Testing

Project Engineer shall verify that the contractor takes QC and QA Density Cores at random locations in the pavement. (1 Sample = 5 Cores Min. See Material QA Manual for more information) 2 per 1 Production Day  
1 Sample = 5 - 6" Dia. Cores (min)

## Density Gauge testing for Patches or Small Quantities Material Sampling and Testing

Patch density measured at random locations with an asphalt density gauge, recorded on a Form 73-1P and submitted to OMT. See specification 505.03.14 for additional details. 1 per 1 Lift of each Patch  
2 Readings per test

## Box Sampling for Asphalt Mixture Material Sampling and Testing

Project Engineer shall verify that the contractor takes QC and QA Mix Box at random intervals during placement of asphalt mixture. 2 per 1000 Ton  
2 per 1 Production Day  
1 Sample = 1-50 LB Box (2-50 LB for 25.0mm Mix, 2-50 LB for 37.5mm Mix)

## Box Sampling for Patches or Small Daily Quantities of Asphalt Mixture Material Sampling and Testing

# Material Quality Assurance Processes

Project Engineer shall verify that the contractor takes QC and QA Box Samples at random intervals at least once per mix for every 1000 tons or once per mix weekly, whichever yields the greater frequency. See 505.03.12 for additional details.

2 per 5  
2 per 1000

Placement Day  
Ton

1 Sample = 1-50 LB Box (2-50 LB for 25.0mm Mix, 2-50 LB for 37.5mm Mix)

## Asphalt Mix Density Pay Factor Analysis

Sample Analysis

Density QA and QC results are to be processed by the Asphalt Technology Division to develop a recommended "Density Pay Factor".

1 per 1

Sample Set

## Asphalt Mix Pay Factor Analysis

Sample Analysis

Mixture QA and QC results are to be processed by the Asphalt Technology Division to develop a recommended "Mixture Pay Factor".

1 per 1  
1 per 6000

Project Completion  
Ton

## Evaluation of Pavement Surface Profile

Project Wide Testing

Surface profiling will be completed as indicated in Section 535 of the Special Provisions.

1 per 1

Item Completion

## Asphalt Release

### Plant or Product Qualification

#### Evaluation of Production Facility for ATD Materials

Facility Qualification

Production facility data maintained to provide a basis for qualified products.

1 per 1

Prior to Usage on Project

#### Evaluation of Material Product for ATD Materials

Product Qualification

Qualification of Material Product.

1 per 1

Prior to Usage on Project

## Cement Materials and Bagged Mixtures, Group 1

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials

Facility Qualification

Production facility data maintained to provide a basis for qualified products.

1 per 1

Prior to Source Request

#### Evaluation of Material Product for CTD Materials

Product Qualification

Qualification of Material Product for use on State Projects

1 per 1

Prior to Source Request

### Source Approval

#### Source Submission

Source of Supply Submittal

Source of Supply Processing

1 per 1

Prior to Usage on Project

### Project Construction

#### CTD Material Verification

Material Verification

Project Engineer to collect certifications (TC 1.03 w/o test data) and submit to OMT for clearance.

1 per 1

Delivery to Project

## Cement Materials and Bagged Mixtures, Group 2

### Plant or Product Qualification



# Material Quality Assurance Processes

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per	1 Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per	1 Prior to Usage on Project

## Material Production

CTD Material Review and Acceptance			Material Certification for Project Usage
Submit sample of material accompanied by a Form 88 and Material certification (1.03 w/o test data) to OMT for job specific approval. 1 Factory Sealed Container in a Factory Sealed Container	1	per	1 Prior to Usage on Project

## Project Construction

CTD Material Verification			Material Verification
Project Engineer to collect certifications (TC 1.03 w/o test data) and a material sample. Submit to OMT for verification and clearance	1	per	1 Delivery to Project

## Cement Materials and Bagged Mixtures, Group 3

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per	1 Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per	1 Prior to Usage on Project

### Material Production

CTD Material Review and Acceptance			Material Certification for Project Usage
Submit Form 88 and Material Certification (1.03 w/o test data) to OMT for job specific approval.	1	per	1 Prior to Usage on Project

### Project Construction

CTD Material Verification			Material Verification
Project Engineer to verify approval stamp.	1	per	1 Delivery to Project

## Cement Materials and Bagged Mixtures, Group 4

### Plant or Product Qualification

Evaluation of Production Facility for CTD Materials			Facility Qualification
Material Specific Qualification of Material Producer	1	per	1 Prior to Source Request

## Cement Treated Base/Cement Treated Subgrade

### Plant or Product Qualification

# Material Quality Assurance Processes

## Evaluation of Production Facility for SATD Materials Facility Qualification

Producer to perform daily gradations and moisture checks on aggregate materials.	1	per	1	8 Hour Shift
	1	per	1000	Ton
Production Quality Assurance	1	per	10	Production Day
Quality Control Plan of Production Facility for state projects.	1	per	1	Prior to Source Request

### Source Approval

## Source Submission Source of Supply Submittal

Source of Supply Processing	1	per	1	Prior to Usage on Project
Mix Design	1	per	1	Material or Treatment Change
	1	per	1	Prior to Usage on Project

### Material Production

## SATD Material Review Material Certification for Project Usage

Materials to be sampled at its place of origin. Project Engineer to contact SATD to schedule sampling.	1	per	1	Prior to Usage on Project
	1	per	1	Prior to Usage on Project

### Project Construction

## Project Site Testing Material Sampling and Testing

Construct a 500 foot long control strip onsite according to section 502.03.05	1	per	1	Project
Acceptance of the control strip will be based on performing Falling Weight Deflectometer (FWD) testing and analysis per Section 3.10 of the Pavement Performance Specifications and the Pavement and Geotechnical Design Guide	1	per	1	Cement Modified Subgrade
	1	per	1	Cement Treated Base
Application Rate Verification by weight of cement	1	per	1	Truck Load
Project Engineer to submit FM 14 for Depth and Pulverization check	3	per	1	Placement Day
Compaction and Moisture analysis performed by Project Engineer. Submit compaction report to MMD for clearance.	1	per	1	Placement Day
	2	per	2	Lane Mile per Lift

## Compost Materials

### Plant or Product Qualification

## Evaluation of Material Producer for LPD Materials Facility Qualification

Qualification of Compost Supplier for use on State projects	1	per	1	Prior to Source Request
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### Source Approval

## Source Submission Source of Supply Submittal

Source of Supply Processing	1	per	1	Prior to Usage on Project
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### Project Construction

# Material Quality Assurance Processes

## LPD Material Verification Material Verification

Project Engineer to inspect compost certification provided by the Contractor with the delivery to verify that compost is of the correct type per 920.02.05, and that compost is sourced from a MDA or MDE approved producer. Project Engineer to visually inspect the placed material to ensure the compost is fit for usage and applied as specified. Project Engineer to submit Form 14 with copy of product label or delivery ticket for clearance.

1 per 1 Delivery to Project

## Concrete Deck Protection

### Plant or Product Qualification

#### Review of Misc Production Location Limited Producer Check

Production facility data maintained to track the material supply chain.

1 per 1 Prior to Source Request

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

#### CTD Material Verification Material Verification

Project Engineer to collect certifications (TC 1.03 w/o test data) and submit to OMT for clearance.

1 per 1 Delivery to Project

## Contract Specified Material Systems

### Plant or Product Qualification

#### Review of Misc Production Location Limited Producer Check

Production facility data maintained to track the material supply chain.

1 per 1 Prior to Source Request

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing

1 per 1 Prior to Usage on Project

### Project Construction

#### LPD Material Verification Material Verification

Project Engineer to collect manufacturers certification (TC 1.03 w/o test results) and fill out Form 14 indicating material was placed in accordance with documents. Submit certification and Form 14 to OMT for clearance.

1 per 1 Item Completion

## Curing Compounds (Liquid Membrane)

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials Facility Qualification

Production facility data maintained to provide a basis for qualified products.

1 per 1 Prior to Usage on Project

#### Evaluation of Material Product for CTD Materials Product Qualification

# Material Quality Assurance Processes

Qualification of Material Product for use on State Projects.

1 per 1

Prior to Source Request

## Source Approval

### Source Submission *Source of Supply Submittal*

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Project Construction

### CTD Material Verification *Material Verification*

Project Engineer to collect certifications (TC 1.03 w/ test data) and submit to OMT for clearance. 1 per 1 Delivery to Project

## Decorative Concrete Finish, Horizontal Surface

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials *Facility Qualification*

Material Specific Qualification of Material Producer 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission *Source of Supply Submittal*

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Project Construction

#### CTD Material Verification *Material Verification*

Project Engineer to inspect placed materials and submit Form 14 to MMD for clearance. 1 per 1 Item Completion

## Decorative Concrete Stains, Vertical Surface

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials *Facility Qualification*

Production facility data maintained to provide a basis for qualified products. 1 per 1 Prior to Source Request

#### Evaluation of Material Product for CTD Materials *Product Qualification*

Qualification of Material Product for use on State Projects. 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission *Source of Supply Submittal*

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Project Construction

#### CTD Material Verification *Material Verification*

Project Engineer to collect manufacturer's material certifications (TC 1.03 w/ test data) and submit to MMD for clearance. 1 per 1 Delivery to Project

## Decorative Reinforced Thermoplastic

### Plant or Product Qualification

# Material Quality Assurance Processes

<b>Evaluation of Material Producer for LPD Materials</b>	<i>Product Qualification</i>
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Product Qualification	1	per	5	Year
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## Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>
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Sources of Supply Processing	1	per	1	Prior to Source Approval
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## Project Construction

<b>LPD Material Verification</b>	<i>Material Verification</i>
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Material/Product Verification at Project Site. Project Engineer to verify material product, and submit Form 14 for material clearance, which validates the following: Verifying that the imprinting tools and materials are compatible; Monitoring the Contractor/subcontractor conformance with the Quality Control Plan; Verifying the Contractor/subcontractor qualifications to produce this type of markings and comply with these and the manufacturer's specifications; Verifying the actual results of all Quality Control tests for the actual materials in the batch submitted for the project.	1	per	1	Item Completion
	1	per	1	Prior to Usage on Project

## Electrical Accessories

### Plant or Product Qualification

<b>Review of Misc Production Location</b>	<i>Limited Producer Check</i>
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Production facility data maintained to track the material supply chain.	1	per	1	Prior to Source Request
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### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>
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Source of Supply Processing	1	per	1	Prior to Usage on Project
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### Material Production

<b>Approval of Material Prior to Shipment</b>	<i>Material Certification for Project Usage</i>
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Producer to submit Catalog Cuts to the Office of Traffic and Safety.	1	per	1	Prior to Usage on Project
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### Project Construction

<b>OOTS Material Verification</b>	<i>Material Verification</i>
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Project Engineer to verify material product, submit Form 14.	1	per	1	Delivery to Project
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## Emulsified Asphalts, Other

### Plant or Product Qualification

<b>Evaluation of Production Facility for ATD Materials</b>	<i>Facility Qualification</i>
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Production facility to be certified to produce material for State projects.	1	per	12	Months
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<b>Evaluation of Material Product for ATD Materials</b>	<i>Product Qualification</i>
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# Material Quality Assurance Processes

Qualification of Material Product for use on State Projects.

1 per 1

Prior to Usage on Project

## Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

## Project Construction

<b>ATD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to collect certifications (TC 1.03 w/ test data), FORM 88, and material samples. Submit items to OMT for testing and clearance.	1	per	1
			Item Completion
1 Gallon in a Widemouth Plastic Jar			

## Emulsified Asphalts, Tack Coat

### Plant or Product Qualification

<b>Evaluation of Production Facility for ATD Materials</b>	<i>Facility Qualification</i>		
Production facility to be certified to produce material for State projects.	1	per	12
			Months

<b>Evaluation of Material Product for ATD Materials</b>	<i>Product Qualification</i>		
Qualification of Material Product for use on State Projects	1	per	1
			Prior to Source Request

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

### Project Construction

<b>ATD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to collect certifications (TC 1.03 w/ test data), FORM 88, and material samples. Submit items to OMT for testing and clearance.	1	per	1
			Item Completion
1 Gallon in a Widemouth Plastic Jar			

## Fertilizers

### Plant or Product Qualification

<b>Evaluation of Material Producer for LPD Materials</b>	<i>Facility Qualification</i>		
Qualification of Fertilizer producer for use on State projects	1	per	1
			Prior to Source Request

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

### Project Construction

<b>LPD Material Verification</b>	<i>Material Verification</i>		
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# Material Quality Assurance Processes

Project Engineer to verify that fertilizer is from the correct source. Project Engineer to inspect fertilizer labels, visually inspect fertilizer, and verify fertilizer composition and proposed application rates. Project Engineer to verify fertilizer usage and submit Form 14 with fertilizer labels for material clearance.

1 per 1

Delivery to Project

## Foamed Asphalt Stabilized Base Course

### Plant or Product Qualification

#### Review of Misc Production Location *Limited Producer Check*

Production facility data maintained to track the material supply chain. 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission *Source of Supply Submittal*

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Form Release

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials *Facility Qualification*

Production facility data maintained to provide a basis for qualified products. 1 per 1 Prior to Source Request

#### Evaluation of Material Product for CTD Materials *Product Qualification*

Qualification of Material Product for use on State Projects. 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission *Source of Supply Submittal*

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Project Construction

#### CTD Material Verification *Material Verification*

Project Engineer to inspect placed material and submit Form 14. 1 per 1 Delivery to Project

## Geosynthetic Materials, Geotextiles

### Plant or Product Qualification

#### Evaluation of Production Facility for SATD Materials *Facility Qualification*

Cursory Plant data record review, required for qualified products. 1 per 1 Prior to Source Request

#### Evaluation of Material Product for SATD Materials *Product Qualification*

Qualification of Material Product. 1 per 1 Prior to Source Request  
1 per 24 Months

#### Material Product QA for SATD Materials *Product QC/QA*

Quality Assurance of Delivered Products 1 per 3 Months

# Material Quality Assurance Processes

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

## Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to receive certified roll data (TC1.03 w/ test data) and submit to MMD for clearance.	1 per	1	Delivery to Project

## Geosynthetic Materials, Other

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1 per	1	Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

## Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify material.	1 per	1	Delivery to Project

## Latex Emulsion

### Plant or Product Qualification

Evaluation of Production Facility for CTD Materials			Facility Qualification
Production facility data maintained to provide a basis for qualified products.	1 per	1	Prior to Usage on Project

Evaluation of Material Product for CTD Materials			Product Qualification
Qualification of Material Product for use on State Projects.	1 per	1	Prior to Usage on Project

## Liquid Pavement Marking

### Plant or Product Qualification

Pavement Marking Facility Review			Facility Qualification
Inspection of Production Facility	1 per	36	Months

Pavement Marking Product Review			Product Qualification
Qualification of Material Product	1 per	1	Prior to Source Request

Pavement Marking Product Acceptance			Product QC/QA
Material sample to be taken by SHA and Producer to provide material certification conforming to TC 1.03 w/ test data to SHA for review, testing, and stamping. The stamped certification will be returned to the producer.	1 per	1	Batch, Lot or Heat

## Source Approval



# Material Quality Assurance Processes

Source Submission	Source of Supply Submittal			
Source of Supply Processing	1	per	1	Prior to Usage on Project

## Project Construction

Pavement Marking Material Verification at Project Site	Material Verification		
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Project Engineer to collect manufacture’s certifications (TC 1.03 w/ test data) and OMT stamped documentation approving the material batch, submit to MMD for clearance.	1	per	1	Delivery to Project
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Post Placement Project Wide Testing	Project Wide Testing		
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Field Testing at Project Site by the Pavement Marking Team as per MSMT 729.	1	per	1	Item Completion
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## Miscellaneous Chemical Materials

### Project Construction

CTD Material Verification	Material Verification		
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Project Engineer to collect certifications (TC 1.03 w/ test data) and submit certs and Form 14 to OMT for clearance.	1	per	1	Delivery to Project
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## Miscellaneous Landscape Materials

### Plant or Product Qualification

Review of Misc Production Location	Limited Producer Check		
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Production facility data maintained to track the material supply chain.	1	per	1	Prior to Source Request
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### Source Approval

Source Submission	Source of Supply Submittal		
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Source of Supply Processing	1	per	1	Prior to Usage on Project
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### Project Construction

Visual Inspection of Placed Material	Material Sampling and Testing		
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Project Engineer to inspect material. Project Engineer to submit Form 14 for material clearance.	1	per	1	Delivery to Project
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## Miscellaneous Materials

### Source Approval

Source Submission	Source of Supply Submittal		
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Source of Supply Processing.	1	per	1	Prior to Usage on Project
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### Project Construction

LPD Material Verification	Material Verification		
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Project Engineer to inspect placed material and submit Form 14.	1	per	1	Delivery to Project
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Project Engineer to collect certifications (TC 1.03 w/ test data) and submit certs to OMT for clearance.	1	per	1	Delivery to Project
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# Material Quality Assurance Processes

## Miscellaneous Materials with Certifications

### Source Approval

<b>Source Submission</b>				<i>Source of Supply Submittal</i>
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

<b>LPD Material Verification</b>				<i>Material Verification</i>
Project Engineer to collect material certifications (TC 1.03 w/o test data) and submit to OMT for clearance.	1	per	1	Delivery to Project

## Mulch

### Plant or Product Qualification

<b>Review of Misc Production Location</b>				<i>Limited Producer Check</i>
Production facility data maintained to track the material supply chain.	1	per	1	Prior to Source Request

### Source Approval

<b>Source Submission</b>				<i>Source of Supply Submittal</i>
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

<b>Visual Inspection of Placed Material</b>				<i>Material Sampling and Testing</i>
Project Engineer to inspect placed material to verify that it from the approved source and fit for use. Project Engineer to verify that mulch is placed uniformly and correctly during and after placement. Project Engineer to submit Form 14 for material clearance.	1	per	1	Delivery to Project

## Pavement Markers

### Plant or Product Qualification

<b>Pavement Marking Facility Review</b>				<i>Facility Qualification</i>
Inspection of Production Facility	1	per	24	Months

<b>Pavement Marking Product Review</b>				<i>Product Qualification</i>
Qualification of Material Product	1	per	1	Prior to Source Request

### Source Approval

<b>Source Submission</b>				<i>Source of Supply Submittal</i>
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

<b>Pavement Marking Material Verification at Project Site</b>				<i>Material Verification</i>
Project Engineer to collect manufacturer's Certification (TC 1.03 w/o test data), and submit certifications to MMD for clearance.	1	per	1	Delivery to Project

<b>Post Placement Project Wide Testing</b>				<i>Project Wide Testing</i>
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# Material Quality Assurance Processes

Field Testing at Project Site by the Pavement Marking Team as per MSMT 729.

1 per 1

Item Completion

## Pavement Marking Mat'l: Other

### Plant or Product Qualification

<b>Pavement Marking Facility Review</b>				<i>Facility Qualification</i>
Inspection of Production Facility	1	per	12	Months
<b>Pavement Marking Product Review</b>				<i>Product Qualification</i>
Evaluate new material products through the MPEL process	1	per	1	Prior to Usage on Project
<b>Pavement Marking Product Acceptance</b>				<i>Product QC/QA</i>
Producer to submit material certification conforming to TC 1.03 w/ test data to OMT's Pavement Marking team for review, stamping, and return.	1	per	1	Batch, Lot or Heat

### Source Approval

<b>Source Submission</b>				<i>Source of Supply Submittal</i>
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

<b>Pavement Marking Material Verification at Project Site</b>				<i>Material Verification</i>
Project Engineer to collect OMT stamped manufacturer's certification (TC 1.03 w/ test data) and submit them to MMD for clearance.	1	per	1	Delivery to Project

## Pavement Marking Preformed Thermoplastic

### Plant or Product Qualification

<b>Pavement Marking Facility Review</b>				<i>Facility Qualification</i>
Inspection of Production Facility	1	per	24	Months
<b>Pavement Marking Product Review</b>				<i>Product Qualification</i>
Qualification of Material Product	1	per	1	Prior to Source Request

### Source Approval

<b>Source Submission</b>				<i>Source of Supply Submittal</i>
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

<b>Pavement Marking Material Verification at Project Site</b>				<i>Material Verification</i>
Project Engineer to collect manufacturer's Certification (TC 1.03 w/o test data), and submit certifications to MMD for clearance.	1	per	1	Delivery to Project
<b>Post Placement Project Wide Testing</b>				<i>Project Wide Testing</i>
Field Testing at Project Site by the Pavement Marking Team as per MSMT 729.	1	per	1	Item Completion

## Pavement Marking Tape

# Material Quality Assurance Processes

## Plant or Product Qualification

### Pavement Marking Facility Review Facility Qualification

Inspection of Production Facility 1 per 24 Months

### Pavement Marking Product Review Product Qualification

Qualification of Material Product 1 per 1 Prior to Source Request

## Source Approval

### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Project Construction

### Pavement Marking Material Verification at Project Site Material Verification

Project Engineer to collect manufacturer's Certification (TC 1.03 w/o test data), and submit certifications to MMD for clearance. 1 per 1 Delivery to Project

### Post Placement Project Wide Testing Project Wide Testing

Field Testing at Project Site by the Pavement Marking Team as per MSMT 729. 1 per 1 Item Completion

## Pavement Repair Materials

## Plant or Product Qualification

### Review of Producer (QPL) Facility Qualification

Production facility data maintained to provide basis for qualified products. 1 per 1 Prior to Source Request

### Review of Product (QPL) Product Qualification

Qualification of Material Product for use on State Projects. 1 per 1 Prior to Source Request

## Source Approval

### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Project Construction

### ATD Material Verification Material Verification

Project Engineer to collect certifications (TC 1.03 w/o test data) and submit certs to OMT for clearance. 1 per 1 Delivery to Project

## Performance Graded Asphalt Binder

## Plant or Product Qualification

### Evaluation of Production Facility for ATD Materials Facility Qualification

Qualification of Binder Supplier for use on State projects 1 per 1 Prior to Usage on Project

### Evaluation of Material Product for ATD Materials Product Qualification

Qualification of Material Product. 1 per 1 Batch, Lot or Heat

## Plant Materials

# Material Quality Assurance Processes

## Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

## Material Production

LPD Material Review			Material Certification for Project Usage
LPD to inspect plant materials before installation. LPD to inspect plant materials after installation. LPD to submit Form 14 for materials clearance.	1	per 1	Prior to Usage on Project

## Portland Cement Concrete Mixtures

### Plant or Product Qualification

Evaluation of Production Facility for CTD Materials			Facility Qualification
Production facility to be certified to produce material for State projects.	1	per 1	Prior to Source Request
	1	per 12	Months

SHA Acceptance Facility Visit for CTD Material Production			Facility Qualification
OMT Personnel to perform Quality Assurance on concrete production processes.	1	per 10	Production Day
75 Lbs in a Soils Bag			

Evaluation of Material Product for CTD Materials			Product Qualification
Review and Qualification of Portland Cement Concrete Mixture Material Product.	1	per 1	Prior to Source Request

Material Product QC			Product Qualification
Producer to perform daily gradations and moisture tests on aggregate materials.	2	per 1	Production Day
10 LBS - Fine Agg, 35 LBS Lt. wt., 50 LBS Coarse. in a Soils Bag			

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production

Notification of Production for CTD materials			Production Notification
Producer to notify OMT one working day prior to production at concrete@sha.state.md.us	1	per 1	Production Day

### Project Construction

CTD Material Verification			Material Verification
Project Engineer to conduct field tests. (Air Entrainment, Slump, etc.).	1	per 1	Delivery to Project
Project Engineer to collect certifications (TC 1.03 w/ test data) and submit to OMT for clearance.	1	per 1	Delivery to Project

# Material Quality Assurance Processes

## Concrete Sampling and Testing Material Sampling and Testing

Project Engineer to mold acceptance cylinders, Prime Contractor to cure and transport cylinders to OMT for testing.	1	per	50	Cubic Yard
2 Cylinders = 1 Sample	1	per	1	Production Day
Mix 7 -Project Engineer to mold acceptance cylinders, Prime Contractor to cure and transport cylinders to OMT for testing.	3	per	1	Placement Day
2 Cylinders = 1 Sample				

## Pay Factor Calculation Sample Analysis

OMT to perform statistical analysis on all acceptance concrete cylinder tests for project.	1	per	1	Item Completion
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## Portland Cement Concrete Mixtures, Latex Modified

### Plant or Product Qualification

#### Review of Misc Production Location Limited Producer Check

Production facility data maintained to track the material supply chain.	1	per	1	Prior to Source Request
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#### Evaluation of Production Facility for CTD Materials Facility Qualification

Detailed Qualification of Production Facility.	1	per	1	Prior to Usage on Project
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### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing	1	per	1	Prior to Usage on Project
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### Project Construction

#### CTD Material Verification Material Verification

Project Engineer to perform concrete plastic tests.	1	per	1	Delivery to Project
Typically one slump and one air entrainment.				

#### Chemical Tests Material Sampling and Testing

Submit a sample or certification (TC 1.03 w/ test data) of each component to OMT for verification.	1	per	1	Lot / Production Day
2 Quarts - Latex, 1 Quart Each Admixture in a Plastic Jug				

#### Concrete Sampling and Testing Material Sampling and Testing

Submit sample to OMT for testing.	2	per	1	Truck
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#### Pay Factor Calculation Sample Analysis

OMT to perform statistical analysis on all acceptance concrete cylinder tests for project.	1	per	1	Item Completion
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## Precast Concrete, Drainage Structures

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials Facility Qualification

Facility to be qualified (and re-qualified annually) for state projects before it is sourced to a project.	1	per	12	Months
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#### Quality Control for Aggregate Material Gradation Facility QA/QC

# Material Quality Assurance Processes

Producer to perform gradation quality control as per AASHTO T27. 1 per 7 Production Day

17 lbs for coarse; 500 grams for fine

## SHA Acceptance Review for Aggregate Material Gradation. Facility QA/QC

Concrete Technology representative to witness gradation quality control process of producer. 1 per 30 Production Day

## Quality Control for Aggregate Moisture Content Facility QA/QC

Producer to perform moisture quality control as per MSMT 251. 1 per 1 Production Day

17 lbs for coarse; 500 grams for fine

## SHA Acceptance Review of Aggregate Moisture Content Facility QA/QC

Concrete Technology representative to witness moisture quality control 1 per 30 Production Day

## SHA Acceptance Review for Steel Reinforcing Facility QA/QC

Deformed Steel bars to be sampled by producer. A Concrete Technology representative will witness the sampling, fill out Form 88, and deliver sample to the OMT laboratory. 1 per 90 Production Day

3 - 2 foot lengths

## SHA Acceptance Review for Admixture Materials Facility QA/QC

Producer to sample all admixture materials and provide to Concrete Technology for evaluation. 1 per 30 Production Day

1 Quart in a Screw Top Can

## SHA Acceptance Review for Cementitious Materials. Facility QA/QC

Producer to sample all cementitious materials and provide to Concrete Technology for evaluation, as per 902.03. 1 per 3 Months

10 lbs in a Plastic Jug

## Source Approval

### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Material Production

### Notification of Production for CTD materials Production Notification

Producer to notify the Concrete Technology Division prior to production at concrete@sha.state.md.us. Please provide the design standard with the notification. 1 per 1 Prior to Usage on Project

### CTD Material Review and Acceptance Material Certification for Project Usage

Submit copies of any shop drawings, specifications, or plan sheets to the designer as per the Invitation for Bids document. 1 per 1 Prior to Usage on Project

## Project Construction

### CTD Material Verification Material Verification

# Material Quality Assurance Processes

Project Engineer to visually inspect precast elements, record all QC stamps on a Form 14, and verify stamp matches the certification. Collect manufacture's certification and submit it along with the Form 14 to MMD for clearance.

1 per 1

Delivery to Project

## Precast Concrete, Miscellaneous

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials Facility Qualification

Facility to be qualified (and re-qualified annually) for state projects before it is sourced to a project. 1 per 3 Year

#### Quality Control for Aggregate Material Gradation Facility QA/QC

Producer to perform gradation quality control as per AASHTO T27 1 per 7 Production Day  
17 lbs for coarse; 500 grams for fine

#### SHA Acceptance Review for Aggregate Material Gradation. Facility QA/QC

Concrete Technology representative to witness gradation quality control process of producer. 1 per 2 Year

#### Quality Control for Aggregate Moisture Content Facility QA/QC

Producer to perform moisture quality control as per MSMT 251. 1 per 1 Production Day  
17 lbs for coarse; 500 grams for fine

#### SHA Acceptance Review of Aggregate Moisture Content Facility QA/QC

Concrete Technology representative to witness moisture quality control 1 per 2 Year

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Material Production

#### Notification of Production for CTD materials Production Notification

Producer to notify the Concrete Technology Division between 48 hours prior to shipment and end of shipping day at concrete@sha.state.md.us. 1 per 1 Prior to Usage on Project

### Project Construction

#### CTD Material Verification Material Verification

Project Engineer to visually inspect precast elements, record all QC stamps on a Form 14, and verify stamp matches the certification. Collect manufacture's Certification and submit it along with the Form 14 to MMD for clearance. 1 per 1 Delivery to Project

## Precast Concrete, Pipe

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials Facility Qualification



# Material Quality Assurance Processes

Facility to be qualified (and re-qualified annually) for state projects before it is sourced to a project. 1 per 1 Prior to Source Request  
1 per 12 Months

## SHA Acceptance Facility Visit for CTD Material Production Facility Qualification

Quality Assurance of Pipe Production 1 per 1000 Each  
1 per 30 Production Day

## Quality Control for Aggregate Material Gradation Facility QA/QC

Producer to perform gradation quality control as per AASHTO T27 1 per 7 Production Day  
17 lbs for coarse; 500 grams for fine

## SHA Acceptance Review for Aggregate Material Gradation. Facility QA/QC

Concrete Technology representative to witness gradation quality control process of producer. 1 per 30 Production Day

## Quality Control for Aggregate Moisture Content Facility QA/QC

Producer to perform moisture quality control as per MSMT 251. 1 per 1 Production Day  
17 lbs for coarse; 500 grams for fine

## SHA Acceptance Review of Aggregate Moisture Content Facility QA/QC

Concrete Technology representative to witness moisture quality control 1 per 30 Production Day

## SHA Acceptance Review for Admixture Materials Facility QA/QC

Producer to sample all admixture materials and provide to Concrete Technology for evaluation. 1 per 30 Production Day  
1 Quart in a Screw Top Can

## SHA Acceptance Review for Cementitious Materials. Facility QA/QC

Producer to sample all cementitious materials and provide to Concrete Technology for evaluation, as per 902.03. 1 per 1 Months  
1 per 10 Production Day  
10 lbs in a Plastic Jug

## Source Approval

### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

## Material Production

### Notification of Production for CTD materials Production Notification

Producer to notify the Concrete Technology Division between 48 hours prior to shipment and end of shipping day at concrete@sha.state.md.us. 1 per 1 Prior to Usage on Project

### CTD Material Review and Acceptance Material Certification for Project Usage

Plant QC Personnel to perform lot inspection 1 per 1 Prior to Usage on Project

## Project Construction

### CTD Material Verification Material Verification

# Material Quality Assurance Processes

Project Engineer to visually inspect pipe, record all QC Stamps from pipe on a Form 14, and verify a pipe stamp matches the certification. Collect manufacture's Certification and submit it along with the Form 14 to MMD for Clearance.

1 per 1

Delivery to Project

## Precast Concrete, Prestressed and Structural

### Plant or Product Qualification

#### Evaluation of Production Facility for CTD Materials Facility Qualification

Facility to be qualified (and re-qualified annually) for state projects before it is sourced to a project. 1 per 12 Months

#### Quality Control for Aggregate Material Gradation Facility QA/QC

Producer to perform gradation quality control as per AASHTO T27. 1 per 7 Production Day  
17 lbs for coarse; 500 grams for fine

#### SHA Acceptance Review for Aggregate Material Gradation. Facility QA/QC

Concrete Technology representative to witness gradation quality control process of producer. 1 per 30 Production Day

#### Quality Control for Aggregate Moisture Content Facility QA/QC

Producer to perform moisture quality control as per MSMT 251. 1 per 1 Production Day  
17 lbs for coarse; 500 grams for fine

#### SHA Acceptance Review of Aggregate Moisture Content Facility QA/QC

Concrete Technology representative to witness moisture quality control 1 per 30 Production Day

#### SHA Acceptance Review for Steel Reinforcing Facility QA/QC

Deformed Steel bars to be sampled by producer. A Concrete Technology representative will witness the sampling, fill out Form 88 and deliver sample to the OMT laboratory. 1 per 90 Production Day  
3 - 2 foot lengths

#### SHA Acceptance Review for Admixture Materials Facility QA/QC

Producer to sample all admixture materials and provide to Concrete Technology for evaluation. 1 per 30 Production Day  
1 Quart in a Screw Top Can

#### SHA Acceptance Review for Cementitious Materials. Facility QA/QC

Producer to sample all cementitious materials and provide to Concrete Technology for evaluation. 1 per 1 Months  
1 per 10 Production Day

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Material Production

#### Notification of Production for CTD materials Production Notification

# Material Quality Assurance Processes

Producer to submit Shop Drawings and provide Production Notice to the Concrete Technology Division (concrete@sha.state.md.us) 30 business days before commencing production of any prestressed or other structural concrete items. 1 per 1 Prior to Usage on Project

## CTD Material Review and Acceptance Material Certification for Project Usage

Direct Inspection at Facility during Casting, Approval of Material for Project Use. 1 per 1 Prior to Usage on Project

### Project Construction

## CTD Material Verification Material Verification

Project Engineer to visually inspect precast elements, record all stamps on a Form 14, and verify stamps match the certification. Collect manufacture's certification and submit it along with the Form 14 to MMD for clearance. 1 per 1 Delivery to Project

## Precast Concrete, Walls

### Plant or Product Qualification

## Evaluation of Production Facility for CTD Materials Facility Qualification

Facility to be qualified (and re-qualified annually) for state projects before it is sourced to a project. 1 per 1 Prior to Usage on Project  
1 per 12 Months

## Quality Control for Aggregate Material Gradation Facility QA/QC

Producer to perform gradation quality control as per AASHTO T27 17 lbs for coarse; 500 grams for fine 1 per 7 Production Day

## SHA Acceptance Review for Aggregate Material Gradation. Facility QA/QC

Concrete Technology representative to witness gradation quality control process of producer. 1 per 30 Production Day

## Quality Control for Aggregate Moisture Content Facility QA/QC

Producer to perform moisture quality control as per MSMT 251. 17 lbs for coarse; 500 grams for fine 1 per 1 Production Day

## SHA Acceptance Review of Aggregate Moisture Content Facility QA/QC

Concrete Technology representative to witness moisture quality control 1 per 30 Production Day

## SHA Acceptance Review for Admixture Materials Facility QA/QC

Producer to sample all admixture materials and provide to Concrete Technology for evaluation. 1 per 30 Production Day  
1 Quart in a Screw Top Can

## SHA Acceptance Review for Cementitious Materials. Facility QA/QC

Producer to sample all cementitious materials and provide to Concrete Technology for evaluation. 1 per 1 Months  
1 per 10 Production Day  
10 lbs in a Plastic Jug

### Source Approval

## Source Submission Source of Supply Submittal

# Material Quality Assurance Processes

Source of Supply Processing

1 per 1

Prior to Usage on Project

## Material Production

<b>Notification of Production for CTD materials</b>	<i>Production Notification</i>		
Producer to submit Shop Drawings and provide Production Notice to the Concrete Technology Division (concrete@sha.state.md.us) 30 business days before commencing production of any precast MSE or Noise Barrier components.	1	per	1
			Prior to Usage on Project
<b>CTD Material Review and Acceptance</b>	<i>Material Certification for Project Usage</i>		
Direct Inspection at Facility during Casting, Approval of Material for Project Use.	1	per	1
			Prior to Usage on Project
<b>Test Panel Verification</b>	<i>Material Certification for Project Usage</i>		
Test panel to be evaluated by OMT, LOD and OOS.	1	per	1
			Prior to Usage on Project

## Project Construction

<b>CTD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to visually inspect precast elements, record all stamps on a Form 14, and verify stamps match the certification. Collect manufacture's certification and submit it along with the Form 14 to MMD for clearance.	1	per	1
			Delivery to Project

## Recycled Materials for HMA Mixtures

### Plant or Product Qualification

<b>Evaluation of Production Facility for ATD Materials</b>	<i>Facility Qualification</i>		
Joint Qualification with Asphalt Mix production facility.	1	per	1
			Prior to Source Request
<b>Evaluation of Material Product for ATD Materials</b>	<i>Product Qualification</i>		
Qualification of Material Product.	1	per	1
			Prior to Source Request

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

### Project Construction

<b>ATD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to visually inspect placed material and submit Form 14 to OMT for clearance.	1	per	1
			Item Completion

## Reflective Sheeting

### Plant or Product Qualification

<b>Review Producer (OOTS)</b>	<i>Facility Qualification</i>		
Qualification of Production Facility	1	per	1
			Prior to Source Request
<b>SM Production QA</b>	<i>Facility Qualification</i>		
Production Quality Assurance.	1	per	1
	1	per	12
			Prior to Usage on Project Months
<b>Review Product (OOTS)</b>	<i>Product Qualification</i>		

# Material Quality Assurance Processes

Qualification of Material Product

1 per 1

Prior to Source Request

## Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

## Project Construction

<b>OOTS Material Verification</b>	<i>Material Verification</i>		
See source response for "Aluminum Signs" for this item for acceptance	1	per	1
			Delivery to Project

## Sealers: Qualified Liquid Materials

### Plant or Product Qualification

<b>Review of Producer (QPL)</b>	<i>Facility Qualification</i>		
Production facility data maintained to provide a basis for qualified products.	1	per	1
			Prior to Source Request

<b>Review of Product (QPL)</b>	<i>Product Qualification</i>		
Qualification of Material Product for use on State Projects.	1	per	1
			Prior to Source Request

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

### Project Construction

<b>LPD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to collect certifications (TC1.03 w/ test data) and submit certifications to OMT for clearance.	1	per	1
			Delivery to Project

## Seed for Mixes

### Plant or Product Qualification

<b>Review of Misc Production Location</b>	<i>Limited Producer Check</i>		
Production facility data maintained to track the material supply chain.	1	per	1
			Prior to Source Request

### Source Approval

<b>Source Submission</b>	<i>Source of Supply Submittal</i>		
Source of Supply Processing	1	per	1
			Prior to Usage on Project

### Project Construction

<b>LPD Material Verification</b>	<i>Material Verification</i>		
Project Engineer to inspect labels, seed material, seed mixtures, and seed application methods. Project Engineer to submit copies of labels with Form 14 for material clearance.	1	per	1
			Item Completion

## SM Group 1 - General Approval

# Material Quality Assurance Processes

## Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

## Project Construction

Material Verification at Project Site, Structural Materials			Material Verification
Project Engineer to submit Form 14 to the Materials Management Division confirming the material and its placement are acceptable and conform to specifications.	1	per 1	Delivery to Project

## SM Group 2 - General Approval with Certification

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Project Construction

Material Verification at Project Site, Structural Materials			Material Verification
Project Engineer to collect manufacturer's certification (TC 1.03 w/o test data) indicating the specification to which the material conforms. Submit certification with Form 14 Stamp to the Materials Management Division for clearance.	1	per 1	Delivery to Project
Project Engineer to collect manufacturer's certification (TC 1.03 with test data) indicating the specification to which the material conforms. Submit certification with Form 14 Stamp to the Materials Management Division for clearance.	1	per 1	Delivery to Project

## SM Group 3 - Evaluation Before Shipment

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

# Material Quality Assurance Processes

## Material Production

OMT approval of material for shipment, Structural Materials			Material Certification for Project Usage
Submit Material Certification (TC 1.03 w/ Batch Specific Test Data) to metals@mdot.maryland.gov for review prior to delivery. If acceptable the document will be stamped by OMT and returned to the supplier to accompany the material to the project site.	1	per 1	Prior to Usage on Project
The Structural Materials team or an Authorized Representative will inspect the material, all relevant certifications, and may take material samples at the production facility. Please contact metals@mdot.maryland.gov to schedule an inspection.	1	per 1	Prior to Usage on Project
Submit Material Certification (TC 1.03 w/o test data) for timber preservatives to metals@mdot.maryland.gov. If acceptable the document will be stamped by OMT and returned to the source of supply to accompany the material to the project site.	1	per 1	Prior to Usage on Project
Submit Sample, Form 88 and Material Certification (TC 1.03 w/o test data) for clay brick materials to OMT for evaluation. Form 88 will be returned to PE. Alternate sampling may be requested by contacting metals@mdot.maryland.gov 3 weeks prior to delivery. 10 Bricks	1	per 50000	Each
Submit Sample, Form 88 and Material Certification (TC 1.03 w/o test data) for concrete block to OMT for evaluation. Form 88 will be returned to PE. Alternate sampling may be requested by contacting metals@mdot.maryland.gov 3 weeks prior to delivery. 6 Blocks	1	per 6000	Each

## Project Construction

Material Verification at Project Site, Structural Materials			Material Verification
Project Engineer to collect OMT stamped documentation indicating review and approval of material. Submit document to the Materials Management Division for materials clearance.	1	per 1	Delivery to Project

## SM Group 4 - Detectable Warning Surfaces

### Plant or Product Qualification

Review of Producer (SM)			Facility Qualification
Production facility data maintained to track the material supply chain and provide a basis for qualified products.	1	per 1	Prior to Source Request
Review of Product (SM):			Product Qualification
Qualification of Material Product for use on State Projects.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

# Material Quality Assurance Processes

## Project Construction

Material Verification at Project Site, Structural Materials			Material Verification
Project Engineer to collect certifications (TC 1.03 w/o test data) and submit certs to OMT for clearance.	1	per 1	Delivery to Project

## SM Group 5 - Producer and Batch Data Tracked

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

Review of Product (SM):			Product Qualification
Maintain data on each heat or batch of product used on State projects.	1	per 1	Batch, Lot or Heat

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production

OMT approval of material for shipment, Structural Materials			Material Certification for Project Usage
Batch/Heat of Material must be approved by OMT. The producer to submit Material Certification (TC 1.03 w/ test data) and Sample to Structural Materials for evaluation. Contact metals@mdot.maryland.gov for further information.	1	per 1	Batch, Lot or Heat

## Project Construction

Material Verification at Project Site, Structural Materials			Material Verification
Project Engineer to collect OMT stamped Material Certification (TC 1.03 w/ test data) and submit to the Materials Management Division for materials clearance.	1	per 1	Delivery to Project

## SM Group 6 - Qualified Facilities, Limited Review

### Plant or Product Qualification

Review of Producer (SM)			Facility Qualification
Facility to be qualified for state projects (and re-qualified annually) and issued an OMT certification stamp before it is sourced to a project.	1	per 1	Prior to Source Request
	1	per 12	Months

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production

Quality Assurance of Structural Material production facilities.			Material Certification for Project Usage
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# Material Quality Assurance Processes

Facility re-qualification required, Structural Materials or an Authorized Representative to conduct facility evaluation and reissue facility certification. Please contact [metals@mdot.maryland.gov](mailto:metals@mdot.maryland.gov) to schedule an evaluation. 1 per 12 Months

## Project Construction

Material Verification at Project Site, Structural Materials		Material Verification	
Project Engineer to collect the stamped supplier's Certification of Compliance listing the materials shipped and submit to the Materials Management Division for materials clearance.	1 per 1	1	Delivery to Project

## SM Group 7 - Qualified Facilities, Cert Review

### Plant or Product Qualification

Review of Producer (SM)		Facility Qualification	
Facility to be qualified for state projects before it is sourced.	1 per 12	12	Months

### Source Approval

Source Submission		Source of Supply Submittal	
Source of Supply Processing	1 per 1	1	Prior to Usage on Project

### Material Production

Quality Assurance of Structural Material production facilities.		Material Certification for Project Usage	
Facility re-qualification required. Structural Materials or an Authorized Representative to conduct facility evaluation prior to material approval. Contact <a href="mailto:metals@mdot.maryland.gov">metals@mdot.maryland.gov</a> to determine inspection schedule.	1 per 12	12	Months

OMT approval of material for shipment, Structural Materials		Material Certification for Project Usage	
Submit Material Certification (TC 1.03 w/batch test data). All Material Test Result (MTR's) for steel and iron products must include a statement that material was produced (Melted and Manufactured in the United States) and sent to <a href="mailto:metals@mdot.maryland.gov">metals@mdot.maryland.gov</a> for review and approval. If acceptable, the documents will be stamped and returned to the vendor to accompany the delivery.	1 per 1	1	Prior to Usage on Project
Submit Material Certification (TC 1.03 w/ test data) and a sample to Structural Materials, contact <a href="mailto:metals@mdot.maryland.gov">metals@mdot.maryland.gov</a> . If acceptable the document will be stamped by OMT and returned to the source of supply to accompany the delivery.	1 per 1	1	Prior to Usage on Project

## Project Construction

Material Verification at Project Site, Structural Materials		Material Verification	
Project Engineer to collect OMT stamped documentation indicating review and approval of material. Submit document to the Materials Management Division for materials clearance.	1 per 1	1	Delivery to Project

# Material Quality Assurance Processes

## SM Group 8 - Qualified Facilities, Production Insp

### Plant or Product Qualification

#### Review of Producer (SM) Facility Qualification

Facility to be qualified for state projects before it is sourced. 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Material Production

#### Quality Assurance of Structural Material production facilities. Material Certification for Project Usage

Facility re-qualification required. Structural Materials to conduct facility evaluation and reissue facility certification. 1 per 12 Months

#### OMT approval of material for shipment, Structural Materials Material Certification for Project Usage

The Metals team or an Authorized Representative will inspect the fabrication, all relevant certifications, and may take material samples at the production facility. Please contact [metals@mdot.maryland.gov](mailto:metals@mdot.maryland.gov) to determine inspection schedule. 1 per 1 Prior to Usage on Project

### Project Construction

#### Material Verification at Project Site, Structural Materials Material Verification

Project Engineer to collect OMT stamped documentation indicating review and approval of material. Submit document to the Materials Management Division for materials clearance. 1 per 1 Delivery to Project

## SM Group 9 - Qualified Facilities, Not Sourced

### Plant or Product Qualification

#### Review of Producer (SM) Facility Qualification

Facility to be qualified for state projects (and re-qualified annually). 1 per 12 Months

## Sod & Seed Mixes with MDA Labels

### Plant or Product Qualification

#### Review of Misc Production Location Limited Producer Check

Production facility data maintained to track the material supply chain. 1 per 1 Prior to Source Request

### Source Approval

#### Source Submission Source of Supply Submittal

Source of Supply Processing 1 per 1 Prior to Usage on Project

### Project Construction

#### LPD Material Verification Material Verification

# Material Quality Assurance Processes

Project Engineer to inspect and verify labels or tickets.  
Project Engineer to submit copy of label or ticket with Form 14 for material clearance.

1 per 1

Delivery to Project

## Soil Amendments

### Plant or Product Qualification

Review of Misc Production Location				Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per	1	Prior to Source Request

### Source Approval

Source Submission				Source of Supply Submittal
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Project Construction

LPD Material Verification				Material Verification
Project Engineer to inspect labels and verify composition of material product. Project Engineer to determine that material is fit for use and applied as specified. Project Engineer to submit copy of product label with Form 14 for material clearance.	1	per	1	Item Completion

## Soil Materials, Fill Soil

### Source Approval

Source Submission				Source of Supply Submittal
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Material Production

SATD Material Review				Material Certification for Project Usage
Material to be sampled as Common Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per	1	Prior to Usage on Project
Material to be sampled as Capping Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per	1	Prior to Usage on Project
Material to be sampled as Modified Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per	1	Prior to Usage on Project
Material to be sampled as Select Borrow at its place of origin. Project Engineer to contact SATD to schedule a sampling. 35 LBS in a Soils Bag	2	per	1	Prior to Usage on Project
Material to be sampled as Clay Core material at its place of origin. Project Engineer to contact SATD to schedule a sampling 35 LBS in a Soils Bag	2	per	1	Prior to Usage on Project

# Material Quality Assurance Processes

## Project Construction

Project Sampling and Lab Testing of SATD Material				Material Verification
Project Engineer to submit verification samples of Common Borrow. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard
Project Engineer to submit verification samples of material of Capping Borrow. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard
Project Engineer to submit verification samples of material of Modified Borrow. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard
Project Engineer to submit verification samples of material of Select Borrow. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard
Project Engineer to submit verification samples of Clay Core material. 35 LBS in a Soils Bag	1	per	15000	Cubic Yard

Project Site Testing				Material Sampling and Testing
Compaction and Moisture analysis of Common Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Compaction and Moisture analysis of Capping Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Compaction and Moisture analysis of Modified Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Compaction and Moisture analysis of Select Borrow to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	4	per	1	Lane Mile per Lift
	1	per	2000	Cubic Yard
Compaction and Moisture analysis of Select Borrow for Trench Backfill to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	1	per	150	Linear Feet per 3 Foot Lift
Compaction and Moisture analysis of Clay Core material to be performed by Project Engineer. Submit Compaction report to MMD for clearance.	1	per	2000	Cubic Yard

## Soil Materials, Furnished Landscaping Soils

### Plant or Product Qualification

Evaluation of Production Facility for SATD Materials				Facility Qualification
Material Producer to have their soil product tested by an independent laboratory and submit results to SATD.	1	per	6	Months

  

Evaluation of Material Product for SATD Materials				Product Qualification
Quality Evaluation of Furnished Topsoil Product.	1	per	1	Prior to Source Approval
20 LB in a Soils Bag	1	per	6	Months

# Material Quality Assurance Processes

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

## Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify material and submit the approved Form 27B to the Materials Management Division for clearance. Form 27B may be found on the Documents Tab on the material source submission.	1	per 1	Delivery to Project

## Soil Materials, Salvaged & Other Landscaping Soils

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production

SATD Material Review			Material Certification for Project Usage
Project Engineer to contact SATD at least 30 days prior to material usage or placement. SATD will sample material at source, ensure material testing, and provide a Soil Test Report (Form 27B) and the Nutrient Management Plan. 20 LB in a Soils Bag	1	per 1	Prior to Usage on Project
Project Engineer to contact SATD at least 30 days prior to material usage or placement. SATD will sample material at source, ensure material testing, and provide a Soil Test Report (Form 27B). 20 LB in a Soils Bag	1	per 1	Prior to Usage on Project

### Project Construction

Material Verification for SATD Materials			Material Verification
Project Engineer to verify material and submit the approved Form 27B to the Materials Management Division for clearance.	1	per 1	Item Completion

## Soil Stabilization Matting

### Plant or Product Qualification

Evaluation of Material Producer for LPD Materials			Facility Qualification
Production facility data maintained to track the material supply chain and provide a basis for qualified products.	1	per 1	Prior to Source Request
Evaluation of Material Producer for LPD Materials			Product Qualification
Qualification of Material Product for use on State Projects	1	per 1	Prior to Usage on Project

# Material Quality Assurance Processes

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

## Project Construction

LPD Material Verification			Material Verification
Project Engineer to visually inspect soil stabilization matting and fasteners during installation. Project Engineer to visually inspect placed material after installation.	1 per	1	Delivery to Project

## Surface Treatments

### Plant or Product Qualification

Evaluation of Production Facility for ATD Materials			Facility Qualification
Production facility data maintained to provide a basis for qualified products.	1 per	1	Prior to Source Request

Evaluation of Material Product for ATD Materials			Product Qualification
Review and Qualification of Material Mixture for use on State Projects.	1 per	1	Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1 per	1	Prior to Usage on Project

## Material Production

Notification of Production for ATD materials			Production Notification
Producer to notify the Asphalt Technology Division one week prior to material placement.	1 per	1	Placement Day

## Project Construction

ATD Material Verification			Material Verification
Project Engineer to collect material certifications (TC 1.03 w/o test results) and submit to materials management for clearance.	1 per	1	Delivery to Project

Sampling and Testing of ATD materials			Material Sampling and Testing
Project Engineer to sample emulsion and mixture. Sample to be delivered to OMT for verification. 1 Gallon of Mixture and 1 Gallon of Emulsion in a Widemouth Plastic Jar	1 per	1	Production Day

## Traffic and Related Materials, Miscellaneous

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
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# Material Quality Assurance Processes

Production facility data maintained to track the material supply chain. 1 per 1 Prior to Source Request

## Source Approval

Source Submission	Source of Supply Submittal			
Source of Supply Processing	1	per	1	Prior to Usage on Project

## Project Construction

OOTS Material Verification	Material Verification			
Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification.	1	per	1	Delivery to Project

## Traffic Barrier End Treatments

### Plant or Product Qualification

Review of Producer (QPL)	Facility Qualification			
Production facility data maintained to provide a basis for qualified products.	1	per	1	Prior to Source Request

Review of Product (QPL)	Product Qualification			
Qualification of Material Product for use on State Projects.	1	per	1	Prior to Source Request

### Source Approval

Source Submission	Source of Supply Submittal			
Source of Supply Processing	1	per	1	Prior to Usage on Project

### Material Production

Approval of Material Prior to Shipment	Material Certification for Project Usage			
Contractor to submit "Request to use NCHRP-350 Product" to the Engineer of Record. The Engineer of Record refers to a Project's design Engineer or plan sheet approver who is a Licensed Engineer in the field of design and MASH implementation.	1	per	1	Prior to Usage on Project

### Project Construction

OOTS Material Verification	Material Verification			
See source response for "Metal Traffic Barrier, Certified Installer" for this item for acceptance procedures.	1	per	1	Delivery to Project
Project Engineer to collect manufacturer's certification (TC 1.03 w/o test data) and submit certifications to the Materials Management Division for clearance.	1	per	1	Delivery to Project

## Traffic Control Materials, Qualified

### Plant or Product Qualification

Review Producer (OOTS)	Facility Qualification			
Production facility data maintained to track the material supply chain and provide a basis for qualified products.	1	per	1	Prior to Source Request

# Material Quality Assurance Processes

Review Product (OOTS)			Product Qualification
Qualification of Material Product for use on State Projects.	1	per 1	Prior to Source Request

## Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

## Project Construction

OOTS Material Verification			Material Verification
Project Engineer to collect certifications (TC 1.03 w/o test data) and submit certs to the Materials Management Division for clearance.	1	per 1	Delivery to Project

## Traffic Control Materials, Qualified & Temporary

### Plant or Product Qualification

Review Producer (OOTS)			Facility Qualification
Production facility data maintained to track the material supply chain and provide a basis for qualified products.	1	per 1	Prior to Source Request

Review Product (OOTS)			Product Qualification
Qualification of Material Product for use on State Projects.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Project Construction

OOTS Material Verification			Material Verification
Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification. Indicate the product manufacturer and model number (when available).	1	per 1	Delivery to Project

## Traffic Control Materials, Specialty Items

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

Review Product (OOTS)			Product Qualification
Product data maintained for historical purposes.	1	per 1	Prior to Usage on Project

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production



# Material Quality Assurance Processes

Approval of Material Prior to Shipment			Material Certification for Project Usage
Producer to submit Shop Drawings or Catalog Cuts to the Office of Traffic and Safety for evaluation.	1	per 1	Prior to Usage on Project

## Project Construction

OOTS Material Verification			Material Verification
Project Engineer to submit Form 14 to the Materials Management Division confirming receipt of approved documentation from OOTS and conformance to specifications.	1	per 1	Delivery to Project

## Traffic, Misc. Services and Products

### Plant or Product Qualification

Review Producer (OOTS)			Facility Qualification
Facility data maintained to provide a basis for product data or historical reference.	1	per 1	Each

Review Product (OOTS)			Product Qualification
Product data maintained for historical purposes.	1	per 1	Each

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Project Construction

OOTS Material Verification			Material Verification
Project Engineer to submit Form 14 to the Materials Management Division confirming the product is undamaged, acceptably placed, and conforms to specification. Indicate the product manufacturer and model number (when available).	1	per 1	Delivery to Project

## Water, Pesticides, and Adjuvants

### Plant or Product Qualification

Review of Misc Production Location			Limited Producer Check
Production facility data maintained to track the material supply chain.	1	per 1	Prior to Source Request

### Source Approval

Source Submission			Source of Supply Submittal
Source of Supply Processing	1	per 1	Prior to Usage on Project

### Material Production

LPD Material Review			Material Certification for Project Usage
Project Engineer to contact LPD to ensure that pesticides and pesticide application methods meet specifications. An Integrated Pest Management Plan (IPM Plan) or Integrated Pest Management Form (IPMF) may be required for approval by LPD.	1	per 1	Prior to Usage on Project

# Material Quality Assurance Processes

## Project Construction

### Visual Inspection of Placed Material

*Material Sampling and Testing*

Project Engineer to inspect placed material. Project Engineer to submit Form 14 for material clearance.

1 per 1

Item Completion