



# **Final Project Materials Certification**

## Final Project Materials Certification

- The Materials Acceptance and **Certification** system, MAC, is designed around the requirements for Final Project Materials Certification.



# Florida Department of TRANSPORTATION



## Final Project Materials Certification



### *Florida Department of Transportation*

RON DESANTIS  
GOVERNOR

14200 West SR-84  
Davie, FLORIDA 33325

KEVIN J. THIBAUT, P.E.  
SECRETARY

July 17, 2020

Mr. Mario Cabrera, P.E.  
District Six Construction Engineer  
1000 North West 111th Avenue  
Miami, FLORIDA 33172

Dear Mr. Cabrera:

Subject:	Contract No:	T6457
	Financial Project ID:	440184-1-52-01, 440185-1-52-01, 440188-1-52-01
	Federal Project ID:	D618043B
	County:	BROWARD
	Road No:	SR 5/US 1 SIGNALIZED INTERSECTION LIGHTING FROM SW 344 TO SW 244 ST

This is to certify that:

The results of the tests on required acceptance samples indicate the materials incorporated in the construction work and operations controlled by sampling and testing were in conformity with the approved plans and specifications.

There are no known exceptions to this certificate.

Very truly yours,

Michael Kim, P.E.  
District Materials and Research Engineer

Timothy J. Ruelke, P.E.  
Director, Office of Materials

Digitally Signed by MAC Material Certification Process  
Authorization: Michael Kim 7/14/2020 12:18:14 PM

Digitally Signed by MAC Material Certification Process  
Authorization: Timothy Ruelke 7/17/2020 12:26:44 PM



## Final Project Materials Certification

Topic No.: 675-000-000  
Materials Manual  
Quality Assurance

Effective: March 1, 2000  
Revised: February 1, 2018

### Section 5.4

#### FINAL PROJECT MATERIAL CERTIFICATION

##### 5.4.1 PURPOSE

To describe the Material Certification process requirements.

##### 5.4.2 AUTHORITY

Sections 334.044(2), 334.044(10) (a) and 334.048 Florida Statutes

##### 5.4.3 SCOPE

Offices affected by this procedure include the State Materials Office (SMO), State Construction Office (SCO) District Construction Offices (DCOs) and District Materials and Research Offices (DMROs).

##### 5.4.4 REFERENCES

FEDERAL-AID POLICY GUIDE (FAPG), 23CFR, Subchapter G - Engineering and Traffic Operations, Part 637 - Construction Inspection and Approval, Subpart B - Quality Assurance Procedures for Construction

##### 5.4.5 GENERAL INFORMATION

Sampling, testing and reporting requirements are applicable for both Federal-

Topic No. 700-000-000  
Construction Project Administration Manual  
Project Documentation

Effective: July 1, 2002  
Revised: October 3, 2019

### Section 5.8 CONTROL OF MATERIALS

##### 5.8.1 Purpose

To establish a uniform standard for the control of materials on construction projects.

##### 5.8.2 Authority

Sections 20.23(3)(a) and 334.048(3), [Florida Statutes](#)

##### 5.8.3 References

[Standard Specifications for Road and Bridge Construction](#)

[Federal-Aid Policy Guide, 23 Code of Federal Regulations \(CFR\) 637](#)

[Procedure No. 675-000-000, Materials Manual](#)

##### 5.8.4 General

The **Contract Documents** contain **Specifications** and guidance relevant to the acceptance of all materials incorporated into a project. The Job Guide Schedule (JGS), included in the Materials Acceptance and Certification system (MAC), indicates who samples and tests each of these materials and at what frequency. The Final Project

## Final Project Materials Certification

# Agenda

- ☐ How to get the MC Review started
  - Standard JGS & Non-Standard JGS
- ☐ How MC Review handles project issues
  - Findings
- ☐ How PAs respond to the findings
  - Exclude, MC Resolve, or Promote to MAR

## Final Project Materials Certification

Let's get started:

Topic No. 700-000-000  
Construction Project Administration Manual  
Project Documentation

Effective: July 1, 2002  
Revised: October 3, 2019

### **5.8.6 Method of Acceptance**

There are three methods of material acceptance: 1) certification; 2) visual inspection; and 3) sampling and testing.

- This is accomplished with the Job Guide Schedule (JGS)



## Final Project Materials Certification

- JGS is just a report
- MoA is from the contract documents
- JGS is a guide of the contract requirements
- When there is a contradiction, contract rules

## Final Project Materials Certification

- MAC has two types of JGS
  - Standard JGS
  - Non-standard JGS



## Final Project Materials Certification

- Standard JGS
  - Let date logic
  - Project Specific requirements

## Final Project Materials Certification

- We are only concerned with project specific requirements that change the standard method of acceptance



## Final Project Materials Certification

### **MILLING OF EXISTING ASPHALT PAVEMENT.**

**(REV 8-31-99) (FA 2-14-00) (1-16)**

ARTICLE 327-1. The third paragraph is deleted and the following substituted:

For this Contract, the Department will retain ownership of   of the milled material. Haul and stockpile the material to remain the property of the Department at the location shown on the plans. The Contractor will take ownership of any milled material not to be retained by the Department.

ARTICLE 327-6. The text is deleted and the following substituted:

Price and payment will be full compensation for all work specified in this Section, including hauling and stockpiling the material at the location shown on the plans, and hauling off or otherwise disposing of any milled material not to be retained by the Department.

Payment will be made under:

Item No. 327- 70- Milling Existing Asphalt Pavement - per square yard.

## Final Project Materials Certification

### INTEGRAL PILE JACKETS.

(REV 11-16-11) (FA 12-8-11) (1-16)

The following new Section is added after Section 455:

#### SECTION 457 INTEGRAL PILE JACKETS

##### 457-1 Description.

Furnish, fabricate and install an integral pile jacket in accordance with the Contract Documents.

##### 457-2 Materials.

**457-2.1 Stay-In-Place Forms:** Use forms composed of a durable, inert, corrosion resistant material with an interlocking joint along one or two sides that permits the form to be assembled and sealed in place around the pile. Fabricate the forms from fiberglass and polyester resins, having a minimum thickness of 1/8 inches with a minimum thickness at the corners of 3/16 inches. Ensure the form is capable of maintaining its original shape without additional support or damage when placed around a pile. Ensure the inside face of the form has no bond inhibiting agents in contact with the filler material. Provide the forms with bonded or bolted-on, non-metallic standoffs to maintain the forms in the required positions. Sandblast or score the inside surface of the forms with an abrasive material to provide a rough surface texture. Equip



## Final Project Materials Certification

**457-2.3.1 Portland Cement Grout:** Use a mix design of portland cement, fine aggregate, water and an admixture containing a minimum of 940 pounds of cementitious material per cubic yard. Up to 30%, by weight of cement, may be replaced by fly ash for standard pile jackets. Do not use fly ash, slag, or silica fume for cathodic protection jackets.

Use silica sand fine aggregate meeting the requirements of Section 902.

Use portland cement meeting the requirements of Section 921.

Use admixtures meeting the requirements of Section 924, ASHTO M194, Types A and D.

Use air-entraining admixtures meeting the requirements of Section 924 and containing no chlorides or other salts corrosive to metals.

Use fly ash meeting the requirements of Section 929, ASTM C618, Type F, except that loss on ignition shall not exceed 4%.

Provide a grout filler mix with a minimum compressive strength of 5,000 psi at 28 days and a slump of 7 inches to 9 inches. Submit the design mix to the Engineer for approval by the Department before placing any grout filler.

**457-2.3.2 Class IV Concrete:** Use Class IV Concrete meeting the requirements of Section 346 with an adjusted slump of 7 inches to 9 inches. Reduced size coarse aggregate may be used as approved by the Engineer. Do not use fly ash, slag, or silica fume for cathodic protection jackets.

Submit the design mix to the Engineer for approval by the Department before placing any concrete filler.



## Final Project Materials Certification

- Non-Standard JGS
  - Created by QC data entry (or Contractor)
    - LS/DB/LAP On-system
  - Let Date Logic

## Final Project Materials Certification

- Non-Standard JGS
  - Reviewed by PA
  - Project Specific Requirements

## Final Project Materials Certification

- JGS
  - If it's not on the JGS,  
you can't log in a  
sample!!!



## Final Project Materials Certification

# PA Responsibilities

Topic No. 700-000-000  
Construction Project Administration Manual  
Project Documentation

Effective: July 1, 2002  
Revised: October 3, 2019

### (A) Resident Level Responsibilities

The Project Administrator (PA) is responsible for reviewing the **Contract Documents** to ensure the JGS is correct and complete. If there are missing material assignments, the PA must contact the SMO technical unit to ensure the JGS is complete. Project specific materials are included in the **Special Provisions, Technical Special Provisions, Developmental Specifications, and Change Orders** that designate a method of acceptance. If any exist, the PA is responsible to ensure that the JGS includes these entries.

## Final Project Materials Certification

### Agenda

- ☒ How to get the MC Review started
  - Standard JGS & Non-Standard JGS
- ☐ How MC Review handles project issues
  - Findings
- ☐ How PAs respond to the findings
  - Exclude, MC Resolve, or Promote to MAR

## Final Project Materials Certification

- MC Reviewer needs to initiate review when project begins
- MAC sends findings to the MC Review process



# Florida Department of TRANSPORTATION



## Final Project Materials Certification



### Materials Acceptance and Certification System

User: Allen Hughes [FDOT Verifier + 2 others] [Change Company/Role](#) | [Log Out](#)

[Field Help](#) | [Is On](#) | [Help](#)

[Reports](#) [MAC Spec](#) [STRUGGS](#) [Inspections](#) [Facilities](#) [Checklists](#) [Valuations](#) [Material Certification/MAR; Material Certifications/MAR](#) [Samples](#) [Contractor QC Plan](#) [System Admin](#) [My Access](#)

[Initiate Material Certification/MAR](#) [Search](#) [My Material Certification/MARs](#)

Material Certification/MAR

[Go to Material Certification/MAR](#)

Findings [102]

[Click to Collapse](#)

☐ Excluded [49] ☒ MC Resolved [2] ☒ Promoted to MAR [0] ☒ MAR Resolved [1] ☒ Open [0] ☒ Responded [8] ☒ Return for Response Clarification [0] ☒ Submitted [42]

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Start Date	Recommendation	Resolution	Related Findings	
133	Other: DDM for 16/19/16	Dianne Hardy		1600016741 IV	Asphalt Volumetrics	MAR Resolved	10/25/2016	No EAR [Final]	Leave in Place [Final]	74	<a href="#">View Details</a>
67055	Sample 1700111612 - QC Air Voids failure	System		1700111612 QC	Asphalt Volumetrics	MC Resolved	8/4/2017				<a href="#">View Details</a>
265407	Sample 1700158405 has failed straightedge test	System		1700158405 QC	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Responded	5/30/2018				<a href="#">View Details</a>
267423	QC/VT CPF is less than 90% for 31798 [1800248382 QC-VT]	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267424	Sample 1800248382 - Resolution Test for 3/8" Percent Passing has failed	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267425	Sample 1800248382 - Resolution Test for Percent Asphalt Content has failed	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267426	Sample 1800248382 - Resolution Test for No. 4. Percent Passing has failed	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267427	Sample 1800248382 - Resolution Test for No. 8 Percent Passing has failed	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267428	Sample 1800248382 - Resolution Test for Percent Asphalt Content has failed	System	31798 [1800248382 QC-VT]	1800248382 QC		Responded	6/1/2018				<a href="#">View Details</a>
267432	Sample 1700190663 - QC Average sublot 2 failure (fine mix)	System		1700190663 QC	FM 1-T 166 Gmb - Roadway	Responded	5/31/2018				<a href="#">View Details</a>
267433	Test FM 1-T 166 Gmb - Roadway is	System		1800217051 VT	FM 1-T 166	MC	6/7/2018				<a href="#">View Details</a>

Showing 1 to 50 of 53 [Show Next 3](#) [Export Results](#)

## Final Project Materials Certification

- Automatic Findings & Manual Findings (MAR Issues)
  - Based on MC Exceptions
    - What is an MC Exception?



## Final Project Materials Certification

- Exception 1 = Non-Standard Material
  - Failing Test Results
  - Missing Reports



## Final Project Materials Certification

Material Certification  
433908-1-58-01 [Pending]

Click to C

Material Information

Click to Expans

Sample Information

Laboratory Information

Location Information

Contact Information

Sample Comments [1]

Documents [0]

Associated Tests [5]

	Lab or Field	Lab ID	Tester	Test Disposition	Test St
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### ASTM C143 Slump of Hydraulic Cement Concrete

1	Initial Test	Field	H50020270	Fail *	Test Con
---	--------------	-------	-----------	--------	----------

### ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete

2	Initial Test	Field	H50020270	Pass	Test Con
---	--------------	-------	-----------	------	----------

### ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete

### View

Test

ASTM C143 Slump of Hydraulic Cement Concrete

Tester

H50020270

Date Test Performed

11/9/2019

Slump

Slump (in) 8.50

Does not meet target/limit [Slump = 6.5 +/- 1.5]

Test Notes

Lab ID	Tester	Test Disposition	Test Status	Required
H50020270		Fail *	Test Complete	Required

## Final Project Materials Certification

- Exception 2 = Minimum Frequency
  - Required tests not performed
  - Required Comparison not performed
  - Required Resolution not performed
  - Not enough samples





## Final Project Materials Certification

Test Disposition

Test Status

Required

Which test Rules?

Fail

Test Not Performed [Equipment  
Issues] \*

Required

Perform Test

Mark Test Not Performed

Comparison Package 33 [1600013648 QC-VT]

Comparison Package ID	Comparison Definition	Comparison Type	Comparison Status	
33	Compressive Strength	Includes Original Sample	Comparison not Performed	
Spec			Last Updated By	Last Updated On
346 - Portland Cement Concrete, Supplemental Specification, 01/2009, v1.3			Joshua Baker	6/22/2016
Original Sample	Sample Level	FDOT Sample Number	LOT #	Project(s)
1600013648	QC	CC40001Q	1	195765-1-52-01
Verification Sample	Sample Level	FDOT Sample Number	LOT #	Project(s)
1600013659	VT	CC40001V	1	195765-1-52-01

Run Compare on Comparison Packs

Or, a missing Sample (QC or VT)



## Final Project Materials Certification

### Sample

[Aggregate Duplicate Samples](#)

A summary report that highlights aggregate control program duplicated samples

[Aggregate Sample Analysis Report](#)

Aggregate product test data summary report which highlights specific test results with in a date range or the last 30 samples.  
test(s) associated to the sample

[Sampled By Report](#)

Monthly Sampled By and Sample Initiated By Report for Asphalt samples

[SMO Certification Summary](#)

A summary of all MAC Specs containing certification document that must be reviewed by the State Materials Office.

[Water Cementitious Ratio](#)

User inputs data from delivery ticket and this report calculates the W/C ratio.

### Project

[Active Contract Details](#)

A summary of contracts that are active in MAC. These have a Contractor QCP initiated but do not have a completed MC Review.

[Asphalt Control Chart](#)

Provides Gradation, Air Voids, & Asphalt Content results in a graph. The graph also plots the spec limits & targets.

[Asphalt Sample Number – Lot Number Report](#)

Lists all asphalt mix design samples on a specific project(s).  
project QC can use reduced lots.

[Rolling Straightedge Sample](#)

Rolling Straightedge Sample Summary Report with Parameters

[SMO Certification Tracking](#)

A summary of samples for a specific project for the certification documents reviewed by the State Materials Office



## Final Project Materials Certification

### Concrete Sample Number – Lot Number Report

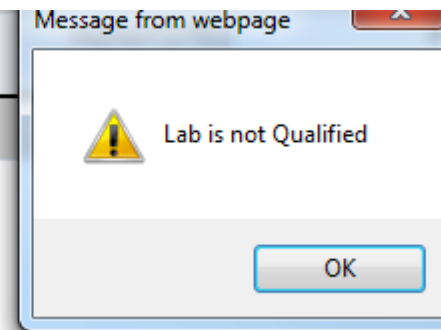
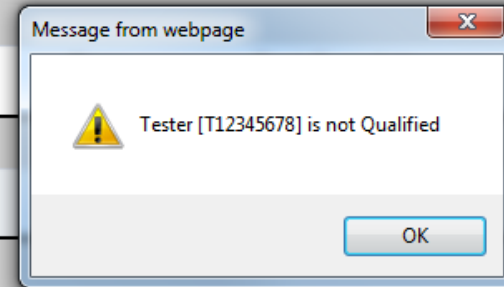
Lot #	FDOT Sample #	Level	Production Facility ID	Sample ID	Date Sample Taken	Sample Status	Comparison Package ID	Comparison Status	Quantity Represented
Mix Design: 01-1188-03			Category: Class II Bridge Deck (4500 PSI) / Conventional						
Financial Project ID: [REDACTED]									
Material ID: 346									
29	CC20029Q	QC	13-489	1600017858	10/19/2016	Finalized	4429	Compares	40 Cubic Yard(s)
30	CC20030Q	QC	13-489	1600017860	10/19/2016	Finalized	4429	Compares	30 Cubic Yard(s)
31	CC20031Q	QC	13-489	1600020470	10/27/2016	Finalized	4429	Compares	50 Cubic Yard(s)
29-32	CC20031v	VT	13-489	1600020508	10/27/2016	Finalized	4429	Compares	50 Cubic Yard(s)
32	CC20032Q	QC	13-489	1600020472	10/27/2016	Finalized	4429	Compares	20 Cubic Yard(s)
33	CC20033Q	QC	13-489	1600023564	11/3/2016	Finalized	8478	Compares	26 Cubic Yard(s)
34	CC20034Q	QC	13-489	1600024225	11/4/2016	Finalized	8478	Compares	26 Cubic Yard(s)
35	CC20035Q	QC	13-489	1700072239	3/11/2017	Finalized	8478	Compares	50 Cubic Yard(s)
33-36	CC20035v	VT	13-489	1700072251	3/11/2017	Finalized	8478	Compares	50 Cubic Yard(s)
36	CC20036Q	QC	13-489	1700072240	3/11/2017	Finalized	8478	Compares	50 Cubic Yard(s)
37	CC20037Q	QC	13-489	1700072241	3/11/2017	Finalized	8479	Compares	50 Cubic Yard(s)
38	CC20038Q	QC	13-489	1700072242	3/11/2017	Finalized	8479	Compares	50 Cubic Yard(s)
37-40	CC20038v	VT	13-489	1700072260	3/11/2017	Finalized	8479	Compares	50 Cubic Yard(s)
39	CC20039Q	QC	13-489	1700072243	3/11/2017	Finalized	8479	Compares	50 Cubic Yard(s)
40	CC20040Q	QC	13-489	1700072245	3/11/2017	Finalized	8479	Compares	41 Cubic Yard(s)
41	CC20041Q	QC	13-489	1700074639	3/16/2017	Finalized	8480	Compares	50 Cubic Yard(s)
42	CC20042Q	QC	13-489	1700074642	3/17/2017	Finalized	8480	Compares	50 Cubic Yard(s)
41-44	CC20042v	VT	13-489	1700074359	3/17/2017	Finalized	8480	Compares	50 Cubic Yard(s)
43	CC20043Q	QC	13-489	1700074644	3/17/2017	Finalized	8480	Compares	50 Cubic Yard(s)
44	CC20044Q	QC	13-489	1700074646	3/17/2017	Finalized	8480	Compares	50 Cubic Yard(s)
45	CC20045Q	QC	13-489	1700074649	3/17/2017	Finalized			50 Cubic Yard(s)
46	CC20046Q	QC	13-489	1700074651	3/17/2017	Finalized	9766	Incomplete Package	40 Cubic Yard(s)

## Final Project Materials Certification

- Exception Category 3 = Qualifications
  - Technicians
  - Laboratories
  - Production Facilities
    - Manual Findings

## Final Project Materials Certification

	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Re
<b>ASTM C143 Slump of Hydraulic Cement Concrete</b>						
1	Initial Test	Field	T12345678 *			Re
<b>ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete</b>						
2	Initial Test	Field	T12345678 *			Re
<b>ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete</b>						
3	Initial Test	Field	T12345678 *	Pass	Test Complete	Re
4	Initial Test	Field				
<b>ASTM C39 Compressive Strength</b>						
5	Initial Test	Lab	XYZ1 *			Test Complete
Showing 1 to 5 of 5						



## Final Project Materials Certification

### Special Programing:

- Straightedge Deficiencies
- Materials that allow Delineation

These two automatic findings trigger specific functionality with the MAR process that you will not get when creating a manual finding

## Final Project Materials Certification

### Agenda

- ☒ How to get the MC Review started
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  - Exclude, MC Resolve, or Promote to MAR

## Final Project Materials Certification

- MC Review in MAC
  - Responding to Findings
  - Processing MARs





## Final Project Materials Certification

Findings [1400] Click to Collapse

☐ Excluded [786] ☒ MC Resolved [9] ☒ Promoted to MAR [6] ☒ MAR Resolved [4] ☒ Open [0] ☒ Responded [0] ☒ Return for Response Clarification [0] ☒ Submitted [595]

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
681405	performed Sample 2000678827 has a failing result on required Test ASTM C143 Slump of Hydraulic Cement Concrete	System		2000678827 VT	ASTM C143 Slump of Hydraulic Cement Concrete	Submitted	10/14/2020			
681404	Comparison is required by the MAC Spec for Sample 2000677185 but was not performed	System		2000677185 QC		Submitted	10/14/2020			
681403	Comparison is required by the MAC Spec for Sample 2000674335 but was not performed	System		2000674335 QC		Submitted	10/14/2020			
681402	Comparison is required by the MAC Spec for Sample 2000674328 but was not performed	System		2000674328 QC		Submitted	10/14/2020			
681401	Comparison is required by the MAC Spec for Sample 2000667687 but was not performed	System		2000667687 QC		Submitted	10/14/2020			
681400	Comparison is required by the MAC Spec for Sample 2000667490 but was not performed	System		2000667490 QC		Submitted	10/14/2020			

## Final Project Materials Certification

### 5.8.7 Materials Acceptance Resolution

If a material is designated by the Materials Certification Review personnel to require resolution of the material acceptance, it will be promoted to the Materials Acceptance Resolution (MAR) process in MAC. All materials with acceptance issues will be promoted to MAR and final resolution determined. The life cycle of the issue will depend on the original issue and the nature of the material acceptance needing resolution. Some issues can be resolved directly by the PA without additional input. Some issues will require input from the District Materials and Research Engineer (DMRE), the District Construction Engineer (DCE), and the Director, Office of Construction (DOC). This procedure is outlined in the ***Material Acceptance Resolution Flow Chart*** ([Attachment 5.8-1](#)).

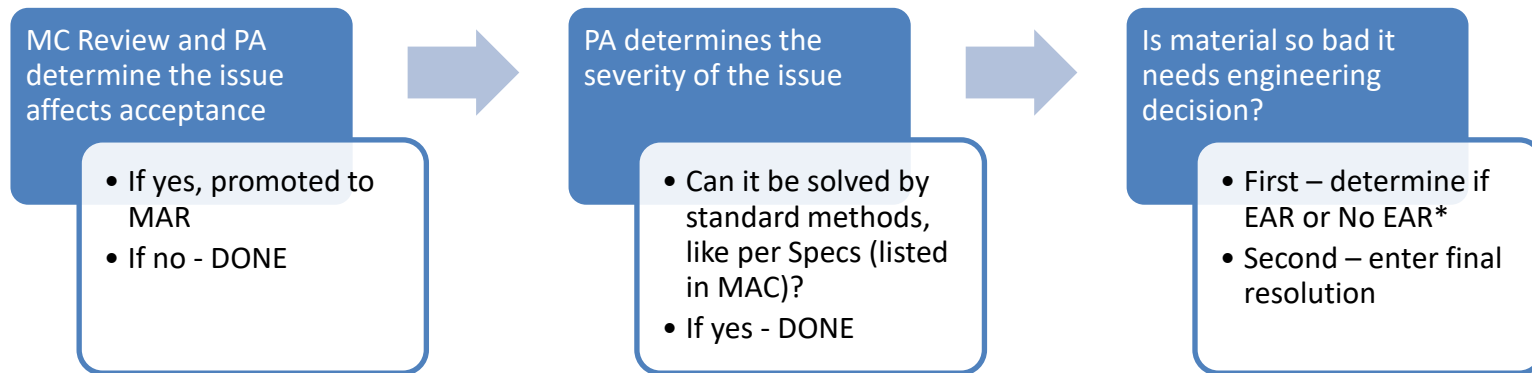
---

Control of Materials

5.8-4

## Final Project Materials Certification

# Overview of the MAR Process





## Final Project Materials Certification

Findings [70] Click to Collapse

[Return to List](#)

Update

Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test	Status
System Generated	Tester [F12345678] on Sample 1600013594/Test ASTM C39 Compressive Strength is not Qualified	<a href="#">1600013594 QC</a>	CC40001Q	ASTM C39 Compressive Strength	Promoted to MAR

Current Recommendation  
Recommendation has not yet been made by District Materials Research Engineer

Pay Items

Sample Info Click to Expand

Responses [1] Click to Expand

Recommendations [2] Click to Expand

Resolutions [0] Click to Expand

Locations [0] Click to Expand

Documents [0] Click to Expand

Comments [0] Click to Expand

## Final Project Materials Certification

- Let's take a moment to look at the difference between a recommendation and a resolution?

## Final Project Materials Certification

- There are seven (7) recommendations
- Five (5) are also final resolutions that can be made by the PA

## Final Project Materials Certification

### (1) Materials Acceptance Resolution by Specifications

For straightedge deficiencies, the procedures shall follow the requirements of [CPAM Section 11.5. Testing and Correcting Asphalt Pavement Surface Deficiencies](#).

For other material acceptance within **Specifications**, the PA will document the final resolution on the MAR issue in MAC. These determinations are designated by selecting one of the following options:

- a) Asphalt Follow-up Sample Passed – The material is resampled and the results are acceptable in accordance with **Materials Manual Section 3.1 District Materials Activities for Asphalt Pavement Construction**.
- b) Complete Removal and Replacement – The Contractor chooses to remove the material and replace it without requesting an [Engineering Analysis Report \(EAR\)](#).
- c) Material Rejected for Use – The material was sampled from a stockpile and the material is removed from use on the project before it is placed.
- d) Pay Reduction per Specifications – The **Specifications** allow a pay reduction to be assessed if a material falls within the pay reduction criteria.
- e) Reworked and Remixed – The material allows for rework, and sample is taken for the rework that designates that the reworked material is acceptable.

### (A) Resident Level Responsibilities

If the material is accepted based on the **Contract Documents** (i.e., Leave in Place at No Pay or Pay Reduction per **Specifications**), the PA will document the final resolution on the MAR issue in MAC. Once the PA has recorded the final recommendation, the issue is considered resolved. The PA will enter additional payment information in MAC if the final resolution includes reduced payment. The payment information is not relevant to the final resolution, but is recorded to assist Construction personnel with tracking the payment requirement.

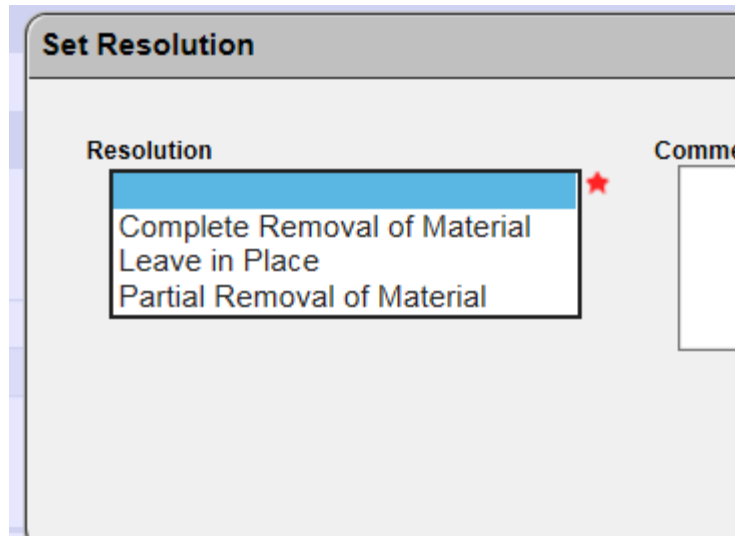
## Final Project Materials Certification

- If EAR or No EAR is selected,  
2<sup>nd</sup> process is needed to  
determine final resolution
  - Or No EAR Delineation if the  
Specification allows resolution  
by delineation



## Final Project Materials Certification

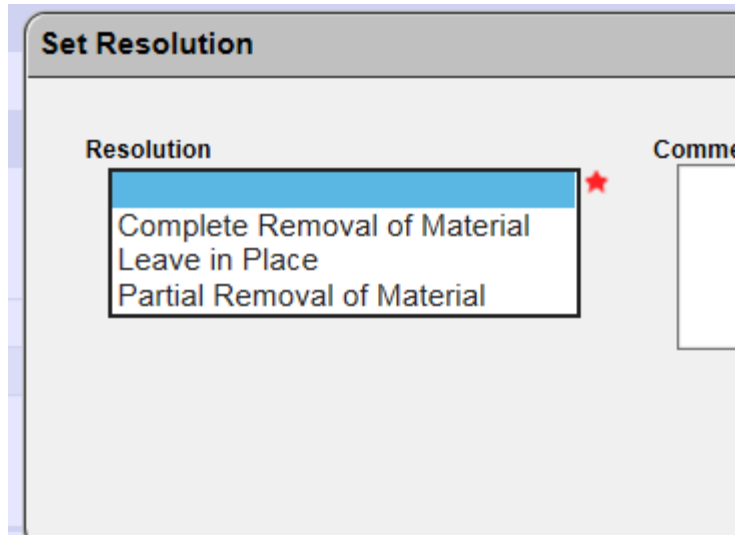
- Resolution options:

A screenshot of a software dialog box titled "Set Resolution". It contains a table with two columns: "Resolution" and "Comments". The "Resolution" column has a dropdown menu open, showing three options: "Complete Removal of Material", "Leave in Place", and "Partial Removal of Material". The first option is highlighted in blue. A red star icon is visible to the right of the dropdown menu. The "Comments" column is empty.

Resolution	Comments
Complete Removal of Material	
Leave in Place	
Partial Removal of Material	

## Final Project Materials Certification

- Resolution options:

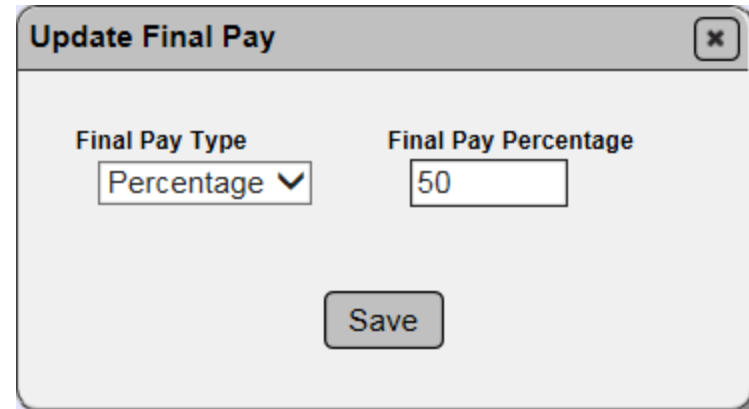


**Set Resolution**

Resolution

- Complete Removal of Material
- Leave in Place
- Partial Removal of Material

Comme



**Update Final Pay**

Final Pay Type: Percentage ▼

Final Pay Percentage: 50

Save

## Final Project Materials Certification

### Recommendations [3]

	Recommendation	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Resident Engineer	Leave in Place No Payment				<a href="#">Update Final Pay</a>
District Bituminous Engineer	Leave in Place No Payment				<a href="#">Update Final Pay</a>
District Construction Engineer	Leave in Place No Payment				<a href="#">Update Final Pay</a>

### Resolutions [0]

*No results found*

Materials and Research Engineer  
– Recommendation is Final Resolution

## Final Project Materials Certification

Set Recommendation

Recommendation

Asphalt Follow Up Sample Passed

Complete Removal and Replacement

EAR

Material Rejected for Use

No EAR

Pay Reduction Per Specification

Reworked and Remixed

Set Recommendation

Recommendation

Asphalt Follow Up Sample Passed

Complete Removal and Replacement

EAR

Material Rejected for Use

No EAR

No EAR - Delineation

Pay Reduction Per Specification

Reworked and Remixed

## Final Project Materials Certification

- Location Information
  - PA fills it out
  - After the resolution

## Final Project Materials Certification

Add Location of Representative Material

Rci Lanes

L1 ✕

L3 ✕

L4 ✕

From Station

100+00

To Station

275+45

Latitude

21.012578

Longitude

-82.213457

Ending Latitude

21.032145

Ending Longitude

-82.242354

Offset Distance

Offset Direction

Reference Line

Placement Designation

Left in Place

Quantity

1,250

Unit Of Measure

Ton(s) ✕ ✕

Save



## Final Project Materials Certification

Total Affected Quantity		Total Affected Quantity Units		Accumulative Quantity									
2,000.00		Ton(s)		2,000									
	Rci Lanes	From Station	To Station	Latitude	Longitude	Ending Latitude	Ending Longitude	Offset Distance	Offset Direction	Reference Line	Placement Designation	Quantity	Units
1	L1 L2	100+00	300+00	27.507800	-82.563040	27.513960	-82.563040				Partial Remove and Replace	2,000.00	Ton(s)
2	L1 L2	100+00	175+00	27.507800	-82.563040	27.509010	-82.563040				Left in Place	500.00	Ton(s)
3	L1 L2	175+00	225+00	27.509010	-82.563040	27.510330	-82.563040				Removed	750.00	Ton(s)
4	L1 L2	225+00	300+00	27.510330	-82.563040	27.513960	-82.563040				Left in Place	750.00	Ton(s)

▼

▼

Placement Designation

Left in Place ▼

Quantity

750.00

Unit Of Measure

Ton(s) ✕

Save

### Exceptions for Project FIN: 429074-1-52-01

#### Non Standard Materials

This is an example of the location information on the PMCL Letter that is derived from MAC.

- Other: For Location Information on PMCL

Ref Material ID: -

Sample Level: -

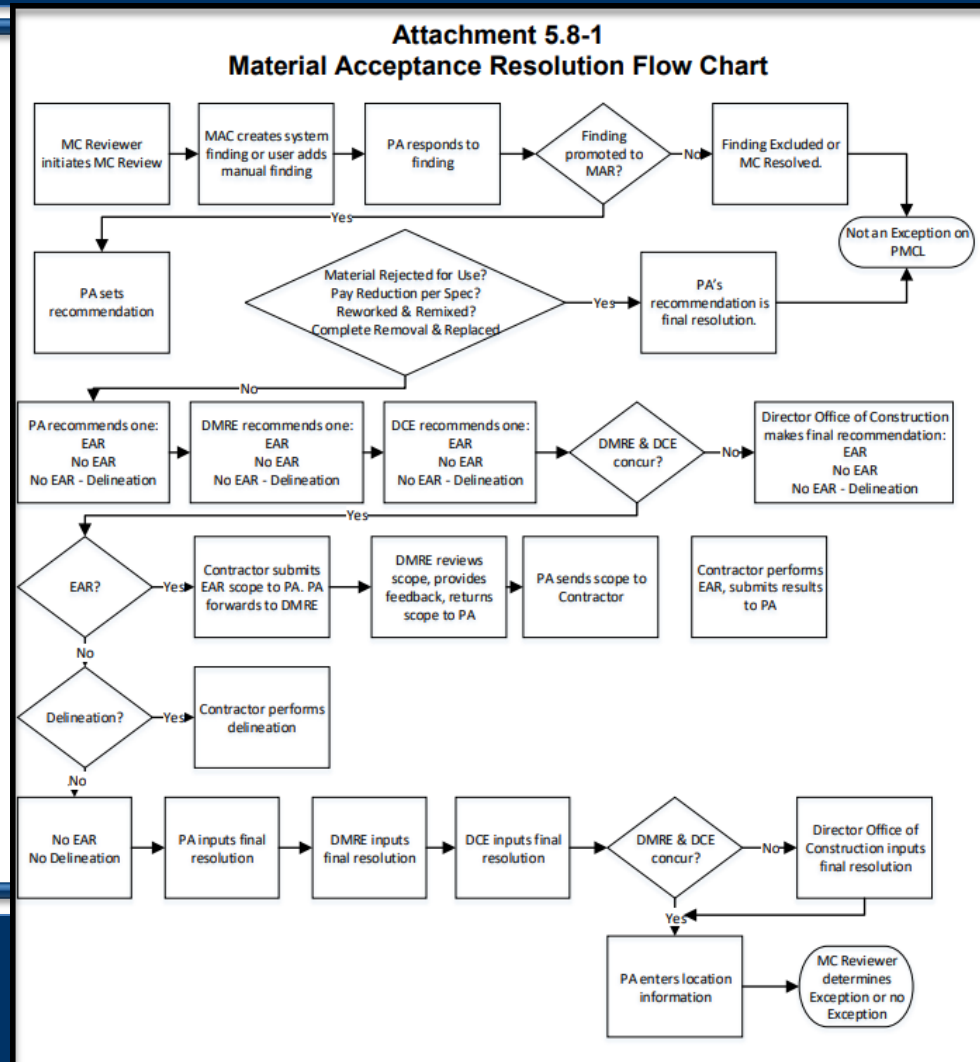
Total Quantity: 2,000 Ton(s)

Accumulative Quantity: 2,000

RCI Options (Lanes):	L1	From Station:	100+00	To Station:	250+00
Beginning Latitude:	21.000000	Longitude:	-82.000000		
Ending Latitude:	21.500000	Longitude:	-82.000000		
Placement Designation:	Partial Remove and Replace	Quantity:	2,000 Ton(s)		
RCI Options (Lanes):	L1	From Station:	100+00	To Station:	175+00
Beginning Latitude:	21.000000	Longitude:	-82.000000		
Ending Latitude:	21.520000	Longitude:	-82.600000		
Placement Designation:	Removed	Quantity:	500 Ton(s)		
RCI Options (Lanes):	L1	From Station:	175+00	To Station:	200+00
Beginning Latitude:	21.520000	Longitude:	-82.600000		
Ending Latitude:	21.250100	Longitude:	-82.412000		
Placement Designation:	Left in Place	Quantity:	750 Ton(s)		
RCI Options (Lanes):	L1	From Station:	200+00	To Station:	250+00
Beginning Latitude:	21.250100	Longitude:	-82.412000		
Ending Latitude:	21.500000	Longitude:	-82.500000		
Placement Designation:	Removed	Quantity:	750 Ton(s)		



## Final Project Materials Certification



## Final Project Materials Certification

### Agenda

- ✓ How to get the MC Review started
  - Standard JGS & Non-Standard JGS
- ✓ How MC Review handles project issues
  - Findings
- ✓ How PAs respond to the findings
  - Exclude, MC Resolve, or Promote to MAR



## Final Project Materials Certification

# RAQs (Recently Asked Questions)

- ***When should we notify MC Reviewers about the project?*** At the beginning, let them know when work begins so they can begin the MC Review in MAC. Then at 75% and 90% completion.
- ***Are you reviewing exceptions statewide for common issues?*** Yes. We are in the early stages but we are beginning to compile this data.
- ***How important is the NSJGS?*** Extremely. This is a big item on the audit list from FHWA so it needs to be completed monthly, and it needs to be accurate.



## Final Project Materials Certification

- Questions?



## Final Project Materials Certification

### List of MCs per District

- D1/7 – Mark Conley
  - 881-4233
- D1/7 - James Stricklin
  - 881-4257
- D2 - Curtis Becker
  - 882-7724
- D2 - Mystery Easter
  - 882-7808
- D3 – Anthony Mosier
  - 883-1373
- D4/6 - Wismith Voltaire
  - 884-7047
- D5 - Jeanie Kozak
  - 885-3489
- D5 - Jodi Johnson
  - 885-3504
- TP – Brad Biery
  - 888-1147