



# Florida Department of TRANSPORTATION

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## Project Administrator MC Review

December 16, 2024

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## Updates

This section summarizes the updates in this document from the last posted version.

<b>Description</b>	<b>Page #</b>
Added findings statuses for surface tolerance deficiencies	11
Added description of new PA recommendation/resolution	20
Added new asphalt pavement surface deficiency recommendation process	34 – 43
Updated QC results on Rolling Straightedge test – location information	42
Added asphalt pavement surface deficiency MAR process flow chart	43
Added MC Review for permit projects	47
Added Chapter for MC Review Reports	48 - 54

## Introduction

### What are the Project Administrator's responsibilities for Materials Certification Review (MC Review)?

The Project Administrator (PA) is the person in responsible charge of the material method of acceptance (MOA) on a contract. The State Construction Office (SCO) has defined the person who can be given the role of PA in MAC. Allowable delegates are defined as the Contract Specialist or the Lead Inspector. In some cases, the Asphalt Plant Technician or Resident Asphalt Specialist can be given the PA role in MAC for asphalt plant samples. The Lead Earthwork VT technician for the Earthwork Records System (ERS) PA functions can be a delegate for the PA role for ERS sample functions.

These instructions describe how to address MC Review findings for the PA role and other functions related to the MC Review including processing the findings through the Materials Acceptance Resolution (MAR) process. Separate instructions are also available for the other users with functions in this process, such as the MC Review Program Maintenance User who will be referred to in this document as the MC Reviewer. Some of the MC Reviewers functions are described in this document because the PA may have follow-up functions to perform.

[Materials Manual 5.4 Volume I](#) (**MM 5.4 V1**) governs the process for the review. These instructions are intended to describe the MAC functions for the **MM 5.4 V1** processes. It is not intended to replace the program requirements. If there is a conflict between these instructions and **MM 5.4 V1**, the Materials Manual instructions supersede the instructions in this document.

*The Construction Project Administration Manual (CPAM)* [Section 5.8 Control of Materials](#) and [Section 11.5 - Testing and Correcting Asphalt Pavement Surface Deficiencies](#) describes the PA's responsibilities for material requirements.

### What is MAR?

Materials Acceptance Resolution (MAR) is the process for documenting the disposition of MOA issues. MOA includes more than just failing material. It includes any material that does not meet requirements such as minimum frequency, qualified personnel, qualified labs and if the QC or Aggregate Control Program material was not produced under program requirements. Any material not meeting the requirements will have to be processed through MAR. Not all MAR issues require recommendations and resolutions by the District Materials and Research Engineer (DMRE), District Construction Engineer (DCE) or Director, Office of Construction (DOC).

### What is a finding?

A finding is a potential issue with the MOA. A finding may or may not result in an Exception to the Project Materials Certification Letter (PMCL). Findings can be generated by the system or they can be added manually by PAs or MC Reviewers (PMUs).

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## What is an issue?

An issue is a finding that needs further action. It is any finding that is not Excluded or MC Resolved. It may result in an Exception. All issues must be promoted to MAR. Not all issues promoted to MAR will result in an Exception.

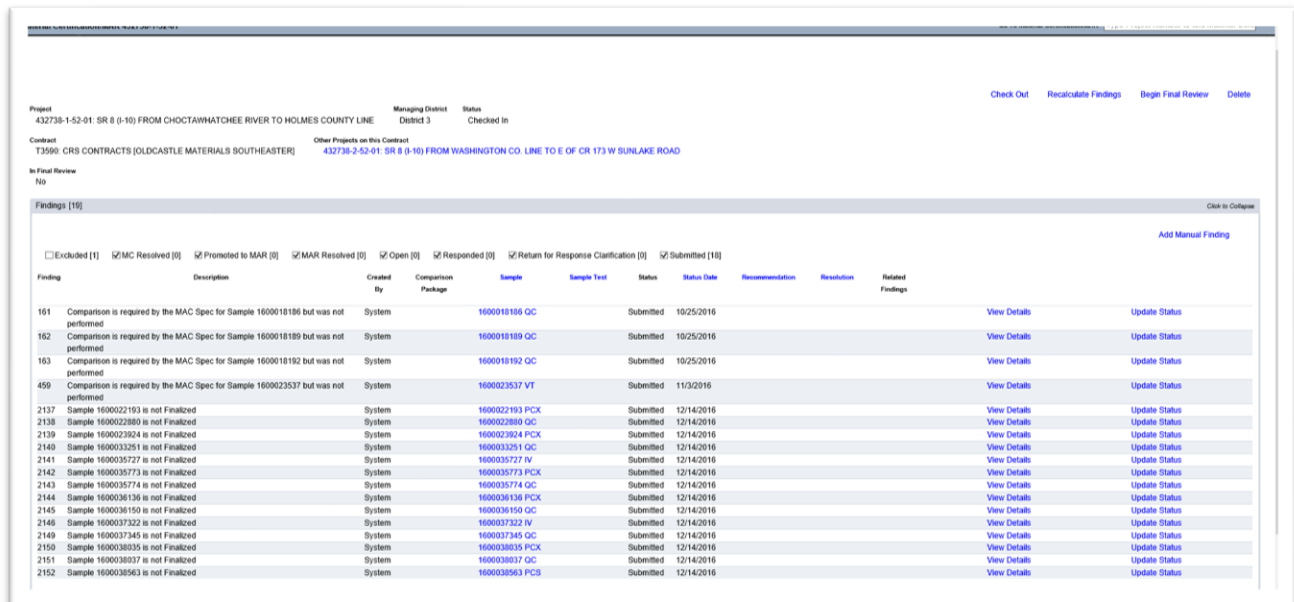
## What is an Exception?

An Exception is a materials issue that meets the definition of a PMCL Exception per **MM 5.4 V1**. All Exceptions must be promoted to MAR in order to have the ability to create the Exception on the PMCL

## Chapter 1 – Initiating an MC Review by the MC Reviewer

The MC Review is initiated for each project on a contract by an MC Reviewer. The MC Review should be created as soon as the District Materials and Research Office (DMRO) is notified that the contract has begun. This will allow for automatic findings to be displayed on the findings screen. The PA should notify the MC Reviewer if the MC Review has not yet been initiated.

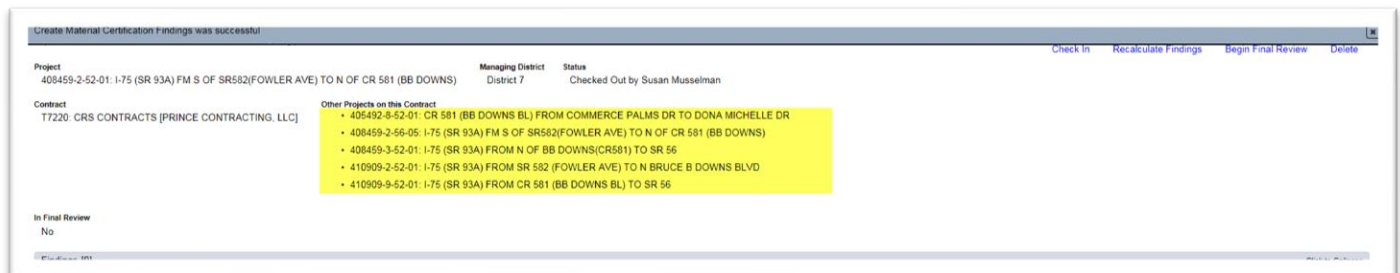
When the MC Review is created, if there are any existing samples for the contract, the system will populate the automatic findings.



The screenshot displays the MC Review interface for a specific project and contract. The project is 432738-1-52-01: SR 8 (I-10) FROM CHOCTAWHATCHEE RIVER TO HOLMES COUNTY LINE, and the contract is T3590: CRS CONTRACTS [OLDCASTLE MATERIALS SOUTHEAST]. The interface shows a list of findings, with columns for Finding, Description, Created By, Comparison Package, Sample, Sample Text, Status, Status Date, Recommendation, Resolution, and Related Findings. The findings are listed in a table, with each row representing a finding and its details.

Finding	Description	Created By	Comparison Package	Sample	Sample Text	Status	Status Date	Recommendation	Resolution	Related Findings
161	Comparison is required by the MAC Spec for Sample 1600018186 but was not performed	System	1600018186 QC	Submitted	10/25/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
162	Comparison is required by the MAC Spec for Sample 1600018189 but was not performed	System	1600018189 QC	Submitted	10/25/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
163	Comparison is required by the MAC Spec for Sample 1600018192 but was not performed	System	1600018192 QC	Submitted	10/25/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
459	Comparison is required by the MAC Spec for Sample 1600023537 but was not performed	System	1600023537 VT	Submitted	11/3/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2137	Sample 1600022193 is not Finalized	System	1600022193 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2138	Sample 1600022880 is not Finalized	System	1600022880 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2139	Sample 1600023924 is not Finalized	System	1600023924 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2140	Sample 1600032251 is not Finalized	System	1600032251 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2141	Sample 1600035727 is not Finalized	System	1600035727 IV	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2142	Sample 1600035773 is not Finalized	System	1600035773 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2143	Sample 1600035774 is not Finalized	System	1600035774 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2144	Sample 1600036136 is not Finalized	System	1600036136 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2145	Sample 1600036150 is not Finalized	System	1600036150 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2146	Sample 1600037322 is not Finalized	System	1600037322 IV	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2149	Sample 1600037345 is not Finalized	System	1600037345 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2150	Sample 1600038035 is not Finalized	System	1600038035 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2151	Sample 1600038037 is not Finalized	System	1600038037 QC	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>
2152	Sample 1600038563 is not Finalized	System	1600038563 PCX	Submitted	12/14/2016					<a href="#">View Details</a> <a href="#">Update Status</a>

For contracts with multiple projects, all the projects on the contract appear on the MC Review header of each project.



The screenshot displays the MC Review interface for a specific project and contract. The project is 408459-2-52-01: I-75 (SR 93A) FM S OF SR582(FOWLER AVE) TO N OF CR 581 (BB DOWNS), and the contract is T7220: CRS CONTRACTS [PRICE CONTRACTING, LLC]. The interface shows a list of findings, with columns for Finding, Description, Created By, Comparison Package, Sample, Sample Text, Status, Status Date, Recommendation, Resolution, and Related Findings. The findings are listed in a table, with each row representing a finding and its details. A highlighted section titled "Other Projects on this Contract" lists additional projects associated with the contract.

Finding	Description	Created By	Comparison Package	Sample	Sample Text	Status	Status Date	Recommendation	Resolution	Related Findings
405492-8-52-01	CR 581 (BB DOWNS BL) FROM COMMERCE PALMS DR TO DONA MICHELLE DR									
408459-2-56-05	I-75 (SR 93A) FM S OF SR582(FOWLER AVE) TO N OF CR 581 (BB DOWNS)									
408459-3-52-01	I-75 (SR 93A) FROM N OF BB DOWNS(CR581) TO SR 56									
410909-2-52-01	I-75 (SR 93A) FROM SR 582 (FOWLER AVE) TO N BRUCE B DOWNS BLVD									
410909-9-52-01	I-75 (SR 93A) FROM CR 581 (BB DOWNS BL) TO SR 56									

If the MC Reviews for the other project(s) have been initiated, they will appear as a hyperlink on the projects reviews. Click on the hyperlink to navigate to another project's MC Review.

Other Projects on this Contract

- [408459-2-52-01: I-75 \(SR 93A\) FM S OF SR582\(FOWLER AVE\) TO N OF CR 581 \(BB DOWNS\)](#)
- 408459-2-56-05: I-75 (SR 93A) FM S OF SR582(FOWLER AVE) TO N OF CR 581 (BB DOWNS)
- 408459-3-52-01: I-75 (SR 93A) FROM N OF BB DOWNS(CR581) TO SR 56
- 410909-2-52-01: I-75 (SR 93A) FROM SR 582 (FOWLER AVE) TO N BRUCE B DOWNS BLVD
- 410909-9-52-01: I-75 (SR 93A) FROM CR 581 (BB DOWNS BL) TO SR 56

Click to go to 408459-2-52-01: I-75 (SR 93A) FM S OF SR582(FOWLER AVE) TO N OF CR 581 (BB DOWNS)

Each project may have its own findings and Exceptions. The MC Reviews are conducted per project, but the PMCL is generated for the contract.



## Chapter 2 – Searching for an MC Review

**NOTE:** PAs may also have company roles. You must be in your system role of PA for the MC Review menu options and functions to appear.



1. Select the Materials Certifications/MAR menu option.
2. Select the Materials Certifications/MAR submenu option.
3. Use the Search option or Go To Material Certification/MAR option to navigate to the MC Review screen.

Material Certification/MAR 421707-2-52-01 Go To Material Certification/MAR Type Project Number to find Material Certi

Project  
421707-2-52-01: SR 931-75 ML SYSTEM FROM NW 170 STREET TO S OF HEFT INTERCHANGE Managing District: District 4 Status: Checked In Check Out Delete

Contract  
E4N84: DESIGN-BUILD CONTRACTS [COMMUNITY ASPHALT CORP.] Other Projects on this Contract

- 421707-3-52-01: SR 931-75 ML SYSTEM FR MIAMI-DADE/BROWARD CL TO S. OF MIRAMAR PARKWAY
- 421707-8-52-01: SR 931-75 ML SYSTEM FR S. OF HEFT INTCH. TO MIAMI/DADE COUNTYLINE

In Final Review  
No

Findings [4] Click to Collapse

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

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
1342	Required resolution for 57 [1600014007 QC-VT] not performed	System	57 [1600014007 QC-VT]	1600014007 QC		Responded	7/26/2016			<a href="#">View Details</a>
1343	Comparison is required by the MAC Spec for Sample 1600014005 but was not performed	System		1600014005 QC		Submitted	7/26/2016			<a href="#">View Details</a>
1344	Comparison is required by the MAC Spec for Sample 1600014006 but was not	System		1600014006 QC		Promoted to MAR	8/23/2016	EAR		<a href="#">View Details</a> <a href="#">Set F</a>

When an MC Review is initiated, it is checked out the MC Reviewer who created it. During this status, no other MC Reviewer can make modifications to the review. Check in and check out does not apply to the PA. The PA does not need to check out an MC Review in order to work on the findings.

## Chapter 3 – Managing Findings

Some findings are generated by the system based on criteria such as a failing test, a required test not being performed, an unqualified technician, etc. Samples can have multiple findings. Similar findings can be related to each other.

### A. Findings List on an MC Review

When the MC Review is created or when it is checked out, the system will populate or recalculate the automatic findings. The PA cannot recalculate the findings. If MC Review findings appear on samples but do not appear on the findings list, check the excluded findings to ensure the MC Reviewer has not already excluded the finding. If they are not there, ask the MC Reviewer to recalculate the MC Review.

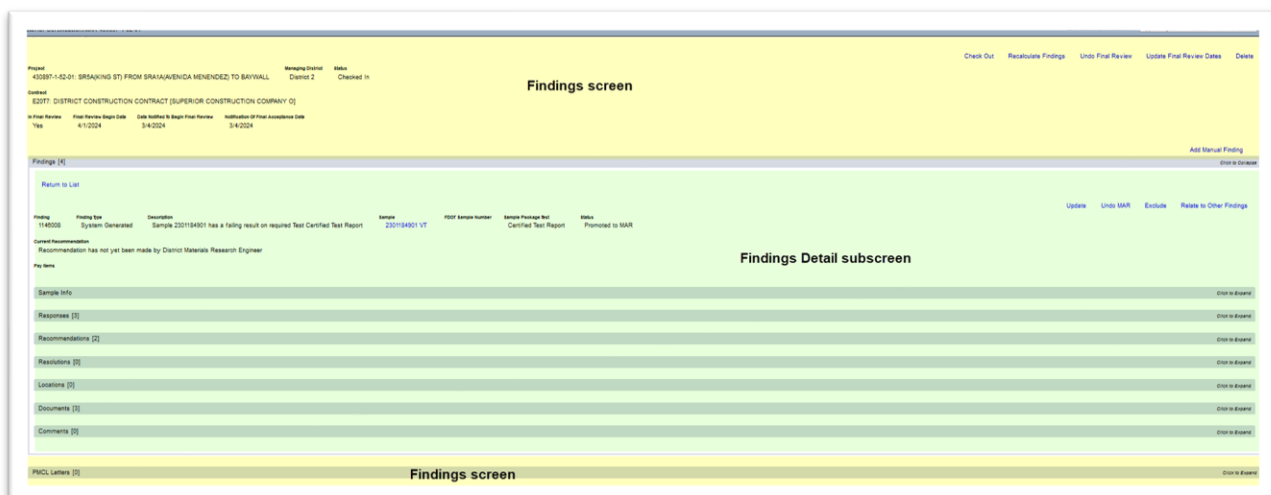


Select the Excluded option on the Findings status selection to review excluded findings.

				Straightedge				
1098071	Sample 2301216973 has a failing result on required Test FM 1-T 166 Gmb - Roadway	System	2301216973 IV	FM 1-T 166 Gmb - Roadway	MAR Resolved	10/31/2023	No EAR - Delineation [Final]	Partial Removal of Material [Final]

1. To see the specific information for a finding, select the finding hotlink.

The finding details subscreen will appear over the findings list screen. The findings screen is still visible behind the findings detail subscreen.



[Return to List](#)

2. Select the Return to List option to return to the findings list.

#### B. Findings Statuses

Findings statuses are as follows:

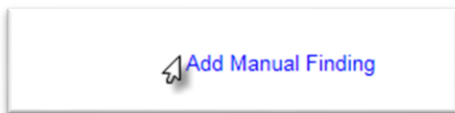
1. **Excluded** – the MC Reviewer has determined that the finding is not an issue. It does not have to be responded to by the PA.
2. **MC Resolved** – the MC Reviewer has determined without the PA's response or is satisfied with the PA's response that the finding is not an issue.
3. **Promoted to MAR** – the finding has a response from the PA and the MC Reviewer and PA agree that the finding should be processed as a MAR issue.
4. **MAR Resolved** – the finding has made it to the end of MAR process and has a final resolution.
  - a. **MAR Resolved [Reason for no Follow Up Sample]** – when the finding is a surface tolerance deficiency and the PA designates that no follow-up sample was performed, the status is MAR Resolved with the reason the PA provided for there being no follow-up sample within the brackets.
  - b. **MAR Resolved & Follow Up Sample hotlink** – when the finding is a surface tolerance deficiency and the PA designates the follow-up sample, the status is MAR Resolved with a hotlink to the follow-up sample.
5. **Open** – The MC Review submitted a manual to the PA for response or excluded it.
6. **Responded** – The PA has submitted a response to the MC Reviewer.
7. **Returned for Response Clarification** – the MC Reviewer has returned a responded finding to the PA for additional response.
8. **Submitted** – the MC Reviewer has submitted the finding to the PA for a response.
9. **Waiting For Follow Up Sample** – when a surface tolerance deficiency has a final recommendation of Remove and Replace, the status is Waiting For Follow Up Sample until the PA designates the follow-up sample or that a follow-up sample was not performed.

**NOTE:** The findings statuses can be used as filters to shorten the list that is displayed. Deselecting an option does not remove the findings. It just takes them off the view.

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

#### C. Manual Findings

Because not all issues that are possible Exceptions can be detected by the system, there is a way to add a manual finding. These can be created by MC Reviewers or PAs. To create a manual finding:



1. Select the Add Manual Finding option.

An Add Manual Finding dialog box appears.

**NOTE:** A ★ indicates a required field.

A screenshot of the "Add Manual Finding" dialog box. It has a title bar with the text "Add Manual Finding" and a close button. The dialog contains several fields: "Finding Type" is a dropdown menu with a blue bar and a red star icon; "Description" is a text area with a blue bar and a red star icon; "Comparison Package" is a dropdown menu with a blue bar and a red star icon; "Sample" is a dropdown menu with a blue bar and a red star icon. At the bottom right is a "Create" button. The fields are numbered 2, 3, 4, and 5 respectively.

2. **Finding Type** – select the finding type from the dropdown.

**NOTE:** Selecting the ERS finding type will put the finding under the ERS findings tab.

3. **Description** – enter a **brief** description of the issue. No more than two sentences. You will have the opportunity to add a response and other details on the findings detail screen.

4. **Comparison Package** – if the manual finding is for a specific comparison package, select it from the dropdown.

5. **Sample** – if the manual finding is for a specific sample, select it from the dropdown. the finding/issue.

6. Select the Create option to create the manual finding.

**NOTE: DO NOT** create a Manual finding for materials that can be resolved by delineating (like asphalt). This automatic finding have its own special programming that is triggered from an automatic finding. Creating a manual finding will not allow for the special programming to be triggered and the manual finding will not be able to be processed correctly.

D. Submitting an Open Manual Finding for PA Response (MC Reviewer)

All manual findings start with an Open status. This gives the MC Reviewer the opportunity to review the finding before processing further. If the MC Reviewer agrees the finding is an MC Review issue, they can submit the finding for the PA to respond

## E. Responding to a Finding in Submitted Status (PA)

To respond to a submitted finding:

1098071	Sample 2301216973 has a failing result on required Test FM 1-T 166 Gmb - Roadway	System	2301216973 IV	Straightedge FM 1-T 166 Gmb - Roadway	MAR Resolved	10/31/2023	No EAR - Delineation [Final]	Partial Removal of Material [Final]
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1. Select the finding hotlink to navigate to the findings details.

Findings [4] Click to Collapse

[Return to List](#)

Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test	Status
System Generated	Sample 1600018092 - QC Air Voids failure	<a href="#">1600018092 QC</a>	2D001Q	Asphalt Volumetrics	Submitted [System Generated]

Pay Items

Sample Info Click to Expand

Responses [0] Click to Collapse

No results found

[Add Finding Response](#)

2. Click on the Responses tab to expand it.

3. Click on the Add Findings Response option.

An Add Finding Response dialog box appears.

**Add Finding Response** ✕

**Response Text**

This failure is documented appropriately. Please promote this issue to MAR so it can be processed.

Create

4. **Response Text** – enter the description of the finding. The information should include any additional details for the MC Reviewer to assist with determining if the finding is a potential exception. The needed information will depend on the finding itself.

5. Select the Create option.

The finding is still in Submitted status. MAC does not know if you saved the response for now and will update it more or if it's ready to be submitted. You must indicate that the response is ready to be submitted.

Findings [5]						Click to Collapse
<a href="#">Return to List</a>						<a href="#">Submit Responses</a>
Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test	Status	
System Generated X	Sample 1600020103 has failed straightedge test	<a href="#">1600020103 QC</a>		FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Submitted [System Generated]	
Pay Items						

6. Once your response is complete, select the Submit Responses option.

The response status will be changed to Responded.

Findings [4]											Click to Collapse
											<a href="#">Add Manual Finding</a>
<input type="checkbox"/> Excluded [0] <input checked="" type="checkbox"/> MC Resolved [0] <input checked="" type="checkbox"/> Promoted to MAR [0] <input checked="" type="checkbox"/> MAR Resolved [0] <input checked="" type="checkbox"/> Open [0] <input checked="" type="checkbox"/> Responded [3] <input checked="" type="checkbox"/> Return for Response Clarification [0] <input checked="" type="checkbox"/> Submitted [1]											
Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings	
120	Sample 1600018092 - QC Air Voids failure	System		<a href="#">1600018092 QC</a>	Asphalt Volumetrics	Responded	12/14/2016				<a href="#">View Details</a>
121	Sample 1600018094 - QC Air Voids failure	System		<a href="#">1600018094 QC</a>	Asphalt Volumetrics	Responded	12/14/2016				<a href="#">View Details</a>
122	Sample 1600018104 - QC Air Voids failure	System		<a href="#">1600018104 QC</a>	Asphalt Volumetrics	Submitted	10/24/2016				<a href="#">View Details</a>
123	Sample 1600018106 - QC Air Voids failure	System		<a href="#">1600018106 QC</a>	Asphalt Volumetrics	Responded	12/14/2016				<a href="#">View Details</a>

## F. Respond to a Finding Returned for Additional Clarification (PA)

If the PA's response is incomplete or unclear, the MC Reviewer may return the finding to the PA to get additional information. The finding will be placed in the status Return for Response.

Findings [4]											Click to Collapse
											<a href="#">Add Manual Finding</a>
<input type="checkbox"/> Excluded [0] <input checked="" type="checkbox"/> MC Resolved [0] <input checked="" type="checkbox"/> Promoted to MAR [0] <input checked="" type="checkbox"/> MAR Resolved [0] <input checked="" type="checkbox"/> Open [0] <input checked="" type="checkbox"/> Responded [2] <input checked="" type="checkbox"/> Return for Response Clarification [1] <input checked="" type="checkbox"/> Submitted [1]											
Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings	
120	Sample 1600018092 - QC Air Voids failure	System		<a href="#">1600018092 QC</a>	Asphalt Volumetrics	Return for Response Clarification	12/14/2016				<a href="#">View Details</a>
121	Sample 1600018094 - QC Air Voids failure	System		<a href="#">1600018094 QC</a>	Asphalt Volumetrics	Responded	12/14/2016				<a href="#">View Details</a>
122	Sample 1600018104 - QC Air Voids failure	System		<a href="#">1600018104 QC</a>	Asphalt Volumetrics	Submitted	10/24/2016				<a href="#">View Details</a>
123	Sample 1600018106 - QC Air Voids failure	System		<a href="#">1600018106 QC</a>	Asphalt Volumetrics	Responded	12/14/2016				<a href="#">View Details</a>

1. Select the View Details option to see the finding details.

The MC Reviewer's comment can be seen under the status heading. You may need to contact the MC Reviewer to coordinate the needed information in the response.

Findings [4] [Click to Collapse](#)

[Return to List](#)

[Relate to Other Findings](#)

Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test
System Generated	Sample 1600018094 - QC Air Voids failure	<a href="#">1600018094 QC</a>	2D001Q	Asphalt Volumetrics

Status  
Return for Response Clarification [The explanation is not complete. Please provide more detail about how the finding was addressed.]

Pay Items

[Expand Info](#) [Click to Expand](#)

Findings [4] [Click to Collapse](#)

[Return to List](#)

Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test	Status
System Generated	Sample 1600018092 - QC Air Voids failure	<a href="#">1600018092 QC</a>	2D001Q	Asphalt Volumetrics	Submitted [System Generated]

Pay Items

Sample Info [Click to Expand](#)

Responses [0] [Click to Collapse](#)

No results found

[Add Finding Response](#)

2. Click on the Responses tab to expand it.
3. Click on the Add Findings Response option.

An Add Findings Response dialog box appears.

Add Finding Response [X](#)

Response Text 57 of 2000

This is additional information for further clarification.

[Create](#)

4. **Response Text** – enter additional information about the finding.
5. Select the Create option.

Findings [4] Click to Collapse

[Return to List](#)
Submit Responses

Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test
System Generated	Sample 1600018094 - QC Air Voids failure	<a href="#">1600018094 QC</a>	2D001Q	Asphalt Volumetrics

**Status**  
 Return for Response Clarification [The explanation is not complete. Please provide more detail about how the finding was addressed.]

Pay Items

6. Click on the Submit Responses option.

The issue status will be changed to Responded.

#### G. Setting a Finding as MC Resolved (MC Reviewer)

If after the MC Reviewer and the PA determine that the finding needs no further action, the finding can be designated with the status of MC Resolved. Similar to excluded findings, MC Resolved findings cannot be promoted to MAR and cannot have an Exception created from the finding. MC Resolved means that after review and comment by the PA and MC Reviewer, the finding does not warrant additional action.

**NOTE:** Most MC Reviewers will use the Excluded option in lieu of MC Resolving because when Excluding a finding, they are prompted to provide a comment or reason. MC Resolving a finding does not allow for comments.

#### H. Relating a Finding to other Findings (MC Reviewer)

Often times, findings will be similar in nature and will be resolved with the same disposition. The MC Reviewer can connect findings together by relating them to each other.

The finding details will be updated to show the related findings.

Findings [4]

[Return to List](#)

Finding Type	Description	Created By	Status
Final Commercial Inspection Report	t	Susan Musselman	Responded

Pay Items

**Related Findings**

- 208 - Sample 1600015313 has failed straightedge test
- 1456 - Sample 1600015313 is not Finalized








The related findings will be listed on the findings listing under the Related Findings header.

File Test	Status	Status Date	Recommendation	Resolution	Related Findings		
9 ness by ng or	MAR Resolved	9/28/2016	Leave in Place Reduced Payment [Final]		1456, 1466	✓ ✓	<a href="#">View Details</a> <a href="#">Update</a>
edge	Responded	10/11/2016			208, 1456	✓	<a href="#">View Details</a> <a href="#">Update</a>

**NOTE:** This does not assign the MAR resolution or create an Exception for the related findings. It only connects the findings together. Each finding must still be processed individually. The MC Reviewer will work with the PA on the primary issue and will resolve related issues with the appropriate status (Excluded or MC Resolved).

#### I. Findings Icons

The following are icons related to findings and what they mean.

Icon	What it indicates
	Has a finding response from the PA
	Has a comment on the finding
	Finding has a document attached
	Finding has an Exception
	Finding has location information
1040398, 1051599, 1051604	Finding is related to other finding(s) (Finding number(s))

#### J. Promoting a Finding to MAR (MC Reviewer)

All findings that are determined to be an issue must be promoted to MAR so the resolution of the issue can be documented. All Exceptions must be promoted to MAR in order for the Exception to be created. See [Chapter 4 – Processing an Issue through MAR](#) for details.

When the MC Reviewer promotes the issue to the MAR process, the finding recommendation will be updated to “Promoted to MAR, Recommendation has not yet been made by the Project Administrator”.

Findings [1]						<a href="#">Click to Collapse</a>
<a href="#">Return to List</a>						
Finding Type	Description	Sample	FDOT Sample Number	Status		
System Generated	Sampler [M24578064] on Sample 1600019925 is not Qualified	1600019925 VT	CC20001V	Promoted to MAR		
Current Recommendation						<a href="#">Update</a> <a href="#">Undo MAR</a> <a href="#">Exclude</a> <a href="#">Relate to Other Findings</a>
Recommendation has not yet been made by Project Administrator						
Pay Items						

## K. Undoing a MAR Promotion (MC Reviewer)

If an item is inadvertently sent to MAR, or if one of the users in the MAR process selects the incorrect recommendation or resolution, the MC Reviewer can undo the process.

At this time, MAC cannot roll the finding status back one step, for example if the DCE selects the wrong recommendation, MAC cannot back it up the DMRE's recommendation. Undoing a MAR takes the finding status all the way back to the Submitted status and you start over. The PA will need to resubmit the responses. All users will need to reperform the steps up to the action that required the MAR promotion to be undone.

Findings [1]

Click to Collapse

Return to List

Submit Responses

Exclude

Relate to Other Findings

Finding Type	Description	Sample	FDOT Sample Number	Status
System Generated	Sampler [M24578064] on Sample 1600019925 is not Qualified	1600019925 VT	CC20001V	Submitted

Pay Items

## Chapter 4 – Processing an Issue through MAR

The PA is responsible for coordinating the steps of the MAR issue through to final resolution. These instructions will describe the process for issues that may require an EAR or delineation. They follow the requirements of **Construction Project Administration Manual (CPAM) Section 5.8**.

Asphalt pavement surface deficiencies have a different MAR process with different users. They are processed according to **CPAM Section 11.5**. [Chapter 5 – Processing a MAR Issue for Straightedge Deficiencies](#) describes the process for asphalt pavement surface deficiencies.

### A. Making an Initial Recommendation from the Finding Details

When an issue is Promoted to MAR, the first step is for the PA to enter an initial recommendation. There are two ways to get to the functions. This section describes how to make the initial recommendation from the findings details. By doing this, the PA has the option to review the information, comments and documents associated with the finding. Section [D. Making an Initial Recommendation from the Findings List](#) describes how to make the finding recommendation from the findings list. Because additional steps and review are usually needed, this is the preferred method.

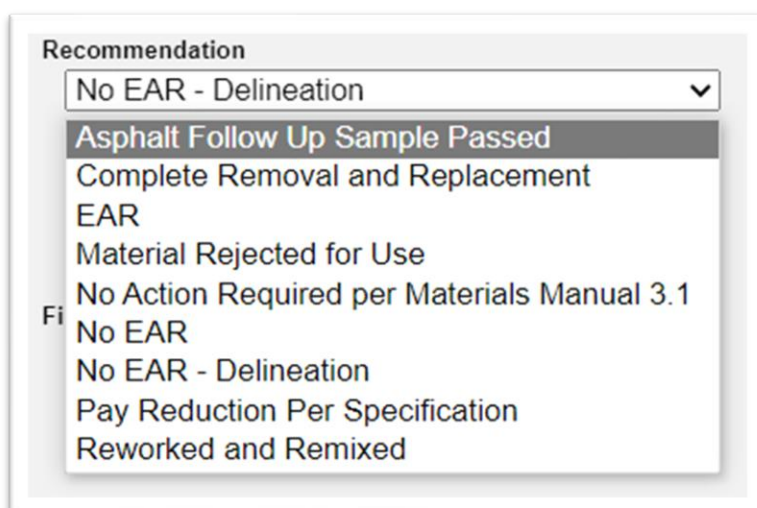
1098071	Sample 2301216973 has a failing result on required Test FM 1-T 166 Gmb - Roadway	System	2301216973 IV	Straightedge FM 1-T 166 Gmb - Roadway	MAR Resolved	10/31/2023	No EAR - Delineation [Final]	Partial Removal of Material [Final]
---------	--	--------	---------------	---	-----------------	------------	---------------------------------	--

1. On a finding with the status of Promoted to MAR, select the findings hotlink.

Sample Info					Click to Expand
Responses [2]					Click to Expand
Recommendations [1]					Click to Collapse
	Recommendation	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Project Administrator	Recommendation has not yet been made				<a href="#">Set Recommendation</a>
Resolutions [0]					Click to Expand
Locations [0]					Click to Expand

2. On the findings details, click on the Recommendations tab to expand it.
3. Click on the Set Recommendations option.

A Set Recommendation dialog box appears.

The image shows a 'Set Recommendation' dialog box. It has a title bar with the text 'Set Recommendation' and a close button (X). Inside the dialog, there are three main fields: 'Recommendation' (a dropdown menu with a red asterisk next to it), 'Comment' (a text area with up and down arrow buttons on the right), and 'Final Pay Type' (a dropdown menu). At the bottom center of the dialog is a 'Save' button.The image shows a close-up of the 'Recommendation' dropdown menu. The menu is open, showing a list of options. The first option is 'No EAR - Delineation'. The second option, 'Asphalt Follow Up Sample Passed', is highlighted with a dark background. Other options include 'Complete Removal and Replacement', 'EAR', 'Material Rejected for Use', 'No Action Required per Materials Manual 3.1', 'No EAR', 'No EAR - Delineation', 'Pay Reduction Per Specification', and 'Reworked and Remixed'.

4. **Recommendation** – select the appropriate recommendation from the dropdown.

a. **Asphalt Follow up Sample Passed** – if the follow up sample as described in **Materials Manual Section 3.1 V1**.

b. **Complete Removal and Replacement** – the material that the finding represents has been removed and replaced before the Contractor requested an EAR to leave in place. If the Contractor voluntarily removes and replaces immediately, this option should be selected.

c. **EAR** – the material meets the definition of defective material and the Contractor has requested the material be left in place and an EAR performed. The PA's recommendation is to allow the Contractor to perform an EAR.

d. **Materials Rejected for Use** – The material has been tested before placement, like a stockpile, and the material was not placed.

e. **No Action Required per Materials Manual 3.1** – this **ONLY** applies when the Department is determining to allow delineation for asphalt failures, the Air Voids are high and the results from QC and IV cores are > 6.0% and <= 7.5% as described in **Materials Manual Section 3.1 V1**.

**NOTE:** This option **only** applies to this specific finding. **Do not** select it for any other asphalt related findings. **Do not** select it for findings under any other material.

f. **No EAR** – the material meets the definition of defective material and the Contractor has requested the material be left in place and an EAR performed. The PA recommends that the Contractor not be allowed to perform and EAR or the EAR is not needed.

g. **No EAR – Delineation** – The material allows for delineation as an option to the EAR and the delineation option is being used instead of an EAR.

**NOTE:** This option does not appear on all findings. The material must allow for the use of delineation on the MAC Spec. If the PA created a manual finding, this option would not appear. For this reason, **DO NOT** create a manual finding for materials that allow the use of delineation as a resolution.

h. **Pay Reduction Per Specification** – a pay reduction has been applied per specifications that addressed the material resolution; for example, a structural concrete compressive strength failure 500 psi or less than the minimum required strength.

i. **Reworked and Remixed** – the material represented by the finding has been reworked and remixed and there are samples that represent the material that do not have any findings.

**NOTE:** When the PA selects a, b, d, e, h or i, the PA's initial recommendation becomes the final resolution and there are no other actions needed by other users such as the DMRE or DCE. The PA should enter the optional final payment information [H. Entering the Final Pay Information](#) and the location information [I. Entering the MAR Location Information](#).

5. Select the Save option to save the initial recommendation.

B. Making a Recommendation of EAR, No EAR, or No EAR - Delineation

If the PA selects c, f, or g (EAR, No EAR, or No EAR – Delineation), they should coordinate with the users in the process to ensure the MAR issue recommendations and resolutions are designated.

1. After the PA makes initial recommendation, they should notify the DMRE that the finding is awaiting DMRE initial recommendation.
2. Once the DMRE makes an initial recommendation, the DCE needs to make an initial recommendation. The PA should not notify the DCE that the finding is awaiting DCE initial recommendation.
3. If the DMRE and DCE do not concur, in some cases, the DOC, may need to make an initial recommendation. The finding will indicate if the DOC's initial recommendation is needed. The PA should notify the DOC that the finding is awaiting the DOC's initial recommendation.

C. Processing the EAR or Delineation steps outside of MAC

Once the initial recommendation of EAR, No EAR, or No EAR – Delineation is selected, the process goes outside of MAC. The PA should return to MAC when the final resolution is ready to be documented.

If the Recommendation is **EAR**:

1. The Contractor submits the scope of the EAR to the PA
2. The PA submits the EAR scope to the DMRE for their review
3. The DMRE reviews the scope and makes recommendations to the scope
4. The DMRE returns the scope with recommendations to the PA
5. The PA returns the scope to the Contractor
6. The Contractor performs the EAR
7. The Contractor submits the EAR to the PA
8. The PA comes back into MAC to continue the process
9. The PA attaches the EAR to the finding ([E. Attaching the EAR and other documents to the Finding](#))
10. The Department makes a final determination if the material must be removed or if all or part of the material can be left in place
11. The PA makes the final recommendation in MAC ([F. Making the Final Recommendation from the Finding Details](#) or [G. Making a Final Recommendation from the Findings List](#))

2. If the Recommendation is **No EAR – Delineation**:

- a. The Contractor performs the delineation
- b. The Contractor submits the delineation summary to the PA
- c. The PA comes back into MAC to continue the process
- d. The PA attaches the any delineation documentation to the finding ([E. Attaching the EAR and other documents to the Finding](#))
- e. The Department makes a final determination if the material must be removed or if all or part of the material can be left in place
- f. The PA makes the final recommendation in MAC ([F. Making the Final Recommendation from the Finding Details](#) or [G. Making a Final Recommendation from the Findings List](#))

3. If the Recommendation is **No EAR**:

- a. The Department makes a final determination if the material must be removed or if all or part of the material can be place
- b. The PA goes directly to making the final recommendation ([F. Making the Final Recommendation from the Finding Details](#) or [G. Making a Final Recommendation from the Findings List](#))

D. Making an Initial Recommendation from the Findings List

The PA can make a recommendation for a finding directly from the findings list. By selecting an initial recommendation from the finding listing, the PA has does not have the option to review the information, comments and documents associated with the finding.

From the findings list:

Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
System		1600018092 QC	Asphalt Volumetrics	Promoted to MAR	12/14/2016	No EAR		<a href="#">View Details</a> <a href="#">Set Recommendation</a> <a href="#">Update Status</a>
System		1600018094 QC	Asphalt Volumetrics	Responded	12/14/2016			<a href="#">View Details</a> <a href="#">Update Status</a>
System		1600018104 QC	Asphalt Volumetrics	Submitted	10/24/2016			<a href="#">View Details</a> <a href="#">Update Status</a>
System		1600018106 QC	Asphalt Volumetrics	Responded	12/14/2016			<a href="#">View Details</a> <a href="#">Update Status</a>

1. Select the Set Recommendations option next to the finding that is promoted to MAR.

A Set Recommendation dialog box appears.

**set Recommendation**

Recommendation ▼ ★

Comment

Final Pay Type ▼

Save

From here, the steps are the same as described in [A. Making an Initial Recommendation from the Finding Details](#).

E. Attaching the EAR and other documents to the Finding

If an EAR or delineation is used, the PA must attach the EAR or delineation documentation to the finding. This process can be used for any document that needs to be attached to the finding.

**Documents [0]** Click to Collapse

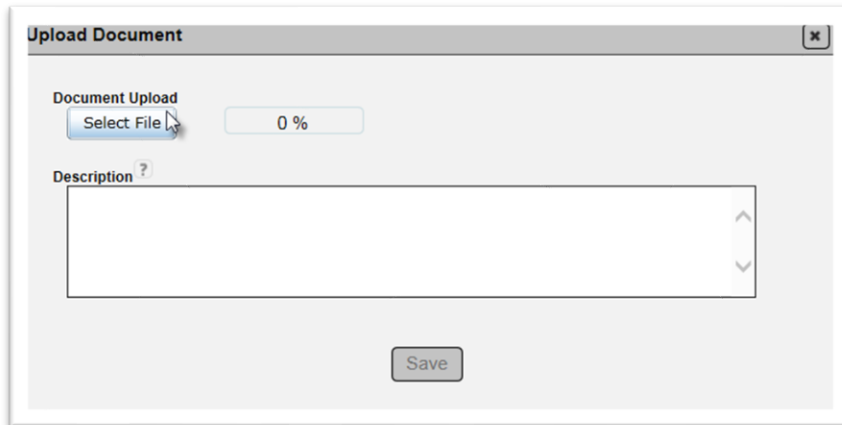
No Documents have been added

[Upload Document](#)

**Comments [0]** Click to Expand

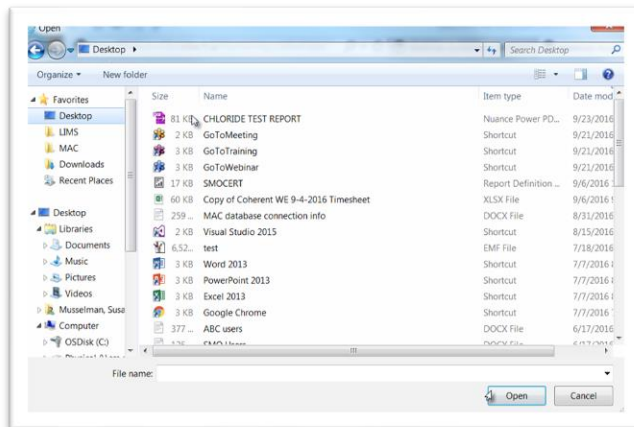
1. Click on the documents tab to expand it.
2. Select the Upload Document option.

An Upload Document dialog box appears.



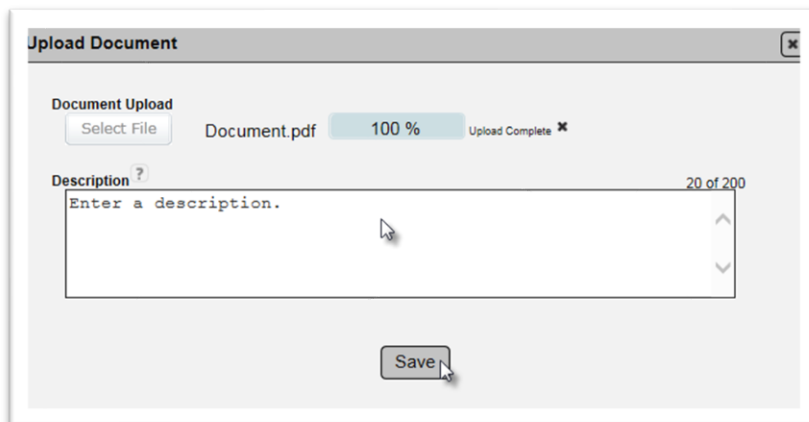
3. Click on the Select File option.

An Open dialog box will appear.



4. Navigate to the file location and click on it to select it.

5. Select the Open option to upload the document.



6. **Description** – enter a description if desired.

7. Select the Save option to upload the document to MAC.



## F. Making the Final Recommendation from the Finding Details

If EAR, No EAR, or No EAR – Delineation is selected, the PA must document the resolution of the material disposition in the final recommendation.

**NOTE:** If any other option for the initial recommendation is selected, such as Pay Reduction per Specification, it becomes the final resolution.

1098071	Sample 2301216973 has a failing result on required Test FM 1-T 166 Gmb - Roadway	System	2301216973 IV	Straightedge FM 1-T 166 Gmb - Roadway	MAR Resolved	10/31/2023	No EAR - Delineation [Final]	Partial Removal of Material [Final]
---------	--	--------	---------------	---	-----------------	------------	---------------------------------	--

1. Select the findings hotlink to navigate to the findings detail screen.

Resolutions [1]		Click to Collapse
Resolution	Comment	
Project Administrator	Resolution has not yet been made	<a href="#">Set Resolution</a>

2. On the finding detail, click on the Resolutions tab to expand it.
3. Click on the Set Resolution option.

A Set Resolution dialog box appears.

Set Resolution

Resolution

Comment

Save

Set Resolution

Resolution

Complete Removal of Material

Leave in Place

Partial Removal of Material

4. **Resolution** – select the appropriate resolution from the drop down list.
  - a. **Complete Removal of Material** – the Department's decision is to direct the Contractor to remove the material.
  - b. **Leave in Place** – the Department's decision is to allow the Contractor to leave the material in place.

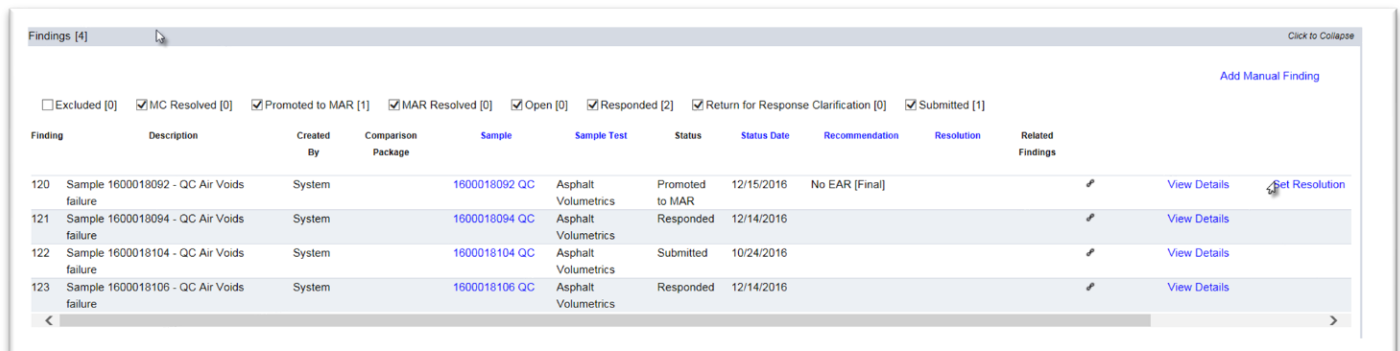
c. **Partial Removal of Material** – the Department’s decision is to allow the Contractor to leave some of the material in place but some of the material must be removed.

5. **Comment** – enter comments, if desired.

6. Select the Save option to save the PA’s recommendation for final resolution.

#### G. Making a Final Recommendation from the Findings List

PAs can set their final resolution directly on the findings list. This option does not allow the PA to enter the Final Pay information, the Location information or review any of the finding details before selecting the final recommendation.



Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
120	Sample 1600018092 - QC Air Voids failure	System		1600018092 QC	Asphalt Volumetrics	Promoted to MAR	12/15/2016	No EAR [Final]		<a href="#">View Details</a> <a href="#">Set Resolution</a>
121	Sample 1600018094 - QC Air Voids failure	System		1600018094 QC	Asphalt Volumetrics	Responded	12/14/2016			<a href="#">View Details</a>
122	Sample 1600018104 - QC Air Voids failure	System		1600018104 QC	Asphalt Volumetrics	Submitted	10/24/2016			<a href="#">View Details</a>
123	Sample 1600018106 - QC Air Voids failure	System		1600018106 QC	Asphalt Volumetrics	Responded	12/14/2016			<a href="#">View Details</a>

1. Select the Set Resolution option on the appropriate finding row.

A Set Resolution dialog box appears.

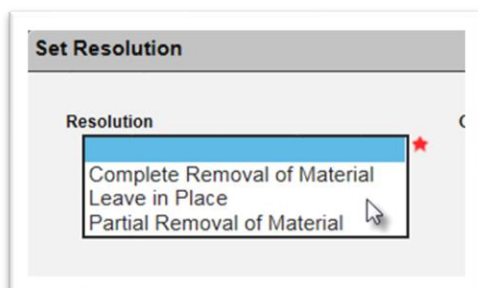


Set Resolution

Resolution: [Dropdown Menu]

Comment: [Text Area]

Save



Set Resolution

Resolution:

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

2. **Resolution** – select the appropriate resolution from the dropdown.

a. **Complete Removal of Material** – the Department’s decision is to direct the Contractor to remove the material.

b. **Leave in Place** – the Department’s decision is to allow the Contractor to leave the material in place.

c. **Partial Removal of Material** – the Department’s decision is to allow the Contractor to leave some of the material in place but some must be removed.

3. **Comments** – enter any comments, if desired.

4. Select the Save option to save the PA’s recommendation for final resolution.

#### H. Entering the Final Pay Information

The PA enters the final pay information. The information entered for final pay is not used in the MC Review process. The fields are available in MAC to document any payment issues from the final resolution; for example, reduced payment per Specification or left in place at reduced or no pay.

**NOTE:** The final pay information will appear in the dialog box for the DMRE, DCE and DOC. These users are not expected to enter the information. It is expected that the PA will record the final pay information.

There are two times when the final payment can be entered:

1. When setting the initial recommendation:



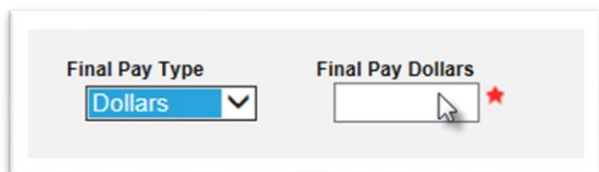
a. Select the Final Pay Type from the drop down list:



i. Dollars – if you want to record the final dollar amount paid, select Dollars.

ii. Percentage – if you want to record the final percentage paid, select Percentage.

If you select Dollars, a new field for Final Pay Dollars will appear.



iii. Enter the final dollars paid. For example, if the final payment amount is ten thousand dollars, select Dollars from the Final Pay Type drop down list, then enter 10,000 in the Final Pay Dollars field.

If you selected Percentage, a new field for Final Pay Percentage will appear.

A screenshot of a web form. On the left, there is a dropdown menu labeled 'Final Pay Type' with 'Percentage' selected. To its right is a text input field labeled 'Final Pay Percentage' with a red asterisk icon to its right. Below these fields is a 'Save' button.

iv. Enter the final percentage paid. For example, if the final payment amount is 50%, select Percentage from the Final Pay Type drop down list, then enter 50 in the Final Pay Percentage field.

b. After entering either the Final Pay Dollars or Final Pay Percentage, select the Save option.

**NOTE:** This information is not used for the purposes of the MC Review and is not needed by Materials personnel. The fields are available to Construction personnel for the purpose of documenting information that may be needed for contract administration related to the material acceptance issue.

2. To update the information after the initial recommendation is made:

Sometimes the final pay amount may not be known when the initial recommendation is made. The information can be left blank and updated later when it is known.

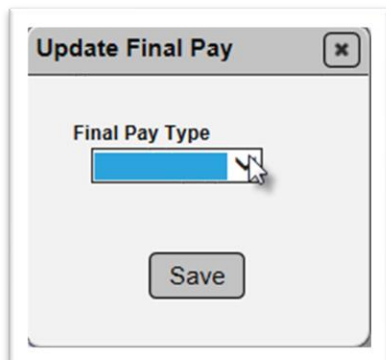
A screenshot of a web application showing a table of recommendations. The table has columns: Recommendation, Comment, Asphalt Sample, Final Pay (\$), and Final Pay (%). The first row is for the Project Administrator, with a recommendation of 'No EAR' and a blue 'Update Final Pay' link. The other rows are for District Materials Research Engineer (EAR), District Construction Engineer (No EAR), and Director Office of Construction (No EAR). Below the table is a 'Resolutions [1]' section.

	Recommendation	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Project Administrator	No EAR				<a href="#">Update Final Pay</a>
District Materials Research Engineer	EAR				
District Construction Engineer	No EAR				
Director Office of Construction	No EAR				

a. Click on the Recommendations tab to expand it.

b. Select the Update Final Pay option on the Project Administrator's row.

An Update Final Pay dialog box will appear.



Follow the instructions listed above.

# I. Entering the MAR Location Information

As part of the PA's responsibilities for processing the MAR issue, they must include the location information on the location tab. The information may not be available until after the final recommendation is complete and the material is removed or partially removed. It must be completed before the finding can be designated as an Exception. This information is used by MAC to enter the location information of the exception on PMCL. Because of this, the MC Reviewer may notify the PA if additional entries are needed or if there are issues with the current location entries.

MAC populates the PMCL Exception with the information from the Location tab.

Locations [1]												
Total Affected Quantity		Total Affected Quantity Units		Accumulative Quantity								
10.60		Cubic Yard(s)		10.6								
RCI Lanes	From Station	To Station	Latitude	Longitude	Ending Latitude	Ending Longitude	Offset Distance	Offset Direction	Reference Line	Placement Designation	Quantity	Units
1 Left Roadway	2211+09	2212+09	30.063204	-81.873771	30.063399	-81.873576	69	Left	Centerline of Construction	Left in Place	10.60	Cubic Yard(s)

**Non Standard Materials**

CONCRETE, CLASS IV  
COMPRESSIVE STRENGTH

Results for the following sample were less than the 5500(PSI) minimum compressive strength allowed by specifications.

MAC ID	Sample ID	STRENGTH(PSI)
2200915161	CC40004Q	4810

- Sample 2200915161 has a failing result on required Test ASTM C39 Compressive Strength

Ref Material ID: 346 - Portland Cement Concrete  
Sample Level: QC

Total Quantity:	10.6 Cubic Yard(s)	Accumulative Quantity:	10.6
RCI Options (Lanes):	Left Roadway	From Station:	2211+09 To Station: 2212+09
Beginning Latitude:	30.063204	Longitude:	-81.873771
Ending Latitude:	30.063399	Longitude:	-81.873576
Offset Distance:	69	Offset Direction:	Left
		Reference Line:	Centerline of Construction
Placement Designation:	Left in Place	Quantity:	10.6 Cubic Yard(s)

In accordance with 346-10, the Contractor performed an Engineering Analysis Report (EAR). The Specialty Engineer requested the original design calculations for these spread footings and reanalyzed these footings with the average 4810 PSI concrete strength. Original calculations utilized FDOT Rectangular Spread Footing MathCad version 1.0 program. Using the same input values as the original design (except for the concrete strength), the Engineer utilized the newer version (version 1.1) of the same FDOT program for reanalysis, which is the current version available. Our

**NOTE:** PAs should subscribe to the Locations Notification ([PA Notification for Location MAR Resolved Location Tab](#)).

1. Click on the Locations tab to expand it.
2. Click on the Add Locations of Representative Material option.

An Add Location of Representative Material dialog box appears. Enter the information for the entire area that is represented by the finding.

3. **RCI Lanes** – select all the lanes material was placed on.
4. **From Station** – select the beginning station for the material placement.
5. **To Station** – select the ending station for the material placement.
6. **Latitude** – enter the latitude entry for the material placement to 6 decimal places; for example, 21.123456.
7. **Longitude** – enter the beginning longitude entry for the material placement to 6 decimal places; for example, -81.123456.
8. **Ending Latitude** – enter the ending latitude entry for the material placement to 6 decimal places; for example, 21.987654.
9. **Ending Longitude** – enter the ending longitude entry for the material placement to 6 decimal places; for example, -81.987654.
10. **Offset Distance** – enter the offset distance from the surveyed reference line.
11. **Offset Direction** – enter the offset direction from the surveyed reference line.
12. **Reference Line** – enter the surveyed reference line.



13. **Placement Designation** – select the placement designation from the dropdown. This is the same information as the final resolution. It is selected again here to drive additional programming for the location information. Make sure your selection matches the final resolution.

14. **Quantity** – enter the material quantity. For example if the material quantity represented is 2,000 tons, enter 2000 in the material quantity field.

15. **Unit of Measure** – enter the unit of measure for the material quantity. For example if the material quantity represented is 2,000 tons, enter Ton(s) in the unit of measure field.

16. Select the Save option.

**NOTE:** If the Placement Designation selected is Left in Place or Removed, one entry for the overall area is sufficient. If the Placement Designation selected is Partial Removal and Replacement, subentries must now be made for each area removed and each area left in place. There may need to be more than two entries, one for all the material removed and one for all the material replaced. The overall area must be broken down by each area that was removed and each that was left in place.

1+00	2+00	3+00	4+00	5+00
[L1] Area 1	Area 2	Area 3		
[L2] Area 4	Area 5	Area 6		
[L3] Area 7	Area 8	Area 9	Area 10	

Overall Locations = L1, L2, L3 1+00 – 5+00

Orange areas were removed

Green areas were left in place

In MAC this would be represented by 11 entries – one for the overall area for L1, L2, and L3 from 1+00 to 5+00 and 10 more for each sub area removed or left in place.

To enter a sub area after the Placement Designation is Partial Removal and Replacement:

Locations [1]

Click to Collapse

Total Affected Quantity

10,000.00

Total Affected Quantity Units

Ton(s)

Accumulative Quantity

0

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

L3

1+00

2+00

21.123456

-81.123456

21.987654

21.987654

Partial Remove and Replace

10,000.00

Ton(s)

Update

Delete

Add Location of Representative Material

Showing 1 to 1 of 1

1. Select the Add Location of Representative Material option.

The Add Location of Representative Material dialog box appears again. Enter the information for the first sub area.

The screenshot shows a dialog box titled "Add Location of Representative Material". It contains the following fields and controls:

- RCI Lanes**: A dropdown menu with the value "2" selected.
- From Station**: A text input field containing the value "3".
- To Station**: A text input field containing the value "4".
- Latitude**: A text input field containing the value "5".
- Longitude**: A text input field containing the value "6".
- Ending Latitude**: A text input field containing the value "7".
- Ending Longitude**: A text input field containing the value "8".
- Offset Distance**: A text input field containing the value "9".
- Offset Direction**: A dropdown menu with the value "10" selected.
- Reference Line**: A dropdown menu with the value "11" selected.
- Placement Designation**: A dropdown menu with the value "12" selected.
- Quantity**: A text input field containing the value "13".
- Unit Of Measure**: A text input field containing the value "Start 14 ng code value".
- Save**: A button located at the bottom right of the dialog box.

2. **RCI Lanes** – select all the lanes for the first sub area.

3. **From Station** – select the beginning station for the first sub area.

4. **To Station** – select the ending station for the first sub area.

5. **Latitude** – enter the beginning Latitude entry for the first sub area to 6 decimal places; for example, 21.123456.

6. **Longitude** – enter the beginning Longitude entry for the first sub area to 6 decimal places; for example, -81.123456.

7. **Ending Latitude** – enter the ending Latitude entry for the first sub area to 6 decimal places; for example, 21.987654.

8. **Ending Longitude** – enter the ending Longitude entry for the first sub area to 6 decimal places; for example, -81.987654.

9. **Offset Distance** – enter the offset distance from the surveyed reference line for the first sub area.

10. **Offset Direction** – enter the offset direction from the surveyed reference line for the first sub area.

11. **Reference Line** – enter the surveyed reference line for the first sub area.

12. **Placement Designation** – select the placement designation for the first sub area. Select either Left in Place or Removed. From our example above, the first sub area was Removed.

13. **Quantity** – enter the material quantity for the first sub area. For example if the material quantity represented is 200 tons, enter 200.

14. **Unit of Measure** – enter the unit of measure for the material quantity. For example if the material quantity represented is 200 tons, enter Ton(s).

15. Select the Save option.

The Locations tab will be updated to include both the original overall area and the new sub area information. Fields will appear for the Total Affected Quantity and the Accumulated Quantity. The Accumulated Quantity should add up to the Total Affected Quantity when all the sub areas are entered.



Locations [2]

Click to Collapse

Location of Representative Material

Total Affected Quantity		Total Affected Quantity Units		Accumulative Quantity										
10,000.00		Ton(s)		200										
	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 L3	1+00	2+00	21.123456	-81.123456	21.987654	21.987654				Partial Remove and Replace	10,000.00	Ton(s)	<a href="#">Update</a>
2	L1	1+00	2+00	21.123456	-81.123456	21.125123	-81.123456				Removed	200.00	Ton(s)	<a href="#">Update</a> <a href="#">Delete</a>

Showing 1 to 2 of 2

16. Repeat steps 1-15 for each sub area.

When the entries are complete, if the areas do not match, the PA should correct the entries so that the sub areas indicated show fully how the overall area was designated. This information will be used as the Location Information on the PMCL and cannot be updated anywhere but here. The MC Reviewer may ask the PA for corrections or additional information if the sub areas do not fully represent the overall area or if the sub areas fall outside the overall area.

Locations [3]

Total Affected Quantity

Total Affected Quantity Units

Accumulative Quantity

5,000.00

Ton(s)

3,500

Accumulated quantity does not match total affected quantity

	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	700+00	21.000000	-80.000000	21.500000	-80.000000				Partial Remove and Replace	5,000.00	Ton(s)
2	L1	100+00	200+00	21.000000	-80.000000	21.200000	-80.000000				Left in Place	1,000.00	Ton(s)
3	L1	250+00	600+00	21.000000	80.000000	21.000000	-80.000000				Removed	2,500.00	Ton(s)

Showing 1 to 3 of 3

No entries for L2

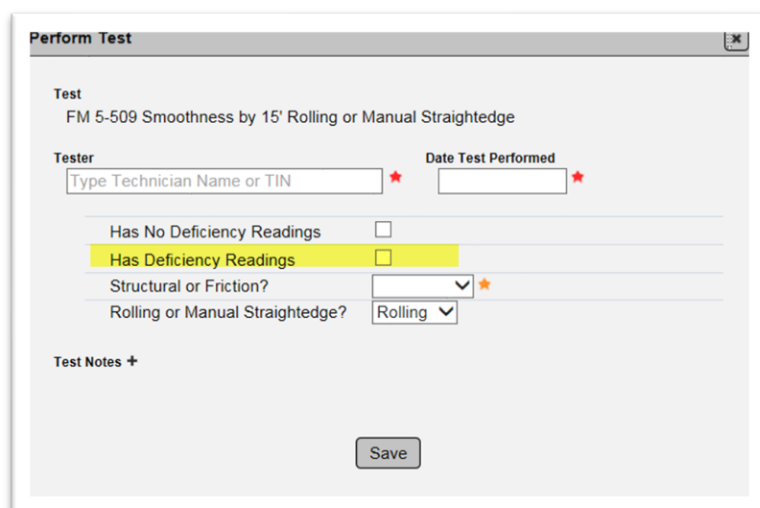
Stationing not fully represented.

Lat/Long not fully represented.

## Chapter 5 – Processing an Asphalt Pavement Surface Deficiency through MAR

Surface deficiencies from rolling straightedge (tested under test method FM 5-509) and Ride Acceptance (RI) or International Roughness Index (IRI) (tested under test method FM 5-549) are processed according to **CPAM [Section 11.5 - Testing and Correcting Asphalt Pavement Surface Deficiencies](#)**.

### A. Straightedge Deficiencies



FM 5-509 Smoothness by 15' Rolling or Manual Straightedge						
1	Initial Test	Field	M26579266	Pass *	Test Complete	Required
Showing 1 to 1 of 1						

**NOTE:** When the QC data entry select the **Has Deficiency Readings** option, the test disposition for FM 5-509 will appear as **Pass\***. This is because there are no limits set on the test definition on the MAC Spec. So it technically it does pass the targets and limits programming. However, the special programming that detects this selection as an automatic finding indicates it as a failure. If you click on the test disposition, a dialog box will appear describing the test as failing.

## B. Ride Number and IRI Deficiencies

For FM 5-549 which utilizes the laser profiler, the failing test disposition is triggered by the test targets for both the Ride Number and International Roughness Index types.

Associated Tests [1]							
		Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required
FM 5-549 Ride Acceptance (RN)							
1	Initial Test	Lab	DSM001	Zachary Neal	Fail *	Test Complete	Required
Showing 1 to 1 of 1							

1358531	Sample 2401486499 has a failing result on required Test FM 5-549 Ride Acceptance (RN)	System	2401486499 VT	FM 5-549 Ride Acceptance (RN)
---------	---	--------	---------------	-------------------------------

Associated Tests [1]							
		Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required
FM 5-549 Ride Acceptance (IRI)							
1	Initial Test	Lab	DSM001	Jesse Martin	Fail *	Test Complete	Required
Showing 1 to 1 of 1							

1358540	Sample 2401492545 has a failing result on required Test FM 5-549 Ride Acceptance (IRI)	System	2401492545 VT	FM 5-549 Ride Acceptance (IRI)
---------	--	--------	---------------	--------------------------------

The process for resolving these deficiencies is the same as for a rolling straightedge as described in [C. Making an Initial Recommendation on a Rolling Straightedge by Project Administrator \(PA\)](#) below. The only difference between rolling straightedge and RN or IRI is there is only one finding per sample for RN and IRI.

### C. Making an Initial Recommendation on a Rolling Straightedge by PA

The PA now makes the initial recommendation for each rolling straightedge deficiency reading on a sample. A sample with multiple deficiency readings will have a finding for each reading on a rolling straightedge sample.

**Test**  
FM 5-509 Smoothness by 15' Rolling or Manual Straightedge

**Tester**  
R56010198

**Date Test Performed**  
9/7/2024

Has Deficiency Readings: Yes  
Structural or Friction?: Friction  
Rolling or Manual Straightedge?: Rolling

**Total Area Tested**

	Lanes	Width (ft)	Station From	Station To	Description (Road/Street Name)	Comments
Reading 1	Ramp	15	205+80	221+46	Ramp B	
Reading 2	Right Turn Lane	12	216+44	221+46	Ramp B	
Reading 3	Ramp	15	300+36	315+54	Ramp C	

+ Add Reading   - Remove Last Reading

**Deficiency Readings**

	Lanes	Width (ft)	Begin Deficiency Station	End Deficiency Station	Total Length	Deficiency Length	Measurement	High/Low	Comments	Latitude	Longitude
Reading 1	Ramp	15	213+87	213+90	3	5	8/16	High			
Reading 2	Ramp	15	215+41	215+45	4	5	5/16	High			
Reading 3	Ramp	15	302+46	302+48	2	5	9/16	High			

+ Add Reading   - Remove Last Reading

**Test Notes**

**Findings [82]**

☐ Excluded [13]  
 ☒ MC Resolved [0]  
 ☒ Promoted to MAR [1]  
 ☒ MAR Resolved [5]  
 ☒ Open [0]  
 ☒ Responded [0]  
 ☒ Return for Response Clarification [2]  
 ☒ Submitted [61]

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution
<a href="#">1357439</a>	Sample 2401526523 has failed straightedge test for deficiency Reading 3	System		<a href="#">2401526523 QC</a>	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Promoted to MAR	11/18/2024		

1. Click on the finding hotlink to navigate to the findings details on a finding that has been responded to and Promoted to MAR.

**Recommendations [1]**

Recommendation	Made By	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Project Administrator	Recommendation has not yet been made				

[Set Recommendation](#)

- Click on the Recommendations tab to expand it.
- Select the Set Recommendation option.

A Set Recommendation dialog box appears.



4. Select the recommendation for the disposition of the deficiency.
  - a. **Leave in Place with Pay** – select this option if the deficiency will be left in place and payment (full or reduced) will be made to the Contractor. For example, the deficiency is caused by a manhole and the contract did not include payment to the Contractor to adjust the manholes.
  - b. **Leave in Place without Pay** – select this option if the deficiency will be left in place and no payment will be made to the Contractor.
  - c. **Remove and Replace** – select this option if the deficiency will be removed (such as by milling off a high), or replaced, such as the area was milled and repaved.
5. Final Pay Type – this is an optional field for Construction and Final Estimates. See Chapter 4, [H. Entering the Final Pay Information](#).
6. Select the Save option.

Depending on the PA's recommendation, the finding may or may not be complete at this time. See the RSE finding flow in the next section for more information.

#### D. Making a Recommendation by the Resident Engineer (RE)

The Resident Engineer or Sr. Project Engineer who has been assigned the RE role in MAC makes a recommendation per **CPAM 11.5** if the PA does not direct the Contractor to remove and replace a deficiency.

Findings [82]									
<input type="checkbox"/> Excluded [13] <input checked="" type="checkbox"/> MC Resolved [0] <input checked="" type="checkbox"/> Promoted to MAR [1] <input checked="" type="checkbox"/> MAR Resolved [5] <input checked="" type="checkbox"/> Open [0] <input checked="" type="checkbox"/> Responded [0] <input checked="" type="checkbox"/> Return for Response Clarification [2] <input checked="" type="checkbox"/> Submitted [61]									
Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution
<a href="#">1357439</a>	Sample 2401526523 has failed straightedge test for deficiency Reading 3	System		<a href="#">2401526523 QC</a>	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Promoted to MAR	11/18/2024		

1. Click on the finding hotlink to navigate to the findings details on the finding that has been responded to and Promoted to MAR.

Finding	Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test	Status
1357439	System Generated	Sample 2401526523 has failed straightedge test for deficiency Reading 3	<a href="#">2401526523 QC</a>	F049Q	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Promoted to MAR

Reading 3	Lanes	Width	Begin Deficiency Station	End Deficiency Station	Total Length	Deficiency Length	Measurement	High/Low	Comments	Latitude	Longitude
	Ramp	15	302+46	302+48	2	5	9/16	High			

Current Recommendation  
Recommendation has not yet been made by Resident Engineer

Pay Items

Sample Info [Click to Expand](#)

Responses [1] [Click to Expand](#)

Recommendations [2] [Click to Collapse](#)

	Recommendation	Made By	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Project Administrator	Leave in Place without Pay	Susan Musselman				
Resident Engineer	Recommendation has not yet been made					<a href="#">Set Recommendation</a>

2. Click on the Recommendations tab to expand it.

3. Select the Set Recommendation option.

A Set Recommendation dialog box appears showing the PA's recommendation.

Set Recommendation

Previous Recommendations

Project Administrator

Leave in Place without Pay

Recommendation

Leave in Place with Pay

Leave in Place without Pay

Remove and Replace

Comment

Save

4. Select the Recommendation from the Recommendation drop down list.

a. **Leave in Place with Pay** – select this option if the deficiency will be left in place and payment (full or reduced) will be made to the Contractor. For example, the deficiency is caused by a manhole and the contract did not include payment to the Contractor to adjust the manholes.

b. **Leave in Place without Pay** – select this option if the deficiency will be left in place and no payment will be made to the Contractor.

c. **Remove and Replace** – select this option is the deficiency will be removed (such as by milling off a high), or replaced, such as the area was area is milled and repaved.

5. Select the Save option.

**NOTE:** If the PA selected Remove and Replace for the recommendation, the RE will not be required to make a recommendation. The RE does not have to provide the Final Pay information.

#### E. Making a Recommendation by the DBE (now District Pavement Materials Engineer)

If the PA or RE do not select Remove and Replace, they are recommending the deficiency be left in place. Per **CPAM 11.5**, the District Pavement Materials Engineer then makes a recommendation. It is always followed by the DCE's recommendation ([F. Making a Recommendation by the District Construction Engineer \(DCE\)](#)) and concurrence is not required. The DOC is no longer required to make recommendations for asphalt pavement surface deficiencies.

Findings [82]									
<input type="checkbox"/> Excluded [13] <input checked="" type="checkbox"/> MC Resolved [0] <input checked="" type="checkbox"/> Promoted to MAR [1] <input checked="" type="checkbox"/> MAR Resolved [5] <input checked="" type="checkbox"/> Open [0] <input checked="" type="checkbox"/> Responded [0] <input checked="" type="checkbox"/> Return for Response Clarification [2] <input checked="" type="checkbox"/> Submitted [61]									
Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution
<a href="#">1357439</a>	Sample 2401526523 has failed straightedge test for deficiency Reading 3	System		<a href="#">2401526523 QC</a>	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Promoted to MAR	11/18/2024		

1. Click on the finding hotlink to navigate to the findings details on the finding that has been responded to and Promoted to MAR.

Findings [82]											
<a href="#">Return to List</a>											
Finding	Finding Type	Description				Sample	FDOT Sample Number	Sample Package Test			
1357439	System Generated	Sample 2401526523 has failed straightedge test for deficiency Reading 3				<a href="#">2401526523 QC</a>	F046Q	FM 5-509 Smoothness by 15' Rolling or Manual			
Reading 3	Lanes Ramp	Width 15	Begin Deficiency Station 302+46	End Deficiency Station 302+48	Total Length 2	Deficiency Length 5	Measurement 9/16	High/Low High	Comments	Latitude	Longitude
Current Recommendation											
Recommendation has not yet been made by District Bituminous Engineer											
Pay Items											
Sample Info											
Responses [1]											
Recommendations [3]											
	Recommendation	Made By		Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)				
Project Administrator	Leave in Place without Pay	Susan Musselman									
Resident Engineer	Leave in Place without Pay	Susan Musselman									
District Bituminous Engineer	Recommendation has not yet been made						<a href="#">Set Recommendation</a>				

2. Click on the Recommendations tab to expand it.  
3. Select the Set Recommendation option.

A Set Recommendation dialog box appears showing the PA and RE's recommendation.

The 'Set Recommendation' dialog box displays 'Previous Recommendations' for the Project Administrator and Resident Engineer, both set to 'Leave in Place without Pay'. The 'Recommendation' dropdown menu is open, showing options: 'Leave in Place with Pay', 'Leave in Place without Pay', and 'Remove and Replace'. A 'Comment' text area and a 'Save' button are also visible.

4. Select the Recommendation from the Recommendation drop down list.
  - a. **Leave in Place Full Payment** – if the deficiencies were left in place at full payment.
  - b. **Leave in Place No Payment** – if the deficiencies were left in place at no payment.
  - c. **Leave in Place Reduced Payment** – if the deficiencies were left in place and payment was reduced.
  - d. **Remove and Replace** – if the deficiencies were removed and replaced.
5. Select the Save option.

#### F. Making a Recommendation by the District Construction Engineer (DCE)

If the PA and or RE do not direct the Contractor to remove and replace the deficiency, once the DBE has made a recommendation for Materials, the District Construction Engineer makes the final recommendation. Rolling Straightedge deficiencies are considered to be resolved at this point and no entries are required on the Resolutions tab.

Findings [82]									
<input type="checkbox"/> Excluded [13] <input checked="" type="checkbox"/> MC Resolved [0] <input checked="" type="checkbox"/> Promoted to MAR [1] <input checked="" type="checkbox"/> MAR Resolved [5] <input checked="" type="checkbox"/> Open [0] <input checked="" type="checkbox"/> Responded [0] <input checked="" type="checkbox"/> Return for Response Clarification [2] <input checked="" type="checkbox"/> Submitted [61]									
Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution
<a href="#">1357439</a>	Sample 2401526523 has failed straightedge test for deficiency Reading 3	System		<a href="#">2401526523 QC</a>	FM 5-509 Smoothness by 15' Rolling or Manual Straightedge	Promoted to MAR	11/18/2024		

1. Click on the finding hotlink to navigate to the findings details on the finding that has been responded to and Promoted to MAR.



Findings [82]

[Return to List](#)

Finding	Finding Type	Description	Sample	FDOT Sample Number	Sample Package Test
1357439	System Generated	Sample 2401526523 has failed straightedge test for deficiency Reading 3	<a href="#">2401526523 QC</a>	F046Q	FM 5-509 Smoothness by 15' Rolling or Manual Str

Reading 3	Lanes	Width	Begin Deficiency Station	End Deficiency Station	Total Length	Deficiency Length	Measurement	High/Low	Comments	Latitude	Longitude
	Ramp	15	302+46	302+48	2	5	9/16	High			

Current Recommendation  
Recommendation has not yet been made by District Construction Engineer

Pay Items

Sample Info

Responses [1]

Recommendations [4]

	Recommendation	Made By	Comment	Asphalt Sample	Final Pay (\$)	Final Pay (%)
Project Administrator	Leave in Place without Pay	Susan Musselman				
Resident Engineer	Leave in Place without Pay	Susan Musselman				
District Bituminous Engineer	Remove and Replace	Susan Musselman				
District Construction Engineer	Recommendation has not yet been made					

[Set Recommendation](#)

2. Click on the Recommendations tab to expand it.
3. Select the Set Recommendation option.

A Set Recommendation dialog box appears showing the PA, RE and DBE's recommendation.

**Set Recommendation**

Previous Recommendations

Project Administrator	Leave in Place without Pay
Resident Engineer	Leave in Place without Pay
District Bituminous Engineer	Remove and Replace

Recommendation

Comment

Leave in Place with Pay

Leave in Place without Pay

Remove and Replace

Save

4. Select the Recommendation from the Recommendation drop down list.
  - a. **Leave in Place Full Payment** – if the deficiencies were left in place at full payment.
  - b. **Leave in Place No Payment** – if the deficiencies were left in place at no payment.
  - c. **Leave in Place Reduced Payment** – if the deficiencies were left in place and payment was reduced.
  - d. **Remove and Replace** – if the deficiencies were removed and replaced.
5. Select the Save option.

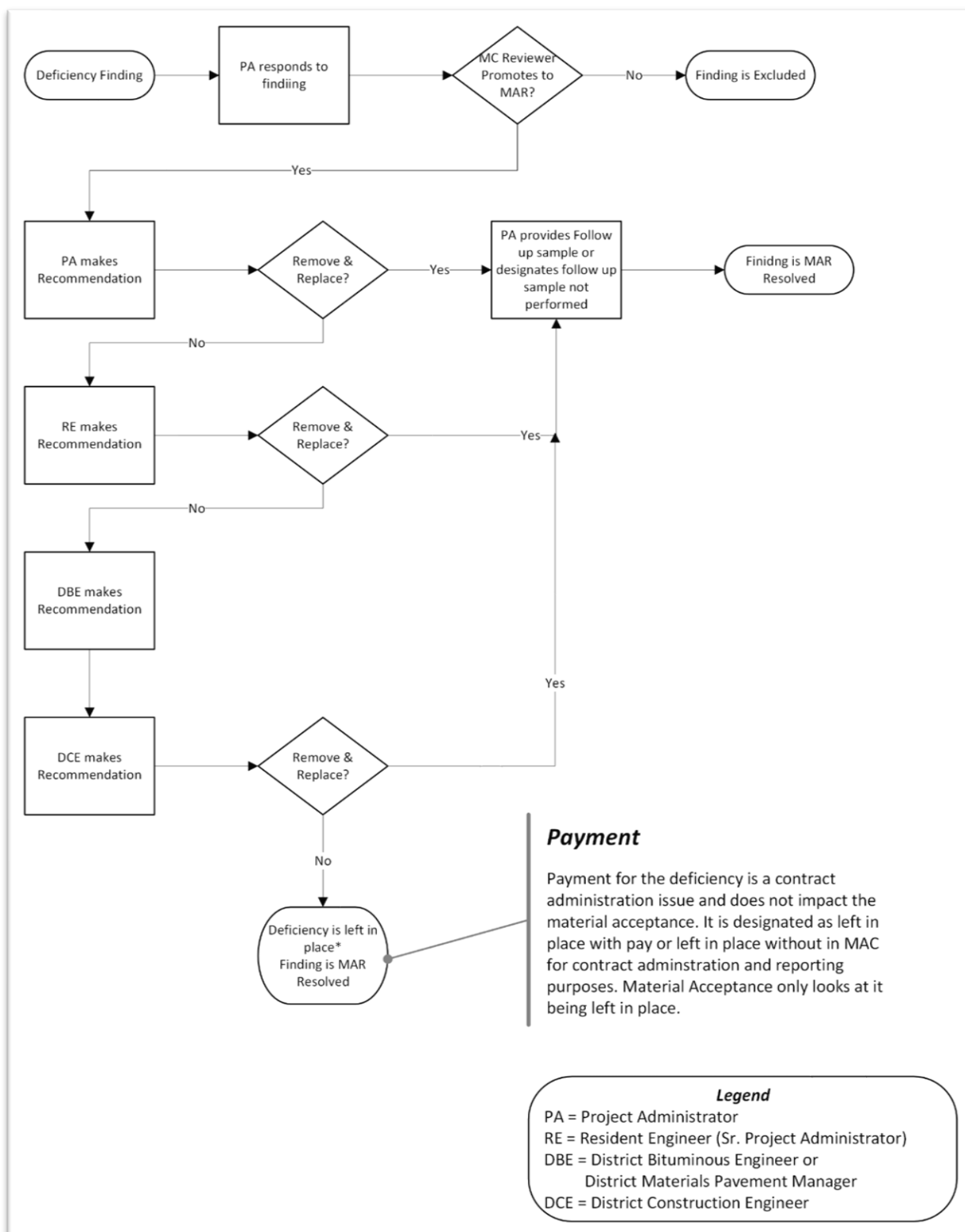
## G. Straightedge Deficiency Location Information

Straightedge deficiencies need information location tab as well. The instructions for entering the location information are the same as in Chapter 4, [I. Entering the MAR Location Information](#).

You may need fields from the QC test results. If QC does not include results in the fields, return the sample for test corrections, and request the information be provided. It should be included in all deficiencies being left in place that are MAR Resolved.

Deficiency Readings											
	Lanes	Width (ft)	Begin Deficiency Station	End Deficiency Station	Total Length	Deficiency Length	Measurement	High/Low	Comments	Latitude	Longitude
Reading 1	L1	12	159+25	159+18	7	7	7/16	High	Mill and Replace		
Reading 2	L1	12	159+09	158+99	10	10	5/16	High	Mill and Replace		
Reading 3	L1	12	158+83	158+81	2	5	5/16	Low	Mill and Replace		

## H. Asphalt Pavement Surface Deficiency Recommendation Process



## Chapter 6 – Earthwork Records System (ERS) MC Review

Some ERS MC Review issues are automatically identified by MAC. The ERS portion of the MC Review appears on the MC Review as a tab with ERS findings. The ERS MC Review process is the same as the functions for MC Review findings as described in this manual.

In order for the ERS findings tab to appear, MC Reviewers may need to recalculate the MC Review. If the tab does not appear upon recalculation, there are no ERS findings yet. Any regular finding detected by MAC such as failing test results or unqualified technician will appear as an automatic finding.

Findings [37]

Click to Expand

ERS Findings [1]

Click to Collapse

☐ Excluded [0]

☒ MC Resolved [0]

☒ Promoted to MAR [0]

☒ MAR Resolved [0]

☒ Open [0]

☒ Responded [0]

☒ Return for Response Clarification [0]

☒ Submitted [1]

Finding

Description

Created By

Comparison Package

Sample

Sample Test

Status

Status Date

Recommendation

Resolution

Related Findings

1156263

Sample 2201011304 has a failing result on required Test ERS: FM 1-T 238 Nuclear Density

System

2201011304 VT

ERS: FM 1-T 238 Nuclear Density

Submitted

4/4/2024

View Details

Update

<

>

Showing 1 to 1 of 1

Export Results

MAC sends a finding to the ERS tab when:

- An automatic finding on an ERS sample
  - Example of a failing test notification on a sample with an ERS test
    - Populated under the ERS Findings tab

1160984	Sample 2301136657 has a failing result on required Test ERS: FM 1-T 238 Nuclear Density	System		2301136657 VT	ERS: FM 1-T 238 Nuclear Density	Submitted	3/28/2024
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- Example of a failing test notification on a sample that is not an ERS sample or with an ERS test
  - Populated under the Findings tab

1161103	Sample 2401334565 has a failing result on required Test FM 1-T 166 Gmb - Roadway	System		2401334565 IV	FM 1-T 166 Gmb - Roadway	Submitted	3/28/2024
---------	--	--------	--	---------------	--------------------------	-----------	-----------

- A manual finding is created on an ERS sample regardless of the Finding Type

The screenshot shows the 'Add Manual Finding' form. The 'Finding Type' dropdown is set to 'Sample Data Issues'. A blue callout bubble points to this dropdown with the text 'Does not have to be ERS when an ERS sample is selected'. The 'Sample' field contains the value '2301061113'. A blue callout bubble points to this field with the text 'This is an ERS sample'. The 'Description' field is empty. The 'Comparison Package' and 'Sample Package Test' dropdowns are also empty. A 'Create' button is at the bottom right.

- A manual finding is created for the ERS finding type

The screenshot shows the 'Add Manual Finding' form. The 'Finding Type' dropdown is set to 'ERS'. The 'Sample' field contains the placeholder text 'Type Sample Id'. The 'Description' field is empty. The 'Comparison Package' and 'Sample Package Test' dropdowns are also empty. A 'Create' button is at the bottom right.

ERS IA Project Reviewers evaluate many items in the ERS data. Not all will appear as an ERS finding in the MC Review. They may find issues with the plots being incorrect. The MAC ERS reports used by the ERS IA Project Reviewers detect issues with gauges, test depth, etc. PAs should expect to coordinate resolving to ensure that they will not result in an ERS finding for example, incorrect plots that result in a missed field density test.

## Chapter 7 – Work Order and Permit MC Reviews

With the implementation of Work Order nonstandard JGS (NSJGS), MC Reviews can be conducted per Work Order.

On an MC review with a Work Order NSJGS, each Work Order will have its own tab under the Findings tab. Under each Work Order tab, will be two subtabs, one for ERS findings and one for MC Review Findings.

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
1357407	Tester (A01234567) on Sample 2401577715/Test ERS: FM 1-T 310 Nuclear Density is not Qualified	System		2401577715 QC	ERS: FM 1-T 310 Nuclear Density	Submitted	11/18/2024			<a href="#">Update Status</a>

Showing 1 to 1 of 1 [Export Results](#)

**Findings [7]**

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
1357456	Laboratory 10903 - XYZ Testing testing Sample 2401577688/Test ASTM C39 Compressive Strength is not Qualified	System		2401577688 VT	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357455	Laboratory 10902 - ABC Road and Bridge Construction testing Sample 2401577687/Test ASTM C39 Compressive Strength is not Qualified	System		2401577687 QC	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357454	Tester (V2378989) on Sample 2401577687/Test ASTM C39 Compressive Strength is not Qualified	System		2401577687 QC	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357453	Laboratory 10902 - ABC Road and Bridge Construction testing Sample 2401577686/Test ASTM C39 Compressive Strength is not Qualified	System		2401577686 QC	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357452	Laboratory 10902 - ABC Road and Bridge Construction testing Sample 2401577685/Test ASTM C39 Compressive Strength is not Qualified	System		2401577685 QC	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357451	Laboratory 10902 - ABC Road and Bridge Construction testing Sample 2401577684/Test ASTM C39 Compressive Strength is not Qualified	System		2401577684 QC	ASTM C39 Compressive Strength	Submitted	11/18/2024			<a href="#">Update Status</a>
1357449	Project 420913-2-52-01 Work Order WO01 is missing an initiated JGS template	System				Submitted	11/18/2024			<a href="#">Update Status</a>

Showing 1 to 7 of 7 [Export Results](#)

Each Work Order is meant to function as its own MC Review; however since the PMCL is contract based, it will require only one PMCL to be generated. Because of the nature of the Design Build Phased contracts, the primary reason for Work Order NSJGS, the MC Review may be open for years. MC Reviewers can close Work Order reviews.

### A. Closing an Open Work Order MC Review (MC Reviewers)

When an MC Reviewer has determined that all of the work in a specific work order is completed and the data for materials acceptance is completed, they may close the work order MC Review.

Finding	Description	Created By	Comparison Package	Sample	Sample Test	Status	Status Date	Recommendation	Resolution	Related Findings
1161802	Sampler (M24578064) on Sample 2401357705 is not Qualified	System		2401357705 QC		MC Resolved	4/4/2024			<a href="#">View Details</a> <a href="#">Update</a>
1161801	Sample 2401357698 has less than 3 specimens on required test ASTM C39 Compressive Strength	System		2401357698 IV	ASTM C39 Compressive Strength	MAR Resolved	4/4/2024	Pay Reduction Per Specification [Final]		<a href="#">View Details</a> <a href="#">Update</a>

[Close Work Order](#)

When a Work Order is closed:

- No additional samples can be added to the system for that Work Order
- No changes can be made to existing samples
- Existing samples cannot be deleted
- Work Order NSJGS cannot be updated or deleted and entries on the NSJGS cannot be deleted
- The Contractor QC Plan can be updated or deleted since it is contract based and needs to remain open until the PMCL is generated.

In order to close a Work Order MC Review, all findings must have a status of either Excluded, MC Resolved or MAR Resolved.

B. Reopening a Close Work Order MC Review

On a Work Order designated as Closed, the MC Review can select Reopen Work Order option. The Work Order MC Review will be reset to Open. All records that were previously locked down are reopened.

C. Permit Project MC Review

With the implementation of permit project in MAC, an MC Review can now be created for some permit projects, for example, a pedestrian bridge being constructed outside FDOT right of way but crossing over the state highway system. The review and processing of findings is the same for these entries. In most cases, an MC Review for a permit project will not also be Work Order based.

## Chapter 8 – MC Review Reports

There are several reports designed to assist the PA and MC Reviewer with identifying MC Review issues. Some are designed for processes related to MC Review, such as open sample reports and other are specific to the MC Review such as Project Findings. Here are the MAC reports and how a PA can use them for MC Review.

### A. Missed Frequency

These reports can be found on the Reports Page under the Sample Tab.

#### 1. ***APL/BABA Tracking Spec Summary***

This report provides a list of all the project MAC Specs with a category of APL and BABA tracking and categories that align with the APL Spec categories. It can be used by PAs to determine if there are requirements in MAC that may not have been assigned to their JGS entries. For more information, see the [APL Tracking and Materials Certification Review](#) instructions.

#### 2. ***QCP Materials Versus***

This report is specifically for Materials 948 (Flexible Pipe), 967 (Guardrail), and 932FRP (Fiber Reinforced Polymers). It serves two purposes. If there are these material types on the Contractor Quality Control Plan, it identifies if there are samples in MAC for them. These material types are used less frequently and tend to be overlooked. The second purpose is when there are samples, it identifies if the material type is listed on the Contractor QC Plan. This assists the PA with ensuring compliance with ***Specifications Section 105***. See the [FDOT Contractor QC Plan Review](#) instructions.

#### 3. ***SMO Certification Summary***

Not all MAC Specs with a certification document require the document to be logged into MAC for SMO review. This report provides a list of all the project MAC Specs with a certification MOA that designates it is to be reviewed by SMO. It can be used by PAs to determine if there are requirements in MAC that may not have been assigned to their JGS entries. For more information, see the [Certification Documents Reviewed by the State Materials Office](#) instructions.

These Reports can be found under the Project tab.

#### 4. ***APL Project Tracking Summary***

This report sounds similar to the APL/BABA Tracking Spec Summary report, but it differs in that it is specific to a single Project JGS entry. PAs can use this report to see what may require an APL MOA, determine if the requirement applies to their project and if the sampling frequency of 1 per product has been met.



5. ***Asphalt Sample Number – Lot Number Report***
6. ***Concrete Sample Number – Lot Number Report***
7. ***Earthwork Sample Number – Lot Number Report***

The sample number lot number reports work with the material sample numbering systems. The numbering systems are designed so that when the samples appear in the report, it can be relatively easy to see that there is a missed frequency for asphalt plant, structural concrete or Earthwork / Soils lab samples.

Things the PA should watch for are:

- If it appears that a sample is missing within the LOT, check the FDOT Sample Number
  - Samples not following the numbering system will be thrown out of order, maybe at the top or bottom of the list depending on the error
    - CC1001V mistyped as CC101V will sort closer to the top
    - CC1001V mistyped as CC100001V will sort closer to the bottom
- The report is meant to quickly show missed samples with whatever samples exist
  - It cannot identify when samples should have been taken and were not
    - For example, the last four lots of a material were not sampled

## 8. ***Reduced Lot Analysis***

This report is used by QC Manager and PAs to confirm that a project is eligible for concrete reduced lots as specified in ***Specifications Section 346***. Using this report ensures the analysis meets the requirements spelled out in the Specifications consistently across the state.

## 9. ***SMO Certification Tracking***

This report sounds similar to the SMO Certification Tracking Spec Summary report, but it differs in that it is specific to a single Project JGS entry. PAs can use this report to see what may require a certification document to be reviewed by SMO, determine if the requirement applies to their project and if the sampling frequency has been met.

### B. **Non-standard Material**

These reports can be found on the Reports Page under the Sample Tab.

#### 1. ***Asphalt Content Test Report***

This report was originally developed to identify asphalt content results, particularly those that are failing. Previously, MAC MC Review finding programming related to QC sample failures did not catch all the potential findings. Recent updates have corrected this. The report is still a good summary of the test results: passing, failing or both.

## **2.     *Asphalt Roadway Density Report***

Like the Asphalt Content Test Report, this report was originally developed to identify asphalt roadway density results, particularly those that are failing. Previously, MAC MC Review finding programming related to QC sample failures did not catch all the potential findings. Recent updates have corrected this. The report is still a good summary of the test results: passing, failing or both.

## **3.     *Asphalt Sample Pay Factor Report***

Not all users have access to the Close Out Sample comparison package screen. This report can be used to summarize the Pay Factor from many aspects, including by project.

**NOTE:** The Composite Pay Factor Report for In-Progress Lot is intended for the QC Manager as a way to monitor a LOT that is still in progress and is not intended for Lots that have been completed.

## **4.     *Gradation Failure Report***

Like the Asphalt Content Test Report and Asphalt Roadway Density Report, this report was originally developed to identify asphalt gradation results, particularly those that are failing. Previously, MAC MC Review finding programming related to QC sample failures did not catch all the potential findings. Recent updates have corrected this. The report is still a good summary of the test results: passing, failing or both.

## **5. *Rolling Straightedge Summary***

This report is designed to provide a summary of the rolling straightedge samples. PAs can use this report to summarize all the samples, or just the samples with deficiencies.

These Reports can be found under the Project tab.

## **6.     *All Materials Compares***

This report is not specifically for project information and does not necessarily indicate non-standard material. It can be used by the PA to summarize any existing comparison package on the project and if it compared or not. It will summarize the comparisons by facility id to assist in determining if non-comparisons may be related to the production facility.

## **7.     *Asphalt Segregation Report***

This report provides a summary of any asphalt segregation samples and results.

## **8. Concrete Pavement Core-Out Averages**

Prior to MAC implementation, PAs had to develop their own summary for concrete pavement cores and designate pavement deficiencies. Now that the test is recorded in MAC, this report is designed to document both MC Review deficiencies and information required for Final Estimates average thickness calculations. By utilizing the report, PAs do not need to develop an alternate method. In fact, this is discouraged. PAs should utilize this report to ensure the calculations are consistent on every project. Also, there are no failing test results for these samples. **PAs need to generate this report when the concrete pavement is completed and create manual findings for any deficient thicknesses left in place.**

## **9. Concrete Project Test Results**

This report summarizes the finalized concrete sample test results and highlights any that do not meet the Specification limits. MAC should be flagging these samples. The report is meant to provide the PA with an overall summary. It also assists with failures to help determine if a failure might be eligible for a pay reduction per Spec or if it is severe enough to require a structural analysis. The report itself cannot be used for this determination but it does indicate if the psi portion of the determination is < or > 500 psi.

## **10. Earthwork Sample Analysis**

This report provides a summary of finalized earthwork / soils lab samples including graphs of any proctor curves. It highlights issues with the samples in bold, red font.

## **11. ERS – Base Thickness Report**

Like the Concrete Pavement Core-Out Averages report, the ERS – Base Thickness report is intended for both MC Review and Final Estimates purposes. It differs in three ways:

- Instead of PAs having to come up with their own calculations, PAs previously used the Construction ENGMENU program for the Final Estimates Final Report
  - This report replaces that process and entries into ENGMENU are no longer required
- It can be generated as the project is progressing for issues related to the ERS Project or PA functions or it can be generated at the end of the project for Final Estimates payment purposes
  - Use the Earthwork Office View for on-going monitoring
  - Use the Estimates Office View for the final report that replaces what would have been generated by ENGMENU
- Samples with deficient thickness are flagged as findings in the MC Review
  - PAs do not need to create manual findings

## **12. ERS – Density**

This report provides a summary of earthwork ERS field samples. It does include information for samples that are not yet finalized to assist the PA with determining if a sample is open. It highlights many issues, including many of the paper logbook review items that may not be an MC Review issue.

### **C. Open Samples**

These reports can be found on the Reports Page under the Sample Tab.

#### **1. Open Sample Report**

This report is designed for the PA as a way to determine open samples. There is no indicator on any sample in MAC that states if the sample is “open” or “closed”. It is a business definition based on whether the sample has completed all required steps. Some of those steps are within the sample life cycle. For some samples, there are additional steps after the samples are finalized. See the [Project Sample User Manual](#) Chapter 1 for more information. The report has many options. For a PA who wishes to find all the open samples on a contract or project, the following options should be selected:

1. Contract or Project Id
2. Sample Status = All But Finalized
3. Missing Comparison/Resolution = Both

Additional filters can narrow down the list to a specific subset. For example, if the PA is looking for all the MAC Material 346 project samples that are open, so they can finalize them:

1. Contract Id – concrete project sample comparison packages can cross FPNs if they are in the same contract.
2. Sample Status – Pending Finalization
3. Material IDs – 346 – Portland Cement Concrete or 346 – Structural Portland Cement Concrete, depending on the material on your project.

### **D. Qualifications**

There is one report under the Projects tab that is specific to asphalt or ERS samples with a Witnessed By TIN.

#### **1. Witnessed by Technicians**

This report summarizes the samples with a requirement to enter a Witnessed By TIN. It will flag instances when the QC Technician’s TIN and the VT Witnessed By TIN are the same TIN.

## E. MC Review Reports

These reports sound similar and appear to be for the same thing, but they are for different purposes. Some reports are for all findings, some are for those promoted to MAR and some are for those that have Exceptions created.



### 1. ***MCR – Cert Process Time***

This report is intended for MC Reviewers and tabulates the time for processing the Project Materials Certification Letter (PMCL). PAs can review it to determine how long it takes the District Materials and Research Office, the State Materials Office or both to send the PMCL once it has been generated.

### 2. ***MCR – Exception by Category***

This report summarizes any Exception and groups by Exception Categories of Missed Frequency, Non-Standard Materials or Qualification. While this report can be generated for a specific project, it is meant to be used by the Materials Offices for feedback to identify potential problem areas that can be addressed by improvements in the Materials Certification review process.

### 3. ***MCR – Exceptions Report***

This report is designed to summarize the Exceptions for a specific project or the managing districts of projects. It is a subset of the MAR findings ([link](#)) that have had an Exception created.

#### **4. *MCR – MAR Findings***

The purpose of This report is to summarize and track turnaround times for project findings that have been Promoted to MAR. It shows the recommendation/ resolution status and the user who made the recommendation or resolution. It can also be run on a district basis for the purpose of tracking statuses district wide. PAs can use it to see what the latest status is of each recommendation or resolution. It is helpful with findings awaiting recommendation or resolution but can be generate for both open and closed findings.

#### **5. *MCR – MAR Process Time***

Like the MCR – MAR Findings report, this report tracks MAR findings recommendation and resolution statuses, but it has a different purpose. While the MAR Findings report lists detailed information on each finding, like the finding description and users performing the recommendations and resolutions, this report is focused on how long it takes the Department (both the PA and Materials personnel) to process a finding. It is intended to assist the PA and Materials personnel with ensuring findings are being processed in a timely manner.

#### **6. *MCR – Project Findings***

Like the MCR Exceptions report and the MAR Findings report, this report provides detailed information on findings and their statuses. Those are both subsets of this report. This report allows the PA to review all findings. Here is a visual depiction of what each report includes.