

NC Region Electronic Materials Guidance

This guide is an overview of the general process in which NCR would like to have materials finals formatted. This is not intended as a “shall follow” as different projects may require different formatting, but the general ideas are advised.

A new folder system has been adopted by DTSD. The folder system and descriptions of each folder’s contents can be found in the *NCR DTSD ConstructionProjectsFileStructure _MaterialsFinals* document. This was a statewide change, not just for NCR. The next numbered sections will detail contents for each folder ONLY as it relates to materials finals.

Note: Final material documentation is divided into two categories: 3) FinalMaterialArchive and 5) MaterialProjectRecords. Guidance on what material/bid item falls into each category is in CMM 845.5.1. Procedures for the electronic filing of these two categories are detailed in this document.

Materials	
1	BuyAmerica
2	EGuide
3	FinalMaterialsArchive
4	FinalMaterialsArchiveItems
5	MaterialsProjectRecords
6	NCNP
7	Submittals
	HMAPWL
	Part2
	Part3
	Part4
	Part5
	Part6
	QMP
	SPV

1) BuyAmerica Folder

This can be used as a working folder for BABA documentation. Documents that may be stored here are drafts for: DT4567 Buy America Certification, exception spreadsheet, invoices.

2) EGuide Folder

This folder can be used for draft EGuide documents such as what is sent to the contractor at project start.

3) FinalMaterialArchive Folder











Files in this folder must be final pdf form. The following final documents will be saved in this folder.

Note: *There is no longer a Finals>MaterialsFinals folder in box, do not create a new one. Everything will be housed out of the main Materials folder for your project and as described below.*

Final Materials Archive Folder Content Guidance

In the folder will only be final documents that are prepared for material finals submittal. You will need to save the following *final* documents in this location: 905 reports, 155 reports, DT1310 Certification of Materials, DT4567 Buy America Certification, EGuide, and *create* a FinalMaterialArchiveItems folder (more on this below in Section 4). The naming conventions below are consistent with DT2075.

Example content for FinalMaterialsArchive folder:

Name
 FinalMaterialArchiveItems
 16200061_155-0004-2023.pdf
 16200061_155-0005-2023.pdf
 16200061_155-0006-2026.pdf
 16200061_155-0007-2023.pdf
 16200061_905-0003-2023.pdf
 16200061_DT1310.pdf
 16200061_DT4567.pdf
 16200061_EGuide.pdf
 16200061_NCNP_460.6424.docx

3a) 155 Reports

Save all final 155 Reports as printed from MIT or Atwoods as projectID_155-XXX-XXXX.pdf
Guidance for 155 Reports on Pantry under QMP Form Templates [Statewide forms](#)

3b) 905 Reports

Save all final 905 reports as printed from MIT or Atwoods as projectID_905-XXX-XXXX.pdf
See Exhibit A – Example 905 Report

3c) Final DT1310

Save the final DT1310 Certification of Materials as printed from MIT as projectID_DT1310.pdf.

3d) Final DT4567

Save the final DT4567 Buy America as projectID_DT4567.pdf

3e) Final EGuide

Save the final marked up EGuide in the FinalMaterialArchive folder as projectID_EGuide.pdf. The EGuide PDF should be one document, marked up to add 905 report number (if only one 905 report number is generated for the project, it is not required for every page of the EGuide), bid item IDs, document IDs, items not being used are crossed off, and all other required information. Items in the EGuide that are covered under Material Project Records can remain in the EGuide but reference the MaterialProjectRecords folder for documents. Save as projectID_EGuide.

Exhibit B – Example of final marked up EGuide page.

3f) Signed NC/NP Form(s)

Save final NC/NP forms as projectID_NCNP-Item. Remove either the “nonconformance” or “non-performance” name from the document to be clearer if it is a conformance or performance issue. A form should be created for each item that has a NP/NC issue. This form is used for filling in an FHWA spreadsheet and provides the details necessary to do so. A blank NC/NP form is located on the Statewide Pantry under QMP found [here](#).

4) FinalMaterialsArchiveItems Folder

This folder needs to be created by project staff which shall be located here Box>Project-ID>Materials>FinalMaterialArchive>FinalMaterialsArchiveItems. In the FinalMaterialsArchiveItems folder create item folders as broken down by the EGuide (you will have a folder for each EGuide item), specific for items in the contract (example screenshots below). Each item folder will contain reference documents that have specific information for that item only (just as previously done with documents following the EGuide item sheet). Files used for the reference documents shall have the same name as detailed in the 905 entries. Markup the item reference docs with Doc. ID labels and page numbers. All reference documents must be checked, dated, and initialed by project personnel. See [CMM 845.3.2](#) and the Project Guide Requirements for Material Archives at the start of the EGuide for more information on what to mark up on these documents.




Example of content in FinalMaterialsArchiveItems folder:

- 305.0110 - Base Aggregate Dense .75-Inch
- 305.0120 - Base Aggregate Dense 1.25-Inch
- 416.0160 - Concrete Driveway 6-inch
- 416.0610 - Drilled Tie Bars
- 455.0605 - Tack Coat
- 460.6424 - HMA Pavement 4 MT 58-28 H
- 465.0105 - Asphaltic Surface
- 602.1500 - Concrete Steps



The following items shall be located in each FinalMaterialsArchiveItems folder following this additional guidance:

- In each item folder shall contain:
 - QMP documents
 - Test Reports (any MIT/MTS prefix report) not including the 155 nor 905 reports
 - Backup Documentation (Cert report of tests, mfr cert, Buy America, etc.)
 - Approved List (with material highlighted)
- Each document should be labeled with a document ID and it is recommend to add page numbers to the document
 - **If the documentation is included in another item**, note location of documentation on EGuide sheet and the 905 Diary Entry will reference the other item in the Basis for Acceptance (BFA)
 - Example: Item 646.0106 Pavement Marking Epoxy Line 4-Inch and Item 647.0196 Pavement Marking Arrows Epoxy Type 4 are both on the project.
 - The information for both items is the same, but the bid items are on different EGuide sheets. Under the first bid item (646.0106), place all documentation in the first item's folder. For bid item 647.0196, write on the EGuide sheet "See Item 646.0106 Pavement Marking Epoxy 4-Inch for documentation."
- Item of Concrete (as referenced in EGuide Sheets) – Class I & II
 - Create a separate Item of Concrete and 905 report for **EACH** Batch Plant / Production Facility.
 - Create a 155 report for **EACH** mix design and contractor. Include quantity breakdowns for **EACH** mix design/mix grade, placement method and class.
 - Example naming convention for concrete documents: 1.CONC.1a, 1.CONC.1b, 1.CONC.1c, etc. so these documents appear in alphabetical order in the box folder
- Item of Concrete – Class III
 - Create an Item of Concrete and 905 report that includes all Class III concrete if a mix design and certificate of compliance was not provided, otherwise reference them from the appropriate bid item 905 entry.
 - If Class III concrete is from the same concrete plant and mix design used for Class I or II, a separate 905 is not required. An entry can be added to the Class I/II 905 report called out as the Class III concrete.

Example of item folder content:

-  305.0110.01 Bugar R Quarry Quailty Test 0-225-0227-2021.pdf
-  305.0110.02 QMP Base Plan AET_AET-106133-1.rev_1QMP.pdf
-  305.0110.03 Stockpile Sample Bugar R Quarry AET_AET-105249-2.pdf

Or

-  416.0610.A APL reinforcement-coating.pdf
-  416.0610.B Drilled Tie Bar Certification.pdf

5) MaterialsProjectRecords Folder

Documentation for items in this category are not entered on the 905 report(s), included on the DT1310, nor submitted to TSS materials for review. Subfolders may be created in this folder as seen fit by project staff. Creating folders for bid items will likely improve organization of this folder. See [CMM 845.5.1.1](#) for further guidance.

5a) MaterialProjRecordsChklst NCR

This spreadsheet summarizes the MaterialsProjectRecords folder items from CMM 845.5.1 into a spreadsheet checklist. The spreadsheet will provide guidance on what contents are in the folder but only covers standard bid items. The intent of this spreadsheet is to aid on clarity of what items shall be filed in the MaterialsProjectRecords folder.

5b) DT1349

Final source of materials document shall be saved in the MaterialsProjectRecords folder.

5c) Final DT1345

Save the final DT1345 Materials Project Records Deviation Log document in this folder. This document provides reasoning for the Materials Project Records items that are not shown on the DT1310 which are varied from specification requirements.

6) NCNP

This folder can be used for working or draft documents for nonconformance/nonperformance issues. For questions on these documents contact Taylor Christianson (WIS) or Chris Peplinski (RHI).

7) Submittals Folder

- This folder can be used as a working folder should the project staff want to use it that way.
- The main thing the region will be looking for in it are PWL records as the project progresses as test strip and productions spreadsheets shall be stored there.

- QMP plans will be initially saved in the Box>Project-ID>Materials>Submittals>QMP folder. These final documents will be in each FinalMaterialsArchiveItems folder for final materials submittals. QMP plans need to be labeled in accordance with [CMM 845](#).

Paper archives:

Digital archives are required for 2024. If you have a carryover project from 2023 and started it as paper, a paper submittal would be acceptable. If you must do a paper copy, reach out to the Region IAs to discuss.

For any changes or edits to this document contact Wisconsin Rapids Soils, Pavements, and Materials Engineer, Taylor Christianson 715-315-8029.

If there are any questions with the materials finals process or a variance from this guidance is desired contact an NCR Region IA.

- Wisconsin Rapids IA: **Brent Ferguson** 715 421-8094
- Rhinelander IA: **Steven Hunter** 715 365-5753

Test Number: 977.893 - 905 - 0003 - 2023

Lab Site
Lab Site Info

Materials Laboratory Testing System Tests On:
Materials Diary Inspection

Main Project ID: 1620-00-61

Date Entered: 07/27/23 **By:** Inspector

Category:

Bid Item	Inspection		Manufacturer Name Location	Quantity	Satisfactory
	Date	Bid Item Description			
416.0610	05/02/23	Drilled Tie Bars	Harris Rebar BOURBONNAIS, IL.	378 EACH	Y

Inspected By Inspector

Product Name EPOXY COATING REPORT OF TESTS

Basis for Acceptance

Epoxy Coating Certified Report of Tests for Rebar Heat Number 360002634 and Powder Lot # CH0602HH were accepted as meeting specification requirements. Harris Rebar is a CRSI coating plant. Epoxy Coating Application Test Report is filed in BOX with this item.

Documents Included in Material Records

- | | | |
|--|---------------------|--------------------------------------|
| <input type="checkbox"/> Mfg Certification | | <input type="checkbox"/> QMP Plan |
| <input checked="" type="checkbox"/> Certified Report of Test | Doc Id: 416.0610.01 | <input type="checkbox"/> WISDOT Test |
| <input type="checkbox"/> Buy America | | <input type="checkbox"/> QC Test |
| <input type="checkbox"/> Product Data Sheets | | <input type="checkbox"/> Other |
| <input type="checkbox"/> PAL / Approved LList | | |

416.0610	05/02/23	Drilled Tie Bars	Sherwin Williams CHARLOTTE, NC.	378 EACH	Y
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Inspected By Inspector

Product Name COATING CERT AND APL

Basis for Acceptance

Tie Bar Epoxy Coating by Sherwin Williams, Valspar 720A009 was accepted by visual inspecting and certification of coating material. Valspar 720A009 is also on current Wisdot approved list for Bar Steel Epoxy Coating. Coating material certification and APL are filed in BOX with this item.

Documents Included in Material Records

- | | | |
|--|---------------------|--------------------------------------|
| <input checked="" type="checkbox"/> Mfg Certification | Doc Id: 416.0610.01 | <input type="checkbox"/> QMP Plan |
| <input type="checkbox"/> Certified Report of Test | | <input type="checkbox"/> WISDOT Test |
| <input type="checkbox"/> Buy America | | <input type="checkbox"/> QC Test |
| <input type="checkbox"/> Product Data Sheets | | <input type="checkbox"/> Other |
| <input checked="" type="checkbox"/> PAL / Approved LList | Doc Id: 416.0610.02 | |

Verified Date: 10/20/2023

Verified By: Inspector

Exhibit A

Test Number: 977.893 - 905 - 0003 - 2023

Lab Site
 CORRE, Inc.
 Site 1
 6510 Grand Teton Plaza suite 314
 Madison, WI 53719
 (608) 828-1011

Materials Laboratory Testing System Tests On:
 Materials Diary Inspection

Main Project ID: 1620-00-61

Date Entered: 07/27/23 **By:** Inspector

Category:

Bid Item	Inspection		Manufacturer Name Location	Quantity	Satisfactory
	Date	Bid Item Description			
416.0610	05/02/23	Drilled Tie Bars	Nucor Harris Rebar Midwest BOURBONNAIS, IL.	378 EACH	Y

Inspected By Inspector

Product Name TIE BAR REPORT OF TESTS

Basis for Acceptance

Tie Bars #4 were supplied by Nucor. Tie Bars were visually inspected and were free of defects. One heat number used 3600026234. Tie Bars were installed at plan locations and as directed by the engineer. Tie Bars were Force Driven in existing concrete per 416.3.3.1. Tie Bar quantity includes quantity also included on CCO #1. Tie Bar Certified Report of Tests is filed in BOX with this item.

Documents Included in Material Records

- | | | |
|--|---------------------|--------------------------------------|
| <input type="checkbox"/> Mfg Certification | | <input type="checkbox"/> QMP Plan |
| <input checked="" type="checkbox"/> Certified Report of Test | Doc Id: 416.0610.01 | <input type="checkbox"/> WISDOT Test |
| <input type="checkbox"/> Buy America | | <input type="checkbox"/> QC Test |
| <input type="checkbox"/> Product Data Sheets | | <input type="checkbox"/> Other |
| <input type="checkbox"/> PAL / Approved LList | | |



Complete

Drilled Tie Bars

416.0610

905- 3 - 2023

Buy America (BA)

Certification documents for iron and steel items and construction materials items must denote compliance to all elements of Buy America provisions. See CMM Chapter 228 for Buy America provision and guidance. ✓ 416.0610.01

Tie Bars (BA – Iron and Steel) ✓

1. Diary entry required. Bid Item ID: 416.0610
2. Manufacturer’s certified report of tests or analysis required for all steel grades, bar sizes, and heat numbers. ✓ 416.0610.01
3. Verify heat numbers used on project. Document heat numbers in diary entry. ✓

Epoxy Coating – Tie Bars ✓

Epoxy Fusion-bonded Powder

1. Diary entry required. Bid Item ID: 416.0610
2. Verify product and manufacturer is on the approved list. ✓ 416.0610.02
3. Manufacturer’s certification of compliance is required. ✓ 416.0610.01

Epoxy Coating Application (BA – Iron and Steel, Epoxy Coating Process) ✓

1. Diary entry required. Bid Item ID: 416.0610
2. Manufacturer’s certification of compliance is required. ✓
 - a. For surface preparation, coating materials, and process.
 - b. Ensure coating is applied in a CRSI certified epoxy coating plant.
3. Certified report of test or analysis is required. Indicate testing laboratory in diary entry. ✓ 416.0610.01

Epoxy for Anchoring Force Driven per 416.3.3.1

1. ~~Diary entry required. Bid Item ID: _____~~
2. ~~Manufacturer’s certification of compliance is required.~~
3. ~~Certified report of test or analysis is required. Indicate testing laboratory in entry.~~
4. ~~Verify the temperature class and compressive strength cure times.~~

Item No.	Description	Plan Quantity		Final Quantity	
416.0610	Drilled Tie Bars	58	EA	378	EA