1600000 STABILIZING
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (12-18-17)
Currently, the contractor has the option to use soaked or unsoaked LBR results provided the material meets the requirements. The primary reason for unsoaked is time. It appears now that if unsoaked is desired, a soaked must also be performed for comparison. I will apologize in advance if my understanding is wrong, but this is pointless. You are either meeting the stricter requirement of unsoaked with no tolerance or waiting 7-10 days for soaked with tolerances. The Department is already holding the contractor to a tighter standard so what is the point of doing both. This change will only result in one thing, Nobody will bother with an unsoaked LBR. The Department should have just eliminated the option.
If anyone has time, I would greatly appreciate a call or email on this.

Response: (Response by Dino Jameson, 12-18-17) The Contractor still has the option to test either by the soaking or the unsoaked method. It's one or the other; not both. If unsoaked is desired, then submit request for approval to the Engineer.
There are no changes to the LBR requirements for 160 specs. The only change is the location in the specs. It was moved from the Additional Requirements section in 160-4.3 to Acceptance Criteria in 160-4.2.
In addition, Dino Jameson SMO discussed with Neil over the phone on 12-19-17 and clarified the confusion.

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Comments: (12-18-17)
Under Section 160-4.6 "Disposition of Defective Material" known as DDM. Currently in MAC this is now called "Material Acceptance Resolution" (MAR). Also need to change Specification 120-10.5 to say the same thing.

Response: No changes are necessary based on the following.
(1) MM Section 5.8 Materials Acceptance and Certification System (MAC) is written to **Department personnel/representatives**, not the Contractor. MAR is a module within the MAC system for processing materials acceptance issues.
(2) In the Specs, 6-4 **Defective Materials**, is directed to the Contractor.

Also, if this change is made, it doesn't just affect Sections 120 and 160. The term "defective materials" is used throughout the Spec Book.)

No change made.

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Comments: (12-19-17)
160-4.1.4.4: In the table, I suggest completing the criteria for test AASHTO M145 as follows: Symbol= S (per Standard Plans Index 120-001)

Response: This is already stated in the text in 160-4.1.4.4 (see highlight below).

160-4.1.4.4 Soil Classification and Organic Content Testing: Perform soil classification tests on the sample collected in 160-4.1.4.1, in accordance with AASHTO T88, AASHTO T89, AASHTO T90, and FM 1-T-267. The Engineer may waive the soil classification and organic content testing requirements for existing base ~~(160-2.3)~~ or granular sub-base ~~(160-2.4)~~ materials. Classify soils in accordance with AASHTO M-145 to determine compliance with soil utilization requirements as specified in ~~FDOT Design~~ Standard Plans, ~~Index No. S05~~120-001. If the stabilizing material used is 100% RAP ~~(160-2.2.2)~~ or RAP blended material ~~(160-2.2.3)~~, then replace FM 1-T-267 with FM 5-563 (excluding gradation analysis). ~~Ensure that t~~The following testing requirements ~~are~~must be met.

Test Method	Criteria
AASHTO M145	Soil Symbol = S
FM 1-T267	Average of 3 Organic Content ≤ 2.5%
	Individual Organic Content Results ≤ 4.0%

No change made.

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D5 Construction Operations
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Comments: (12-29-17)
There needs to be a definition of "Local Stabilizing Materials"

Response: 160-2.2.1 states that local stabilizing material must meet the requirements of Section 91,. 914-2.2 defines the material.

Engineer at least 14 days prior to the stabilization operation.

160-2.2.1 Local Stabilizing Material: Sample and ~~T~~test ~~stabilizing~~ material ~~f~~rom each source and meet the requirements of Section 914. The Engineer will ~~sample and test each source to~~ verify ~~if~~ the Quality Control (QC) test results meet the requirements of Section 914. If the QC and Verification sample results do not compare, the Engineer will take one

914-2.2 Local Materials: Local materials used for stabilizing may be soils or recyclable materials such as crushed concrete, roof tiles and asphalt coated base, reclaimed asphalt pavement (RAP) or Fossil Fuel Combustion Products (FFCPs) provided the following limits for organic content are met.

Average Organic Content* (FM 1-T267)	Maximum 2.5%
Individual Organic Content Sample (FM 1-T267)	Maximum 4%

*Note: A minimum of three samples per source.

FFCPs may be used provided they meet the requirements of 403.7047, F.S., are not used outside the paved area and are not less than 3 feet above the design high groundwater table. All materials for stabilizing must meet all applicable air or water quality standards or criteria in Florida Department of Environmental Protection (FDEP) rules.

No change made.

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Anonymous

Comments: (1-11-18)
160-4.4.1 Frequency for Stabilizing Mixing Depth in the table. Change verification frequency from "witness one per LOT" to "witness". This change would match frequency for verification stabilizing mixing depth check in Verification Earthwork Density Record System Form 675-620-28 table Verification Stabilizing Mixing Depth Witness. Also section 200 of the specifications for rock base the verification frequency is "witness". Thanks for your consideration.

Response: Agree. Will use “Witness QC”.
Change made.

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Comments: (1-11-18)
1. 160-2.2.1 - Because of the sub section title, this would lead me to believe that the section 914 is actually 914-2.2. Shouldn't we specify 914-2.2 Or is the intent is to meet the criteria in 914-1 as well as 914-2.2? What are we comparing? There is no comparison criteria for the test methods listed in 914. Are we going to establish comparison criteria? If so, shouldn't it be stated in this specification? We would have new programing for the comparison packages to be created. With this new programing, will the resolution status to be manually set, or will MAC set the status based on the test data?

Response: All of 914 needs to be met for 160-2.2.1. Comparison requirements are explained in 160-2.2.1 and the targets and limits for the comparison is detailed in 914. MAC already have these comparison packages programmed. Remember we have always been doing it this way, but now we are clarifying the methods in the specifications.
No change made.

2. 160-2.2.2 – Is testing required if material is coming from an approved RAP source?

Response: There is no such thing as approved RAP source. The Department (Aggregates) doesn’t have a control program for RAP source to be approved at the production facility. As specification states in 160-2.2 this material is milled and stockpiled without blending or contaminating with any other material. No testing is needed since the Department knows the Contractor is milling and windrowing it back on the project.
No change made.

3. 160-2.2.3 - How does QC determine which category to log this sample under? Once the QC passes, VT enters theirs with matching category? The resolution criteria is still vague. Are we

going to resolution based on 914-1 or 914-2? Is there a +/- limit that is acceptable? Will that be built into the MAC specification?

Response: QC will determine this category if they bring in RAP from somewhere else where the Department has no knowledge what the material consists of or the same project if the RAP is not pure (100%). Comparison requirements are explained in 160-2.2.3 and targets/limits are the opposite of local material for organic and same requirements as local for LL/PI.
No change made.

4. 160-3.2 – Last paragraph in this section - Based on this language we now have an IV level of sampling and testing that is used for acceptance/rejection of material. How are these findings going to be addressed in MAC? Currently there is no programing on pass/fail IV samples. If the sample fails and the material is not removed and replaced, is it an exception?

Response: No comparison package required at this point. As the specs states, if the IV fails then the contractor needs to remove and replace. MAR in MAC needs to be created if IV results in failure.
No change made.

5. 160-3.4 - This section reads very repetitive. Can we remove, "Break down or remove from the stabilized area materials, including clay lumps or lumps made of clay-size particles (any particle size 2 microns or less), not meeting the gradation requirements. Remove any lumps of clay or clay-sized particles greater than one inch that do not meet the requirements of 160-3.2."?

Response: First sentence has two options; break down or remove. The option in second sentence is only to remove clay lumps that remains greater than 1” after agitation.
Since they cannot be combined, we can clarify the second sentence to say: “After mixing, remove any existing lumps of clay or clay-sized particles greater than one inch that do not meet the requirements of 160-3.2 from the stabilized area.”.

Change made.

6. 160-3.4.1- Is the intent of this testing to be done on the same sample? The QC will perform a soil class and LBR on the same sample, no matter the material placed (local, RAP, RAP Blend, or Commercial)? Wouldn't this information be located under 160-4.1.4.1?

Response: 160-4.1.4.1 refers to modified Proctor and 160-3.4.1 refers to LBR. All sample types (MAC categories) will have this requirement.
No change made.

7. 160-4 – Exactly what is ‘Mixed Material’?

Response: Final product (stabilized subgrade). Stabilizing (914) material mixed with embankment material.
No change made.

8. 160-4.1.4.1 - Is the intent of this sentence for the Verification to not log or submit their sample for testing until all 8 QC LOTs have been tested?

Response: No. The Department is stating to the Contractor to hold on to their samples until VT has accepted QC LOTs based on the VT frequency.
No change made.

9. 160-4.1.4.3 - In 160-3.4.1 references soil utilization and classification. That is not mentioned here at all. 160-4.1.4.3.2 - We will have two ways to handle a failing unsoaked LBR. Resolution or discontinue unsoaked... How is programing going to handle this?

Response: In the acceptance section (160-4), tests are broken down individually. Classification requirements are mentioned in 160-4.1.4.4. Discontinuing the unsoaked method will be upon the CEI if the results of the resolution don't favor QC. If QC fails then no VT or RT testing is needed, then QC must stop the unsoaked method. MAC will only collect data.
No change made.

10. 160-4.1.4.4 - This section is still very misleading. In 160-4.1.4.1 it is clear on what must be tested. Then this section is introduced. Is the intent that the proctor only be performed on commercial material? And the tests listed in 160-4.1.4.4 on all other stabilizing material OTHER than commercial?

Response: In the acceptance section (160-4), tests are broken down individually. The proctor is done for all material types. The proctor section doesn't mention anything about waiving based on material type.
No change made.

11. 160-4.4.1 – Table. The way this table is presented, it leads you to understand that all this testing is being done on the same sample, no matter what material that is being placed (Commercial, Local, Existing base). The only difference is the AC content for RAP, RAP Blend. 160-4.5 - So no more soil classification on the VT LBR? It is only an LBR, no matter the material placed?

Response: The required tests are specified in 160-4.1.4 regardless of the type of material unless specified under a Section that testing may be waived for a specific material type.
No change made.

12. General comments – With the intricacies of the local material, would you consider making a specification for this material? Referencing the 120 specification so many times with in the specification gets very awkward. Would you consider entering the language instead of the reference?

Response: Not necessary. This can be solved through training to those needed.
No change made.

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