## FY 2020/2021 QC Category No. 4 STATEWIDE INSPECTION GUIDELIST Earthwork

## **EXCAVATION / EMBANKMENT**

- 1. If borrow pit is used, the location must be approved. [Spec. 120-6]
- 2. No work can be performed at an off-site construction activity area prior to obtaining clearance from the Division of Archives and complying with the Federal Endangered Species Act specified in Section 7-1.4. [Spec. 120-6]
- 3. Ensure that material used for embankment does not contain muck, stumps, roots, brush, vegetable matter, rubbish or other Material that does not compact into a suitable and enduring Roadbed. [Spec. 120-7]
- 4. Verify the maximum particle size does not exceed the specified limits. [Spec.120-7].
- 5. Without thick lift approval, lift thickness for embankment soils that are not A-3 or A-2-4 with up to 15% fines must be 6 inches (150 mm) or less, compacted thickness, for the full embankment width. [Spec. 120-8]
- 6. Where thick lifts are demonstrated and approved, maximum lift thickness may not exceed 12 inches (300mm) compacted thickness. [Spec. 120-8]
- 7. Verify the Contractor compacts uniformly each layer, using equipment that will achieve the required density. [Spec. 120-9]
- 8. Ensure that initial equipment comparison is performed and valid calibrations are maintained for all equipment used on the project? [120-10]
- 9. Ensure that all sampling and testing requirements are met and enforce the requirement that all samples and tests are taken randomly? Does the field test verify this? [Spec 120-10]
- 10. Have an appropriate process to ensure that the correct Proctor is used when density test results are evaluated for materials acceptance? Are the appropriate materials used in each portion of the roadway? [Spec 120-10, 120-7]
- 11. Enforce the requirement that all required density test results are documented on current forms provided by the department in accordance with the *Materials Manual 2.3, Appendix A*? [Spec 120-10]
- 12. While construction is in progress, ensure that adequate drainage for the roadbed must be maintained at all times. [Spec 120-11]
- 13. Verify that maintenance and protection of earthwork construction is performed in accordance with the Specs. [Spec. 104, 120-11]

- 14. Verify that construction tolerances of the final shaping of the earthwork are met. [Spec. 120-12]
- 15. Ensure that grassing of shoulder areas is completed prior to placing the final wearing course. [Spec. 120-12]
- 16. The manipulation of embankment material on a pavement surface is not permitted. [Spec. 120-12]

## **STABILIZING**

- 17. Ensure the stabilizing materials meet spec. requirements. [Spec. 914, 160-3.2]
- 18. Prior to beginning stabilizing operations, the roadbed grading must conform to the lines, grades and cross-sections shown in the plans. [Spec. 160-3]
- 19. When additive stabilizing materials are required, verify the Contractor spreads material uniformly over the area to be stabilized. [Spec. 160-3]
- 20. Rotary tillers and/or approved equals must be used when thoroughly mixing the stabilized areas to full depth and width. [Spec. 160-3]
- 21. Ensure that at the completion of the mixing the material meets the specified gradation, organic content, plasticity index and liquid limit. [Spec. 160-3]
- 22. Ensure the completed stabilized subgrade conforms to the finished lines, grades and cross-sections indicated in the plans. [Spec. 160-3]
- 23. Ensure the subgrade is firm and substantially unyielding upon completing the stabilizing and compacting operations. [Spec. 160-3]
- 24. Ensure that maintenance and protection of stabilized subgrade until the placement of base and subbase in place, is performed in accordance with specification. [Spec. 160-3]
- 25. Where the subgrade is rock, a waiver may be given for the stabilizing requirements and payment is adjusted accordingly. [Spec 160-4]
- 26. Ensure the granular subbase in lieu of stabilized subgrade is treated as a separate operation from rock base and the sampling and testing is conducted separately [Spec. 160-3 and 160-4].
- 27. Ensure separate samples are used for Limerock Bearing Ratio (LBR) and Proctor by Verification. [Spec 160-4.3.2.1]
- 28. Ensure extra tests are taken if mixing depths exceed plan limits. [160-4]
- 29. For any area where the bearing value obtained after mixing is deficient, ensure the reprocessing efforts are as specified. [Spec 160-4]

30. Ensure densities comply with specifications including shoulder pad thickness. [Spec. 160-4]