Sample project special: 105cce

02-03-11

REVISION OF SECTIONS 105, 106, AND 203

CONFORMITY TO THE CONTRACT OF EMBANKMENT

Sections 105, 106 and 203 of the Standard Specifications are hereby revised for this project as follows:

Subsection 105.03 shall include the following:

Conformity to the contract of embankment construction shall be determined in accordance with the following:

(a) *Quality Control Plan.* The Contractor shall be responsible for Quality Control (QC) for all embankment material on this project. The Contractor shall submit a written Quality Control Plan (QCP), including a methods statement, to the Engineer for acceptance. The QCP shall include but not be limited to the following:

1. Maximum lift thickness of eight inches in accordance with subsection 203.06 or as directed.
2. Compaction equipment capable of obtaining the specified compaction.
3. Water trucks with an adequate distribution system that will apply water evenly.
4. List of all inspection and materials testing forms and procedures utilized by the Contractor.
5. Adherence to Table 106-4 requiring minimum testing frequency.

The contractor shall submit the QCP at least five working days prior to the start of the work. The Engineer’s review of the QCP will not exceed two working days. Work shall not begin until the QCP has been accepted in writing, unless otherwise approved.

# *(b) Documentation.* The Contractor shall maintain current records of quality control operation activities, and tests performed. These records shall be in the form shown in the QCP, and shall include as a minimum, the Contractor or subcontractor, the number of personnel working, weather conditions, type of equipment being used, delays and their cause, and deficiencies along with corrective action taken. Such records shall cover both conforming and defective or deficient features. Additional documentation to the Engineer shall include all daily test results, daily inspection reports, daily non-compliance reports, and monthly certification reports. Copies of these records and a statement that work incorporated in the project complies with the Contract shall be submitted to the Engineer prior to payment for the work or upon request. Monthly certification reports shall be stamped with the seal of a Professional Engineer registered in Colorado. Failure to provide the Engineer with the necessary documentation will result in the suspension of payments on embankment until the documentation has been completed and accepted by the Engineer. CDOT Quality Assurance documentation shall not be used as supporting documentation for the Contractors certification.

CDOT or CDOT’s certified representative will be responsible for Quality Assurance (QA) and Independent Assurance Testing (IAT).

Subsection 106.03 shall include the following:

Testing of embankment construction shall conform to the following:

The supervisor responsible for the direct supervision for the process control sampling and testing shall be identified in the QCP and be qualified according to the requirements of CP-10 (Note: this will require a PE or a NICET Level III certification). The technicians taking samples and performing tests must be qualified according to requirements of CP 10 (Note: this will require WAQTC qualification).

2

REVISION OF SECTIONS 105, 106, AND 203

CONFORMITY TO THE CONTRACT OF EMBANKMENT

The project verification sampling and testing procedures shown in the CDOT Field Materials Manual under the frequency guide schedule for minimum materials sampling, testing and inspection shall be used for the elements shown in Table 106-4.

###### Table 106-4

**EXCAVATION AND EMBANKMENT TESTING SCHEDULE**

|  |  |  |
| --- | --- | --- |
| **Minimum Testing Frequency** Contractor’s Process Control | **Element** | Minimum Testing Frequency **CDOT verification Testing** |
| None Required | Soil Survey  (Classification) | See CDOT Field Materials  Manual for Frequency |
| 1 per soil type | Moisture – Density Curve | 1 per soil type |
| 1 per 1,000 cubic yards  or fraction thereof. | In-Place Density | 1 per 2,000 cubic yards  or fraction thereof. |
| 1 per 300 cubic yards  or fraction thereof. | In-Place Density when within 100 ft. of Bridge Approach(s). | 1 per 500 cubic yards  or fraction thereof. |
| 1 per 5,000 cubic yards  or fraction thereof. | 1 Point Check | 1 per 10,000 cubic yards  or fraction thereof. |

Qualifications for testing and personnel are contained in Section 203, Chapter 200 of the CDOT Field Materials Manual, CP-10, CP 13, CP 15, and CP 80, and the CDOT Inspectors Checklist.

Subsection 203.02 (a) shall include the following:

Unclassified Excavation shall include removal of unstable or unsuitable material within the roadway as determined and directed by the Engineer.

Subsection 203.02 (c) shall include the following:

Embankment material containing significantly more than optimum moisture that would become stable if dried shall not be considered muck.

Subsection 203.13 (b) shall include the following:

The disposal of unsuitable material and replacement of embankment will not be measured and paid for separately, but shall be included in the work.

The Contractor’s Quality Control efforts will not be measured and paid for separately but shall be included in the work.

3

REVISION OF SECTIONS 105, 106, AND 203

CONFORMITY TO THE CONTRACT OF EMBANKMENT

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**INSTRUCTIONS TO DESIGNERS** (delete instructions from final draft):

Use this Project Special Provision on projects having more than 100,000 cubic yards of Embankment Material (Complete in Place), Unclassified Excavation (Complete in Place), Borrow (Complete in Place), or other projects as selected by the Project Manager.