SECTION 31 25 13

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

A. The work covered by this section consists of the installation and maintenance of all erosion siltation control devices, wash down areas, or seeding and sodding applications necessary to effectively prevent storm water pollution of adjoining or downstream areas that may occur as a direct or indirect result of the construction of this project. The contractor is responsible for creating and maintaining the storm water pollution prevention plan by utilizing the base sheets and narrative provided in the bid documents. The contractor is also responsible for submitting the Notice of Intent (NOI) and Notice of Termination (NOT) and conducting inspections as required by the Texas Commission on Environmental Quality (TCEQ.) The required forms for these activities are included in the bid documents.

The engineer will provide:

- 1. Base Sheets for Erosion Control Plan (ECP)
- 2. The Narrative for the Storm Water Pollution Prevention Plan (SWPPP)

The contractor will generate, submit, and maintain the:

- 1. ECP
- 2. SWPPP
- 3. NOI (if required)
- 4. NOT (if required)
- 5.

1.2 MEASUREMENT AND PAYMENT

Erosion and Sediment Control is measured as a lump sum item.

The work and materials as prescribed by this item will be paid on the following schedule:

- A. 25% of the bid value shall be paid when the erosion control plan is fully detailed and implemented, the NOI (if required) is submitted to both TCEQ and the City Inspector, and all of the initial erosion control devices have been installed and are in working order.
- B. 50% of the value will be prorated for the installation and maintenance of erosion control devices during the course of construction as a percent of the total contract value. If the sediment trapping devices on the site appear to be un-maintained, no payment of this portion of the item shall be paid.
- C. 25% will be paid at the completion of construction when the site is stabilized, the NOT is submitted to both TCEQ and the City Inspector and all erosion control devices are removed from the site.

1.3 SUBMITTALS

A. The contractors shall submit the initial erosion control plan along with the NOI (if required) prior to receiving a notice to proceed.

- B. If required, the Contractor is responsible for filing a "Notice of Intent" (NOI.) The contractor shall comply with all TCEQ and EPA regulations and pay the filing fees associated with the regulations. Fees associated with these regulations are subsidiary to the bid item Storm Water Prevention. The forms are available at:

 http://www.tceq.state.tx.us/assets/public/permitting/waterquality/forms/20023.pdf
- C. Said NOI must be postmarked two days before construction begins. NOI's and NOT's shall be submitted to the address shown on the forms. It is the Contractor's responsibility to file and provide the owner a copy of the Notice of Termination (NOT) at the completion of the project.

PART 2 – PRODUCTS

N/A

PART 3 – EXECUTION

3.1 GENERAL

- A. It is the responsibility of the Contractor to utilize whatever techniques are necessary to address erosion problems as they occur during construction.
- B. Siltation control and sediment trapping devices shall be installed prior to site clearing, grading or utility construction operations. All devices should be positioned so as to effectively remove silt from storm water before it leaves the site. Of particular concern, are gravel or stone blankets placed at construction traffic exits and entrances. These controls should be closely monitored to see that they trap sediment before it reaches the existing street and drainage system.
- C. Construction activities should be phased to expose a minimum of graded area at one time. Earth exposed by the construction process shall be re-vegetated every two weeks until vegetation is established. Re-vegetation shall require seeding, hydromulching or sodding. Fresh growth of vegetation shall eliminate the need for additional re-vegetation but does not constitute stabilization.
- D. Should a construction process remove any portion of the perimeter controls, the controls should be replaced in accordance with the TCEQ guidelines. Prior to the completion of the project, all bare areas shall be re-vegetated with a cellulose fiber hydromulch seeding process or sodded.
- E. Siltation control devices placed at storm drain inlets and culverts shall be removed by the Contractor once the site has been stabilized.

3.2 MAINTENANCE AND INSPECTION

A. The contractor shall familiarize himself with the erosion control requirements of TCEQ. The site superintendent, or his representative, shall make a visual inspection of all structural and/or natural controls and newly stabilized areas as required by TCEQ, especially after a rainfall to insure that all controls are maintained and properly functioning. Any damaged controls shall be repaired prior to the end of the work day, including re-seeding and mulching or re-sodding if necessary. All inspections shall be documented with a written report. Reports shall include the effectiveness of erosion control measures, construction activities conducted since the last report and their location. Reports shall be maintained by the Contractor along with the Erosion Control Plan per the TCEQ guidelines.

- B. The contractor is responsible for the ECP. The contractor shall continuously update the plan with all changes. Areas already stabilized shall be noted on the plan. All sediment trapping devices shall be installed as soon as practical after the area has been disturbed (never more than 14 days). All sediment trapping devices shall be cleaned when the sediment level reaches 25% capacity. Sediment shall be disposed of by spreading on site or hauling away if not suitable for fill.
- C. The Contractor shall be responsible for any and all materials, improvements, and maintenance activities necessary to keep dust, silt, and mud from leaving the work zone, including being tracked by vehicles traveling throughout the zone.
- D. Should, in the opinion of the Owner, the Contractor fail to prevent the escape of dust or contain silt and mud within the project, after due notification by the City Representative, Owner forces will be used to clean up those affected areas, and the cost of same will be deducted from the contract.
- E. Prior to Substantial Completion, the Contractor shall verify that no dust, silt, or mud exists within the work zone in deposits deeper than two inches (2") as a result of the contractor's containment procedures. Should the Contractor claim final completion without removing such deposits, they will be removed by Owner forces and the cost of which shall be deducted from the contract.

END OF SECTION