SP-155044 (New)



SPECIAL PROVISIONS FOR FLOW THROUGH PLANTERS

Des Moines County EDP-0977(650)--7Y-29

Effective Date October 20, 2020

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

155044.01 DESCRIPTION.

- **A.** Flow through planters consist of vegetated basins which contain conditioned planting soil beds and planting materials that are used to filter stormwater runoff. The planters combine physical filtering and absorption with biological processes in dense urban areas. The planters act as a short-term stormwater detention structure and allow suspended solids in runoff to settle out.
- B. Construction of planters shall consist of furnishing necessary materials, constructing the vertical containment curb, curb opening including grate and frame, excavating for and installing the swale bottom filter media zone which consists of engineered soil, geotextile fabric, perforated and non-perforated subdrains, gravel filter, and amended subgrade as shown in the contract documents. All planters shall be installed at the locations and to the grades and elevations shown in the contract documents. Installation of trees and plant material, fertilizing, and watering of the planters are not included in this item.

155044.02 MATERIAL.

- A. Base material shall meet the requirements of Section 2201 of the Standard Specifications.
- B. Concrete shall meet the requirements of Section 4101 of the Standard Specifications.
- **C.** Steel Reinforcement shall meet the requirements of Article 4151.03 of the Standard Specifications. Steel reinforcement shall be epoxy coated.
- D. Curb box and plate basis of design is Neenah Foundary, Inc. Model NF-T2511.
- **E.** Grate between curb box and flow through planter curb basis of design is Neenah Foundary, Inc. Model R-4990-CA. Grates shall be bolted to cast frame.
- F. Engineering fabric shall meet the requirements of Article 4196.01, B of the Standard

Specifications.

- **G.** Gravel filter shall be porous backfill material and shall meet the requirements of Section 4131 of the Standard Specifications.
- **H.** Pipe for subdrains shall be of the size and type shown in the contract documents and shall meet the requirements of Sections 4143 and 2502 of the Standard Specifications.
- I. Engineered soils mix shall be a combination of the specified sand, topsoil, and compost at the ratios shown in the contract documents.
- J. Amended subgrade shall be a combination of the specified sand and native soil as shown in the contract documents.

155044.03 CONSTRUCTION.

Construction of flow through planters shall be as shown in the contract documents. Contractor shall make all efforts to limit soil compaction of the surface soils within the bioswale side slopes and bottom. Concrete finishes shall be smooth, consistent, and without surface defects for all exposed surfaces including inner planter exposed curb walls. Trench shall be formed smooth and consistent with pitch into planter. Street curb shall be formed clean and true to receive the curb box casting and trench grate

155044.04 METHOD OF MEASUREMENT.

The areas of flow through planters will be measured by the Engineer to the nearest square foot measured from outside face of planter curb. The length of non-perforated subdrain pipe connections beneath the intercepting side roads will not be measured and will be incidental to this bid item.

155044.05 BASIS OF PAYMENT.

- **A.** For the number of square feet of flow through planter of the size specified, furnished, and installed, the Contractor will be paid the contract unit price per square foot.
- **B.** This payment shall be full compensation for excavating, furnishing material, labor and tools necessary for construction of the planter curbs, placement of the flow through planter bottom filter media zone, removal of excess excavated material from the project, furnishing and placing the engineered soils, furnishing and placing the geotextile fabric, furnishing and placing perforated subdrain, furnishing and placing the curb box opening and trench frame and grate, non-perforated subdrain, outlets, subdrain end caps, elbows, tees, and other necessary subdrain connections, and furnishing and placing the amended subgrade as shown in the contract documents as directed by the Engineer.
- **C.** For flow through planter built in accordance with the contract documents, no extra compensation will be allowed for over-depth, rock excavation, tamping backfill, and removal of surplus material from the project.