

SECTION 33 49 13

INLETS

PART 1 - GENERAL

- 1.01 The work covered by this section shall include the excavation and backfill for the construction of standard and/or special inlets of the types indicated at the locations shown on the drawings and/or designated by the A/E. The necessary excavation and backfill shall comply with the applicable provisions of Section 31 23 16.13, Unclassified Excavation for Utilities. All work performed and materials used shall conform to the standard specifications of the local review authority.

PART 2 - PRODUCTS

- 2.01 Brick: Grade NA, ASTM C32, or concrete brick conforming to the requirements of ASTM C55, Grade A.
- 2.02 Concrete, Cement, Sand and Water: Conforming to the applicable provisions of Section 32 16 00, Curbs, Gutters, Sidewalks, and Driveways.
- 2.03 Standard reinforced, precast concrete inlet structures are required, prior written consent must be obtained from the A/E, to use cast-in place concrete, brick or concrete masonry may be used for height adjustment (maximum 12"). Reinforced precast concrete inlet structures shall meet ASTM C478, or ASTM C913.
- 2.04 GRATES, FRAMES AND CURB CASTINGS
- A. Bicycle safe, conforming to the requirements of the AHJ or Public Works Department of the local review authority, whichever is more stringent.
- B. Meet HS20 load conditions.
- 2.05 Ladder Bars: To be 3/8" reinforced rod encapsulated in polypropylene plastic or equal as approved by A/E. Install at 16" O.C. maximum.
- 2.06 Nyloplast Drain Basin (or approved equal): Size and configuration as specified in drawings. Install per manufacturer specifications.

PART 3 - EXECUTION

- 3.01 Construct inlets to the sizes, shapes and dimensions shown on the drawings or as directed by the A/E to meet special conditions.
- 3.02 Excavate for inlets in accordance with the applicable provisions of Section 31 23 16.13, Unclassified Excavation for Utilities.
- 3.03 Where inlets are to be constructed in existing pavements and/or curbs and gutters, cut such pavements and/or curbs and gutters to a neat line with an air hammer or other suitable equipment, removing no more pavement and/or curb and gutter than essential.
- 3.04 Protect inlet foundations from damage by water and/or other causes. Do not place concrete until the trench has been freed from water and/or mud, and maintain the trench in a reasonably dry condition during the progress of construction on structures.

- 3.05 When the foundation has been prepared and is approved by the A/E, construct the bottom to the required line and grade. After the bottom has been allowed to set for a period of no less than 24 hours, construct the inlet thereon, taking care to form the pipe or pipes into the walls at the required elevations.
- 3.06 Lay brick in common bond with each fifth course as a header course and joints staggered from course to course. The use of bats will not be permitted in header courses. All joints at the face of wall shall be no more than ½ inch thick and shall be trowel struck joints to provide a clean, smooth wall surface. Wet each brick thoroughly by immersing it in water immediately before placement; lay each brick separately in a full and closed joint of mortar on its bed, sides and/or ends in one operation by shoving the brick into the mortar. Make no joints by working mortar into the joints, by grouting, or by “slushing” after the brick is in place. Brickwork shall be plumb and in conformance with the drawing dimensions.
- 3.07 Whenever work is discontinued for any purpose, rack the unfinished brick masonry back into courses, and remove all mortar from exposed surfaces. When work is resumed, clean and thoroughly wet the exposed surfaces before adding any new work.
- 3.08 Carefully protect fresh brickwork against damage from freezing and against movement from any cause. Remove and properly rebuild any work that, in the opinion of the A/E, has been damaged by any cause either before or after backfilling.
- 3.09 Set all castings accurately to line and grade in full cement mortar beds on the brick masonry. Unless otherwise shown on the drawings and/or directed by the A/E, set all grate frames no less than 1 inch below the normal grade of surrounding pavement and not less than 3 inches below the normal surface of unpaved areas; then slope the surrounding area to the grates on a minimum slope of 1:12.
- 3.10 Allow completed inlets to set for a period of not less than 24 hours before backfilling as specified in Section 31 23 16.13, Unclassified Excavation for Utilities.

END OF SECTION