SECTION 7100 CATCH BASINS

PART 1 GENERAL

1.1 SCOPE:

A. This Section covers the work necessary for the construction of catch basins and inlets.

PART 2 PRODUCTS

2.1 BASE ROCK AND DRAIN GRAVEL:

A. 1-inch minus aggregate, in accordance with Section 2300, shall be used.

2.2 FORMS:

A. Forms for exposed surfaces shall be steel or plywood. Others shall be matched boards, plywood, or other approved material. Form all vertical surfaces. Trench walls, large rock, or earth will not be approved form material.

2.3 PIPE AND FITTINGS:

A. Pipe and fittings shall conform to this Section of these specifications or as shown on the Plans.

2.4 INLETS:

A. Catch basin inlets shall conform to Standard Detail No.7100-4. Precast inlets will be approved on a case by case basis.

2.5 STANDARD FRAMES AND GRATES FOR INLETS AND CATCH BASINS:

A. Frames and grates shall be as shown on Standard Detail No. 7100-4, or approved equal.

PART 3 EXECUTION

3.1 EXCAVATION AND BACKFILL:

A. Conform to Section 3800.

3.2 BASE ROCK:

A. When specified or directed, place crushed aggregate base rock thoroughly compacted to the required thickness and density.

3.3 FOUNDATION STABILIZATION:

A. If material in bottom of excavation is unsuitable for supporting catch basins and other sewer appurtenances, excavate below subgrade as directed and backfill to required grade with rock conforming to these standards.

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3.4 PIPE CONNECTIONS:

A. Special care shall be taken to see the openings through which pipes enter the structure are completely watertight. All pipes shall be connected to catch basins according to the manufacturer's recommendations. All rigid nonreinforced pipes entering or leaving the catch basins shall be provided with flexible joints within 1 foot of the structure and shall be placed on firmly compacted bedding.

- B. Concrete pipe connections shall be grouted watertight with nonshrink grout according to Section 7100.
- C. PVC pipe shall be connected using an approved adapter specifically manufactured for the intended service. PVC pipe adapters shall be "Fowler Inseta-Tee", "Kor-N-Seal", "Sealtite", "Z-Lok-XP", or approved equal.
- D. Field fabricate water stops or improvised adapters shall not be used. Adapters requiring the use of grout for installation shall be anchored and finished using nonshrink grout as approved.

3.5 PLACING PRECAST UNITS:

A. Precast units shall be installed per the manufacturer's recommendations unless otherwise directed by the Engineer.

3.6 INLET AND CATCH BASIN EXTENSIONS:

- A. When approved, install extensions to height as directed. Lay risers in mortar with sides plumb and tops to grade. Joints shall be sealed with mortar, and interior and exterior troweled smooth. Prevent mortar from drying out and cure by applying an approved curing compound or other approved method.
- B. Extensions shall be watertight.

3.7 INSTALLATION OF INLET AND CATCH BASIN FRAMES AND GRATES:

A. Set frame and grates at elevation shown or as directed. Bearing surfaces shall be clean and provide uniform contact. Anchor bolts and other fastenings shall be firmly bedded in concrete or otherwise secured as approved.

3.8 CLEANING:

A. Upon completion, clean each structure of all silt, debris, and foreign matter.

3.10 MEASUREMENT AND PAYMENT:

A. Payment will be made at the Contract unit price in the Bid each catch basin supplied and installed complete and verified in the field.

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PART 4 TESTING

4.1 FRAMES AND GRATES:

A. Frames and gratings shall be tested one within the other and there shall be no more than 1/16-inch rock. When checked by a test jig, the bearing seat of either component shall have no more than 1/16-inch rock. The manufacturer shall furnish test jigs.

4.2 CONCRETE:

A. Concrete, for cast-in-place inlets, shall be tested, at the discretion of the Engineer, in conformance with Section 2000.

4.3 BASE ROCK:

A. Base rock shall be sampled and tested, at the discretion of the Engineer, in conformance with Section 2300.

END OF SECTION

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