

ITEM 11615.6011 M – DRINKING FOUNTAIN – TYPE "C" (NYCDPR)

DESCRIPTION

This work shall consist of furnishing and installing Drinking Fountain-Type "C" in accordance with the details indicated in the plans at the locations indicated in the plans or where directed by the Engineer.

MATERIALS

Drinking Fountain:

Drinking Fountain, Type "C", the foundation, fountain and concrete step shall be Water-for-all "Classic", copyright VAU201-940, as manufactured by Londino Stone Co., Inc., 3621 Provost Avenue, Bronx, N.Y. 10466-6120.

Furnish Drinking Fountain-Type "C" in compliance with all A.D.A. and A.N.S.I. standards, including all internal plumbing, access doors, foundation, concrete step and all external plumbing work and connection to water service and drainage lines within 1.5 m (5') feet of the foundation walls.

The Drinking Fountain and step shall be constructed of 34,470 kPa (5,000 psi) reinforced precast concrete, and shall be set in a precast concrete foundation on a grout bed of one (1) part Portland Cement and two (2) parts sand. All joints shall be caulked using a polyurethane sealant such as "Sikaflex-1A" as manufactured by Sika Chemical Corporation, PO Box 297, Lyndhurst, NJ 07071, or approved equal by the Engineer.

Reinforcing Materials:

Reinforcing bars: ASTM A 615, Grade 40 or Grade 60 as necessary. Bars are to be used to handle transportation and handling stresses.

Welded Wire Fabric: ASTM A 185, 4 X 4 - W2.9 X W2.9 welded wire fabric is to be used to handle temperature stresses as well as to deter vandalism.

Supports for Reinforcement: Provide supports for reinforcement including bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing.

Where legs of supports are in contact with forms, provide supports with legs of stainless steel or plastic.

Concrete Materials:

Portland Cement: ASTM C 150, Type I or Type III. Color shall be Grey and or White as required to match the Engineer's Approved Sample.

Fine Aggregate: ASTM C 33; Natural Sand.

Coarse Aggregate: ASTM C 33; Natural Gravel.

Water: Potable.

Air-entraining Admixture: ASTM C 260.

Water-Reducing Admixture: ASTM C 494, Type A.

ITEM 11615.6011 M – DRINKING FOUNTAIN – TYPE "C" (NYCDPR)

Calcium Chloride: Do not use calcium chloride in precast concrete.

Waterproofing Admixture: Sikaproof CS, or equal, noncorrosive integral waterproofing admixture.

Proportioning and Design of Concrete Mix:

When required, an independent testing facility shall submit the mix design proportioned in accordance with Section 4.3 of A.C.I. 318 and the New York City Building Code.

Concrete Mix: Standard-weight concrete consisting of specified Portland cement, pigments, aggregates, admixtures and water to produce the following properties:

1. Compressive Strength: 34,470 kPa (5,000 psi) minimum at 28 days.
2. Total Air Content: Not less than 4 percent nor more than 6 percent.
3. Concrete is to be waterproof.

Admixtures: Use air-entraining and waterproofing admixture in strict compliance with manufacturer's directions. Admixtures to increase cement dispersion or provide increased workability for low-slump concrete may be used, subject to the Engineer's acceptance.

Access Doors: Access Doors shall be 3mm (1/8") thick anodized aluminum natural clear finish to match brush chrome finish. Doors to be predrilled and counter-sunk to receive vandal resistant stainless steel screws. Screws to be stainless steel tamper resistant flat head spanner bolts, 6mm (1/4") diameter by 25mm (1") long minimum.

Plumbing

Strainer: Strainer shall be cast brass with exposed parts chromium plated, brushed finish. The tailpiece shall be soft temper copper tubing connecting to strainer with bronze elbow.

Drain: All piping shall be of standard weight galvanized steel pipe. Fittings shall be galvanized M.I. banded pattern.

Trap: Shall be 37mm (1-1/2") cast rough brass full S-swivel trap, tapped at inlet and outlet for 37mm (1-1/2") pipe and shall have a cleanout plug. Upon the written request of the licensed plumber to the Engineer, the trap may be eliminated.

Water Piping: All water lines up to the 9mm (3/8") - 12mm (1/2") reducer shall be of rigid hard temper type "K" copper tubing, meeting the specification for A.S.T.M. Designation No. B88. Fittings shall be approved wrought copper and bronze solder joint pressure fittings (A.N.S.I. B 16.22). Above the reducer, piping to be 9mm (3/8") soft temper copper tubing with copper sweat fittings.

Bubbler Control: Valve shall be brass with a stainless steel push button. All exposed parts to have a brushed finish.

Bubbler Assembly: Shall be one piece stainless steel including the tail piece. Provide a stainless steel washer and locknut for the tailpiece. All exposed parts to be stainless steel with a brushed finish.

ITEM 11615.6011 M – DRINKING FOUNTAIN – TYPE "C" (NYCDPR)

Pressure Regulators: Pressure regulating valve shall not be used.

Ball Valve: The ball valve shall be similar and equal to SMC Model 025 brass ball valve.

Pipe Supports: Pipe clamps shall be made up of 25mm (1") x 9mm (3/8") galvanized strap iron and shall be rigidly constructed to hold the pipe firmly in place. Clamps shall be held in place with anchor bolts drilled into the fountain shaft or base.

Finishes:

Precast Concrete shall have a fine sand texture simulating natural sandstone. All exposed edges shall be finished to a 6 mm (1/4") radius minimum.

Exposed Brass shall be chromium plated and shall have a brushed finish. Exposed stainless steel shall have a brushed finish.

Aluminum Doors shall have an anodized finish to match brushed chrome.

Factory Installation: All pipes except the bubbler tailpiece passing through walls shall be run through pipe sleeves. The stainless steel push button rod shall be protected with sleeves where it passes through walls. Bubbler controls shall be a stainless steel push button activated by a maximum of 2.27 kg (5 lb) of pressure.

In the 'C' fountain, the factory installed portion of the cold water supply shall be from the bubbler down to, but not including, the 9mm (3/8") to 12mm (1/2") reducer. The factory installed portion of the waste line shall be from the strainer down to, but not including, the reducing coupling.

Quality Assurance: The Drinking Fountain shall have all unique components pre-tested and factory installed before delivery to site.

CONSTRUCTION DETAILS

Install Drinking Fountain-Type "C" in compliance with all A.D.A. and A.N.S.I. standards, including all internal plumbing, access doors, foundation, concrete step and all external plumbing work and connection to water service and drainage lines within 1.5 m (5') feet of the foundation walls.

The fountains shall operate with no more than 2.27 kg (5 lbs.) of force applied to the bubbler control valve push button (to conform to A.D.A. requirements) without the use of a pressure regulating valve to reduce the maximum inlet pressure of 448 kPa (65 psi).

Winterization: Drinking fountains shall be winterized by shutting off water supply and opening bleeder valve (outside of fountain). The fountain shall be designed to allow internal water to drain by gravity, without opening the access door.

Field Installation: All field connections to be made by a Licensed Plumber, as per Section C Special Provisions, Article 19, issued by NYCDPR. All other plumbing work required to complete the installation, including making waste and water supply connections within the fountain, shall be done in the field.

Connections: The Contractor shall connect the water and drain lines to pipes provided under another Item.

ITEM 11615.6011 M – DRINKING FOUNTAIN – TYPE "C" (NYCDPR)

The Drinking Fountain drain shall be extended 1.5m (5') beyond the foundation and be connected to the drain line, as shown in the plans. Connecting to drain shall be made with ferrule and neat cement grout. The 25mm (1") cold water line shall be extended 1.5m (5') beyond the foundation and connected to the water supply pipe with threaded fittings, as shown on the plans.

All parts shall be installed in such a manner as to facilitate removal for purposes of replacement. Water and drain lines shall be pitched away from the drinking fountain. Pockets in rigid piping that cannot be drained by gravity will not be allowed.

Submittals:

All submittals shall be in accordance with the requirements of Special Requirements, Section C, Article 11, issued by NYCDPR. The Contractor shall submit the following to the Engineer.

Brochure: The Contractor shall submit a Catalog Cut of the Drinking Fountain.

Samples: Before starting work, the Contractor shall submit, for approval of the Engineer, the mix design of the precast concrete they propose to use as well as finished samples showing the extreme range of color and finish proposed for the finished work. Samples shall be marked with the name of the manufacturer, mix design, and finish.

Shop Drawings: The Contractor shall submit a complete dimensional Shop Drawing showing details of construction, reinforcement, plumbing, etc., including gauges of metal and thickness of wall construction.

Extra Materials: The Contractor shall furnish extra materials and deliver to the State.

Extra Materials: For each drinking fountain installed under this item, Contractor shall supply the applicable materials:

- 1 (One) Tamper-proof tooled key as described under Access Door.
- 1 (One) # 49000 S.S. Bubbler Assembly.
- 1 (One) #11000 Plated Brass Strainer and Elbow Set.
- 1 (One) 6mm (¼") Ball Valve. All field connections shall be made by a Licensed Plumber. All parts and installation shall meet applicable requirements of N.Y.C. Codes. The fountain is to be handled by lifting points designated by the manufacturer; no chipped or cracked fountains will be acceptable.

METHOD OF MEASUREMENT

The work will be measured for payment as the number of Drinking Fountain-Type "C" (NYCDPR) satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid for Drinking Fountain-Type "C" (NYCDPR) shall include the cost of all labor, materials and equipment necessary to satisfactorily perform the work.