

SECTION 02460  
SITE IMPROVEMENTS

PART 1. GENERAL

1.1 Related Work Specified Elsewhere

- a. The general provisions and documents of the Contract, including General and Special Conditions, apply to the work specified in this Section.
- b. Excavation and Backfill - 02315.
- c. Construction Drawings.

PART 2. PRODUCTS

2.1 Concrete Pavement

- a. All concrete shall meet the requirements as specified in Section 03300 of these Specifications.

2.2 Signage

- a. Provide traffic control signs complying with U.S. Department of Transportation, Federal Highway Administrations Manual "Uniform Traffic Control Devices"; local codes, and as specified. See Drawings for type, location and quantity of sign required.

To be painted with reflective baked - enamel finish with following colors:

- (1) "HANDICAPPED PARKING ONLY" Sign: 12" x 18" white legend on blue background. ("Van Accessible" where required)
- (2) "STOP" signs shall be 24" x 24" octagon, reflectorized copy and boarder.
- (3) Directional signs shall be 18" x 24", reflectorized copy and boarder.

2.3 Lighting

- a. Pole mounted lighting within the public Right-of-Way shall be the City of Portland Bayside Neighborhood standard lighting. Lighting shall be Holophane model ESU175MH12A4-R-RAL7016. Entire pole height shall be 19'-3". **(Light Fixture to be provided by CMP for the City of Portland)**
  - (1) Luminaire: Holophane Lighting model ESU175MH12A4-R-RAL7016. Cast Aluminum housing with stainless steel hardware. Dropped refractor shall be thermal resistant borosilicate glass. Internal reflector and prismatic diffuser shall provide an IES Type III distribution pattern according to the manufacturer's photometric test #47384. Luminaire shall include integral ballast with modular wiring connectors and multi-voltage taps (factory wired for 120VAC). Provide an internal receptacle type photocell control. Luminaire finish shall be RAL #7016 polyester powder coat paint (silver metallic aluminum); coordinate with CMP. **(Light Fixture to be provided by CMP for the City of Portland)**

- (2) Lamp: Holophane Lighting model S-M175/U 64471 Vertical mounted, 175 watt mogul base clear metal halide lamp.
- (3) Bracket Arm: Holophane model OUC 6063-T6 aluminum cross arm with a post-top fitting for a 3 1/2" by 8" tenon. Bracket arm finish shall be RAL #7016 polyester powder coat paint (dark gray). **(Included in Contract)**
- (4) Slip Fitter: Holophane Lighting model BHLF200-SCA/AS (Boston Harbor Series). 2 3/8" O.D. with swivel cast fitter. Finish shall be polyester powder coat paint RAL #7016 (dark gray). **(Included in Contract)**
- (5) Lighting Pole: Tapered steel pole shaft rated for a 90 mph wind load with a 1.3 gust factor. Pole shall be pre-galvanized with a finish coat of polyester powder coat paint RAL #7016 (dark gray). Provide four hot-dipped galvanized steel L-type anchor bolts. Pole shall be fifteen (15) feet in height. **(Included in Contract)**
- (6) Decorative Pole Base: Holophane model 'Cambridge Series' clamshell cast aluminum base. Hardware shall be stainless steel. **(Included in Contract)**

#### 2.4 Concrete Light Pole Bases

- a. Furnish and install all concrete work in accordance with the following standards: ACI 301 Formwork, ASTM C150 Normal Type I Portland Cement, grey color, ASTM C33 fine and coarse aggregates, ASTM C94 concrete mix, comprehensive strength of 4000 PSI at 28 days. Deformed welded wire fabric ANSI/ASTM A497, rebar; ASTM A613 grade 60.

#### 2.5 Bicycle Racks

- a. The bicycle racks shall be "U" Rack (with Lean Bar) Product Number UX238-LB-IG-PC color Black as manufactured by Madrax in quantities as shown on drawings. Madrax 2700 Laura Lane Middleton, WI 53562 or approved equal.

### PART 3. EXECUTION

#### 3.1 Concrete Pavement

- a. After placement of the gravel base, the surface shall be brought to a smooth, uniform surface by grading and rolling the crushed aggregate base and re-rolled until the surface is true and even.
- b. Slabs shall be placed alternately in lengths not to exceed 30 feet, or as directed and shall be separated by an expansion joint of preformed expansion joint filler and sealant 1/3 inch in thickness. The thickness of the slab shall be as shown on the Plans. The sidewalk surface shall be scored 1-3/8 inch deep into block units as shown on the Plans. When a concrete sidewalk is constructed adjacent to a building, fixed or other structures, a 1/2 inch thick preformed zip strip joint filler and sealant shall be used between the slab and the structure. Both expansion and control joints are to occur only within score joints.
- c. Broom Finish - Broom finish by drawing a stiff-bristled pushbroom with a long handle over a troweled surface. Concrete walks shall receive a medium broom finish. Direction of brooming

shall be perpendicular to major direction of pedestrian movement or as directed by the Landscape Architect.

- d. Concrete pavement shall be saw cut (not tooled) after brooming to insure a well-defined and smooth border.
- e. Finished concrete shall be properly cured using a waterproof material, such as Sisal Kraft orange label lapped 6 inch taped. The concrete shall be properly moistened before covering it, and shall be kept tight. Curing shall be a minimum of seven (7) days.

### 3.2 Signage

- a. Contractor shall install signs in locations and as detailed on the Drawings. Set posts vertical and plumb. Mount sign in accordance with manufacturer's instructions.

### 3.3 Light Pole

- a. Install light pole per manufacturer's requirements. Halophane light fixture (Marginal Way) to be provided by others.

### 3.4 Concrete Bases and Footings

- a. Contractor shall supply and install concrete light pole, bases in quantities and locations as shown on the Drawings and specified herein.

### 3.5 Bicycle Rack

- a. Provide bike racks in quantities as shown on drawings. Install according to manufactures requirements for in-ground mounting.

**END OF SECTION**