NOTE TO CONSULTANTS: Edit with Track Changes turned on, any text in this section that appears in bold and italics then turn off the bold and italics for the final approved version. (Remove this Note).

PART 1 - GENERAL

1.01 Description: Provide all labor, equipment, materials, and coordination required to install all Brick Masonry including brickwork on precast concrete walls and steps, and accent paving, and installation of cast-on-site concrete masonry units (wall coping).

1.02 Related Sections: Coordinate the work of this Section with the work of related specification sections including:

Section 03 30 00 - Cast-in-Place Concrete
Section 31 00 00 - Earthwork
Section 32 11 23 - Mineral Aggregates
Section 32 13 13 - Concrete Paving

1.02 Reference Standards:

A. American Society for Testing and Materials (ASTM), most recent edition of referenced Materials, Testing, or Procedural Specifications.

B. City of Seattle Standard Specifications and Plans for Road, Bridge, and Municipal Construction, (most recent edition).

1.03 Quality Assurance:

A. Inspection Notice: Notify the Engineer at least two (2) working days before inspection will be required; inspection will be required immediately prior to any intended pours or placement of concrete.

B. The work shall be performed by, or under the direct supervision of, a Journey-level Mason.

C. The Work shall not commence until acceptance of cast-in-place concrete or concrete paving base, as appropriate.

D. Cast-on-site wall coping shall be fabricated to the requirements of Section 03300 – Cast-in-Place Concrete for Site Work and installed only when accepted by the Engineer.

1.04 Submittals:

A. Submit Mix Design for Masonry Mortar.

B. Submit 5 sample units of each distinct color, size, and shape unit specified.

C. Submit manufacturer's written data for all hardware, ties, and reinforcement including written description of attachment method.

1.05 Fabrication Mock-ups: Provide one complete installation, approx. 15' x 4', installed on-site as specified, for approval prior to commencing the balance of the work.

PART 2 - PRODUCTS

2.01 Structural Support:

A. Cement Concrete paving support of accent brick paving is provided for under Section 32 13 13 - Concrete Paving.

B. Cast-in-Place Reinforced Concrete Walls are provided for under Division 3, Concrete, for support of Brick Veneer Masonry.

2.02 Brick Masonry Units: Provide the following clay brick masonry units, as manufactured by Mutual Materials, Bellevue, WA (425) 452-2322, or approved equal.

A. All units shall be Standard 3½ x 2½ x 7½ Solid Face Brick.

B. All units shall be produced with a Smooth Finish.

C. All units shall be Grade MW, ASTM Type C 216, FBX or as approved.

D. Color, mix percentages as follows;

1. Color, X%
2. Color, X%
3. Color, X%

2.03 Cast-in-Place Concrete Coping: ***Shall be Cast on-site, light sand-blast finish, cross-section dimensioned per the Contract Drawings. Dimension length to span between cast-in-place pilasters in equal lengths not under 36". Allow for mortar spacing.***

2.03 Portland Cement: Type II Portland Cement, as specified in City of Seattle Standard Specifications (most recent edition), Section 9-01.2(1), and AASHTO - M85. Alternatively, Type III cement, meeting the requirements of AASHTO T131 on approval as conditions warrant.

2.04 Aggregates: Fine aggregate for Mortar shall be City of Seattle Standard Specification Class 1 or Class 2 as appropriate for the conditions and as approved by the Engineer.

2.05 Water: Use water from a potable or domestic source. Comply with the requirements of the City of Seattle Standard Specification (most recent edition), "Water for Concrete".

2.06 Mortar Mix: Shall be Type N Mortar and have the following characteristics:

A. Provide proportions of approved cement, aggregates, and water appropriate for the application, generally 1:2.5 with sufficient water to achieve a consistency adequate for the Work.

B. Admixtures: Do not add calcium chloride.

2.07 Grout: Use only approved non-shrinking grout.

2.08 Ties & Trusses: Use galvanized veneer ties, DUR-O-WALL D/A 431, D/A 990 or approved equal. Use only approved wire trusses, and/or hardware cloth. Attach as directed.

PART 3 - EXECUTION

3.01 Examination: Do not commence the Work of this Section until the supporting concrete work has been accepted and is properly cured and ready to accept the Brick work.

3.02 Layout Control: Establish proper course and bond layout to minimize cutting of brick units. Adjust mortar thickness/width as necessary and approved to accommodate. Report conflicts to the Engineer for resolution prior to proceeding.

3.03 Mortar: Mix Mortar only in such quantities as can be used without adding additional water or admixtures. Apply Mortar only to properly dampened surfaces and uniformly in quantities appropriate for the size and weight of the brick units to be used and volume of joints.

3.04 Pattern:

A. Vertical Surfaces: Brick installed on vertical surfaces shall be installed in a traditional running bond pattern. Adjust initial course and head joint width such that no brick less than 2/5 original length is required. Adjust depth of bed joints so that the top and final course can be installed without cutting. Repeat adjustment to the best match of bed and head joints within 3/8” to ½”.

B. Steps: Install Brick Masonry on cast-concrete base structure as indicated on the Contract Drawings. Install radiused tread-nose courses on edge, row-locked, with joints equally tapered throughout.

C. Accent Paving: Install radiused Accent Paving Bricks in a stacked row-lock pattern, on edge, with joints equally tapered throughout.

3.05 Joints:

A. Horizontal (Bed) and Vertical (Head) Joints: Construct these joints uniformly at 3/8” to 1/2” or as allowed, dependent on accepted layout. Exposed surfaces shall be uniformly rodded, concave, “v”-shaped, weathered, or as approved.

B. Collar joints shall be uniformly complete and flush between the surfaces being bonded, typically brick-to-cast concrete.

3.06 Ties & Reinforcing: Provide approved tie-backs at no more than 1 per 3.5sf of face, in no case spaced more than 18” vertically or 32” horizontally.

3.07 Cleaning:

A. Remove loose mortar and grout materials from all exposed surfaces and the site in general.

B. Leave premises clean and free of residue from work in this section, including trash, materials, containers, mason line, and Brick or Mortar rubble.

END OF SECTION