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 Regulations: Conform to requirement of the IBC and the Seattle Building Code for concrete reinforcement, as supplemented and modified on drawings or herein.

1.02 Reference Standards: Conform to requirements of the following Reference Standards as the Engineer judges them applicable and as modified and supplanted herein.

A. American Concrete Institute (ACI) Building Code Requirements for Reinforced Concrete, ACI 318.

B. ACI Specifications for Structural Concrete for Buildings, ACI 301.

C. ACI Detailing Manual, ACI 315.

1.03 Related Sections:

Section 32 13 13 - Concrete Paving
Section 03 10 00 - Concrete Formwork
Section 03 30 00 - Cast in Place Concrete
Section 03 35 00 - Concrete Finishing

1.04 Quality Assurance: Special Inspection: Notify the Engineer at least 48 hours before placing any concrete. Call the **SPR Inspection Request Line @ (206) 684-7034 or by email at parksconstruction.inspection@seattle.gov** to make arrangements for inspection.

1.05 Submittals: Product Data - Submit manufacturers' published literature for specified products and accessories as applicable, including manufacturers' specifications, physical characteristics and performance data. Submit as a supplement, manufacturers' instructions and directions for application if not included in manufacturers' published literature.

PART 2 - PRODUCTS

2.01 Materials:

A. Bars: ASTM A615; types, sizes and grades as indicated and noted on drawings; all bars free from rust and loose scale at time of delivery.

B. Tie wire: 16-gauge double annealed wire. Provide galvanized tie wire for exposed concrete.

PART 3- EXECUTION

3.01 Fabrication and Detailing:

A. Fabricate steel bar reinforcement to shapes and dimensions as shown and placed as indicated.

B. Bending and Straightening: Form bars accurately to detail, other kinks or bends will not be permitted; conform to requirements of ACI 318. Make bends cold around pin with diameter at least 6 times bar dimension; heating of reinforcement will be permitted only if entire operation is approved. No bending of reinforcement after partial embedment in concrete will be permitted, except for Grade 40 dowels.

C. Splices: Obtain approval of all splices not indicated on drawings. In general avoid splices at points of maximum stress. Saw, shear or flame-cut bar ends; straighten ends of sheared bars; chip and wire brush ends of flame-cut bars. Wire brush splice area to remove burrs, paint, oil, and other foreign matter before splicing. Splice overlap shall be at least 50 times the diameter of the bars or per ACI 318 02 Code.

3.02 Placement:

A. Unless specified otherwise, all steel reinforcement shall be centered within the forms and approved by the Engineer prior to placement of concrete. No reinforcement shall be closer than 2” from any concrete surface.

B. Clean reinforcing bars free from loose rust, mud, oil and other foreign matter affecting or reducing bond using approved portable sandblasting equipment. Accurately position bars in accordance with approved placement drawings and secure against displacement. Lap at intersections as indicated or as directed; extend reinforcement through, and lap beyond, construction joints.

C. Displacement: If bars are displaced, or if it is necessary to move bars to avoid interference with other reinforcing or embedded items, and if bars are moved to exceed tolerances, obtain the Engineer’s approval of resulting arrangement prior to placing concrete.

D. Miscellaneous: After cutting tie-wire, turn wires to the inside of the section and bend in such manner that concrete placement will not force ends to exposed concrete surfaces.

END OF SECTION