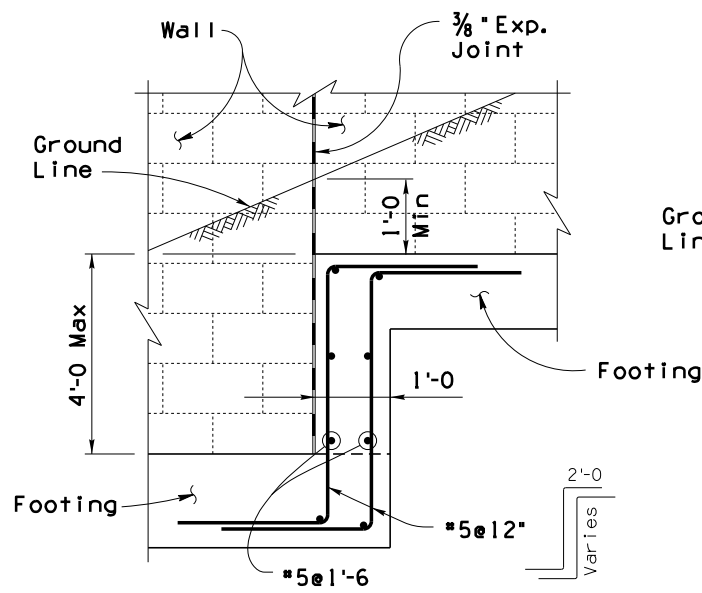
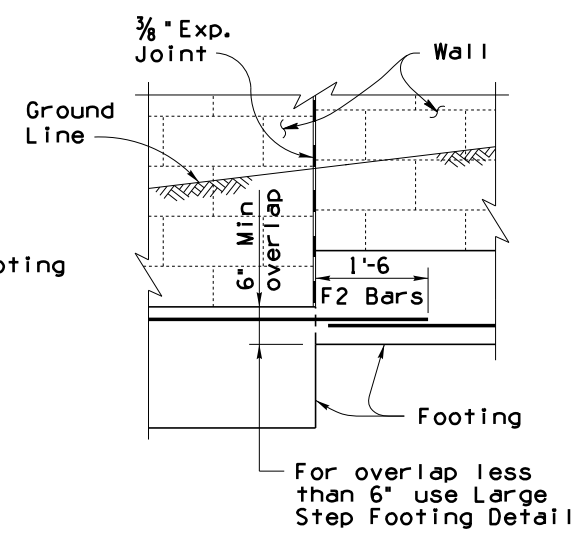


Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

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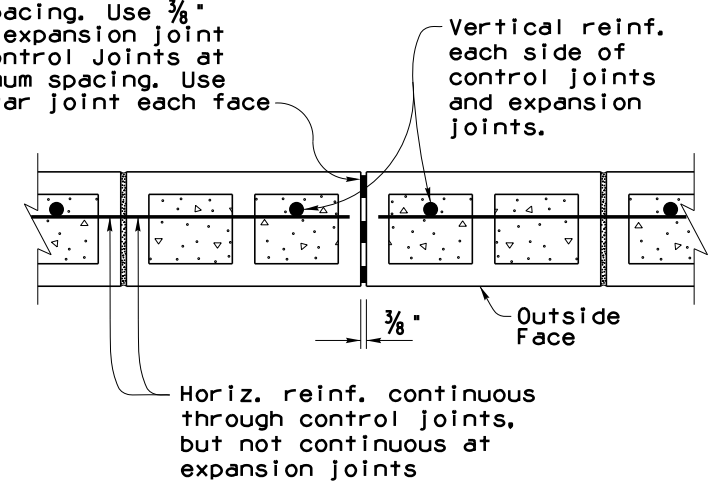


**LARGE STEP FOOTING DETAIL**

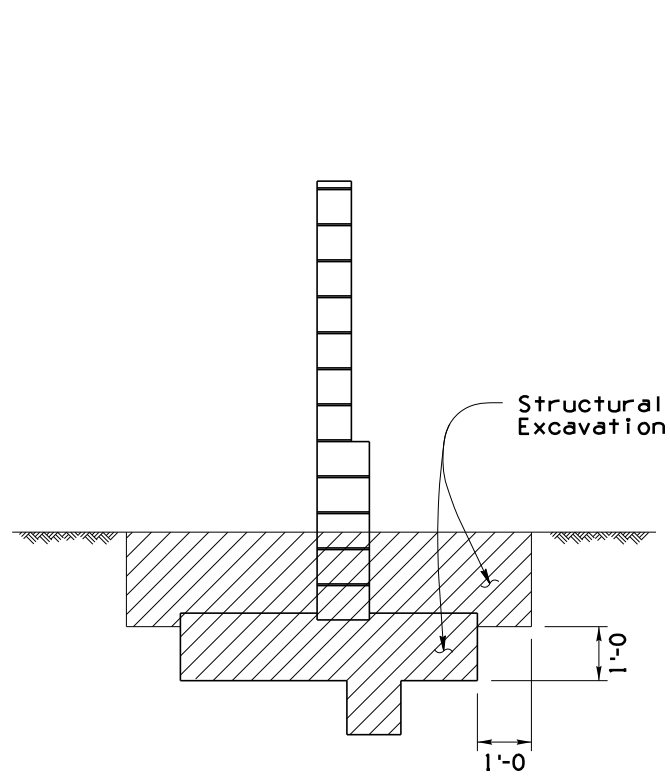


**SMALL STEP FOOTING DETAIL**

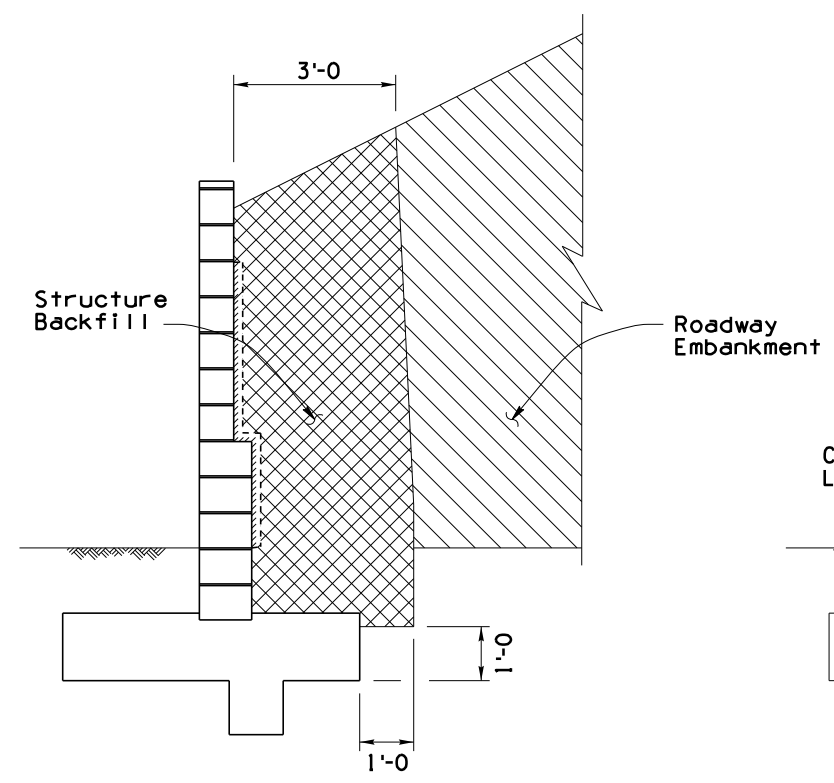
Expansion Joints at 96'-0" maximum spacing. Use 3/8" premolded expansion joint filler. Control Joints at 24'-0" maximum spacing. Use raked mortar joint each face



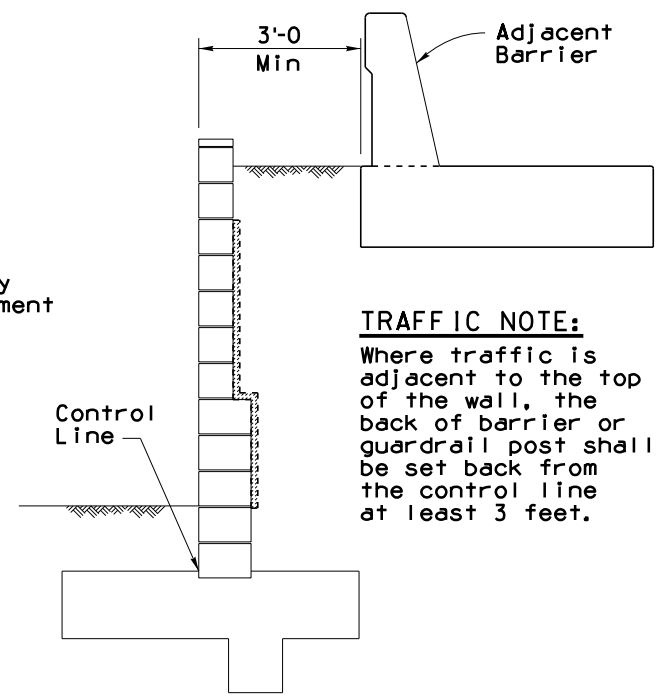
**EXPANSION/CONTROL JOINT DETAIL**



**STRUCTURAL EXCAVATION LIMITS**



**STRUCTURE BACKFILL LIMITS**



**TYPICAL SECTION**

**TRAFFIC NOTE:**  
 Where traffic is adjacent to the top of the wall, the back of barrier or guardrail post shall be set back from the control line at least 3 feet.

**GENERAL NOTES (Continued):**

**Materials Notes:**

- Masonry: f'm = 1500 psi, ASTM C90, Medium or Normal weight, Running Bond, SLUMP BLOCK unless noted otherwise.
- Mortar: ASTM C270, Type S, Cube Strength 1800 psi, ASTM C91 cement.
- Grout: ASTM C476, Type Coarse, Cube strength 2000 psi.
- Reinforcing Steel: ASTM A615, Grade 60.
- Joint Reinforcing: 9 Gauge Ladder or Truss type, Standard weight, fy=33,000 psi, ASTM A82 Wire.

**Special Inspection Notes:**

Special inspection and testing, provided by the Department, are required for the masonry retaining wall stem to assure quality materials and construction.

**(A) Pre-construction:**

- 1) Verify correct block type to be used.
- 2) Verify correct mortar and grout to be used.
- 3) Verify the location, spacing, size and lap length of vertical reinforcing dowel bars and wall reinforcement that is within plus or minus 1/2" of the plan dimension as measured normal to the wall and plus or minus 2" in the longitudinal direction.
- 4) Verify that masonry units are clean and free from dirt when placed in the wall. Masonry units shall be dry before placement.

**(B) Construction:**

- 1) Observe, periodically, the placement of the masonry units and the making of the mortar. Verify that the initial bed joint thickness is not less than 1/4" or more than 1"; subsequent bed joints shall not be less than 1/4" or more than 5/8" in thickness.
- 2) Observe all grout placements.
- 3) Verify horizontal joint reinforcing size, location, and spacing.
- 4) Verify that all concrete masonry units are placed in uniform and true course, level and plumb with a tolerance of 1/4" in 8 feet, non-cumulative.
- 5) Verify that concrete masonry units are placed to the desired height with joints of uniform thickness. Level, plumb and straighten before the mortar stiffens. Bond shall be plumb throughout.
- 6) Verify that all concrete masonry units are cured by sprinkling twice a day for minimum of 2 days.

**NOTE:**

For General Notes, Typical Elevation, Sections and Details see SD 7.02 (1 of 2).

STANDARD ENGINEER	<b>A. ALZUBI</b>
RECOMMENDED FOR APPROVAL	
GROUP MANAGER	
APPROVED	<b>D. EBERHART</b>
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	12/21 DATE

ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP STANDARD DRAWING	
<b>RETAINING WALL MASONRY CANTILEVER</b>	DRAWING NO. <b>SD 7.02 (2 of 2)</b>