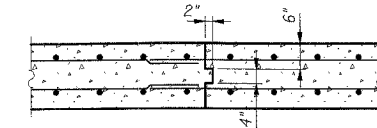


Note: E.J. = Wall Expansion Joint  
C.J. = Wall Construction Joint  
I.F. = Inside Face  
O.F. = Outside Face  
E.F. = Each Face  
S.C.J. = Slab Construction Joint

- ▲ Construction Sequence of Footing pours
  - 1 Wall Elevation Number - See Sheets S17 & S18 of S19 for Elevations
- Tilt bottom slab hooked bars if necessary to provide specified clearances.

**MIN. BAR LAPS**

- #4 = 2'-6"
- #5 = 3'-2"
- #5 = 3'-8" (Top Bar)
- #6 = 3'-10"



**SLAB CONSTRUCTION JOINT DETAIL**

**BILL OF MATERIAL**

Structure Excavation	Cu. Yd.	610
Porous Granular Embankment	Cu. Yd.	70

Maximum Bearing Pressure = 1.0 ksf  
Allowable Bearing Pressure = 1.5 ksf

\* Bottom of excavation shall be proof rolled to locate any areas not meeting the Allowable Bearing Pressure. Unsuitable material shall be removed and replaced with CA-6 aggregate. The CA-6 shall be compacted to 95% of Standard Proctor Density. Cost of removal and replacement of unsuitable soil shall be included in pay item "Structure Excavation"

**LOADING**

Equivalent Fluid Lateral Soil Pressure = 40 lb/ft<sup>3</sup>

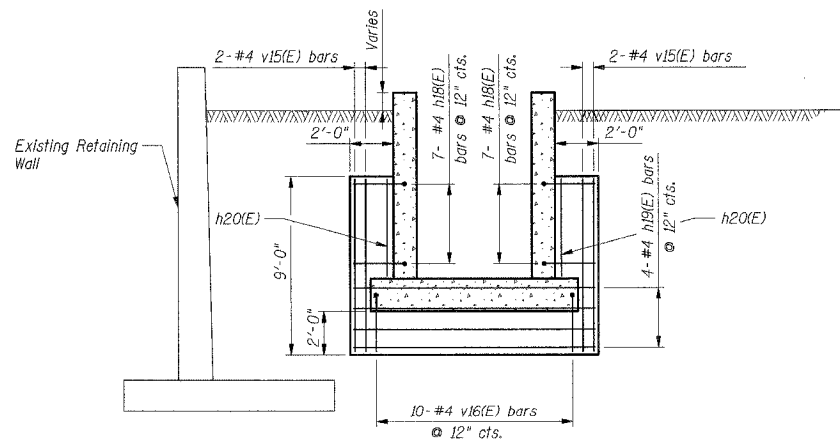
**DESIGN SPECIFICATIONS**

2002 AASHTO  
U.S. Army Corps of Engineers  
Engineer Manual No. 1110-2-2104  
ACT 318-02

**DESIGN STRESSES**

**FIELD UNITS**

$F_c$  = 3,500 psi  
 $F_y$  = 60,000 psi (Reinf.)  
 $F_y$  = 36,000 psi (Channels & misc. pieces)  
 $F_y$  = 50,000 psi (Wide Flange Beams)  
 $F_y$  = 28,000 psi (6061-T6 Aluminum Alloy)



**ELEVATION - TYPICAL SEEPAGE COLLAR**

(Looking West @ Sta. 42+05.00, 41+55.00 Similar)

DESIGNED BY: NDD  
 DRAWN BY: MEF  
 CHECKED BY: BGC  
 DATE: 1-18-2006