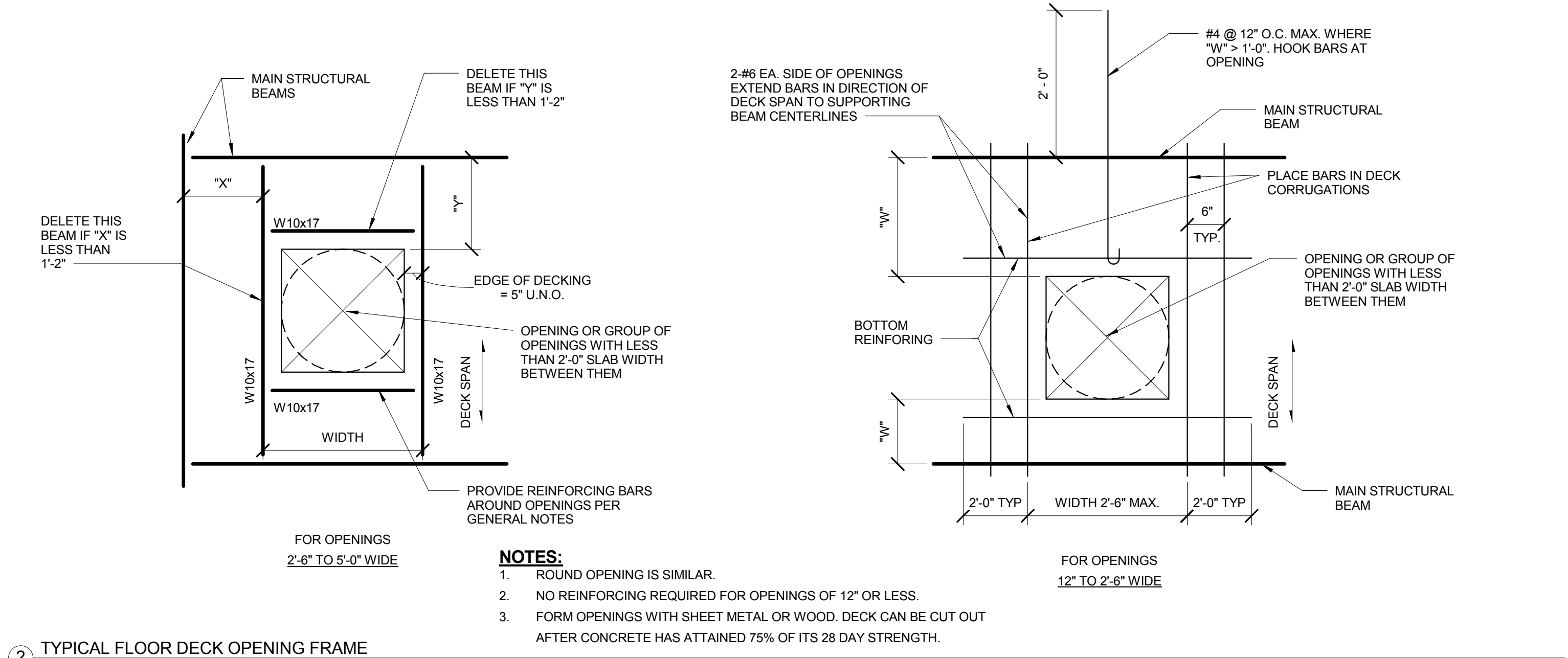
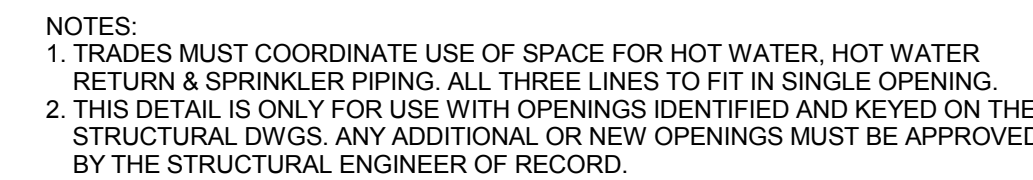




**NOTES:**

1. LAP SPLICE TOP REINFORCING AT GRADE BEAM MIDSPAN.
2. LAP SPLICE BOTTOM REINFORCING AT DRILLED PIER SUPPORT.
3. LAP SPLICE SIDE REINFORCING AT DRILLED PIER SUPPORT.
4. WHERE (2) LAYERS OF TOP OR BOTTOM REINFORCING IS SHOWN IN GRADE BEAM SCHEDULE - PROVIDE 1 1/2" CLEAR DISTANCE BETWEEN THE 2 LAYERS.

② TYPICAL FLOOR DECK OPENING FRAME  
3/4" = 1'-0"

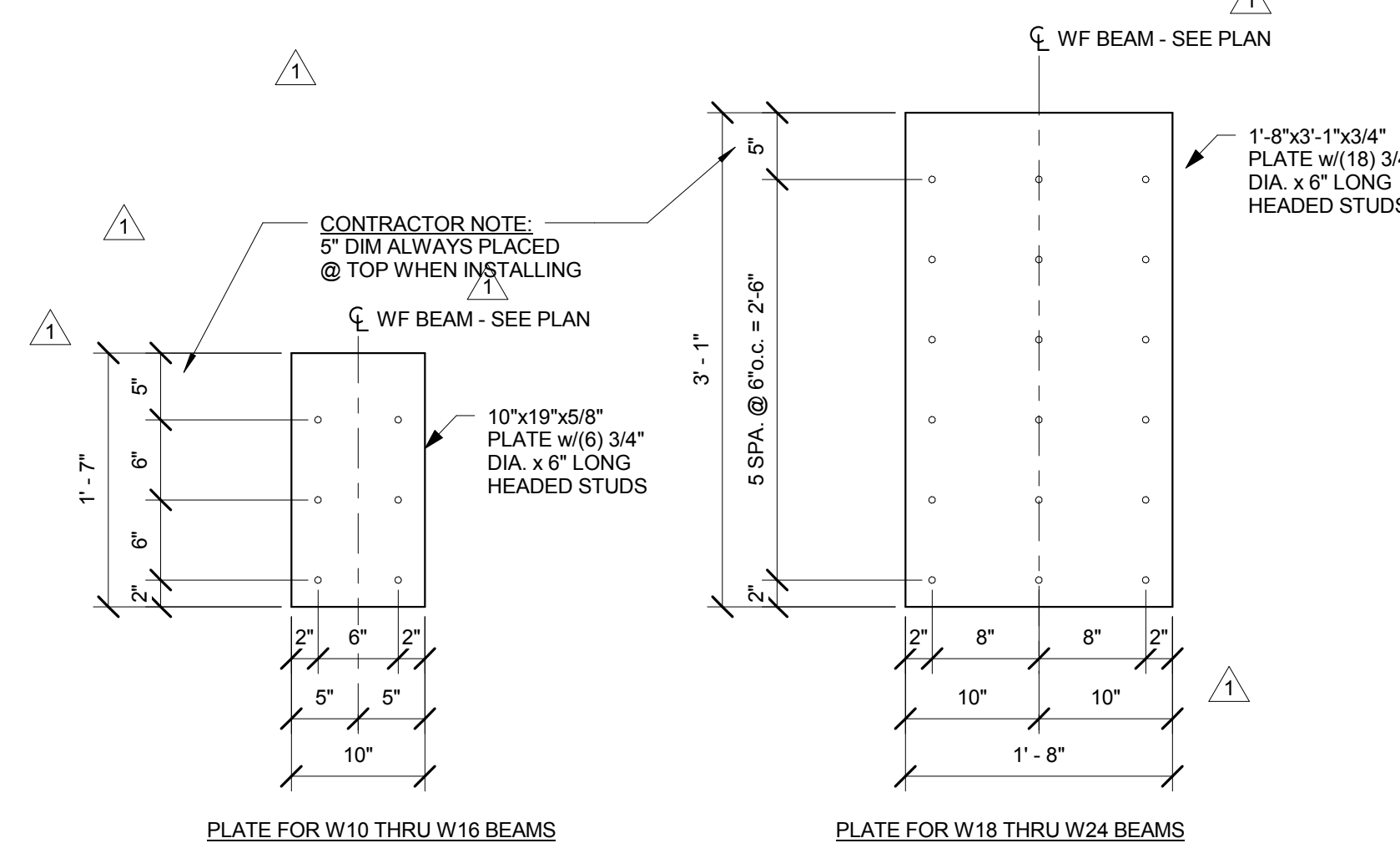


10 TYPICAL WEB OPENING DETAIL IN WF BEAM  
3/4" = 1'-0"

**NOTES:**

1. SPACE CONTROL JOINTS AT 20'-0" ON CENTER MAXIMUM.
2. SPACE EXPANSION JOINTS AT 100'-0" ON CENTER MAXIMUM.

4 TYPICAL CONCRETE SITE RETAINING WALL SCHEDULE  
3/4" = 1'-0"



7 TYPICAL EMBEDDED PLATE DETAILS FOR BEAM CONNECTION TO CONCRETE WALLS  
1" = 1'-0"

Technical drawings of a pipe penetration through a grade beam, showing cross-section and plan views.

**Cross-Section View (Left):**

- SLEEVE PIPE PENETRATION SEE PLUMBING DRAWINGS**
- (3) #6 x5'-0" LONG OVER SLEEVE**
- REINFORCING PER GRADE BEAM SCHEDULE**
- 1'-0" MIN** (vertical dimension for sleeve overhang)
- 1'-0" MIN** (vertical dimension for sleeve penetration)
- 8" MIN** (horizontal dimension for sleeve penetration)
- #5 U-BAR EACH SIDE**
- 2'-0" MIN** (horizontal dimension for sleeve penetration)
- 1'-0" MIN** (horizontal dimension for sleeve penetration)
- 4'-0" 4'-0"** (horizontal dimensions for sleeve penetration)
- REINF. TO MATCH GRADE BEAM BOTTOM REINF.**
- NOTE: WHERE PIPING RUNS BELOW GRADE BEAM PLACE IN STEEL SLEEVE IF OCCURS WITHIN 2'-0" FROM BOTTOM OF GRADE BEAM**

**Plan View (Right):**

- GRADE CIVIL SEE CIVIL**
- 6" MIN** (vertical dimension for sleeve penetration)
- 2'-6" MIN** (horizontal dimension for sleeve penetration)
- #5 @ 12" o.c. EACH WAY**
- #5 TOP AND BOTTOM**
- 8" MIN** (horizontal dimension for sleeve penetration)
- FREE DRAINING GRANULAR FILL**
- 1** and **2** (callouts for equipment and connection)

9 TYPICAL SPANDREL BEAM DETAIL  
3/4" = 1'-0"

9 TYPICAL SPANDREL BEAM DETAIL  
3/4" = 1'-0"

5 TYPICAL TERRACED CONCRETE SITE RETAINING WALL  
3/4" = 1'-0"

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