

|      |        |       |                             |              |                 |
|------|--------|-------|-----------------------------|--------------|-----------------|
| DIST | COUNTY | ROUTE | POST MILES<br>TOTAL PROJECT | SHEET<br>NO. | TOTAL<br>SHEETS |
|      |        |       |                             |              |                 |

*C. M. Dunn*  
REGISTERED CIVIL ENGINEER

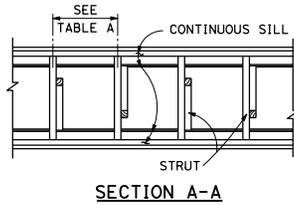
October 30, 2015  
PLANS APPROVAL DATE

Carl M. Dunn  
No. C59976  
Exp. 6-30-16  
CIVIL  
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**TABLE A**

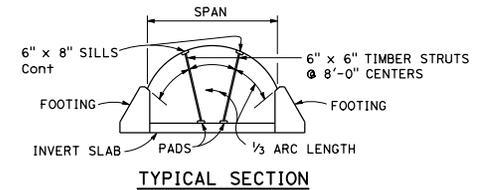
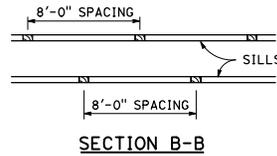
| PIPE Dia             | STRUT SIZE | HEIGHT OF FILL |                     |
|----------------------|------------|----------------|---------------------|
|                      |            | 0 TO 20'-0"    | GREATER THAN 20'-0" |
| 240"<br>THRU<br>252" | 8" x 8"    | 5'-0" SPACING  | 3'-0" SPACING       |
|                      | 10" x 10"  | 8'-0" SPACING  | 4'-6" SPACING       |



**TABLE B**

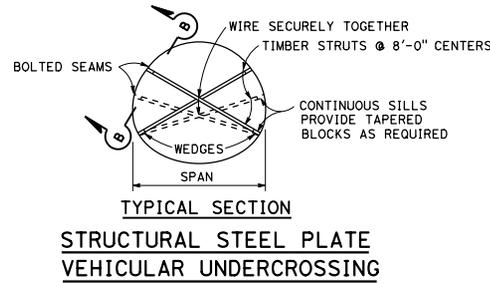
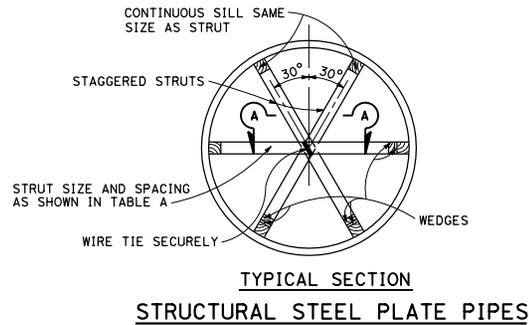
| SPAN            | STRUT SIZE | SILL SIZE |
|-----------------|------------|-----------|
| 13'-2" - 15'-6" | 4" x 4"    | 4" x 6"   |
| 15'-9" - 17'-3" | 4" x 4"    | 4" x 8"   |
| Over 17'-3"     | 6" x 6"    | 6" x 8"   |

Tabular data in Table B based on 6" x 2" corrugations, (Structural steel plate).



**STRUCTURAL STEEL PLATE ARCHES**

Struts required when span of structural steel plate arch exceeds 18'-0" pad size as directed by Engineer.



**NOTES:**

1. Struts shown are minimum required during construction when construction vehicle loading exceeds 32 kip/axle, and minimum cover is less than that shown for metal culverts in the table on Standard Plan D88.
2. Backfill shall be brought up uniformly on both sides of the structure.
3. For minimum cover over structure for construction loads, see Standard Plan D88.
4. Strut all situations where overfill is removed in an unbalanced manner.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**STRUT DETAILS FOR  
STRUCTURAL STEEL PIPES,  
ARCHES AND  
VEHICULAR UNDERCROSSING**

NO SCALE

**D88A**