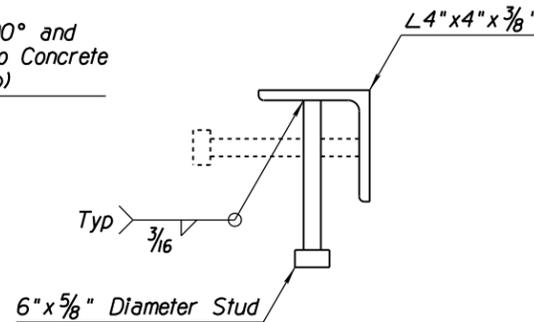
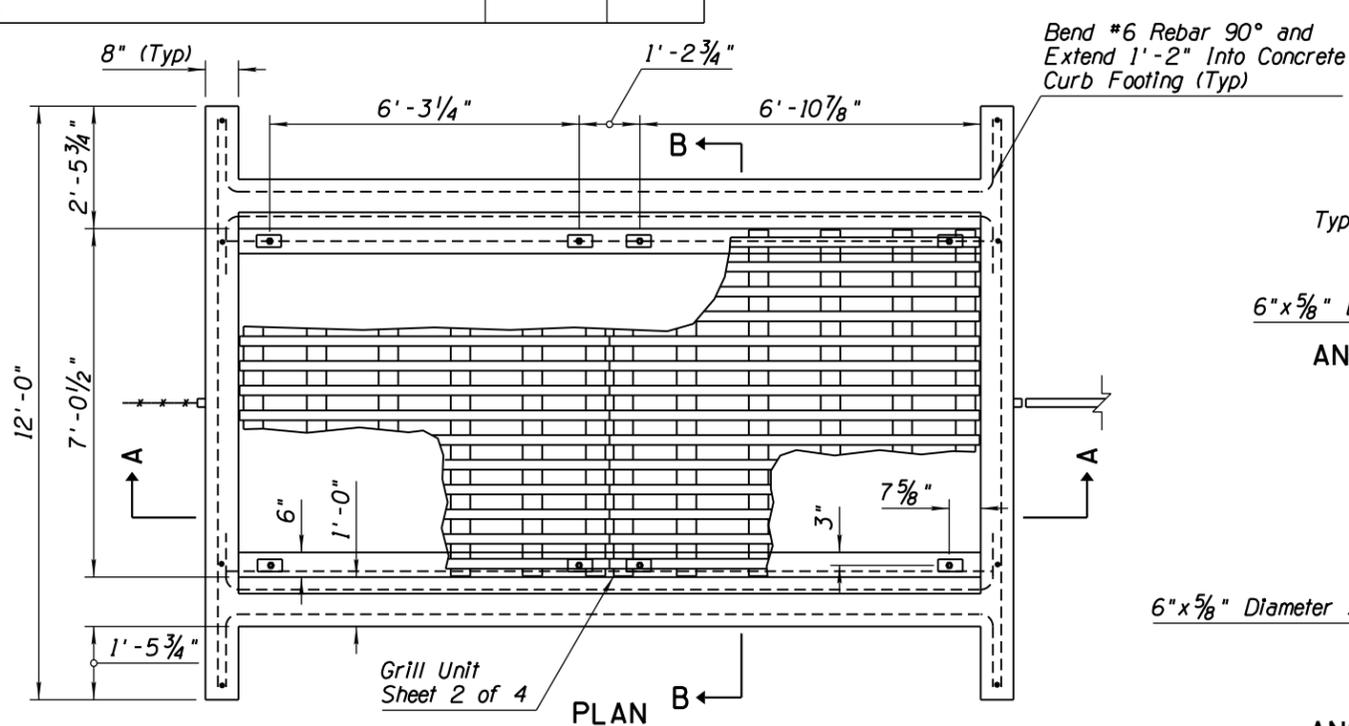
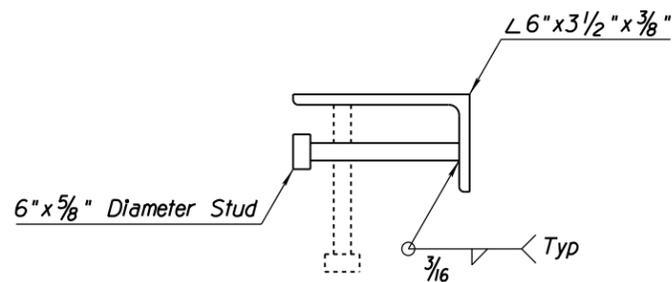


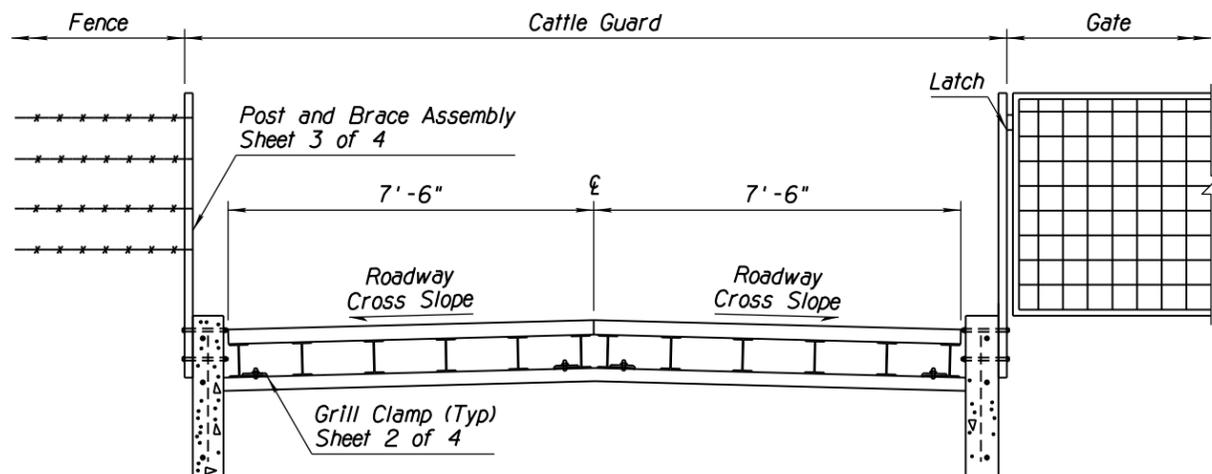
NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REISSUED STD DWG	RLF	4/06
2			
3			
4			



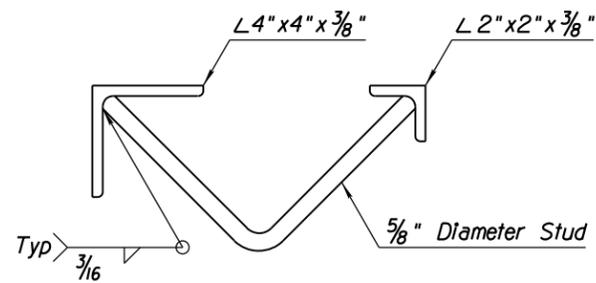
ANGLE ASSEMBLY DETAIL 1



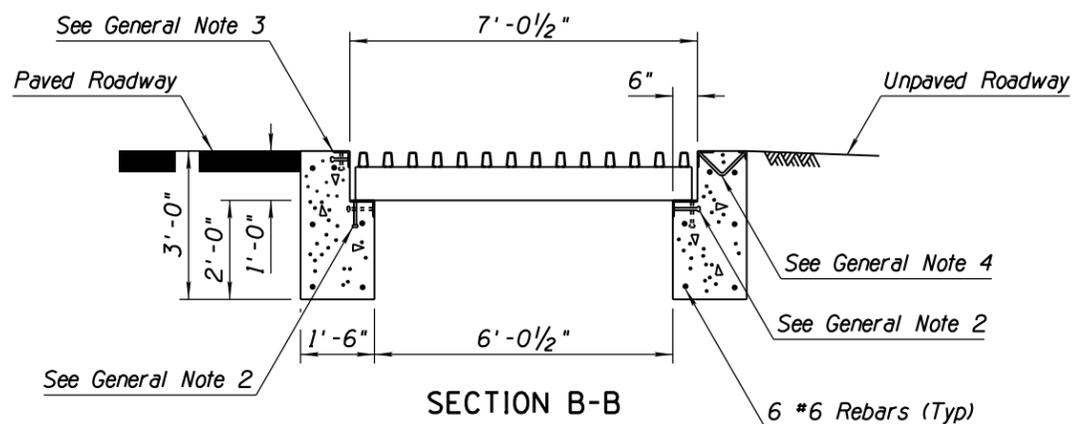
ANGLE ASSEMBLY DETAIL 2



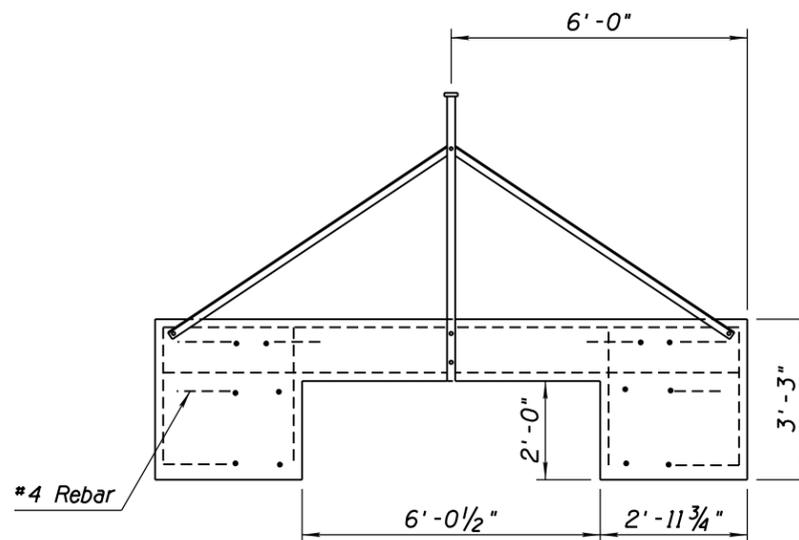
SECTION A-A



ANGLE ASSEMBLY DETAIL 3



SECTION B-B



END VIEW

GENERAL NOTES

1. Cattle guard shall include two (2) clamps per Sheet 4 at each gap between two (2) grill units, one at each end. Clamps shall be adjusted to provide a 1/4-inch, plus or minus 1/16-inch gap between adjacent grill units.
2. Grill units shall be set on an angle iron assembly consisting of one piece of 6"x3 1/2"x 3/8" angle iron and studs with a head. The studs shall be placed on 1'-0" alternate centers. See Angle Assembly Detail 2.
3. Cattle guard shall be sloped to conform to the roadway grade and cross-section, except that where an odd number of grill units is specified in a crowned roadway, the center grill unit shall have a level cross slope.
4. Where the adjacent roadway is paved, an angle iron assembly shall consist of one piece of 4"x4"x 3/8" angle iron and studs with a head. The studs shall be placed on 1'-0" alternate centers. See Angle Assembly Detail 1.
5. Where the adjacent roadway is unpaved, an angle iron assembly shall consist of one 4"x4"x 3/8" angle iron, one 2"x2"x 3/8" angle iron, and connected with studs. The assembly shall be crowned at the centerline and constructed with a bevel cut and welded. The studs shall be bent 90° and placed on 1'-0" centers. See Angle Assembly Detail 3.
6. Each angle iron and angle iron assembly shall be fabricated to form a single piece for the full length of the cattle guard.
7. Quantities shown for concrete and rebar are approximations for informational purposes only.
8. When a gate is to be installed, it shall be called out on the plans.
9. All rebar shall have a minimum cover of 3", or as shown on the plans.
10. Cattle guard beams shall be HS-20 loading unless otherwise shown on the plans.

UNIT TABLE			
Roadway Width (ft)	Grill Units Required	Concrete (Cu Yd)	Rebar (Lbs)
12	2	5.8	175
16	3	8.0	240
20	4	10.3	310
28	5	12.5	375
34	6	14.7	445
36	6	14.7	445
38	7	16.9	510
40	7	16.9	510

APPROVED FOR DESIGN 	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION ROADWAY STANDARD DRAWINGS	REV. 5/12
APPROVED FOR DISTRIBUTION 	ROADWAY CATTLE GUARD	DRAWING NO. C-11.10 Sheet 1 of 4