

Diary Number: _____

Inspector Name: _____

TRACS Number: _____

Date: _____

Division IX: Incidentals

Title: Cattle Guards

Route
Station
Offset
C-11.10
C-11.20
Precast or Cast in Place

Attribute Numbers	Compliance	Narratives	References
0.		All stakeholders have participated in the pre-activity meeting (can be combined with another pre-activity).	Recommended
1.		The Contractor's safety Plan includes detail on preventing animals from escaping during construction without restricting vehicular traffic.	Standard Specifications 104.04 Standard Specifications 107.08
2.		The contractor submitted signed and sealed shop drawings, or used the current approved drawings.	Standard Drawing C-11.20 Standard Drawing C-11.10
3.		The Certificates of Compliance state that steel or iron products incorporated into the project meet the "Buy America" Act requirements; certifying that all manufacturing processes producing a steel or iron product, including any application of a coating to iron or steel, occurred in the United States.	23 CFR Part 635.410 Special Provisions 106.05
4.		Reinforcing bars and structural steel conform to the requirements of Section 1003 and Section 1004. ASTM A 570, Grade 40 steel may be used as an alternate to ASTM A 36 for the fabrication of cattle guard grill rails.	Standard Specifications 906-2.02

5.		Threaded Rod, Bolts, Nuts, and Washers Conform to ASTM A36 OR A307 and will be galvanized or zinc plated in Accordance with ASTM A 1 53 or B695. Pre cast Concrete Miscellaneous Structures: General Notes or Structural Notes:	Manufacturer Drawings Notes
6.		The fabrication and connections of grille units, angle units, and other steel elements conform to Section 604. Either H-10 or H-20 loading is designated on the project plans.	Standard Specifications 906-3
7.		Longitudinal grade at pre cast cattle guard locations does not exceed six percent.	Standard Specifications 906-3
8.		Blue stake (Arizona 811) is done before excavation.	Standard Specifications 107.15
9.		If the unit is pre cast, the Certificate of Compliance matches the unit and the unit is identified with a ADOT stamp.	Standard Specifications 906-1 Standard Specifications 906-3
10.		Steel parts are primed.	Standard Specifications 610 Standard Specifications 906-3
11.		Repair of any scraped areas is by painting structural steel in accordance with Section 610. Structural steel is painted with one coat of primer in accordance with Section 1002.	Standard Specifications 906-3
12.		Backfill material is compacted to at least 95% of maximum density.	Standard Specifications 203-5.03 (B)(4) Standard Specifications 906-2.04
13.		Cattle guards are in accordance with the details on the plans and specifications.	Standard Specifications 906-1
14.		The cattle guards are in reasonably close conformity to the lines and grades established or shown on the project plans.	Standard Specifications 906-3
15.		When Cattle Guard is placed on a roadway a single piece angle iron assembly of 4"x 4" x 3/8" is used (on both edges of the cattle guard / outside edge).	Standard Drawing Notes 4 or 5 Standard Drawing C-11.10
16.		Cattle guards were adjusted so that the gap between adjacent grille units does not exceed 1/4" +/- 1/16".	Standard Drawing Note 1 Standard Drawing C-11.10
17.		Cattle guards are set to the required elevations using shims on the steel angles so that there isn't any rocking under load of a grille or tread assembly. The no gap greater than 1/32 inch exists between any pair of bearing surfaces when the grille or assembly is not under load.	Standard Specifications 906-3
18.		Each grille has 4 bottom clamps held in place with four 3/4" – 10 UNC x 2-1/2" Bolts and Nuts with Helical Spring Lock washers.	Standard Drawing Sheet 2 of 2, Section C-C plan view Standard Drawing C-11.10
19.		Each grille is connected to the adjacent grille with two clamp sets. The clamp sets are secured with 11-5/8" x 3/4" Bolts with one 3/4" nut spot welded at one end with a plain round washer and two 3/4" nuts with a plain round washer on the other end tightened together with high-strength thread-locking compound applied to the threads.	Standard Drawing Sheet 4 of 4 Standard Drawing C-11.10

20.		Where an odd number of Cattle guard grilles are specified in a crowned roadway, the center grille has a level cross slope.	Standard Drawing Sheet 1 of 4 - Notes 3 Standard Drawing C-11.10
21.		Completed cattle guards are well-drained to prevent ponding of water in the structure.	Standard Specifications 906-3
22.		When required, the channel lining has wire mesh and conforms to detail drawing; thickness and the spillway meets Standard Drawing C-04.10 detail.	Standard Drawing C-11-20
23.		The correct Object Markers were placed per notes in the project plans.	Signing and Marking Standard Drawings M-24
24.		Fence lines were restored so that the cattle guard performs its intended function.	Standard Specifications 107.11
25.		Quantlist Minimum Frequency is being followed, One per Location.	Construction Bulletin 07-01