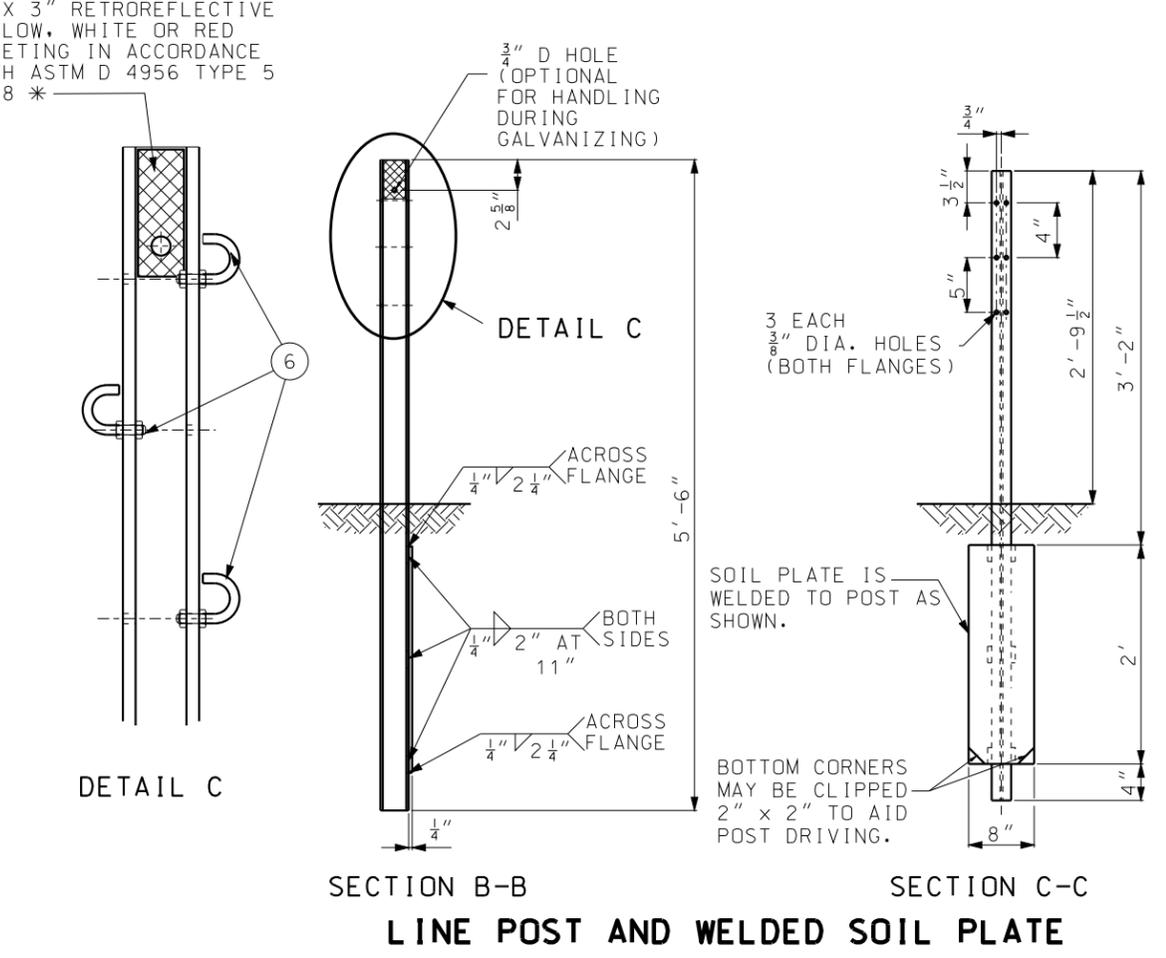
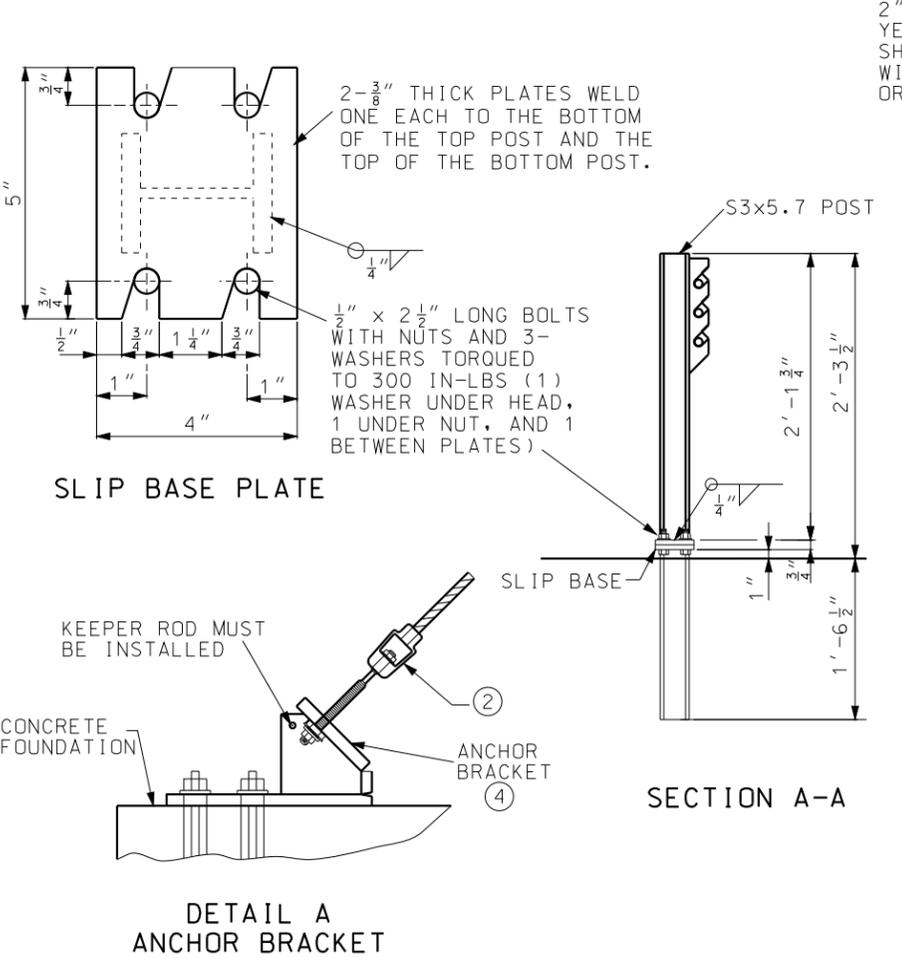
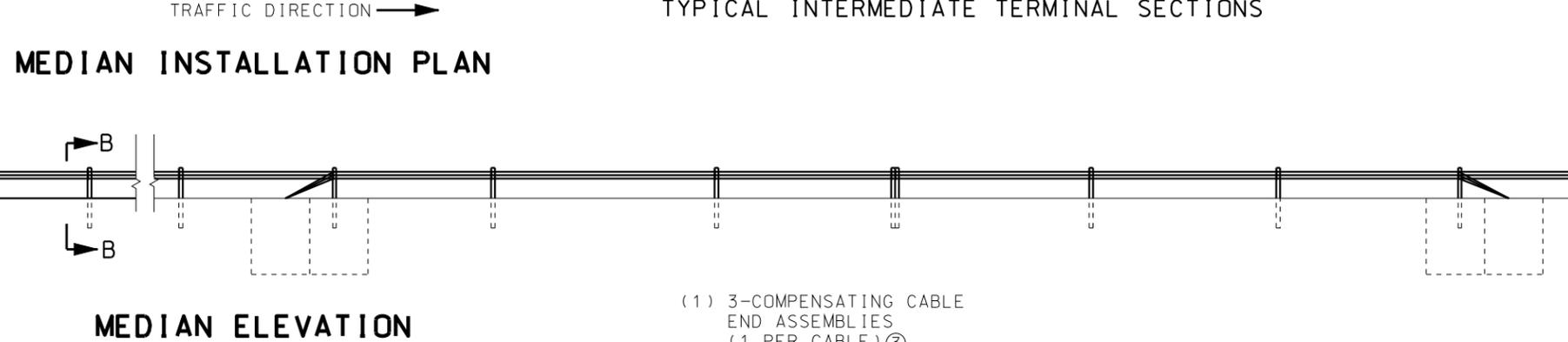
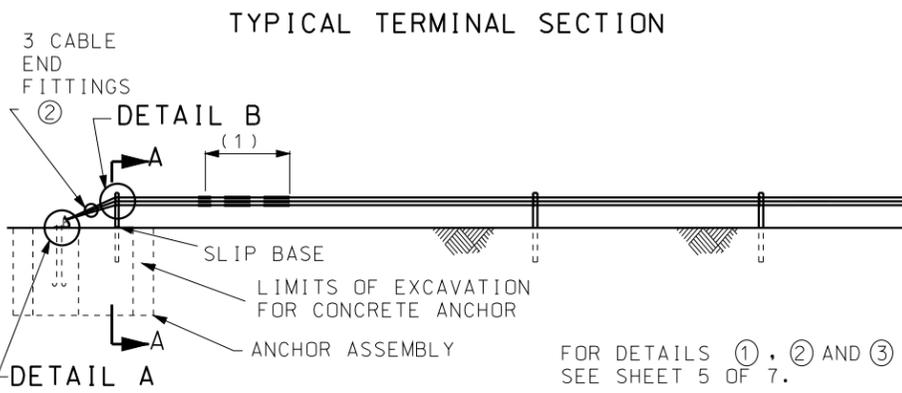
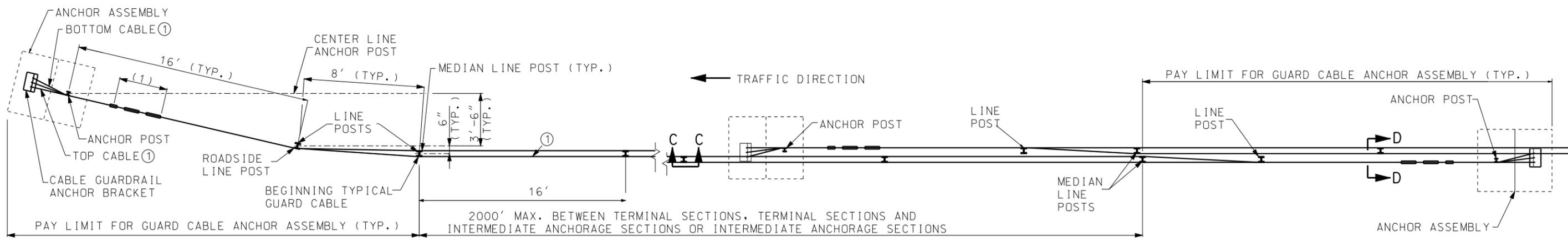


IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



GENERAL NOTES:

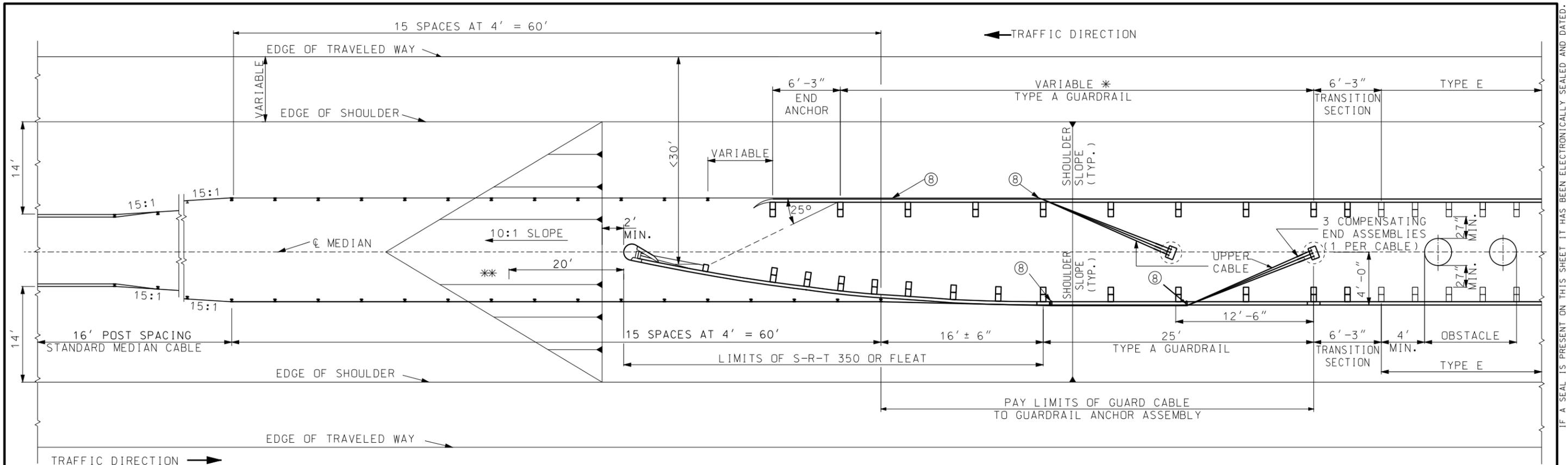
IN THE EVENT THE NORMAL 16' POST SPACING WOULD PLACE A POST ON A DROP INLET, THE SPACING OF THE TWO POSTS IMMEDIATELY PRECEDING THE INLET SHALL BE REDUCED SUCH THAT THE FOLLOWING POST CLEARS THE INLET. EACH SUBSEQUENT POST SHALL BE SPACED AT 16'. IN NO CASE SHALL THE SPACING EXCEED 16'.

IN THE EVENT A LONGITUDINAL MEDIAN PIPE IS ENCOUNTERED THE CABLE SHALL BE PLACED PARALLEL TO THE PIPE AT A MINIMUM OFFSET OF 12". THE OFFSET SHALL BE ACHIEVED BY A MINIMUM 16:1 TAPER ON THE UPSTREAM AND DOWNSTREAM END OF THE PIPE.

FOR SECTION D-D, SEE SHEET 4.

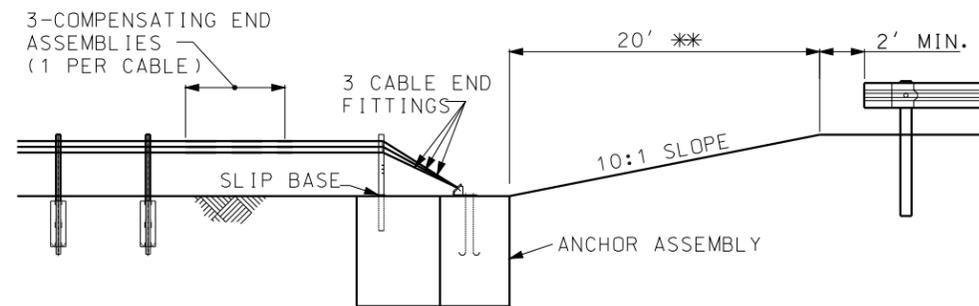
* REFLECTIVE SHEETING SHALL FOLLOW GUIDELINES OUTLINED IN SEC 1042.2.7 FOR CORRECT APPLICATION OF SHEETING TO GUARD CABLE POST. THE COLOR OF THE SHEETING SHALL MATCH THE CLOSEST ADJACENT PAVEMENT MARKING. RED SHEETING SHALL BE APPLIED TO THE BACK SIDE OF THE POST WHEN THE DELINEATION IS PLACED ALONG AN INTERCHANGE RAMP AND COULD BE VIEWED BY WRONG WAY TRAFFIC.

<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
<p>KATHRYN PHILLIPS HARVEY NUMBER PE-23751 PROFESSIONAL ENGINEER</p> <p>THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.</p>	<p>THREE-STRAND GUARD CABLE MEDIAN APPLICATION</p>
<p>DATE EFFECTIVE: 01/01/2005 DATE PREPARED: 11/26/2012</p>	<p>606.41J</p>
<p>SHEET NO. 1 OF 7</p>	



GUARD CABLE TO GUARDRAIL TRANSITION AT MEDIAN OBSTACLE

- * VARY LENGTH TO ACHIEVE 25° DEFLECTION TO SECOND POST OF S-R-T 350 OR FLEAT.
- ** IF GUARD CABLE IS USED WITH BULLNOSE GUARDRAIL SYSTEM, OR A CRASHWORTHY END TERMINAL ON A MEDIAN LESS THAN 60' IN WIDTH, THE CABLE ANCHORAGE SHALL BE PLACED ON THE MEDIAN CENTERLINE 20' FROM THE NOSE OF THE CRASHWORTHY END TERMINAL OR BULLNOSE GUARDRAIL SYSTEM.



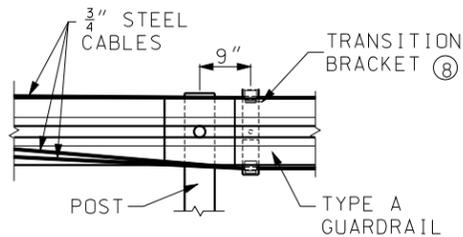
PROFILE OF TRANSITION AT MEDIAN OBSTACLE WITH BULLNOSE OR IN A MEDIAN NARROWER THAN 60' **

GENERAL NOTES:

WHEN GUARD CABLE IS LOCATED ALONG THE MEDIAN CENTERLINE NEAR A BRIDGE END OR CONCRETE BARRIER, IT SHALL BE ANCHORED BEHIND THE GUARDRAIL ASSEMBLY WITH THE GUARD CABLE ANCHOR ASSEMBLY. THE GUARD CABLE ANCHOR SHALL BE CONSTRUCTED SO THAT IT IS PROTECTED BY THE GUARDRAIL.

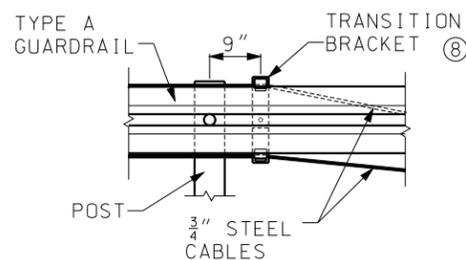
THIS DRAWING DEPICTS OPTIONS FOR THE ATTACHMENT OF GUARD CABLE TO GUARDRAIL. IT DOES NOT INDICATE THAT TWO RUNS OF CABLE ARE REQUIRED.

SUITABLE DRAINAGE MUST BE PROVIDED WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

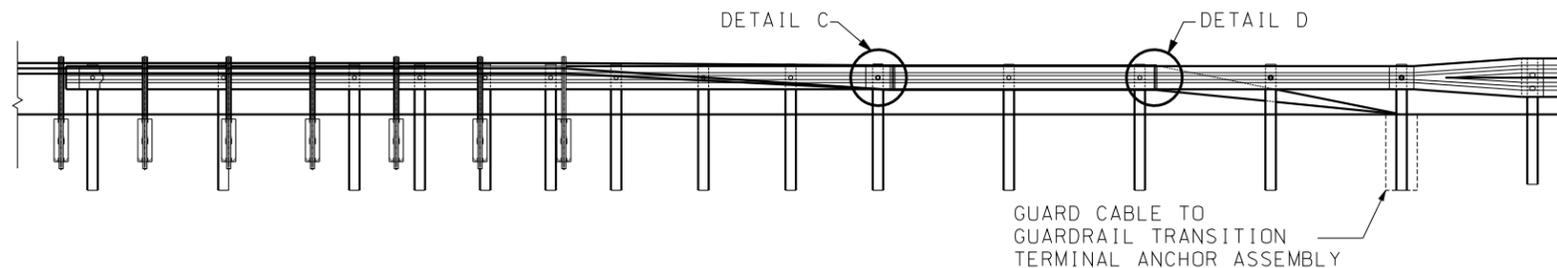


DETAIL C

FOR DETAIL ⑧ SEE SHEET 6 OF 7.



DETAIL D

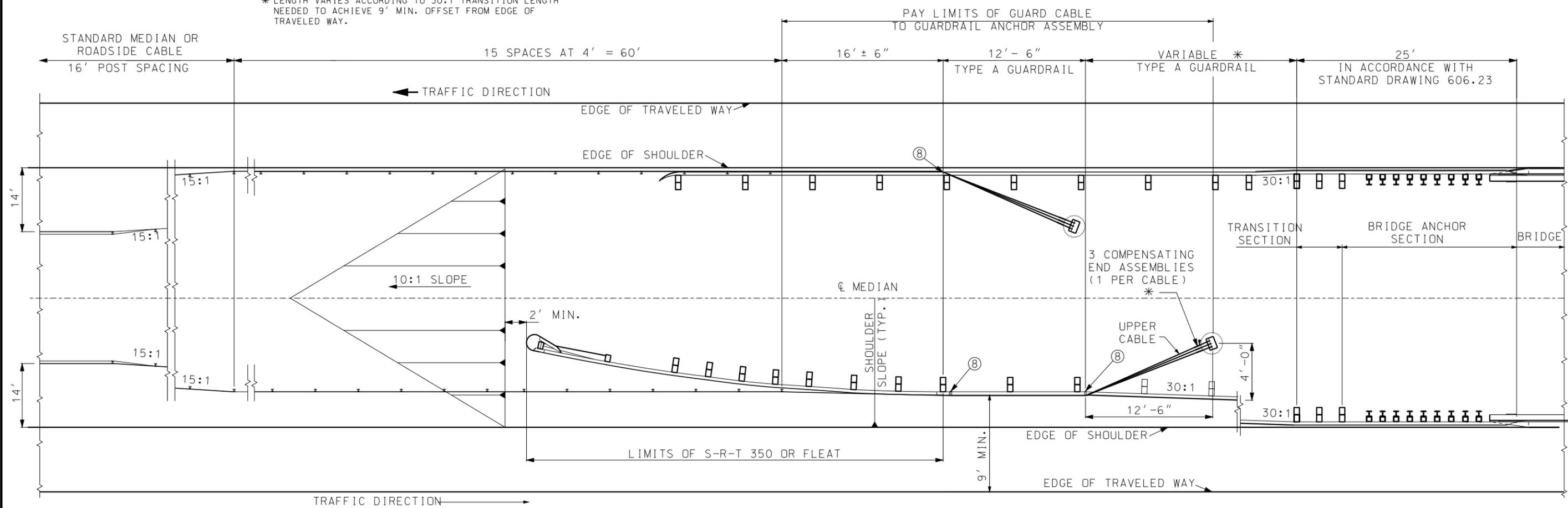


TYPICAL GUARD CABLE TO GUARDRAIL TRANSITION ELEVATION

<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	<p>THREE-STRAND GUARD CABLE</p>
<p>DATE EFFECTIVE: 01/01/2005 DATE PREPARED: 8/21/2009</p>	<p>606.41J</p>
<p>SHEET NO. 2 OF 7</p>	<p>SHEET NO. 2 OF 7</p>

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

* LENGTH VARIES ACCORDING TO 30:1 TRANSITION LENGTH NEEDED TO ACHIEVE 9' MIN. OFFSET FROM EDGE OF TRAVELED WAY.

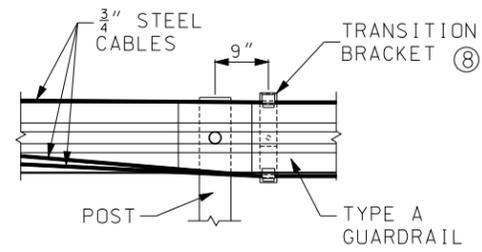


GUARD CABLE TO GUARDRAIL TRANSITION AT MEDIAN BRIDGE END

GENERAL NOTES:
 WHEN GUARD CABLE IS LOCATED ALONG THE MEDIAN CENTER-LINE NEAR A BRIDGE END OR CONCRETE BARRIER, IT SHALL BE ANCHORED BEHIND THE GUARDRAIL ASSEMBLY WITH THE GUARD CABLE ANCHOR ASSEMBLY. THE GUARD CABLE ANCHOR SHALL BE CONSTRUCTED SO THAT IT IS PROTECTED BY THE GUARDRAIL.

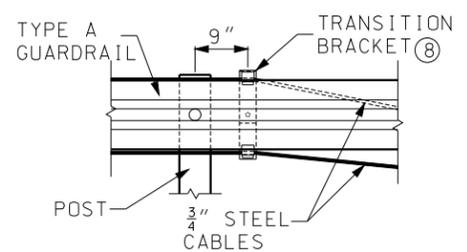
THIS DRAWING DEPICTS OPTIONS FOR THE ATTACHMENT OF GUARD CABLE TO GUARDRAIL. IT DOES NOT INDICATE THAT TWO RUNS OF CABLE ARE REQUIRED.

SUITABLE DRAINAGE MUST BE PROVIDED WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

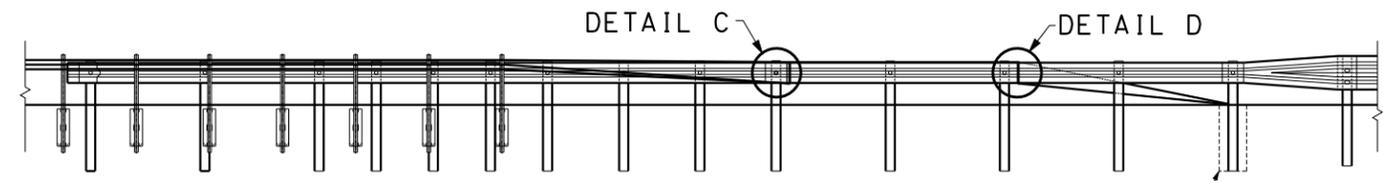


DETAIL C

FOR DETAIL 8 SEE SHEET 6 OF 7.



DETAIL D



TYPICAL GUARD CABLE TO GUARDRAIL TRANSITION ELEVATION

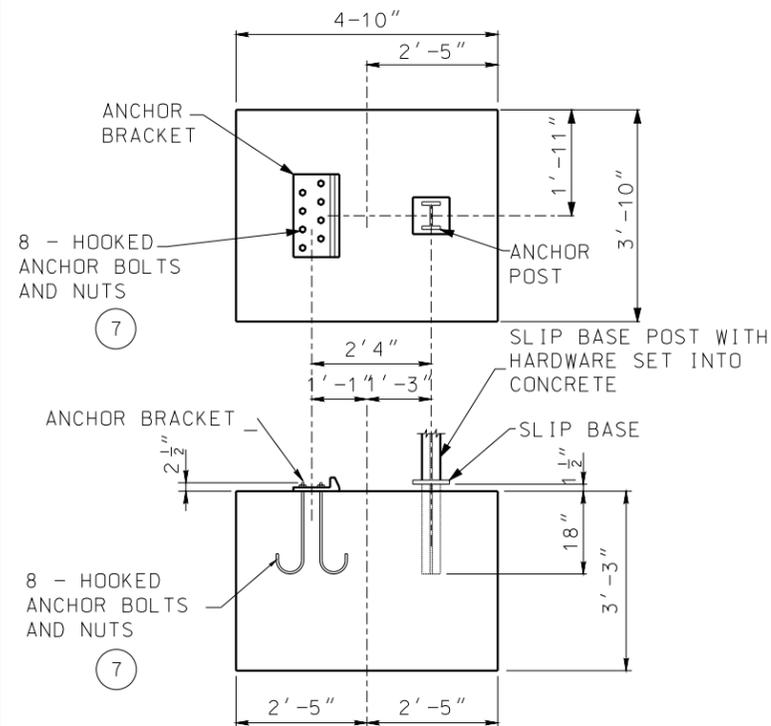
MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 KATHRYN PHILLIPS HARVEY
 NUMBER PE-23751
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY.

THREE-STRAND GUARD CABLE

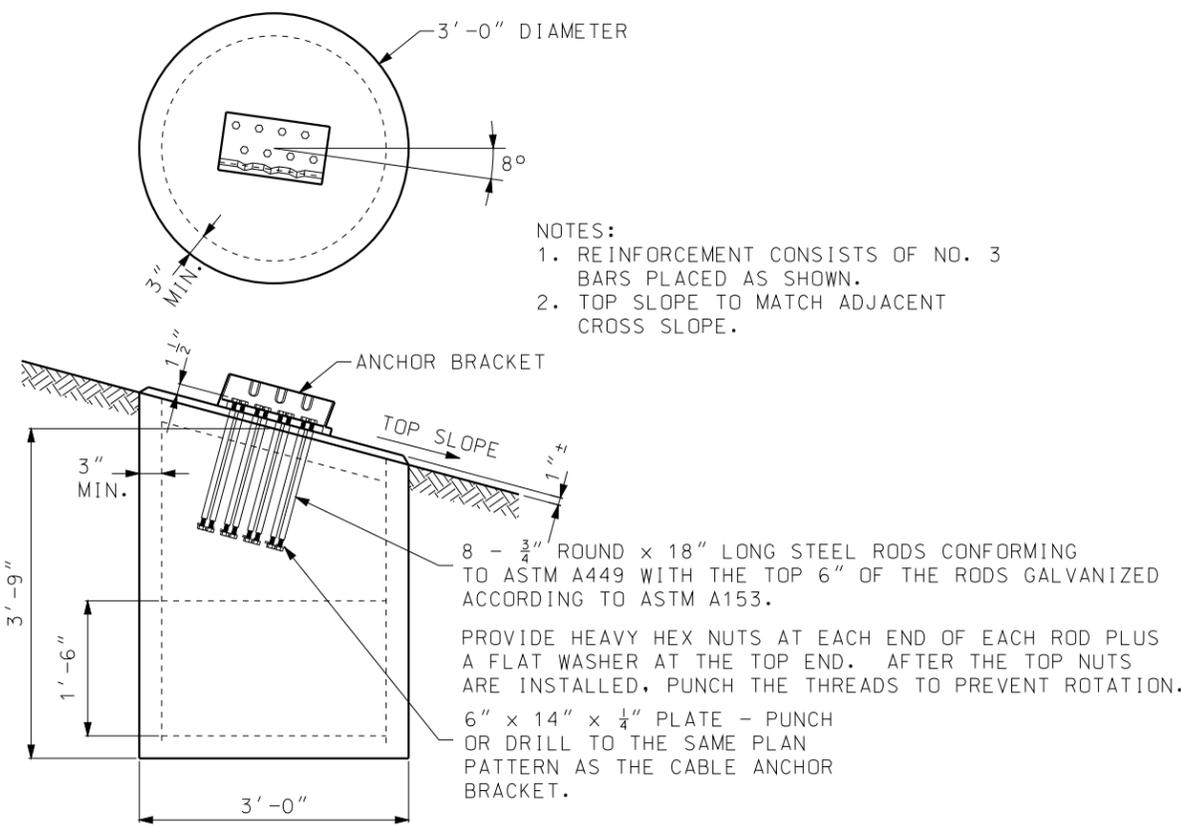
DATE EFFECTIVE: 01/01/2005	606.41J	SHEET NO.
DATE PREPARED: 8/21/2009		3 OF 7

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



MEDIAN AND ROADSIDE CABLE

- NOTES:
1. PLACE ANCHORS SO THE TOPS ARE LEVEL; WARP SLOPE TO FIT.
 2. THE CONCRETE ANCHOR BLOCK DOES NOT REQUIRE REINFORCEMENT.



GUARD CABLE TO GUARDRAIL TRANSITION

- NOTES:
1. REINFORCEMENT CONSISTS OF NO. 3 BARS PLACED AS SHOWN.
 2. TOP SLOPE TO MATCH ADJACENT CROSS SLOPE.
- 8 - 3/4" ROUND x 18" LONG STEEL RODS CONFORMING TO ASTM A449 WITH THE TOP 6" OF THE RODS GALVANIZED ACCORDING TO ASTM A153.
- PROVIDE HEAVY HEX NUTS AT EACH END OF EACH ROD PLUS A FLAT WASHER AT THE TOP END. AFTER THE TOP NUTS ARE INSTALLED, PUNCH THE THREADS TO PREVENT ROTATION.
- 6" x 14" x 1/4" PLATE - PUNCH OR DRILL TO THE SAME PLAN PATTERN AS THE CABLE ANCHOR BRACKET.

STANDARDIZED HARDWARE	
①	WIRE ROPE
②	CABLE END FITTING
③	COMPENSATING CABLE END ASSEMBLY
④	ANCHOR BRACKET
⑤	U-BOLT CABLE CLIPS
⑥	CABLE HOOK BOLT AND NUT
⑦	HOOKED ANCHOR BOLT AND NUTS
⑧	CABLE TRANSITION BRACKET

GENERAL NOTES:

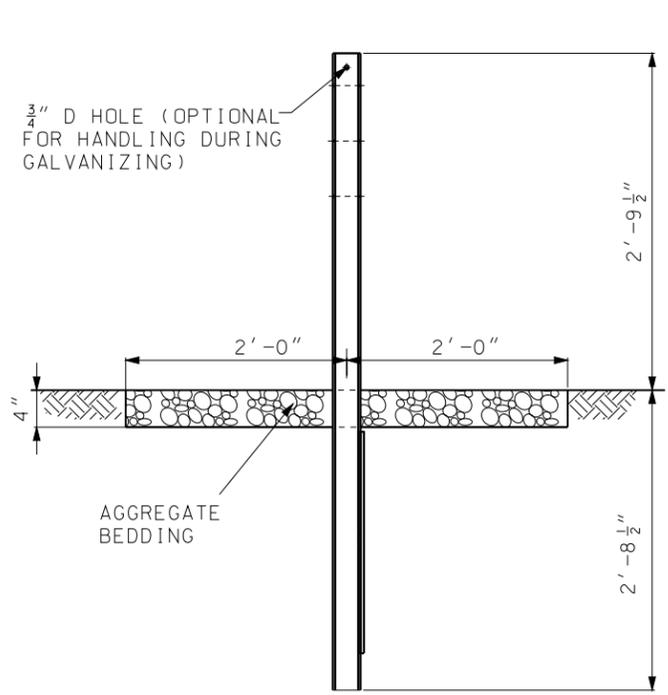
FOR ARRANGEMENT OF SPRING AND COMPENSATING CABLE END ASSEMBLIES AND TURNBUCKLE CABLE END ASSEMBLIES, THE FOLLOWING CRITERIA SHALL APPLY: LENGTH OF CABLE RUNS TO 1000' - USE COMPENSATING CABLE END ASSEMBLY ON ONE END AND THE TURNBUCKLE CABLE END ASSEMBLY ON THE OTHER END OF EACH INDIVIDUAL CABLE. FOR LENGTHS LONGER THAN 1000' AND UP TO AND INCLUDING 2000' - USE COMPENSATING CABLE END ASSEMBLY ON EACH END OF THE INDIVIDUAL CABLE.

PRIOR TO FINAL ACCEPTANCE BY THE ENGINEER, THE FOLLOWING PROCEDURES SHALL BE USED TO TIGHTEN THE TURNBUCKLES. DEPENDING ON THE TEMPERATURE AT THE TIME OF THE ADJUSTMENT IN ACCORDANCE WITH THE FOLLOWING TABLE:

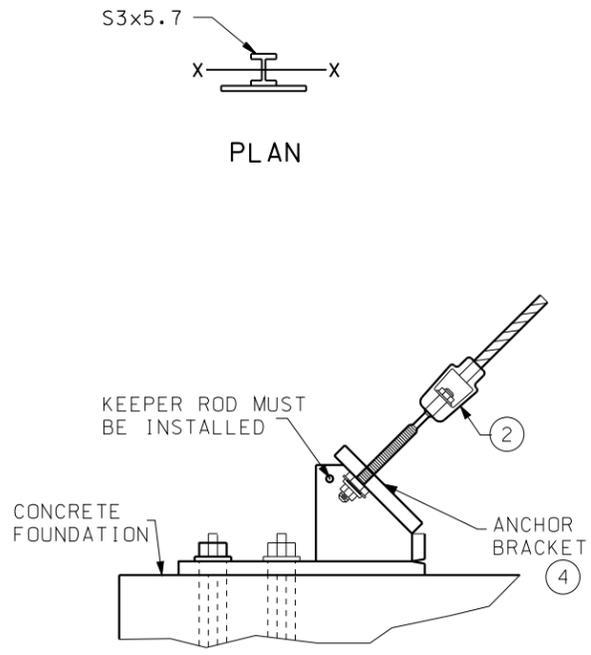
TEMPERATURE (°F)	SPRING COMPRESSION FROM UNLOADED POSITION IN EACH SPRING
120 TO 100	1"
99 TO 80	1 1/2"
79 TO 60	2"
59 TO 40	2 1/2"
39 TO 20	3"
19 TO 0	3 1/2"
-1 TO -20	4"

THE SPECIFICATIONS AND DIMENSIONS OF ALL HARDWARE AND FITTINGS SHALL COMPLY WITH AASHTO-AGC-ARTBA JOINT COMMITTEE TASK FORCE 13 REPORT, A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE.

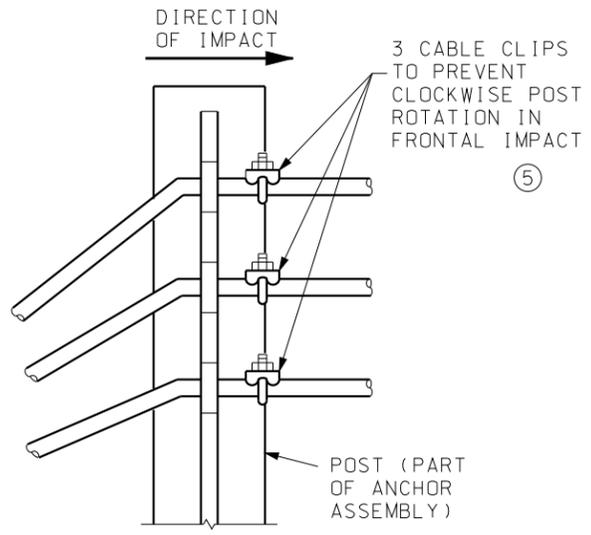
TERMINAL ANCHOR ASSEMBLY
DETAIL FROM SHEET 1.



SECTION D-D



DETAIL A
ANCHOR BRACKET
DETAIL FROM SHEET 1.



DETAIL B
CABLE CLIPS
DETAIL FROM SHEET 1.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

**THREE-STRAND
GUARD CABLE**

THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

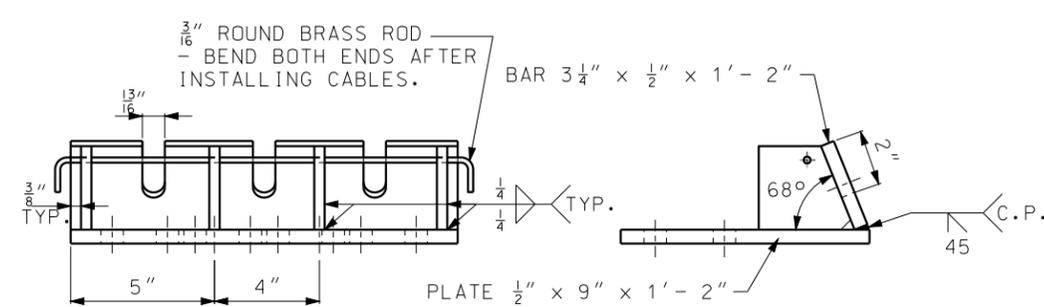
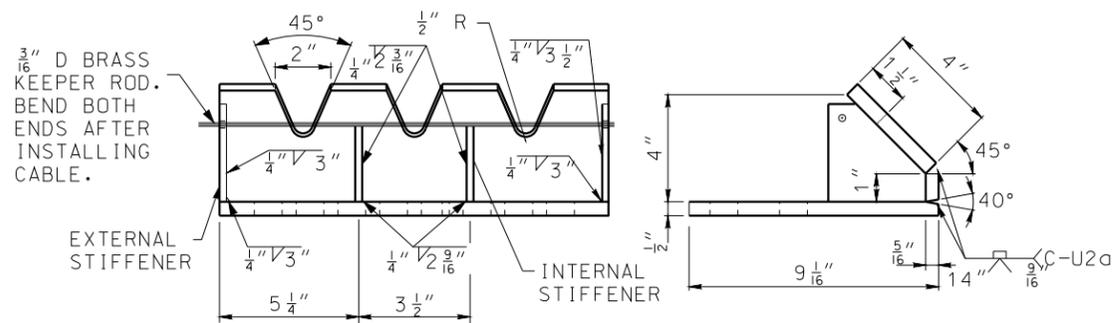
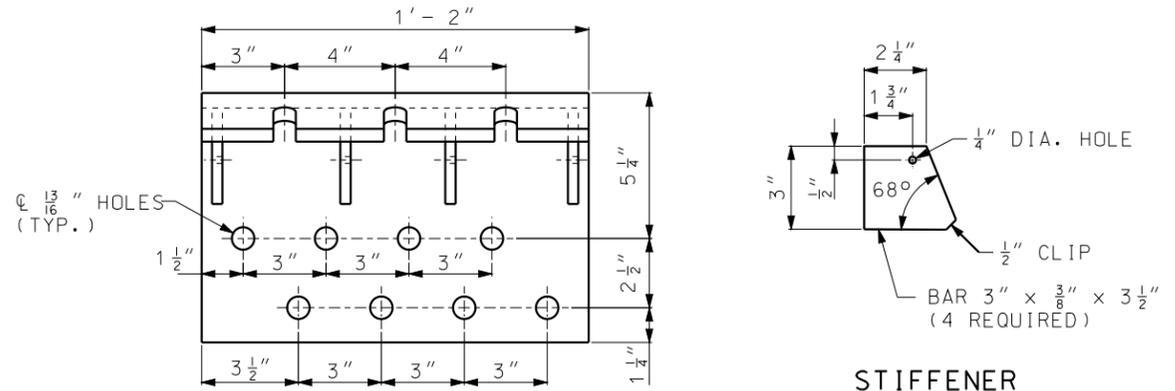
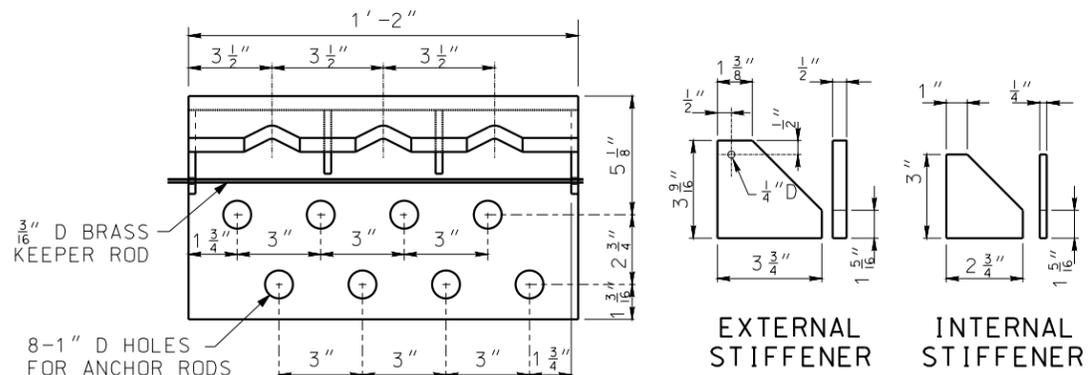
DATE EFFECTIVE: 01/01/2005
DATE PREPARED: 8/21/2009

SHEET NO.
606.41J
4 OF 7

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



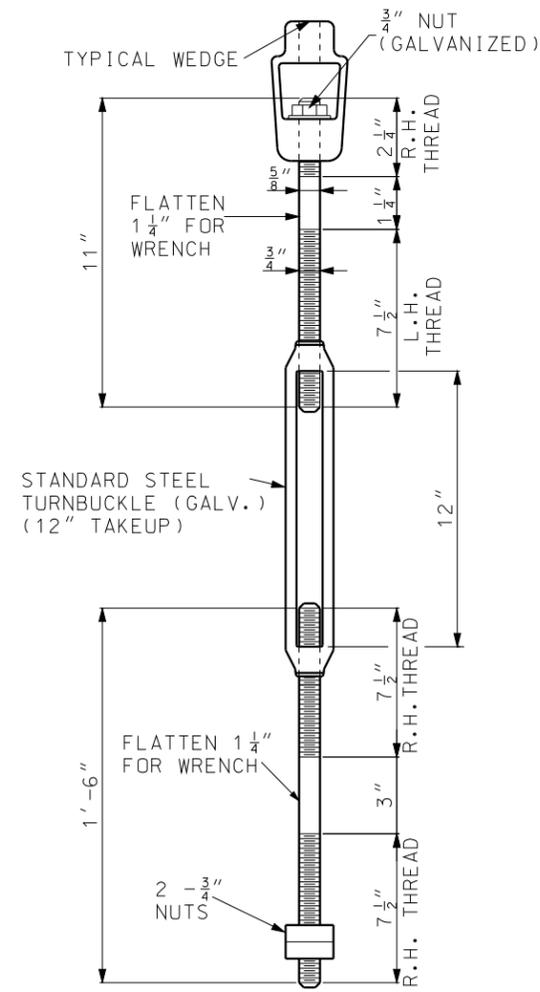
① WIRE ROPE



GUARD CABLE TO GUARDRAIL TRANSITION

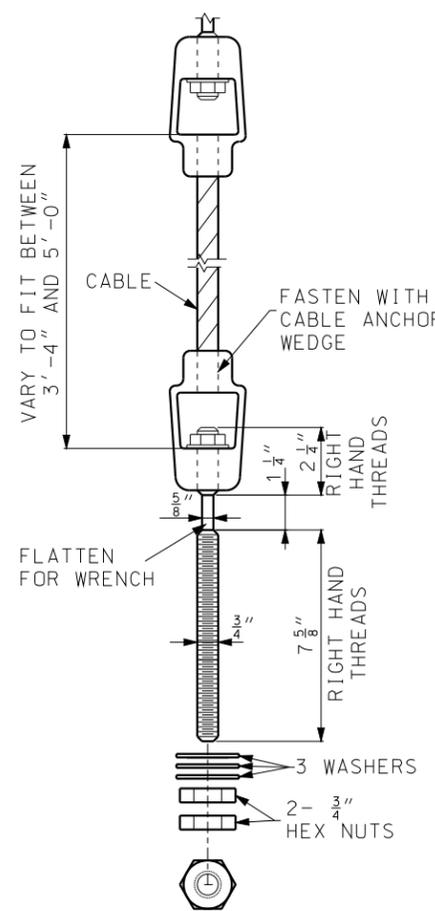
MEDIAN AND ROADSIDE CABLE

④ ANCHOR BRACKET

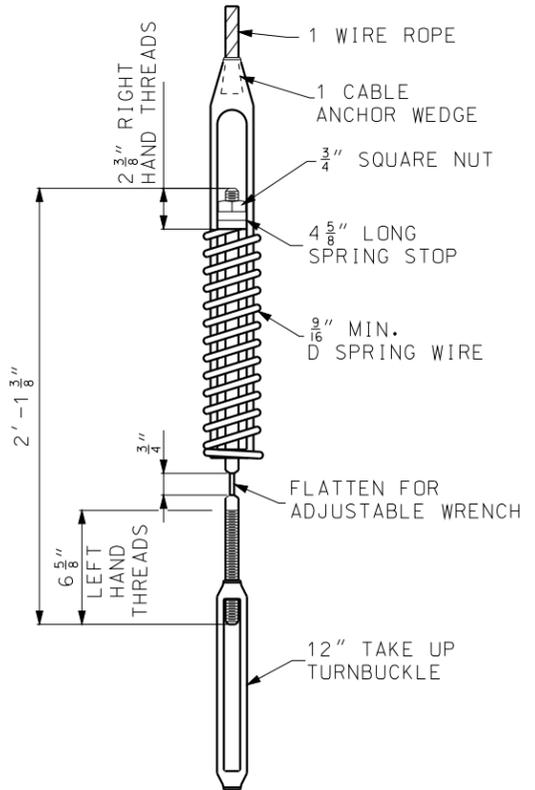


TURNBUCKLE CABLE END ASSEMBLY

② CABLE END FITTINGS



CABLE END FITTING



③ COMPENSATING CABLE END ASSEMBLY

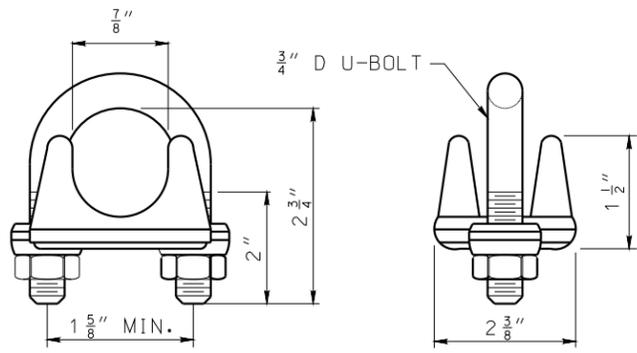
GENERAL NOTES:

AT ALL LOCATIONS WHERE THE CABLE IS CONNECTED TO A CABLE SOCKET WITH A WEDGE TYPE CONNECTION, ONE WIRE OF THE WIRE ROPE SHALL BE CRIMPED OVER THE BASE OF THE WEDGE TO HOLD IT FIRMLY IN PLACE.

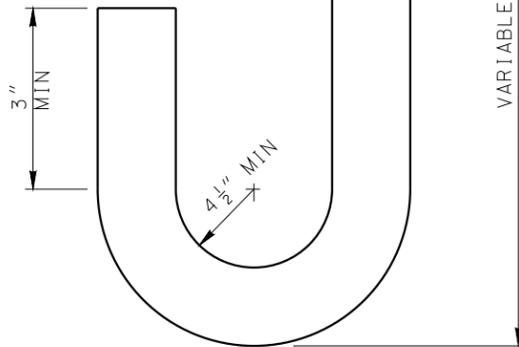
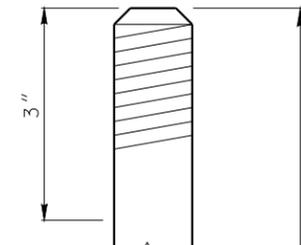
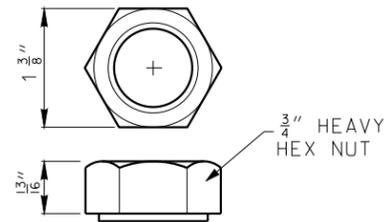
THE SPECIFICATIONS AND DIMENSIONS OF ALL HARDWARE AND FITTINGS SHALL COMPLY WITH AASHTO-AGC-ARTBA JOINT TASK FORCE 13 REPORT, A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE.

<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
<p>STATE OF MISSOURI KATHRYN PHILLIPS HARVEY NUMBER PE-23751 PROFESSIONAL ENGINEER</p> <p>THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.</p>	<p>THREE-STRAND GUARD CABLE</p>
<p>DATE EFFECTIVE: 04/01/2009 DATE PREPARED: 8/21/2009</p>	<p>606.41J</p>
<p>SHEET NO. 5 OF 7</p>	

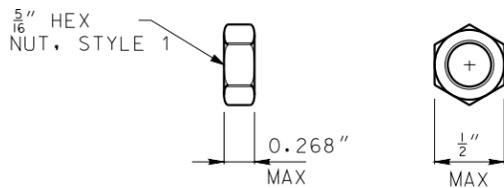
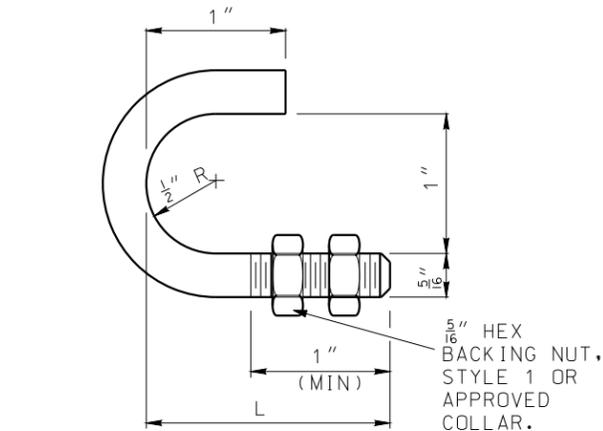
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



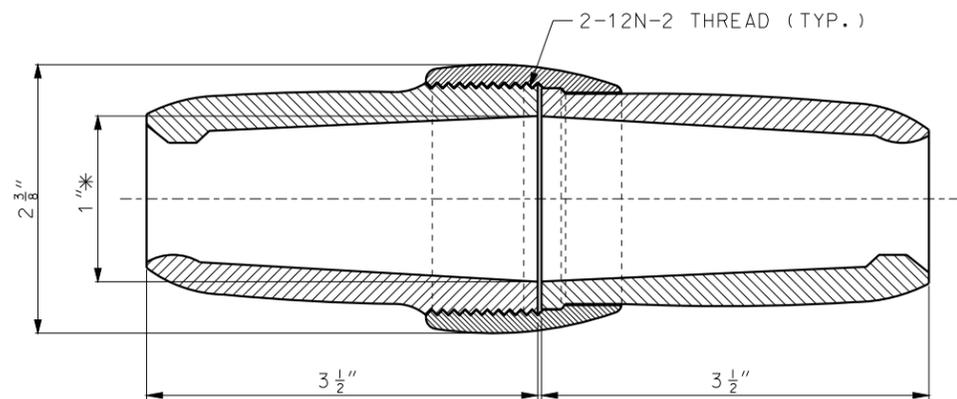
⑤ U-BOLT CABLE CLIPS



⑦ 25" HOOKED ANCHOR BOLT AND NUT

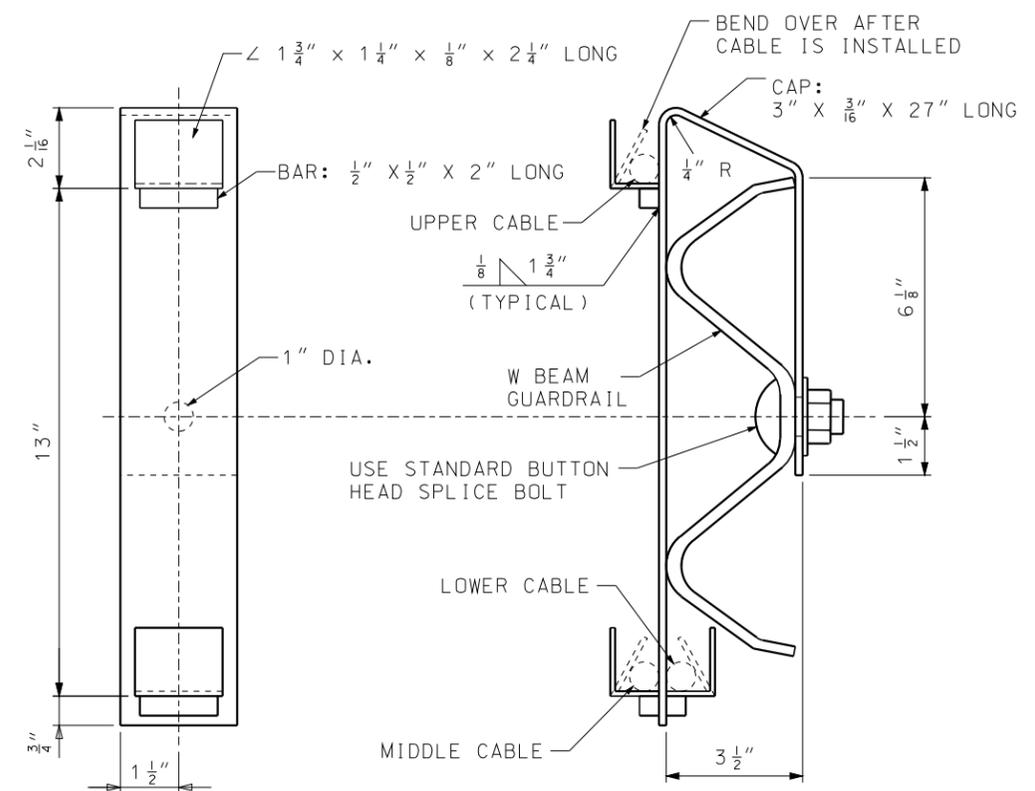


⑥ CABLE HOOK BOLT AND NUT

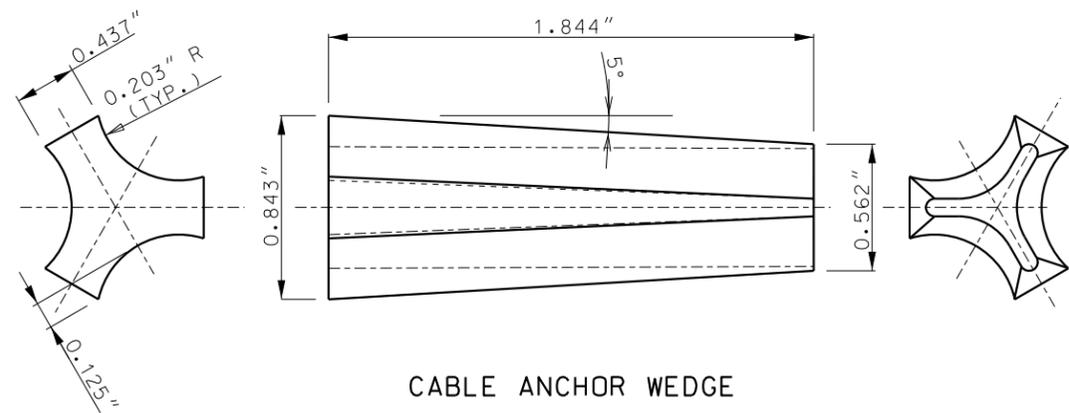


NOTE:
FITTING SPLICE SHALL DEVELOP THE FULL
STRENGTH OF THE CABLE (25,000 LB.).

CABLE SPLICE



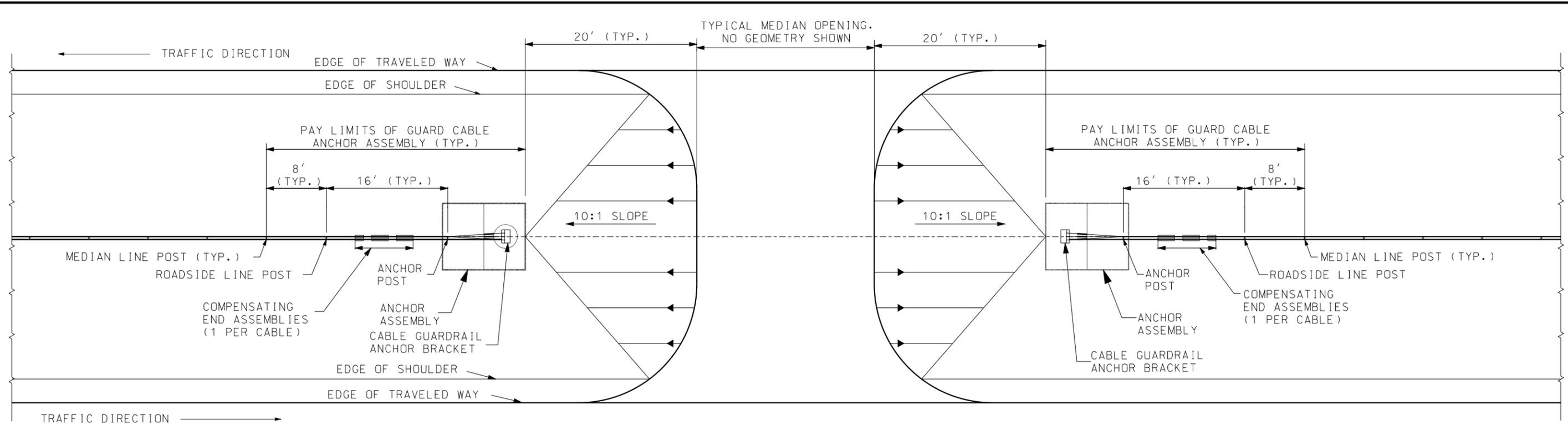
⑧ CABLE TRANSITION BRACKET



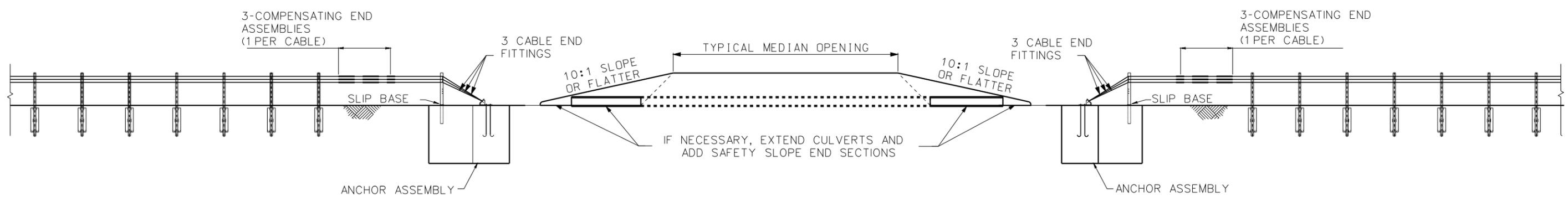
CABLE ANCHOR WEDGE

 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<p>THREE-STRAND GUARD CABLE</p>
DATE EFFECTIVE: 04/01/2009 DATE PREPARED: 8/21/2009	<p>606.41J</p>
SHEET NO. 6 OF 7	

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PLAN



PROFILE

	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
		THREE-STRAND GUARD CABLE TRANSITION AT MEDIAN OPENING
DATE EFFECTIVE: 04/01/2009 DATE PREPARED: 8/21/2009	606.41J	SHEET NO. 7 OF 7

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.