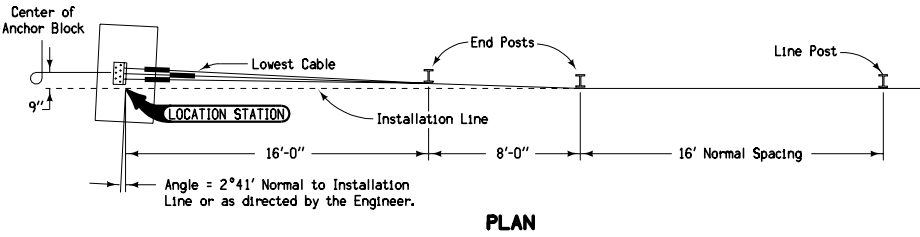
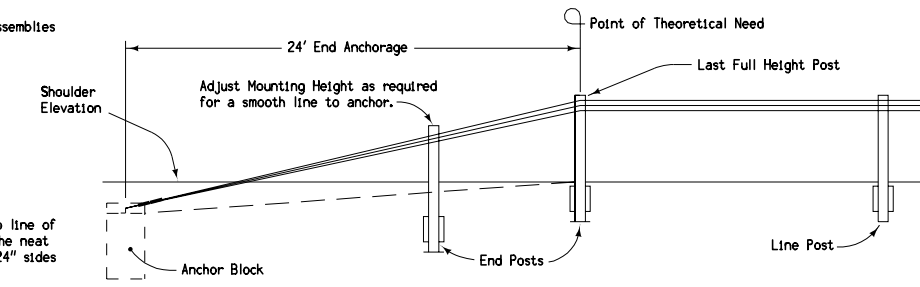


ANCHOR BLOCK

Anchor block shall be cast in place with ϵ normal to line of guardrail. Excavation for anchor block shall be to the neat lines indicated. Forms will be allowed only on the 24" sides of the anchor block.



PLAN

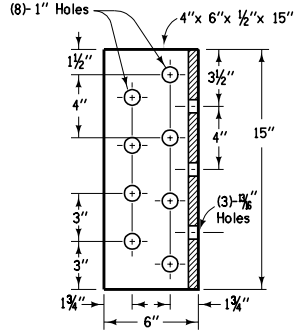
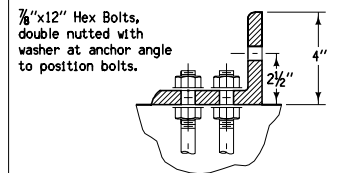


ELEVATION

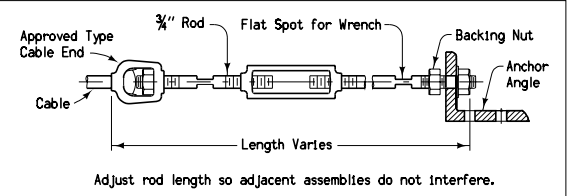
Cable end assemblies shall be installed based on the length of run as follows:

- Less than 500' - Use a spring type compensating device on one end and a turnbuckle on the opposite end of each individual cable.
- 500' to 1000' - Use a spring type compensating device plus a turnbuckle on each end of each individual cable.

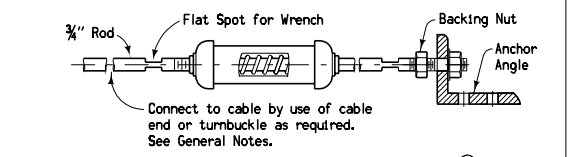
- ① Apply Type III or IV retroreflective sheeting to both end posts of the anchor at the beginning of an installation and at the end of an installation. The sheeting shall provide a minimum surface area of 7 square inches and shall match the color of the adjacent edge line. Attach sheeting to that side of the post from which impacts are most likely to occur. Where impacts are likely to occur from either direction, attach sheeting to both sides of the post.
- ② No welding of the galvanized anchor angle and attached hardware is allowed.
- ③ Turnbuckles are used to properly tension each cable, depending on the ambient temperature at the time of adjustment — refer to table, this sheet. Apply tension at one end of cable only. Turnbuckles shall be of the open type and shall each provide for a minimum takeup of 12 inches.
- ④ Spring-type compensating devices maintain proper cable tension at various temperature conditions. Devices shall provide for a minimum travel of 5 inches and shall have a spring rate of 450 + 50 lbs. per inch.



ANCHOR ANGLE



TURNBUCKLE



SPRING-TYPE COMPENSATING DEVICE

CABLE END ASSEMBLIES

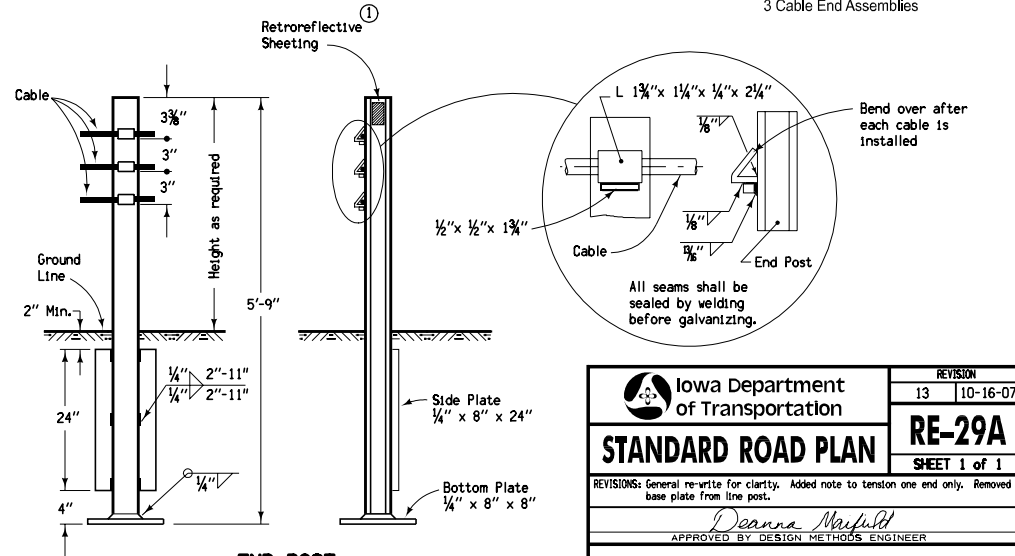
Contract Item:

Guardrail, End Anchorage, Cable

Tabulation: 108-9

Materials included in the Contract Item:

- 1 Anchor Angle and Hardware
- 1.19 cubic yards concrete
- 59 lbs. of reinforcing steel (approx.)
- 3 Cable End Assemblies



END POST

(Type S 3x5.7 or Type C 3x5.9)

CABLE TENSION ADJUSTMENTS FOR TEMPERATURE VARIATIONS														
Temperature Range Degrees F	120 to 110	109 to 100	99 to 90	89 to 80	79 to 70	69 to 60	59 to 50	49 to 40	39 to 30	29 to 20	19 to 10	9 to 0	-1 to -10	-11 to -20
Spring Compression Inches *	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4

* From the unloaded position in each spring

Iowa Department of Transportation

STANDARD ROAD PLAN

REVISIONS: General re-write for clarity. Added note to tension one end only. Removed base plate from line post.

Deanna Macfild
APPROVED BY DESIGN METHODS ENGINEER

REVISION

13	10-16-07
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RE-29A

SHEET 1 of 1

CABLE GUARDRAIL
END ANCHORAGE