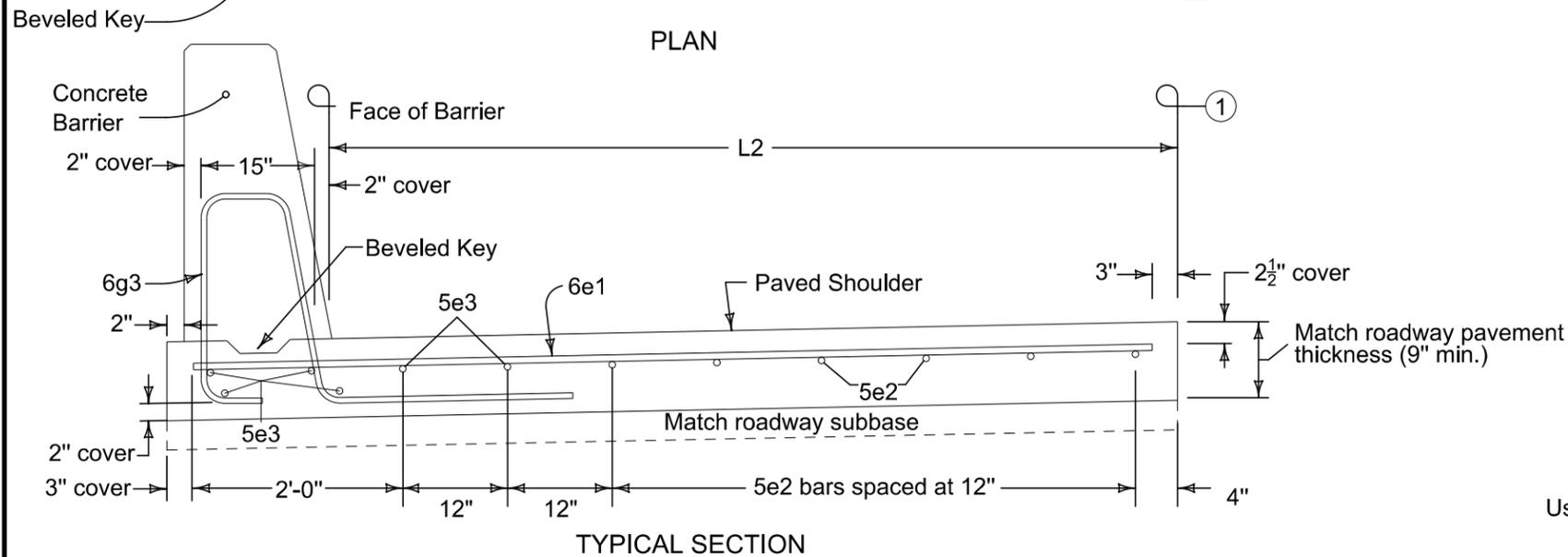
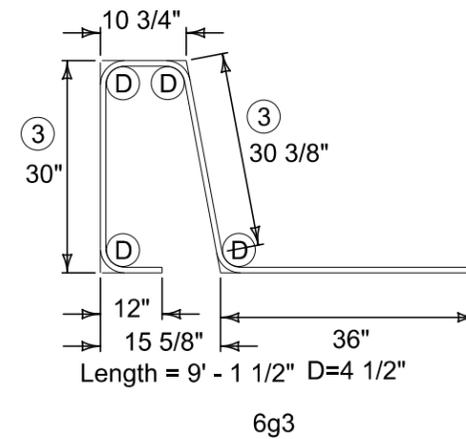


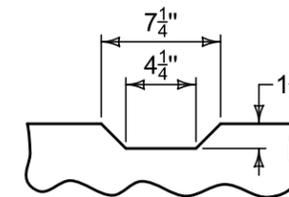
PLAN

REINFORCING BAR LIST				
Per Shoulder Panel (Approximately 17 Linear Feet)				
L2	Bar	Number of Bars	Length	Spacing
8'	6e1	15	9'-1"	12"
	5e2	8	15'-0"	12"
10'	6e1	15	11'-1"	12"
	5e2	10	15'-0"	12"
12'	6e1	15	13'-1"	12"
	5e2	12	15'-0"	12"
Applies to all Shoulder Widths	5e3	6	16'-4"	See Drawing
	6g3	varies	varies	12"

- ① 'L-2' joint. When roadway pavement is existing, use 'BT-3' joint. See PV-101.
- ② 'CD' joint. Match roadway joint locations. See PV-101. No 'CD' joint baskets required within 4' of outside edge of shoulder.
- ③ Increase these dimensions by one inch for every inch of paved shoulder thickness greater than 9 inches.



TYPICAL SECTION



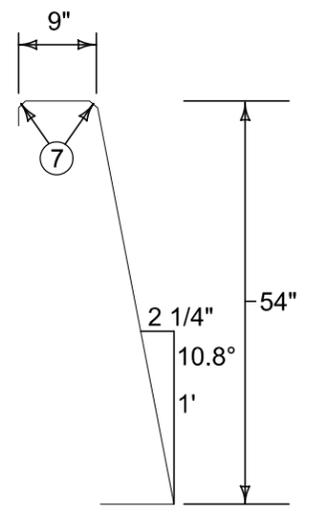
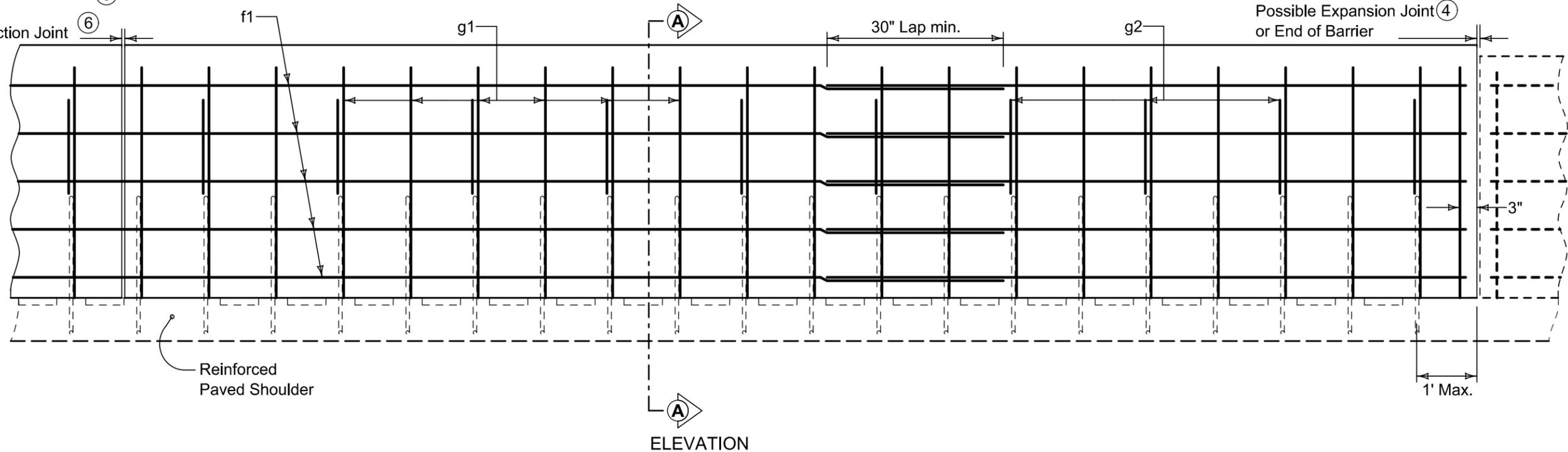
BEVELED KEY

Use 2 x 8 lumber 8" long to make keys.  
Place keys at 2'-8" centers.

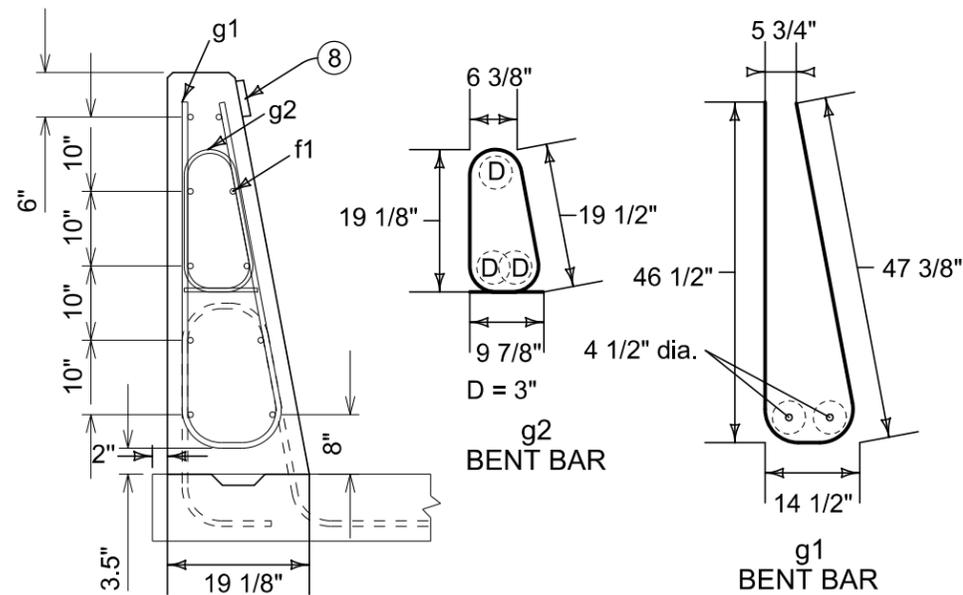
Possible Contract Item:  
Reinforced Paved Shoulder for Concrete Barrier

Possible Tabulation:  
108-18B

Construction Header (5)  
or  
Contraction Joint (6)



BARRIER FACE



SECTION A-A

Use Grade 60 epoxy-coated reinforcing bars. Provide 2 inches minimum cover. Anchor all reinforcement to prevent movement. Secure each section at the front, back, and at 3 foot 6 inch intervals using a method approved by the Engineer.

- (4) Expansion joints are necessary only where specifically required by project plans. Conform expansion material to the shape of the barrier. No sealer is required.
- (5) Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 3 feet.
- (6) For barrier tied to pavement, match pavement joints. For free-standing barrier with integral footings, use 17 foot maximum, 15 foot minimum joint spacing.

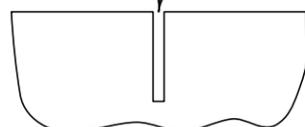
- (7) Fillet all exposed corners with a 3/4 inch dressed and beveled strip.
- (8) Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.

Possible Contract Item:  
Concrete Barrier, BA-102 or  
Concrete Barrier, BA-102 and Footing

Possible Tabulation:  
108-18

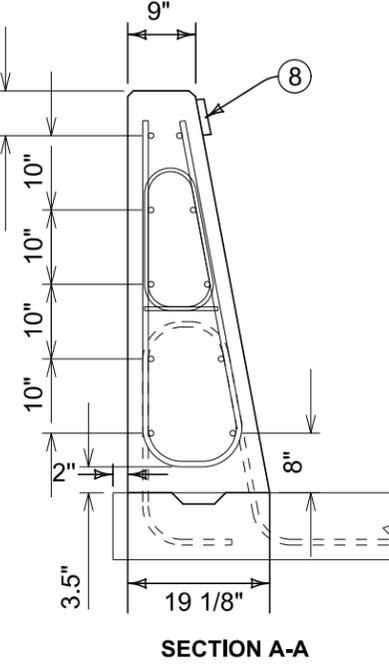
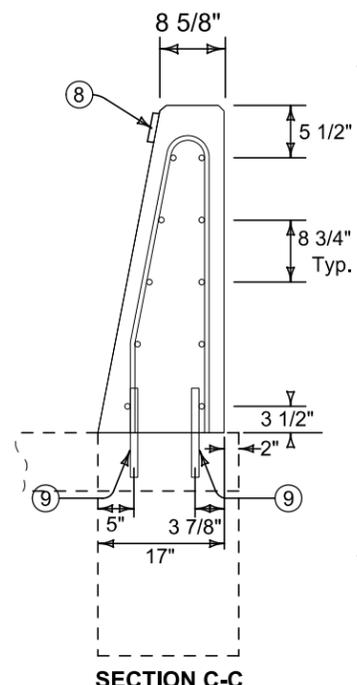
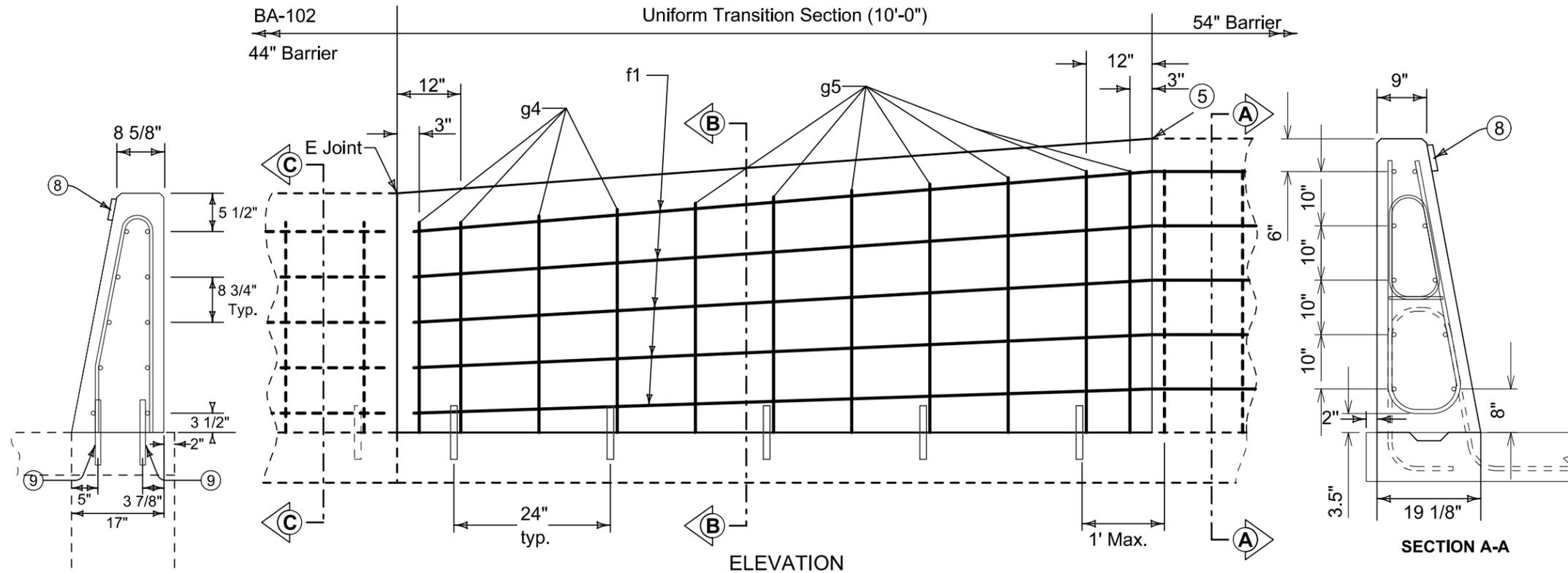
REINFORCING BAR LIST Per Section (Approx. 20 feet)					
Bar	Size	Number of Bars	Length	Weight (lbs.)	Spacing
g1	6	20	8' 5"	150	12"
g2	4	10	4' 9"	150	24"
f1	6	10	20'	204	—

1/8" min. wide x 1" deep  
saw cut. No sealing required.



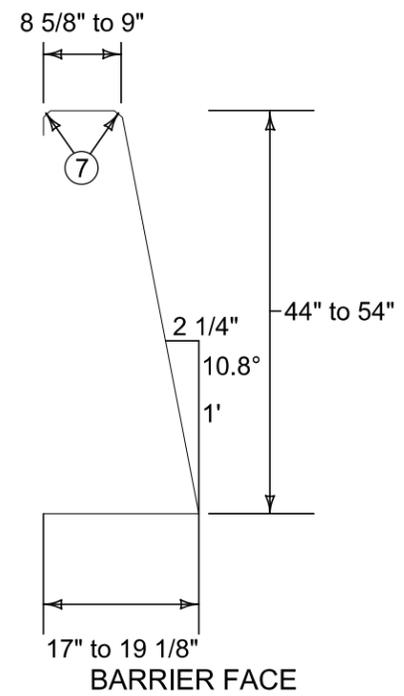
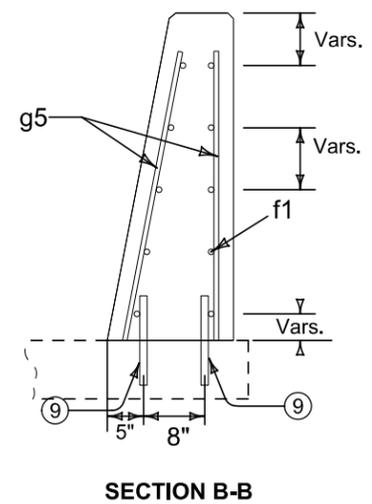
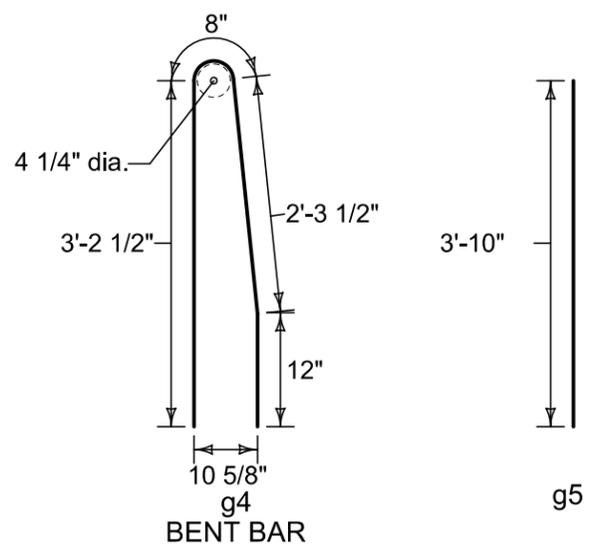
SAWED CONTRACTION JOINT  
Saw cut top and front face.  
Saw cut back if exposed.

CONCRETE QUANTITIES  
Per foot  
0.20 cy



Use Grade 60 epoxy-coated reinforcing bars. Provide 2 inches minimum cover. Anchor all reinforcement to prevent movement. Secure each section at the front, back, and at 3'-6" intervals using a method approved by the Engineer.

- ⑤ Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 3 feet.
- ⑨ Use 1 inch diameter deformed dowel bars of sufficient length to ensure 6 inch minimum embedment in barrier and supporting surface. Install dowels either in supporting surface when placed, or in drilled holes using polymer grout complying with Materials I.M. 491.11 or hydraulic cement grout complying with Materials I.M. 491.13.
- ⑦ Fillet all exposed corners with a  $\frac{3}{4}$  inch dressed and beveled strip.
- ⑧ Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.



REINFORCING BAR LIST					
Per Section					
Bar	Size	Number of Bars	Length	Weight (lbs.)	Spacing
g4	5	4	7' 2"	22	12"
g5	5	14	3' 10"	59	12"
f1	6	10	9' 9"	101	—

**CONCRETE QUANTITIES**  
Per 10 ft section  
1.7 cy

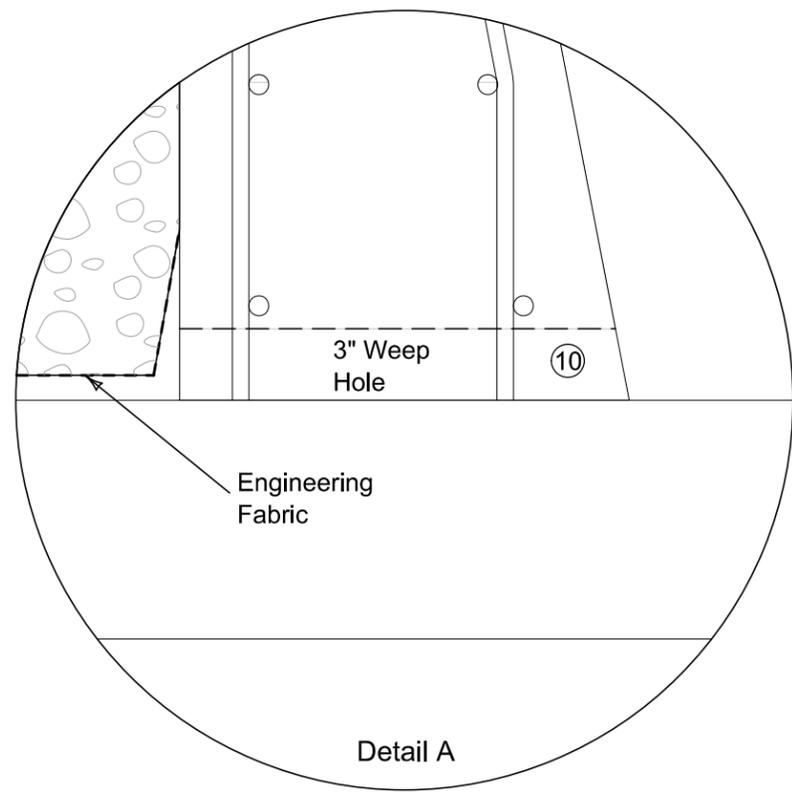
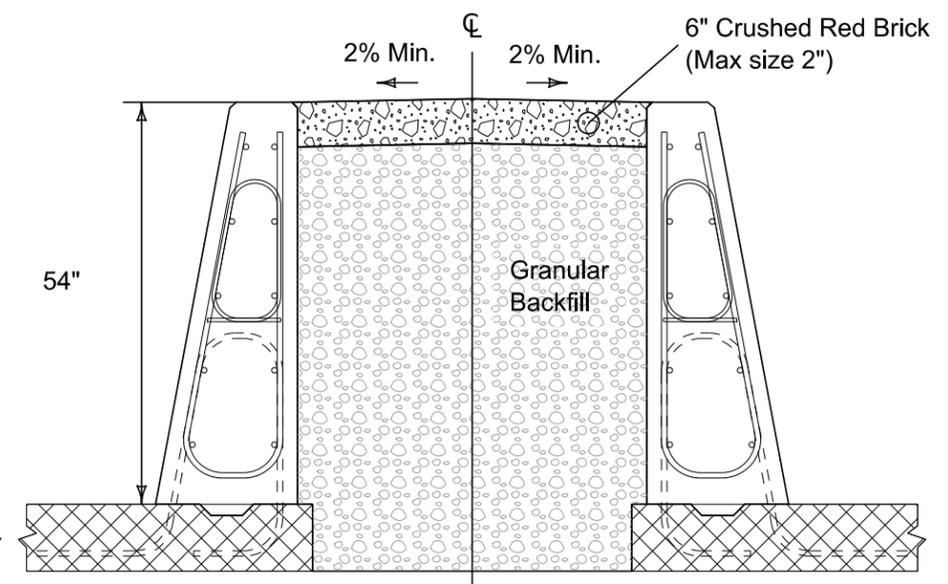
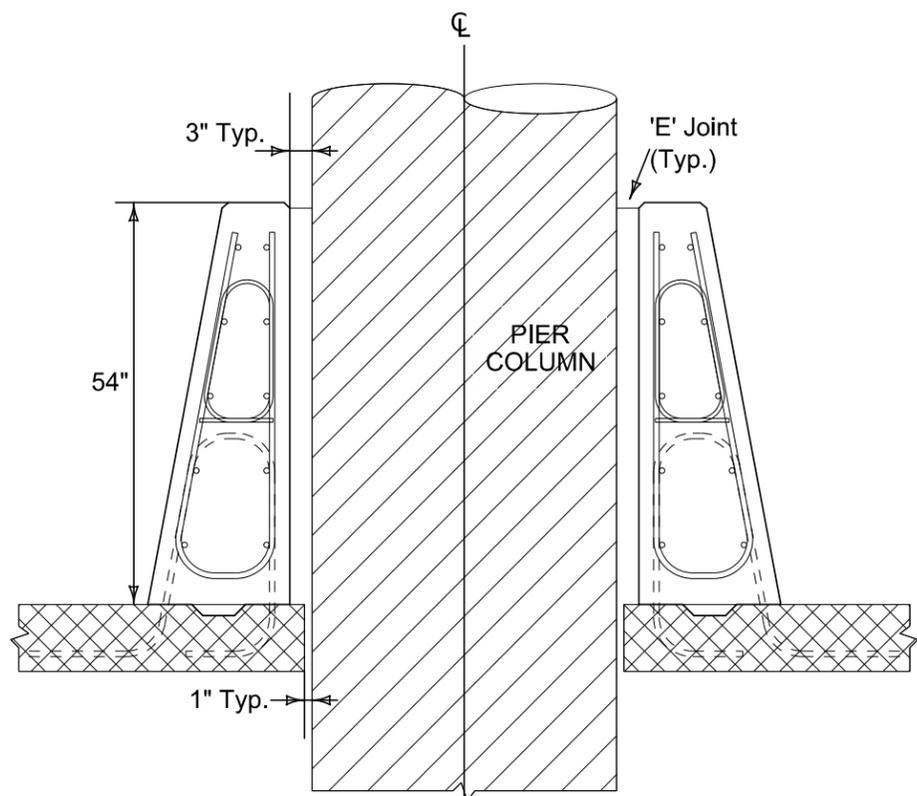
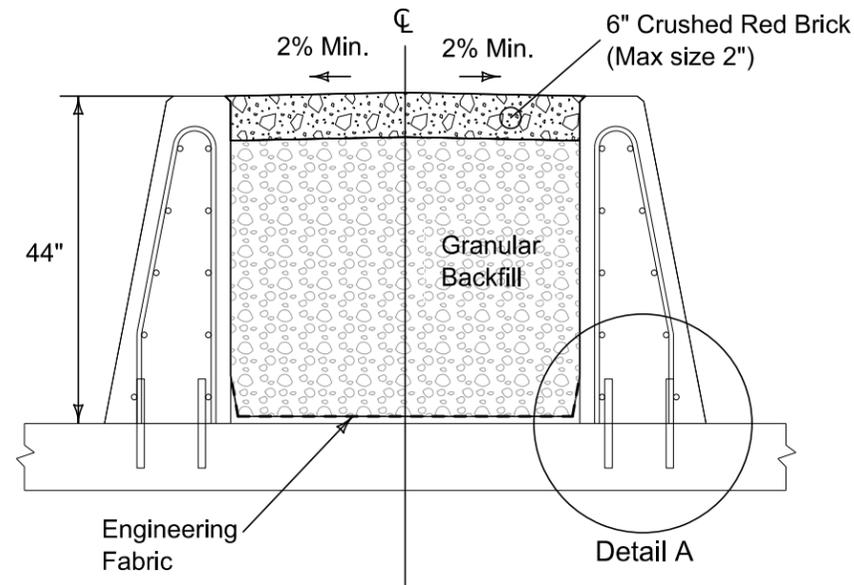
Possible Contract Item:  
Concrete Barrier, BA-105 or  
Concrete Barrier, BA-105 and Footing

Possible Tabulation:  
108-18B

**Sheet 3 of 5**

**PIER PROTECTION**  
**44" TO 54" CONCRETE BARRIER**  
**HEIGHT TRANSITION SECTION**





10 Construct weep holes from 3 inch diameter PVC pipe. Maximum spacing between weep holes is 20 feet. However, keep holes at least 5 feet from any transverse joints. Cover interior of weep holes with copper screening or galvanized hardware cloth. Attach engineering fabric at least 6 inches above top of weep holes in a manner approved by the engineer. The cost of supplying and installing weep holes, engineering fabric, and screening will be considered incidental to concrete barrier items.

NOTE: Do not construct weep holes in areas of reinforced paved shoulder.