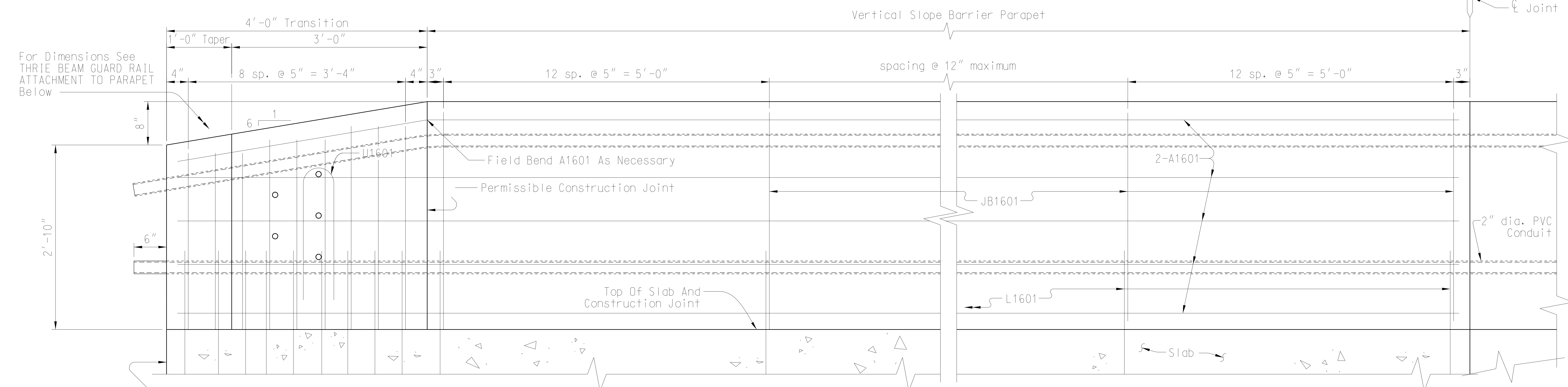
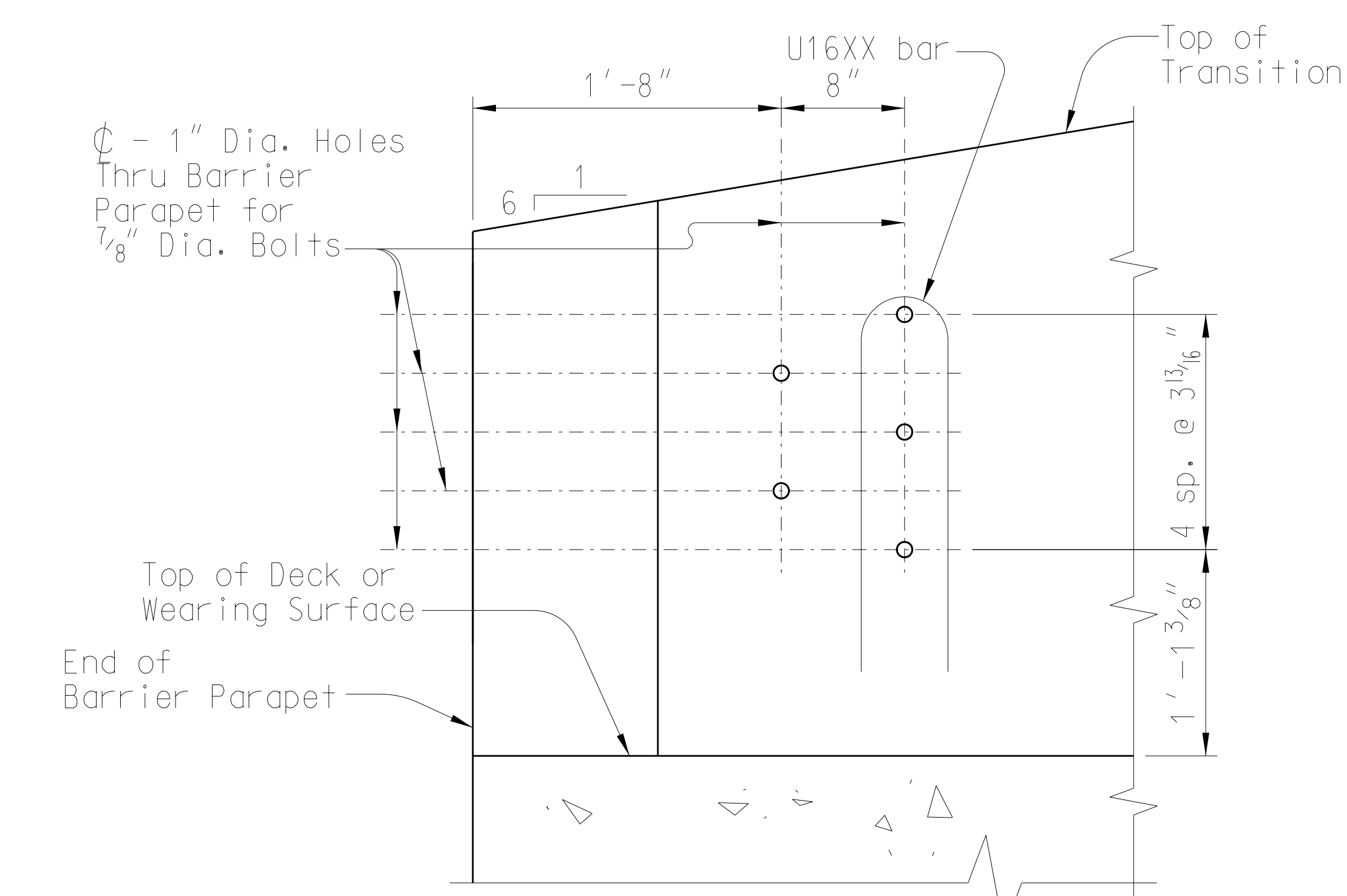


PLAN



ELEVATION

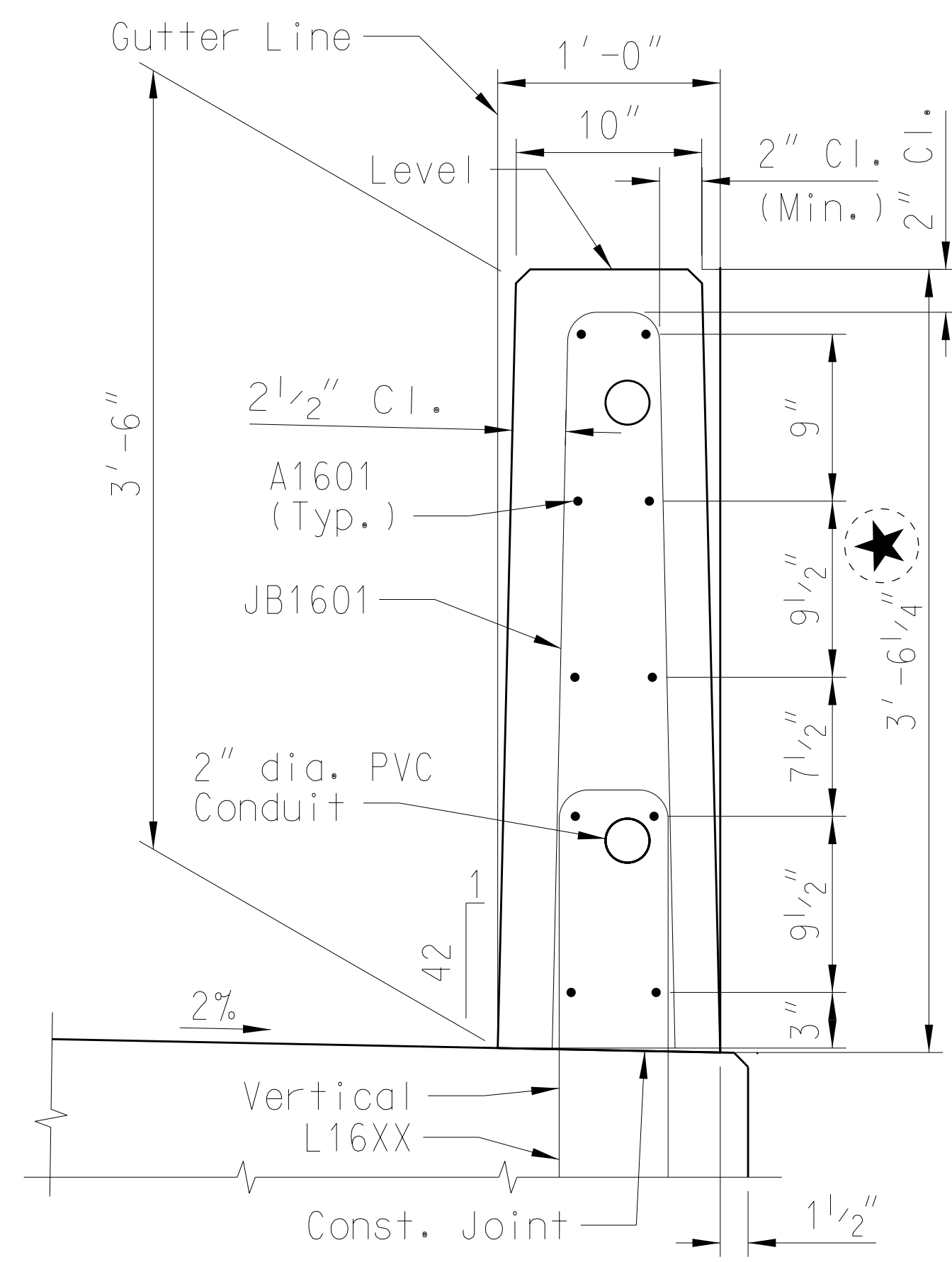


THREE BEAM GUARD RAIL ATTACHMENT TO PARAPET

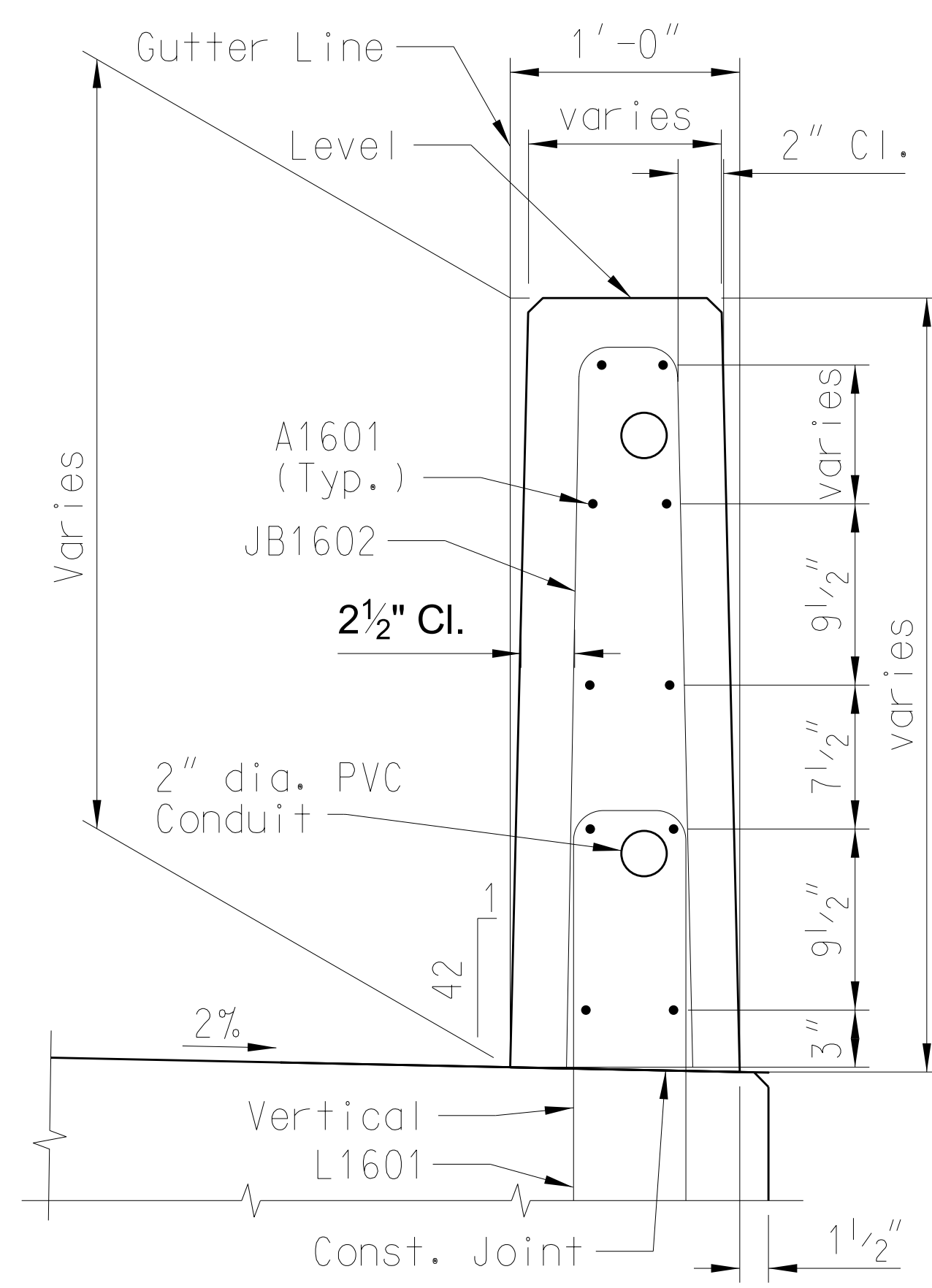
Form the 1" dia. holes with plastic pipe, PVC pipe, or galvanized standard weight steel pipe having an I.D. of 1". Include all cost of pipe and installation in the price bid for reinforcing steel. All pipe to remain in place when forms are removed. RCE to verify location of the holes to insure that the guardrail shoe will fit properly when installed.

Draft Print
10/31/2019 1:23:14 PM

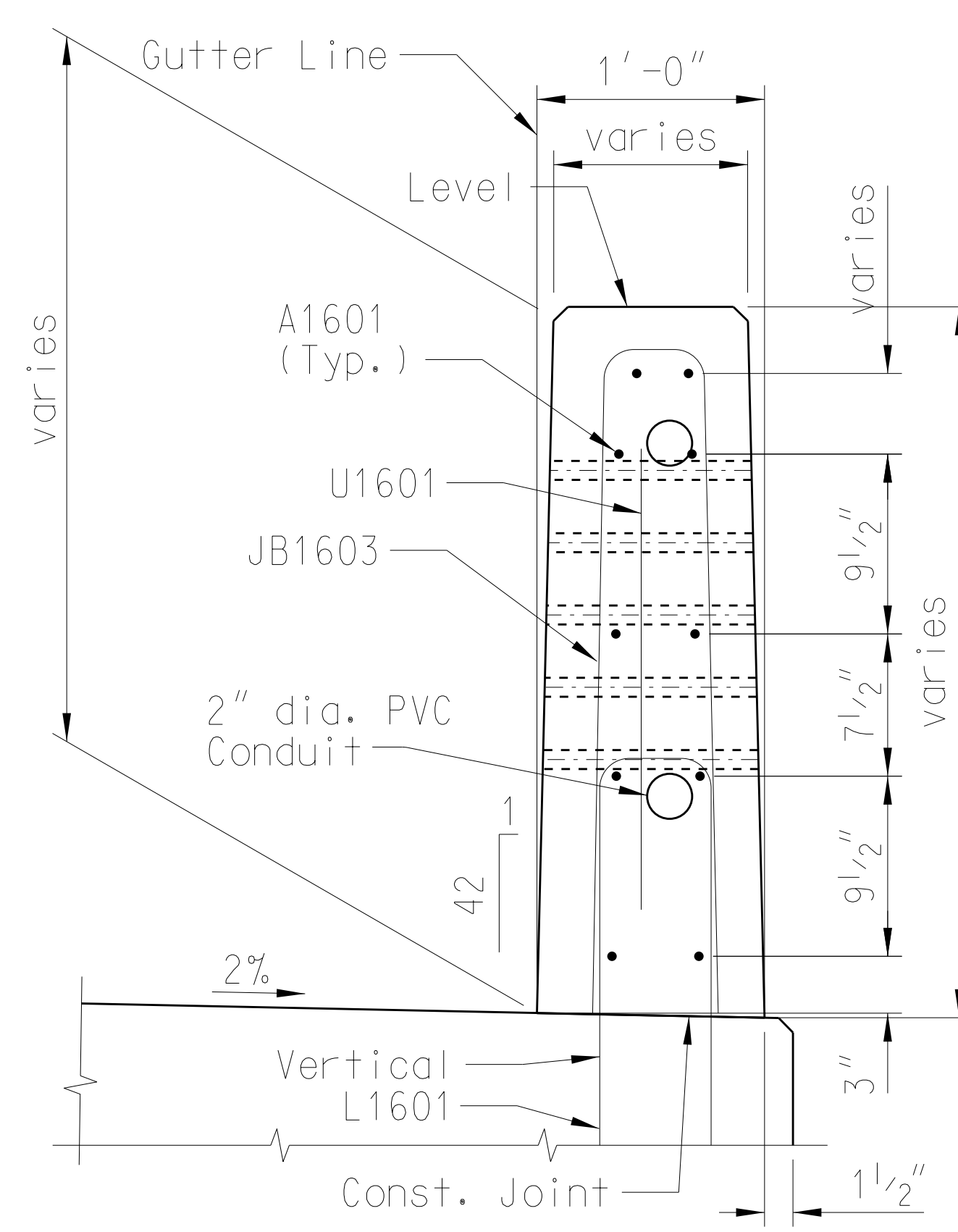
REV.	XXX	XXX	XX-XX	SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
REV.	XXX	XXX	XX-XX	
REV.	XXX	XXX	XX-XX	
REVIEWED				MASH BARRIER (1 OF 2)
QUAN.	XXX	XXX	XX-XX	
DR.	PCW	HL	10-19	COUNTY XXXXXXXXXXXX
DES.	PCW	MCCA	10-19	
BY	CHK	DATE		ROUTE XX-XXX



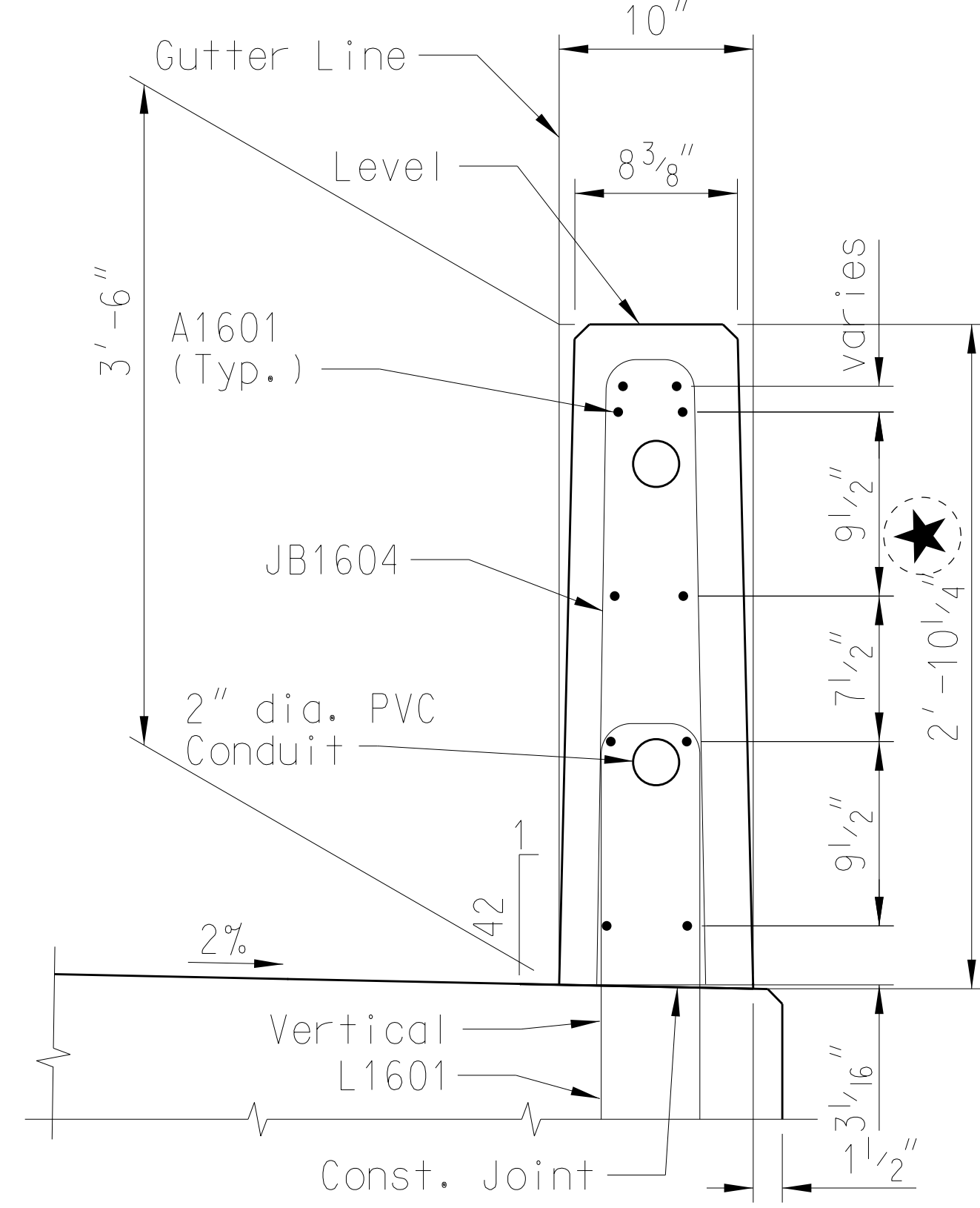
SECTION A-A
(Slab Reinforcing not Shown)



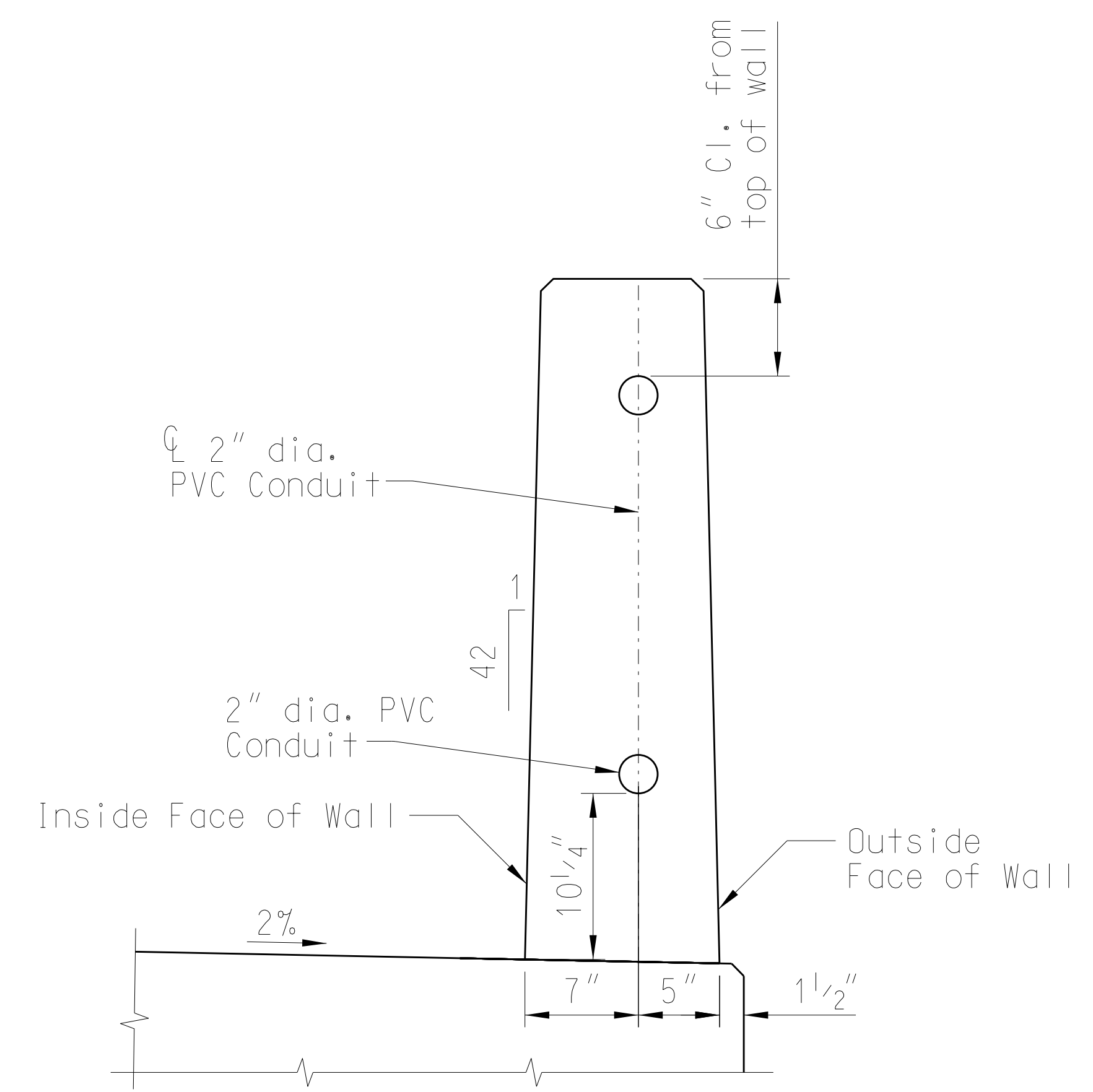
SECTION B-B
(Slab Reinforcing not Shown)



SECTION C-C
(Slab Reinforcing not Shown)



ELEVATION D-D
(Slab Reinforcing not Shown)



CONDUIT LOCATION
(Reinforcing not Shown)

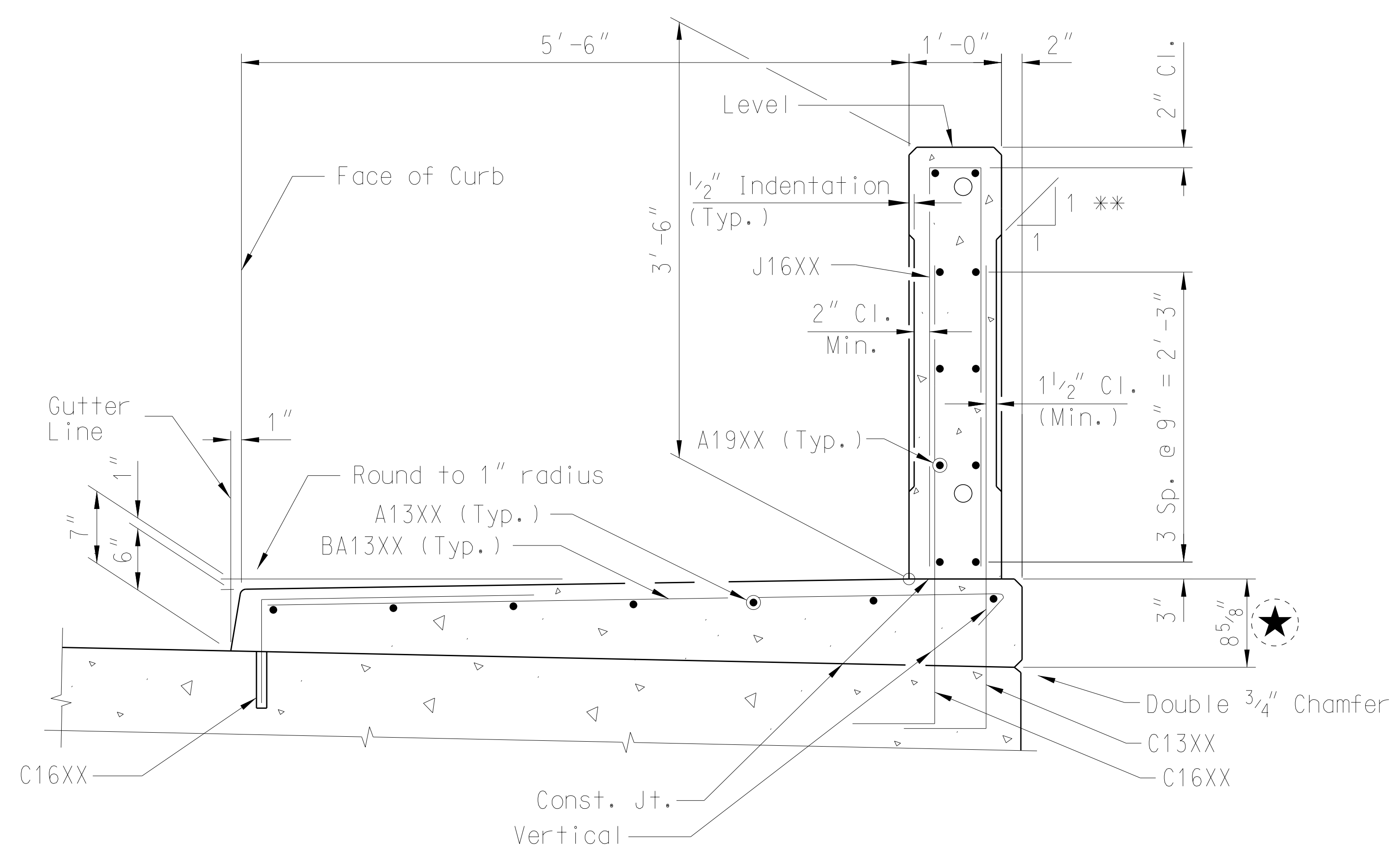
★ Dimensions shown are calculated for bridges with normal crown and S.E. = 0.02 ft./ft.

LEGEND:
F.S. = Far Side
N.S. = Near Side
S.E. = Superelevation

Draft Print
10/31/2019 1:23:56 PM

REV.	XXX	XXX	XX-XX	SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
REV.	XXX	XXX	XX-XX	
REV.	XXX	XXX	XX-XX	
REVIEWED				MASH BARRIER 2 OF 2
QUAN.	XXX	XXX	XX-XX	
DR.	PCW	HL	10-19	
DES.	PCW	MCCA	10-19	
BY	CHK.	DATE	COUNTY XXXXXXXXXXXXXX	ROUTE XX-XXX

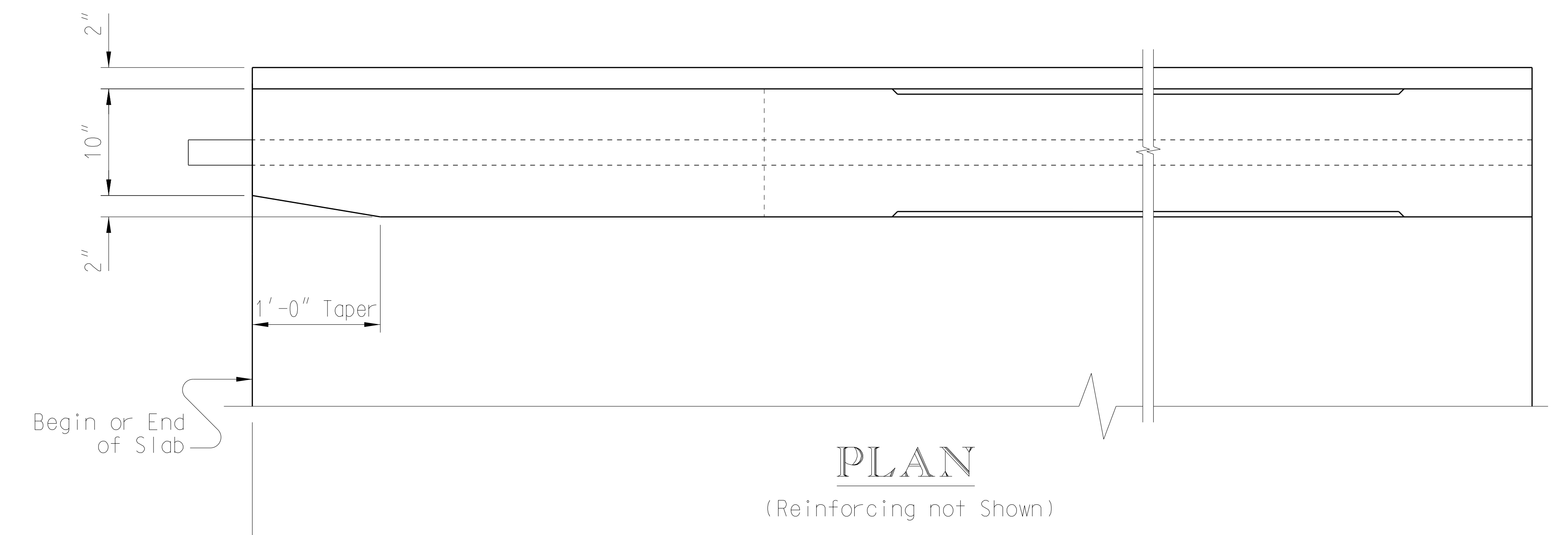
Note to Designer:
 This drawing furnished for information only. All dimensions shown are sheet specific. Any use of this design and drawing, including dimensions, must be checked by the User's Engineer to ensure design is adequate for the intended use. All drawings must be signed and sealed by a South Carolina Registered Professional Engineer when used.
 Refer to Section 17.6.1 of the SCDOT Bridge Design Manual for barrier and transition requirements.
 Insert appropriate code numbers in reinforcing steel designations.
 ★ Dimensions shown are calculated for bridges with normal crown and SE= 2 % Designer to revise dimensions for different geometry.



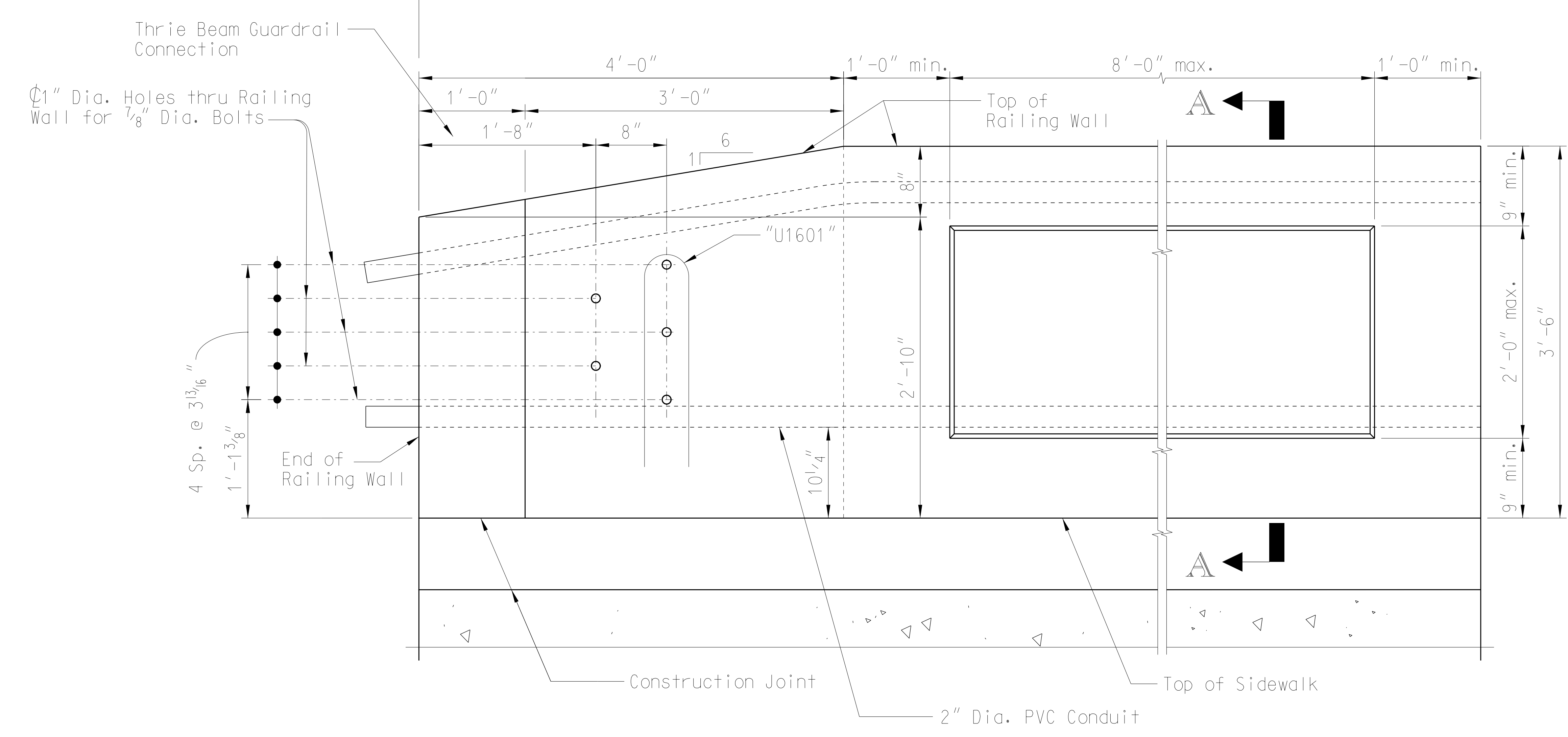
SECTION A-A
 (Slab Reinforcing not Shown)

* Adhesively bonded dowel bars, conforming to the requirements of the Supplemental Specifications.
 ** Typical at all locations where transitioning from indentation to full width of railing wall.

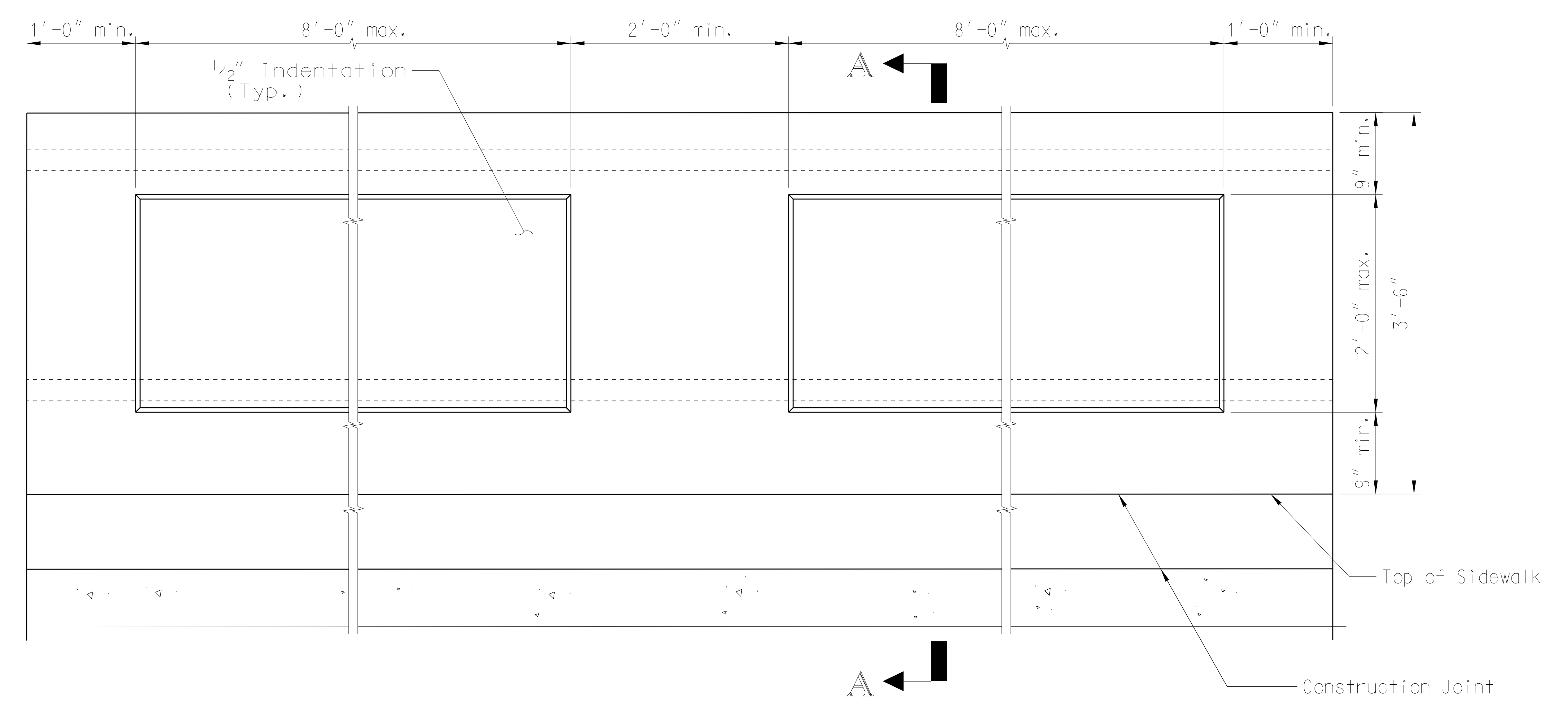
PEDESTRIAN RAILING WALL DETAILS



PLAN
 (Reinforcing not Shown)



PEDESTRIAN RAILING WALL WITH TRANSITION DETAILS
 (Reinforcing not Shown)



PEDESTRIAN RAILING WALL DETAILS
 (Reinforcing not Shown)

REV.	DR.	PCW	HL	10-19

Draft Print
 10/31/2019 1:24:03 PM

GENERAL CONDUIT NOTES

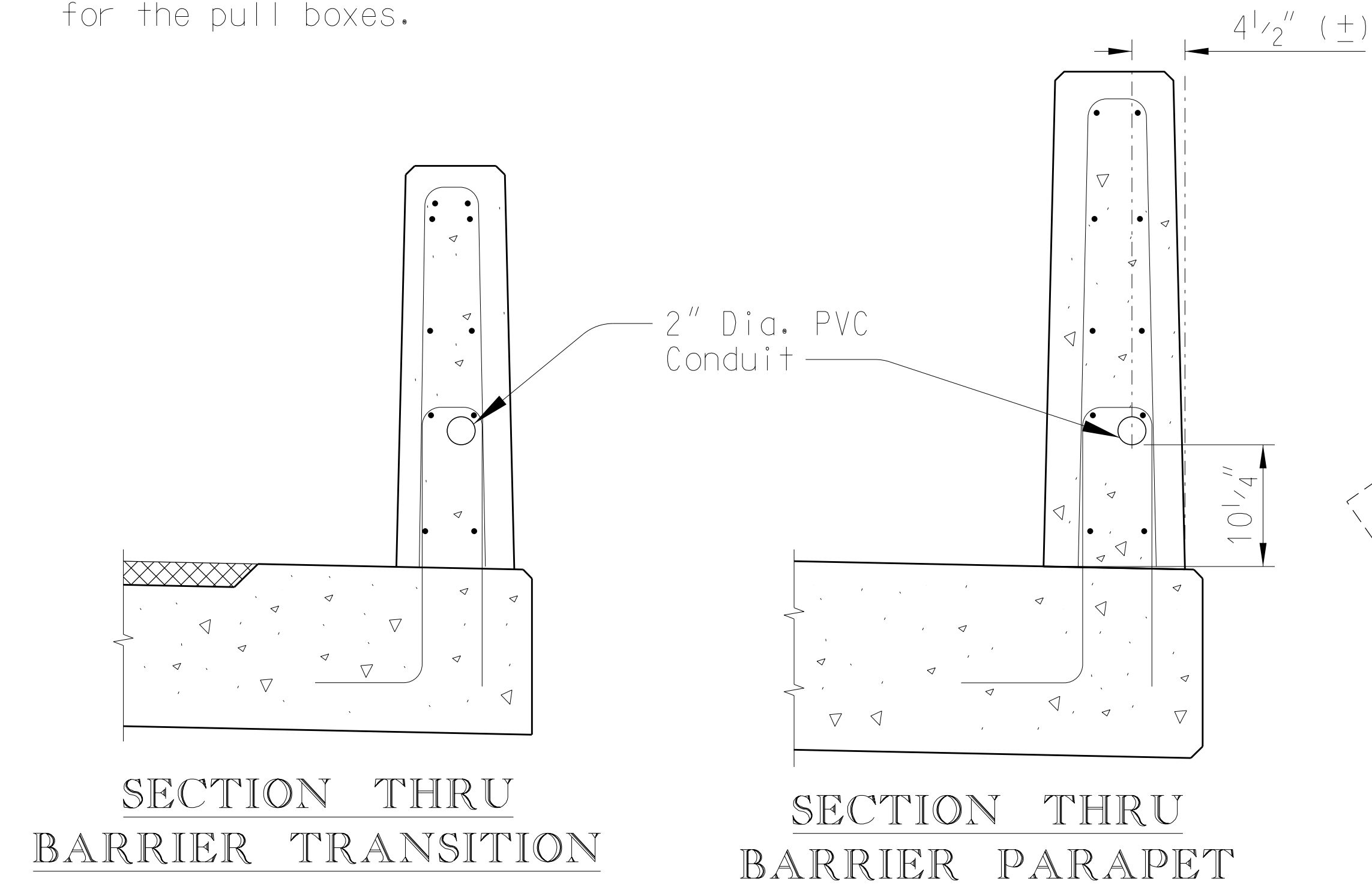
Furnish and install approved conduits and fittings in accordance with the National Electric Code (NEC) and as directed by the RCE.

Furnish Schedule 80 PVC rigid nonmetallic conduits in accordance with NEMA TC-2 and UL Standard 651 and furnish fittings in accordance with NEMA TC-3 and UL Standard 514B. Furnish conduit and fittings with UL labels: conduit - on each 10 foot length; fittings - stamped or molded on each fitting. Connect conduit and fittings using solvent cement in accordance with manufacturer's recommendations.

Furnish and install NEMA Type 4X non-metallic or galvanized steel pull boxes sized in accordance with NEC requirements and the maximum limits shown. Provide gasketed weatherproof covers for the pull boxes.

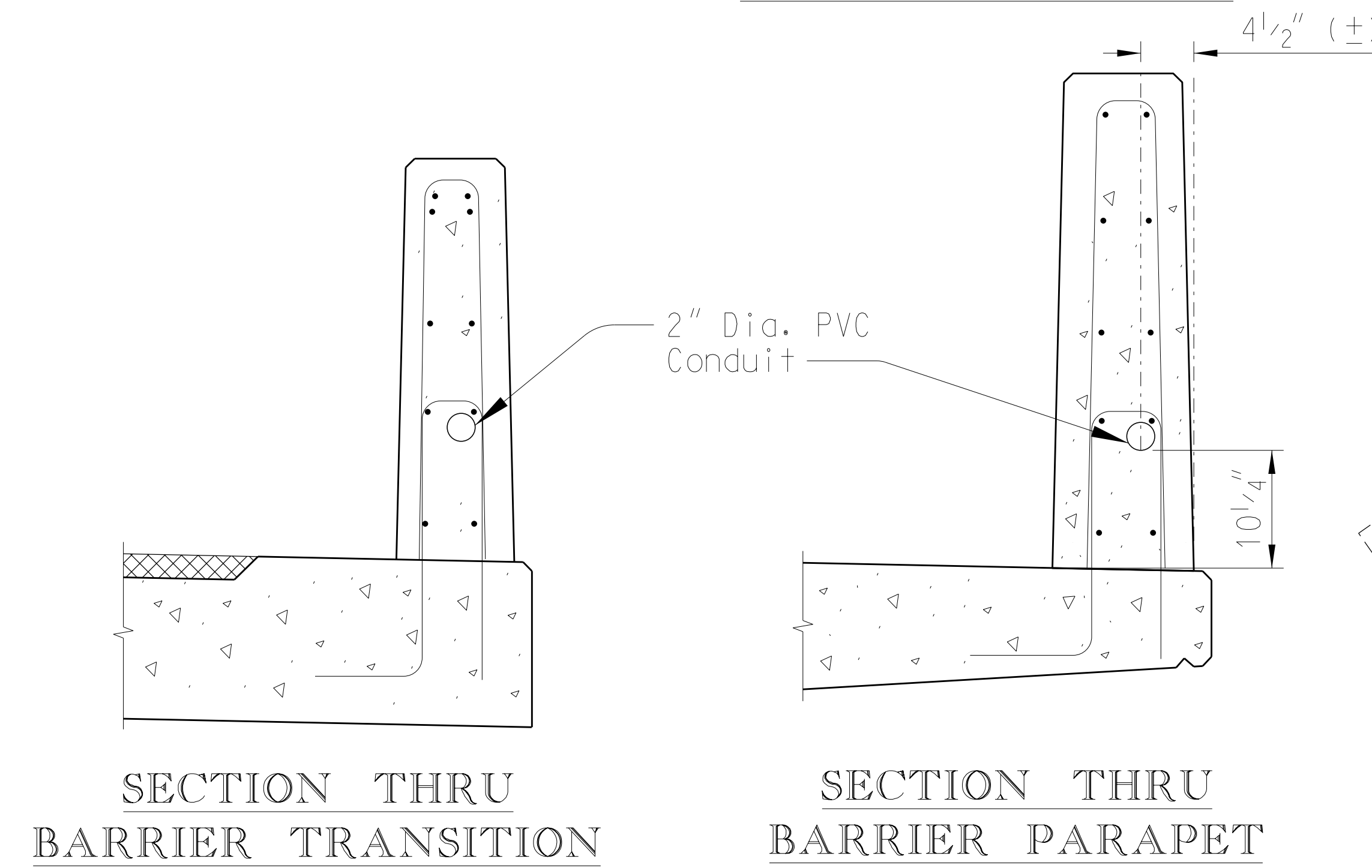
Notes to Designer:

Incorporate into the set of Bridge Plans the appropriate details for two separate 2" diameter Schedule 80 PVC conduit in all concrete bridge barrier parapets and concrete railing walls. Include the applicable Expansion/Deflection Fitting detail and/or Expansion Fitting detail and the applicable notes. Expansion/Deflection Fittings should be detailed for open joints at interior bents of bridges with tangent alignments where little or no transverse movement is expected. Expansion/Deflection Fittings should be detailed for open expansion joints of bridges with curved alignments and for open joints at end bents where transverse movement or rotation is expected. At openings where either type of fitting is acceptable, the Expansion Fitting which type of fitting is required at each open joint in the concrete bridge barrier parapet or concrete railing wall. For any conduit lengths in excess of 300', detail pull boxes. If pull boxes are required, insert the reinforcing steel code numbers in the drawing and include the bars in the Reinforcing Steel Schedule for the superstructure.



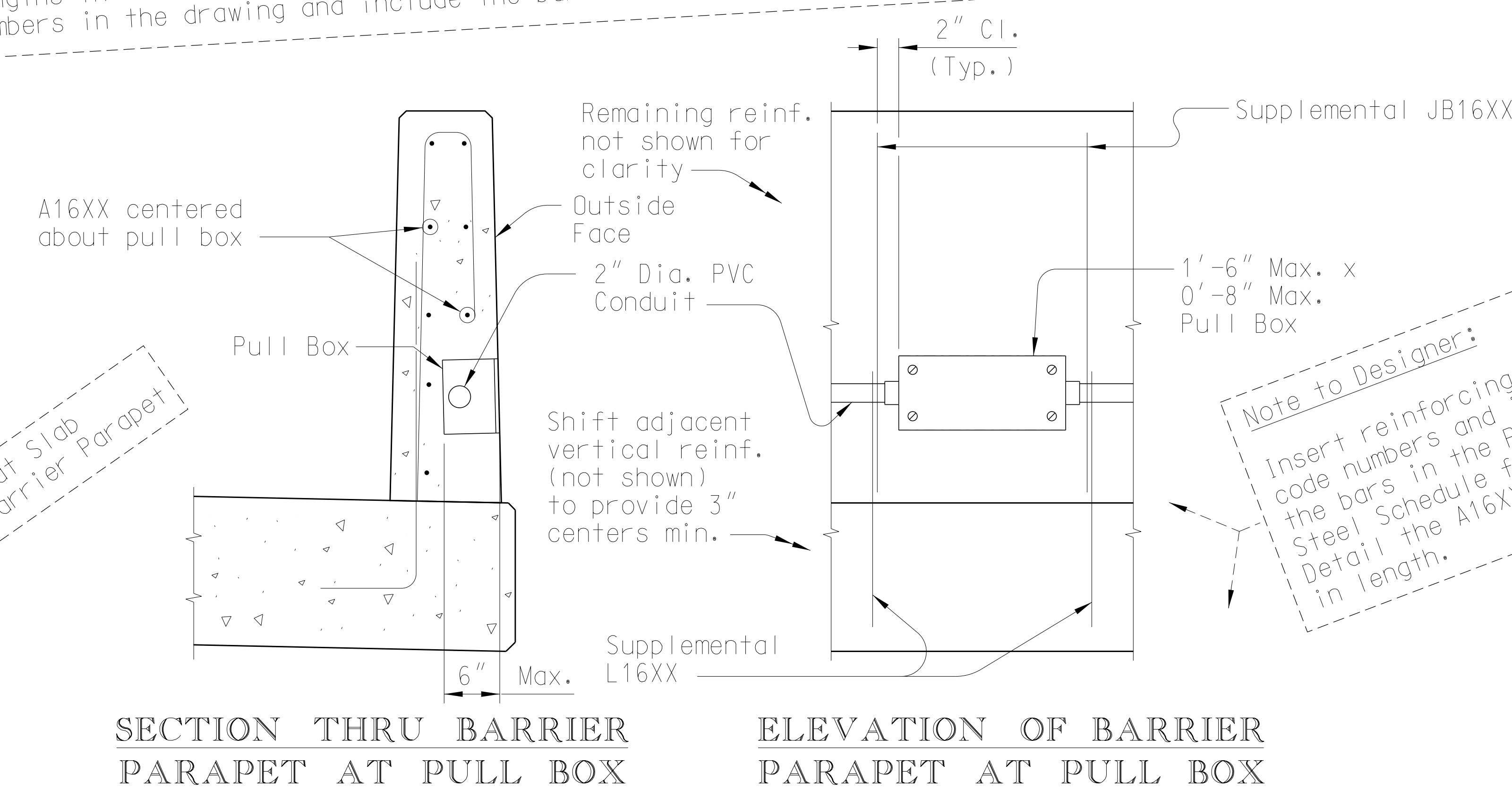
SECTION THRU BARRIER TRANSITION

SECTION THRU BARRIER PARAPET



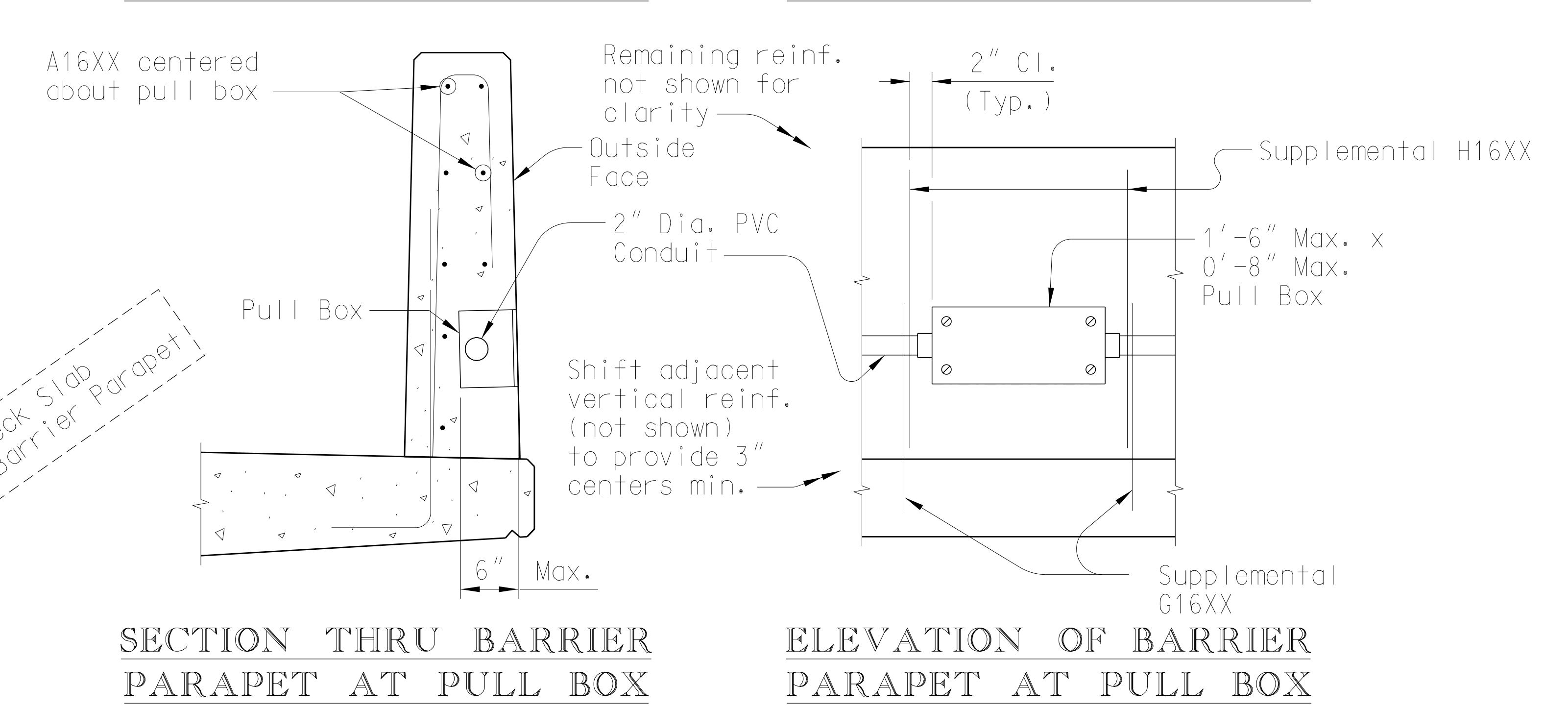
SECTION THRU BARRIER TRANSITION

SECTION THRU BARRIER PARAPET



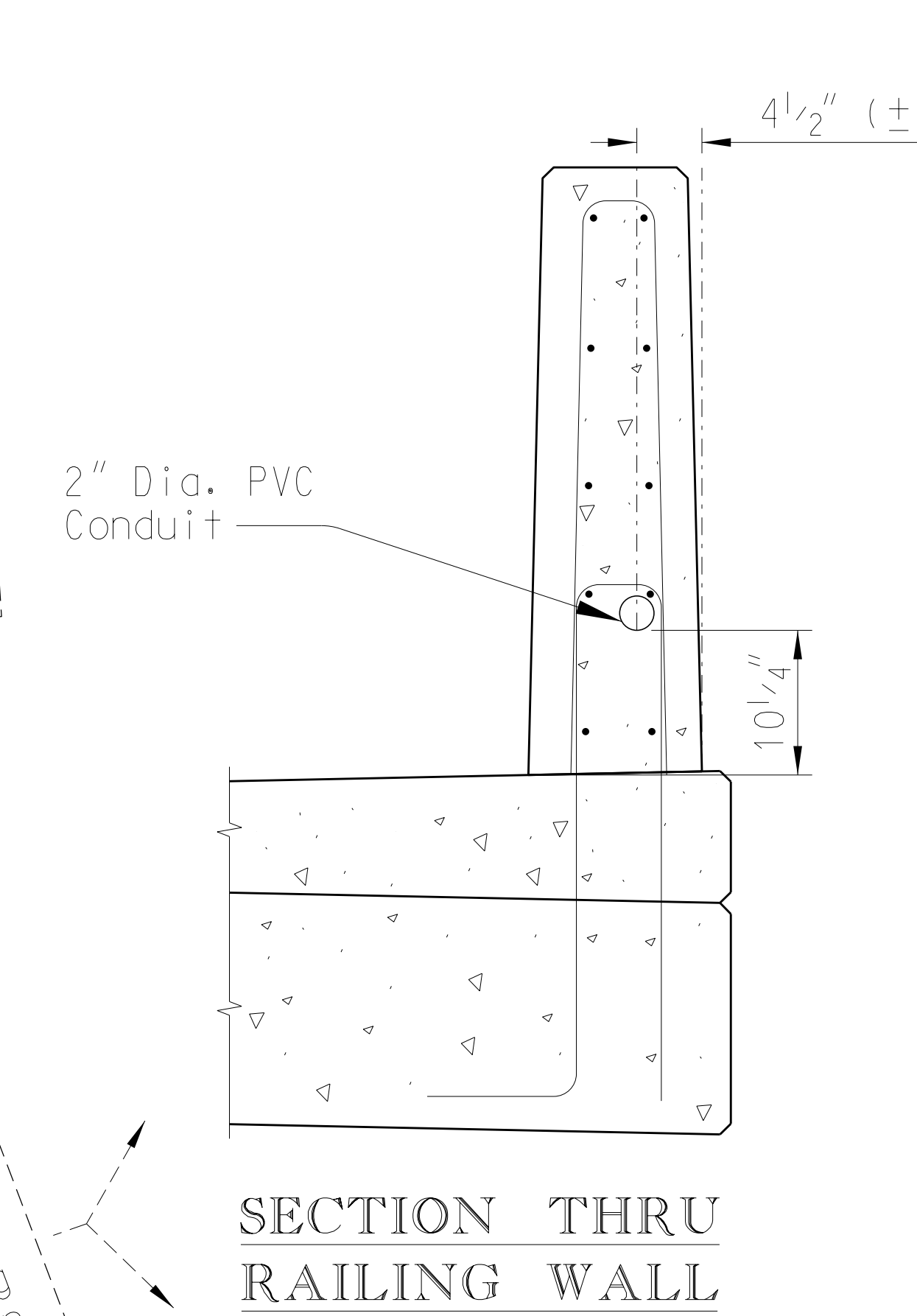
SECTION THRU BARRIER PARAPET AT PULL BOX

ELEVATION OF BARRIER PARAPET AT PULL BOX

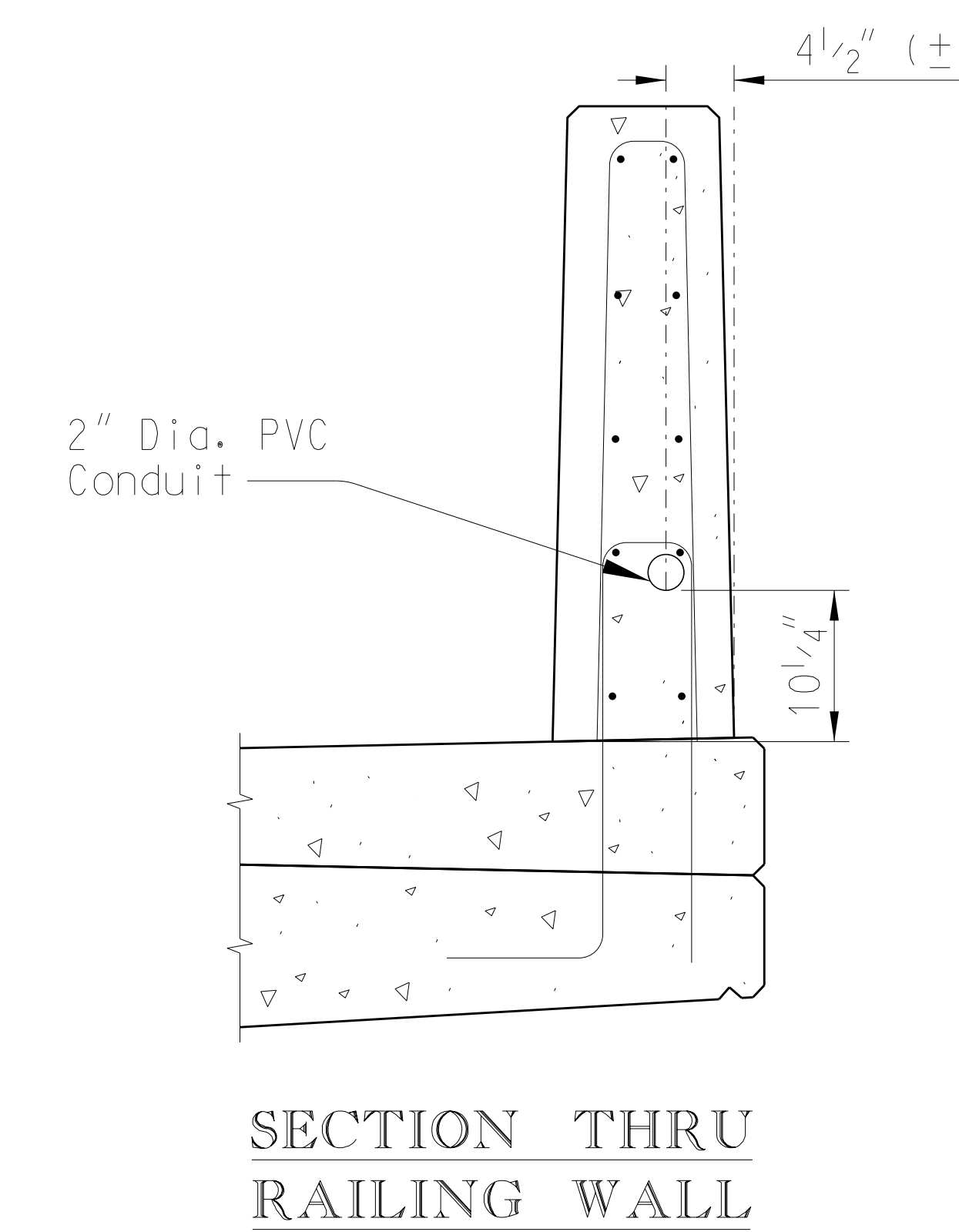


SECTION THRU BARRIER PARAPET AT PULL BOX

ELEVATION OF BARRIER PARAPET AT PULL BOX



SECTION THRU RAILING WALL



SECTION THRU RAILING WALL

DETAILS OF CONDUIT IN RAILING WALL

(Typ. ea. side of bridge)

Use Schedule 80 PVC nonmetallic pipe for conduit.
 Extend conduits 6 inches beyond each end of the barrier parapet transition and cap with watertight covers.
 Provide expansion fittings and/or expansion/deflection fittings at all open joints in the railing wall.
 Include all costs for furnishing and installing conduit, expansion/deflection and/or expansion fittings, and any incidentals required in the unit price bid for 2.0" Schedule 80 PVC Conduit.

Note to Designer:
 Edit these paragraphs to fit project specific requirements. See "Notes to Designer" above.

DETAILS OF CONDUIT IN BARRIER PARAPET

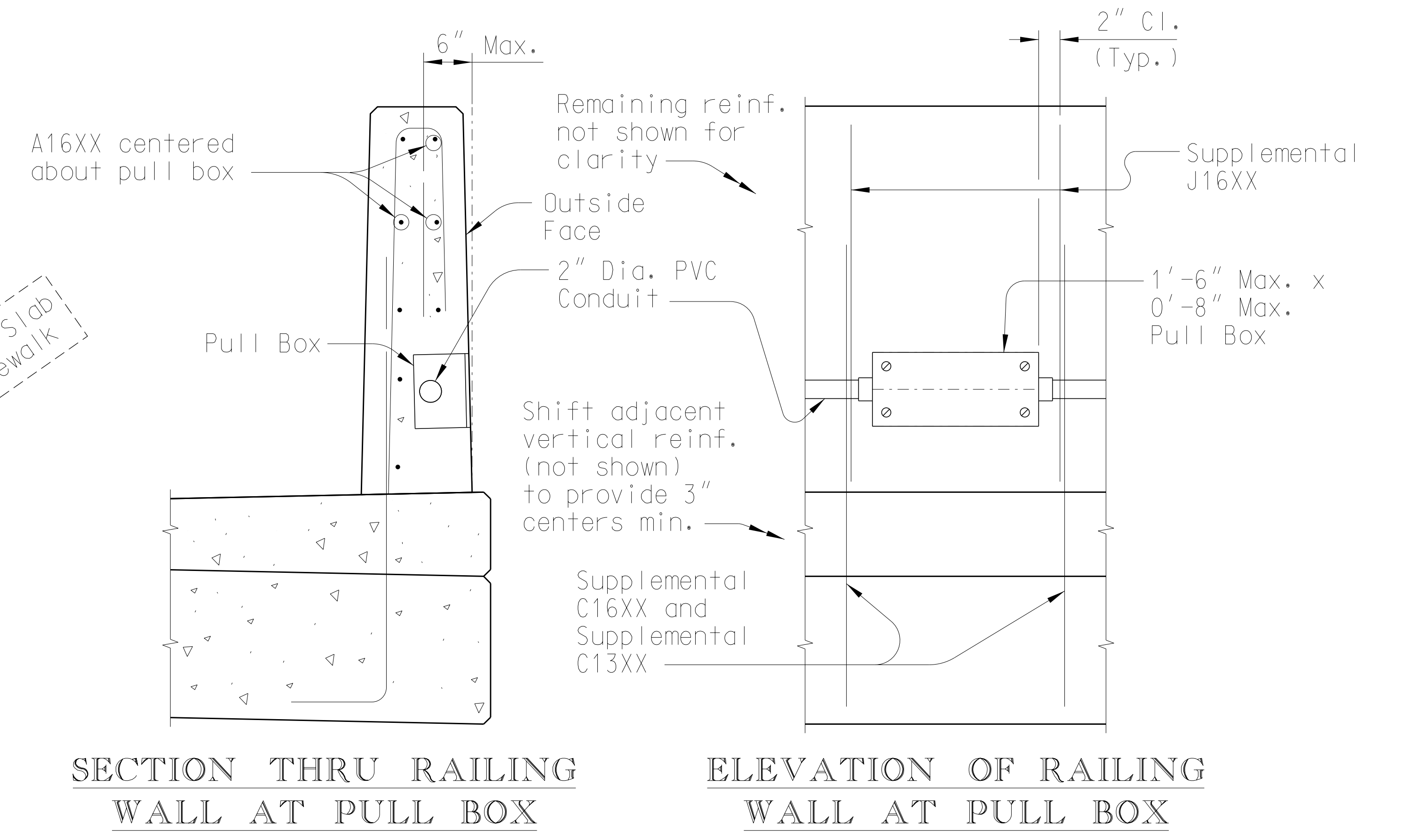
(Typ. ea. side of bridge)

Use Schedule 80 PVC nonmetallic pipe for conduit.
 Extend conduits 6 inches beyond each end of the barrier parapet transition and cap with watertight covers.
 Provide expansion fittings and/or expansion/deflection fittings at all open joints in the barrier parapet.
 Include all costs for furnishing and installing conduit, expansion/deflection and/or expansion fittings, and any incidentals required in the unit price bid for 2.0" Schedule 80 PVC Conduit.

Note to Designer:
 Edit these paragraphs to fit project specific requirements. See "Notes to Designer" above.

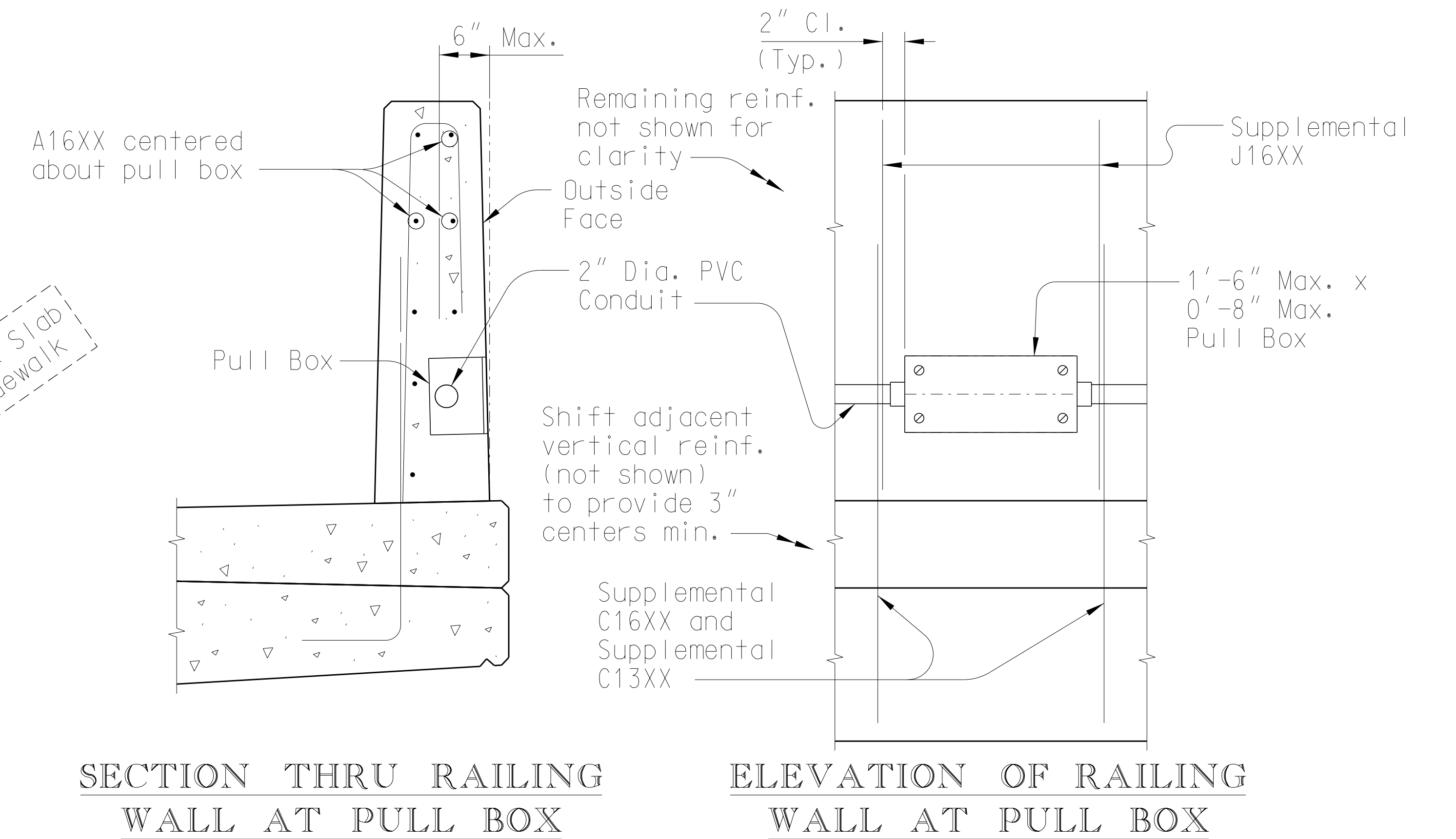
CONDUIT PULL BOX DETAILS

Mount nonmetallic or galvanized steel pull boxes flush with the outside face of the barrier parapet.
 Space pull boxes at no more than 300 feet and a minimum of 10 feet from an open joint in the barrier parapet. Do not locate pull box within the barrier parapet transition.
 Provide pull boxes with gasketed weatherproof covers.
 Field cut and/or bend barrier reinforcing along outside face around the pull boxes as necessary to provide 2 inch clearance between the reinforcing and the pull boxes.
 Include all costs for furnishing and installing pull boxes and any incidentals required in the unit price bid for 2.0" Schedule 80 PVC Conduit. Supplemental pull box reinforcement is included in the Superstructure Reinforcing Steel Schedule.



SECTION THRU RAILING WALL AT PULL BOX

ELEVATION OF RAILING WALL AT PULL BOX

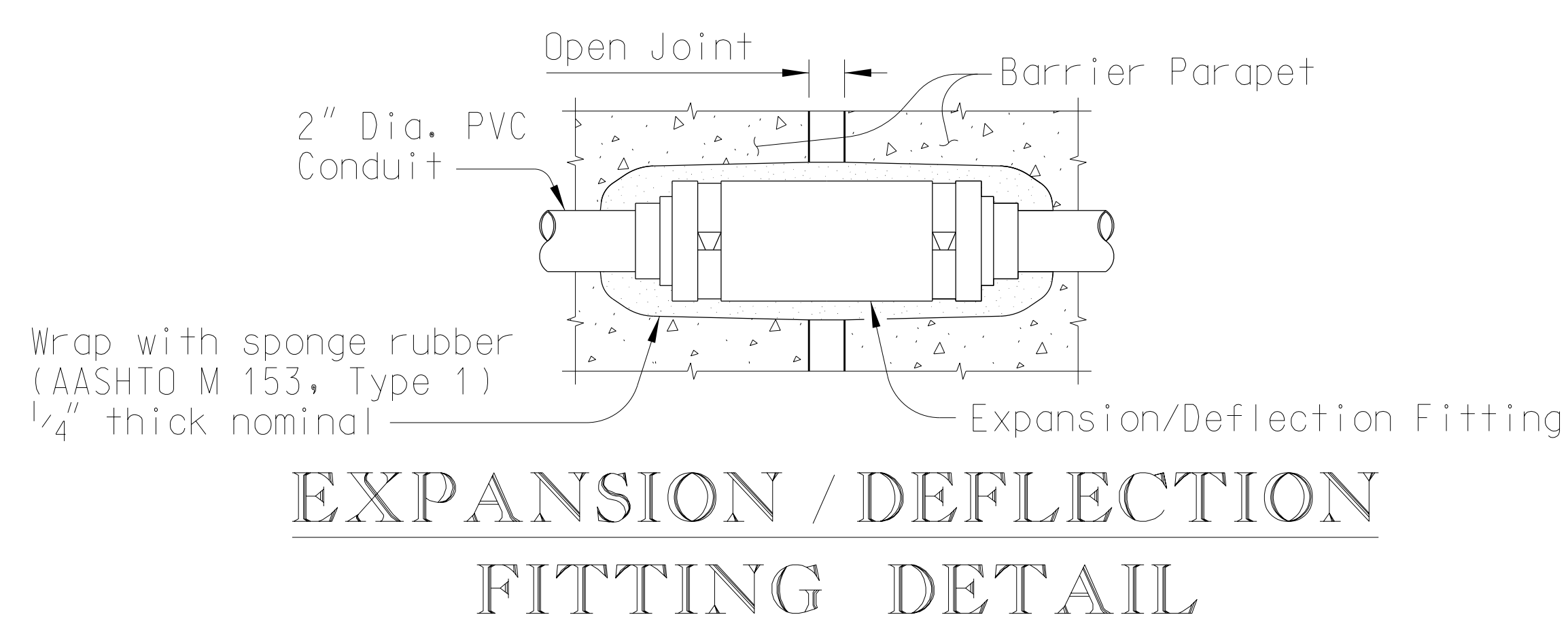


SECTION THRU RAILING WALL AT PULL BOX

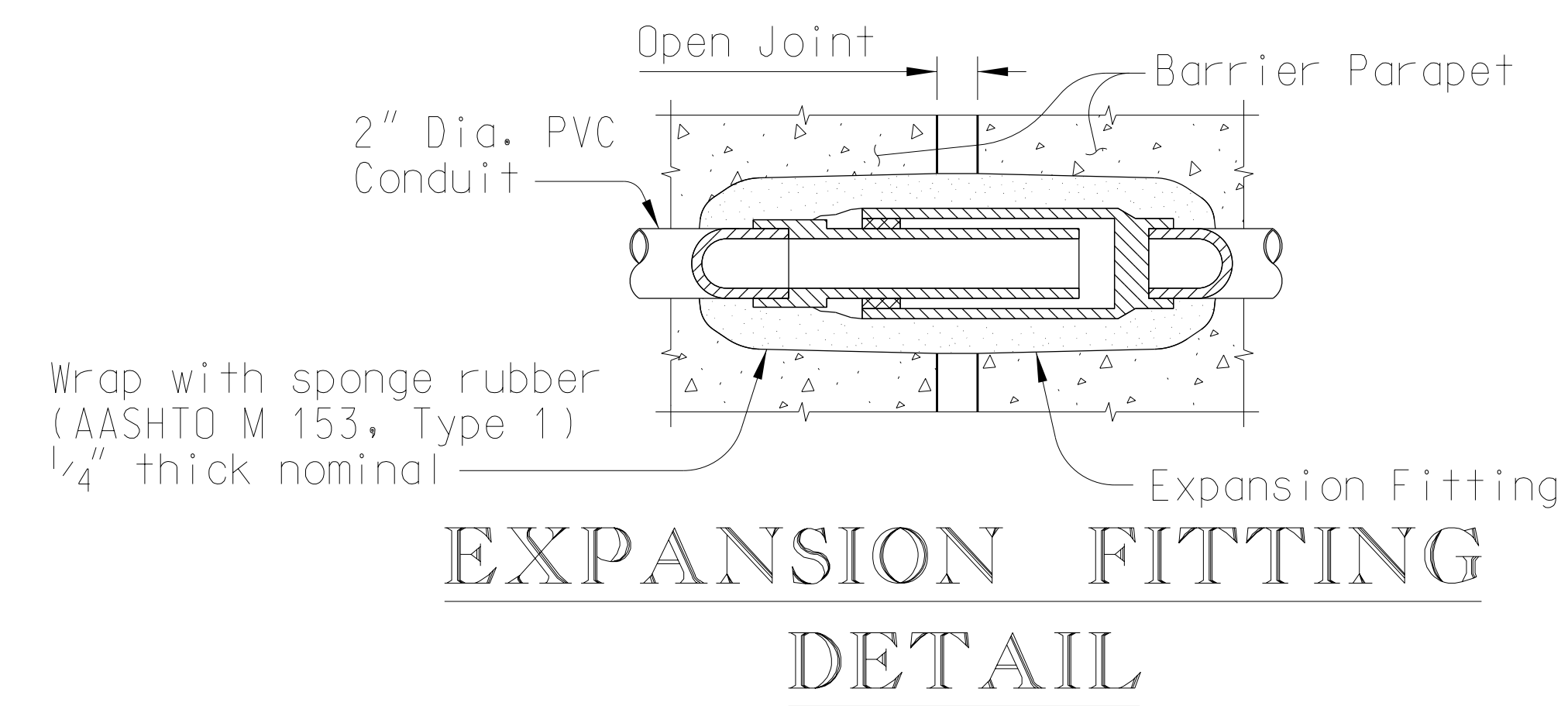
ELEVATION OF RAILING WALL AT PULL BOX

CONDUIT PULL BOX DETAILS

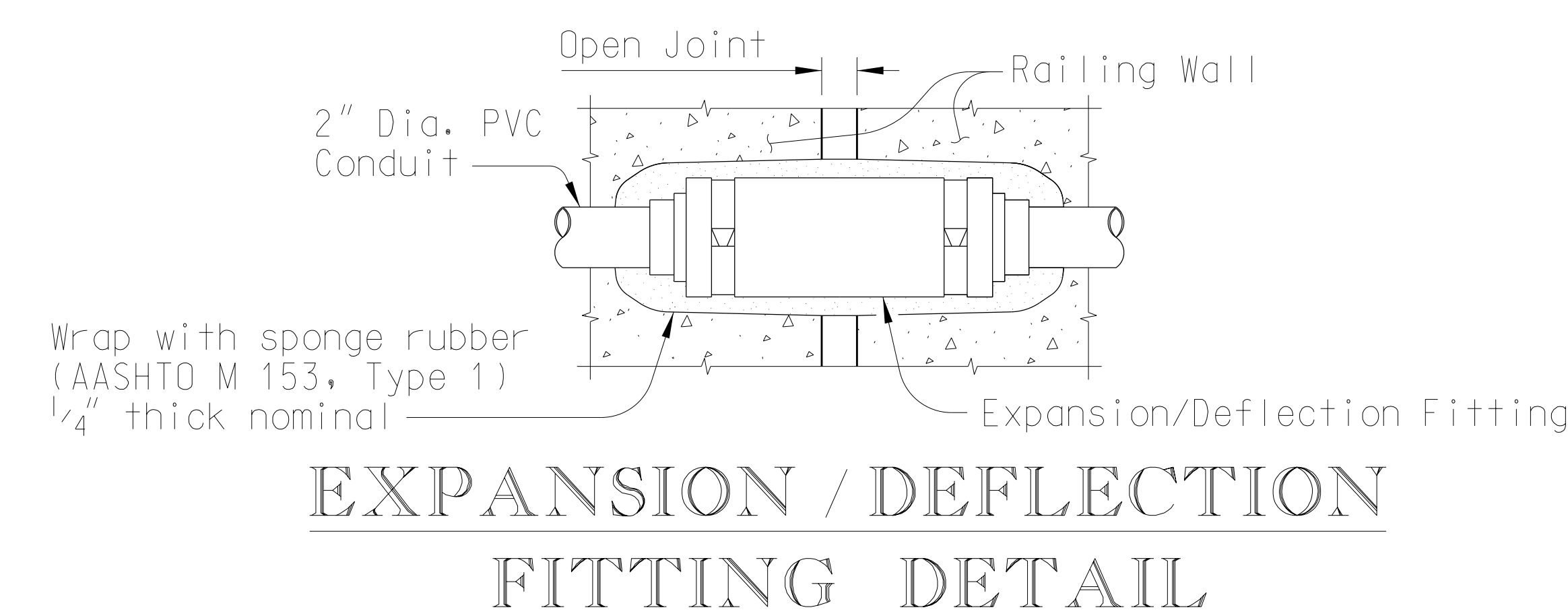
Mount nonmetallic or galvanized steel pull boxes flush with the outside face of the railing wall.
 Space pull boxes at no more than 300 feet and a minimum of 10 feet from an open joint in the railing wall.
 Provide pull boxes with gasketed weatherproof covers.
 Field cut and/or bend railing wall reinforcing along outside face around the pull boxes as necessary to provide 2 inch clearance between the reinforcing and the pull boxes.
 Include all costs for furnishing and installing pull boxes and any incidentals required in the unit price bid for 2.0" Schedule 80 PVC Conduit. Supplemental pull box reinforcement is included in the Superstructure Reinforcing Steel Schedule.



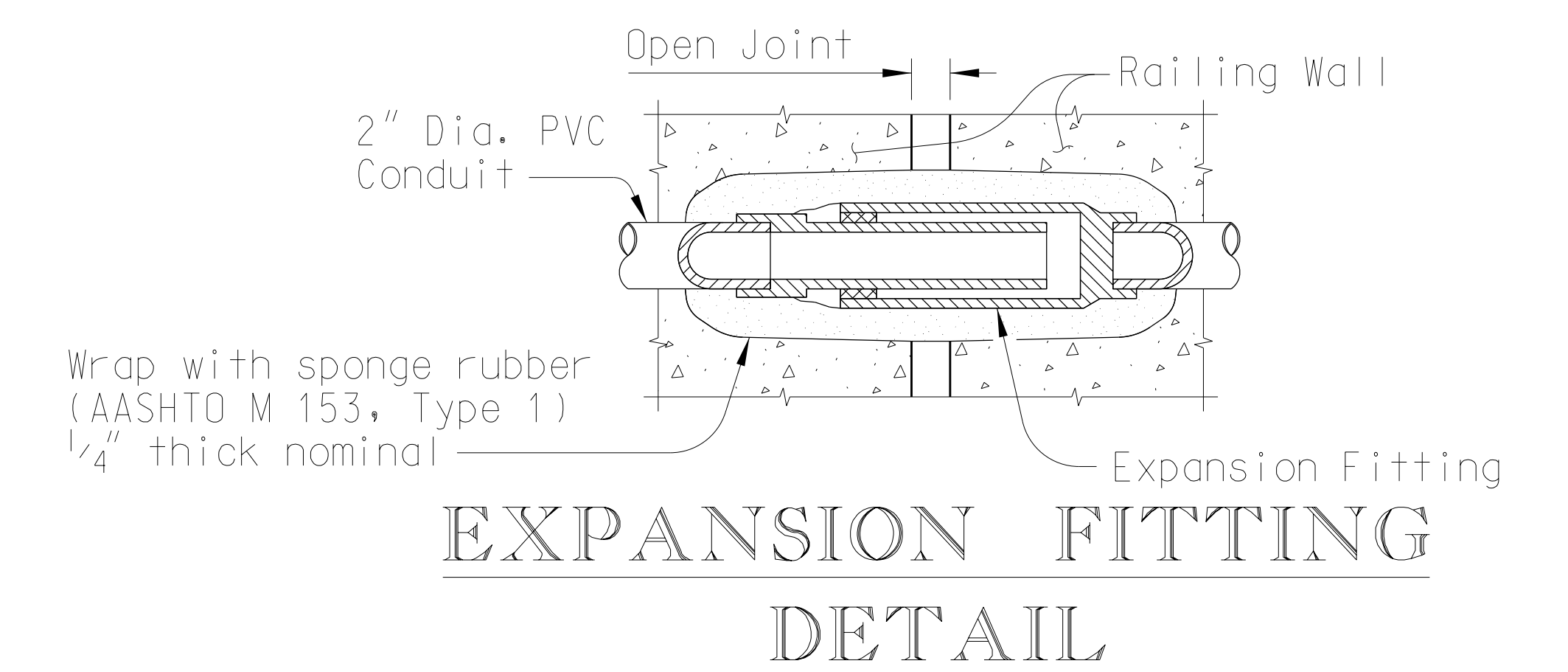
EXPANSION / DEFLECTION FITTING DETAIL



EXPANSION FITTING DETAIL



EXPANSION / DEFLECTION FITTING DETAIL



EXPANSION FITTING DETAIL

REV.	DR.	PCW	HL	10-19