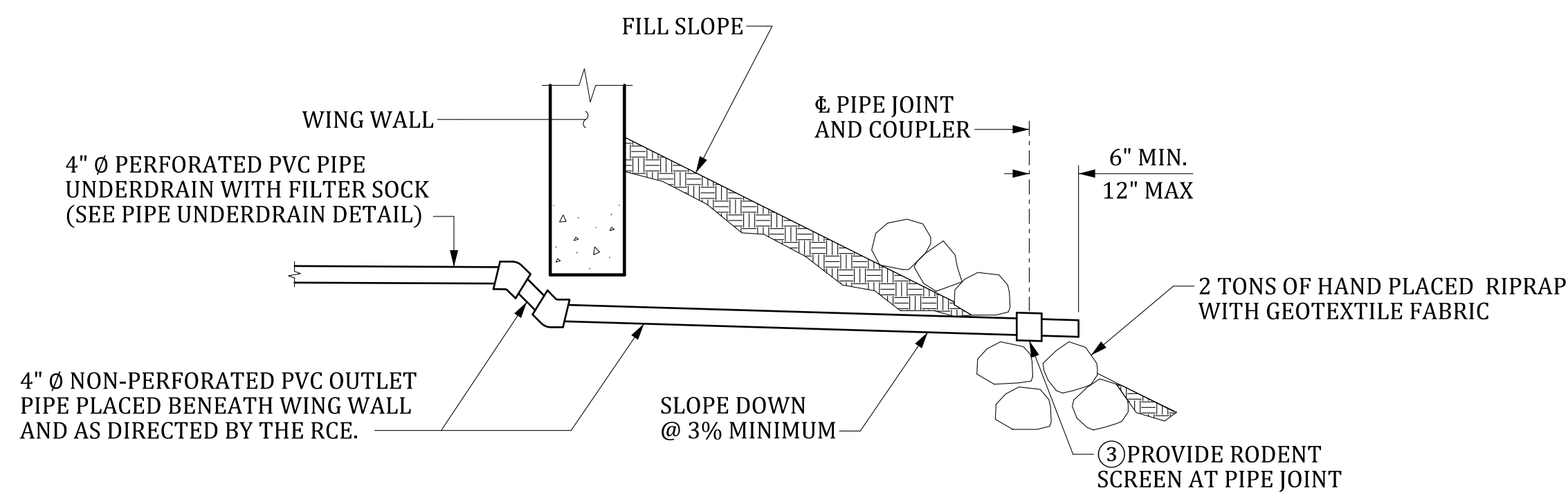


PIPE UNDERDRAIN DETAIL

- EXTEND SUBSTRUCTURE WATERPROOFING THE FULL LENGTH OF THE END WALL AND WING WALLS. SEE SECTION 729 OF THE STANDARD SPECIFICATIONS.
- SLOPE PIPE A MINIMUM OF 0.5% TO DRAIN.



PIPE OUTLET DETAIL

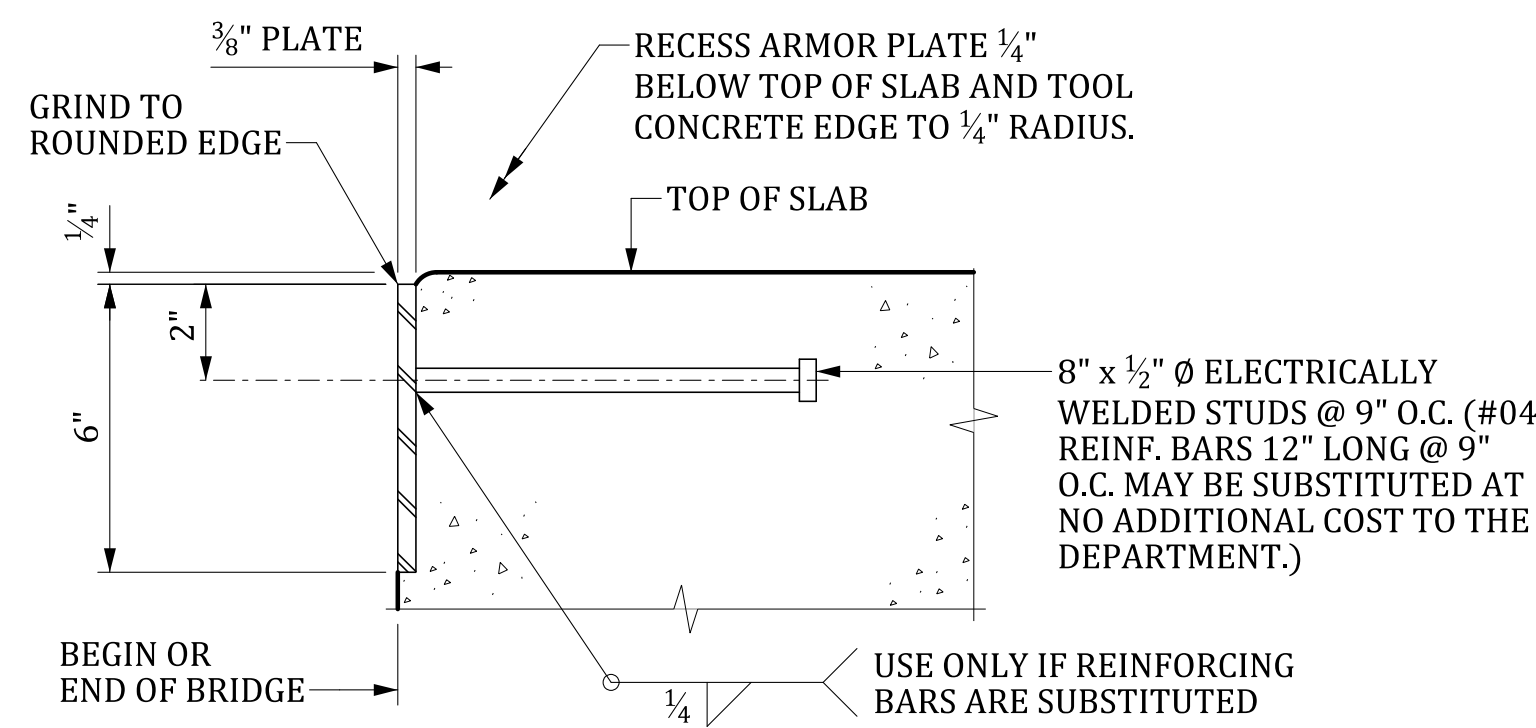
NOTES:

INSTALL 4" Ø PERFORATED PIPE UNDERDRAIN IN ACCORDANCE WITH SECTION 802 OF THE STANDARD SPECIFICATIONS. USE UNCOMPACTED #789 COARSE AGGREGATE IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. USE GEOTEXTILE FOR DRAINAGE FILTRATION, CLASS 1 FABRIC (PROTECTED) FOR THE FILTER SOCK IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE 4" DIA. PERFORATED PVC PIPE UNDERDRAIN, FILTER SOCK, #789 COARSE AGGREGATE, 4" Ø NON-PERFORATED PVC OUTLET PIPE, RIPRAP, GEOTEXTILE FABRIC FOR RIPRAP, RODENT SCREEN, AND CONSTRUCTING THE OUTLET AS DIRECTED BY THE RCE IN THE UNIT PRICE BID FOR AGGREGATE UNDERDRAIN (AGGREGATE #789) WITH 4" PERFORATED PIPE FOR STRUCTURES.

INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE SUBSTRUCTURE WATERPROOFING IN THE UNIT PRICE BID FOR WATERPROOFING.

- CONSTRUCT THE PIPE OUTLET WITH A PIPE JOINT THAT IS A MINIMUM OF 6" AND A MAXIMUM OF 1'-0" FROM THE OUTLET END OF THE PIPE. PROVIDE RODENT SCREEN MANUFACTURED FROM T304 STAINLESS STEEL OR GALVANIZED STEEL WITH A MINIMUM WIRE DIAMETER OF 0.050". PROVIDE A RODENT SCREEN WITH A MINIMUM OF 2 OPENINGS PER INCH AND A MAXIMUM OF 4 OPENINGS PER INCH.



ARMOR PLATE DETAIL

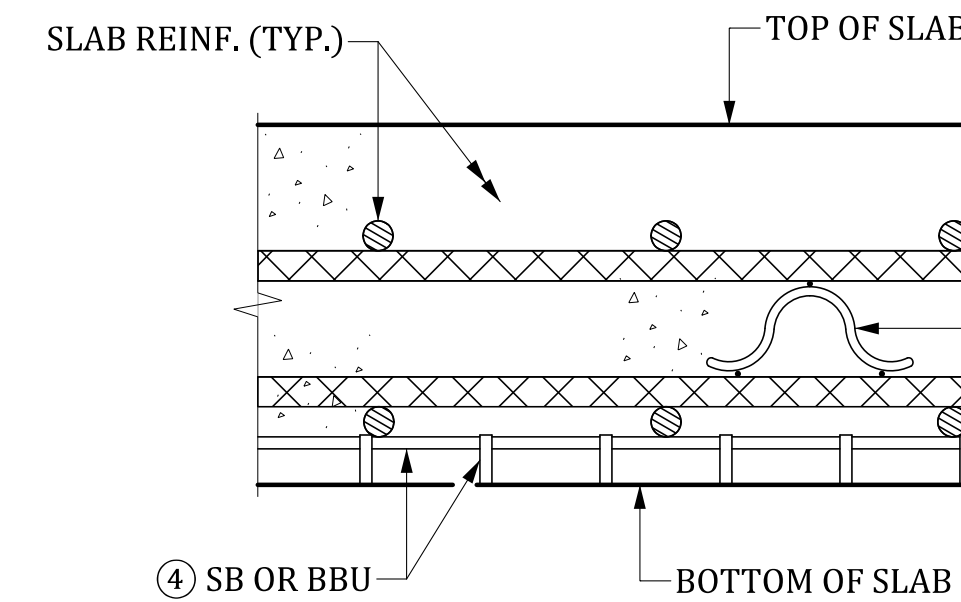
INSTALL 3/8" THICK PLATES, AS DETAILED ABOVE, AT THE BEGINNING AND END OF THE BRIDGE.

PROVIDE STEEL FOR THE ARMOR PLATES THAT CONFORMS TO THE LATEST AASHTO M 270 GRADE 50W (ASTM A 709 GR. 50W) STEEL AND NEITHER THE PLATES NOR THE ANCHOR STUDS NEED TO BE PAINTED.

PROVIDE FABRICATED PLATES THAT CONFORM TO THE CROWN AND GRADE OF THE ROADWAY AND EXTEND FROM GUTTER LINE TO GUTTER LINE. THE PLATES MAY BE FABRICATED IN REASONABLE LENGTHS AND CONNECTED AT THE JOB SITE WITH FULL PENETRATION BUTT WELDS GROUND FLUSH ALONG THE TOP FACE OF CONNECTED PLATES.

HOLES, 1/4" DIAMETER, SPACED APPROXIMATELY 2'-0" ON CENTER MAY BE PROVIDED IN THE LOWER PORTION OF THE PLATES TO BOLT THE PLATES TO THE FORMS.

INCLUDE ALL COSTS OF MATERIAL AND WORKMANSHIP TO FABRICATE, FURNISH, AND INSTALL THE ARMOR PLATES AND ANCHOR STUDS COMPLETE IN PLACE IN THE UNIT PRICE BID FOR CLASS 4000 CONCRETE.



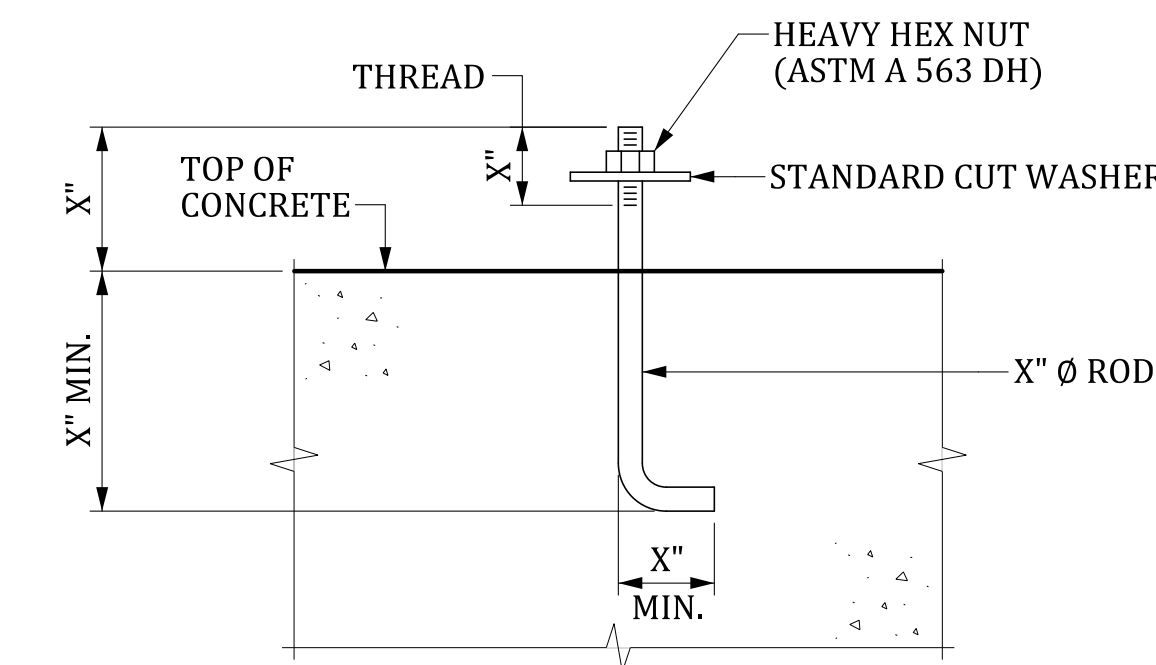
BAR SUPPORT DETAIL

SECTION PARALLEL TO ROADWAY

FOR BAR SUPPORTS THAT CONTACT FORMS OR FLOOR SURFACES, USE PLASTIC BAR SUPPORTS THAT CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. PROTECT THE PLASTIC BAR SUPPORTS FROM EXPOSURE TO SUNLIGHT UNTIL PLACED IN THE FORM. WHERE REMOVABLE FORMS ARE USED, DO NOT USE CONTINUOUS LEGS OR RAILS THAT ARE IN CONTACT WITH THE FORMS.

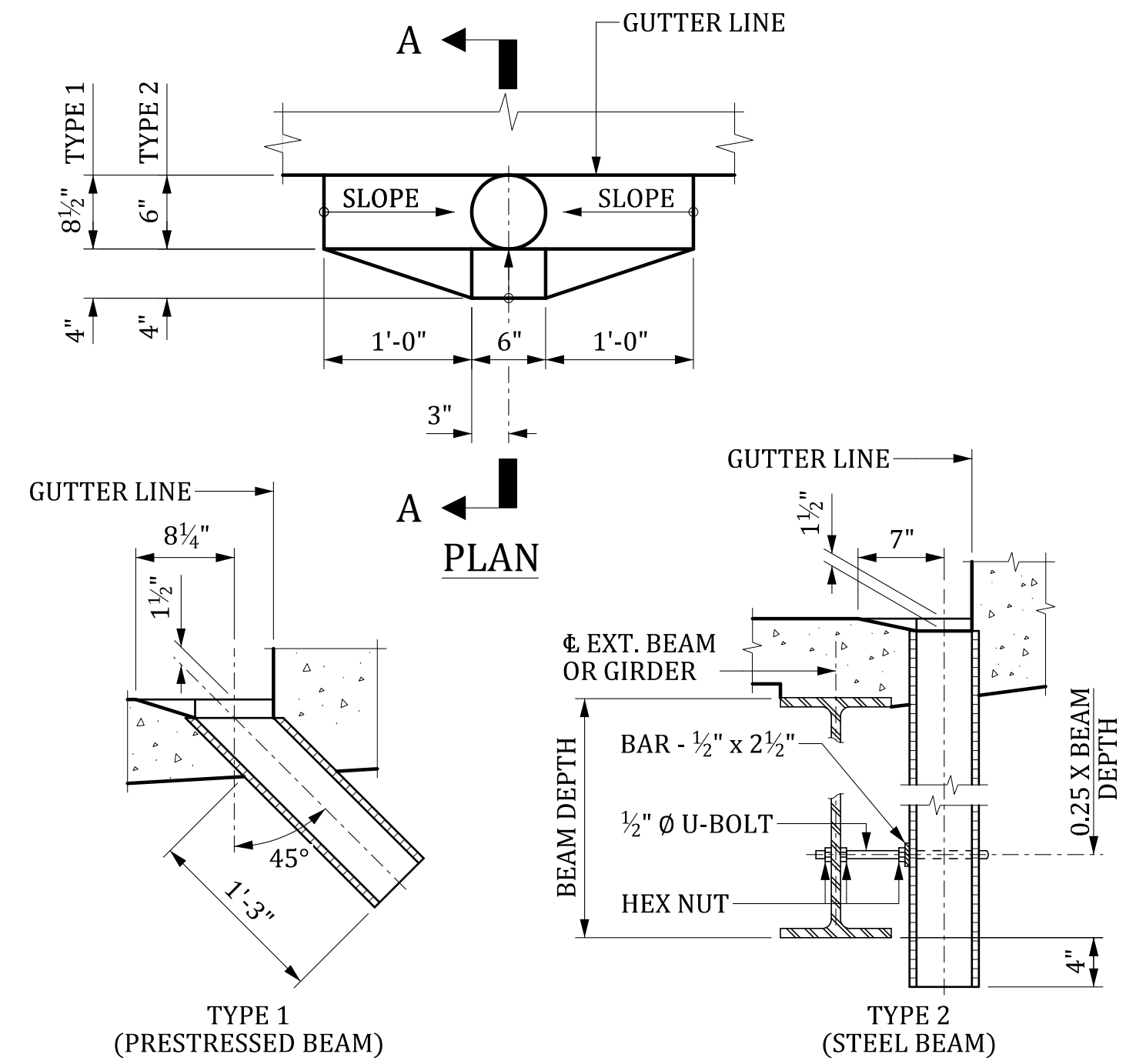
FOR SUPPORTS THAT DO NOT CONTACT FORMS OR FLOOR SURFACES, USE WIRE BAR SUPPORTS THAT CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. IN APPLICATIONS WHERE GALVANIZED BARS ARE USED, USE GALVANIZED WIRE SUPPORTS.

- USE SBU WHERE STEEL STAY-IN-PLACE FORMS USED, USE SB ELSEWHERE.



ANCHOR BOLT DETAILS

SEE REINFORCING STEEL SCHEDULE ON BENT SHEETS FOR LENGTH AND NUMBER OF ANCHOR BOLT ASSEMBLIES REQUIRED. PROVIDE ANCHOR BOLTS THAT CONFORM WITH ASTM F 1554 (GRADE X). SHIP ANCHOR BOLTS AND NUTS ASSEMBLED.



SECTION A-A

DRAIN DETAILS

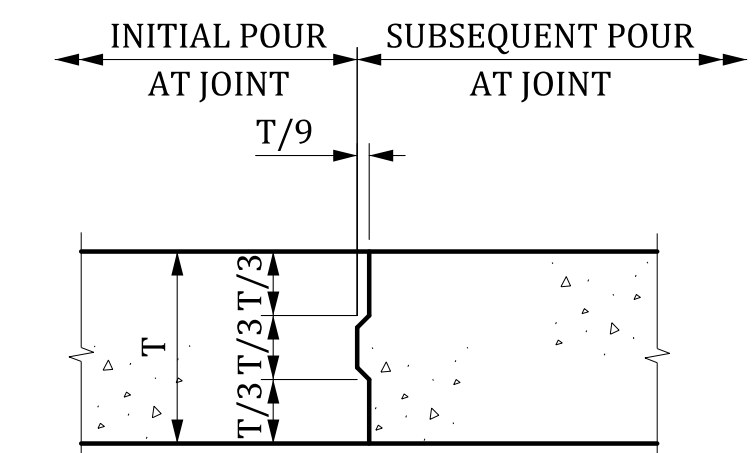
PROVIDE DRAIN PIPES THAT ARE 6" NOMINAL DIAMETER FIBERGLASS PIPE MEETING THE REQUIREMENTS OF ASTM D 2996 AND THE ACCELERATED UV WEATHERING PERFORMANCE REQUIREMENTS OF ASTM G 154.

PROVIDE PIPE THAT HAS PIGMENTED RESIN THROUGHOUT THE WALL. PAINT, GEL-COAT, OR EXTERIOR COATING WILL NOT BE ACCEPTED. COLOR SHALL BE LIGHT GRAY (AMS-STD 26622) FOR CONCRETE AND PAINTED STRUCTURAL STEEL GIRDER BRIDGES, OR BROWN (AMS-STD 30045) FOR WEATHERING STEEL GIRDER BRIDGES.

GALVANIZE PLATE, BOLTS, AND NUTS IN ACCORDANCE WITH AASHTO M 111, AASHTO M 232, OR ASTM F 2329 AS APPLICABLE. PAINT U-BOLT ASSEMBLIES THE APPROPRIATE COLOR TO MATCH THE GIRDER.

TO ANCHOR THE PIPE, CEMENT AT LEAST TWO SUITABLE LUGS OF A SATISFACTORY SIZE TO THE PORTION OF THE PIPE TO BE EMBEDDED IN THE CONCRETE SLAB.

INCLUDE ALL COSTS OF FURNISHING AND PLACING DRAINS IN THE UNIT PRICE BID FOR CLASS 4000 CONCRETE. INCLUDE ALL COSTS OF FURNISHING AND PAINTING U-BOLT ASSEMBLIES IN THE LUMP SUM BID FOR STRUCTURAL STEEL.



KEYED CONSTRUCTION JOINT DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.

CONSULTANT NAME/LOGO

SOUTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS
 FOR BEAM/GIRDER SUPERSTRUCTURE

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COUNTY: ###

ROUTE: ###

DRAWING NUMBER: 700-07.GD01.BM

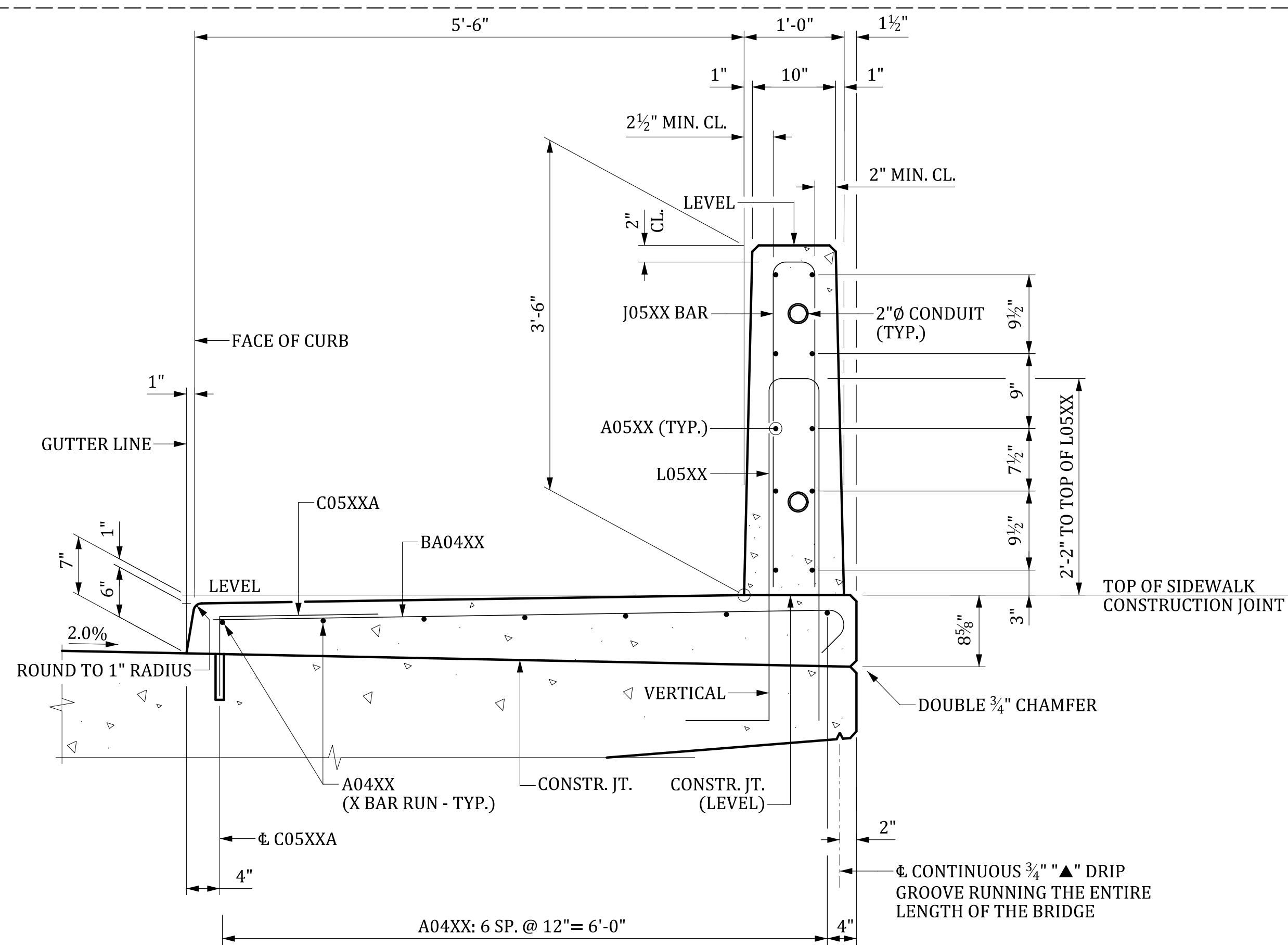
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BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	BY	CHK.	DATE
QUAN.	GMC	MWB	12-23
DR.			
DES.			

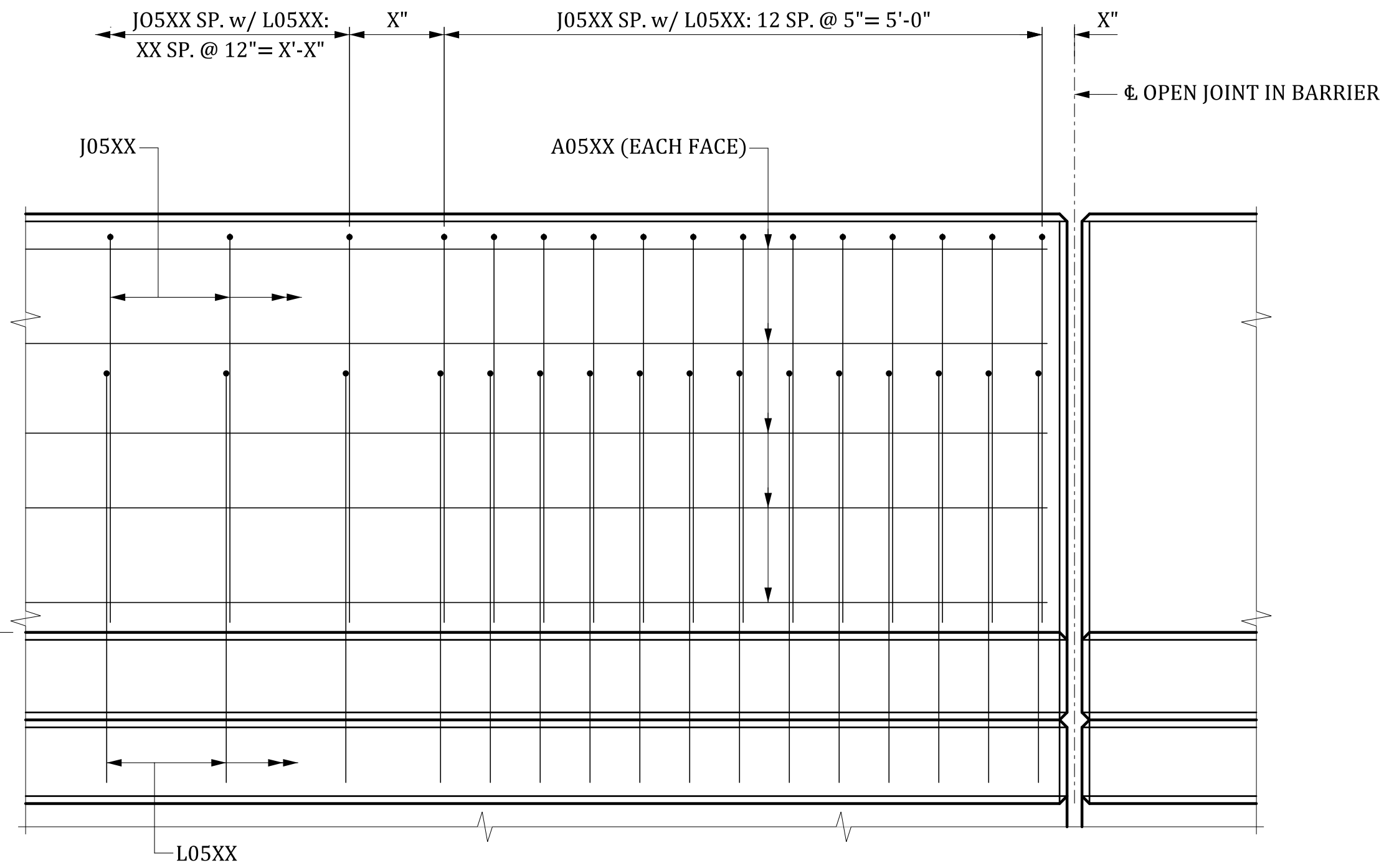
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REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	BY	CHK.	DATE

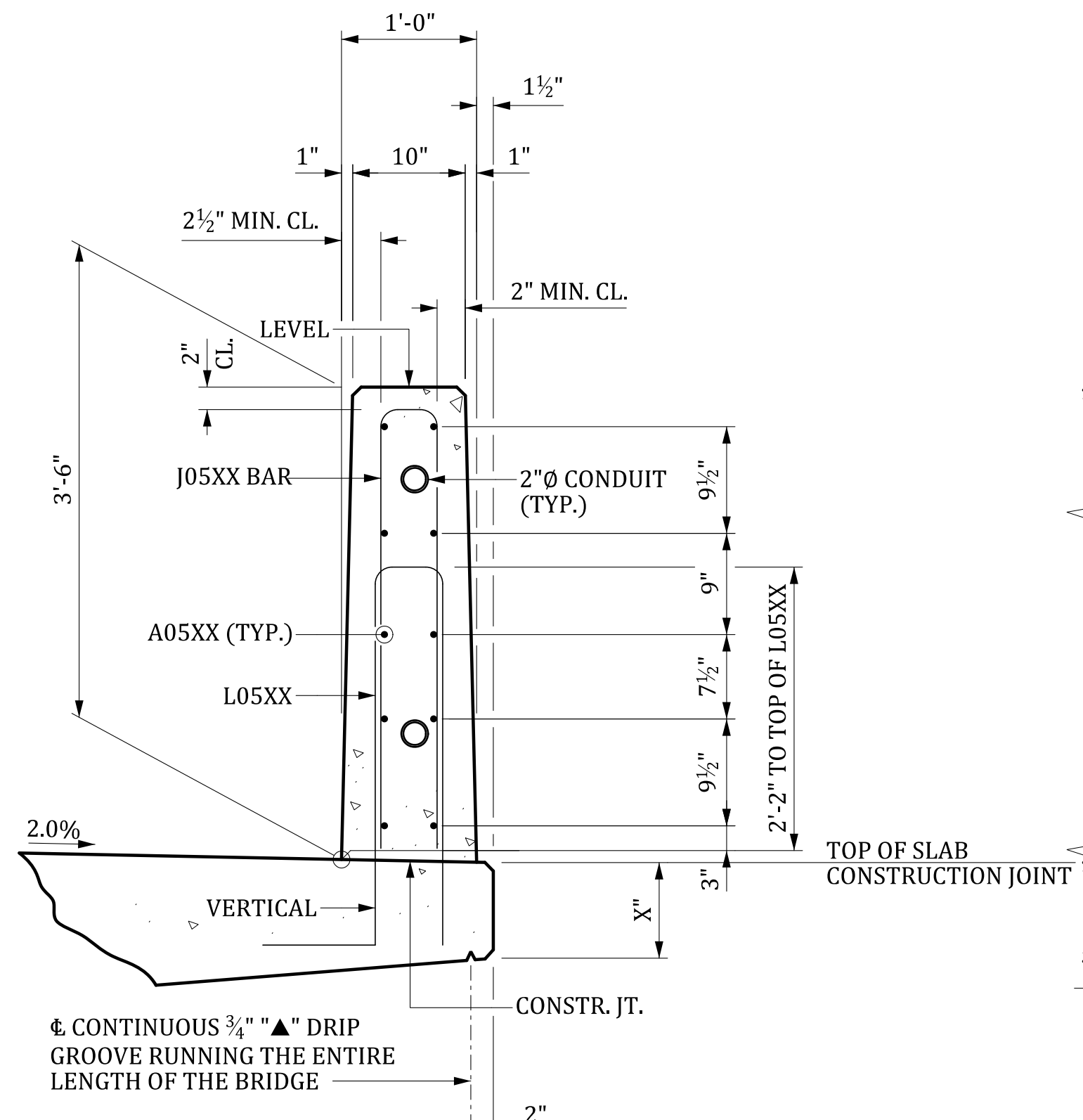


SECTION THRU SIDEWALK w/ RAILING WALL
SLAB REINFORCING NOT SHOWN.

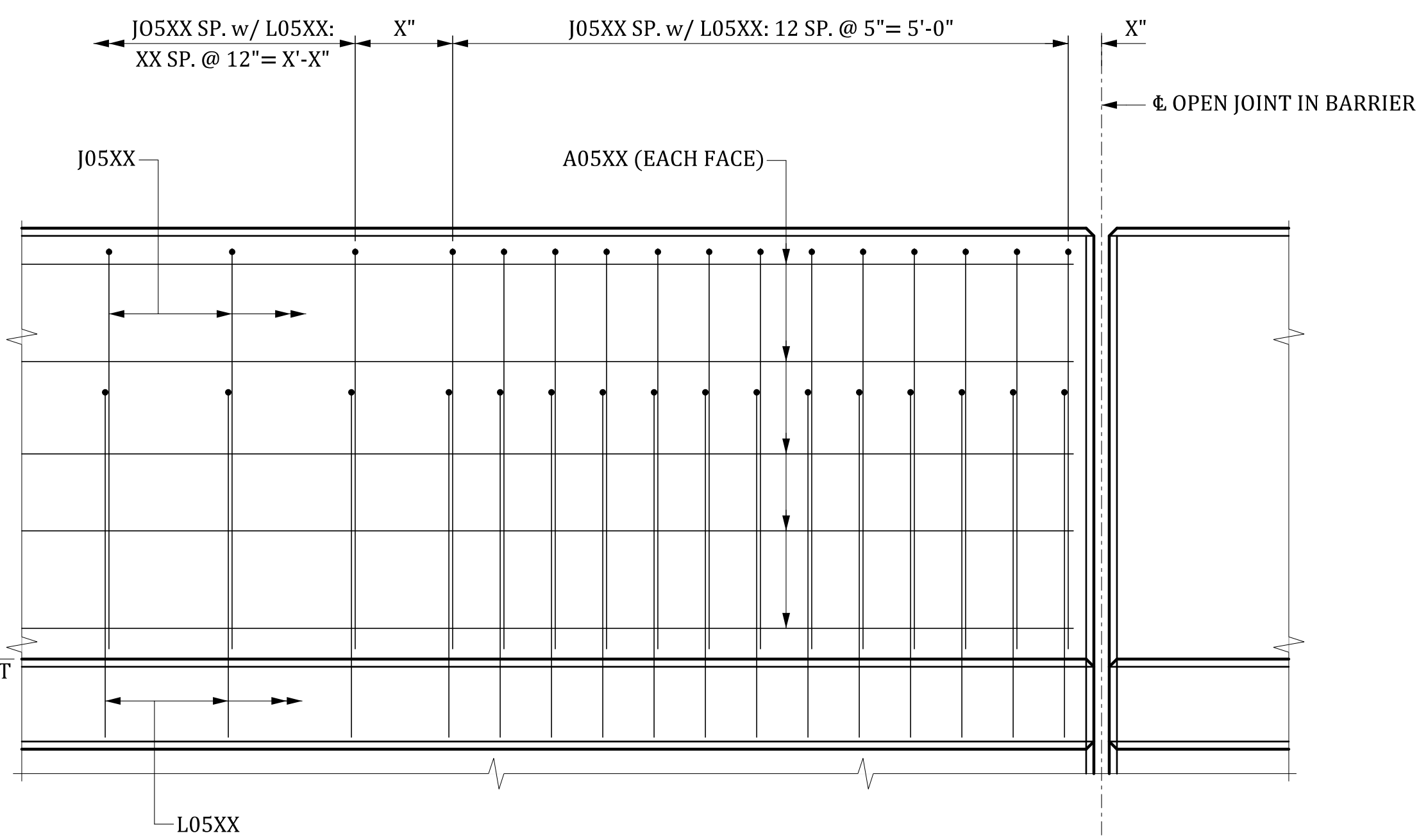


ELEVATION OF RAILING WALL
SIDEWALK / SLAB REINFORCING AND CONDUIT NOT SHOWN.

NOTE:
IF THE CONTRACTOR ELECTS TO HAND FORM RAILING WALL INSTEAD OF SLIP FORMING, CAST A UNIFORM 12" THICK RAILING WALL. ENSURE THAT BOTH FACES OF WALL ARE CAST VERTICAL AND PARALLEL TO ONE ANOTHER. PERFORM THIS WORK AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT. ALSO, NOTE ON AS-BUILT PLANS IF HAND FORMED WALL WAS UTILIZED.



SECTION THRU BARRIER PARAPET
SLAB REINFORCING NOT SHOWN.



ELEVATION OF BARRIER PARAPET
SLAB REINFORCING AND CONDUIT NOT SHOWN.

NOTE:
IF THE CONTRACTOR ELECTS TO HAND FORM BARRIER PARAPET INSTEAD OF SLIP FORMING, CAST A UNIFORM 12" THICK BARRIER PARAPET. ENSURE THAT BOTH FACES OF PARAPET ARE CAST VERTICAL AND PARALLEL TO ONE ANOTHER. PERFORM THIS WORK AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT. ALSO, NOTE ON AS-BUILT PLANS IF HAND FORMED BARRIER WAS UTILIZED.

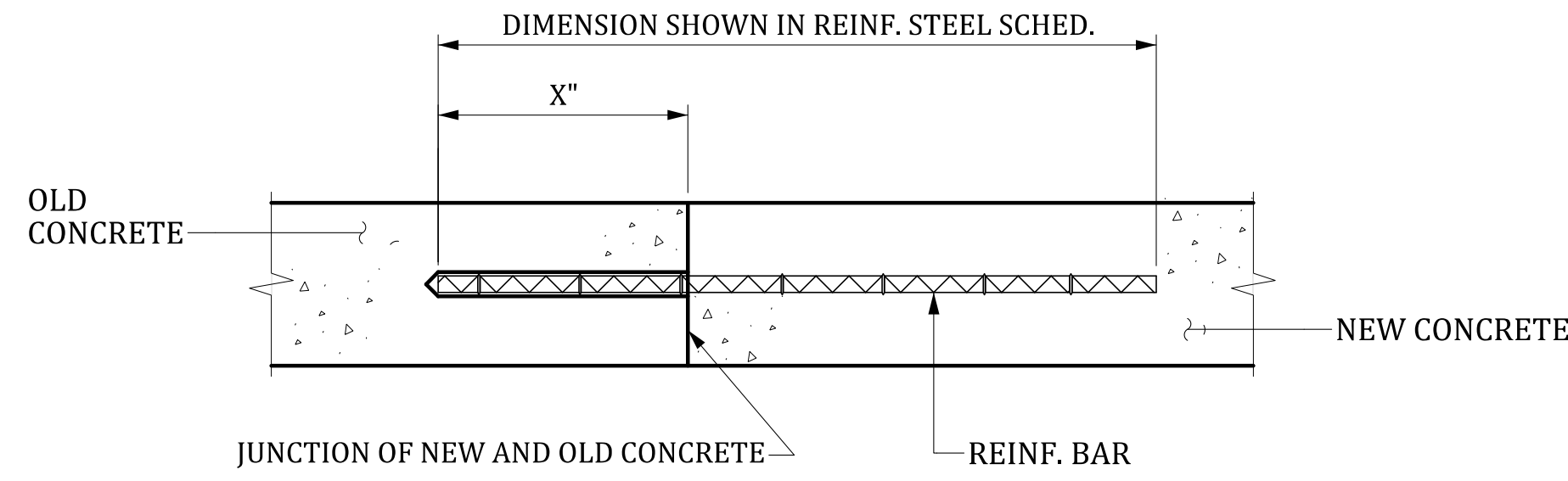
NOTE:
DO NOT INSERT THIS SHEET INTO THE PLANS. ADD APPLICABLE DETAILS TO EITHER THE GENERAL DETAILS SHEET OR TO THE SUPERSTRUCTURE DETAILS.

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GENERAL DETAILS
FOR BEAM/GIRDER SUPERSTRUCTURE
SUPPLEMENTAL 1

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BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED			
QUAN.			
DR.	MWB	AMP	12-23
DES.			
BY	CHK.	DATE	

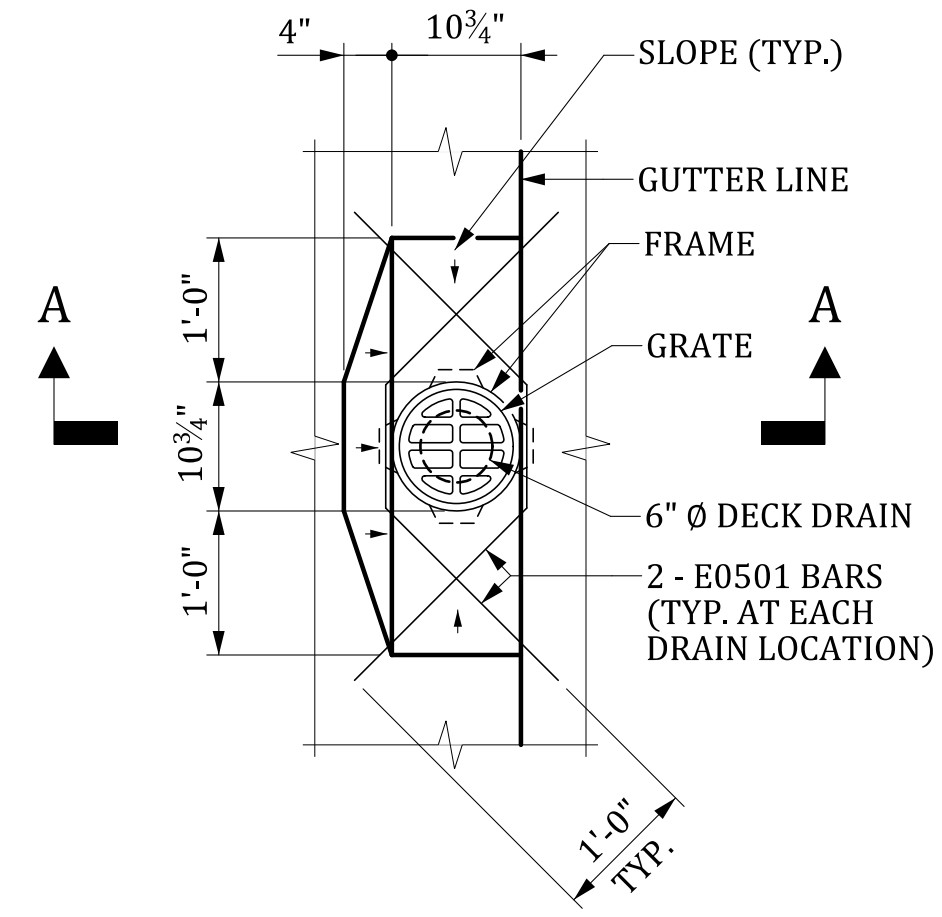


ADHESIVELY BONDED DOWEL DETAIL

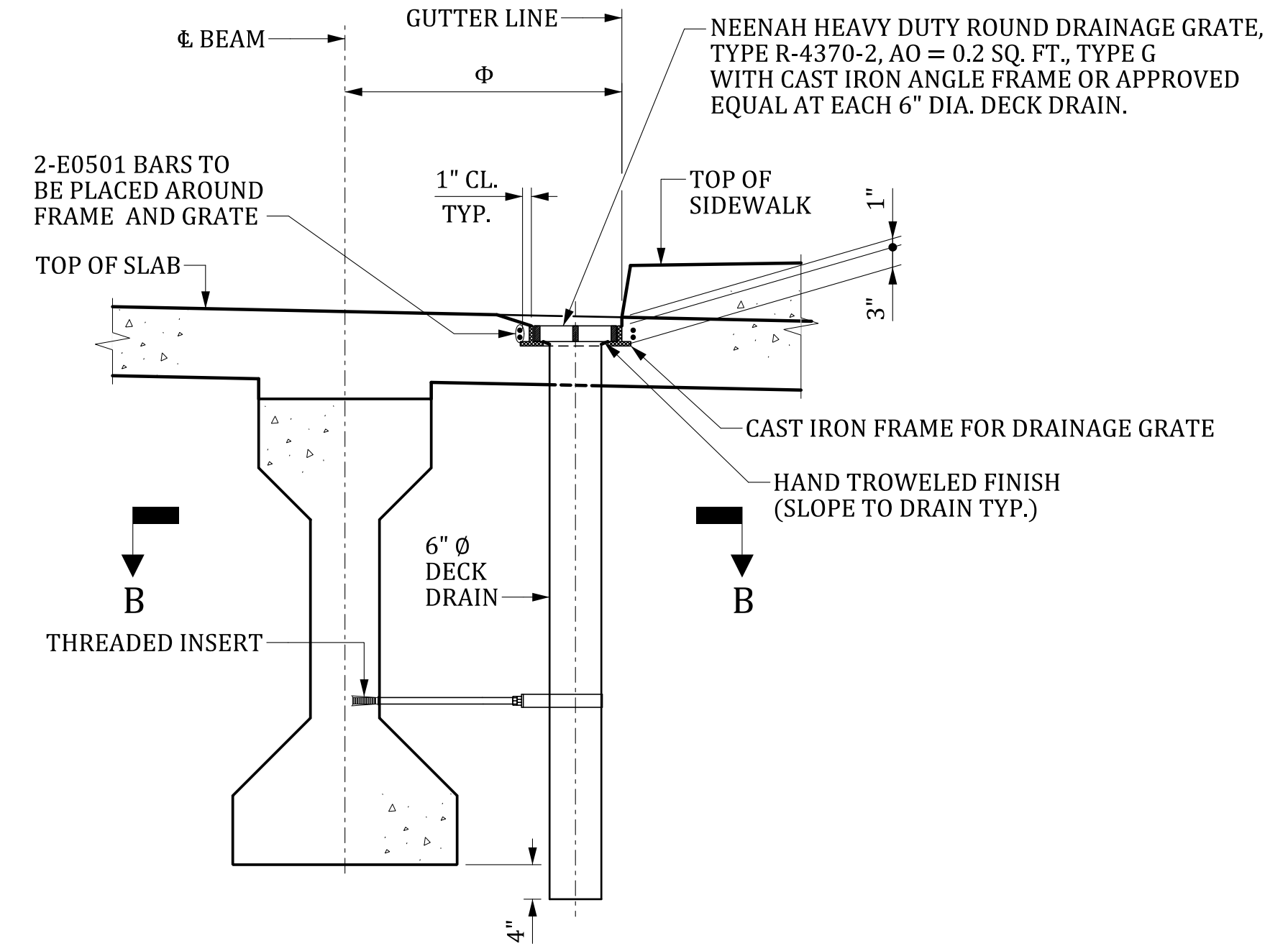
CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF 1/4\"/>

PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSI. FIELD TEST THE ANCHORAGES, USING A TEST LOAD OF XX KIPS PER ANCHOR, IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION.

INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.

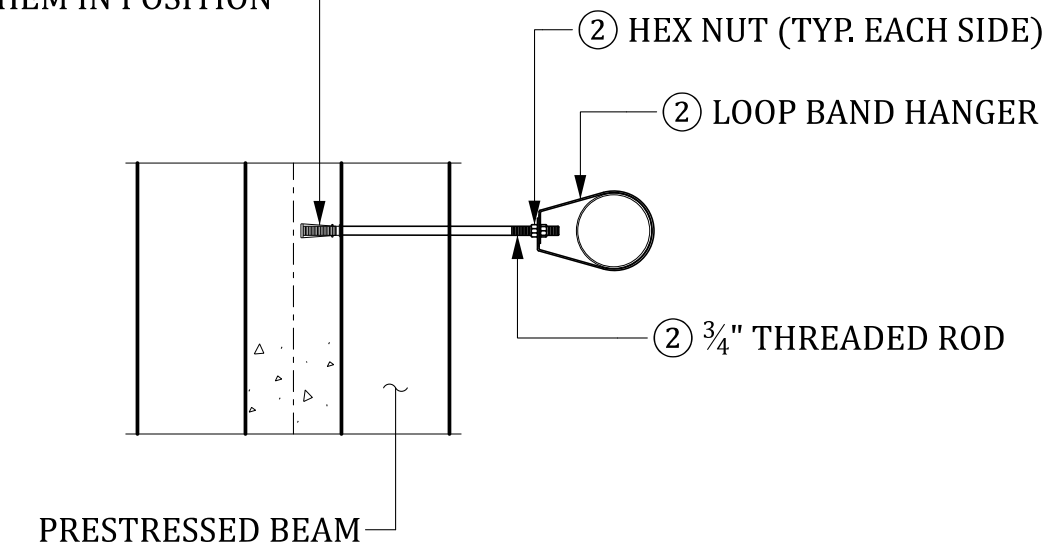


PLAN



SECTION A-A

① IN THE SHOP DRAWINGS, INCLUDE DETAILS THAT SHOW THE INSERTS AND THE METHODS OF HOLDING THEM IN POSITION



SECTION B-B

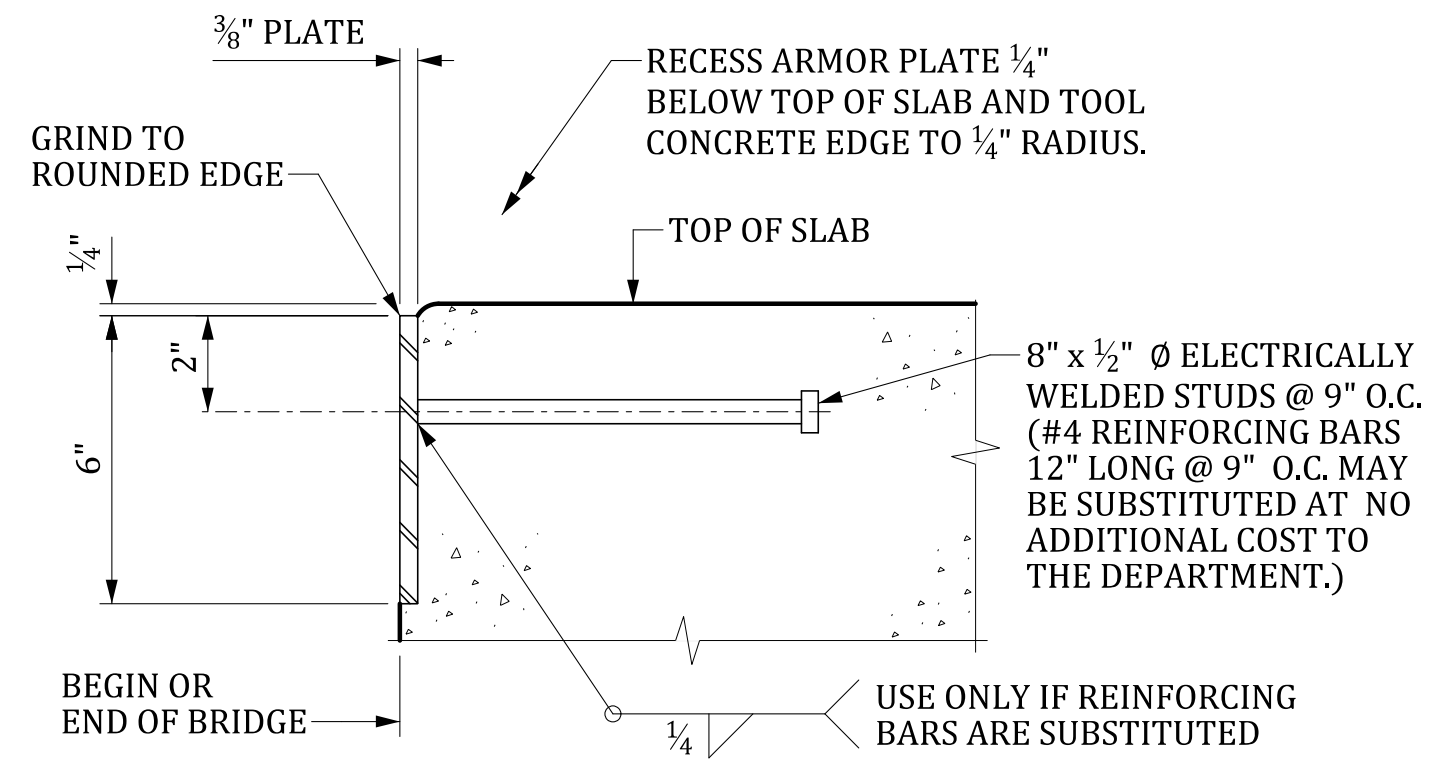
- ① 3/4\"/>
- ② LOOP BAND HANGER, THREADED ROD, AND NUTS ARE TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111, AASHTO M 232, OR ASTM F 2329 AS APPLICABLE.

DRAIN DETAILS WITH GRATE

NOTE:
DO NOT INSERT THIS SHEET INTO THE PLANS. ADD APPLICABLE DETAILS TO EITHER THE GENERAL DETAILS SHEET OR TO THE SUPERSTRUCTURE DETAILS.

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GENERAL DETAILS FOR BEAM/GIRDER SUPERSTRUCTURE SUPPLEMENTAL 2



ARMOR PLATE DETAIL

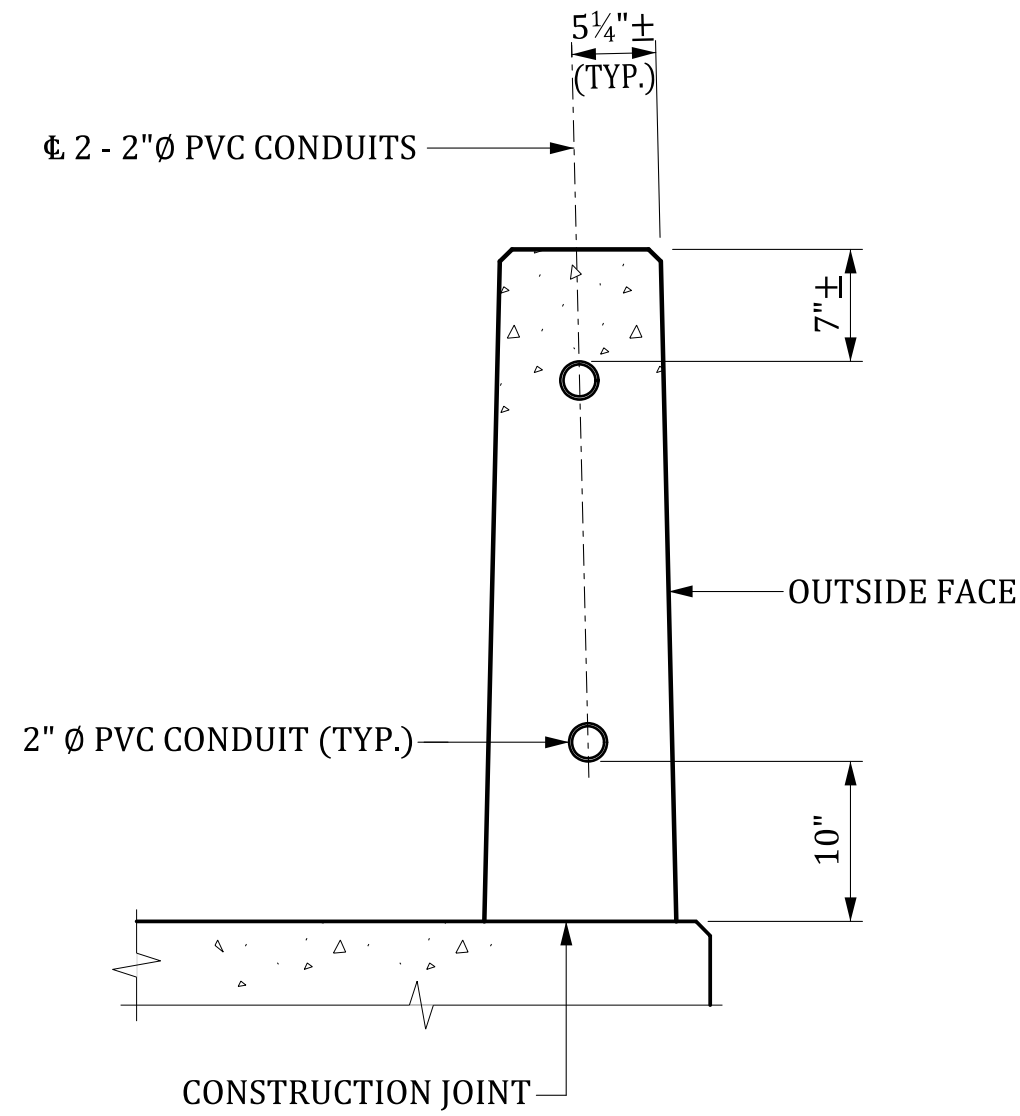
INSTALL $\frac{3}{8}$ " THICK PLATES, AS DETAILED ABOVE, AT THE BEGINNING AND END OF THE BRIDGE.

PROVIDE STEEL FOR THE ARMOR PLATES THAT CONFORMS TO THE LATEST AASHTO M 270 GRADE 50W (ASTM A 709 GR. 50W) STEEL AND NEITHER THE PLATES NOR THE ANCHOR STUDS NEED TO BE PAINTED.

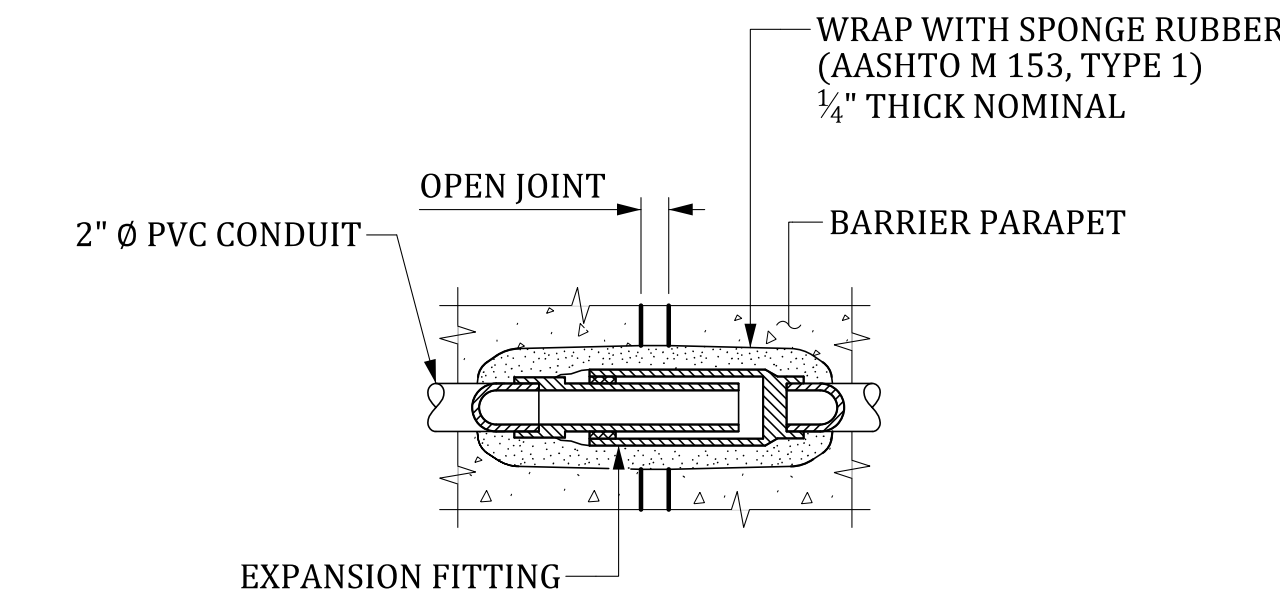
PROVIDE FABRICATED PLATES THAT CONFORM TO THE CROWN AND GRADE OF THE ROADWAY AND EXTEND FROM GUTTER LINE TO GUTTER LINE. THE PLATES MAY BE FABRICATED IN REASONABLE LENGTHS AND CONNECTED AT THE JOB SITE WITH FULL PENETRATION BUTT WELDS GROUND FLUSH ALONG THE TOP FACE OF CONNECTED PLATES.

HOLES, $\frac{5}{16}$ " DIAMETER, SPACED APPROXIMATELY 2'-0" ON CENTER MAY BE PROVIDED IN THE LOWER PORTION OF THE PLATES TO BOLT THE PLATES TO THE FORMS.

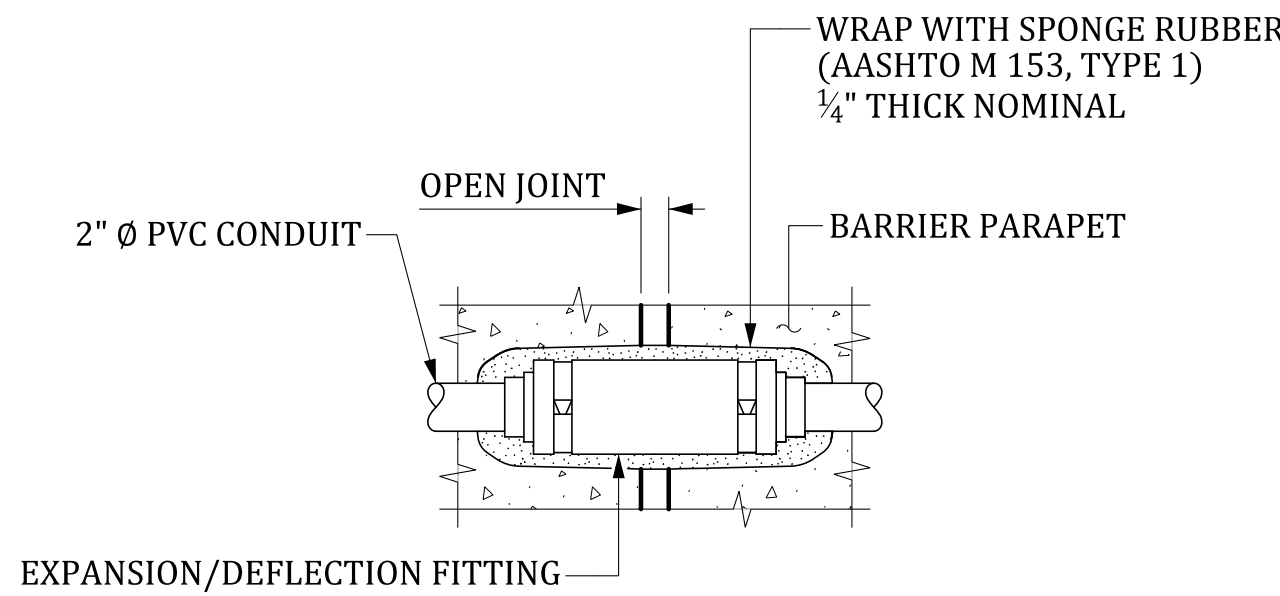
INCLUDE ALL COSTS OF MATERIAL AND WORKMANSHIP TO FABRICATE, FURNISH, AND INSTALL THE ARMOR PLATES AND ANCHOR STUDS COMPLETE AND IN PLACE, IN THE UNIT PRICE BID FOR CLASS 4000 CONCRETE.



SECTION THRU BARRIER

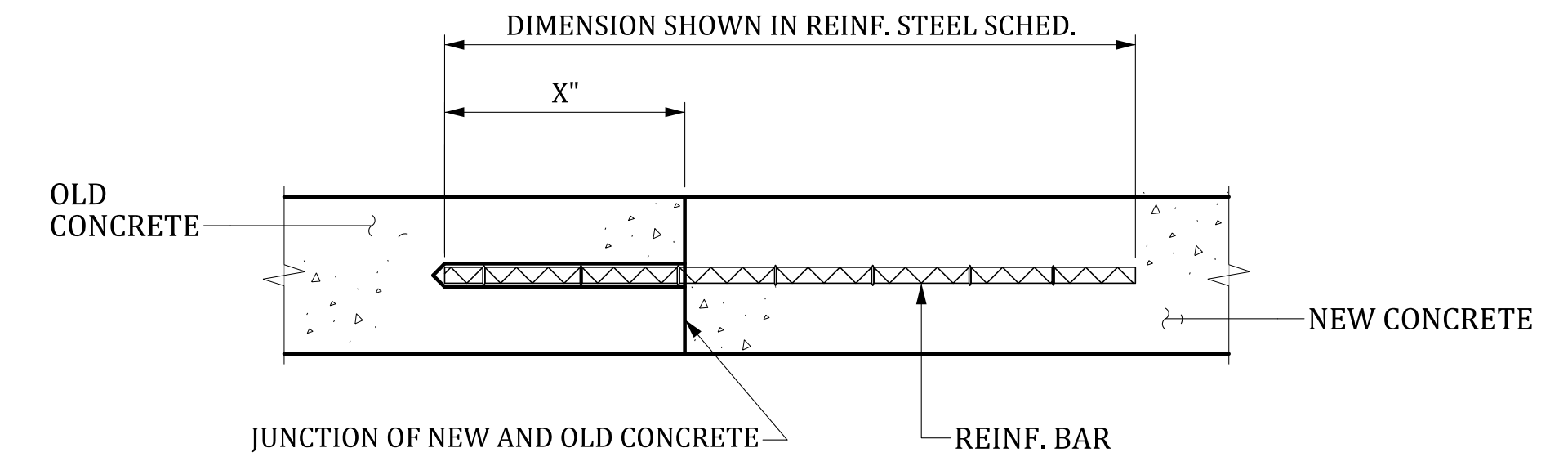


EXPANSION FITTING



EXPANSION / DEFLECTION FITTING

2"Ø CONDUIT DETAILS

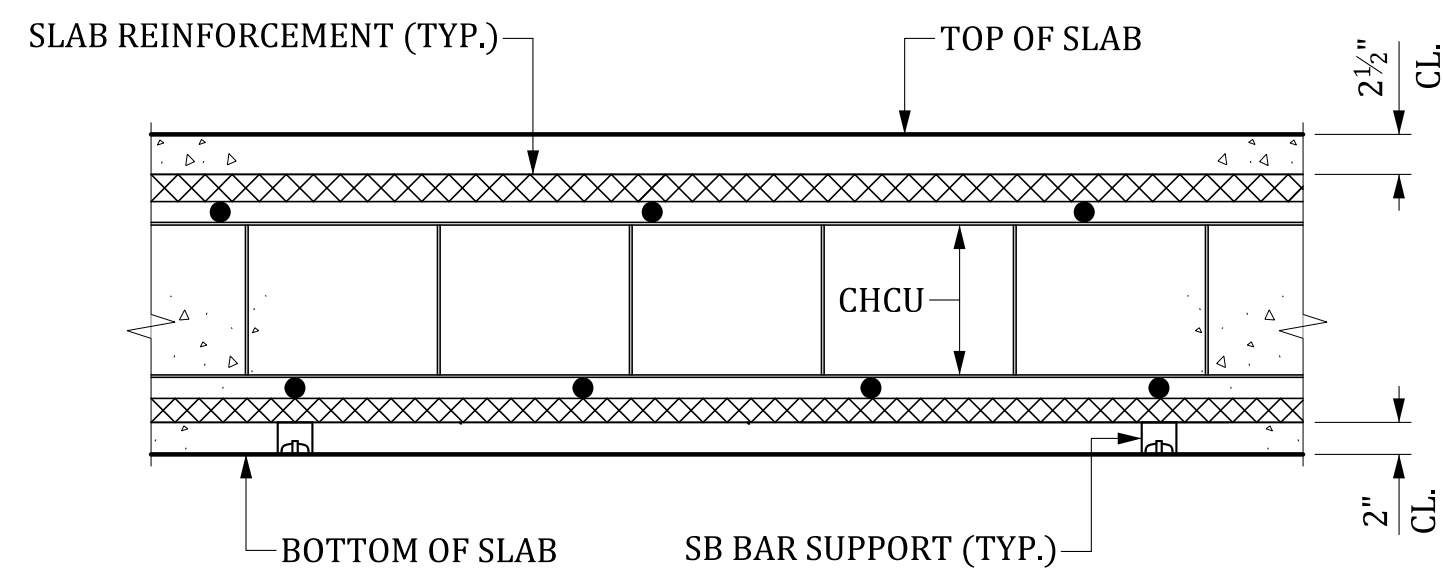


ADHESIVELY BONDED DOWEL DETAIL

CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF $\frac{1}{4}$ ".

PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSI. FIELD TEST THE ANCHORAGES, USING A TEST LOAD OF XX KIPS PER ANCHOR, IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION.

INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.

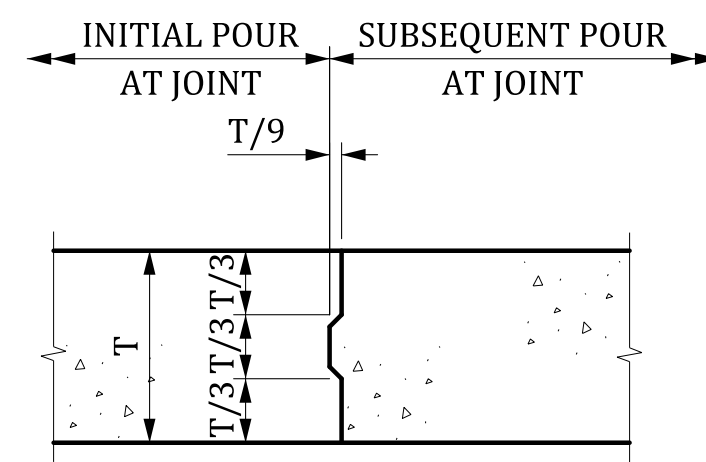


BAR SUPPORT DETAIL

SECTION PARALLEL TO ϕ ROADWAY

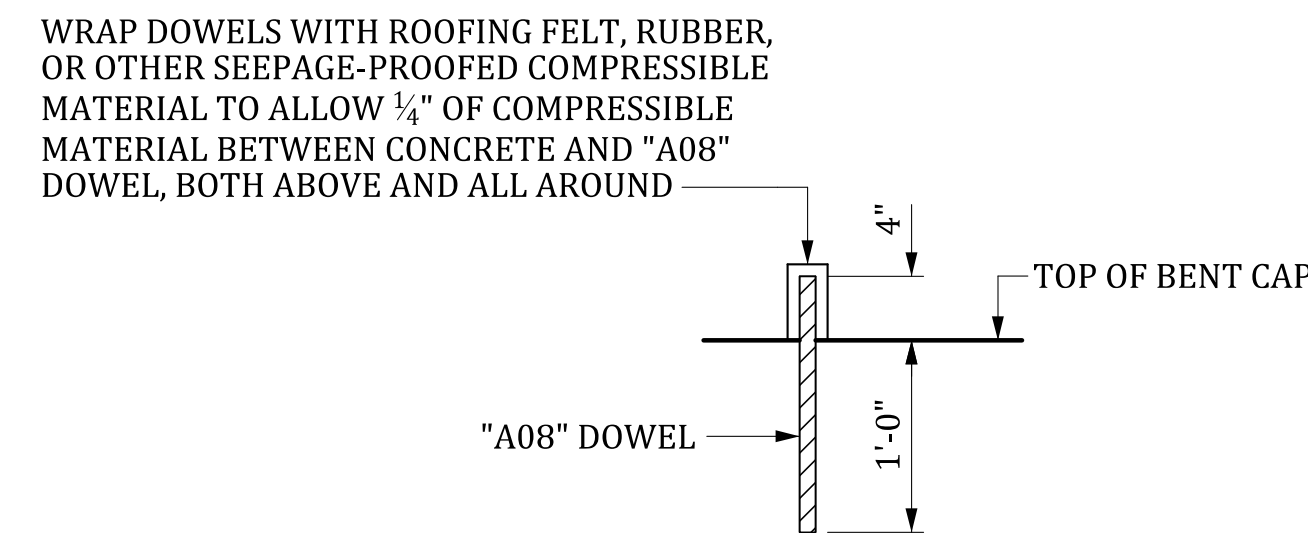
FOR BAR SUPPORTS THAT CONTACT FORMS OR FLOOR SURFACES, USE PLASTIC BAR SUPPORTS THAT CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. PROTECT THE PLASTIC BAR SUPPORTS FROM EXPOSURE TO SUNLIGHT UNTIL PLACED IN THE FORM. WHERE REMOVABLE FORMS ARE USED, DO NOT USE CONTINUOUS LEGS OR RAILS THAT ARE IN CONTACT WITH THE FORMS.

FOR SUPPORTS THAT DO NOT CONTACT FORMS OR FLOOR SURFACES, USE WIRE BAR SUPPORTS THAT CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. IN APPLICATIONS WHERE GALVANIZED BARS ARE USED, USE GALVANIZED WIRE SUPPORTS.



KEYED CONSTRUCTION JOINT DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.



FLAT SLAB ANCHORAGE DETAIL

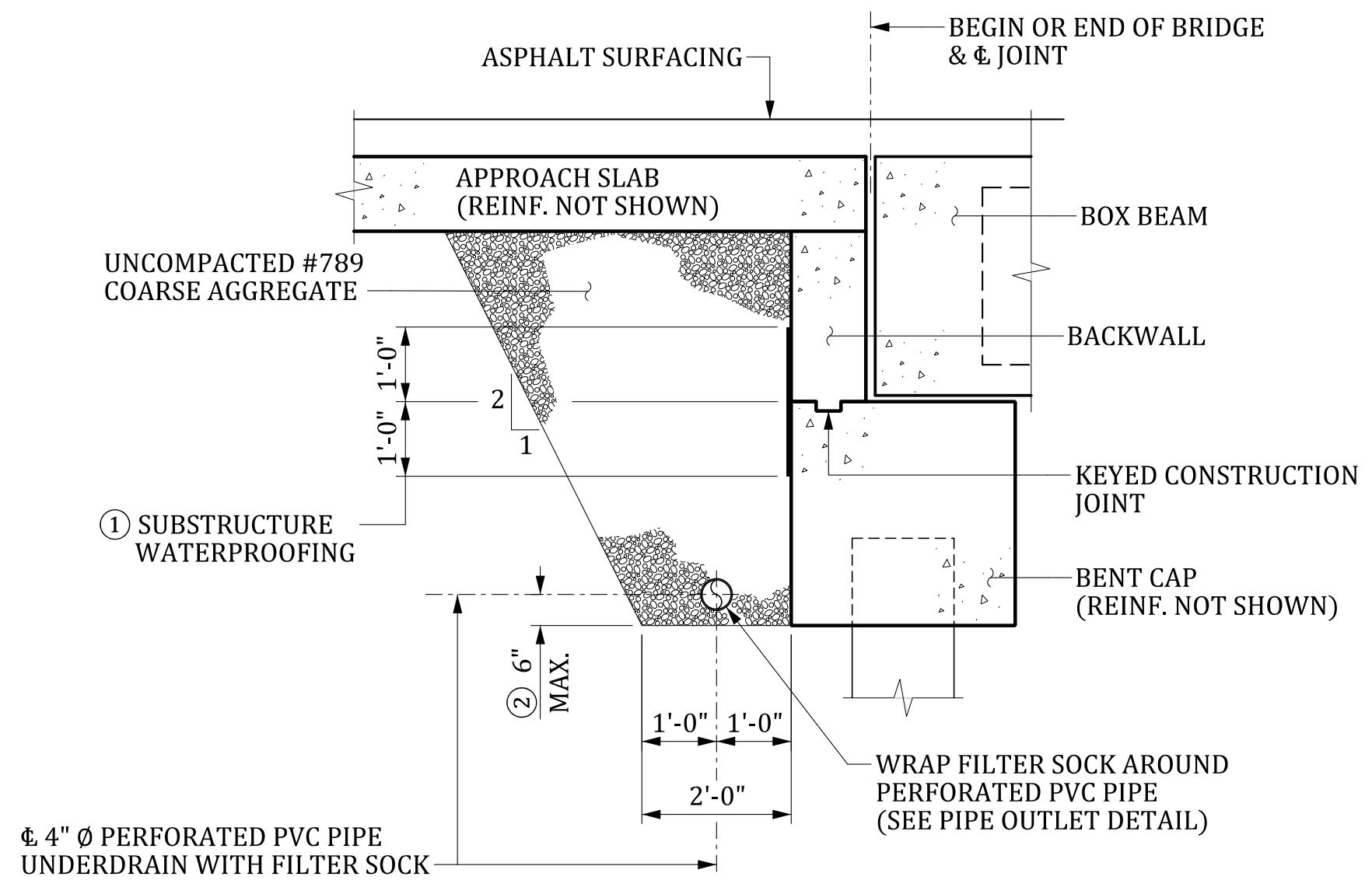
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CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
GENERAL DETAILS FOR FLAT SLAB SUPERSTRUCTURE	
COUNTY: ####	ROUTE: ####

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

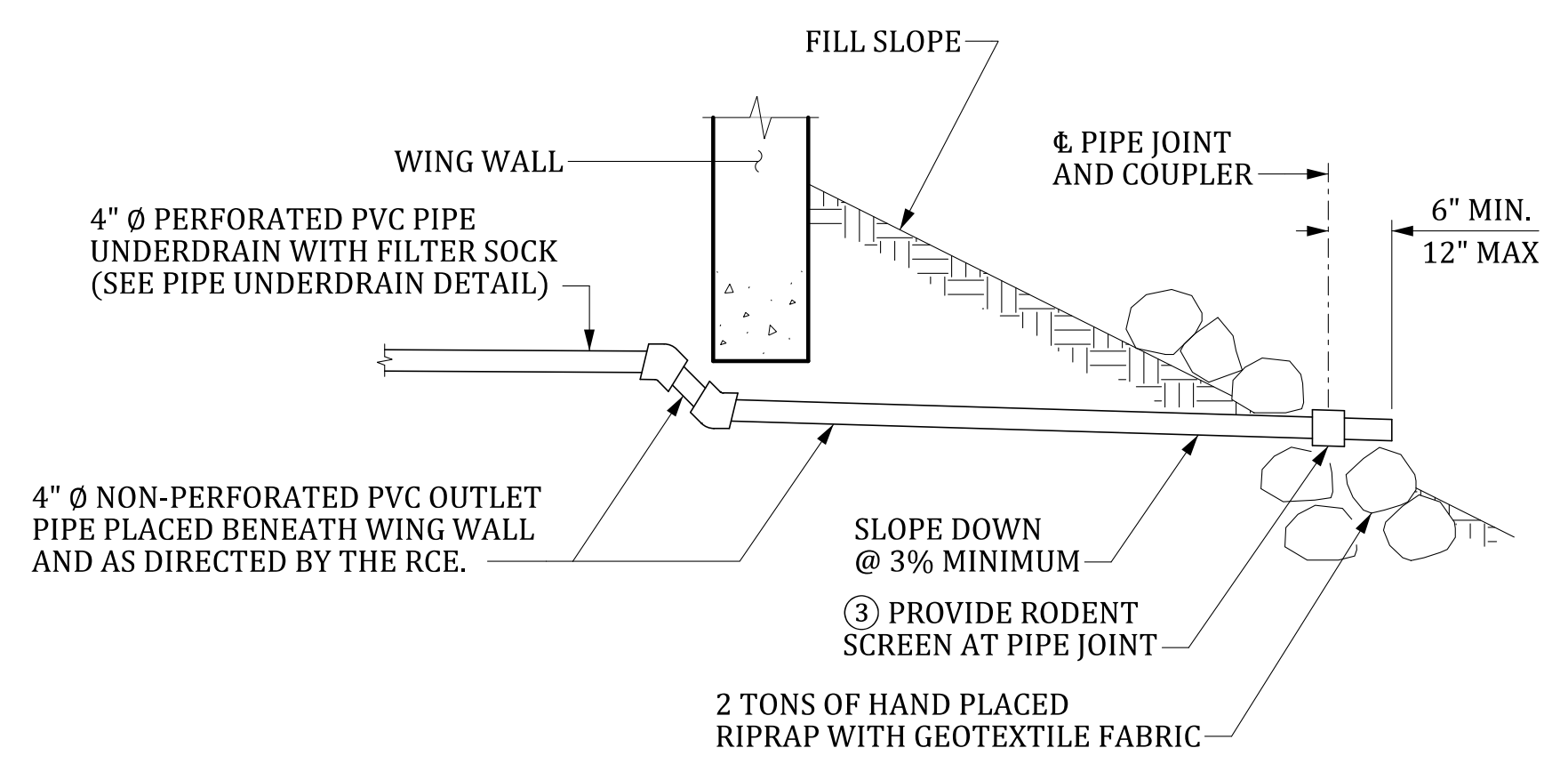
REVIEWED	QUAN	GMC	MWB	12-23

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PIPE UNDERDRAIN DETAIL

- ① EXTEND SUBSTRUCTURE WATERPROOFING THE FULL LENGTH OF THE BACKWALL AND WING WALLS. SEE SECTION 729 OF THE STANDARD SPECIFICATIONS.
- ② SLOPE PIPE A MINIMUM OF 0.5% TO DRAIN.



PIPE OUTLET DETAIL

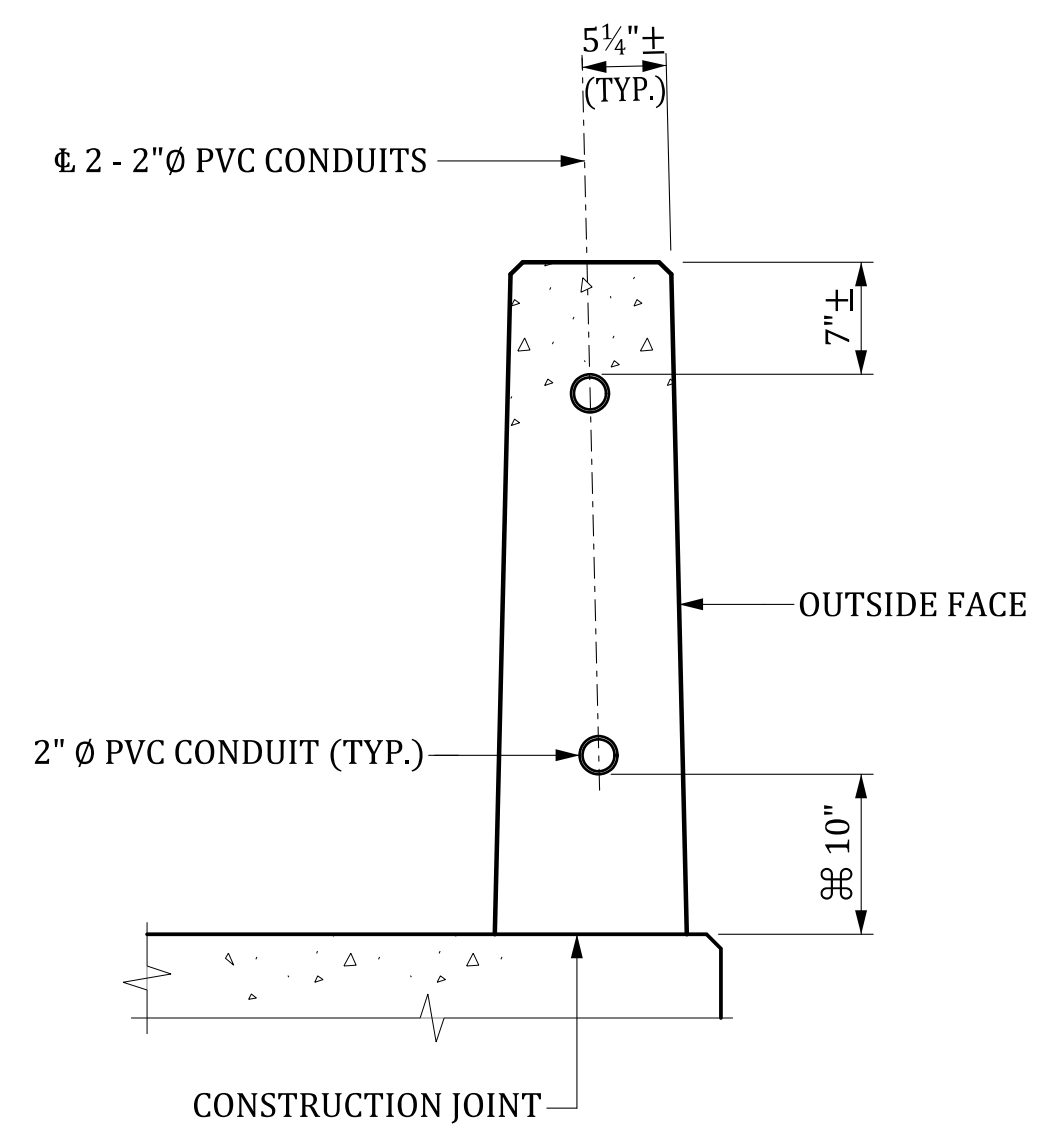
PIPE UNDERDRAIN NOTES:

INSTALL 4" Ø PERFORATED PIPE UNDERDRAIN IN ACCORDANCE WITH SECTION 802 OF THE STANDARD SPECIFICATIONS. USE UNCOMPACTED #789 COARSE AGGREGATE IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. USE GEOTEXTILE FOR DRAINAGE FILTRATION, CLASS 1 FABRIC (PROTECTED) FOR THE FILTER SOCK IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

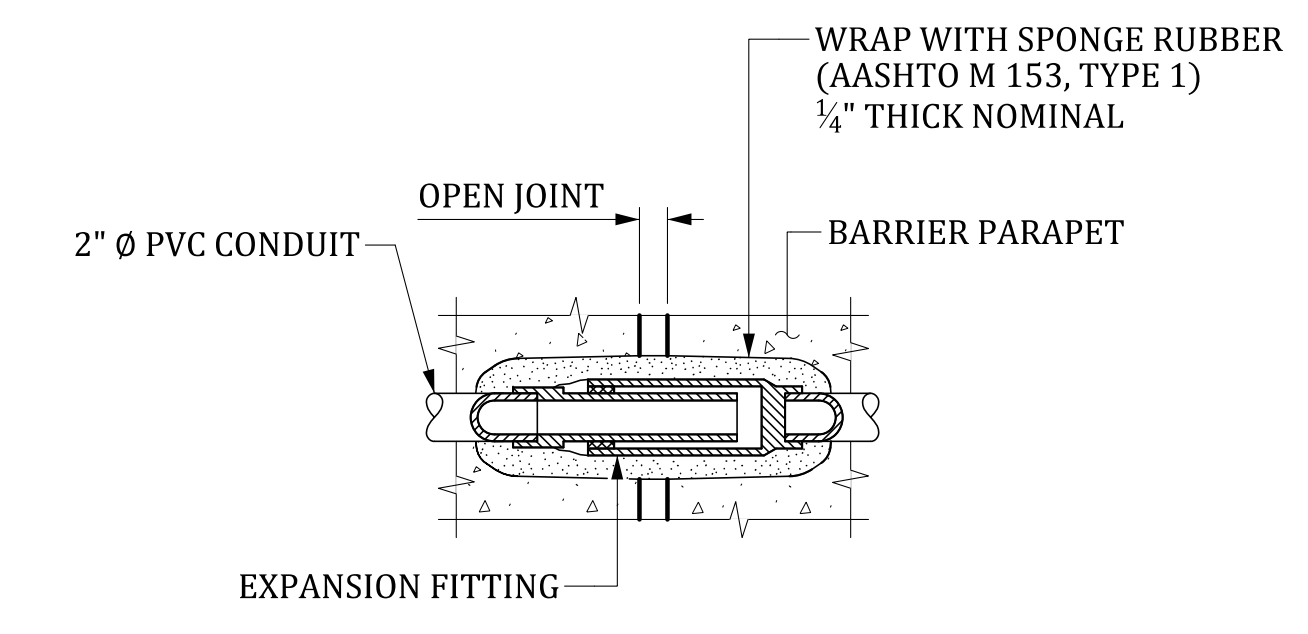
INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE 4"Ø PERFORATED PVC PIPE UNDERDRAIN, FILTER SOCK, #789 COARSE AGGREGATE, 4"Ø NON-PERFORATED PVC OUTLET PIPE, RIPRAP, GEOTEXTILE FABRIC FOR RIPRAP, RODENT SCREEN, AND CONSTRUCTING THE OUTLET AS DIRECTED BY THE RCE IN THE UNIT PRICE BID FOR AGGREGATE UNDERDRAIN (AGGREGATE #789) WITH 4" PERFORATED PIPE FOR STRUCTURES.

INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE SUBSTRUCTURE WATERPROOFING IN THE UNIT PRICE BID FOR WATERPROOFING.

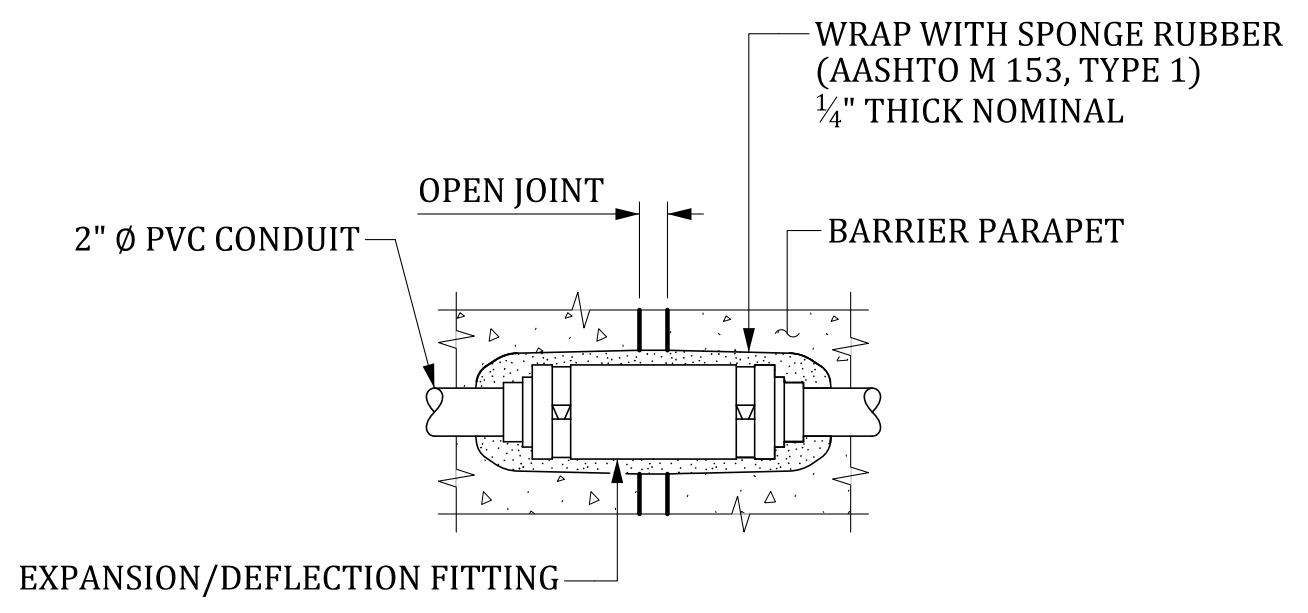
- ③ CONSTRUCT THE PIPE OUTLET WITH A PIPE JOINT THAT IS A MINIMUM OF 6" AND A MAXIMUM OF 1'-0" FROM THE OUTLET END OF THE PIPE. PROVIDE RODENT SCREEN MANUFACTURED FROM T304 STAINLESS STEEL OR GALVANIZED STEEL WITH A MINIMUM WIRE DIAMETER OF 0.050". PROVIDE A RODENT SCREEN WITH A MINIMUM OF 2 OPENINGS PER INCH AND A MAXIMUM OF 4 OPENINGS PER INCH.



SECTION THRU BARRIER



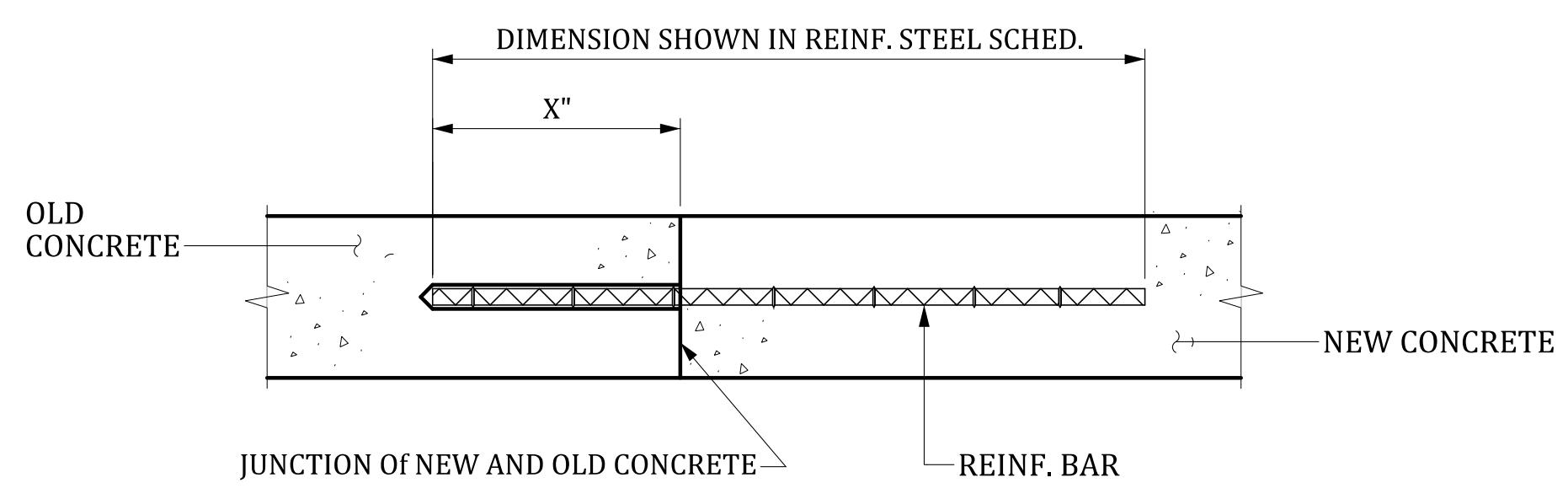
EXPANSION FITTING



EXPANSION / DEFLECTION FITTING

2"Ø CONDUIT DETAILS

⊕ ADJUST HEIGHT OF LOWER CONDUIT AT ENDS OF BARRIER AS NECESSARY TO CLEAR THE ROADWAY APPROACH CURB TRANSITION.

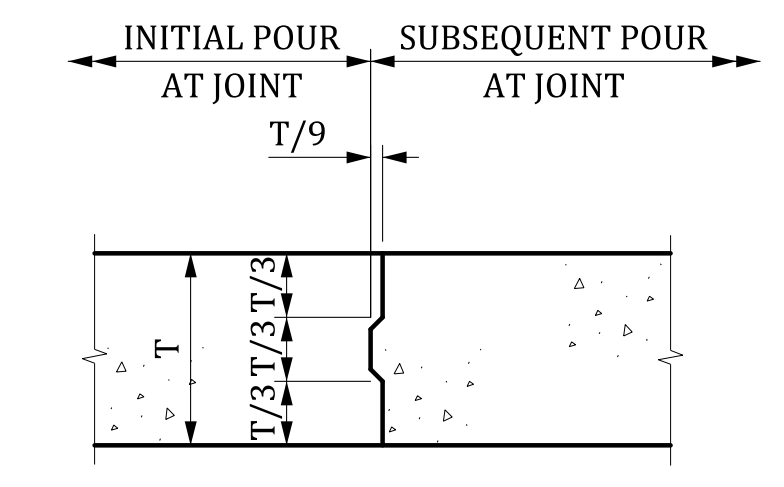


ADHESIVELY BONDED DOWEL DETAIL

CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF 1/4".

PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSI. FIELD TEST THE ANCHORAGES, USING A TEST LOAD OF XX KIPS PER ANCHOR, IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION.

INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.



KEYED CONSTRUCTION JOINT DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.

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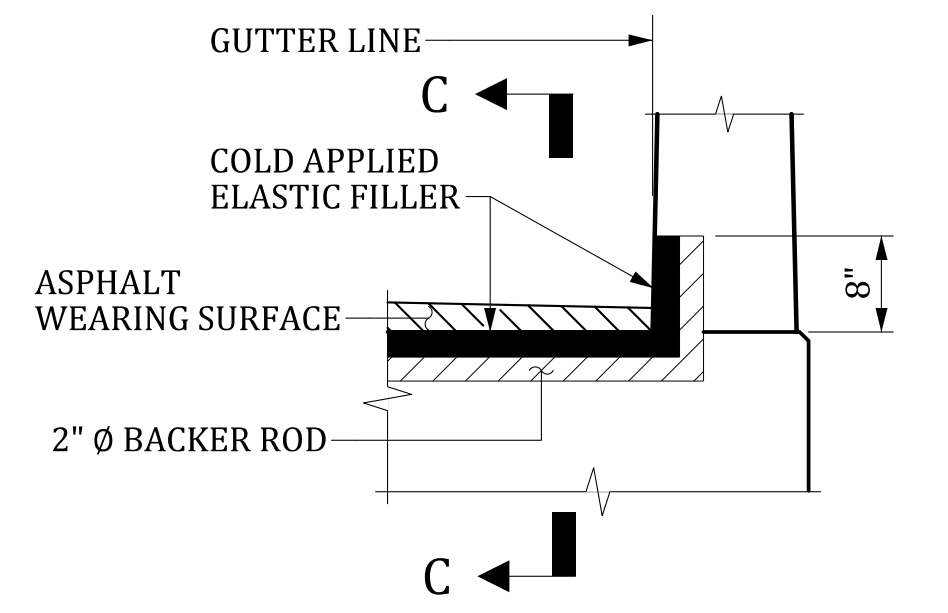
CONDUIT NOTES:

FURNISH AND INSTALL APPROVED CONDUITS AND FITTINGS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND AS DIRECTED BY THE RCE.

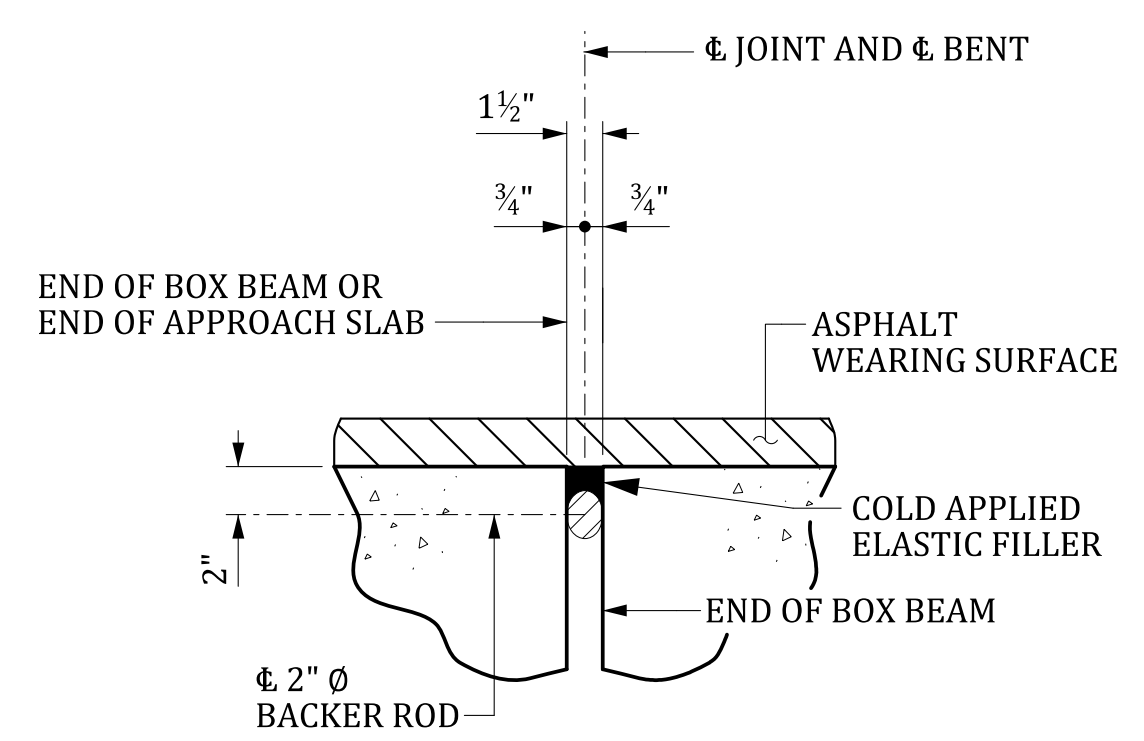
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EXTEND CONDUITS 6 INCHES BEYOND EACH END OF THE BARRIER PARAPET AND CAP WITH WATERTIGHT COVERS. PROVIDE EXPANSION/DEFLECTION FITTINGS AT ALL DEFLECTION JOINTS AND EXPANSION FITTINGS AT ALL EXPANSION JOINTS IN THE BARRIER PARAPET.

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.



ELEVATION



SECTION C-C

JOINT DETAIL

CONSULTANT NAME/LOGO

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS FOR ADJACENT PRESTRESSED CONCRETE BOX BEAM SUPERSTRUCTURE

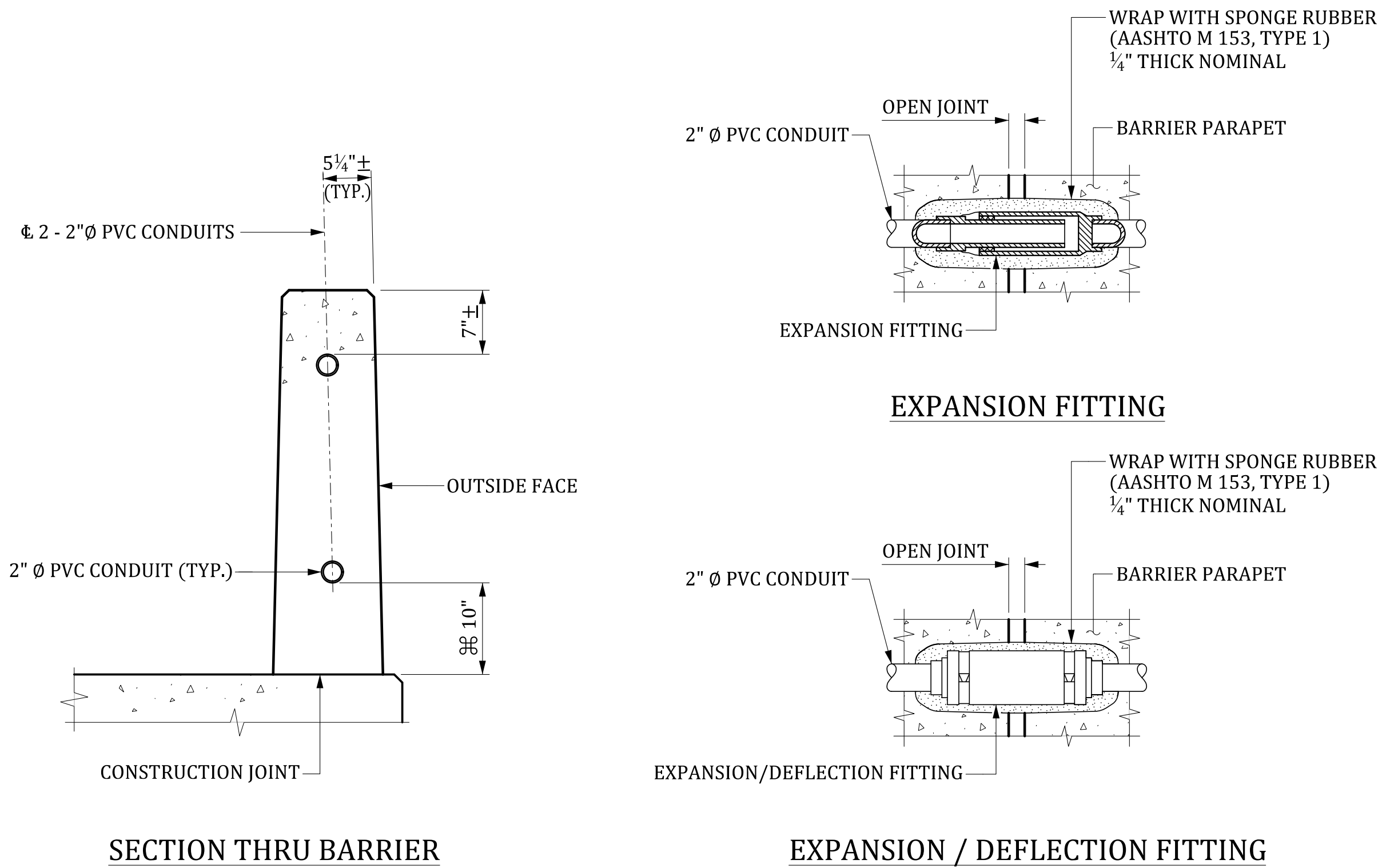
COUNTY: ###

ROUTE: ###

DRAWING NUMBER: 700-09.GD01.ABB

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REV.			
REV.			
REV.			
BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED			
QUAN.			
DR.	GMC	MWB	12-23
DES.			
BY	CHK.	DATE	



2" Ø CONDUIT DETAILS

⌘ ADJUST HEIGHT OF LOWER CONDUIT AT ENDS OF BARRIER AS NECESSARY TO CLEAR THE ROADWAY APPROACH CURB TRANSITION.

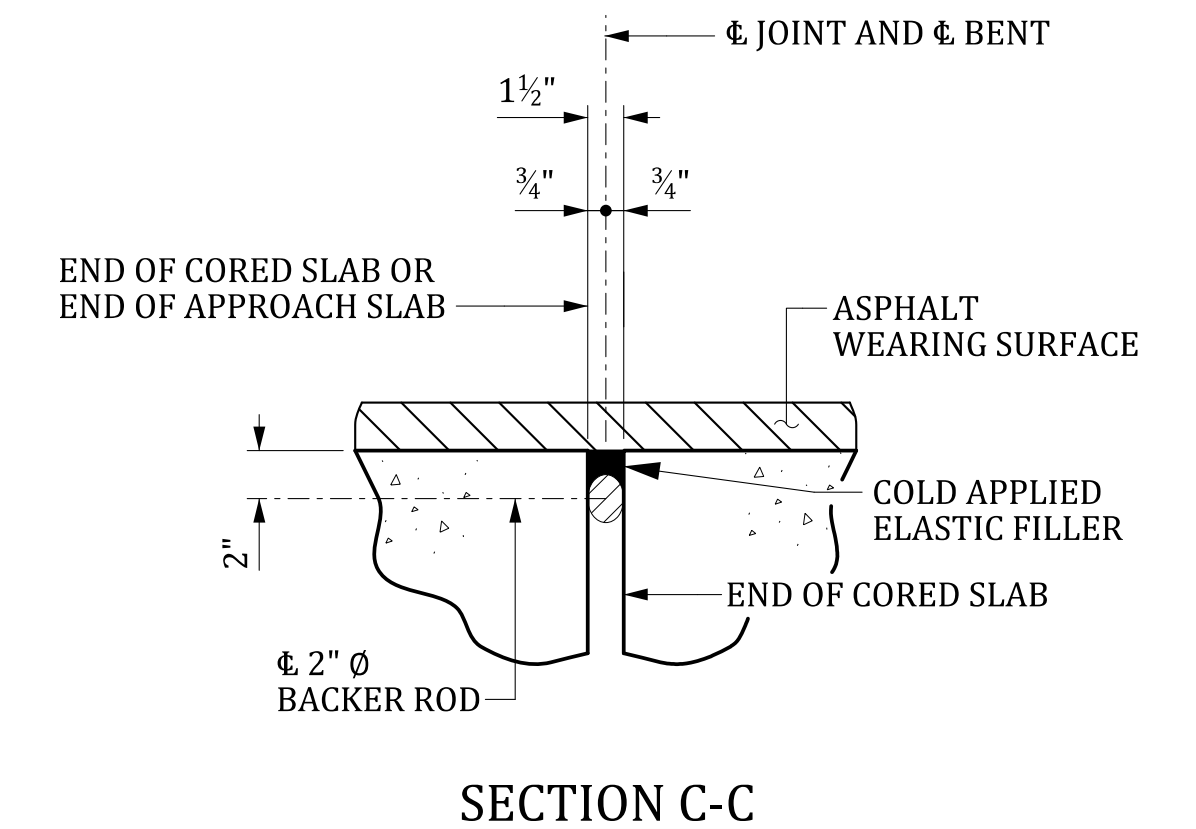
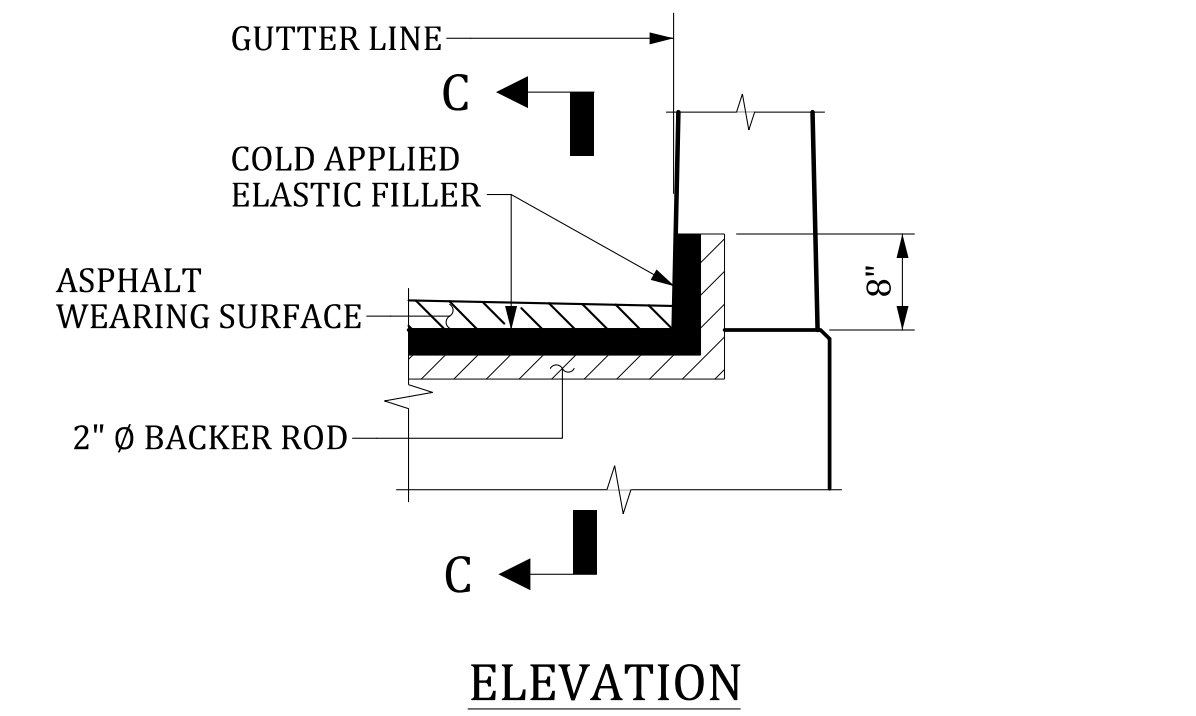
CONDUIT NOTES:

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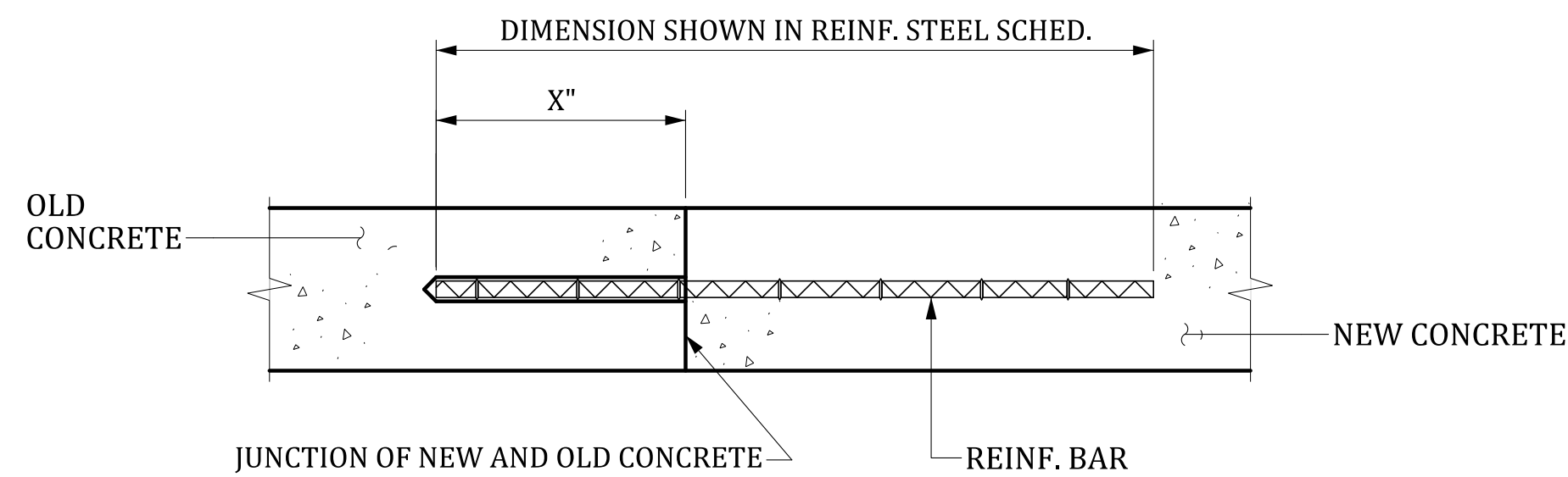
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EXTEND CONDUITS 6 INCHES BEYOND EACH END OF THE BARRIER PARAPET AND CAP WITH WATERTIGHT COVERS. PROVIDE EXPANSION/DEFLECTION FITTINGS AT ALL DEFLECTION JOINTS AND EXPANSION FITTINGS AT ALL EXPANSION JOINTS IN THE BARRIER PARAPET.

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.



JOINT DETAIL

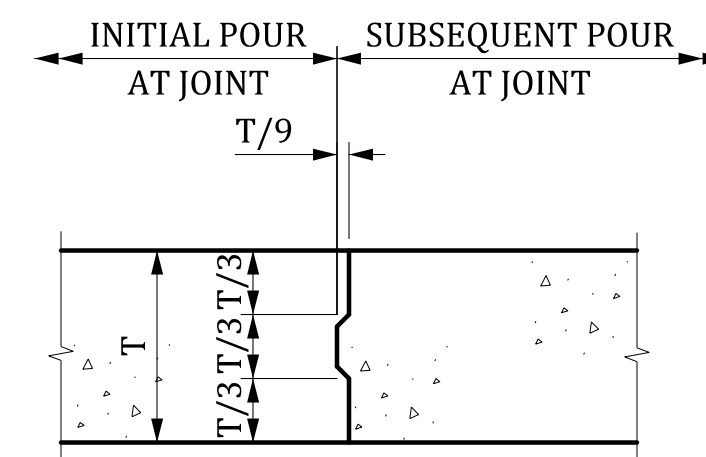


ADHESIVELY BONDED DOWEL DETAIL

CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF 1/4".

PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSL FIELD TEST THE ANCHORAGES, USING A TEST LOAD OF XX KIPS PER ANCHOR, IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION.

INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.



KEYED CONSTRUCTION JOINT DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.

THIS DRAWING IS 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.

CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
GENERAL DETAILS FOR ADJACENT PRESTRESSED CONCRETE CORED SLAB SUPERSTRUCTURE	
COUNTY: ###	ROUTE: ###

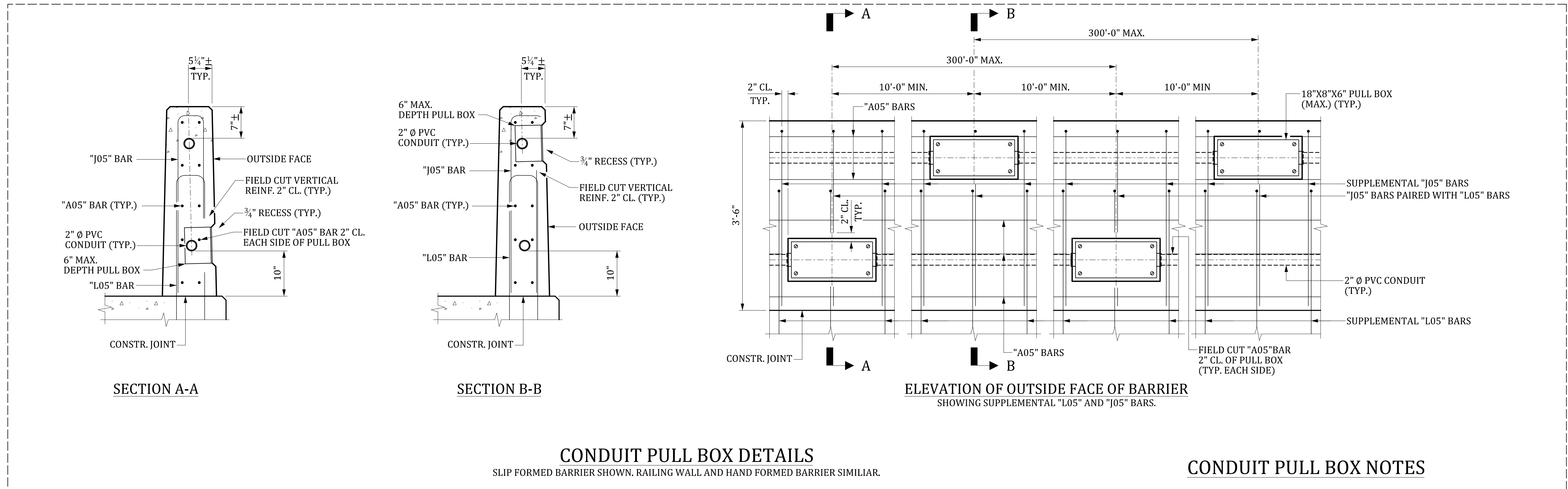
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REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	BY	CHK.	DATE

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	BY	CHK.	DATE
QUAN.	GMC	MWB	12-23
DR.			
DES.			

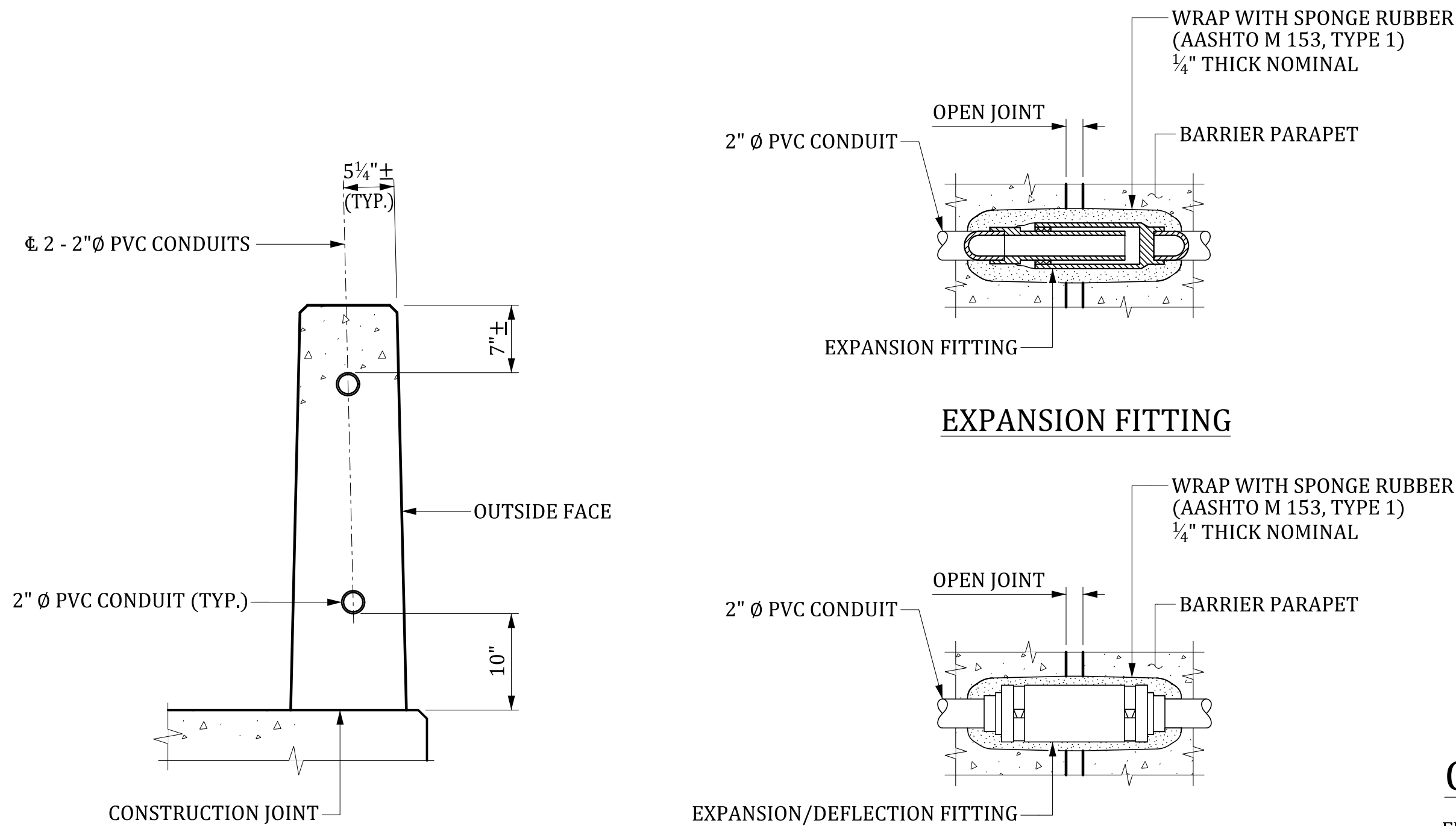


CONDUIT PULL BOX DETAILS

SLIP FORMED BARRIER SHOWN. RAILING WALL AND HAND FORMED BARRIER SIMILAR.

CONDUIT PULL BOX NOTES

- INSTALL PULL BOXES RECESSED 3/4" FROM THE OUTSIDE FACE OF THE BARRIER PARAPET WITH 3/4" CHAMFER.
- SPACE PULL BOXES AT NO MORE THAN 300 FEET AND A MINIMUM OF 10 FEET FROM AN OPEN JOINT IN THE BARRIER PARAPET.
- 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.
- FIELD CUT AND/OR BEND BARRIER REINFORCING ALONG OUTSIDE FACE AROUND THE PULL BOXES AS NECESSARY TO PROVIDE 2" 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 BARRIER

2"Ø CONDUIT DETAILS

CONDUIT NOTES

- FURNISH AND INSTALL APPROVED CONDUITS AND FITTINGS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND AS DIRECTED BY THE RCE.
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- EXTEND CONDUITS 6 INCHES BEYOND EACH END OF THE BARRIER PARAPET TRANSITION AND CAP WITH WATERTIGHT COVERS. PROVIDE EXPANSION FITTINGS AT ALL DEFLECTION JOINTS AND EXPANSION FITTINGS AT ALL EXPANSION 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:
DO NOT INSERT THIS SHEET INTO THE PLANS. ADD APPLICABLE DETAILS TO EITHER THE GENERAL DETAILS SHEET OR TO THE SUPERSTRUCTURE DETAILS.

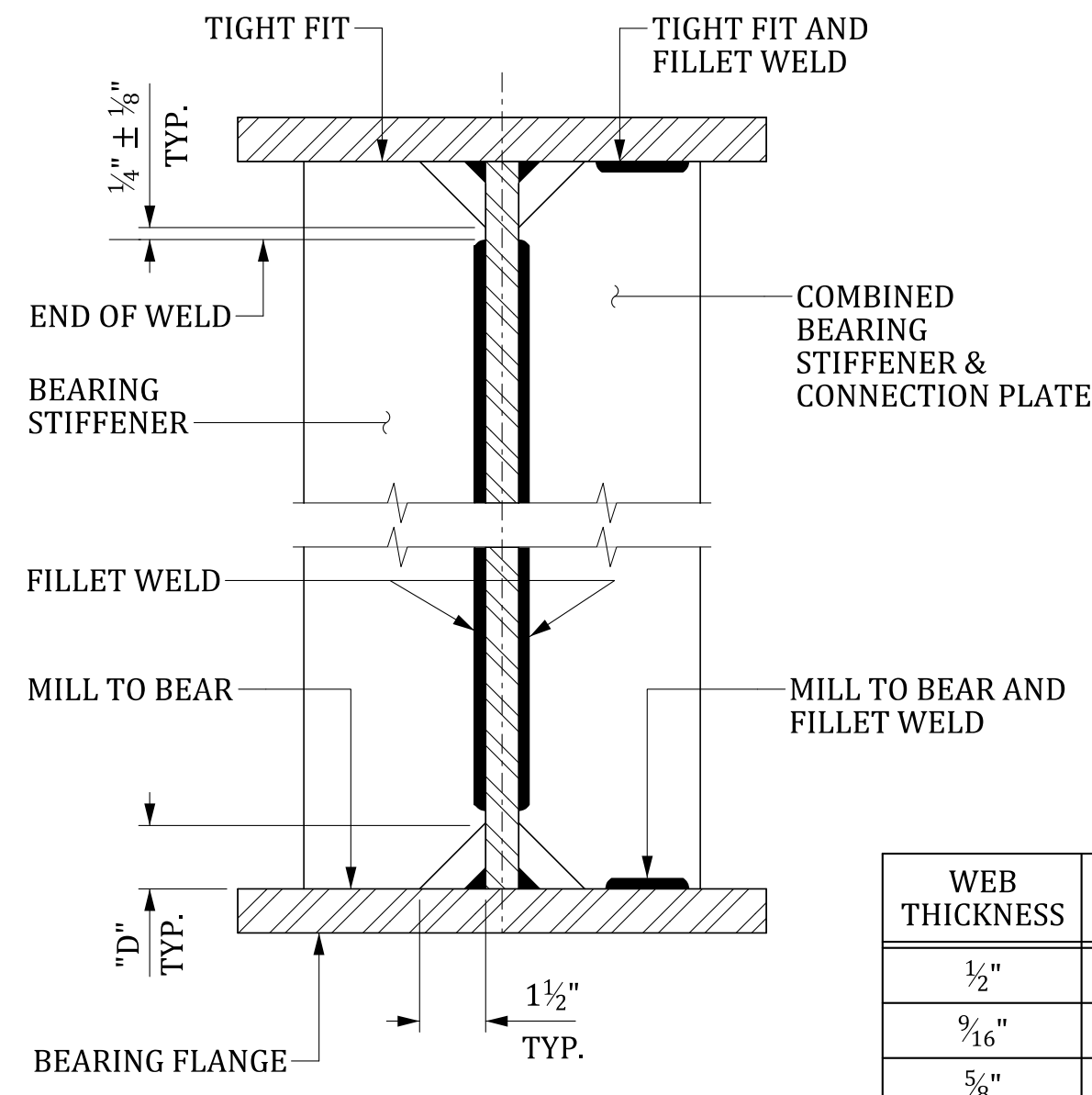
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GENERAL DETAILS FOR ALL SUPERSTRUCTURES SUPPLEMENTAL

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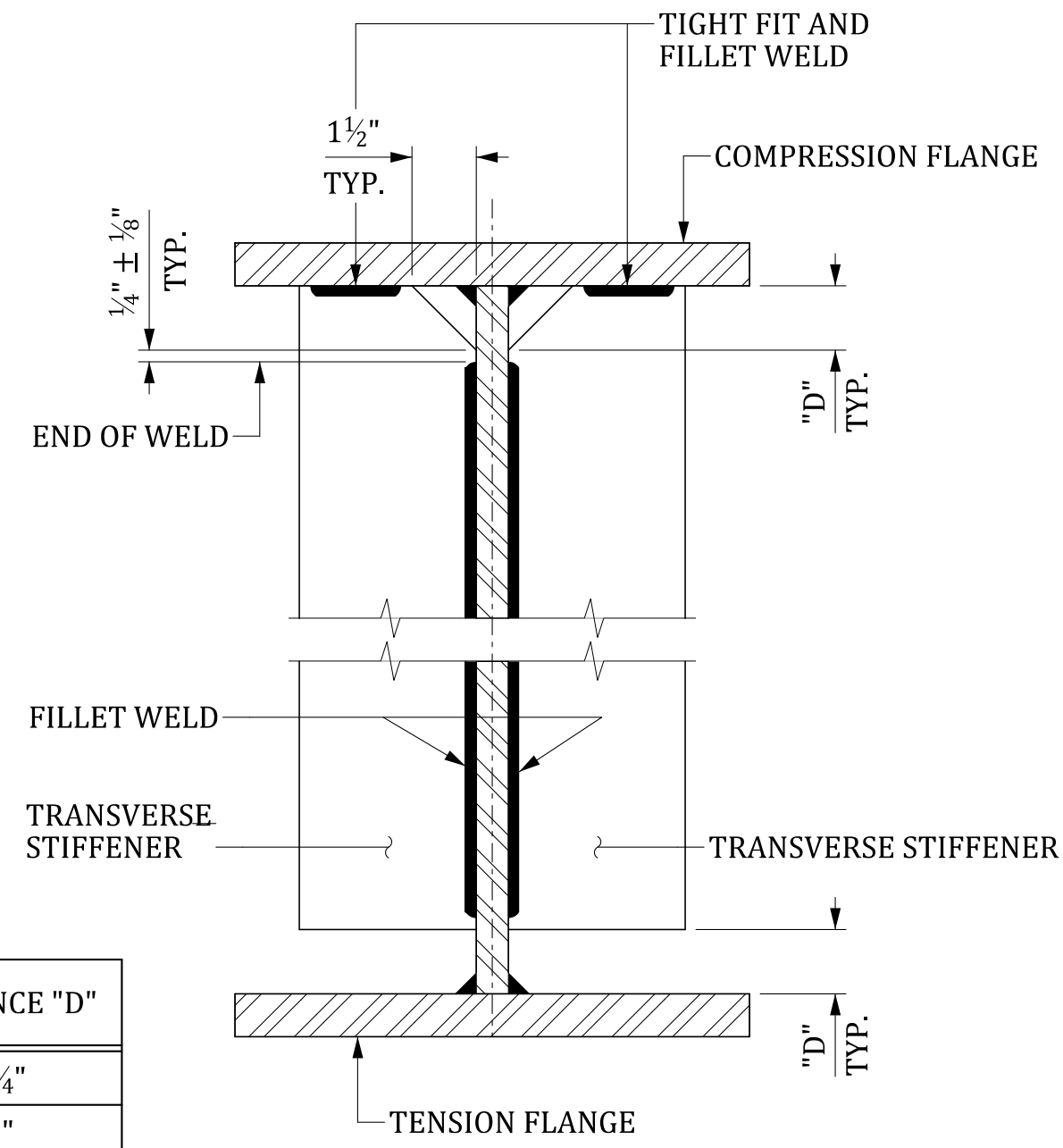
REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	BY	CHK.	DATE

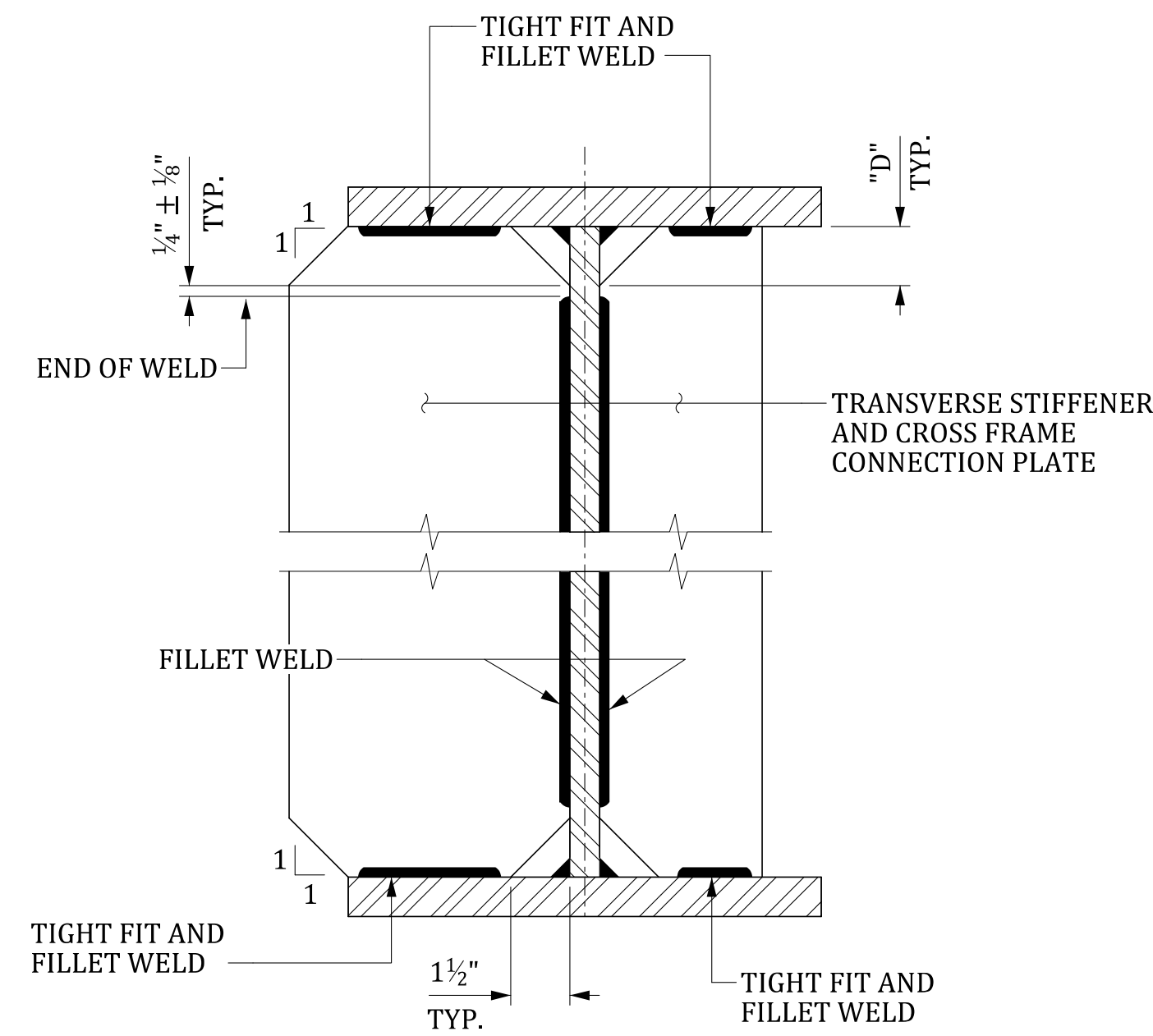


BEARING STIFFENERS

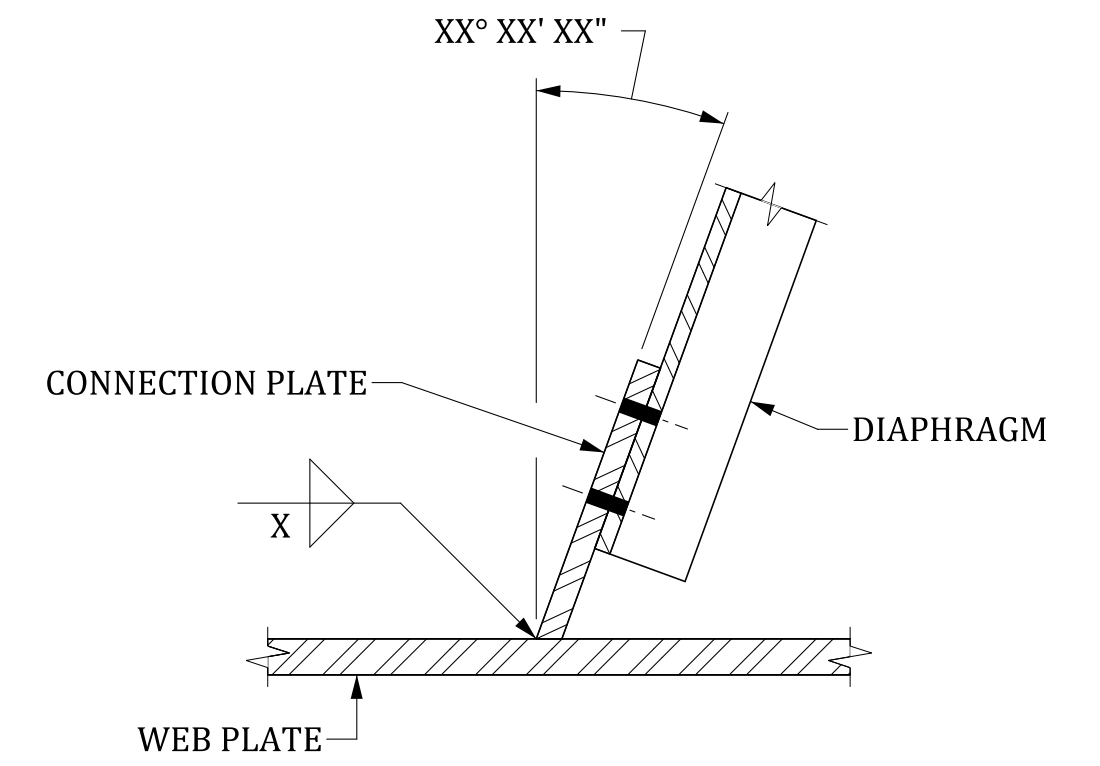
WEB THICKNESS	DISTANCE "D"
1/2"	2 1/4"
9/16"	3"
5/8"	3"
1 1/16"	3"
3/4"	3 1/2"



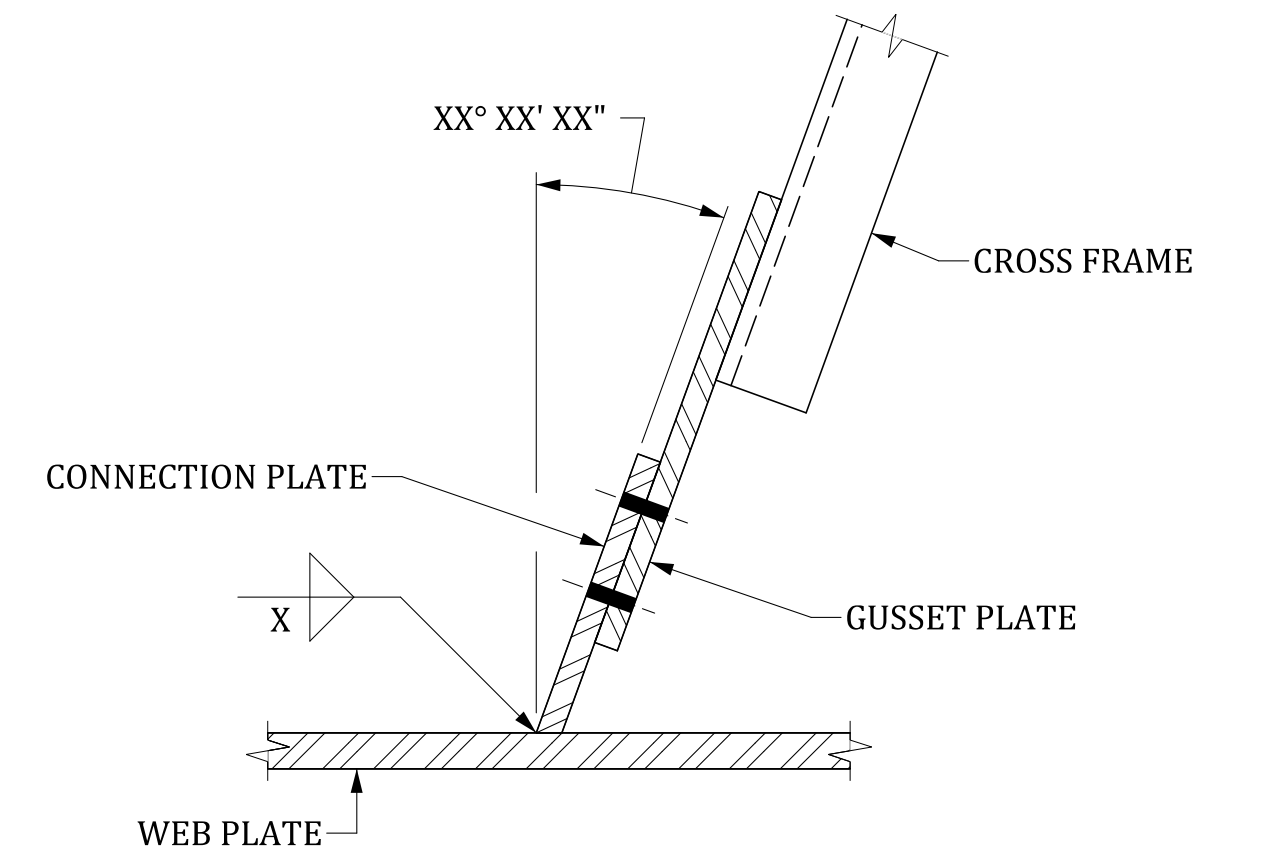
TRANSVERSE STIFFENERS



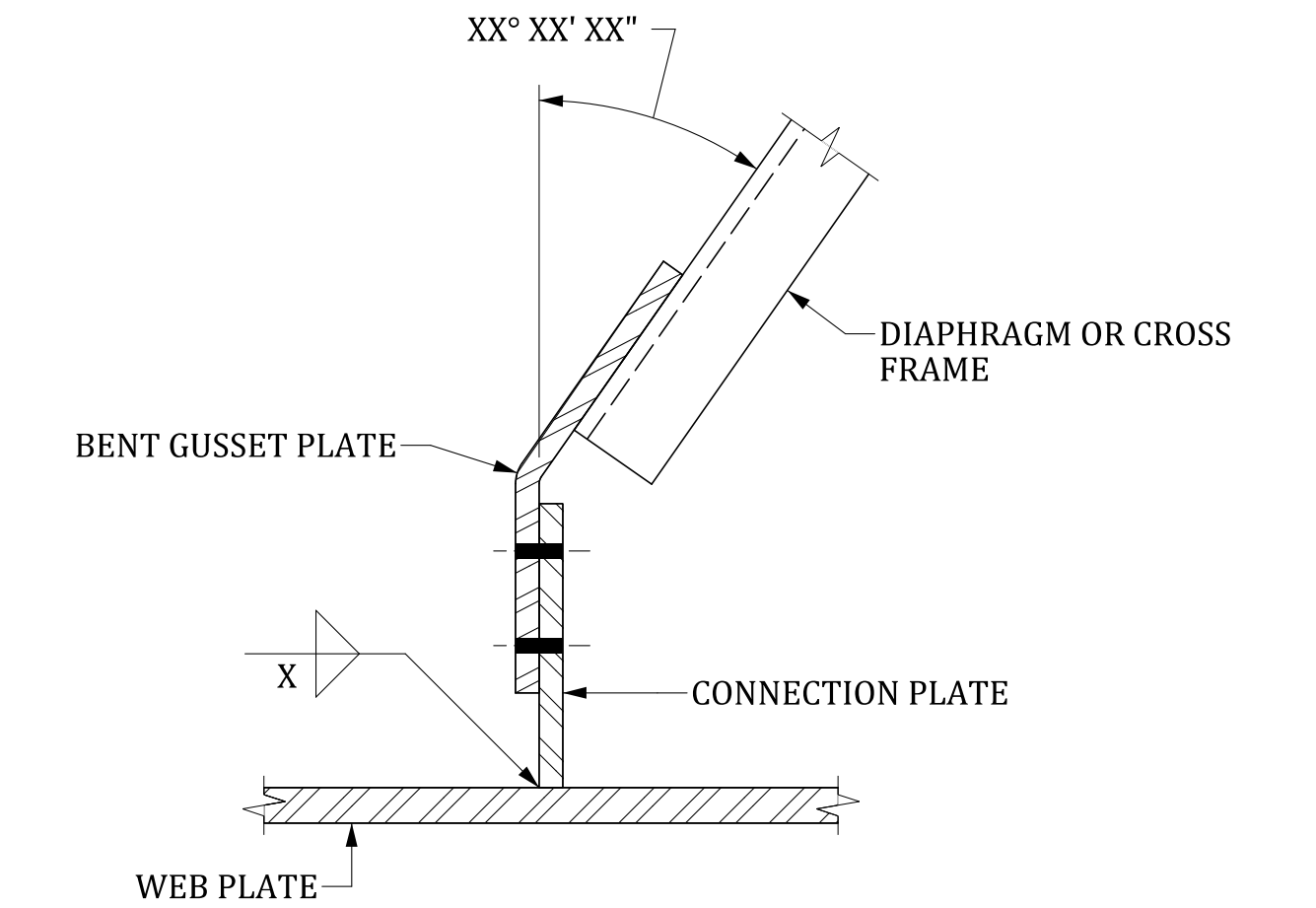
CROSS FRAME CONNECTIONS



FILLET WELD DETAIL
CONNECTION FOR PLATES TO WEBS
WHEN SKEW IS 20° OR LESS.



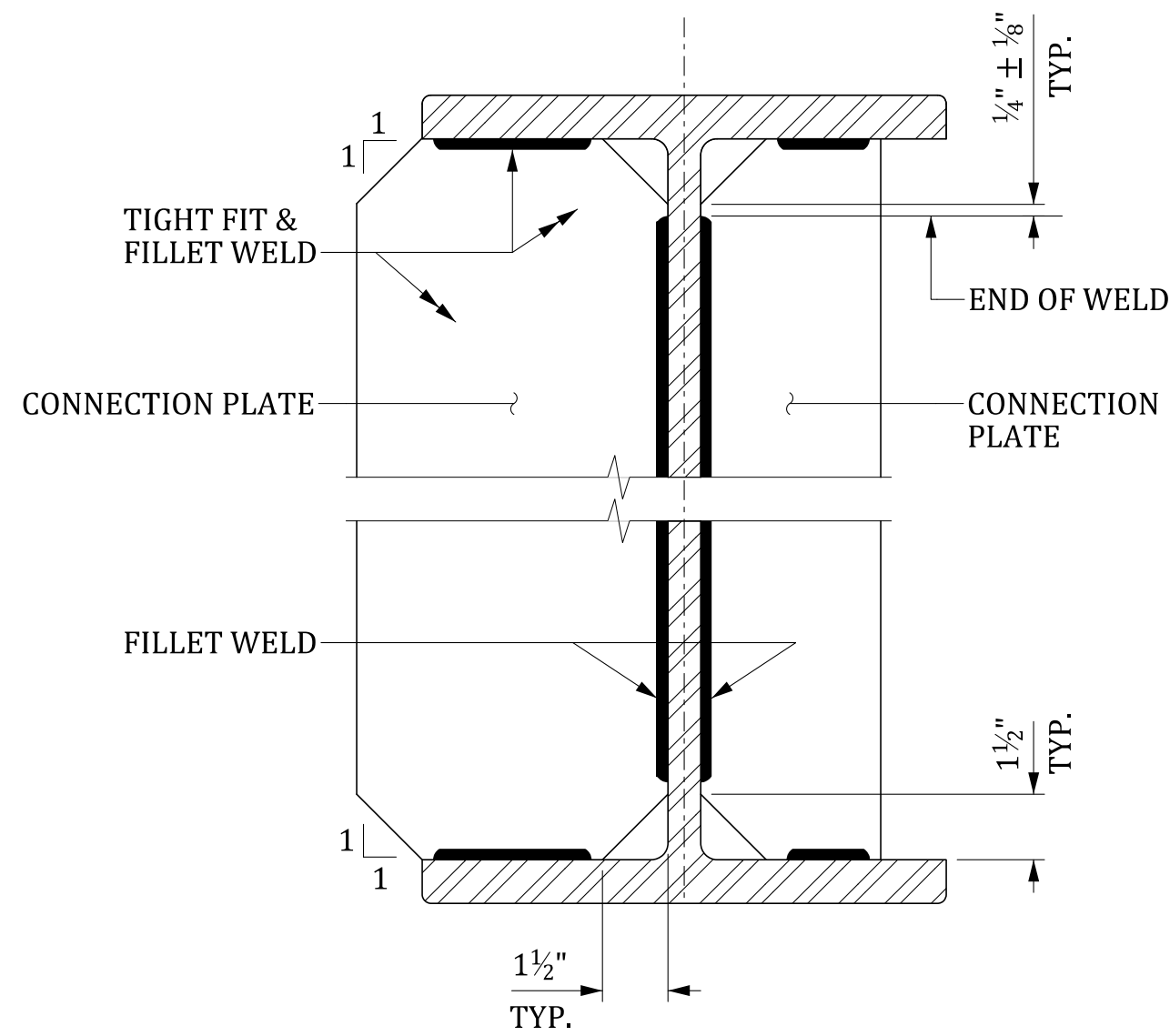
FILLET WELD DETAIL
CONNECTION FOR PLATES TO WEBS
WHEN SKEW IS 20° OR LESS.



FILLET WELD DETAIL
CONNECTION FOR PLATES TO WEBS
WHEN SKEW IS GREATER THAN 20°

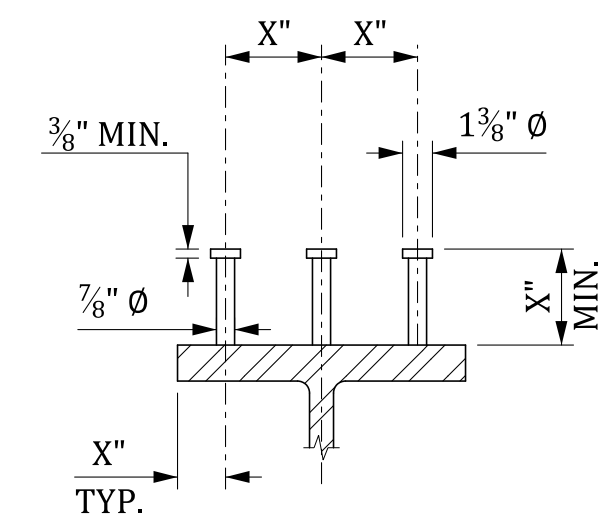
**WELDING DETAILS
(WELDED PLATE GIRDER)**

NOTE:
DO NOT INSERT THIS SHEET INTO THE PLANS. ADD APPLICABLE DETAILS TO THE SUPERSTRUCTURE DETAILS. USE THESE DETAILS AS TEMPLATES AND MAKE ADJUSTMENTS AND/OR ADDITIONS TO THE DETAILING TO CONVEY PROJECT SPECIFIC DESIGN REQUIREMENTS. UPDATE THE DETAILS TO INCLUDE PROJECT SPECIFIC VALUES SUCH AS PLATE SIZES, WELD SIZES AND SKEW ANGLES.



DIAPHRAGM CONNECTION PLATES

**WELDING DETAIL
(ROLLED BEAMS)**



WELDED STUDS DETAIL

SKREW STUDS PARALLEL TO BOTTOM SLAB STEEL. ENSURE STUD LENGTH PROVIDES MINIMUM 2" PENETRATION OF STUD INTO THE DECK SLAB.

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**GENERAL DETAILS
STRUCTURAL STEEL SUPERSTRUCTURE
SUPPLEMENTAL**

**SECTION THRU STEEL
INTERMEDIATE DIAPHRAGM
(ROLLED BEAMS)**

