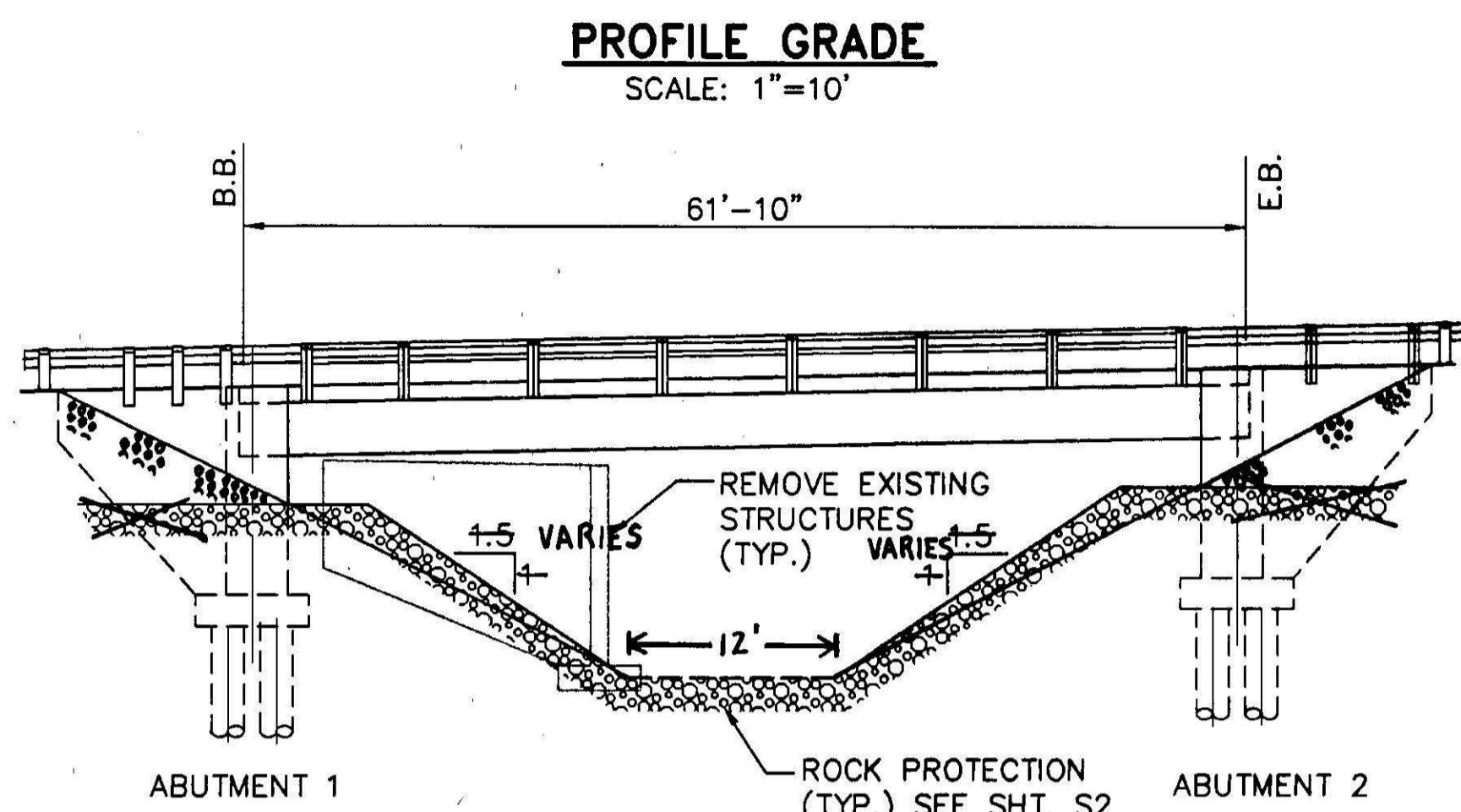
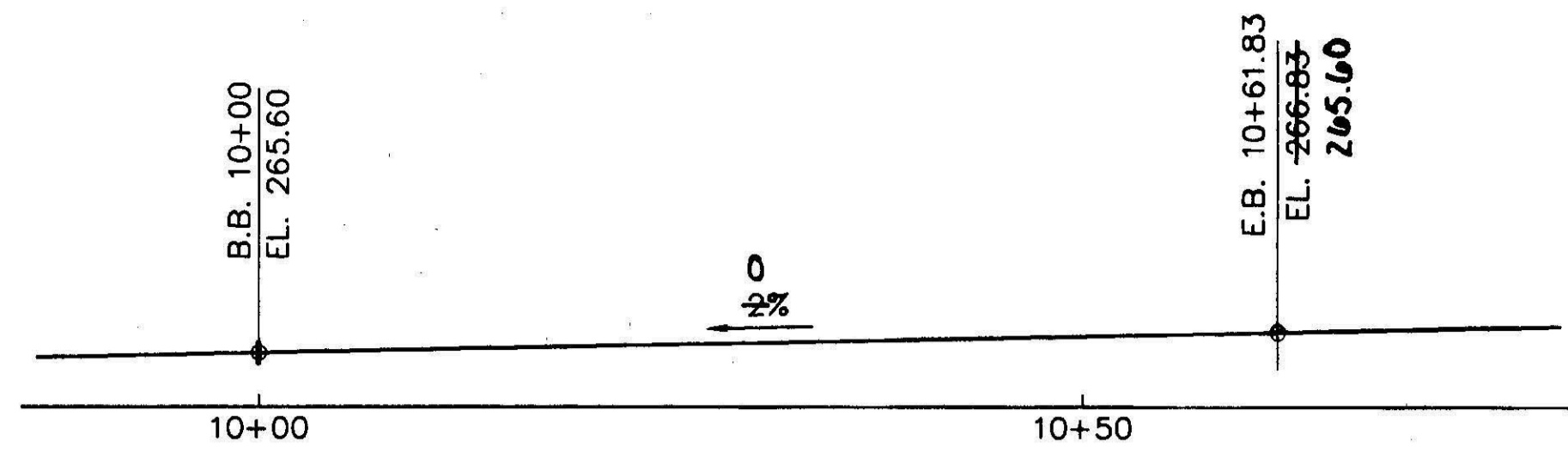
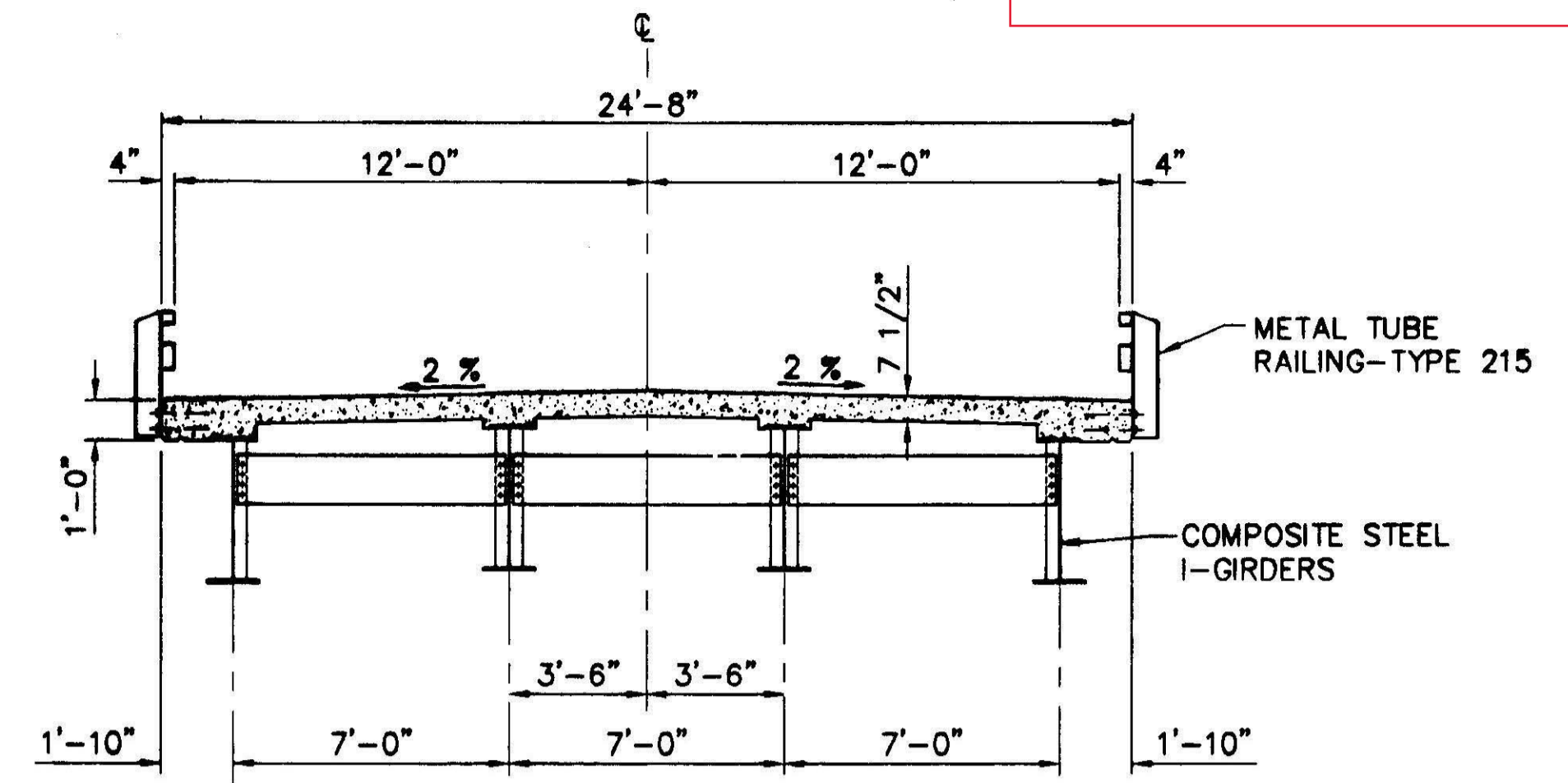


The Bridge As-Built Plans and corresponding BrDR Models are provided for example only and may not represent the modeling techniques used by your agency.



ELEVATION
SCALE: 1"=10'

CHANNEL FLOW MATCHED TO UP AND DOWN STREAM BEYOND PROJECT LIMITS



TYPICAL SECTION
SCALE: 1/4"=1'-0"

PILE DATA TABLE						
LOCATION	TYPE	DESIGN LOADING (SERVICE LOAD)	NOMINAL RESISTANCE		DESIGN TIP ELEVATIONS	SPECIFIED TIP ELEVATION
			COMPRESSION	TENSION		
ABUT. 1	24" CIDH	45 TONS	180 KIPS	70 KIPS	229 (1)(4)	227
					227 (2)(4)	
					227 (3)(4)	
ABUT. 2	24" CIDH	45 TONS	180 KIPS	70 KIPS	229 (1)(4)	227
					227 (2)(4)	
					227 (3)(4)	

PILE TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS: (1) COMPRESSION, (2) TENSION, (3) LATERAL, (4) ASSUMED PROJECTED SCOUR/EROSION TO ELEV. 241.

GENERAL NOTES - LOAD FACTOR DESIGN

DESIGN: BRIDGE DESIGN SPECIFICATIONS (1983 AASHTO WITH INTERIMS AND REVISIONS)
 DEAD LOADING: INCLUDES 35 PSF FOR FUTURE WEARING SURFACE
 LIVE LOADING: HS 20-44
 SEISMIC LOADING: PEAK ROCK ACCELERATION = 0.7g
 ATC-32 ARS CURVE, FIG R3-3
 SOIL PROFILE = TYPE B
 REINFORCED CONCRETE: $f_y = 60,000$ psi
 $f_c = 3,250$ psi
 $n = 9$
 STRUCTURAL STEEL: $f_y = 36,000$ psi

STANDARD PLANS DATED JULY 1992

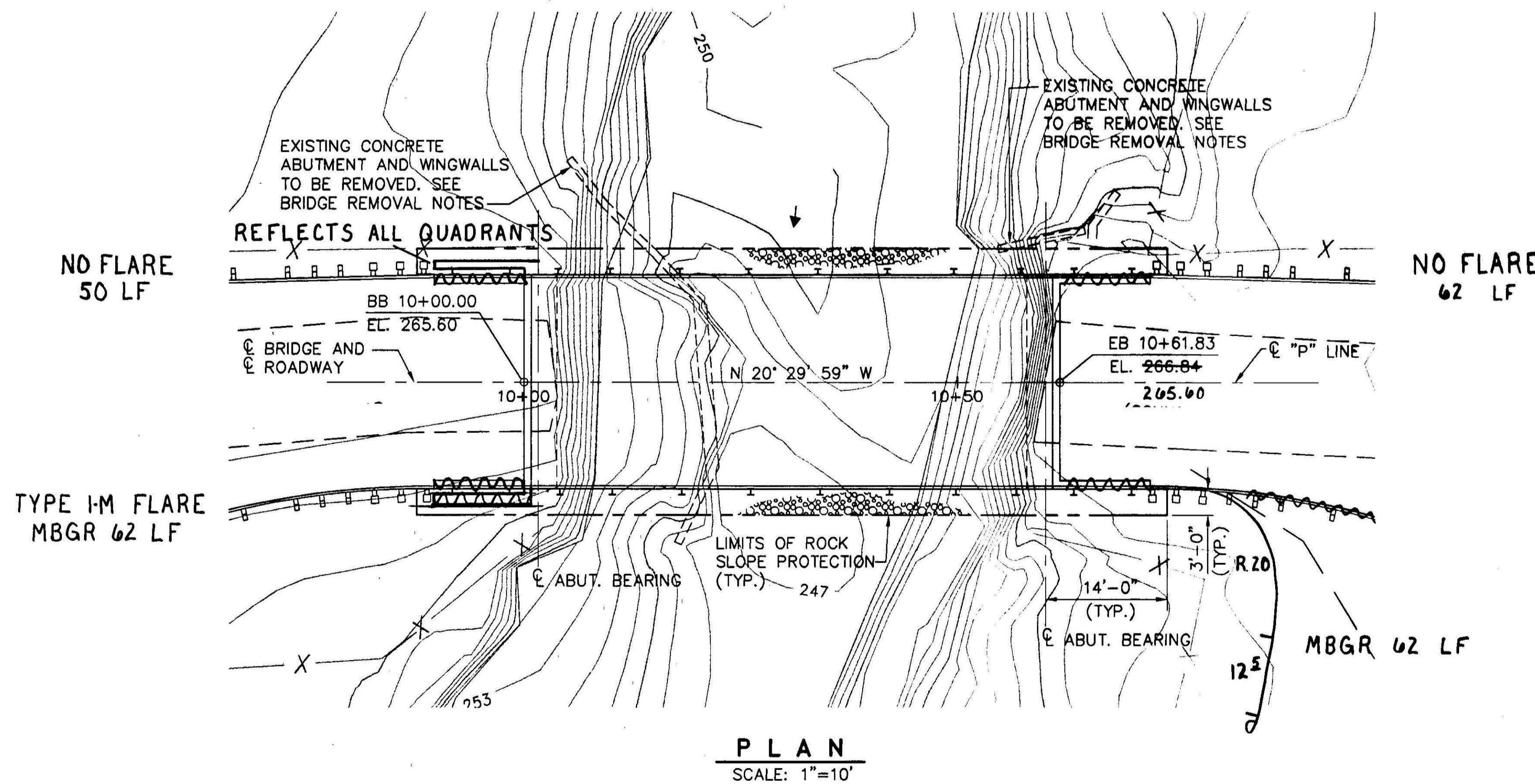
A10A ABBREVIATIONS
 A10B SYMBOLS
 A62C LIMITS OF PAYMENT FOR EXCAVATION BACKFILL - BRIDGE
 A77 METAL BEAM GUARD RAILING
 B0-3 BRIDGE DETAIL
 B3-8 RETAINING WALL DETAILS NO. 1
 B6-21 JOINT SEALS

INDEX OF PLANS

SHEET NO.	TITLE
S1	GENERAL PLAN
S2	FOUNDATION PLAN AND DECK CONTOURS
S3	ABUTMENT DETAILS
S4	TYPICAL SECTION & STEEL FRAMING DETAILS
S5	METAL TUBE BRIDGE RAILING-TYPE 215, SHT. 1 OF 2
S6	METAL TUBE BRIDGE RAILING-TYPE 215, SHT. 2 OF 2
S7	LOG OF TEST BORINGS

BRIDGE REMOVAL NOTES

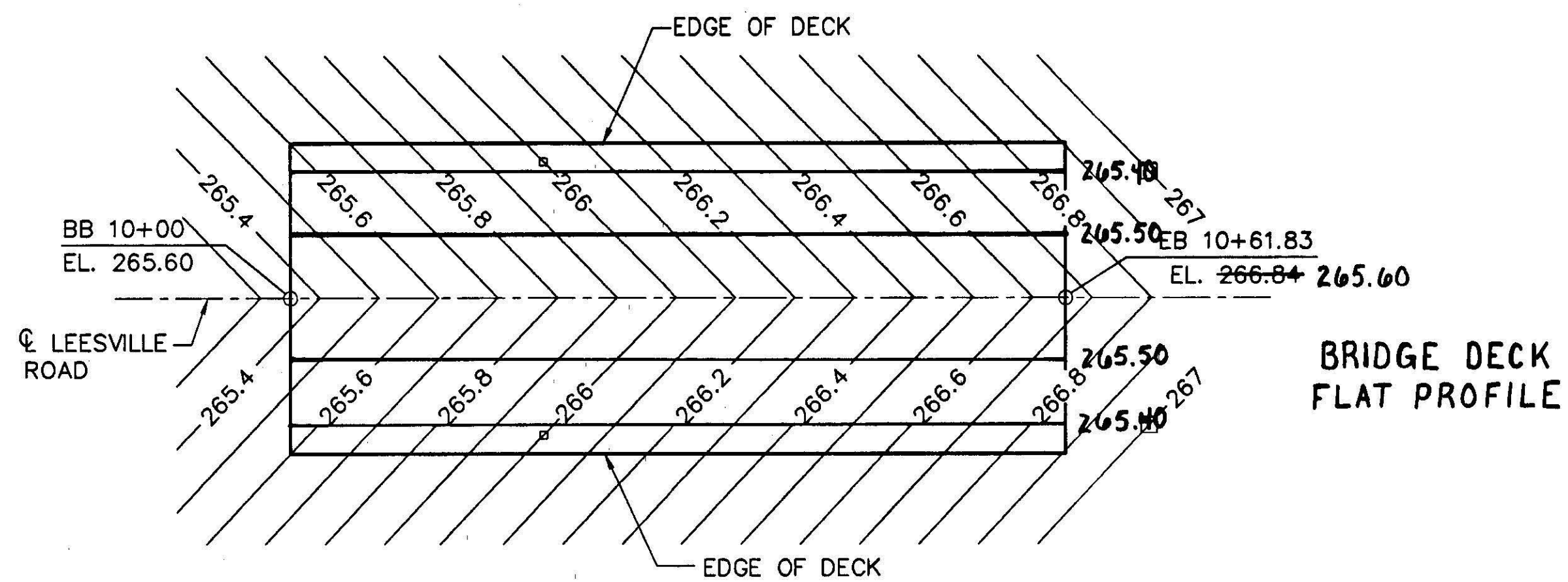
- CONTRACTOR SHALL VERIFY EXISTING CONDITION AND DIMENSIONS PRIOR TO REMOVAL.
- CONTRACTOR SHALL REMOVE ALL COMPONENTS OF THE EXISTING BRIDGE INCLUDING ABUTMENTS, WINGWALL AND ALL FOUNDATION.
- CONTRACTOR IS RESPONSIBLE TO PROPERLY DISPOSE OF ALL MATERIALS IN ACCORDANCE WITH COUNTY REQUIREMENTS.



PLAN
SCALE: 1"=10'

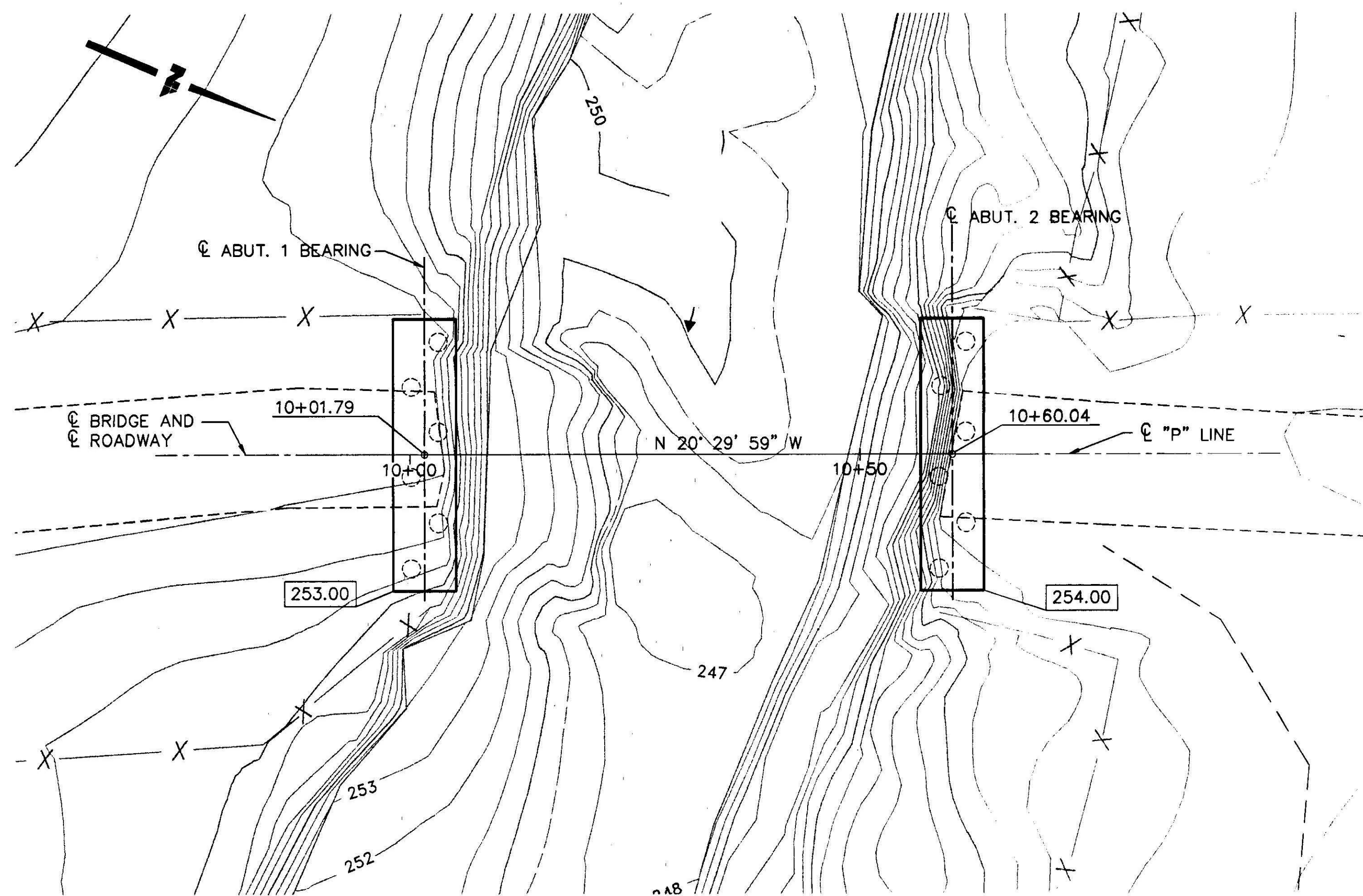
UNAUTHORIZED CHANGES & USES

CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.



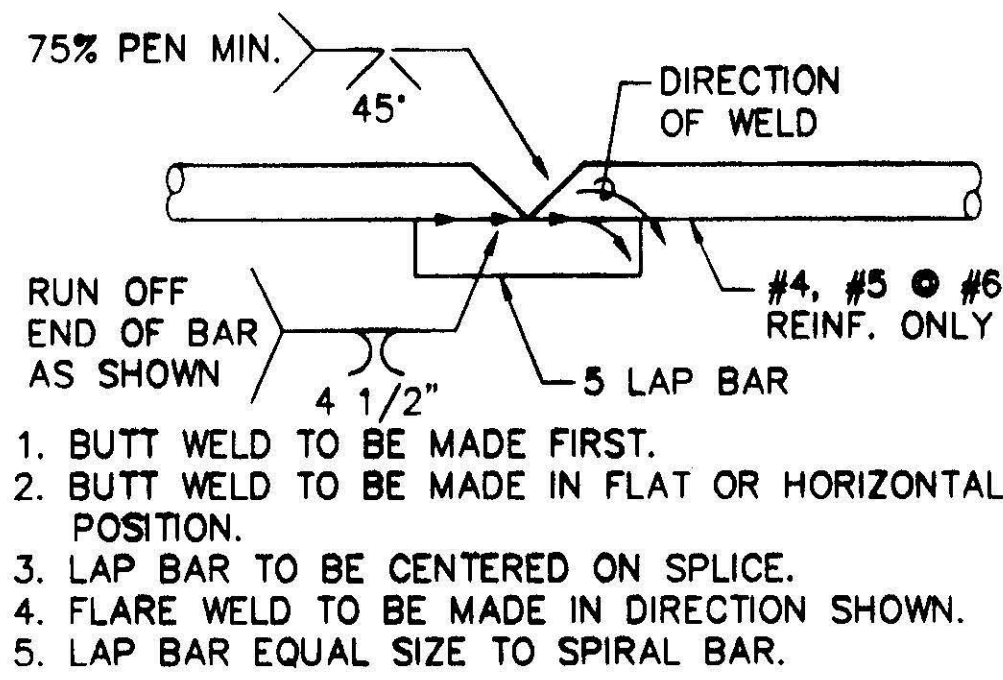
DECK CONTOUR PLAN
SCALE: 1/4"=1'-0"

- NOTES:**
1. CONTOUR INTERVAL = 0.1 FOOT.
 2. CONTOUR SHOW IS FOR INFORMATION ONLY.
 - □ INDICATES EVEN FOOT CONTOUR

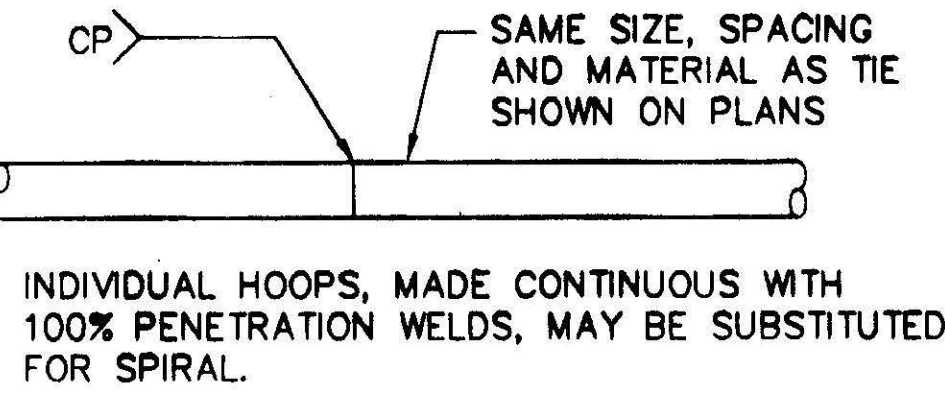


FOUNDATION PLAN
SCALE: 1"=10'

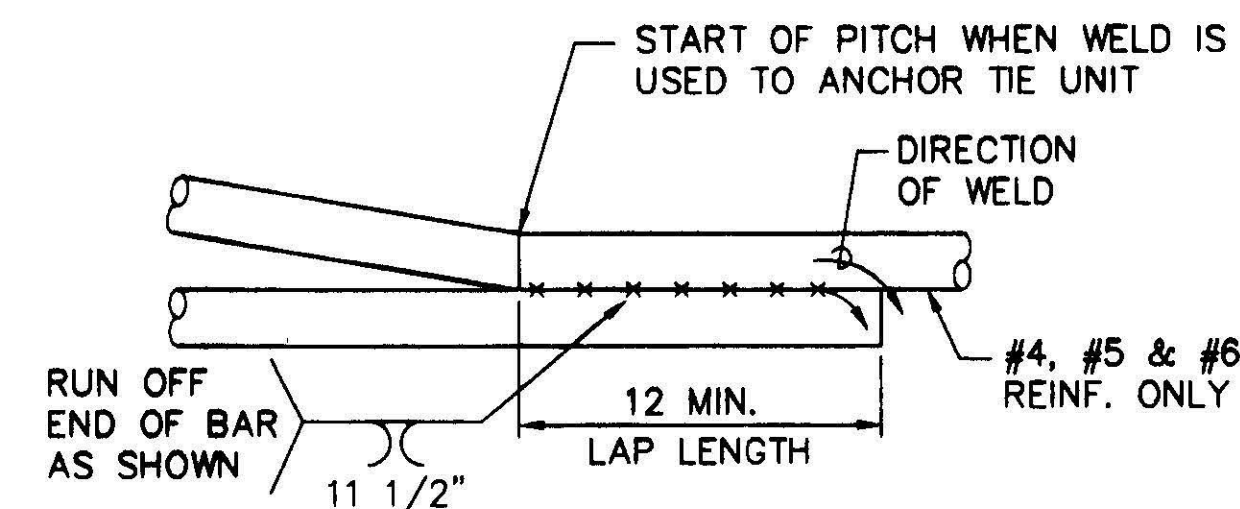
- LEGEND**
- DENOTES BOTTOM OF FOOTING ELEVATION



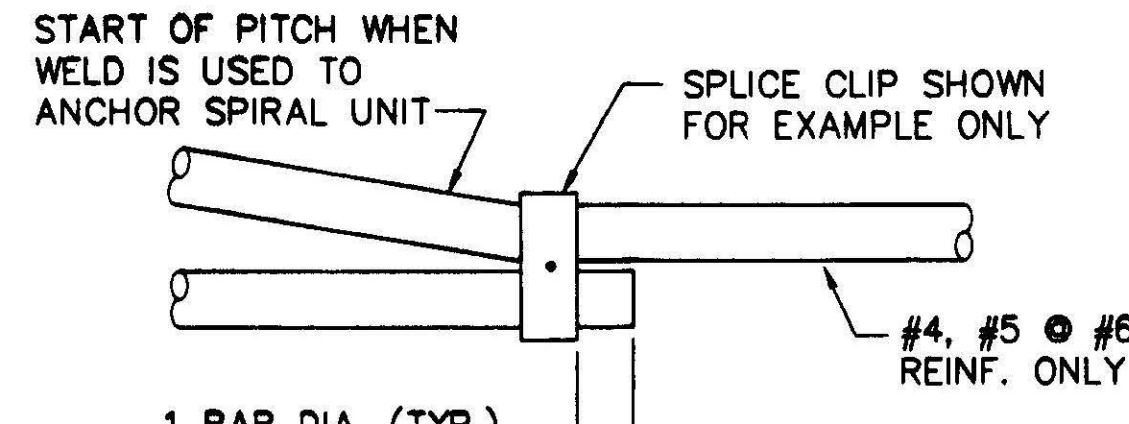
VEE GROOVE WELDED SPLICE



BUTT WELDED CONTINUOUS HOOP



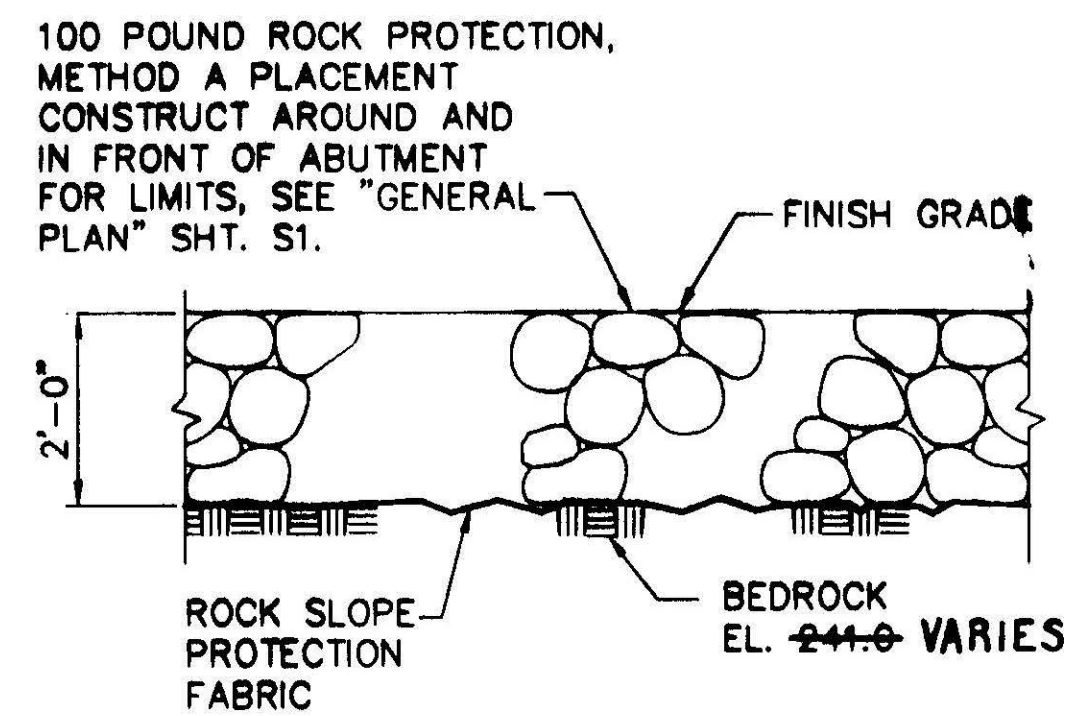
WELDED LAP SPLICE & ANCHOR



MECHANICAL LAP SPLICE & ANCHOR

BAR SPIRAL SPLICE & SPIRAL ANCHOR & HOOP DETAILS

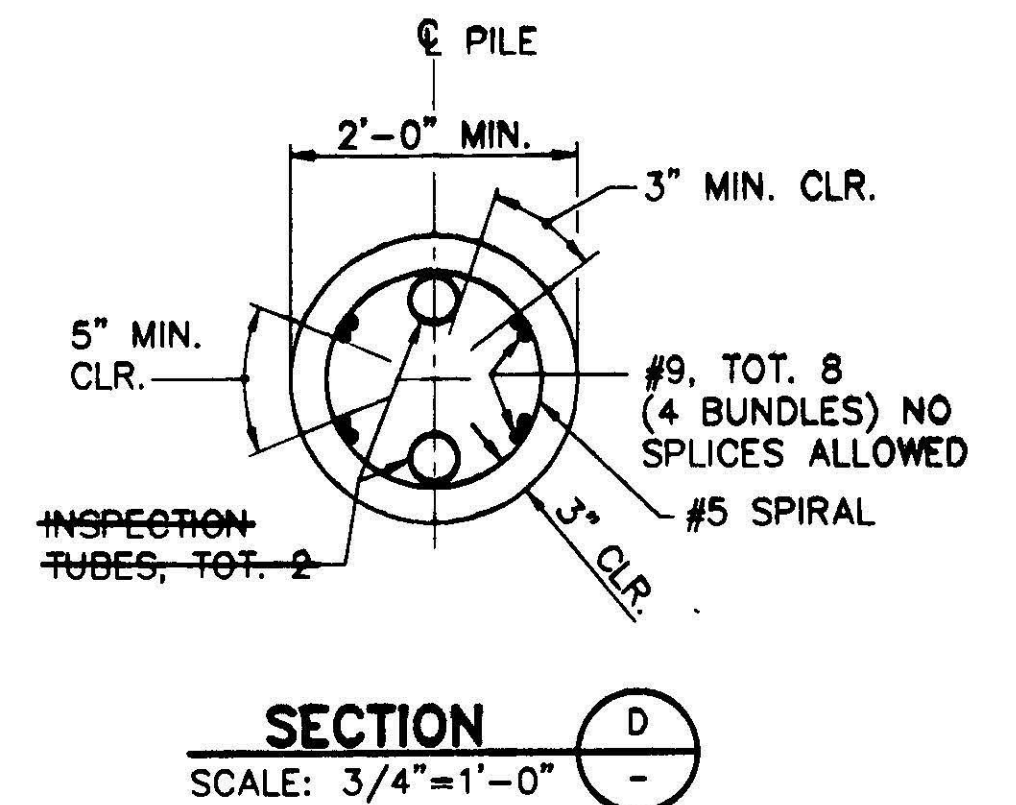
N.T.S.



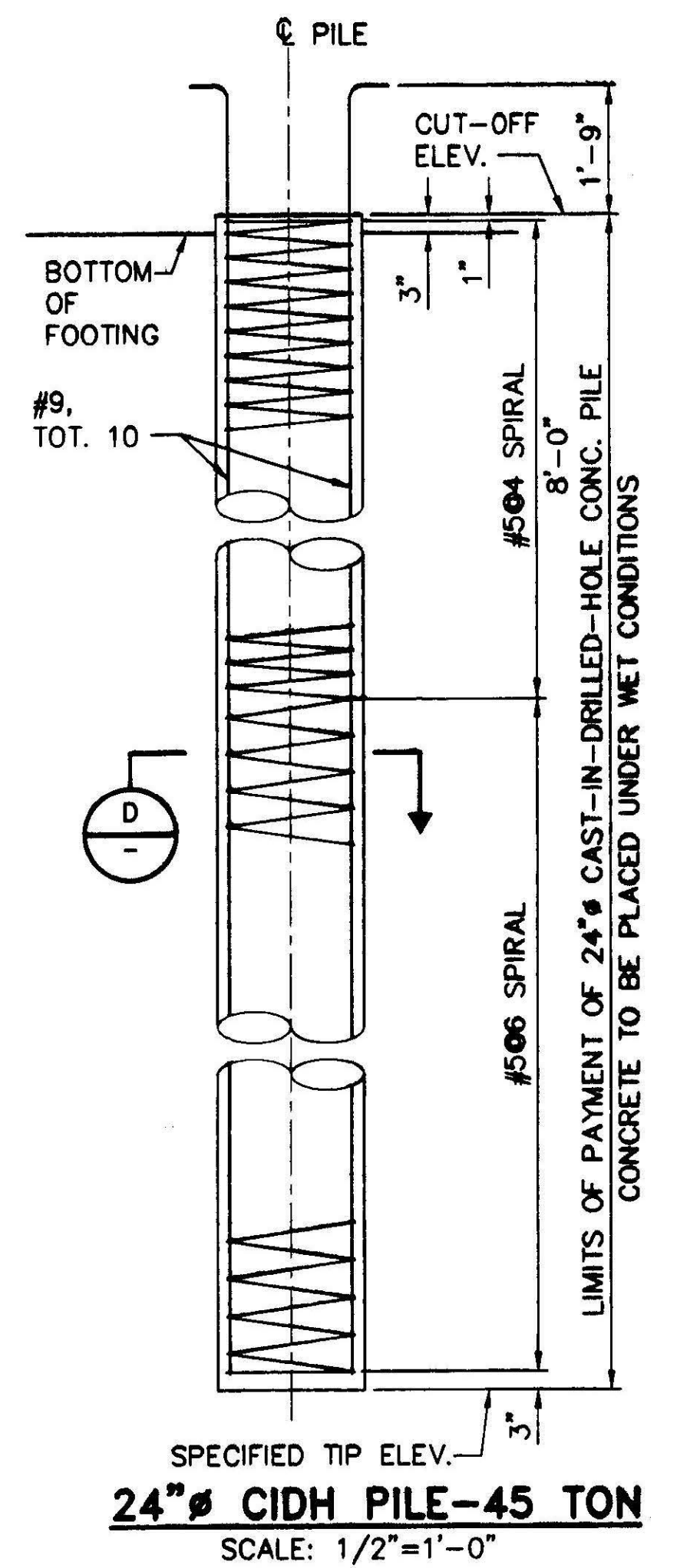
ROCK PROTECTION DETAIL

N.T.S.

CHANNEL MATCHED TO UP AND DOWN STREAM BEYOND PROJECT LIMITS



SECTION D
SCALE: 3/4"=1'-0"

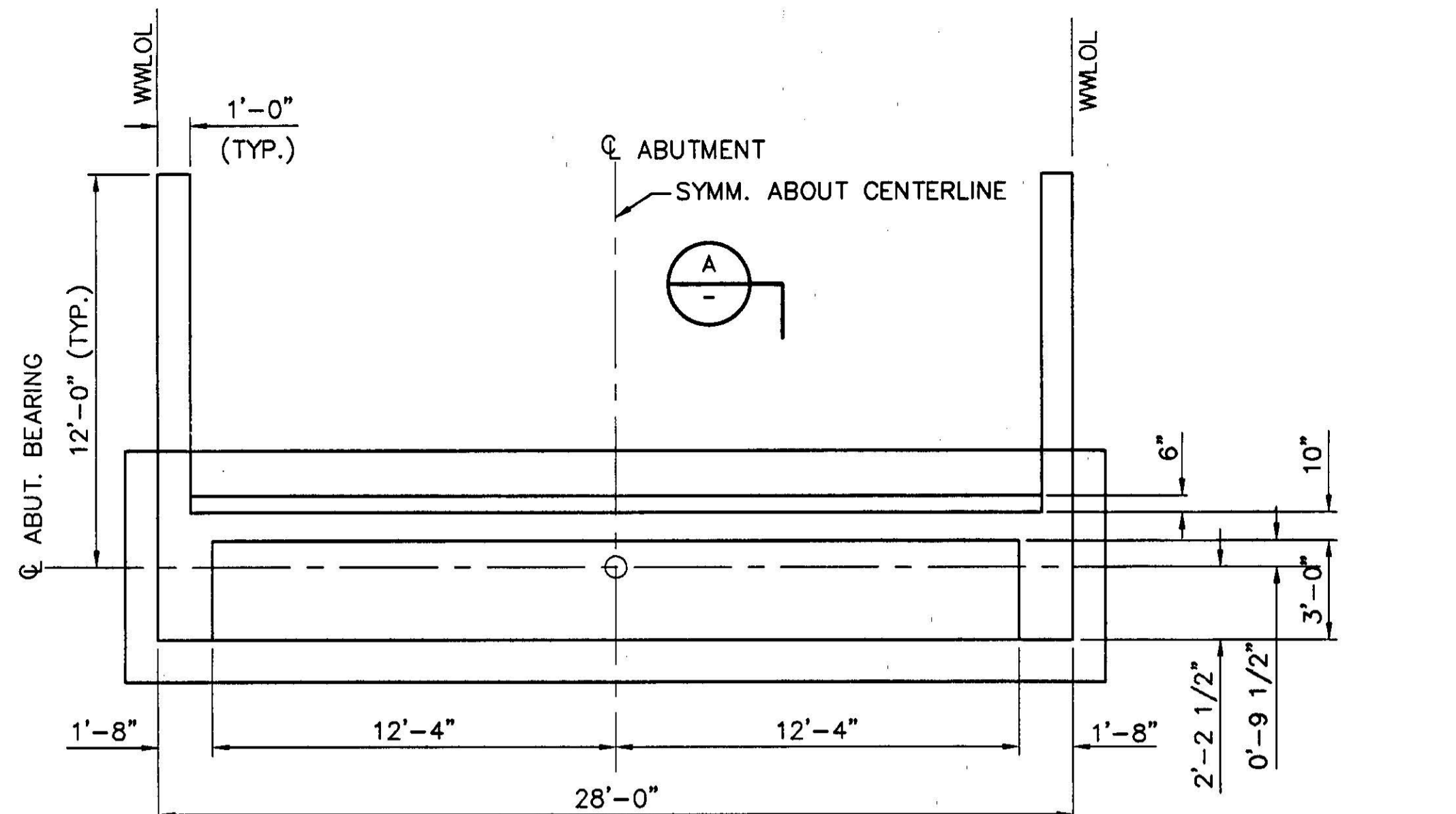


24" CIDH PILE-45 TON
SCALE: 1/2"=1'-0"

- NOTE:**
1. FOR SPIRAL SPLICE AND ANCHOR DETAIL, SEE "BAR SPIRAL SPLICE & SPIRAL ANCHOR DETAIL" THIS SHEET.
 2. CASING IS EXPECTED TO BE REQUIRED FOR GROUND (CAVING) CONTROL TO SPECIFIED TIP ELEVATION.
 3. DE-WATERING AND POURING OF CONCRETE IN OPEN, UNCASSED PORTIONS OF PILE EXCAVATIONS IS NOT EXPECTED TO BE FEASIBLE.

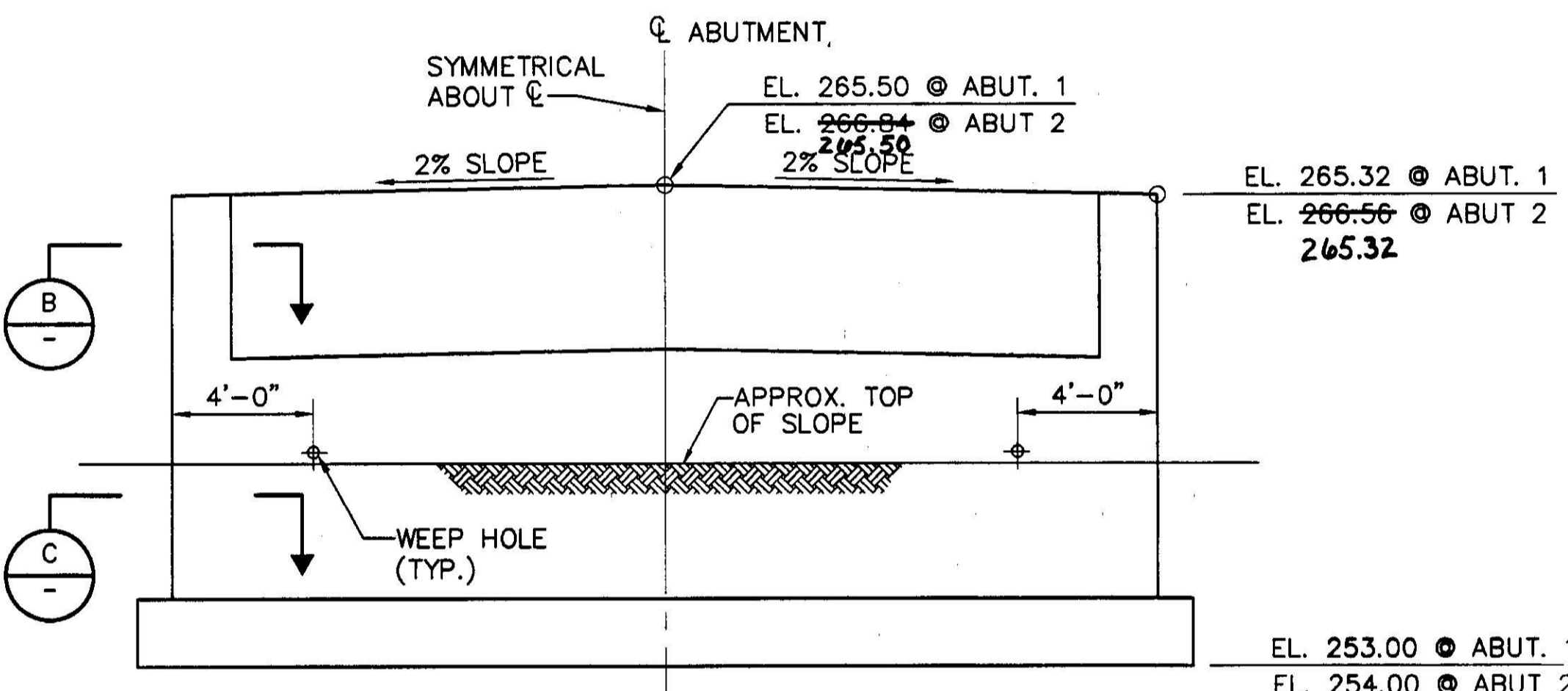
UNAUTHORIZED CHANGES & USES

CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

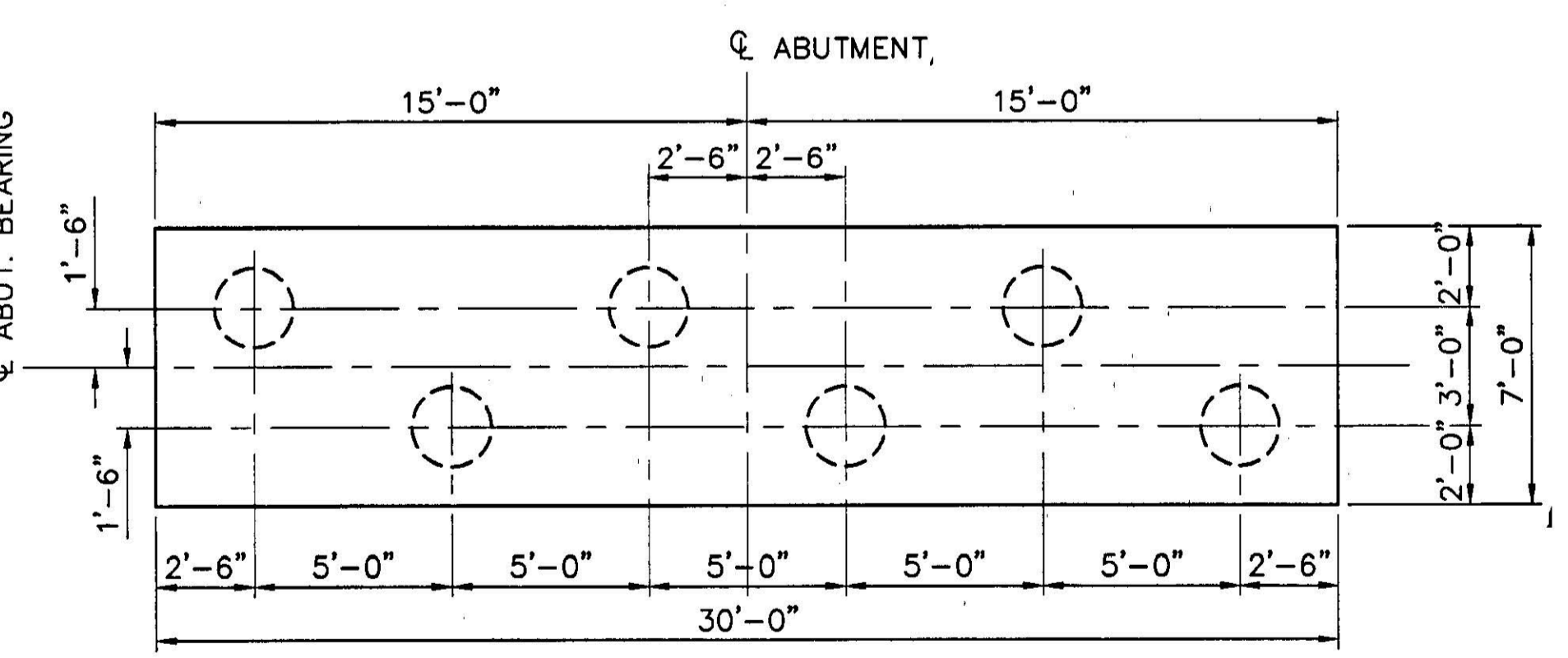


ABUTMENT PLAN (1 AND 2)
SCALE: 1/4"=1'-0"

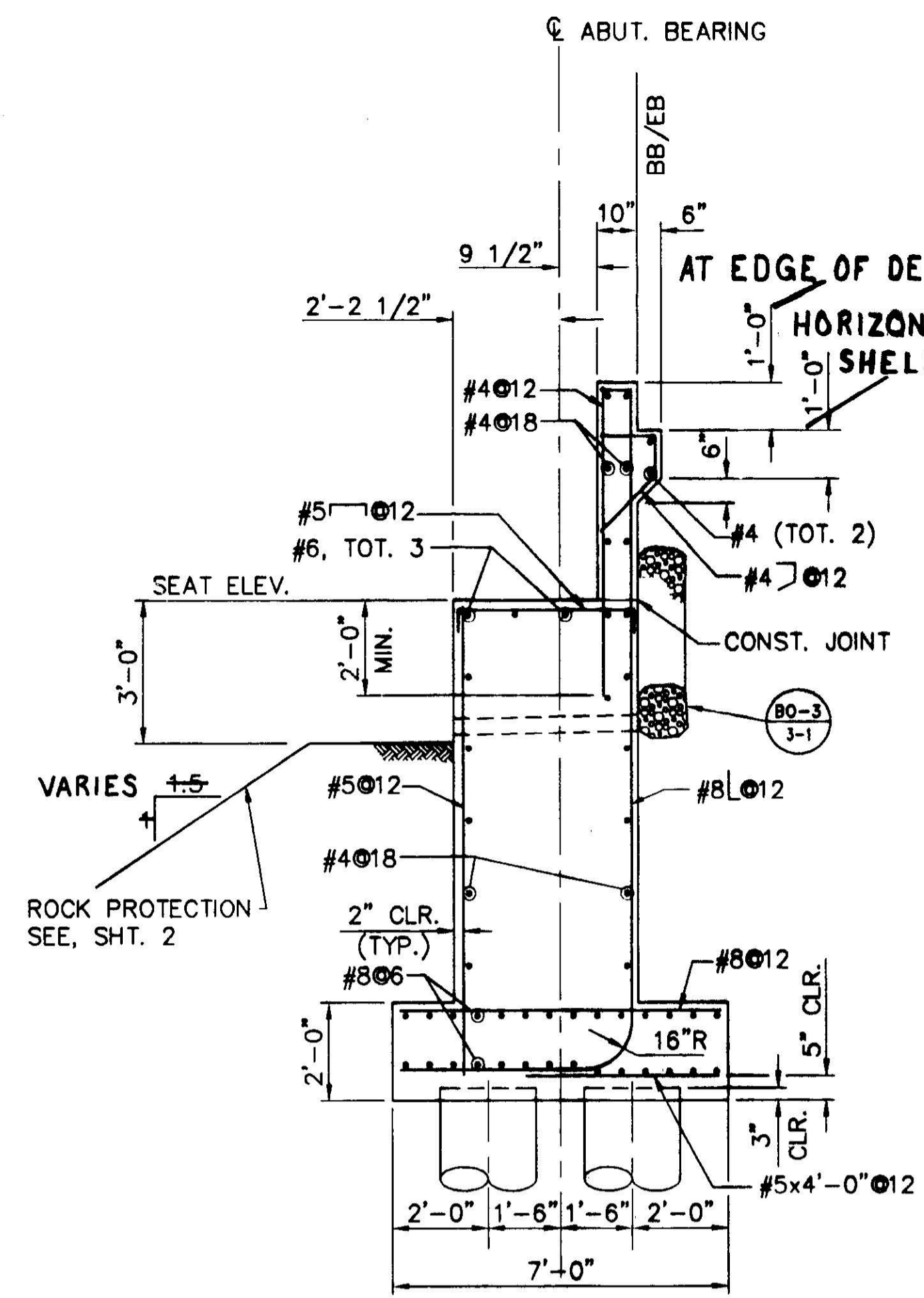
ABUTMENT SEAT ELEVATION @ GIRDER		
GIRDER NO.	GIRDER 1L AND 1R	GIRDER 2
ABUTMENT 1	260.6	261.0
ABUTMENT 2	261.7	262.1



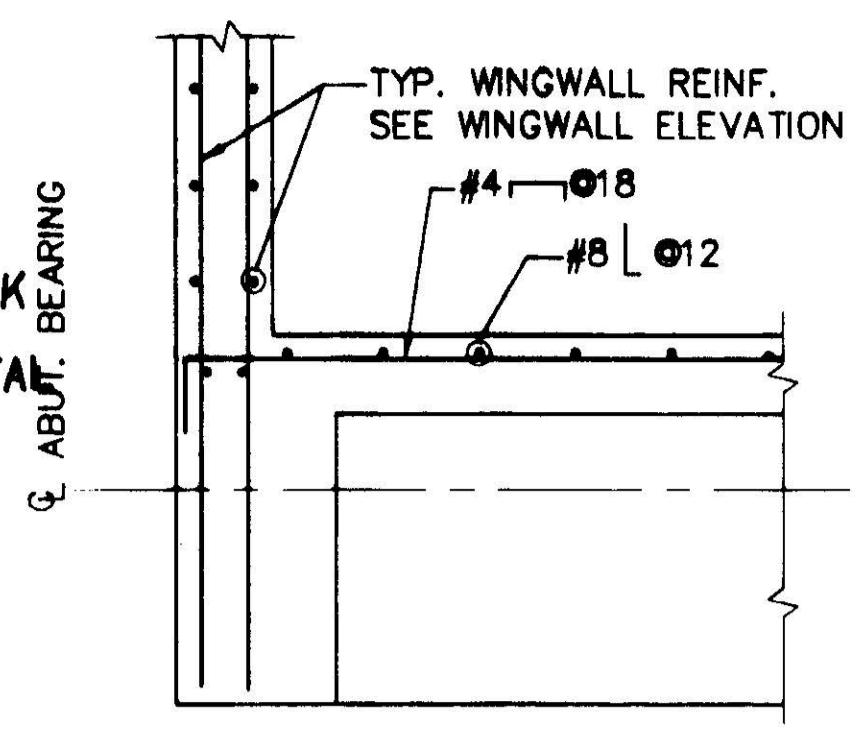
ELEVATION
SCALE: 1/4"=1'-0"



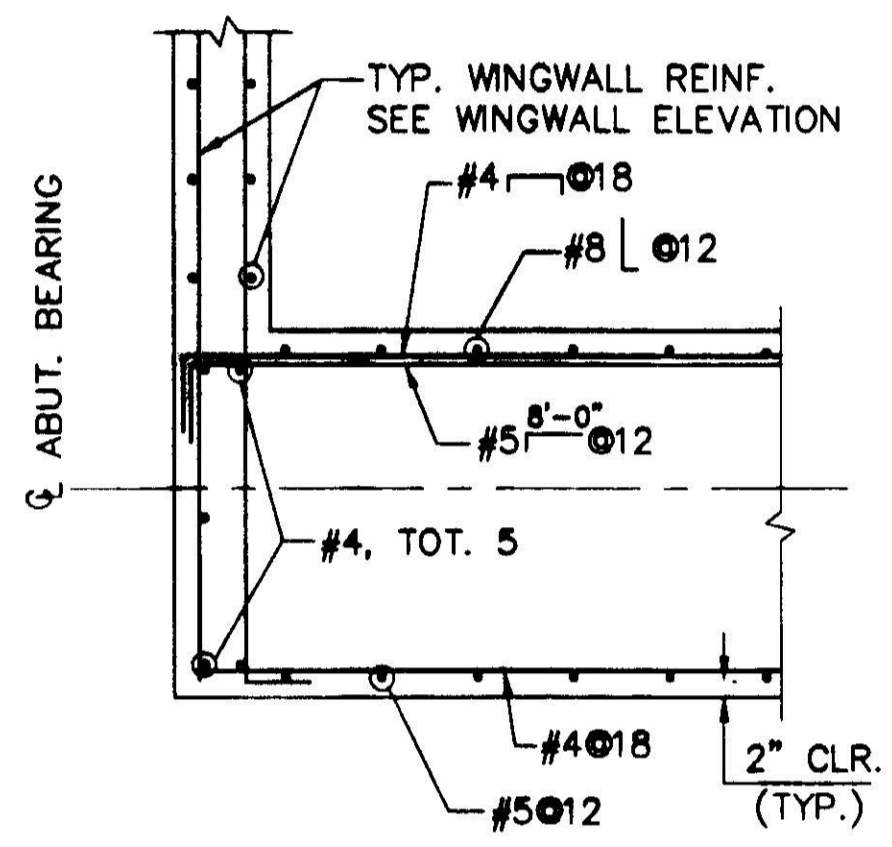
FOUNDATION PLAN
SCALE: 1/4"=1'-0"



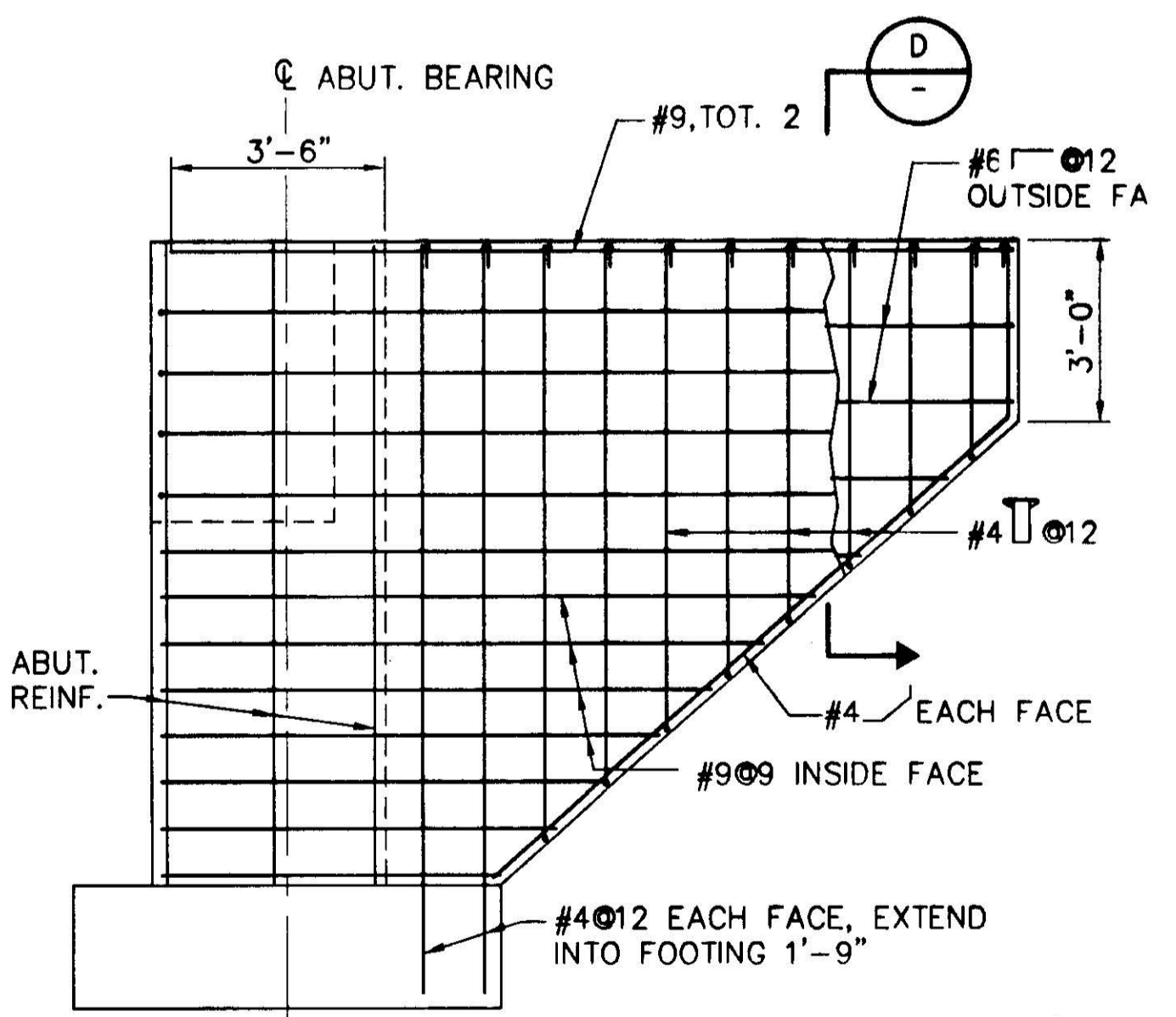
SECTION A
SCALE: 3/8"=1'-0"



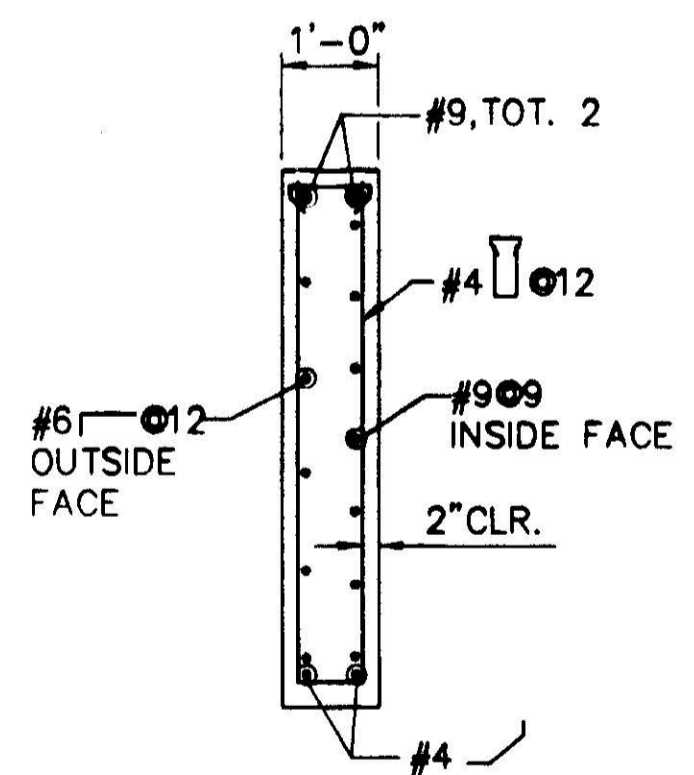
SECTION B
SCALE: 1/2"=1'-0"



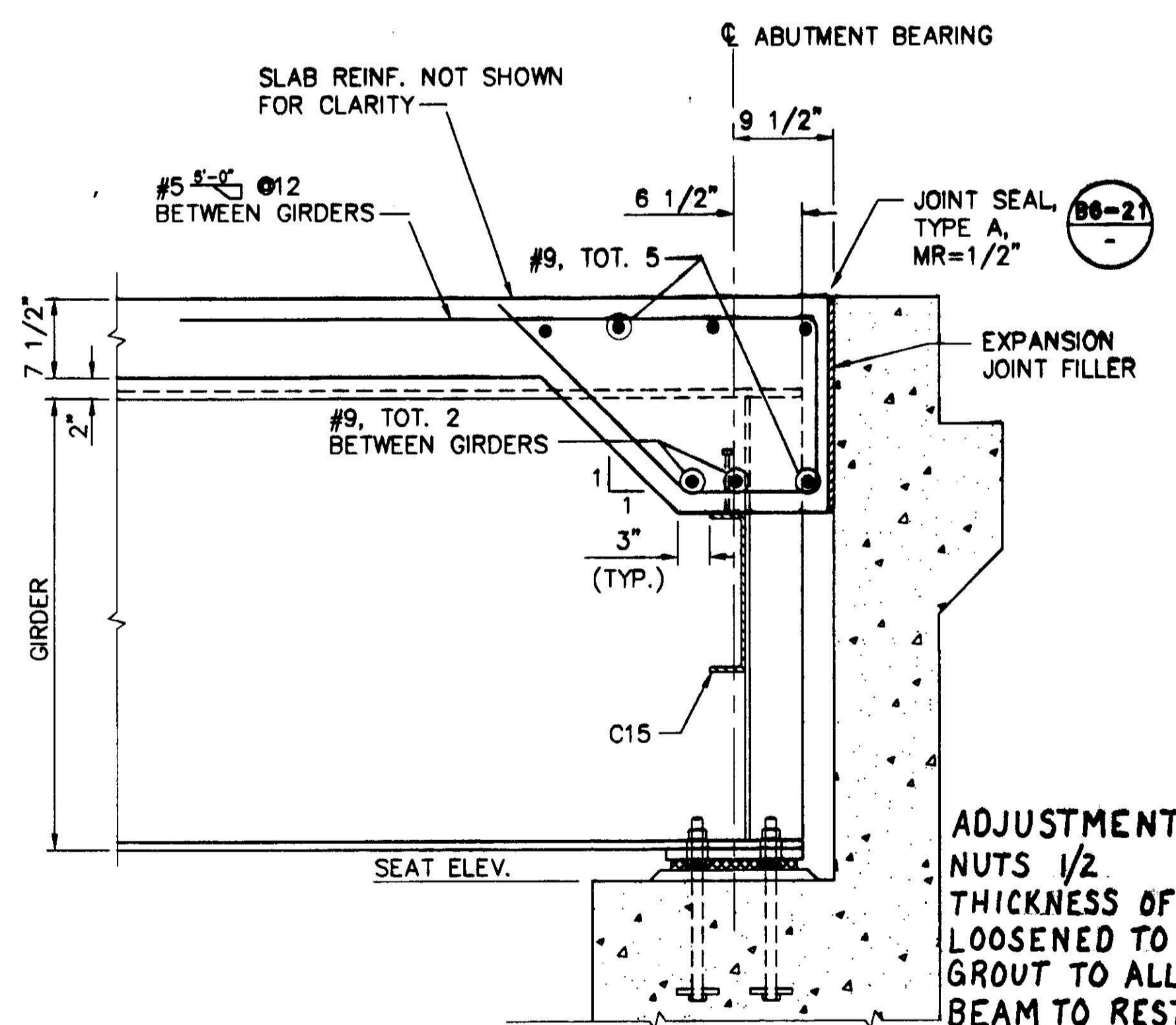
SECTION C
SCALE: 1/2"=1'-0"



WINGWALL ELEVATION
SCALE: 3/8"=1'-0"



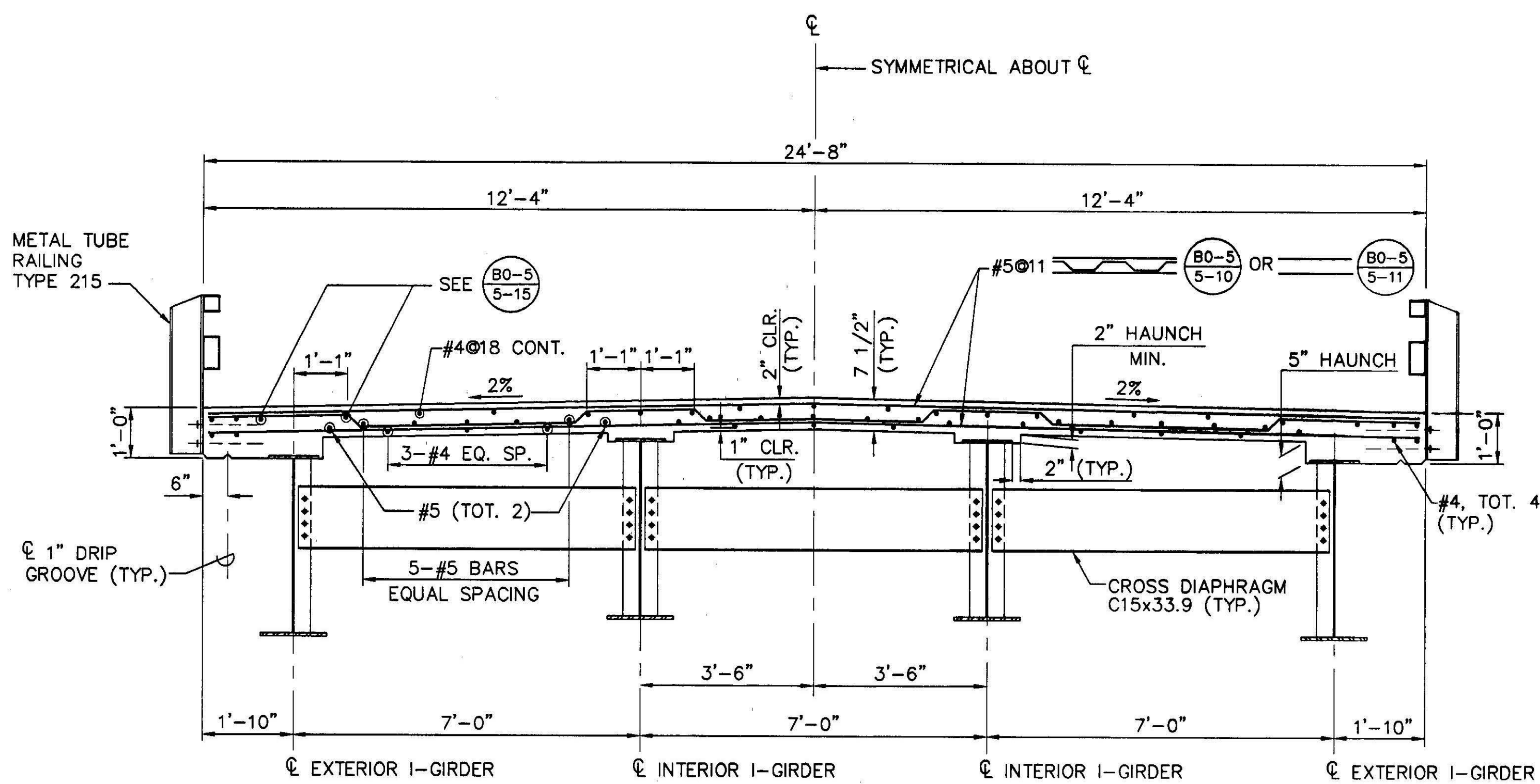
SECTION D
SCALE: 1/2"=1'-0"



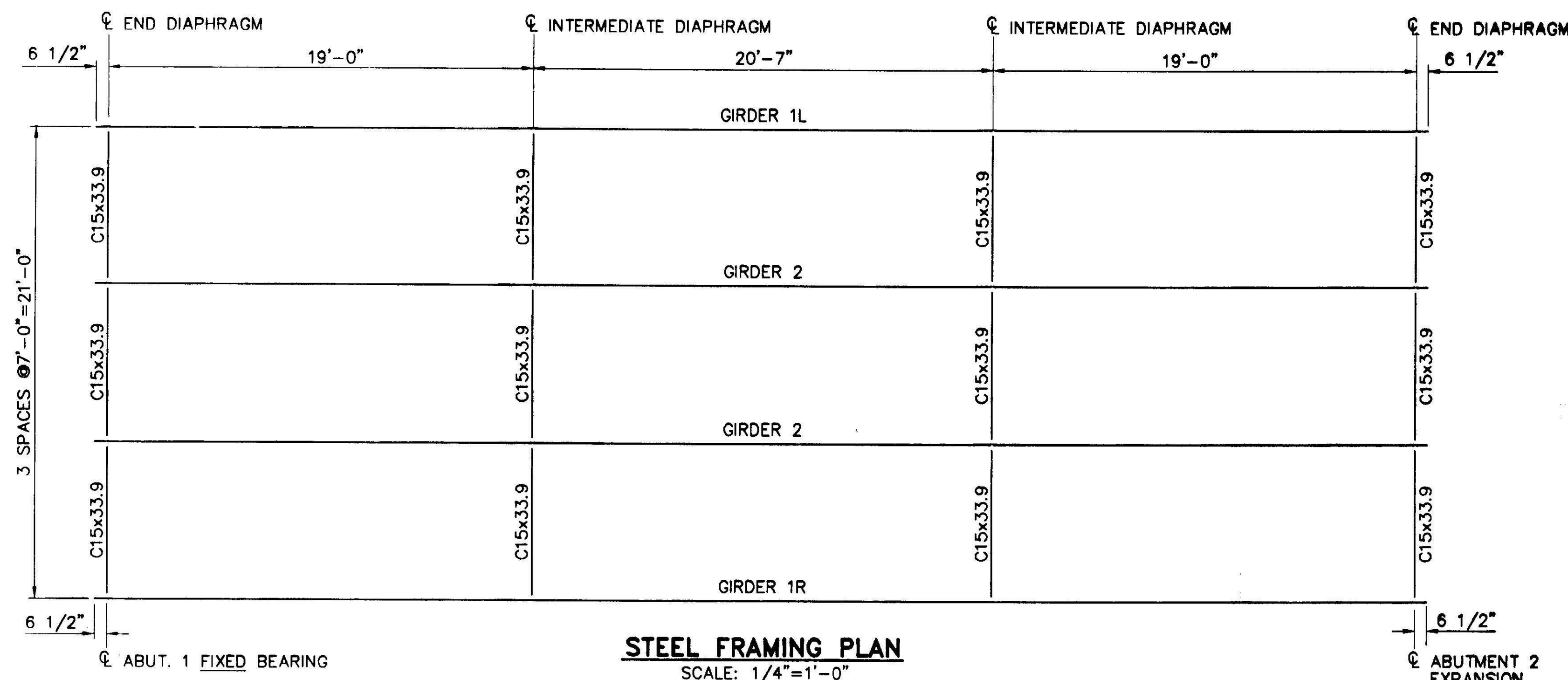
TYPICAL SECTION AT ABUTMENTS
SCALE: 1"=1'-0"

UNAUTHORIZED CHANGES & USES

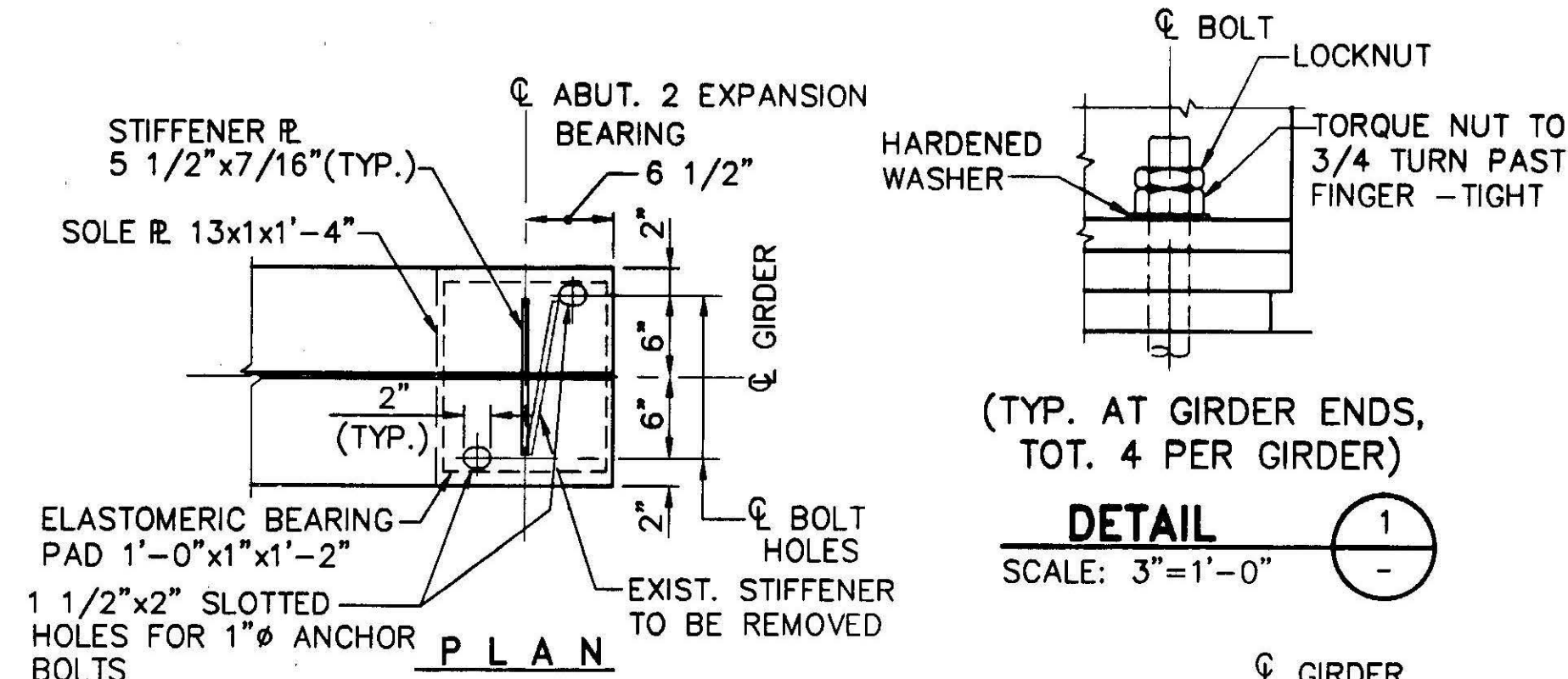
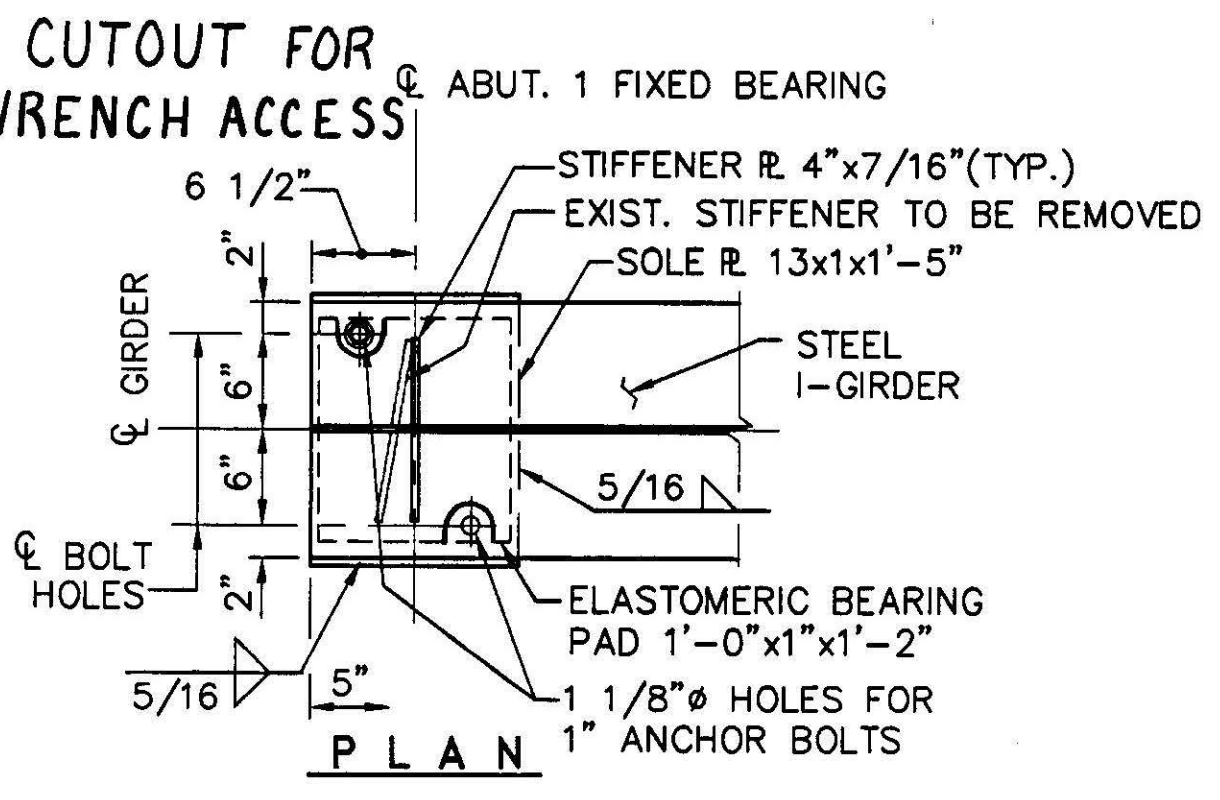
CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.



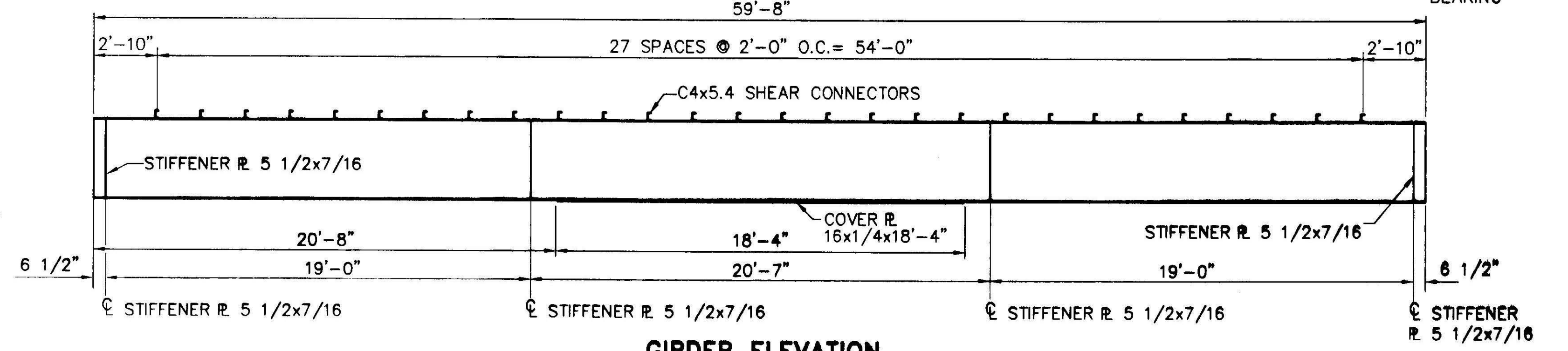
TYPICAL SECTION
SCALE: 1/2"=1'-0"



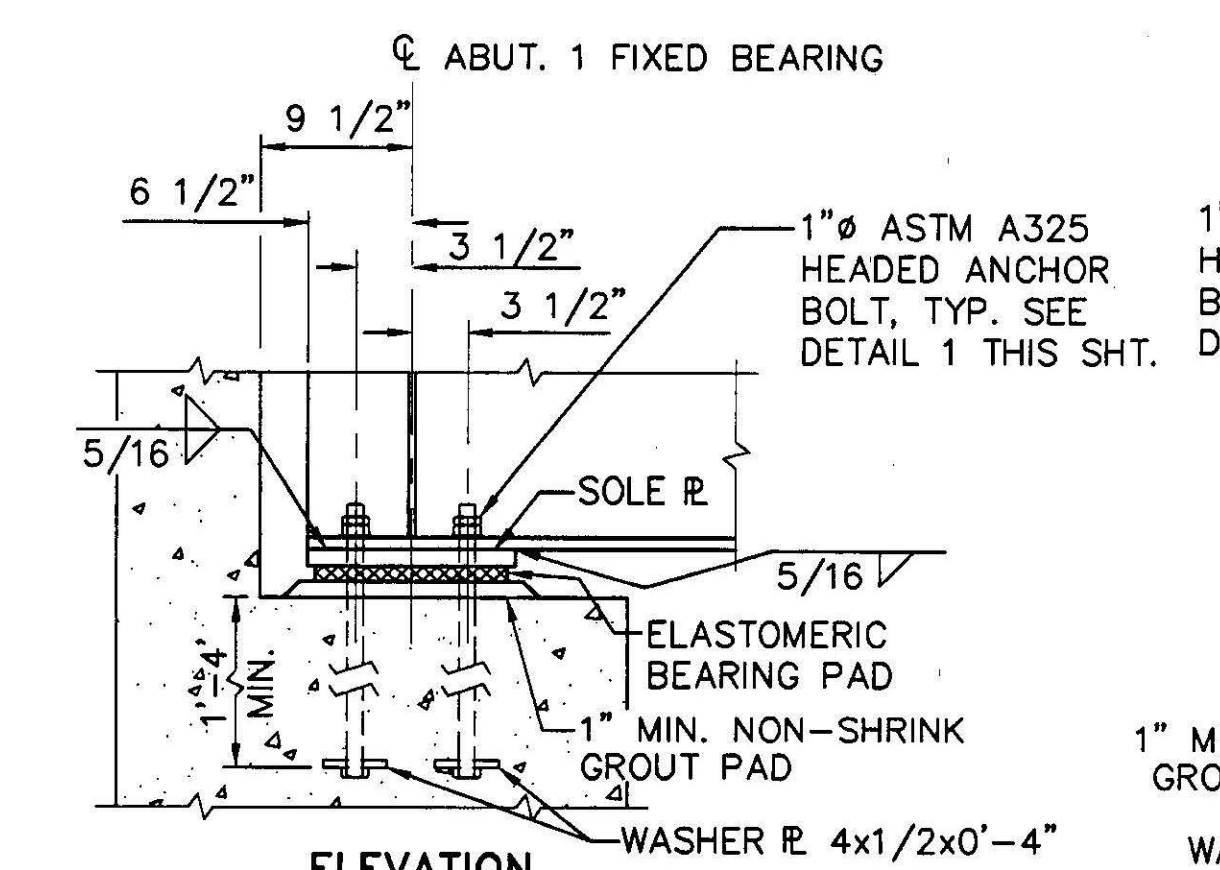
STEEL FRAMING PLAN
SCALE: 1/4"=1'-0"



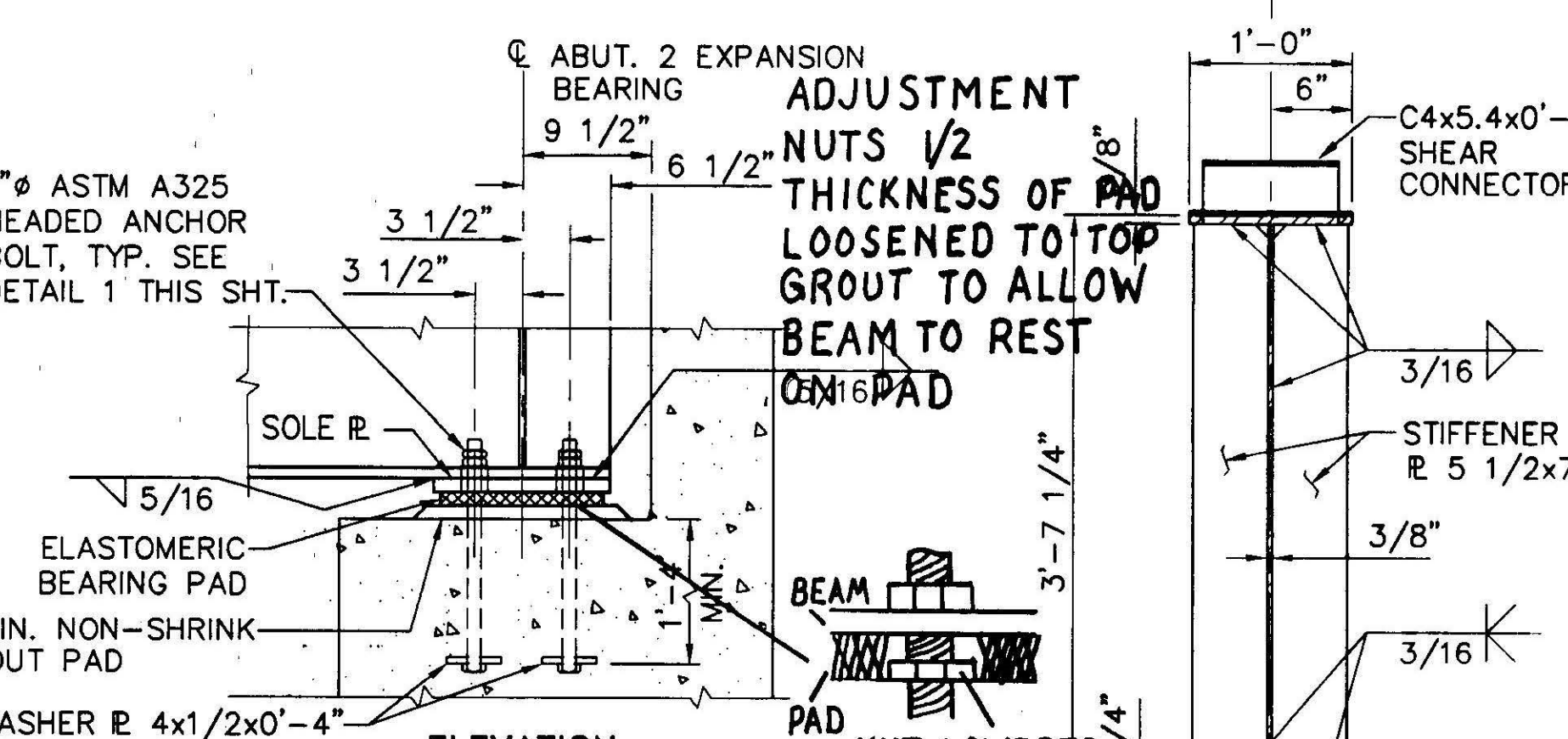
DETAIL 1
SCALE: 3"=1'-0"



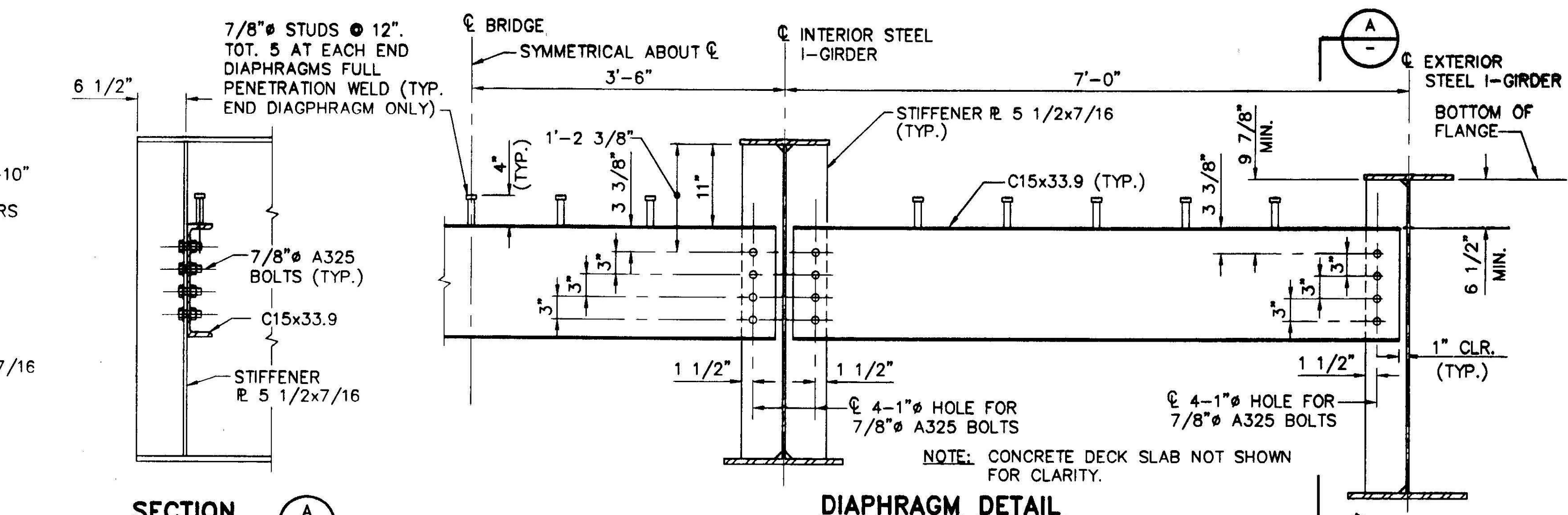
GIRDER ELEVATION
SCALE: 1/4"=1'-0"



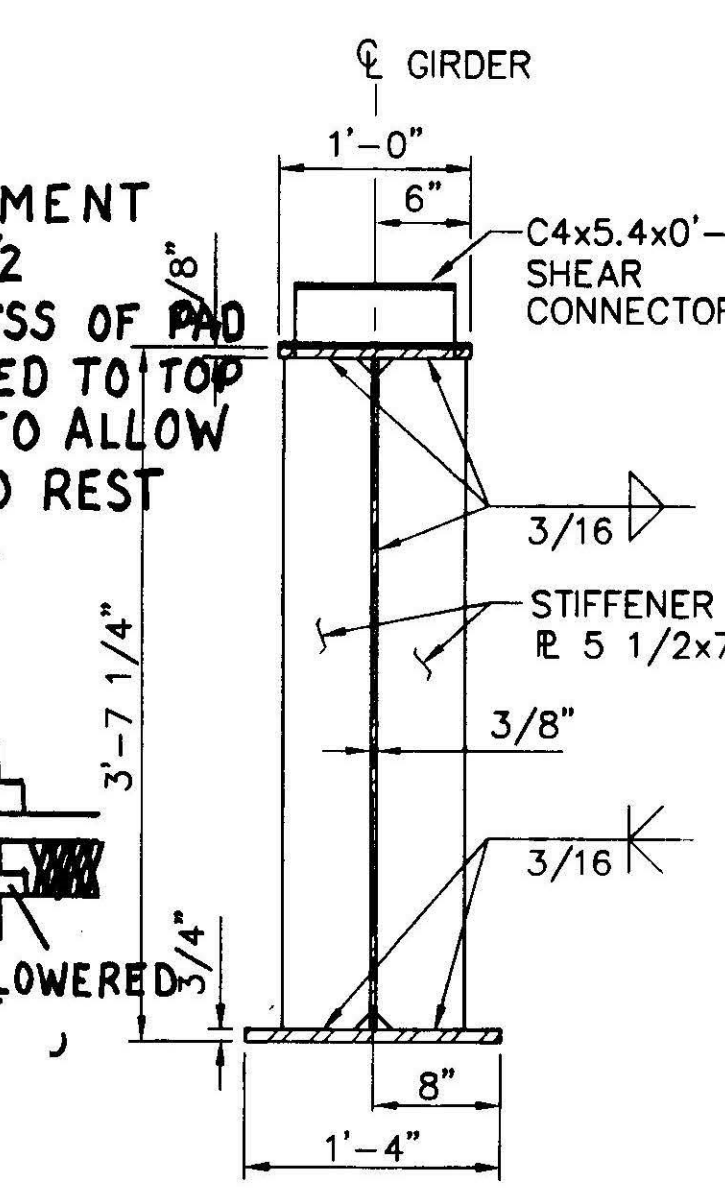
FIXED BEARING AT ABUT. 1
SCALE: 1"=1'-0"



EXPANSION BEARING AT ABUT.
SCALE: 1"=1'-0"



DIAPHRAGM DETAIL
SCALE: 1"=1'-0"

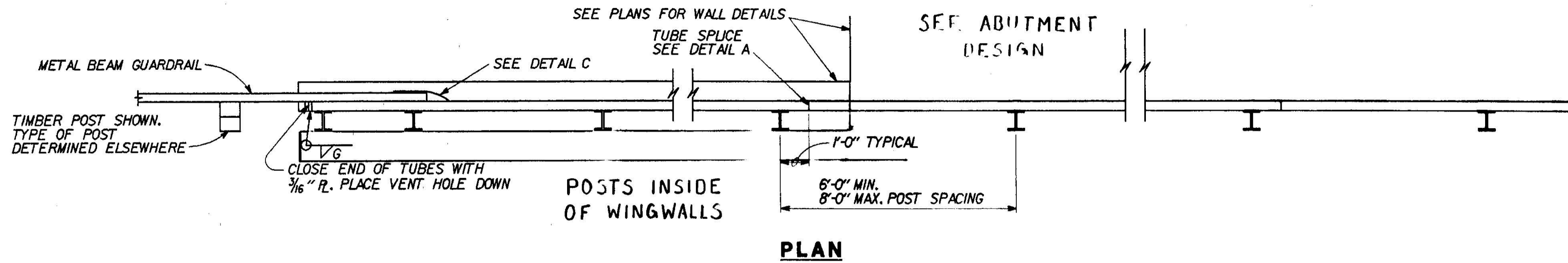


STEEL I-GIRDER DETAIL
SCALE: 1"=1'-0"

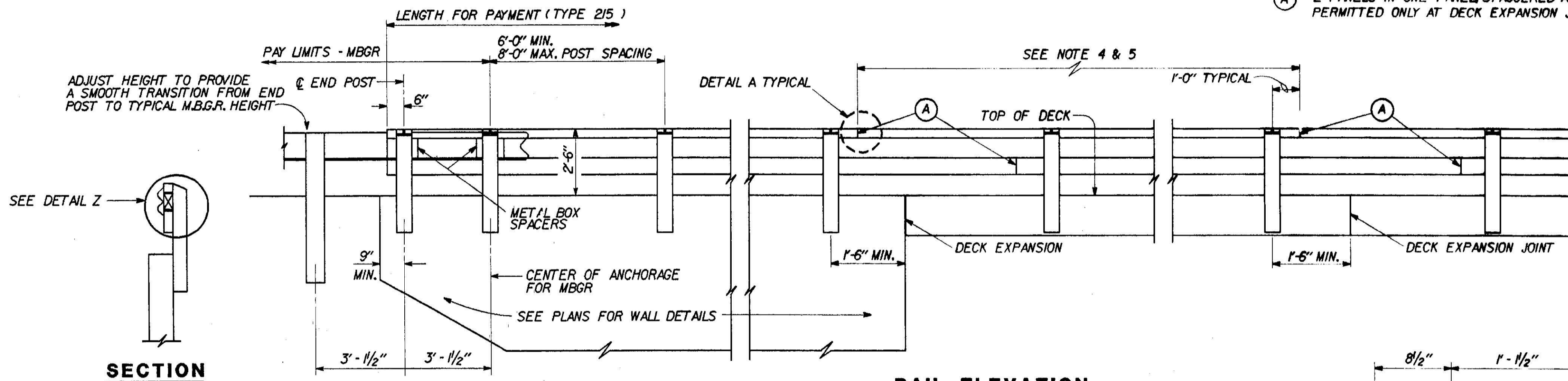
SECTION A
SCALE: 1"=1'-0"

- NOTES:**
- 1) STEEL I-GIRDERS ARE STORED AT THE COLUSA COUNTY MAINTENANCE YARD IN WILLIAMS, CA.
 - 2) STIFFENER PLATES ARE NOT REQUIRED ON THE EXTERIOR FACE OF GIRDERS 1L & 1R.
 - 3) SHEAR CONNECTORS ARE C4x5.4.
 - 4) EXISTING INTERIOR I-GIRDERS HAVE ADDITIONAL STIFFENER PLATES 4"x5/16" AT 4'-0" ON CENTER. THESE EXTRA STIFFENER PLATES SHOULD NOT BE REMOVED.
 - 5) THE CONTRACTOR SHALL VERIFY ALL CONTROLLING GIRDER DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
 - 6) HOLES FOR FASTENING C15x33.9 DIAPHRAGM SHALL BE DRILLED AFTER PLACING I-GIRDERS AT THE ABUTMENT.

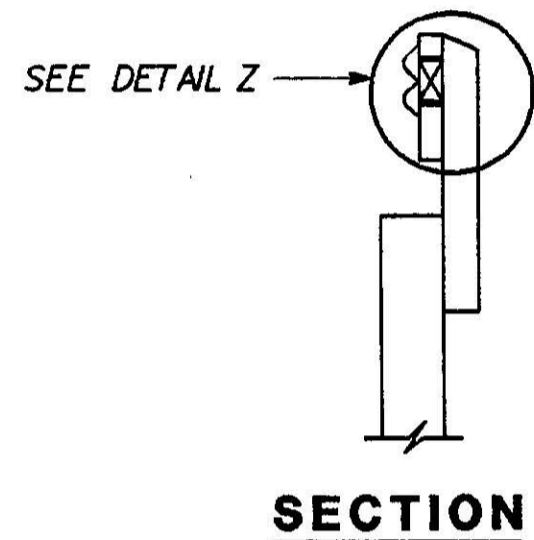
UNAUTHORIZED CHANGES & USES
CAUTION: The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.



PLAN



RAIL ELEVATION



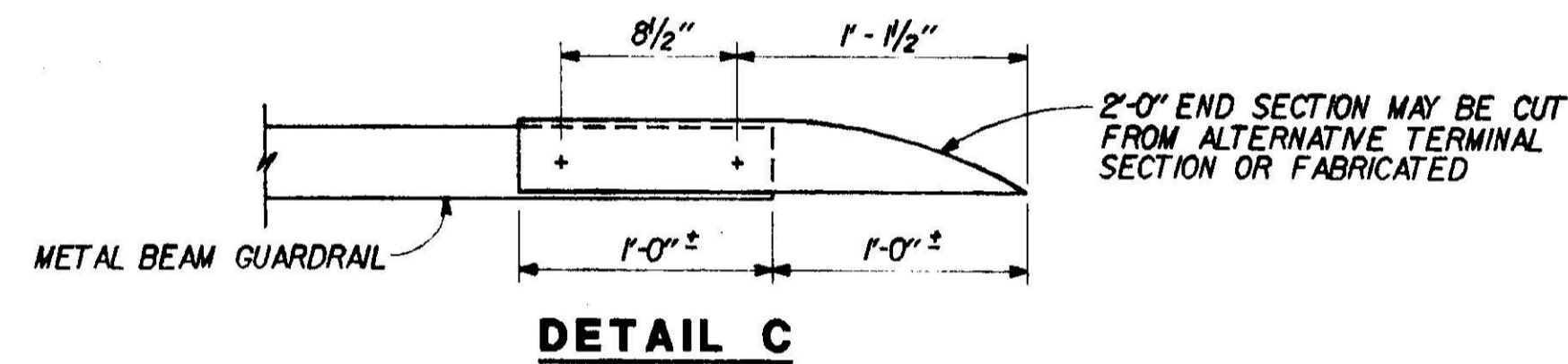
SECTION

METAL BEAM APPROACH

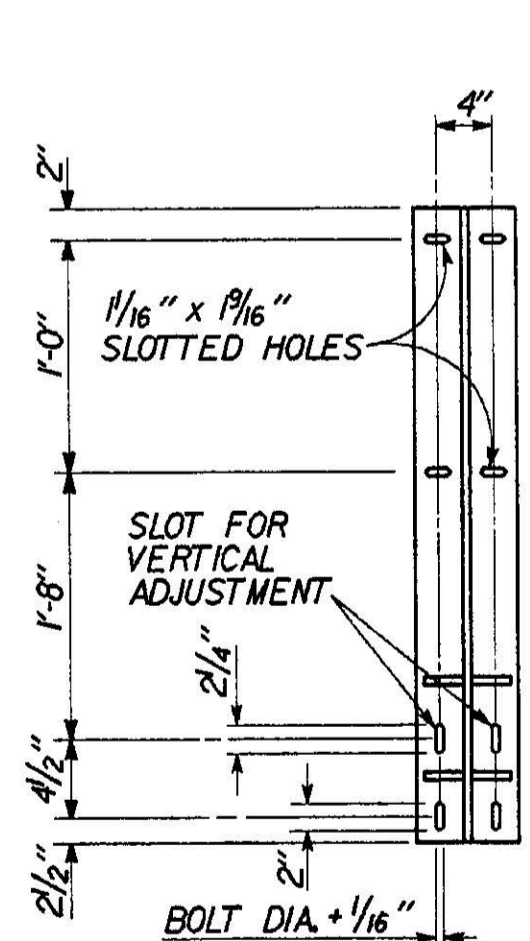
(A) 2 PANELS IN ONE PANEL, STAGGERED AS SHOWN, PERMITTED ONLY AT DECK EXPANSION JOINTS.

NOTES:

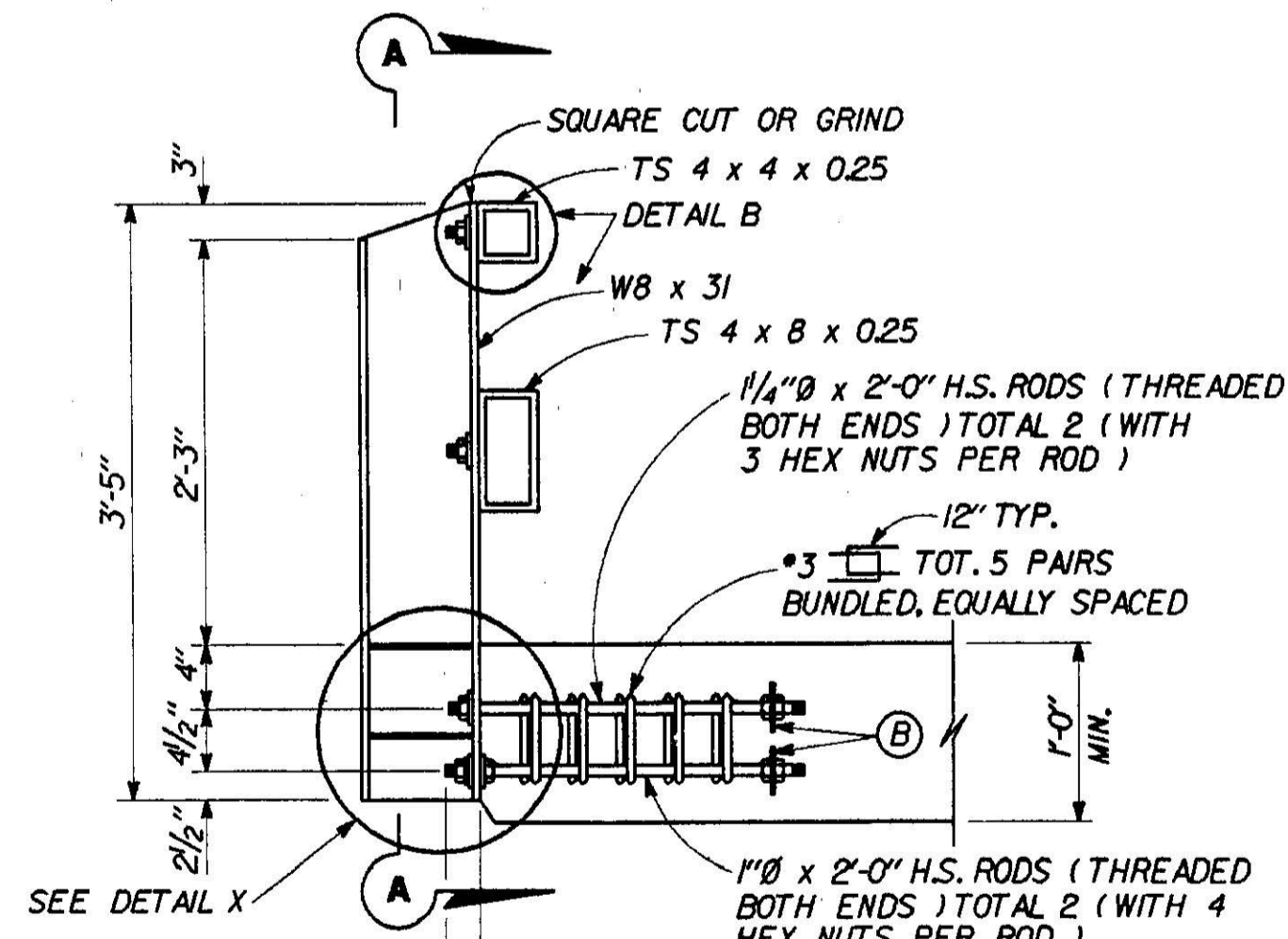
1. POST SHALL BE VERTICAL.
2. TUBING SHALL BE SHOP BENT TO FIT HORIZONTAL CURVE WHEN CURVE RADIUS IS LESS THAN 950'.
3. TUBING SHALL BE PARALLEL TO VERTICAL ALIGNMENT.
4. TUBING SHALL BE CONTINUOUS OVER NOT LESS THAN 3 INTERMEDIATE POSTS, WITH A MINIMUM LENGTH OF 3 PANELS EXCEPT AS NOTED.
5. NO MORE THAN ONE TUBE SPLICE PER PANEL IS PERMITTED, EXCEPT AS NOTED.
6. SPACE POSTS TO PROVIDE 1'-6" MIN. CLEAR BETWEEN EXPANSION JOINTS AND CENTERLINE OF POST.
7. RAIL JOINTS IN TOP AND BOTTOM TUBES AT DECK EXPANSION JOINTS SHALL PROVIDE ALLOWANCE FOR MOVEMENT EQUAL TO WIDTH OF DECK JOINT WITH CORRESPONDING INCREASE IN LENGTH OF SLEEVE.
8. RAILING ON BRIDGE WINGWALLS TO BE PLACED AFTER WALLS ARE BACKFILLED.
9. STUD BOLT NUTS SHALL BE TORQUED TO 175 ft-lbs.
10. ANCHOR BOLT NUTS SHALL BE WRENCH TIGHT.
11. GALVANIZE RAIL ASSEMBLY AFTER FABRICATION.
12. DESIGN HEIGHT OF RAIL IS BASED ON A FUTURE OVERLAY OF 3 INCHES MAXIMUM.
13. FOR DETAILS NOT SHOWN, SEE METAL TUBE BRIDGE RAILING - TYPE 215 - SHEET 2



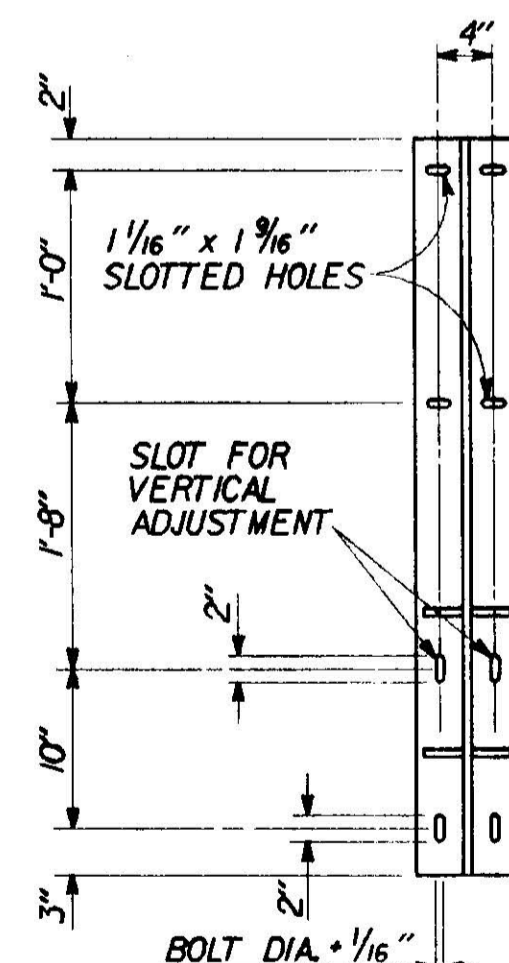
DETAIL C



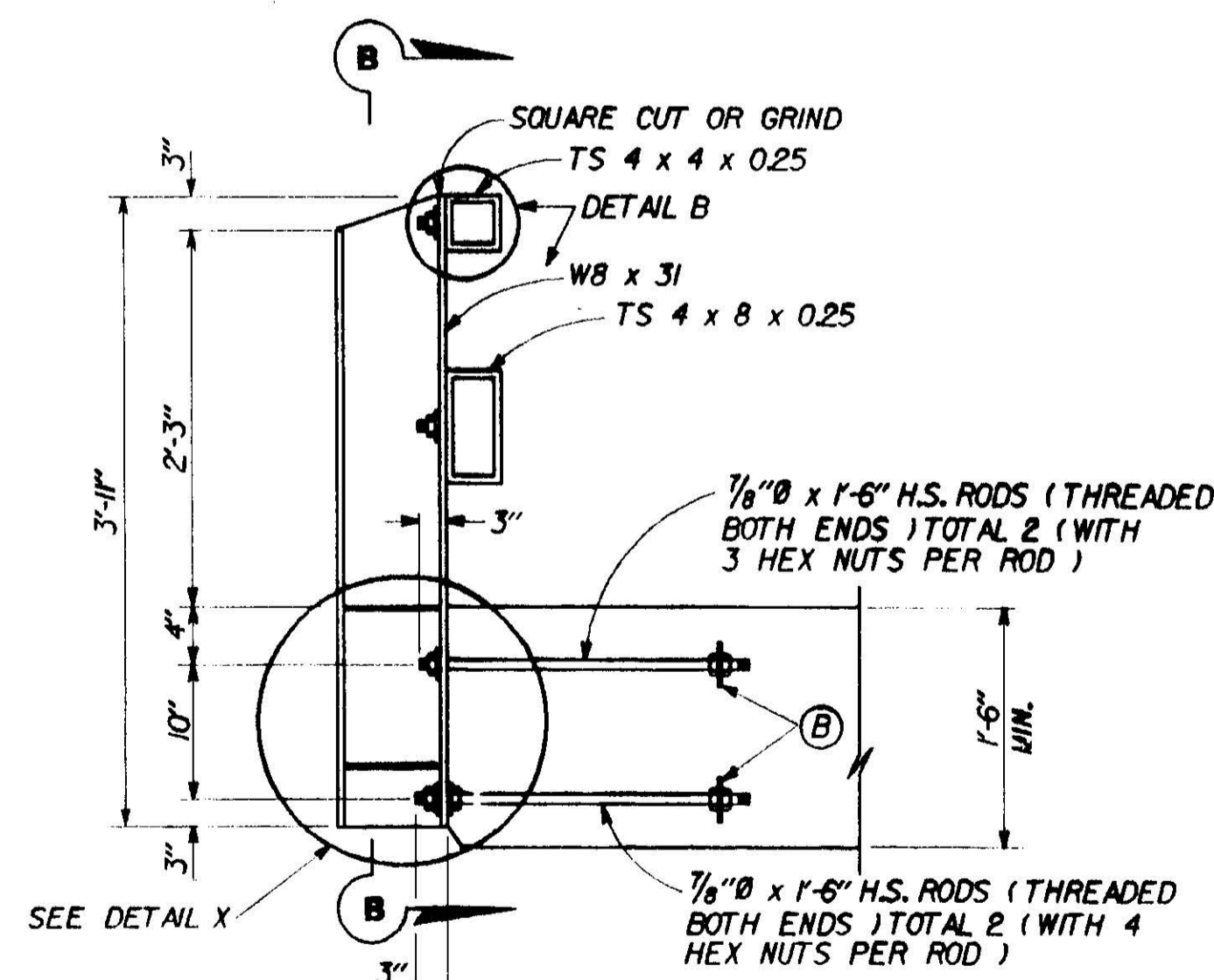
SECTION A-A



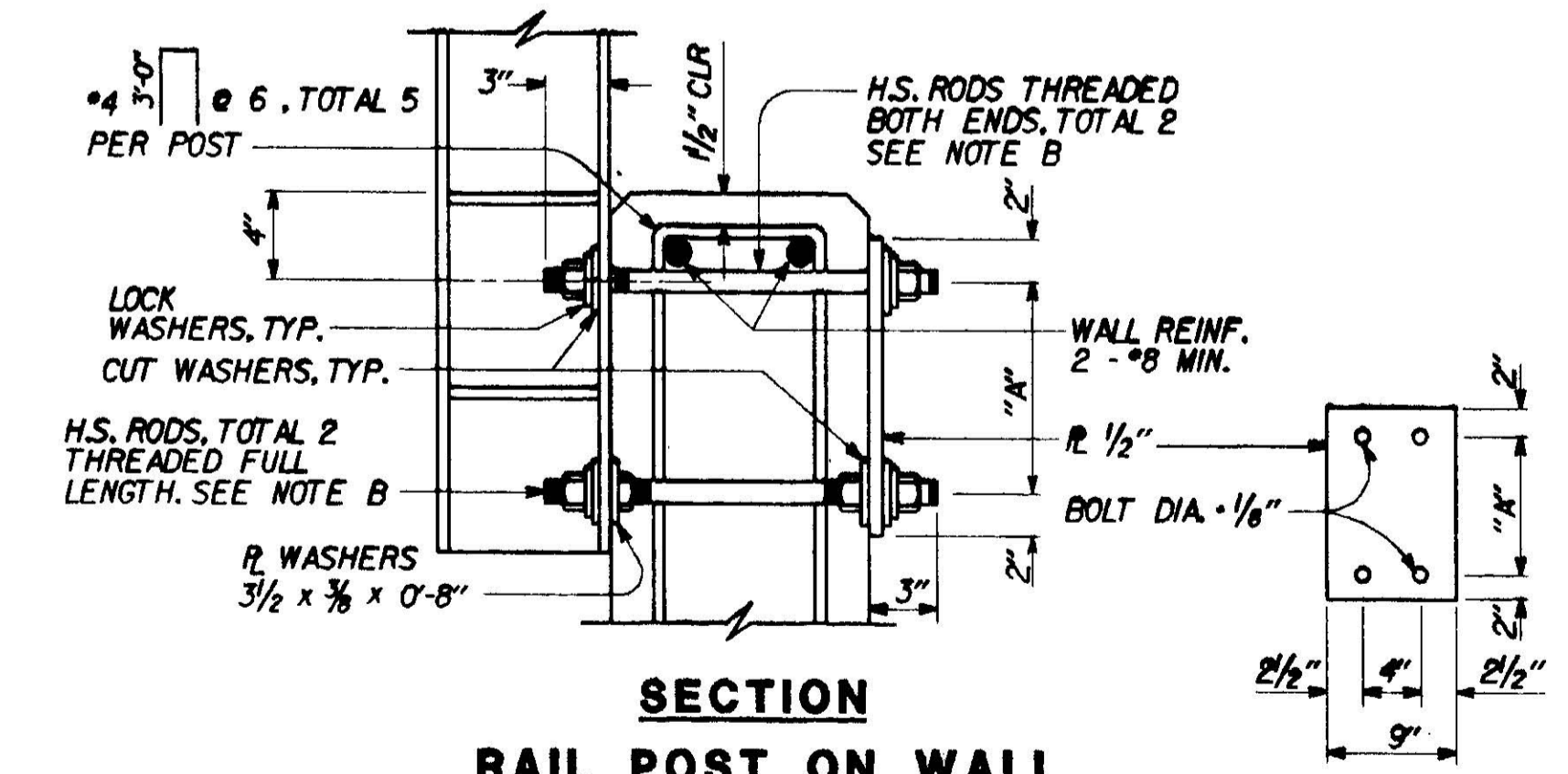
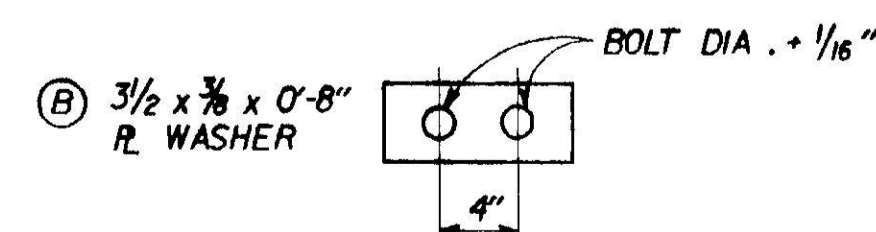
RAIL POST DETAILS - THIN SLAB



SECTION B-B

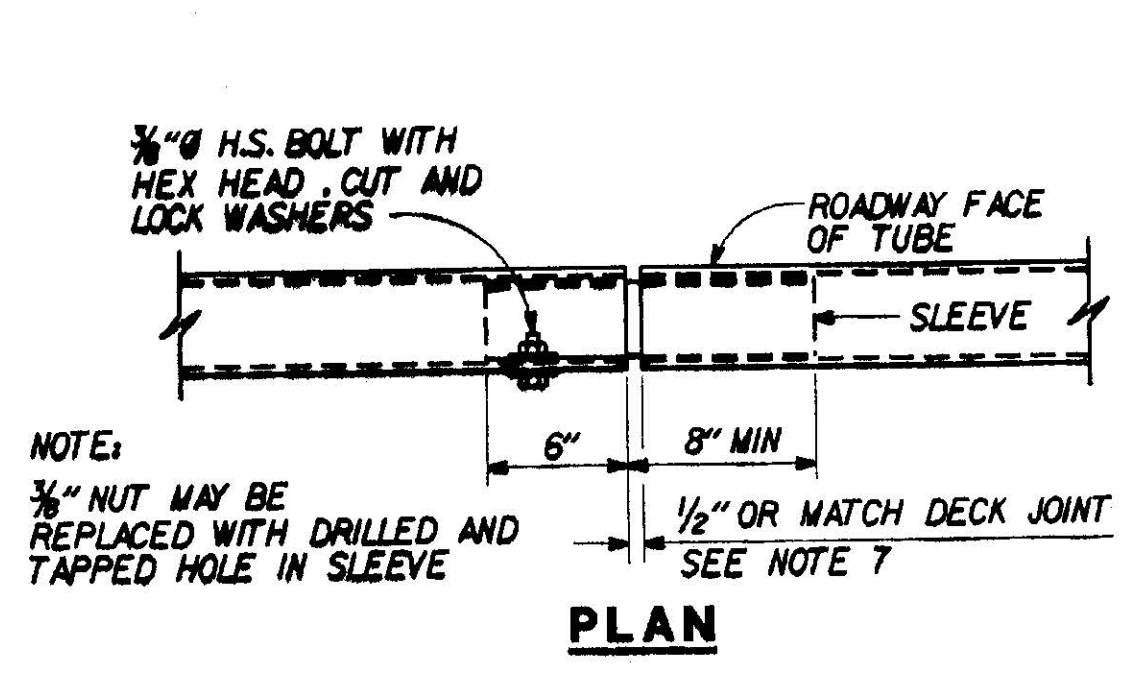


RAIL POST DETAILS - THICK SLAB

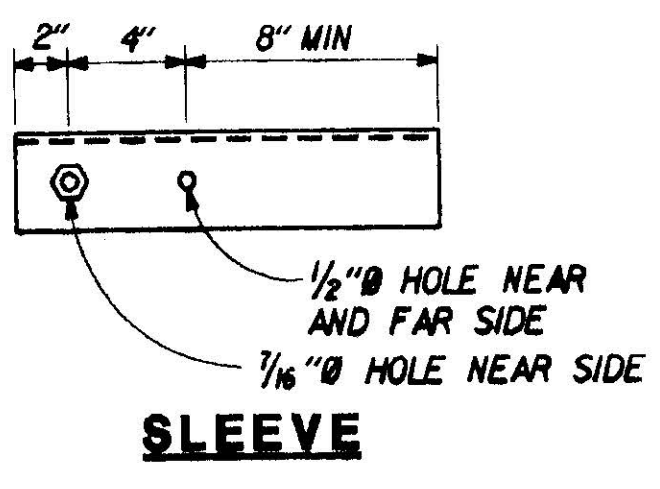


SECTION RAIL POST ON WALL

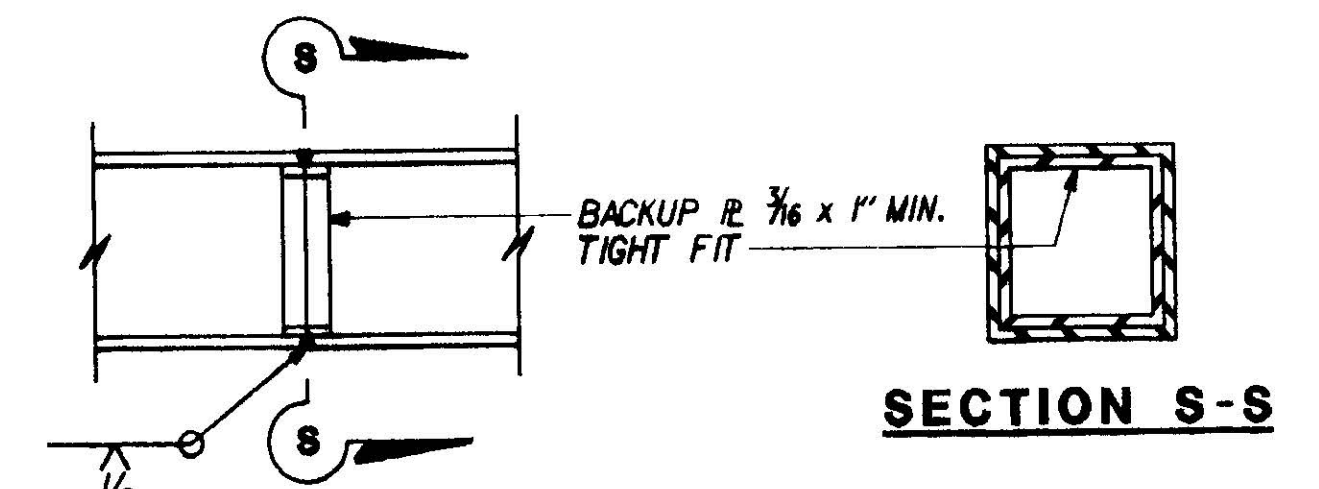
NOTE B: WHEN "A" = 4 1/2" MIN. - TOP RODS ARE 1/4"Ø
 WHEN "A" = 10" MIN. - RODS ARE 1/8"Ø



PLAN

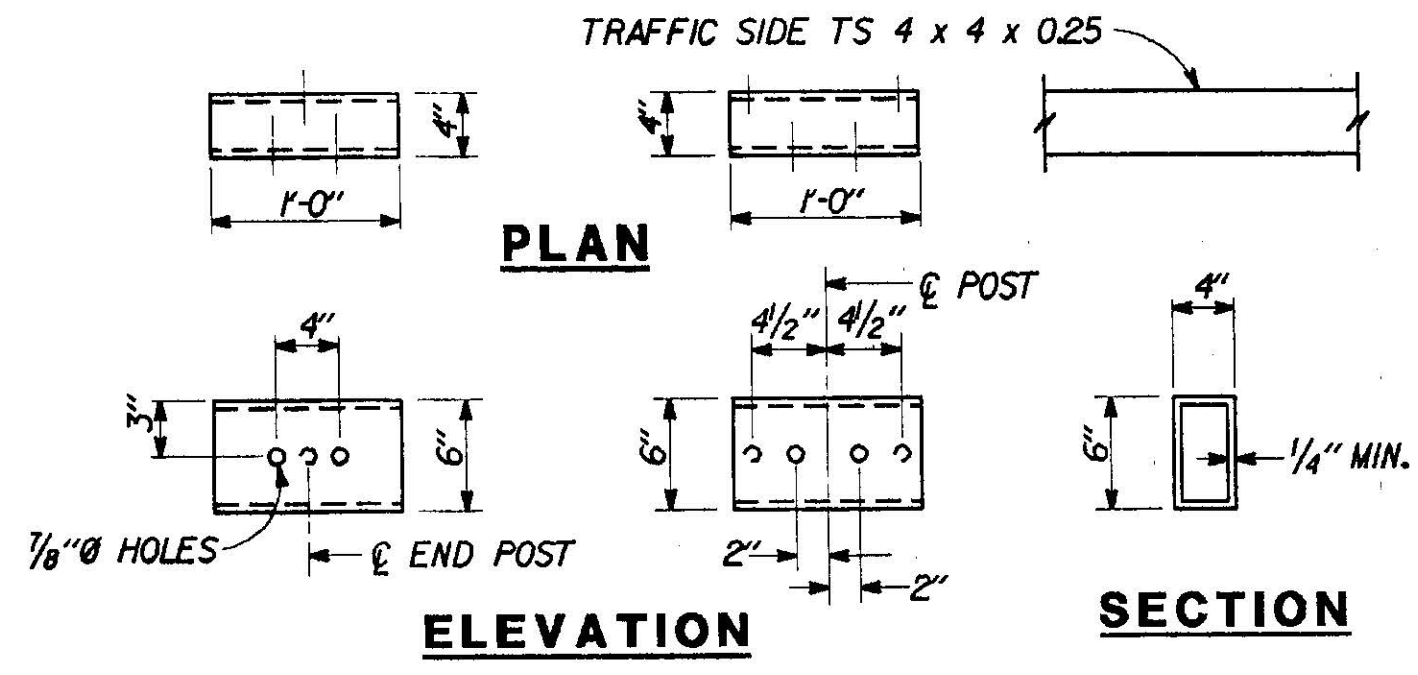


SLEEVE



SECTION S-S

SHOP FABRICATION - WELDED TUBE SPLICE
TS 4 x 4 x 0.25 SHOWN, TS 4 x 8 x 0.25 SIMILAR

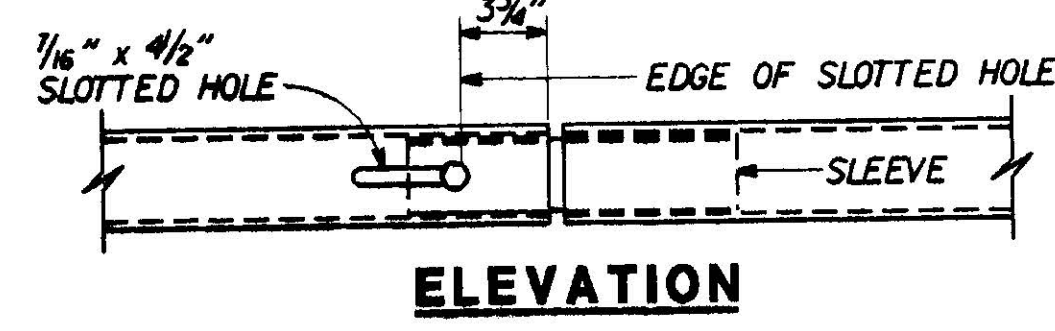


PLAN

ELEVATION

SECTION

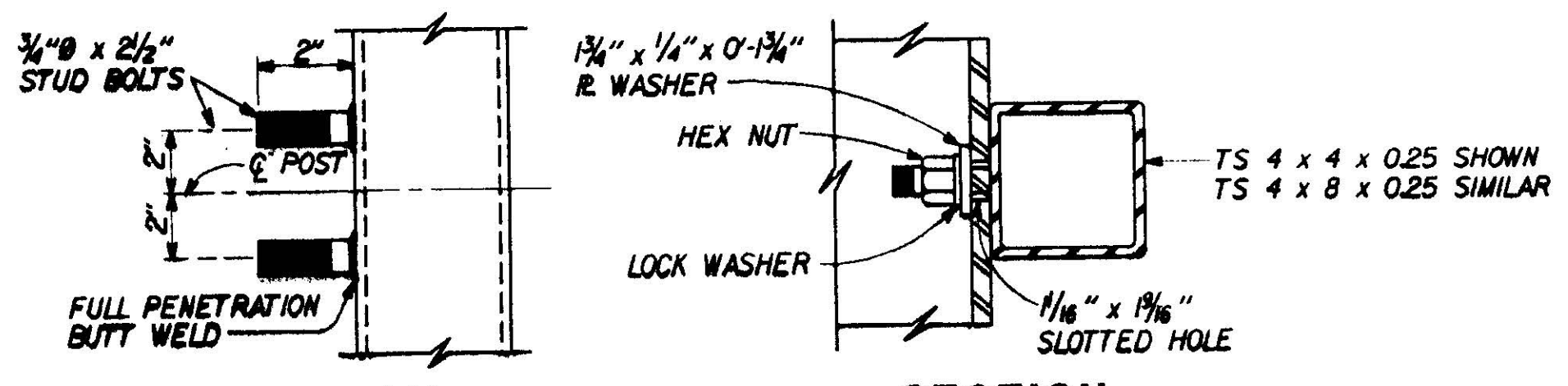
METAL BOX SPACERS



ELEVATION

DETAIL A - TUBE SPLICE

TS 4 x 4 x 0.25 SHOWN, TS 4 x 8 x 0.25 SIMILAR

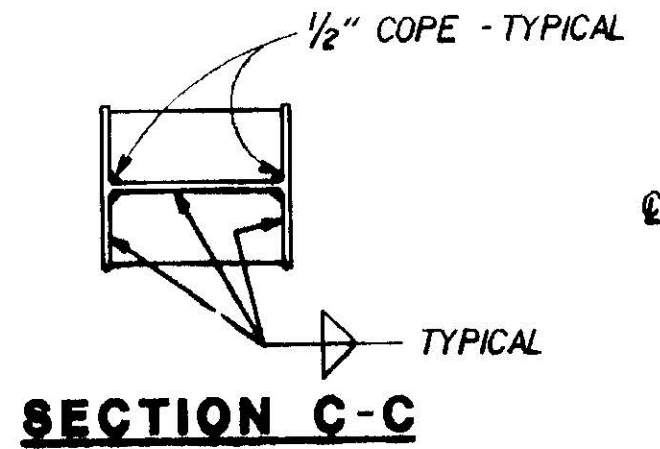


PLAN

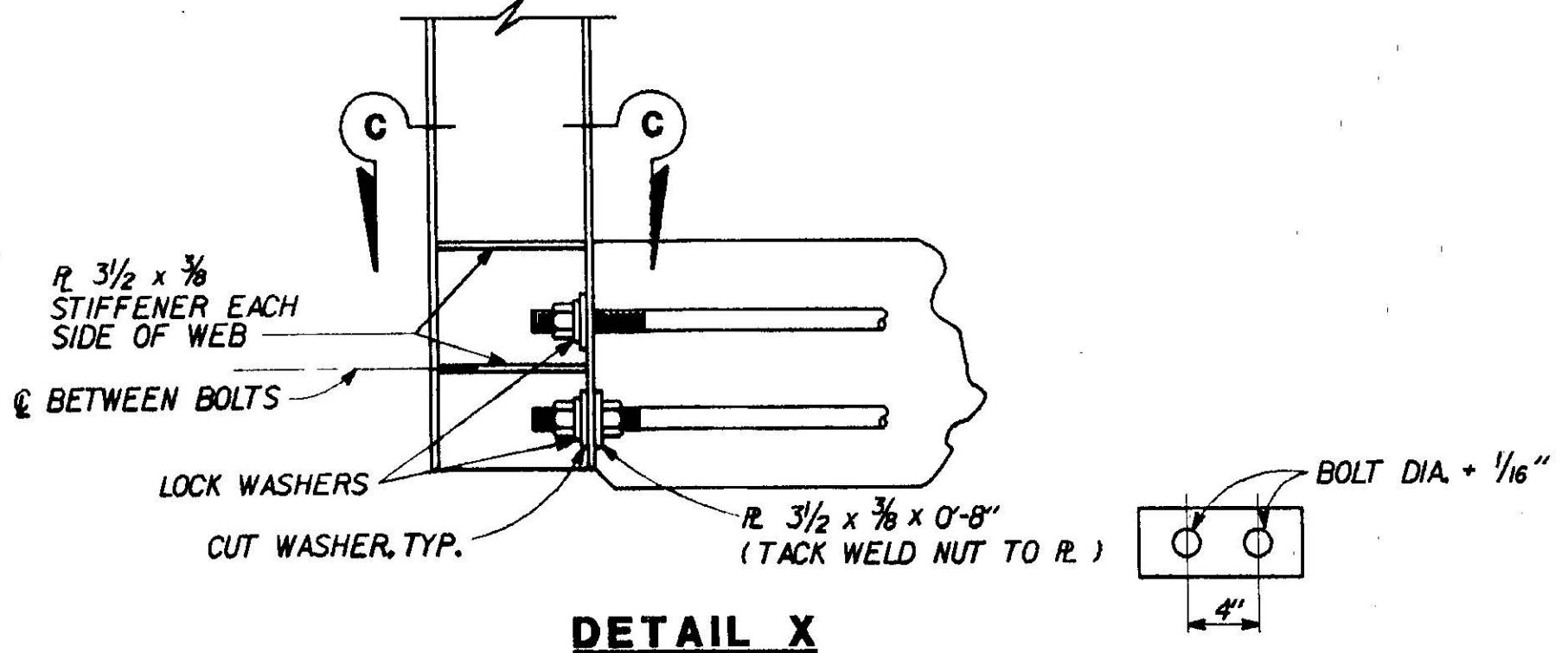
SECTION

DETAIL B

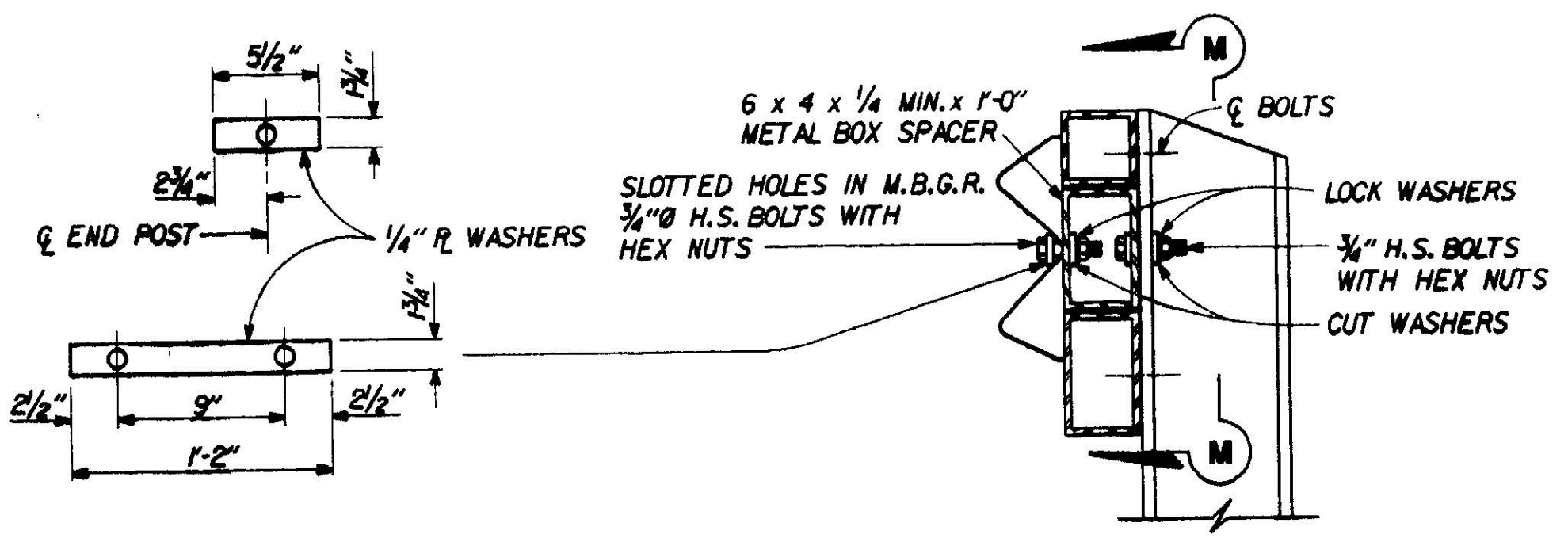
TS 4 x 4 x 0.25 SHOWN, TS 4 x 8 x 0.25 SIMILAR



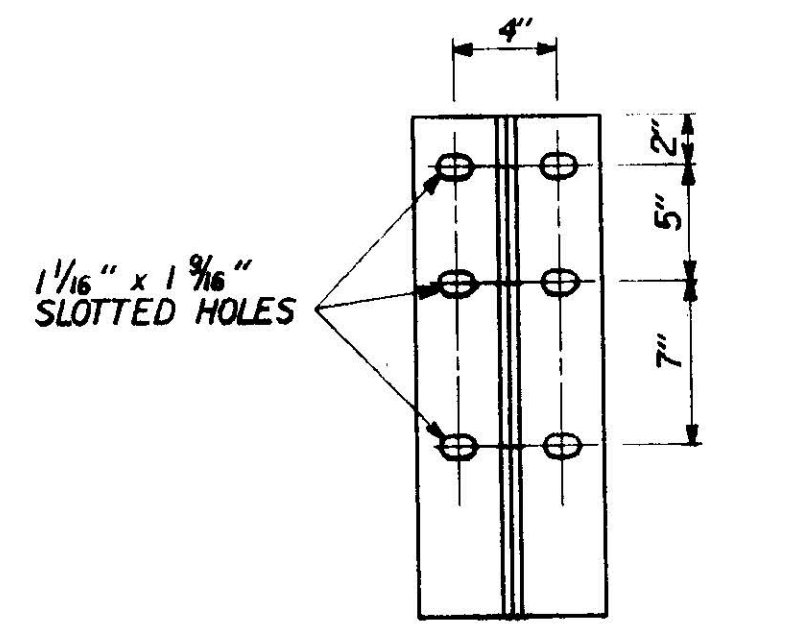
SECTION C-C



DETAIL X



DETAIL Z



SECTION M-M

NOTE: FOR DETAILS NOT SHOWN, SEE METAL TUBE BRIDGE RAILING - TYPE 215 - SHEET 1