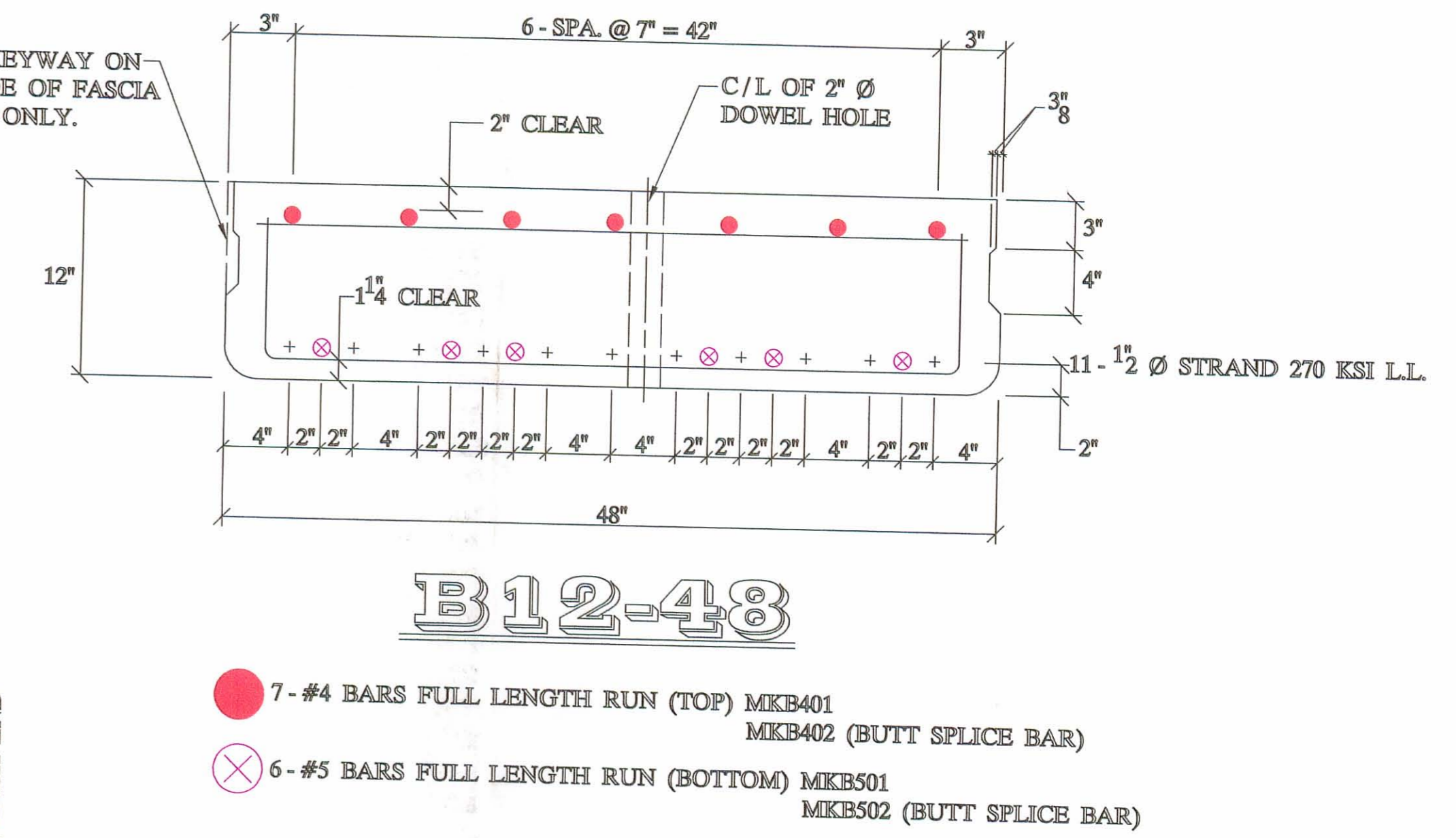
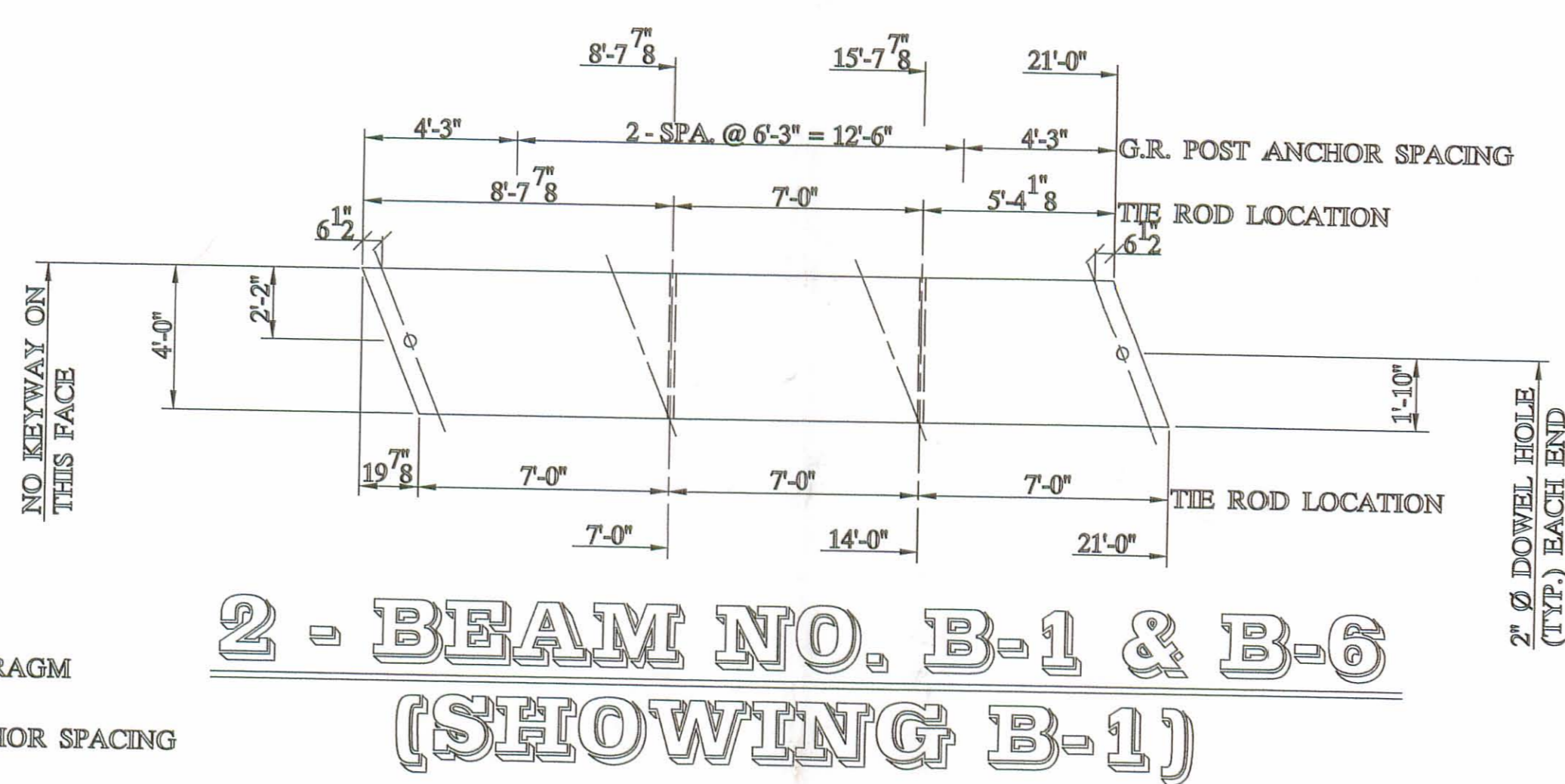
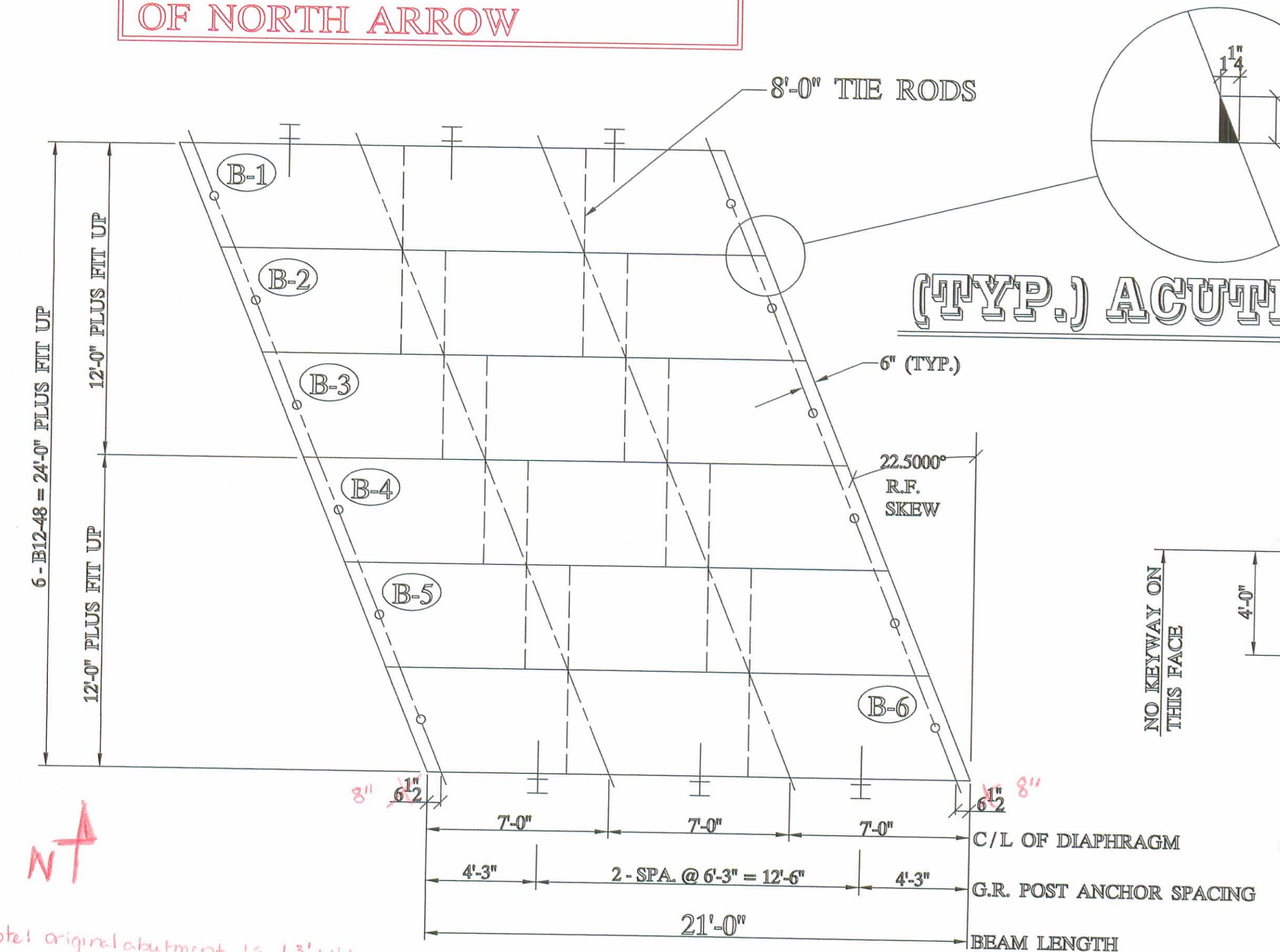


PLEASE INDICATE DIRECTION OF NORTH ARROW



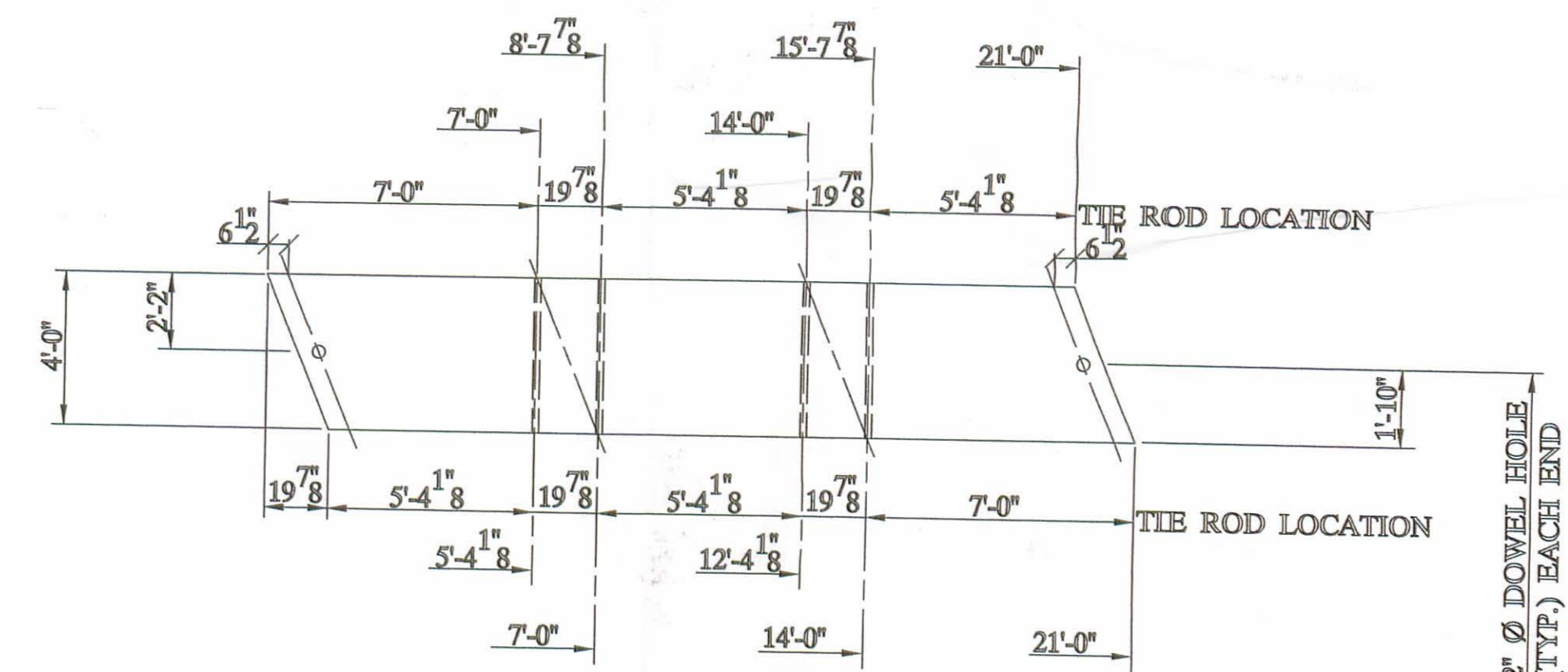
Note: original abutment is 1.3' wide measured to face. We want to center dowels on abutments - extend extra length past the abutment. This change is 8" or 8.5" per your judgment. 18.1' FF is the dimension to road.

Stephane Giff  
Abutment Engineer

DECK PLAN

QUALITY CONTROL NOTE :

- STRAND IS LOW LAX.
- INITIAL LOAD IS 30,982 # / STRAND.
- REBAR IS ALL GRADE - 60.
- STIRRUPS UNDER STRAND.



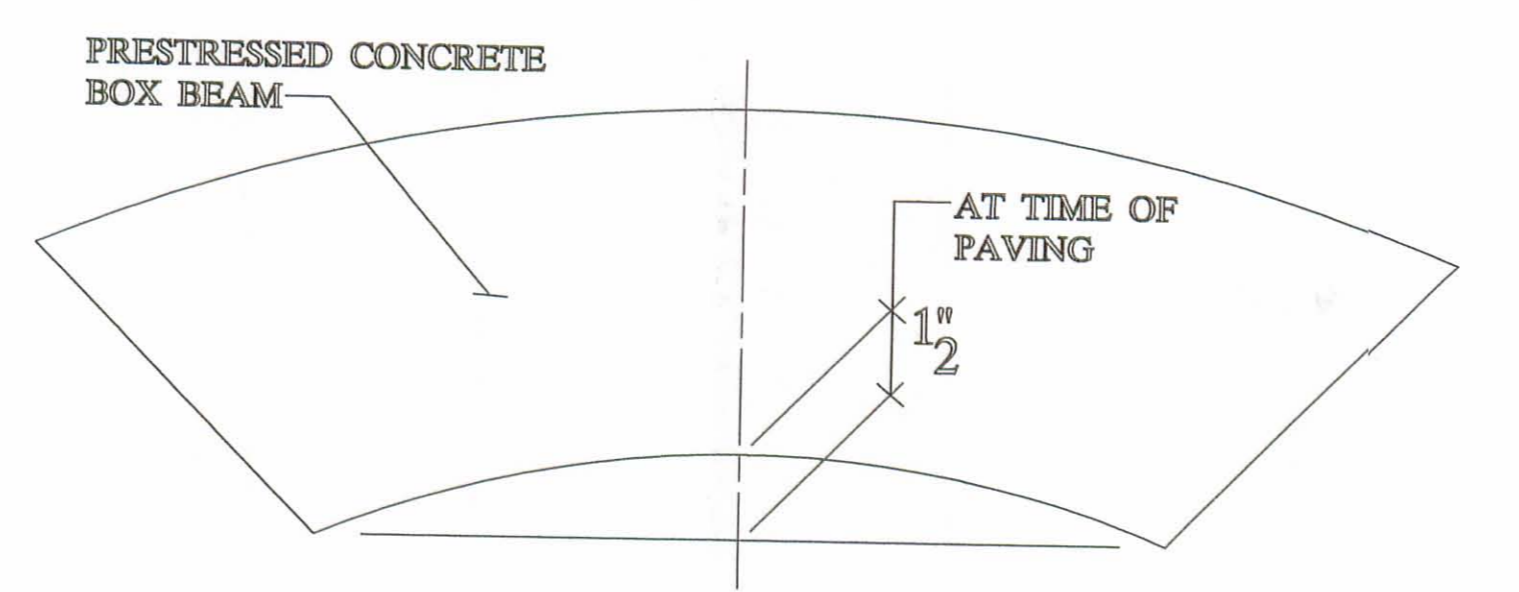
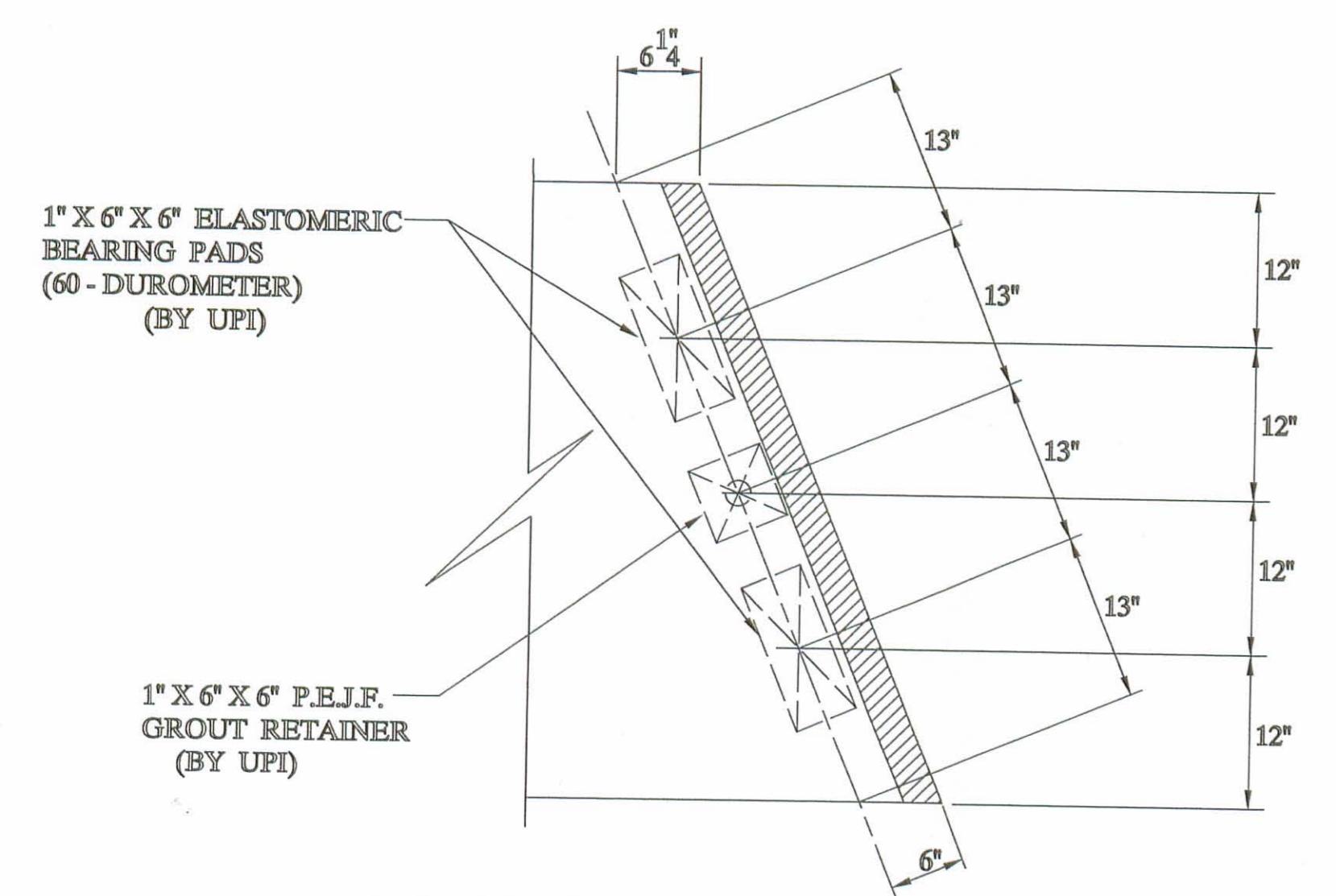
APPROVED BY LOGAN CO. ENGINEER

8-1-01

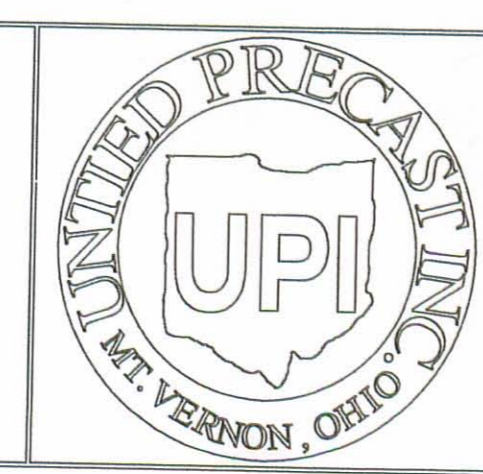
SL note on deck plan

BILL OF MATERIALS

NO	ITEM	QTY / BEAM	NOTES	TOTAL
1	BEAM WEIGHT		13,100 #	
2	CONCRETE	3.2 CY.		19.2 CY.
3	CALCIUM NITRITE	12.8 GAL		76.8 GAL.
4	STRAND		(D.C.I.) 4- GAL / CY.	2,640 L.F.
5	RE-STEEL		1/2" Ø STRAND 270 KSI L.L. GRADE - 60	2,670 #
6	TIE ROD	8'-0"	1" Ø STEEL ROD	10 EA.
7	TIE ROD SLEEVES			80 L.F.
8	TYPE - B - ANCHORS			12 EA.
9	TYPE - C - ANCHORS			6 EA.
10	DOWELS & SLEEVES			12 EA.
11	INTERTUF - 132			0.3 GAL.
12	SILANE			1 GAL.
13	JUTE			105 L.F.
14	BEARING PADS		1" X 6" X 6" (50 - DURO.)	24 EA.
15	GUARDRAIL POST		(TYPE - 2) (4) OFF OF DECK	10 EA.
16	GUARDRAIL ELEMENT			50 L.F.
17	TUBULAR BACK - UP			50 L.F.
18	P.E.J.F. (AT ABUT. ENDS)		1" X 3" X 52'	13 S.F.
19	NON - SHRINK GROUT ADDITIVE			9 LBS.



CAMBER DETAIL



UNITED PRECAST INC.

ADDRESS : ROUNDHOUSE LANE  
MOUNT VERNON, OHIO 43050

PHONE : (740) 393-1121  
FAX : (740) 393-0044

DESCRIPTION : BOX BEAM DETAILS

SCALE : \_\_\_\_\_

DRAWN BY : PHIL

REVISIED : \_\_\_\_\_

DATE : JULY 2001

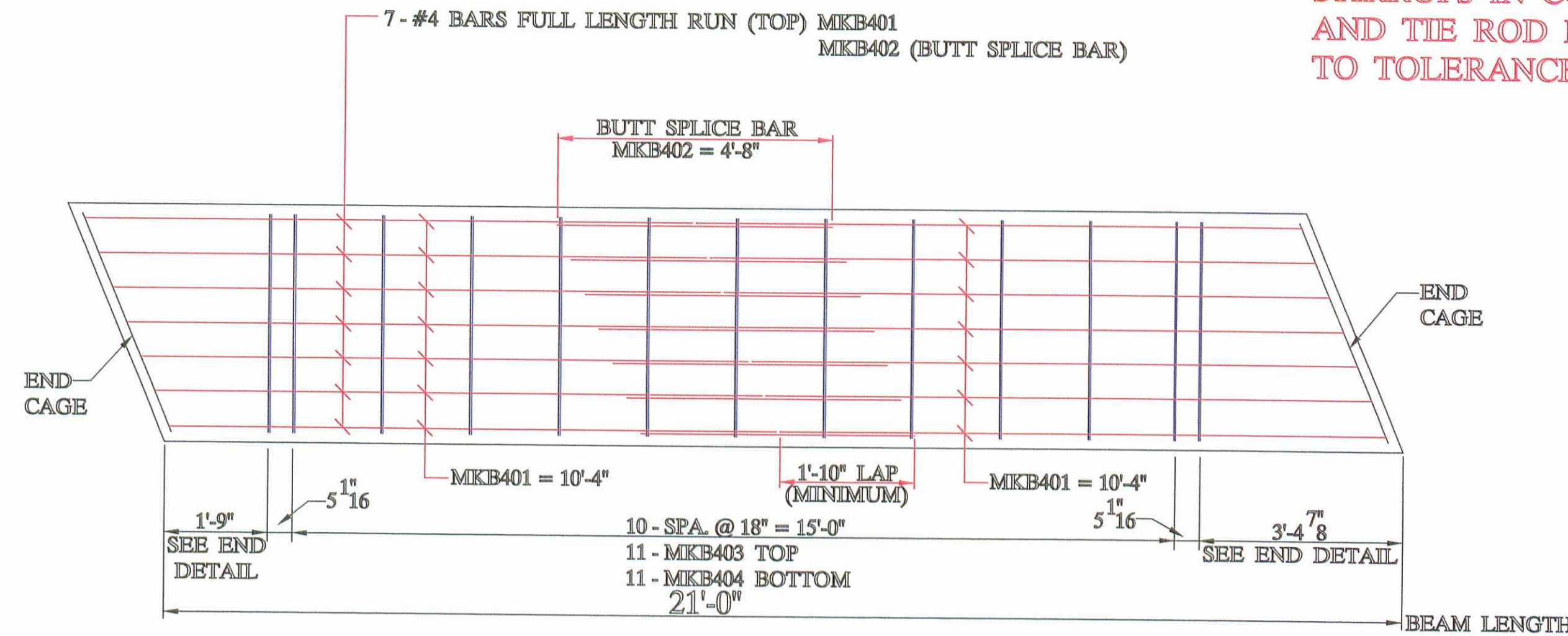
APPROVED BY : E.O.C. 7/24/01

DRAWING NO. 1 OF 3

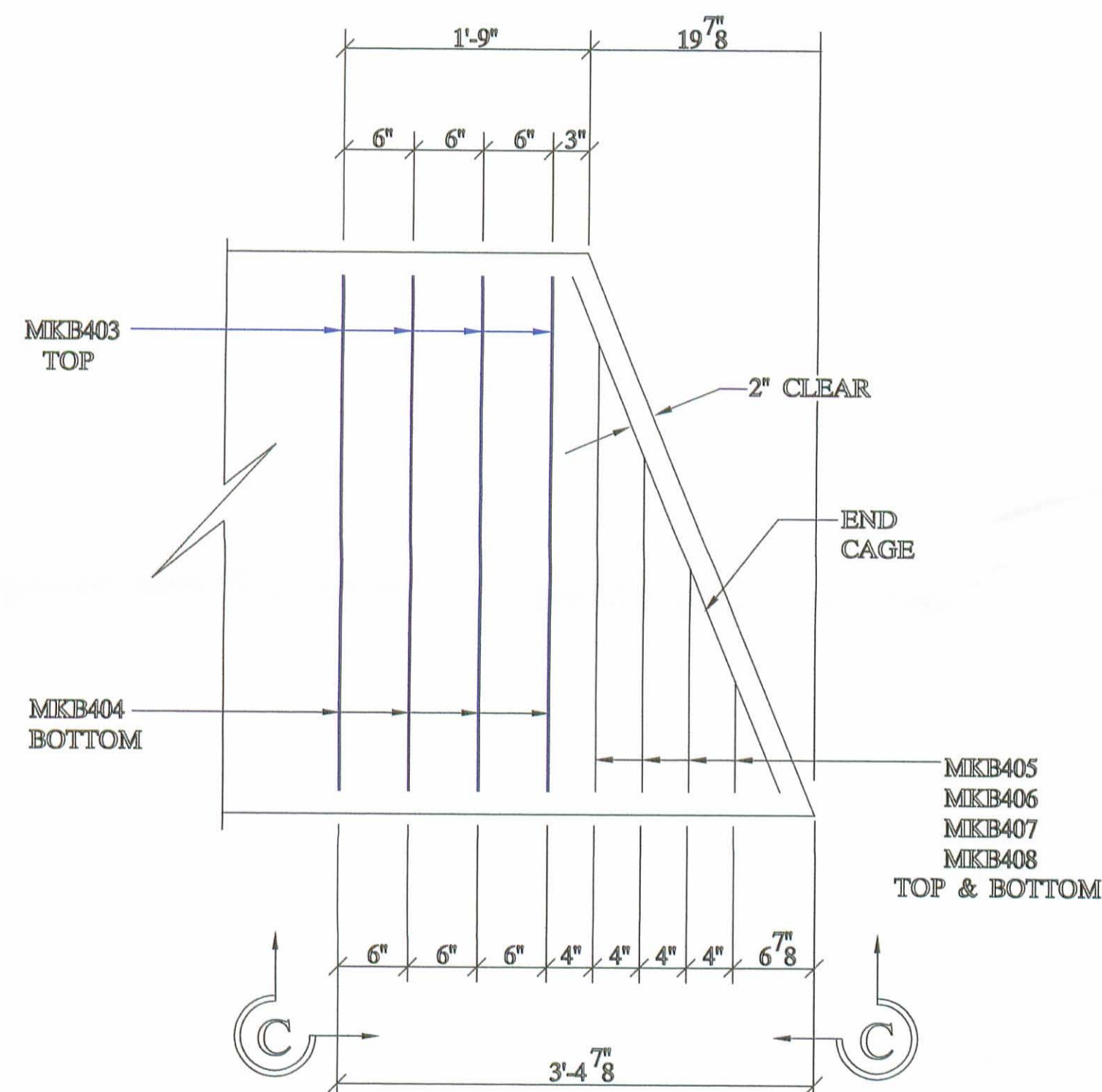


**NOTE :**

STIRRUPS IN CONFLICT WITH GUARDRAIL ANCHORS AND TIE ROD POCKETS, ARE TO BE SHOP ADJUSTED TO TOLERANCE OF ± 1", OR ANOTHER STIRRUP ADDED.



**REINFORCING LAYOUT**

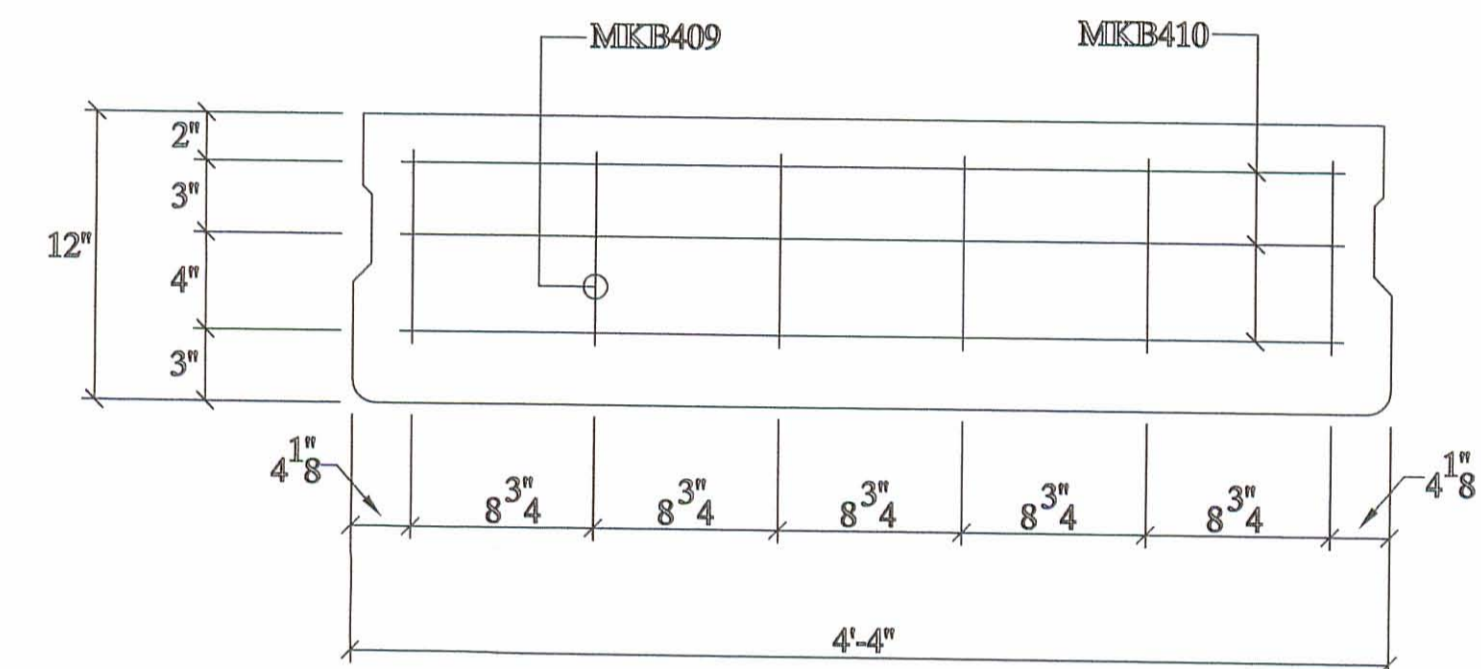
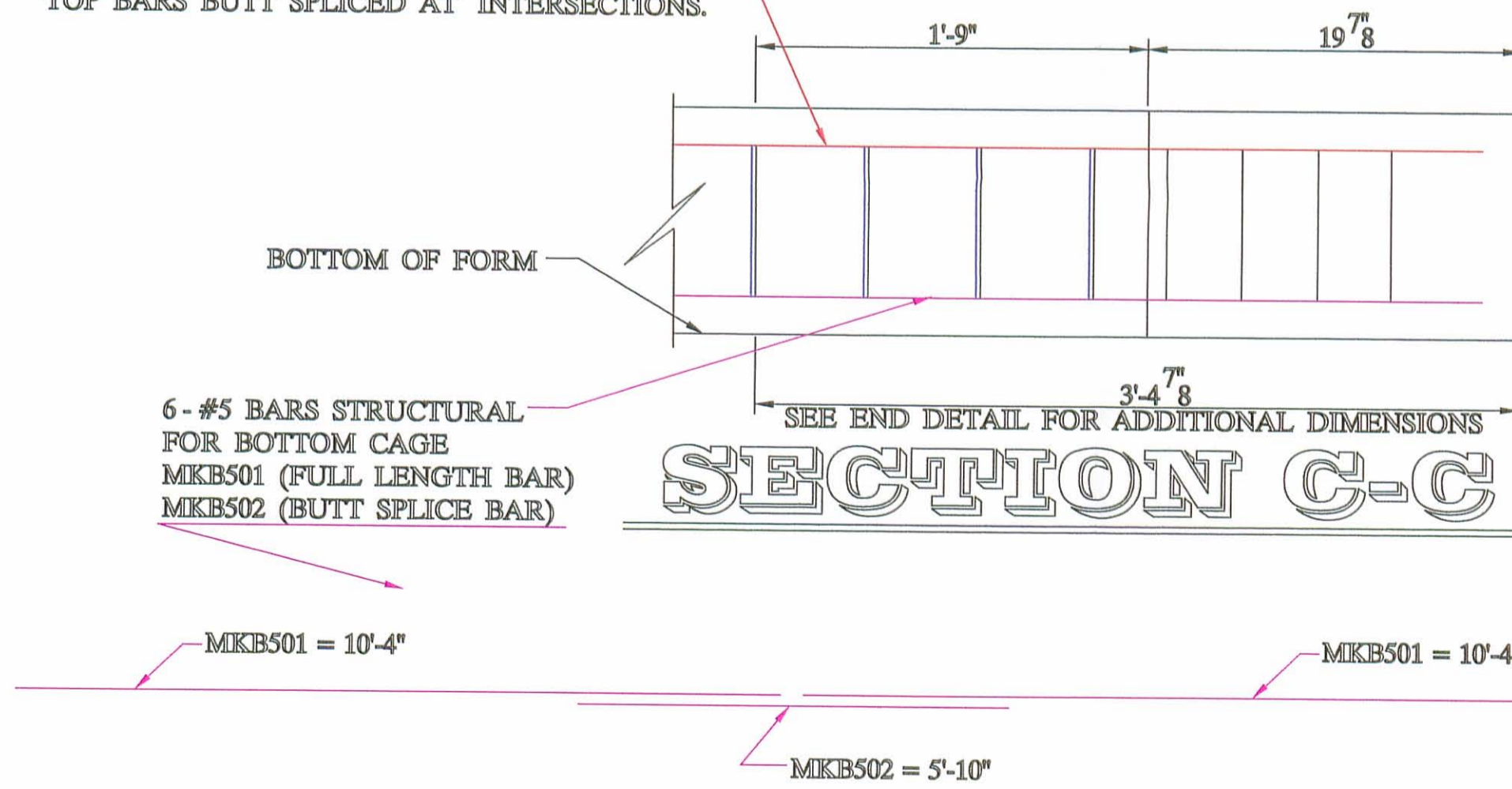


**(TYP.) END DETAIL (WITH SKEW)**

**NOTE :**

MINIMUM BUTT SPLICE LENGTH REQUIRED IF CAGE FIT UP IS PERFECT IS AS FOLLOWS:  
 #4, UNCOATED 44" (22" EACH SIDE)  
 #5, UNCOATED 58" (29" EACH SIDE)

TOP LONGITUDINAL BARS & TOP STIRRUPS ASSEMBLED IN TOP CAGE & PLACED IN BED IN UNITS OF VARIOUS LENGTH WITH TOP BARS BUTT SPICED AT INTERSECTIONS.

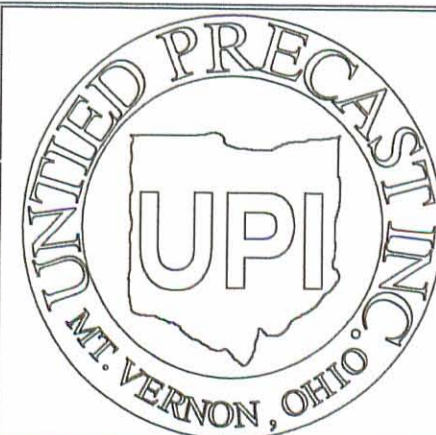


**BEAM END CAGE (WITH SKEW)**

6 - B12-48 X 21'-0" WITH 22.5° R.F. SKEW

**BAR LIST**

MARK	SIZE	LENGTH	QUANTITY	SHAPE	A	B	C	D	E
B401	4	10'-4"	84	TYPE - 3	10'-4"				
B402	4	4'-8"	42	TYPE - 3	4'-8"				
B403	4	3'-7"	114	TYPE - 3	43"				
B404	4	4'-8 1/4"	114	TYPE - 2	43"	8"			
B405	4	1'-10 1/2"	24	TYPE - 2	9"	8"			
B406	4	2'-8 1/2"	24	TYPE - 2	19"	8"			
B407	4	3'-6 1/2"	24	TYPE - 2	29"	8"			
B408	4	4'-3 1/2"	24	TYPE - 2	38"	8"			
B409	4	8"	72	TYPE - 3	8"				
B410	4	3'-8 3/4"	36	TYPE - 3	44 3/4"				
B501	4	10'-4"	72	TYPE - 3	10'-4"				
B502	4	5'-10"	36	TYPE - 3	5'-10"				



**UNITED PRECAST INC.**

ADDRESS : ROUNDHOUSE LANE  
 MOUNT VERNON, OHIO 43050  
 PHONE : (740) 393-1121  
 FAX : (740) 393-0044

DESCRIPTION :

REINFORCING DETAILS

JOB NAME :

ITEM 515  
 BRIDGE NO. C.R. 52 - 0.02  
 LOGAN COUNTY

DATE :

JULY 2001

APPROVED BY :

E.O.C. 7/24/01

SCALE :

DRAWN BY :

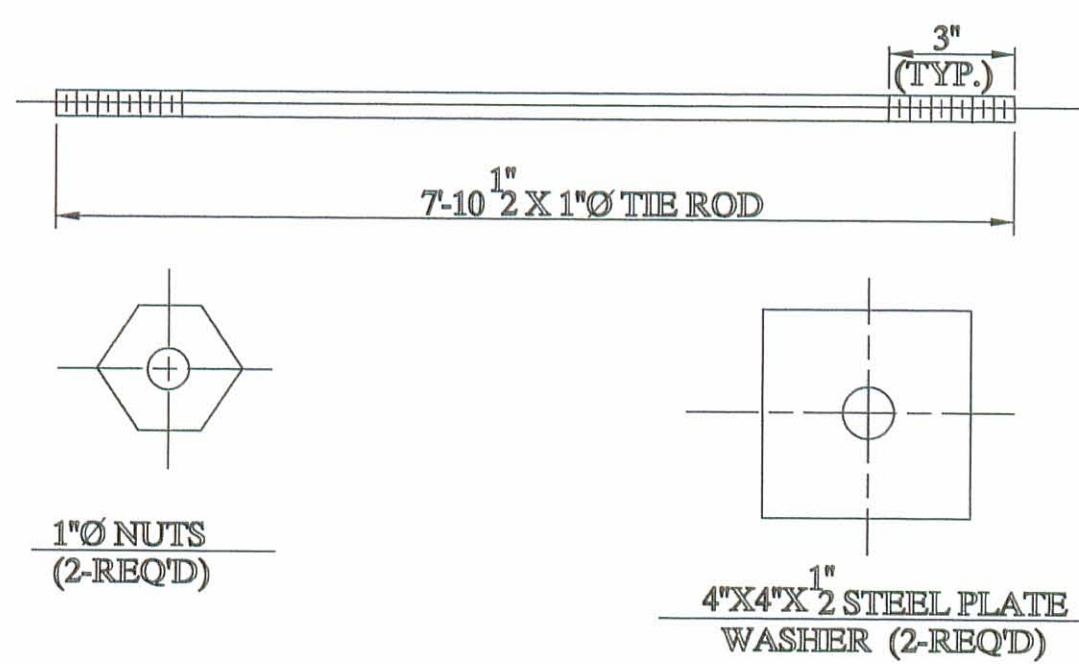
PHIL

REVISED :

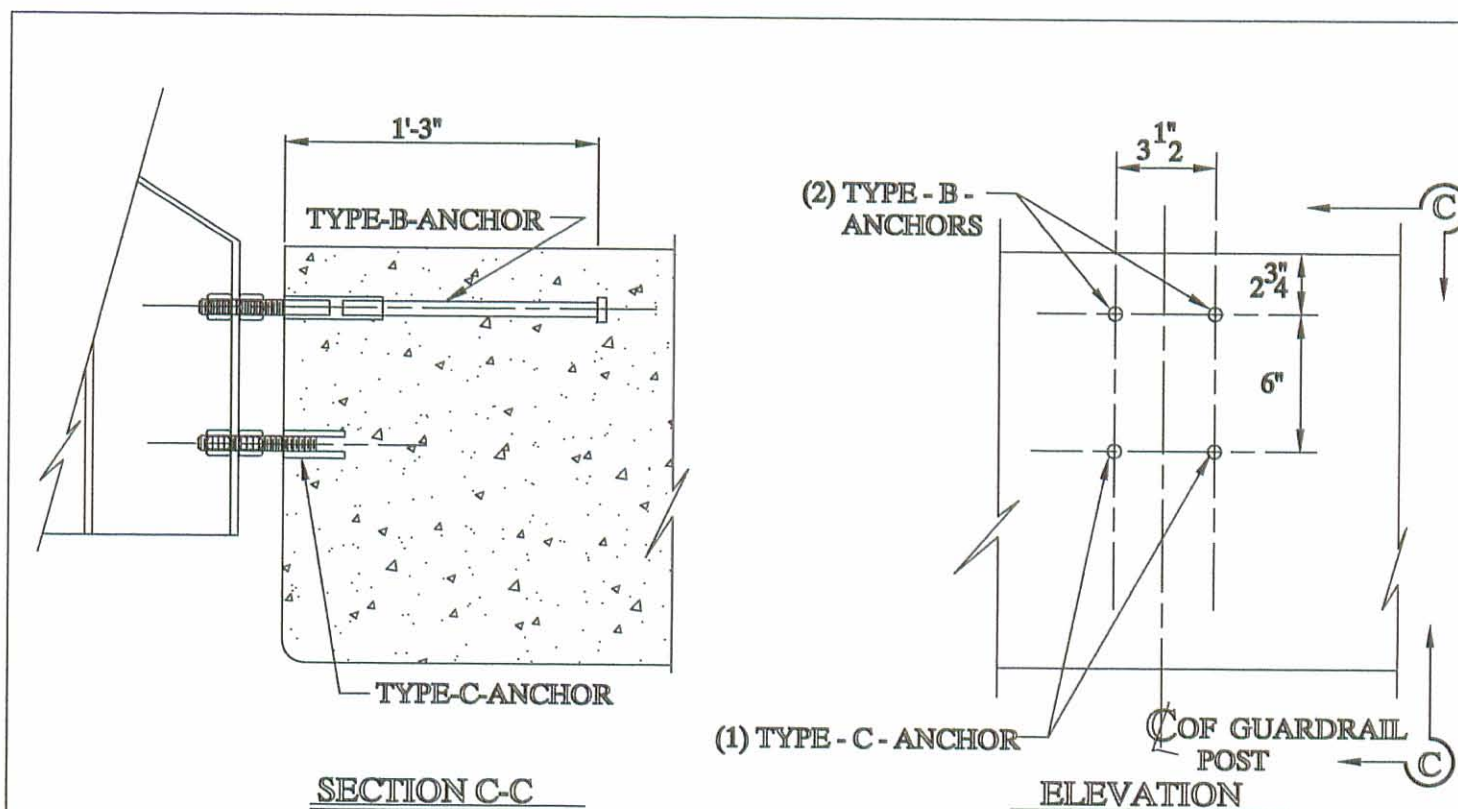
DRAWING NO.  
 2 OF 3



### 8'-0" TIE ROD ASS'Y

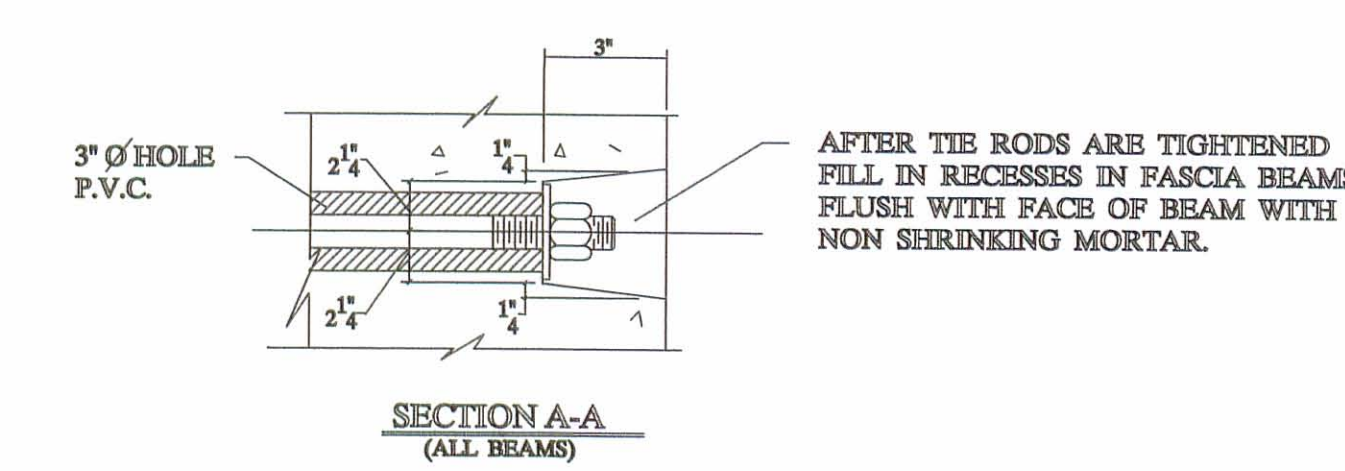
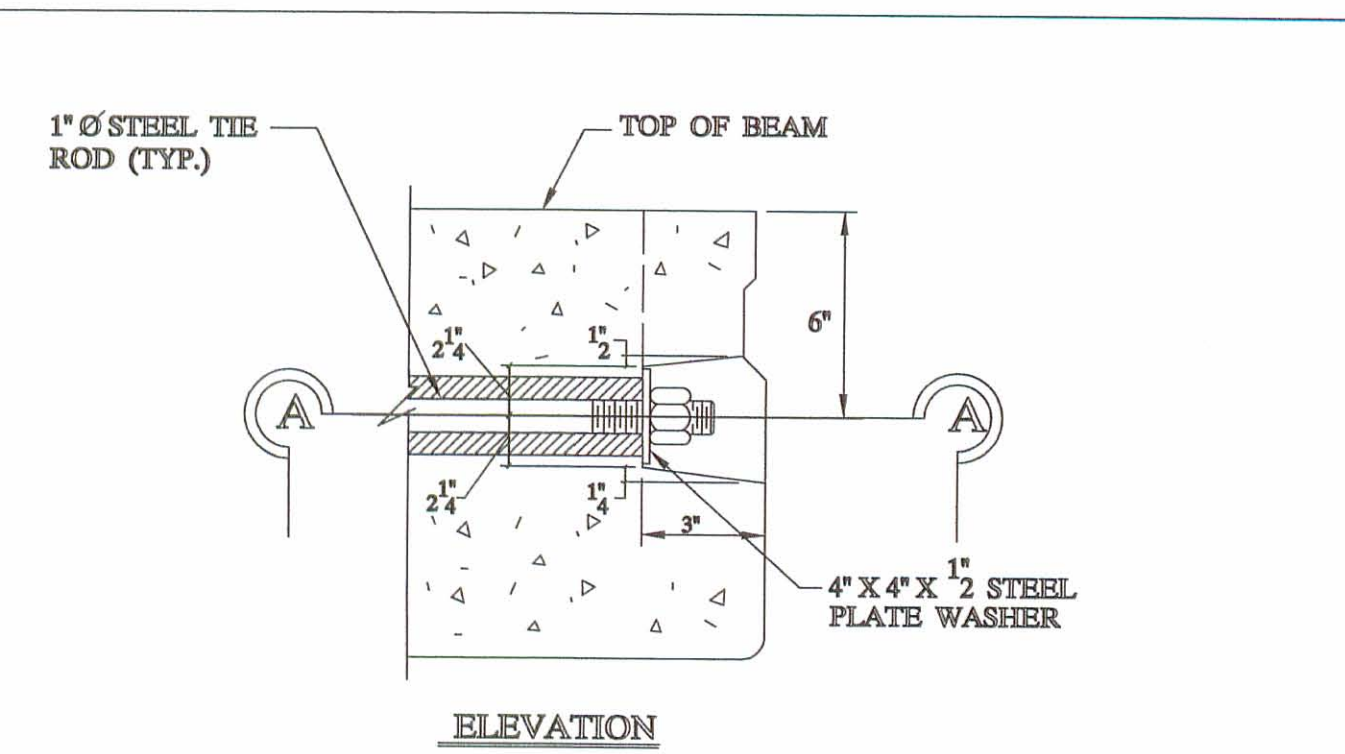


NOTE:  
ALL ITEMS INCLUDING TIE RODS ACCESSORIES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-123 OR 153. PER CMS 711.02, UNLESS OTHERWISE NOTED.



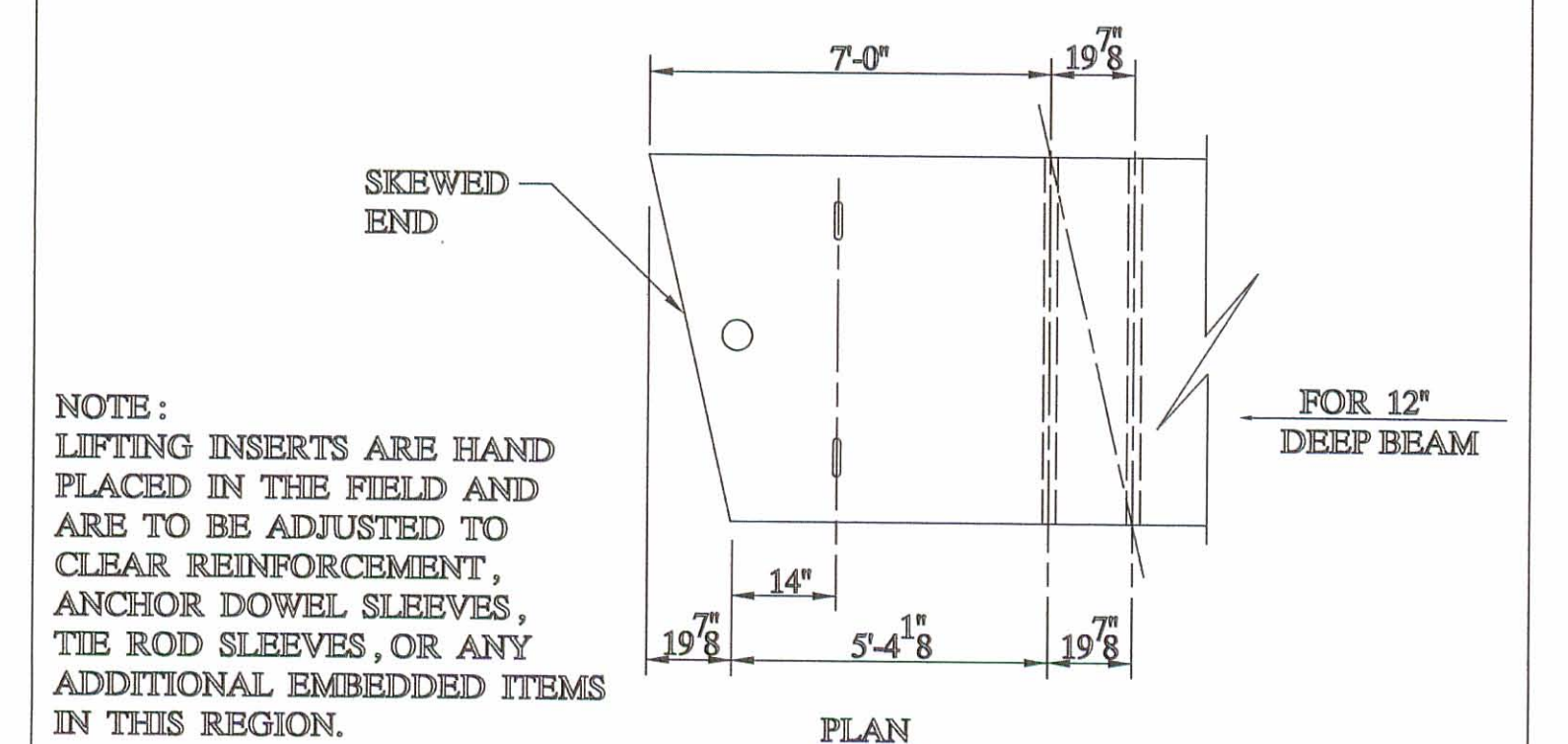
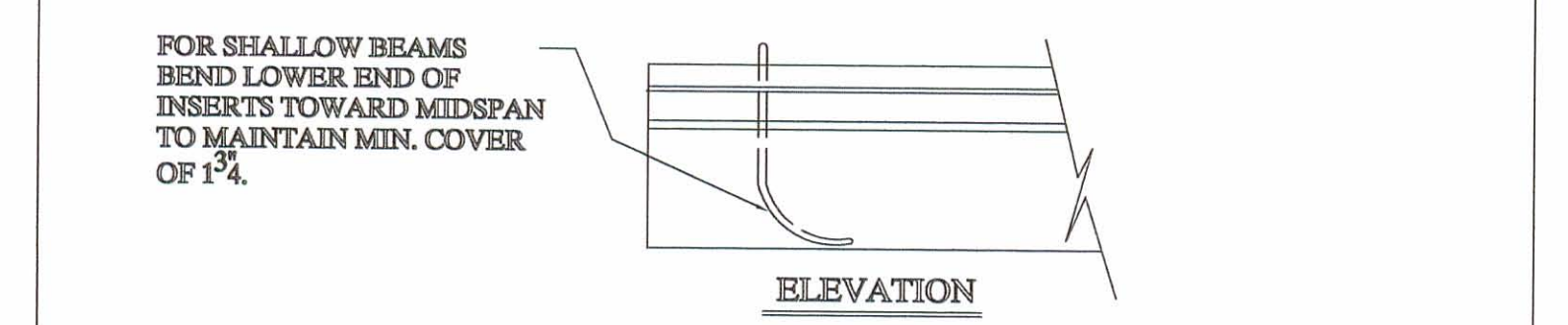
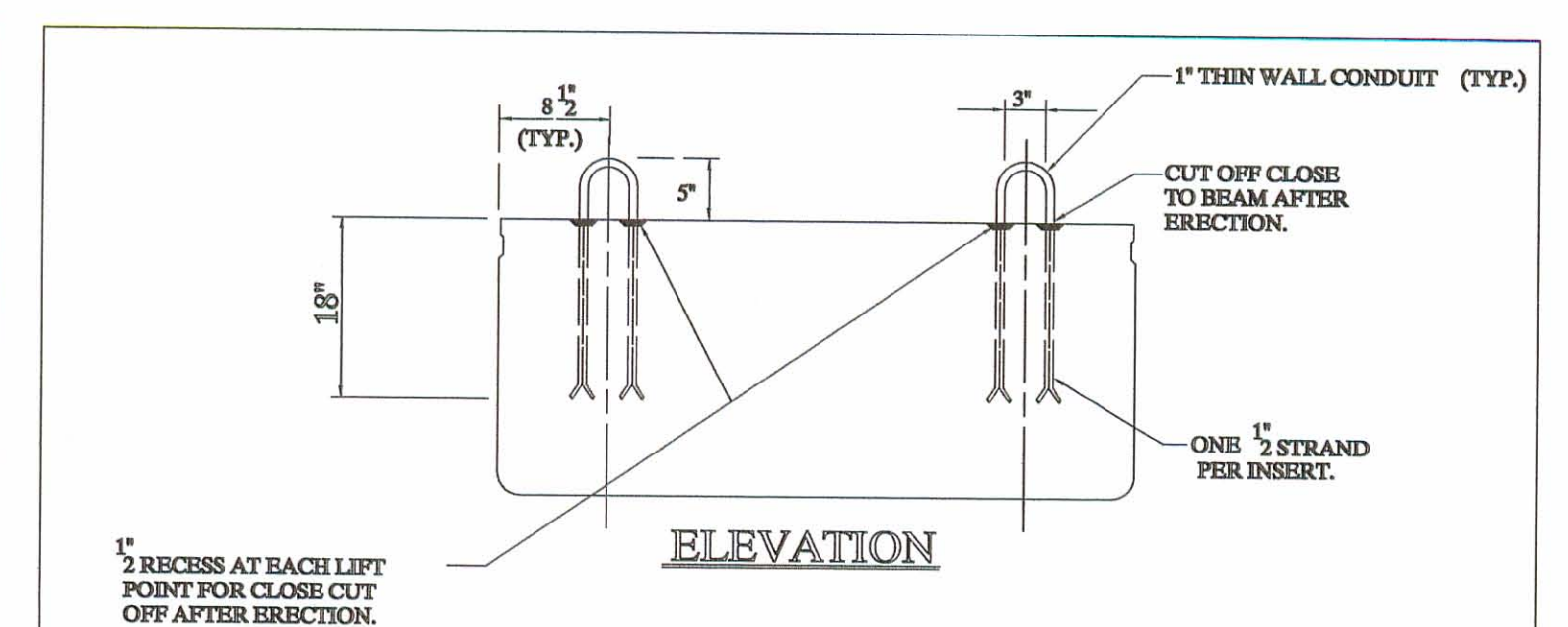
NOTE:  
ONE TYPE 'C' ANCHOR PROVIDE S FOR (2) STUDS (SEE BELOW).

NOTE:  
TYPE B & C ANCHOR ASSEMBLIES SHALL CONFORM TO PHYSICAL PROPERTIES OF ASTM-A-325. EXCEPT MIN. ELONGATION SHALL BE 10%. THE CHEMICAL PROPERTIES ARE WAIVED.



### END DETAIL OF TRANSVERSE TIE ROD ANCHORAGE

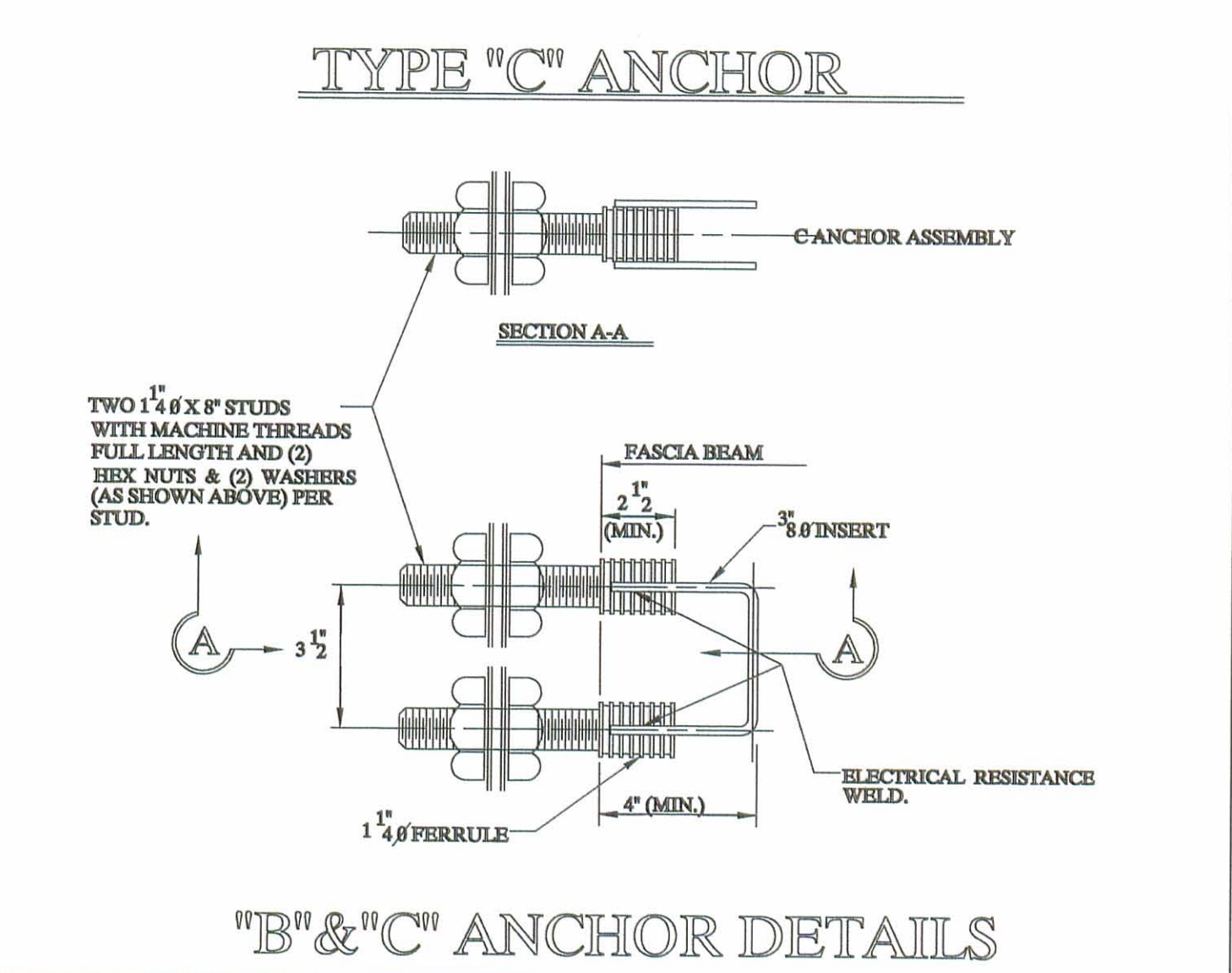
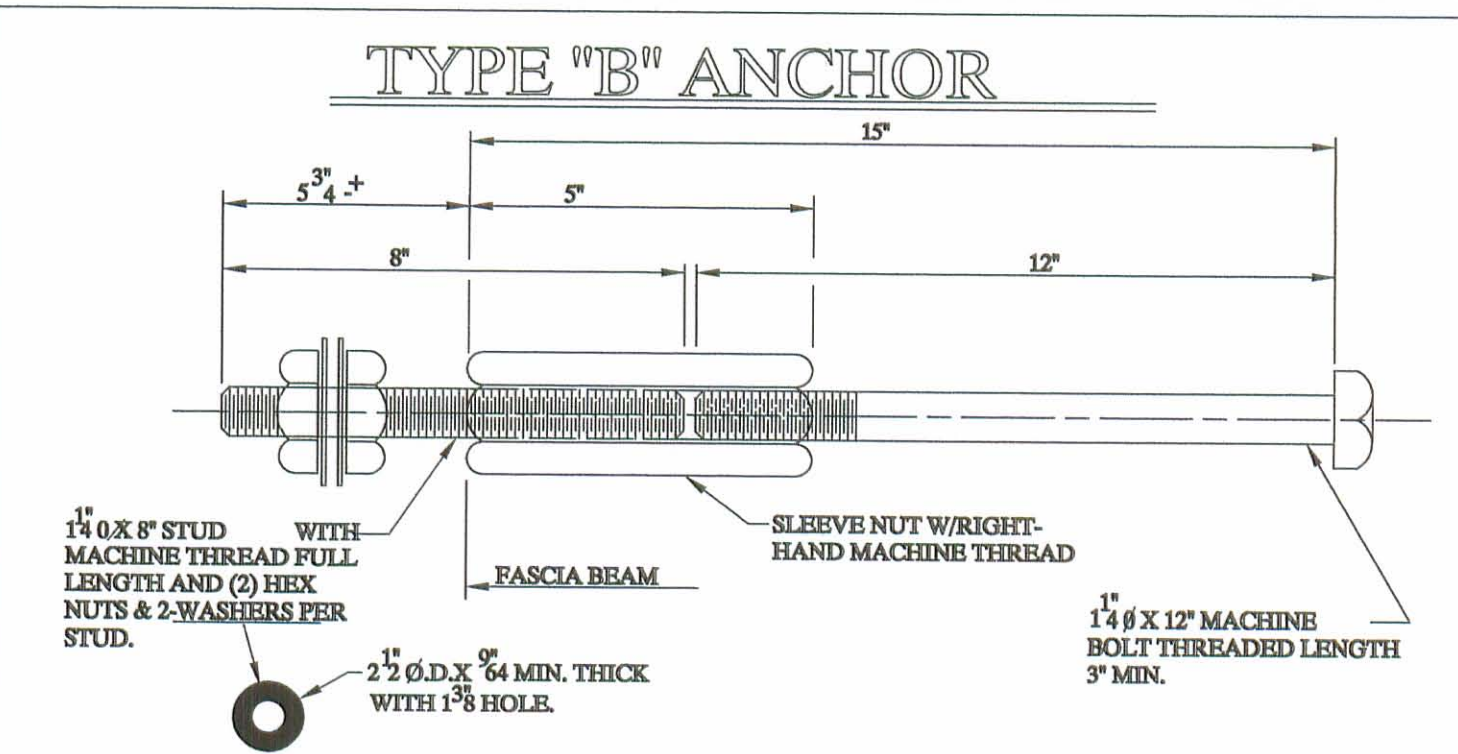
NOTE:  
TIE RODS SHALL BE A311-G1018 STEEL, OR A-36 MODIFIED.



### LIFTING INSERT DETAIL

NOTE:  
LIFTING INSERTS ARE HAND PLACED IN THE FIELD AND ARE TO BE ADJUSTED TO CLEAR REINFORCEMENT, ANCHOR DOWEL SLEEVES, TIE ROD SLEEVES, OR ANY ADDITIONAL EMBEDDED ITEMS IN THIS REGION.

- NOTE:
- 1) GALVANIZE ALL HARDWARE PER CMS. 711.02.
  - 2) PROVIDE A BROOM FINISH ON TOP SURFACE OF BEAM SUITABLE FOR WATERPROOFING.
  - 3) ADD D.C.I. TO CONCRETE (4 - GAL. / CUBIC YARD).
  - 4) WATERPROOF BEAM ENDS.
  - 5) DETENSION STRAND SYMMETRICALLY ABOUT CENTERLINE.

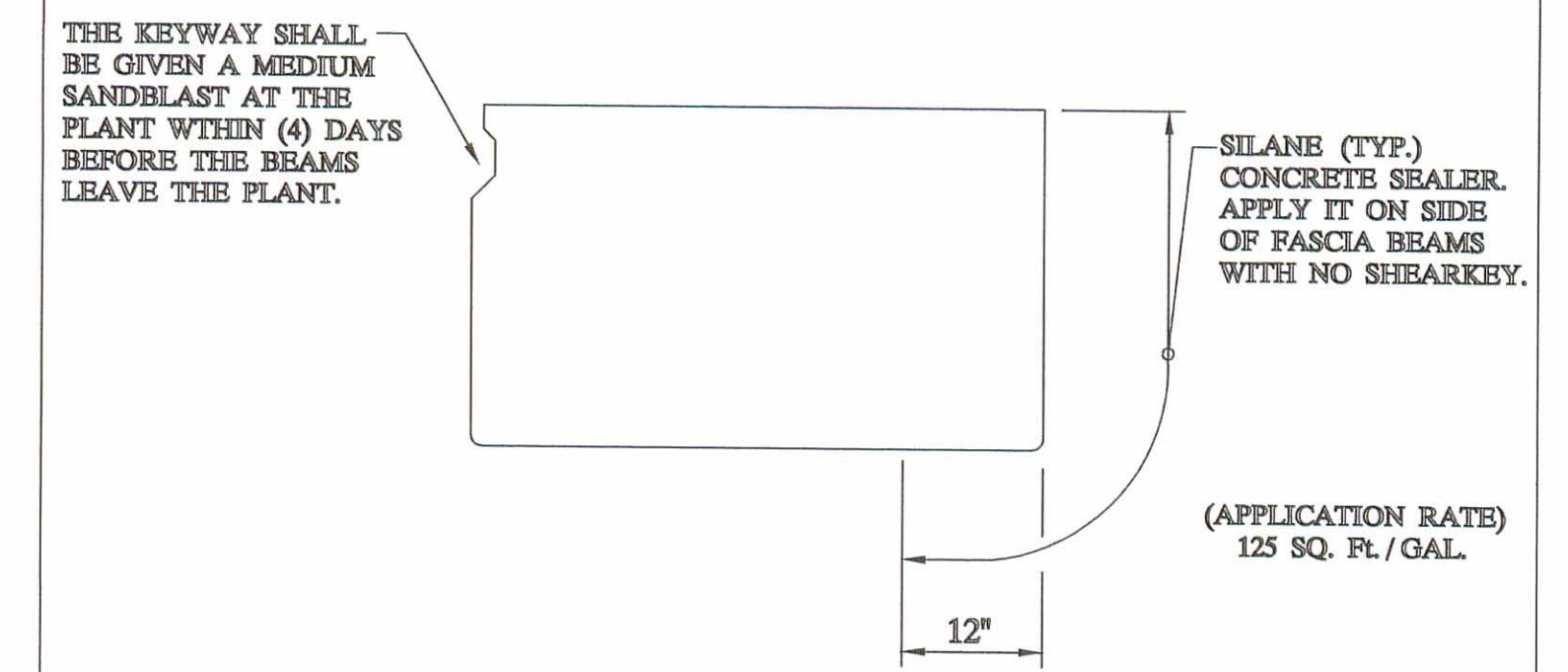


### "B" & "C" ANCHOR DETAILS

### SPECIFICATIONS

- DESIGN LOADING: HS20-44 AND ALTERNATE MILITARY LOADING.
- CONCRETE: COMPRESSIVE STRENGTH,  $f_c = 5500$  PSI @ 28 DAYS (SHIPPING).  $f_c = 4000$  PSI @ RELEASE.
- PRESTRESSING STRAND: ASTM A-416 GRADE 270, 1/2" DIAMETER, SEVEN WIRE, UNCOATED LOW RELAXATION STRAND,  $A_s = .153$  in.  $f_b = 270$  KSI. INITIAL STRESS:  $0.75 f_b = 202.5$  KSI.
- REINFORCING STEEL: GRADE-60: ASTM A-615, ASTM A-616, ASTM A-617. UNIT STRESS 24,000 PSI.

NOTE:  
PRESTRESSED CONCRETE BEAMS AND APPURTENANCES CONFORM TO O.D.O.T. STANDARD BRIDGE DRAWINGS PSBD-1-93 SHEETS ONE, TWO, THREE, & FOUR.



### TYPICAL FASCIA BEAM

BRIDGE NO. C.R. 52-0.02 LOGAN COUNTY ITEM 515

## UNITED PRECAST INC.

ROUNDHOUSE LANE  
MT. VERNON, OHIO 43050  
PHONE: (740) 393-1121, FAX: (740) 392-9708

DATE: JULY 2001 APPROVED BY: E.O.C. 7/24/01 DRAWING NO. 3 OF 3