

Ⓢ = BEAM IS SYMMETRICAL

**GENERAL NOTES:**

1. MANUFACTURE BEAMS IN ACCORDANCE WITH ODOT SPECIFICATIONS.
2. MINIMUM CONCRETE STRENGTH @ RELEASE OF STRAND = 4,000 P.S.I  
MINIMUM CONCRETE STRENGTH @ 28 DAYS = 5,500 P.S.I
3. STRAND SHALL BE (7) WIRE, UNCOATED, LOW RELAXATION, 1/2" DIAMETER (A<sub>s</sub> = 0.153 IN<sup>2</sup>), GRADE 270
4. PULL EACH STRAND TO 30,982 LBS.
5. STEEL GRADE 60, A.S.T.M. A-615.
6. BROOM-FINISH TOPS OF BEAMS
7. HS20-44 & THE ALTERNATE MILITARY LOADING.
8. CONCRETE MIX SHALL INCLUDE ODOT APPROVED CORROSION INHIBITOR; DOSAGE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
9. ALL ANCHOR BOLTS, STUDS, INSERTS, TIE RODS, NUTS, & WASHERS SHALL BE GALVANIZED, PER ODOT SPECIFICATIONS.
10. KEYWAYS SHALL RECEIVE A MEDIUM SANDBLAST AT PLANT WITHIN FOUR DAYS PRIOR TO SHIPPING.

**NOTE:**

P.S.M. SHALL FURNISH, INCIDENTAL TO BEAMS:

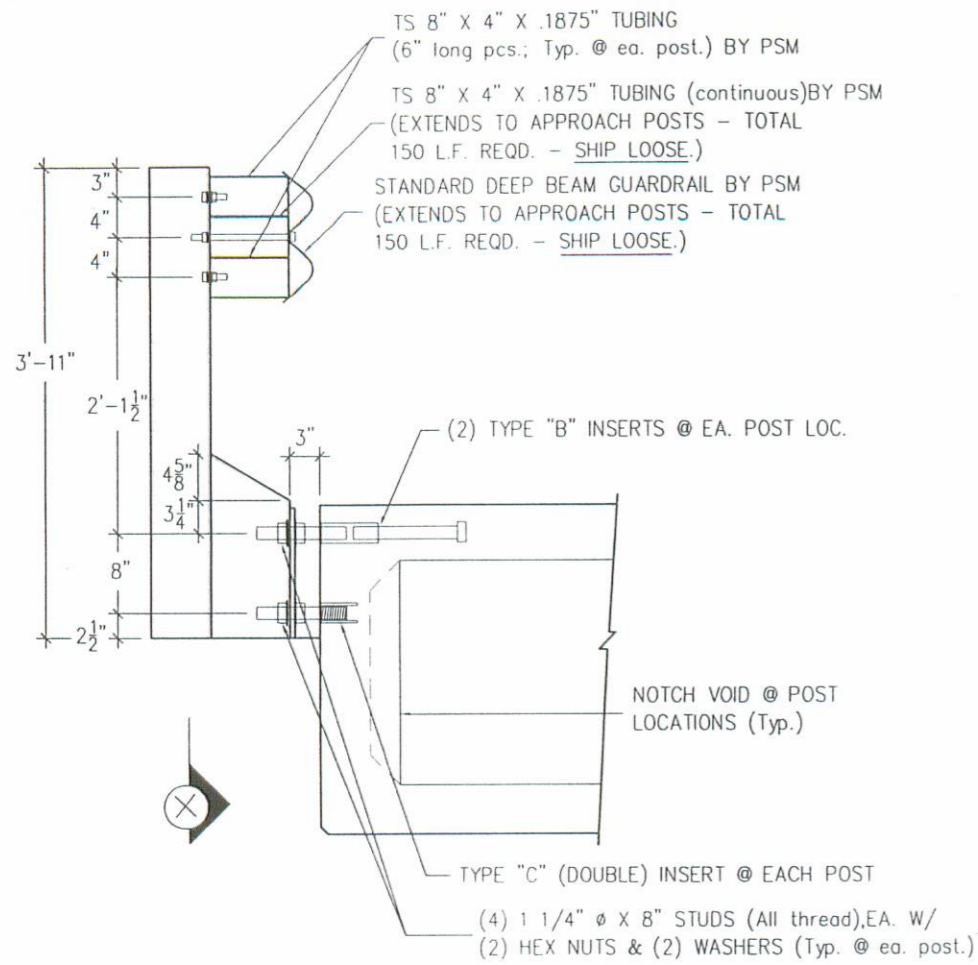
- (24) 1"Ø HEX NUTS
- (24) 1/2" X 4" SQ. PLATE WASHERS
- (8) 1"Ø TIE ROD 12'-0" LONG
- (4) 1"Ø TIE ROD 8'-0" LONG
- (12) 1"Ø X 3'-9" (GALV.) SMOOTH DOWEL RODS
- (12) 1" X 6" SQ. PEJF DOWEL SEALS
- (65') 7 STRAND JUTE + INTERPLAST-N GROUT ADDITIVE
- (80) 1 1/4"Ø X 8" STUDS (ALL THREADED)
- (160) 1 1/4"Ø HEX NUTS
- (160) WASHERS
- (48') 1" X 3" PEJF
- (24) 1" X 6" X 1'-6" ELASTOMERIC BEARING PAD (70 DURO)
- (24) 1/8" X 6" X 1'-6" SHIMS
- (20) ODOT TYPE 2 POSTS (INSTALLED ON BMS.)
- (10) W6x25 APPROACH POSTS (SHIP LOOSE)
- (150') STD. DEEP BEAM GUARDRAIL (SHIP LOOSE)
- (150') TUBULAR BACK-UP (SHIP LOOSE)

MARK NO.	NO. REQD.	WEIGHT
01	1	57,894 LBS.
02	4	57,885 LBS.
03	1	57,894 LBS.

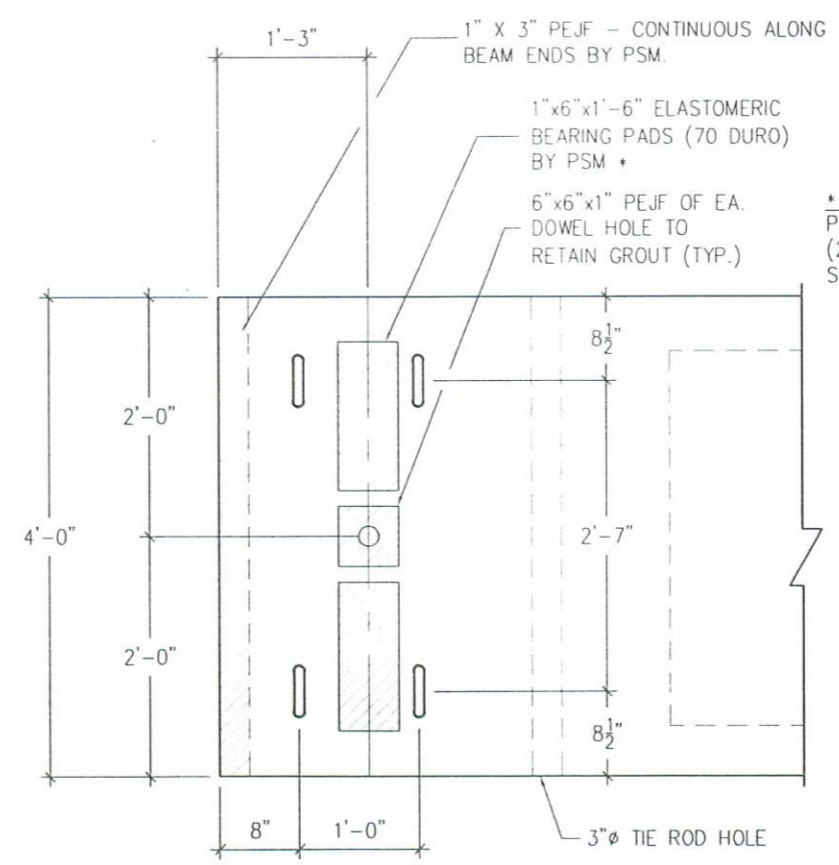
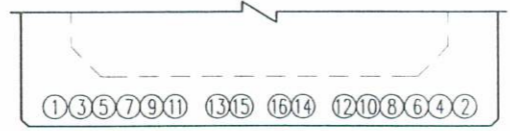
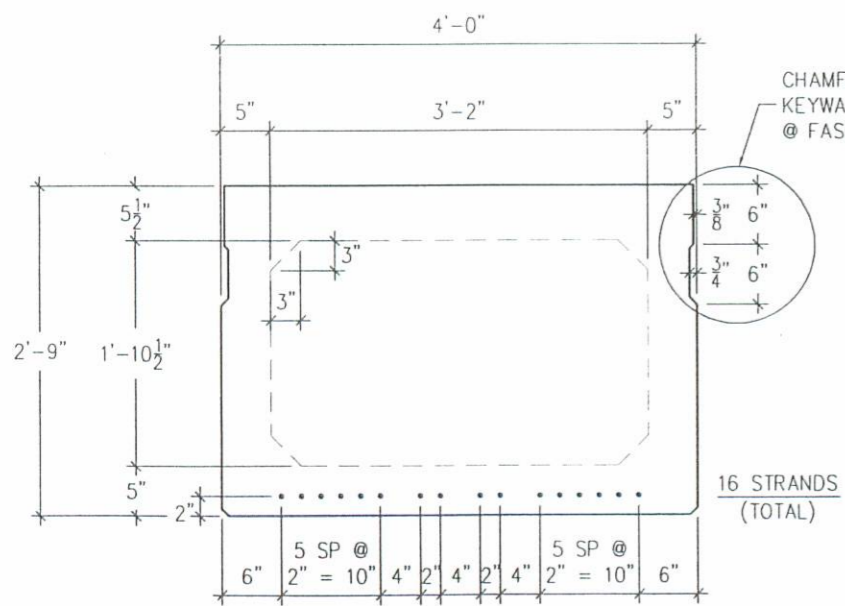
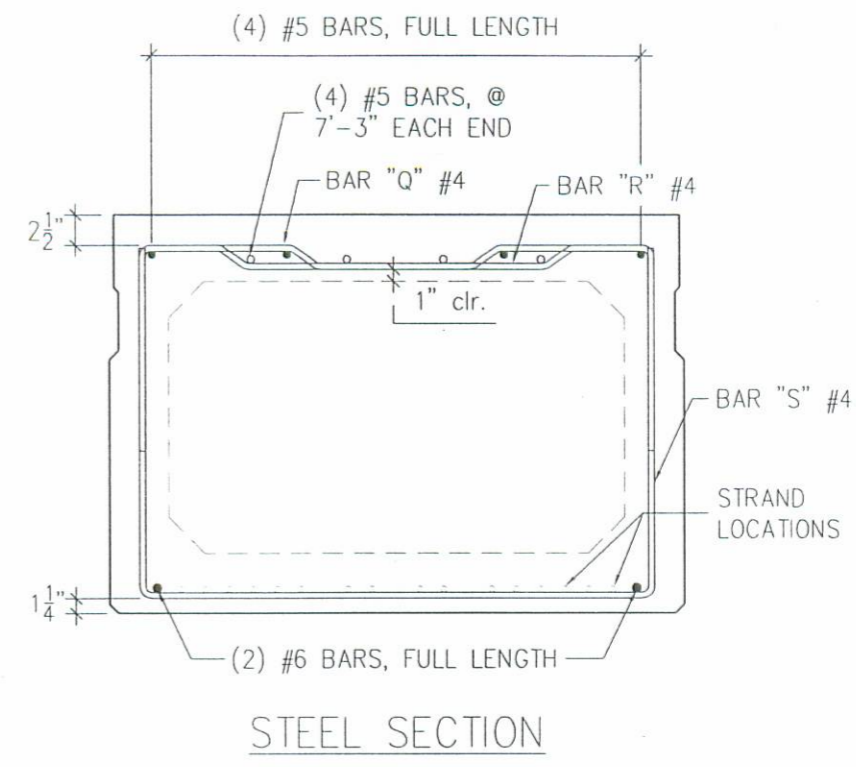
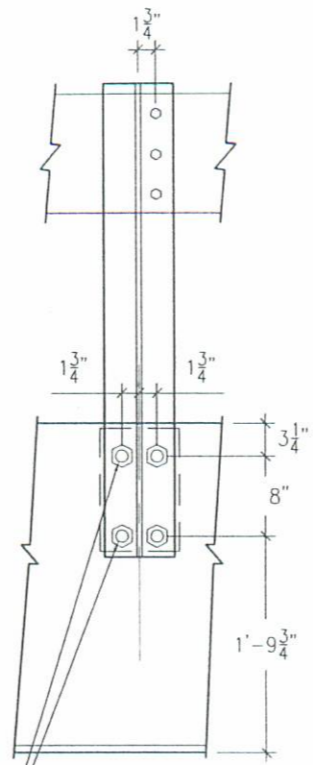
**APPROVED**  
**BY LOGAN CO. ENGINEER**  
*Scott C. Baker* 2-20-02

**PROJECT OVERVIEW**

LOGAN COUNTY, OHIO BR. NO. T.R. 29-8.84		
CONTRACTOR: COUNTY FORCES		
<b>PSI</b> Progress Services	PRODUCING PLANT: STATE ROUTE 8 MELBOURNE, KY 41059 PH: (859) 441-0068 FAX: (859) 441-7986	DRAFTING OFFICE: P.O. BOX 211 MELBOURNE, KY 41059 PH: (859) 441-0068 FAX: (859) 441-7986
	DATE: 2-07-02	DRAWN BY: EDD
REVISIONS	△	
△		
△		
CODE:	SHEET: 1 of 4	JOB NO: M2109

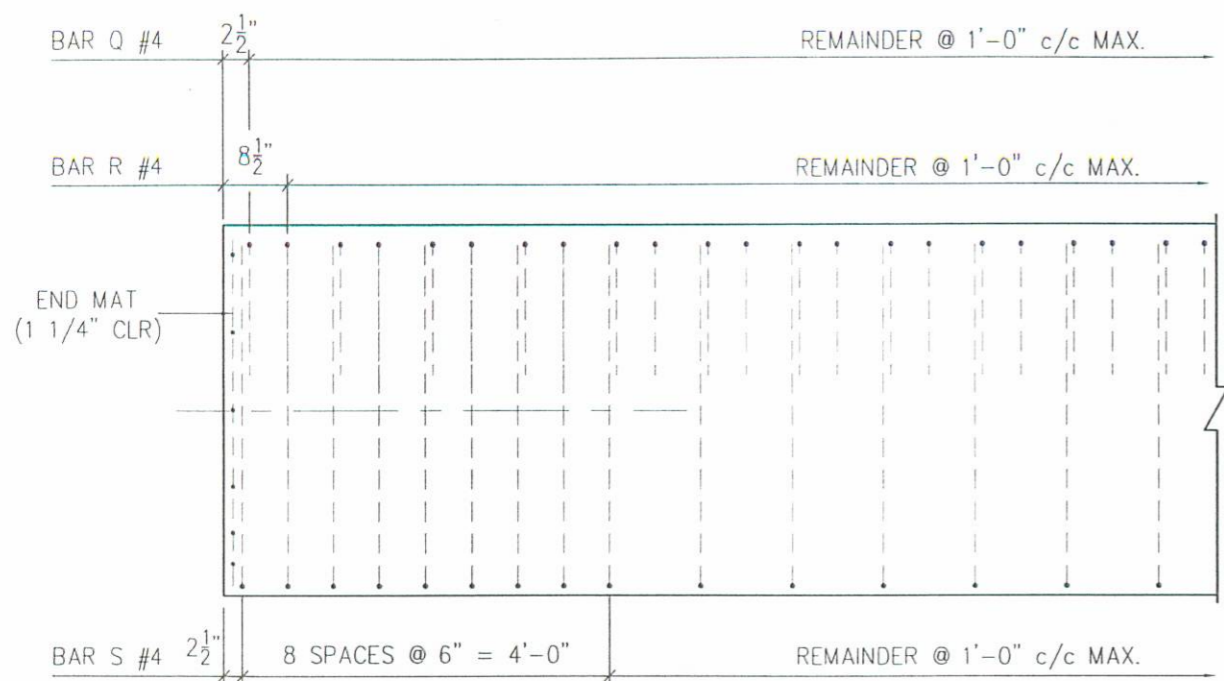


GUARDRAIL DETAIL

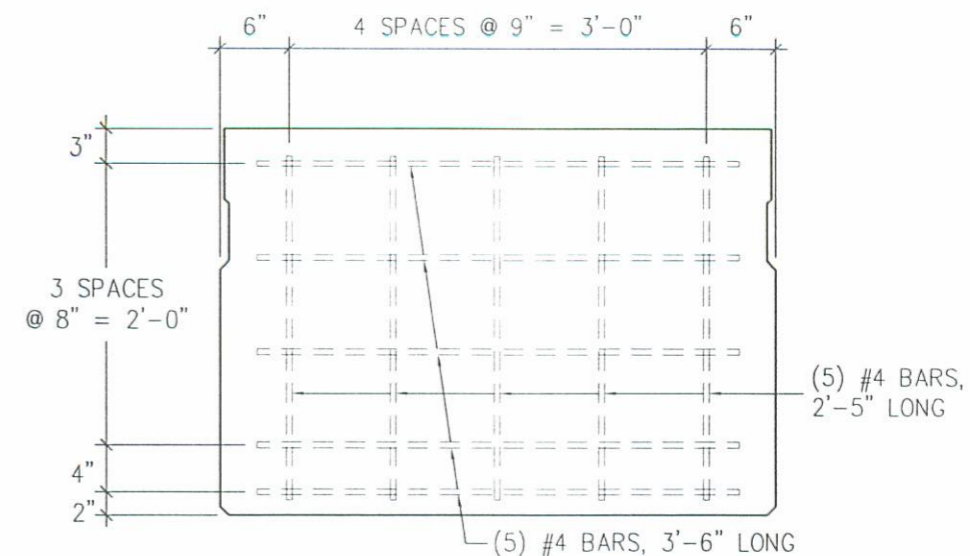


STRAND & DETAILS

LOGAN COUNTY, OHIO BR. NO. T.R. 29-8.84		
CONTRACTOR: COUNTY FORCES		
<b>PSI</b> Prestress Services	PRODUCING PLANT: STATE ROUTE 8 MELBOURNE, KY 41059 PH: (859) 441-0068 FAX: (859) 441-7986	DRAFTING OFFICE: P.O. BOX 211 MELBOURNE, KY 41059 PH: (859) 441-0068 FAX: (859) 441-7986
	DATE: 2-07-02	DRAWN BY: EDD
REVISIONS		
CODE:	SHEET: 2 of 4	JOB NO: M2109

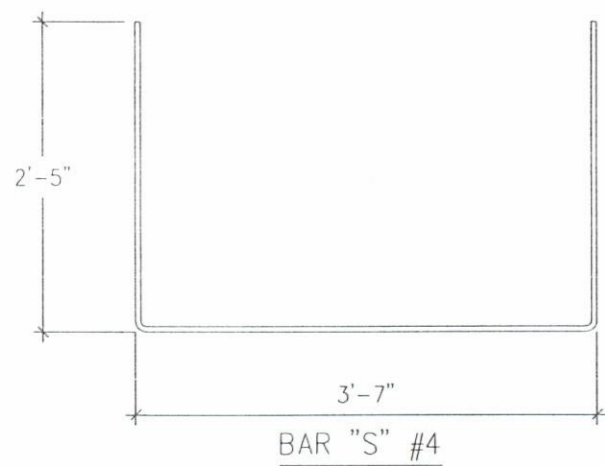


PARTIAL ELEVATION VIEW  
(SHOWING STIRRUP SPACING)

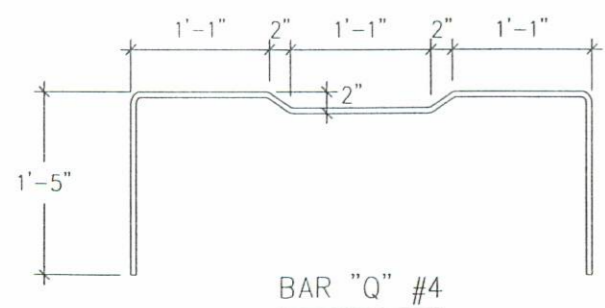


END MAT - B33x48

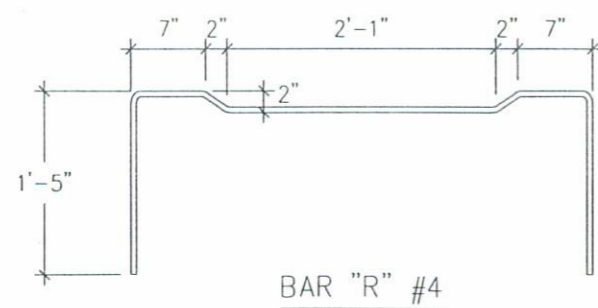
STIRRUP QUANTITIES PER BEAM		
MARK	BAR SIZE	NO. REQD.
BAR Q	# 4	64
BAR R	# 4	63
BAR S	# 4	72



BAR "S" #4

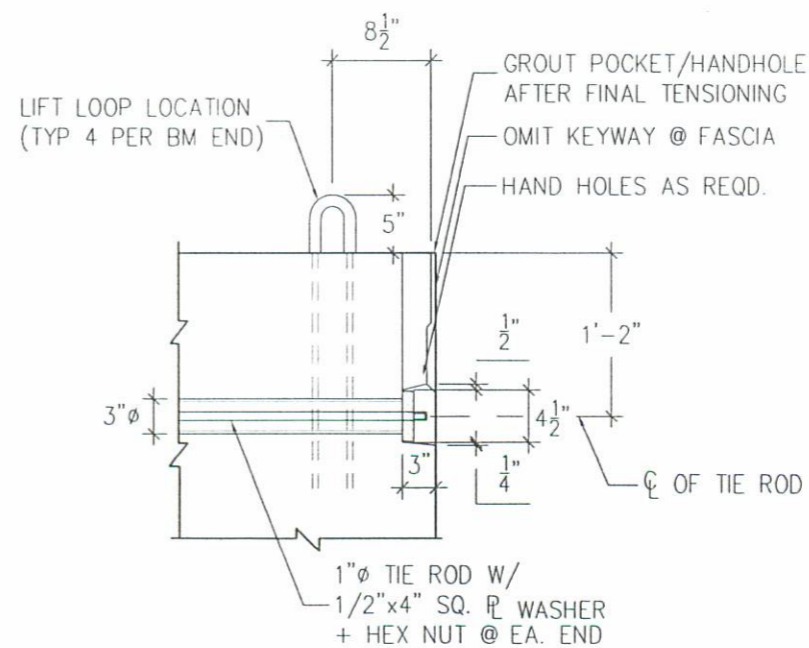


BAR "Q" #4



BAR "R" #4

BENDING DIAGRAM



TIE ROD DETAIL

STEEL DETAILS

LOGAN COUNTY, OHIO  
BR. NO. T.R. 29-8.84

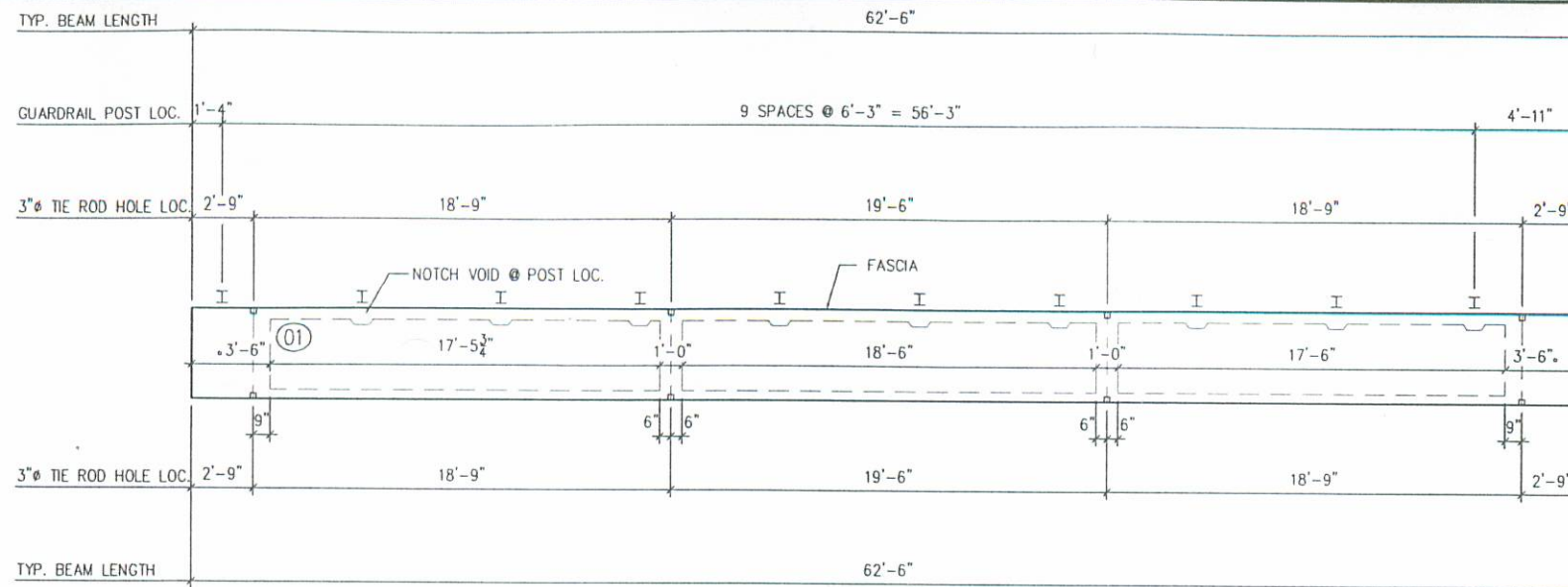
CONTRACTOR: COUNTY FORCES

<b>PSI</b> Prestress Services	PRODUCING PLANT:	DRAFTING OFFICE:
	STATE ROUTE 8	P.O. BOX 211
	MELBOURNE, KY 41059	MELBOURNE, KY 41059
	PH: (859) 441-0068	PH: (859) 441-0068
FAX: (859) 441-7986	FAX: (859) 441-7986	

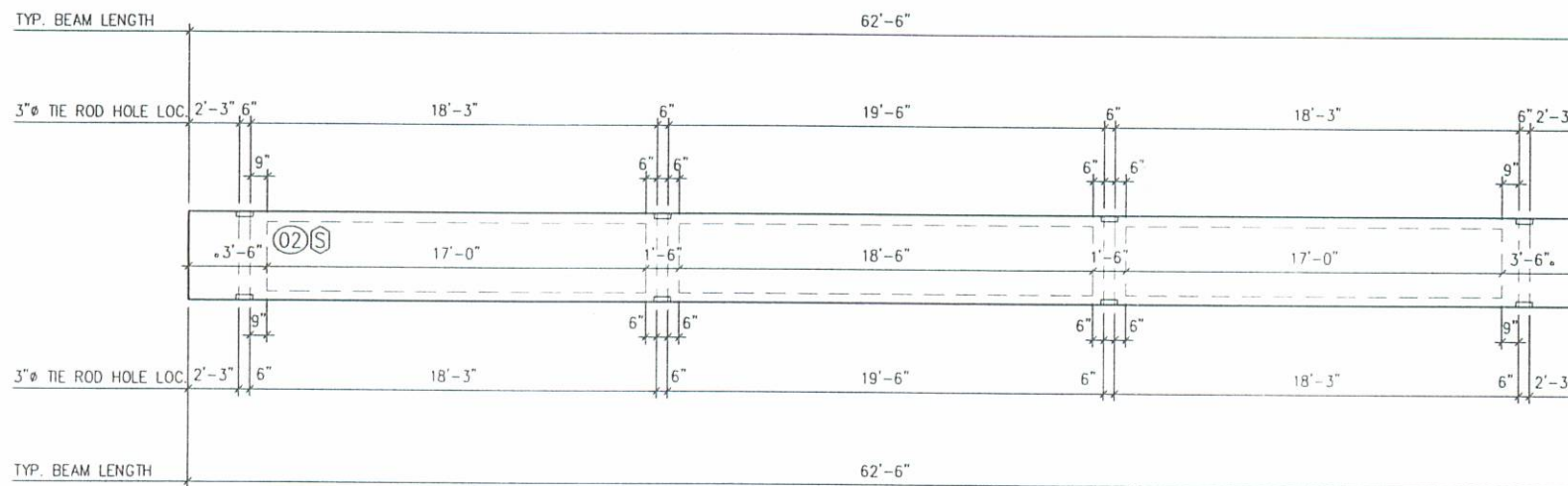
DATE: 2-07-02    DRAWN BY: EDD    CHECKED: GDA

REVISIONS		
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CODE:                      SHEET: 3 of 4    JOB NO: M2109

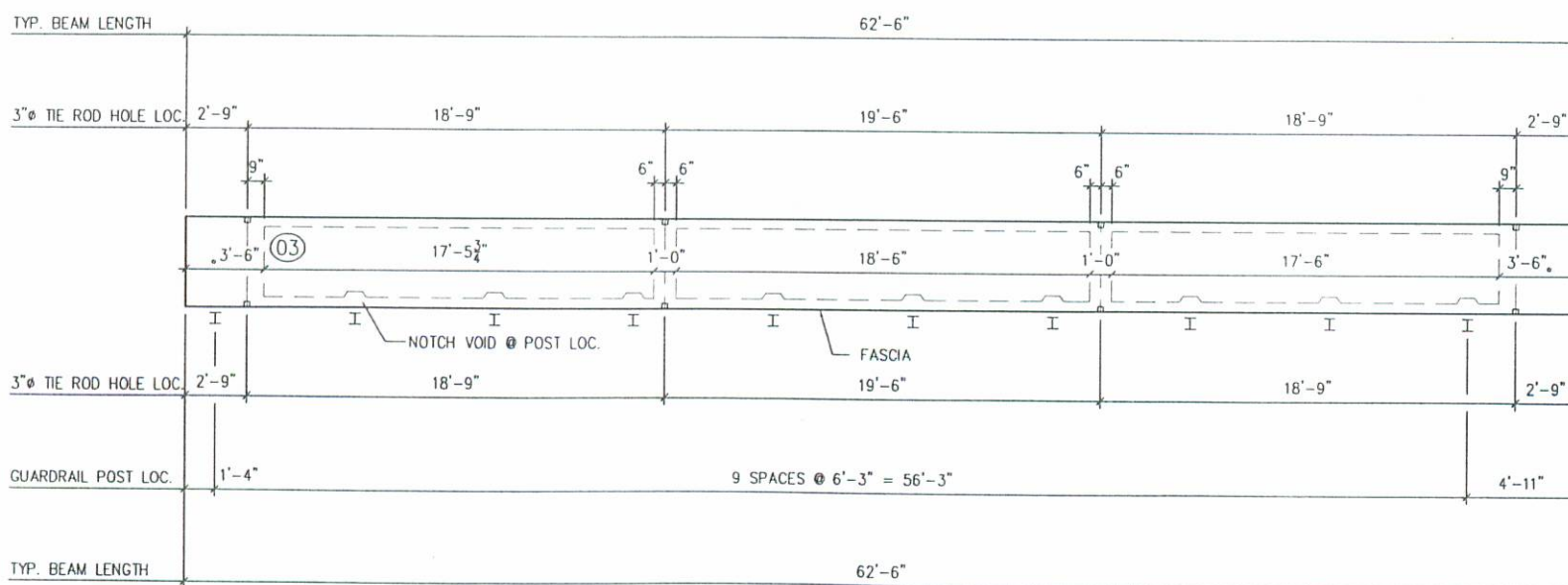


TIE ROD / VOID LAYOUT MK.01 (1 REQD. THUS) WT. = 57,894 LBS.



TIE ROD / VOID LAYOUT MK.02 (4 REQD. THUS) WT. = 57,885 LBS.

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TIE ROD / VOID LAYOUT MK.03 (1 REQD. THUS) WT. = 57,894 LBS.

BEAM LAYOUTS

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