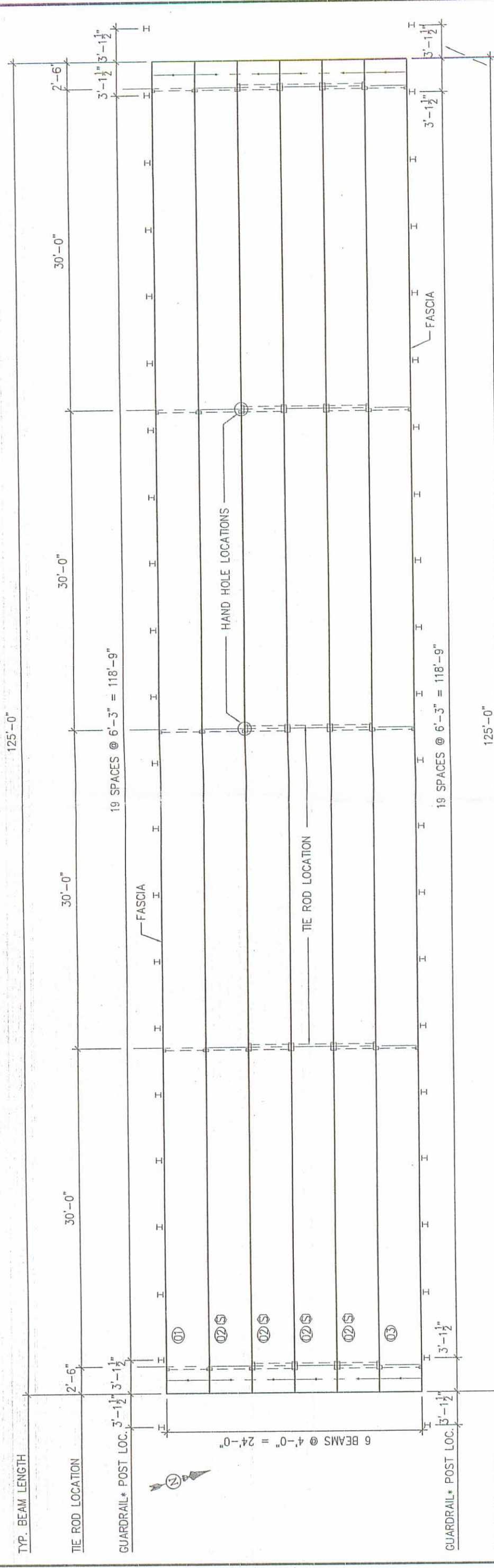


54-472



W6x25 APPROACH POST  
(TOTAL 4 BY PSI.)

**BRIDGE PLAN**

Ⓢ = BEAM IS SYMMETRICAL

\*NOTE:  
POSTS, RAIL, & TUBULAR BACKUP BY  
PSI - (SEE ALSO SHIP LIST BELOW)

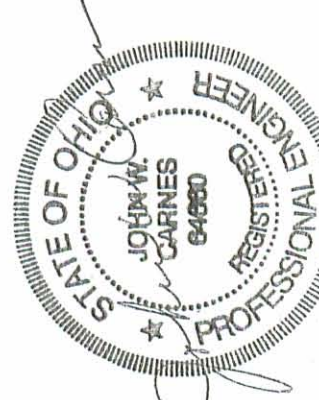
**APPROVED**  
**BY LOGAN CO. ENGINEER**  
*5-28-02*  
*SPC Industrial 1117*

**GENERAL NOTES:**

1. MANUFACTURE BEAMS IN ACCORDANCE WITH ODOT SPECIFICATIONS.
2. MINIMUM CONCRETE STRENGTH @ RELEASE OF STRAND = 5,200 P.S.I  
MINIMUM CONCRETE STRENGTH @ 28 DAYS = 7,400 P.S.I
3. STRAND SHALL BE (7) WIRE, UNCOATED, "SPECIAL - OVERSIZED" LOW RELAXATION, 1/2" DIAMETER (A s= 0.167 IN2), GRADE 270 KSI
4. PULL EACH STRAND TO 33,818 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.
11. BEAM ENDS SHALL BE SEALED WITH BITUMINOUS MATERIAL @ CUT STRAND LOCATIONS.

**NOTE:**  
**P.S.I. SHALL FURNISH, INCIDENTAL TO BEAMS:**

- (30) 1"φ HEX NUTS
  - (30) 1/2" X 4" SQ. PLATE WASHERS
  - (10) 1"φ TIE ROD 12'-0" LONG
  - (5) 1"φ TIE ROD 8'-0" LONG
  - (12) 1"φ X 4'-6" (A311) SMOOTH DOWEL RODS
  - (125') 7 STRAND JUTE + INTERPLAST-N GROUT ADDITIVE
  - (160) 1 1/4" X 8" STUDS (ALL THREADED)
  - (320) 1 1/4"φ HEX NUTS
  - (320) WASHERS
  - (40) ODOT TYPE 2 GUARDRAIL POSTS (SHIP LOOSE)
  - (4) W6 x 25 x 6'-9" APPROACH POSTS
  - (300 LF) STANDARD DEEP BEAM GUARDRAIL
  - (300 LF) TUBULAR BACKUP
- SHIP INSTALLED ON EXT. BEAMS*
- BEARING PADS, PUFF, SHIMS*

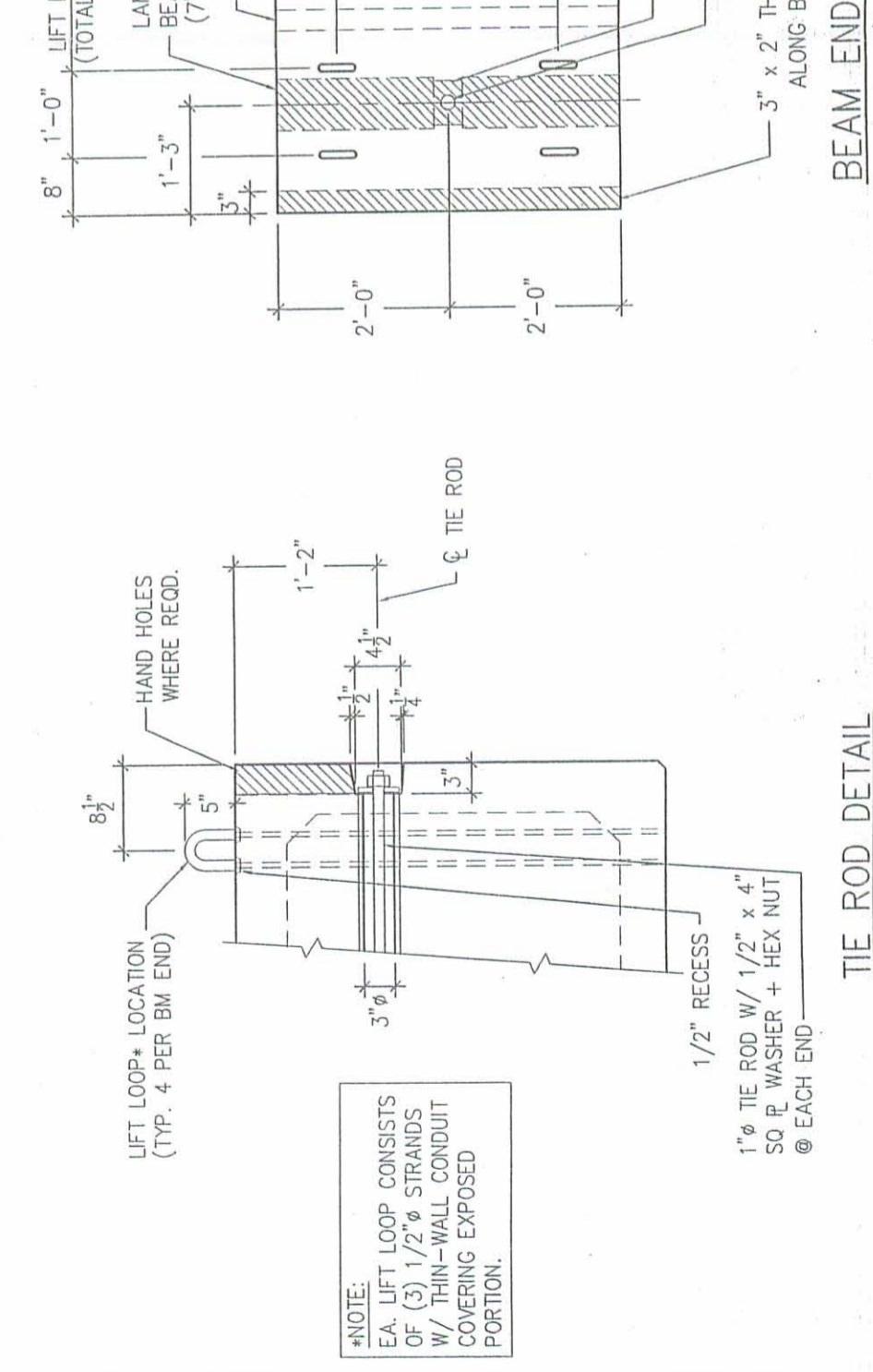
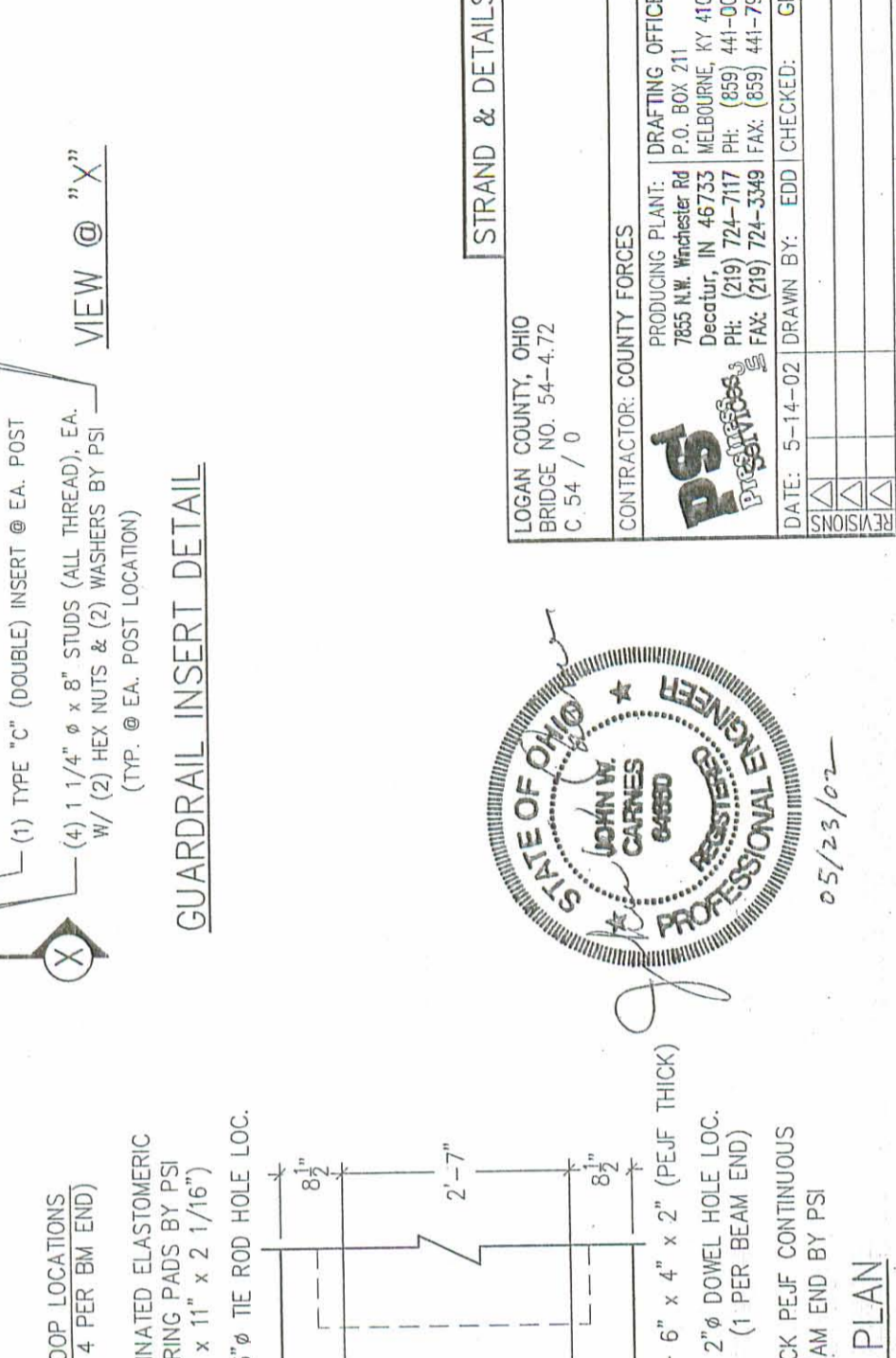
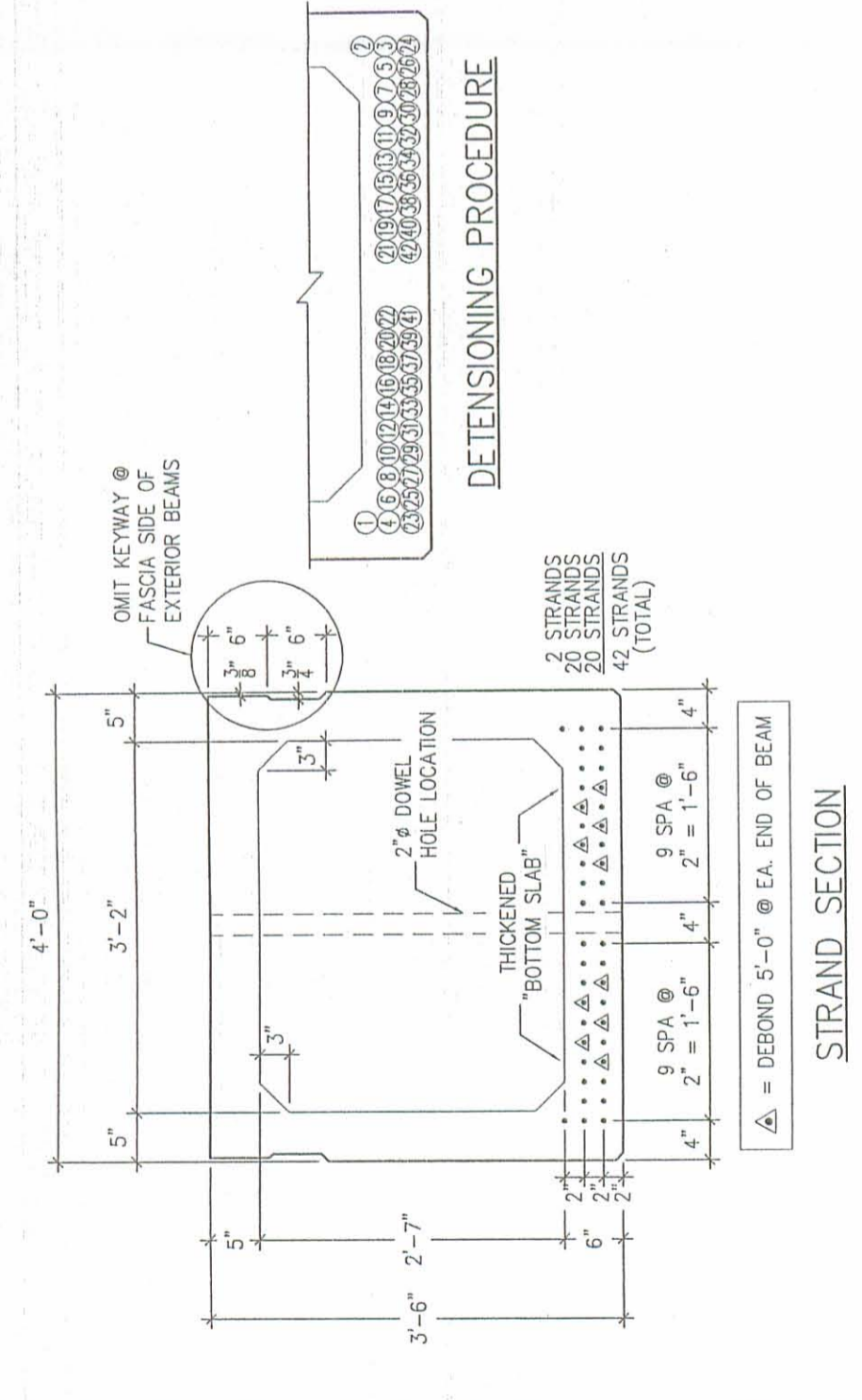
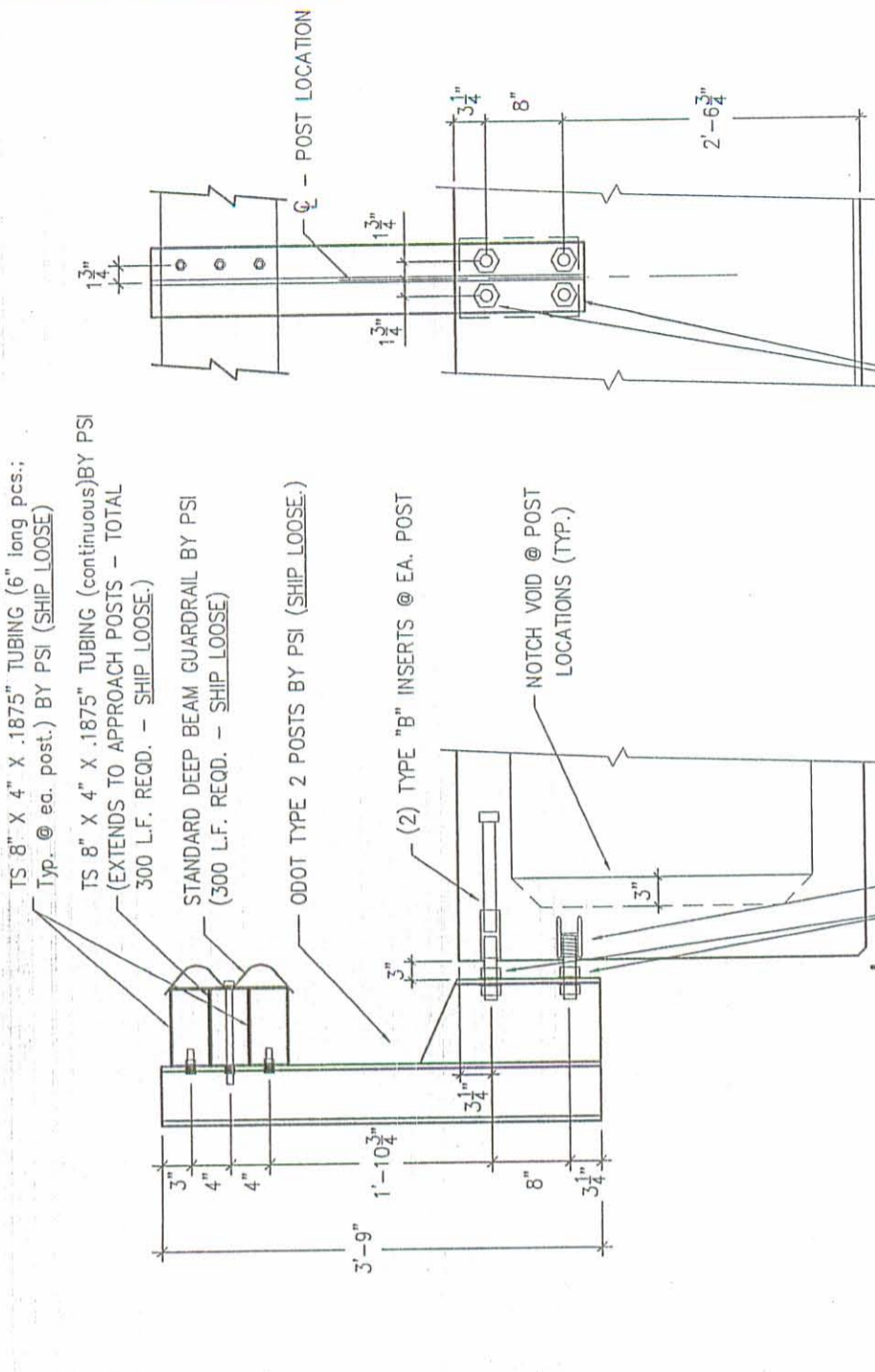


05/23/02

MARK NO.	NO. REQD.	SHIPPING WEIGHT
01	1	126,416 LBS.
02	4	126,392 LBS.
03	1	126,416 LBS.

**PROJECT OVERVIEW**

LOGAN COUNTY, OHIO BRIDGE NO. 54-4.72 C 54 / 0	CONTRACTOR: COUNTY FORCES
PRODUCING PLANT: 7855 N.W. Winchester Rd P.O. BOX 211 Decatur, IN 46733 PH: (219) 724-7117 FAX: (219) 724-3349	DRAFTING OFFICE: 41059 MELBOURNE, KY PH: (859) 441-0068 FAX: (859) 441-7986
DATE: 5-14-02 DRAWN BY: EDD CHECKED: GDA	
REVISIONS	
PERMISSIONS	
CODE:	
SHEET: 1 of 4	JOB NO: D2162



TS 8" X 4" X .1875" TUBING (6" long pcs.; Typ. @ ea. post.) BY PSI (SHIP LOOSE)

TS 8" X 4" X .1875" TUBING (continuous) BY PSI (EXTENDS TO APPROACH POSTS - TOTAL 300 L.F. REQD. - SHIP LOOSE)

STANDARD DEEP BEAM GUARDRAIL BY PSI (300 L.F. REQD. - SHIP LOOSE)

ODDOT TYPE 2 POSTS BY PSI (SHIP LOOSE)

(2) TYPE "B" INSERTS @ EA. POST

NOTCH VOID @ POST LOCATIONS (TYP.)

(1) TYPE "C" (DOUBLE) INSERT @ EA. POST

(4) 1 1/4" x 8" STUDS (ALL THREAD), EA. W/ (2) HEX NUTS & (2) WASHERS BY PSI (TYP. @ EA. POST LOCATION)

OMIT KEYWAY @ FASCIA SIDE OF EXTERIOR BEAMS

2" DOWEL HOLE LOCATION

THICKENED "BOTTOM SLAB"

9 SPA @ 2" = 1'-6"

9 SPA @ 2" = 1'-6"

2 STRANDS  
20 STRANDS  
42 STRANDS (TOTAL)

2" DOWEL HOLE LOCATION

3" x 2" THICK PEJF CONTINUOUS ALONG BEAM END BY PSI

6" x 4" x 2" (PEJF THICK)

2" DOWEL HOLE LOC. (1 PER BEAM END)

3" x 2" THICK PEJF CONTINUOUS ALONG BEAM END BY PSI

DETENSIONING PROCEDURE

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺

STRAND SECTION

▲ = DEBOND 5'-0" @ EA. END OF BEAM

TIE ROD DETAIL

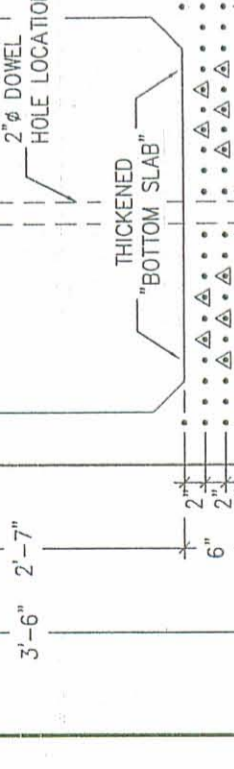
\*NOTE:  
EA. LIFT LOOP CONSISTS OF (3) 1/2" STRANDS W/ THIN-WALL CONDUIT COVERING EXPOSED PORTION.

1" TIE ROD W/ 1/2" x 4" SQ PL WASHER + HEX NUT @ EACH END

BEAM END PLAN

GUARDRAIL INSERT DETAIL

VIEW @ "X"



05/23/07

LOGAN COUNTY, OHIO  
BRIDGE NO. 54-4.72  
C. 54 / 0

CONTRACTOR: COUNTY FORCES

PRODUCING PLANT: DRAFTING OFFICE:  
7855 N.W. Winchester Rd  
P.O. BOX 211  
Decatur, IN 46733  
Melbourne, KY 41059  
PH: (859) 724-7117  
PH: (859) 441-0068  
FAX: (859) 724-3349  
FAX: (859) 441-7986

DATE: 5-14-02  
DRAWN BY: EDD  
CHECKED: GDA

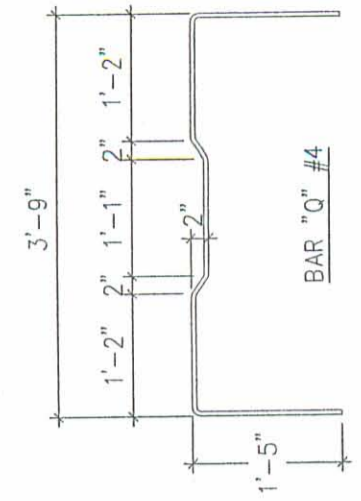
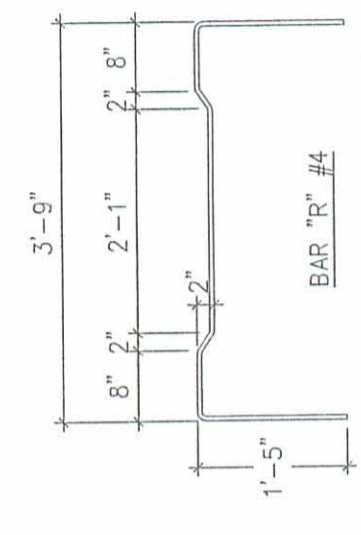
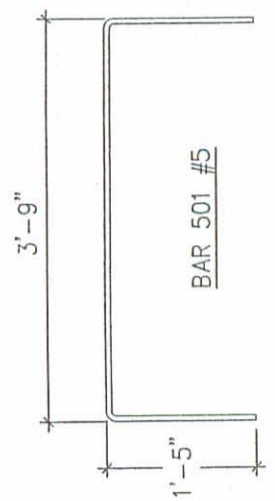
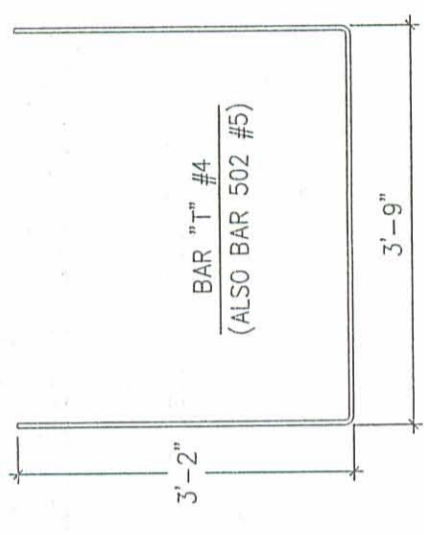
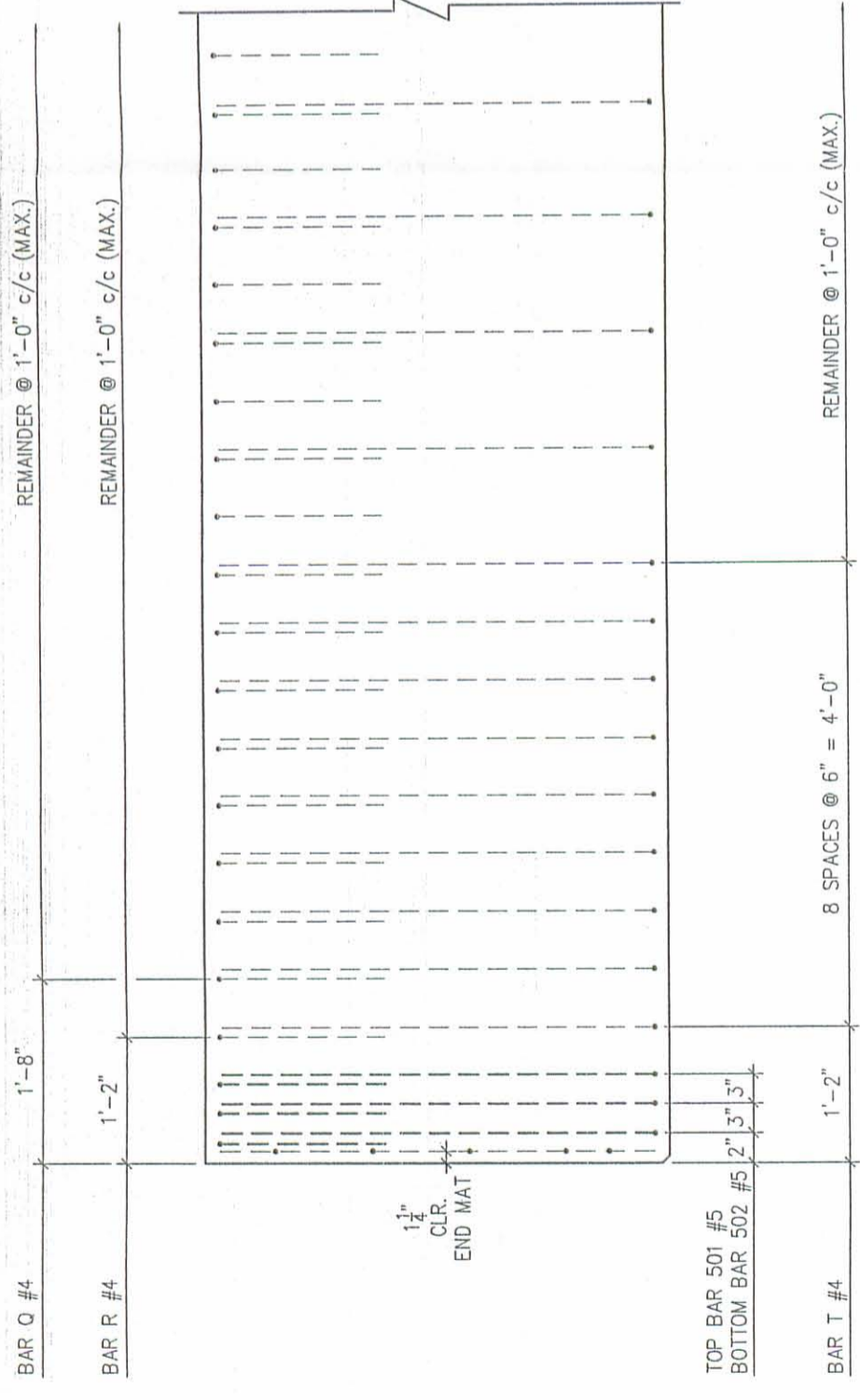
REVISIONS

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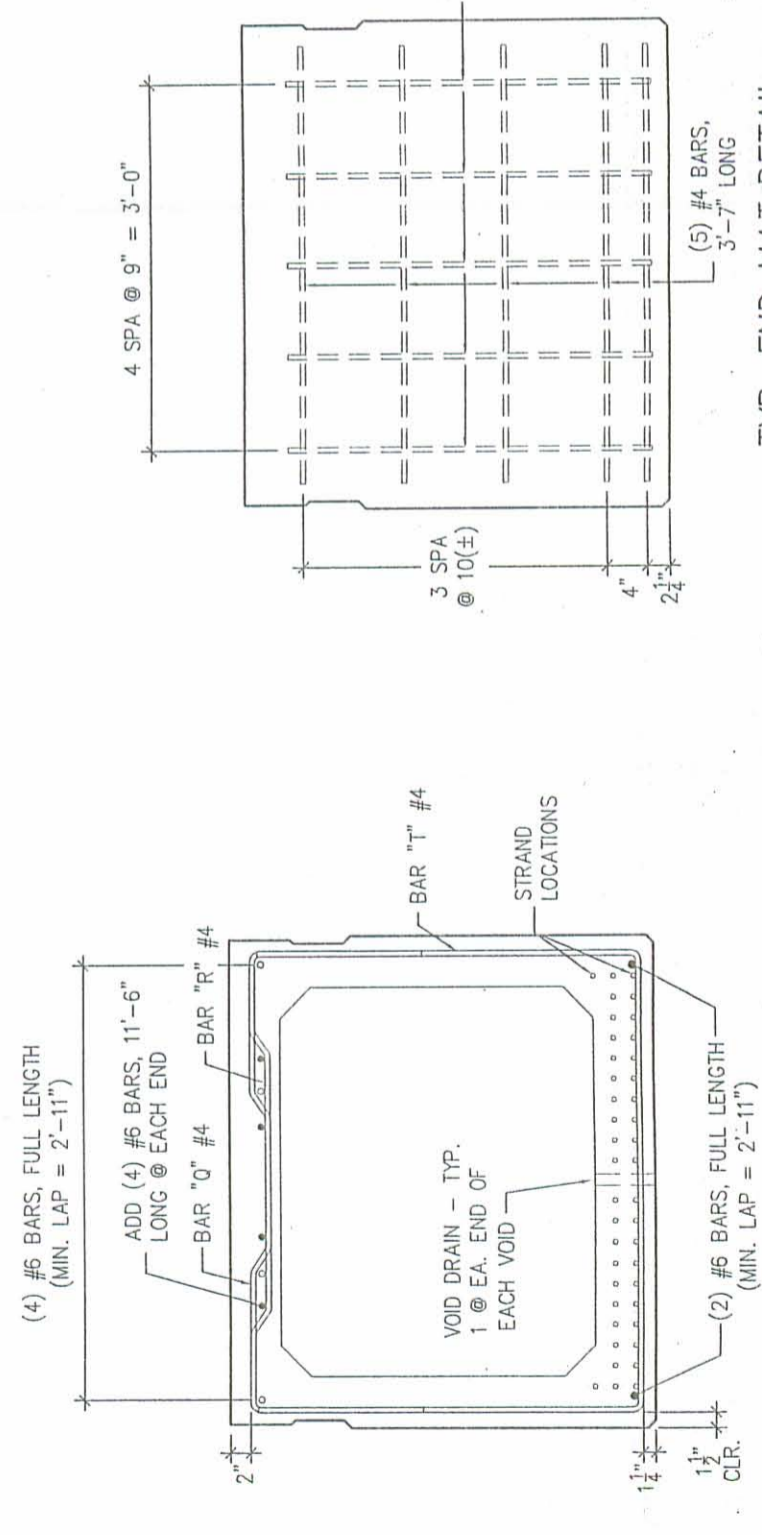
SHEET: 2 of 4  
JOB NO: D2162

STRAND & DETAILS

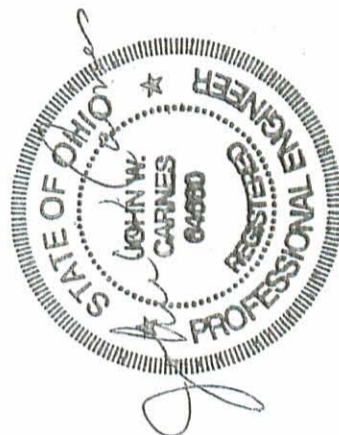
STIRRUP QUANTITIES PER BM		
MARK	BAR SIZE	BAR NO.
BAR Q	#4	123
BAR R	#4	124
BAR T	#4	132
501	#5	6
502	#5	6



BENDING DIAGRAM



TYP. END MAT DETAIL



LOGAN COUNTY, OHIO  
BRIDGE NO. 54-4.72  
C 54 / 0

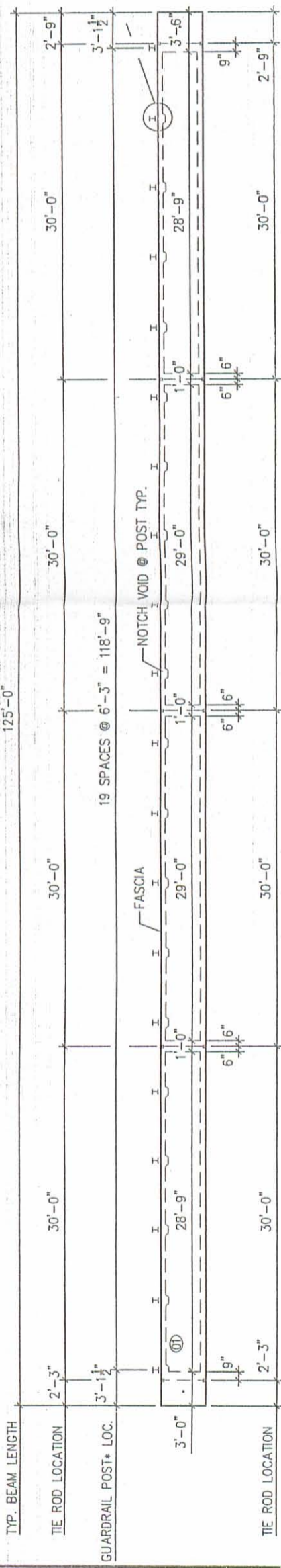
CONTRACTOR: COUNTY FORCES

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7855 N.W. Winchester Rd  
P.O. BOX 211  
Decatur, IN 46733 MELBOURNE, KY 41059  
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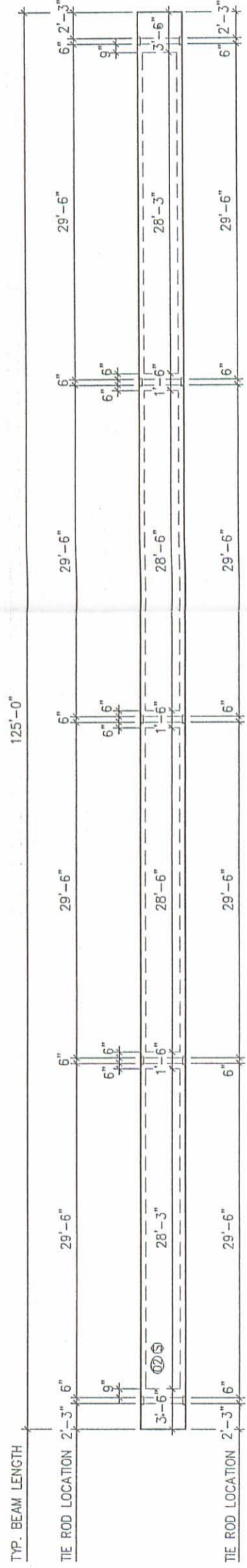
DATE: 5-14-02 DRAWN BY: EDD CHECKED: GDA

REVISIONS

CODE: SHEET: 3 of 4 JOB NO: D2162

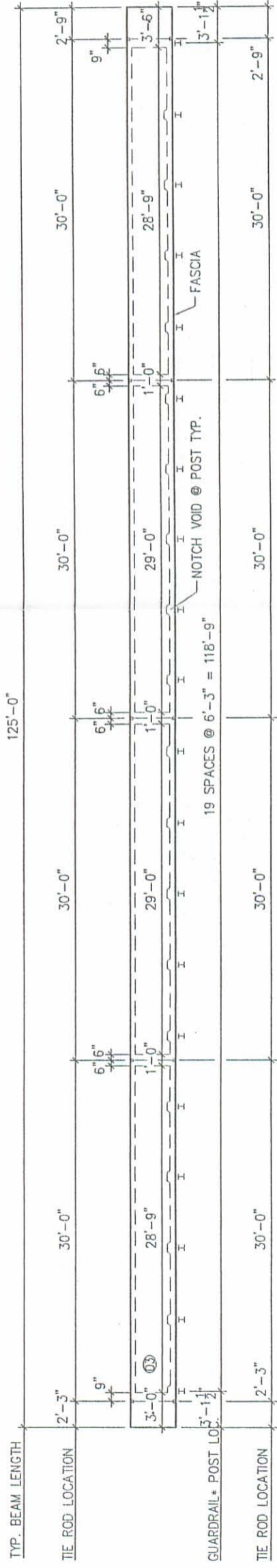


TIE ROD / VOID LAYOUT MK.01 (1 REQD. THUS) SHIPPING WT. = 126,416 LBS.

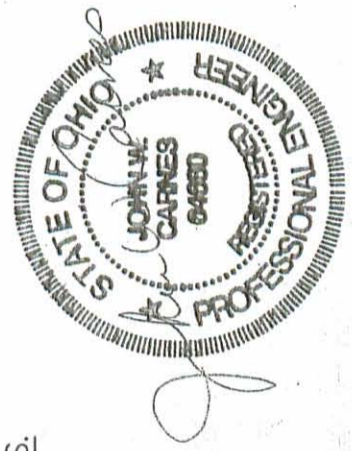


TIE ROD / VOID LAYOUT MK.02 (4 REQD. THUS) SHIPPING WT. = 126,392 LBS.

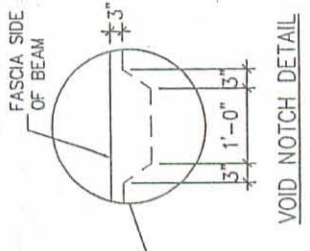
ISI = BEAM IS SYMMETRICAL



TIE ROD / VOID LAYOUT MK.03 (1 REQD. THUS) SHIPPING WT. = 126,416 LBS.



05/23/02



\*POSTS, RAIL, & TUBULAR BACKUP BY PSI (SHIP LOOSE) SEE SHIP LIST FOR QUANTITIES.

BEAM LAYOUTS

LOGAN COUNTY, OHIO  
BRIDGE NO. 54-4.72  
C 54 / 0

CONTRACTOR: COUNTY FORCES

PRODUCING PLANT: DRAFTING OFFICE:  
7855 N.W. Winchester Rd P.O. BOX 211  
Decatur, IN 46733 MELBOURNE, KY 41059  
PH: (219) 724-7117 PH: (859) 441-0068  
PSI SERVICES PH: (219) 724-3349 FAX: (859) 441-7985

DATE: 5-14-02 DRAWN BY: EDD CHECKED: GDA

REVISIONS			

CODE: SHEET: 4 of 4 JOB NO: D2162