

BRIDGE BEAM FABRICATION NOTES

COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS (f'_c) SHALL NOT BE LESS THAN 5500 PSI.

COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF DETENSIONING (f'_c) SHALL NOT BE LESS THAN 4000 PSI.

PRESTRESSING STEEL SHALL BE SEVEN WIRE UNCOATED LOW RELAXATION STRAND IN ACCORDANCE WITH ASTM A416 GRADE 270, 1/2" DIAMETER.

ALL PRESTRESSING STRANDS SHALL BE STRESSED TO AN INITIAL TENSIONING FORCE PER STRAND EQUAL TO 3,000 lbs. ALL PRESTRESSING STRANDS SHALL BE STRESSED TO A FINAL TENSIONING FORCE PER STRAND EQUAL TO 30,982 lbs. (BEFORE LOSSES).

DETENTION STRANDS SYMMETRICALLY ABOUT CENTERLINE OF BEAM IN ACCORDANCE WITH STANDARD RECOGNIZED PRACTICES.

ALL REINFORCING BARS SHALL CONFORM TO ASTM A615, A616, OR A617 GRADE 60 BLACK STEEL, UNLESS OTHERWISE NOTICED.

ALL ANCHOR BOLTS, NUTS AND STUDS SHALL CONFORM TO THE PHYSICAL PROPERTIES OF ASTM-A325

ALL GUARDRAIL EMBEDDED ACCESSORIES AND TRANSVERSE TIE RODS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM 711.02.

KEYWAYS TO BE GIVEN A MEDIUM SANDBLAST AT THE PLANT (WITHIN (4) DAYS OF SHIPMENT)

TOP OF BEAM FINISH TO BE TRANSVERSE BROOMED.

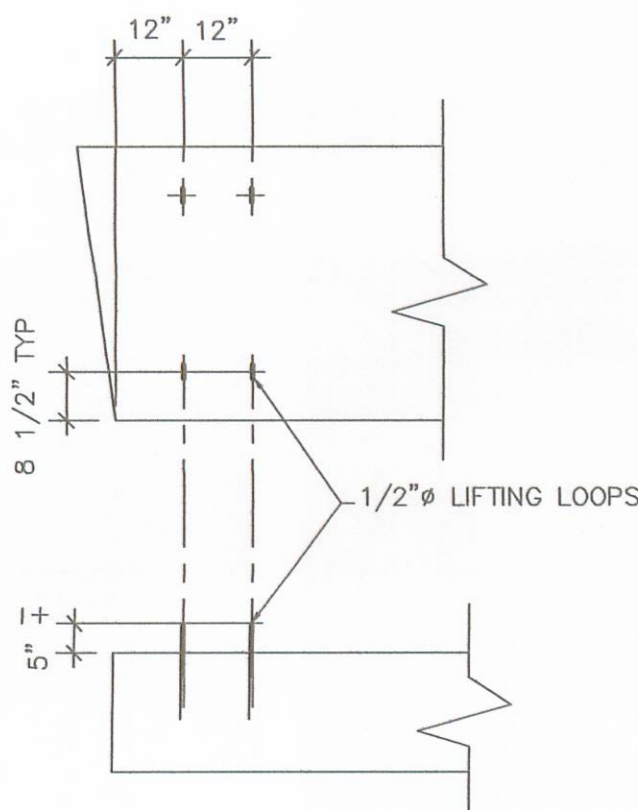
TRANSVERSE TIE RODS SHALL BE 1" DIAMETER STEEL ROD OF GRADE A311 G1018 STEEL.

CALCIUM NITRITE CORROSION INHIBITOR SHALL BE ADDED AT THE RATE OF 4 GAL. PER CUBIC YARD OF CONCRETE. (W R GRACE D C I)

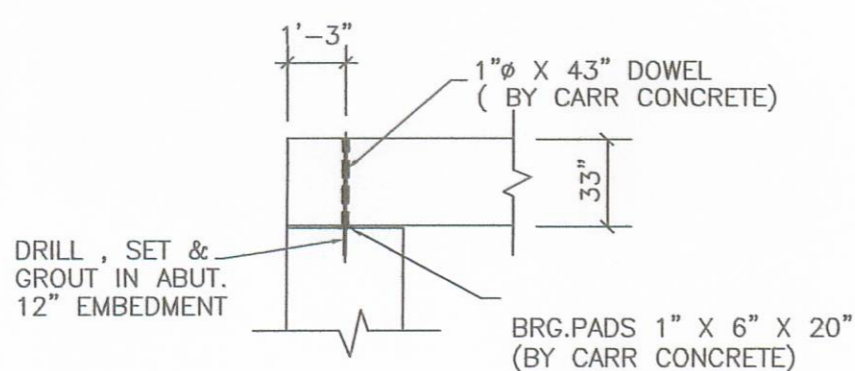
BEAMS ARE DESIGNED WITH HS 20-44 LOADING AND ARE DESIGNED IN ACCORDANCE WITH ODOT STANDARDS PSBD-1-93 AND SPECIFICATION 865.

ITEMS FURNISHED BY CARR CONCRETE

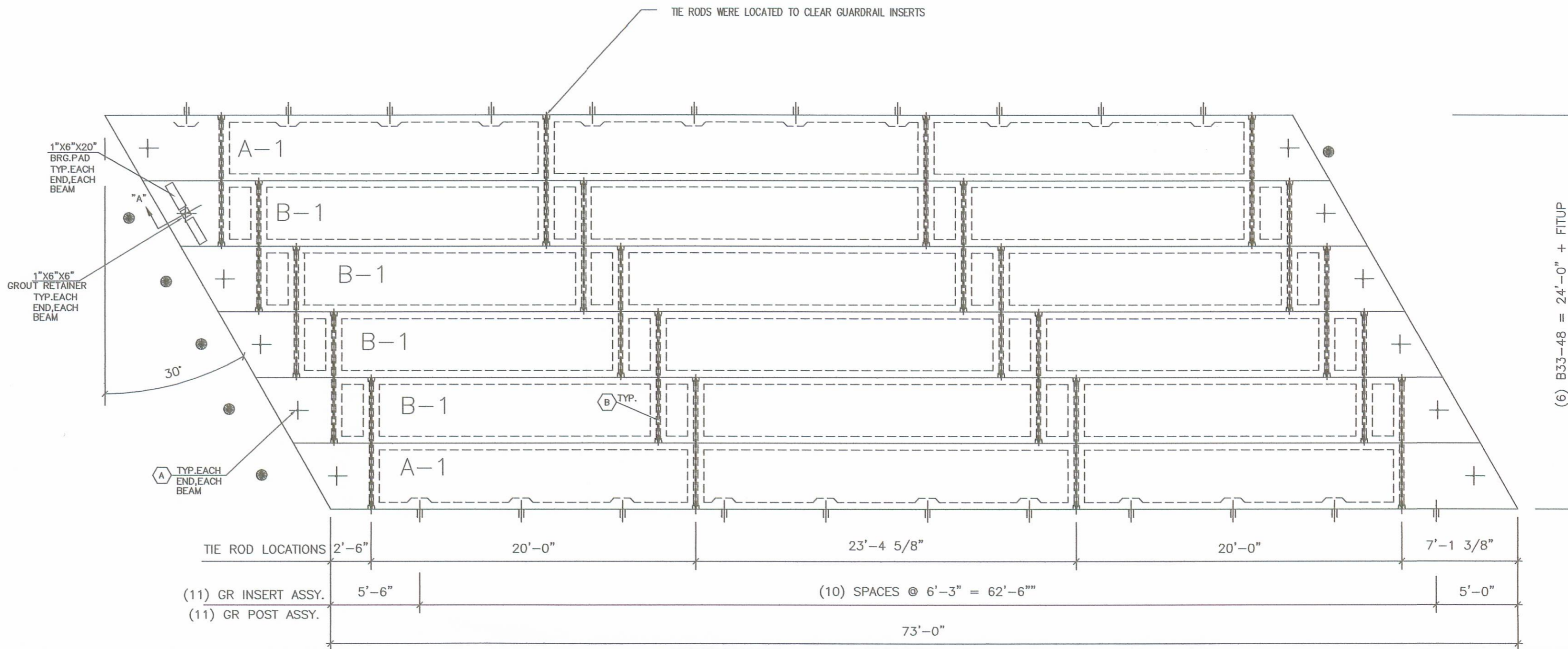
- (A) (12) 1" ϕ X 43" ANCHOR DOWEL
- (B) (20) 1" ϕ X 7'-11" TIE ROD
- (40) HEAVY HEX NUTS
- (40) 4" X 4" X 1/2" PLATE WASHERS
- (365') 1/2" ϕ BACKER ROD
- (12) 6" X 6" X 1" GROUT RETAINERS (PEJF)
- (88) 1 1/4" dia. X 8" STUDS
- (176) 1 1/4" dia. HVY. HEX NUTS
- (176) 1 1/4" dia. FLAT WASHERS
- (24) 1" X 6" X 20" BEARING PADS
- (22) GUARDRAIL TYPE 2 POST (ATTACHED)
- (2) 75'-0" RUNS DEEP BEAM RAIL w/ TUBULAR BACKUP
- (8) GUARDRAIL POST W6X25



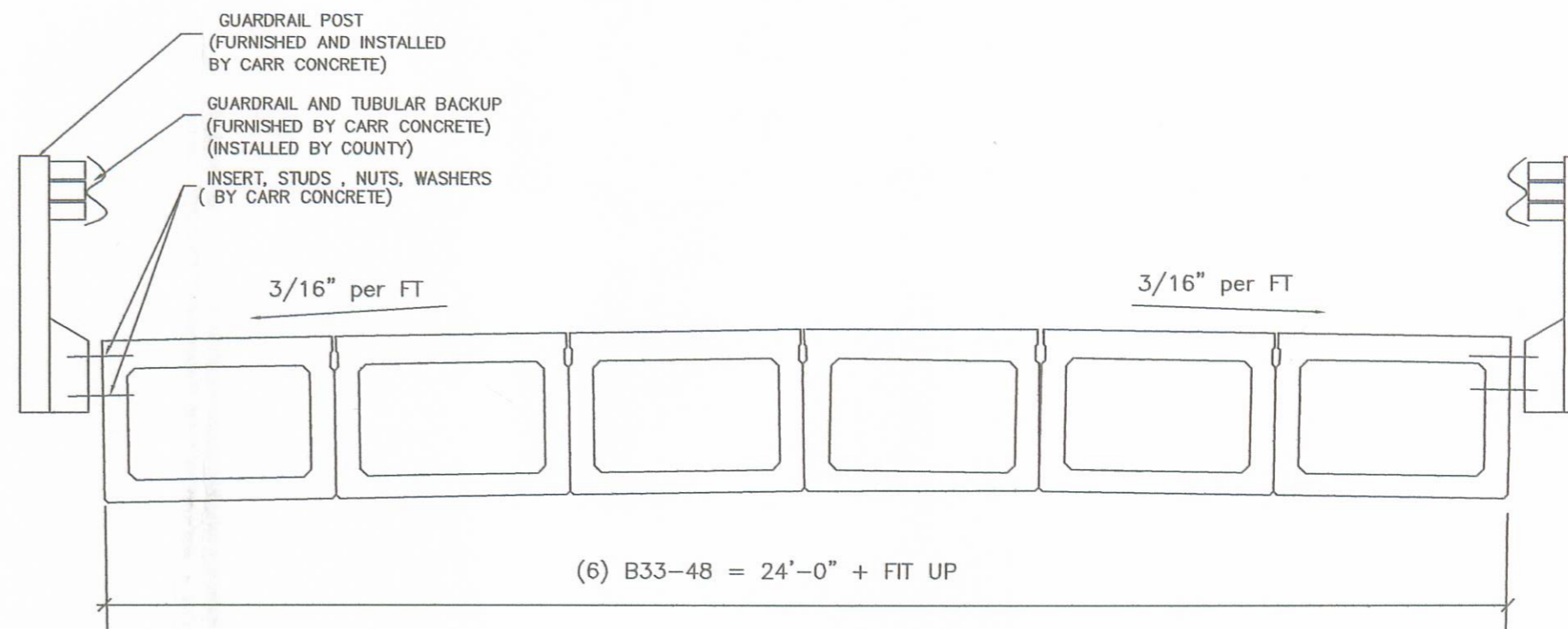
LIFTING DETAIL



ABUTMENT DETAIL "A"



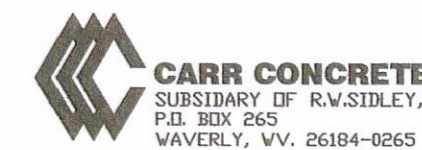
TYPICAL PLAN



TYPICAL CROSS SECTION

INDICATES MARKED END OF BEAM

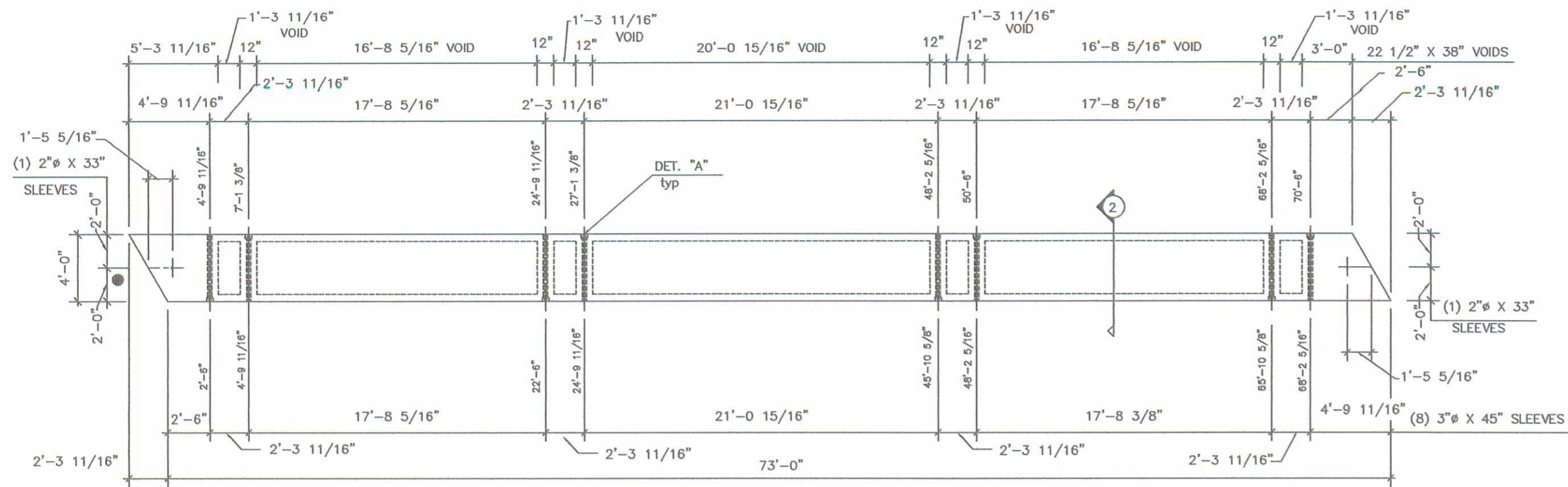
APPROVED
BY LOGAN CO. ENGINEER
Kristen M. King PE 2/17/2004



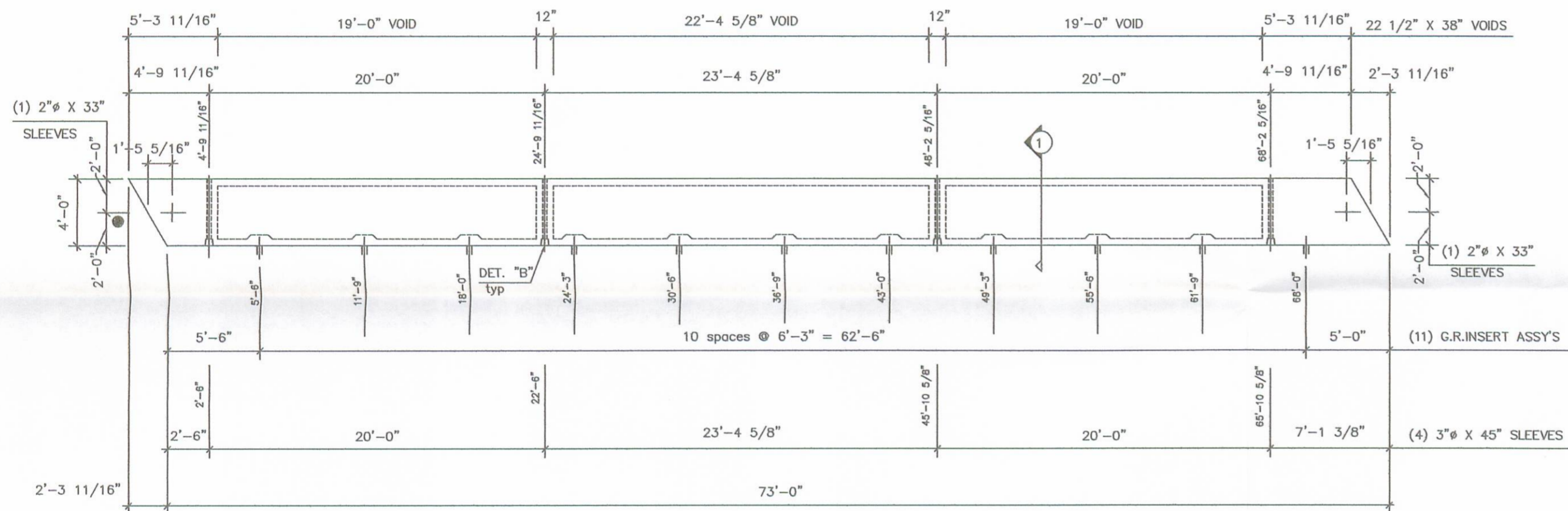
BRIDGE 116-055	DRAWN BY: arm
RUSH CREEK TOWNSHIP	DATE: 1/14/2004
LOGAN, COUNTY OH	CHECKED BY:
LOGAN COUNTY ENGINEER	DOC JOB: BB0472
LOGAN COUNTY ENGINEER	SHEET: 1 of 2

DATE	PER ENGINEER'S COMMENTS	BY
2/3	PER ENGINEER'S COMMENTS	arm
	DESCRIPTION OF REVISION	

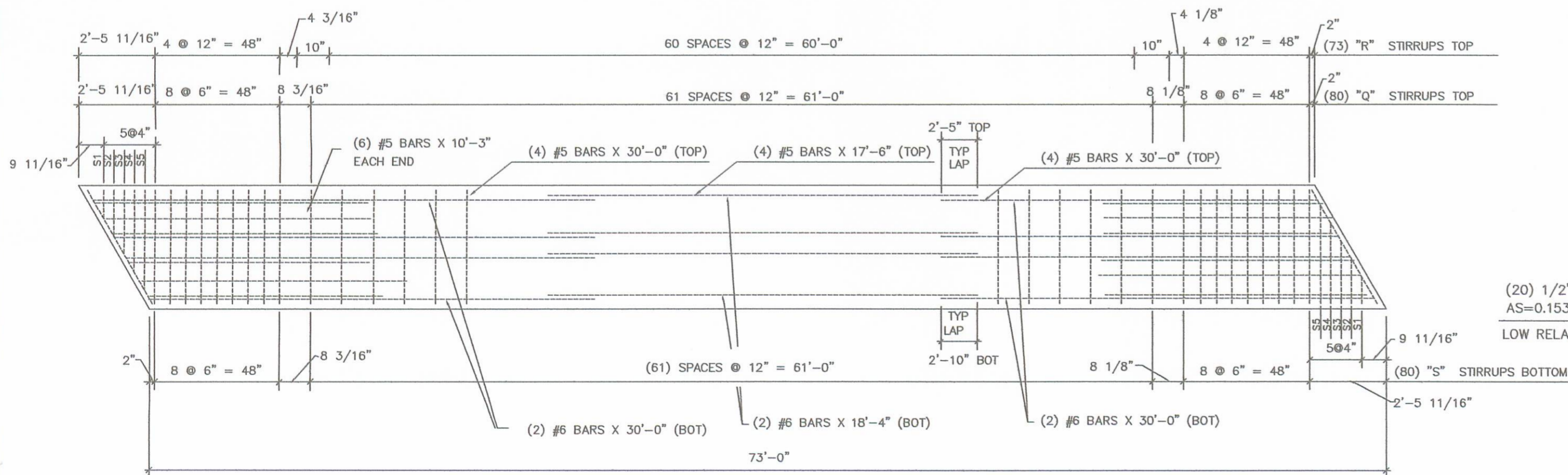
116-055



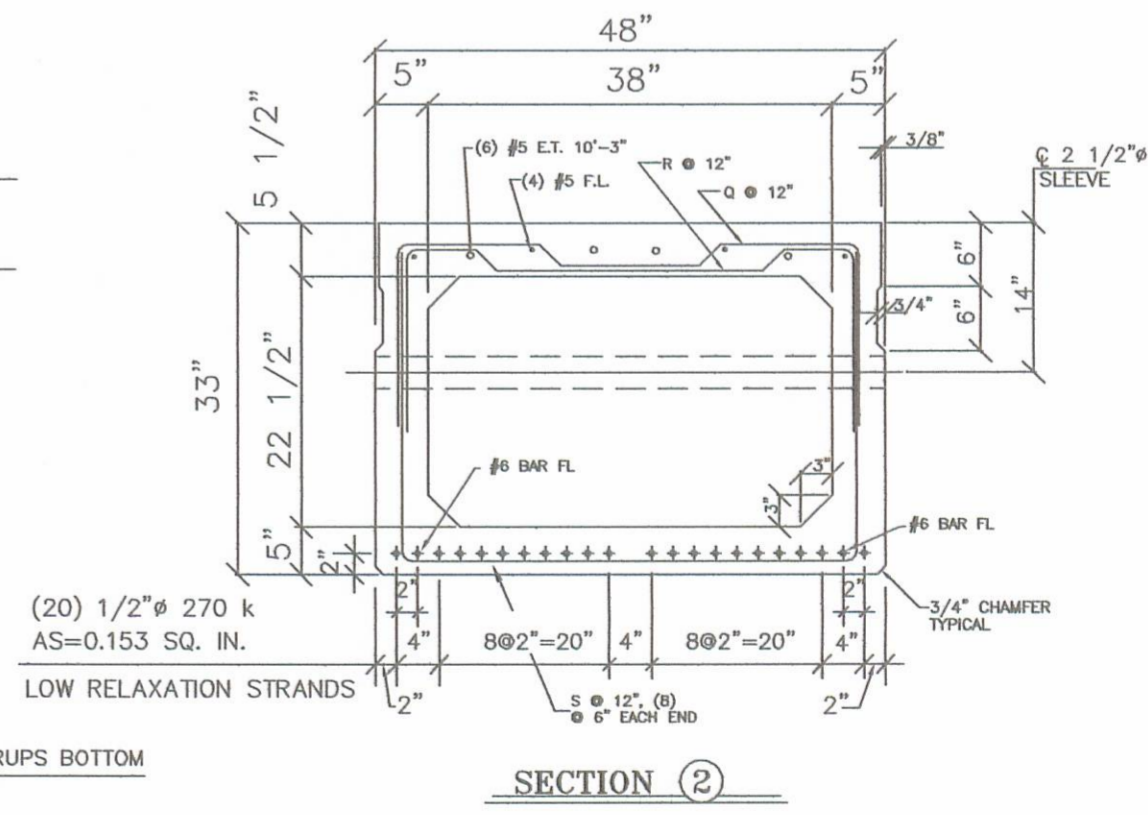
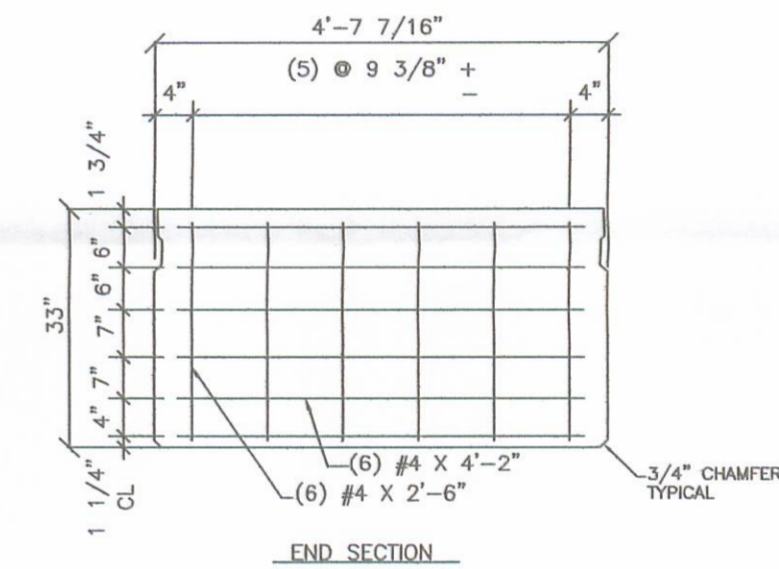
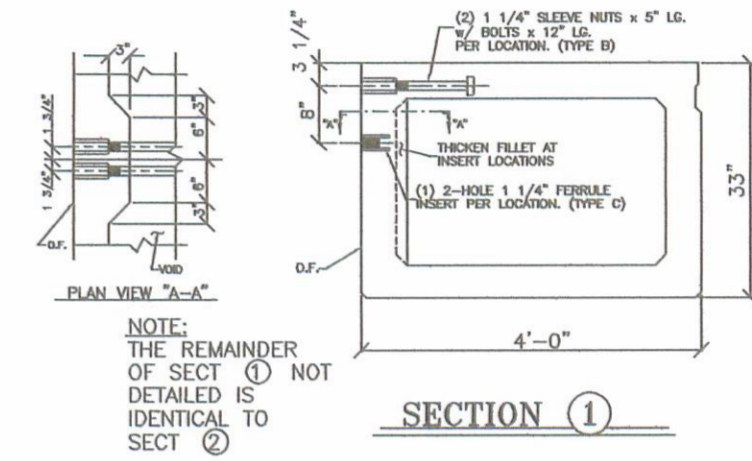
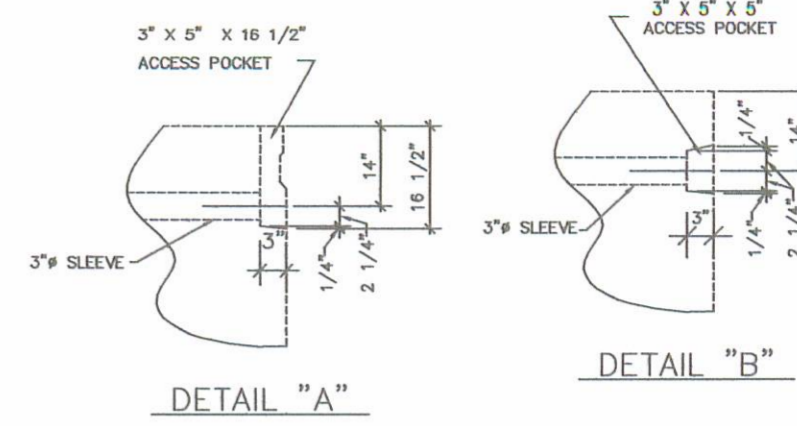
B-1 16.80 cy VOL
4 REQ'D. 34.02 tons WT



A-1 16.6 cy VOL
2 REQ'D. 33.6 tons WT



STIRRUP LOCATION



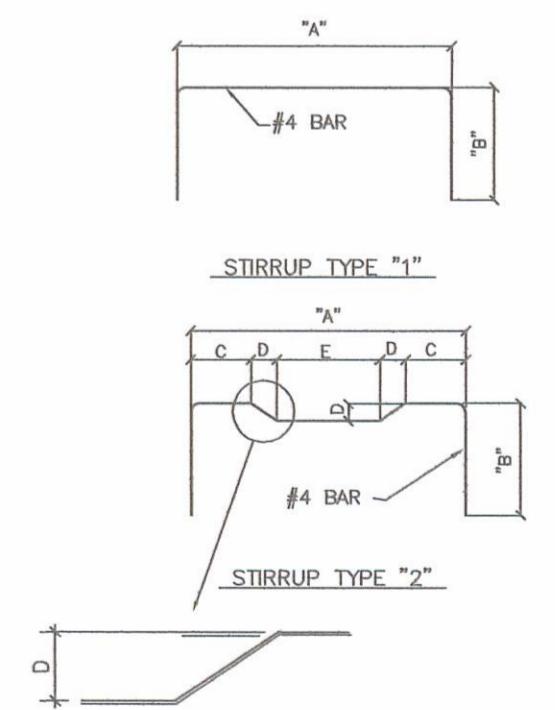
SECTION 2

FABRICATION BILL OF MATERIALS

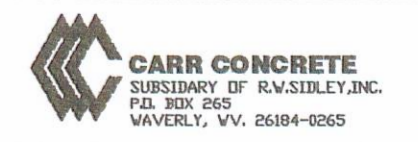
QUAN PER P.C.	DESCRIPTION	TOTAL QUANTITY
A-1 (2) BEAMS		
2	2" Ø X 33" SLEEVES	4
4	3" Ø X 45" SLEEVES	8
2	22 1/2" X 38" VOID X 19'-0"	4
1	22 1/2" X 38" VOID X 22'-4 5/8"	2
6	5" VOID DRAINS	12
22	TYPE B GUARDRAIL INSERTS	44
11	TYPE C GUARDRAIL INSERTS	22
B-1 (4) BEAMS		
2	2" Ø X 33" SLEEVES	8
8	3" Ø X 45" SLEEVES	32
2	22 1/2" X 38" VOID X 16'-8 5/16"	8
4	22 1/2" X 38" VOID X 1'-3 11/16"	16
1	22 1/2" X 38" VOID X 20'-0 15/16"	4
10	5" VOID DRAINS	32

QUANTITY PER P.C.	MARK NUMBER	DESCRIPTION	TOTAL QUANTITY
REINFORCING FOR ALL (6) BEAMS			
80	Q	#4 STIRRUP (BLACK)	480
73	R	#4 STIRRUP (BLACK)	438
80	S	#4 STIRRUP (BLACK)	480
4	S1	#4 STIRRUP (BLACK)	24
4	S2	#4 STIRRUP (BLACK)	24
4	S3	#4 STIRRUP (BLACK)	24
4	S4	#4 STIRRUP (BLACK)	24
4	S5	#4 STIRRUP (BLACK)	24
8	STR	#5 BAR X 30'-0" (BLACK)	48
4	STR	#5 BAR X 17'-6" (BLACK)	24
12	STR	#5 BAR X 10'-3" (BLACK)	72
12	STR	#4 BAR X 4'-2" (BLACK)	72
12	STR	#4 BAR X 2'-6" (BLACK)	72
4	STR	#5 BAR X 30'-0" (BLACK)	24
2	STR	#5 BAR X 18'-4" (BLACK)	12

STIRRUP SIZES						
MARK	TYPE	DIMENSIONS				
		A	B	C	D	E
S	1	43"	29"			
Q	2	43"	17"	13"	2"	13"
R	2	43"	17"	7"	2"	25"
S1	1	10 5/16"	29"			
S2	1	17 1/4"	29"			
S3	1	24 3/16"	29"			
S4	1	31 1/8"	29"			
S4	1	38"	29"			



INDICATES MARKED END OF BEAM



CARR CONCRETE
SUBSIDIARY OF R.V. STIDLEY, INC.
P.O. BOX 265
WAVERLY, VA. 26184-0265

BRIDGE 116-0.55
RUSH CREEK TOWNSHIP
LOGAN, COUNTY OH
LOGAN COUNTY ENGINEER
LOGAN COUNTY ENGINEER

DATE: 1/16/2004
CHECKED BY:
DESIGNED BY:
DATE: BB0472
SHEET: 2 of 2