

STANDARD SHEETS

B-5	SLOPE GRADING, EMBANKMENTS, MUCK	6/1/94
C-1	CURBS, BITUMINOUS CONCRETE SIDEWALKS GRANITE SLOPE EDGING, VERTICAL GRANITE CURB PRECAST REINFORCED CONCRETE CURB CAST IN PLACE CONCRETE CURB BITUMINOUS CONCRETE CURB, TREATED TIMBER CURB	1/3/00
E-100	CONSTRUCTION APPROACH SIGNS	1/6/97
E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	1/6/97
E-101	CONSTRUCTION SIGN DETAILS	5/30/03
E-102	CONSTRUCTION SIGN DETAILS	6/30/03
E-102A	CONSTRUCTION SIGN DETAILS	8/8/95
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	8/8/95
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	6/30/03
E-107A	BREAKAWAY BARRICADE DETAILS	8/8/95
E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	8/8/95
E-193	PAVEMENT MARKING DETAILS	8/18/95
G-1	STEEL BEAM GUARDRAIL WITH STEEL POSTS STEEL BEAM GUARDRAIL WITH WOOD POSTS	1/03/00
G-1D	STEEL BEAM GUARDRAIL APPROACH END TERMINAL STEEL BEAM GUARDRAIL TRAILING END TERMINAL ANCHOR FOR STEEL BEAM RAIL STEEL BEAM MEDIAN BARRIER	1/03/00
G-18	PRECAST CONCRETE TEMPORARY TRAFFIC BARRIER	6/1/94
SB-R6-82	BRIDGE RAILING - HEAVY DUTY STEEL BEAM	1/6/95
T-1	TEMPORARY EROSION CONTROL DETAILS	6/1/94
T-2	TEMPORARY EROSION CONTROL DETAILS	6/1/94

STATE OF VERMONT AGENCY OF TRANSPORTATION



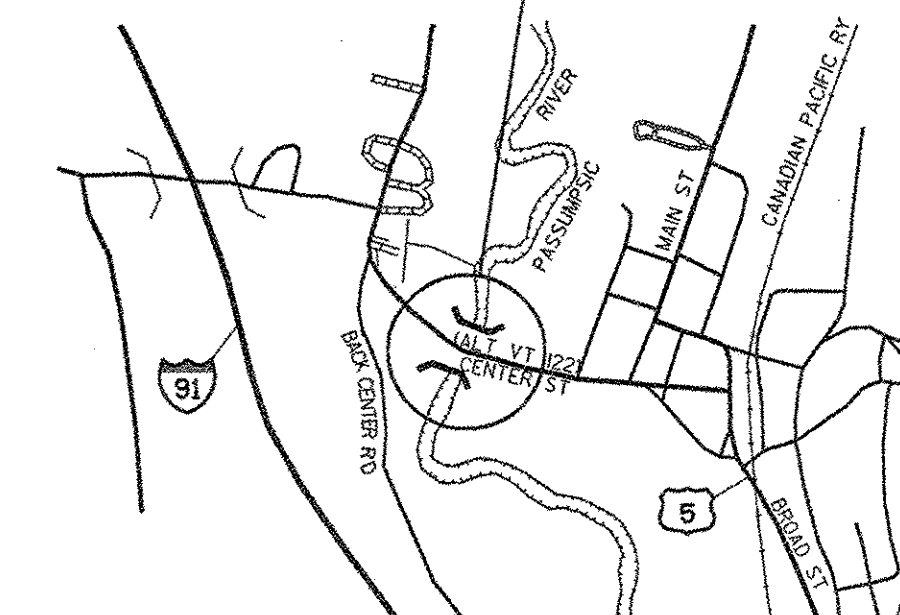
PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF LYNDON COUNTY OF CALEDONIA CENTER STREET (ALT VT 122) BRIDGE #2 CLASS II MAJOR COLLECTOR

PROJECT LOCATION: IN THE TOWN OF LYNDON ON CENTER STREET (ALT VT 122), BEGINNING AT A POINT ON CENTER STREET APPROXIMATELY 0.300 MILES EAST OF THE INTERSECTION OF BACK CENTER ROAD AND ALT VT 122, AND PROCEEDING SOUTHERLY ALONG CENTER ST. FOR 0.052 MILES.

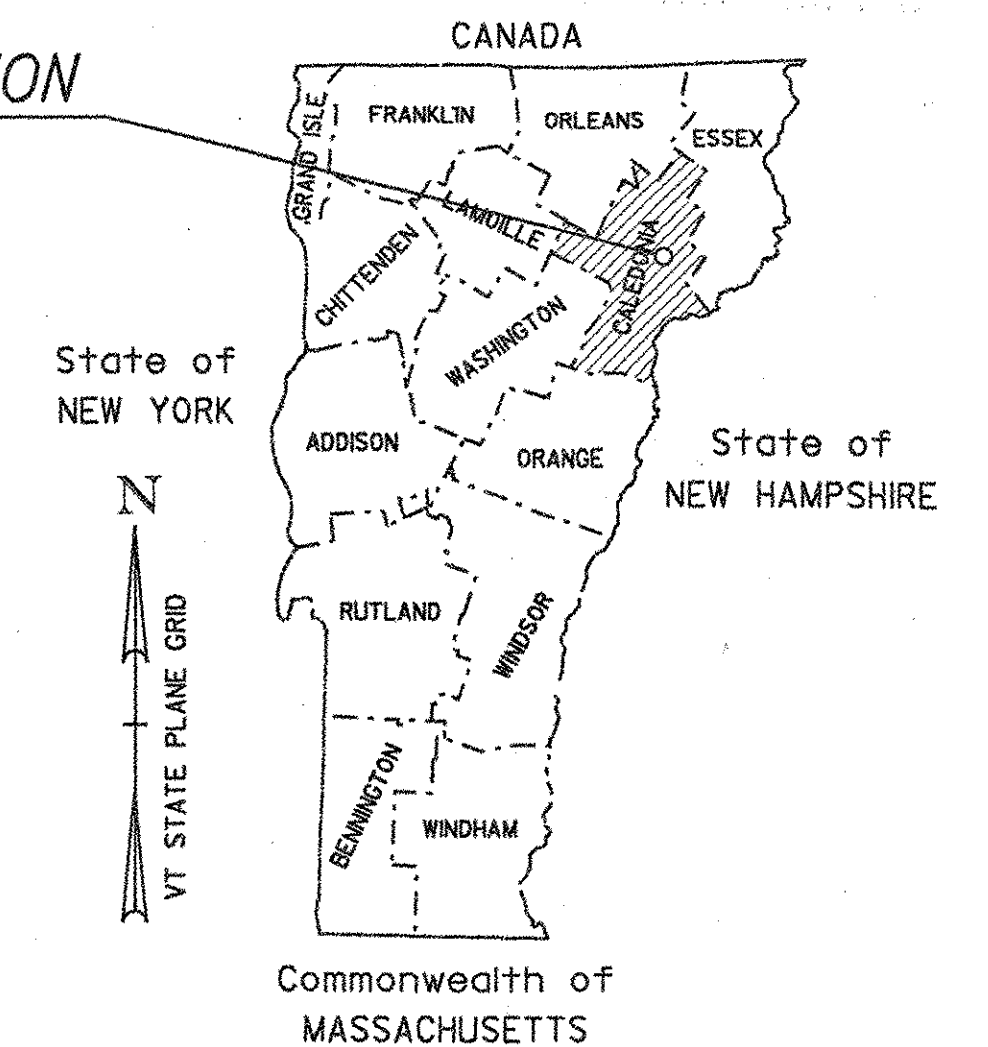
PROJECT DESCRIPTION: REPLACEMENT OF EXISTING SUPERSTRUCTURE WITH A REINFORCED CONCRETE DECK COMPOSITE WITH NEW ROLLED BEAM GIRDERS, CONSTRUCTION OF APPROACH SLABS AND NEW BEAM SEATS, AND FULL ROADWAY APPROACH WORK.

LENGTH OF BRIDGE = 172.00 FEET = 0.033 MILES
LENGTH OF ROADWAY = 100.00 FEET = 0.019 MILES
LENGTH OF PROJECT = 272.00 FEET = 0.052 MILES

PROJECT LOCATION LYNDON BHO 1447(26)



LOCATION MAP
NOT TO SCALE



RECORD PLANS

CONTRACTOR: AUTIN CONSTRUCTION, INC. - CONCORD, VT
RESIDENT ENGINEER: DOUG BUMPS
CONSTRUCTION BEGAN: APRIL 15, 2004
CONSTRUCTION COMPLETE: JULY 6, 2005
RECORD PLANS BY: DOUG BUMPS & CHIP PIERCE

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY *Doug Bumps* RESIDENT ENGINEER
DATE 3/8/06

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

INDEX OF SHEETS

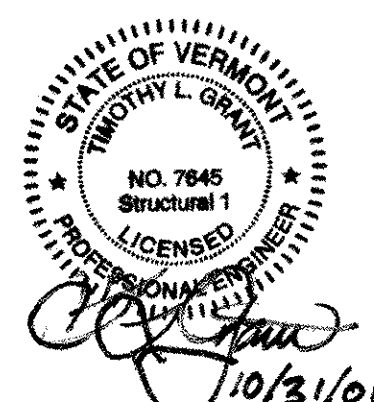
- TITLE SHEET
- PRELIMINARY INFORMATION SHEET
- QUANTITY SHEET
- ROADWAY LAYOUT AND PAVEMENT MARKING
- PROFILE
- DETOUR AND SIGNING PLAN
- TEMPORARY TRAFFIC SIGNAL PLAN - 1
- TEMPORARY TRAFFIC SIGNAL PLAN - 2
- TEMPORARY TRAFFIC SIGNAL PLAN - 3
- EROSION CONTROL PLAN
- PLAN AND ELEVATION
- GENERAL NOTES
- DECK REINFORCING - 1
- DECK REINFORCING - 2
- FRAMING PLAN
- BEAM DETAILS - 1
- BEAM DETAILS - 2
- BEARING DETAILS - 1
- BEARING DETAILS - 2
- BEARING DETAILS - 3
- EXPANSION JOINT DETAILS - 1
- EXPANSION JOINT DETAILS - 2
- APPROACH SLAB DETAILS
- DIAPHRAGM DETAILS
- MISCELLANEOUS DETAILS
- ABUTMENT REMOVAL DETAILS
- ABUTMENT DETAILS
- PIER REMOVAL DETAILS
- PIER DETAILS
- REINFORCING STEEL SCHEDULE
- CIP CONCRETE BRIDGE RAILING DETAILS - 1
- CIP CONCRETE BRIDGE RAILING DETAILS - 2
- ROADWAY SECTIONS - 1
- ROADWAY SECTIONS - 2

CONVENTIONAL SYMBOLS

COUNTY LINE	— — — — —
TOWN LINE	— — — — —
LIMITS OF ACCESS	— — — — —
POINT OF ACCESS	X
FENCE LINE	X — X — X — X —
STONE WALL	— — — — —
TRAVELED WAY	— — — — —
GUARD RAIL	— — — — —
RAILROAD	— — — — —
SURVEY LINE	— — — — —
CULVERT	— — — — —
POWER POLE	— — — — —
TELEPHONE POLE	— — — — —
TREES	— — — — —
CONTROL OF ACCESS	— — — — —
PROPERTY LINE	— — — — —
R.O.W. TAKING LINE	— — — — —
SLOPE RIGHTS	— — — — —
TOP OF CUT	— — — — —
TOE OF SLOPE	— — — — —

DATUM

VERTICAL ASSUMED
HORIZONTAL ASSUMED



PLAN

SCALE 1" = 20'-0"



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROJECT DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2004, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

McFARLAND-JOHNSON, INC.

APPROVED *Arthur Sanborn* DATE 11/17/03

ARTHUR SANBORN
MUNICIPAL PROJECT MANAGER

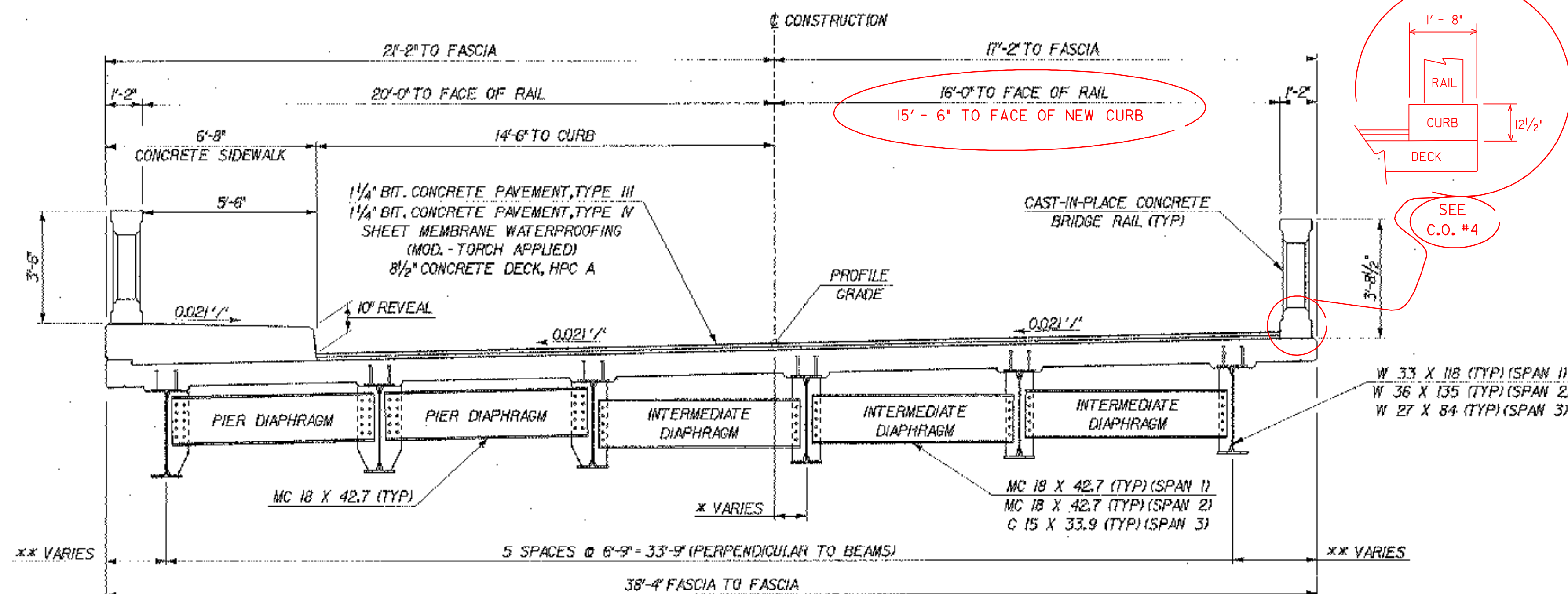
DIRECTOR OF PROGRAM
DEVELOPMENT

APPROVED *Doug Bumps* DATE 11/25/03

PROJECT NAME : LYNDON
PROJECT NUMBER : BHO 1447 (26)

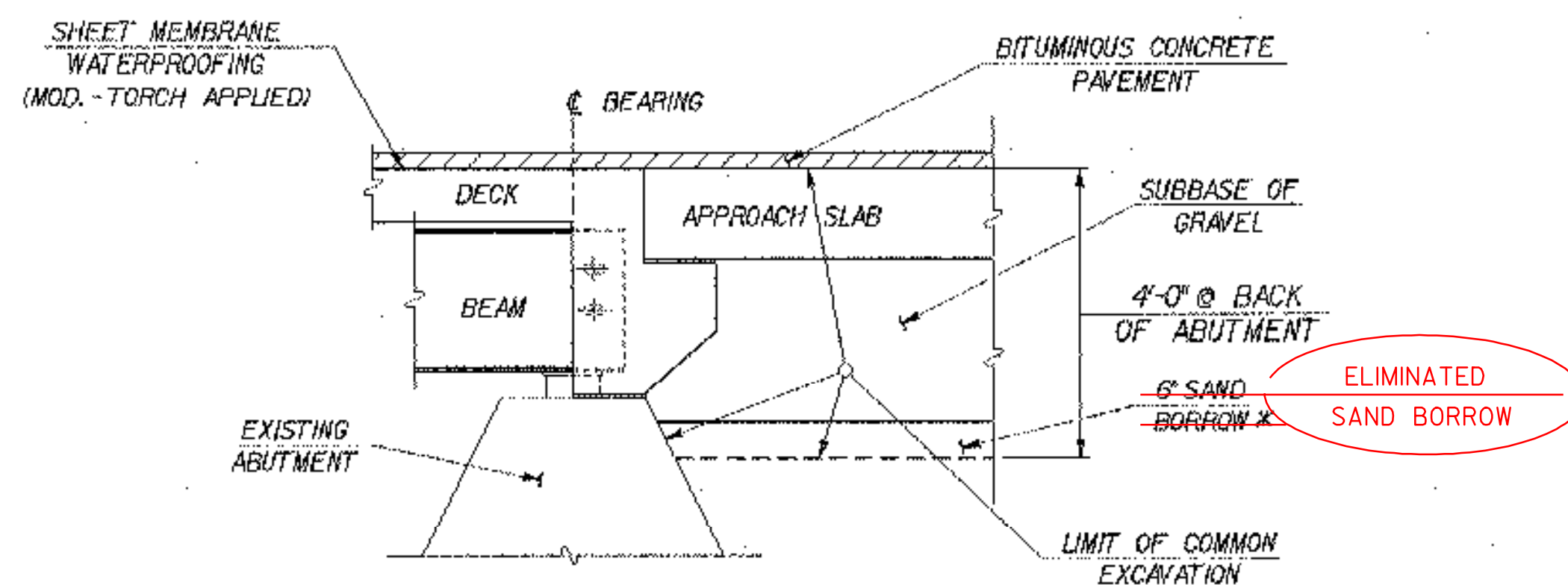
SHEET 1 OF 34 SHEETS

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TYPICAL BRIDGE SECTION

SCALE: 3/8" = 1'-0"
 (* POSITION OF BEAMS WITH RESPECT TO CENTERLINE CONSTRUCTION VARIES)
 (** CURB AND SIDEWALK OVERHANG WIDTHS VARY)

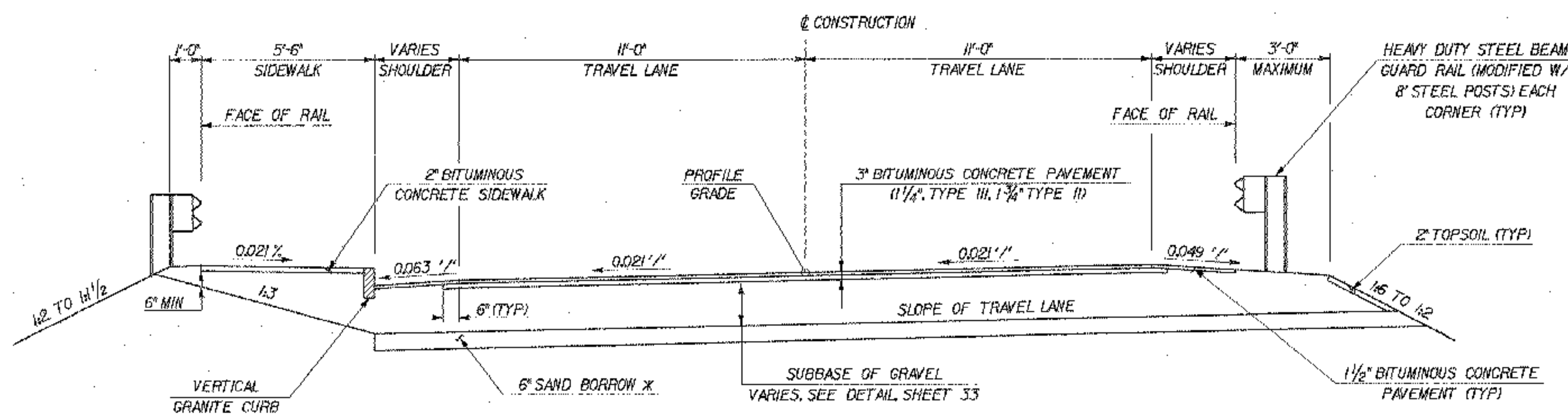


TYPICAL ABUTMENT EARTHWORK SECTION

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

MATERIAL ITEM	TOLERANCE
PAVEMENT	± 1/4" TOTAL THICKNESS
SUBBASE OF GRAVEL	± 1"
SAND BORROW *	± 1"

* 6" SAND BORROW TO BE USED ONLY IF SO DIRECTED BY THE RESIDENT ENGINEER.



TYPICAL ROADWAY SECTION

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

* 6" SAND BORROW TO BE USED ONLY IF SO DIRECTED BY THE RESIDENT ENGINEER.

EXISTING STRUCTURE DATA

STRUCTURE TYPE: CONCRETE ABUTMENT WITH REINFORCED CONCRETE DECK ON ROLLED STEEL BEAMS.
 THE BRIDGE RAIL IS AN ALUMINUM SPINDLE TYPE, SET ON STEEL POSTS, BUILT IN 1961.
 OVERALL LENGTH: 172 FEET INVENTORY RATING: 24.7 TONS
 OVERALL DECK WIDTH: 38'-8"
 SPAN LENGTH(S) CENTER TO CENTER OF BEARING: SPAN 1: 51'-11 15/16", SPAN 2: 81'-11 7/8", SPAN 3: 31'-11 15/16".
 CLEAR SPAN LENGTH(S) NORMAL TO STREAM: 170'-0"
 DISPOSITION OF STRUCTURE: REMOVE EXISTING CONCRETE DECK, RAILS, AND STEEL BEAMS. THE EXISTING ABUTMENTS AND PIERS ARE TO BE MODIFIED AS SHOWN. STEEL BEAMS AND RAIL TO BE DISPOSED OF BY CONTRACTOR.

NEW STRUCTURE DATA

STRUCTURE GEOMETRY

STRUCTURE TYPE: NEW STEEL ROLLED BEAMS WITH REINFORCED CONCRETE DECK.
 OVERALL LENGTH: 172'-0" (MEASURED ALONG CENTERLINE CONSTRUCTION)
 OVERALL DECK WIDTH: 38'-4"
 SPAN LENGTH(S) CENTER TO CENTER OF BEARING: SPAN 1: 51'-11 15/16", SPAN 2: 81'-11 7/8", SPAN 3: 31'-11 15/16".
 CLEAR SPAN LENGTH(S) NORMAL TO STREAM: 170'-0"
 ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? NO

HYDRAULIC DATA

NO CHANGE FROM EXISTING STRUCTURE.

DESIGN CRITERIA

- DESIGN LIVE LOAD AASHTO: HS-20
- DESIGN SPAN: 52-82-32
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: N/A ON LEDGE: N/A
- ALLOWABLE LOAD FOR PILING: N/A TYPE: N/A ESTIMATED LENGTH: N/A
- STRUCTURAL STEEL AASHTO GRADE: M20, GR50W
- REINFORCING STEEL GRADE: 60
- CONCRETE HPC A: f'c = 4000 PSI
CONCRETE HPC B: f'c = 3500 PSI

TRAFFIC MAINTENANCE

TRAFFIC TO BE MAINTAINED BY DETOUR

LOADING LEVELS (LOAD FACTOR)	LOAD FACTOR LOAD RATING (TONS)					
	H	HS	352	6 AXLE	3A. STR.	4A. STR.
INVENTORY A=2.17, B=1.00	40	55				
POSTED A=1.55, B=1.40	56	76	91		70	72
OPERATING A=1.30, B=1.67		91	108	129	83	86

$$\text{STRENGTH RF} = \frac{0.95 F_y S_{x1} - M_{D1}}{A \times M_{LL+I}} \quad \text{SERVICEABILITY RF} = B \frac{0.95 F_y S_{x1} - M_{D1}}{1.67 M_{LL+I}}$$

TRAFFIC DATA

ALT VT 122 BR 2

2001 ADT	3,030 VPD	OK	50%
2021 ADT	4,030 VPD	TZ	5.0%
2001 ADTT	150 VPD	DESIGN SPEED	35 MPH
2021 ADTT	200 VPD	18 KIP ESALS (2 LANES)	
2001 DHV	370 VPH	20 YR - 746,150	
		40 YR - 1,671,144	

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
PRELIMINARY INFORMATION SHEET			
Designed By	T. GRANT / S. MERKMAN	Drawn By	S. DEJAS / S. MERKMAN
Checked By	T. GRANT / R. WOOD	Bridge Design Supervisor	M. ZYDEL
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549\036\an\z\238pl.dgn		
Bridge Sheet No.		Sheet	2 of 34

MJ
MCFARLAND-JOHNSON, INC.

QUANTITIES

NO.	ITEM	UNIT	QUANTITY BREAKDOWN										TOTAL
			SUPER STRUCTURE	ABUTMENT NO. 1	ABUTMENT NO. 2	PIER NO. 1	PIER NO. 2	APPROACH SLAB NO. 1	APPROACH SLAB NO. 2	EROSION CONTROL	ROADWAY	E & C	
203.15	COMMON EXCAVATION	CY									380		380
203.31	SAND BORROW	CY									0		0
210.10	COLD PLANING - BITUMINOUS PAVEMENT	SY									360		360
301.15	SUBBASE OF GRAVEL	CY									330		330
404.65	EMULSIFIED ASPHALT	CWT	0					0	0		0		0
406.25	BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	TON	79					10	9		74		172
501.33	CONCRETE, HIGH PERFORMANCE CLASS A	CY	265.40			21.76	24.25						255.40
501.34	CONCRETE, HIGH PERFORMANCE CLASS B	CY				19.5	21.5	30.57	30.5				107.16
506.50	STRUCTURAL STEEL (ROLLED BEAM)	LB	15450										15450
507.15	REINFORCING STEEL	LB				1180	1560						2740
507.16	DRILLING AND GROUTING DOWELS	LF				32	32						64
507.17	EPOXY COATED REINFORCING STEEL	LB	53626					3892	3892				61410
508.15	SHEAR CONNECTORS (2800 - 7/8" DIA. X 7')	LS	1										1
513.25	STRUCTURAL PAINTING, SHOP APPLIED (16 TONS)	LS	1										1
513.35	CONTAINMENT & ENVIRONMENTAL PROTECTION, SHOP	LS	1										1
513.40	SURFACE PREPARATION, SHOP (16 TONS)	LS	1										1
514.10	WATER REPELLENT	GAL	38	3.0	3.0	3.0	3.0						50
516.10	BRIDGE EXPANSION JOINT	LF	74.5										74.5
519.20	SHEET MEMBRANE WATERPROOFING (MOD. - TORCH APPLIED)	SY	552.3					0	0				552.3
525.50	CAST-IN-PLACE CONCRETE BRIDGE RAIL	LF						12	12				369
529.10	REMOVAL OF BRIDGE PAVEMENT	SY	585										585
529.20	PARTIAL REMOVAL OF STRUCTURE	EA	0										0
531.10	BEARING DEVICE ASSEMBLY	EA	36										36
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE 1	HR											1
616.21	VERTICAL GRANITE CURB	LF									8		8
616.40	REMOVING AND RESETTING CURB	LF									95		95
618.15	BITUMINOUS CONCRETE SIDEWALK	TON									0		0
621.21	HEAVY DUTY STEEL BEAM GUARD RAIL (MODIFIED)	LF									174		174
621.60	ANCHOR FOR STEEL BEAM RAIL	EA									3		3
621.80	REMOVAL AND DISPOSAL OF GUARD RAIL	LF									138		138
621.81	REMOVAL AND DISPOSAL OF GUIDE POSTS	EA									2		2
621.90	TEMPORARY TRAFFIC BARRIER	LF									60		60
630.10	UNIFORMED TRAFFIC OFFICERS	HR									110		110
630.15	FLAGGERS	HR									60		60
631.10	FIELD OFFICE - ENGINEERS	LS										1	1
631.16	TESTING EQUIPMENT - CONCRETE	LS										1	1
631.17	TESTING EQUIPMENT - BITUMINOUS (MOD.)	LS										1	1
631.25	FIELD OFFICE TELEPHONE (N.A.B.I.)	LS										1	1
634.10	EMPLOYEE TRAINEESHIP	HR										1	1
635.10	MOBILIZATION	LS									568		568
641.10	TRAFFIC CONTROL	LS									1		1
646.40	DURABLE 4 INCH WHITE LINE	LF	344					40	40		320		744
646.41	DURABLE 4 INCH YELLOW LINE	LF	344					40	40		320		744
646.46	DURABLE 24 INCH STOP BAR	LF									58		58
646.66	TEMPORARY 24 INCH STOP BAR	LF									207		207
646.85	REMOVAL OF EXISTING PAVEMENT MARKINGS	SF									100		100
649.51	GEOTEXTILE FOR SILT FENCE	SY								140			140
651.15	SEED	LB								50			50
651.17	SEED-WINTER RYE	LB								50			50
651.18	FERTILIZER	LB								50			50
651.20	AGRICULTURAL LIMESTONE	TON								1			1
651.25	HAY MULCH	TON								1			1
651.26	HAY BALES FOR EROSION CONTROL	EA								20			20
651.35	TOPSOIL	CY									2		2
652.10	EROSION & SEDIMENT CONTROL PLAN	LS								1			1
652.20	MONITORING EROSION & SEDIMENT CONTROL PLAN	HR								16			16
652.30	FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN (N.A.B.I.)	LU								1			1
654.10	EROSION MATTING	SY								50			50
675.301	FLANGED CHANNEL SIGN POST	LF									43		43
675.50	REMOVING SIGNS	EA									3		3
675.60	ERECTING SALVAGED SIGNS	EA									3		3
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM (US 5 AT BACK CENTER ROAD)	EA									1		1
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM (BRIDGE AT MILLER RUN)	EA									1		1
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM (US 5 AT VT 114)	EA									1		1
678.42	TEMPORARY DETECTOR	EA									12		12

ITEMS ADDED BY CHANGE ORDER

- C.O. #1
646.70 TEMPORARY LETTER OR SYMBOL - 118 EACH
- C.O. #2
641.15 PORTABLE CHANGABLE MESSAGE BOARD - 1 EACH (MOD.)
- C.O. #3
529.20 PARTIAL REMOVAL OF STRUCTURE - 1 EACH (MOD.)
- C.O. #5
618.10 PORTLAND CEMENT CONCRETE SIDE WALK - 56 SY (5 INCH)
- C.O. #6
516.10 BRIDGE EXPANSION JOINT - 61LF (ASPHALTIC PLUG JOINT)
- C.O. #7
646.20 (4 INCH) WHITE LINE - 800 LF
646.21(4 INCH) YELLOW LINE - 800 LF
- C.O. #8
514.10 WATER REPELLENT - 20 GAL (MOD. S.LANE)
- C.O. #9
678.15 TRAFFIC CONTROL SIGNAL SYSTEM (MOD) - 1 EACH US5 AT VT114
- C.O. #10
TRAFFIC CONTROL SIGNAL SYSTEM (MOD #2) - 1 EACH US5 AT BACK CENTER ROAD

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of LYNDON Bridge No. 2
Highway No. ALT VT 122 Log Sta.
Surv. Sta.

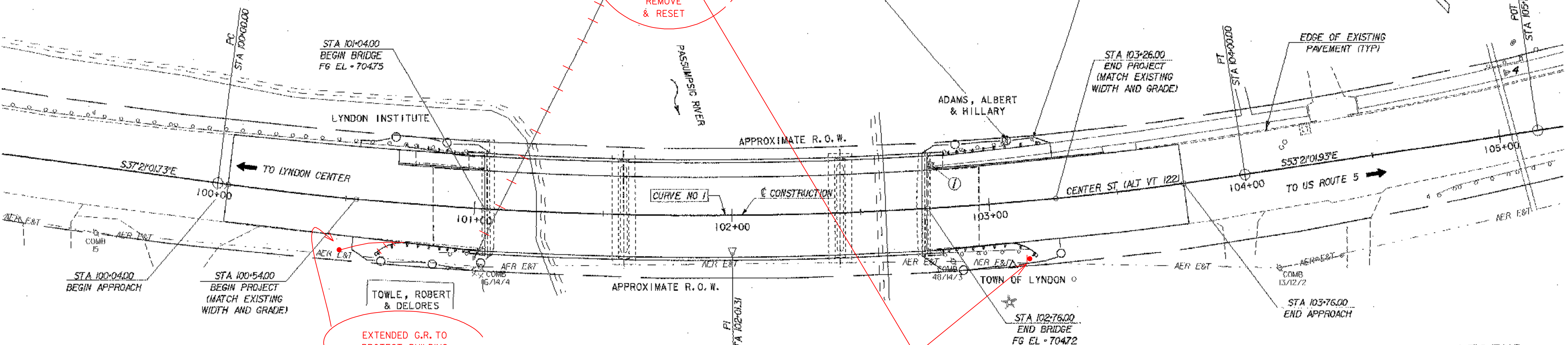
CENTER STREET OVER PASSUMPSIC RIVER

QUANTITY SHEET

Designed By T.GRANT/S.MERKMAN Drawn By S.DELIA/S.MERKMAN
Checked By T.GRANT/R.WOOD Date 10/01 Bridge Design Supervisor
M.ZYDEL Date 10/01
PROJECT LYNDON PROJECT NO. BHO 1447(26)
I.G.C. Info. mh154910316cont/z/238qshdgn
Bridge Sheet No. Sheet 3 of 34

SEEDING FORMULA - RURAL AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREeping RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			



EXISTING BRIDGE DATA

SPAN 1 = 51'-11 1/2", SPAN 2 = 81'-11 1/2", SPAN 3 = 31'-11 1/2"
DECK WIDTH = 38'-8" FASCIA TO FASCIA
SUPERSTRUCTURE = ROLLED STEEL BEAMS SUPPORTING A CONCRETE DECK
SUBSTRUCTURE = CONCRETE ABUTMENTS AND PIERS

CONSTRUCTION NOTES

DURABLE 4" WHITE LINE
STA. 100+04.00, 11.00' RT TO STA. 103+76.00, 11.00' RT
STA. 100+04.00, 11.00' LT TO STA. 103+76.00, 11.00' LT

DURABLE 4" YELLOW LINE
STA. 100+04.00, 0' TO STA. 103+76.00, 0' DBL. LINE - SOLID

HEAVY DUTY STEEL BEAM GUARD RAIL (MODIFIED)
STA. 100+62.92, 20.22' RT - STA. 100+99.83, 15.71' RT
STA. 102+80.18, 15.71' RT - STA. 103+16.98, 20.88' RT
STA. 100+72.09, 21.73' LT - STA. 100+97.38, 19.71' LT (SEE GENERAL NOTE 4)
STA. 102+82.62, 19.73' LT - STA. 103+22.07, 21.68' LT

CAST-IN-PLACE CONCRETE BRIDGE RAILING
STA. 100+98.84, 16.00' RT - STA. 102+81.17, 16.00' RT
STA. 100+96.36, 20.00' LT - STA. 102+83.63, 20.00' LT

REMOVAL OF EXISTING GUARD RAIL
STA. 100+87.51, 17.73' RT - STA. 100+98.54, 16.62' RT
STA. 102+81.07, 17.20' RT - STA. 103+14.33, 18.21' RT
STA. 100+72.09, 21.73' LT - STA. 100+97.38, 19.71' LT (SEE GENERAL NOTE 4)
STA. 102+83.46, 20.31' LT - STA. 103+09.81, 22.88' LT

VERTICAL GRANITE CURB
STA. 100+69.38, 14.50' LT - STA. 100+77.45, 14.50' LT

REMOVING AND RESETTING CURB
STA. 100+77.45, 14.40' LT - STA. 101+03.18, 14.94' LT
STA. 102+76.88, 14.50' LT - STA. 103+45.55, 15.17' LT

BITUMINOUS CONCRETE SIDEWALK
STA. 100+69.38, LT - STA. 101+03.18, LT
STA. 102+76.88, LT - STA. 103+26.00, LT

ANCHOR FOR STEEL BEAM GUARD RAIL
STA. 100+68.92, RT
STA. 103+10.98, RT
STA. 103+18.07, LT

COLD PLACING BITUMINOUS PAVEMENT
STA. 100+04.00 0' - STA. 100+54.00 0'
STA. 103+26.00 0' - STA. 103+76.00 0'

ALIGNMENT DATA

CONSTRUCTION CENTERLINE	NORTHING	EASTING
BEGIN PROJECT STA 100+54.00	10148.5758	4833.2705
PI CURVE NO. 1 STA 102+01.31 BK - STA 101+98.69 AH.	10030.8467	4921.8405
END PROJECT STA 103+26.00	9956.3658	5025.1488

CURVE DATA
Δ = 150°00'00" LT
D = 400'00"
R = 1432.39'
T = 201.31'
L = 400'00"
E = 1408'

COORDINATES

POINT	STATION	NORTHING	EASTING
PC	100+00.00	10190.8749	4799.7080
BEGIN APPROACH	100+04.00	10187.6985	4802.1392
BEGIN PROJECT	100+54.00	10148.5758	4833.2705
BEGIN BRIDGE	101+04.00	10110.5634	4865.7482
END BRIDGE	102+76.00	9988.9098	4987.1917
END PROJECT	103+26.00	9956.3658	5025.1488
END APPROACH	103+76.00	9925.1669	5064.2177
PT	104+00.00	9910.6802	5083.3520
POT	105+15.00	9842.0347	5175.6168

NOTE:
NORTHINGS AND EASTINGS ARE BASED
UPON THE LOCAL SURVEY OF THIS PROJECT, NOT
THE VERMONT GRID SYSTEM.

APPLICATION NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT
AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

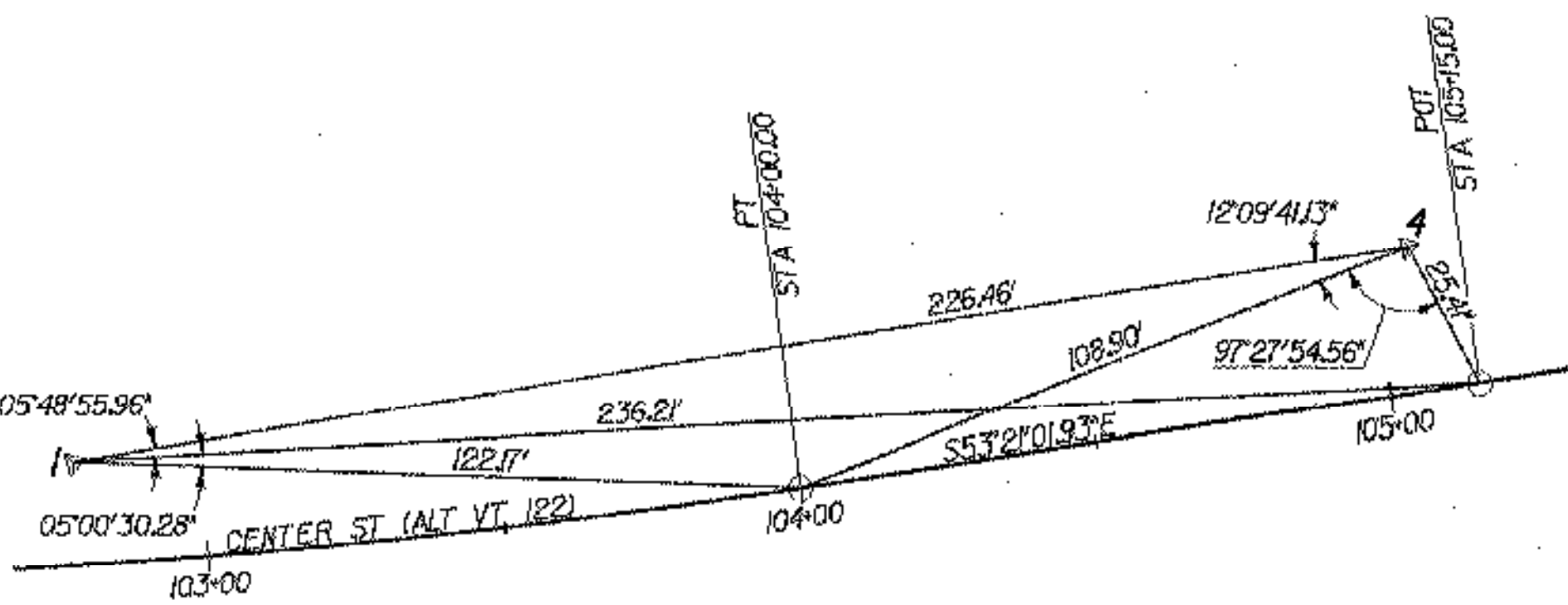
FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF
500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR
AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE,
OR AS DIRECTED BY THE ENGINEER.

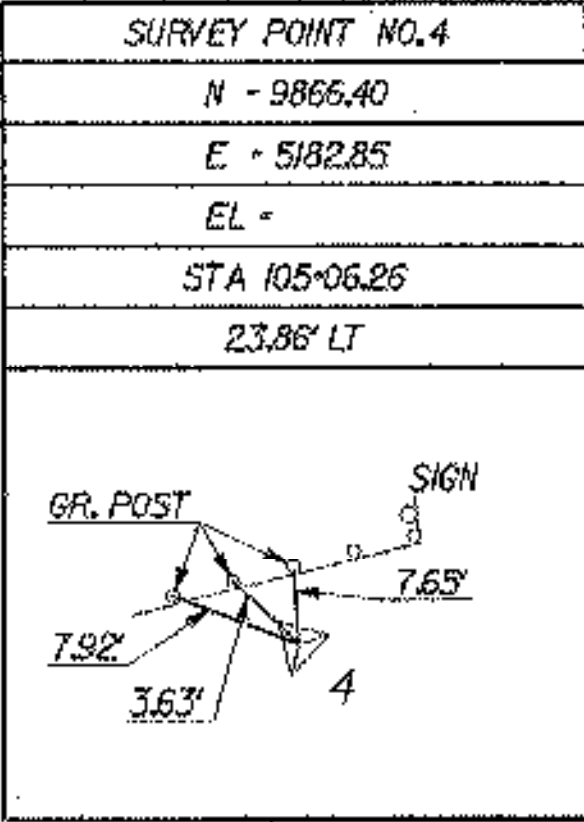
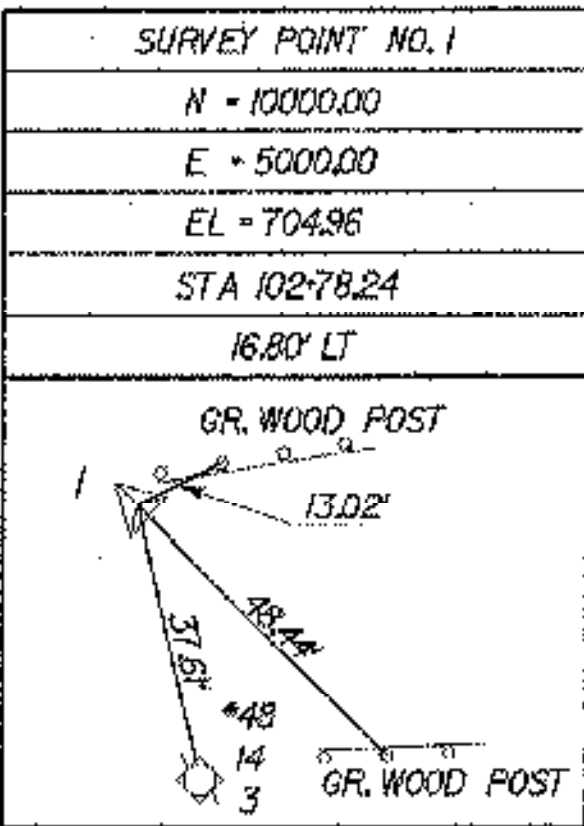
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED
BY THE ENGINEER.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.15 GAL/SY
BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.



SCHEMATIC LAYOUT, CONTROL POINTS TO ALIGNMENT
NOT TO SCALE

SWING TIES TO
CENTERLINE CONSTRUCTION



LEGEND

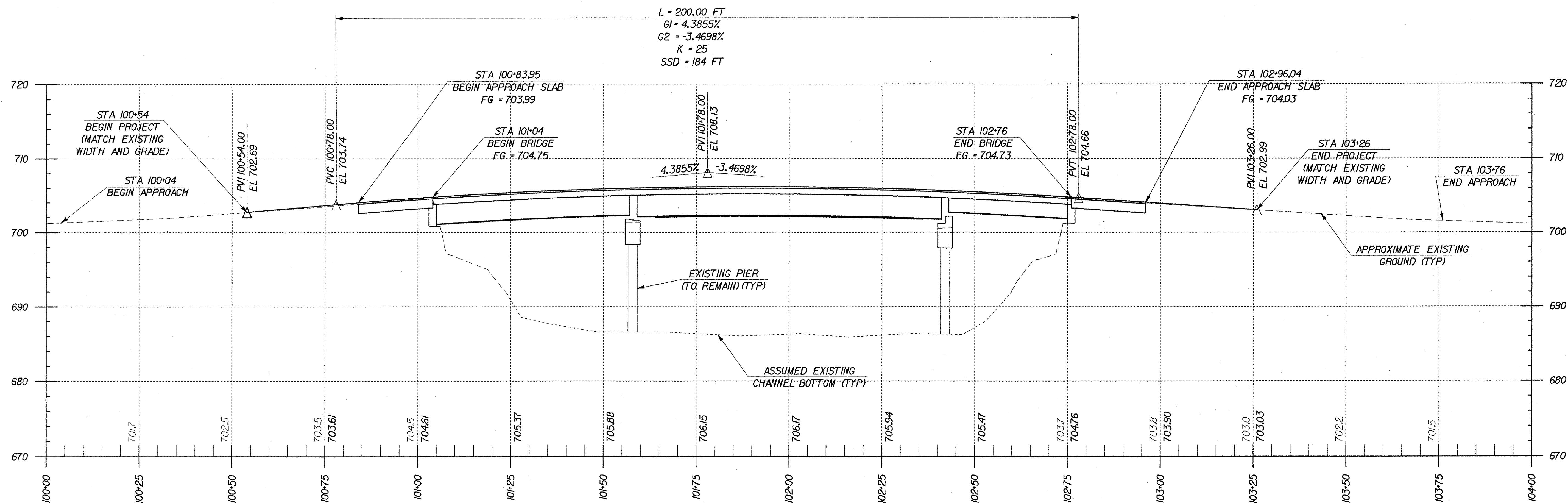
EXISTING SIGNS
RET = RETAIN

GENERAL NOTES

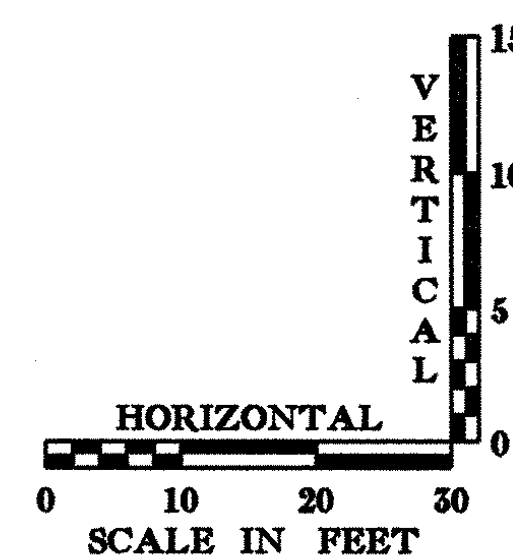
- ALL CONSTRUCTION ACTIVITY SHALL REMAIN WITHIN THE EXISTING RIGHT-OF-WAY.
- THE EXISTING ROADWAY ALONG CENTER STREET (ALT VT 122) IS PAVED (DEPTH UNKNOWN).
- ALL SALVAGED SIGNS SHALL BE ERECTED IN THE SAME LOCATION, ON NEW POSTS, AFTER COMPLETION OF CONSTRUCTION. POSTS SHALL BE PAID FOR UNDER ITEM 675.304, "FLANGED CHANNEL SIGN POSTS".
- APPROXIMATE LENGTH SHOWN, MODIFY AS NECESSARY TO TIE INTO EXISTING RAIL WITHIN DISTANCE SHOWN.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
ROADWAY LAYOUT AND PAVEMENT MARKING			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	T. GRANT/R. WOOD	Bridge Design Supervisor	M. ZYDEL
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
L.G.C. Info. m:\549103\6cont\2\238trp1.dgn			
Bridge Sheet No.		Sheet	4 of 34

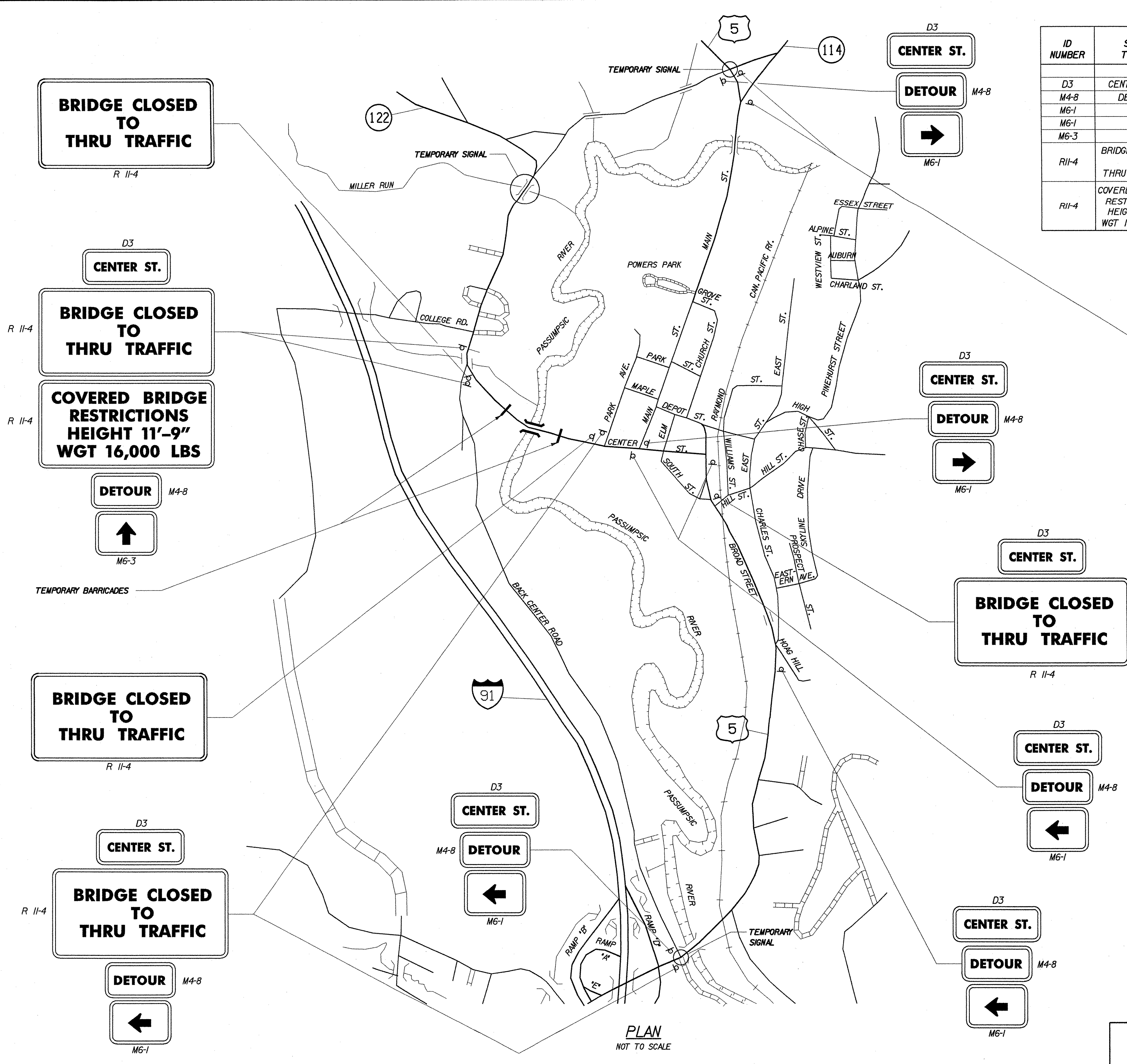


PROFILE



STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of <i>LYNDON</i>		Bridge No. <i>2</i>	
Highway No. <i>ALT VT 122</i>		Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER PROFILE			
Designed By <i>T.GRANT</i>		Drawn By <i>S.DELIA</i>	
Checked By <i>T.GRANT</i>		Bridge Design Supervisor	
<i>10/01</i>		<i>M.ZYDEL</i> <i>Date 10/01</i>	
PROJECT <i>LYNDON</i>		PROJECT NO. <i>BHO 1447(26)</i>	
I.G.C. Info. <i>m\549103\6cont\zj238prodgn</i>			
Bridge Sheet No.		Sheet <i>5</i> of <i>34</i>	

MJ
MCFARLAND-JOHNSON, INC.



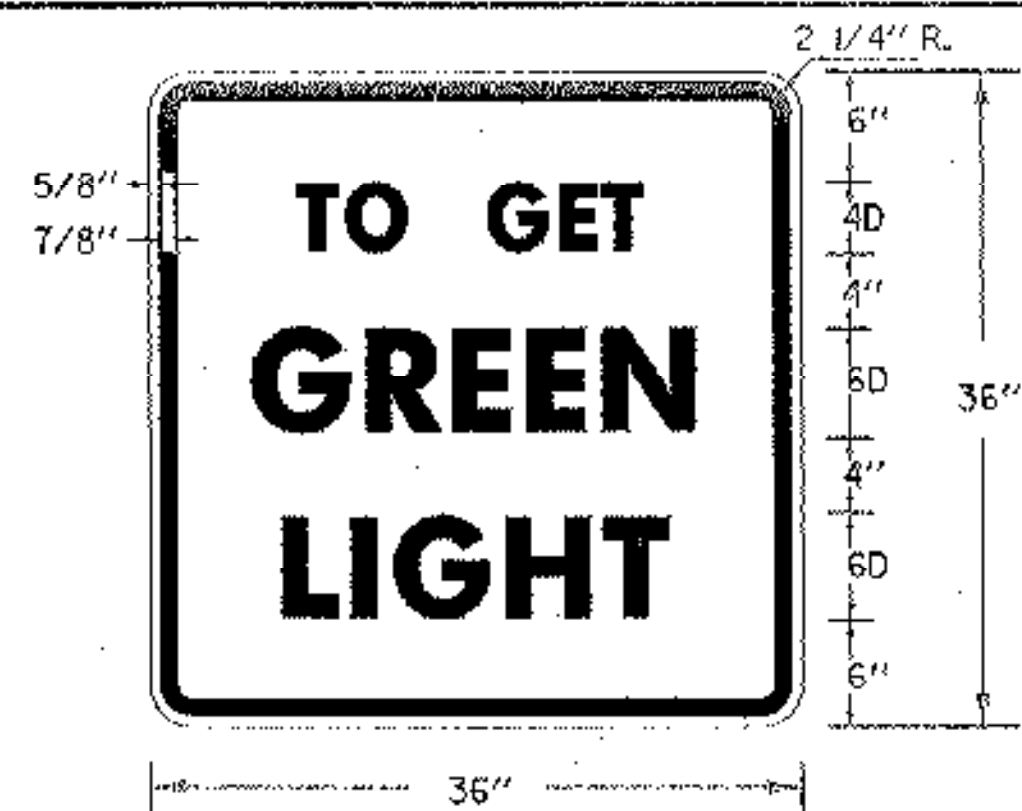
ID NUMBER	SIGN TEXT	SIZE OF SIGN		SIGN AREA (SQ.FT.)	NUMBER REQ'D	POST SIZE AND NUMBER REQ'D, EACH SIGN	TOTAL AREA (SQ.FT.)
		WIDTH	HEIGHT				
D3	CENTER ST.	30"	12"	2.5	8	1 ~ FLANGED CHANNEL STEEL POST, 3 LBS/FT	20.00
M4-8	DETOUR	24"	12"	2.0	7		14.00
M6-1	←	2"	15"	2.19	4		8.76
M6-1	→	2"	15"	2.19	2		4.38
M6-3	↑	2"	15"	2.19	1		2.19
R11-4	BRIDGE CLOSED TO THRU TRAFFIC	60"	30"	12.5	5	2 ~ FLANGED CHANNEL STEEL POSTS, 3 LBS/FT	62.50
R11-4	COVERED BRIDGE RESTRICTIONS HEIGHT 11'-9" WGT 16,000 LBS	60"	30"	12.5	4		50.00

SIGNING NOTES

1. ALL SIGNS SHALL FOLLOW THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. ALL DETAILS NOT SPECIFIED SHALL BE IN ACCORDANCE WITH VTRANS STANDARDS E- 100, E- 100A, E- 101, E- 102, E- 102A, E- 106, E- 107, E- 107A, E- 160.
3. TYPE III CONSTRUCTION BARRICADES SHALL BE PLACED SO AS TO PHYSICALLY EXCLUDE TRAFFIC FROM THE ENTIRE ROADWAY WIDTH OR AT THE DISCRETION OF THE RESIDENT ENGINEER TO BE PAID AS ITEM 621.90, TEMPORARY TRAFFIC BARRIER.
4. ALL ORANGE SIGNS SHALL BE FABRICATED USING REFLECTORIZED FLOURESCENT ORANGE COLORED SHEETING.
5. USE A TYPE A SIGN WITH BACKGROUND PER NOTE 4 AND BLACK LETTERING.
6. DETOUR SIGNS SHALL BE PAID AS ITEM 641.10. ALL SIGNS AND SIGN POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
7. DETOUR SIGNS MAY BE ADDED OR DELETED AT THE DISCRETION OF THE RESIDENT ENGINEER.

STATE OF VERMONT AGENCY OF TRANSPORTATION	
Town Of LYNDON	Bridge No. 2
Highway No. ALT VT 122	Log Sta.
	Surv. Sta.
CENTER STREET OVER PASSUMPSIC RIVER	
DETOUR AND SIGNING PLAN	
Designed By T. GRANT/S. MERKMAN	Drawn By S. DELIA/S. MERKMAN
Checked By T. GRANT/R. WOOD	Bridge Design Supervisor M. ZYDEL
Date 10/01	Date 10/01
PROJECT LYNDON	PROJECT NO. BHO 1447(26)
I.G.C. Info. m:\549103\6conf\2\2381pldgn	
Bridge Sheet No.	Sheet 6 of 34





COLORS: BLACK TEXT & BORDER
WHITE REFL. BACKGROUND
MATERIALS: PER STD. E-142

PHASING DIAGRAM AND SPECIAL NOTES FOR EACH LOCATION

PHASE	2			4		
MINIMUM	12	4	18	12	4	18
EXTENSION	2			2		
MAXIMUM	25	4	18	41	4	18
HEAD 2	G	Y	R	R	R	R
HEAD 6	R	R	R	G	Y	R

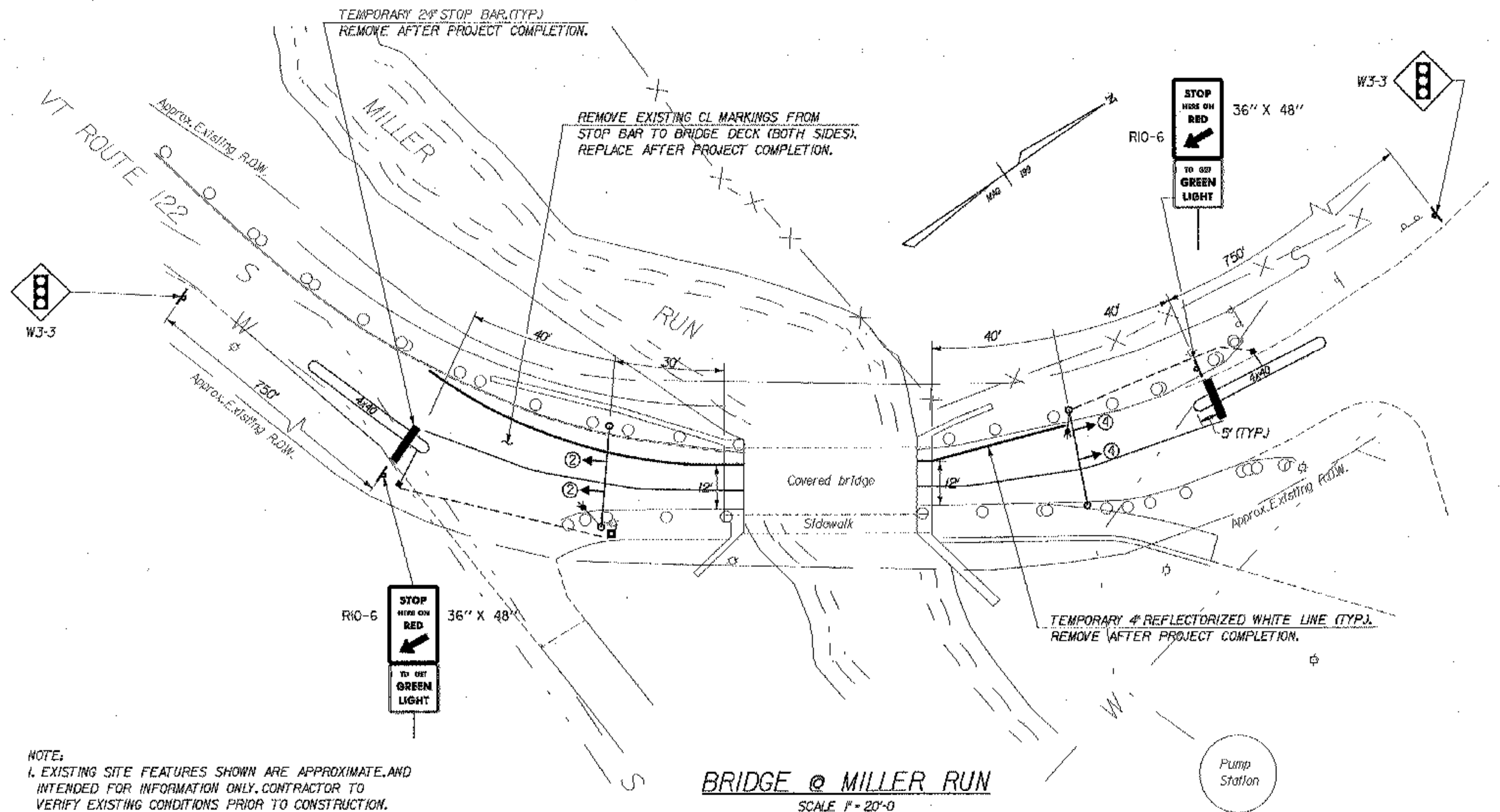
SPECIAL REQUIREMENTS

APPROACH	TEMPORARY VEHICLE DETECTOR	FLASHING BEACON ON ADVANCED WARNING SIGN
2	✓	
6	✓	
4		

ENTER CHECK MARK IN APPROPRIATE
BOX WHEN REQUIRED ON THIS PROJECT

LEGEND		
EXISTING	NEW	LEGEND
—●—	—●—	UTILITY POLE
—○—	—○—	LUMINAIRE
○	●	LIGHT OR WOOD POLE
⊙	⊙	STRAIN POLE
□	□	CONTROLLER CABINET
□	□	PULLBOX/JUNCTION BOX
—○—	—○—	SIGNAL HEAD
—○—	—○—	CONDUIT
—○—	—○—	VEHICLE LOOPS
—○—	—○—	PEDESTAL POST
—○—	—○—	STANCHION
—○—	—○—	SWEEP
—○—	—○—	REMOVE PAINT STRIPE

VT RT.122			
AM	PM	AM	PM
114	156	105	182
AVERAGE WEEKDAY TRAFFIC			



NOTE:
1. EXISTING SITE FEATURES SHOWN ARE APPROXIMATE AND
INTENDED FOR INFORMATION ONLY. CONTRACTOR TO
VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

BRIDGE @ MILLER RUN
SCALE: 1" = 20'-0"

GENERAL TEMPORARY TRAFFIC SIGNAL NOTES

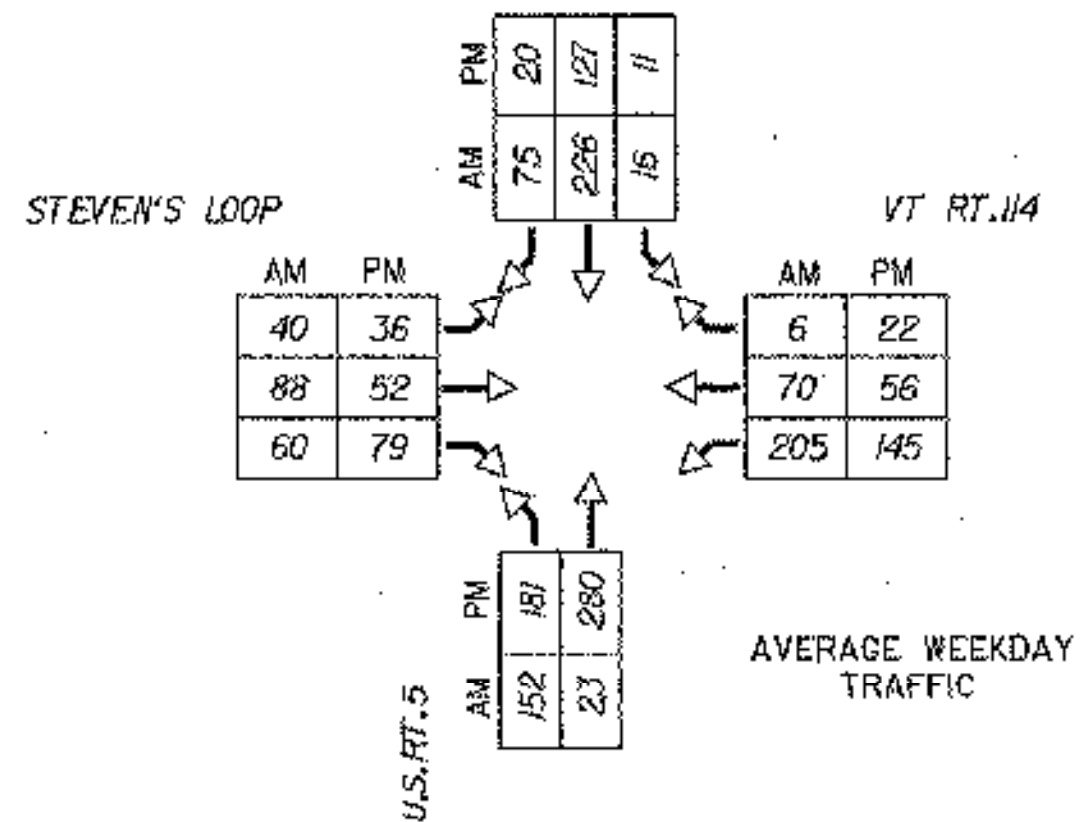
- DESIGN OF THE SIGNAL SUPPORT(S) AND ANY REQUIRED GUYING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE RESIDENT ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM. THE ALL-RED CLEARANCE INTERVAL IS BASED ON AN ASSUMED SPEED OF 10-20 MPH. THE RESIDENT ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.
- SIGNAL FACES SHALL CONSIST OF 12" LENSES (RED, YELLOW AND GREEN). ALL LENSES SHALL BE LED'S.
- THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 13 1/2 FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO INSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROAD GRADE.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER OF FACES.
- SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE NO GREATER THAN 1/2 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE M.T.C.D. FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGN, LUMINAIRES, FLASHING BEACONS, AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COST ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- THE CONTRACTOR SHALL PROVIDE AN ACTUATED CONTROLLER. THE APPROACHES NOTED SHALL HAVE A TEMPORARY VEHICLE DETECTOR. THE TYPE OF DETECTION SHALL BE AT THE OPTION OF THE CONTRACTOR. LOOPS ARE SHOWN FOR PLACEMENT PURPOSES ONLY. THE CONTROLLER, DETECTOR AND ALL OTHER SIGNAL EQUIPMENT SHALL MEET OR EXCEED ALL NEMA STANDARDS.
- WHEN USED, VEHICLE DETECTOR LOOPS SHALL BE 4' X 40' FOR PRESENCE DETECTION AT THE STOP BAR WITH THE NEAR PORTION LOCATED 5 FEET BEYOND THE STOP BAR.
- ON SEMI-ACTUATED SIGNAL, PARTICULARLY WITH LONG BRIDGES, THE CONTROLLER SHOULD BE LOCATED ON THE SAME SIDE OF THE BRIDGE AS THE DETECTOR.
- INTERVAL TIMING SHOWN IN SECONDS.
- CONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT TO PROVIDE FOR A SAFE INSTALLATION.
- PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
- POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELLING PUBLIC.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL, INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC. TEMPORARY LOOP DETECTORS SHALL BE LEFT IN PLACE.
- A 250 WATT MER/150 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON A POLE ON EACH APPROACH AT A MOUNTING HEIGHT OF 30' ABOVE ROADWAY CENTERLINE. THE INTENT IS TO LIGHT UP THE AREA AROUND THE SIGNAL HEADS AND STOP BAR FOR INCREASED VISIBILITY. THE RESIDENT ENGINEER SHALL DETERMINE THE ADEQUACY OF THE LIGHTING AND DIRECT CHANGES IF THE LIGHTING IS INSUFFICIENT.
- STOP BARS SHALL BE LOCATED A MINIMUM OF 40' AND A MAXIMUM OF 120' FROM AT LEAST ONE OF THE SIGNAL HEADS.
- PAYMENT FOR THE VEHICLE DETECTORS SHALL BE FOR EACH UNIT INSTALLED.
- SIGNS AND POSTS AS SHOWN ON THIS SHEET AND NOTED BELOW ARE SUBSIDIARY TO THE TRAFFIC CONTROL SIGNAL ITEMS ("STOP HERE ON RED", "SIGNAL AHEAD", "NO PASSING ZONE", AND "TO GET GREEN LIGHT" ETC.). THE TEMPORARY STOP BARS SHOULD BE PAID UNDER THE TEMPORARY 24" STOP BAR ITEM.
- SEE STD. E-140 FOR "STOP HERE ON RED" SIGN DETAIL AND E-101 FOR "SIGNAL AHEAD" SYMBOL SIGN. SEE STANDARD E-121 FOR SIGN PLACEMENT. SEE STANDARD E-171A AND E-172 FOR ADDITIONAL INFORMATION ON SIGNALS AND DETECTORS.
- A "SIGNAL AHEAD" SIGN SHALL BE PLACED AT LEAST 750' FROM THE SIGNAL OR AT A POSITION TO BE DETERMINED BY THE ENGINEER.
- ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND STATE INSPECTOR.

NOTE: THIS SYSTEM WAS REMOVED
WHEN CENTER STREET WAS
OPENED AS PER PLAN

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
TEMPORARY TRAFFIC SIGNAL PLAN - 2			
Designed By	C. BOWLER	Drawn By	S. DELIA
Checked By	M. LONG	Bridge Design Supervisor	M. ZYDEL
Date	04/01	Date	04/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m\549103\6conf\zj238tp3.dgn		
Bridge Sheet No.		Sheet	2 of 34

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PHASING DIAGRAM AND SPECIAL NOTES
FOR EACH LOCATION

PHASE	2 & 6	4 & 8
MINIMUM	8 4 2 8 4 2	
EXTENSION	2	2
MAXIMUM	46 4 2 32 4 2	
HEAD 2	G Y R R R R	
HEAD 6	R R R G Y R	

SPECIAL REQUIREMENTS

APPROACH	TEMPORARY VEHICLE DETECTOR	FLASHING BEACON ON ADVANCED WARNING SIGN
2		
6		
4	✓	
8	✓	

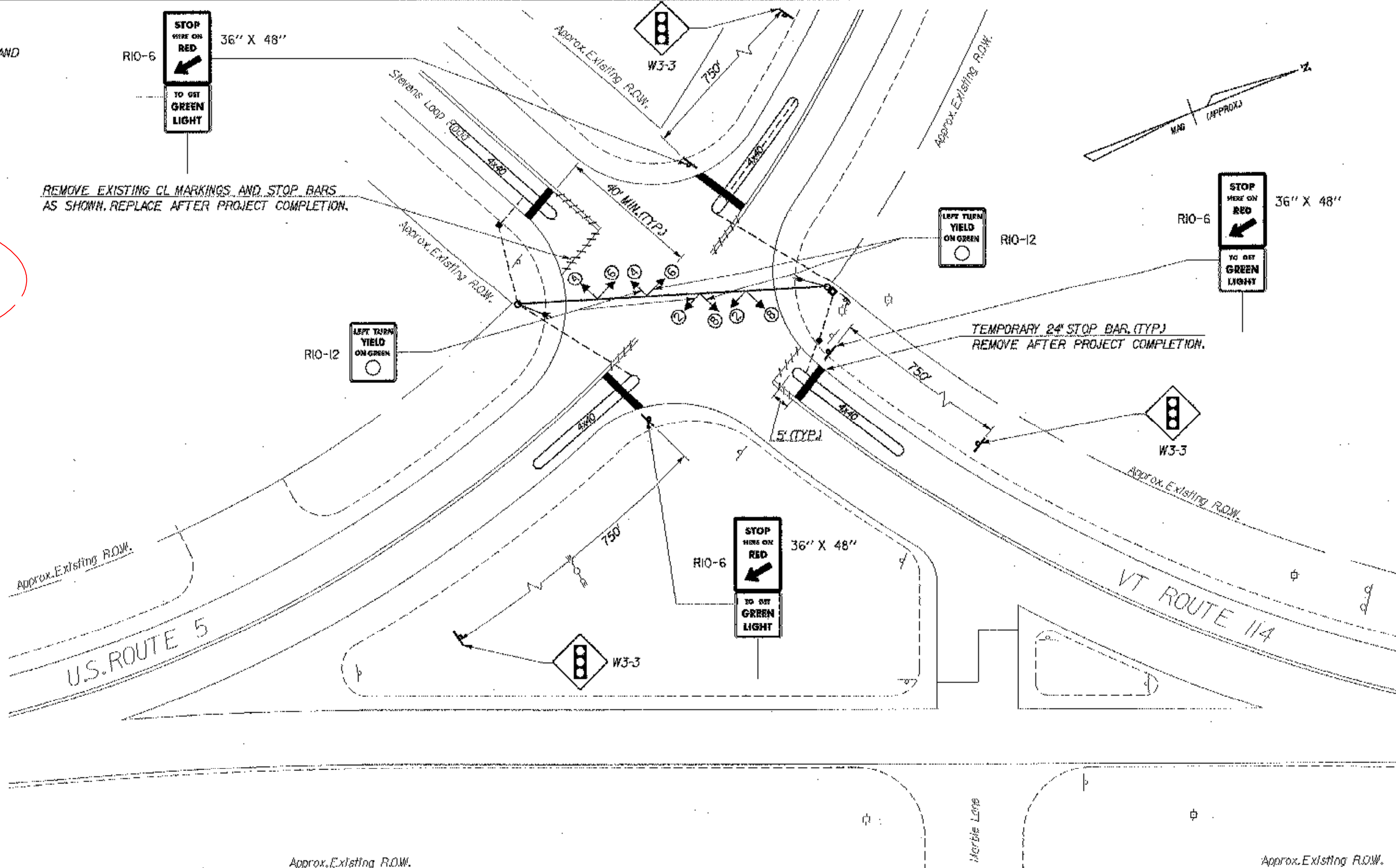
ENTER CHECK MARK IN APPROPRIATE BOX WHEN REQUIRED ON THIS PROJECT

NOTE:
1. EXISTING SITE FEATURES SHOWN ARE APPROXIMATE, AND INTENDED FOR INFORMATION ONLY. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

NOTE: THIS SYSTEM WAS PURCHASED BY THE AOT WHEN CENTER STREET WAS OPENED TO REMAIN AS A PERMANENT INSTALLATION

U.S. RT. 5 @ VT RT. 114

SCALE 1" = 20'-0"



GENERAL
TEMPORARY TRAFFIC SIGNAL NOTES

- DESIGN OF THE SIGNAL SUPPORT(S) AND ANY REQUIRED GUYING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE RESIDENT ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL ITEM.
- SIGNAL FACES SHALL CONSIST OF 12" LENSES (RED, YELLOW, AND GREEN). ALL LENSES SHALL BE LED'S.
- THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16' FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND.
- SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER OF FACES.
- SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE NO GREATER THAN 14' FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
- THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, WARNING SIGN, LUMINAIRES, FLASHING BEACONS, AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COST ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- THE CONTRACTOR SHALL PROVIDE AN ACTUATED CONTROLLER. THE APPROACHES NOTED SHALL HAVE A TEMPORARY VEHICLE DETECTOR. THE TYPE OF DETECTION SHALL BE AT THE OPTION OF THE CONTRACTOR. LOOPS ARE SHOWN FOR PLACEMENT PURPOSES ONLY. THE CONTROLLER, DETECTOR AND ALL OTHER SIGNAL EQUIPMENT SHALL MEET OR EXCEED ALL NEMA STANDARDS.
- WHEN USED, VEHICLE DETECTOR LOOPS SHALL BE 4' X 40' FOR PRESENCE DETECTION AT THE STOP BAR WITH THE NEAR PORTION LOCATED 5 FEET BEYOND THE STOP BAR.
- INTERVAL TIMING SHOWN IN SECONDS.
- INTERCONNECT BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT TO PROVIDE FOR A SAFE INSTALLATION.
- PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
- POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELLING PUBLIC.
- ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL. INCLUDING ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC. TEMPORARY LOOP DETECTORS SHALL BE LEFT IN PLACE.
- A 250 WATT MER/150 WATT HPS LUMINAIRE AND MAST ARM SHALL BE PROVIDED ON EACH POLE AT A MOUNTING HEIGHT OF 30' ABOVE ROADWAY CENTERLINE. THE INTENT IS TO LIGHT UP THE AREA AROUND THE SIGNAL HEADS AND STOP BAR FOR INCREASED VISIBILITY. THE RESIDENT ENGINEER SHALL DETERMINE THE ADEQUACY OF THE LIGHTING AND DIRECT CHANGES IF THE LIGHTING IS INSUFFICIENT.
- STOP BARS SHALL BE LOCATED A MINIMUM OF 40' AND A MAXIMUM OF 120' FROM AT LEAST ONE OF THE SIGNAL HEADS.
- PAYMENT FOR THE VEHICLE DETECTORS SHALL BE FOR EACH UNIT INSTALLED.
- A "SIGNAL AHEAD" SIGN SHALL BE PLACED AT LEAST 750' FROM THE SIGNAL OR AT A POSITION TO BE DETERMINED BY THE ENGINEER.
- ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND STATE INSPECTOR.
- REMOVE OR COVER EXISTING STOP SIGNS AT INTERSECTION AFTER TEMPORARY SIGNALS ARE IN PLACE. RESTORE SIGNS TO ORIGINAL CONDITION WHEN PROJECT IS COMPLETE. THE COSTS OF REMOVING OR COVERING STOP SIGNS AND RESTORING THESE SIGNS WHEN THE SIGNALS ARE REMOVED WILL BE INCLUDED IN THE PRICE BID FOR THE TEMPORARY SIGNAL SYSTEM INSTALLED.
- ONE SIGN (R10-12), "LEFT TURN YIELD ON GREEN BALL" SHALL BE MOUNTED ADJACENT TO ONE OF THE SIGNAL HEADS FACING EACH APPROACH.

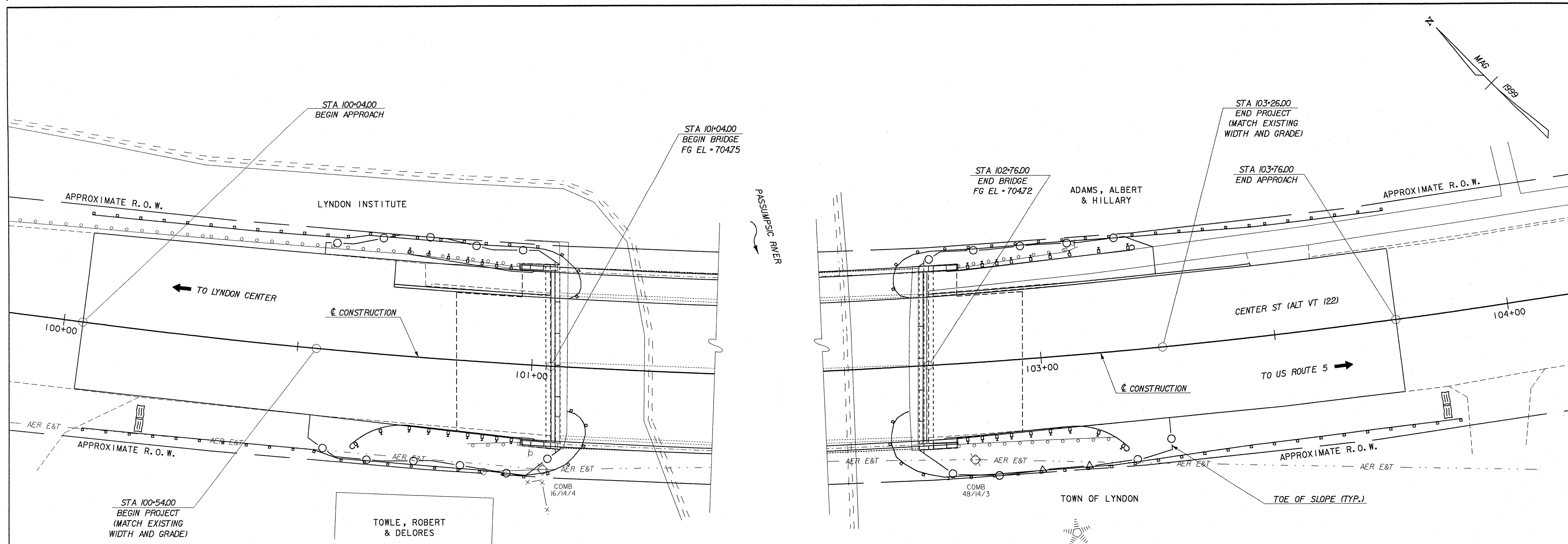
LEGEND

EXISTING	NEW	LEGEND
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULL BOX/JUNCTION BOX
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		STANCHION
		SWEEP
		REMOVE PAINT STRIPE

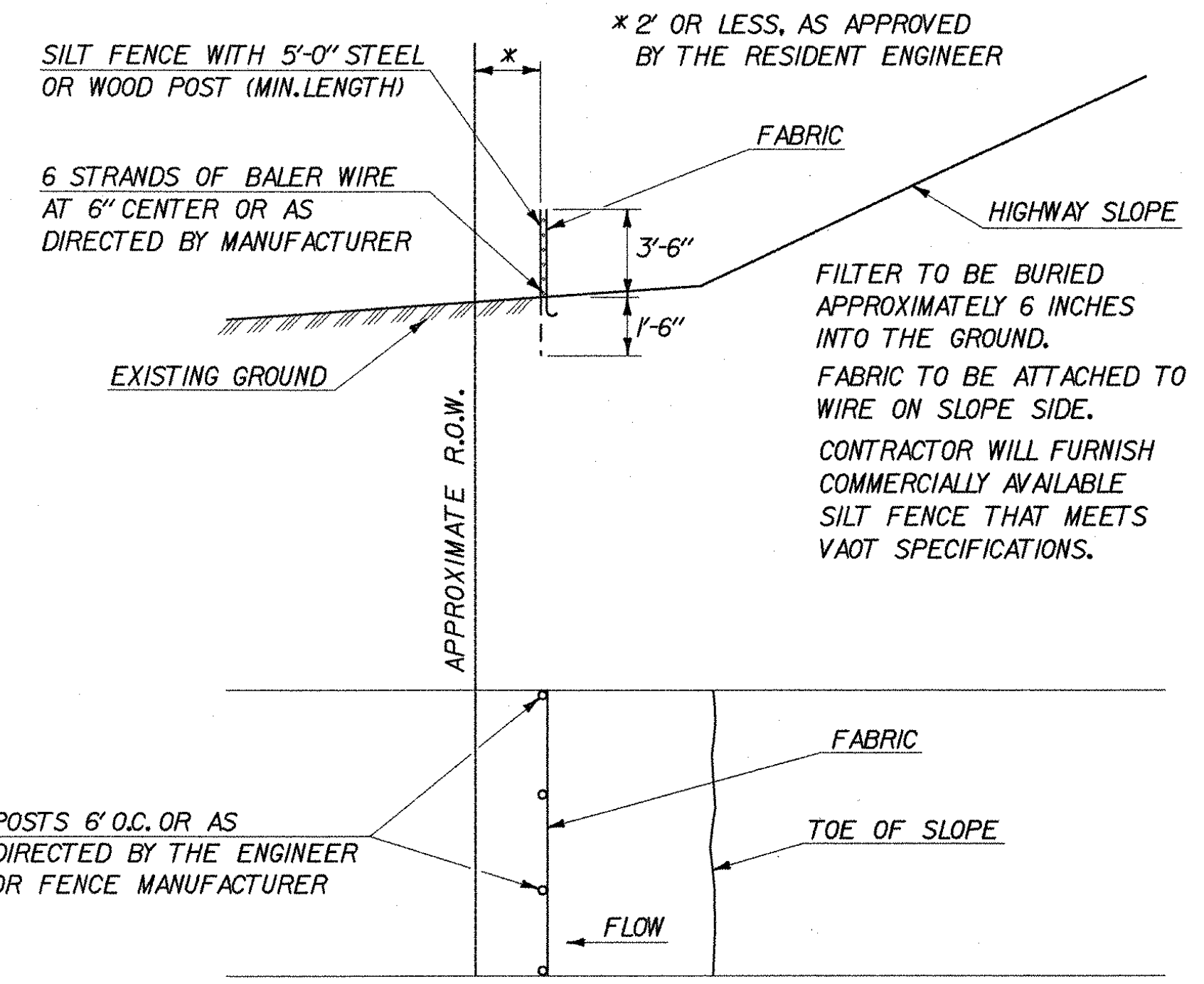
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MCFARLAND-JOHNSON, INC.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
TEMPORARY TRAFFIC SIGNAL PLAN - 3			
Designed By	C. BOWLER	Drawn By	S. DEUA
Checked By	M. LONG	Bridge Design Supervisor	M. ZYDEL
Date	04/01	Date	04/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	MA\540103\600mhz\230m4.dgn		
Bridge Sheet No.		Sheet	9 of 34



EROSION CONTROL LAYOUT
SCALE 1" = 10'-0"



SILT FENCE DETAIL
NOT TO SCALE

LEGEND

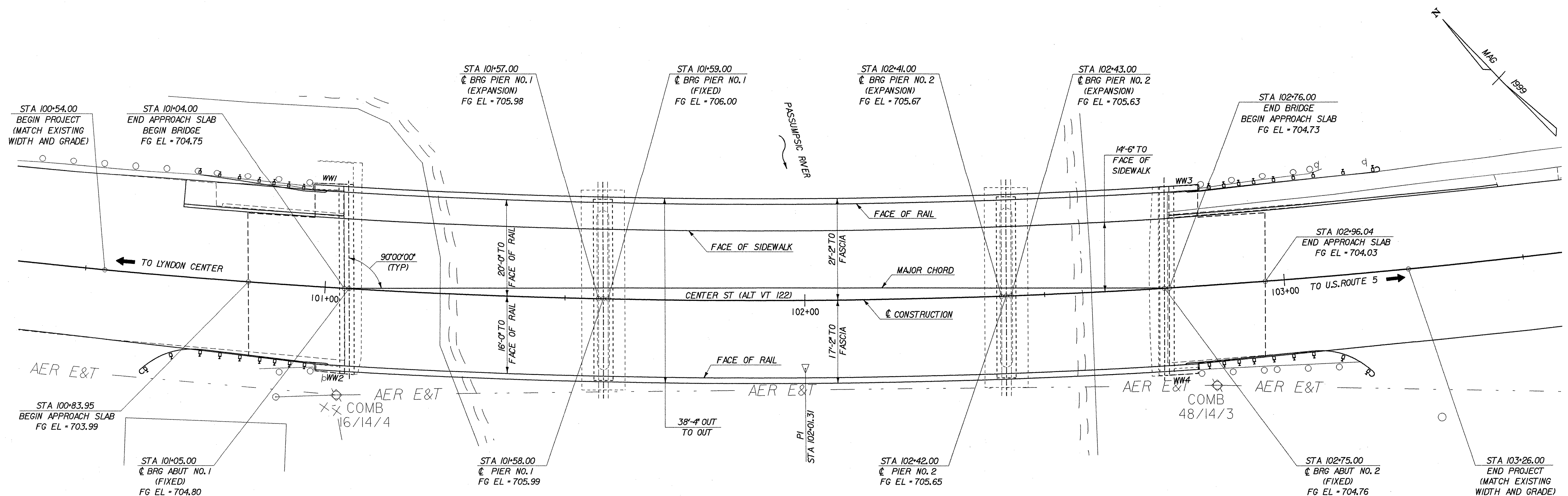
- SILT FENCE
- HAY BALES

NOTES

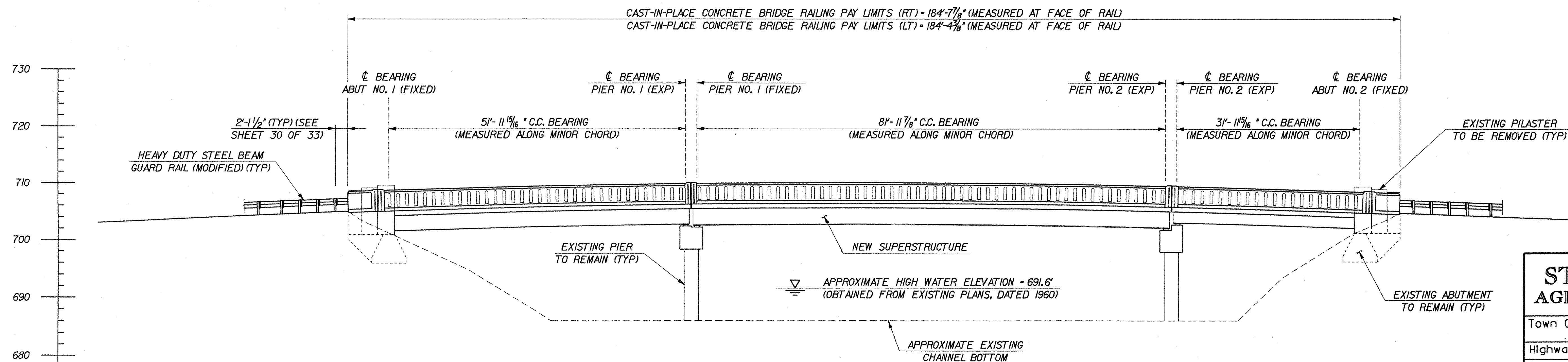
1. THE EROSION CONTROL MEASURES SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL EROSION CONTROL PLAN SHALL BE BASED ON EXISTING FIELD CONDITIONS AND SUBMITTED BY THE CONTRACTOR FOR APPROVAL TO THE REGIONAL CONSTRUCTION ENGINEER AND STREAM ALTERATION ENGINEER. PAYMENT FOR THE DEVELOPMENT OF THE EROSION CONTROL PLAN SHALL BE INCLUDED IN ITEM 652.10, EROSION AND SEDIMENT CONTROL PLAN.
2. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THERE WILL BE AREAS WHERE THE LOCATION OF THE SILT FENCE WILL BE IN CLOSE PROXIMITY TO THE LIMITS OF THE PROPOSED TOES OF SLOPE IN ORDER TO KEEP ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY LIMITS. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS TO HIGHLIGHT THE LOCATION OF THE SILT FENCE AND TO AVOID DAMAGING IT. SPECIAL DETAILS FOR SILT FENCE MAY BE REQUIRED IN THESE AREAS AND SHALL BE INCLUDED WITH THE SUBMITTAL OF THE EROSION AND SEDIMENT CONTROL PLAN. A SAMPLE DETAIL IS INCLUDED ON THIS SHEET FOR REFERENCE PURPOSES.
3. MONITORING AND MAINTAINING THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE PER ITEM 652.20, MONITORING EROSION AND SEDIMENT CONTROL PLAN AND ITEM 652.30, FIELD MAINTENANCE OF EROSION AND SEDIMENT CONTROL PLAN.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
EROSION CONTROL PLAN			
Designed By	R. JOY	Drawn By	S. MERKMAN
Checked By	E. WEINGARTNER	Date	10/03
		Bridge Design Supervisor	M. ZYDEL
		Date	10/03
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6conf\z\238ecp.dgn		
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PLAN
SCALE 1" = 10'-0"



ELEVATION
SCALE 1" = 10'-0"

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
PLAN AND ELEVATION			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6cont\zj238gpe.dgn	Sheet	11 of 34
Bridge Sheet No.			

MUFARLAND-JOHNSON, INC.

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.

2. THERE ARE OVERHEAD UTILITIES IN CLOSE PROXIMITY. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING AROUND THESE UTILITIES AND/OR COORDINATE TEMPORARY RELOCATION WITH UTILITY COMPANY. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.

3. THE STRUCTURAL STEEL OF THE EXISTING BRIDGE ON THIS PROJECT IS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR MAY DISPOSE OF IT OR RETAIN IT FOR FUTURE USE. THE CONTRACTOR SHALL INFORM THE ENGINEER OF HIS/HER PLANS FOR THE DISPOSAL OR RETAINAGE OF THE STRUCTURAL STEEL PRIOR TO ITS REMOVAL.

4. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN AND ADJACENT PROPERTY OWNERS TO OBTAIN A SUITABLE STAGING AREA.

5. THE CONTRACTOR SHALL ERECT, MAINTAIN, REMOVE AND/OR RESET AS REQUIRED ALL SIGNS AND BARRICADES ON THE PROJECT. STANDARD PROJECT CONSTRUCTION SIGNING AND BARRICADES SUCH AS SHOWN ON VAOT STANDARD DRAWINGS E-100 THRU E-107A, UNLESS SPECIFICALLY DESIGNATED TO BE PAID AS A CONTRACT ITEM, SHALL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE PROJECT IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 104, 105 AND 107 OF THE VAOT 2001 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

6. DESIGN IS FOR HS25 LIVE LOADING WITH NO ALLOWANCE FOR FUTURE PAVEMENT.

7. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE BEAMS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINAL GRADE AND HAUNCH DEPTHS.

8. IN NO CASE SHALL THERE BE LESS THAN 2½" OF COVER OVER THE TOP OF THE SHEAR STUDS, NOR SHALL THE STUDS HAVE LESS THAN 2" OF EMBEDMENT INTO THE DECK.

9. WHEN POURING THE DECK, THE CONCRETE SHALL BE DEPOSITED PARALLEL TO THE CENTERLINE OF BEARING SO AS TO LOAD THE GIRDERS EQUALLY.

10. "FLEMING BRACKETS" OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN UP TO A MAXIMUM OF 4'.

11. THE UNIT WEIGHT OF SOIL SHALL BE TAKEN AS 140 PCF.

12. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- ¼ INCH

13. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
ALONG BACK FACES OF WALLS AGAINST EARTH: 2 INCHES
ALONG TOP SURFACE OF DECK SLAB: 2½ INCHES
ALONG BOTTOM SURFACE OF DECK SLAB: 1½ INCHES
ELSEWHERE UNLESS OTHERWISE NOTED: 3 INCHES

14. DECK CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. ALL OTHER CONCRETE SHALL BE CONCRETE, HPC CLASS B UNLESS NOTED OTHERWISE.

15. THE SIDEWALK SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. REGARDING RAILING MATERIALS, PLEASE REFER TO THE SPECIAL PROVISIONS.

16. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1".

17. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP BEADS.

18. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

19. THE KEY IN CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.

20. ALL REINFORCING STEEL IN THE CONCRETE DECK, BRIDGE CURB AND SIDEWALK SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17. ALL REINFORCING STEEL IN THE CAST-IN-PLACE CONCRETE BRIDGE RAILING SHALL BE EPOXY COATED AND INCLUDED IN THE BID PRICE FOR ITEM 525.50. WHEN EPOXY COATED REBAR IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REBAR WILL NOT BE PERMITTED.
21. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED ½ INCH PER FOOT. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD MIDSPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISH.

22. ANY BOLT HOLES IN THE WEB OF THE FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS MEETING AASHTO M 164 (ASTM A325). THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

23. ALL FIELD CONNECTIONS SHALL BE MADE USING 7⁄8 INCH DIAMETER, TYPE 1 GALVANIZED BOLTS FOR PAINTED CONNECTIONS AND TYPE 3 BOLTS FOR UNPAINTED CONNECTIONS MEETING AASHTO M 164 (ASTM A325). HOLES SHALL BE 15⁄16 INCH DIAMETER UNLESS OTHERWISE NOTED. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL.

24. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO THE LATEST ANSI/AASHTO/AWS D1.5-95 CODE AND LATEST REVISIONS.

25. ALL STRUCTURAL STEEL WITHIN 6 FEET OF PIER NO. 1 AND PIER NO. 2 SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AND GREASE AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513, "PROTECTIVE COATINGS". THE COLOR OF PAINT WILL BE BROWN, FEDERAL COLOR CHIP 20059. ALL COSTS SHALL BE INCLUDED IN ITEM 513.40, "SURFACE PREPARATION, SHOP", AND ITEM 513.25, "STRUCTURAL PAINTING, SHOP APPLIED", AND ITEM 513.35 "CONTAINMENT & ENVIRONMENTAL PROTECTION, SHOP".

26. THE CHARPY V-NOTCH TEST IS REQUIRED FOR MEMBERS DESIGNATED AS SUCH AND ONLY FOR SUCH MEMBERS, AS SPECIFIED IN SECTION 714.01 OF THE STANDARD SPECIFICATIONS.

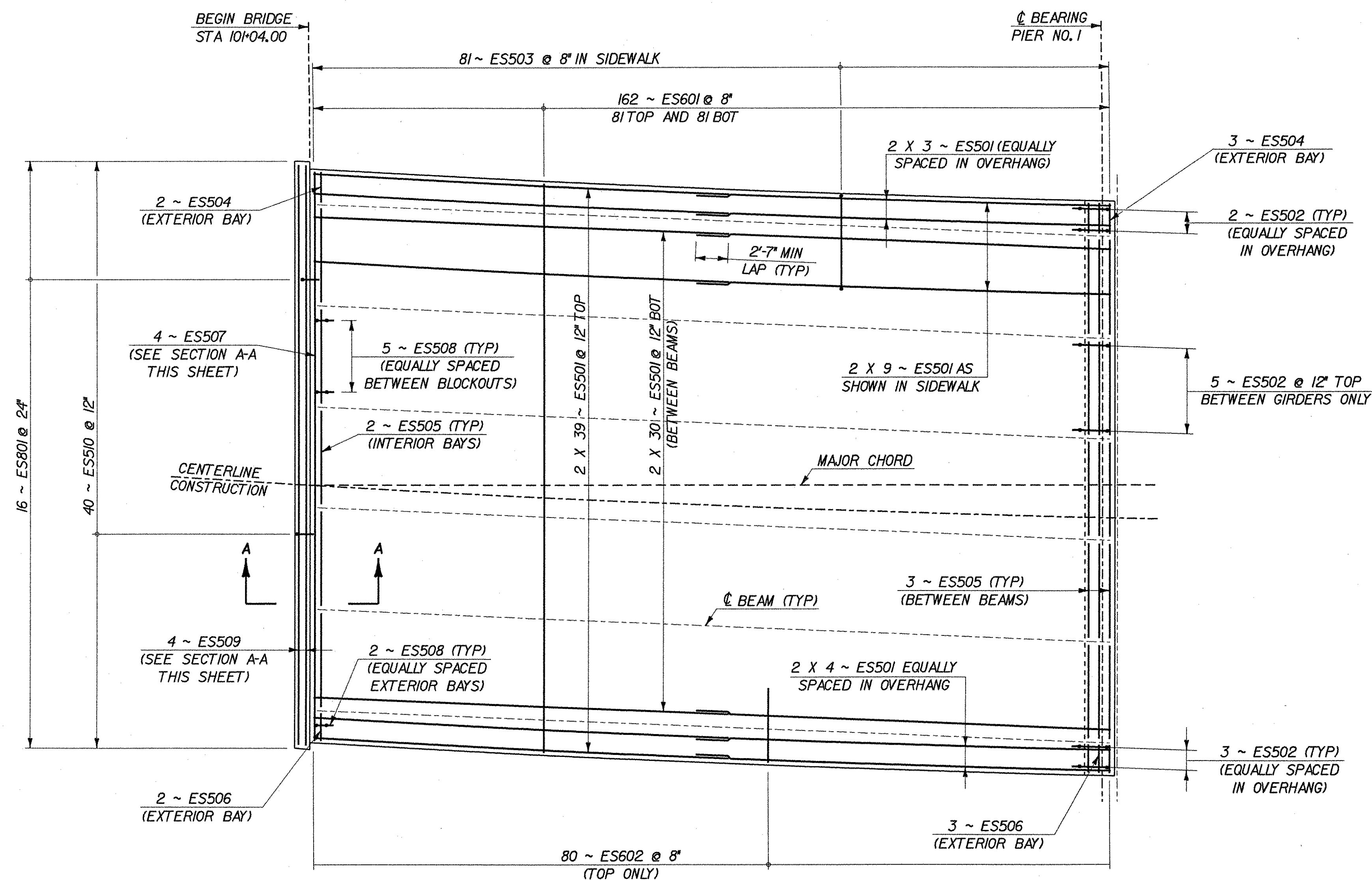
27. ALL DIMENSIONS ARE HORIZONTAL AND VERTICAL AND ARE GIVEN AT 68° F, UNLESS OTHERWISE NOTED.

28. ALL OF THE EXISTING SUBSTRUCTURE INFORMATION SHOWN WITHIN THESE PLANS HAS BEEN OBTAINED THROUGH FIELD SURVEY, FIELD MEASUREMENTS AND REVIEW OF THE EXISTING 1960 BRIDGE DESIGN PLANS, AND ARE ASSUMED TO BE CORRECT. HOWEVER, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CRITICAL TO THE CONSTRUCTION OF THE NEW STRUCTURE AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE INFORMATION SHOWN IN THESE PLANS.

29. ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, SHALL INCLUDE:
a. REMOVAL OF EXISTING BRIDGE RAILING, CONCRETE BRUSH CURB, SIDEWALK AND CONCRETE BRIDGE DECK.
b. REMOVAL OF ALL STEEL STRUCTURAL BEAMS, DIAPHRAGMS AND CROSS FRAMES.
c. REMOVAL OF ALL THE BEARING DEVICES.
d. REMOVAL OF PORTIONS OF THE EXISTING ABUTMENTS AND PIER AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
e. ERECTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURES TO PREVENT DEBRIS FROM FALLING INTO THE PASSUMPSIC RIVER.

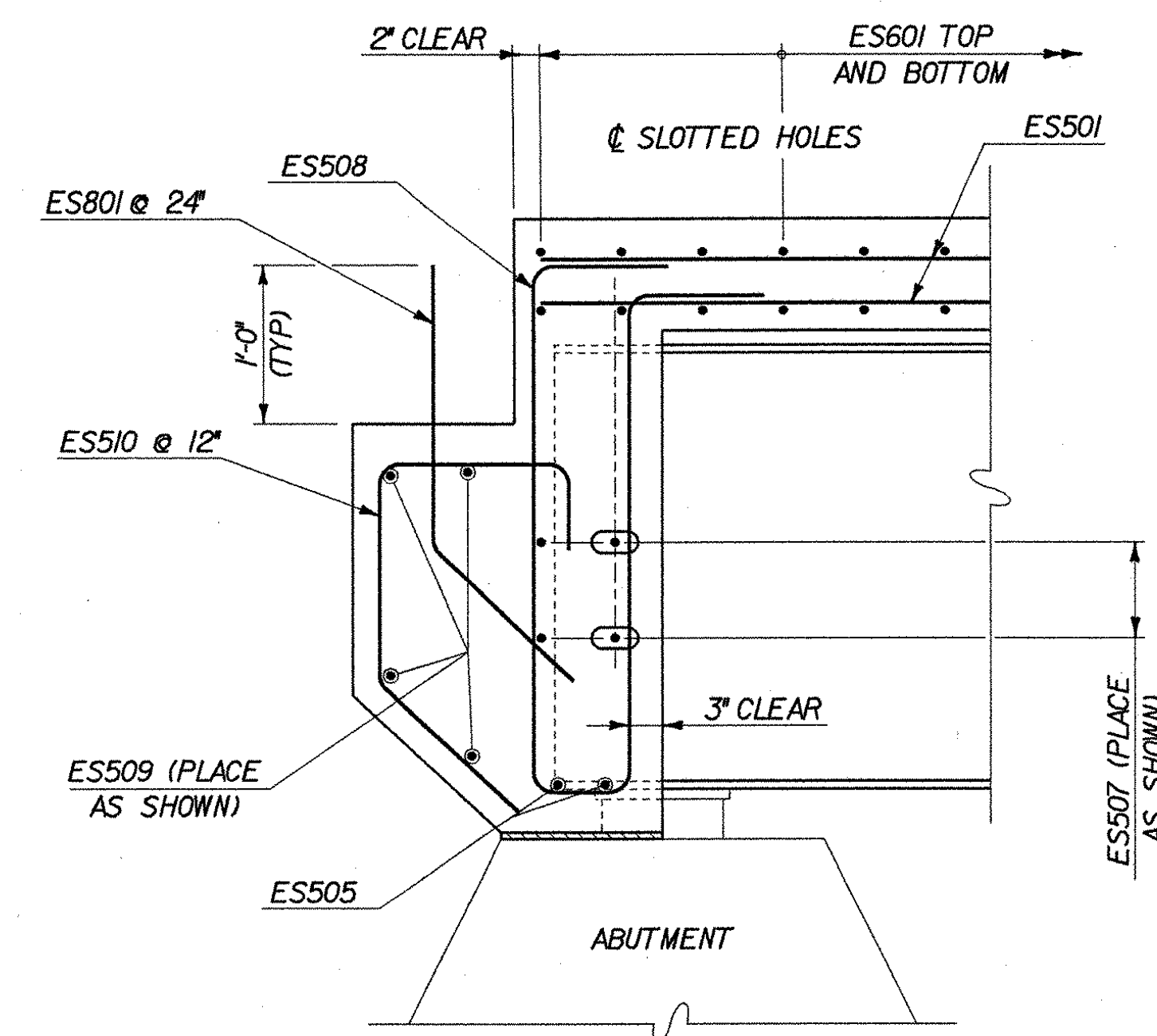
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of		LYNDON	Bridge No.
			2
Highway No.		ALT VT 122	Log Sta.
			Surv. Sta.
CENTER STREET OVER PASSUMPSIC RIVER			
GENERAL NOTES			
Designed By		T.GRANT/S.MERKMAN	Drawn By
			S.DELIA/S.MERKMAN
Checked By		Date	Bridge Design Supervisor
T.GRANT/R.WOOD		10/01	M.ZYDEL
			Date
			10/01
PROJECT		LYNDON	PROJECT NO.
			BHO 1447(26)
I.G.C. Info.		m\549103\6cont\zj238nte.dgn	
Bridge Sheet No.		Sheet 12 of 34	





SPAN NO. 1 PLAN

SCALE: $\frac{3}{16}$ " = 1'-0"
(ES507 NOT SHOWN IN PIER FOR CLARITY.
SEE SHEET 22 OF 34 FOR LOCATION)

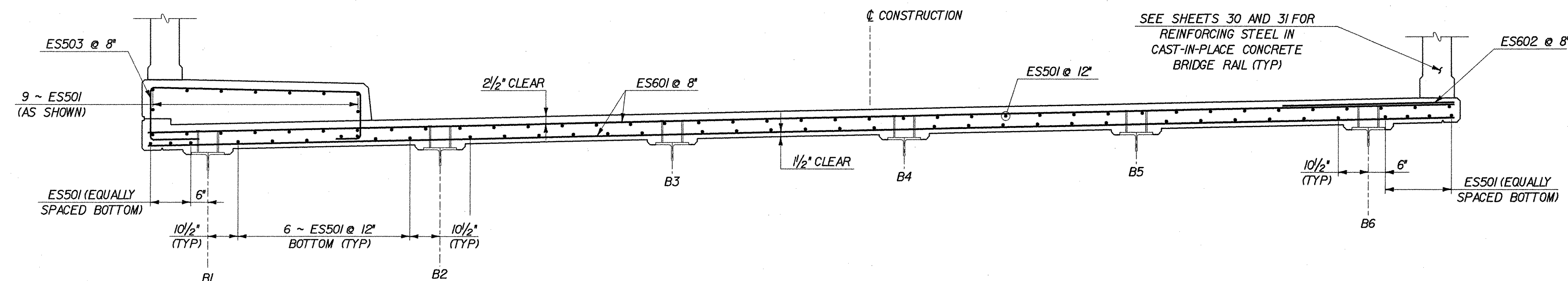


SECTION A-A

SCALE: 1" = 1'-0"
(PERPENDICULAR TO CENTERLINE BEARING)

REINFORCING NOTES

1. ALL REINFORCEMENT IN THE DECK, EXCEPT BARS IN CAST-IN-PLACE CONCRETE BRIDGE RAILING SHALL BE PAID UNDER ITEM 507.17, EPOXY COATED REINFORCING STEEL.
2. SOME RAILING BARS ARE TO BE CAST INTO THE DECK AND THE SIDEWALK. SEE SHEETS 30 AND 31 FOR DETAILS.
3. N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE
4. SEE SHEET 27 FOR CURTAIN WALL ELEVATION.
5. SEE SHEET 22 FOR ADDITIONAL REINFORCING DETAILS AT EXPANSION JOINT.



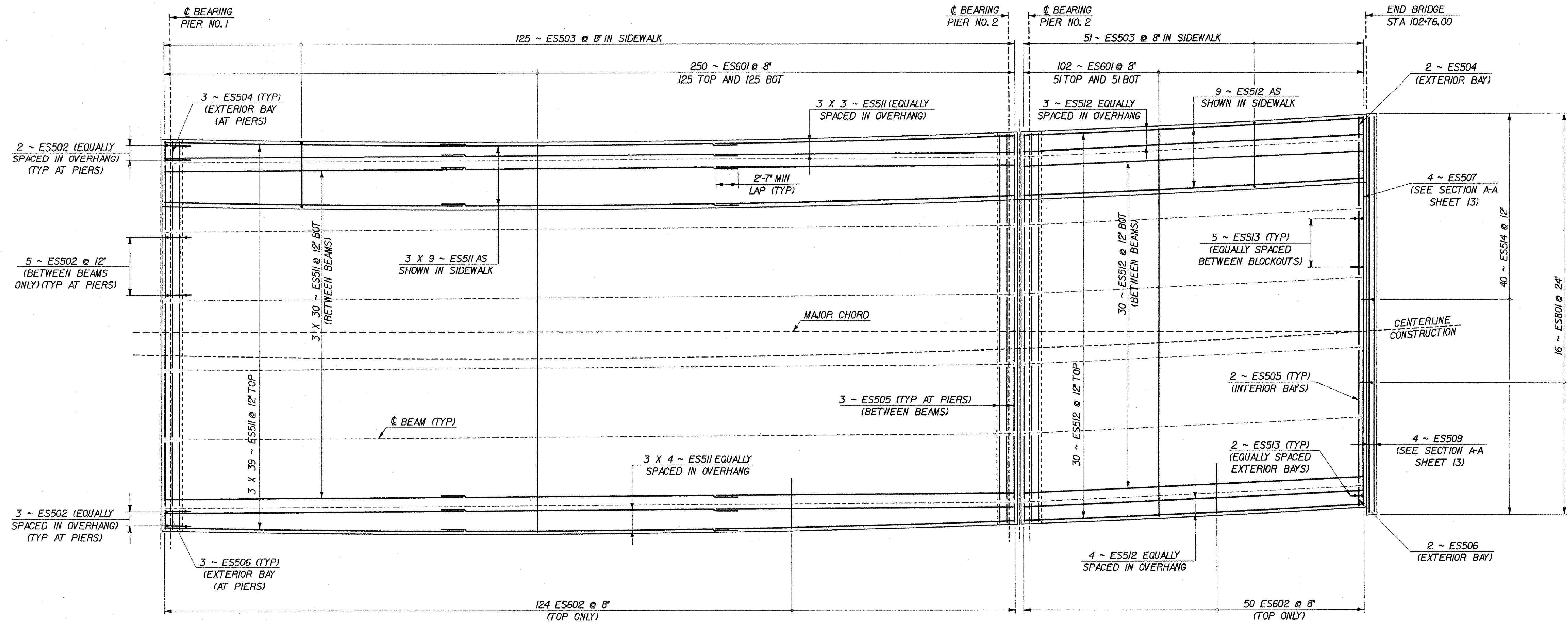
TYPICAL SECTION

SCALE: $\frac{1}{2}$ " = 1'-0"
(SPAN 1 SHOWN, OTHERS SIMILAR)

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

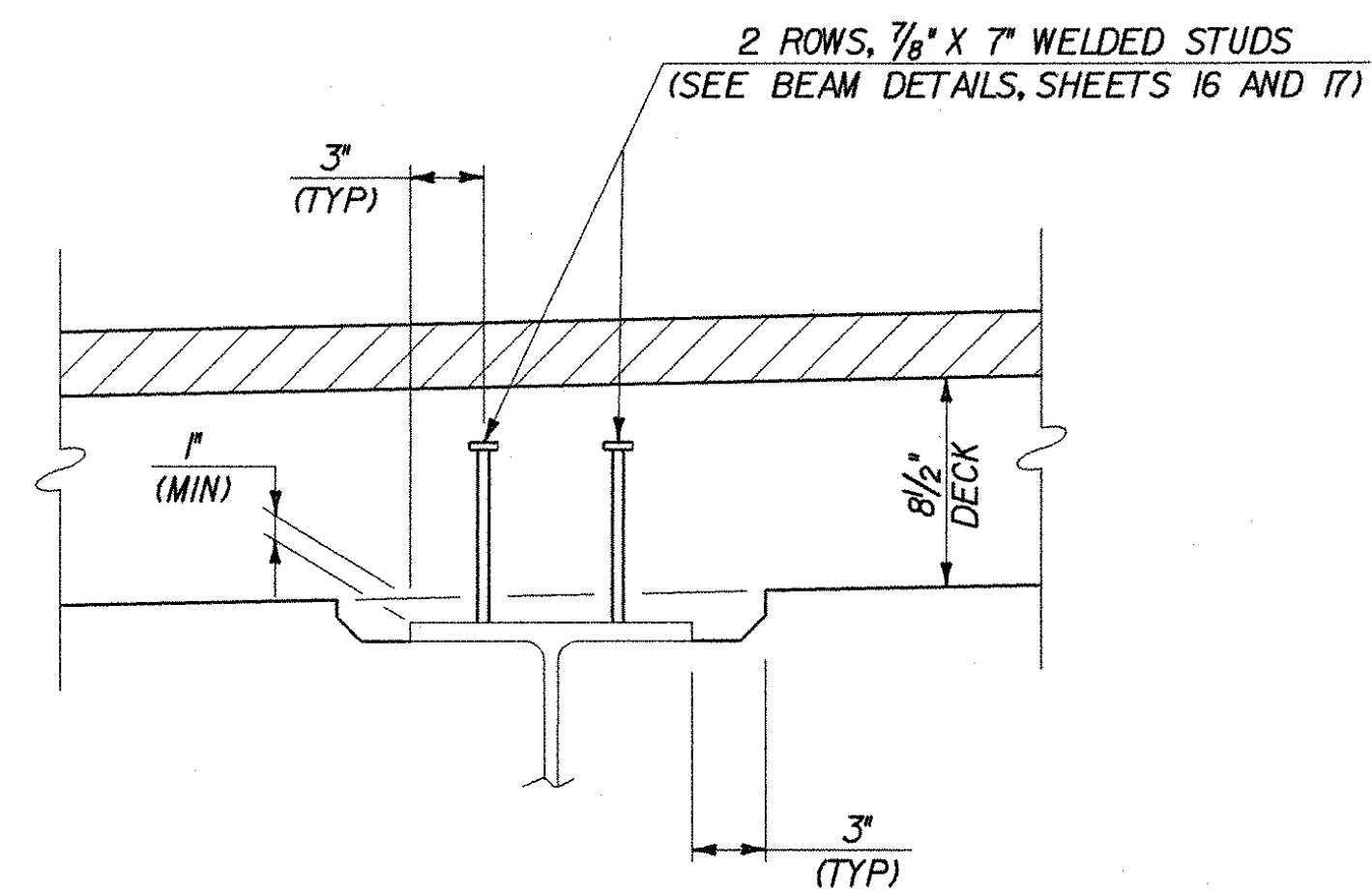
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
DECK REINFORCING - I			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m\549103\6cont\zj238drl.dgn		
Bridge Sheet No.		Sheet	13 of 34

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SPAN NO.2 AND NO.3 PLAN

SCALE: $\frac{1}{16}'' = 1'-0''$
(ESS07 NOT SHOWN IN PIER FOR CLARITY.
SEE SHEET 22 OF 34 FOR LOCATION)



HAUNCH AND SHEAR CONNECTOR DETAILS

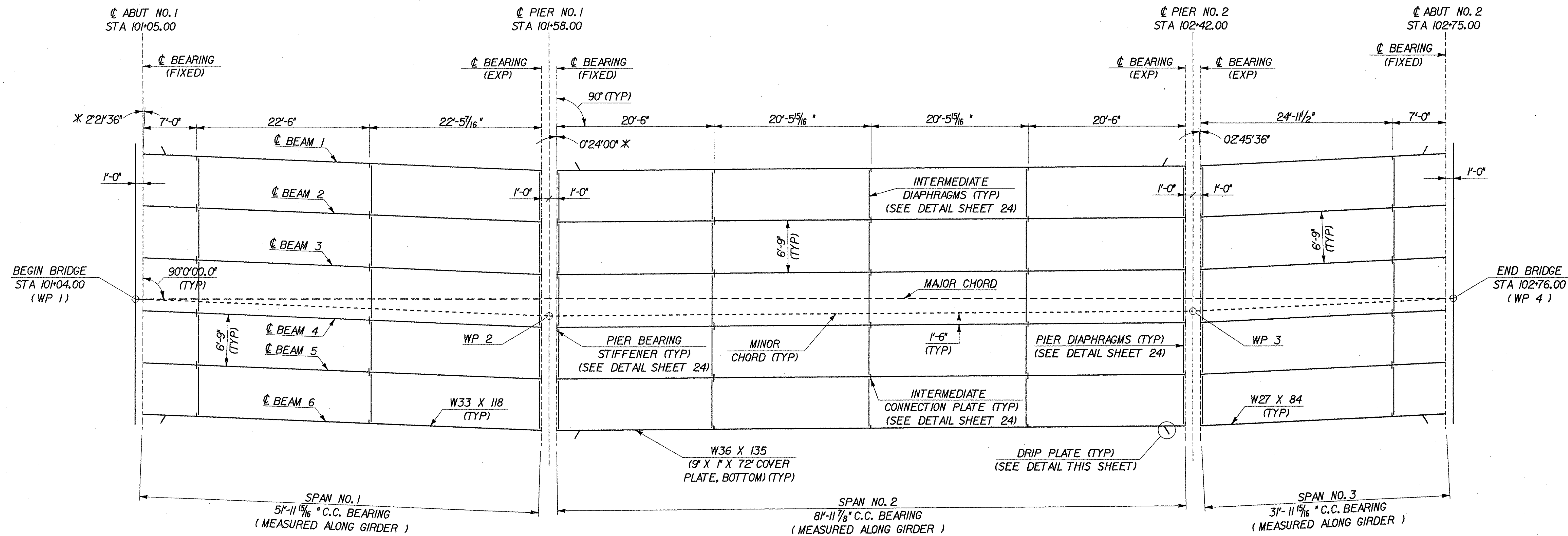
SCALE: $\frac{1}{2}'' = 1'-0''$

NOTE

1. SEE SHEET 13 OF 34 FOR REINFORCING NOTES.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
DECK REINFORCING - 2			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6cont\zj238dr2.dgn		
Bridge Sheet No.		Sheet	14 of 34

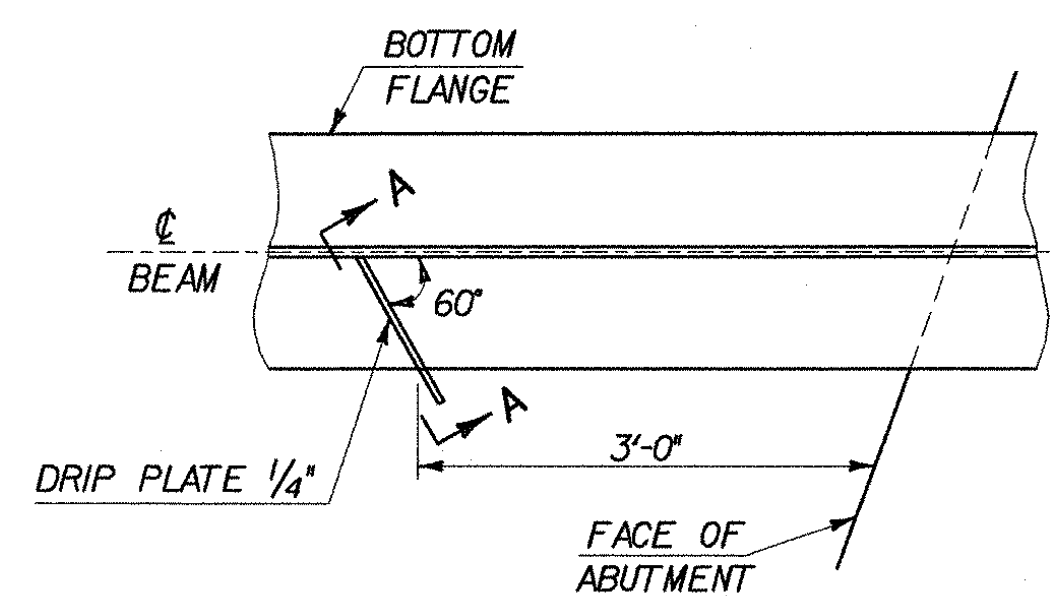
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FRAMING PLAN

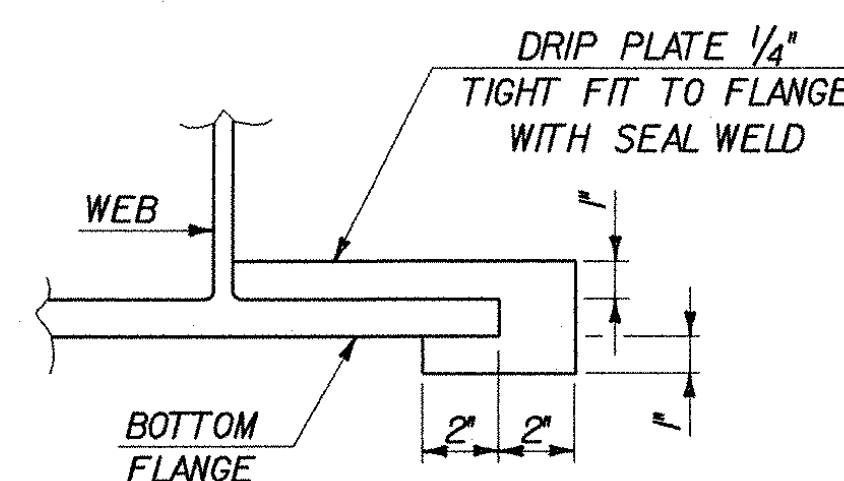
SCALE: 1/8" = 1'-0"

* = ANGLE BETWEEN ϕ BEARING AND PERPENDICULAR TO ϕ OF BEAMS (MINOR CHORD)



PLAN DRIP PLATE

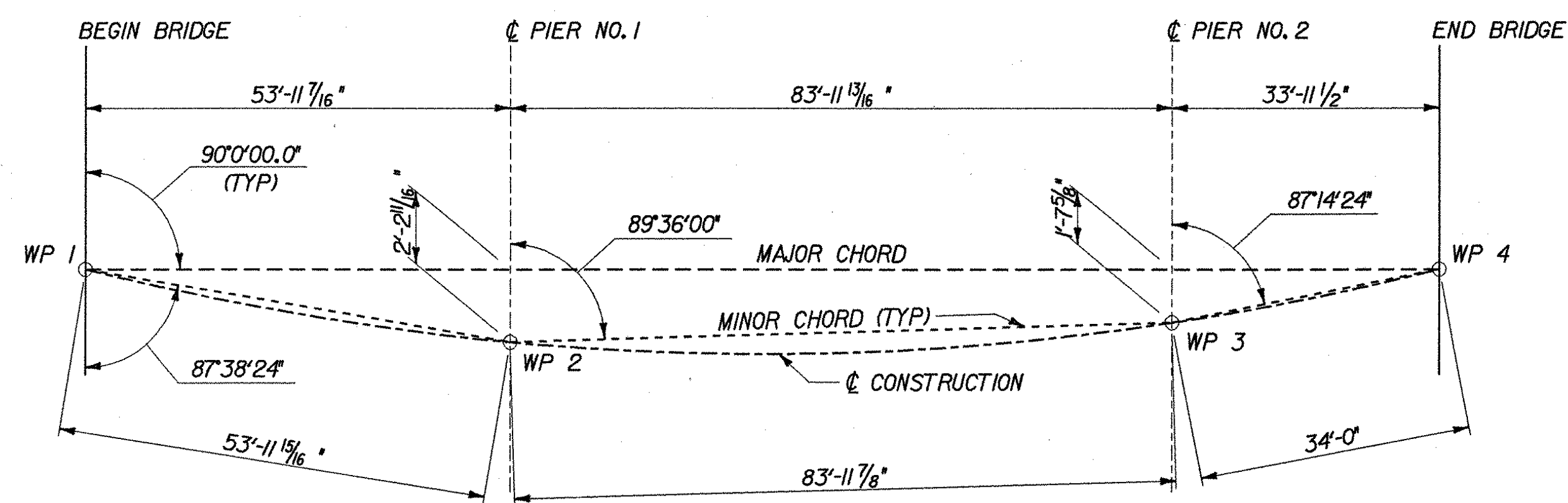
NOT TO SCALE



SECTION A - A

NOT TO SCALE

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA BEAMS ON THE HIGH SIDE OF ALL PIERS AND ABUTMENTS OR AS INDICATED ON PROJECT PLANS.



CHORD LAYOUT

N.T.S.

(WORKING POINTS AT ABUTMENTS FOLLOW ORIGINAL LAYOUT (1960) AND ARE NOT AT THE CENTERLINE OF BEARINGS.)

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of **LYNDON** Bridge No. **2**
Highway No. **ALT VT 122** Log Sta.
Surv. Sta.

CENTER STREET OVER PASSUMPSIC RIVER

FRAMING PLAN

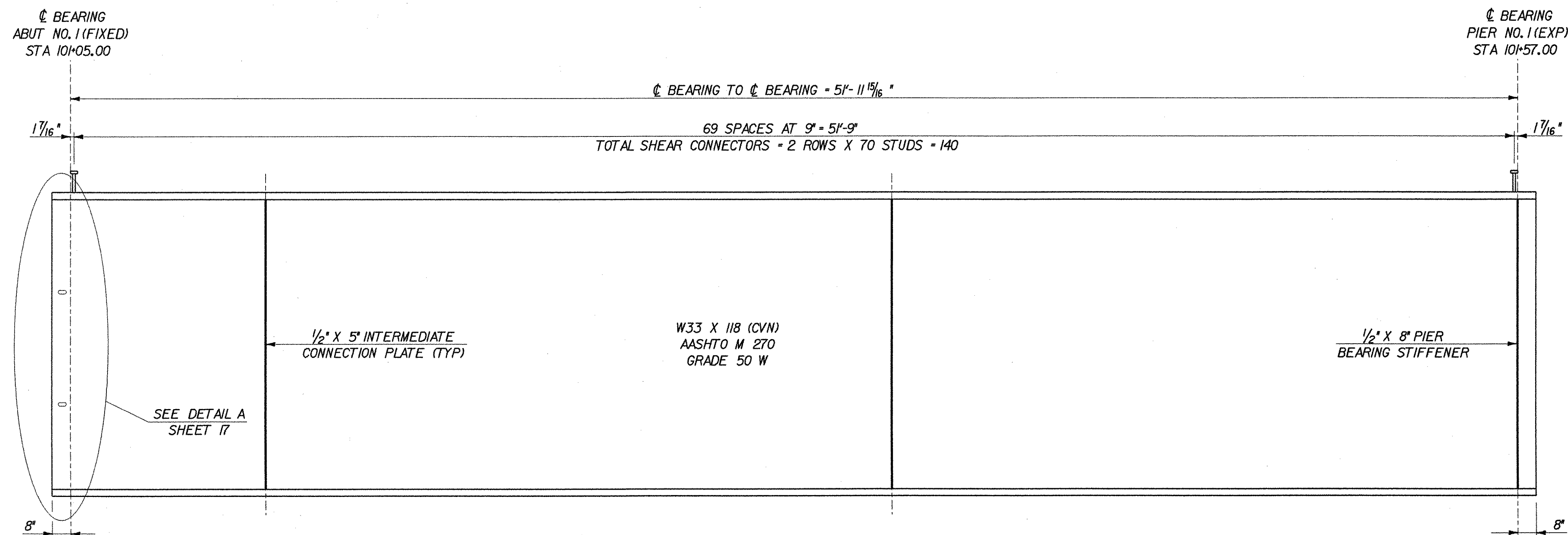
Designed By **T. GRANT** Drawn By **S. DELIA**
Checked By **T. GRANT** Date **10/01** Bridge Design Supervisor **M. ZYDEL** Date **10/01**

PROJECT **LYNDON** PROJECT NO. **BHO 1447(26)**

I.G.C. Info. **m:\549103\6conf\zj238f.plt.dgn**

Bridge Sheet No. Sheet **15** of **34**

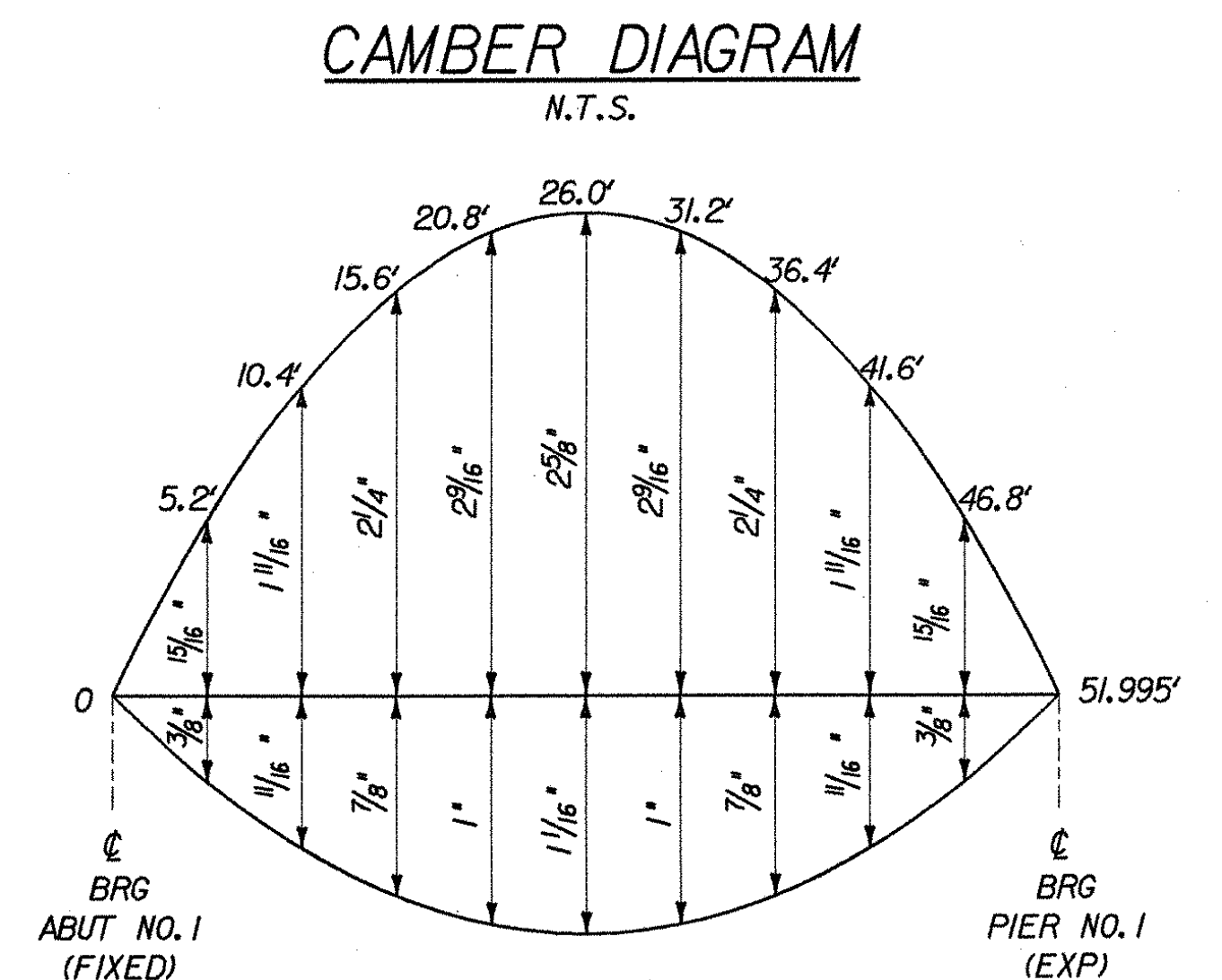
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MCFARLAND-JOHNSON, NC.



SPAN NO. 1 BEAM ELEVATION

NOT TO SCALE

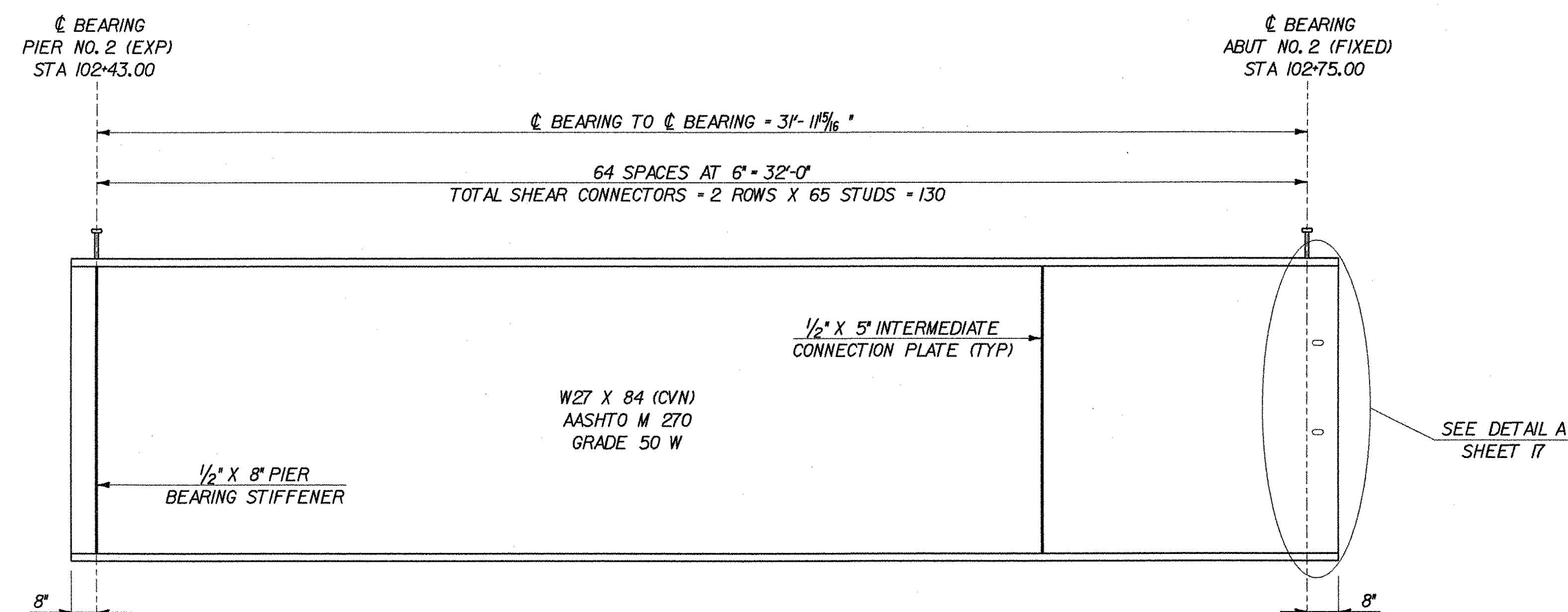
(CVN) INDICATES CHARPY V-NOTCH TESTING
REQUIRED PER SPECIFICATION
(SEE NOTE 26, SHEET 12)



DL DEFLECTION DIAGRAM

N.T.S.

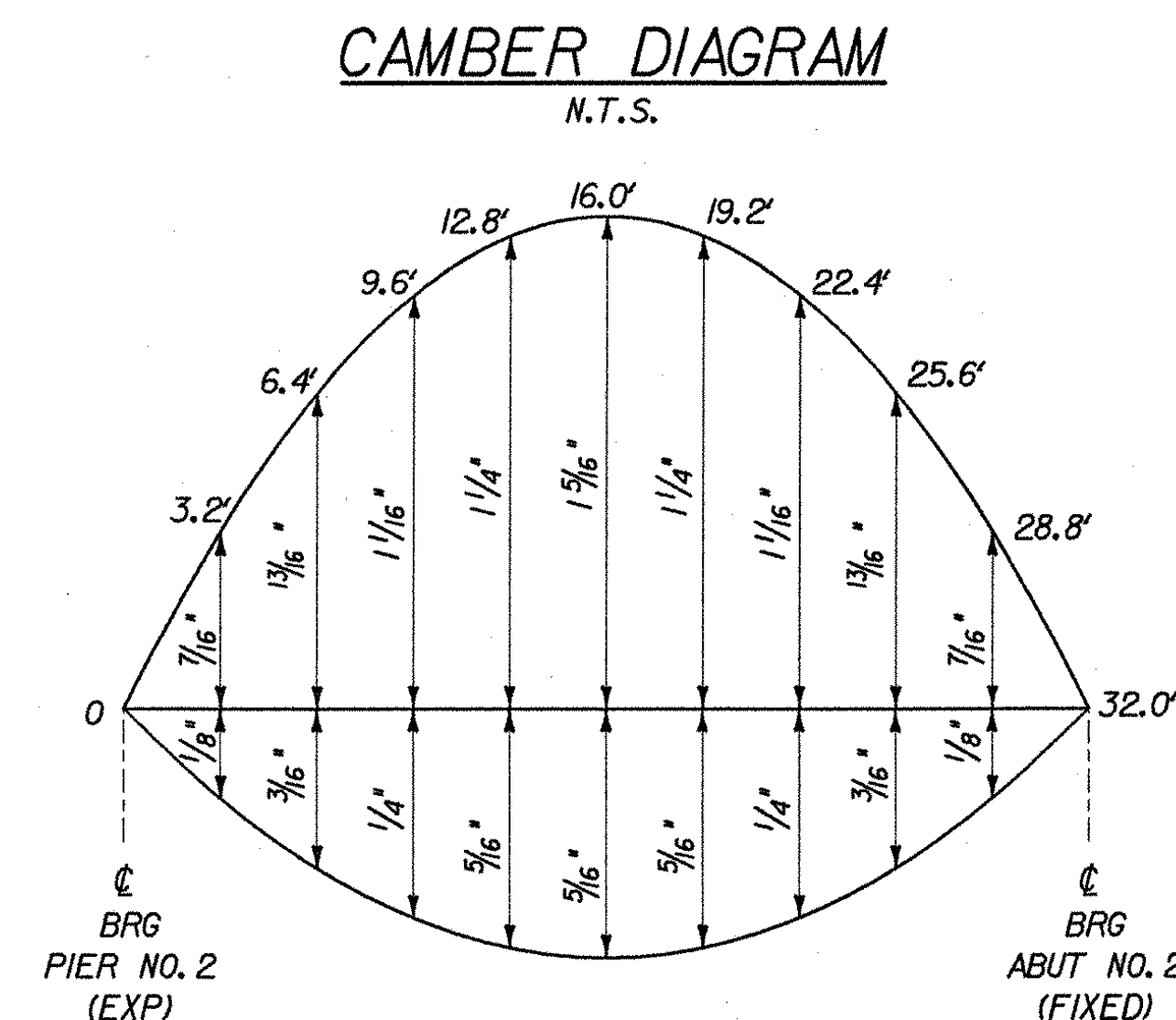
CAMBER AND DEFLECTION MEASUREMENTS
ARE GIVEN IN INCHES AT TENTH POINTS



SPAN NO. 3 BEAM ELEVATION

NOT TO SCALE

(CVN) INDICATES CHARPY V-NOTCH TESTING
REQUIRED PER SPECIFICATION
(SEE NOTE 26, SHEET 12)



DL DEFLECTION DIAGRAM

N.T.S.

CAMBER AND DEFLECTION MEASUREMENTS
ARE GIVEN IN INCHES AT TENTH POINTS

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
BEAM DETAILS - 1			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	Date	Bridge Design Supervisor	
T. GRANT	10/01	M. ZYDEL	Date 10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6cont\zj238gdl.dgn		
Bridge Sheet No.		Sheet	16 of 34

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1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 & 731.
2. BEARINGS SHALL BE PAID FOR AS ITEM 531.10, "BEARING DEVICE ASSEMBLY".
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED TO INCLUDE WELDING AND BONDING PROCEDURES.
4. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
5. "A" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER ALL DEAD LOAD HAS BEEN APPLIED. "B" DISTANCE IS LISTED FOR SETTING THE BEARING AFTER THE STRUCTURAL STEEL IS ERECTED AND BEFORE THE CONCRETE DECK IS POURED. THE DIFFERENCE IS THE THEORETICAL ELONGATION OF THE BOTTOM FLANGE DUE TO DEAD LOAD DEFLECTION. THE FINAL "A" DISTANCE, AS SHOWN IN THE TABLE, MUST BE ATTAINED WITHIN $\frac{1}{8}$ INCH.
6. DESIGN CRITERIA:
 - A. BEARING PAD TO CONCRETE DESIGN PRESSURE = 1000 PSI MAXIMUM.
 - B. MINIMUM DESIGN ROTATION = 0.015 RADIAN.
 - C. DESIGN LOAD PER BEARING (KIPS):

		PIER NO. 1		PIER NO. 2		
LOAD	ABUT NO. 1	BRG NO. 1	BRG NO. 2	BRG NO. 1	BRG NO. 2	ABUT NO. 2
R_{DL}	25	25	37	37	15	15
$R_{LL + I}$	60	60	61	61	55	55
R_{SDL}	15	15	23	23	10	10

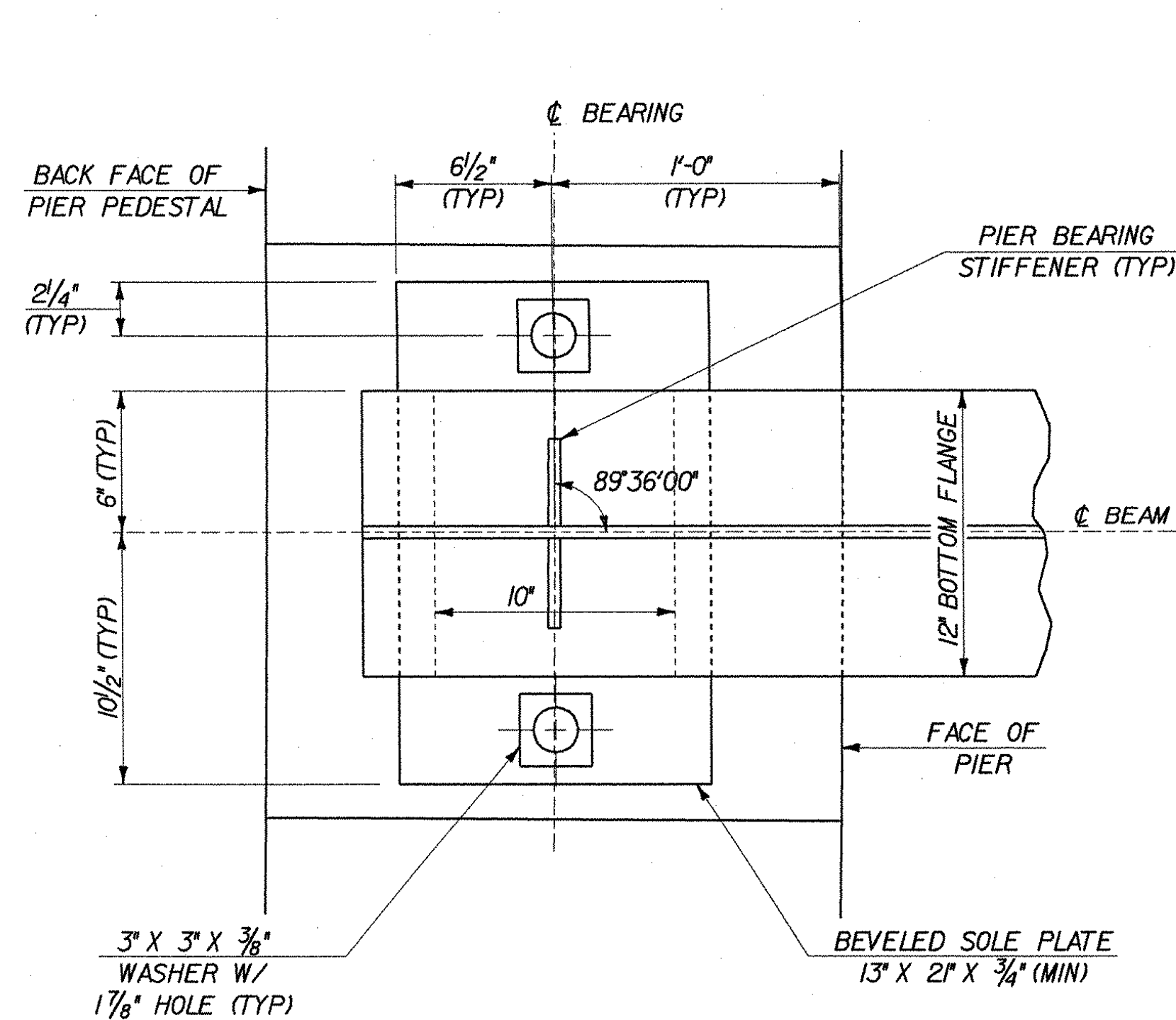
7. ALL STEEL IN BEARING DEVICES (EXCEPT STAINLESS STEEL) SHALL BE AASHTO M-270, GRADE 36.
8. ANCHOR BOLTS SHALL BE SWEDGED AND GALVANIZED WITH 4" THREADS. THREADS SHALL BE BURRED TO PREVENT NUT REMOVAL. ANCHOR BOLTS SHALL HAVE A MINIMUM OF 15" EMBEDMENT INTO THE CONCRETE, AND 6" MIN. INTO EXISTING STRUCTURE. ANCHOR BOLTS, NUTS AND WASHERS SHALL MEET THE REQUIREMENTS OF SUBSECTION 714.08 OF THE SPECIAL PROVISIONS USING ASTM 307.
9. ALL BEARING DEVICES SHALL BE GALVANIZED OR METALLIZED. AREAS OF GALVANIZING OR METALLIZING DAMAGED BY THE FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.
10. ALL HORIZONTAL DIMENSIONS SHOWN @ 45° ARE FINAL CONDITION DIMENSIONS.
11. CONTRACTOR SHALL GRIND EXISTING SEATS OR PROVIDE GALVANIZED SHIMS AS REQUIRED TO MATCH THE SEAT ELEVATIONS SHOWN ON SHEET 27 OF 34.

PIER NO.1 TEMPERATURE SETTING TABLE

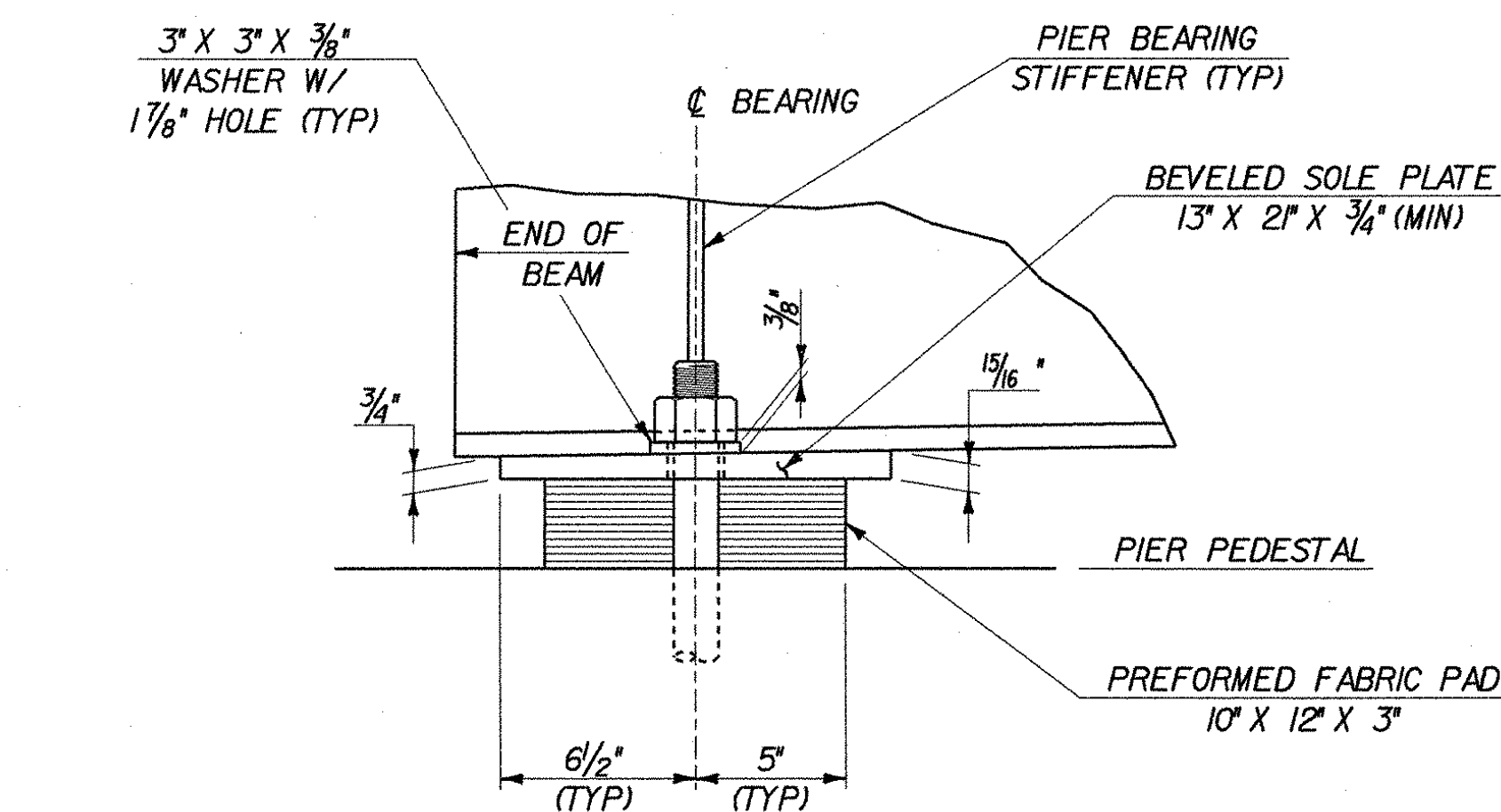
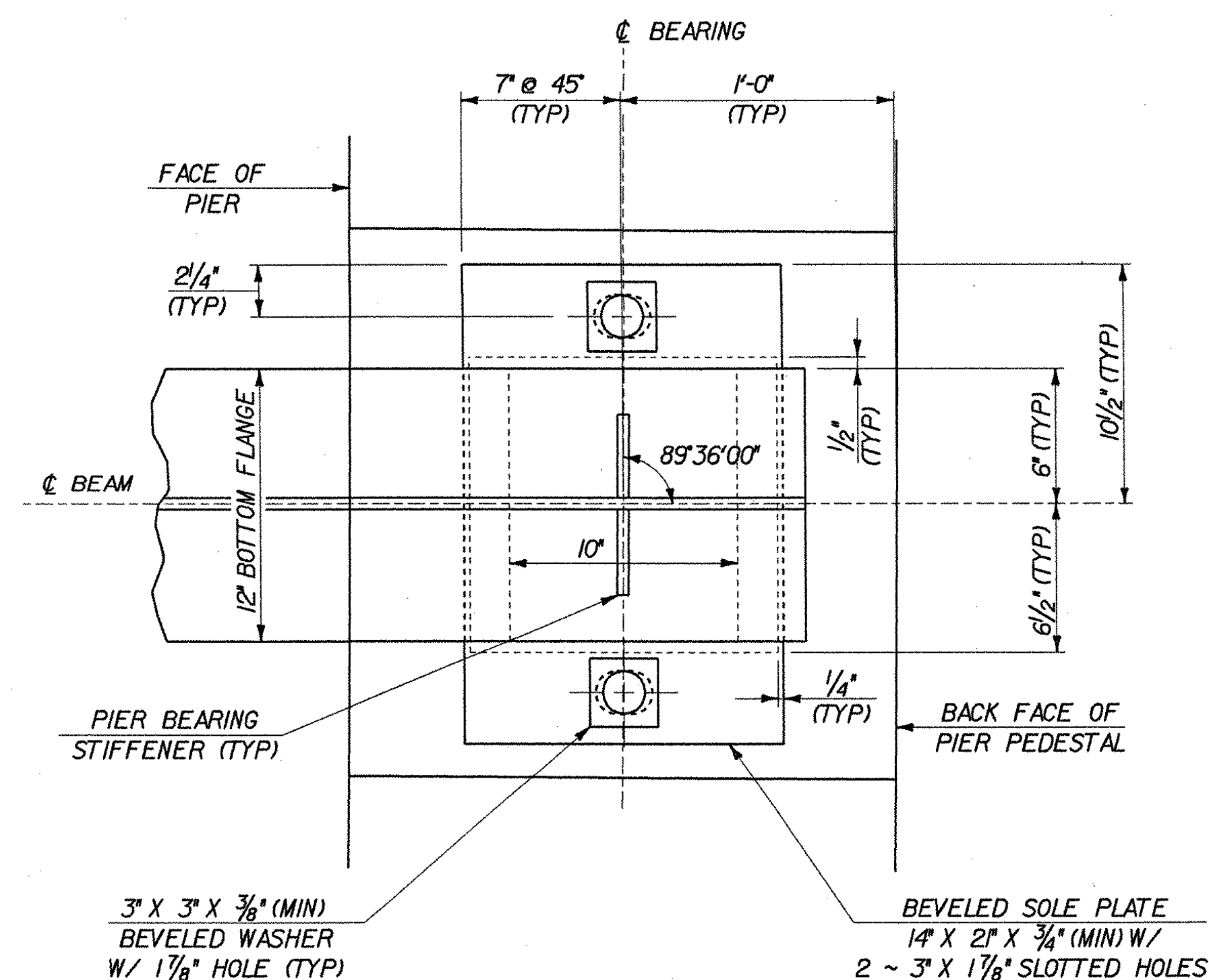
TEMP	"A" DIST	"B" DIST
0° F	2 3/16"	2 1/16"
15° F	2 1/8"	2 3/8"
30° F	2 1/16"	2 3/8"
45° F	2"	2 1/4"
60° F	1 15/16"	2 3/16"
75° F	1 7/8"	2 1/8"
90° F	1 13/16"	2 1/16"
105° F	1 3/4"	2"



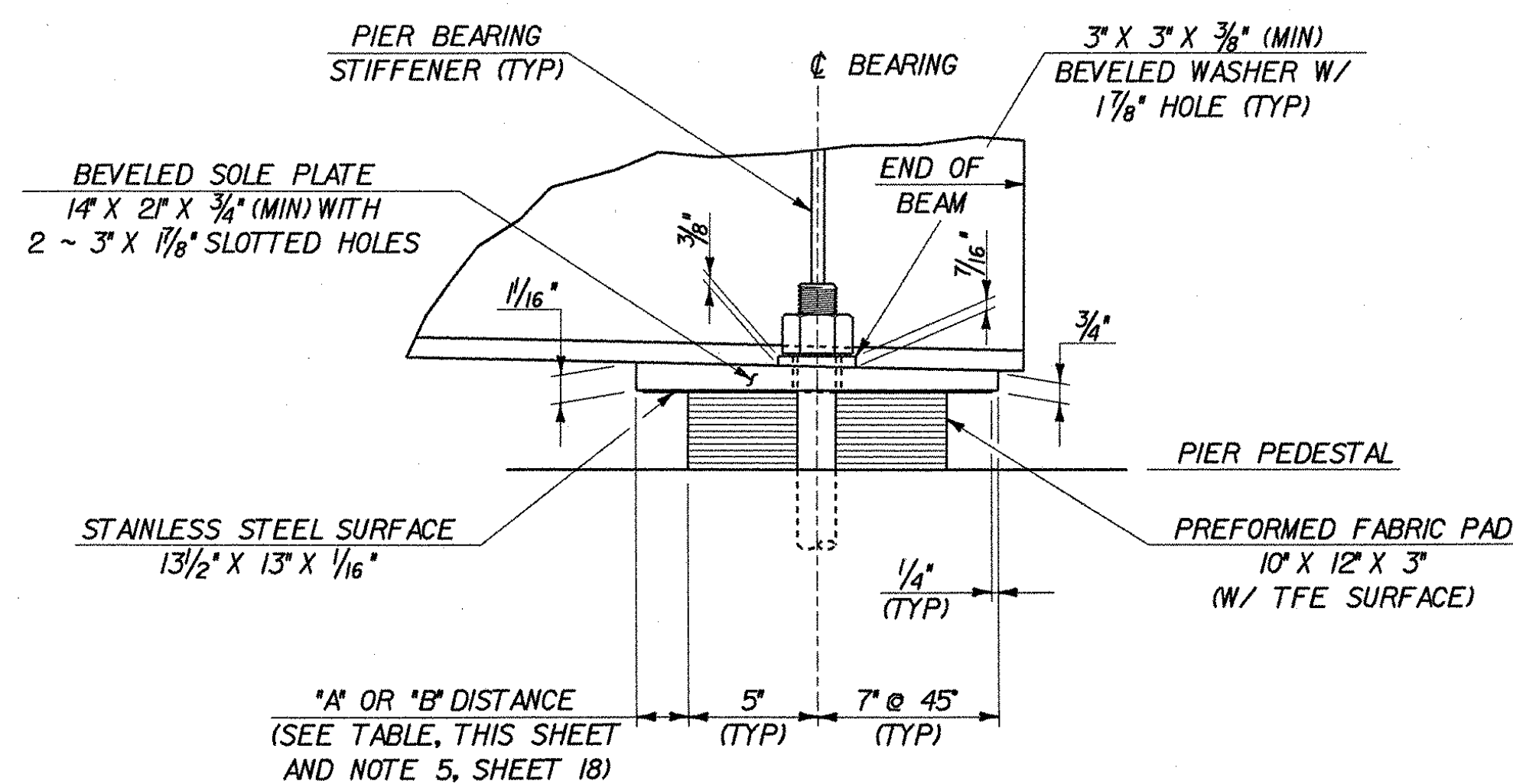
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of <i>LYNDON</i>		Bridge No. <i>2</i>	
Highway No. <i>ALT VT 122</i>		Log Sta. Surv. Sta.	
<i>CENTRAL STREET OVER PASSUMPSIC RIVER</i>			
<i>BEARING DETAILS - I</i>			
Designed By <i>T. GRANT / S. MERKMAN</i>		Drawn By <i>S. DELIA / S. MERKMAN</i>	
Checked By <i>T. GRANT / R. WOOD</i>		Bridge Design Supervisor <i>M. ZYDEL</i> Date <i>10/01</i>	
PROJECT <i>LYNDON</i>		PROJECT NO. <i>BHO 1447 (26)</i>	
I.G.C. Info. <i>mzV5491036confzj238bdl.dgn</i>			
Bridge Sheet No.		Sheet <i>18</i> of <i>34</i>	



PLAN VIEW



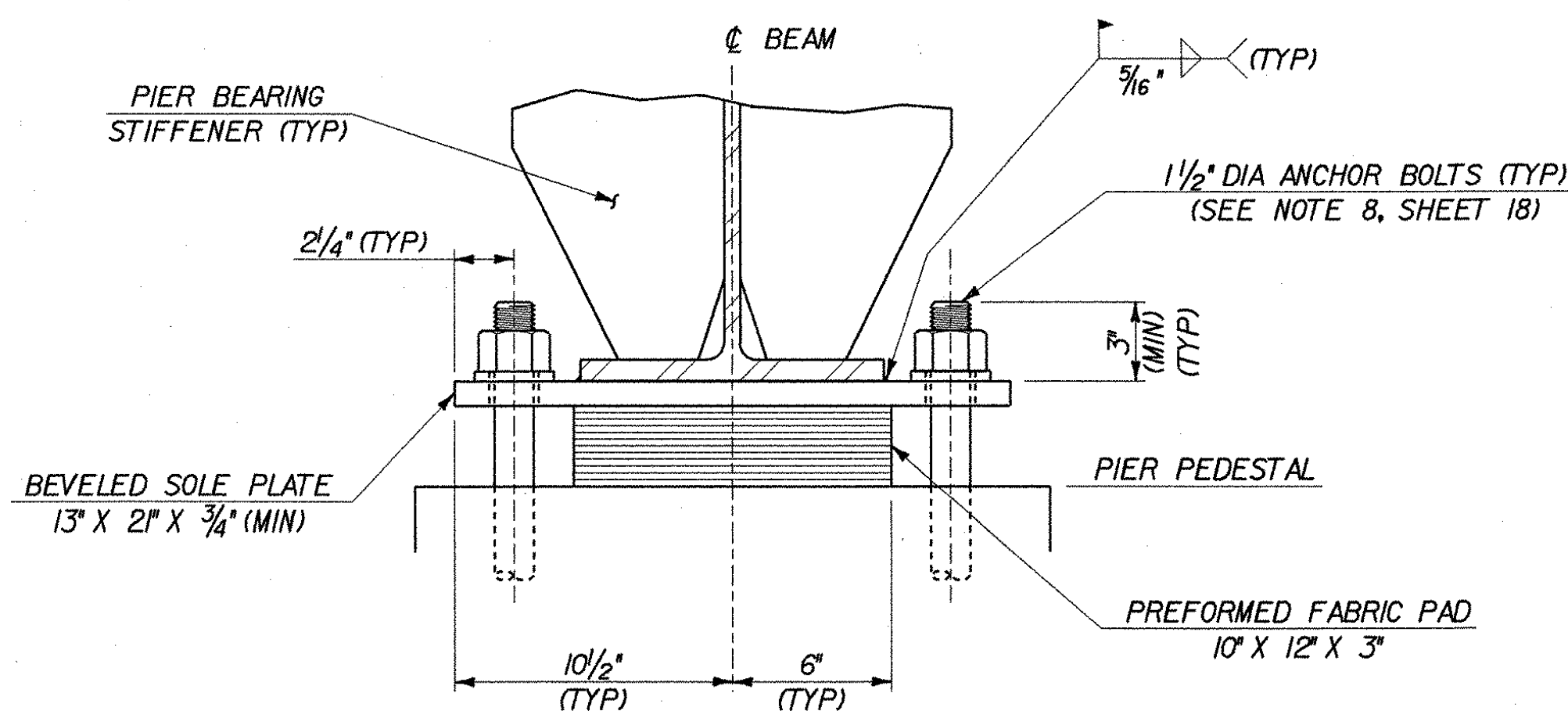
SIDE ELEVATION



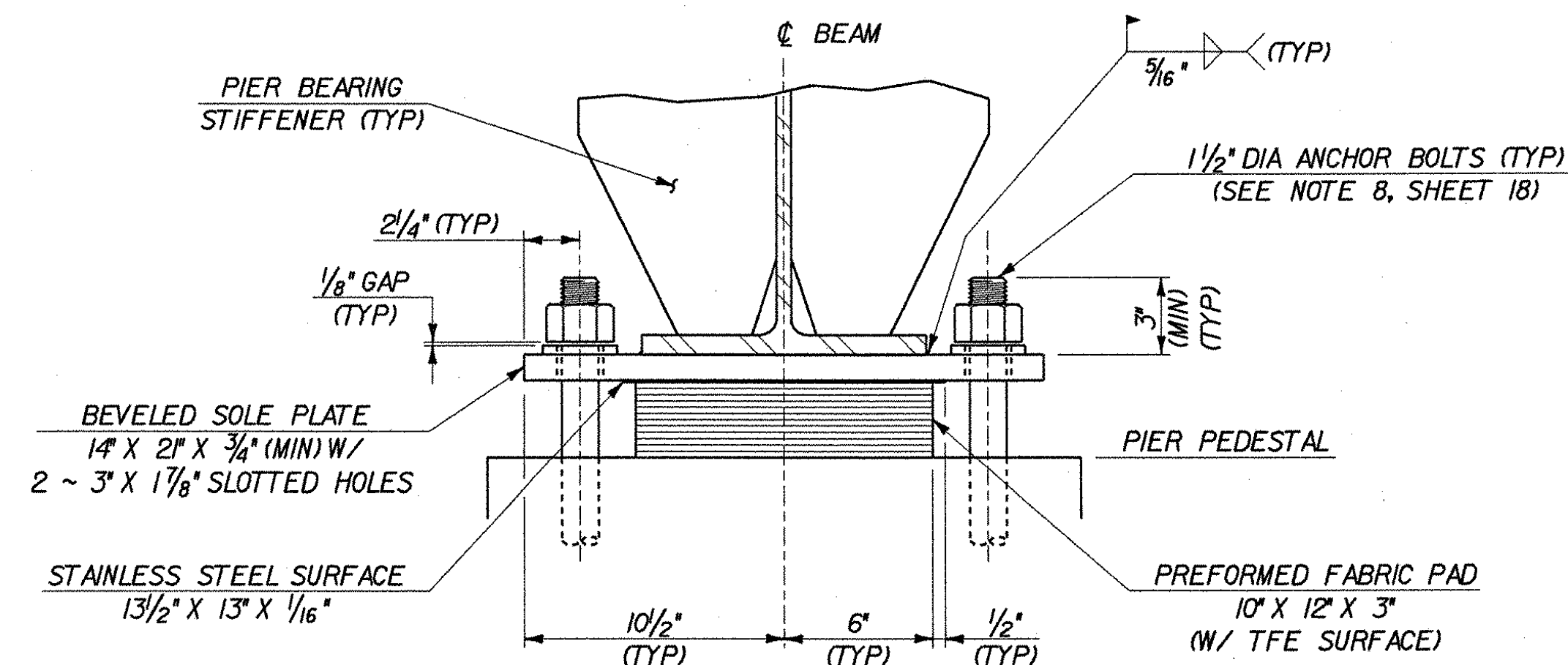
BEARING NO. 1 AT PIER NO. 2
TEMPERATURE SETTING TABLE

TEMP	"A" DIST	"B" DIST
0° F	2 5/16"	2 7/8"
15° F	2 3/16"	2 3/4"
30° F	2 1/8"	2 1/16"
45° F	2"	2 3/16"
60° F	1 7/8"	2 1/2"
75° F	1 13/16"	2 3/8"
90° F	1 11/16"	2 5/16"
105° F	1 5/8"	2 3/16"

"A" IS THE DISTANCE WITH ALL DEAD LOAD IN PLACE
"B" IS THE DISTANCE BEFORE DECK IS IN PLACE



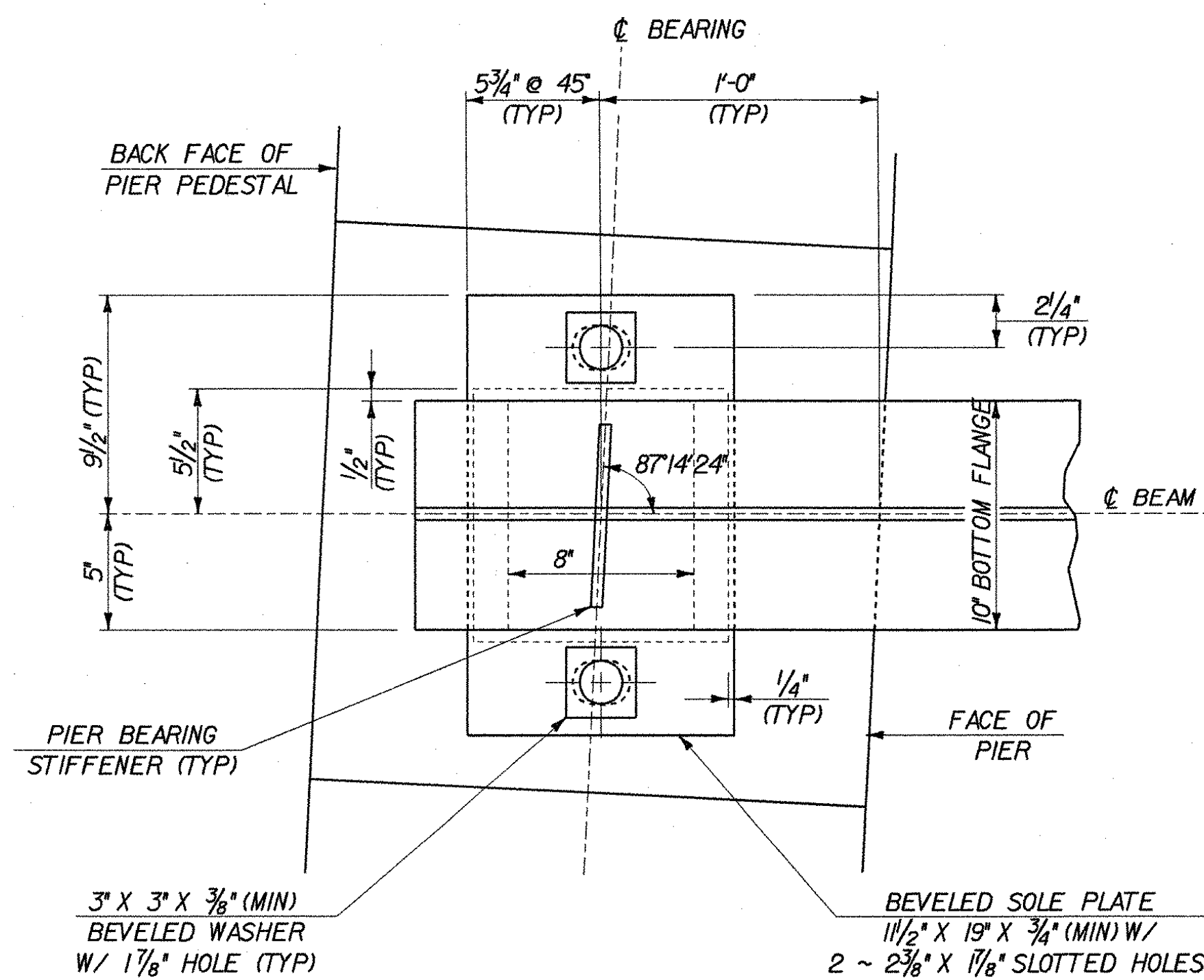
FRONT VIEW



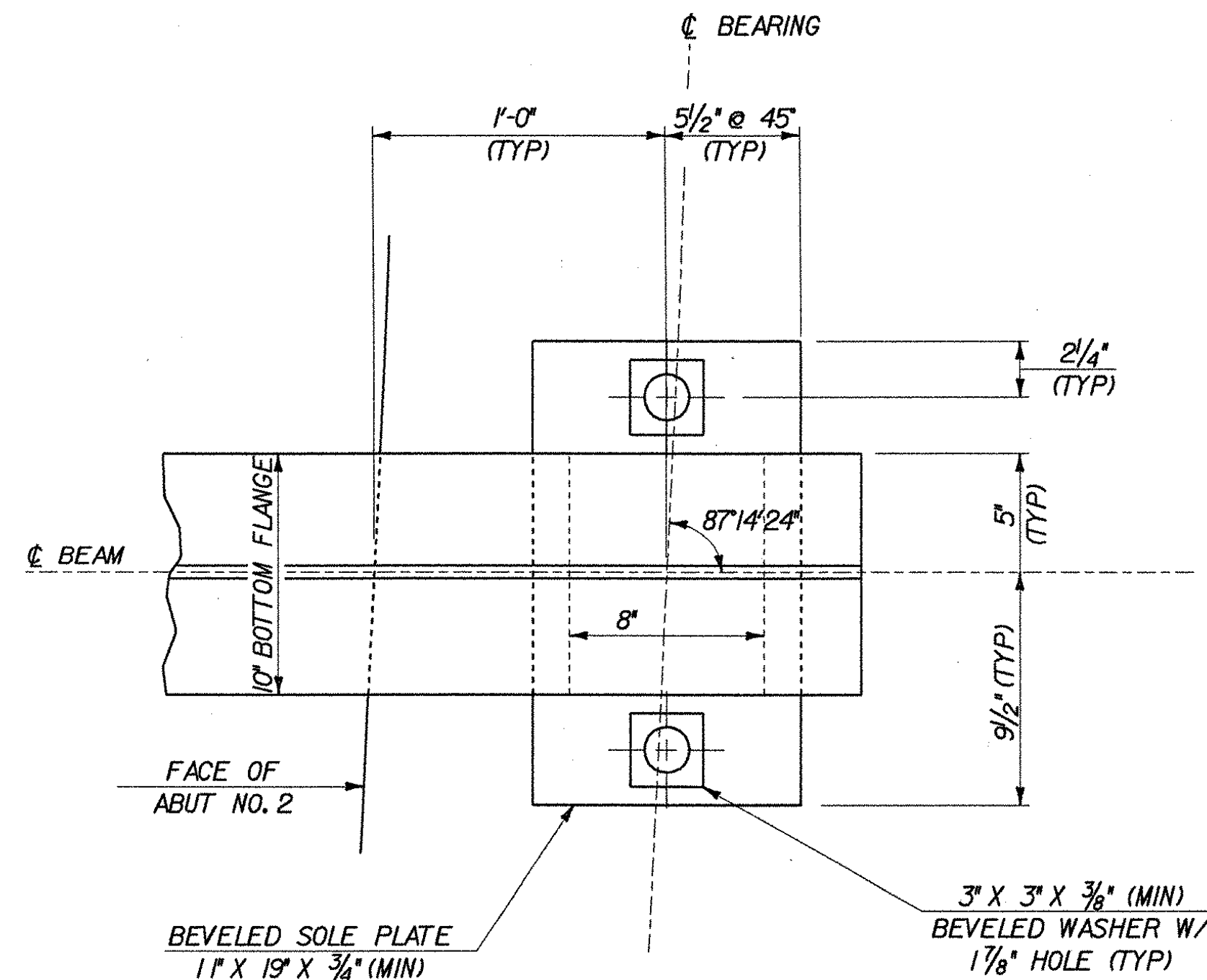
FIXED BEARING AT PIER NO. 1
SCALE: 2" = 1'-0"

EXPANSION BEARING NO. 1 AT PIER NO. 2
SCALE: 2" = 1'-0"

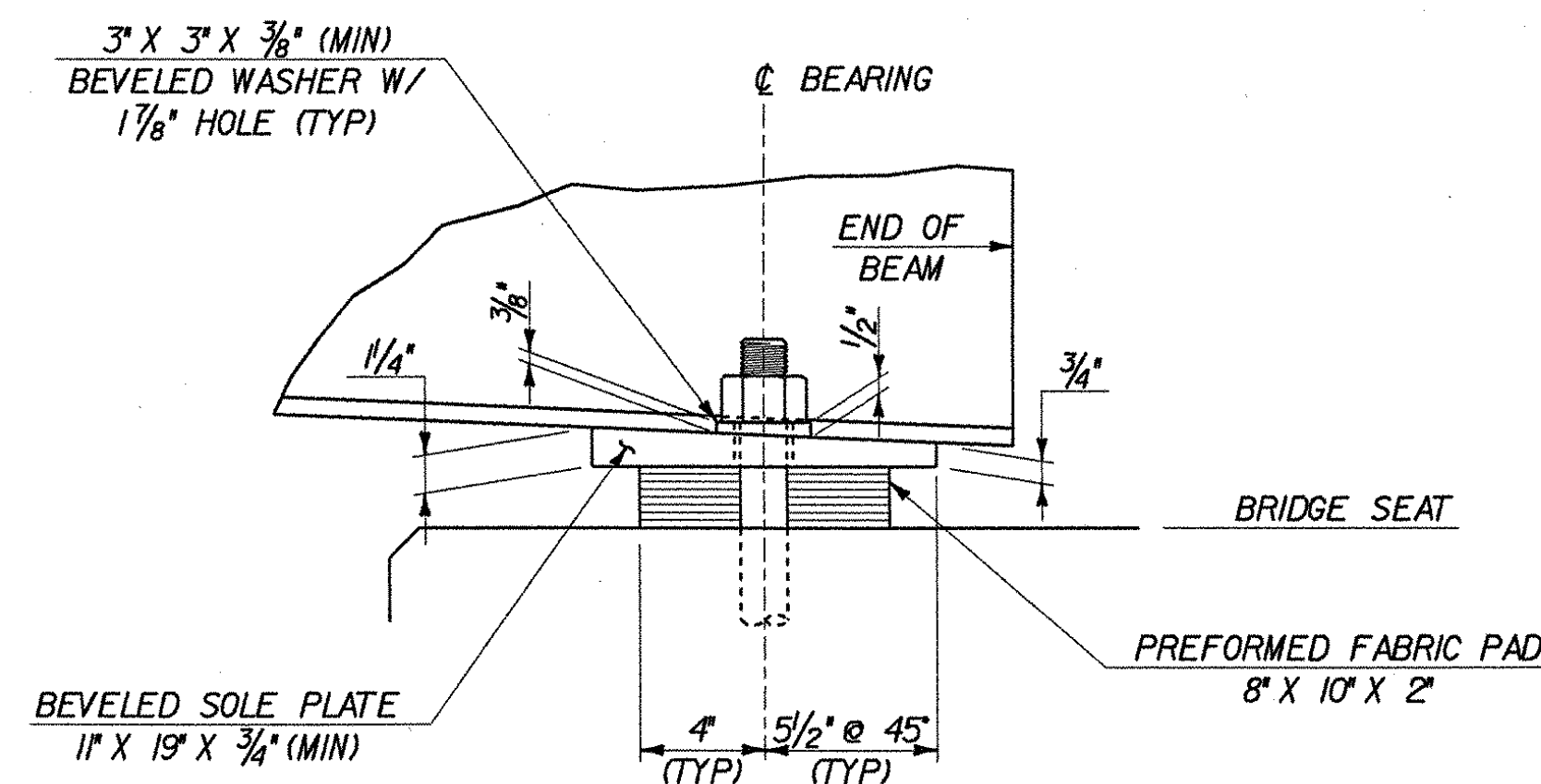
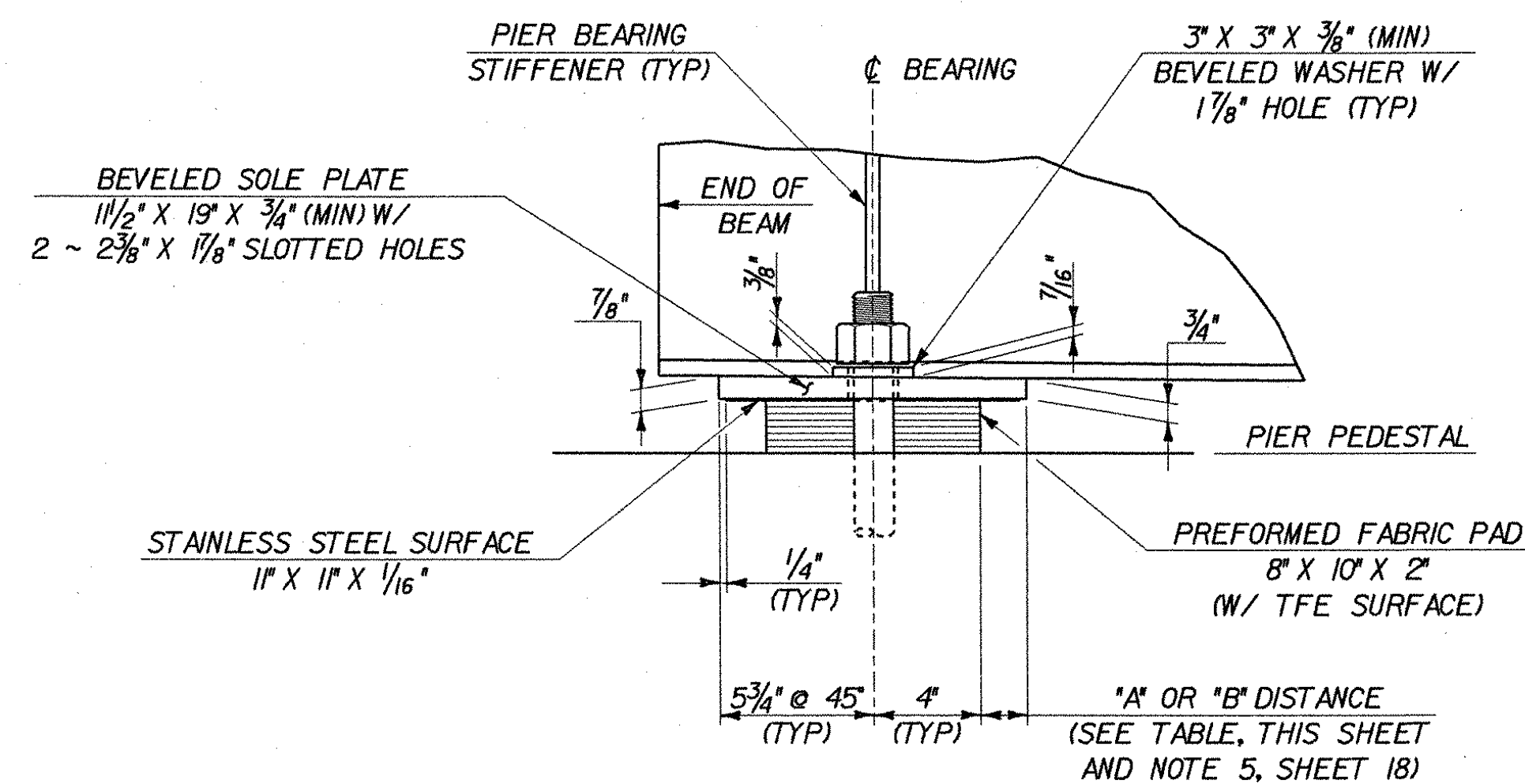
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
BEARING DETAILS - 2			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6conf\z\238bd2.dgn		
Bridge Sheet No.	Sheet 19 of 34		



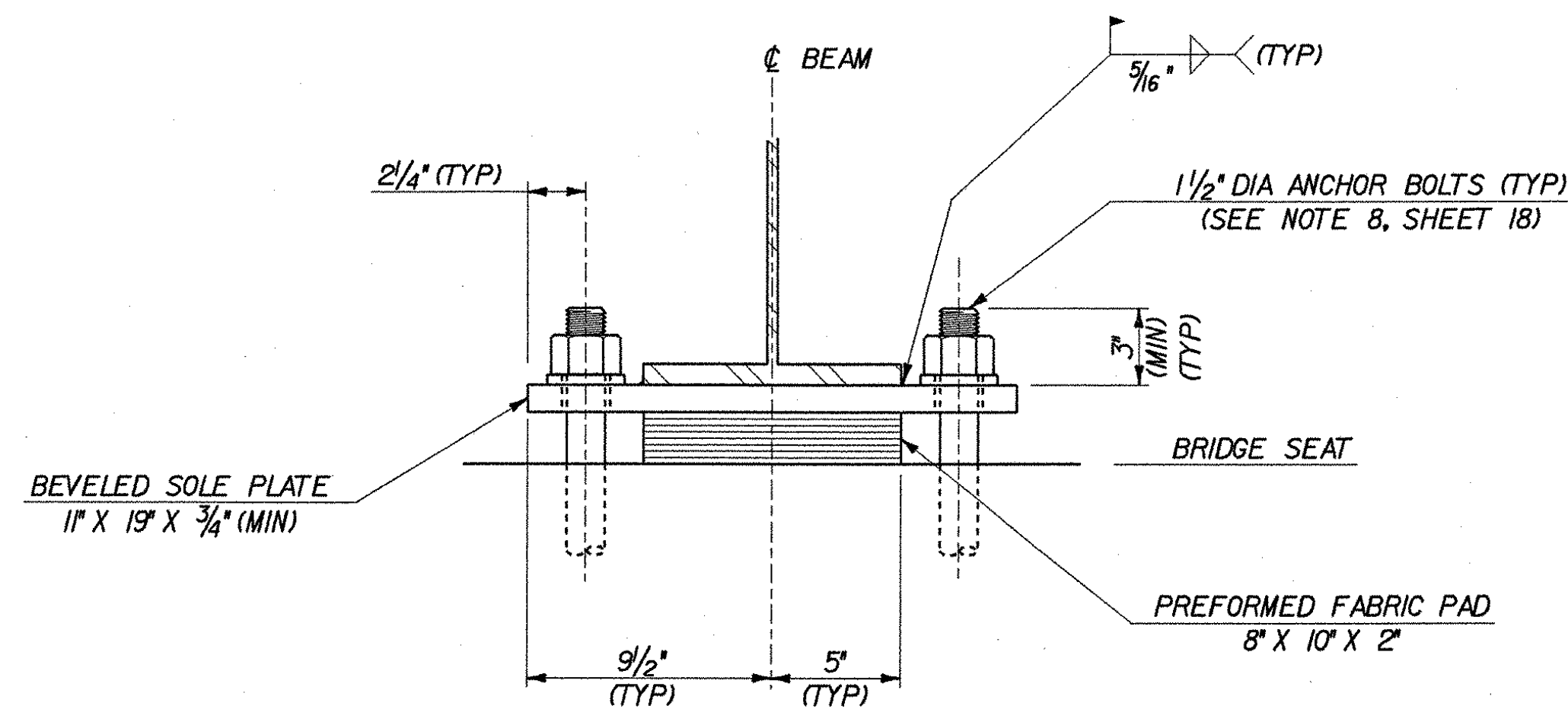
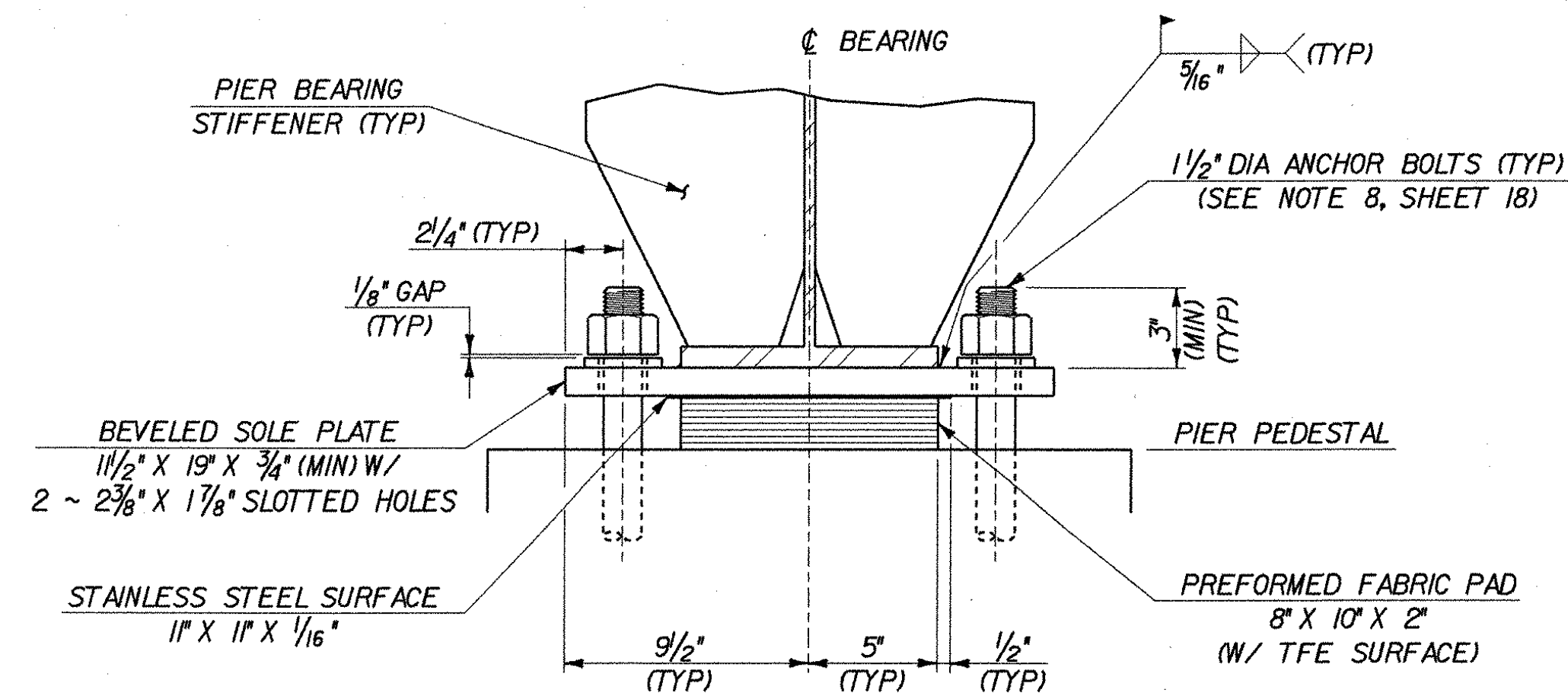
PLAN VIEW



SIDE ELEVATION



FRONT VIEW



BEARING NO. 2 AT PIER NO. 2
TEMPERATURE SETTING TABLE

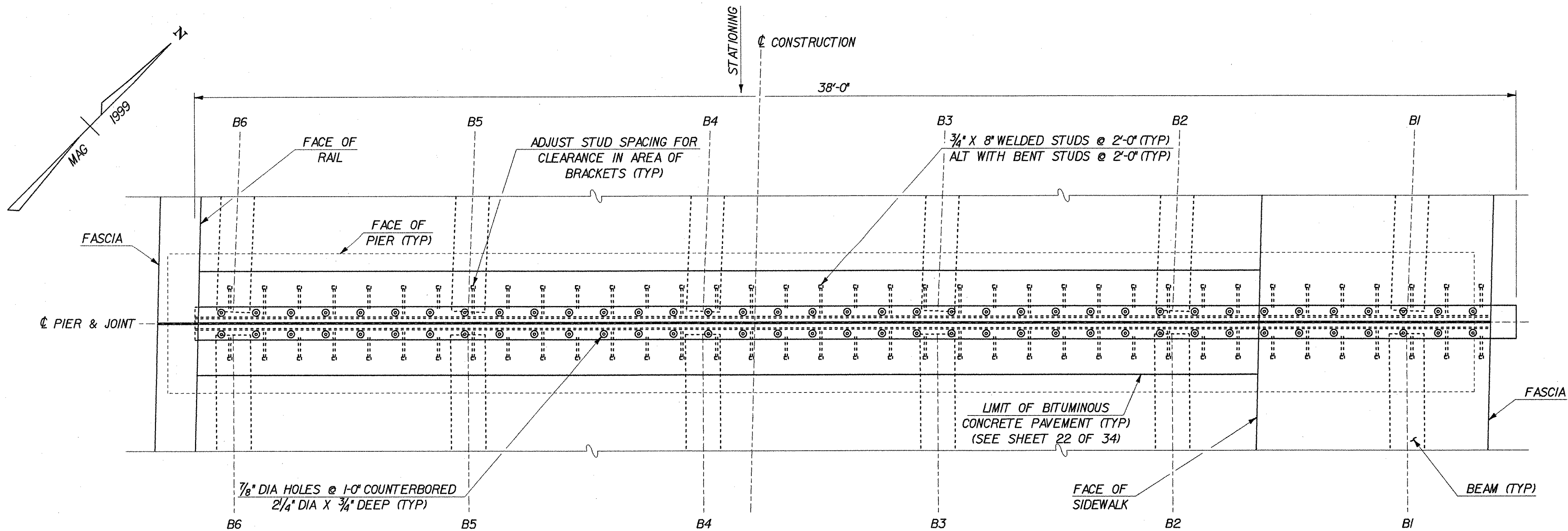
TEMP	"A" DIST	"B" DIST
0° F	1 7/8"	2"
15° F	1 13/16"	1 15/16"
30° F	1 13/16"	1 7/8"
45° F	1 3/4"	1 7/8"
60° F	1 11/16"	1 13/16"
75° F	1 11/16"	1 13/16"
90° F	1 5/8"	1 3/4"
105° F	1 5/8"	1 11/16"

"A" IS THE DISTANCE WITH ALL DEAD LOAD IN PLACE
"B" IS THE DISTANCE BEFORE DECK IS IN PLACE

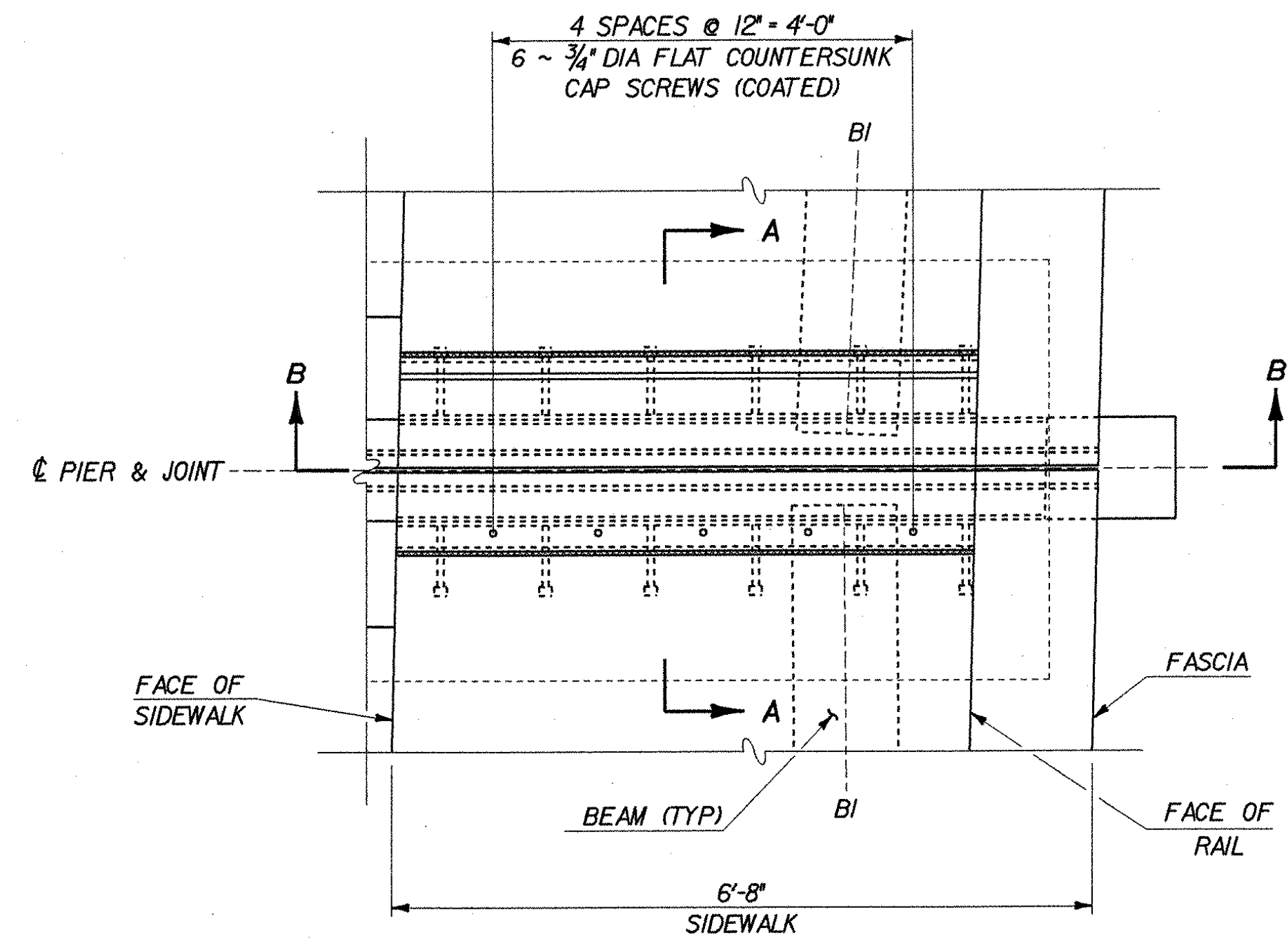
EXPANSION BEARING NO. 2 AT PIER NO. 2
SCALE: 2" = 1'-0"

FIXED BEARING AT ABUTMENT NO. 2
SCALE: 2" = 1'-0"

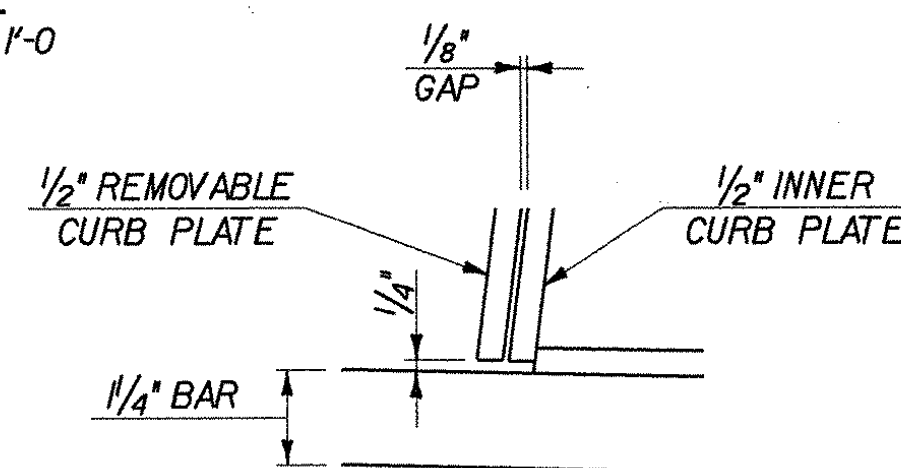
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
BEARING DETAILS - 3			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6conf\z\238bd3.dgn		
Bridge Sheet No.	Sheet 20 of 34		



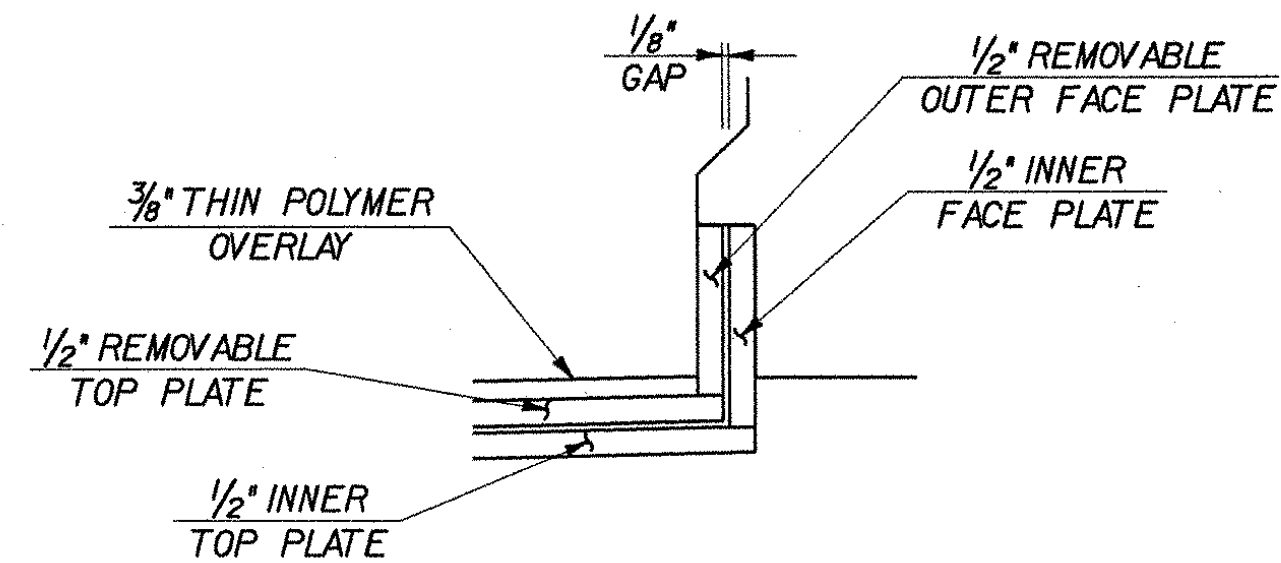
PLAN
SCALE: 1/2" = 1'-0"



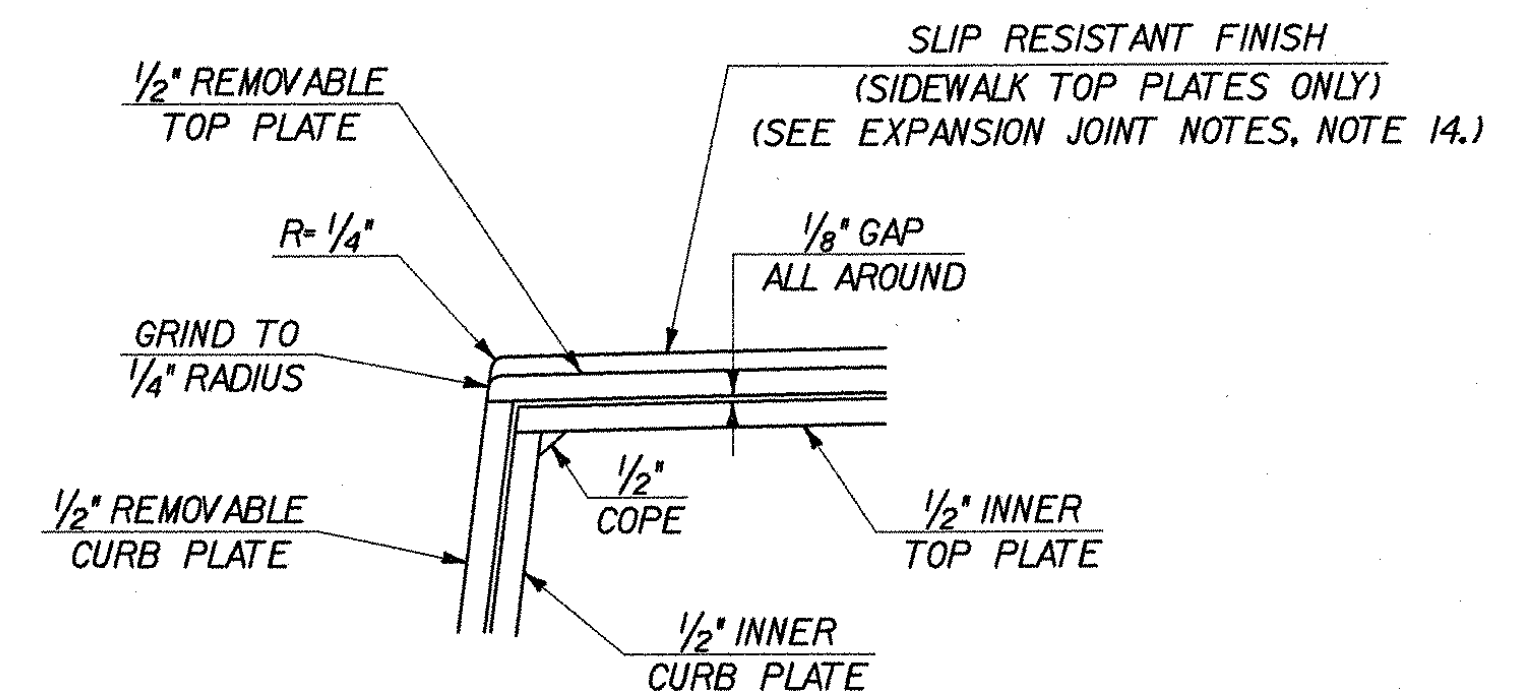
TYPICAL SIDEWALK PLAN
SCALE: 3/4" = 1'-0"



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

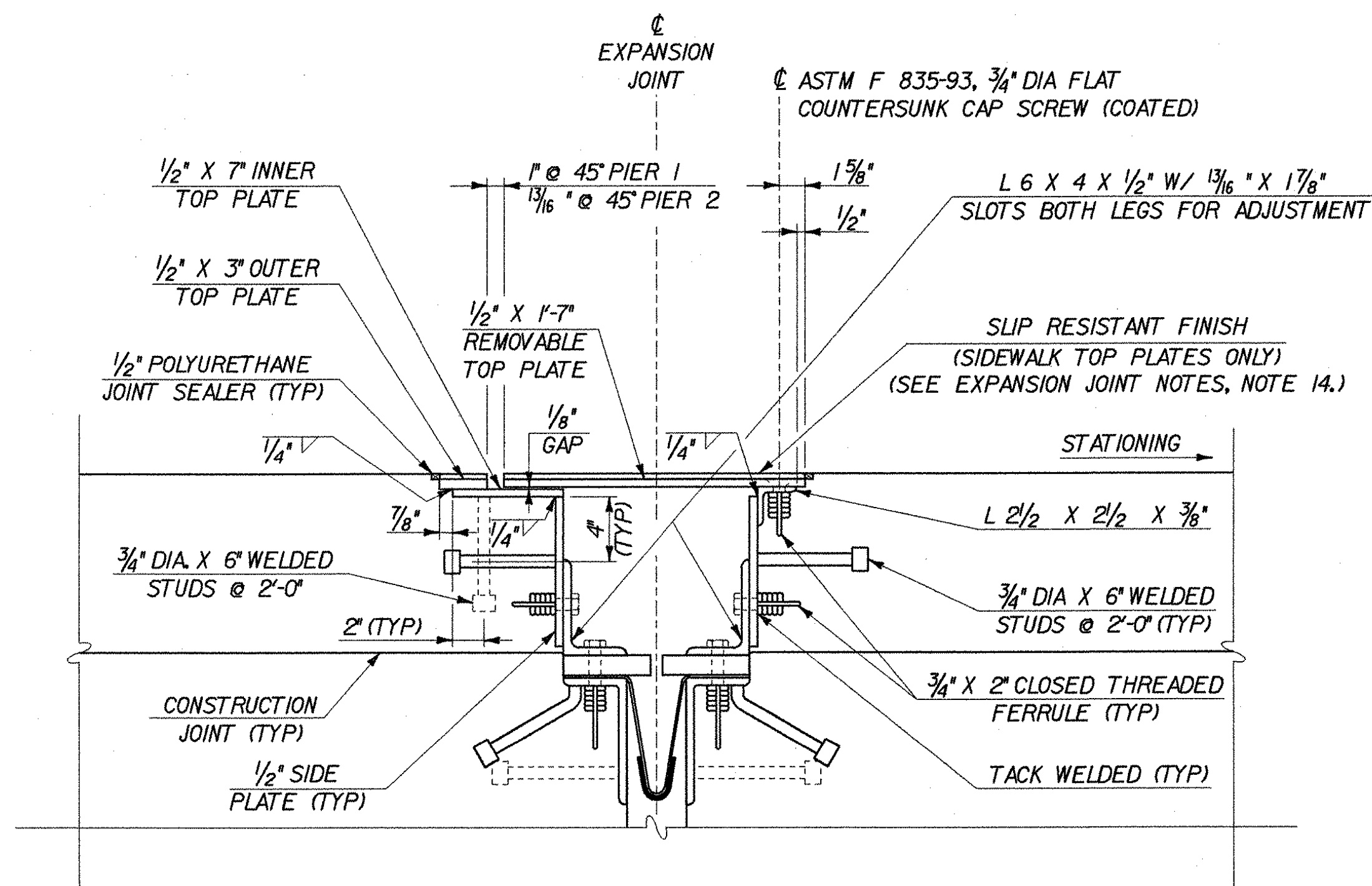


DETAIL C
SCALE: 3" = 1'-0"

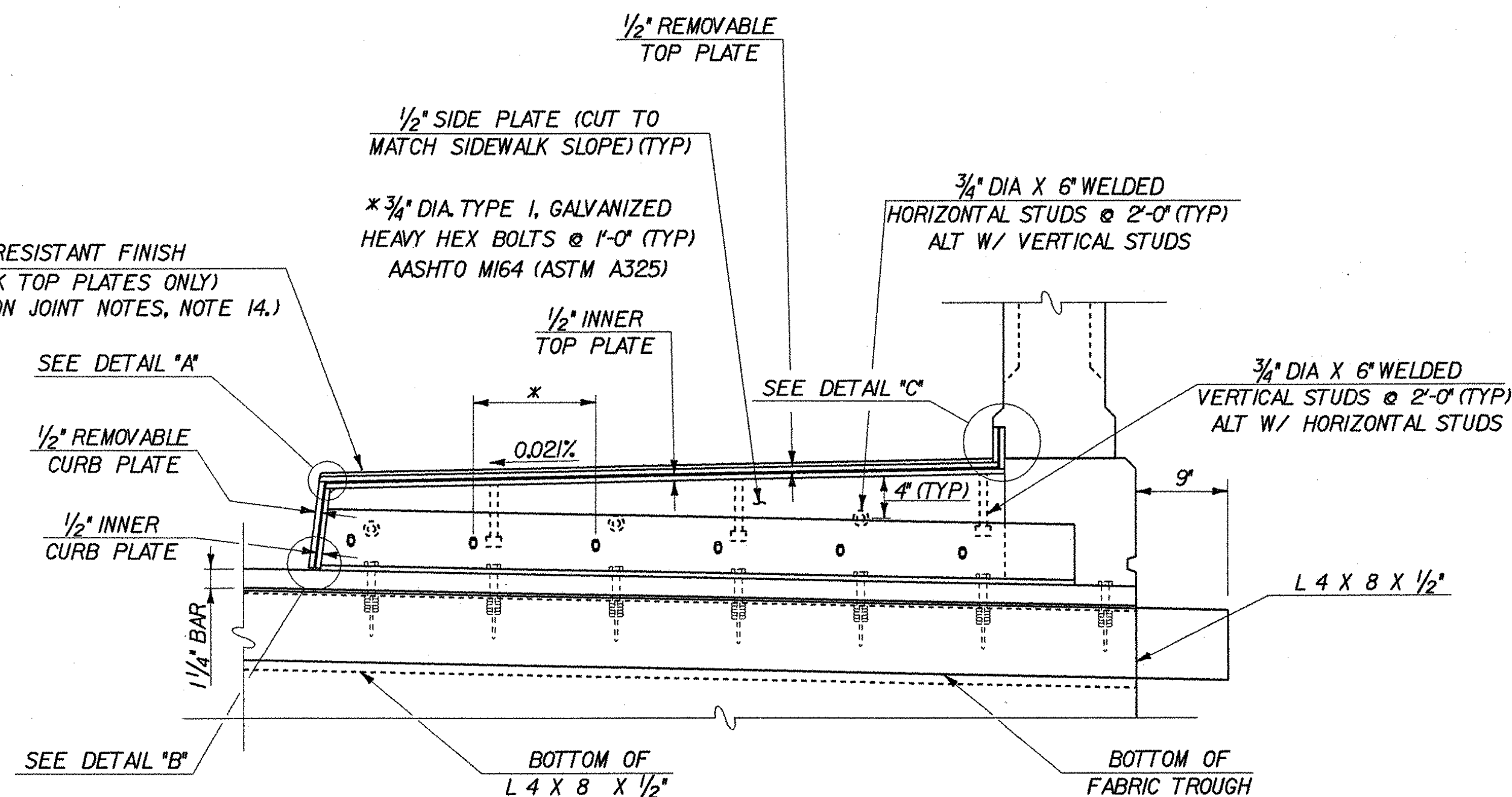


DETAIL A
SCALE: 3" = 1'-0"

NOTE:
FOR EXPANSION JOINT NOTES, SEE SHEET 22.



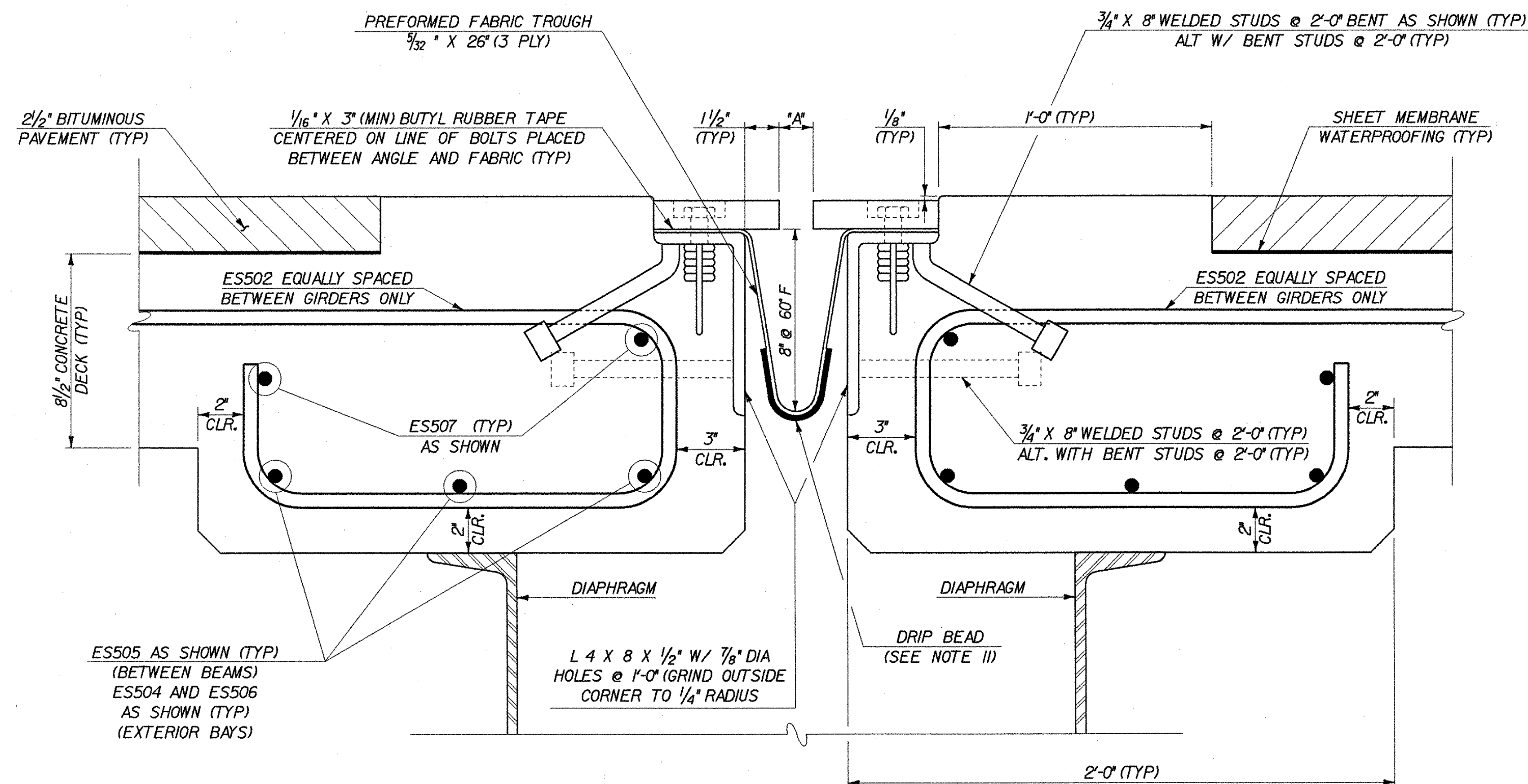
SECTION A-A
SCALE: 1 1/2" = 1'-0"
(NORMAL TO BEARING)
(REINFORCING NOT SHOWN)



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

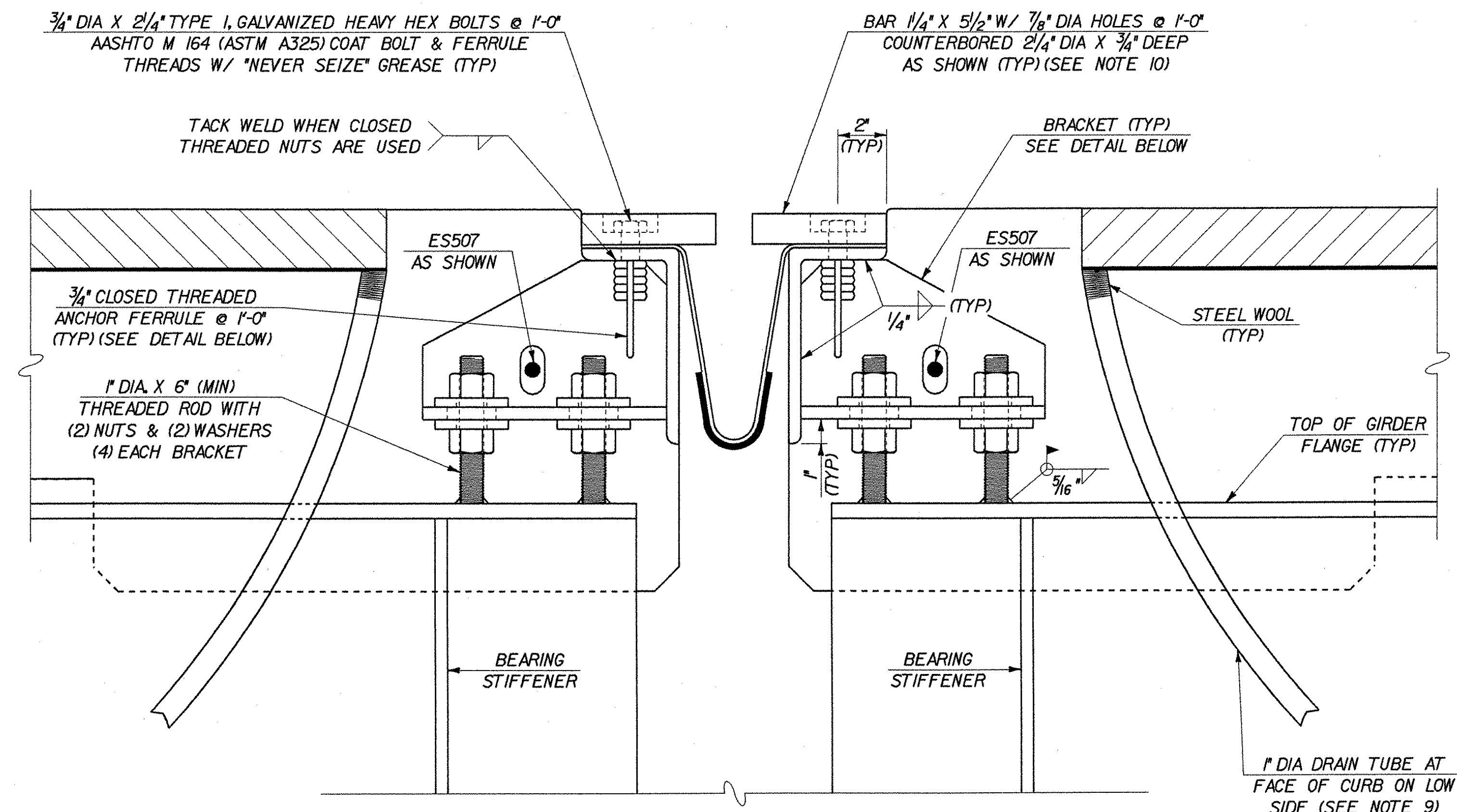
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER EXPANSION JOINT DETAILS - I			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	T. GRANT/R. WOOD	Bridge Design Supervisor	M. ZYDEL
	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m\549103\600n\2\238\j.dwg		
Bridge Sheet No.		Sheet	21 of 34

MJ
MCFARLAND-JOHNSON, INC.



TYPICAL SECTION BETWEEN GIRDERS

SCALE: 3" = 1'-0"
(NORMAL TO BEARING)

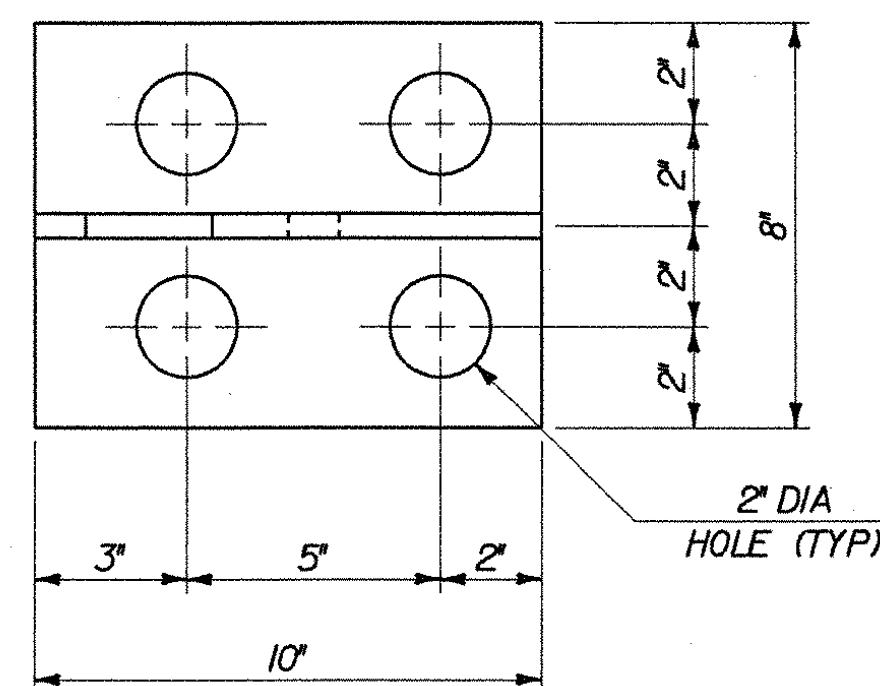


TYPICAL SECTION AT GIRDERS

SCALE: 3" = 1'-0"
(NORMAL TO BEARING)

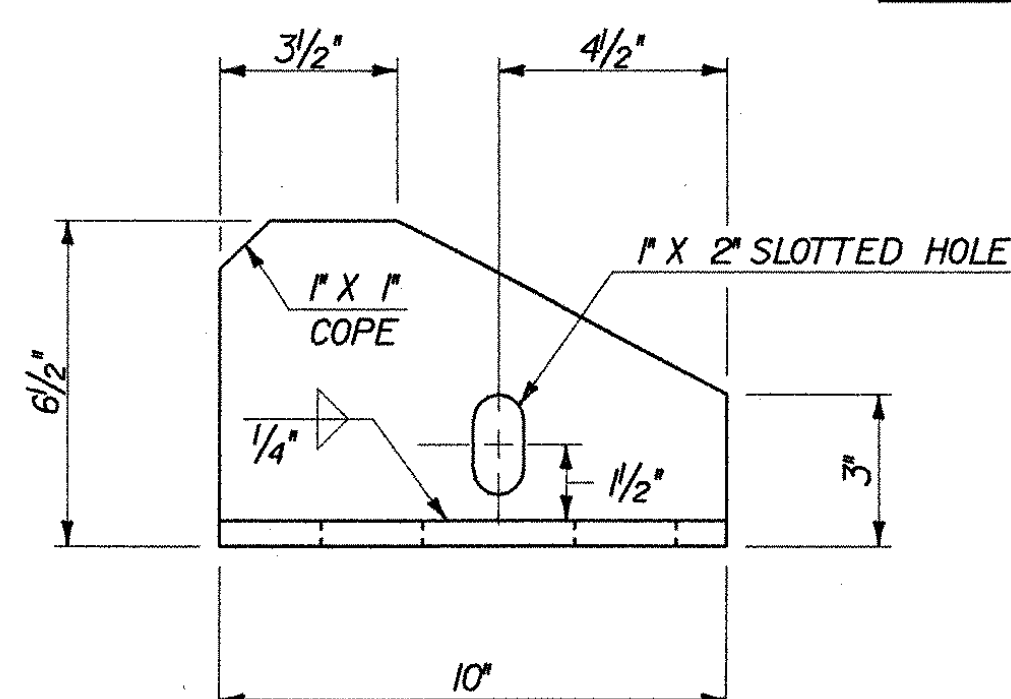
EXPANSION JOINT NOTES

- DETAILS ON THIS SHEET ARE FOR ITEM 516.10, "BRIDGE EXPANSION JOINT".
- PREFORMED FABRIC MATERIAL SHALL BE CONTINUOUS AND SHALL CONFORM TO SUBSECTION 707.07 OF THE STANDARD SPECIFICATIONS.
- BUTYL RUBBER TAPE SHALL CONFORM TO AASHTO SPECIFICATION M-198, TYPE II.
- THE FINAL FINISH OF THE EXPANSION DEVICE SHALL BE COVERED DURING THE PLACING OF BRIDGE DECK CONCRETE.
- ALL STEEL COMPONENTS SHALL BE AASHTO M270 GRADE 36 GALVANIZED OR METALIZED AS PER SUBSECTION 516.04. THREADED RODS AND NUTS SHALL CONFORM TO SUBSECTION 714.04.
- THE ITEM "BRIDGE EXPANSION JOINT" SHALL INCLUDE THE FABRICATION AND ERECTION OF THE COMPLETE JOINT ASSEMBLY INCLUDING ALL STEEL PLATES, BRACKETS, ANGLES, WELDED STUDS OR RODS, PREFORMED FABRIC DRAIN TROUGH MATERIAL AND PLASTIC DRAIN TUBES, BUTYL RUBBER TAPE AND ANY OTHER MISCELLANEOUS MATERIAL NECESSARY TO INSTALL JOINT.
- THE 4 X 8 X 1/2" ANGLES SHALL BE FURNISHED AS ONE CONTINUOUS PIECE. THE 1/4" X 5 1/2" BARS EACH SIDE OF THE JOINT SHALL BE PROVIDED IN TWO EQUAL LENGTHS.
- COAT CONCRETE CONTACT SURFACES WITH EPOXY BONDING COMPOUND MEETING THE REQUIREMENTS OF SUBSECTION 719.02 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516.10, "BRIDGE EXPANSION JOINT".
- A 1" DIAMETER PLASTIC DRAIN TUBE (PER STD SPEC 740.01) SHALL BE INSTALLED AS SHOWN AT THE FACE OF CURB. THE UPPER END IS TO BE PLUGGED WITH STEEL WOOL AND THE LOWER END IS TO EXTEND BELOW THE BOTTOM OF THE ADJACENT STRINGER. THE DRAIN TUBES SHALL BE FASTENED TO THE STRINGERS USING A METHOD APPROVED BY THE ENGINEER.
- FILL COUNTERBORED HOLES WITH HOT POURED JOINT SEALER AFTER BOLT INSTALLATION. PAYMENT FOR THE WORK SHALL BE SUBSIDIARY TO ITEM 516.10.
- A DRIP BEAD OF 1/4" X 7" STRIP OF PREFORMED MATERIAL SHALL BE CEMENTED TO THE BOTTOM OF THE FABRIC TROUGH USING AN ADHESIVE APPROVED BY THE MANUFACTURER. THE DRIP BEAD SHALL BE APPLIED 1" FROM THE DOWNSPOUT END OF THE TROUGH.
- FABRIC TROUGH SHALL BE THOROUGHLY CLEANED AND FLUSHED AFTER PAVING OPERATION.
- THE EXPANSION JOINT SHALL BE SHOP ASSEMBLED AND SHIPPED AS ONE UNIT.
- THE FABRICATOR SHALL PROVIDE A SLIP RESISTANT FINISH ON THE SURFACE OF THE SIDEWALK TOP PLATES. THE FINISH SHALL INCORPORATE SAND, GRIT, OR OTHER APPROVED MATERIAL, AND SHALL BE SPECIFIED ON THE SHOP DRAWINGS. ALL ASSOCIATED COSTS SHALL BE INCIDENTAL TO ITEM 516.10, BRIDGE EXPANSION JOINT.



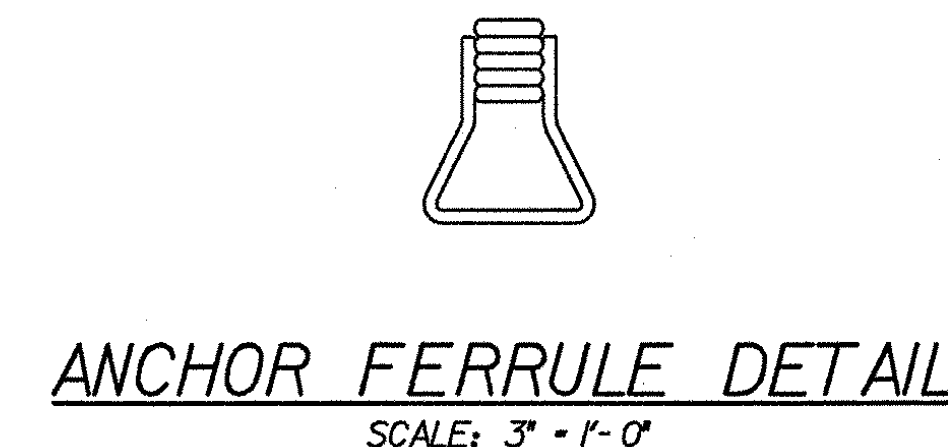
BRACKET PLAN

SCALE: 3" = 1'-0"



BRACKET ELEVATION

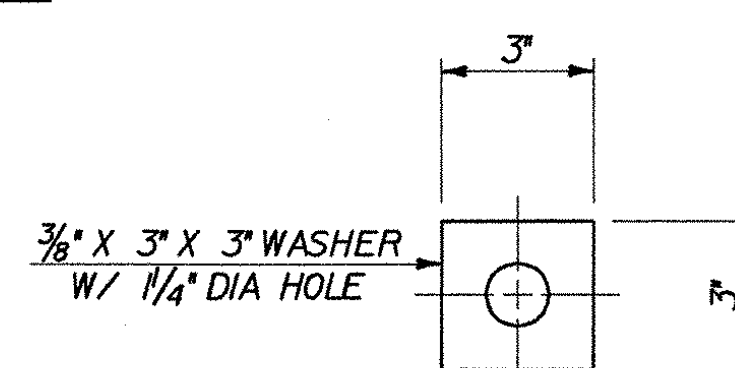
SCALE: 3" = 1'-0"



ANCHOR FERRULE DETAIL

SCALE: 3" = 1'-0"

NOTE: CLOSED THREADED FERRULE NUTS WITHOUT ANCHOR LOOPS MAY BE USED - PER MANUFACTURER (DAYTON/RICHMOND) OR APPROVED EQUAL



WASHER FOR BRACKET

SCALE: 3" = 1'-0"

PIER NO. 1

PIER NO. 2

TEMP	"A" DIST
0° F	1/2"
15° F	7/16"
30° F	3/8"
45° F	9/16"
60° F	1/4"
75° F	3/16"
90° F	1/8"
105° F	1/16"

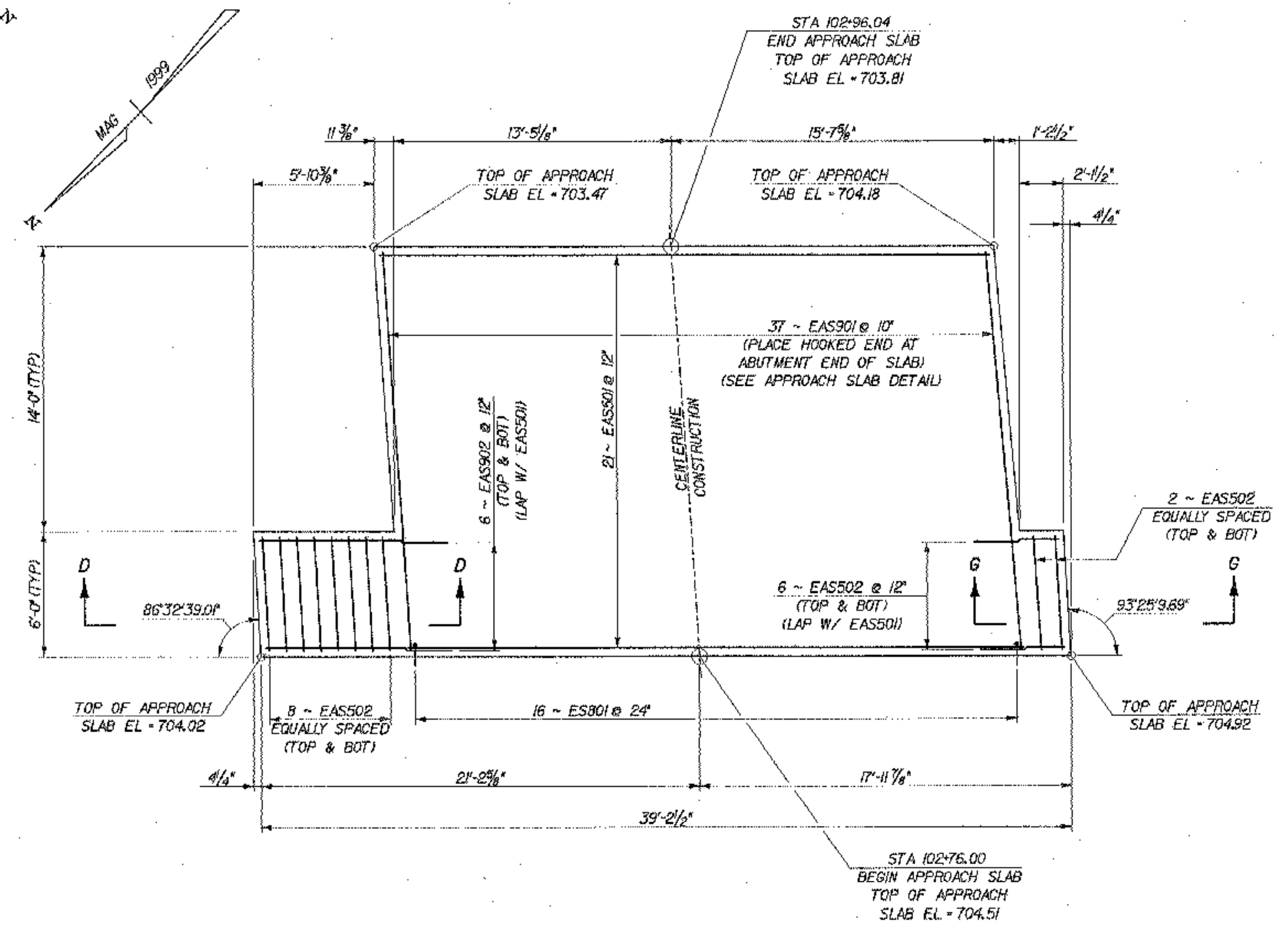
TEMP	"A" DIST
0° F	1 1/16"
15° F	1 1/16"
30° F	1 1/16"
45° F	1 1/16"
60° F	9/16"
75° F	7/16"
90° F	1/4"
105° F	1/8"

"A" IS THE SETTING BEFORE DEAD LOADS ARE IN PLACE

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
EXPANSION JOINT DETAILS - 2			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	Date	Bridge Design Supervisor	
T. GRANT/R. WOOD	10/01	M. ZYDEL	Date 10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6conf\z\238\jd2.dgn		
Bridge Sheet No.		Sheet	22 of 34

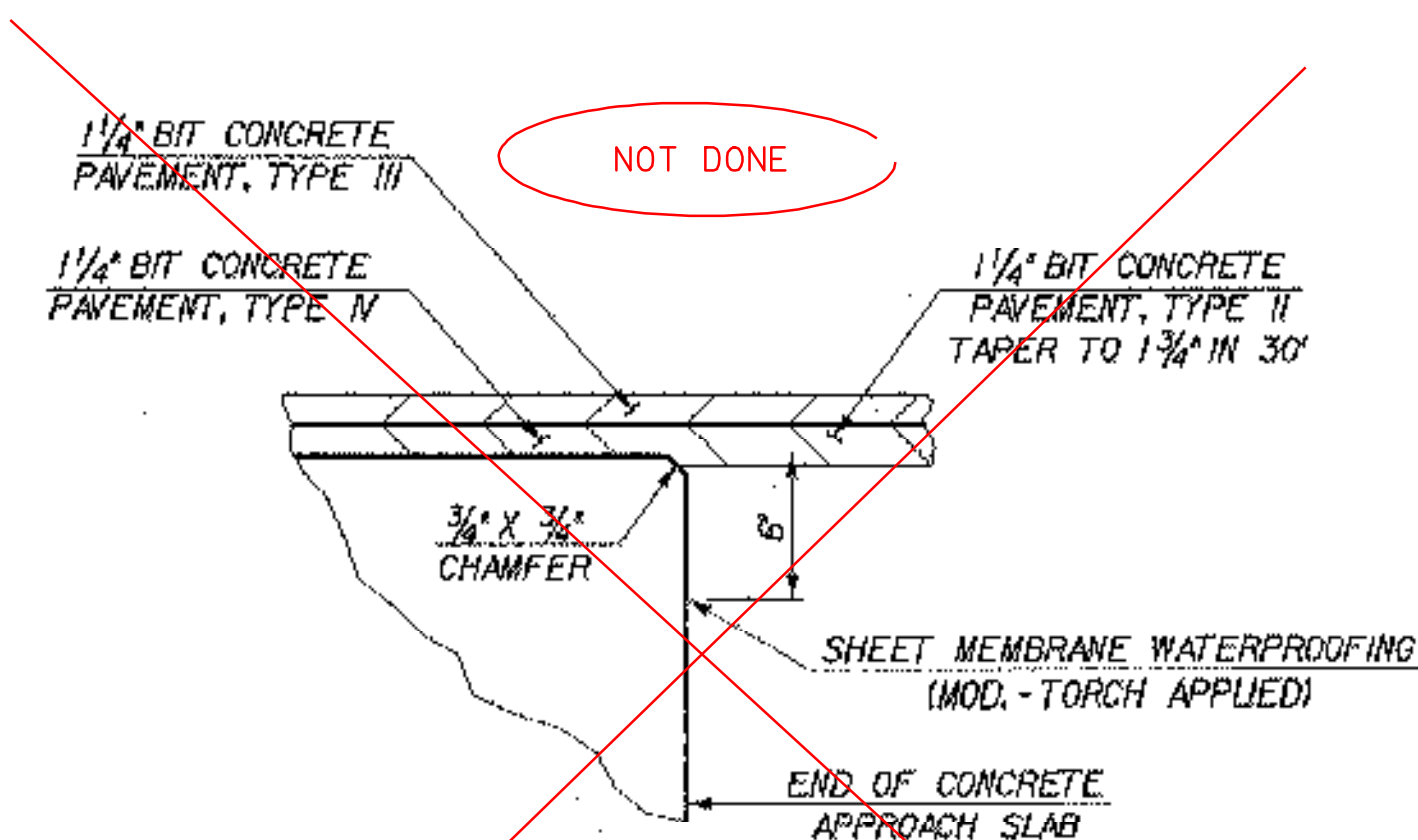
McFARLAND-JOHNSON, INC.



APPROACH SLAB NO.2 PLAN

SCALE: $1/4'' = 1'-0''$

NOTE - MEMBRANE WAS NOT PLACED ON
APPROACH SLABS PER PROJECT MANAGER



~~DETAIL FOR SHEET MEMBRANE
AT APPROACH SLAB ENDS~~

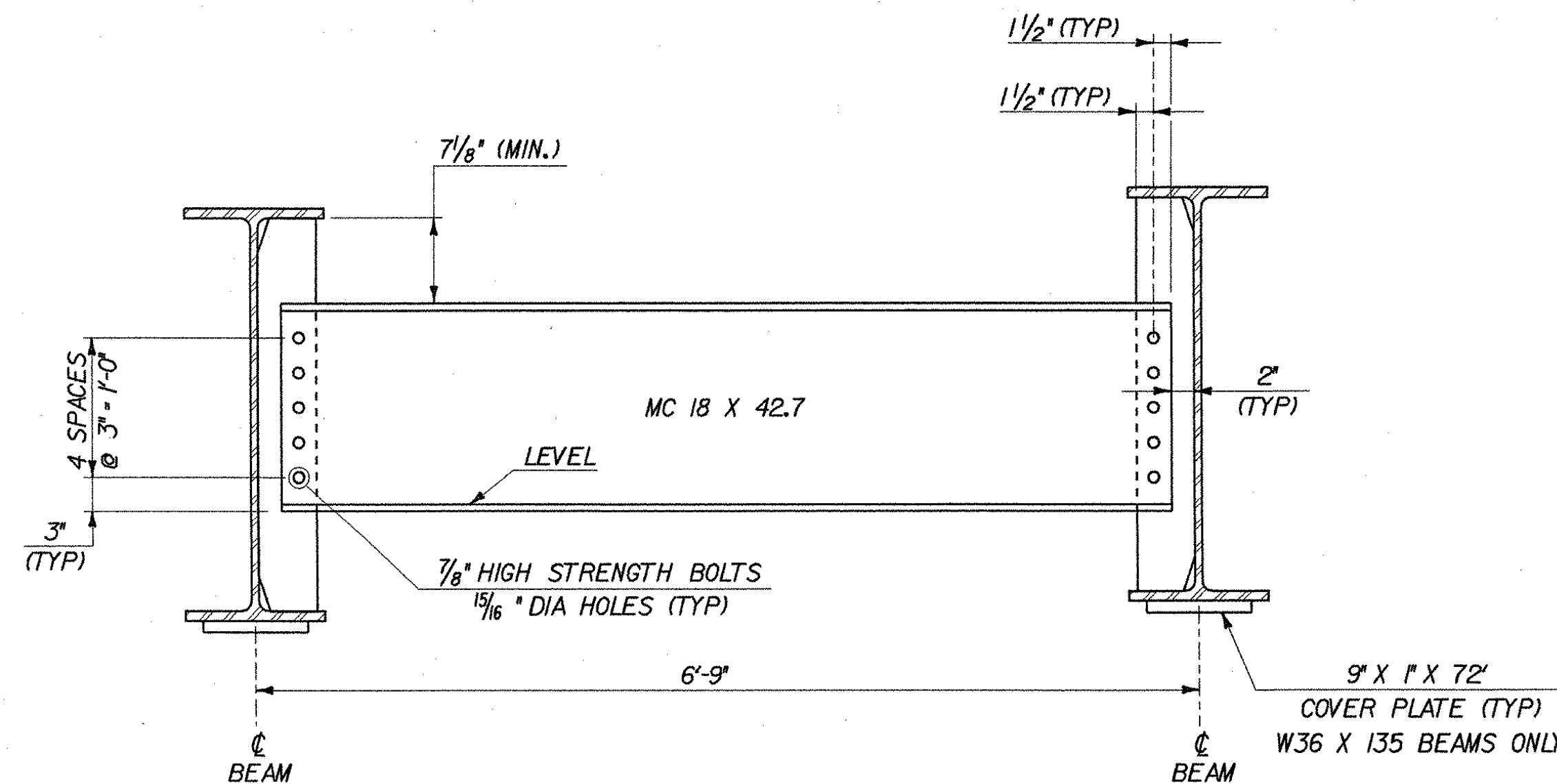
SCALE: $1/2" = 1'-0"$

~~DETAIL FOR SHEET MEMBRANE
AT APPROACH SLAB ENDS~~

SCALE: 1" = 100'
(PERPENDICULAR TO CENTERLINE BEARING)

1. FOR SECTIONS D-D AND G-G, SEE SHEET 32.

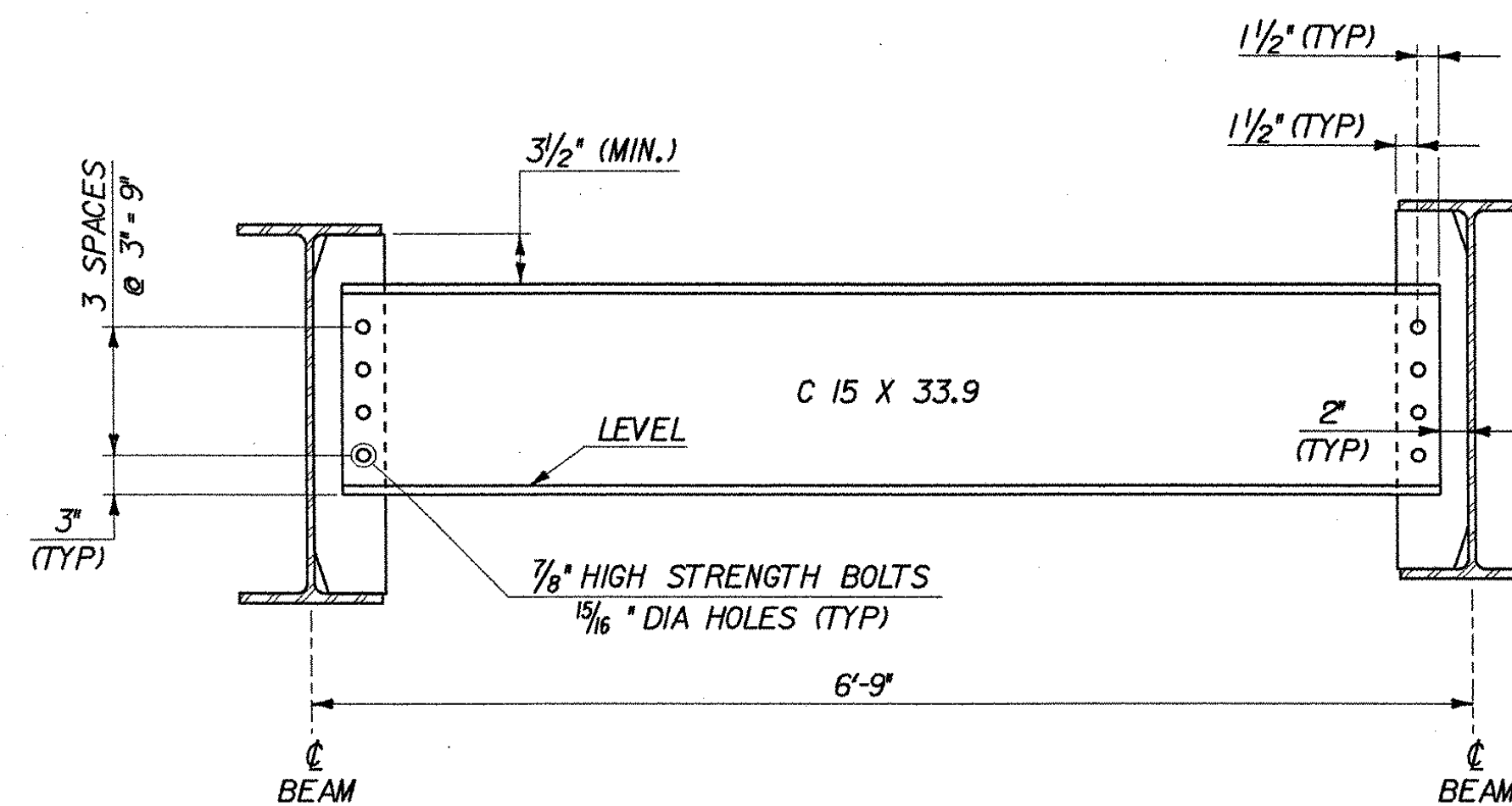
STATE OF VERMONT		
AGENCY OF TRANSPORTATION		
Town Of	LYNDON	Bridge No. 2
Highway No.	ALT VT 122	Log Sta.
		Surv. Sta.
CENTER STREET OVER PASSUMPSIC RIVER		
APPROACH SLAB DETAILS		
Designed By T. GRANT / S. MERRINAN	Drawn By S. DELIA / S. MERRINAN	
Checked By Date	Bridge Design Supervisor	
T. GRANT / R. WOOD 10/01	M. ZYDEL Date 10/01	
PROJECT LYNDON		PROJECT NO. BHO 1447(26)
L.G.C. Info. m\549103\6conr\z\238ape.dgn		
Bridge Sheet No.	Sheet 23 of 34	



**INTERMEDIATE DIAPHRAGMS FOR
W33 X 118 AND W36 X 135 BEAMS**

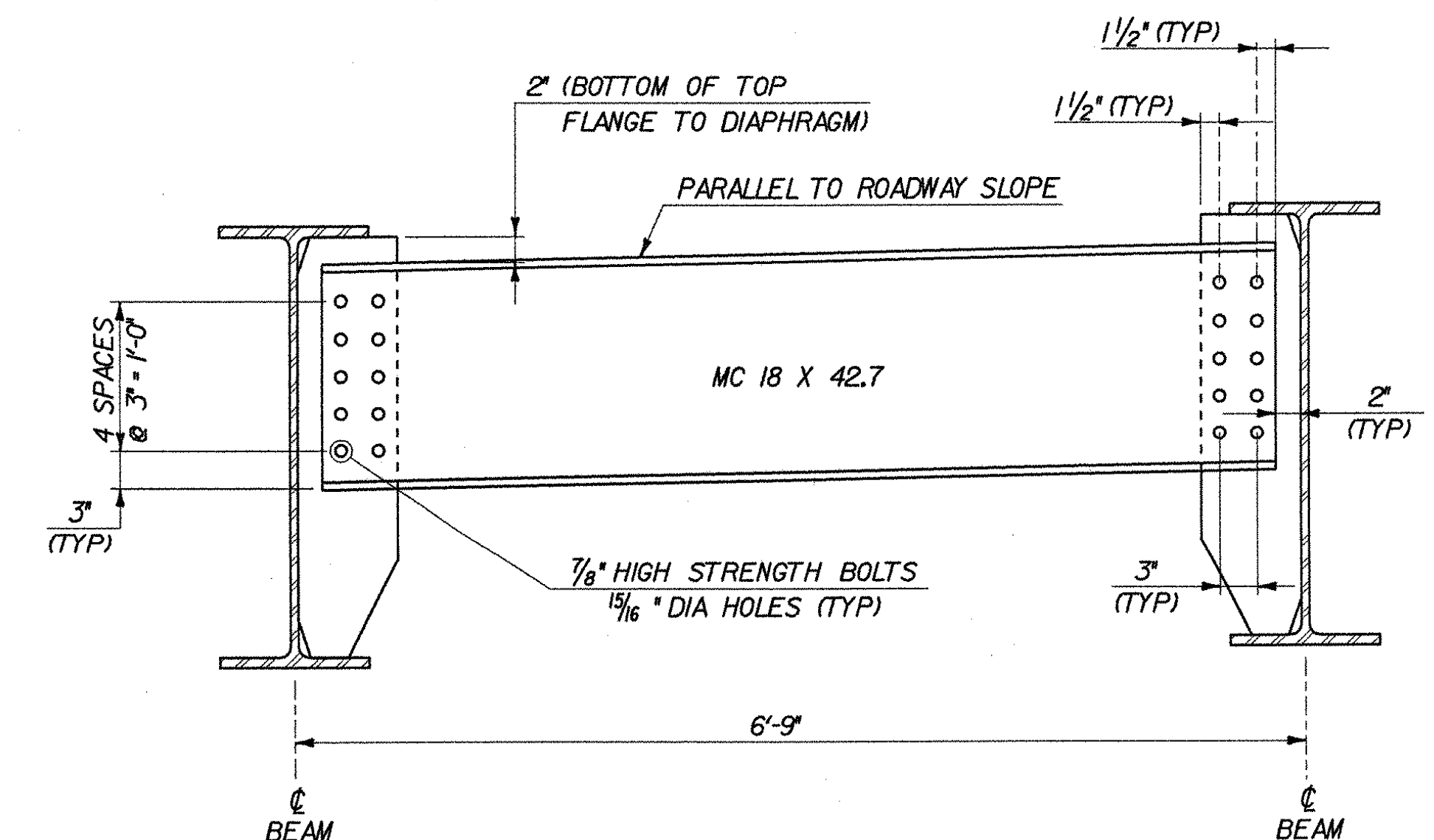
SCALE: 1" = 1'-0"

(W36 X 135 SHOWN, W33 X 118 SIMILAR)



**INTERMEDIATE DIAPHRAGMS
FOR W27 X 84 BEAMS**

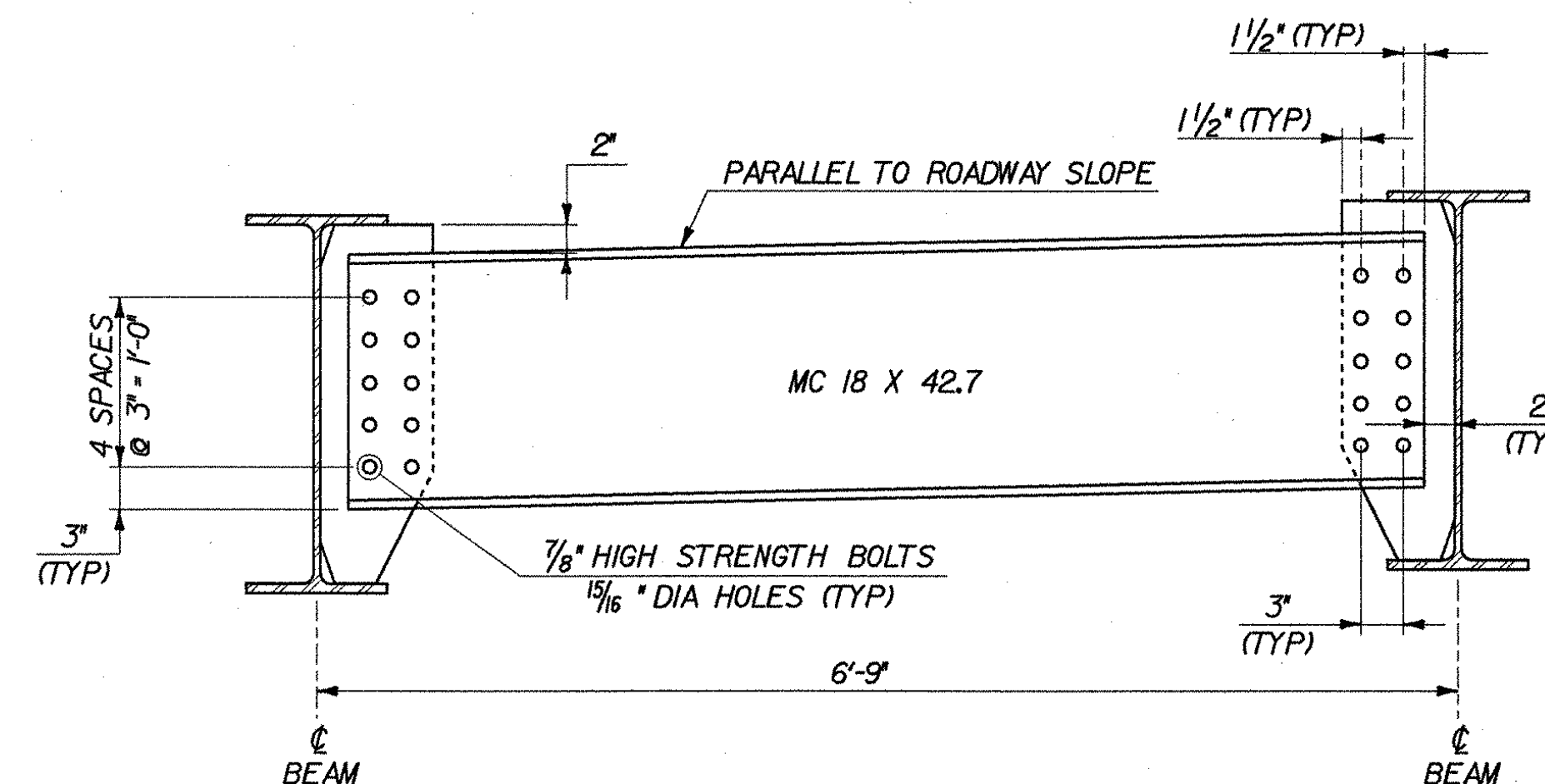
SCALE: 1" = 1'-0"



**PIER DIAPHRAGMS FOR
W33 X 118 AND W36 X 135 BEAMS**

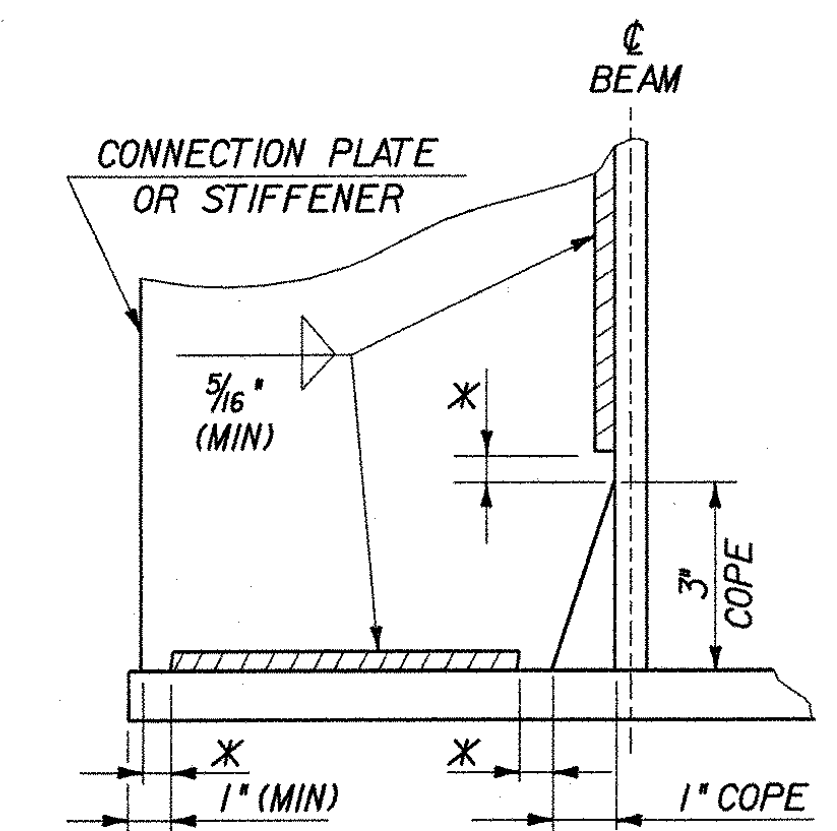
SCALE: 1" = 1'-0"

(W36 X 135 SHOWN, W33 X 118 SIMILAR)



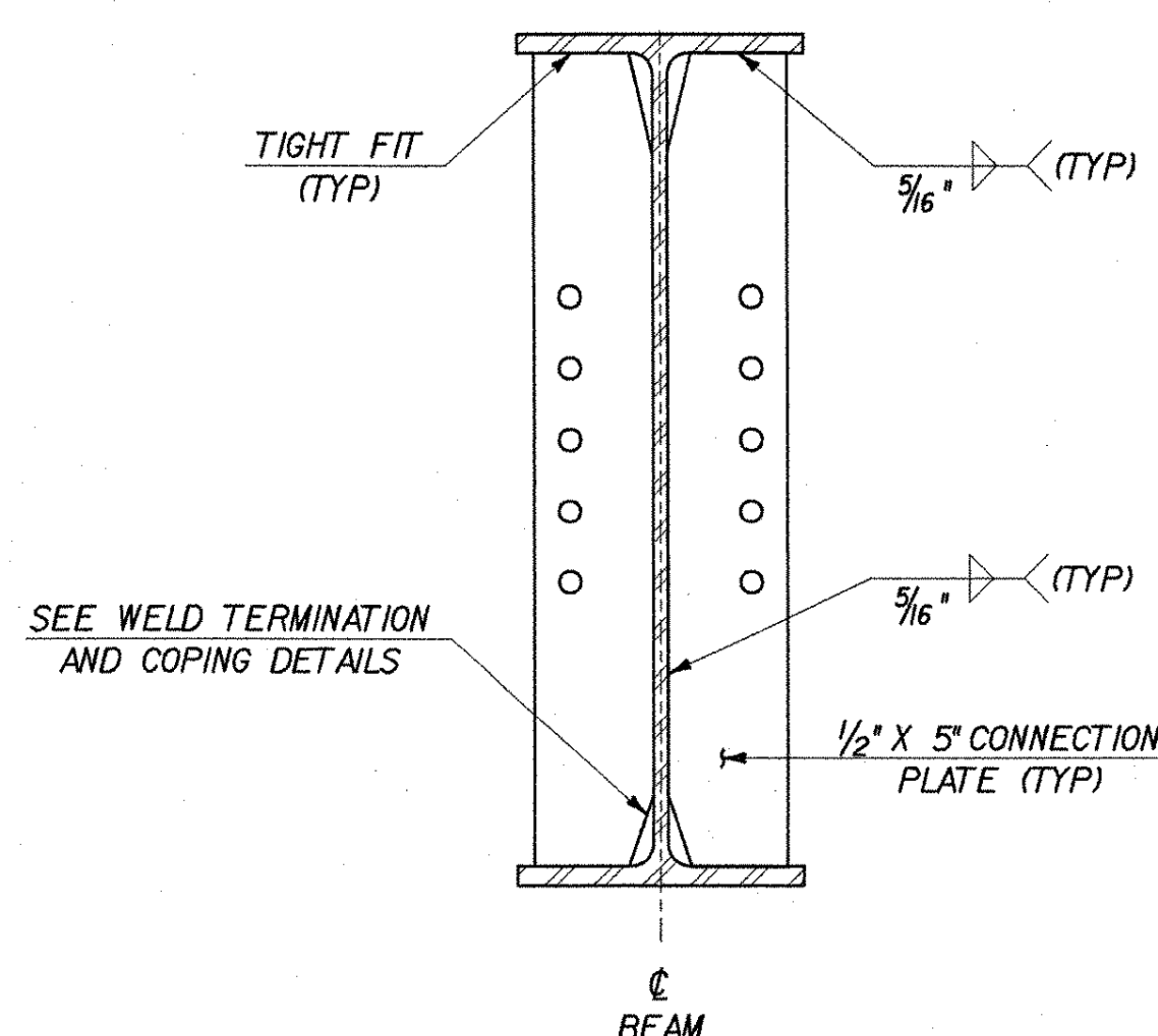
**PIER DIAPHRAGMS
FOR W27 X 84 BEAMS**

SCALE: 1" = 1'-0"



* NO WELD FOR 1/4" (MIN) 1/2" (MAX)
(EXCEPT MUST MAINTAIN 1" (MIN) FROM EDGE OF FLANGE)

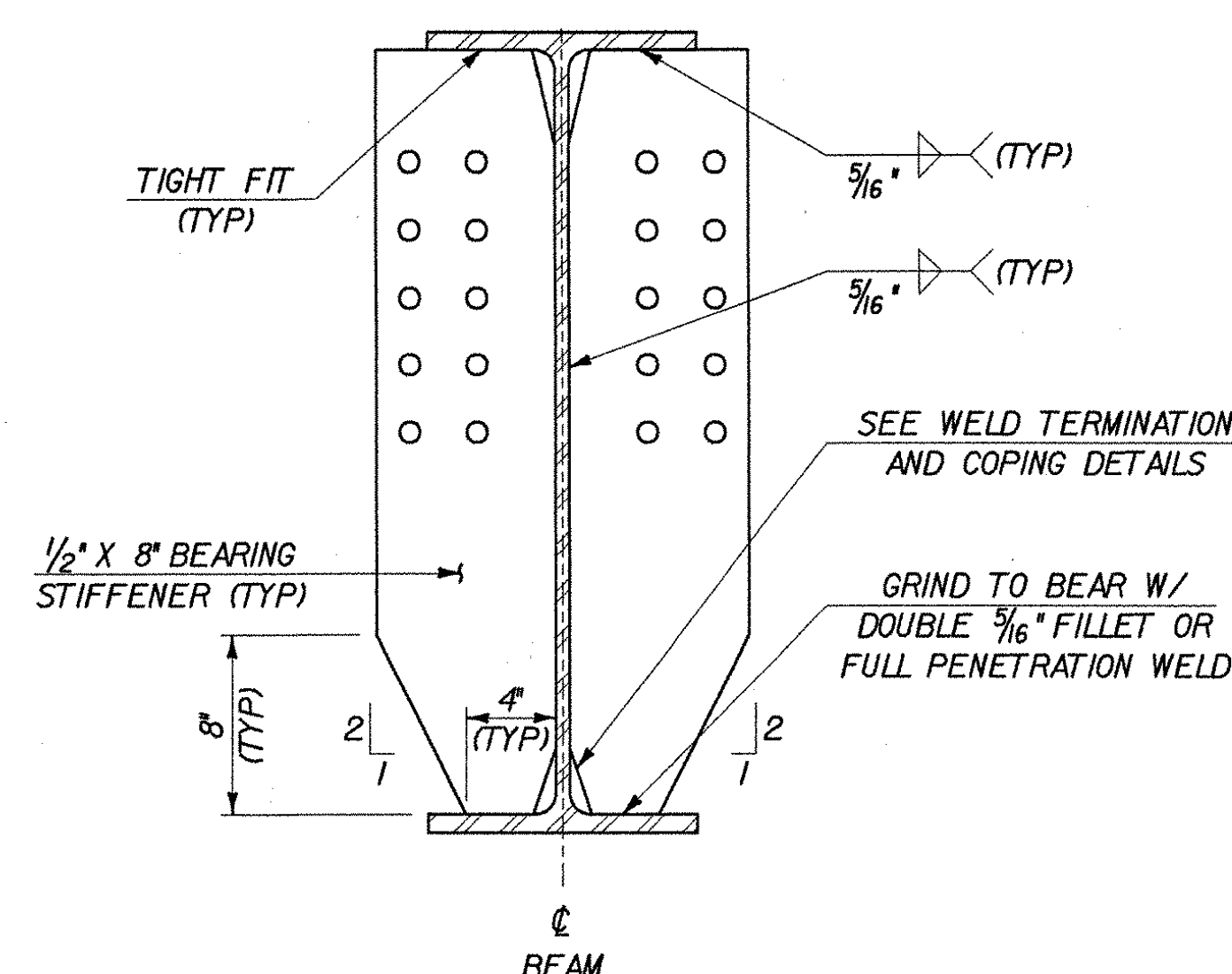
**WELD TERMINATION AND
COPING DETAILS**
NOT TO SCALE



**INTERMEDIATE CONNECTION
PLATE DETAIL**

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

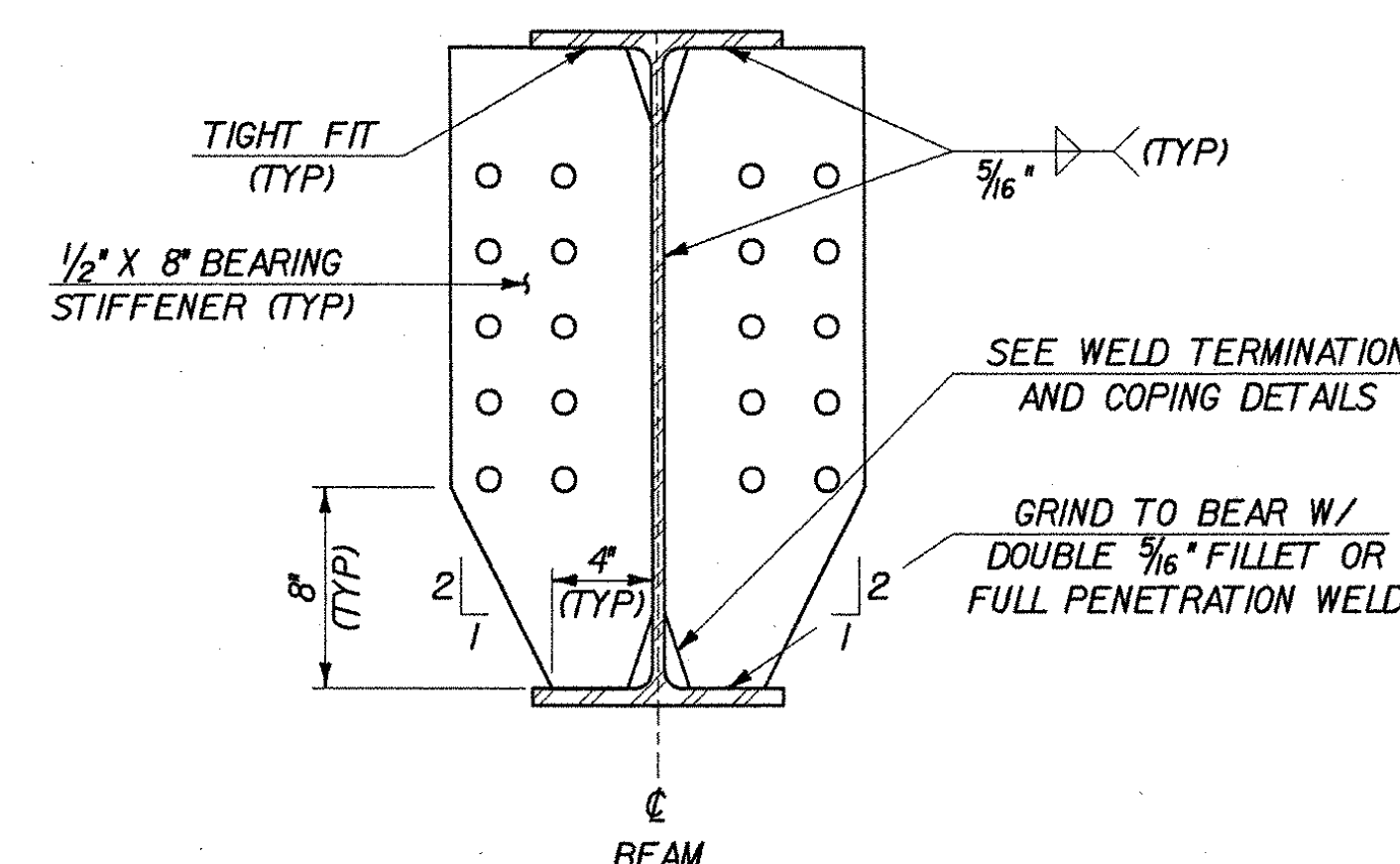
(PLATE SHOWN ON W36 X 135 BEAM,
W33 X 118 AND W27 X 84 SIMILAR)



**PIER BEARING STIFFENER DETAIL
FOR W33 X 118 AND W36 X 135 BEAMS**

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

(STIFFENER SHOWN ON W36 X 135 BEAM, W33 X 118 SIMILAR)

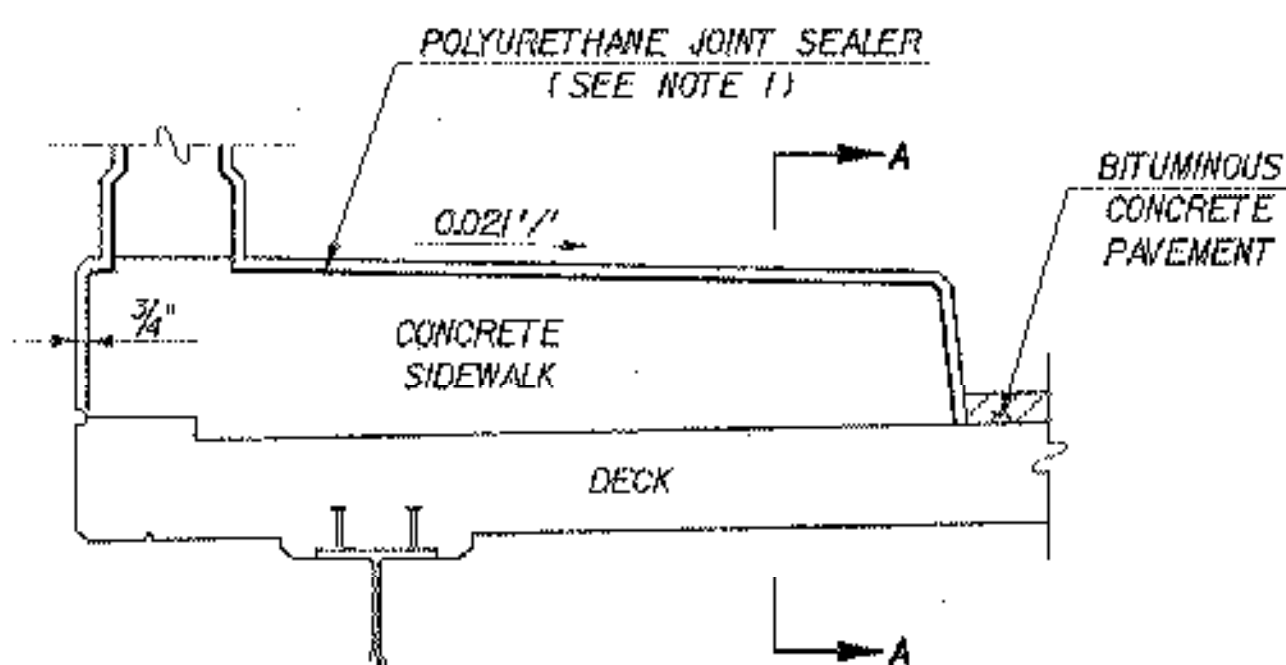


**PIER BEARING STIFFENER DETAIL
FOR W27 X 84 BEAMS**

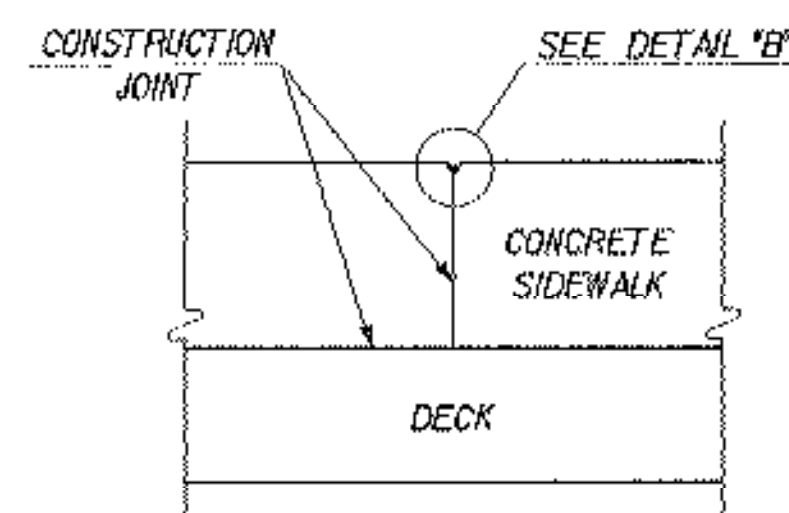
SCALE: 1/2" = 1'-0"

MJ
MCFARLAND-JOHNSON, INC.

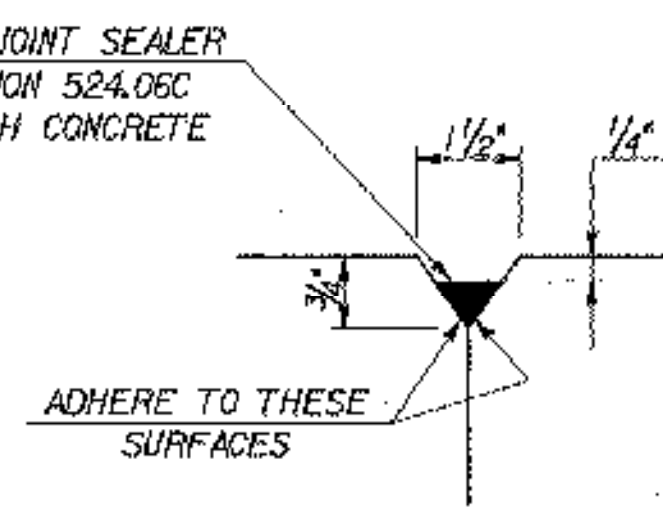
STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
DIAPHRAGM DETAILS			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	T. GRANT/R. WOOD	Bridge Design Supervisor	M. ZYDEL
	Date 10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\5491036conf\z\238sdt.dgn		
Bridge Sheet No.		Sheet	24 of 34



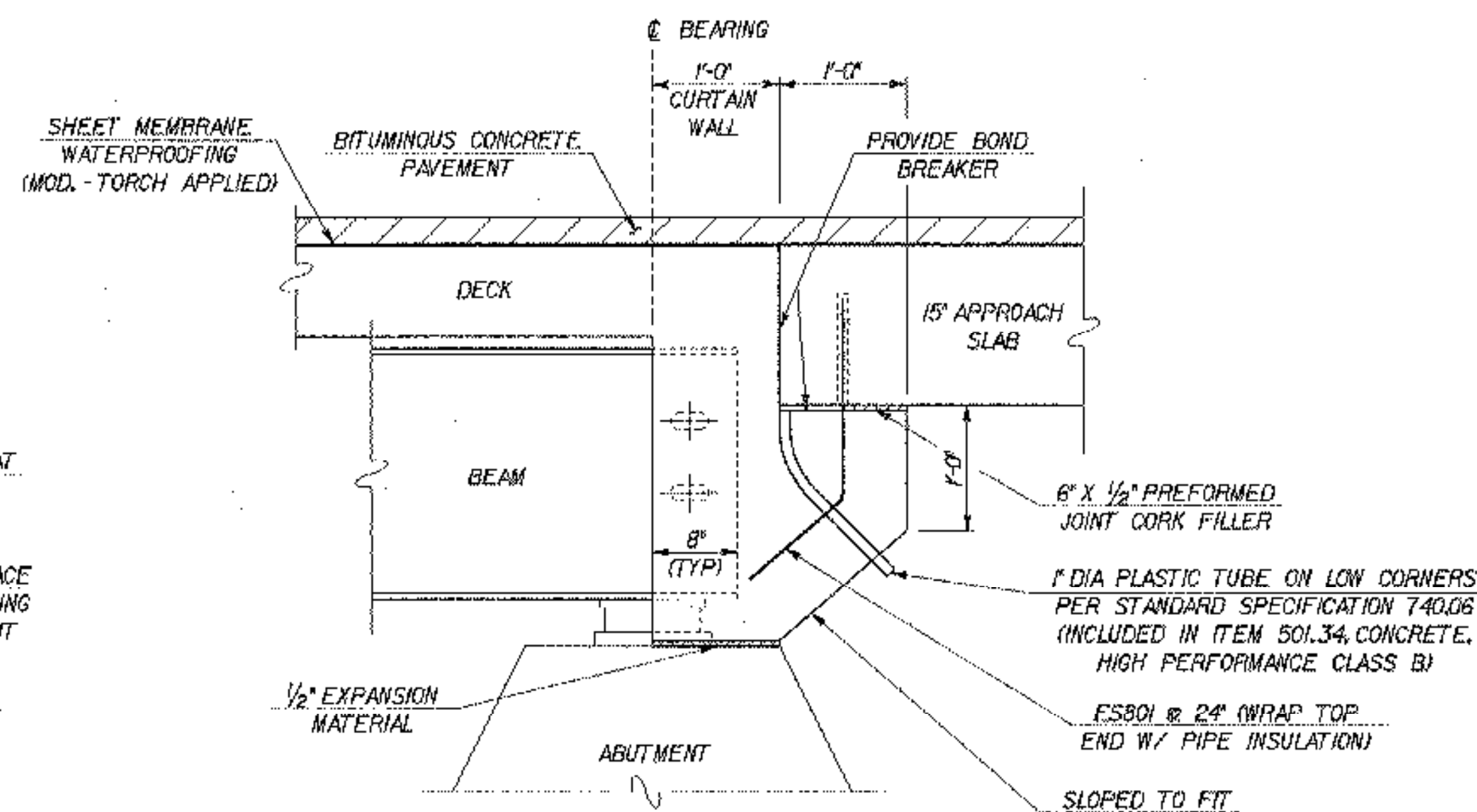
SECTION A-A



DETAIL B

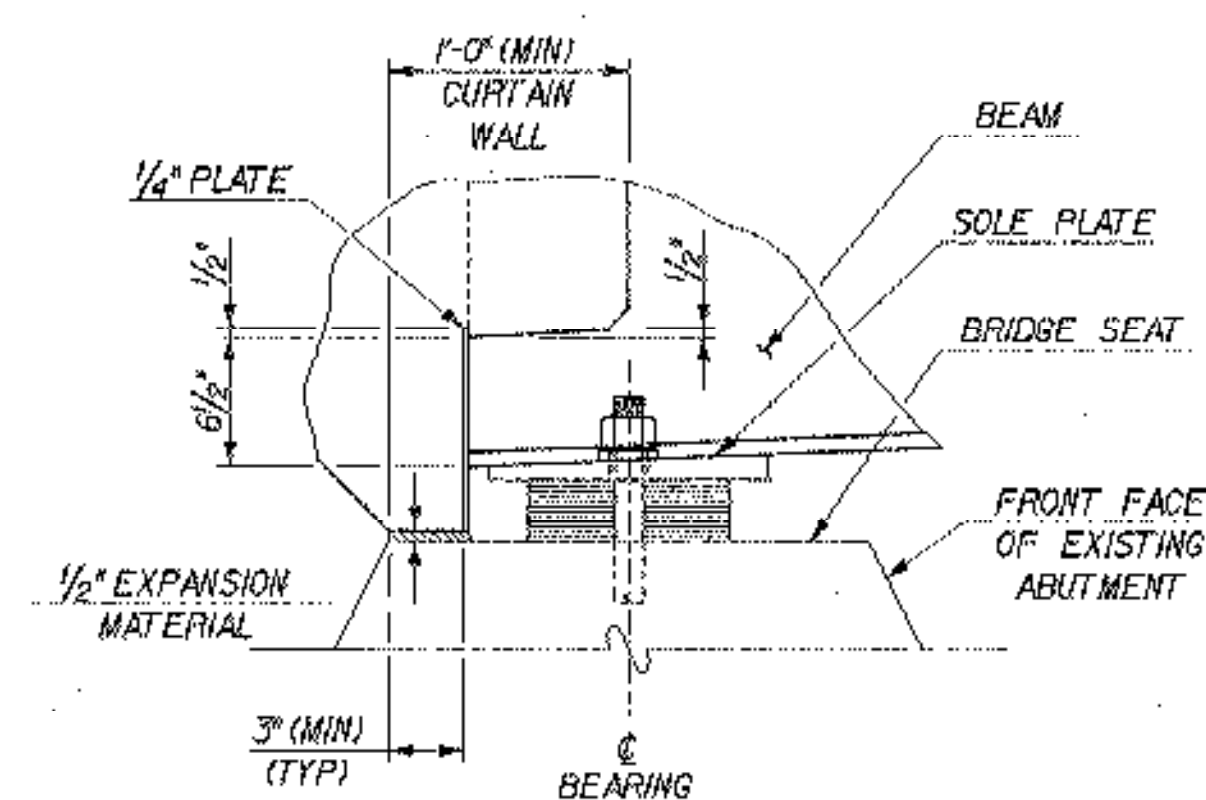


CONCRETE SIDEWALK CONSTRUCTION JOINT
N.T.S.

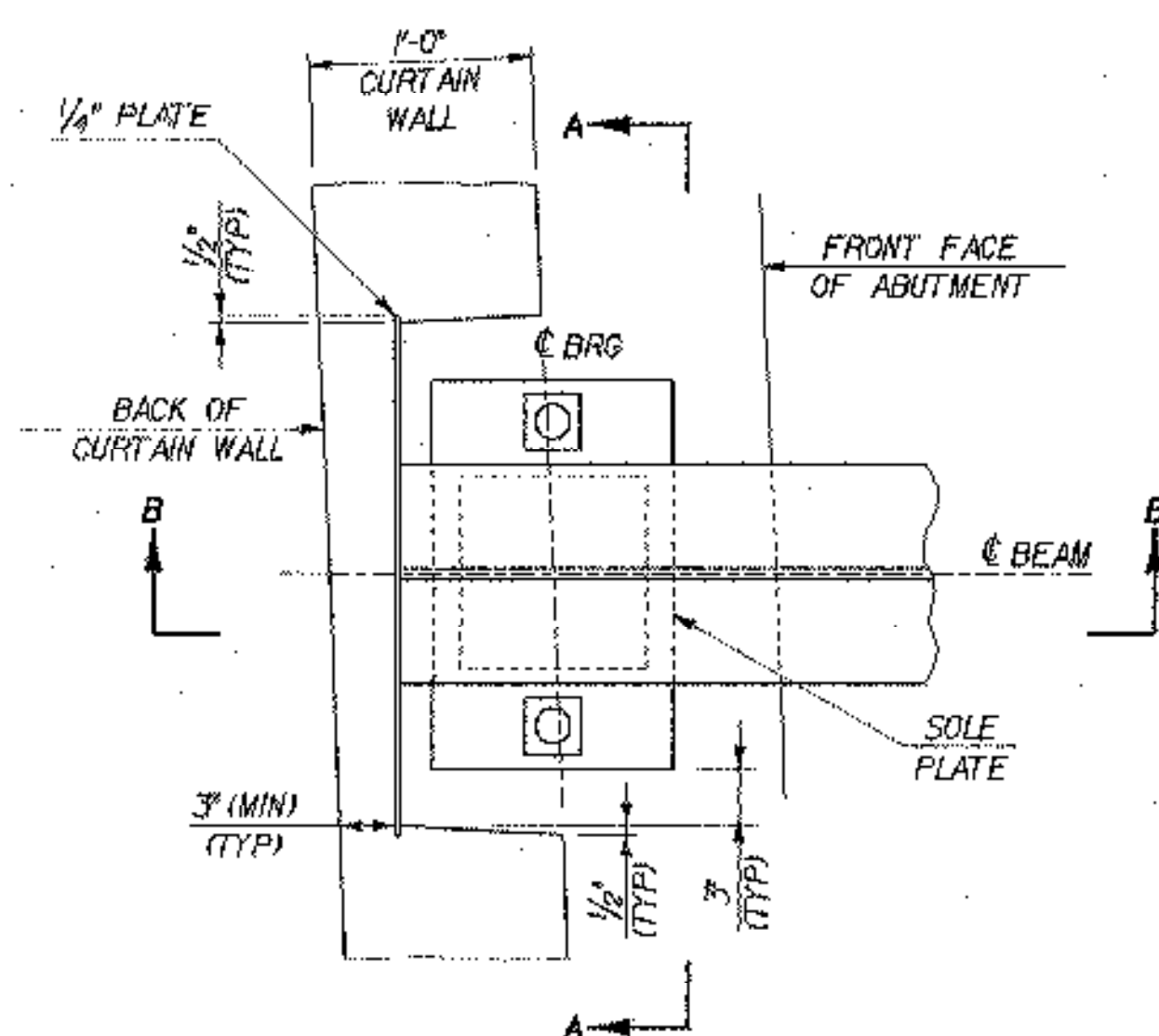


TYPICAL CURTAIN WALL SECTION

SCALE: 1" = 1'-0"

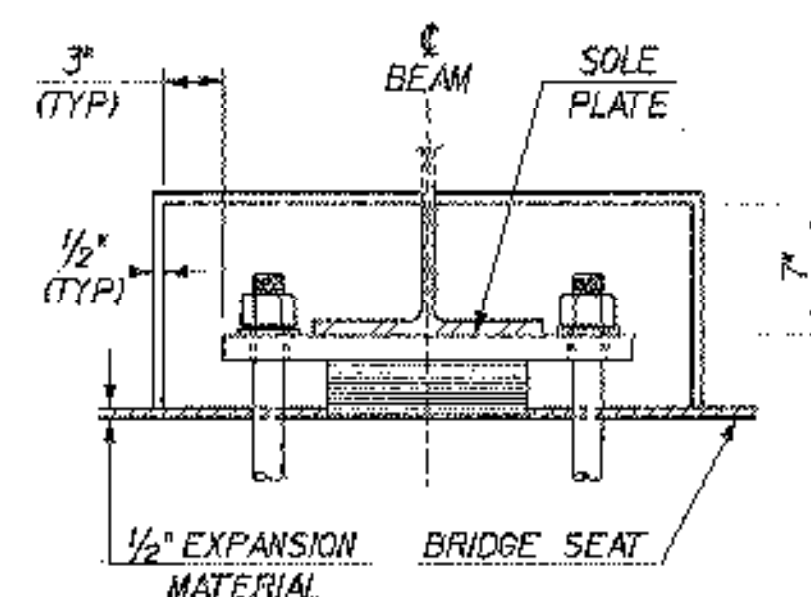


SECTION 8-8



PLAN

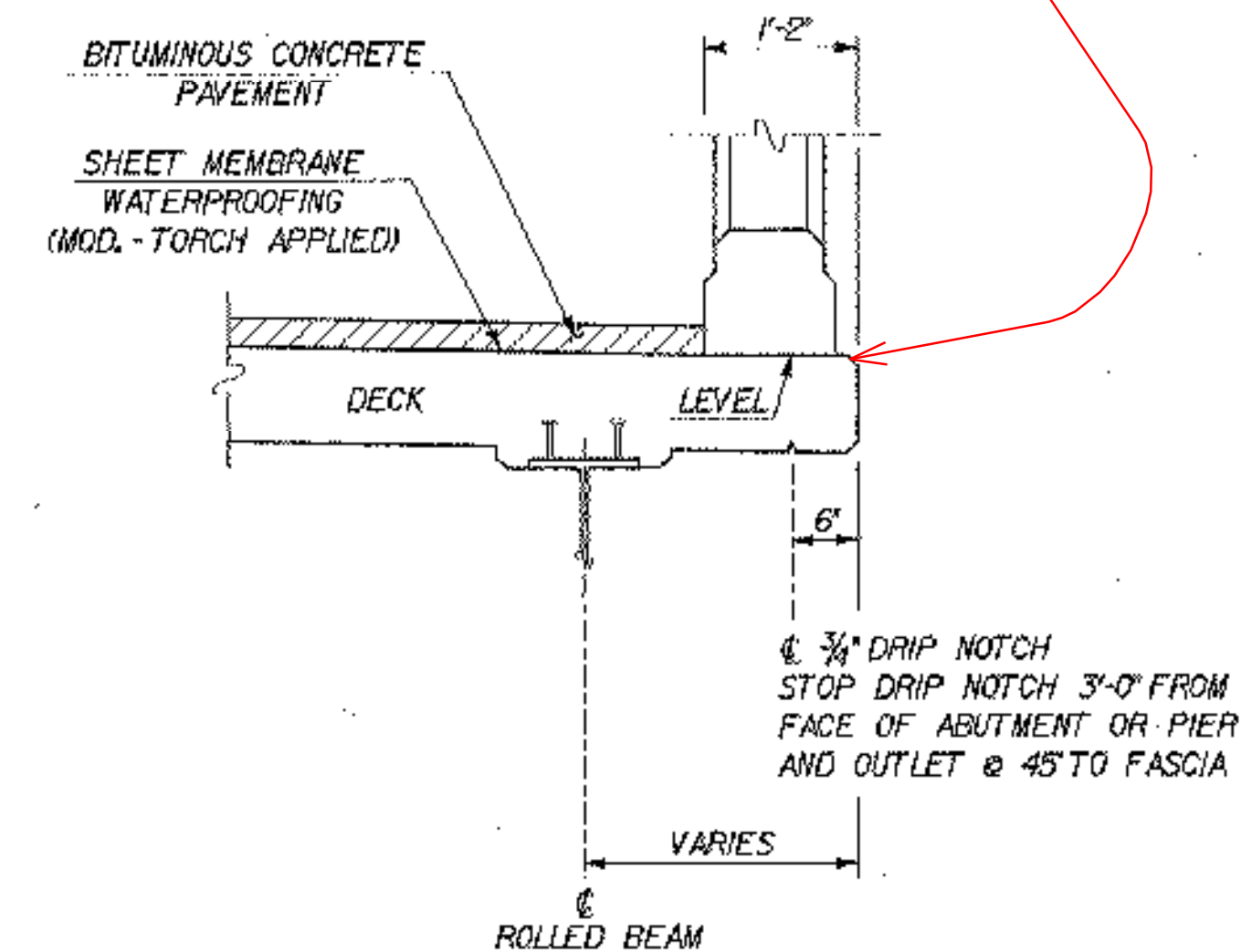
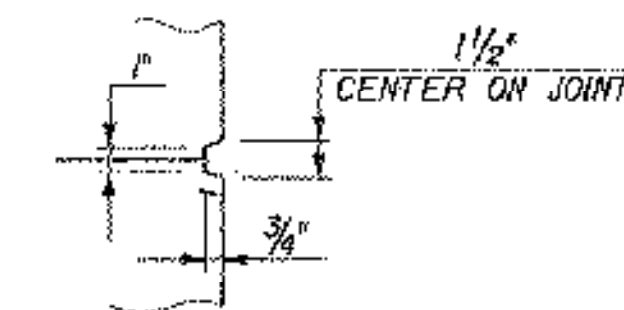
BEARING BLOCKOUT DETAIL
NOT TO SCALE



VIEW A-A

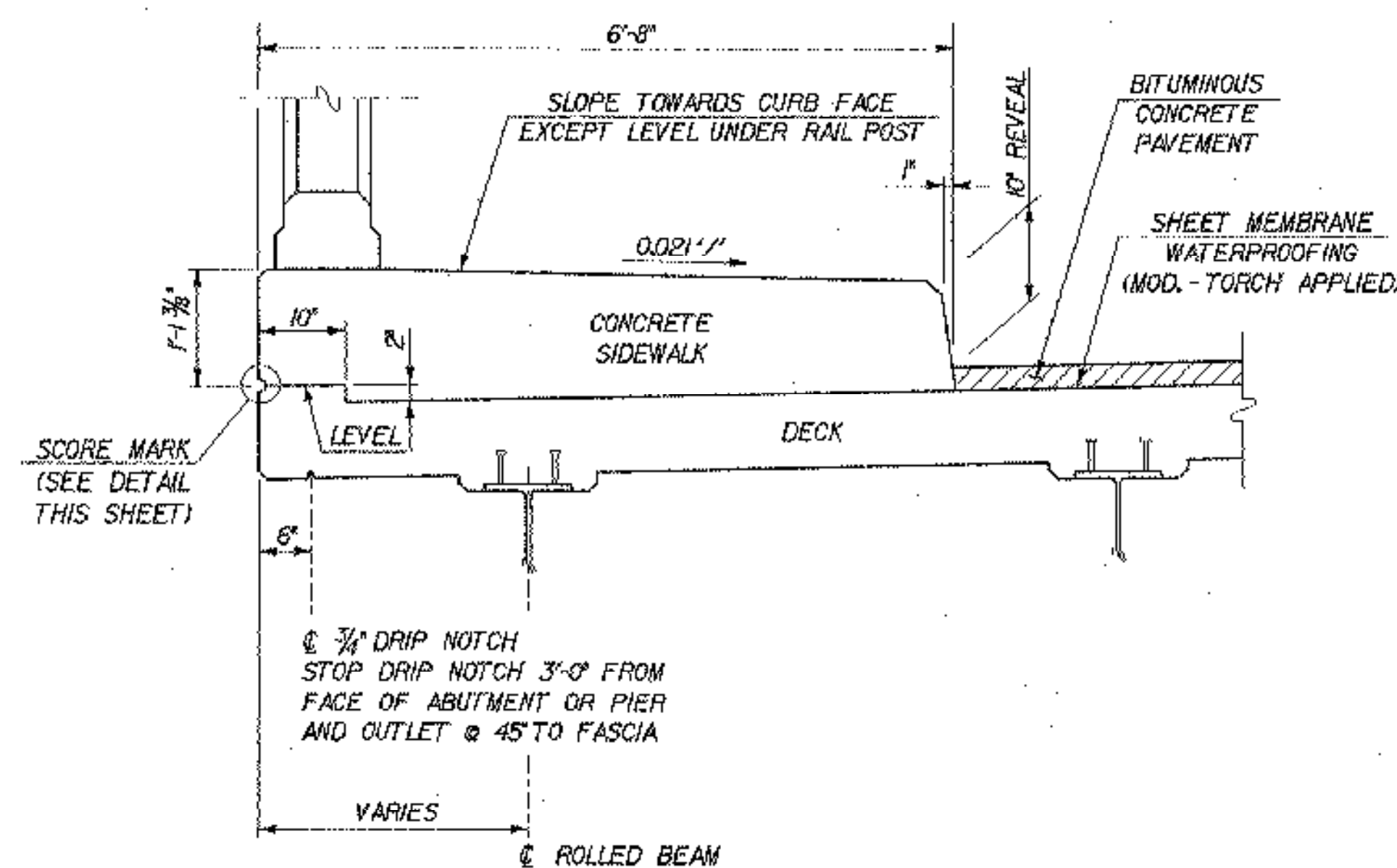
SCORE MARK DETAIL

SCALE: $1/2" = 1'-0"$



TYPICAL CURB DETAIL

SCALE: $\frac{3}{4}" = 1'-0"$



TYPICAL SIDEWALK DETAIL

SCALE: $\frac{3}{4}" = 1'-0"$

NOTES

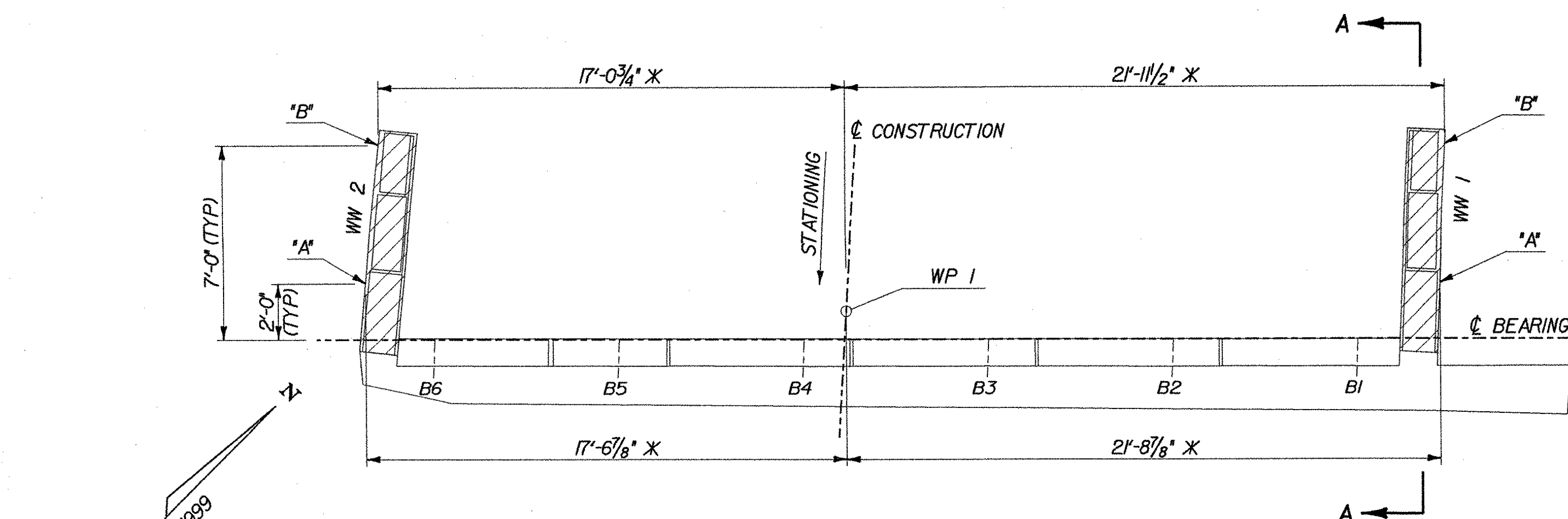
1. THE COST OF POLYURETHANE JOINT SEALER USED ON THE BRIDGE RAIL SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 525.50. THE PAY LIMIT FOR THE RAIL JOINT SEALER IS THE BOTTOM OF THE RAILING. THE COST OF POLYURETHANE JOINT SEALER USED ON THE SIDEWALK SHALL BE INCLUDED IN ITEM 501.60. THE PAY LIMIT FOR THE SIDEWALK JOINT SEALER IS THE ENTIRE AREA ABOVE THE DECK AND BELOW THE RAILING AS IDENTIFIED IN THE TYPICAL SIDEWALK DETAIL.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

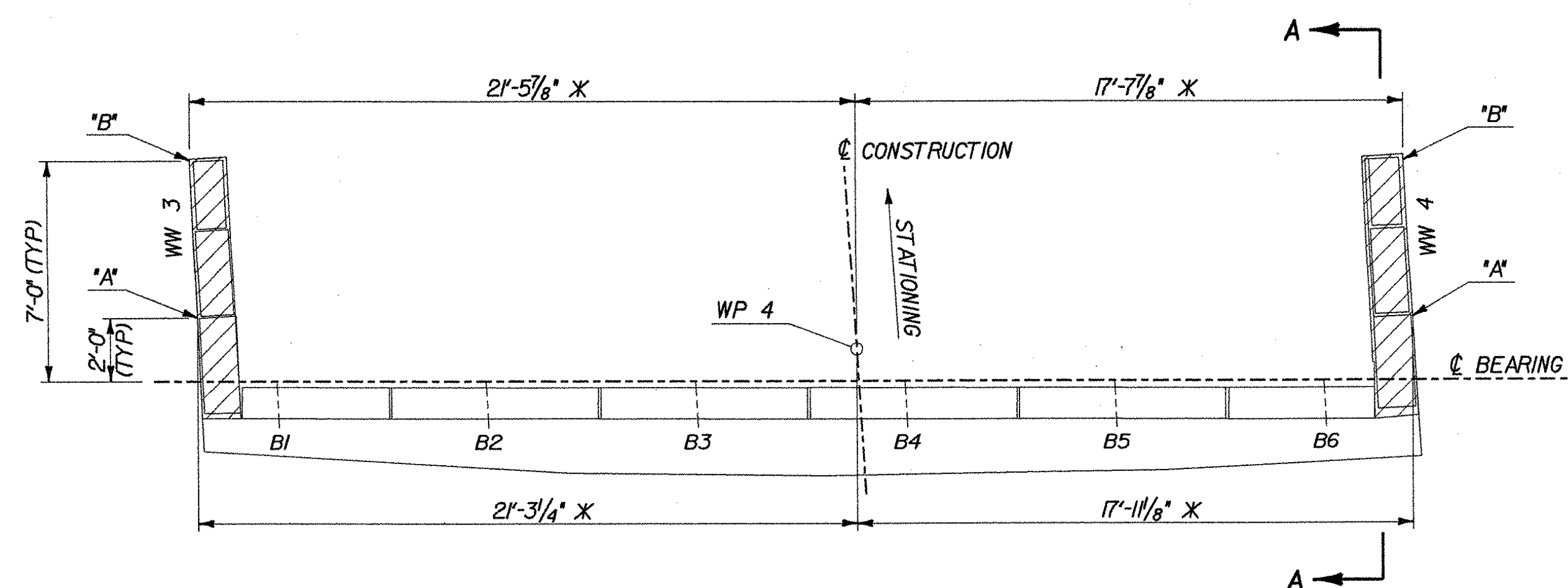
Town Of	LYNDON		Bridge No.		2
			Log Sta.		
Highway No.	ALT VT 122		Surv. Sta.		
CENTER STREET OVER PASSUMPSIC RIVER					
MISCELLANEOUS DETAILS					
Designed By T. GRANT / S. MERKMAN			Drawn By S. DELIA / S. MERKMAN		
Checked By T. GRANT / R. WOOD		Date 10/01	Bridge Design Supervisor M. ZYDEL		Date 10/01
PROJECT			PROJECT NO.		
LYNDON			BHO 1447(26)		
I.G.C. Info. m\VS49103\60amt\zj238mdt.dgn					
Bridge Sheet No.			Sheet 25 of 34		



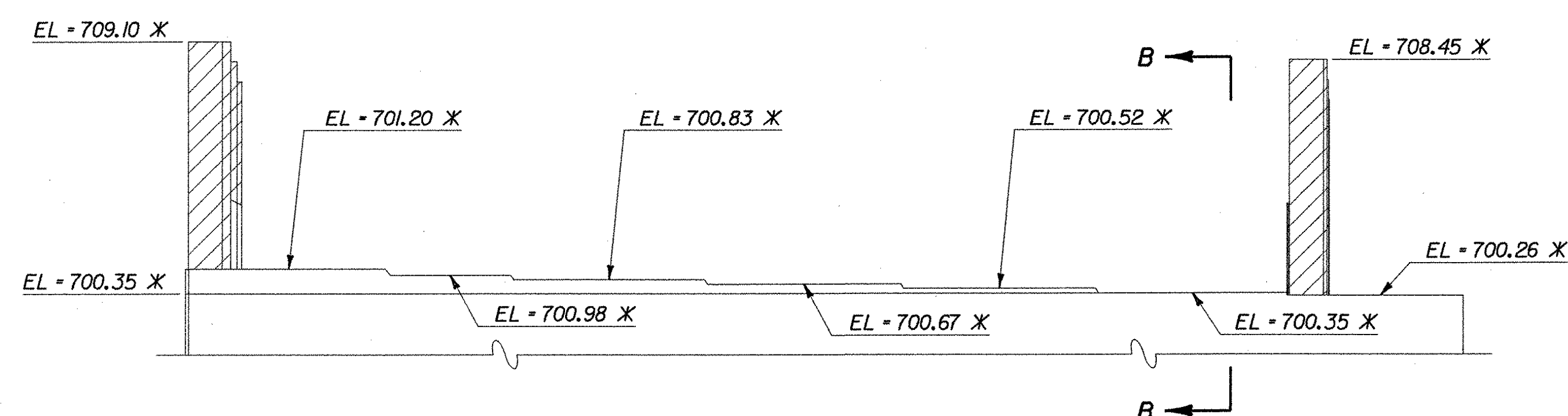
McFARLAND-JOHNSON, NC.



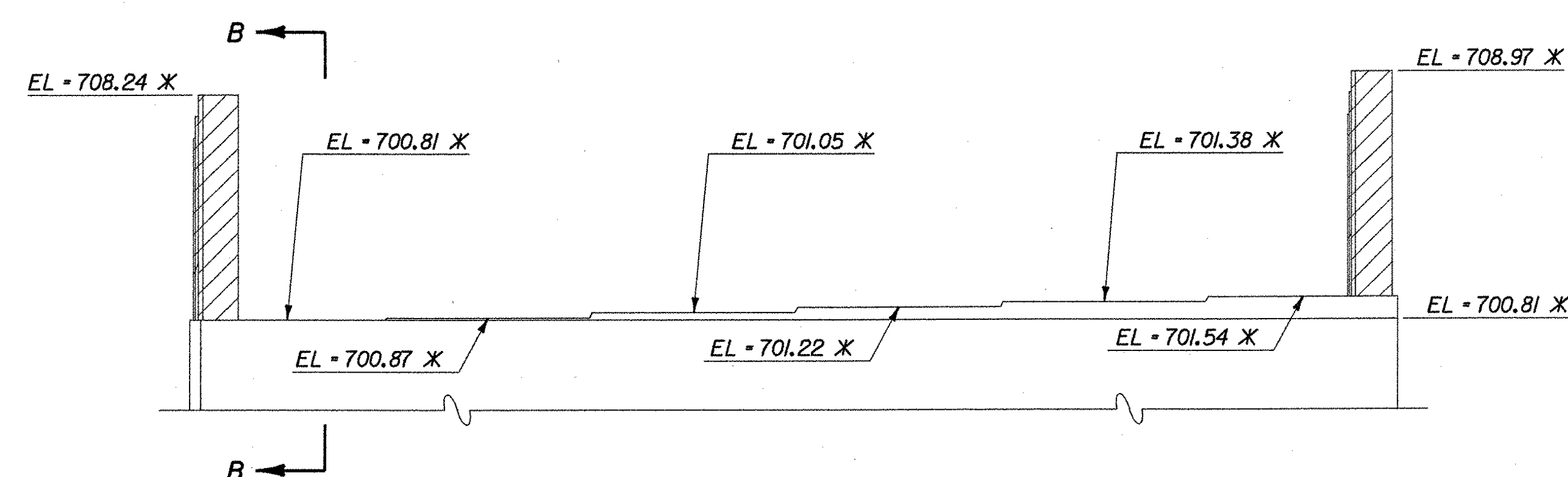
ABUTMENT NO. 1 PLAN
SCALE: 1/4" = 1'-0"



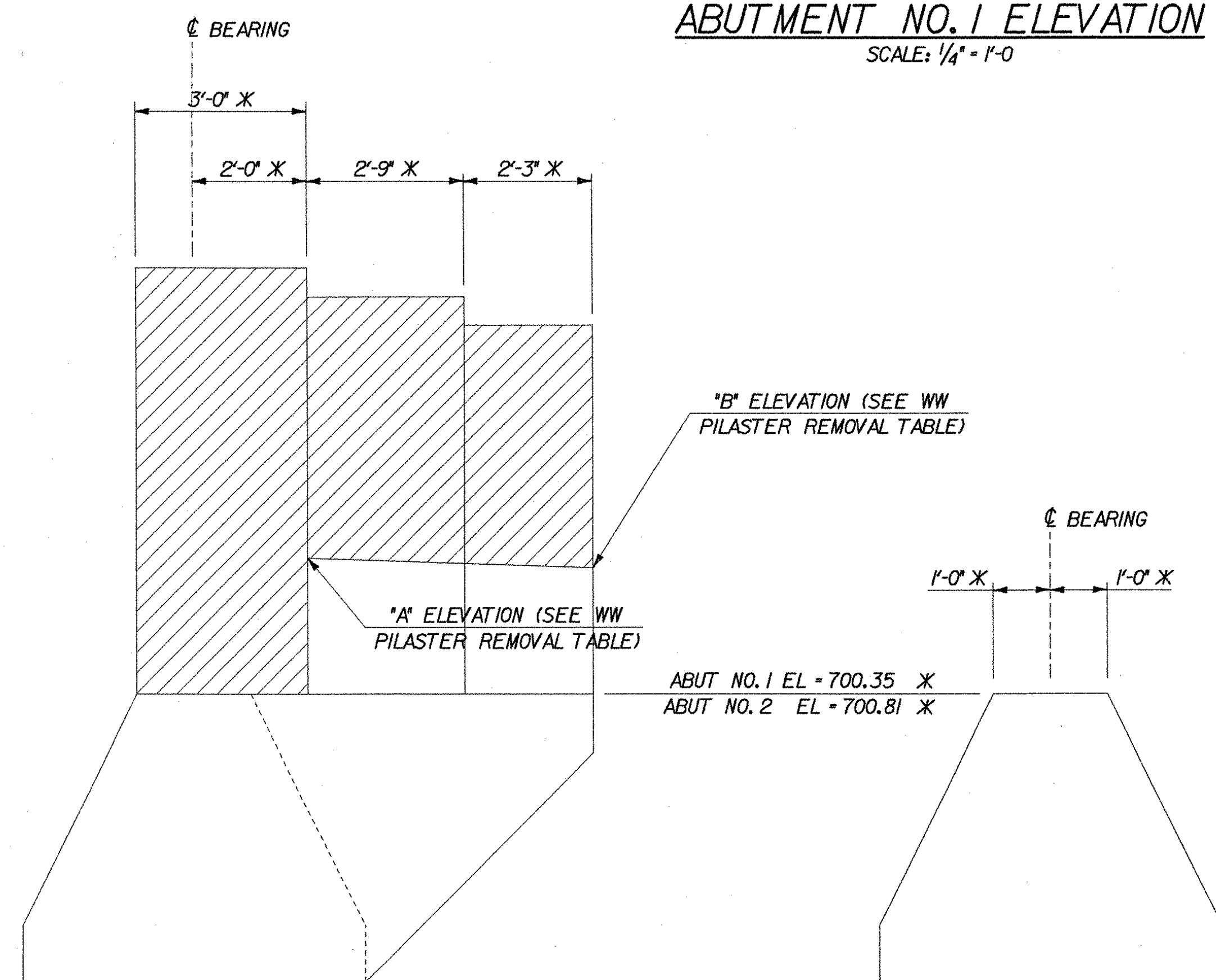
ABUTMENT NO. 2 PLAN
SCALE: 1/4" = 1'-0"



ABUTMENT NO. 1 ELEVATION
SCALE: 1/4" = 1'-0"



ABUTMENT NO. 2 ELEVATION
SCALE: 1/4" = 1'-0"



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

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

REMOVAL NOTES

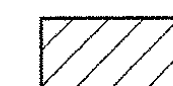
- REMOVAL OF EXISTING BRIDGE PAVEMENT SHALL BE PAID AS ITEM 529J0, REMOVAL OF BRIDGE PAVEMENT.
- ITEM 52920, PARTIAL REMOVAL OF STRUCTURE, SHALL INCLUDE:
 - REMOVAL OF EXISTING BRIDGE RAILING, CONCRETE BRUSH CURB, SIDEWALK AND CONCRETE BRIDGE DECK.
 - REMOVAL OF ALL STEEL STRUCTURAL BEAMS, DIAPHRAGMS AND CROSS FRAMES.
 - REMOVAL OF ALL THE BEARING DEVICES.
 - REMOVAL OF PORTIONS OF THE EXISTING ABUTMENTS AND PIER AS SHOWN ON THE PLANS AND DIRECTED BY THE ENGINEER.
 - ERECTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURES TO PREVENT DEBRIS FROM FALLING INTO THE PASSUMPSIC RIVER.
- THE CONTRACTOR'S METHODS FOR PARTIAL REMOVAL OF THE EXISTING STRUCTURES SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY REMOVAL WORK.
- LIMITS OF REMOVAL ARE APPROXIMATE. THE ENGINEER WILL ESTABLISH ACTUAL LIMITS AFTER A COOPERATIVE INSPECTION BY THE CONTRACTOR AND THE ENGINEER. EXISTING ELEVATIONS SHALL BE FIELD VERIFIED TO ENSURE THE REMOVAL LIMITS ARE ADEQUATE TO OBTAIN THE REQUIRED DIMENSIONS AND ELEVATIONS OF THE NEW CONSTRUCTION.
- SAW CUTS SHALL BE 1" DEEP ALONG ALL EXPOSED REMOVAL LINES WHERE NEW CONCRETE IS TO BE PLACED AGAINST EXISTING CONCRETE. ALL COSTS SHALL BE INCLUDED IN ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE.
- CARE SHALL BE TAKEN TO AVOID MECHANICAL DAMAGE TO EXISTING REINFORCING STEEL WHICH IS TO BE INCORPORATED INTO THE NEW MASONRY. EXISTING REINFORCING STEEL TO BE INCORPORATED INTO THE NEW MASONRY SHALL BE FREE OF LOOSE RUST AND LATANCE.
- EXISTING REINFORCING STEEL THAT WILL NOT BE INCORPORATED INTO THE NEW MASONRY SHALL BE REMOVED A MINIMUM OF 1" BEYOND THE MASONRY SURFACE. CAVITIES PRODUCED BY REMOVAL SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER WITH COSTS PAID FOR PER ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE.
- ROUGHEN SURFACE OF EXISTING CONCRETE TO A TOTAL AMPLITUDE OF 1/4" WHERE IT IS TO BE IN CONTACT WITH NEW SEAT CONCRETE.
- EXISTING CONCRETE SURFACES WHICH ARE TO BE IN CONTACT WITH CORK OR EXPANSION MATERIAL SHALL BE CUT OR GROUND TO HAVE A SMOOTH SURFACE.

WW PILASTER REMOVAL TABLE

WW	"A" ELEV	"B" ELEV
1	702.70	702.53
2	703.61	703.43
3	702.69	702.31
4	703.60	703.42

LEGEND

* - APPROXIMATE EXISTING
ELEVATION OR DIMENSION

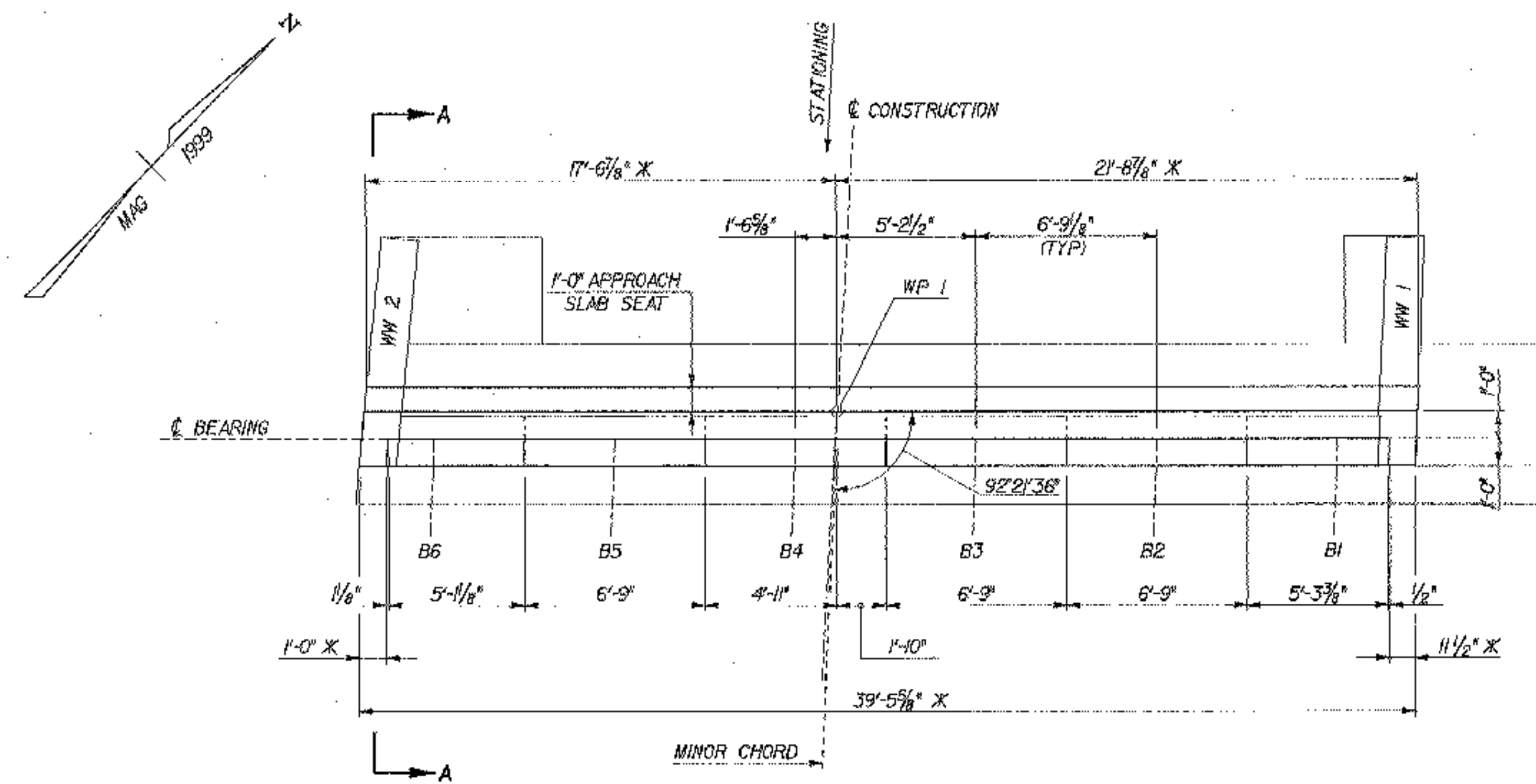


REMOVAL OF EXISTING CONCRETE

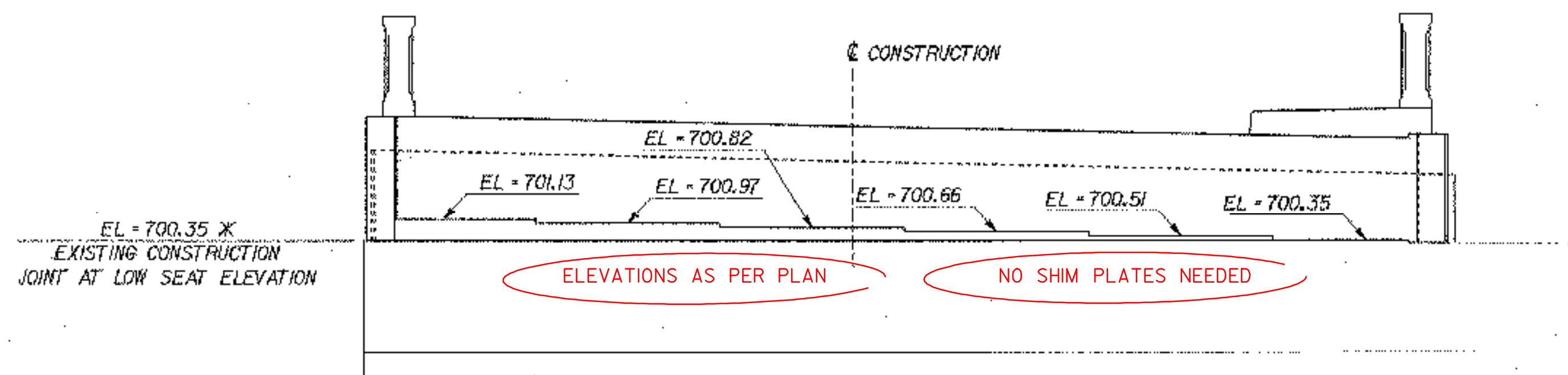
STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
ABUTMENT REMOVAL DETAILS			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	T. GRANT/R. WOOD	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6cont\2\239arr.dgn		
Bridge Sheet No.		Sheet	26 of 34

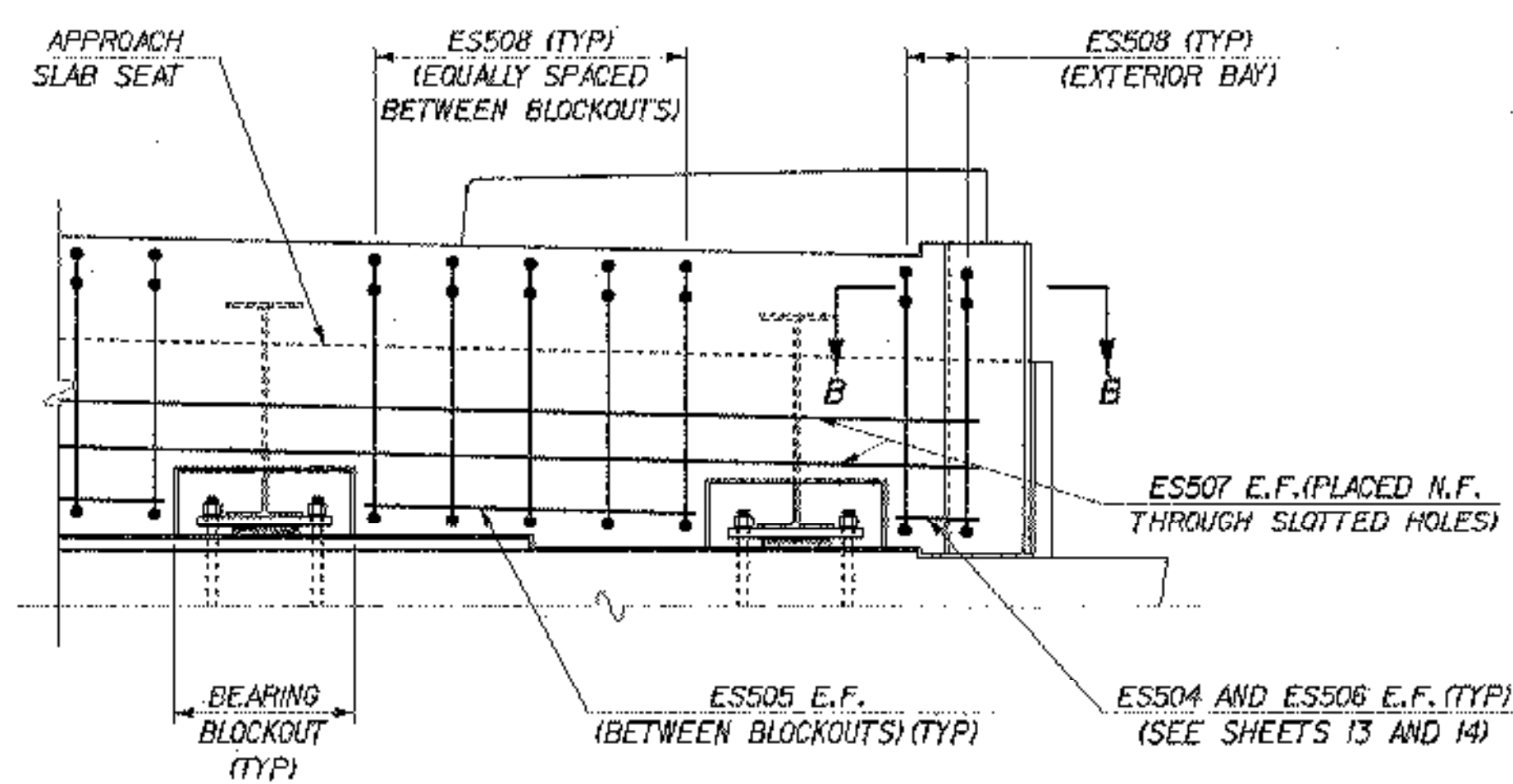
MJ
MUFARLAND-JOHNSON, INC.



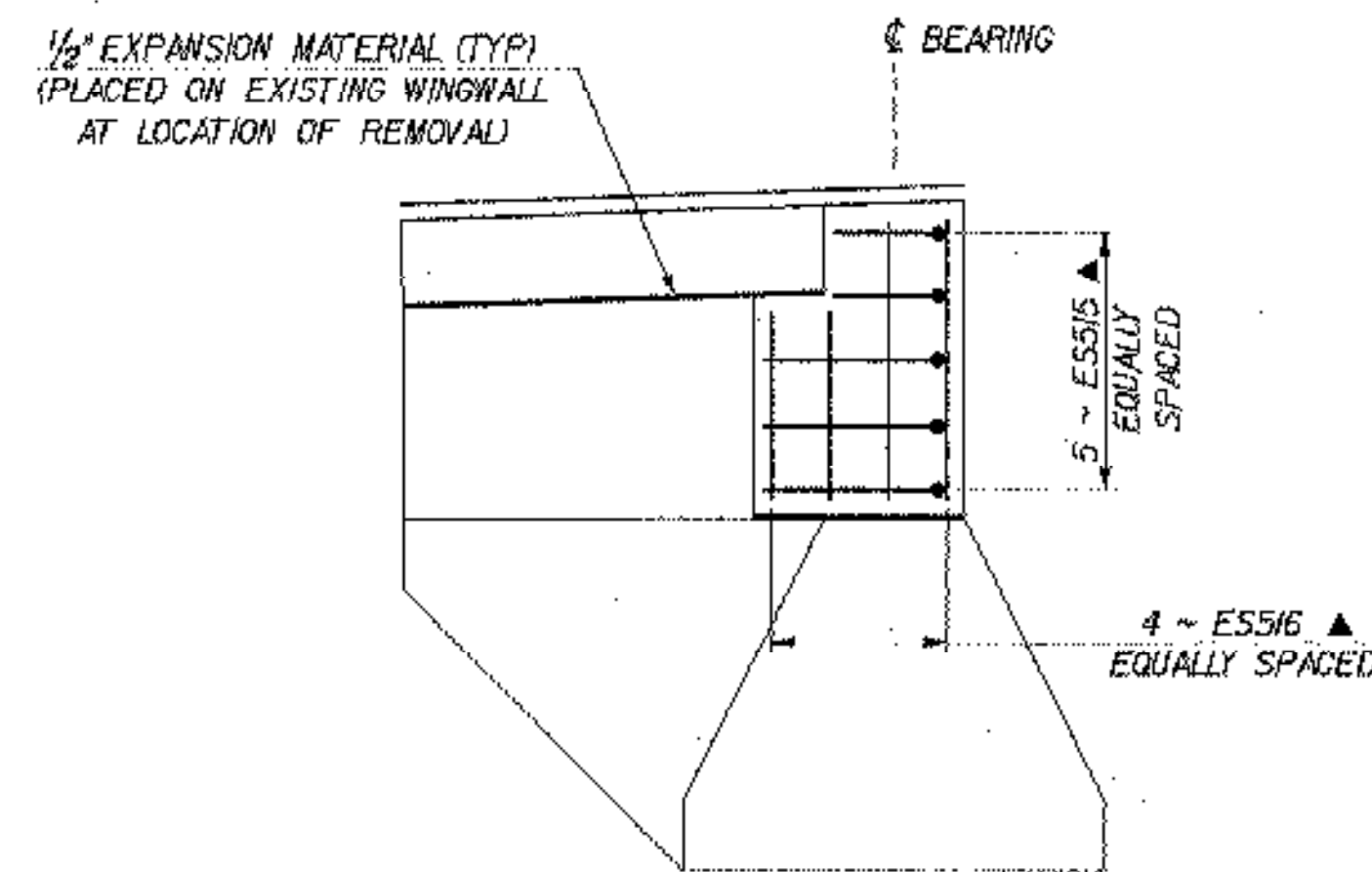
ABUTMENT NO. 1 PLAN
SCALE: 1/4" = 1'-0"



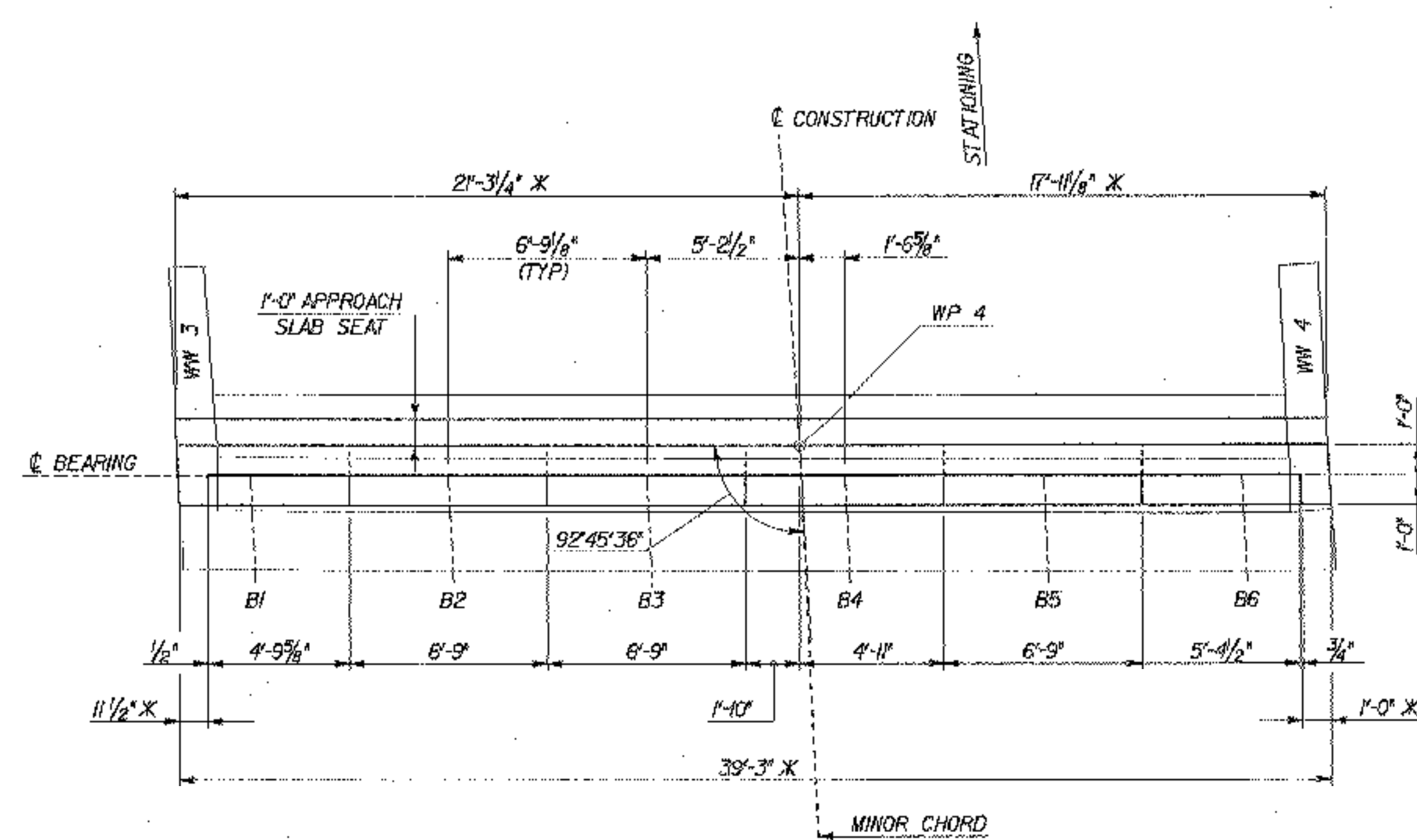
ABUTMENT NO. 1 ELEVATION
SCALE: 1/4" = 1'-0"



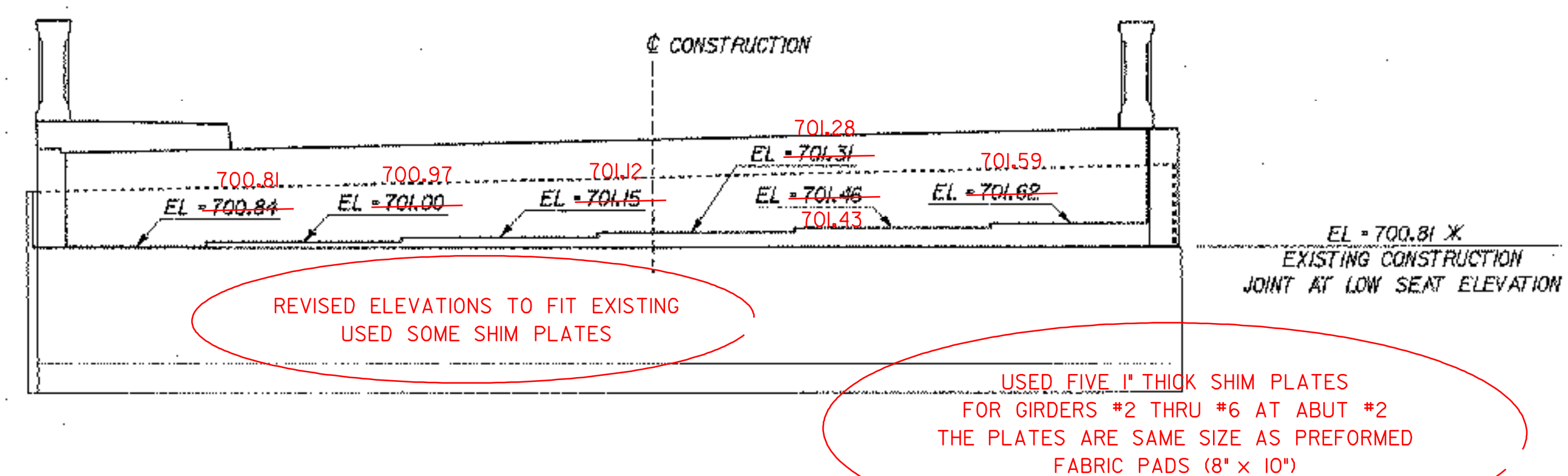
TYPICAL CURTAIN WALL ELEVATION
SCALE: 1/2" = 1'-0"



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



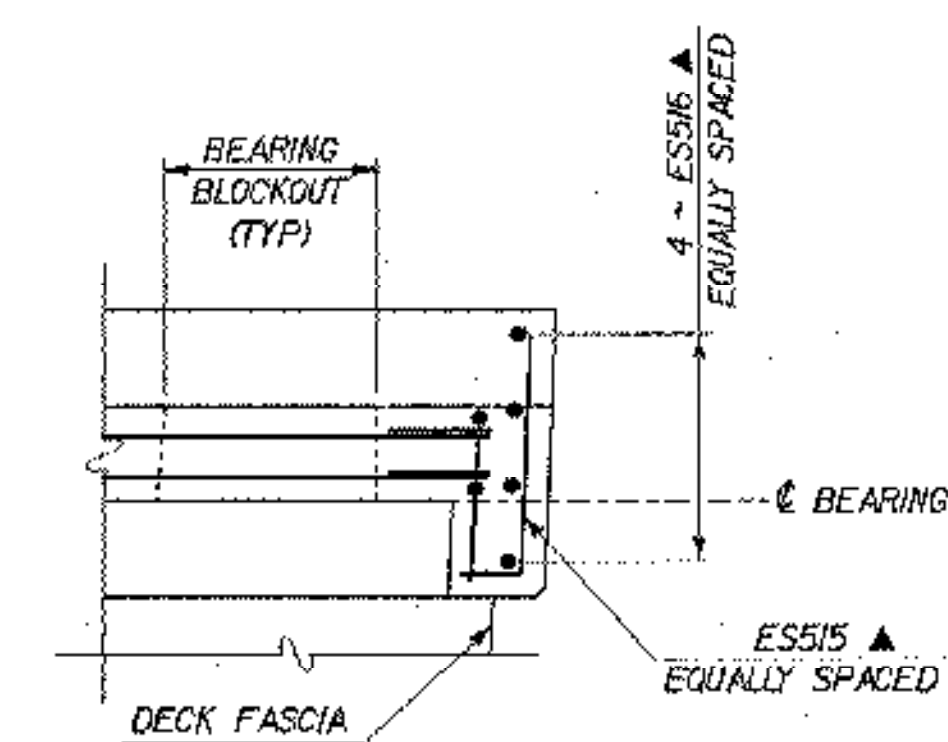
ABUTMENT NO. 2 PLAN
SCALE: 1/4" = 1'-0"



ABUTMENT NO. 2 ELEVATION
SCALE: 1/4" = 1'-0"

REINFORCING NOTES

1. N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD
2. X = APPROXIMATE EXISTING ELEVATION OR DIMENSION

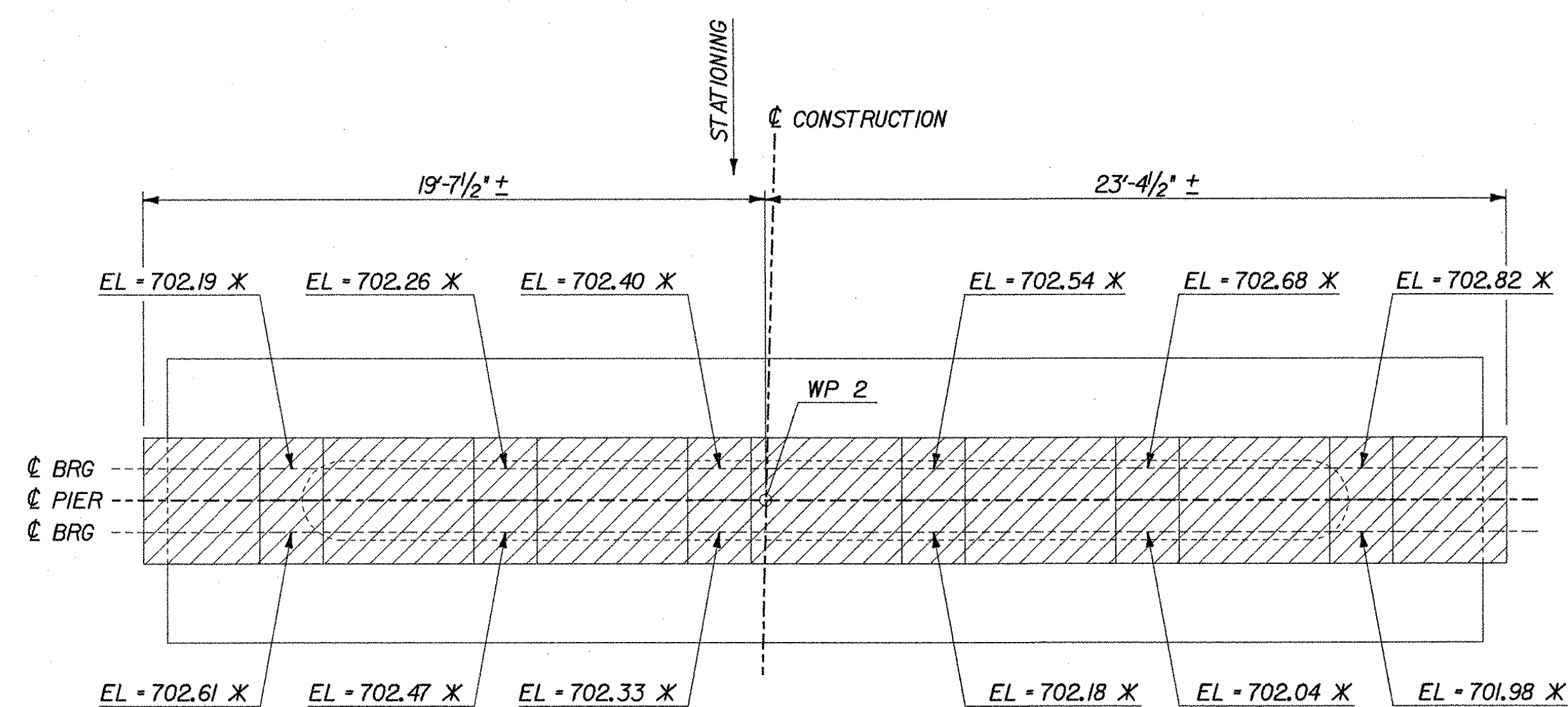


TYPICAL SECTION B-B
SCALE: 1/2" = 1'-0"

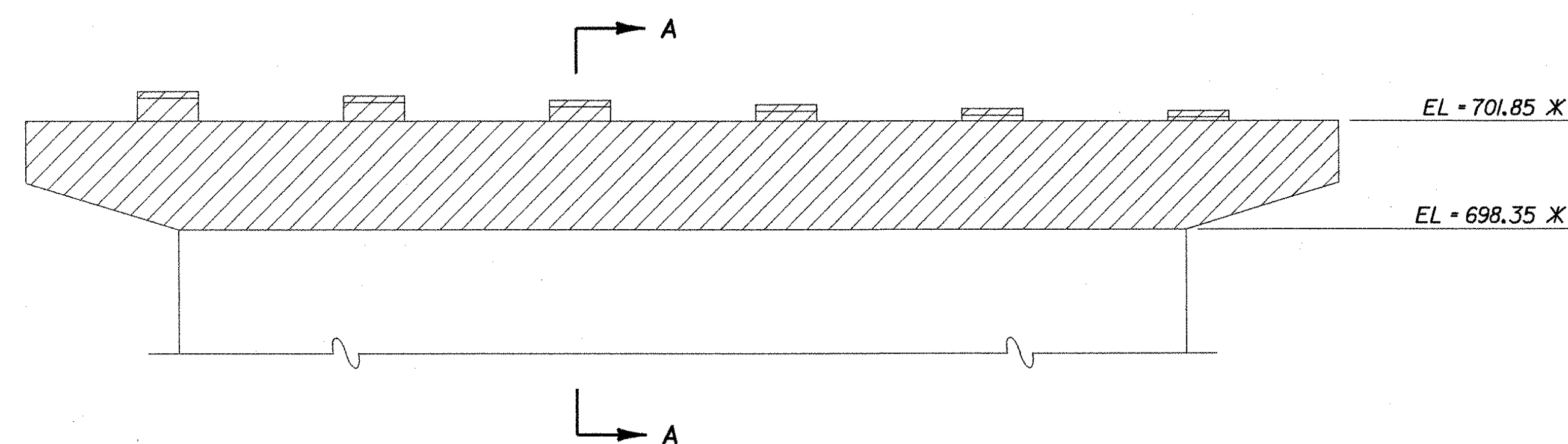
STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
ABUTMENT DETAILS			
Designed By	T. GRANT	Drawn By	S. DEUA
Checked By	T. GRANT	Bridge Design Supervisor	
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	MNS49103\6conf\2\238dtd.dgn		
Bridge Sheet No.		Sheet	27 of 34

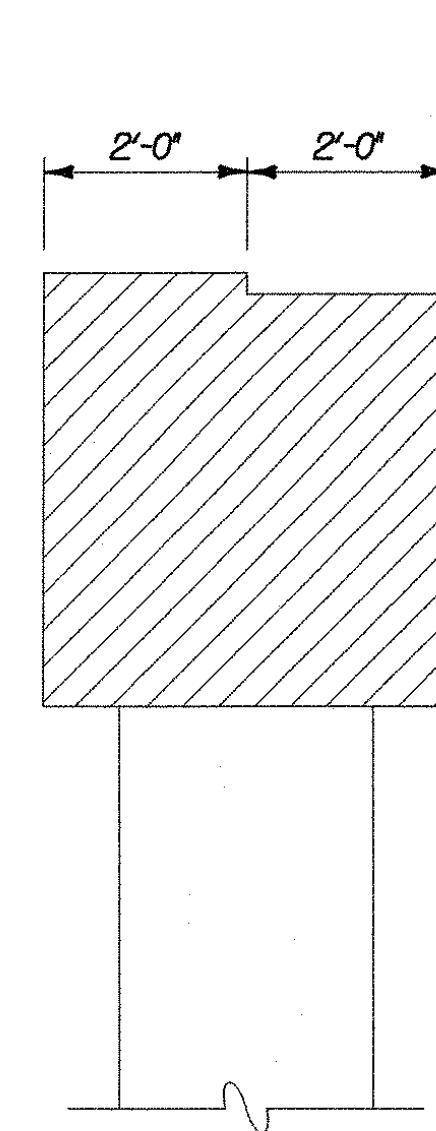
MJ
MCFARLAND-JOHNSON, INC.



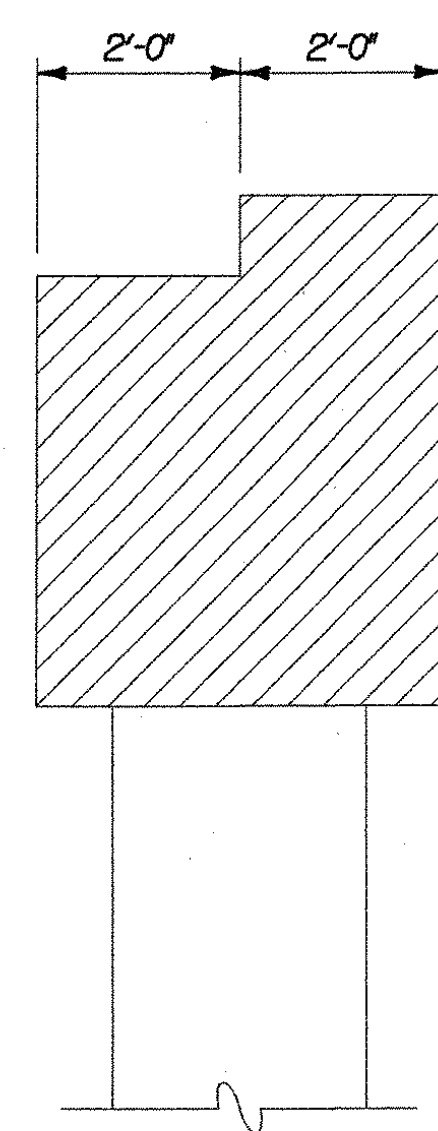
PIER NO. 1 PLAN
SCALE: 1/4" = 1'-0"



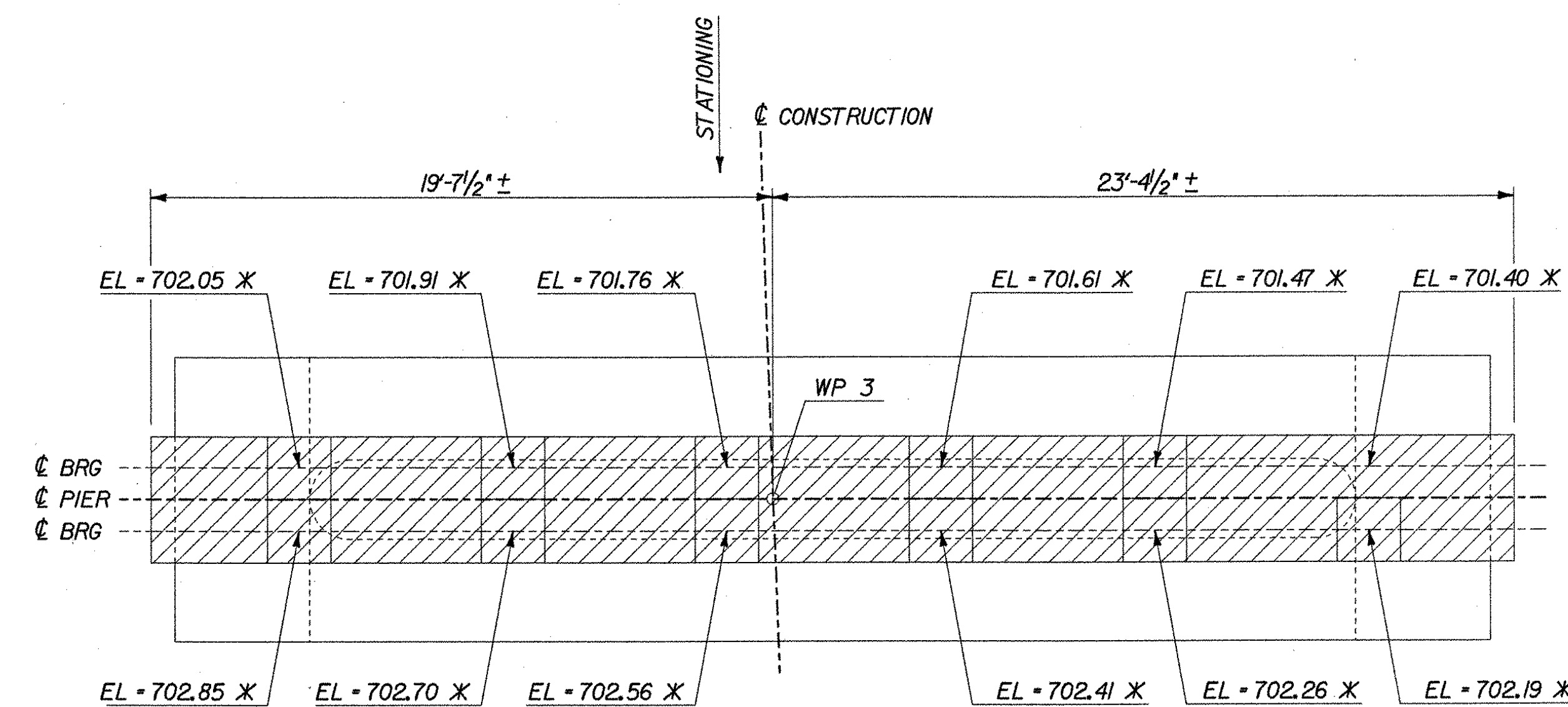
PIER NO. 1 ELEVATION
SCALE: 1/4" = 1'-0"



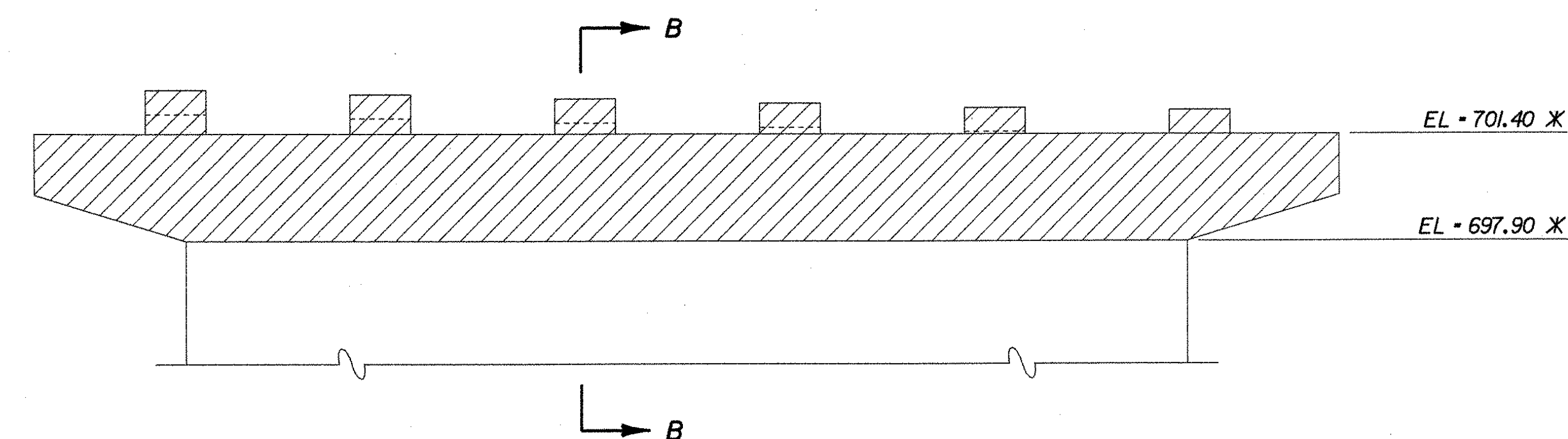
SECTION A-A
SCALE: 1/2" = 1'-0"



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



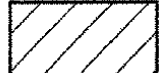
PIER NO. 2 PLAN
SCALE: 1/4" = 1'-0"



PIER NO. 2 ELEVATION
SCALE: 1/4" = 1'-0"

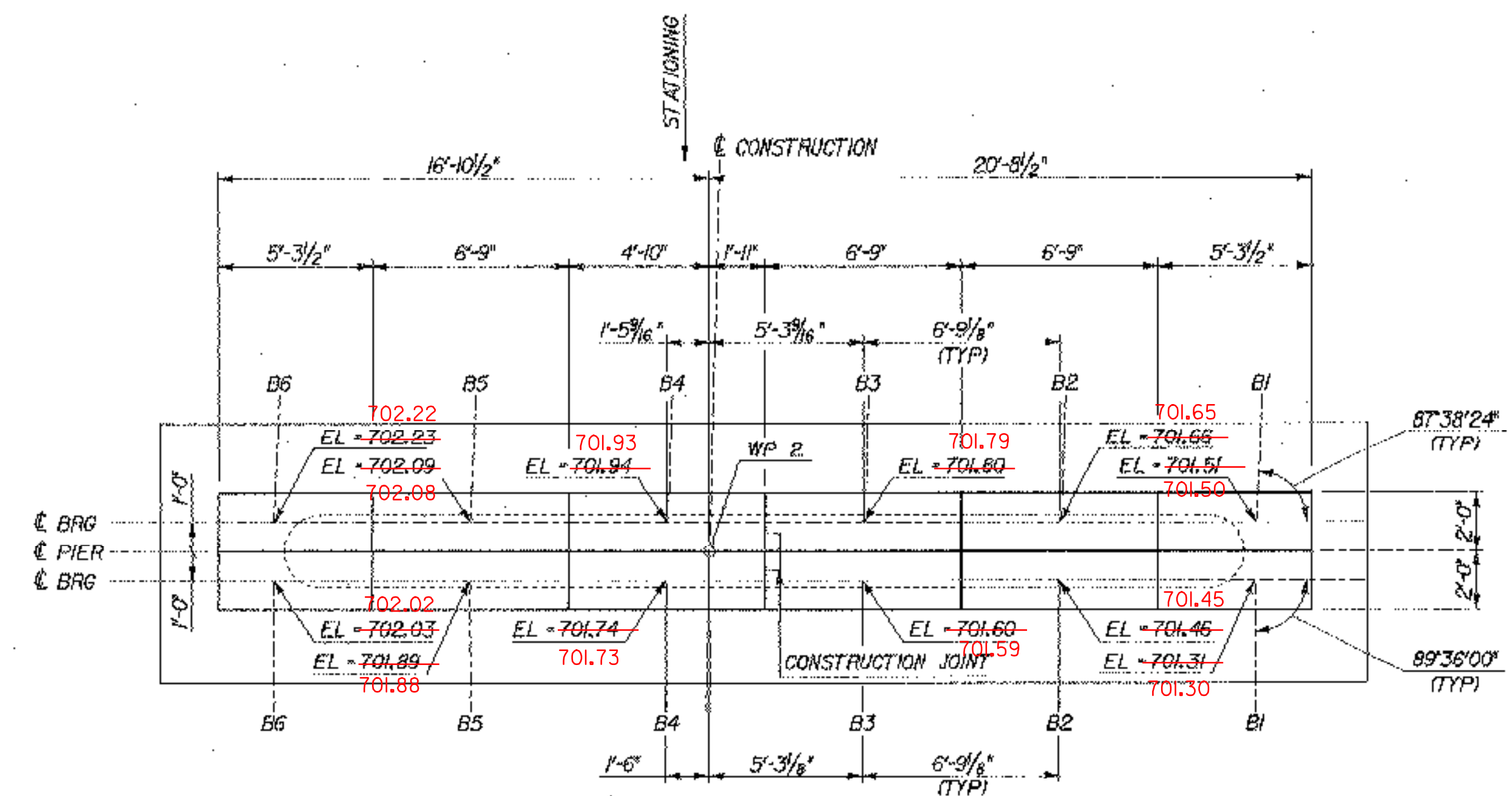
LEGEND

* - APPROXIMATE EXISTING
ELEVATION OR DIMENSION

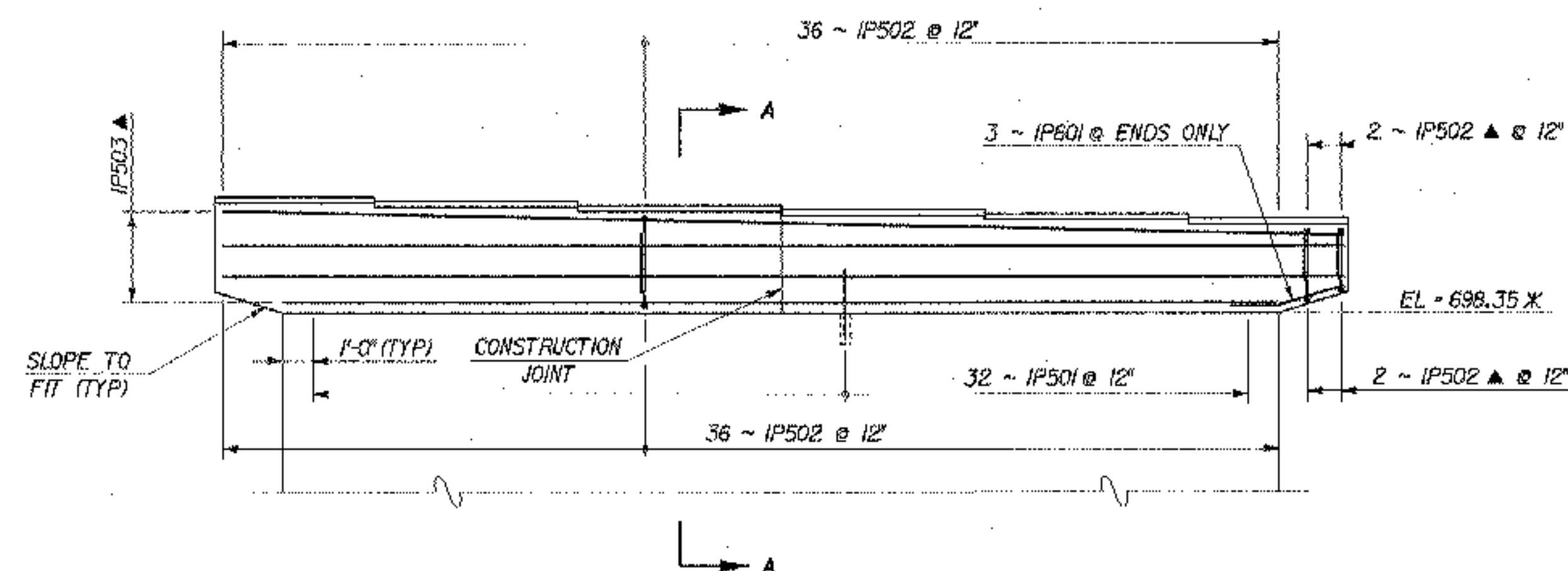
 REMOVAL OF EXISTING CONCRETE

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER PIER REMOVAL DETAILS			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	Date	Bridge Design Supervisor	
T. GRANT	10/01	M. ZYDEL	Date 10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m\N549103\6cont\zj238prr.dgn		
Bridge Sheet No.	Sheet 28 of 34		

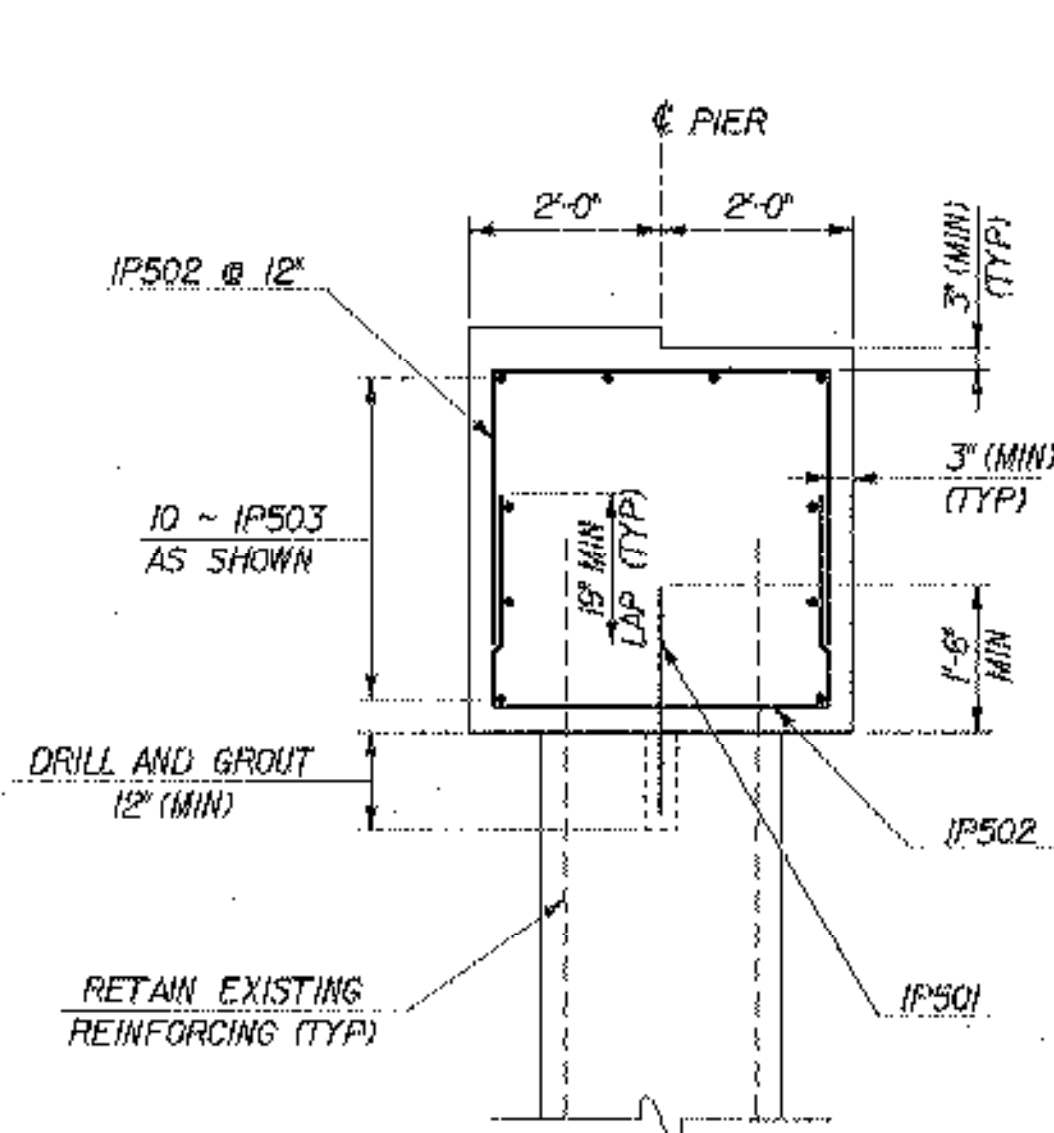

MUFARLAND-JOHNSON, INC.



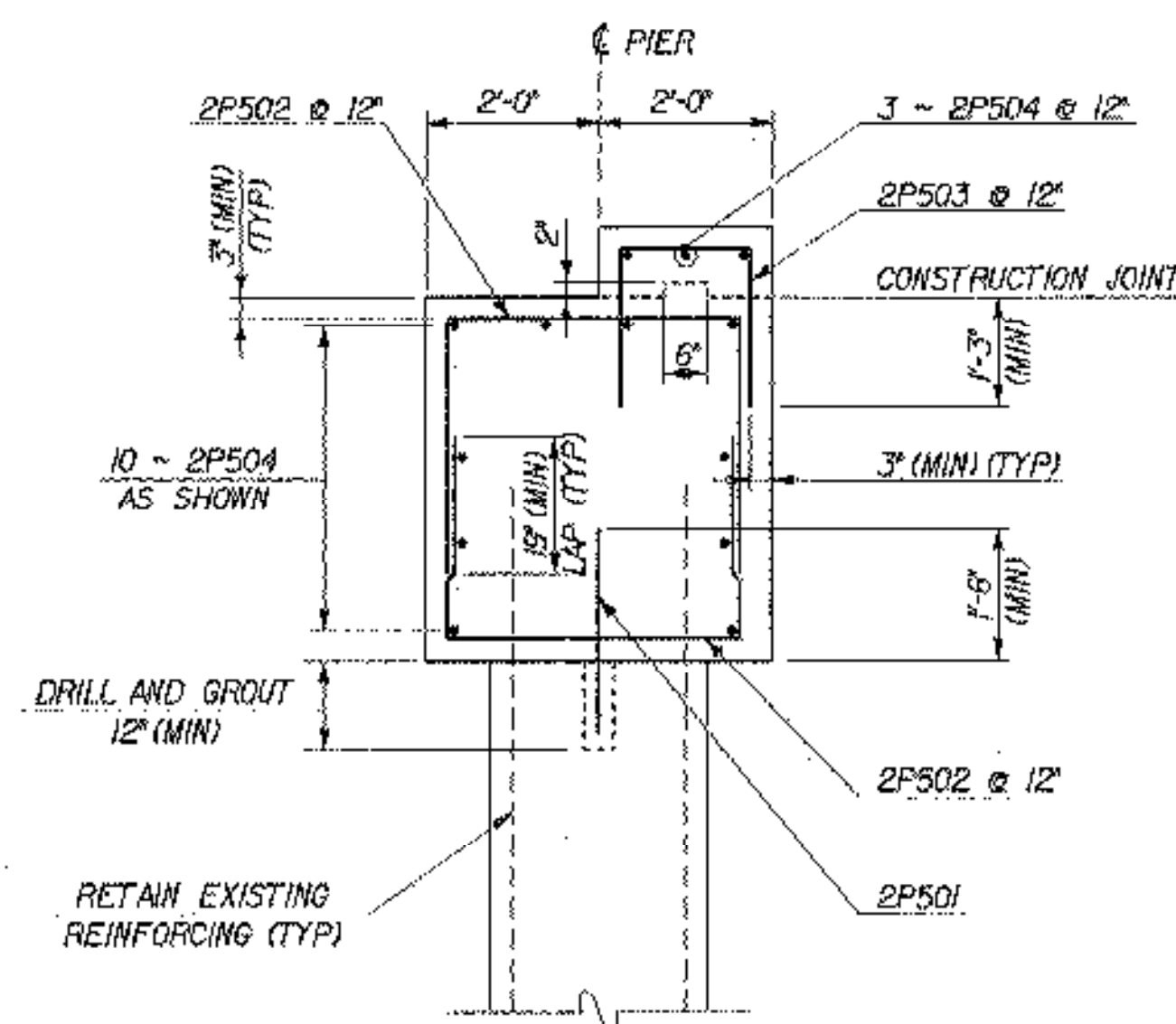
PIER NO. 1 PLAN
SCALE: 1/4" = 1'-0"



PIER NO. 1 ELEVATION
SCALE: 1/4" = 1'-0"

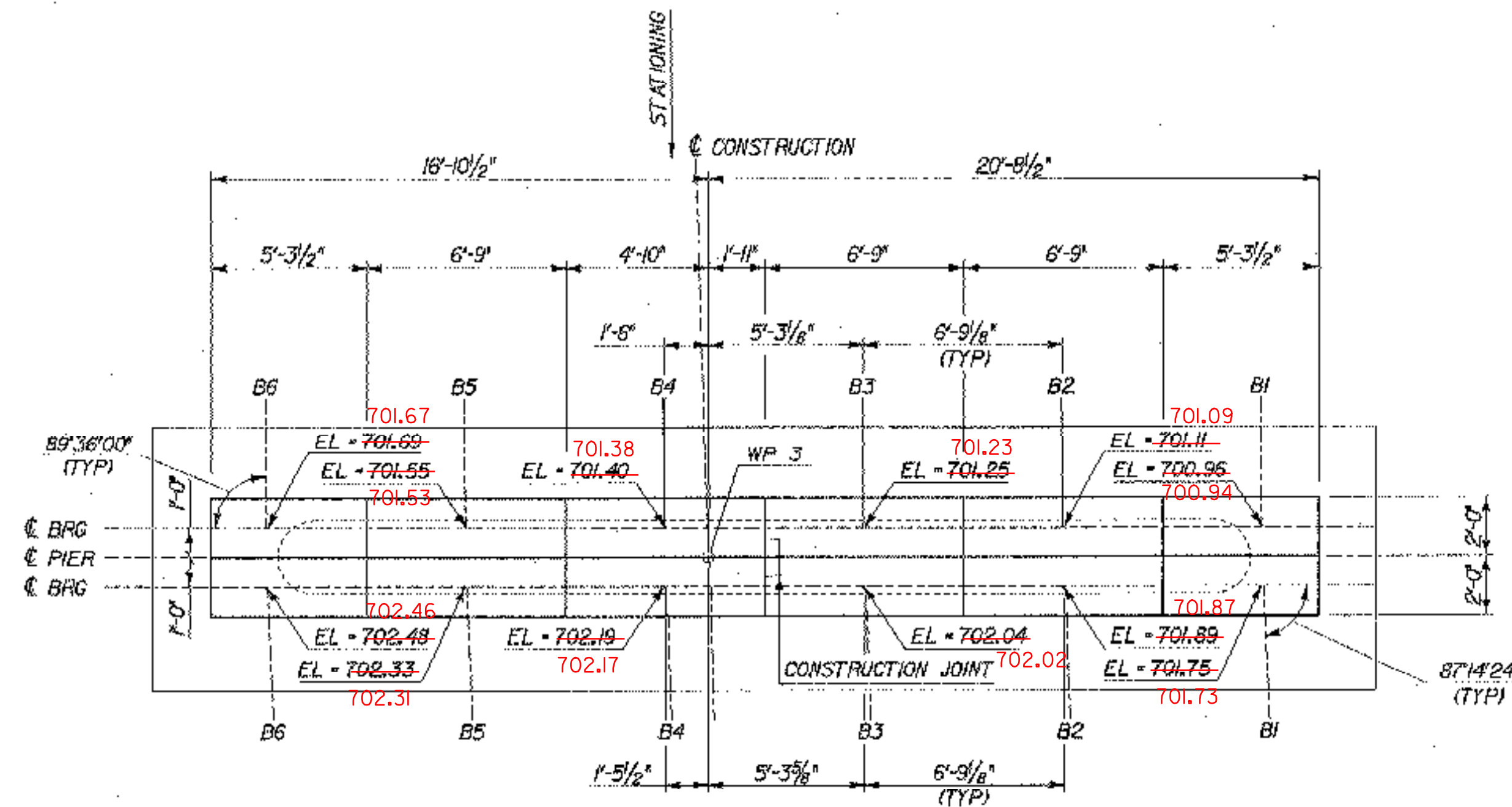


SECTION A-A
SCALE: 1/2" = 1'-0"

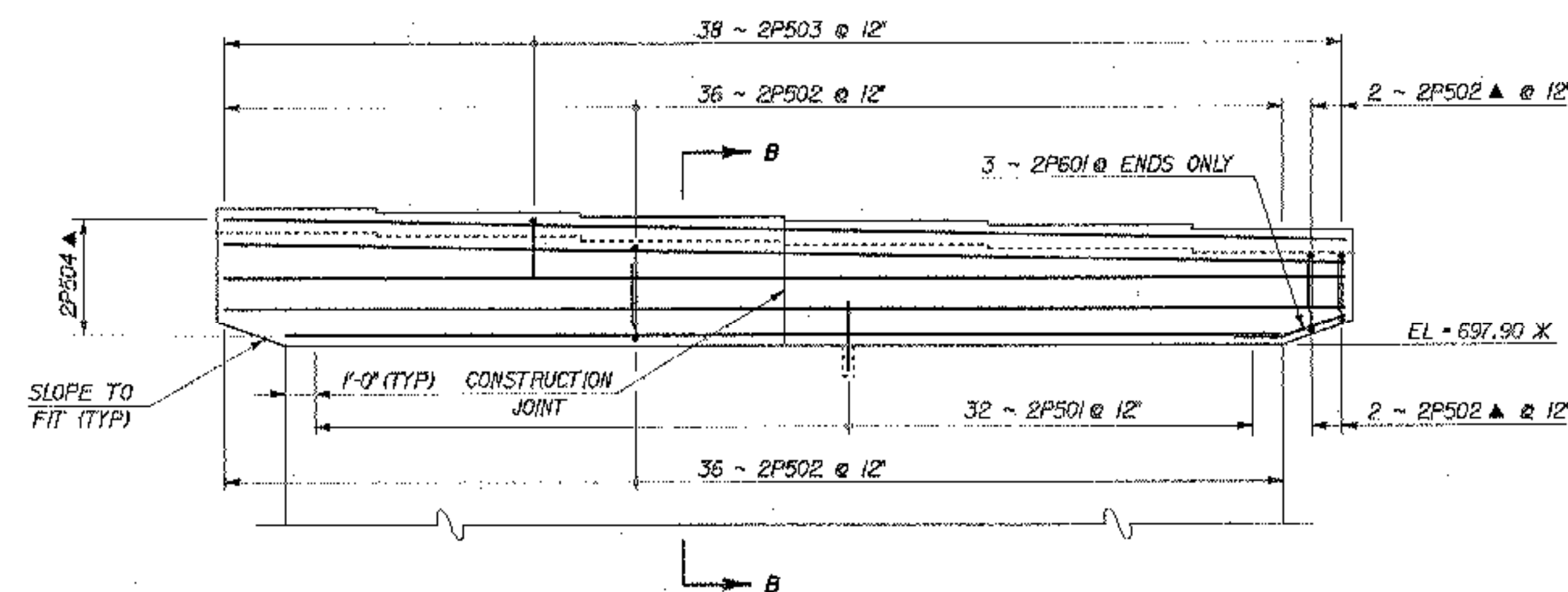


SECTION B-B
SCALE: 1/2" = 1'-0"

SEAT GRADES
ADJUSTED IN FIELD
TO FIT EXISTING
ABUTMENT GRADES



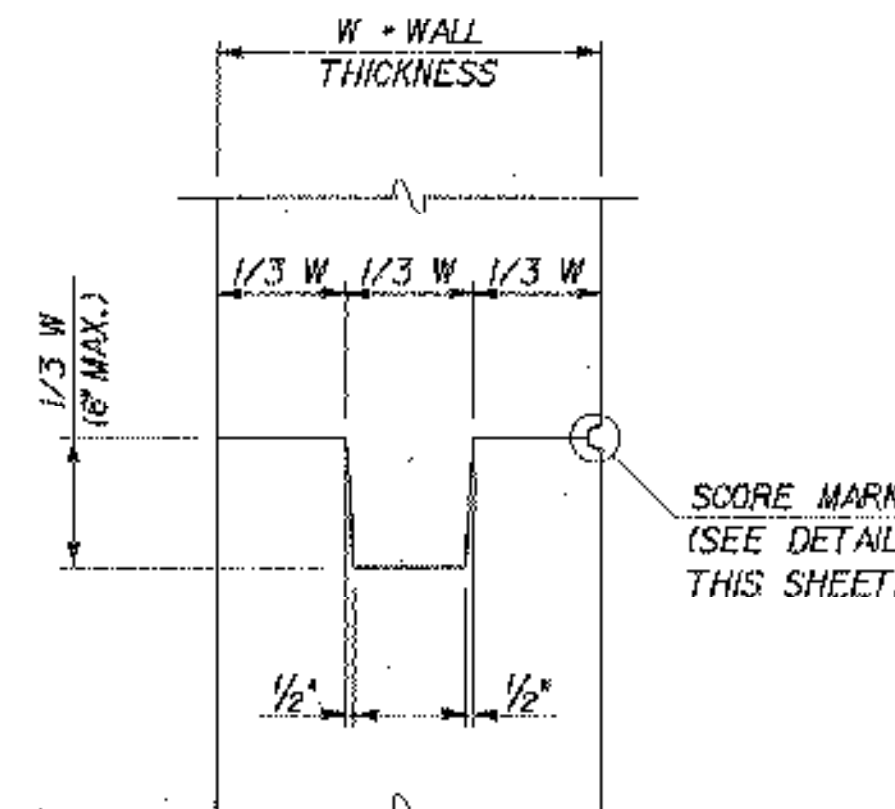
PIER NO. 2 PLAN
SCALE: 1/4" = 1'-0"



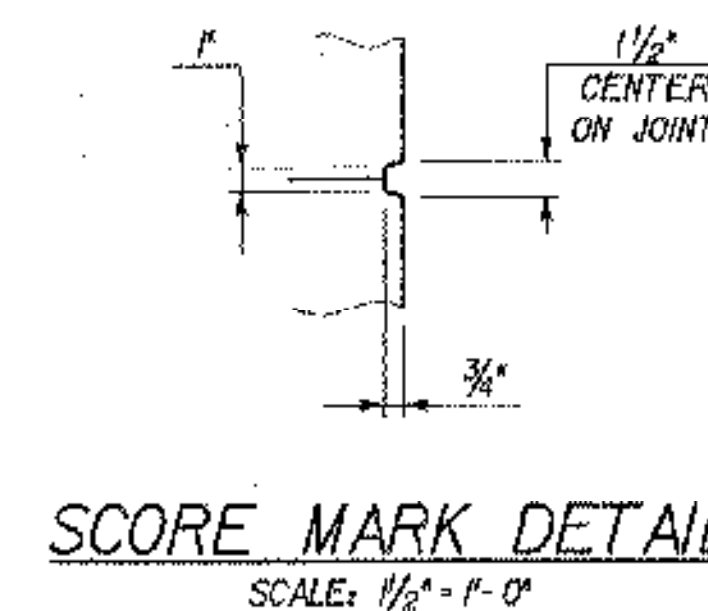
PIER NO. 2 ELEVATION
SCALE: 1/4" = 1'-0"

REINFORCING NOTES

- N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
E.W. = EACH WAY
▲ = CUT TO FIT IN FIELD
- X = APPROXIMATE EXISTING ELEVATION OR DIMENSION



TYPICAL CONCRETE
CONSTRUCTION JOINT
SCALE: 1" = 1'-0"

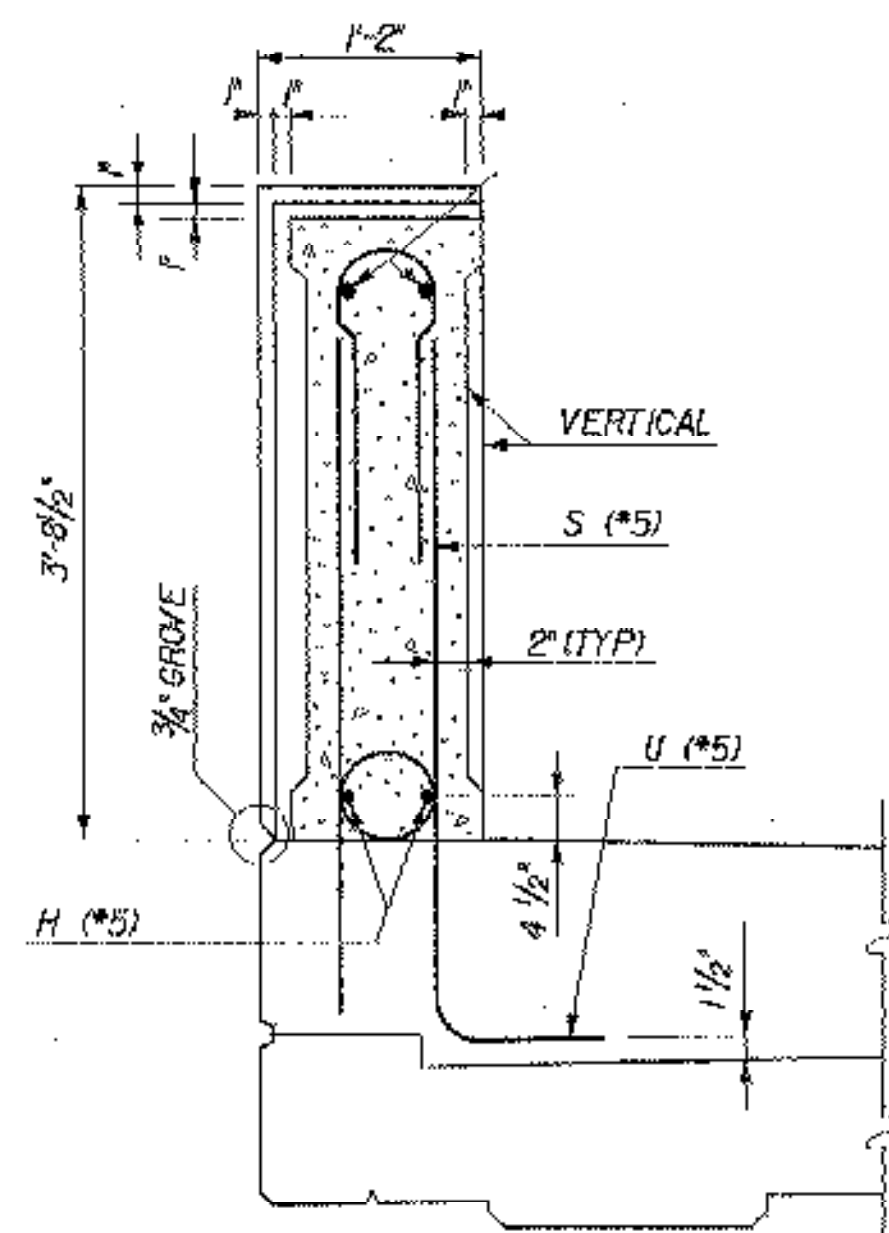


SCORE MARK DETAIL
SCALE: 1/2" = 1'-0"

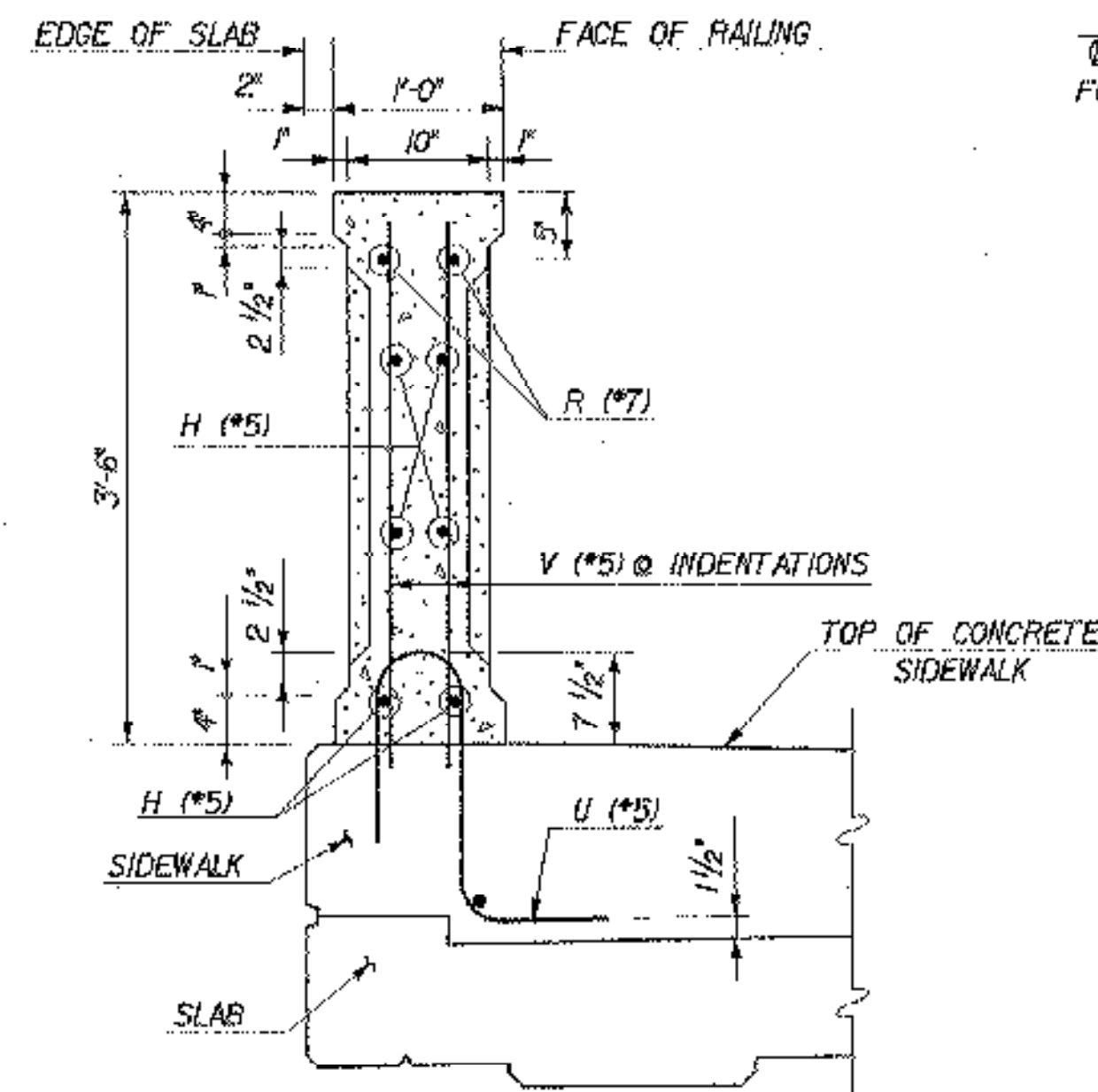
STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
PIER DETAILS			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	Date	Bridge Design Supervisor	
T. GRANT/R. WOOD	10/01	M. ZYDEL	Date 10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m\549103\6001\2\238.pdf.dgn		
Bridge Sheet No.		Sheet	29 of 34

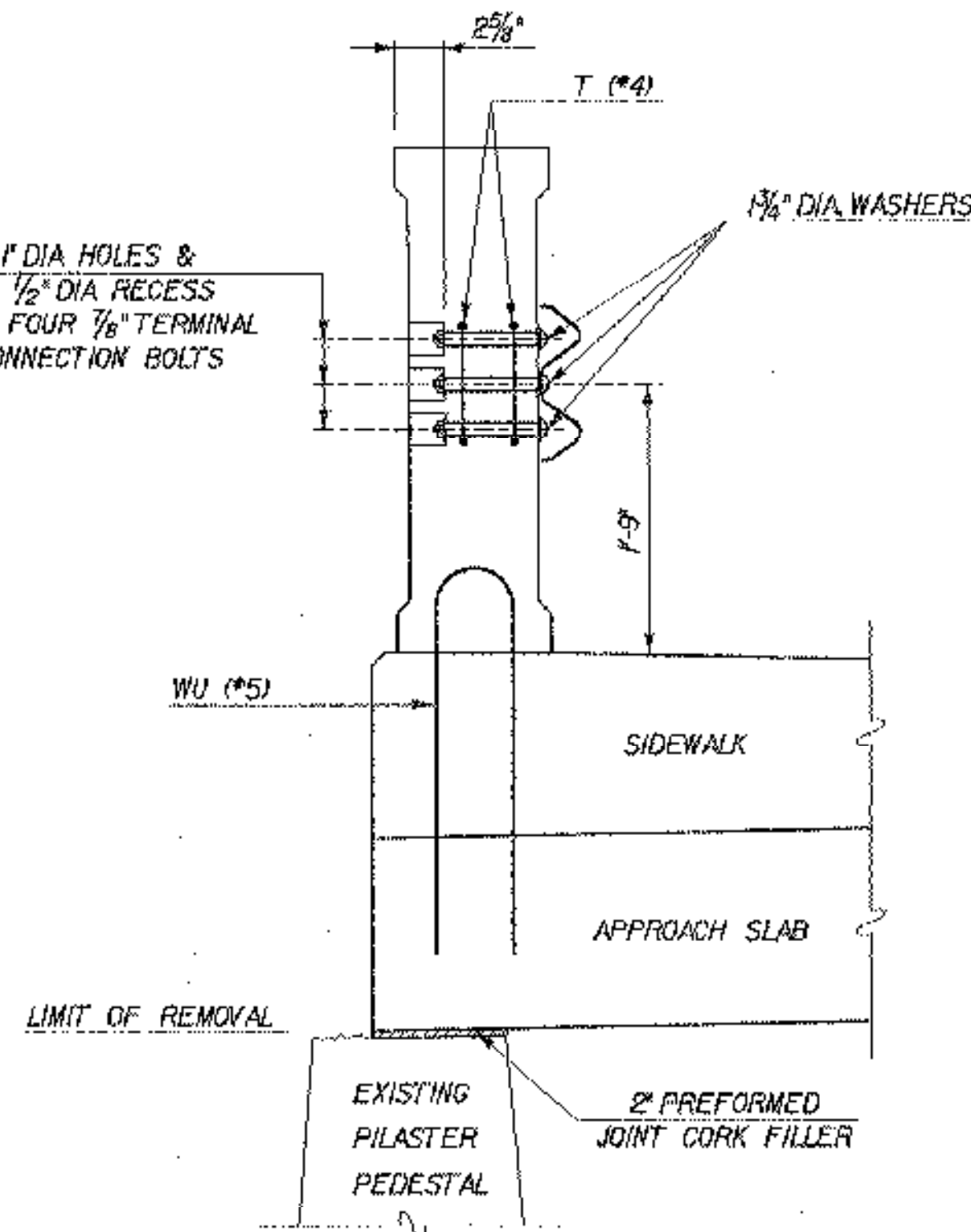
MCFARLAND-JOHNSON, INC.



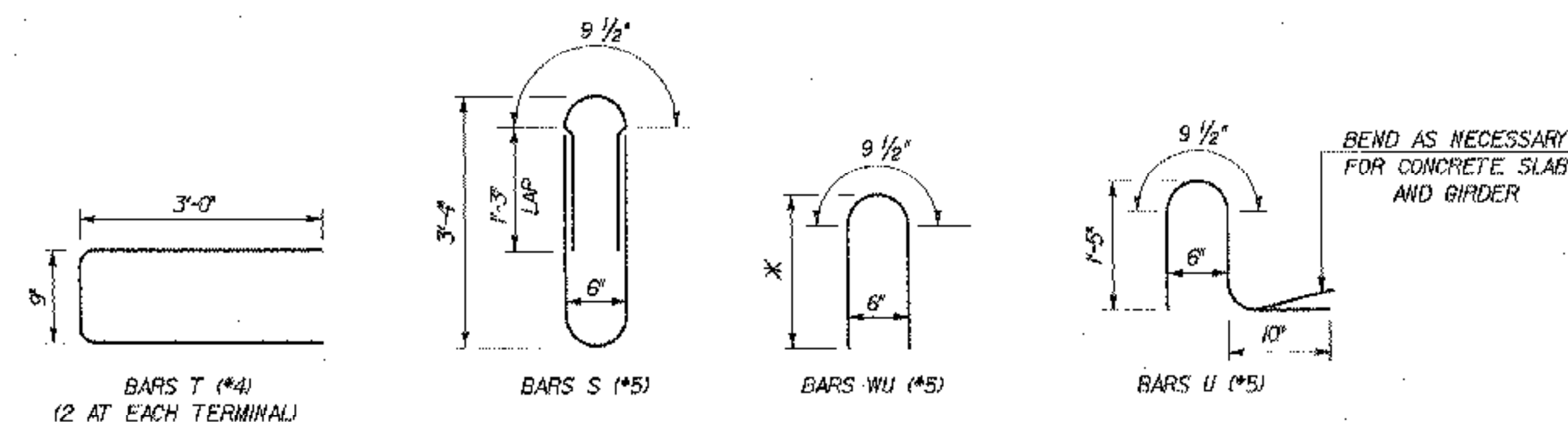
SECTION B-B
NOT TO SCALE
(SHOWING PILASTER AND BEYOND)



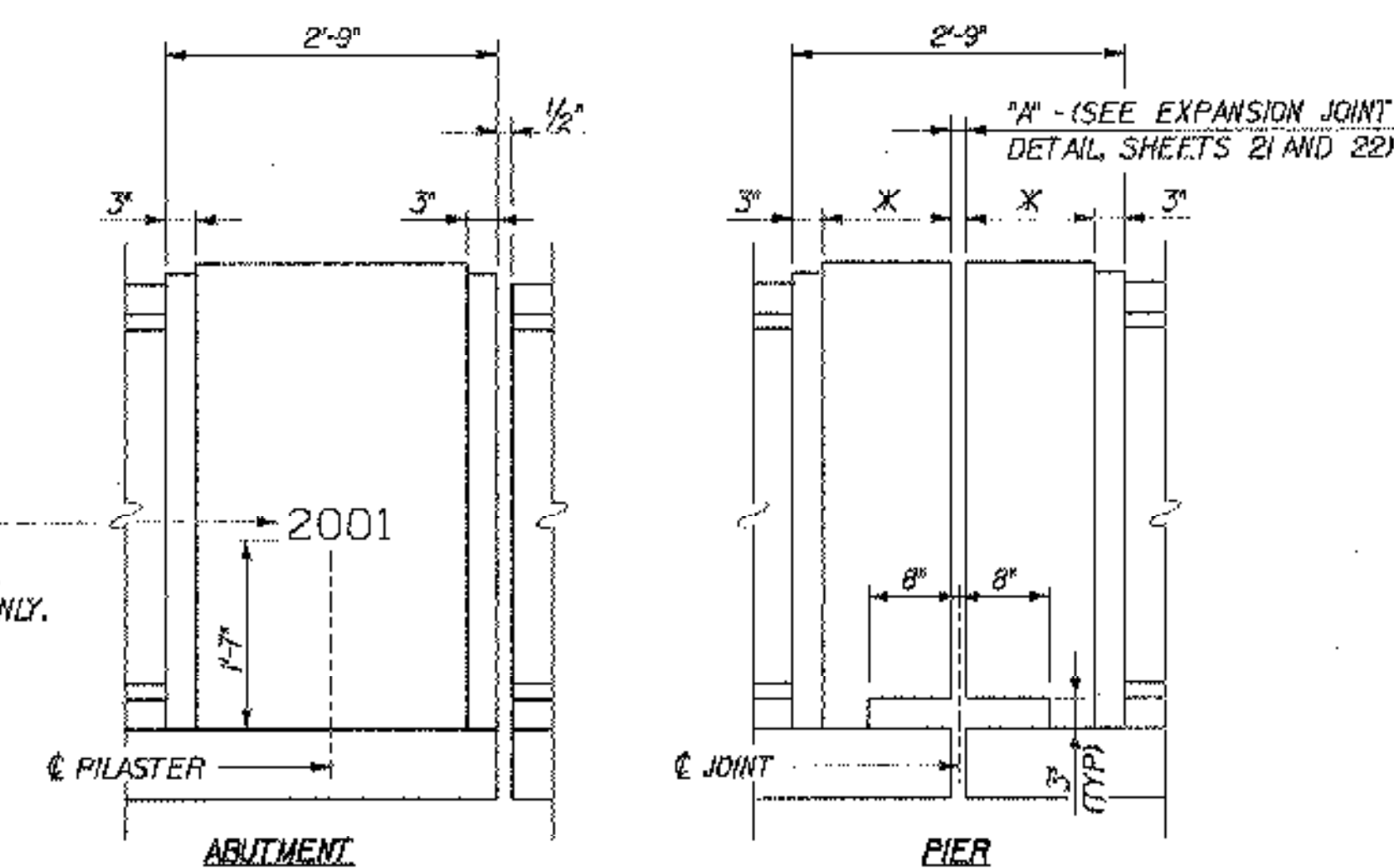
SECTION C-C
NOT TO SCALE



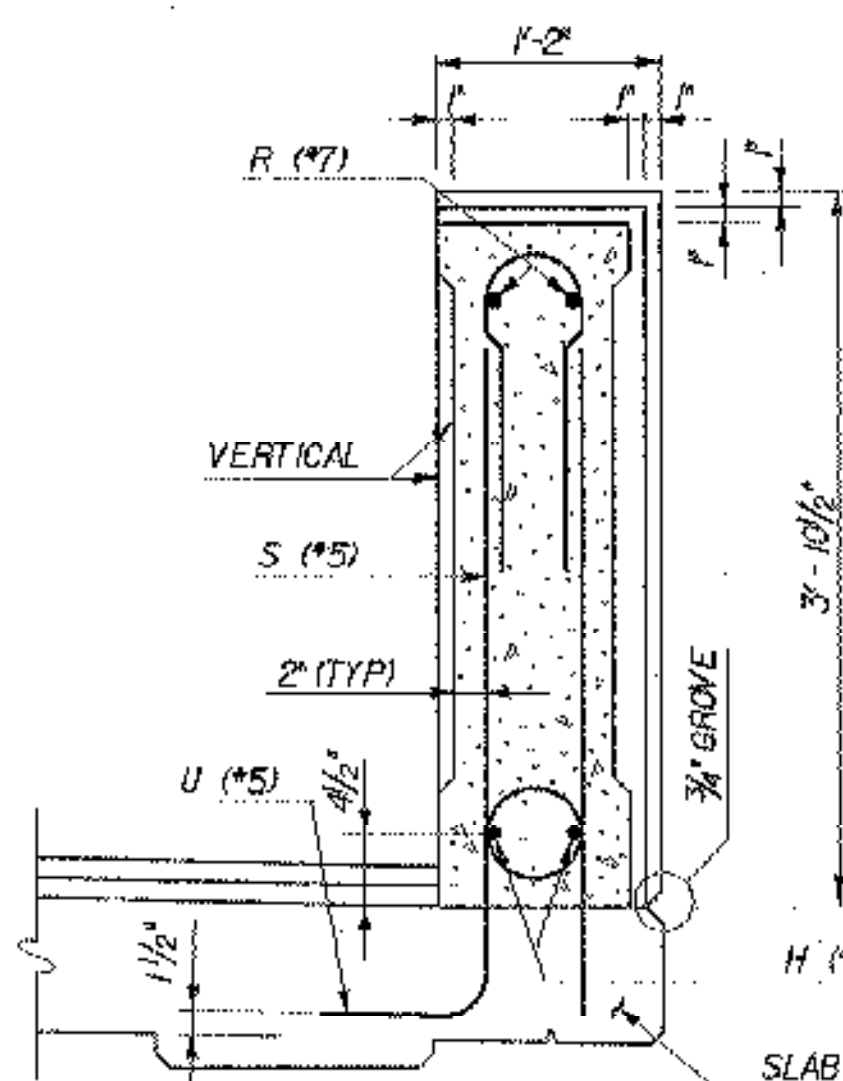
SECTION D-D
NOT TO SCALE
(SHOWING HDSBGR CONNECTION,
SOME REINFORCING OMITTED FOR CLARITY)
(SEE SECTION B-B FOR OMITTED REINFORCING)



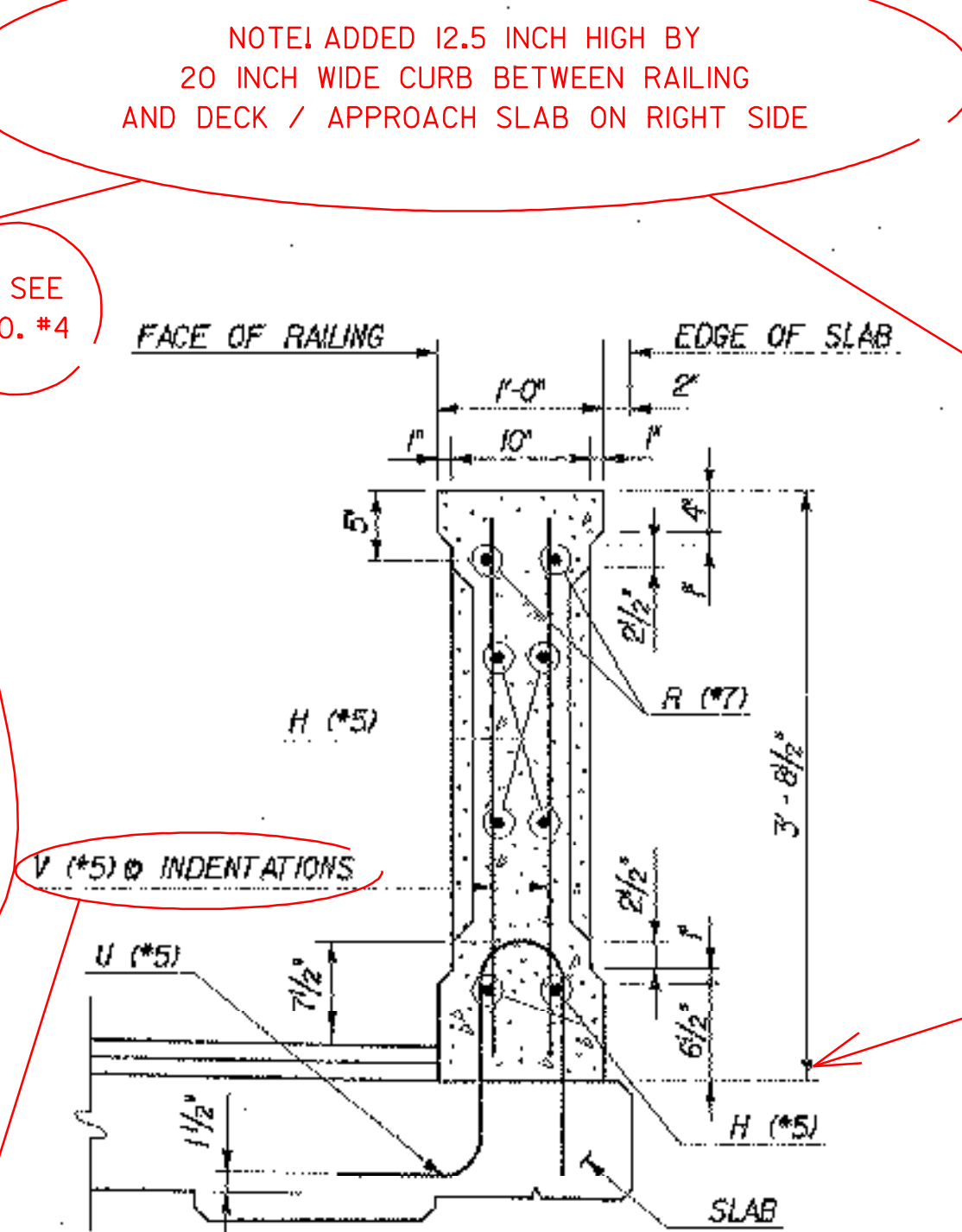
REINFORCING BAR DETAILS
NOT TO SCALE
(X 1'-10" ON DECK, 2'-7" ON SIDEWALK)



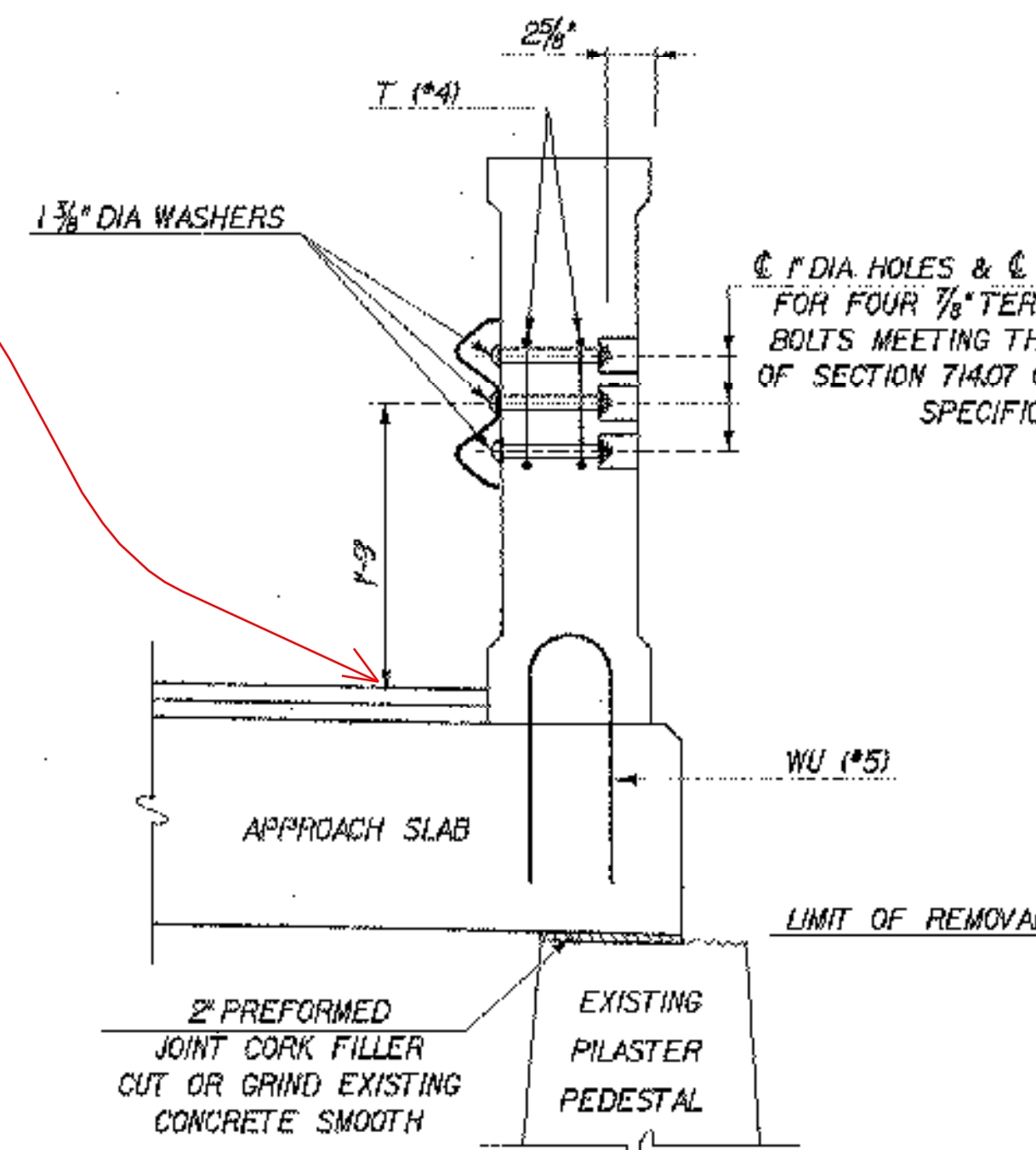
EXTERIOR PILASTER ELEVATIONS
SCALE: 3/4" = 1'-0"
(X DIMENSIONS SHALL BE THE SAME ON EACH SIDE OF JOINT)



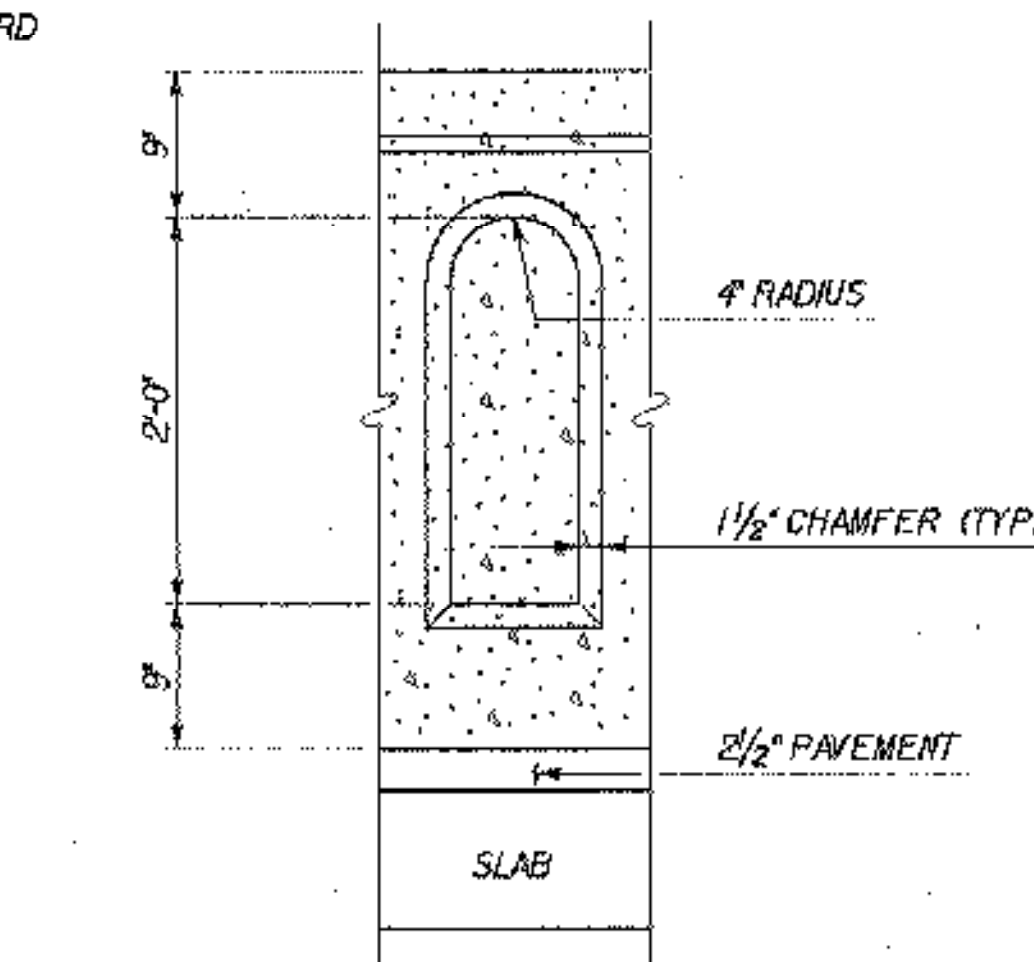
SECTION E-E
NOT TO SCALE
(SHOWING PILASTER)



SECTION F-F
NOT TO SCALE



SECTION G-G
NOT TO SCALE
(SHOWING HDSBGR CONNECTION,
SOME REINFORCING OMITTED FOR CLARITY)
(SEE SECTION E-E FOR OMITTED REINFORCING)



ARCHITECTURAL INDENTATION
SCALE: 1" = 1'-0"

NOTE: ADDED 12.5 INCH HIGH BY
20 INCH WIDE CURB BETWEEN RAILING
AND DECK / APPROACH SLAB ON RIGHT SIDE

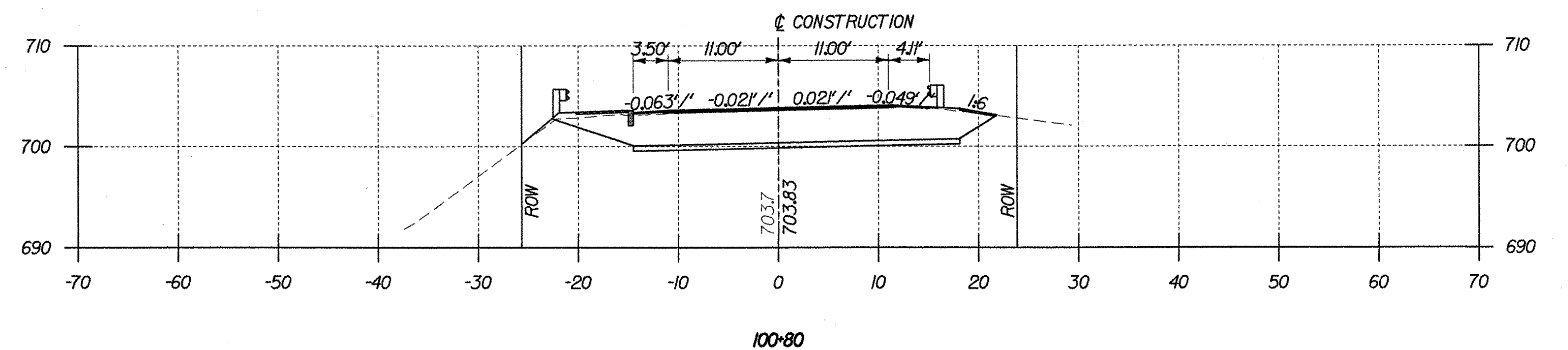
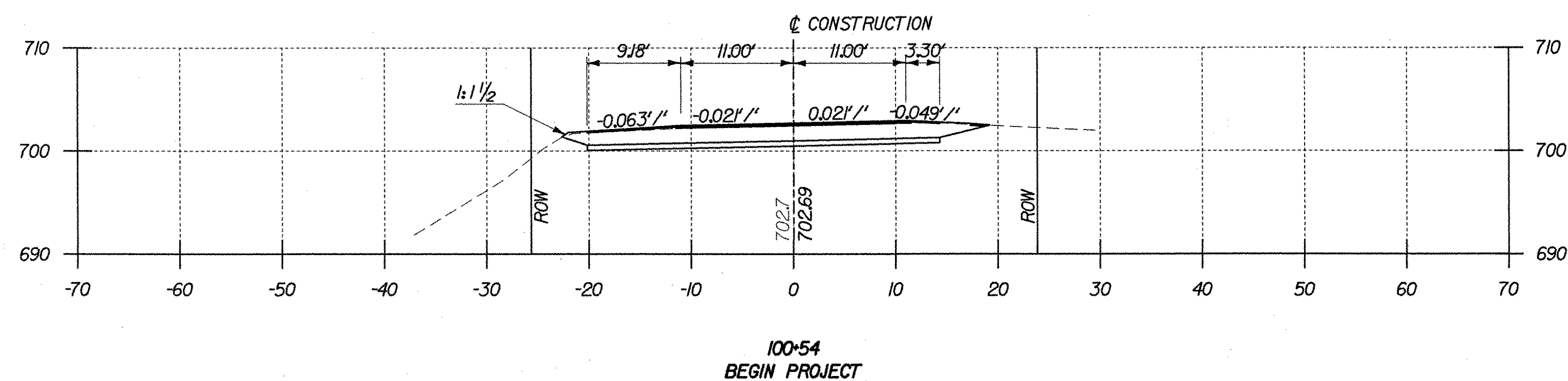
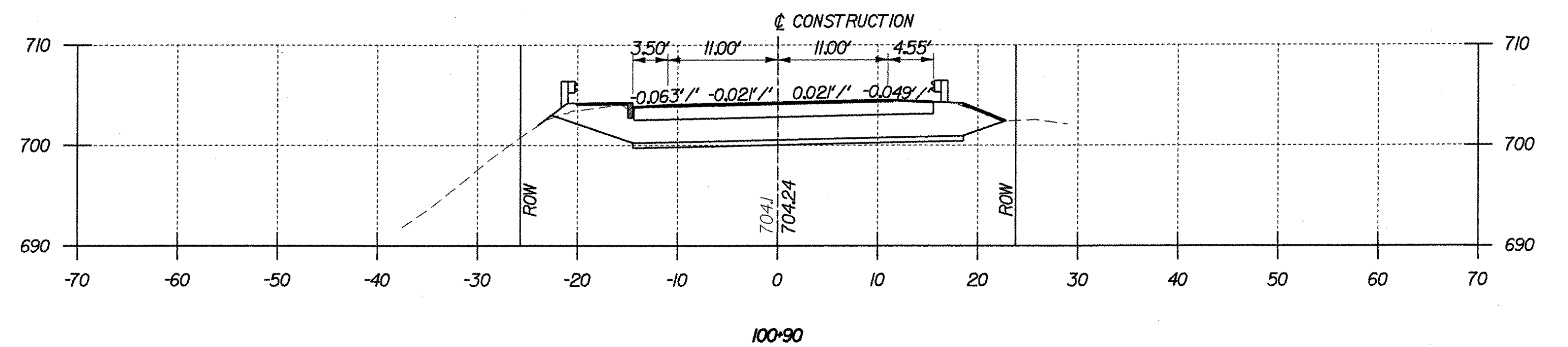
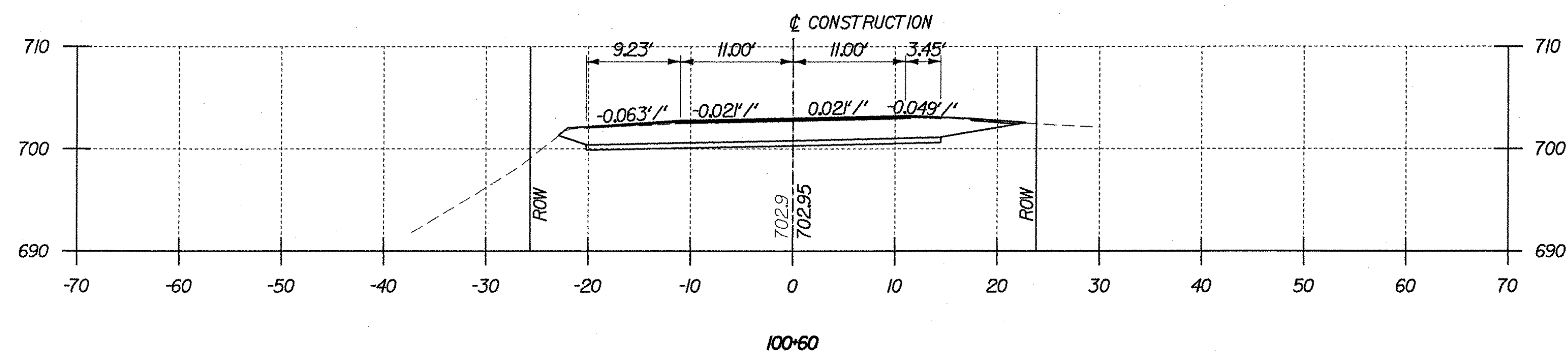
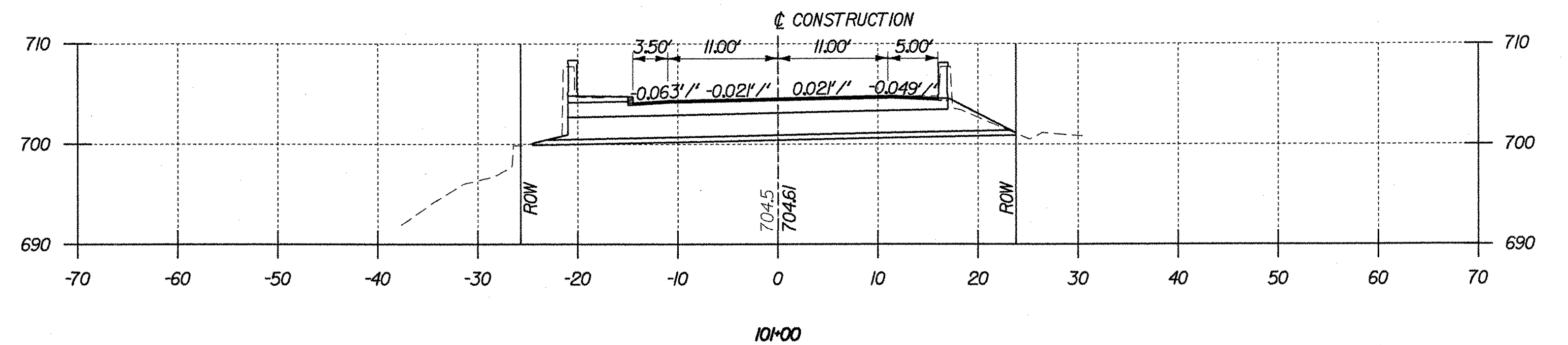
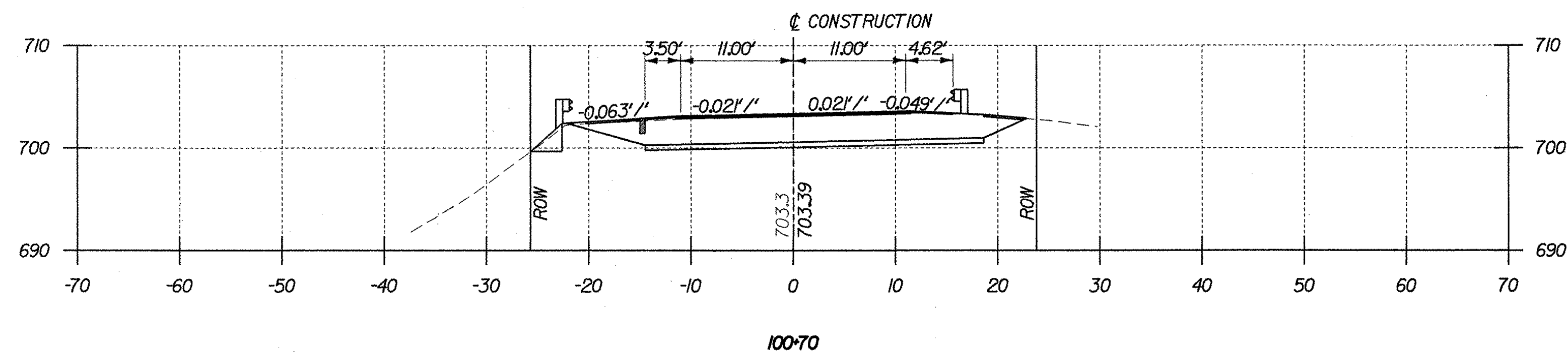
SEE
C.O. #4

ELIMINATED
V #5 BARS AS
PER W. TRIPP

NOT ENOUGH RAIL THICKNESS
TO GET THESE BARS IN

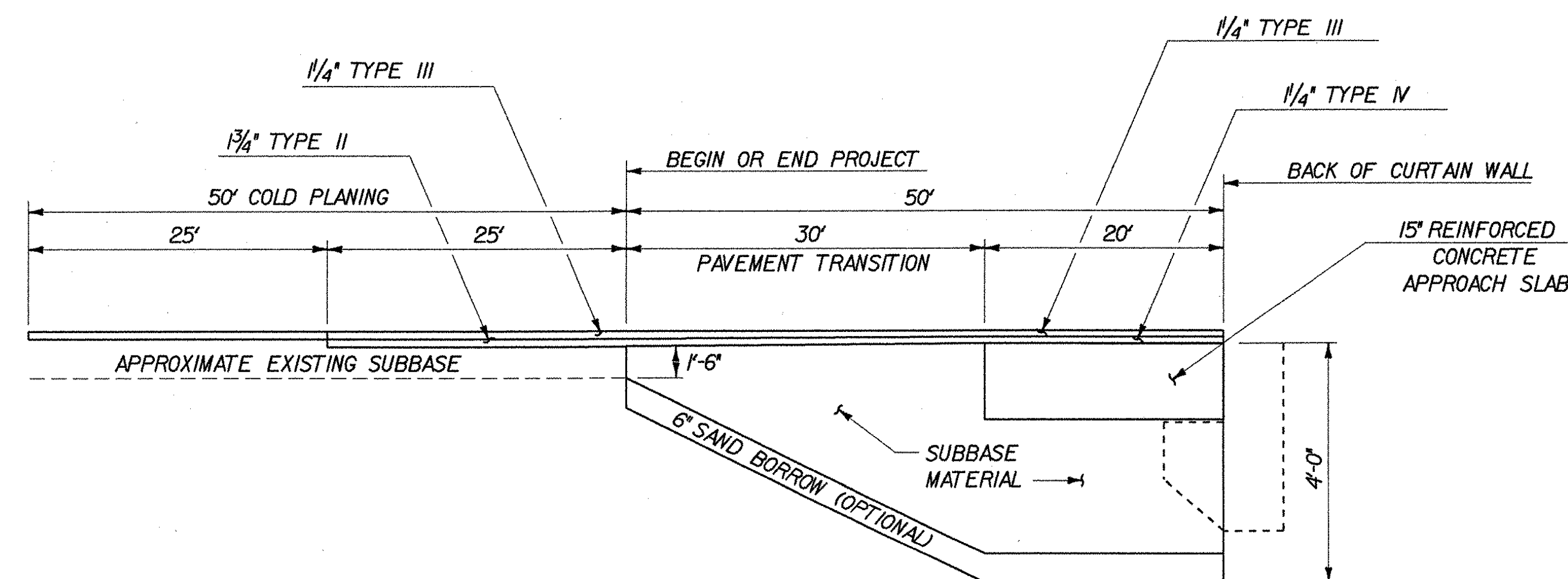
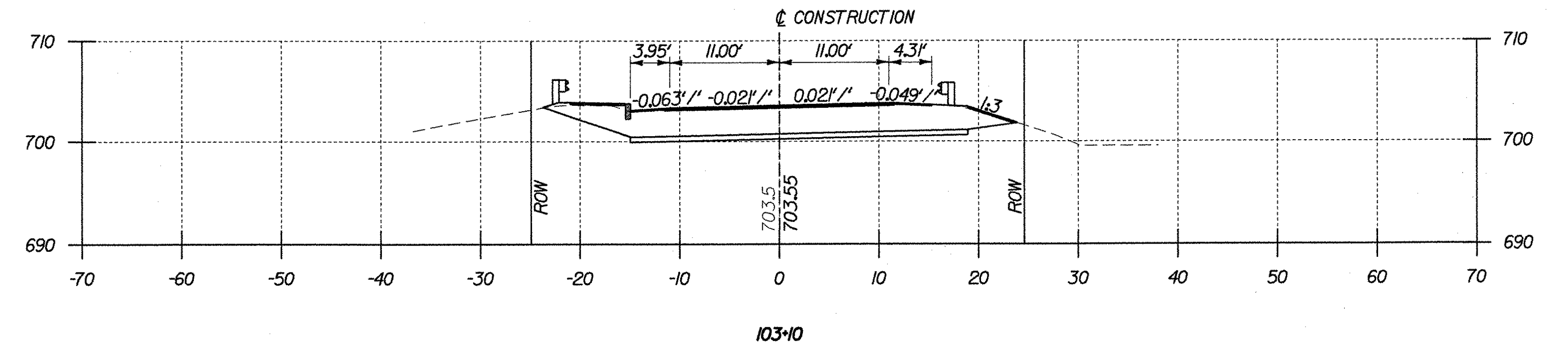
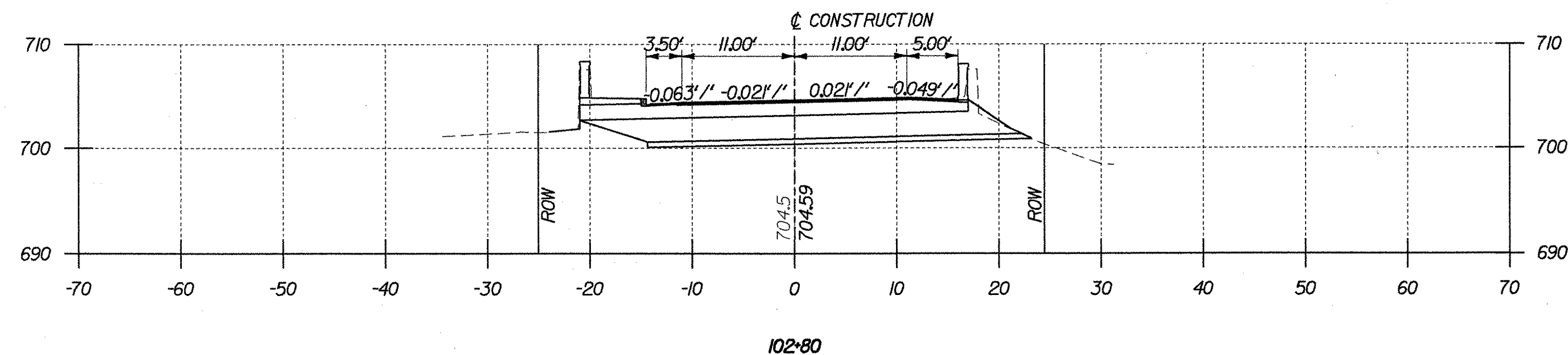
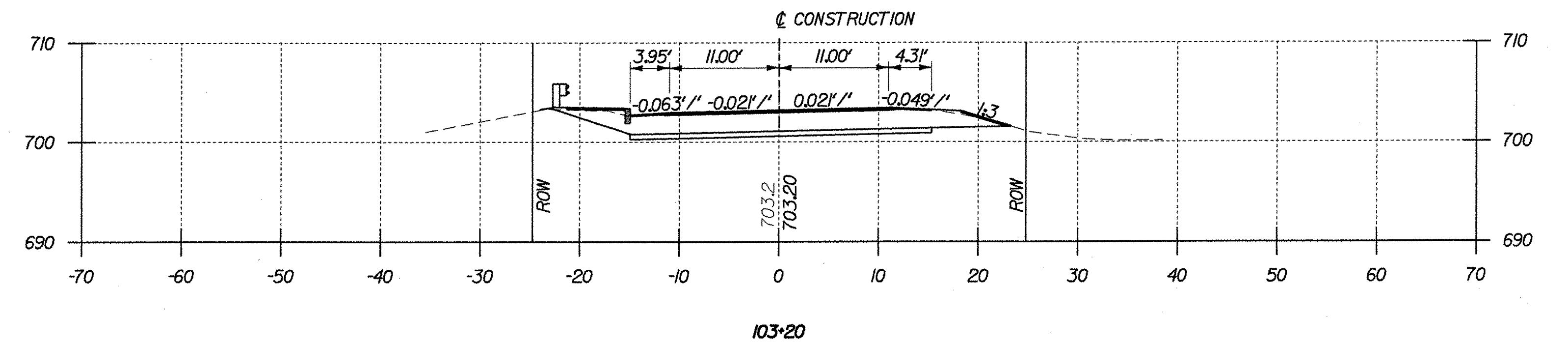
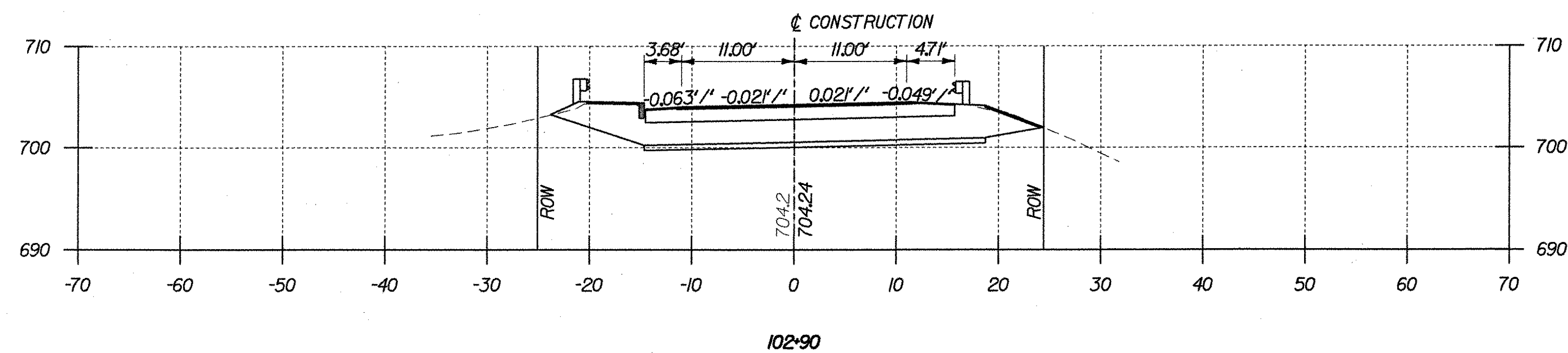
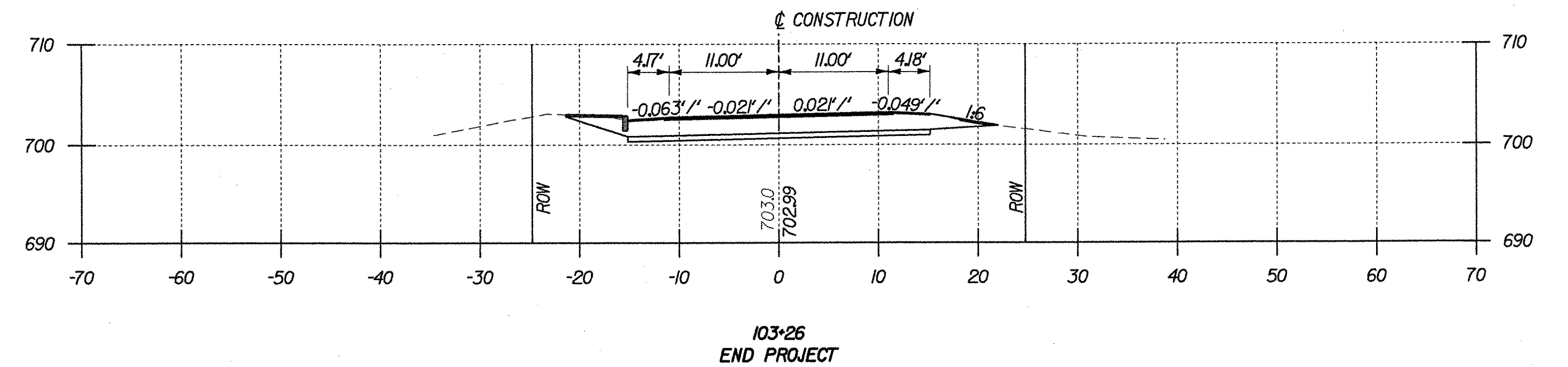
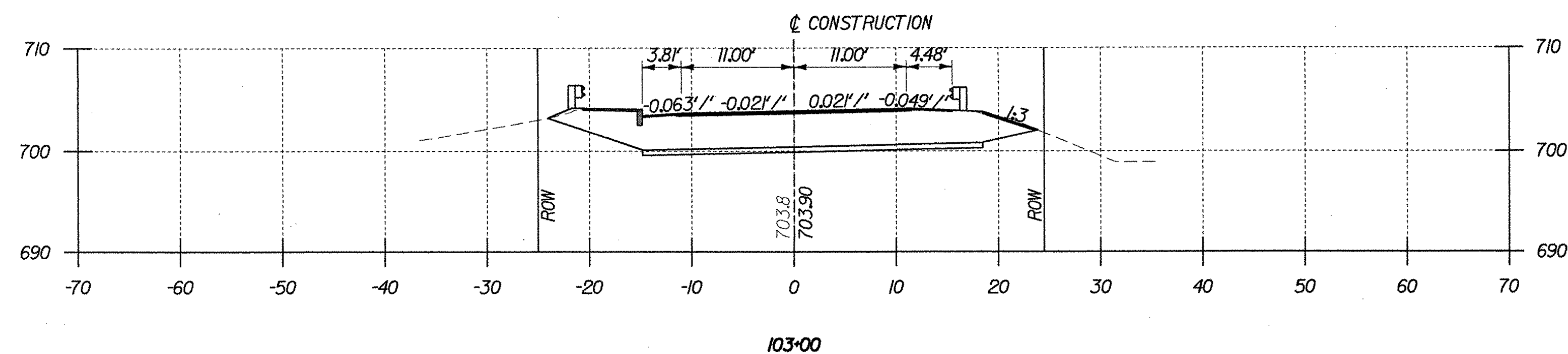
**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
CIP CONCRETE BRIDGE RAILING DETAILS - 2			
Designed By	T. GRANT/S. MERKMAN	Drawn By	S. DELIA/S. MERKMAN
Checked By	T. GRANT/R. WOOD	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
L.C.C. info.	m:\549103\6cont\2\2381x2.dgn		
Bridge Sheet No.	Sheet 32 of 34		



STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
ROADWAY SECTIONS - I			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
	Date 10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\600\h\z\238sec.dgn		
Bridge Sheet No.		Sheet	33 of 34

MJ
MCFARLAND-JOHNSON, INC.



TRANSITION AT PROJECT LIMITS
AND SUBBASE DETAIL AT ABUTMENTS
N.T.S.

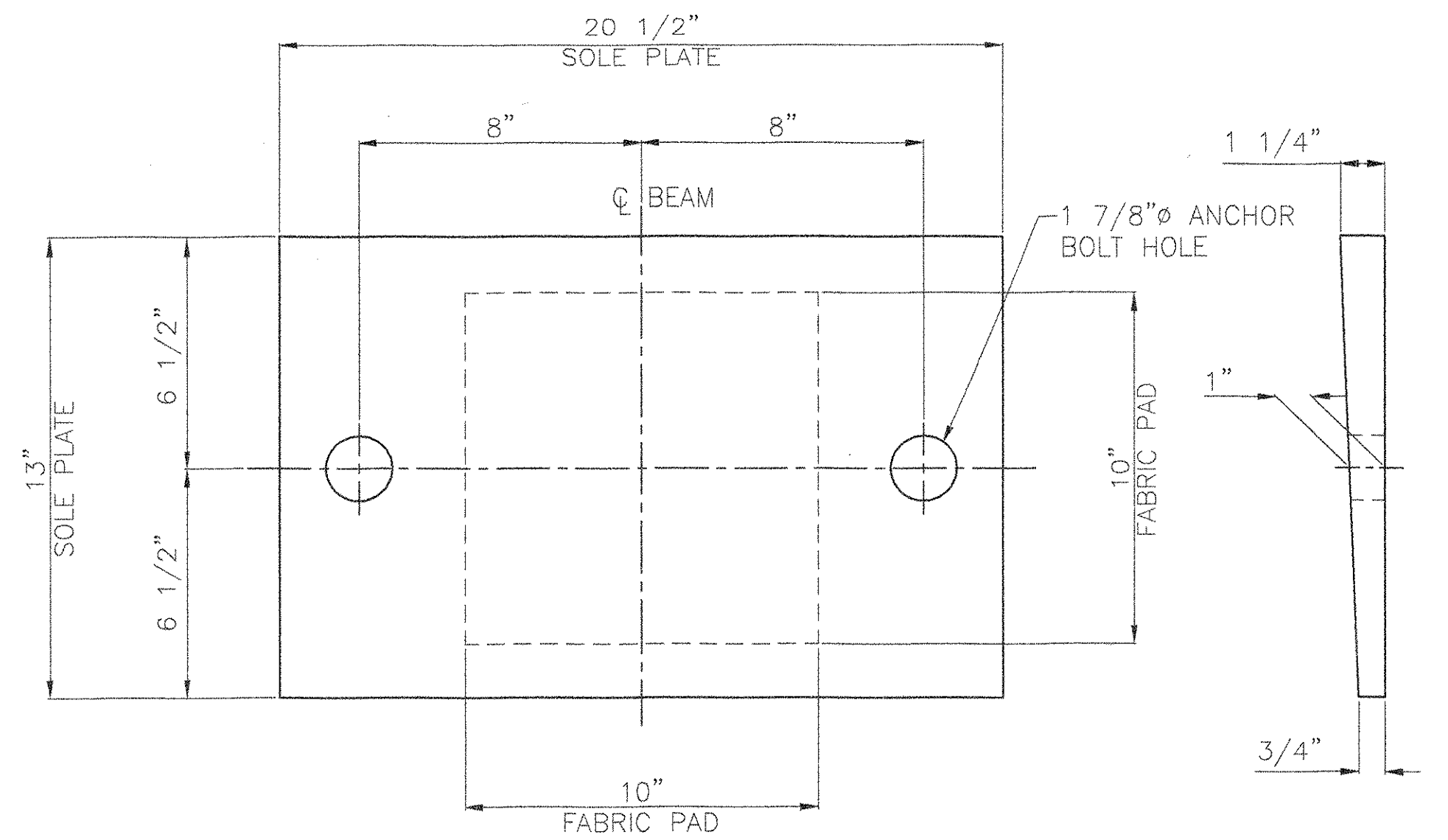
GENERAL NOTE

1. THE CONTRACTOR SHALL ENSURE FREE DRAINAGE OF THE ROADWAY SUBGRADE BEHIND THE ABUTMENTS TO THE SATISFACTION OF THE RESIDENT ENGINEER. THE RESIDENT ENGINEER WILL EXAMINE THE EXCAVATION TO DETERMINE IF THE EXISTING MATERIALS ALLOW ADEQUATE DRAINAGE OR IF A TRENCH FROM THE ABUTMENT TO A SIDESLOPE IS REQUIRED.

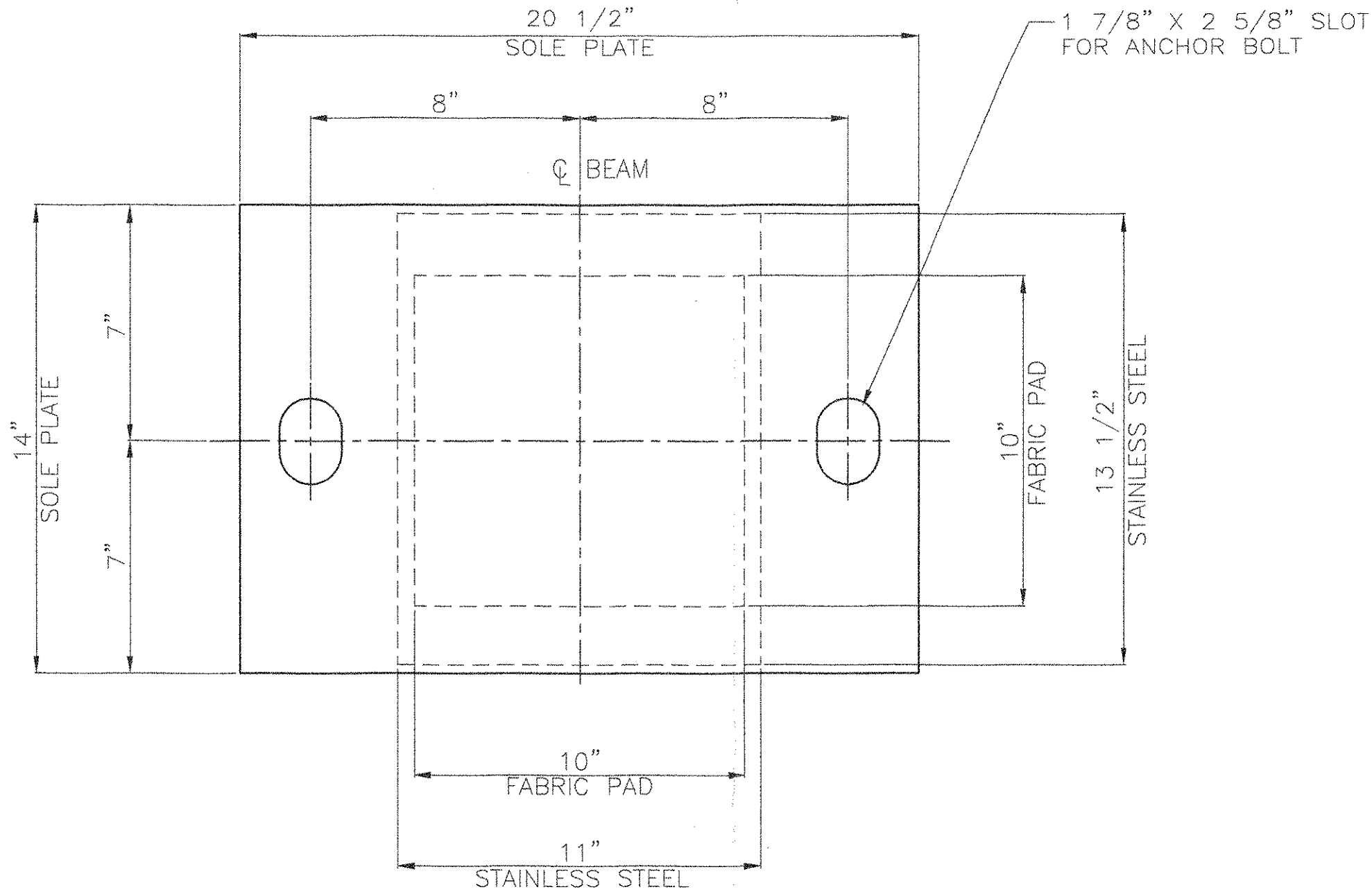
STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of	LYNDON	Bridge No.	2
Highway No.	ALT VT 122	Log Sta.	
		Surv. Sta.	
CENTER STREET OVER PASSUMPSIC RIVER			
ROADWAY SECTIONS - 2			
Designed By	T. GRANT	Drawn By	S. DELIA
Checked By	T. GRANT	Bridge Design Supervisor	M. ZYDEL
Date	10/01	Date	10/01
PROJECT	LYNDON	PROJECT NO.	BHO 1447(26)
I.G.C. Info.	m:\549103\6cont\2\238sec.dgn		
Bridge Sheet No.		Sheet	34 of 34

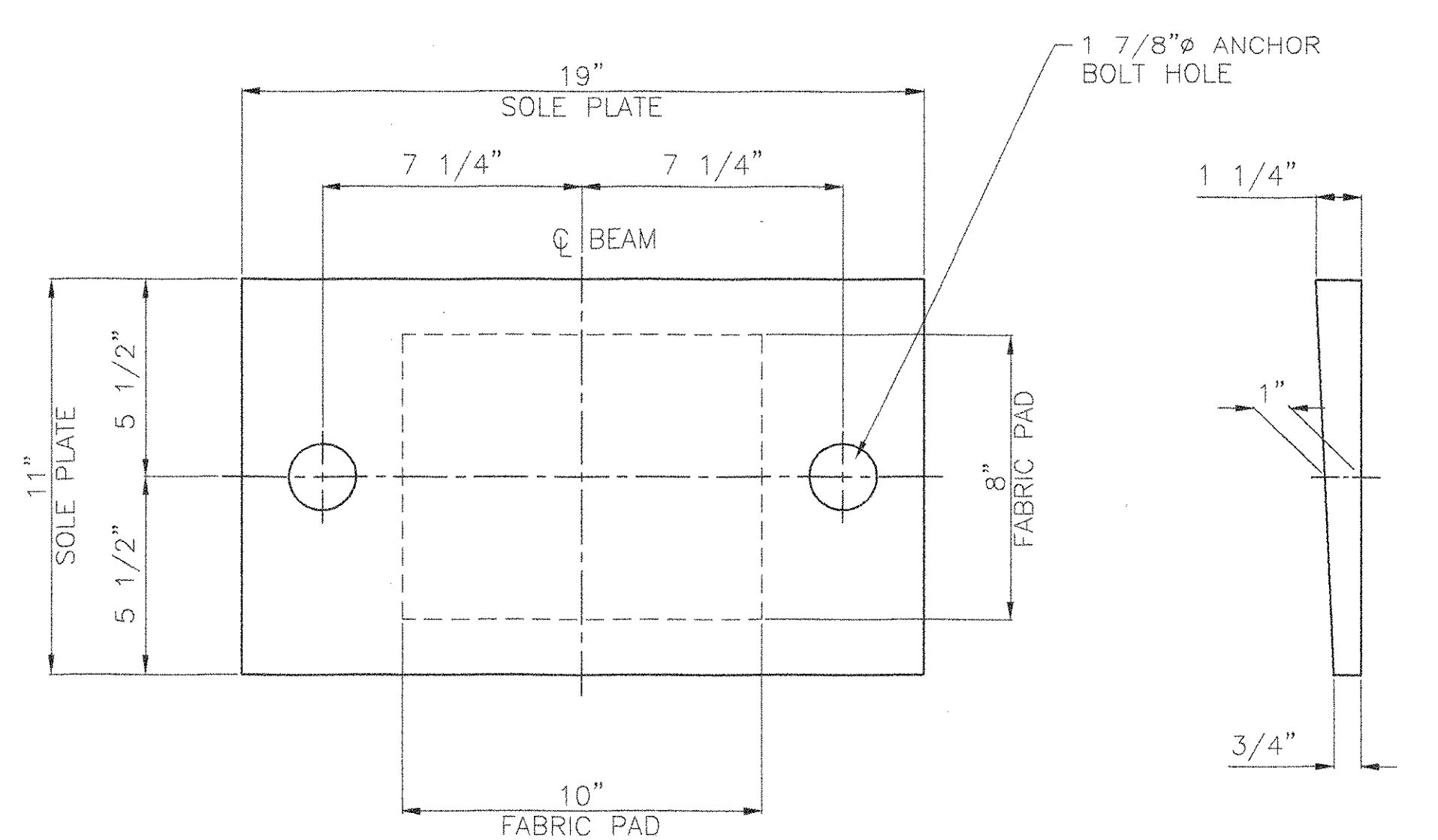
MJ
MCFARLAND-JOHNSON, INC.



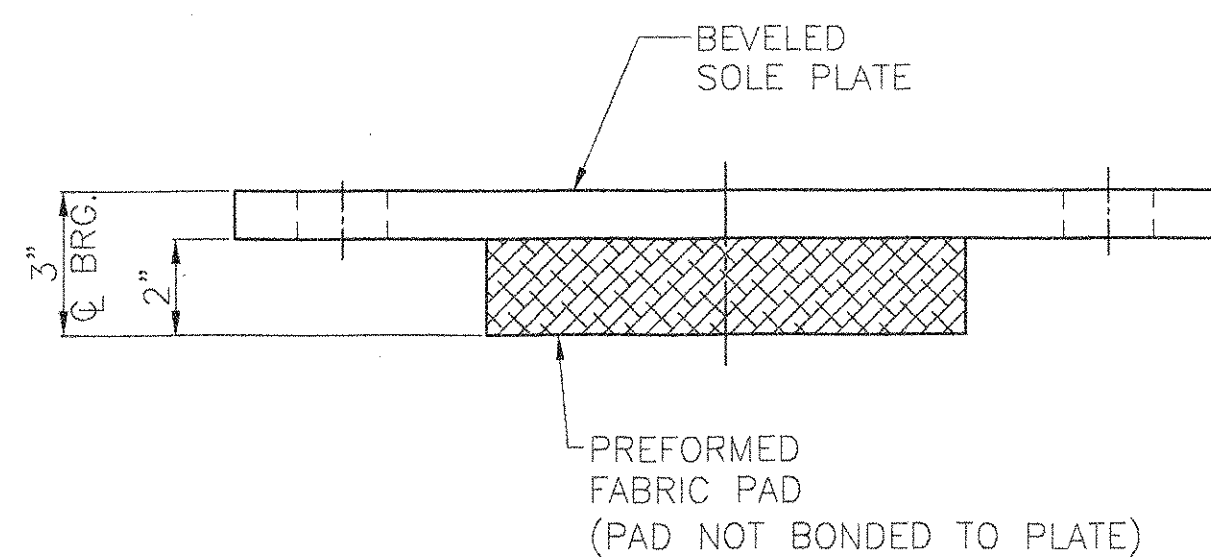
PLAN
FIXED PREFORMED FABRIC PAD BEARINGS
LOCATION: ABUTMENT 1
QUANTITY: 6



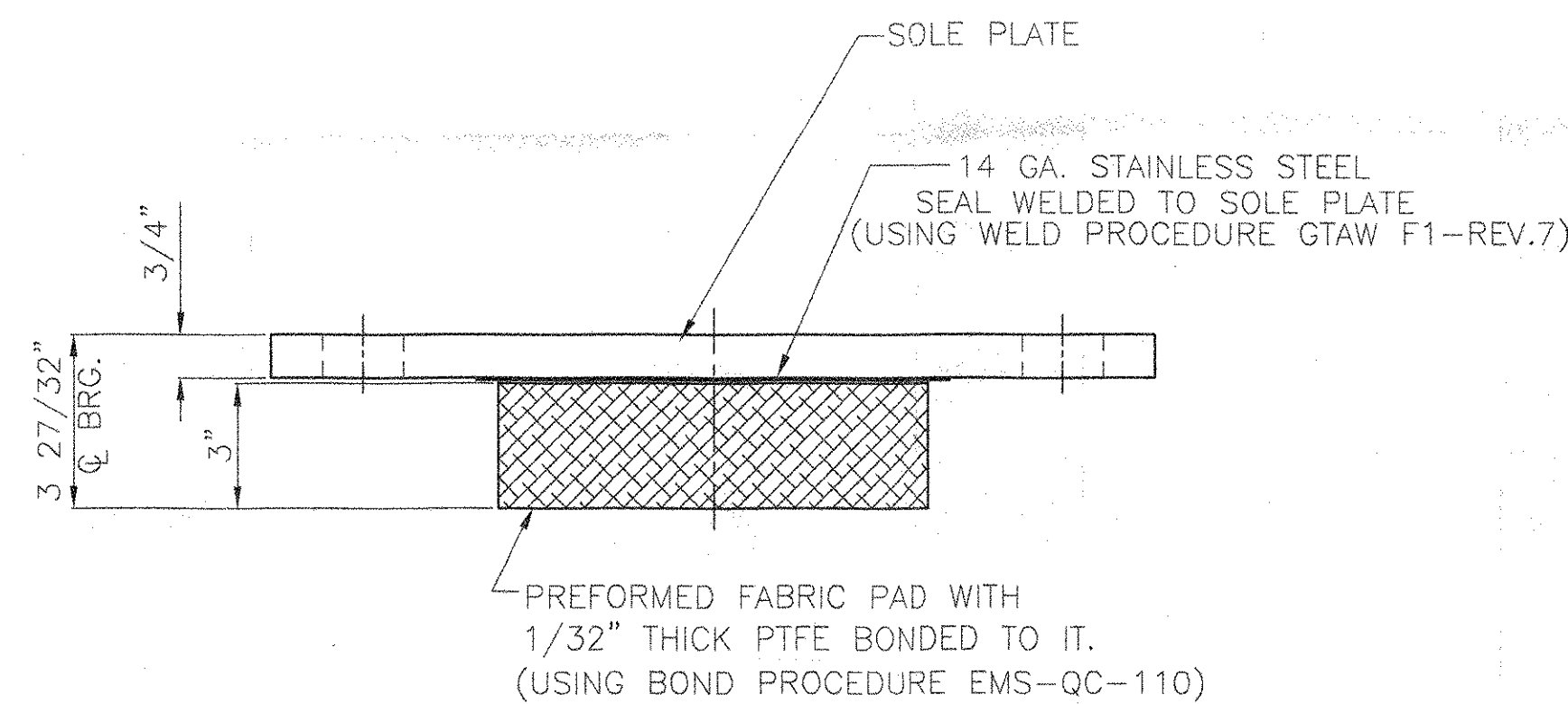
PLAN
EXPANSION PREFORMED FABRIC PAD BEARING
LOCATION: PIER 1
QUANTITY: 6



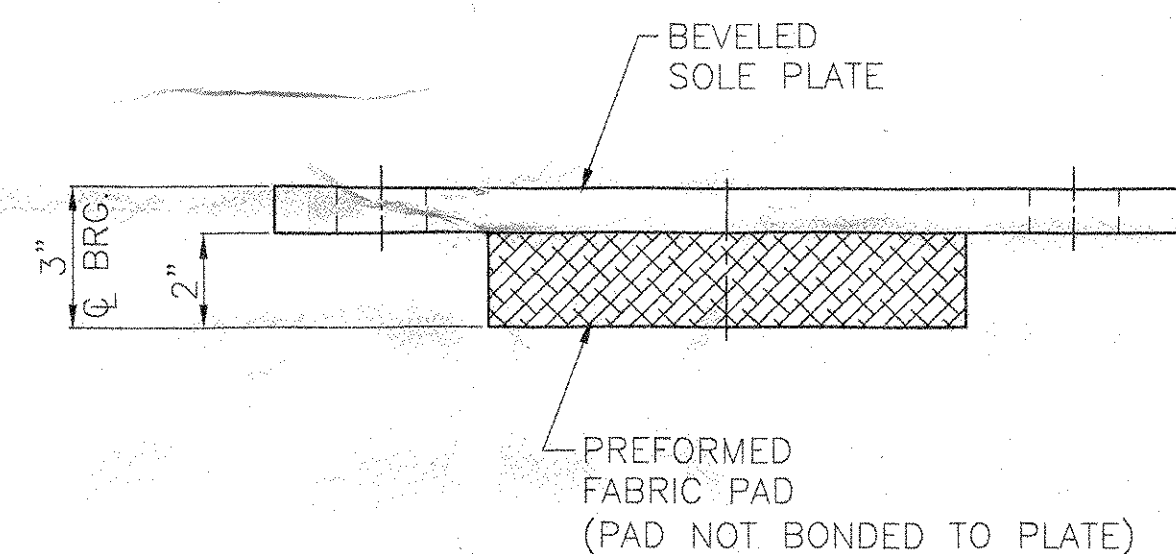
PLAN
FIXED PREFORMED FABRIC PAD BEARING
LOCATION: ABUTMENT 2
QUANTITY: 6



FRONT ELEVATION



FRONT ELEVATION



FRONT ELEVATION

☒ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design and the information given in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and corrected at the shop. Information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all other trades and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 5-11-04
By Steven Z. Delia

STATE OF VERMONT
AGENCY OF TRANSPORTATION
HIGHWAY NUMBER ALT VT 122
TOWN OF LYNDON
CENTER STREET OVER PASSUMPSIC RIVER
PROJECT NUMBER BHO1447 (26)
BRIDGE NUMBER 2

COSMEC, INC. 70 SOUTH STREET
WALPOLE, MA. 02081

SCALE: 1/4" = 1" DRAWN BY: RFC CHECKED BY: MCM
DATE: 4-21-04 DATE: 4-26-04

COSMEC PREFORMED FABRIC PAD BEARINGS

CUSTOMER: AUSTIN CONSTRUCTION S.O. NUMBER: 60024 DRAWING NUMBER: 4155 REV.

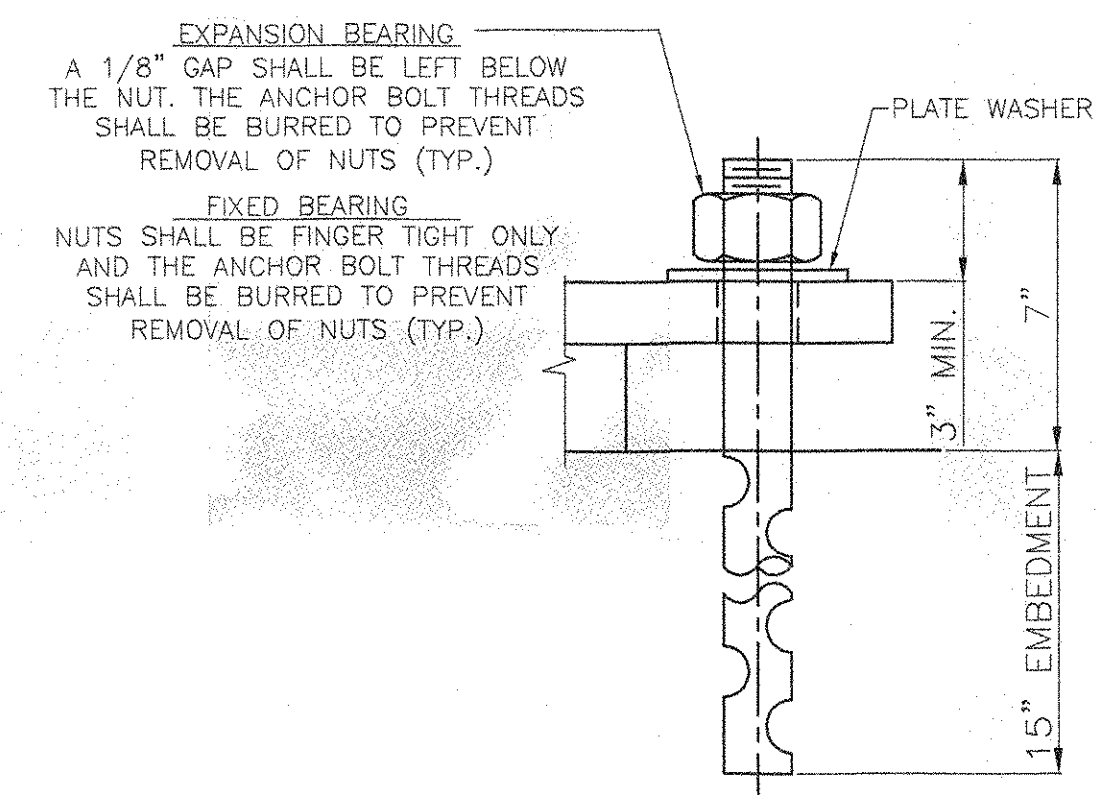
- BEARING NOTES**
- ALL MATERIALS USED IN THE FABRICATION OF THESE BEARINGS SHALL BE MADE IN THE U.S.A.
 - BEARINGS ARE TO BE SHIPPED AS COMPLETE UNITS, STEEL Banded, AND SHALL BE WRAPPED TO PROTECT FROM MOISTURE AND DIRT DURING TRANSIT AND STORAGE.
 - LOCATION OF FABRICATION PLANT - 70 SOUTH STREET WALPOLE, MA. 02081
 - COSMEC, INC. REPRESENTATIVE - MR. MATT McANDREWS (508) 668-6600
 - BEARINGS SHALL BE STORED IN A CLEAN, DRY, LEVEL UPRIGHT POSITION.
 - ⊗ MARKS THE THICK END OF SOLE PLATE
 - ALL EDGES OF STEEL PLATES SHALL HAVE 1/16" MINIMUM RADIUS

MATERIALS
STEEL - ASTM A709 GR. 36 (AASHTO M270) ZINC METALIZED AND SEALED WITH AN APPROVED SEALANT.
STAINLESS STEEL - ASTM A240 TYPE 304, WITH MIRROR FINISH
PREFORMED FABRIC PAD - AASHTO DIV. II SPEC. 18.4.10.1
PTFE - ASTM D1457 (UNFILLED)
ANCHOR BOLTS, NUTS & WASHERS - SEE DETAIL

ALL BEARINGS DEVICES SHALL BE METALIZED AS PER SUBSECTIONS 531.04(b) AND 506.15(C) & (D). BEARINGS SHALL BE SEALED WITH AN APPROVED SEALER AS SPECIFIED IN STANDARD SPEC. SUBSECTION 506.15(b). AREAS OF METALIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE PAINTED WITH AN APPROVED SEALANT IN ACCORDANCE WITH STANDARD SPEC. SUBSECTION 708.02(d).

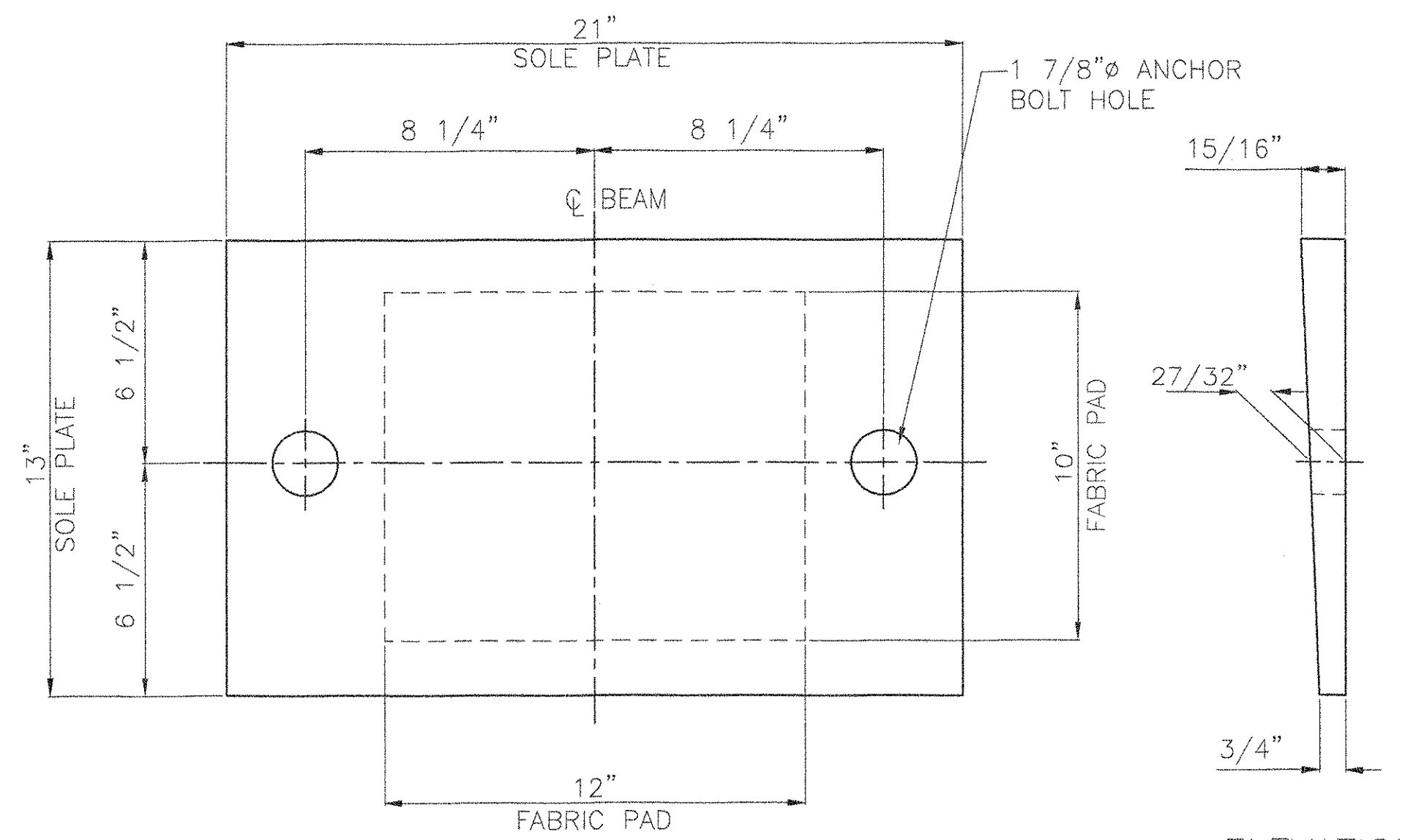
3/8"
3" X 3" WITH A
1 7/8" HOLE ASTM A36 (GALV.)
⊗ PIER 1 ONLY
PLATE WASHER

3/8"
3" X 3" WITH A
1 7/8" HOLE ASTM A36 (GALV.)
⊗ ABUTMENT 1 & 2
BEVELED PLATE WASHER

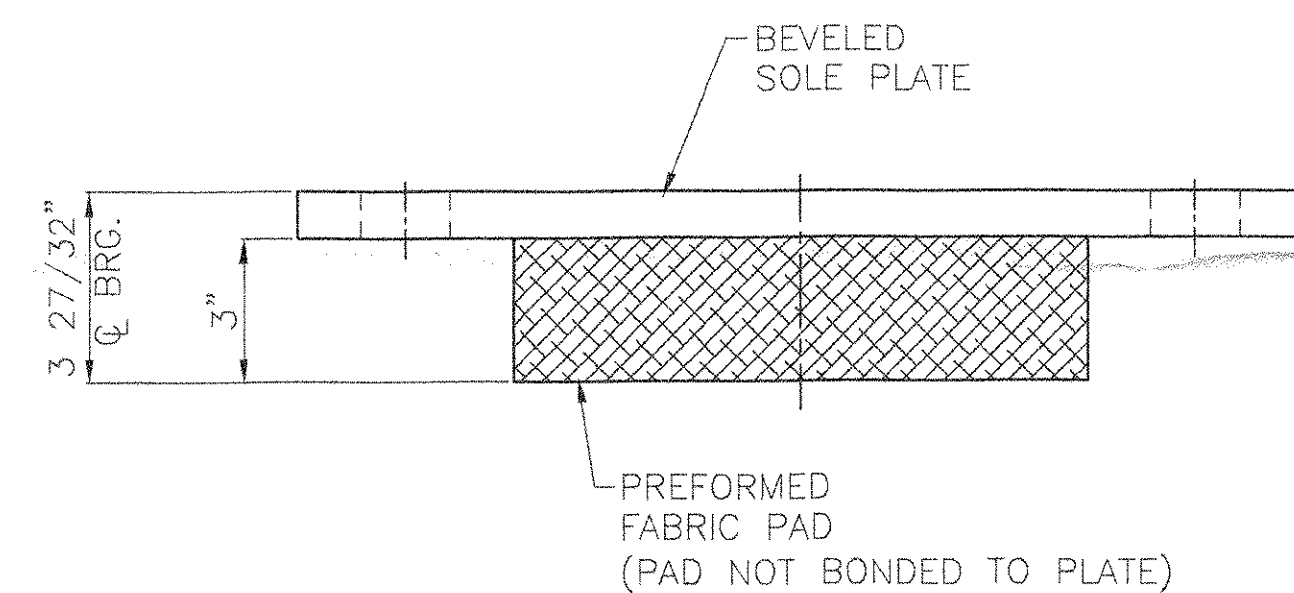


ANCHOR BOLT DETAIL
1 1/2" x 22" ASTM F1554 GRADE 55
SWAGED ANCHOR BOLT WITH 4" OF THREADS
ON ONE END. W/ ONE HEAVY HEX NUT
(ALL GALV.)

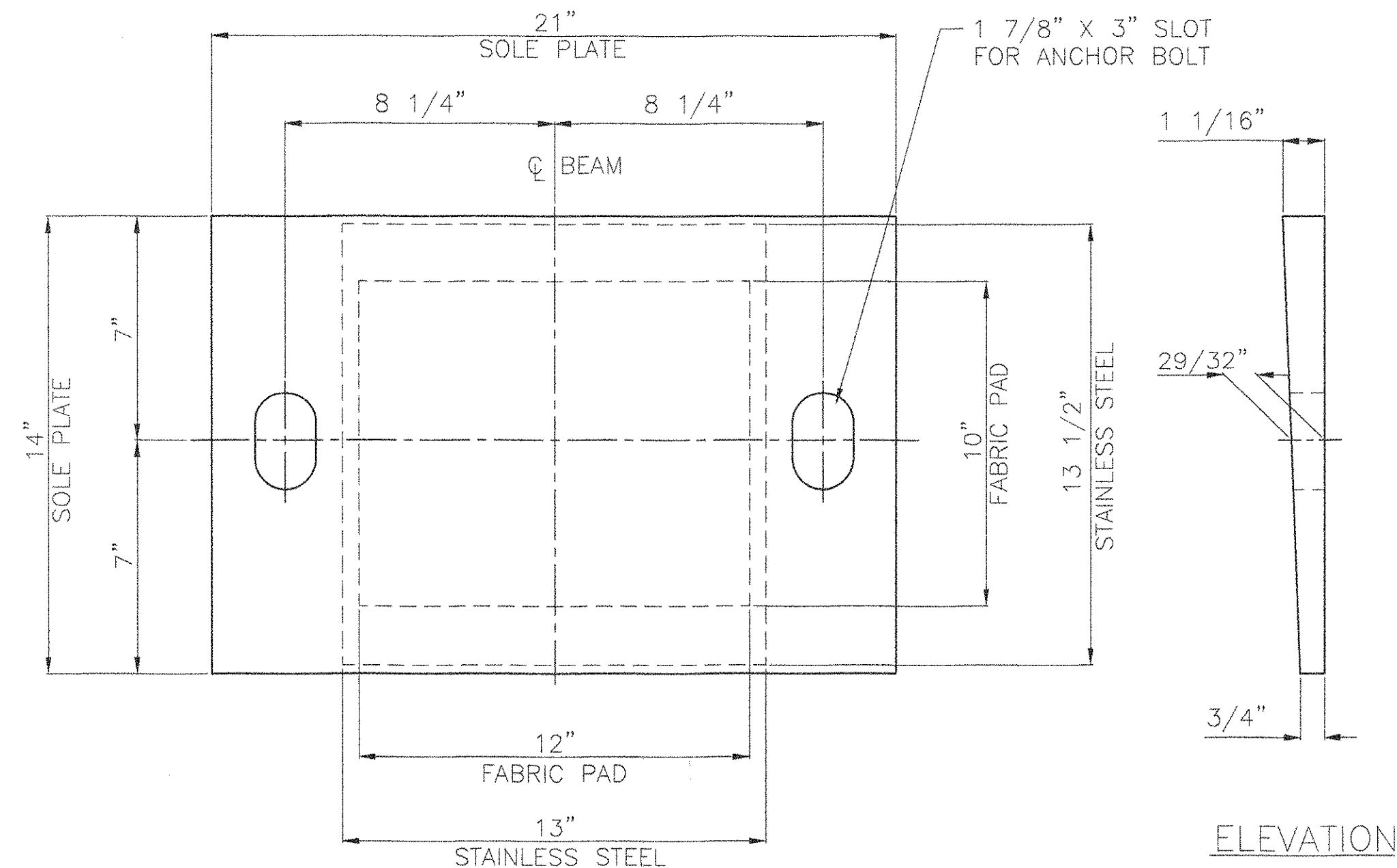
REV. BY: DATE OK'D BY: DATE



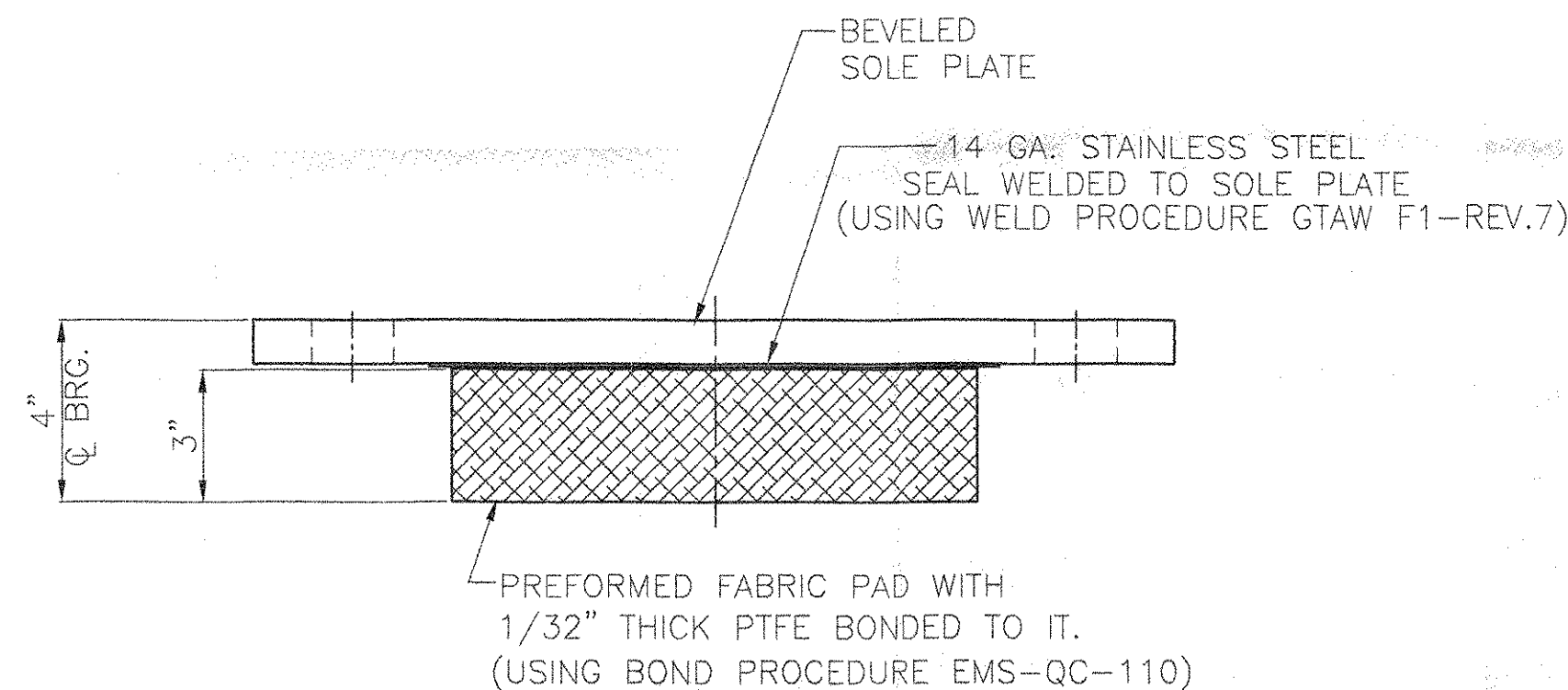
PLAN
FIXED PREFORMED FABRIC PAD BEARINGS
LOCATION: PIER 1
QUANTITY: 6



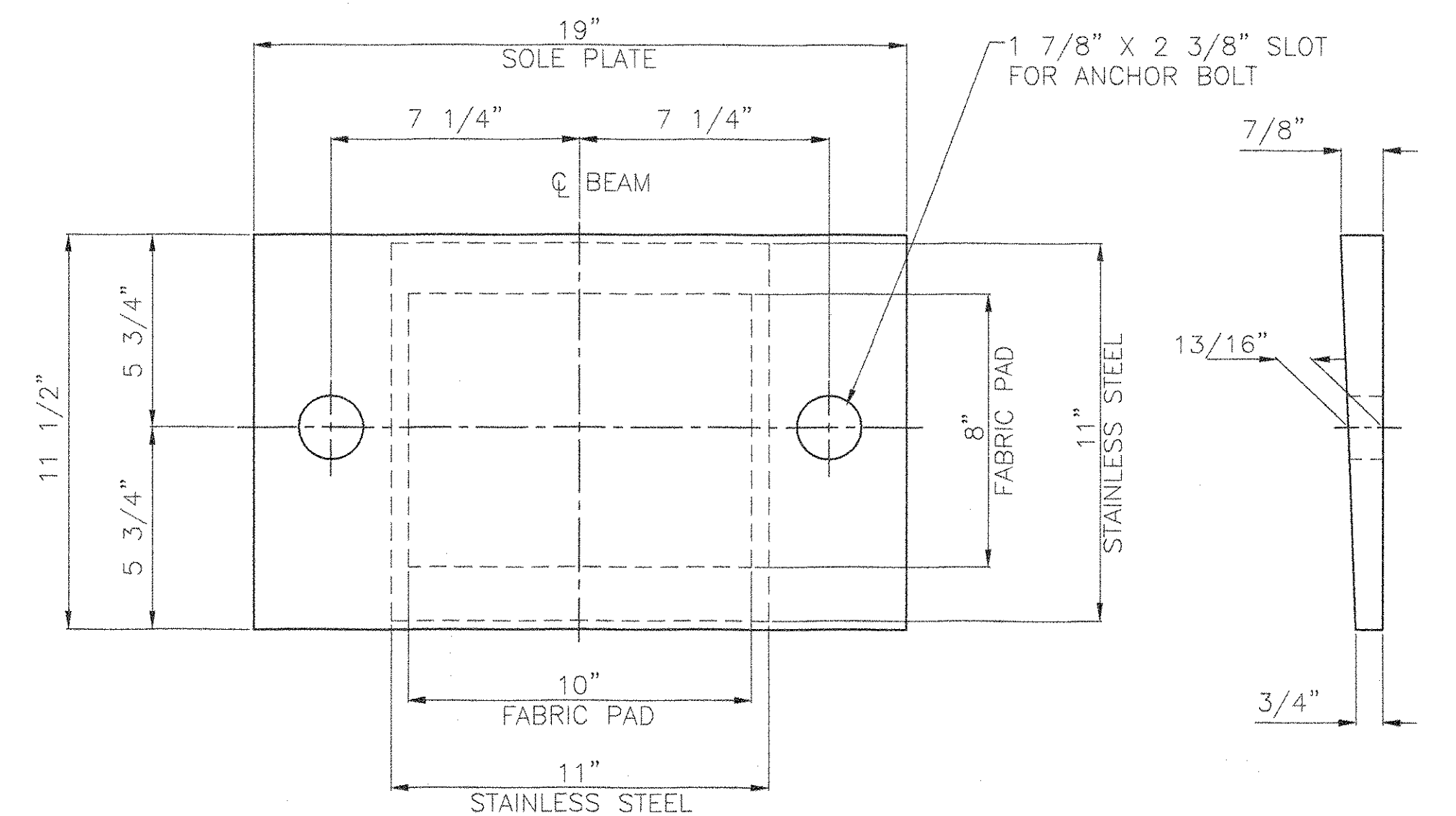
FRONT ELEVATION



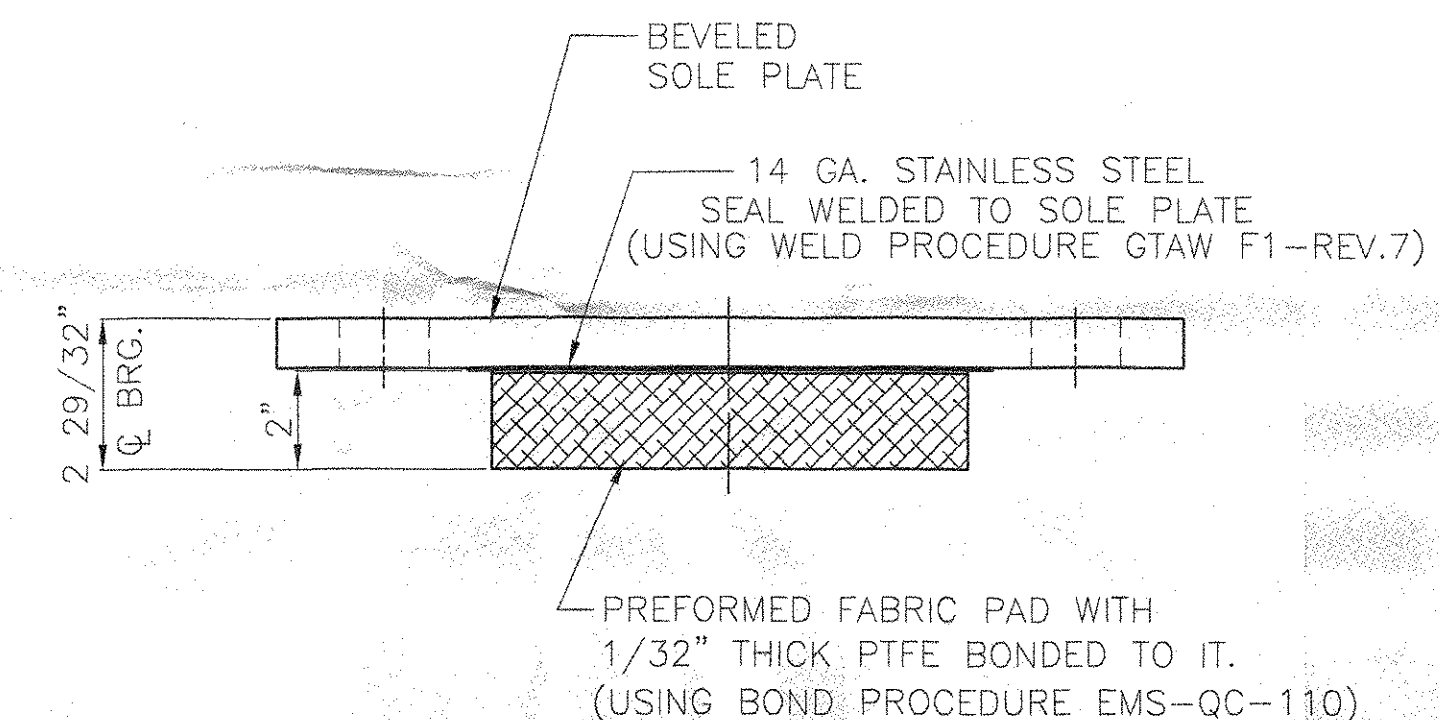
PLAN
EXPANSION PREFORMED FABRIC PAD BEARINGS
LOCATION: BEARING # 1 PIER 2
QUANTITY: 6



FRONT ELEVATION



PLAN
EXPANSION PREFORMED FABRIC PAD BEARINGS
LOCATION: BEARING # 2 PIER 2
QUANTITY: 6



FRONT ELEVATION

☒ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during the review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and corrected in the field. Information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all other trades and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date: 5-11-04
By: Steven F. Delia

STATE OF VERMONT
AGENCY OF TRANSPORTATION
HIGHWAY NUMBER ALT VT 122
TOWN OF LYNDON
CENTER STREET OVER PASSUMPSIC RIVER
PROJECT NUMBER BH01447 (26)
BRIDGE NUMBER 2

COSMEC, INC. 70 SOUTH STREET
WALPOLE, MA. 02081

SCALE: 1/4" = 1" DRAWN BY: RFC CHECKED BY: MCM
DATE: 4-21-04 DATE: 4/26/04

COSMEC PREFORMED FABRIC PAD BEARINGS

CUSTOMER: AUSTIN CONSTRUCTION S.O. NUMBER: 60024 DRAWING NUMBER: 4156 REV.

- BEARING NOTES**
- ALL MATERIALS USED IN THE FABRICATION OF THESE BEARINGS SHALL BE MADE IN THE U.S.A.
 - BEARINGS ARE TO BE SHIPPED AS COMPLETE UNITS, STEEL Banded, AND SHALL BE WRAPPED TO PROTECT FROM MOISTURE AND DIRT DURING TRANSIT AND STORAGE.
 - LOCATION OF FABRICATION PLANT - 70 SOUTH STREET, WALPOLE, MA. 02081
 - COSMEC, INC. REPRESENTATIVE - MR. MATT McANDREWS (508) 668-6600
 - BEARINGS SHALL BE STORED IN A CLEAN, DRY, LEVEL UPRIGHT POSITION.
 - ⊗ MARKS THE THICK END OF SOLE PLATE
 - ALL EDGES OF STEEL PLATES SHALL HAVE 1/16" MINIMUM RADIUS

MATERIALS
STEEL - ASTM A709 GR. 36 (AASHTO M270) ZINC METALIZED AND SEALED WITH AN APPROVED SEALANT.
STAINLESS STEEL - ASTM A240 TYPE 304, WITH A MIRROR FINISH
PREFORMED FABRIC PAD - AASHTO DIV. II SPEC. 18.4.10.1
PTFE - ASTM D1457 (UNFILLED)
ANCHOR BOLTS, NUTS & WASHERS - SEE DETAIL

ALL BEARINGS DEVICES SHALL BE METALIZED AS PER SUBSECTIONS 531.04(b) AND 506.15(c) & (d). BEARINGS SHALL BE SEALED WITH AN APPROVED SEALER AS SPECIFIED IN STANDARD SPEC. SUBSECTION 506.15(b). AREAS OF METALIZING DAMAGED BY FIELD WELDING OR HANDLING SHALL BE PAINTED WITH AN APPROVED SEALANT IN ACCORDANCE WITH STANDARD SPEC. SUBSECTION 708.02(d).

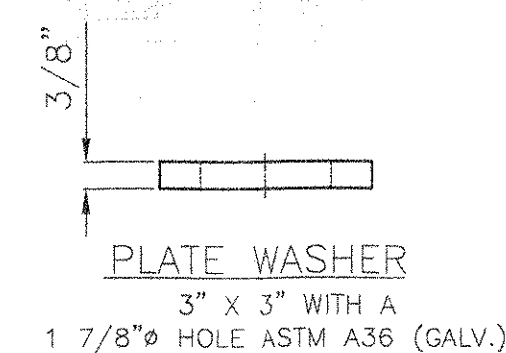
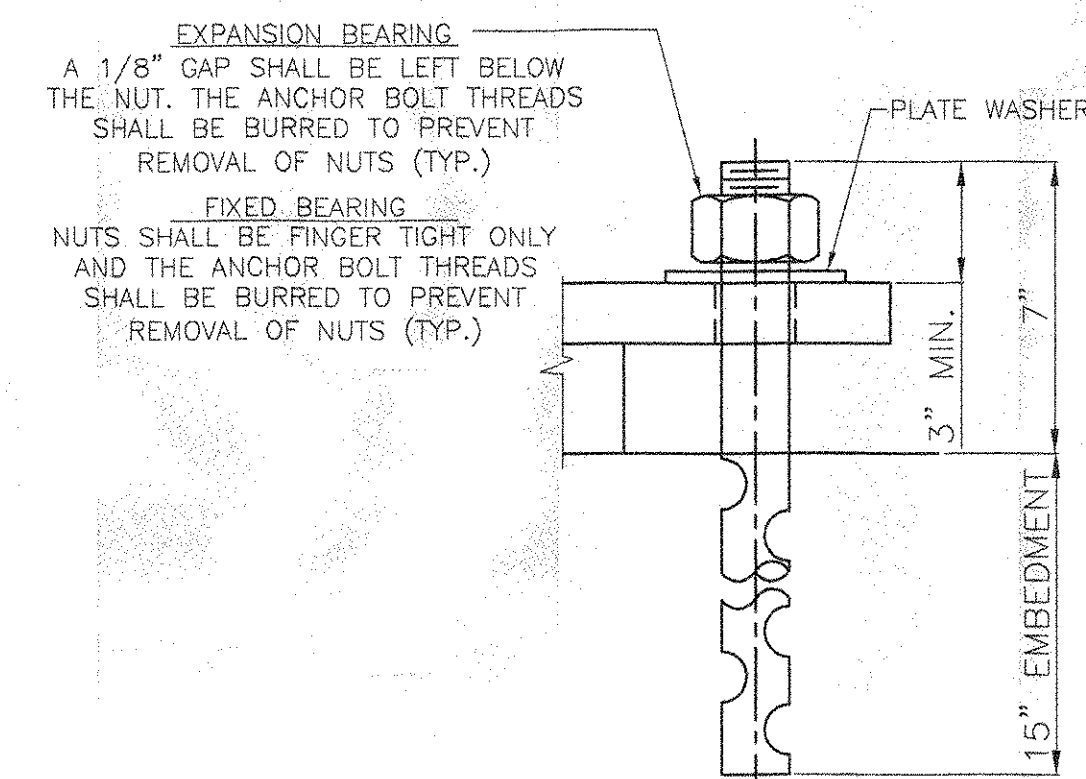


PLATE WASHER
3" X 3" WITH A
1 7/8" HOLE ASTM A36 (GALV.)



ANCHOR BOLT DETAIL
1 1/2" X 22" ASTM F1554 GRADE 55
WEDGED ANCHOR BOLT WITH 4" OF THREADS
ON ONE END. W/ ONE HEAVY HEX NUT
(ALL GALV.)

REV. BY: DATE CK'D BY: DATE

CONSTRUCTION SPECIFICATIONS

- 1). ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001 WITH LATEST REVISIONS AND THE SPECIAL PROVISIONS.
- 2). AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17th EDITION DATED 2002, WITH LATEST REVISIONS.

- 1). UNLESS NOTED, ALL STEEL TO BE AASHTO M270 GRADE 50W (ASTM A709-50W).
- 2). MATERIAL NOTED "CVN" OR "H2-3" ON DETAIL DRAWINGS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS.
- 3). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325).
TYPE 3 BOLTS SHALL BE USED FOR UNPAINTED CONNECTIONS.
TYPE 1 (GALV.) BOLTS SHALL BE USED FOR PAINTED CONNECTIONS.

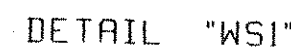
- 1). ALL HOLES SHALL BE PUNCHED OR DRILLED FULL SIZE (UN).
- 2). STUDS ARE FURNISHED AND FIELD APPLIED BY OTHERS.

- 1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AWS/D1.5-02 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.
- 2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.
- 3). NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.

- 1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a)
- 2). 2mm RADIUS ON ALL EDGES OF PAINTED SURFACES.

1). ALL STEEL COMPONENTS WITHIN 6'-0 OF THE BEARINGS @ PIER 1 & 2 SHALL BE COATED WITH THE PROTECTIVE SYSTEM ACCORDING TO SECTION 513 OF THE SPECIFICATION. (SEE SKETCHES "PI") THE PAINT COLOR SHALL BE BROWN. PAINT SYSTEM MUST BE SYSTEM LISTED ON THE QUALIFIED PRODUCT LIST SECTION 513.02 BROWN COLOR CHIP #20059. PROTECTIVE GREASE SHALL BE APPLIED IN THE FIELD BY OTHERS.

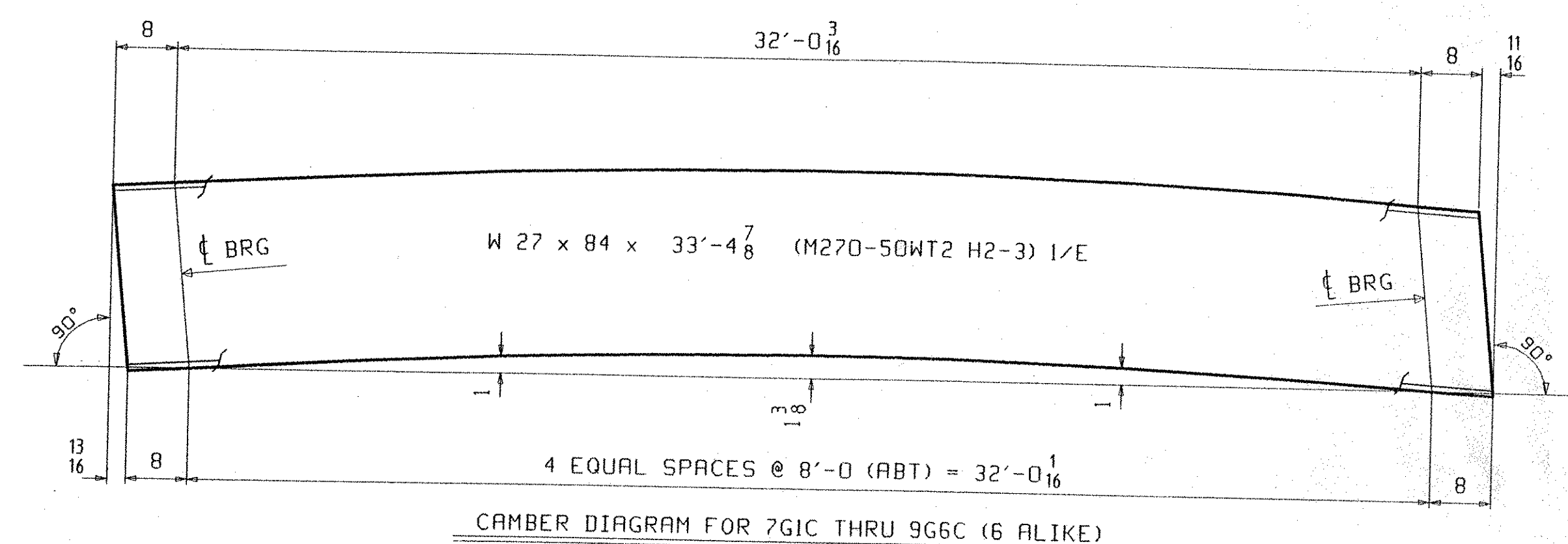
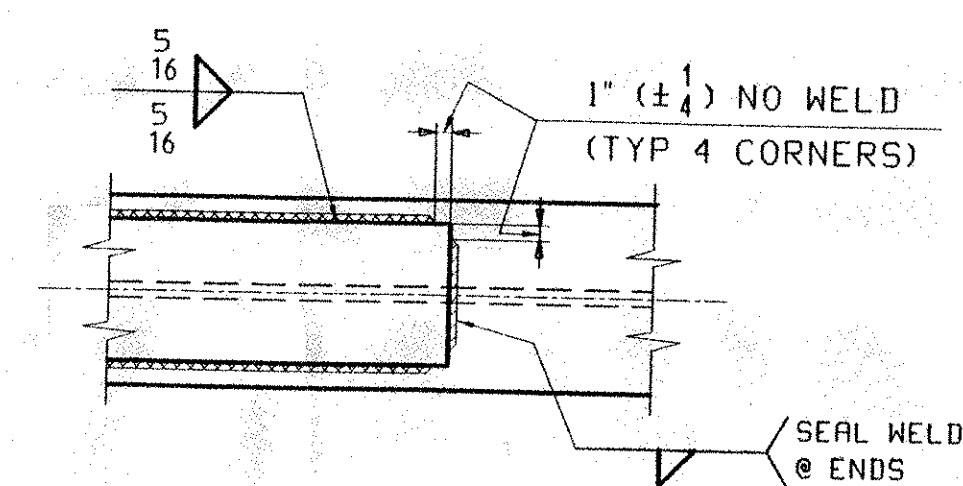
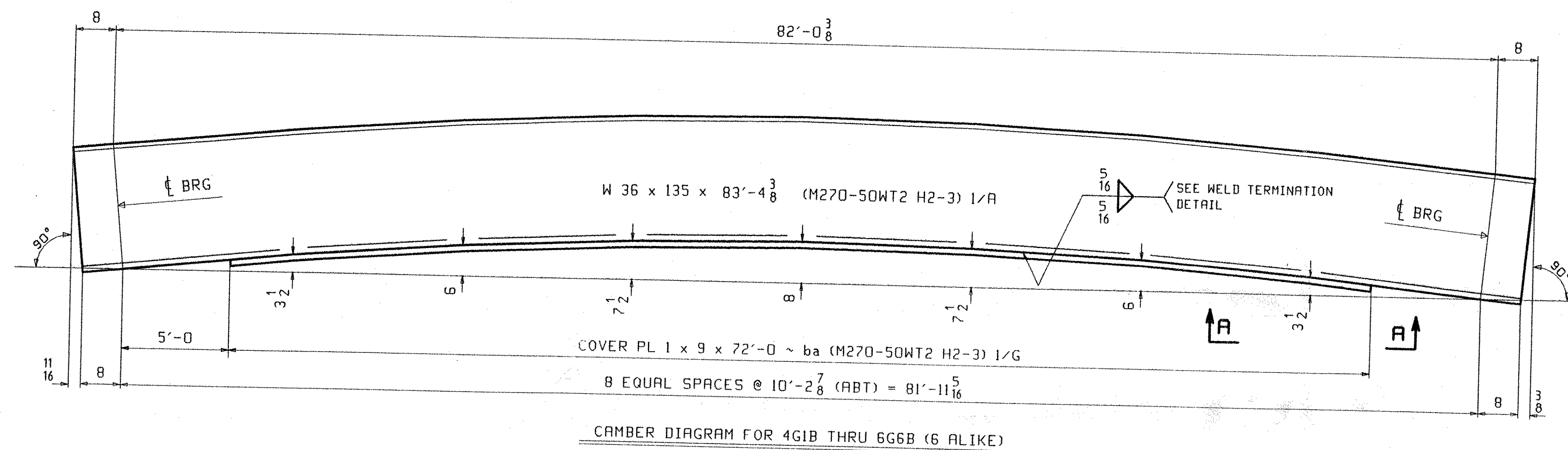
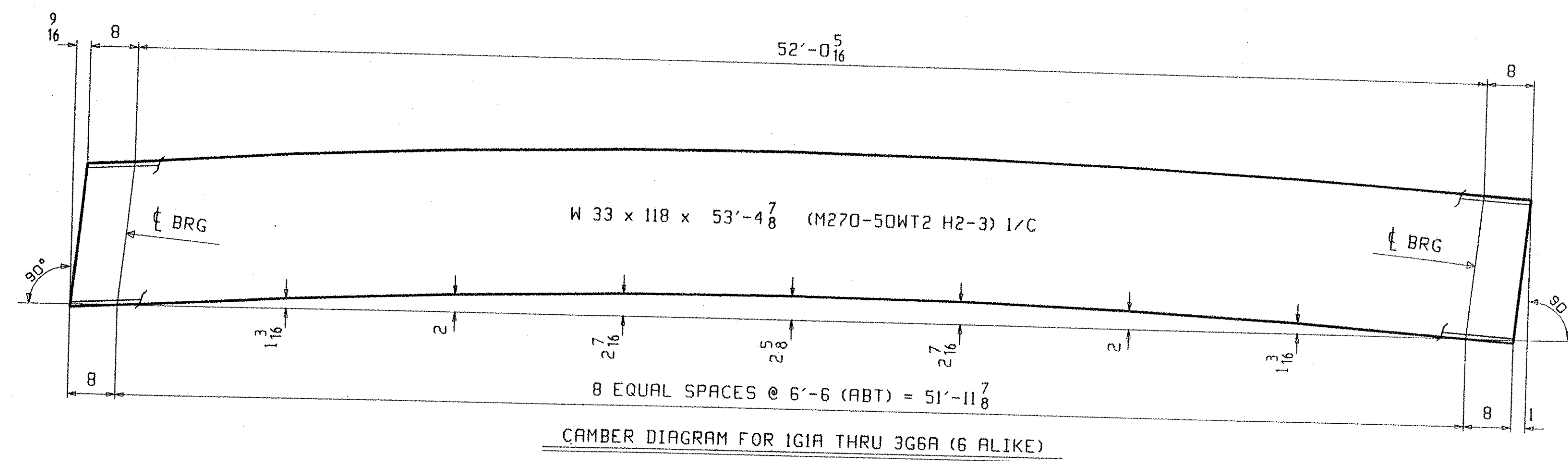
- 1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 22mm (7/8") DIAMETER HIGH STRENGTH A-325 BOLTS, INSTALLED PER SECTION 506.19(c).
- 2). BOLTS SHALL HAVE HEAVY HEX NUT, HEX HEAD, & ONE FLAT WASHER EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT).
- 3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.



APPROX 4-8-04



TENSOR
2425



OUT FOR APPROVAL		3-18-04																					
OUT FOR APPROVAL																							
ISSUED TO SHOP		6-7-04																					
FIELD & OFFICE																							
REV.		REMARKS		DATE	DWN	CHK	APP	O.A.	NO.	DIA.	LGT	TYPE	WASHER										
MATERIAL:				ELECTRODES:				HOLES:				SHOP BOLTS:											
M270-50W								AS NOTED				AS NOTED											
SURFACE PREP. & PAINT:																							
ALL STEEL WITHIN 6'-0 OF PIERS 1 & 2 SHALL BE PAINTED IN ACCORDANCE WITH THE NOTES ON GNI.																							
DESCRIPTION:										CAMBER DIAGRAM										DRAWN BY		DATE	
JOB: CENTER ST (ALT VT 122) OVER THE PASSUMPSIC RIVER																				WL		02/19	
BRIDGE NO. 2, PROJ BHO 1447(26)																				CHKD BY			
LYNDON, VT (CALEDONIA COUNTY)																				JTB		02/19	
CONTRACTOR: AUSTIN CONSTRUCTION																				APPROV BY			
																				SUPERVISOR		M. J. GATTI	
PROJ NO. BHO 1447 (26)																				O.A.			
CUSTOMER: VERMONT A. O. T.																							
CASCO BAY STEEL STRUCTURES, INC.																				JOB NO.		DRG. NO.	
75 SPRING HILL ROAD										SACO, MAINE 04072										227		C1	
PHONE (207) 282-7360										FAX. (207) 282-1179												REV. /	



BRG DIAPH CONN PL

SPAN 1SPAN 2SPAN 3

INT DIRPH CONN PL

SPAN 1 (HIGH)SPAN 1 (LOW)SPAN 2 (HIGH)SPAN 2 (LOW)

INT DIAPH CONN PL

SPAN 3 (HIGH)SPAN 3 (LOW)

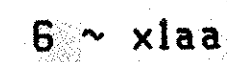
SECTION B

SPAN 1 LINE 1SPAN 2 LINE 1 (PIER 1 END)

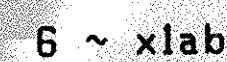
SPAN 3 LINE



SECTION D

SPAN 1 LINE 8SPAN 2 LINE 1 (PIER 2 END)5550-2-6-INT

END PLATE ABUT I



END PLATE ABUT 2

NOTES:

1. ALL MATERIAL TO BE A709-50W.
2. FOR GENERAL NOTES SEE DRAWING GNI.
3. ALL BOLT HOLES SHALL BE $\frac{15}{16}$ Ø FOR $\frac{7}{8}$ Ø HSB.

[illegible]

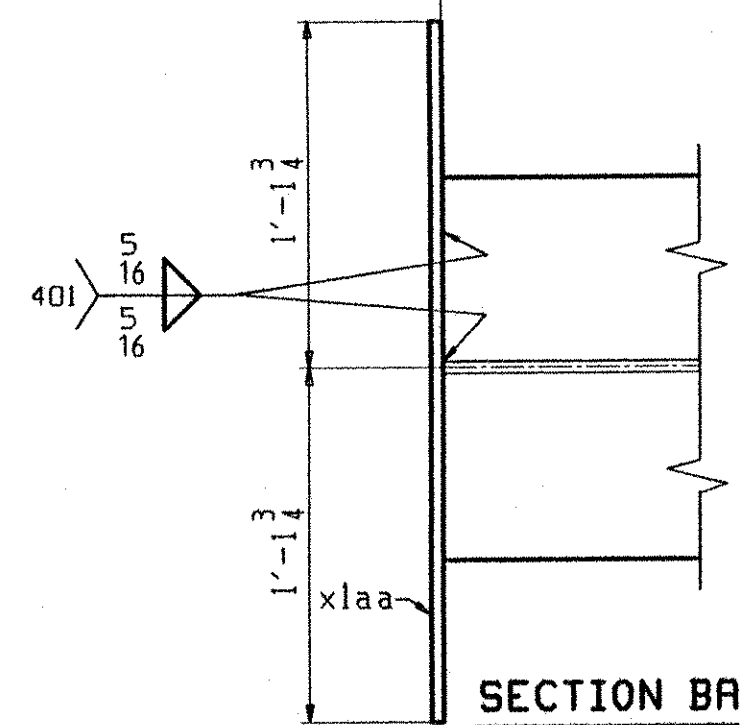
9 $\frac{1}{16}$ 52'-0 $\frac{5}{16}$ 8

8 51'-11 $\frac{7}{8}$ 1

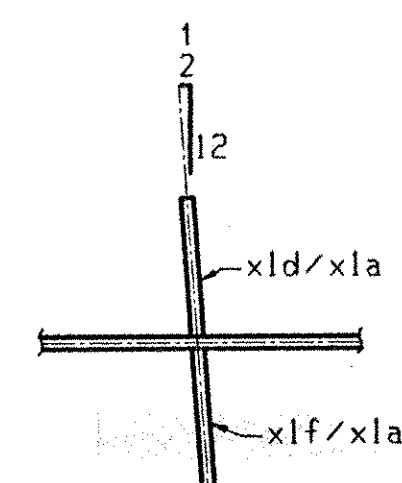
BRG BRG

ORIENTATION DIAGRAM
SEE DWG C1

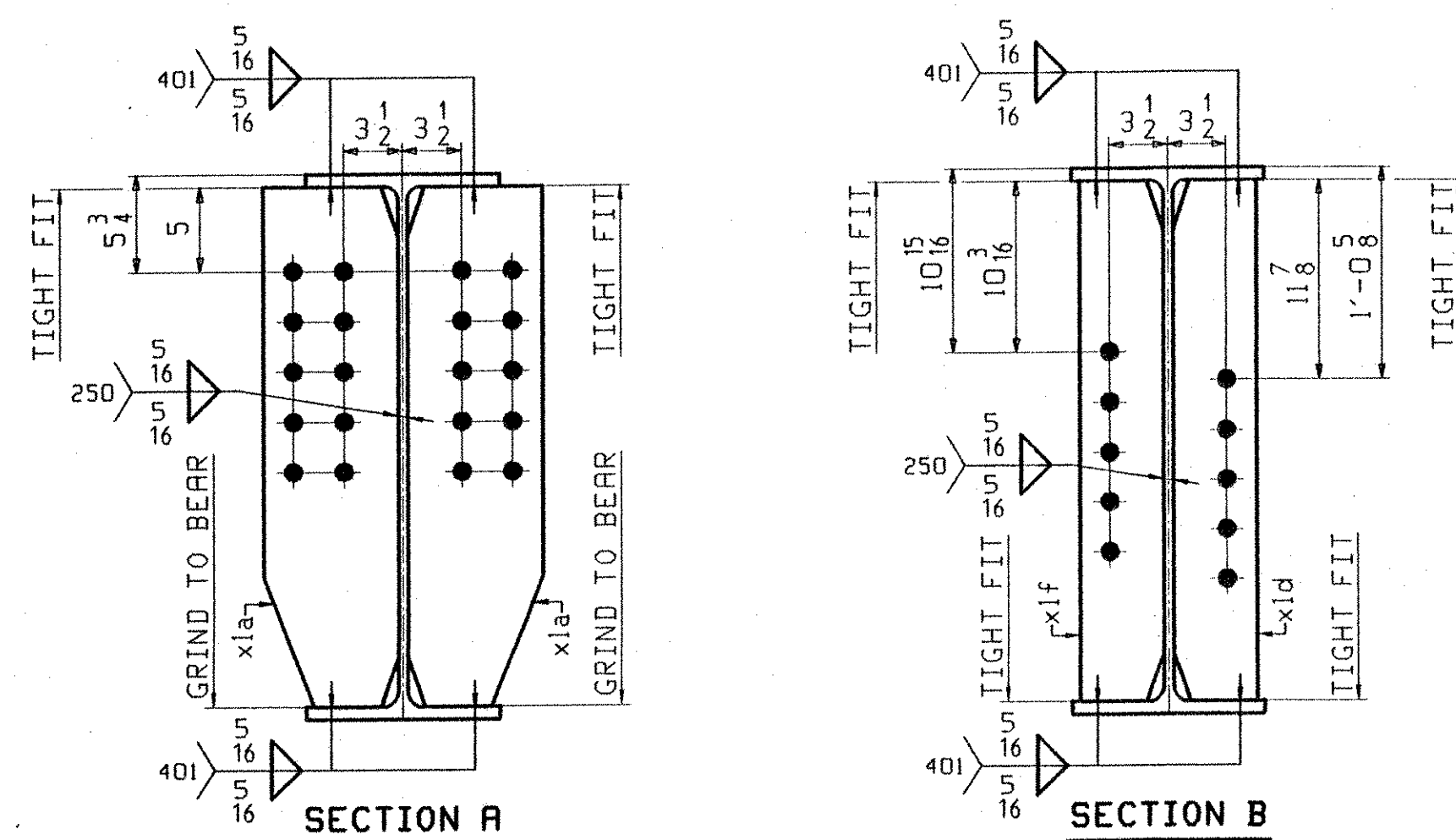
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179



FOR STRINGER STANDARD DETAILS SEE DRAWING X1.
FOR CAMBER DIAGRAM SEE DRAWING C1.
FOR GENERAL NOTES SEE DRAWING GNI.
H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.



SECTION BB



05955

82' - 0 $\frac{3}{8}$

8

8

BRG

BRG

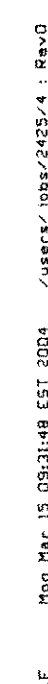
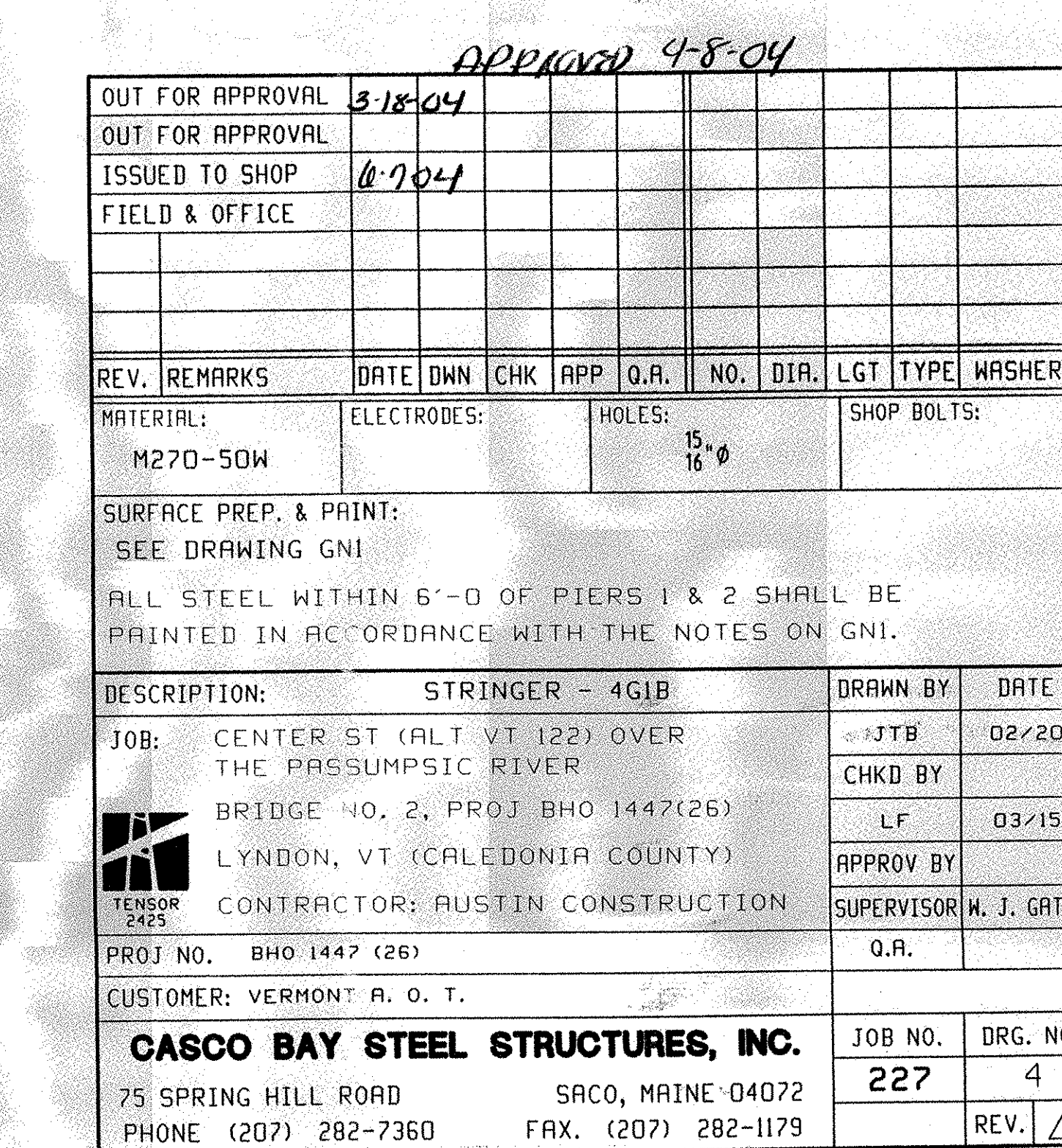
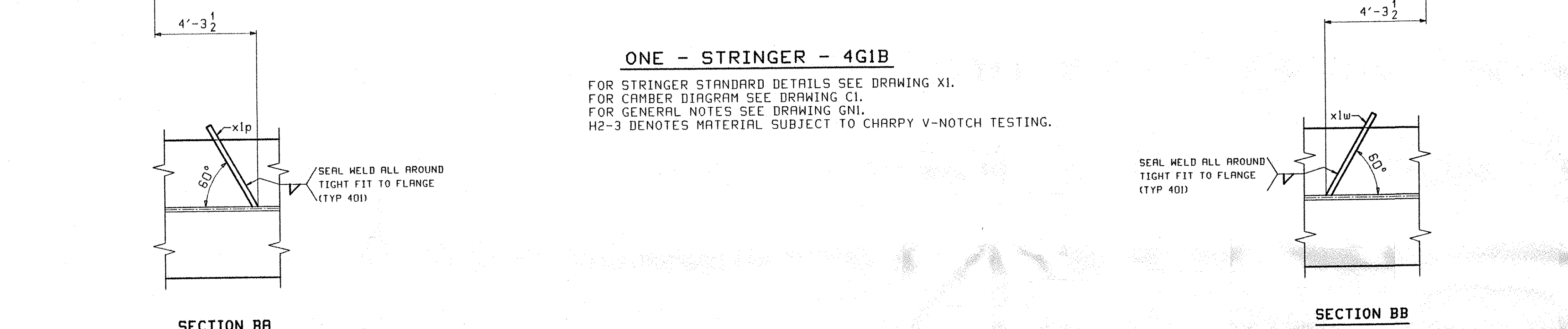
11 $\frac{11}{16}$

81' - 11 $\frac{5}{16}$

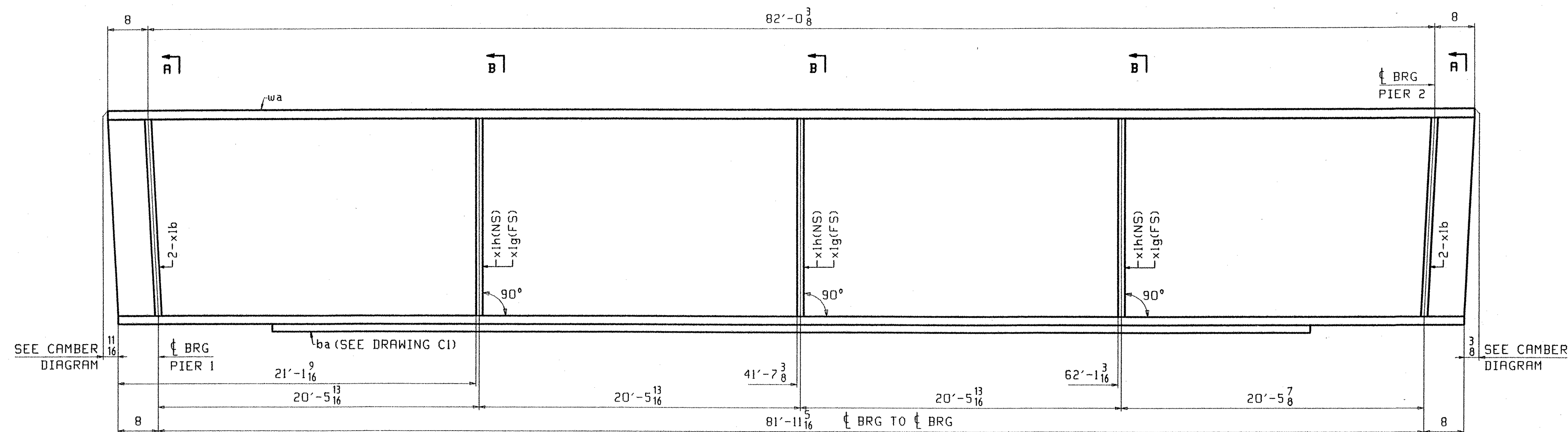
3 $\frac{3}{8}$

ORIENTATION DIAGRAM

SEE PNC C1

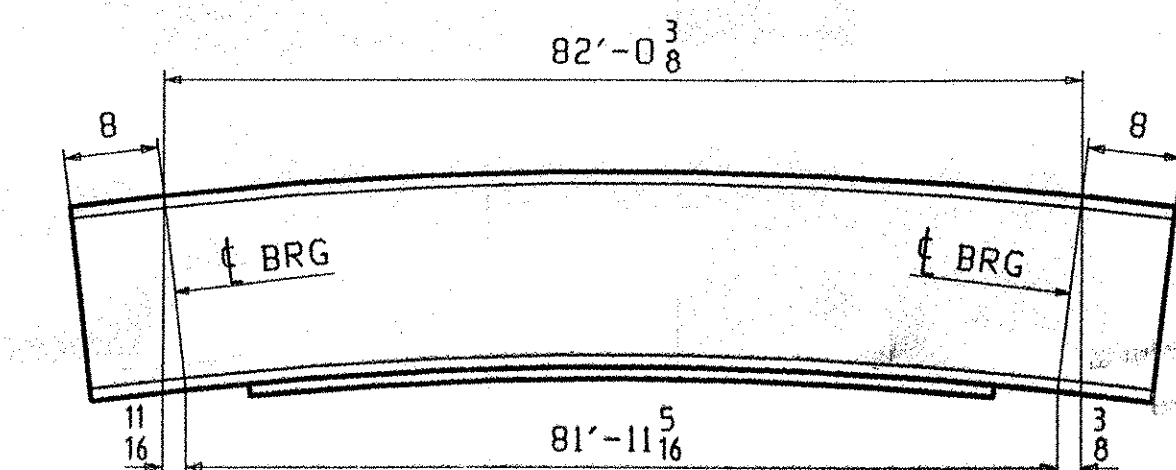


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						FT	INCHES					
		5G2B	1		STRINGER				13752			
		5G3B	1		STRINGER				13752			
		5G4B	1		STRINGER				13752			
		5G5B	1		STRINGER				13752			
1	A		4	wa	W 36x135	83	4 ³ / ₈	(M220-50MT2) (H2-3)				
1	G		4	ba	PL 1x9	72	0	(M220-50MT2) (H2-3)				
2	G		16	x1b	PL ¹ / ₂ x8	2	9 ⁷ / ₈	FIE				
2	C		12	x1h	PL ¹ / ₂ x5	2	9 ⁷ / ₈					
2	C		12	x1g	PL ¹ / ₂ x5	2	9 ⁷ / ₈					
					</							

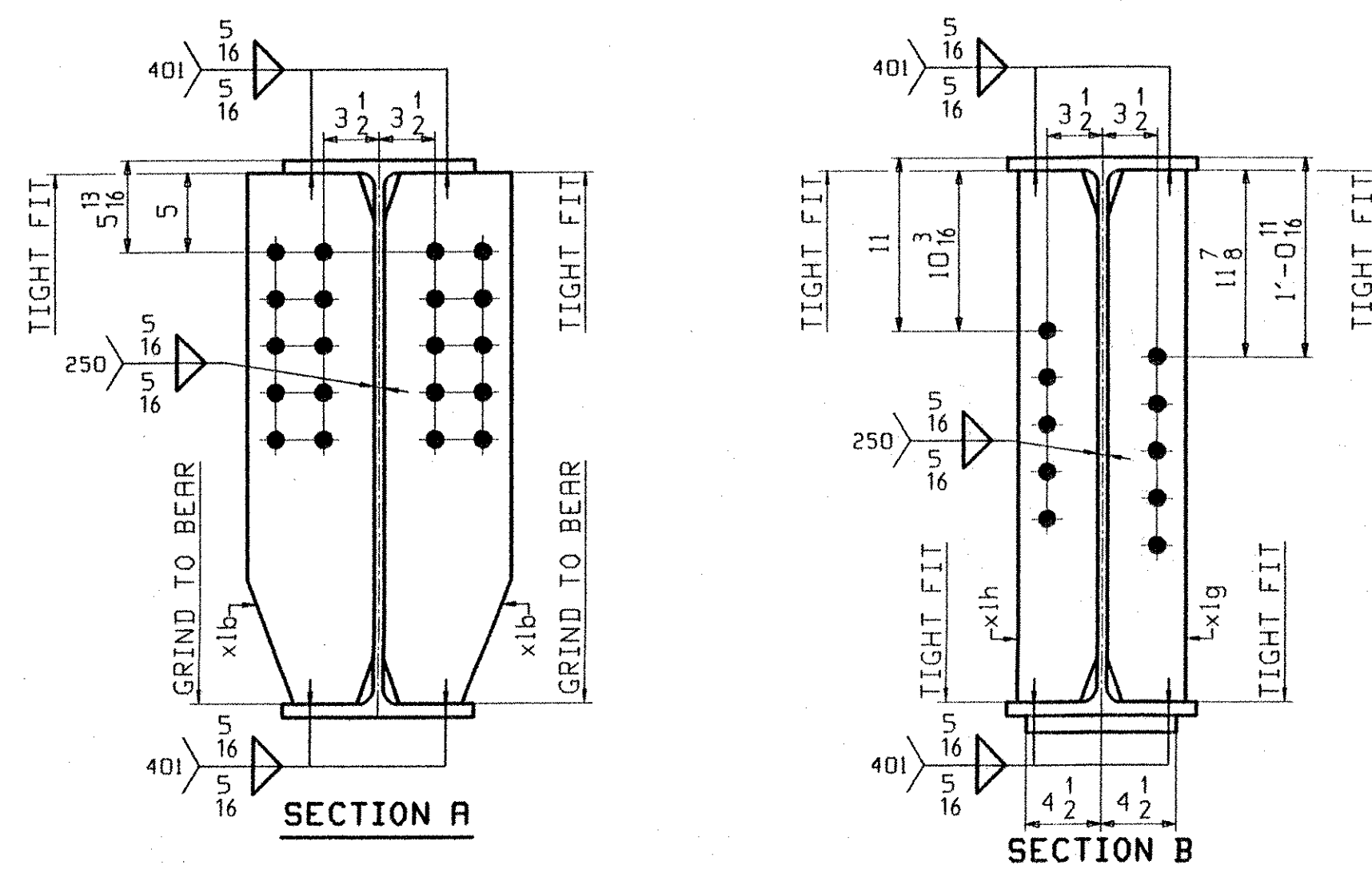


ONE - STRINGER - 5G2B	} ALIKE EXCEPT FOR MARK
ONE - STRINGER - 5G3B	
ONE - STRINGER - 5G4B	
ONE - STRINGER - 5G5B	

FOR STRINGER STANDARD DETAILS SEE DRAWING XI.
FOR CAMBER DIAGRAM SEE DRAWING CI.
FOR GENERAL NOTES SEE DRAWING GNI.
H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.

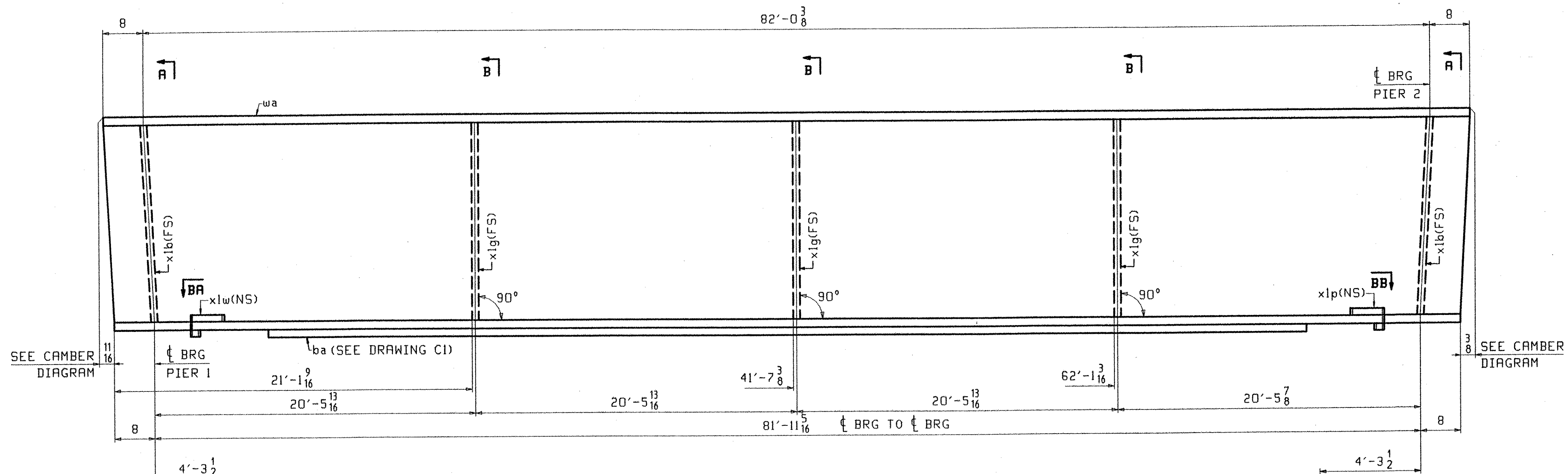


ORIENTATION DIAGRAM
SEE DWG C1



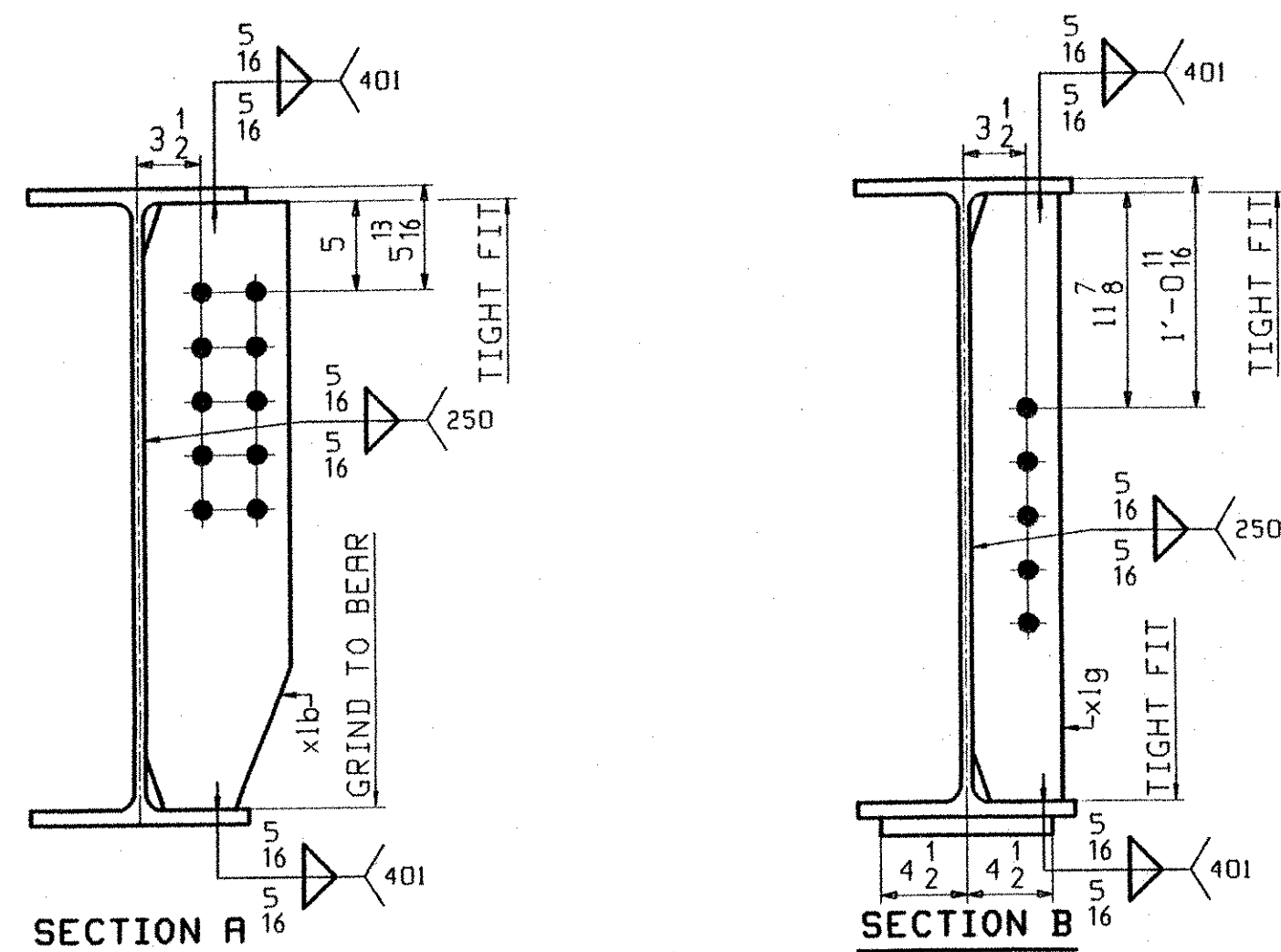
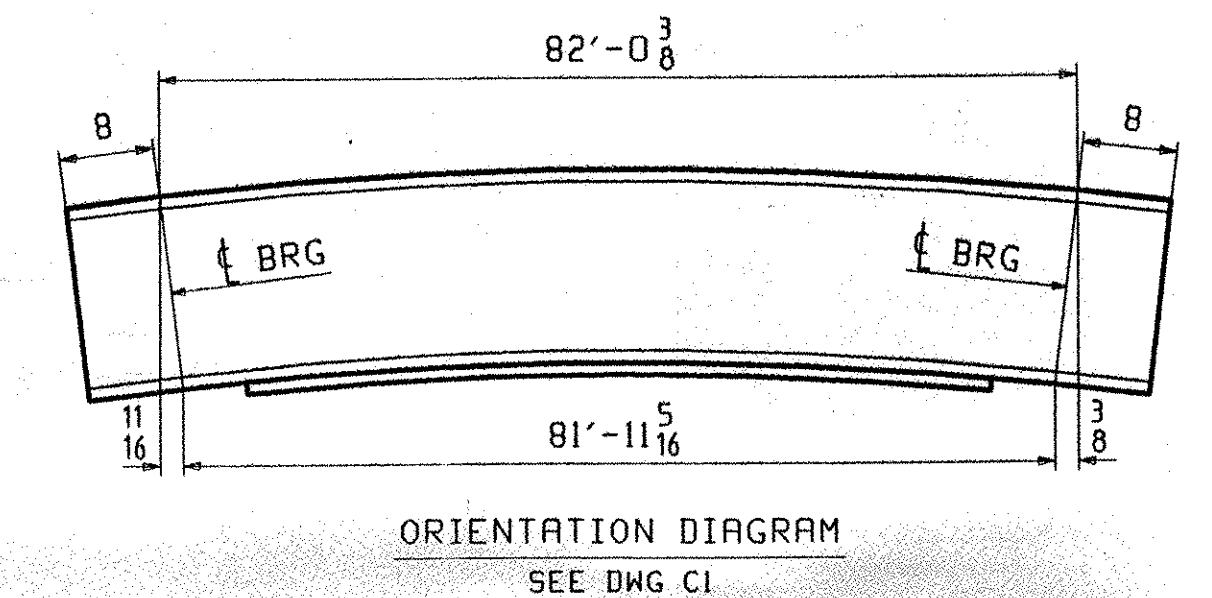
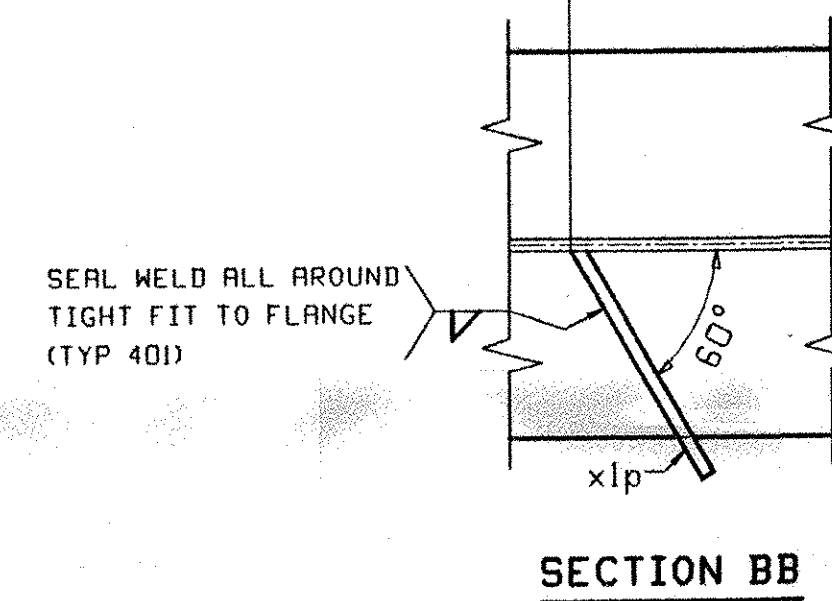
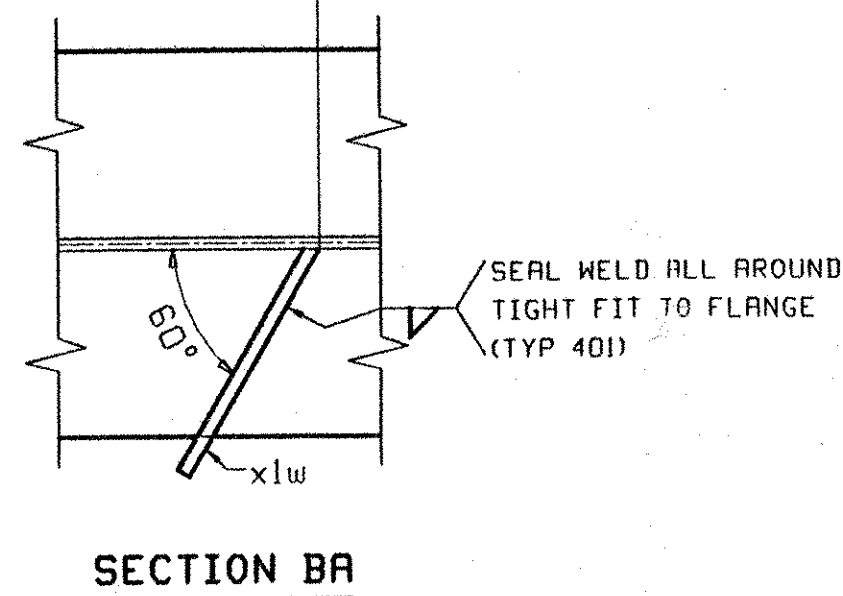
OUT FOR APPROVAL	3-18-04																		
OUT FOR APPROVAL																			
ISSUED TO SHOP	6-7-04																		
FIELD & OFFICE																			
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER								
	MATERIAL: M270-50W	ELECTRODES:					HOLES: 1 1/2" Ø				SHOP BOLTS:								
SURFACE PREP. & PAINT: SEE DRAWING GNI ALL STEEL WITHIN 6'-0" OF PIERS 1 & 2 SHALL BE PAINTED IN ACCORDANCE WITH THE NOTES ON GNI.																			
DESCRIPTION: STRINGERS - 5G2B, 5G3B, 5G4B, 5G5B												DRAWN BY		DATE					
JOB: CENTER ST (ALT VT 122) OVER THE PASSUMPSIC RIVER												JTB		02/20					
BRIDGE NO. 2, PROJ BHO 1447(26)												CHKD BY							
LYNDON, VT (CALEDONIA COUNTY)												LF		03/15					
CONTRACTOR: AUSTIN CONSTRUCTION												APPROV BY							
PROJ NO. BHO 1447 (26)												SUPERVISOR		W. J. GATTI					
CUSTOMER: VERMONT A. O. T.												Q.A.							
CASCO BAY STEEL STRUCTURES, INC.												JOB NO.		DRG. NO.					
75 SPRING HILL ROAD PHONE (207) 282-7360												SACO, MAINE 04072 FAX. (207) 282-1179		227 5					
												REV.		△					

06235



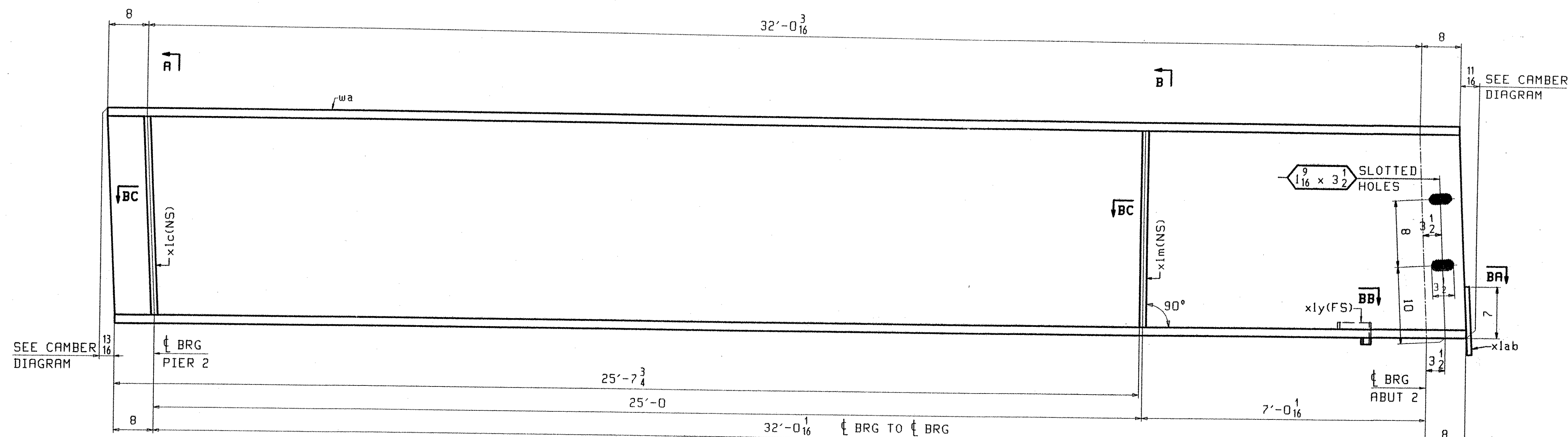
ONE - STRINGER - 6G6B

FOR STRINGER STANDARD DETAILS SEE DRAWING XI.
FOR CAMBER DIAGRAM SEE DRAWING CI.
FOR GENERAL NOTES SEE DRAWING GNI.
H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.



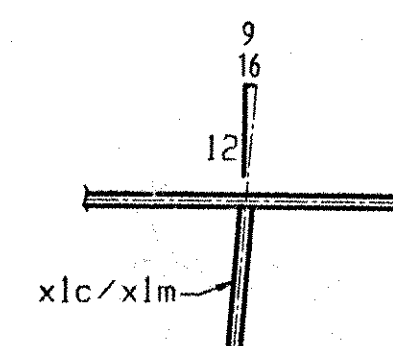
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												6		
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH		REMARKS	WT	PROCUREMENT NOTES				
						FT	INCHES							
		6G6B	1		STRINGER					13612				
1	A		1	wa	W 36x135	83	4 ³ / ₈	(M270-50WT2) (H2-3)						
1	G		1	ba	PL 1x9	72	0	(M270-50WT2) (H2-3)						
2	G		2	x1b	PL 1 ¹ / ₂ x8	2	9 ⁷ / ₈	FIE						
2	C		3	x1g	PL 1 ¹ / ₂ x5	2	9 ⁷ / ₈							
2	N		1	x1p	PL 1 ¹ / ₄ x3	0	8 ⁹ / ₁₆							
2	N		1	x1w	PL 1 ¹ / ₄ x3	0	8 ⁹ / ₁₆							

APPROVED 4-8-04													
OUT FOR APPROVAL		3-18-04											
OUT FOR APPROVAL													
ISSUED TO SHOP		4-7-04											
FIELD & OFFICE													
REV.		REMARKS		DATE		DWN		CHK		APP		Q.A.	
												NO. DIA. LGT TYPE WASHER	
MATERIAL:		ELECTRODES:				HOLES:				SHOP BOLTS:			
M270-50W						15 16-Ø							
SURFACE PREP. & PAINT:													
SEE DRAWING GNI													
ALL STEEL WITHIN 6'-0 OF PIERS 1 & 2 SHALL BE PAINTED IN ACCORDANCE WITH THE NOTES ON GNI.													
DESCRIPTION:		STRINGER - 6G6B								DRAWN BY		DATE	
JOB:		CENTER ST (ALT VT 122) OVER THE PASSUMPSIC RIVER								JTB		02/20	
		BRIDGE NO. 2, PROJ BHO 1447(26)								CHKD BY			
		LYNDON, VT (CALEDONIA COUNTY)								LF		03/15	
		CONTRACTOR: AUSTIN CONSTRUCTION								APPROV BY			
		SUPERVISOR: W. J. GRITTI								Q.A.			
PROJ NO.		BHO 1447 (26)											
CUSTOMER:		VERMONT A. O. T.											
CASCO BAY STEEL STRUCTURES, INC.										JOB NO.		DRG. NO.	
75 SPRING HILL ROAD										227		6	
PHONE (207) 282-7360										REV.		△	
SACO, MAINE 04072													
FAX. (207) 282-1179													

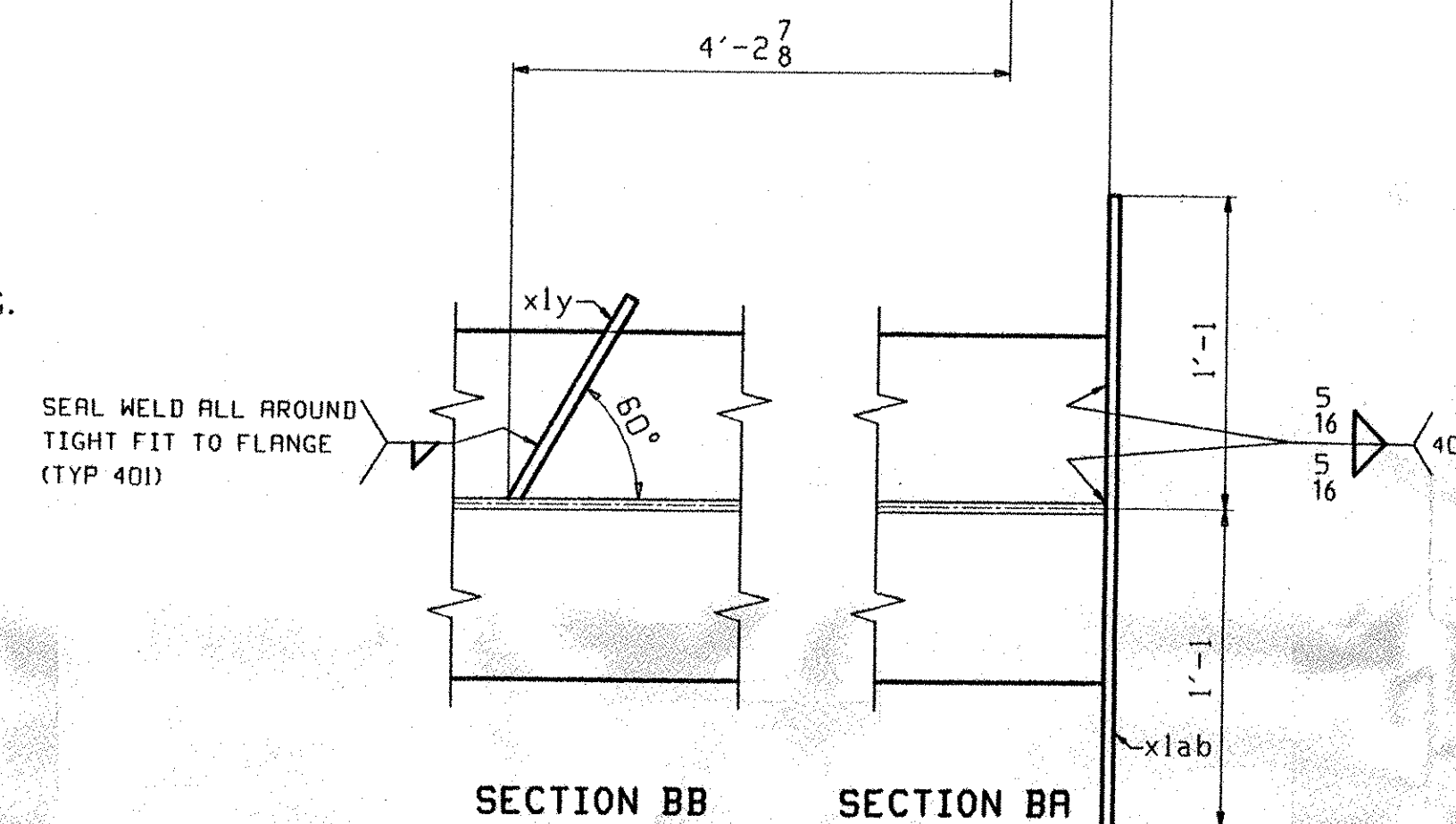


ONE - STRINGER - 7G1C

FOR STRINGER STANDARD DETAILS SEE DRAWING XI.
FOR CAMBER DIAGRAM SEE DRAWING CI.
FOR GENERAL NOTES SEE DRAWING GNI.
H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.

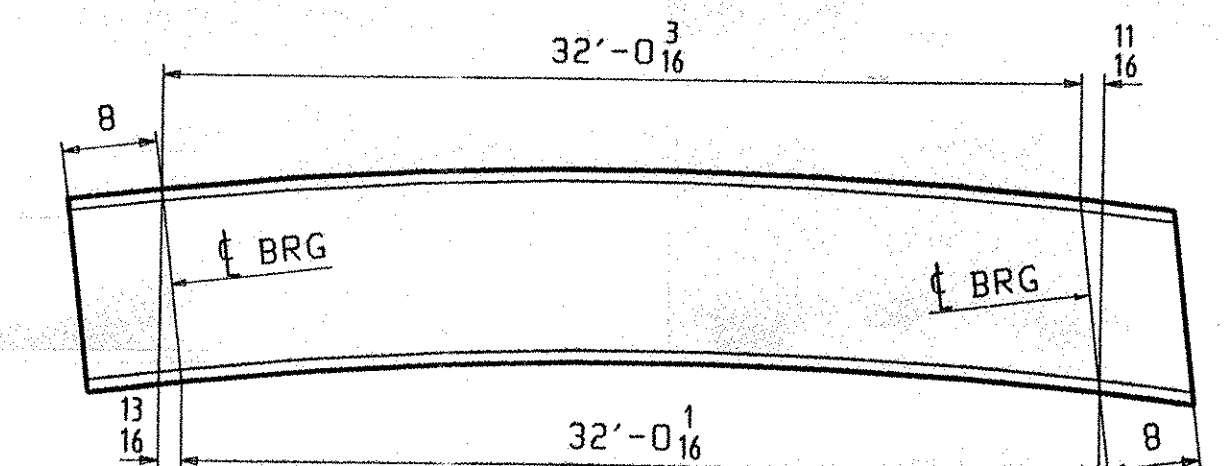


SECTION BC

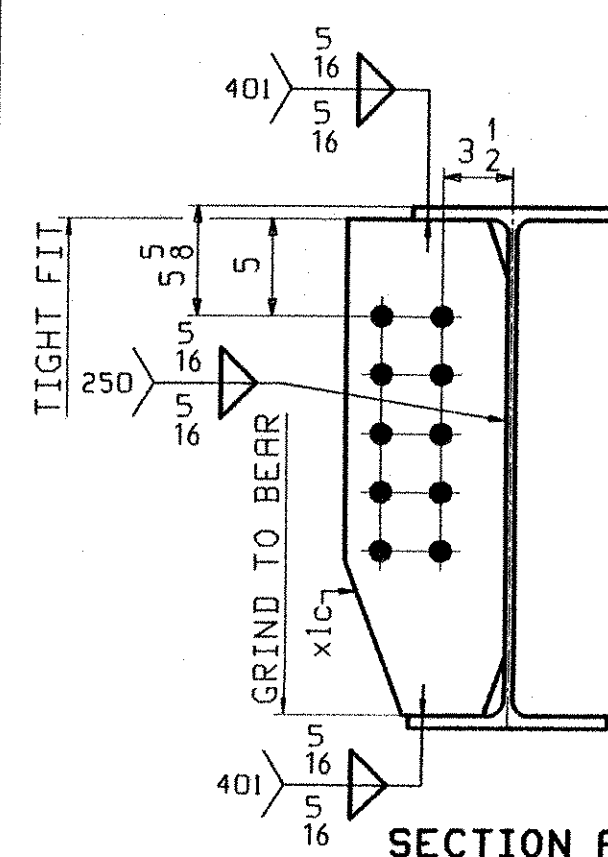


SECTION BB

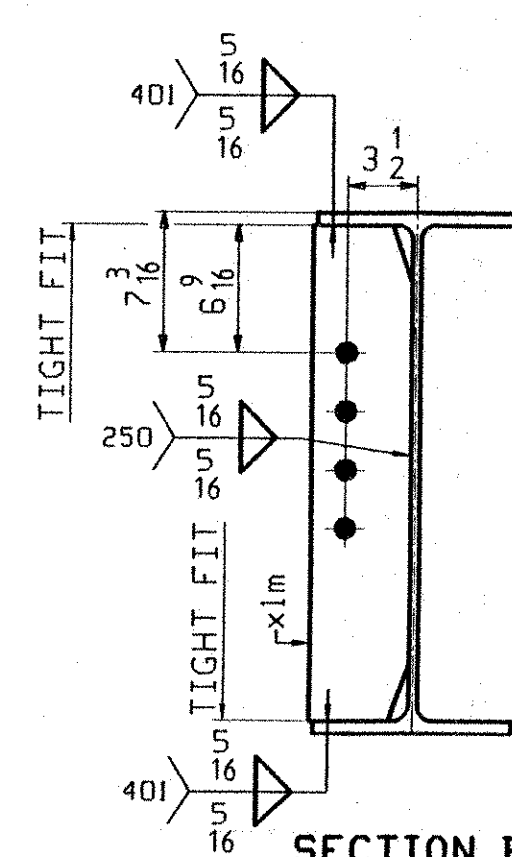
SECTION BA



ORIENTATION DIAGRAM
SEE DWG CI



SECTION A

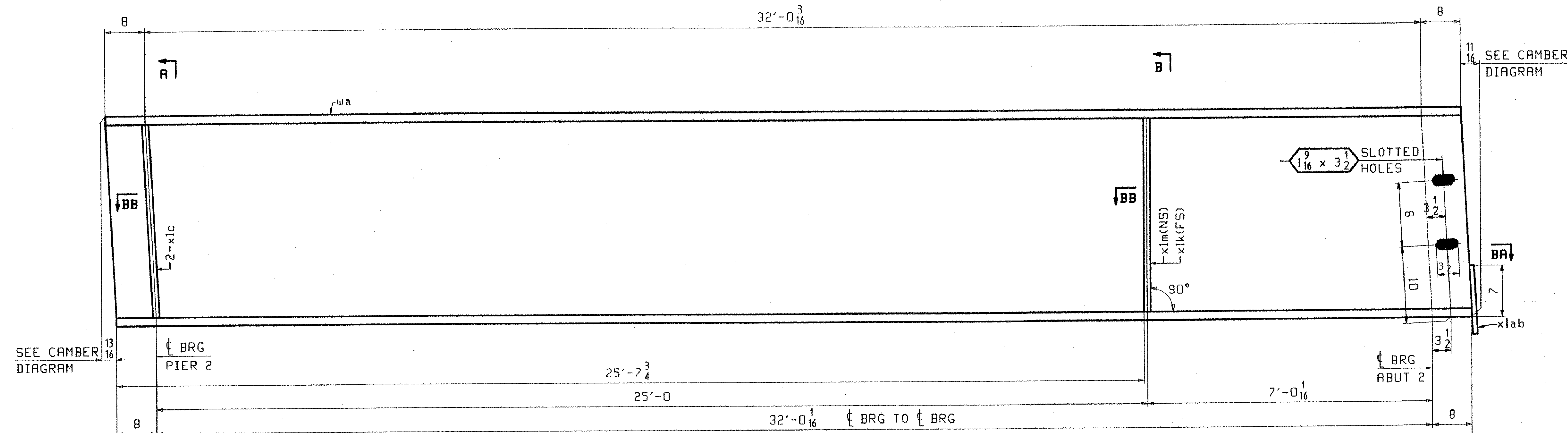


SECTION B

ABM INFO		SHIP		BILL OF MATERIAL				JOB NO.		DRAWING NO.		REV.
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH		REMARKS	WT	PROCUREMENT NOTES		
						FT	INCHES					
		7G1C	1		STRINGER					2872		
1	E		1	wa	M 27x84	33	4 7/8	(M270-5QWT2) (H2-3)				
2	H		1	xlc	PL 1/2x8	2	1 1/2	FIE				
2	D		1	xlm	PL 1/2x3	2	1 1/2					
2	N		1	xly	PL 1/2x3	0	7/2					
2	L		1	xlab	PL 1/4x9 1/4	2	2					

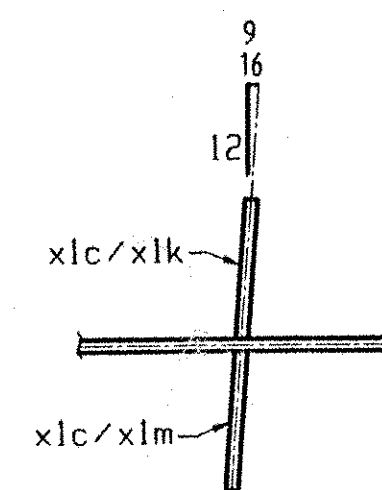
OUT FOR APPROVAL		3-18-04											
OUT FOR APPROVAL		6-7-04											
ISSUED TO SHOP		6-7-04											
FIELD & OFFICE													
REV.		REMARKS		DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
MATERIAL:		ELECTRODES:				HOLES:				SHOP BOLTS:			
M270-50W						15/16" Ø							
SURFACE PREP. & PAINT: SEE DRAWING GNI													
ALL STEEL WITHIN 6'-0 OF PIERS 1 & 2 SHALL BE PAINTED IN ACCORDANCE WITH THE NOTES ON GNI.													
DESCRIPTION:		STRINGER - 7G1C							DRAWN BY:		DATE		
JOB:		 TENSOR 2425 BRIDGE NO. 2, PROJ BHO 1447(26) LYNDON, VT (CALEDONIA COUNTY) CONTRACTOR: AUSTIN CONSTRUCTION							JTB		02/20		
									CHKD BY				
									LF		03/15		
									APPROV BY				
PROJ NO.		BHO 1447 (26)							Q.A.				
CUSTOMER:		VERMONT A. O. T.											
CASCO BAY STEEL STRUCTURES, INC.													
75 SPRING HILL ROAD				SACO, MAINE 04072				JOB NO.		DRG. NO.			
PHONE (207) 282-7360				FAX. (207) 282-1179				227		7			
										REV. /			

ABM INFO		SHIP		BILL OF MATERIAL				JOB NO.		DRAWING NO.		REV.	
										8			
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH		REMARKS	WT	PROCUREMENT NOTES			
						FT	INCHES						
		8G2C	1		STRINGER								
		8G3C	1		STRINGER								
		8G4C	1		STRINGER								
		8G5C	1		STRINGER								
1	E		4	wa	W. 27x84	33	4 7/8	(M27Q-50WT2)	(#2-3)				
2	H		8	x1c	PL 1/2 x 8	2	1 1/2	FLF					
2	D		4	x1m	PL 1/2 x 5	2	1 1/2						
	D		4	x1k	PL 1/2 x 5	2	1 1/2						
2	L		4	x1ab	PL 1/4 x 9 1/4	2	2						

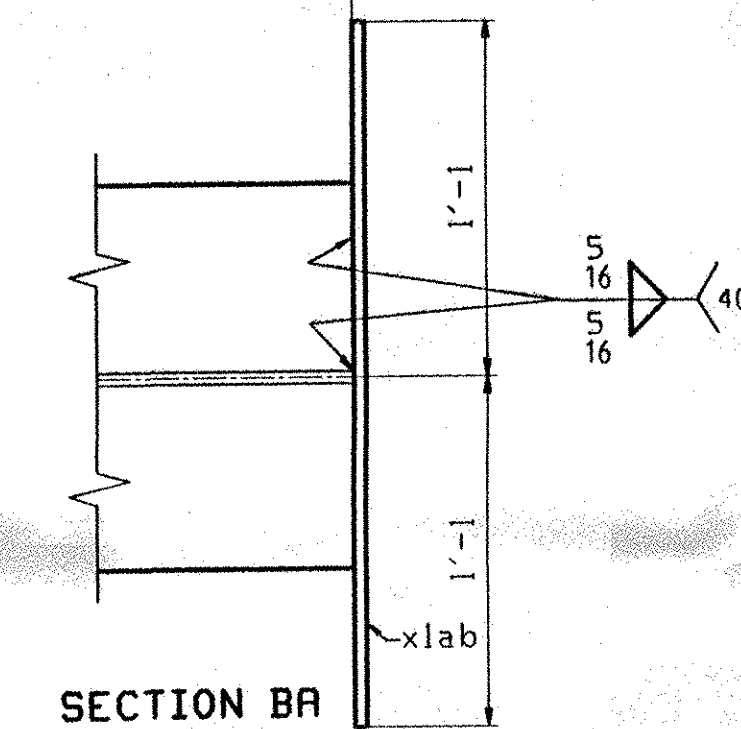


ONE - STRINGER - 8G2C	} ALIKE EXCEPT FOR MARK
ONE - STRINGER - 8G3C	
ONE - STRINGER - 8G4C	
ONE - STRINGER - 8G5C	

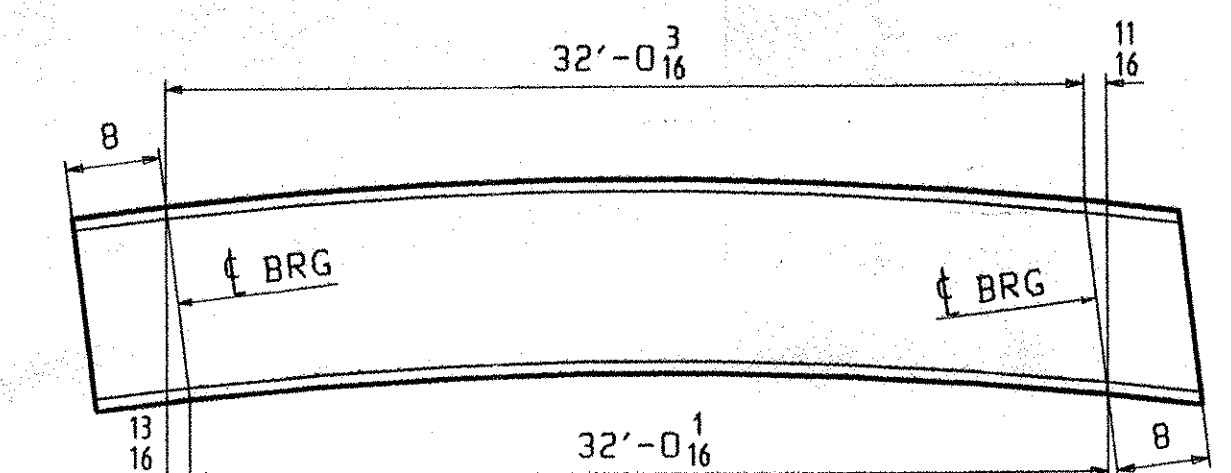
FOR STRINGER STANDARD DETAILS SEE DRAWING XI.
FOR CAMBER DIAGRAM SEE DRAWING CI.
FOR GENERAL NOTES SEE DRAWING GNI.
H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.



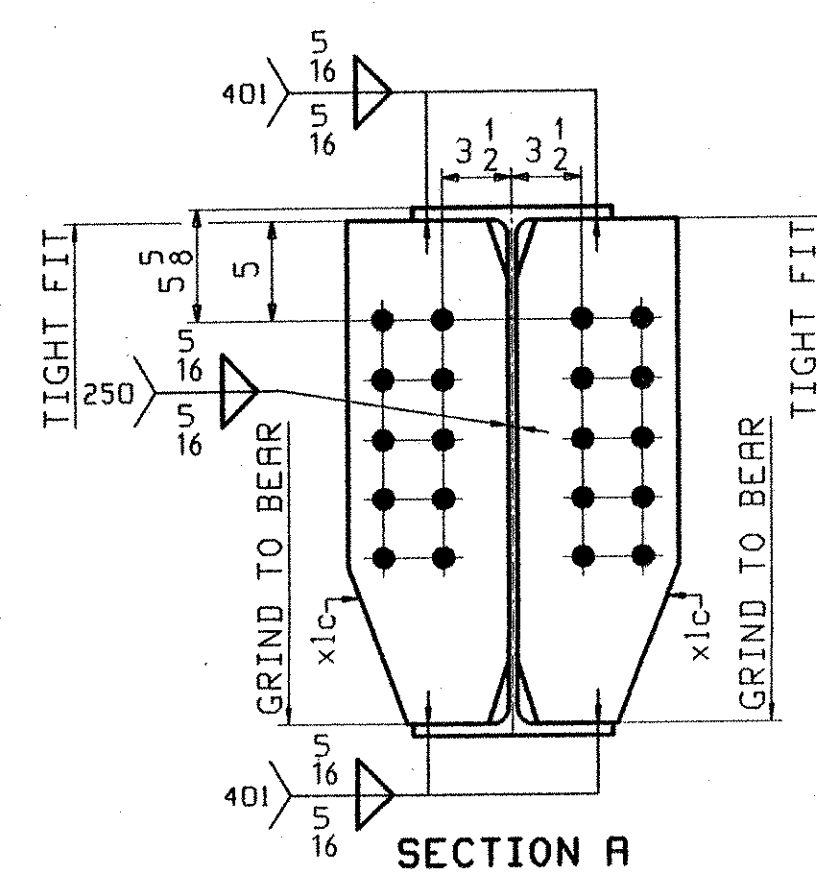
SECTION BB



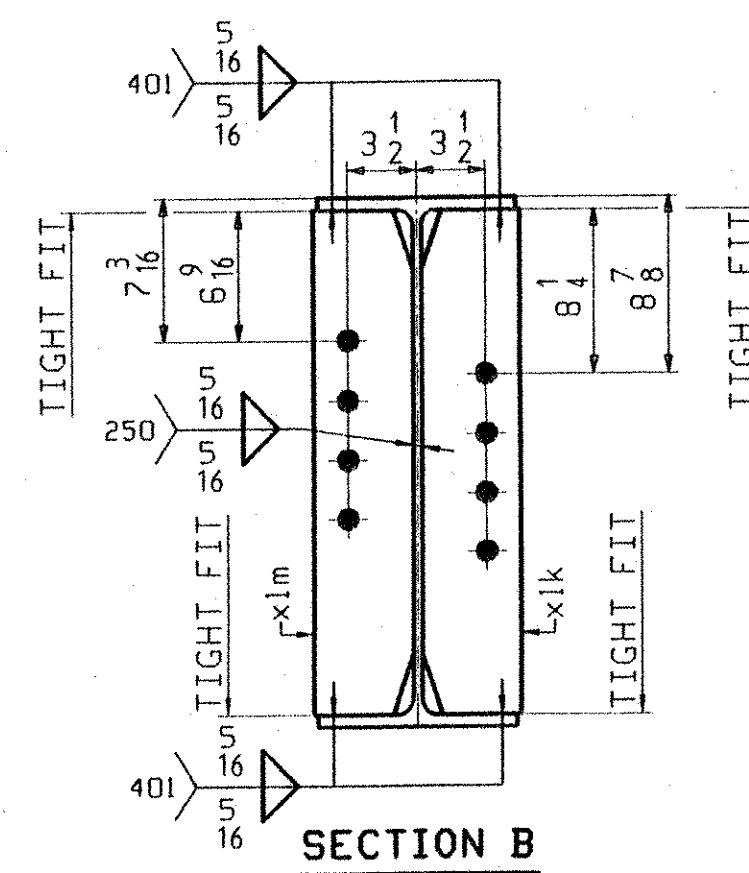
SECTION B



ORIENTATION DIAGRAM
SEE DWG C1



SECTION A



SECTION B

[illegible]



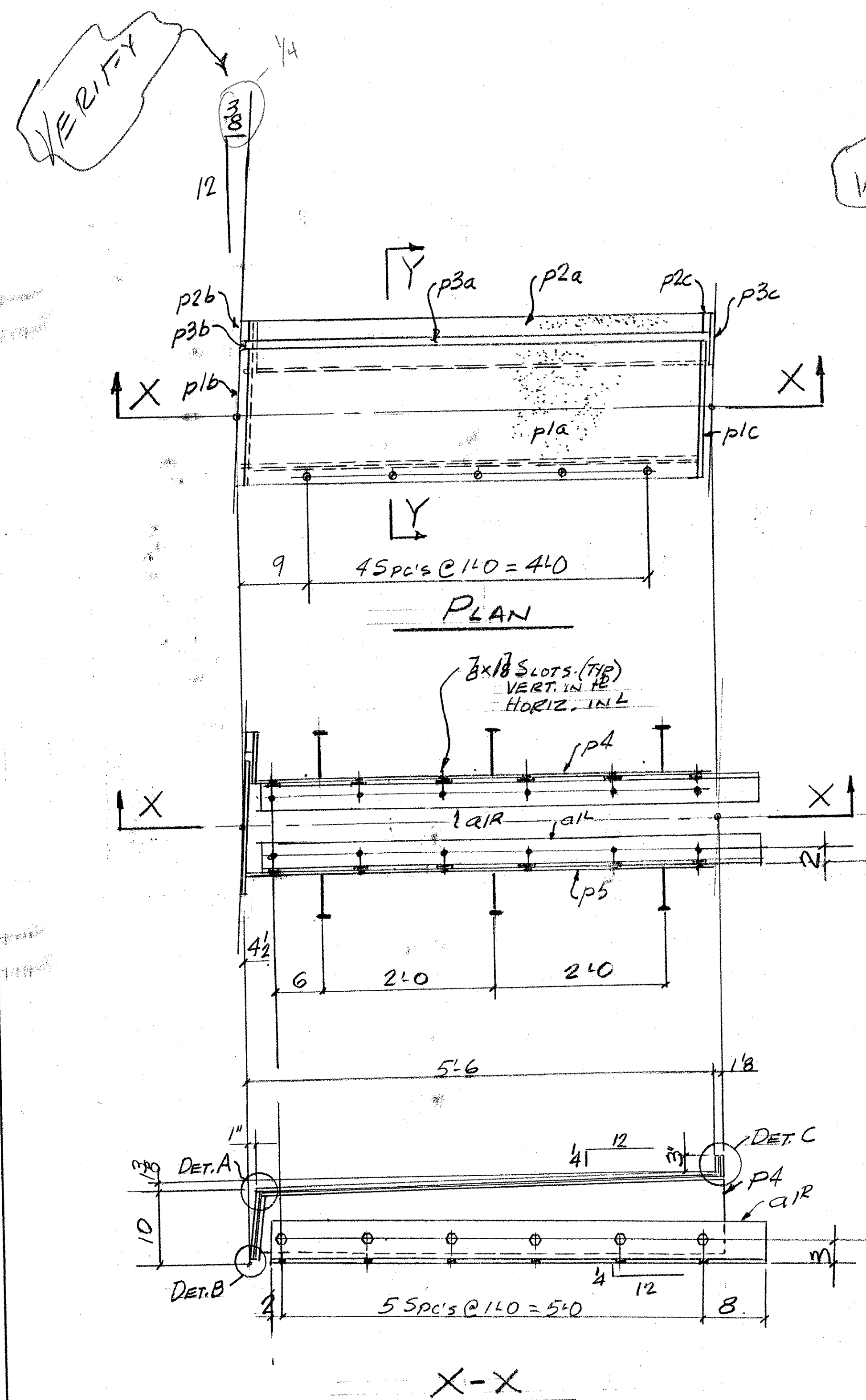
10 ~ PIER DIAPHRAGM - 10D4

SHOP NOTE:
PIER DIAPHRAGMS 1004 ARE PAINTED - SEE DRAWING GNI.

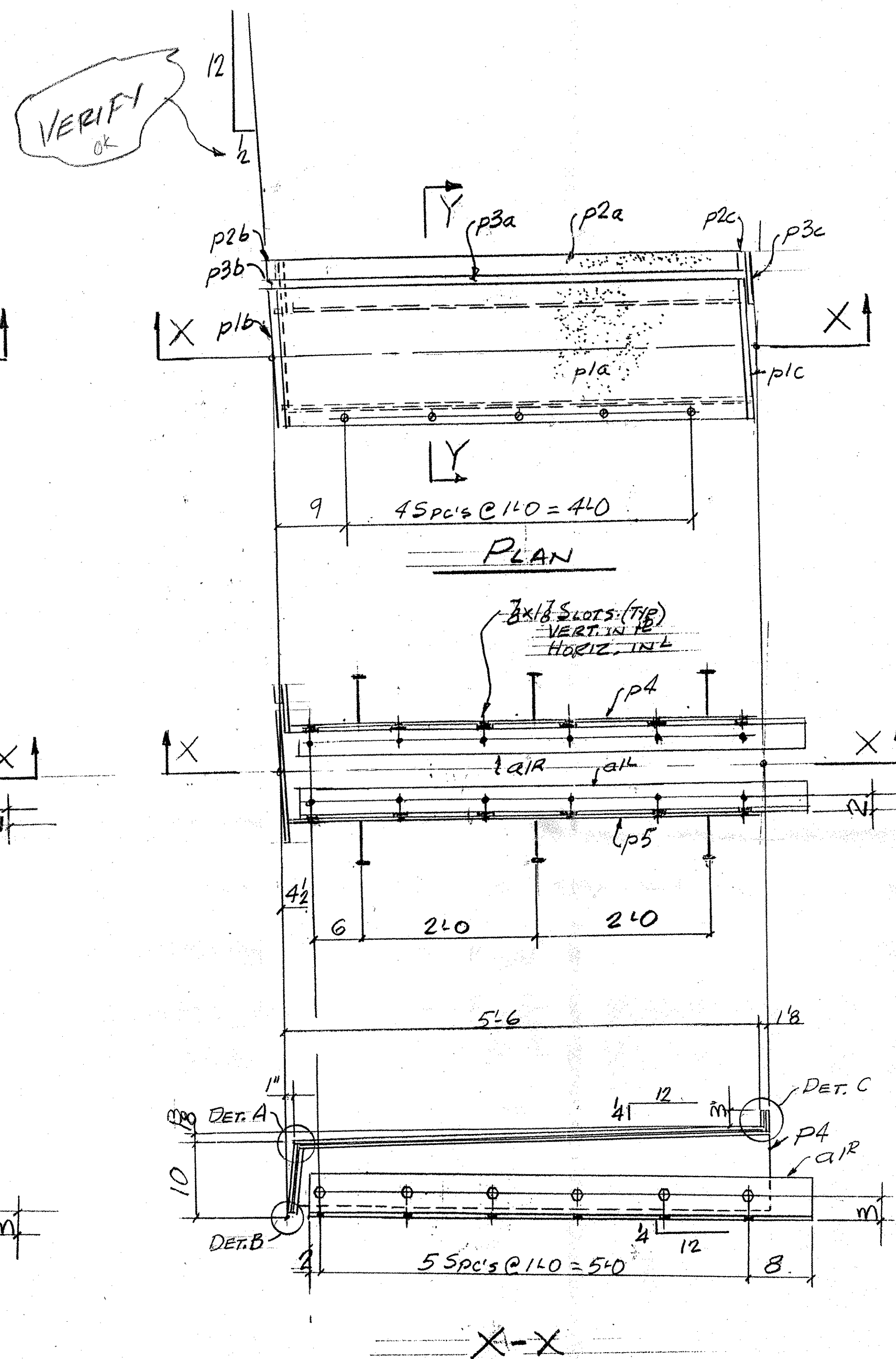
[illegible]

OUT FOR APPROVAL		3-18-04																			
OUT FOR APPROVAL																					
ISSUED TO SHOP		6-7-04																			
FIELD & OFFICE																					
REV.		REMARKS		DATE	DWN	CHK	APP	O.R.	NO.	DIA.	LGT	TYPE	WASHER								
MATERIAL:				ELECTRODES:				HOLES:				SHOP BOLTS:									
M270-50W								15 16-Ø													
SURFACE PREP. & PAINT:																					
SEE DRAWING GNI																					
ALL STEEL WITHIN 6'-0 OF PIERS 1 & 2 SHALL BE PAINTED IN ACCORDANCE WITH THE NOTES ON GNI.																					
DESCRIPTION:				DIAPHRAGMS								DRAWN BY				DATE					
JOB:				CENTER ST (ALT VT 122) OVER THE PASSUMPSIC RIVER								JTB				02/20					
 TENSOR 425				BRIDGE NO. 2, PROJ BHO 1447(26)								CHKD BY									
				LYNDON, VT (CALEDONIA COUNTY)								LF				03/15					
				CONTRACTOR: AUSTIN CONSTRUCTION								APPROV BY									
												SUPERVISOR				W. J. GATTI					
PROJ NO.				BHO 1447 (26)								O.R.									
CUSTOMER:				VERMONT R. O. T.																	
CASCO BAY STEEL STRUCTURES, INC.												JOB NO.		DRG. NO.							
75 SPRING HILL ROAD												227		10							
PHONE (207) 282-7360																					
SACO, MAINE 04072																					
FAX. (207) 282-1179																					
												REV.		△							

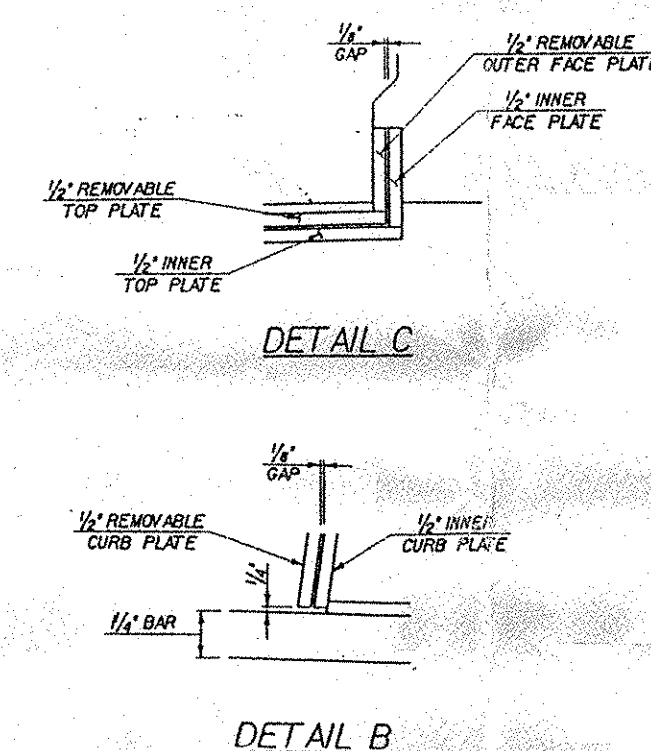
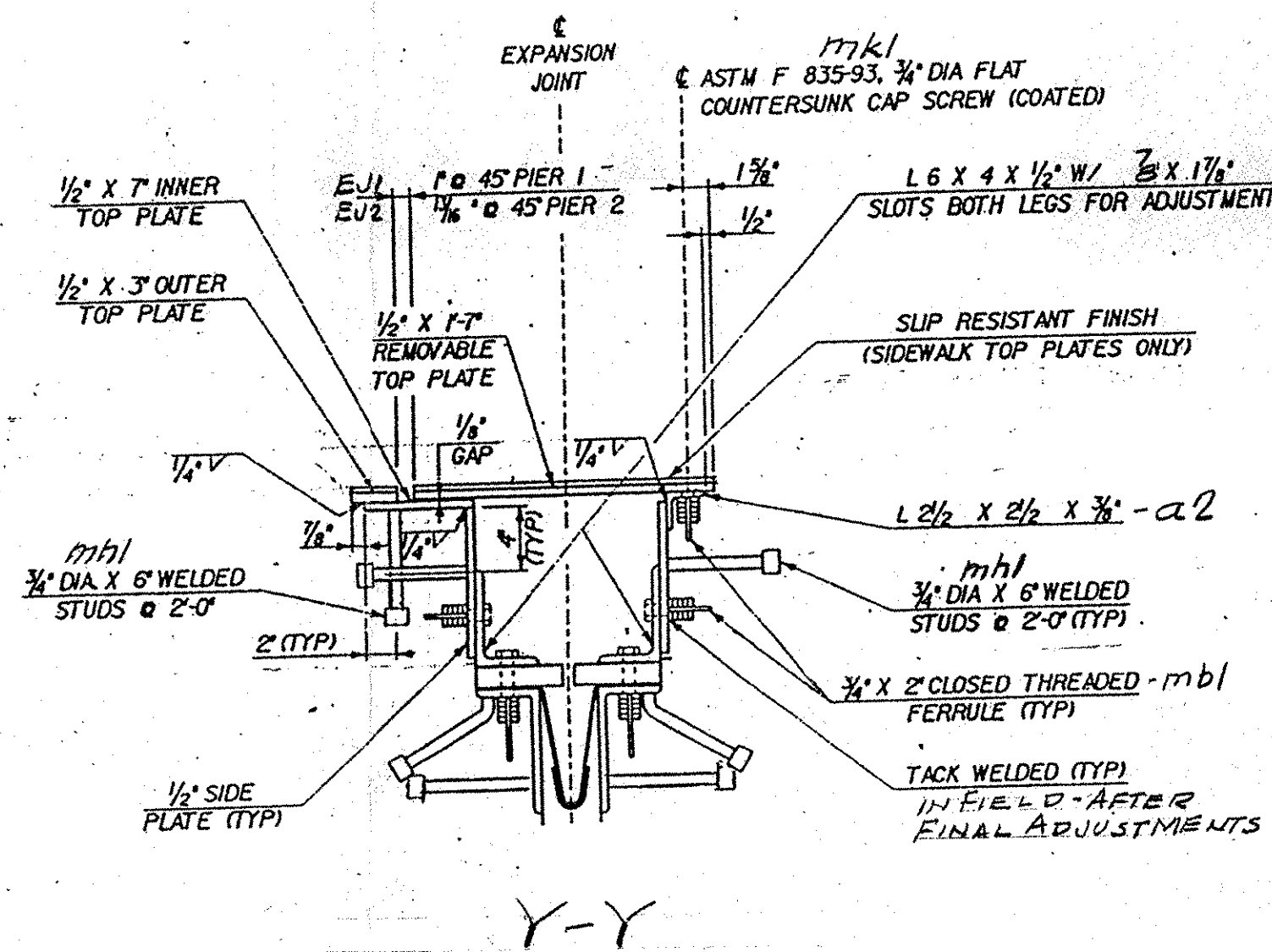




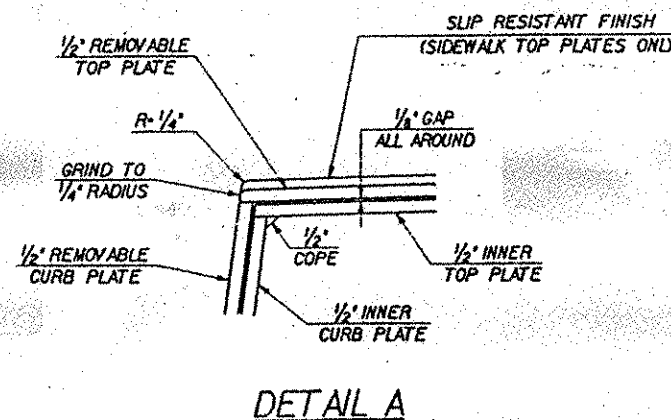
SIDEWALK ASSEMBLY
SHOP BOLT TO EJI



SIDEWALK ASSEMBLY
SHOP BOLT TO EJ2



WORK THIS DWG. W/ DWG. 11

[illegible]

☒ Reviewed
☐ Rejected

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all other trades; and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.

Date 6-25-04

BY Steven F. Delia

069 B5