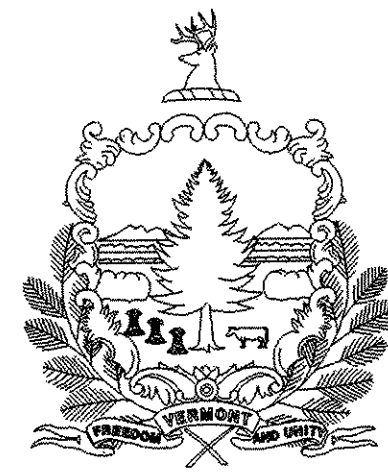


STATE OF VERMONT  
AGENCY OF TRANSPORTATION



|                     |              |             |
|---------------------|--------------|-------------|
| LENGTH OF BRIDGE 12 | 110.03 FEET= | 0.021 MILES |
| LENGTH OF ROADWAY   | 339.97 FEET= | 0.064 MILES |
| LENGTH OF PROJECT   | 450.00 FEET= | 0.085 MILES |

COUNTY LINE

TOWN LINE

LIMITS OF ACCESS

POINT OF ACCESS

FENCE LINE

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

## PLAN

0 50 100  
SCALE IN FEET

DATE PLOTTED 15-MAY-2003

|                                                                                                |                     |
|------------------------------------------------------------------------------------------------|---------------------|
| DIRECTOR OF PROJECT DEVELOPMENT                                                                |                     |
| APPROVED  | DATE <u>5/16/03</u> |
| PROJECT MANAGER : A. PORTALUPI                                                                 |                     |
| PROJECT NAME : CHESTER                                                                         |                     |
| PROJECT NUMBER : <del>K</del> BRF 025-I(35)                                                    |                     |
| SHEET 1 OF 79 SHEETS                                                                           |                     |



INDEX OF SHEETS

VAOT STANDARDS

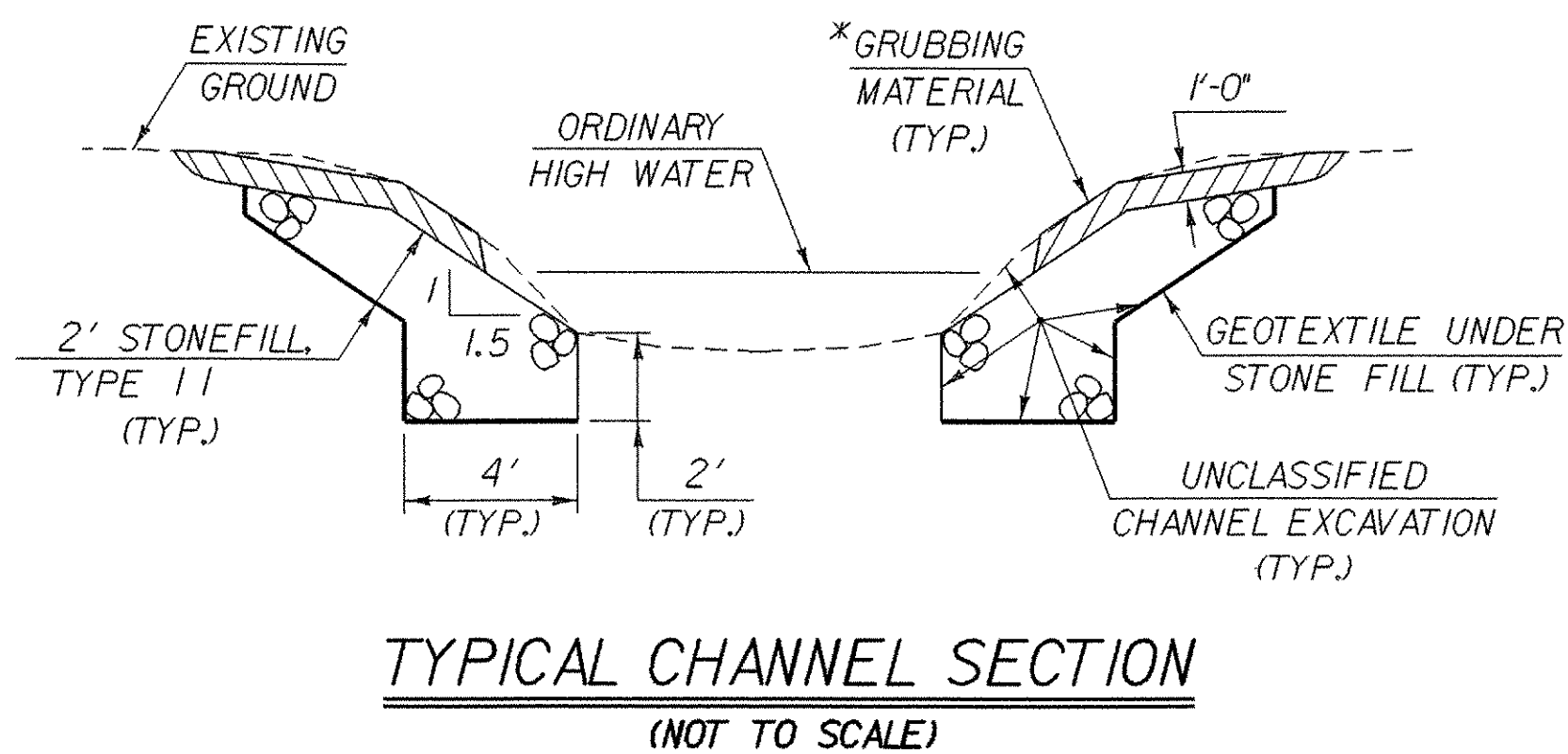
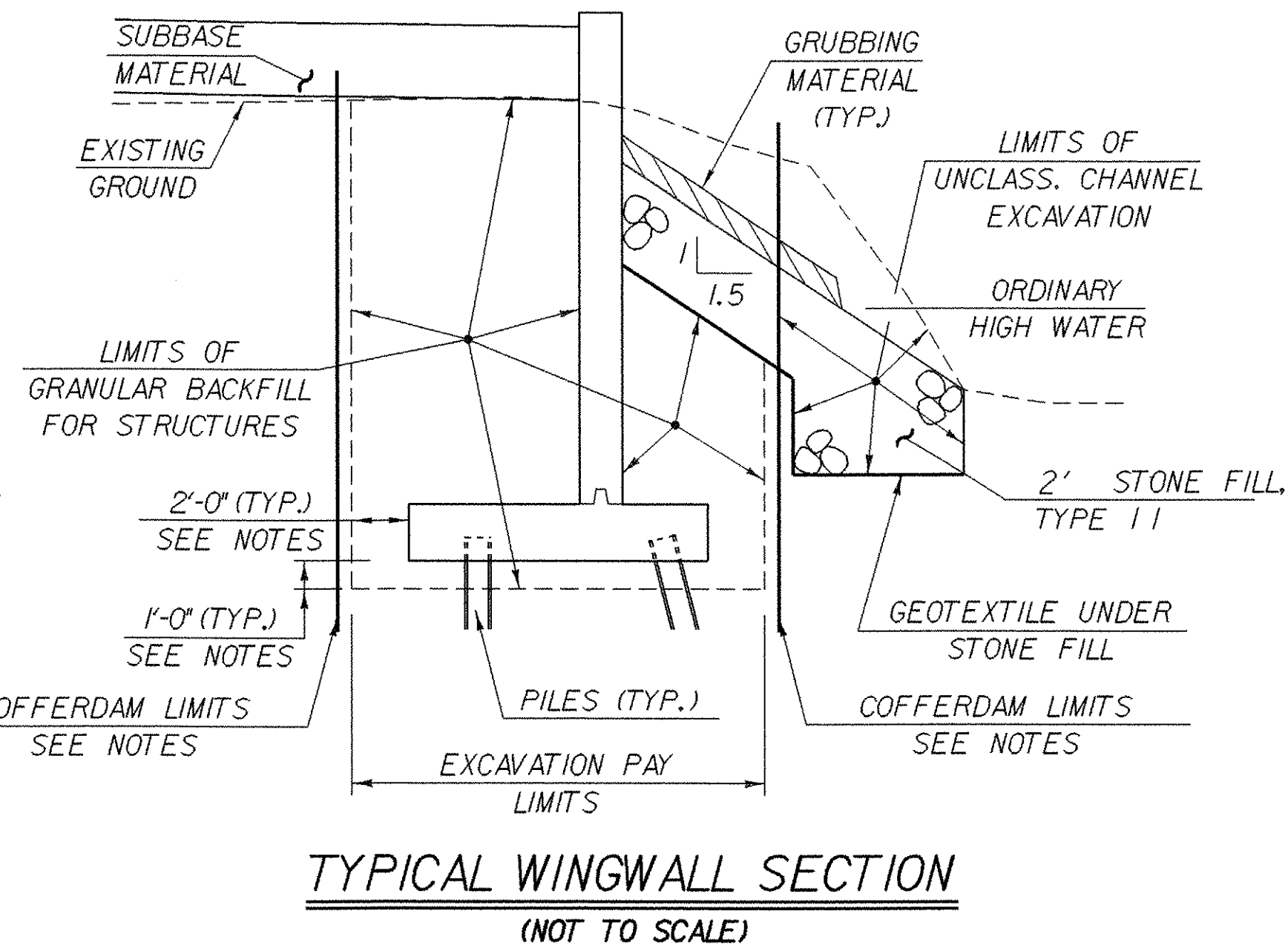
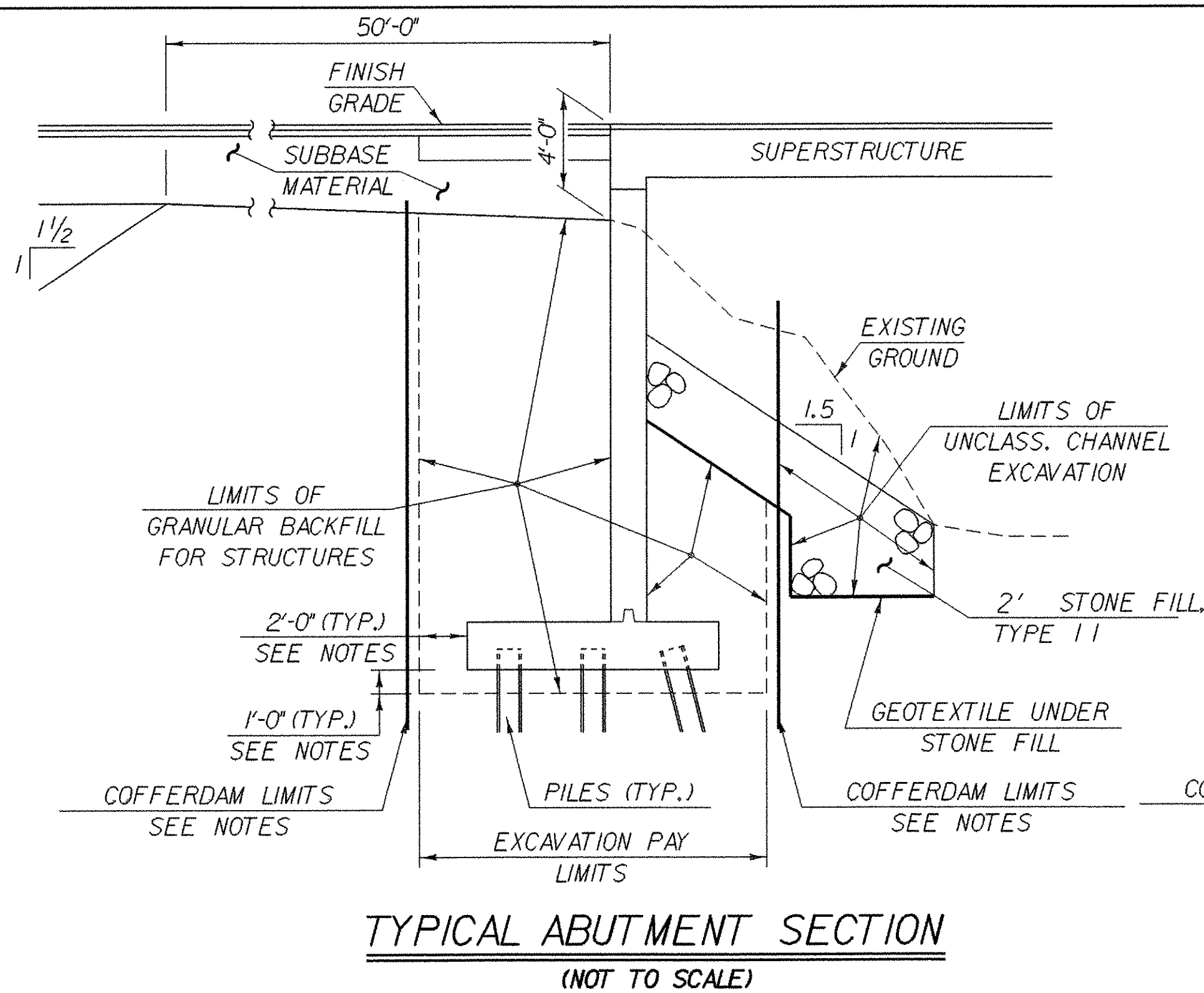
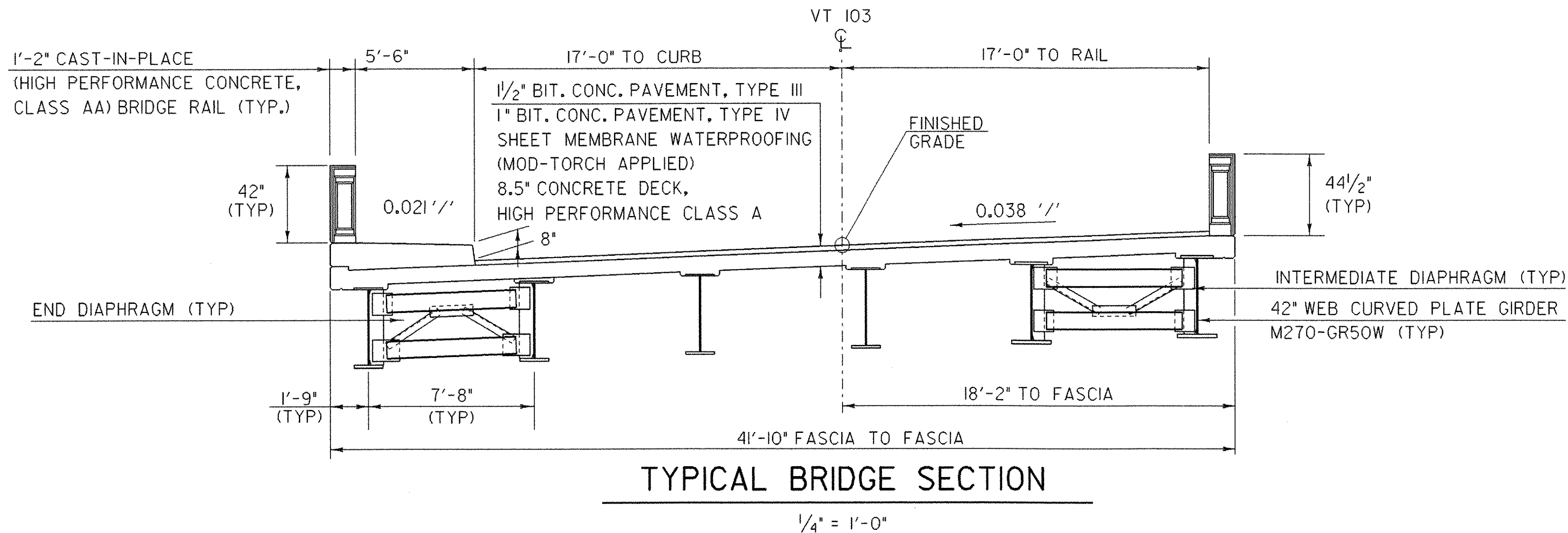
|          |                                                            |          |
|----------|------------------------------------------------------------|----------|
| B-5      | SLOPE GRADING, EMBANKMENTS, MUCK                           | 6/1/94   |
| B-11     | UNDERDRAIN - ROCK SUBGRADE, SLOPE STABILIZ.                | 6/1/94   |
| B-71     | RESIDENTIAL AND COMMERCIAL DRIVES                          | 11/16/00 |
| C-1      | CURBS, BITUMINOUS CONCRETE SIDEWALKS                       | 1/3/00   |
| C-2A     | CEMENT CONCRETE SIDEWALK, CONCRETE CURB                    | 1/3/00   |
| C-2B     | CEMENT CONCRETE SIDEWALK, GRANITE CURB                     | 1/3/00   |
| D-2      | UNDERDRAIN & CARRIER PIPE CONSTRUCTION DETAILS             | 6/1/94   |
| D-4      | UNDERDRAIN FLUSHING BASIN, END SECTION                     | 6/1/94   |
| D-9      | REINFORCED CONCRETE DROP INLET W/ VERTICAL CURB            | 6/1/94   |
| D-15     | PRCP DI W/CAST IRON GRATE ,TYPE D                          | 6/1/94   |
| E-100    | CONSTRUCTION APPROACH SIGNS                                | 1/6/97   |
| E-101    | CONSTRUCTION SIGN DETAILS                                  | 3/10/97  |
| E-102    | CONSTRUCTION SIGN DETAILS                                  | 8/8/95   |
| E-106    | TRAFFIC CONTROL - MISCELLANEOUS DETAILS                    | 8/8/95   |
| E-107    | DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS | 8/8/95   |
| E-107A   | BREAKAWAY BARRICADE DETAILS                                | 8/8/95   |
| E-108    | CONSTRUCTION ZONE LONGITUDINAL DROP OFFS                   | 8/18/95  |
| E-121    | STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD                | 8/8/95   |
| E-123    | GUIDE SIGN PLACEMENT MISCELLANEOUS DETAIL                  | 8/8/95   |
| E-136B   | STATE ROUTE MARKER SIGN DETAILS                            | 8/8/95   |
| E-141    | REGULATORY SIGN DETAILS                                    | 9/20/95  |
| E-143    | REGULATORY SIGN DETAILS                                    | 9/20/95  |
| E-160    | FLANGED CHANNEL STEEL SIGN POST                            | 5/20/99  |
| E-164    | SQUARE STEEL SIGN POST                                     | 5/20/99  |
| E-191    | PAVEMENT MARKING DETAILS                                   | 2/1/99   |
| E-193    | PAVEMENT MARKING DETAILS                                   | 8/18/95  |
| G-1D     | STEEL BEAM GUARDRAIL (40MPH & LESS)                        | 1/3/00   |
| G-18     | PRECAST CONCRETE TEMPORARY TRAFFIC BARRIER                 | 6/1/94   |
| J-3      | MAILBOX SUPPORT DETAILS                                    | 8/7/95   |
| T-1      | TEMPORARY EROSION CONTROL DETAILS                          | 6/1/94   |
| T-2      | TEMPORARY EROSION CONTROL DETAILS                          | 6/1/94   |
| SB-R6-82 | BRIDGE RAILING - HEAVY DUTY STEEL BEAM                     | 1/6/95   |
| SB-R7-90 | BRIDGE RAILING - HEAVY DUTY STEEL BEAM                     | 1/11/95  |

|       |                                             |
|-------|---------------------------------------------|
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| 2     | INDEX OF SHEETS                             |
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| 4     | VT 103 TYPICAL SECTION SHEET                |
| 5     | TH 6 TYPICAL SECTION SHEET                  |
| 6-10  | QUANTITY SHEETS                             |
| 11    | ITEM DETAIL AND DRAINAGE SHEET              |
| 12    | BRIDGE QUANTIY SHEET                        |
| 13    | EARTHWORKS SHEET                            |
| 14-16 | R.O.W. LAYOUT SHEETS                        |
| 17-18 | R.O.W. PROPERTY TABLES                      |
| 19    | HORIZONTAL ALIGNMENT SHEET                  |
| 20    | TIE SHEET                                   |
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| 28    | TH 6 BANKING & MATERIAL TRANSITION SHEETS   |
| 29    | SHOULDER TRANSITION SHEETS                  |
| 30    | DROP INLET DETAILS                          |
| 31-34 | TRAFFIC CONTROL SHEETS                      |
| 35    | DETOUR MARKING AND SIGNING                  |
| 36-38 | UTILITY SHEETS                              |
| 39-44 | EROSION CONTROL SHEETS                      |
| 45    | EROSION CONTROL DETAIL SHEETS               |
| 46    | BORING LAYOUT SHEET                         |
| 47-48 | BORING LOG SHEETS                           |
| 49    | PLAN AND ELEVATION SHEET                    |
| 50    | GENERAL NOTES                               |
| 51    | DECK TYPICAL AND REINFORCEMENT SHEET        |
| 52    | GIRDER FRAMING PLAN                         |
| 53    | CROSS FRAME DETAILS                         |
| 54-55 | BEARING DETAIL SHEETS                       |
| 56-57 | EXPANSION JOINT DETAIL SHEETS               |
| 58    | DOWNSPOUT DETAIL                            |
| 59    | MISCELLANEOUS DETAILS                       |
| 60    | MISCELLANEOUS DETAILS                       |
| 61    | APPROACH SLAB 1 AND 2                       |
| 62-63 | ABUTMENT 1 & 2                              |
| 64    | WINGWALLS 1,2,3,4                           |
| 65-66 | FOOTINGS 1 AND 2                            |
| 67    | REINFORCING SCHEDULE SHEET                  |
| 68-69 | CONCRETE BRIDGE RAIL DETAIL SHEETS          |
| 70-73 | VT 103 CROSS SECTIONS                       |
| 74    | TH 6 CROSS SECTIONS                         |
| 75-79 | CHANNEL LINE #1 CROSS SECTIONS              |

|            |     |
|------------|-----|
| DATUM      |     |
| VERTICAL   | N/A |
| HORIZONTAL | N/A |

|                   |                                                    |                  |               |
|-------------------|----------------------------------------------------|------------------|---------------|
| PROJECT:          | CHESTER                                            | PROJECT NO.:     | BRF 025-I(35) |
| DESIGN FILE NAME: | M:\1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn | IPARM FILE NAME: | zf134ind.i    |
| SURVEYED BY:      | L. BULLOCK                                         | PLOT DATE:       | 28-MAY-2003   |
| SQUAD LEADER:     | PORTALUPI                                          | SURVEY DATE:     |               |
|                   |                                                    | DRAWN BY:        | 6/93          |
|                   |                                                    | SHEET:           | 2 OF 79       |





\*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

## FINAL HYDRAULICS REPORT

### HYDROLOGIC DATA

(Dated 4-30-98)

DRAINAGE AREA= 27.50 MI.  
CHARACTER OF TERRAIN: LOW ROLLING HILLS  
CHARACTER & TYPE OF STREAM: STRAIGHT - PERENNIAL  
NATURE OF STREAMBED: GRAVEL AND COBBLE  
02.33= 1 200 CFS 050= 4 800 CFS  
010= 3 000 CFS 0100= 5 600 CFS  
025= 4 000 CFS 0500= 8 200 CFS  
DATE OF FLOOD OF RECORD: 1938  
WATER SURFACE ELEV.: NA ESTIMATED DISCHARGE: NA  
NATURAL STREAM VELOCITY @ 050 = 8.5 FPS  
ICE CONDITIONS: MODERATE DEBRIS: MODERATE  
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? NO  
IS ORDINARY RISE RAPID? NO  
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? YES  
IF YES, DESCRIBE: DOWNSTREAM STRUCTURE - CHESTER B63 ON TH9  
WATERSHED STORAGE 1% HEADWATERS UNIFORM THROUGHOUT WATERSHED X IMMEDIATELY ABOVE SITE

### EXISTING STRUCTURE

STRUCTURE TYPE: THREE-SPAN T-BEAM YEAR BUILT: 1931  
CLEAR SPAN (NORMAL TO STREAM): 3 X 29 FT EACH = 87 FT TOTAL  
VERTICAL CLEARANCE ABOVE STREAMBED: 12 FT  
WATERWAY OF FULL OPENING: 650 SQ FT  
DISPOSITION OF STRUCTURE: REMOVE  
TYPE OF MATERIAL UNDER SUBSTRUCTURE: NA  
WATER SURFACE ELEV. @ 02.33= 586.4 VELOCITY= 3.8 FPS  
010= 589.7 " 6.0  
025= 590.8 " 7.4  
050= 591.5 " 8.5  
0100= 592.2 " 9.7

LONG TERM STREAM BED CHANGES: NONE NOTED

IS THE ROADWAY OVERTOPPED BELOW THE 0100? YES FREQUENCY: LESS 010  
RELIEF ELEVATION: 588.6 DISCHARGE OVER ROAD @ 0100: 700 CFS

UPSTREAM STRUCTURE: TOWN: CHESTER DISTANCE: 3 000 FT  
HIGHWAY NO.: TH 5 STRUCTURE NO.: B 11  
STRUCTURE TYPE: TWO-SPAN I-BEAM  
CLEAR SPAN: 31 FT CLEAR HEIGHT: 9 FT  
YEAR BUILT: 1940 FULL WATERWAY: 280 SQ FT  
DOWNSTREAM STRUCTURE: TOWN: CHESTER DISTANCE: 450 FT  
HIGHWAY NO.: TH 9 STRUCTURE NO.: B 63  
STRUCTURE TYPE: CONCRETE/STEEL I-BEAM  
CLEAR SPAN: 32 FT CLEAR HEIGHT: 9 FT  
YEAR BUILT: NA FULL WATERWAY: 280 SQ FT

### DESIGN CRITERIA:

- DESIGN LIVE LOAD AASHTO HS25-44
- DESIGN SPAN 107.00 FT.
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 6 KSF ON LEDGE NA
- ALLOWABLE LOAD FOR PILING 190 KIPS TYPE HPI4 X 73 (GR 50) ESTIMATED LENGTH 25 FT
- STRUCTURAL STEEL AASHTO GRADE M 270 Grade 50W 27 KSI
- REINFORCING STEEL GRADE 60
- CONCRETE, HIGH PERFORMANCE CLASS A  $f'_c$ : 4000 PSI  
CONCRETE, HIGH PERFORMANCE CLASS B  $f'_c$ : 3500 PSI
- SOIL UNIT WEIGHT 140 PCF
- DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL N/A

### TRAFFIC MAINTENANCE:

- IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE NO OR ON TEMPORARY BRIDGE OF EXISTING
  - TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED NO
- ARE SIDEWALKS REQUIRED? NO IF SO, ON WHAT SIDE?

### PROPOSED STRUCTURE

STRUCTURE TYPE: SINGLE-SPAN CURVED PLATE GIRDER  
CLEAR SPAN (NORMAL TO STREAM): 90 FT  
VERTICAL CLEARANCE ABOVE STREAMBED: 14 FT  
WATERWAY OF FULL OPENING: 1 000 SQ FT  
WATER SURFACE ELEV. @ 02.33= 586.3 VELOCITY= 3.8 FPS  
010= 589.4 " 5.8  
025= 590.4 " 6.9  
050= 591.1 " 7.9  
0100= 591.8 " 8.9

IS THE ROADWAY OVERTOPPED BELOW THE 0100? YES FREQUENCY: LESS 010  
RELIEF ELEVATION: 588.5 DISCHARGE OVER ROAD @ 0100: 520 CFS

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 594.0 FT (LOW END = 592.6)  
VERTICAL CLEARANCE @ 0100 = 2.2 FT AVERAGE (0.8 ON LOW END)

SCOUR: CONTRACTION 0100 = 4 FT 0500 = 6 FT  
REQUIRED CHANNEL PROTECTION: TYPE II STONE FILL

### PERMIT INFORMATION

AVERAGE DAILY FLOW: 55 CFS  
ORDINARY LOW WATER: 26 CFS DEPTH: 1 FT  
ORDINARY HIGH WATER: 515 CFS DEPTH: 4 FT

### TEMPORARY BRIDGE REQUIREMENTS

TEMPORARY STRUCTURE TYPE: Single span bridge at the location shown on the plans. Temp bridge length exceeds hydraulic requirements due to need to avoid sensitive area.  
VERTICAL CLEARANCE ABOVE STREAMBED: Bottom of steel min elev. = 591.0'  
WATERWAY OF FULL OPENING: 560 sq ft min, perpendicular to channel

### NOTES

- COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.
- THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
- ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.
- IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.

### LOAD FACTOR LOAD RATING (TONS)

| LOADING LEVELS (LOAD FACTOR) | TRUCK |    |     |        |          |          |          |
|------------------------------|-------|----|-----|--------|----------|----------|----------|
|                              | H     | H5 | 3S2 | 6 AXLE | 3A. STR. | 4A. STR. | 5A. SEMI |
| INVENTORY                    | 36    | 50 | —   | —      | —        | —        | —        |
| A=2.17; B=1.00               | 50    | 70 | 81  | —      | 64       | 66       | 75       |
| POSTED                       | —     | —  | —   | —      | —        | —        | —        |
| A=1.55; B=1.40               | —     | 83 | 97  | 114    | 76       | 78       | —        |
| OPERATING                    | —     | —  | —   | —      | —        | —        | —        |
| A=1.30; B=1.67               | —     | —  | —   | —      | —        | —        | —        |

STRENGTH RF:  $\frac{0.95 F_y S_{LL+1} - M_{DL} S_{LL+1} - M_{SD} S_{LL+1}}{A \times M_{LL+1}}$  SERVICEABILITY RF:  $\frac{0.95 F_y S_{LL+1} - M_{DL} S_{LL+1} - M_{SD} S_{LL+1}}{1.67 M_{LL+1}}$

TRAFFIC DATA  
VT 103 BR 12

2002 ADT 4,420 VPD  
2022 ADT 5,910 VPD  
2002 ADTT 805 VPD  
2022 ADTT 1,240 VPD  
2022 DHV 760 VPH  
DX 53 %  
TX 12 %  
DESIGN SPEED 30 MPH  
18 KIP ESALS (2 LANES)  
20 YR - 10,260,000  
40 YR - 26,986,000

## STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of **CHESTER** Bridge No. **12**  
Highway No. **VT 103** Log Sta. **202+50**  
Surv. Sta. **202+50**

**VT 103 OVER THE WILLIAMS RIVER**  
**PRELIMINARY INFORMATION**

Designed By **THL / LKW** Drawn By **THL / PBD**  
Checked By **TLG** Date **10/00** Bridge Design Supervisor **NAP** Date **10/00**

PROJECT **CHESTER** PROJECT NO. **BRF 025-1(35)**

I.G.C. Info. **/user/str2/87b34/zbl34cpl.dgn** **zbl34cplJ**  
Bridge Sheet No. **BR100** Sheet **3** of **79**

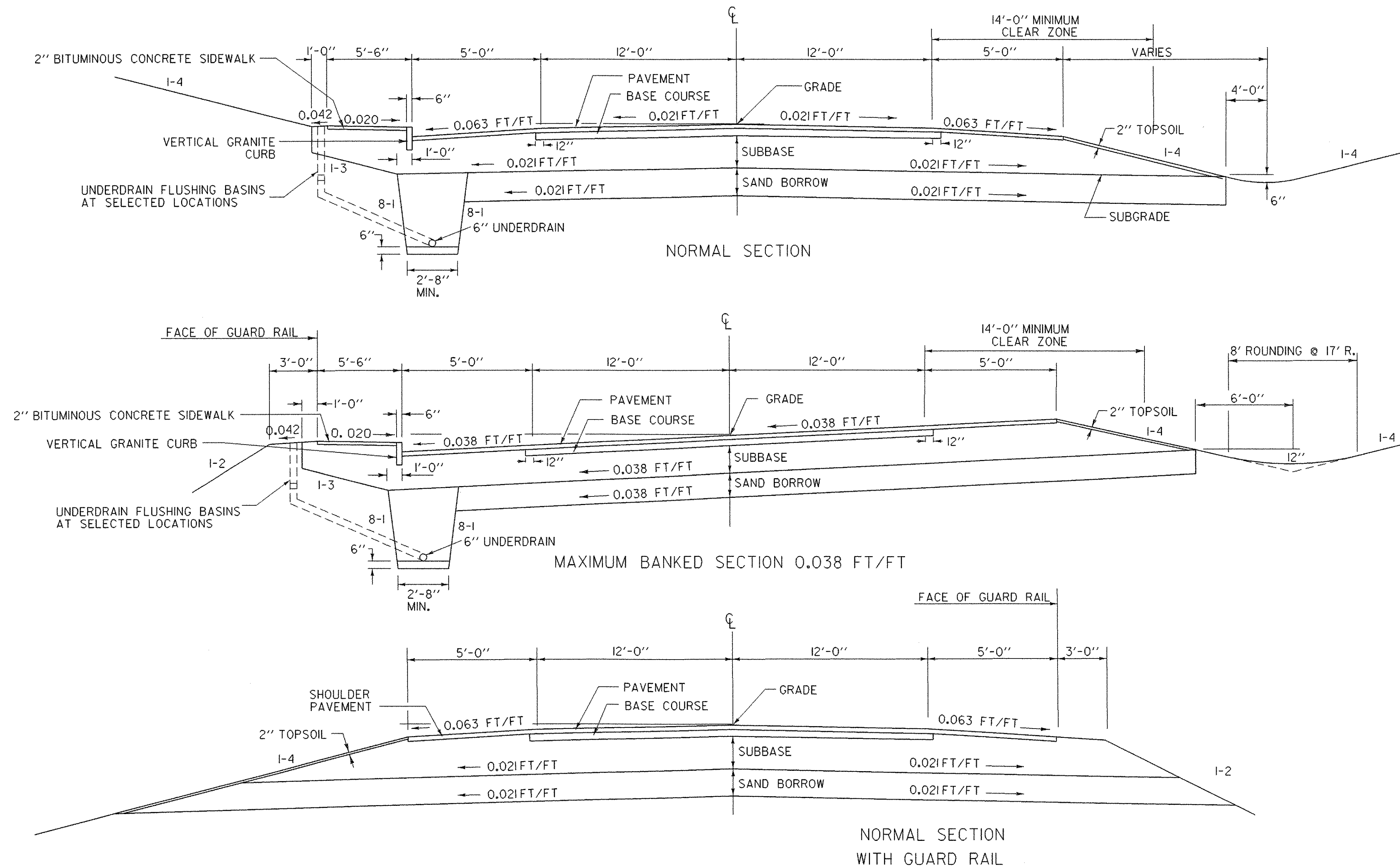


# VT. RTE. 103

## TYPICAL SECTIONS

| MATERIAL ITEM          | THICKNESS TOLERANCE |
|------------------------|---------------------|
| PAVEMENT (TOTAL DEPTH) | ± 1/4"              |
| SUBBASE                | ± 1"                |
| SAND BORROW            | ± 1"                |

1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III  
 2" BITUMINOUS CONCRETE PAVEMENT, TYPE II  
 4" BITUMINOUS CONCRETE PAVEMENT, TYPE I  
 24" SUBBASE OF DENSE GRADED CRUSHED STONE  
 22" SAND BORROW  
 SHOULDER: 1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III  
 2" BITUMINOUS CONCRETE PAVEMENT, TYPE II



NOT TO SCALE (TYP)

### SEEDING FORMULA URBAN AREAS

| % WT.  | LBS./A. | NAME                | PUR % | GERM % |
|--------|---------|---------------------|-------|--------|
| 42.5   | 38.25   | CREeping RED FESCUE | 98    | 85     |
| 10.0   | 9.0     | PERENNIAL RYE GRASS | 95    | 90     |
| 42.5   | 38.25   | KENTUCKY BLUE GRASS | 85    | 85     |
| 5.0    | 4.5     | ANNUAL RYE GRASS    | 95    | 85     |
| 100.00 | 90.0    |                     |       |        |

### GENERAL 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.

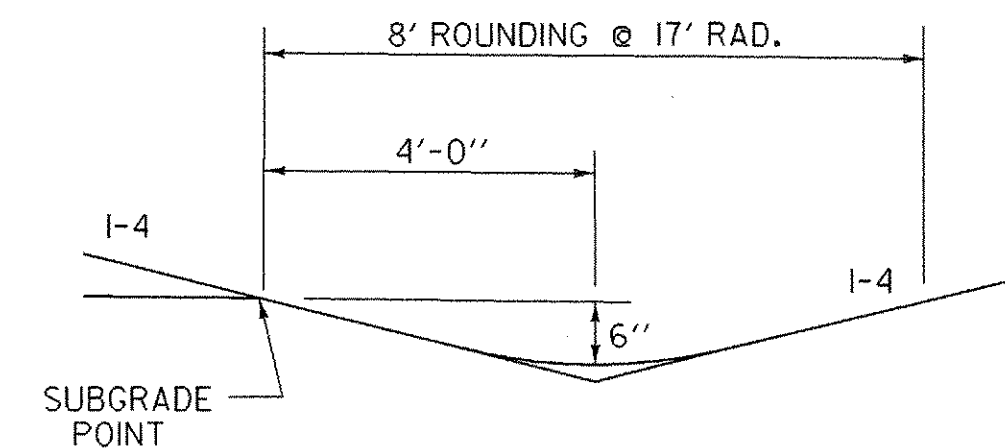
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.

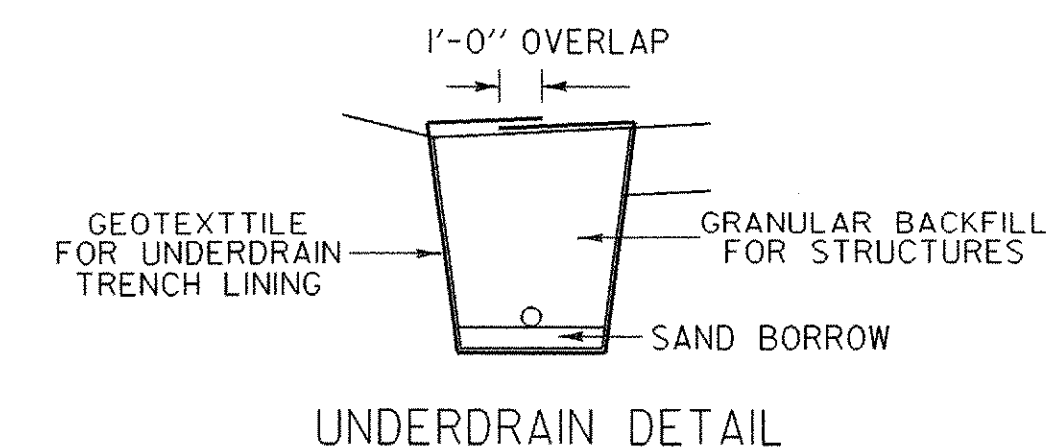
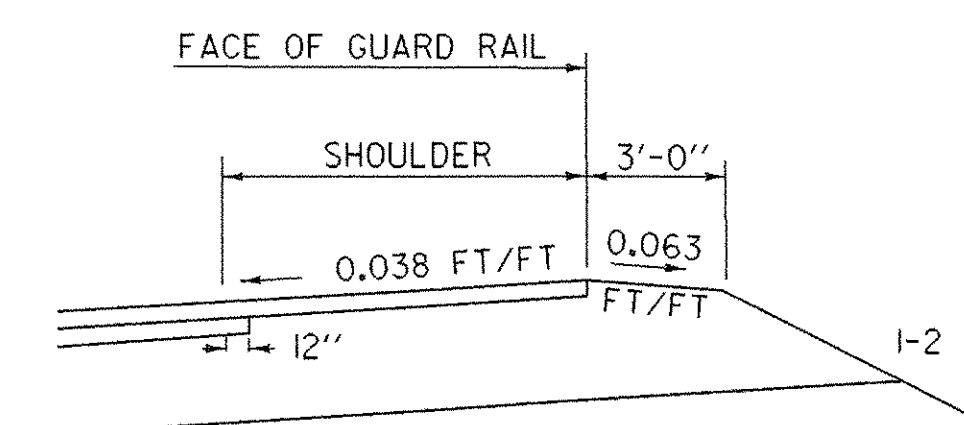
SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.

PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D - 2.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.015 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.



FOR SLOPES IN SOLID ROCK EXCAVATION AND DRILLING AND BLASTING OF SOLID ROCK SUBGRADE, SEE STANDARD SHEET A-60.



|                 |                             |              |             |
|-----------------|-----------------------------|--------------|-------------|
| SURVEYED BY     | SHERIDAN                    | DATE         | 8-90        |
| DRAWN BY        | L. BULLOCK                  | DATE         | 4-92        |
| SQUAD LEADER    | PORTALUPI                   |              |             |
| DESIGN FILE NO. | M:\154900 VAOT Chester Curv |              |             |
| IPARM NAME      | zfi34+yl.I                  | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                     |              |             |
| PROJ. NO.       | BRF025-1(35)                |              |             |
| SHEET           | 4                           | OF 79        | SHEETS      |

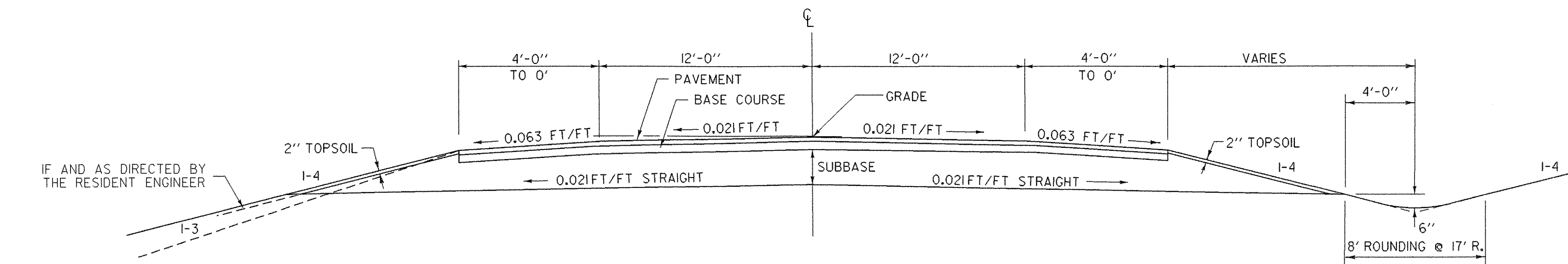


# TH #6 TYPICAL SECTIONS

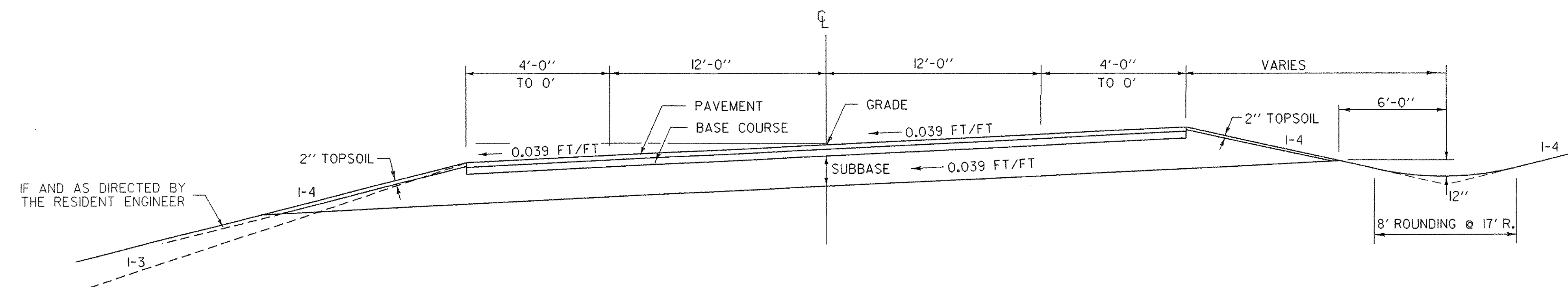
STATION 20+18 - 22+25

1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III  
2" BITUMINOUS CONCRETE PAVEMENT, TYPE II  
12" SUBBASE OF DENSE GRADED CRUSHED STONE

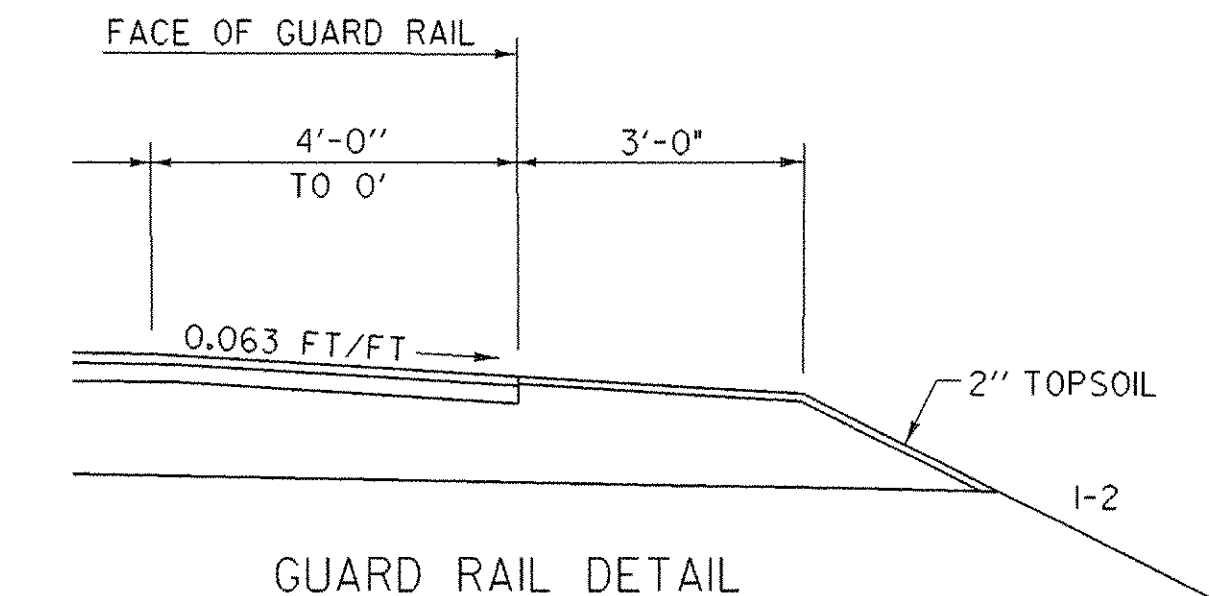
| MATERIAL ITEM          | THICKNESS TOLERANCE |
|------------------------|---------------------|
| PAVEMENT (TOTAL DEPTH) | ± 1/4"              |
| SUBBASE                | ± 1"                |



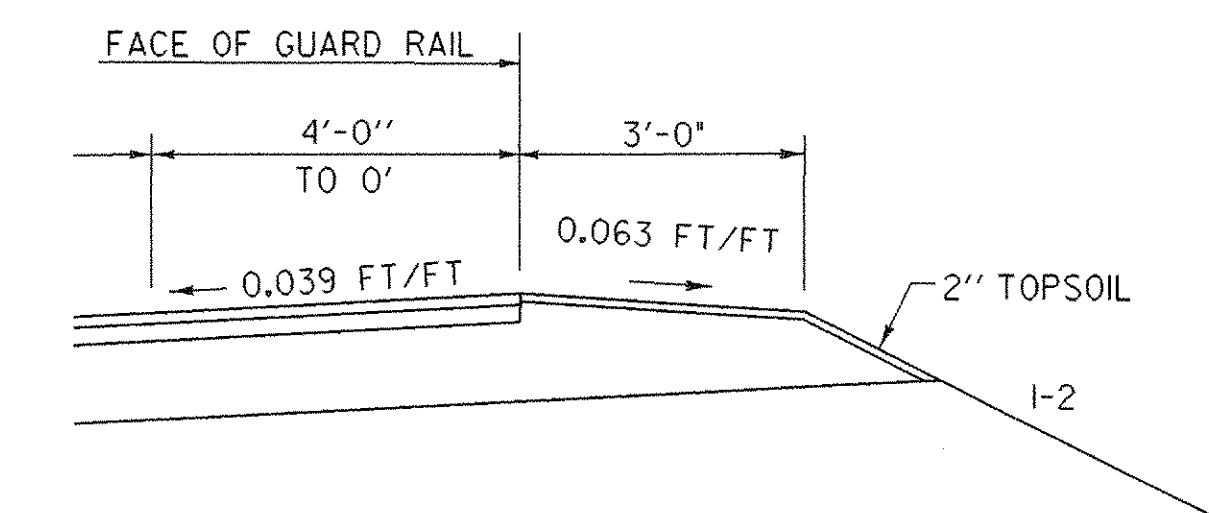
NORMAL SECTION



MAXIMUM BANKED SECTION 0.039 FT/FT



GUARD RAIL DETAIL  
ON NORMAL SECTION



GUARD RAIL DETAIL  
ON BANKED SECTION

NOT TO SCALE

|                 |                             |              |             |
|-----------------|-----------------------------|--------------|-------------|
| SURVEYED BY     | SHERIDAN                    | DATE         | 8-90        |
| DRAWN BY        | L. BULLOCK                  | DATE         | 4-92        |
| SQUAD LEADER    | PORTALUPI                   |              |             |
| DESIGN FILE NO. | M:\154900_VAOT_Chester_Curv |              |             |
| IPARM NAME      | zfi34+y2.i                  | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                     |              |             |
| PROJ. NO.       | BRF025-1(35)                |              |             |
| SHEET           | 5                           | OF           | 79 SHEETS   |



# QUANTITY SHEET

STATE OF VERMONT  
AGENCY OF TRANSPORTATION[illegible]



# QUANTITY SHEET

**STATE OF VERMONT**  
**AGENCY OF TRANSPORTATION**

[illegible]



**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

[illegible]



**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

[illegible]



STATE OF VERMONT  
AGENCY OF TRANSPORTATION

[illegible]



STATE OF VERMONT  
AGENCY OF TRANSPORTATION

[illegible]



BRIDGE QUANTITY SHEET

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
STRUCTURES DIVISION

| ITEM NO. | ITEM                                               | UNIT                | SUPER-STRUCT. | QUANTITY BREAKDOWN |          |               |               |  |    |  |  | CHAN. | TOTAL   | FINAL   |
|----------|----------------------------------------------------|---------------------|---------------|--------------------|----------|---------------|---------------|--|----|--|--|-------|---------|---------|
|          |                                                    |                     |               | ABUT. #1           | ABUT. #2 | APPR. SLAB #1 | APPR. SLAB #2 |  |    |  |  |       |         |         |
| 203.17   | UNCLASSIFIED EXCAVATION                            | CY                  |               |                    |          |               |               |  |    |  |  | 1,305 | 1,305   | 914     |
| 204.30   | GRANULAR BACKFILL FOR STRUCTURES                   | CY                  |               | 155                | 325      |               |               |  |    |  |  |       | 480     | 853.5   |
| 208.30   | COFFERDAM EXCAVATION, EARTH                        | CY                  |               | 255                | 595      |               |               |  |    |  |  |       | 850     | 939.2   |
| 208.35   | COFFERDAM EXCAVATION, ROCK                         | CY                  |               | 45                 | 105      |               |               |  |    |  |  |       | 150     | 0       |
| 208.40   | COFFERDAM STA. 201+80                              | LS                  |               | 1                  |          |               |               |  |    |  |  |       | 1       | 1       |
| 208.40   | COFFERDAM STA. 203+25                              | LS                  |               |                    | 1        |               |               |  |    |  |  |       | 1       | 1       |
| 406.25   | BITUMINOUS CONCRETE PAVEMENT (PG 58-28)            | TON                 | 58            |                    |          |               | 11            |  | 19 |  |  |       | 88      | 67      |
| 501.33   | CONCRETE, HIGH PERFORMANCE CLASS A                 | CY                  | 180           |                    |          |               |               |  |    |  |  |       | 180     | 178.91  |
| 501.34   | CONCRETE, HIGH PERFORMANCE CLASS B                 | CY                  |               | 165                | 270      | 35            | 48            |  |    |  |  |       | 518     | 506.36  |
| 504.10   | FURNISHING EQUIPMENT FOR DRIVING PILES             | LS                  |               | 0.5                | 0.5      |               |               |  |    |  |  |       | 1       | 1       |
| 505.17   | STEEL PILING (HP14 X 73)                           | LF                  |               | 760                | 960      |               |               |  |    |  |  |       | 1,720   | 1,322.0 |
| 506.55   | STRUCTURAL STEEL (PLATE GIRDER)                    | LB                  | 190,000       |                    |          |               |               |  |    |  |  |       | 190,000 | 188561  |
| 507.15   | REINFORCING STEEL                                  | LB                  |               | 12,755             | 19,560   |               |               |  |    |  |  |       | 32,315  | 32,445  |
| 507.17   | EPOXY COATED REINFORCING STEEL                     | LB                  | 44,821        |                    | 110      | 4,532         | 7,519         |  |    |  |  |       | 57,042  | 57,745  |
| 508.15   | SHEAR CONNECTORS (1392 - 7/8" DIA. X 7")           | LS                  | 1             |                    |          |               |               |  |    |  |  |       | 1       | 1       |
| 513.25   | STRUCTURAL PAINTING, SHOP APPLIED (67)             | LS                  | 1             |                    |          |               |               |  |    |  |  |       | 1       | 1       |
| 513.40   | SURFACE PREPARATION, SHOP                          | LS                  | 1             |                    |          |               |               |  |    |  |  |       | 1       | 1       |
| 514.10   | WATER REPELLENT                                    | GAL                 | 32            | 5                  | 6        |               |               |  |    |  |  |       | 43      | 0       |
| 516.10   | BRIDGE EXPANSION JOINT                             | LF                  | 60            |                    |          |               |               |  |    |  |  |       | 60      | 59.87   |
| 519.20   | SHEET MEMBRANE WATERPROOFING (MOD - TORCH APPLIED) | SY                  | 417           |                    |          | 78            | 141           |  |    |  |  |       | 636     | 417     |
| 524.11   | JOINT SEALER HOT POURED                            | LF                  | 37            |                    |          |               |               |  |    |  |  |       | 37      | 0       |
| 525.50   | CAST-IN-PLACE CONCRETE BRIDGE RAIL                 | LF                  | 271           |                    |          |               |               |  |    |  |  |       | 271     | 270.35  |
| 528.11   | TWO - WAY TEMPORARY BRIDGE                         | LS                  | 1             |                    |          |               |               |  |    |  |  |       | 1       | 1       |
| 529.10   | REMOVAL OF BRIDGE PAVEMENT                         | SY                  | 280           |                    |          |               |               |  |    |  |  |       | 280     | 279.14  |
| 529.15   | REMOVAL OF STRUCTURE                               | EACH                | 1             |                    |          |               |               |  |    |  |  |       | 1       | 1       |
| 531.10   | BEARING DEVICE ASSEMBLY (GIRDERS)                  | EACH                |               | 6                  | 6        |               |               |  |    |  |  |       | 12      | 12      |
| 531.10   | BEARING DEVICE ASSEMBLY (DECK)                     | EACH                |               |                    | 1        |               |               |  |    |  |  |       | 1       | 1       |
| 613.10   | STONE FILL TYPE I                                  | CY                  |               | 1                  | 1        |               |               |  |    |  |  |       | 2       | 0       |
| 613.11   | STONE FILL TYPE II                                 | CY                  |               | 235                | 490      |               |               |  |    |  |  |       | 725     | 521     |
| 621.21   | HEAVY DUTY STEEL BEAM GUARD RAIL                   | FT                  |               |                    |          |               | 50            |  | 50 |  |  |       | 100     | 140     |
| 649.31   | GEOTEXTILE UNDER STONE FILL                        | SY                  |               | 345                | 725      |               |               |  |    |  |  |       | 1,070   | 769     |
| 651.40   | GRUBBING MATERIAL                                  | SY                  |               |                    |          |               |               |  |    |  |  | 340   | 340     | 257     |
| 514.10   | WATER REPELLENT (MOD. SILANE)                      | SA/CO #1 (11-10-04) |               |                    |          |               |               |  |    |  |  |       |         | 34.5    |
| 516.10   | BRIDGE EXPANSION JOINT (ASPHALTIC PLUG)            | SA/CO #1 (11-10-04) |               |                    |          |               |               |  |    |  |  |       |         | 37      |
| 900.06   | EXTRA WORK ORDER (CONCRETE CRACK SEALER)           | SA/CO #2 (7-14-05)  |               |                    |          |               |               |  |    |  |  |       |         | 1       |

|                                                                                     |                                                                                                                             |                               |                              |                                   |                                  |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-----------------------------------|----------------------------------|
|  | BRIDGE(S) AT STATION(S) <u>BEGIN STA. 201+95.58 END STA. 203+07.59</u><br>LOCATION(S) <u>VT 103 OVER THE WILLIAMS RIVER</u> | PREPARED BY: <u>P. DUSTIN</u> | CHECKED BY: <u>J. WILSON</u> | PROJECT: <u>CHESTER</u>           | PROJECT NO.: <u>BRF 025-(35)</u> |
|                                                                                     |                                                                                                                             | SUPERVISOR: <u>M. ZYDEL</u>   | BR <u>BRID</u> OF <u></u>    | SHEET NO.: <u>12</u> OF <u>79</u> |                                  |



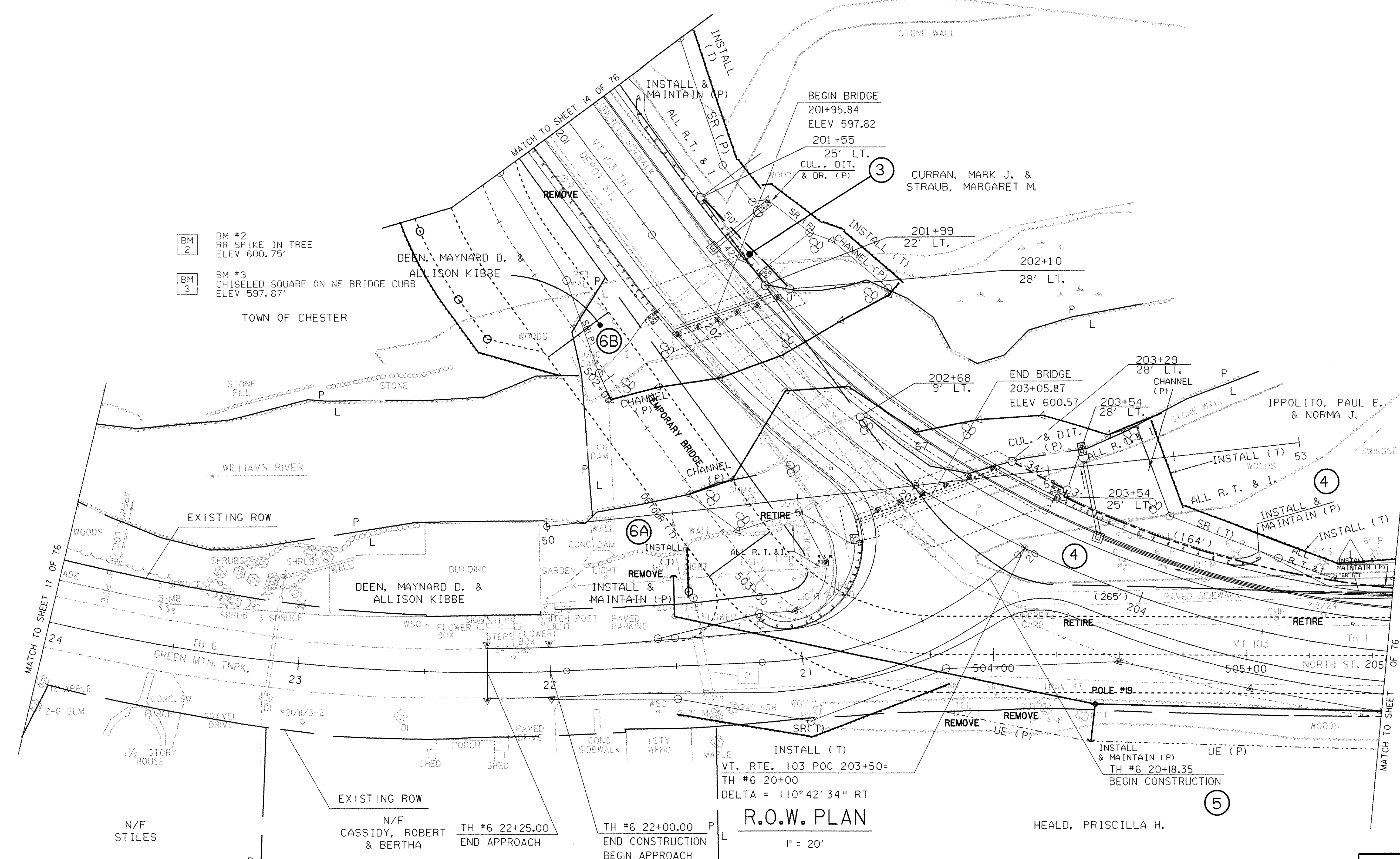
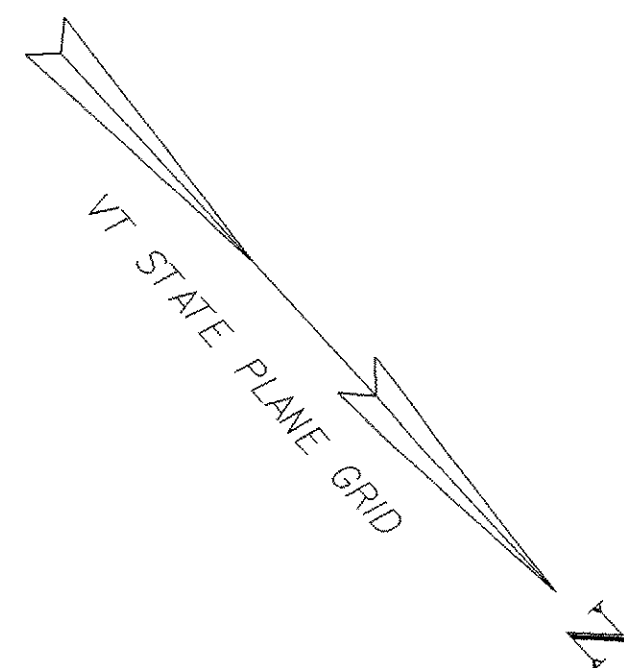
**STATE OF VERMONT**  
**AGENCY OF TRANSPORTATION**

| REMARKS                                   |      |                            |
|-------------------------------------------|------|----------------------------|
| EARTH AND ROCK EXCAVATION                 | 2293 |                            |
| SOLID ROCK EXCAVATION                     | 0    |                            |
| EARTH EXCAVATION                          | 2293 |                            |
| PLANIMETERED FILL                         | 691  |                            |
| LESS FACTORED SOLID ROCK                  | 0    |                            |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | 0    |                            |
| NET PLANIMETERED FILL                     | 691  |                            |
| FACTOR                                    | 104  |                            |
| PLANIMETERED FILL INCLUDING FACTOR        | 795  |                            |
|                                           |      |                            |
| MATERIALS AVAILABLE FOR FILLS             |      |                            |
| EARTH EXCAVATION                          | 2293 |                            |
| CHANNEL EXCAVATION                        | 0    |                            |
| UNDERDRAIN EXCAVATION                     | 0    |                            |
| STRUCTURE EXCAVATION                      | 0    |                            |
|                                           |      |                            |
| TOTAL MATERIAL AVAILABLE FOR FILL         | 2293 |                            |
|                                           |      |                            |
| TOTAL FILL INCLUDING FACTOR               | 795  |                            |
| TOTAL MATERIAL FOR FILL                   | 0    |                            |
| BORROW                                    | 0    |                            |
| EXCESS EXCAVATION                         | 1498 |                            |
|                                           |      |                            |
| PROJECT:                                  |      | PROJECT NO. :              |
| CHESTER                                   |      | BRF 025-I(35)              |
| DESIGN FILE NAME: M:\I549100 VAOT-Chester |      | Curv\HWY\DRAW\zf134frm.dgn |
| IPARM FILE NAME: zf134ew.i                |      | PLOT DATE: 28-MAY-2003     |
| SURVEYED BY: SHERIDAN                     |      | SURVEY DATE: 8/90          |
| SQUAD LEADER: PORTALUPI                   |      | DRAWN BY: L. BULLOCK       |
|                                           |      | SHEET: 13 OF 79            |







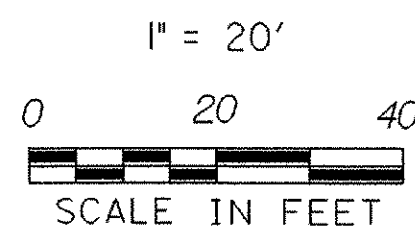


BM #2  
RR SPIKE IN TREE  
ELEV 600.75'

BM #3  
CHISELED SQUARE ON NE BRIDGE CURB  
ELEV 597.87'

TOWN OF CHESTER

### R.O.W. PLAN



LEGEND  
— LIMITS OF WETLAND

LINES SHOWN ON THIS PLAN AS EXISTING  
PROPERTY LINES P/L ARE BELIEVED TO  
BE ACCURATE BUT SHOULD NOT BE RELIED  
UPON FOR PURPOSES UNRELATED TO THE  
TOWN OF CHESTER'S ACQUISITION OF LAND  
AND RIGHTS FOR THIS PROJECT.

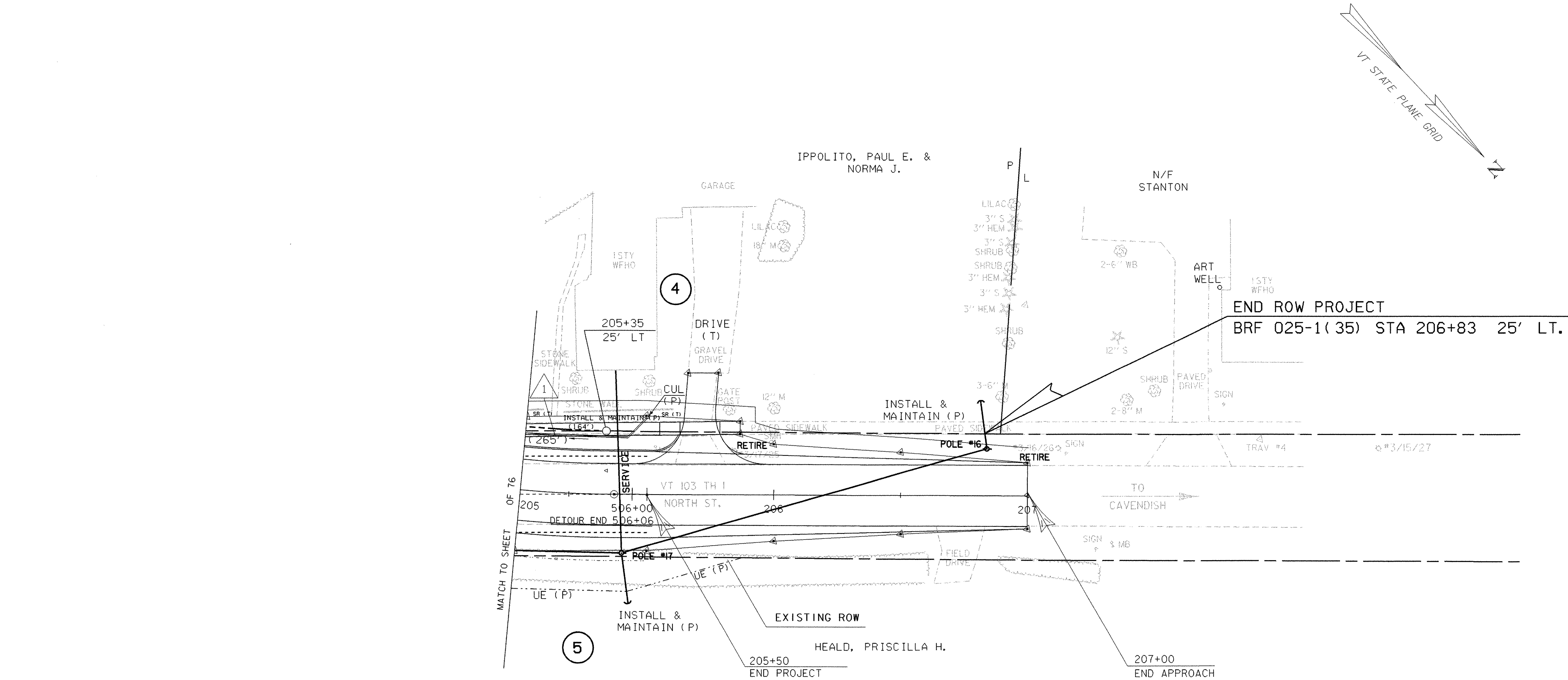
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92  
DRAWN BY L. BULLOCK DATE 1/93  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\1549101\VA01-Chester Curv  
HWY\DRAW\rb134zzz.dgn  
IPARM FILE rb134r2.1 DATE PLOTTED 28-MAY-2003

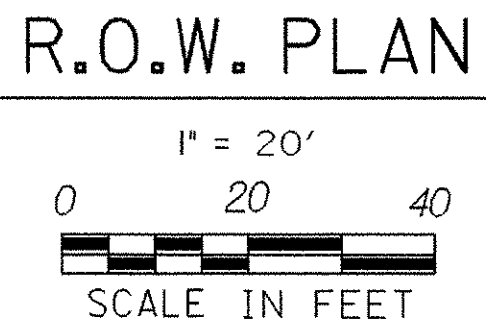
PROJ. NAME CHESTER  
PROJ. NO. BR 025-K(35)



|              |           |
|--------------|-----------|
| <b>DATUM</b> |           |
| VERTICAL     | NGVD 1929 |
| HORIZONTAL   | NAD 1927  |



LINES SHOWN ON THIS PLAN AS EXISTING  
PROPERTY LINES P/L ARE BELIEVED TO  
BE ACCURATE BUT SHOULD NOT BE RELIED  
UPON FOR PURPOSES UNRELATED TO THE  
TOWN OF CHESTER'S ACQUISITION OF LAND  
AND RIGHTS FOR THIS PROJECT.



|                       |                              |      |             |
|-----------------------|------------------------------|------|-------------|
| SURVEYED BY           | SHERIDAN                     | DATE | 08-90       |
| DRAWN BY              | L. BULLOCK                   | DATE | 11-90       |
| SQUAD LEADER          | PORTALUPI                    |      |             |
| DESIGN FILE NO.       | M:\1549101\VAOT-Chester Curv |      |             |
| IPARM NAME            | rb134r3.1                    | DATE | 28-MAY-2003 |
| PROJ. NAME            | CHESTER                      |      |             |
| PROJ. NO.             | BRF025-1(35)                 |      |             |
| SHEET 16 OF 79 SHEETS |                              |      |             |



STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
RIGHT OF WAY PLANS  
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

ALL STATIONS ARE FROM THE REVISED C

| PARCEL NO. | GRANTOR                                                                                                            | SHEET NO. | BEGINNING STATION                                                                                                                                                    | ENDING STATION                                                                                                                                         | TAKING     | REM. | RIGHTS                                                                                                                                                                                                                      | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS                                                                                  | REVISION NO. | SHEET       | DESCRIPTION OF REVISION                                                                                                                                                                                                                                          | DATE     | MADE BY  | APPROVED BY |
|------------|--------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|-----------------------|-----|-----|------------------------------------------------------------------------------------------|--------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------------|
| 1A         | RUBSAMEN, ERNEST B. JR. & PATRICIA A. - TRUSTEES OF THE ERNEST B. RUBSAMEN JR. & PATRICIA A. RUBSAMEN LIVING TRUST |           |                                                                                                                                                                      |                                                                                                                                                        |            |      |                                                                                                                                                                                                                             |             |      |                       |     |     | DELETED                                                                                  | 1            | 15,18       | PARCEL NO. 3 CURRAN & STRAUB. ADD CUL., DIT. & DR. (P) AT STA. 201+75 LT. PER C.O. 9112.                                                                                                                                                                         | 04-05-00 | M. J. R. | R. P. D.    |
| 2          | GODDARD, EDWARD L. & NANCY L.                                                                                      | 17        | 199+64 LT.<br>199+47 LT.                                                                                                                                             | 199+80 LT.<br>199+80 LT.                                                                                                                               |            |      | SLOPE (P) 25 S.F.±<br>INSTALL (T)                                                                                                                                                                                           |             |      | CHESTER               |     |     | EROSION CONTROL                                                                          | 2            | 16,18<br>20 | PARCEL NO. 6 DEEN, MAYNARD, & ALLISON-KIBB CHANGE STATIONS FOR FENCE FROM TH6 22+89 RT. TO TH 6 24+42 RT. AND TH6 24+42 TO TH6 25+05 RT. ON DETAIL SHEET. REMOVE ALL R.T.&I. AND ADD 'REMOVE & RESET (T)'. PER C.O. 9114.                                        | 04-17-00 | R. B. K. | R. P. D.    |
| 3          | CURRAN, MARK J. & STRAUB, MARGARET M.                                                                              | 17,18     | 201+55 LT.<br>199+80 LT.<br>199+80 LT.<br>199+82 LT.<br>201+75 LT.<br>201+96 LT.<br>201+05 LT.                                                                       | 202+10 LT.<br>202+49 LT.<br>201+96 LT.<br>201+65 LT.<br>202+41 LT.<br>201+12 LT.                                                                       | 187 S.F.±  |      | INSTALL (T)<br>SLOPE (P) 3275 S.F.±<br>ALL R.T.&I.<br>CUL., DIT. & DRAIN. (P)<br>CHANNEL (P) 585 S.F.±<br>INSTALL & MAINTAIN (P)                                                                                            |             |      | CHESTER               |     |     | EROSION CONTROL<br><br>STONE WALL<br><br>GUARD RAIL                                      | 3            | 16,18<br>20 | PARCEL NO. 6A DEEN. SLOPE RE-PLOTTED TO FALL WITHIN EXISTING R.O.W.: REMOVE 'SLOPE (P)', REMOVE 'REMOVE & RESET(T)', REMOVE 'ALL R.T.&I.' STONEWALL, REVISE 'INSTALL(T)' SILT FENCE, REMOVE 'ALL R.T.&I.' TWO LIGHTS, REMOVE 'ALL R.T.&I.' FENCE. PER C.O. 9122. | 05-22-00 | R. B. K. | R. P. D.    |
| 4          | IPPOLITO, PAUL F. & NORMA J.                                                                                       | 18,19     | 202+68 LT.<br>203+29 LT.<br>203+43 LT.<br>203+50 LT.<br>203+77 LT.<br>203+81 LT.<br>204+00 LT.<br>204+37 LT.<br>204+89 LT.<br>205+71 LT.<br>206+80 LT.<br>205+45 LT. | 205+33 LT.<br>204+00 LT.<br>203+83 LT.<br>203+68 LT.<br>205+00 LT.<br>204+00 LT.<br>205+87 LT.<br>204+39 LT.<br>205+87 LT.<br>206+83 LT.<br>205+50 LT. | 4050 S.F.± |      | CHANNEL (P) 1170 S.F.±<br>ALL R.T.&I.<br>CULVERT & DITCH (P)<br>INSTALL (T)<br>ALL R.T.&I.<br>SLOPE (T) 820 S.F.±<br>INSTALL & MAINTAIN (P)<br>INSTALL & MAINTAIN (P)<br>DRIVE (T)<br>INSTALL & MAINTAIN (P)<br>CULVERT (P) |             |      | CHESTER               |     |     | STONE WALL<br><br>EROSION CONTROL<br>STONE WALL<br><br>GUARD RAIL<br>SIDEWALK<br>GUYWIRE | 4            |             | GENERAL CHANGE. CHANGE BEGIN ROW PROJECT STA. LENGTH OF ROW PROJECT ON TITLE SHEET. NEW TITLE SHEET SHOWING DETOUR AND DESCRIPTION OF SAME. CHANGE LAYOUT SHEETS. PER C.O. 9154.                                                                                 | 09-29-00 | S. L. D. | R. P. D.    |
| 5          | HEALD, PRISCILLA H.                                                                                                | 18,19     | TH 6 20+80 LT.<br>TH 6 20+97 LT.<br>203+54 RT.<br>203+98 RT.<br>205+40 RT.                                                                                           | TH 6 21+27 LT.<br>TH 6 21+04 LT.<br>205+89 RT.<br>204+02 RT.<br>205+43 RT.                                                                             |            |      | INSTALL (T)<br>SLOPE (T) 7 S.F.±<br>UTILITY EASE. (P) 2510 S.F.±<br>INSTALL & MAINTAIN (P)<br>INSTALL & MAINTAIN (P)                                                                                                        |             |      | CHESTER               |     |     | EROSION CONTROL<br><br>GUY WIRE<br>GUY WIRE                                              | 5            |             | PARCEL NO. 1 RUBSAMEN ET. AL. DELETE PARCEL 1A. CHANGE LAYOUT SHEET.                                                                                                                                                                                             | 09-29-00 | S. L. D. | R. P. D.    |
|            |                                                                                                                    |           |                                                                                                                                                                      |                                                                                                                                                        |            |      |                                                                                                                                                                                                                             |             |      |                       |     |     |                                                                                          | 6            |             | PARCEL NO. 2 GODDARD. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL'. PER C.O. 9156.                                                                                                                                                    | 09-29-00 | S. L. D. | R. P. D.    |
|            |                                                                                                                    |           |                                                                                                                                                                      |                                                                                                                                                        |            |      |                                                                                                                                                                                                                             |             |      |                       |     |     |                                                                                          | 7            |             | PARCEL NO. 3 CURRAN & STRAUB. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL' PER C.O. 9157.                                                                                                                                             | 09-29-00 | S. L. D. | R. P. D.    |
|            |                                                                                                                    |           |                                                                                                                                                                      |                                                                                                                                                        |            |      |                                                                                                                                                                                                                             |             |      |                       |     |     |                                                                                          | 8            |             | PARCEL NO. 4 IPPOLITO. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL'. CHANGE BEGINNING AND ENDING STATIONS FOR GUYWIRE. CHANGE LOCATION OF GUYWIRE ON LAYOUT. PER C.O. 9158.                                                           | 09-29-00 | S. L. D. | R. P. D.    |

M:\1549100 Chester Curv\HWY\DRAW\rb134d.l  
ACCT.rdrawn  
M:\87b134\Structures\rb134d.dgn  
DATE PLOTTED 28-MAY-2003

DR. (P)- DRAINAGE RIGHT  
DIT. (P)- DITCHING RIGHT  
CH. (P)- CHANNEL RT.  
DRIVE (T)- DRIVE RIGHT  
CUL. (P)- CULVERT RIGHT  
[W]- WATER SOURCES

PRESENT R.O.W.  
TAKING WITHOUT ACCESS  
TAKING WITHOUT ACCESS ALONG PROPERTY LINE  
TAKING WITH ACCESS  
PERMANENT EASEMENT  
TEMPORARY EASEMENT

LEGEND  
C&T (P)  
CZ (P)  
CONST. (T)  
SR  
P  
L  
SR  
SR  
CLEARING & TRIMMING  
CLEAR ZONE  
CONSTRUCTION EASEMENT  
SLOPE RIGHTS  
PROPERTY LINE  
TOP OF CUT  
TOE OF SLOPE  
PERMANENT UTILITY EASEMENT

APPROVED: LAWRENCE W. BLISS DATE: 08-16-99  
CHIEF, PLANS & TITLES

R. O. W. PLANS  
CHESTER  
BRF 025-1 ( 35)  
SHEET 17 OF 79

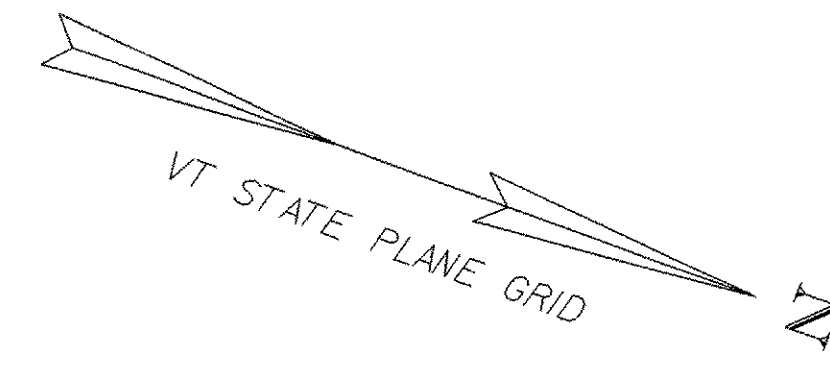


**STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
RIGHT OF WAY PLANS  
DETAIL SHEET**

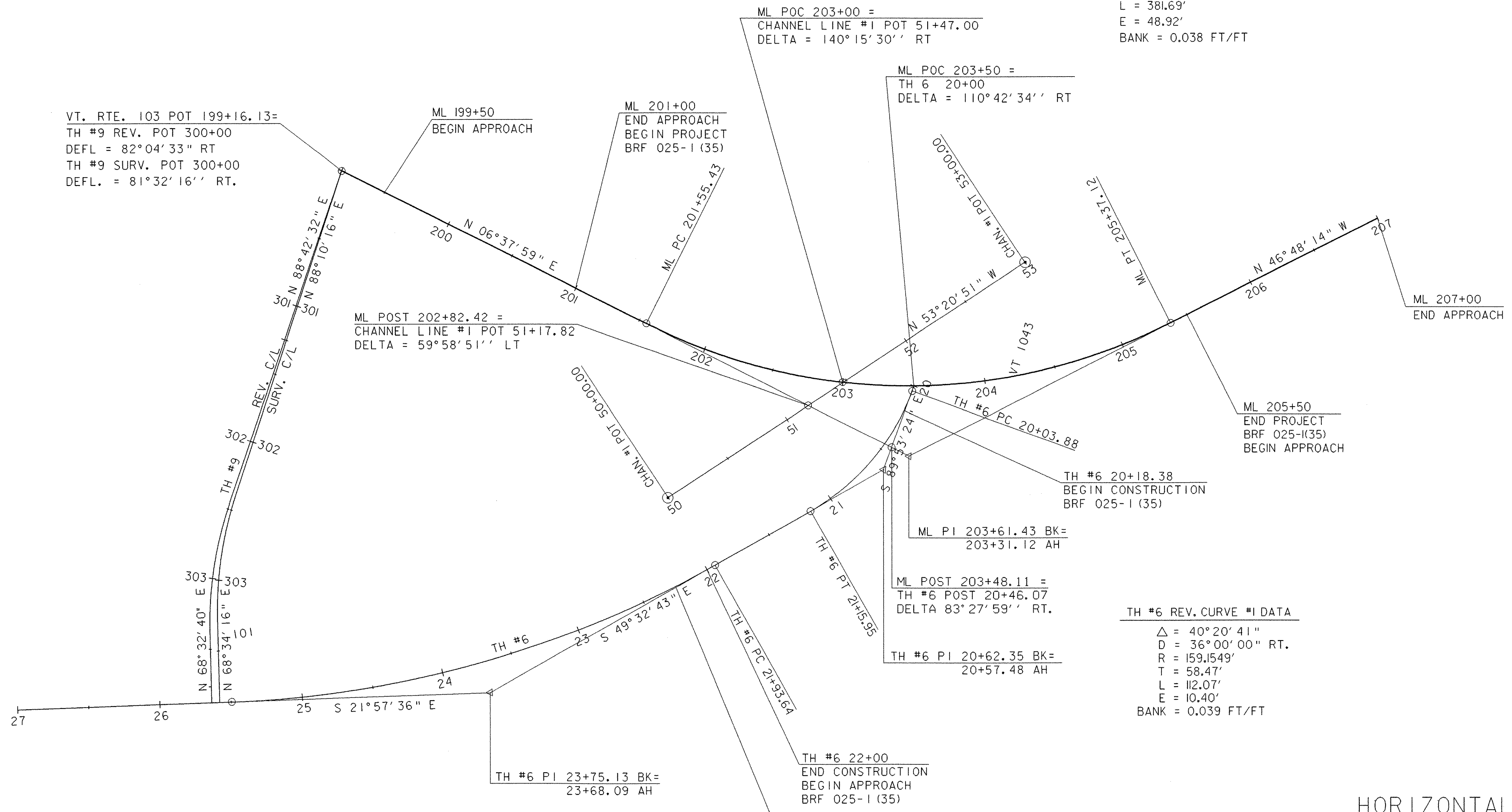
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CHESTER  
BRF 025-1 ( 35)  
SHEET 18 OF 79





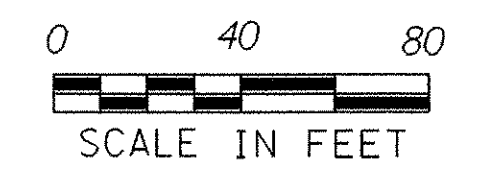
MAINLINE REV CURVE DATA  
 $\Delta = 53^{\circ}26'13''$   
 $D = 14^{\circ}00'00''$  LT.  
 $R = 409.2556'$   
 $T = 206.00'$   
 $L = 381.69'$   
 $E = 48.92'$   
BANK = 0.038 FT/FT



TH #6 REV. CURVE #1 DATA  
 $\Delta = 40^{\circ}20'41''$   
 $D = 36^{\circ}00'00''$  RT.  
 $R = 159.1549'$   
 $T = 58.47'$   
 $L = 112.07'$   
 $E = 10.40'$   
BANK = 0.039 FT/FT

TH #6 REV. CURVE #2 DATA  
 $\Delta = 27^{\circ}35'08''$   
 $D = 7^{\circ}45'00''$  RT.  
 $R = 739.3004'$   
 $T = 181.49'$   
 $L = 355.94'$   
 $E = 21.95'$   
BANK = MATCH EXISTING

### HORIZONTAL ALIGNMENTS

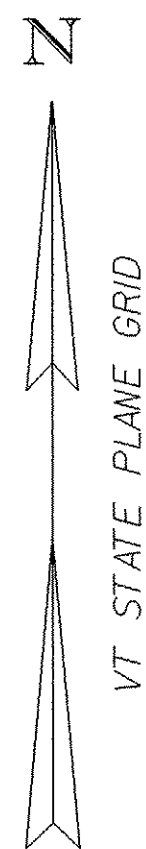


| DATUM      |           |
|------------|-----------|
| VERTICAL   | NGVD 1929 |
| HORIZONTAL | NAD 1927  |

|                   |                                                   |              |               |
|-------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:          | CHESTER                                           | PROJECT NO.: | BRF 025-1(35) |
| DESIGN FILE NAME: | M:\1549100 VAOT-Chester Cur\HWY\DRAW\zfi34aln.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:  | zfi34aln.l                                        | SURVEY DATE: | 8-90          |
| SURVEYED BY:      | SHERIDAN                                          | DRAWN BY:    | L. BULLOCK    |
| SQUAD LEADER:     | PORTALUPI                                         | SHEET:       | 19 OF 79      |



TRAVERSE TIES



| TRAV. #1        | TRAV. #2        | TRAV. #3        | TRAV. #4       | TRAV. #400     | TRAV. #10      |
|-----------------|-----------------|-----------------|----------------|----------------|----------------|
| N = 80938.03430 | N = 81180.84240 | N = 81616.08460 | N = 81876.3900 | N = 81523.7827 | N = 81272.1200 |
| E = 76098.32970 | E = 76151.44310 | E = 76164.94370 | E = 75831.1200 | E = 76204.1569 | E = 76481.0000 |
| Z = 588.293     | Z = 588.816     | Z = 601.803     | Z = 601.5220   | Z = 597.4954   | Z = 589.4150   |
|                 |                 |                 |                |                |                |

ALIGNMENT TIES

| ML POT 199+16.13 = TH #9 | ML PC 201+55.43 | ML PT 205+37.13 | ML PT 207+00.00 | TH #6 POT 20+00.00 = ML POC 203+50.00 | TH #6 PC 20+03.88 | TH #6 PT 21+15.95 |
|--------------------------|-----------------|-----------------|-----------------|---------------------------------------|-------------------|-------------------|
| N = 81135.17             | N = 81372.87    | N = 81718.50    | N = 81829.99    | N = 81564.18                          | N = 81564.18      | N = 81526.13      |
| E = 76130.79             | E = 76158.44    | E = 76032.05    | E = 75913.31    | E = 76134.99                          | E = 76138.87      | E = 76241.83      |
|                          |                 |                 |                 |                                       |                   |                   |

ALIGNMENT TIES

| TH #6 PC 21+93.64 | TH #6 PT 25+49.58 |
|-------------------|-------------------|
| N = 81475.72      | N = 81189.64      |
| E = 76300.95      | E = 76506.92      |
|                   |                   |

NOT TO SCALE

|            |           |
|------------|-----------|
| DATUM      |           |
| VERTICAL   | NGVD 1929 |
| HORIZONTAL | NAD 1927  |

|                   |                                                   |              |               |
|-------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:          | CHESTER                                           | PROJECT NO.: | BRF 025-1(35) |
| DESIGN FILE NAME: | M:\1549100 VAOT-Chester Cur\HWY\DRAW\zf134aln.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:  | zf134tie.i                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:      | SHERIDAN                                          | DRAWN BY:    | L. BULLOCK    |
| SQUAD LEADER:     | PORTALUPI                                         | SHEET:       | 20 OF 79      |



EXISTING DRAINAGE

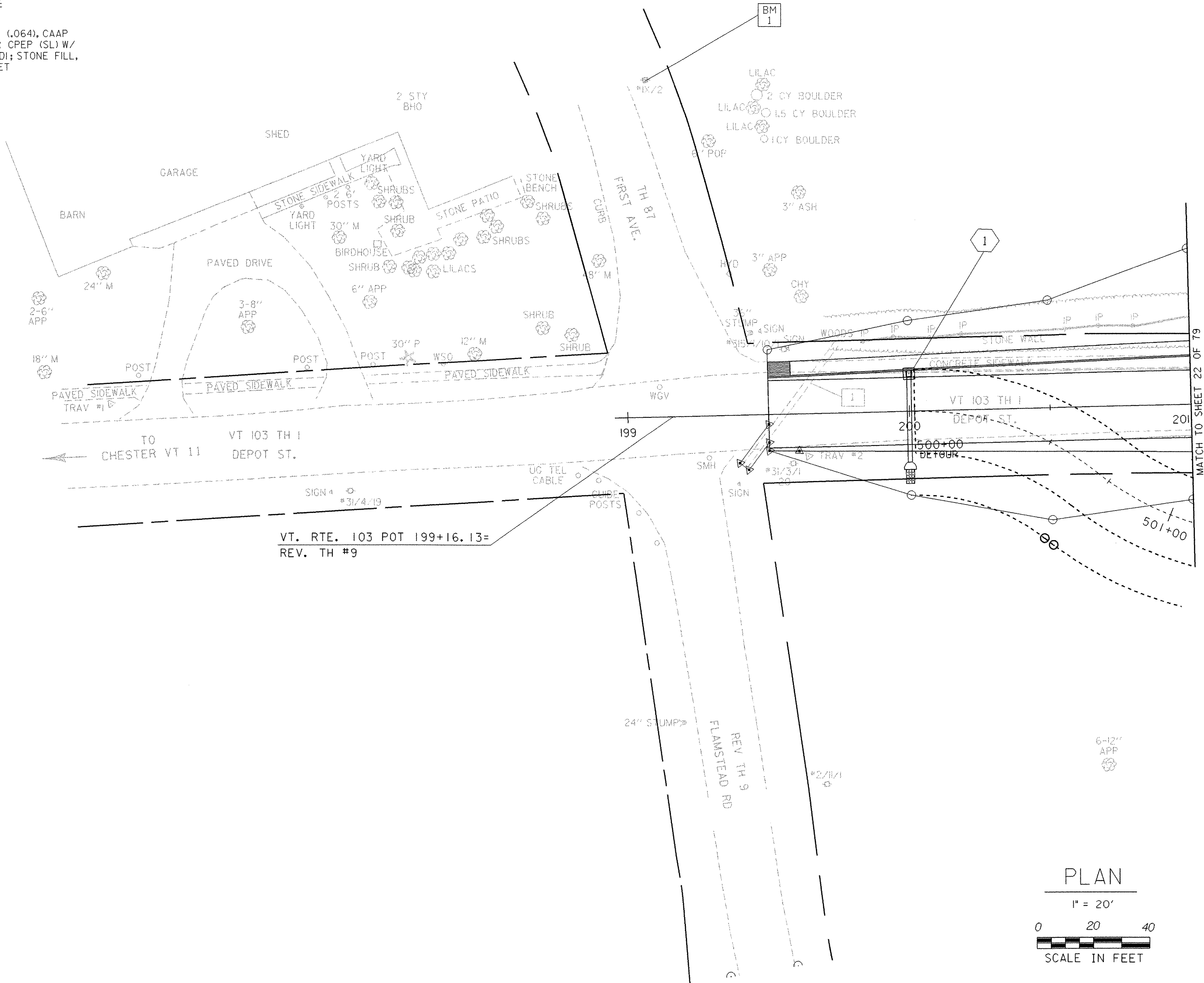
1 ML 199+55 CL ASKEW 53°15'24" METAL PIPE - REMOVE

NEW DRAINAGE

1 ML 200+00 LT  
NEW 18" X 20" PCCSP (.064), CAAP  
(.060), RCP CL III, OR CPEP (SL) W/  
MES AND PRC PIPE DI; STONE FILL,  
TYPE I PAD @ OUTLET

BENCHMARKS

BM 1 BM #1 RAILROAD SPIKE IN POLE ELEV 591.26'



REMOVAL AND DISPOSAL OF GUARD RAIL  
ML 200+78 RT. - ML 201+00 RT.

COLD PLANING - BITUMINOUS CONCRETE  
ML 199+50 - ML 200+00

REPLACE - BITUMINOUS CONCRETE  
EDGE OF EXISTING ROAD ABOVE EXISTING  
PIPE TO ML 199+50 -

CONSTRUCT SIDEWALK RAMP  
ML 199+50 LT. - ML 199+58 LT. (TYPE 1)

BITUMINOUS CONCRETE SIDEWALK  
ML 199+50 LT. - ML 201+00 LT.

CAST-IN-PLACE CONCRETE CURB, TYPE B  
ML 199+50 LT. - ML 201+00 LT.

STEEL BEAM GUARD RAIL  
ML 200+54 RT. - ML 201+00 RT.

ANCHOR FOR STEEL BEAM RAIL  
ML 200+54 RT.

DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

|                 |                              |      |             |
|-----------------|------------------------------|------|-------------|
| SURVEYED BY     | SHERIDAN                     | DATE | 08-90       |
| DRAWN BY        | L. BULLOCK                   | DATE | 11-90       |
| SQUAD LEADER    | PORTALUPI                    |      |             |
| DESIGN FILE NO. | M:\1549101\VA0T-Chester_Curv |      |             |
| PRF FILE        | ZFI34LI.I                    | DATE | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                      |      |             |
| PROJ. NO.       | BRF 025-1(35)                |      |             |
| SHEET           | 21                           | OF   | 79 SHEETS   |



REMOVAL AND DISPOSAL OF GUARD RAIL  
ML 201+43 LT. - ML 201+80 LT.  
ML 201+00 RT. - ML 201+80 RT.  
ML 202+82 RT. - ML 203+30 RT.  
ML 202+75 RT. - TH #6 21+20 RT.

ANCHOR FOR STEEL BEAM RAIL  
ML 201+19 LT.  
ML 200+69 RT.  
ML 204+30 LT.  
TH #6 21+02.5 RT.

STEEL BEAM GUARD RAIL  
ML 201+08 LT. - ML 201+71 LT.  
ML 200+58 RT. - ML 201+55 RT.  
ML 203+77 LT. - ML 204+43 LT.  
TH #6 20+79 RT. - TH #6 21+16 RT.

HEAVY DUTY STEEL BEAM GUARD RAIL  
ML 201+71 LT. - ML 201+96 LT.  
ML 201+55 RT. - ML 201+80 RT.  
ML 203+52 LT. - ML 203+77 LT.  
ML 202+59 RT. - TH #6 20+79 RT.

CAST IN PLACE CONCRETE BRIDGE RAIL  
ML 201+96 LT. - ML 203+52 LT.  
ML 201+80 RT. - ML 202+94.5 RT.

REMOVING AND RESETTNG FENCE  
TH #6 20+81 RT. - TH #6 21+46 RT.

#### EXISTING DRAINAGE

2 TH #6 21+40 EXISTING 2.5' X 3.5' CGMP W/ DI- RETAIN

#### UNDERDRAIN

1 ML 203+75 LT. - ML 205+00 LT.  
NEW 6" UNDERDRAIN TO  
OUTLET INTO NEW DI

#### NEW DRAINAGE

2 ML 201+75 LT  
NEW 18" X 20" PCCSP (.064), CAAP  
(.060), RCP CL. III, OR CPEP (SL) W/  
MES AND PRC PIPE DI; STONE FILL,  
TYPE I PAD @ OUTLET

3 ML 203+75 LT  
NEW 18" X 30" PCCSP (.064), CAAP  
(.060), RCP CL. III, OR CPEP (SL) W/  
MES AND PRC PIPE DI; STONE FILL,  
TYPE I PAD @ OUTLET

#### BENCHMARKS

BM 2  
RR SPIKE IN TREE  
ELEV 600.75'

BM 3  
CHISELED SQUARE ON NE BRIDGE CURB  
ELEV 597.87'

BITUMINOUS CONCRETE SIDEWALK  
ML 201+00 LT. - ML 201+93 LT.  
ML 203+51 LT. - ML 205+00 LT.

CAST-IN-PLACE CONCRETE CURB, TYPE B  
ML 201+00 LT. - ML 201+93 LT.  
ML 203+51 LT. - ML 205+00 LT.

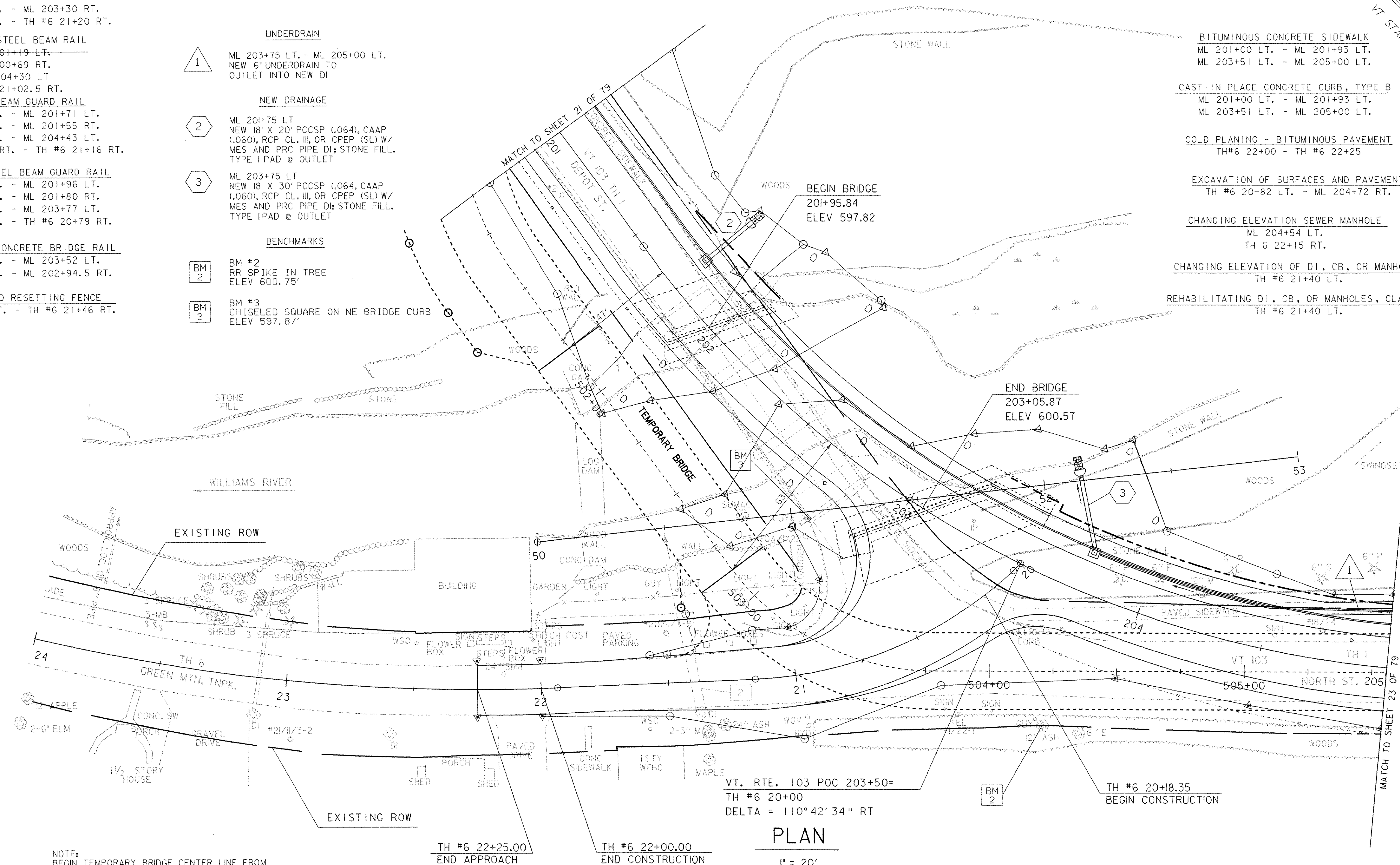
COLD PLANING - BITUMINOUS PAVEMENT  
TH#6 22+00 - TH #6 22+25

EXCAVATION OF SURFACES AND PAVEMENT  
TH #6 20+82 LT. - ML 204+72 RT.

CHANGING ELEVATION SEWER MANHOLE  
ML 204+54 LT.  
TH 6 22+15 RT.

CHANGING ELEVATION OF DI, CB, OR MANHOLES  
TH #6 21+40 LT.

REHABILITATING DI, CB, OR MANHOLES, CLASS I  
TH #6 21+40 LT.



DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92  
DRAWN BY L. BULLOCK DATE 1/93  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\1549101\VAOT-Chester\_Curv  
HWY\DRAW\zf134bdr.dgn  
IPARM FILE zf13412.1 DATE PLOTTED 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BR 025-(K35)  
SHEET 22 OF 79 SHEETS



CONSTRUCT DRIVE  
ML 205+71 LT. - 12' GRAVEL

COLD PLANING - BITUMINOUS CONCRETE  
ML 206+50 - ML 207+00

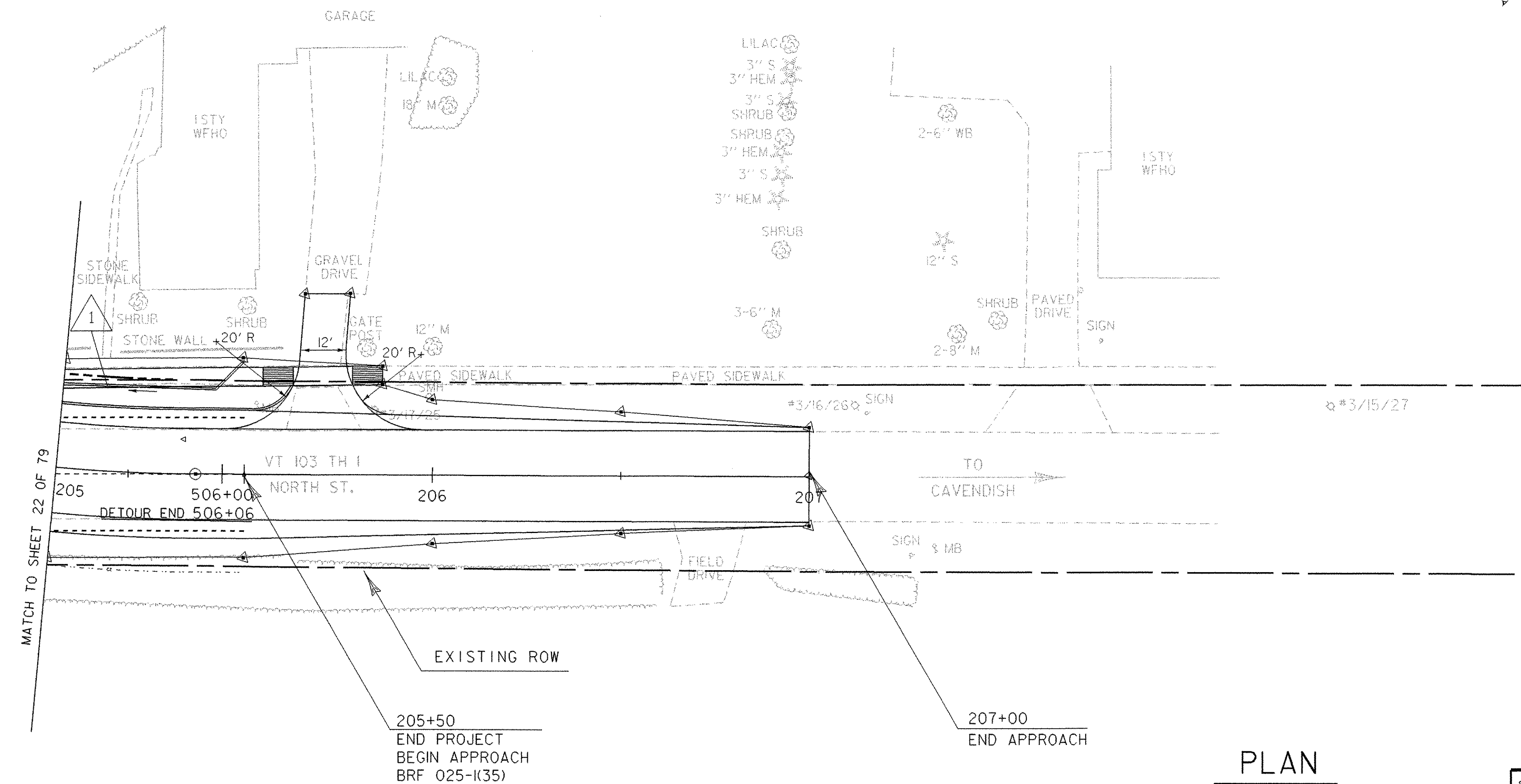
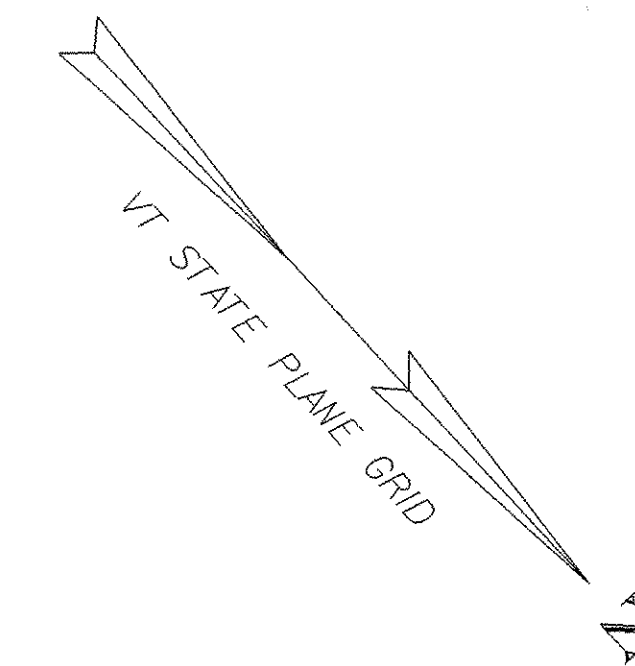
UNDERDRAIN  
ML 205+00 LT. - ML 205+50 LT.  
NEW 6" UNDERDRAIN W/ FLUSHING  
BASIN @ 205+50 LT.

BITUMINOUS CONCRETE SIDEWALK  
ML 205+00 LT. - ML 205+87 LT.

RELOCATE MAILBOX, SINGLE SUPPORT  
ML 205+53 LT.

CONSTRUCT SIDEWALK RAMP  
ML 205+55 LT. - ML 205+63 LT. (TYPE 1)  
ML 205+79 LT. - ML 205+87 LT. (TYPE 1)

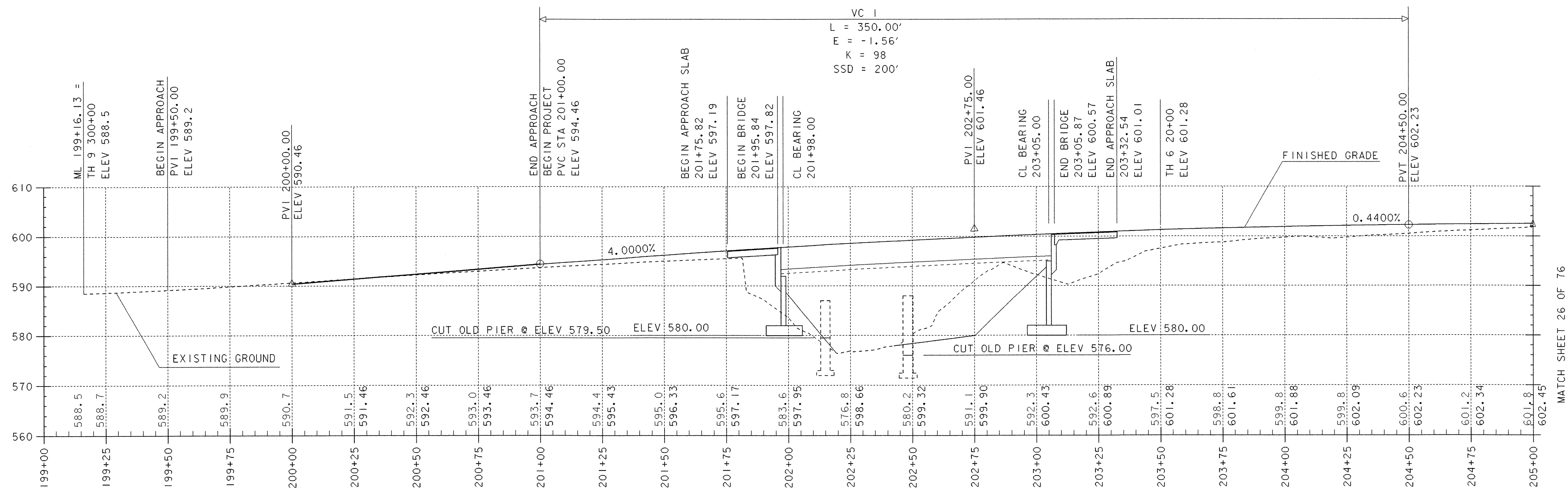
CAS-IN-PLACE CONCRETE CURB, TYPE B  
ML 205+00 LT. - ML 205+63 LT.



DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

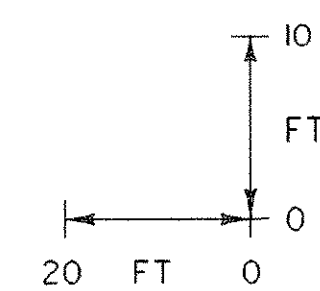
|                 |                              |      |             |
|-----------------|------------------------------|------|-------------|
| SURVEYED BY     | SHERIDAN                     | DATE | 08-90       |
| DRAWN BY        | L. BULLOCK                   | DATE | 11-90       |
| SQUAD LEADER    | PORTALUPI                    |      |             |
| DESIGN FILE NO. | M:\1549101\VA0T-Chester_Curv |      |             |
| IPARM NAME      | zfi3413.1                    | DATE | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                      |      |             |
| PROJ. NO.       | BRF 025-1(35)                |      |             |
| SHEET           | 23                           | OF   | 79 SHEETS   |





# VT 103 PROFILE I

1" = 10' V  
1" = 20' H

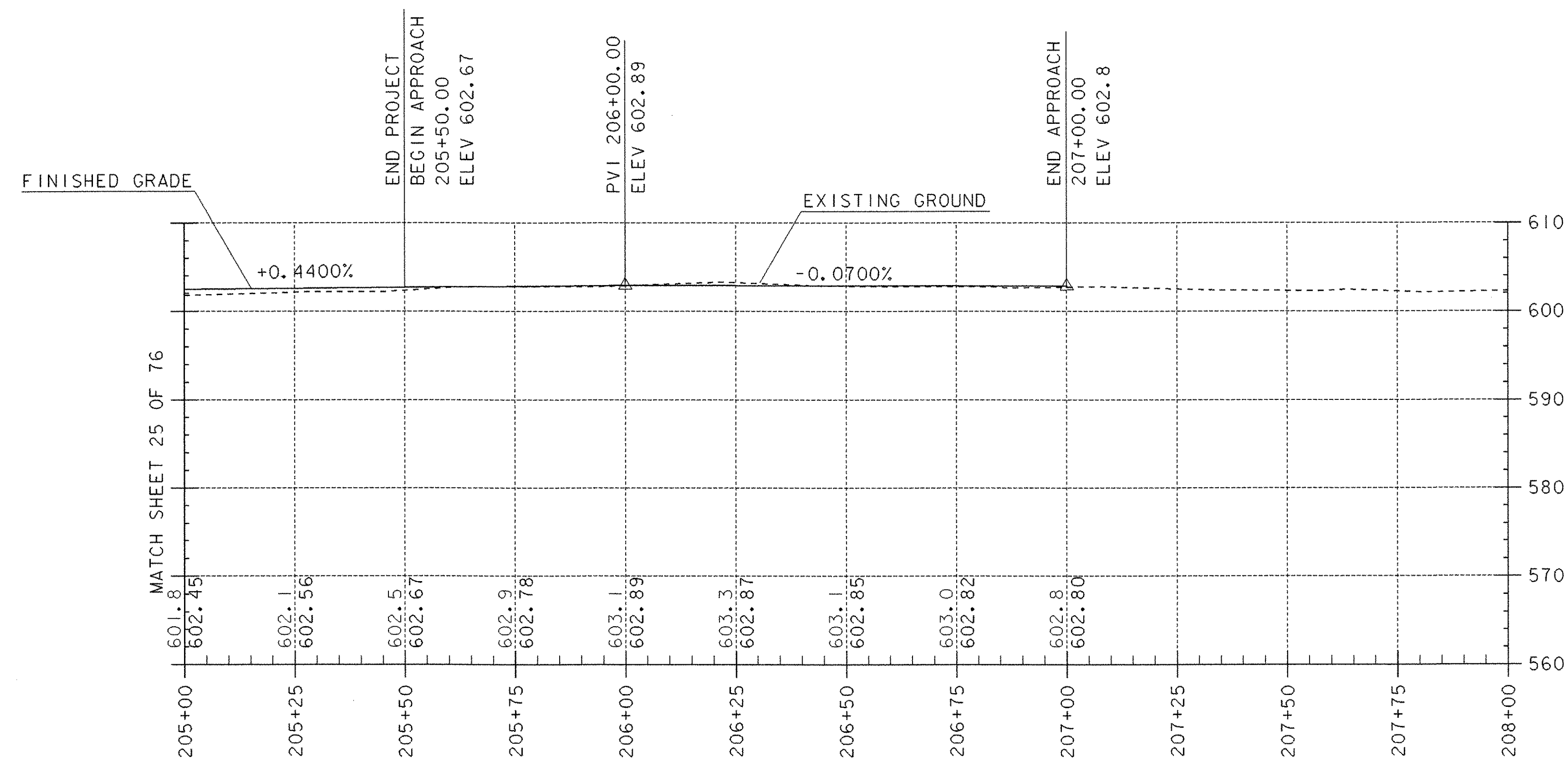


DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

|                                                                       |                            |
|-----------------------------------------------------------------------|----------------------------|
| PROJECT: CHESTER                                                      | PROJECT NO.: BRF 025-K(35) |
| DESIGN FILE NAME: M:\1549101\VAOT Chester Curv\HWY\DRAW\z-f134xs5.dgn | PLOT DATE: 28-MAY-2003     |
| IPARM FILE NAME: z-f134pfl.i                                          | SURVEY DATE: 8/90          |
| SURVEYED BY: SHERIDAN                                                 | DRAWN BY: T. LACKEY        |
| SQUAD LEADER: PORTALUPI                                               | SHEET: 24 OF 79            |

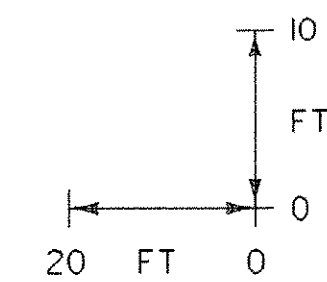
MATCH SHEET 26 OF 76





## VT 103 PROFILE 2

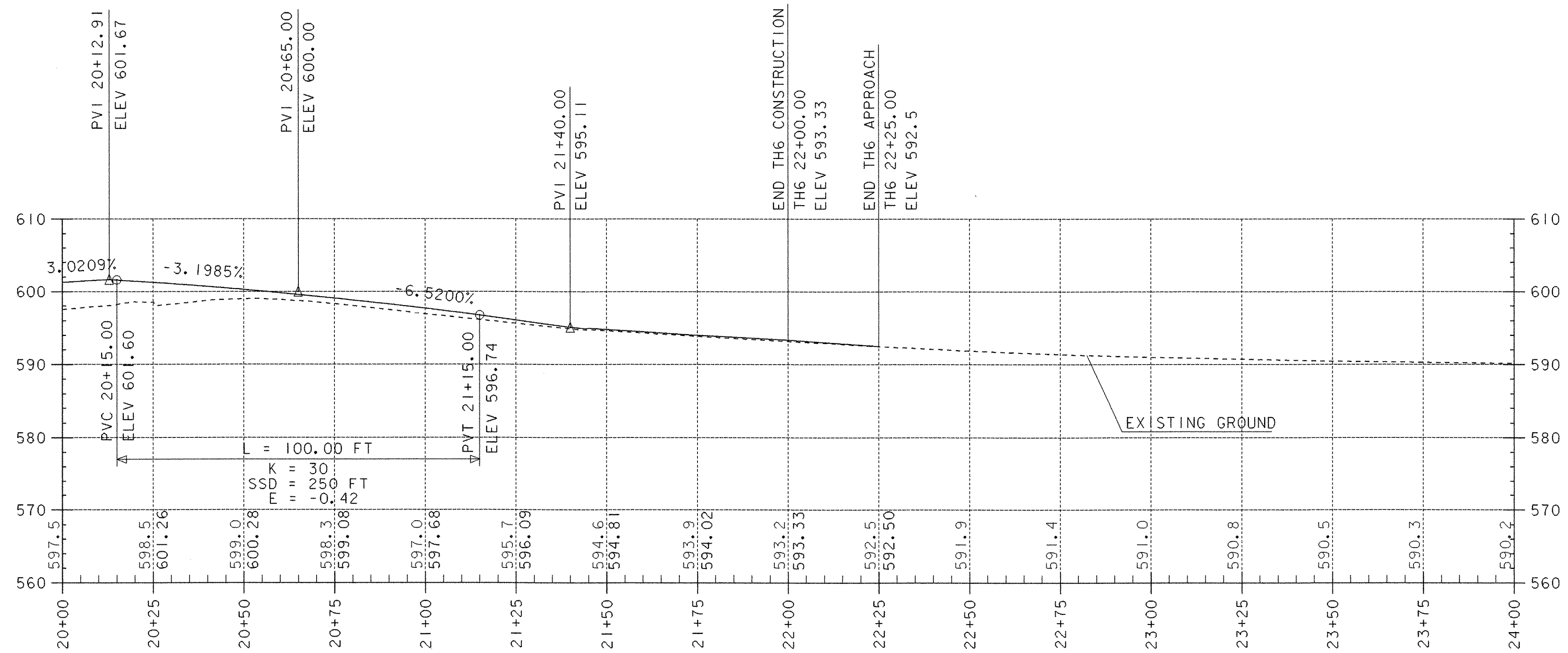
1" = 10' V  
1" = 20' H



**DATUM**  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1928

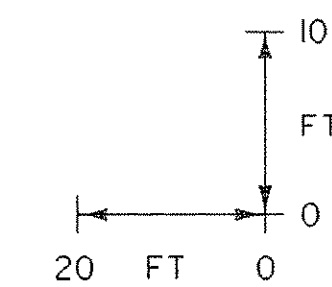
|                   |                                                   |              |               |
|-------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:          | CHESTER                                           | PROJECT NO.: | BRF 025-K(35) |
| DESIGN FILE NAME: | M:\154910\VA01 Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:  | zfi34pf2.1                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:      | SHERIDAN                                          | DRAWN BY:    | T. LACKEY     |
| SQUAD LEADER:     | PORTALUPI                                         | SHEET:       | 25 OF 79      |





## TH 6 PROFILE I

1" = 10' V  
1" = 20' H

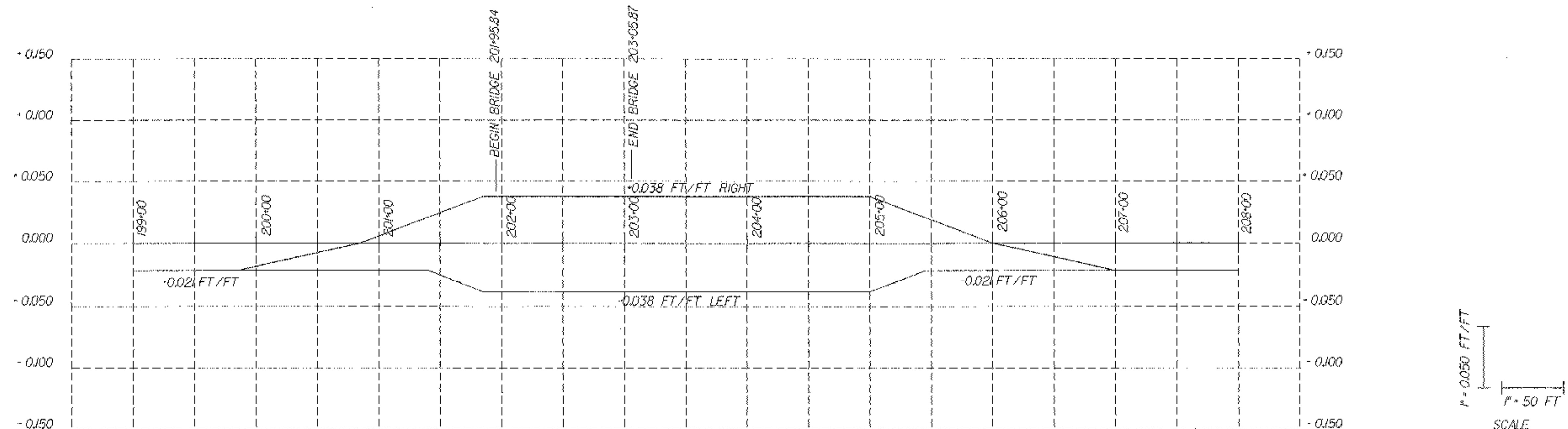


DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

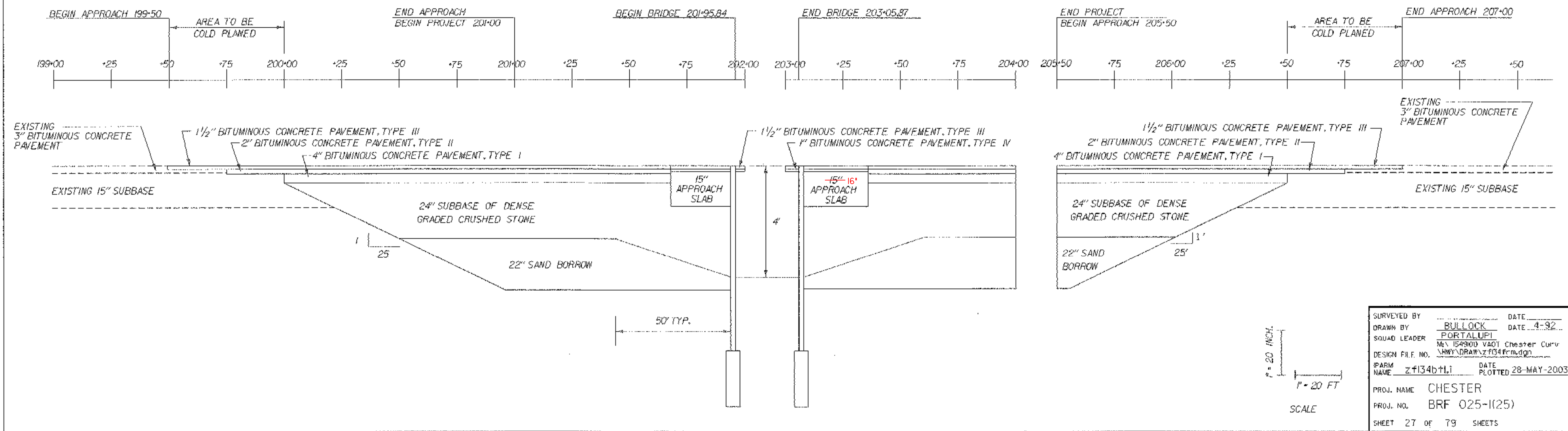
|                   |                                   |              |              |
|-------------------|-----------------------------------|--------------|--------------|
| PROJECT:          | CHESTER                           | PROJECT NO.: | BRF025-I(35) |
| DESIGN FILE NAME: | M:\87b134\Structures\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003  |
| IPARM FILE NAME:  | zfi34pf3.1                        | SURVEY DATE: | 8/90         |
| SURVEYED BY:      | SHERIDAN                          | DRAWN BY:    | L. BULLOCK   |
| SQUAD LEADER:     | PORTALUPI                         | SHEET:       | 26 OF 76     |



# MAINLINE BANKING TRANSITION DIAGRAM



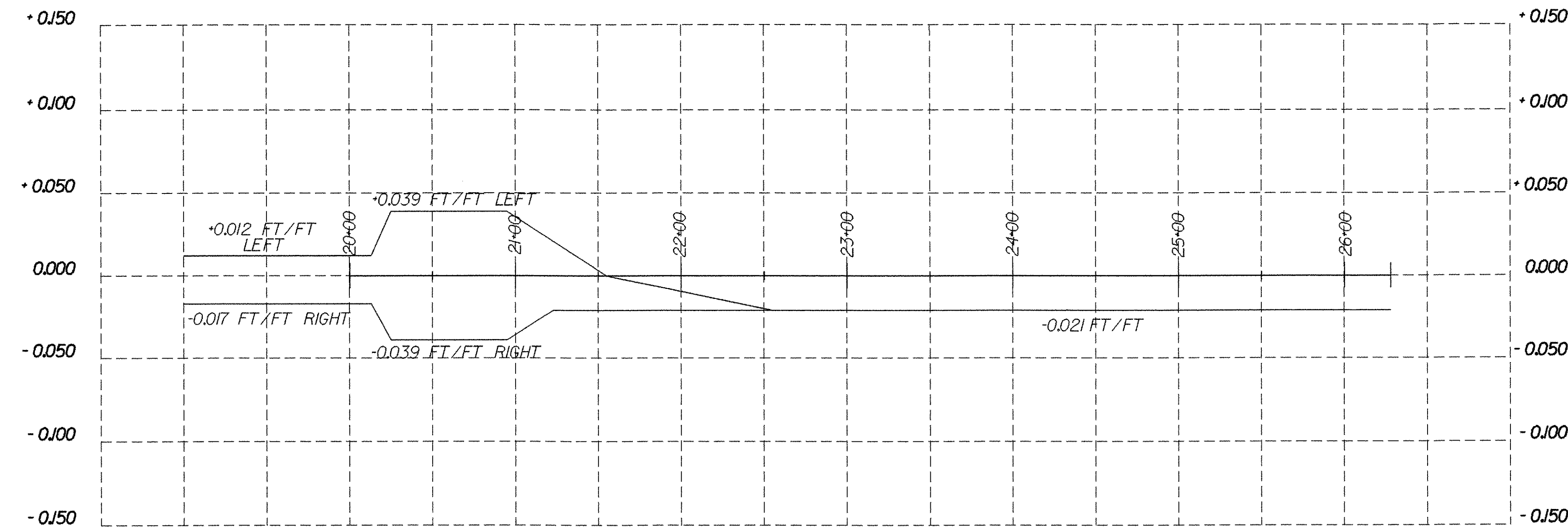
# MAINLINE MATERIAL TRANSITION DIAGRAM



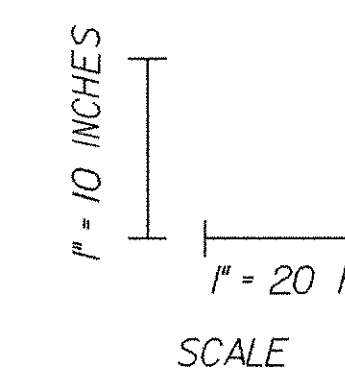
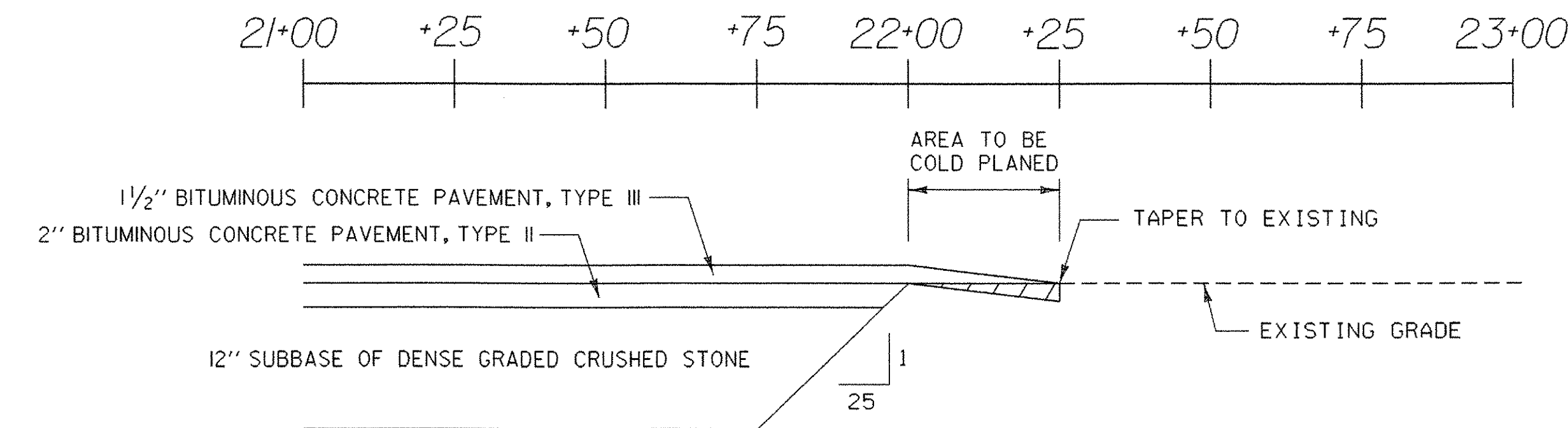
|                 |                              |              |             |
|-----------------|------------------------------|--------------|-------------|
| SURVEYED BY     | BULLOCK                      | DATE         | 4-92        |
| DRAWN BY        | PORTALUPI                    | DATE         | 4-92        |
| SQUAD LEADER    | NAV 154900 V401 Chester Curv |              |             |
| DESIGN FILE NO. | NAVY DRAW 710341.mxd         |              |             |
| PARM NAME       | z-f134b+L1                   | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                      |              |             |
| PROJ. NO.       | BRF 025-1(25)                |              |             |
| SHEET           | 27 OF 79                     | SHEETS       |             |



TH #6 BANKING TRANSITION DIAGRAM



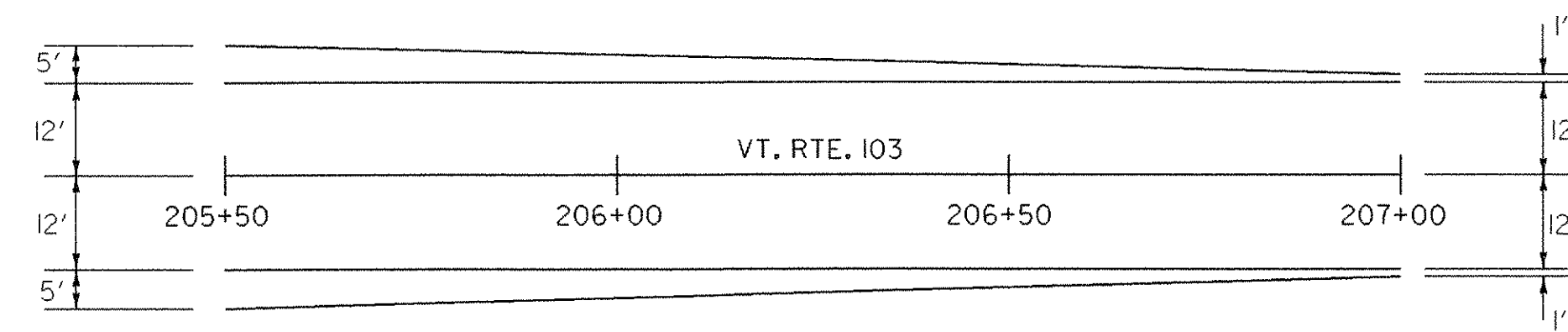
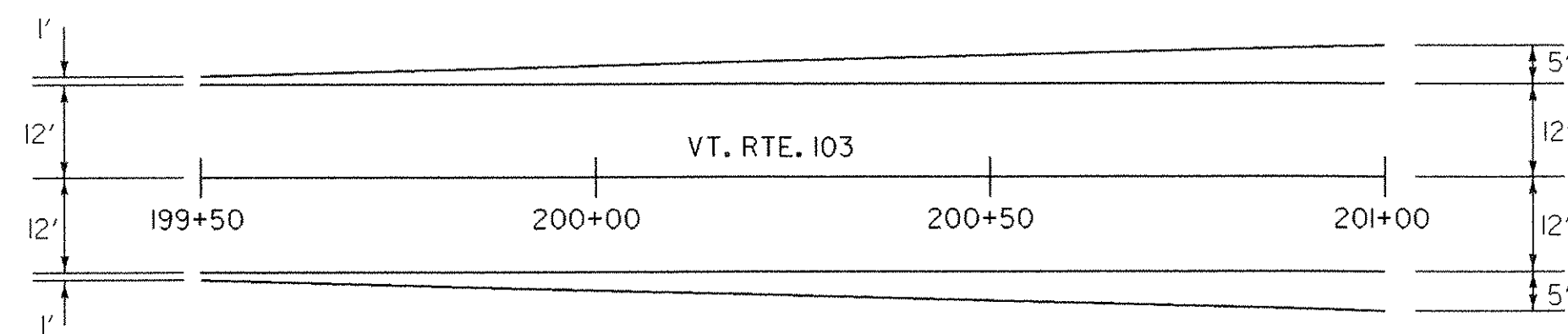
TH #6  
TH #6 MATERIAL TRANSITION DIAGRAM



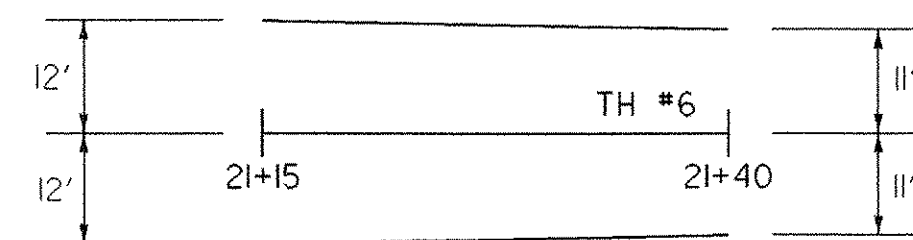
|                 |                             |         |             |
|-----------------|-----------------------------|---------|-------------|
| SURVEYED BY     | SHERIDAN                    | DATE    | 8-90        |
| DRAWN BY        | rdrown                      | DATE    | 4-92        |
| SQUAD LEADER    | PORTALUPI                   |         |             |
| DESIGN FILE NO. | M:\154900 VAOT Chester Curv |         |             |
|                 | \HWY\DRAW\zfi34frm.dgn      |         |             |
| IPARM NAME      | zfi34b12.i                  | DATE    | 28-MAY-2003 |
|                 |                             | PLOTTED |             |
| PROJ. NAME      | CHESTER                     |         |             |
| PROJ. NO.       | BRF025-1(35)                |         |             |
| SHEET           | 28                          | OF      | 79          |
| SHEETS          |                             |         |             |



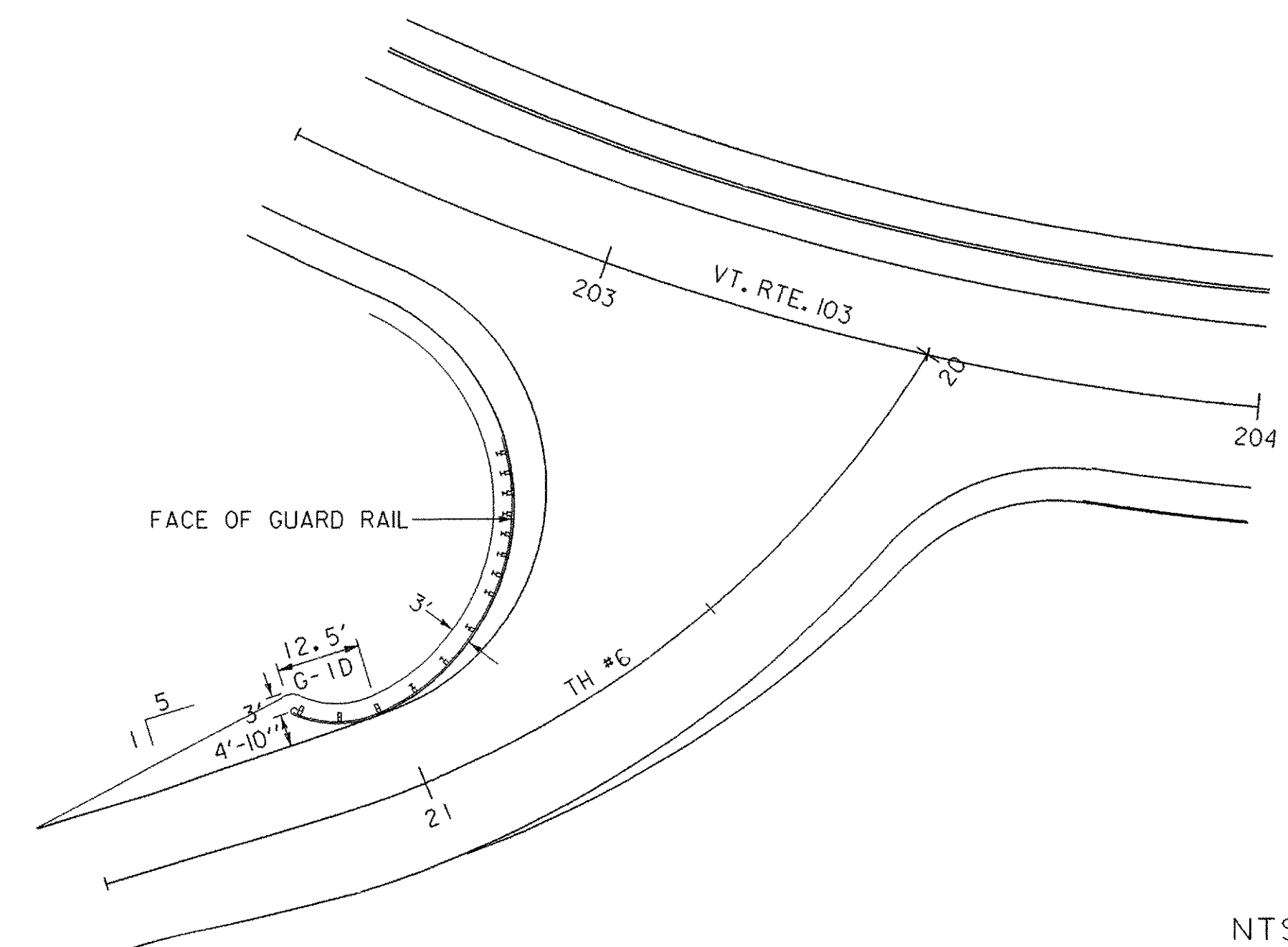
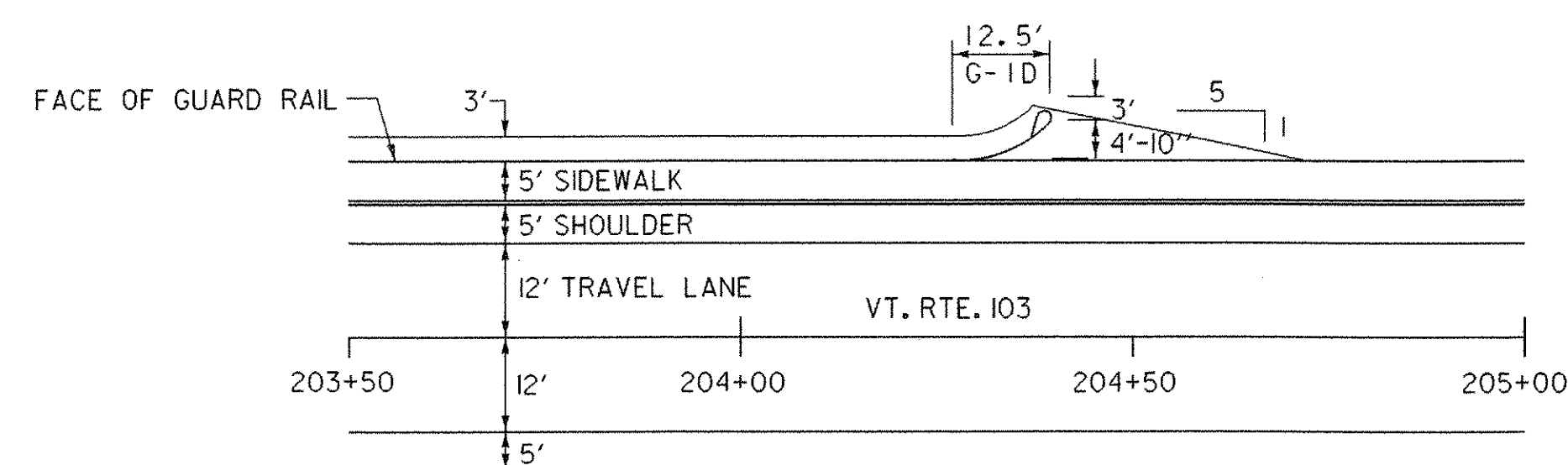
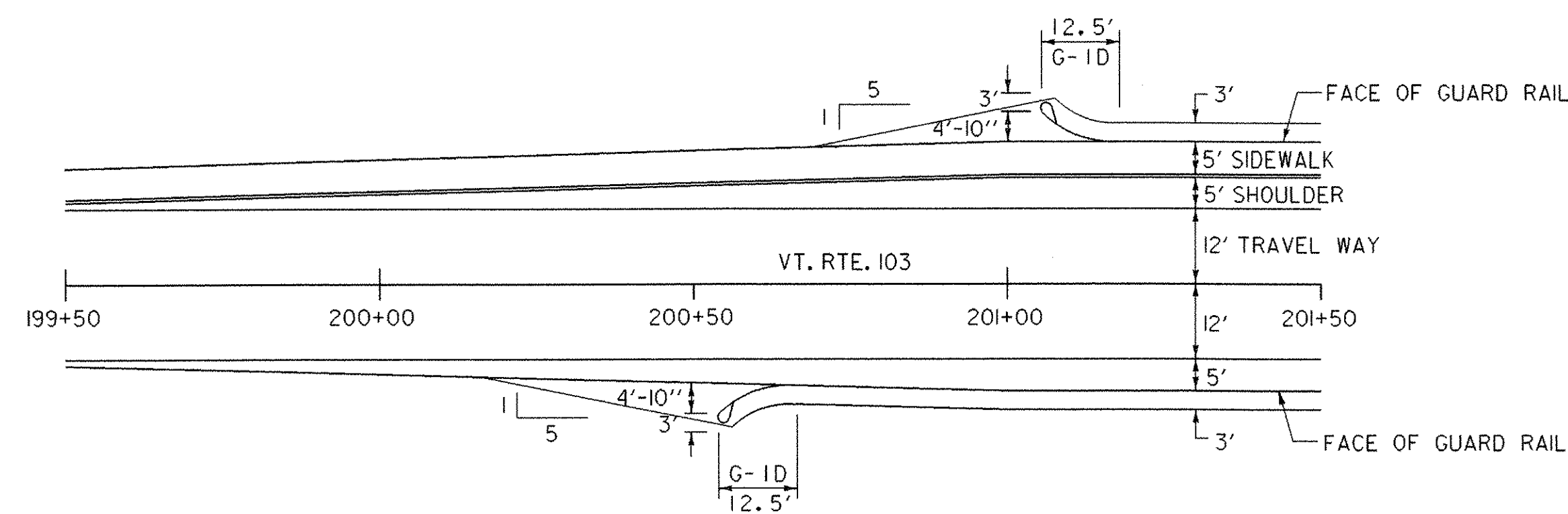
APPROACH TRANSITION DETAILS



TH #6 TRANSITION DETAIL



GUARD RAIL DETAILS



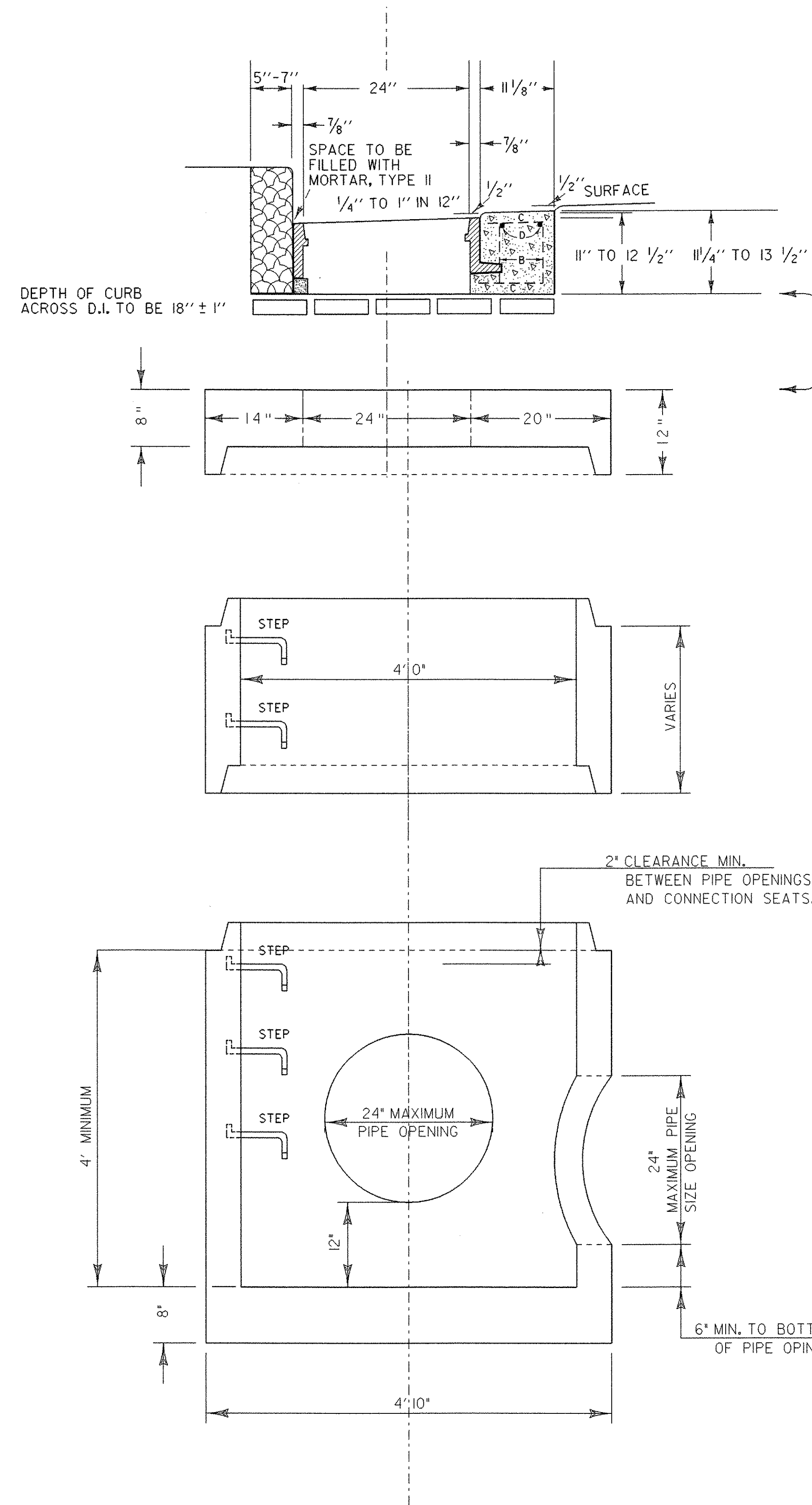
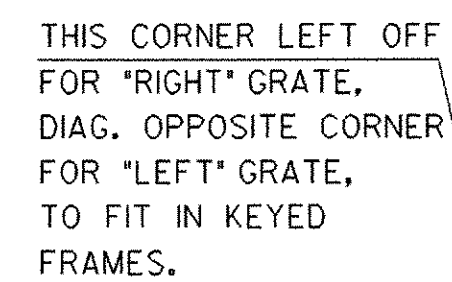
NTS

| DATUM      |     |
|------------|-----|
| VERTICAL   | N/A |
| HORIZONTAL | N/A |

|                   |                                                    |                  |               |
|-------------------|----------------------------------------------------|------------------|---------------|
| PROJECT:          | CHESTER                                            | PROJECT NO.:     | BRF 025-1(35) |
| DESIGN FILE NAME: | M:\1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn | IPARM FILE NAME: | zf134d+li     |
| SURVEYED BY:      | SHERIDAN                                           | SURVEY DATE:     | 8/90          |
| SQUAD LEADER:     | PORTALUPI                                          | DRAWN BY:        | L. BULLOCK    |
|                   |                                                    | SHEET:           | 29 OF 79      |

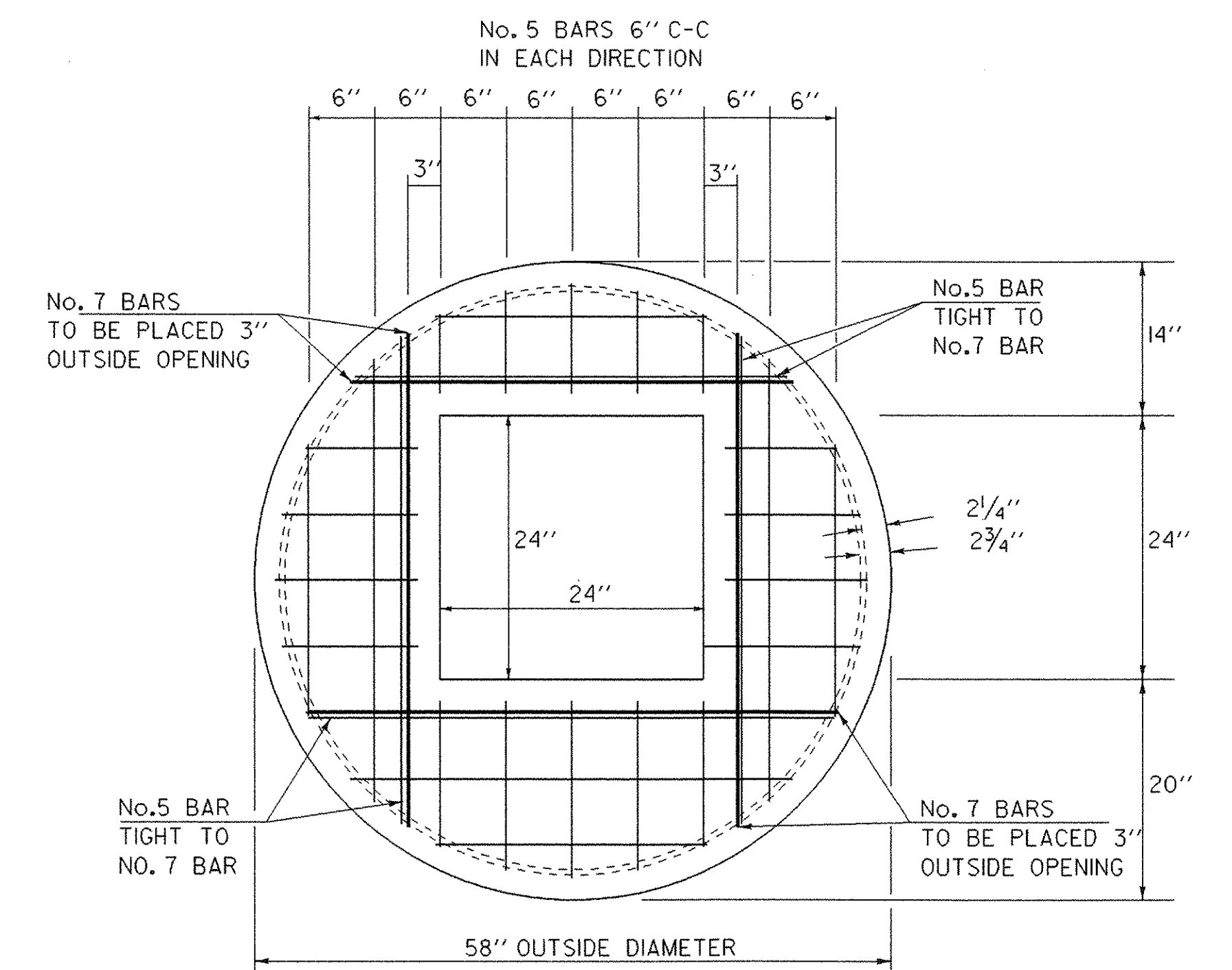


FRAMES TO BE FURNISHED WITH 3 FLANGES  
WHEN USED IN CONJUNCTION WITH CURB  
OR AS DIRECTED BY THE ENGINEER.



THREE COURSES OF BUILDING BRICK TO BE PLACED ON TOP OF CONCRETE STRUCTURE PRIOR TO PLACING FRAME TO FACILITATE CHANGING ELEVATION OF CATCH BASIN OR MANHOLE WHEN REQUIRED. BRICK TO BE INCLUDED IN THE BID PRICE FOR CATCH BASIN OR MANHOLE.

NOTE: SEE DROP INLET STANDARDS D-9, D-15 FOR ANY ADDITIONAL DETAILS AND OR DIMENSIONING.

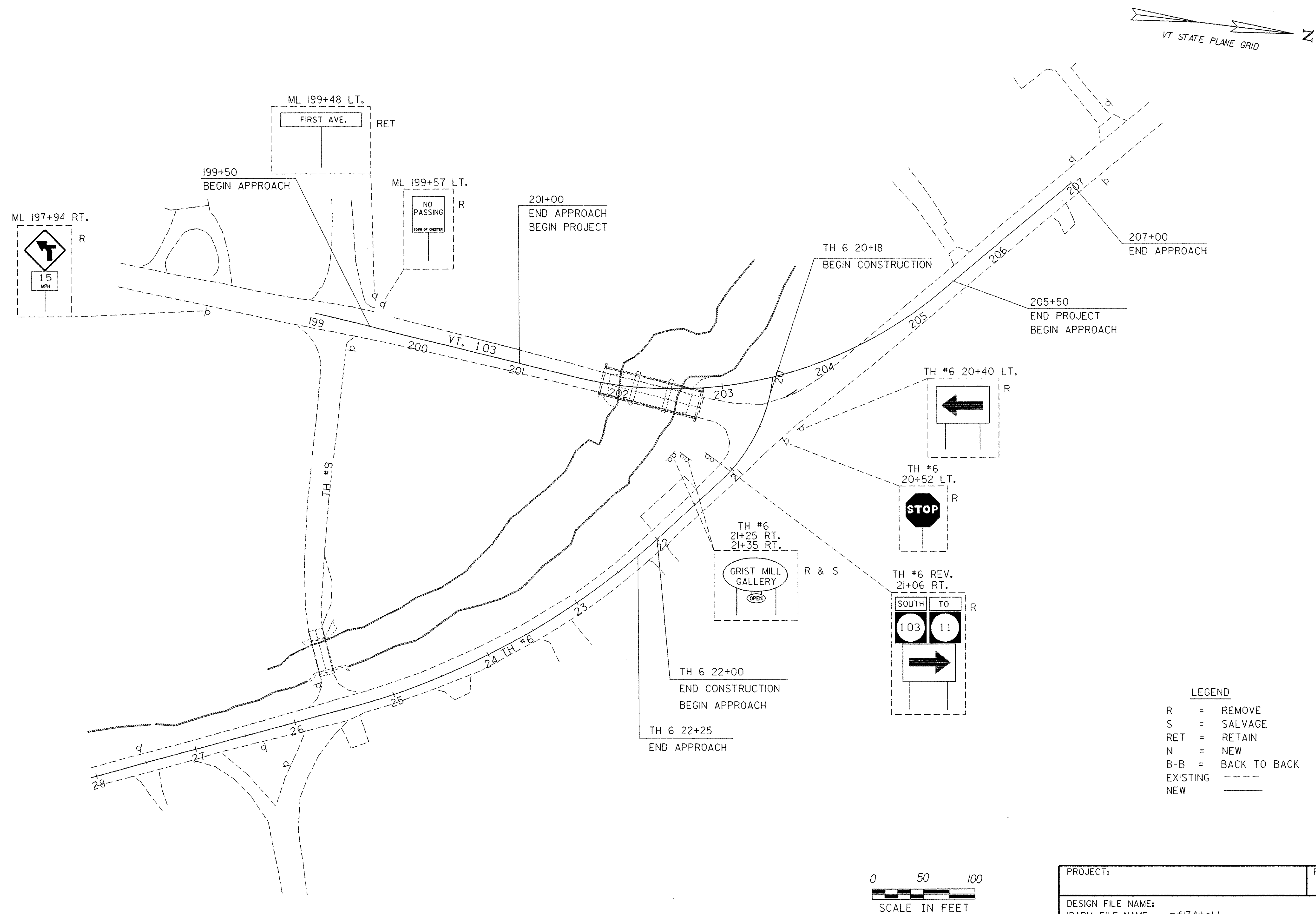


## ADAPTER REINFORCING DETAILS

|                                                   |                               |
|---------------------------------------------------|-------------------------------|
| PROJECT:<br>CHESTER                               | PROJECT NO.:<br>BRF 025-1(35) |
| DESIGN FILE NAME: 87bl34\s\structures\sfl34d1.dgn | PLOT DATE: 28-MAY-2003        |
| IPARM FILE NAME: sfl34d1.i                        | SURVEY DATE:                  |
| SURVEYED BY:                                      | DRAWN BY: G.ROKES             |
| SQUAD LEADER: A. PROTALUPI                        | SHEET: 30 OF 79               |



# EXISTING TRAFFIC SIGNS



|                            |                        |
|----------------------------|------------------------|
| PROJECT:                   | PROJECT NO.:           |
| DESIGN FILE NAME:          | PLOT DATE: 28-MAY-2003 |
| IPARM FILE NAME: zfi34+cl1 | SURVEY DATE:           |
| SURVEYED BY:               | DRAWN BY:              |
| SQUAD LEADER:              | SHEET: 31 OF 79        |
| TRAFFIC CONTROL SHEET 1    |                        |



# FINAL TRAFFIC SIGNS AND PAVEMENT MARKING SHEET

## 4" WHITE LINE

TH #6 20+81 RT. - TH #6 22+25 RT.  
TH #6 20+81 RT. - ML 202+61 RT. (35' RADIUS)  
TH #6 20+48 LT. - TH #6 22+25 LT.  
TH #6 20+48 LT. - ML 203+72 RT. (75' RADIUS)

## 4" YELLOW LINE

TH #6 20+30  $\frac{1}{2}$  - TH #6 22+25  $\frac{1}{2}$  (DOUBLE)

## PAINTED CURB

ML 199+50 LT. - ML 205+63 LT.

## DURABLE 4" WHITE LINE

ML 199+50 LT. - ML 207+00 LT.  
ML 199+67 RT. - ML 202+61 RT.  
ML 203+72 RT. - ML 207+00 RT.

## TEMPORARY 4" YELLOW LINE

TH #6 20+30  $\frac{1}{2}$  - TH #6 22+25  $\frac{1}{2}$  (DOUBLE)

## 24" STOP BAR

TH #6 20+27 LT. - TH #6 20+29 LT.

## TEMPORARY 4" WHITE LINE

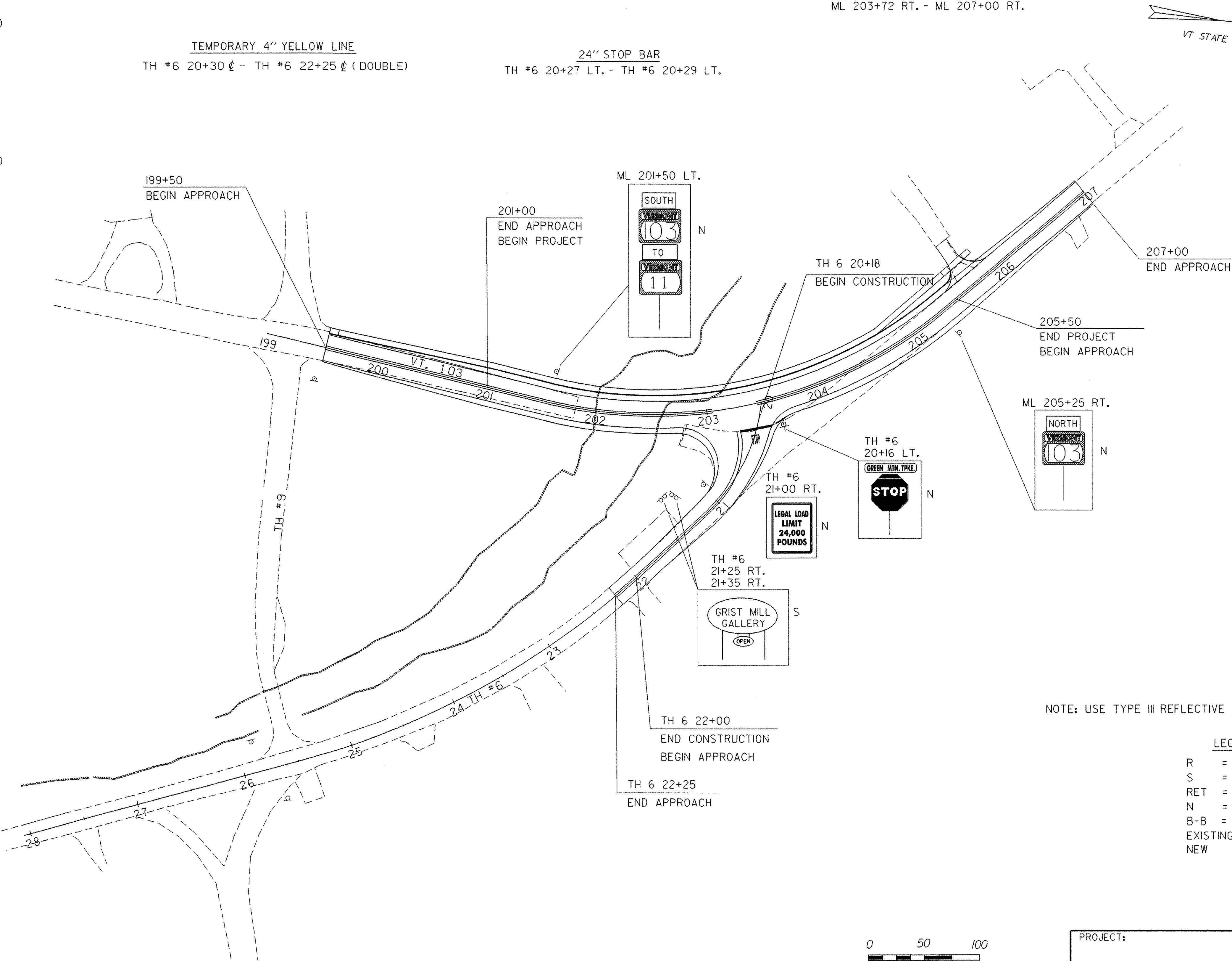
TH #6 20+81 RT. - TH #6 22+25 RT.  
TH #6 20+81 RT. - ML 202+61 RT. (35' RADIUS)  
TH #6 20+48 LT. - TH #6 22+25 LT.  
TH #6 20+48 LT. - ML 203+72 RT. (75' RADIUS)

## DURABLE 4" YELLOW

ML 199+50  $\frac{1}{2}$  - ML 203+04  $\frac{1}{2}$  (DOUBLE)  
ML 203+44  $\frac{1}{2}$  - ML 207+00  $\frac{1}{2}$  (DOUBLE)

## LETTER OR SYMBOL

TH #6 20+30 LT. - TH #6 20+38 LT. (STOP)



NOTE: USE TYPE III REFLECTIVE SHEETING ON ALL NEW ROADWAY SIGNS.

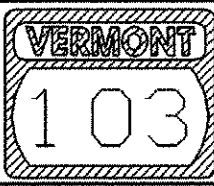
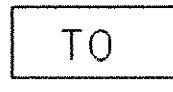
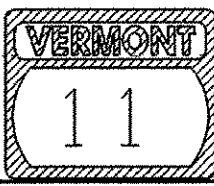
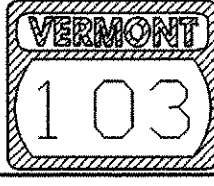
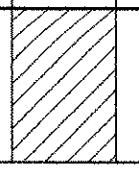
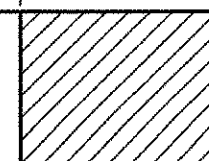
## LEGEND

R = REMOVE  
S = SALVAGE  
RET = RETAIN  
N = NEW  
B-B = BACK TO BACK  
EXISTING ----  
NEW ———

0 50 100  
SCALE IN FEET

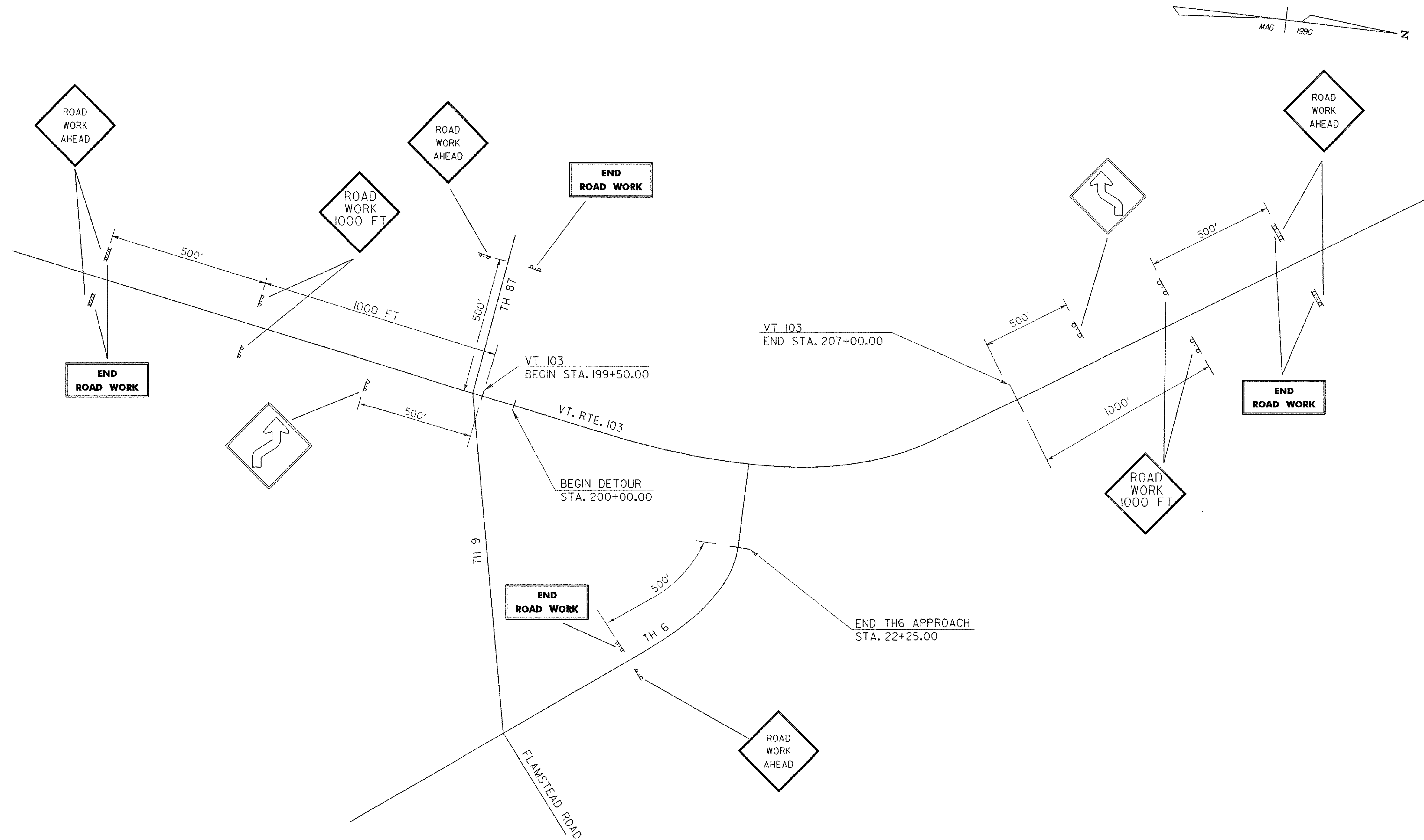
|                              |                        |
|------------------------------|------------------------|
| PROJECT:                     | PROJECT NO.:           |
| DESIGN FILE NAME:            | PLOT DATE: 28-MAY-2003 |
| IPARM FILE NAME: z-f134+c2.1 | SURVEY DATE:           |
| SURVEYED BY:                 | DRAWN BY:              |
| SQUAD LEADER:                | SHEET: 32 OF 79        |
| TRAFFIC CONTROL SHEET 2      |                        |



| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION                                                                                                                                                                                                                                                                                                  |                                                                                     |                    | TRAFFIC SIGN SUMMARY SHEET |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|----------------------------|----------------------|------|--------------|-------------|--------------------------------------------|--------------------------------------------------------------------------------------|-----------------|------|------|----------------------|-----|------------|----------------------------|-----|-----|-------------------------|---------------------------------------------------------------------------------------|-----------|-----|---------------|--------------|-----|------------------------------|-------------------------|-----------------------------------|---------|-------------|-----|-----|--------------------------------|----|--------|
| MILEMARKER,<br>STATION,<br>OR<br>SIGN NUMBER                                                                                                                                                                                                                                                                                                  | SIGN<br>LEGEND                                                                      | SIGN<br>DIMENSIONS |                            | NEW & SALVAGED SIGNS |      |              |             | EXIST<br>POST<br>RE<br>TAIN<br>SAL<br>VAGE | NO.<br>OF<br>POST<br>S                                                               | NEW SIGN POSTS  |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         | RE<br>FR<br>U<br>I<br>T<br>E<br>D | REMARKS | SIGN DETAIL |     |     |                                |    |        |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            | "A"                  | "B"  | SALV<br>SIGN | SALV<br>TIS |                                            |                                                                                      | FLANGED CHANNEL |      |      | SQUARE STEEL<br>(in) |     |            | TUBULAR ALUMINUM<br>Ø (in) |     |     | TUBULAR STEEL<br>Ø (in) |                                                                                       |           |     | W-SHAPE STEEL |              |     | DETAIL<br>ON SHEET<br>NUMBER | STD.<br>SHEET<br>NUMBER |                                   |         |             |     |     |                                |    |        |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     | lb/ft              |                            |                      |      |              |             |                                            |                                                                                      | 1.75            | 2.0  | 2.5  | 3.0                  | 4.0 | 4.0<br>MOD | FOUND-<br>ATION            | 3.0 | 3.5 | 4.0                     | 5.0                                                                                   | FTG. SIZE |     | WEIGHT        | POST<br>SIZE |     |                              |                         |                                   |         |             |     |     |                                |    |        |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     | 1.12               | 2.0                        |                      |      |              |             |                                            |                                                                                      | 3.0             | 1.88 | 2.16 | 3.35                 | 1.3 | 1.7        |                            | 1.7 | 7.6 | 9.0                     | 10.8                                                                                  | 14.6      | 24" |               |              | 30" |                              |                         |                                   |         |             |     |     |                                |    |        |
| OPTION ITEMS                                                                                                                                                                                                                                                                                                                                  |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| ML<br>201+50 LT.                                                                                                                                                                                                                                                                                                                              |    |                    | 24"                        | 12"                  | 2    |              |             |                                            |                                                                                      |                 | 1    |      |                      | X   |            |                            | X   |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M3-3              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |    |                    | 30"                        | 24"                  | 5    |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M1-5              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |    |                    | 24"                        | 12"                  | 2    |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M4-5              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |    |                    | 24"                        | 24"                  | 4    |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M1-5              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| TH 6<br>20+16 LT.                                                                                                                                                                                                                                                                                                                             |    |                    | 42"                        | 6"                   | 1.75 |              |             |                                            |                                                                                      |                 | 1    |      |                      | X   |            |                            | X   |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SEE STD. FOR STREET NAME SIGNS |    | E-123  |
|                                                                                                                                                                                                                                                                                                                                               |    |                    | 30"                        | 30"                  | 5    |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE R1-1              |    | E-143  |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| TH 6<br>21+00 RT.                                                                                                                                                                                                                                                                                                                             |  |                    | 24"                        | 30"                  | 5    |              |             |                                            |                                                                                      |                 | 1    |      |                      | X   |            |                            | X   |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE VR-017            |    | E-141  |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| TH 6<br>21+25 RT.                                                                                                                                                                                                                                                                                                                             |  |                    |                            |                      |      |              |             | 1                                          |                                                                                      |                 | 2    |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| TH 6<br>21+35 RT.                                                                                                                                                                                                                                                                                                                             |  |                    |                            |                      |      |              |             | 1                                          |                                                                                      |                 | 2    |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| ML<br>205+25 RT.                                                                                                                                                                                                                                                                                                                              |  |                    | 24"                        | 12"                  | 2    |              |             |                                            |                                                                                      |                 | 1    |      |                      | X   |            |                            | X   |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M3-1              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |  |                    | 30"                        | 24"                  | 4    |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     | SIGN ID CODE M1-5              |    | E-136B |
|                                                                                                                                                                                                                                                                                                                                               |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| FINAL POST LENGTHS ARE TO BE DETERMINED<br>IN THE FIELD. POST SIZES ARE COMPUTED<br>BASED ON INFORMATION FURNISHED ON THE<br>STANDARD SHEETS AND THE TRAFFIC & SAFETY<br>DIVISION'S "SIGN POST DESIGN GUIDELINE."                                                                                                                             |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      | FT   | FT                   | FT  | 66         | FT                         | FT  | FT  | 66                      |  | EA        | LB  | LB            | LB           | LB  | LB                           | LB                      | LB                                | LB      | EA.         | EA. | EA. | EA.                            | LB |        |
| <b>TOTALS</b>                                                                                                                                                                                                                                                                                                                                 |                                                                                     |                    |                            |                      | SF   | SF           | EA.         | SF                                         |  |                 |      | FT   | 66                   |     |            | FT                         | 66  |     |                         |                                                                                       | LB        |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |
| <div>PROJECT: <b>CHESTER</b> PROJECT NO.: BRF 025-(35)</div> <div>DESIGN FILE NAME: M:\1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn<br/>IPARM FILE NAME: zf134fc3.i PLOT DATE: 28-MAY-2003<br/>SURVEYED BY: SHERIDAN SURVEY DATE: 08-90<br/>SQUAD LEADER: PORTALUP1 DRAWN BY: L. BULLOCK<br/>TRAFFIC CONTROL SHEET 3 SHEET: 33 OF 79</div> |                                                                                     |                    |                            |                      |      |              |             |                                            |                                                                                      |                 |      |      |                      |     |            |                            |     |     |                         |                                                                                       |           |     |               |              |     |                              |                         |                                   |         |             |     |     |                                |    |        |



# CONSTRUCTION APPROACH SIGNING

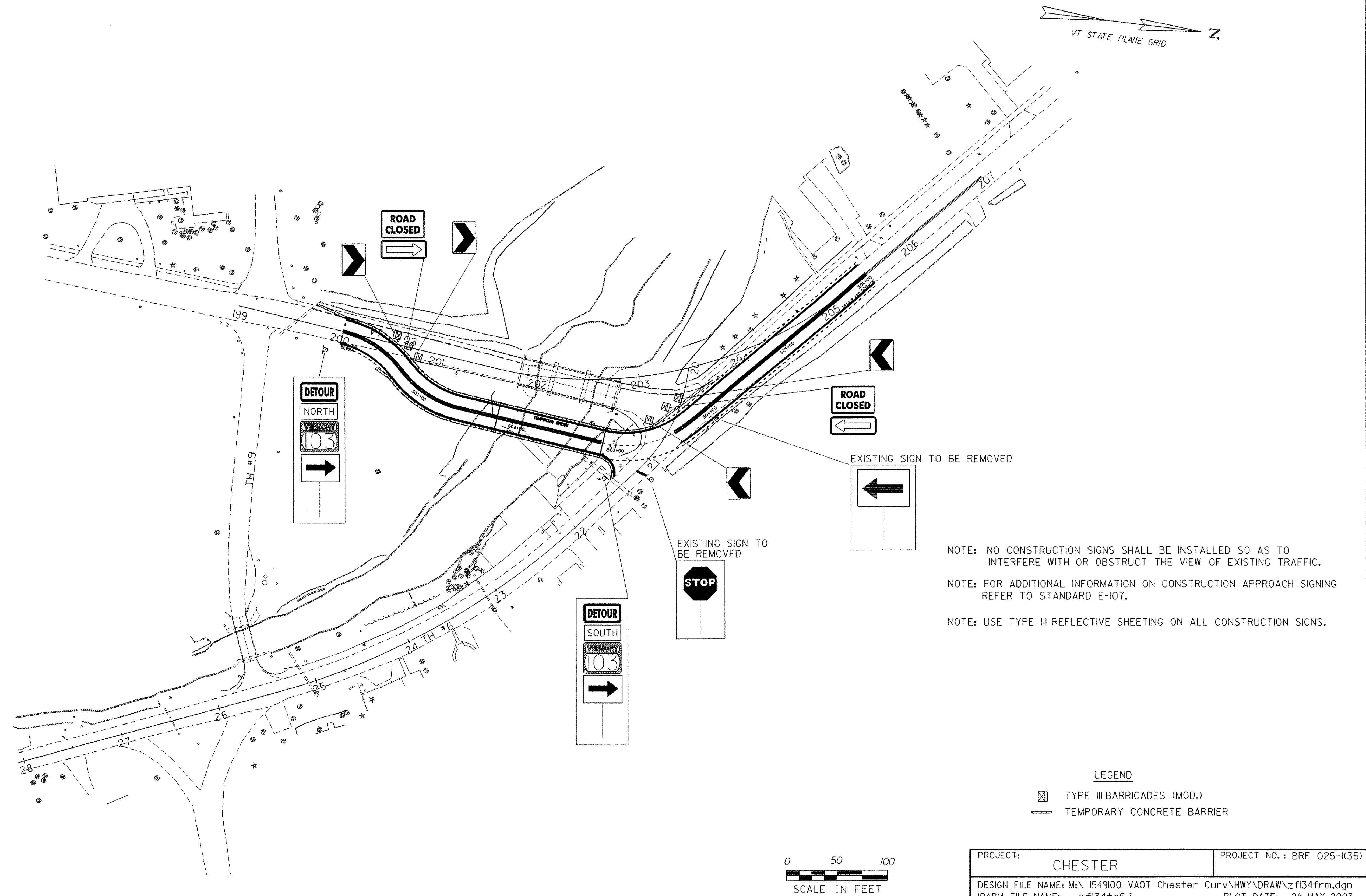


NOT TO SCALE

|                         |                         |                            |
|-------------------------|-------------------------|----------------------------|
| PROJECT:                | CHESTER                 | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME:       | M:\1549100 VAOT-Chester | Curv\HWY\DRAW\zfi34frm.dgn |
| IPARM FILE NAME:        | zfi34tc4.i              | PLOT DATE: 28-MAY-2003     |
| SURVEYED BY:            | SHERIDAN                | SURVEY DATE: 08-90         |
| SQUAD LEADER:           | PORTALUPI               | DRAWN BY: L. BULLOCK       |
| TRAFFIC CONTROL SHEET 4 |                         | SHEET: 34 OF 79            |

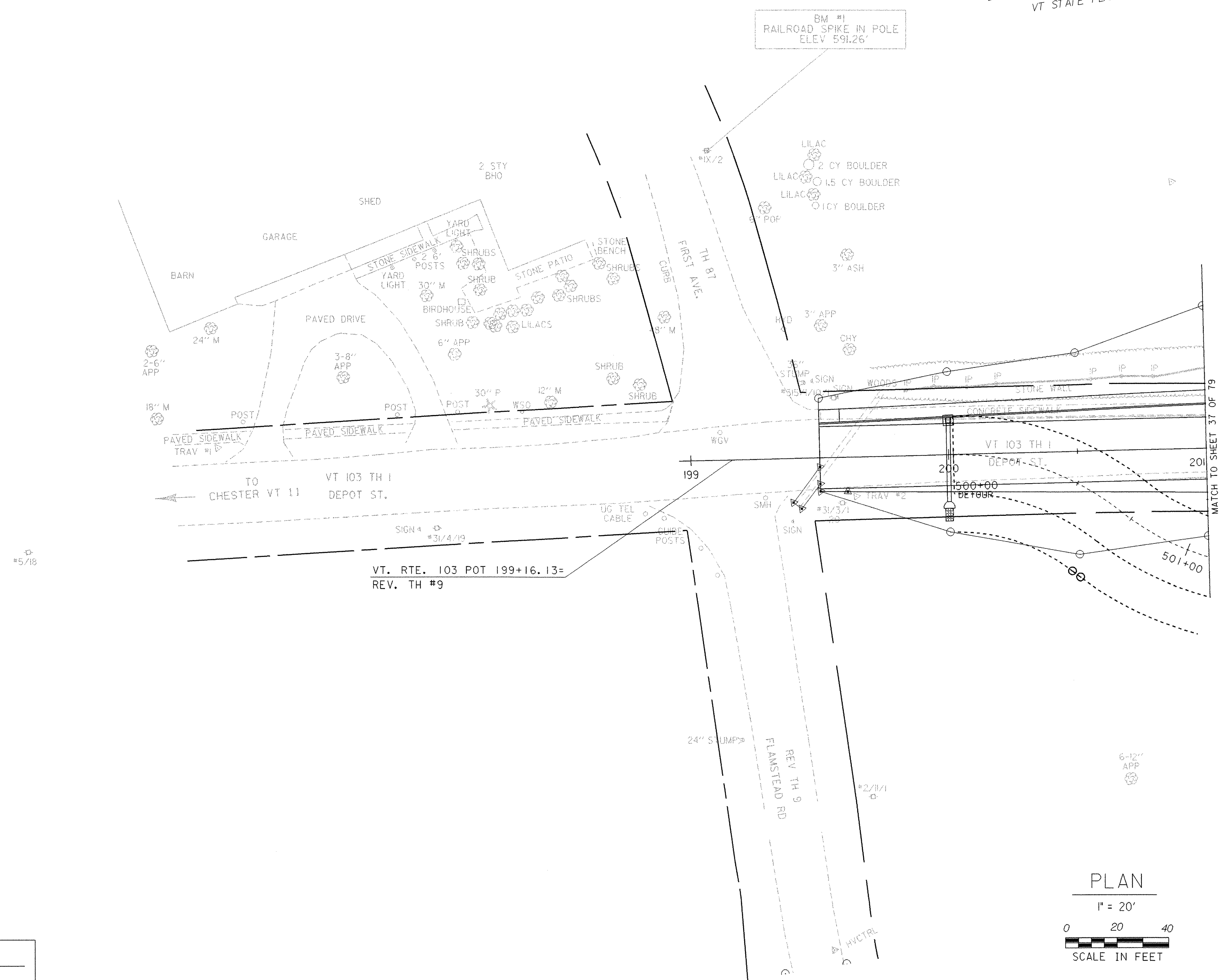
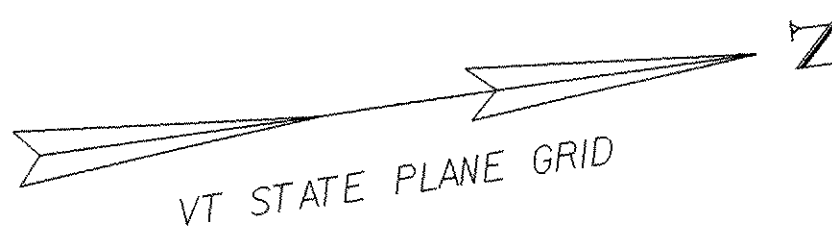


DETOUR PAVEMENT MARKING AND SIGNING  
(CONSTRUCTION OF VT.103)

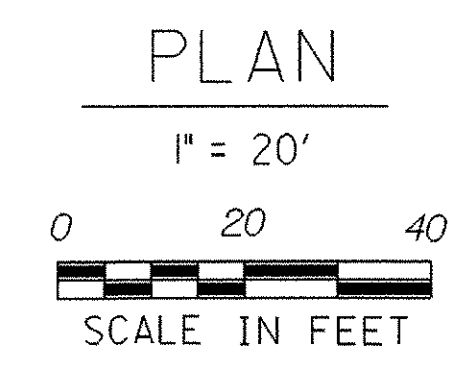




# UTILITY PLAN



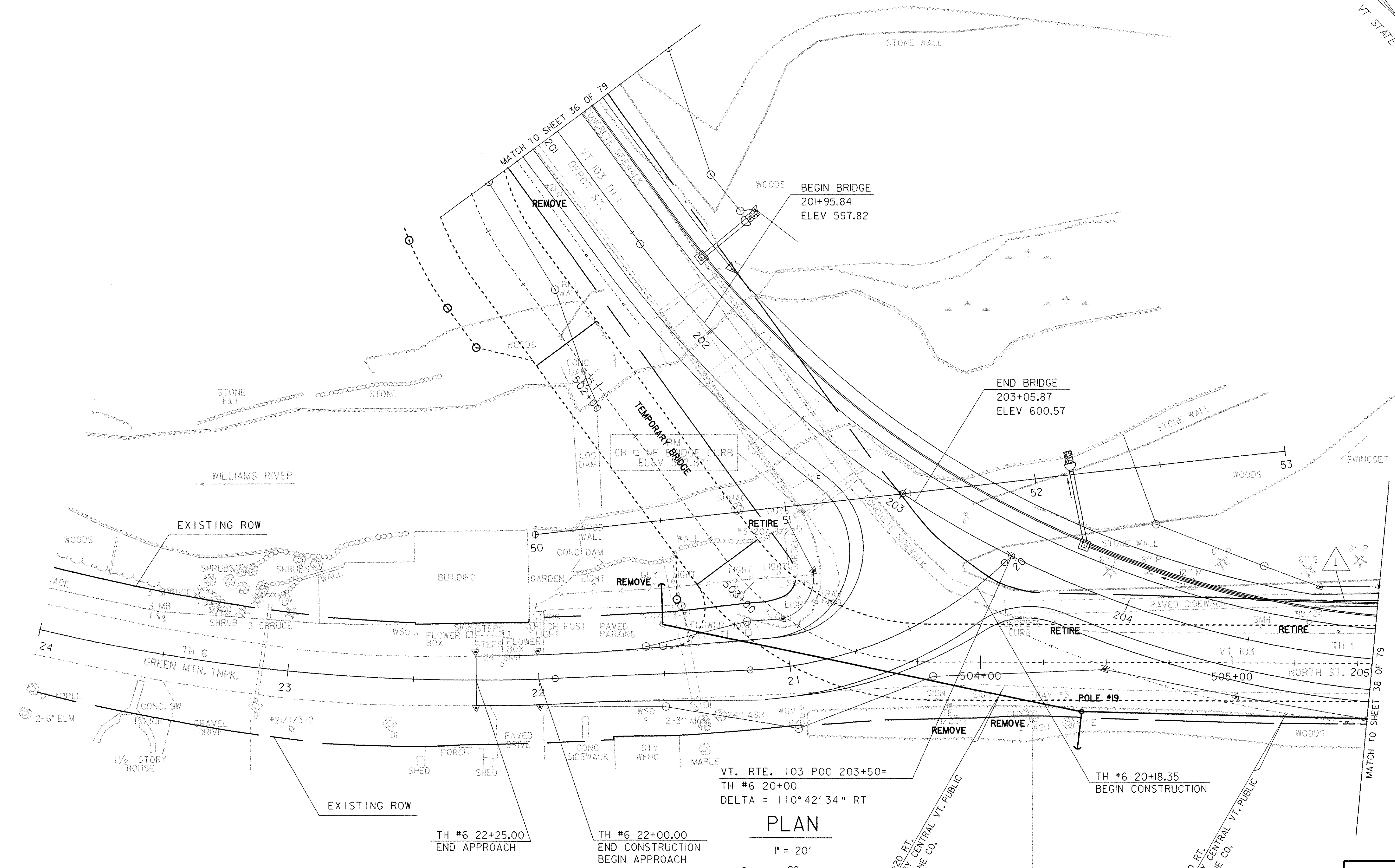
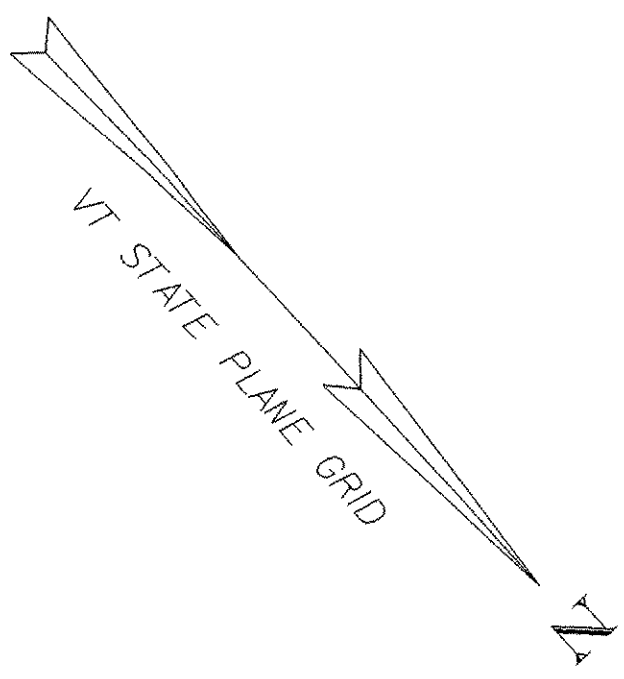
|            |           |
|------------|-----------|
| DATUM      |           |
| VERTICAL   | NGVD 1929 |
| HORIZONTAL | NAD 1927  |



|                 |                              |              |             |
|-----------------|------------------------------|--------------|-------------|
| SURVEYED BY     | SHERIDAN                     | DATE         | 08-90       |
| DRAWN BY        | L. BULLOCK                   | DATE         | 11-90       |
| SQUAD LEADER    | PORTALUPI                    |              |             |
| DESIGN FILE NO. | M:\1549101\VA0T-Chester_Curv |              |             |
| PRF FILE        | z:f134u+1.i                  | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                      |              |             |
| PROJ. NO.       | BRF 025-1(35)                |              |             |
| SHEET           | 36 OF 79 SHEETS              |              |             |



# UTILITY SHEET

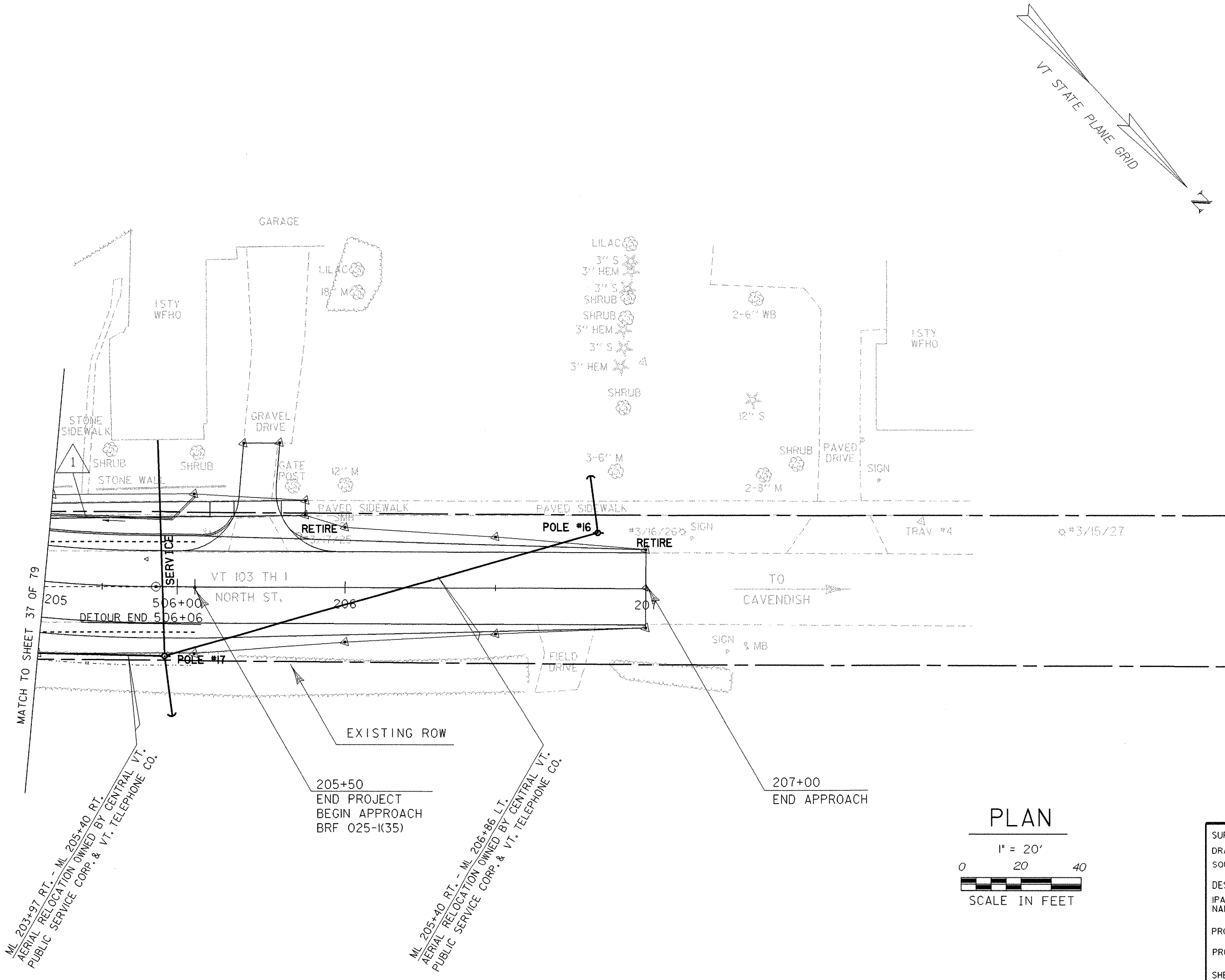


| DATUM      |           |
|------------|-----------|
| VERTICAL   | NGVD 1929 |
| HORIZONTAL | NAD 1927  |

|                 |                                                    |      |             |
|-----------------|----------------------------------------------------|------|-------------|
| SURVEYED BY     | GILMAN                                             | DATE | 12/92       |
| DRAWN BY        | L. BULLOCK                                         | DATE | 1/93        |
| SQUAD LEADER    | PORTALUPI                                          |      |             |
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| IPARM FILE      | zfi34ut2.1                                         | DATE | 28-MAY-2003 |
| PROJ. NAME      | CHESTER                                            |      |             |
| PROJ. NO.       | BRF 025-K(35)                                      |      |             |
| SHEET           | 37                                                 | OF   | 79 SHEETS   |



# UTILITY SHEET



**DATUM**  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

PLAN

1" = 20'

0 20 40

SCALE IN FEET

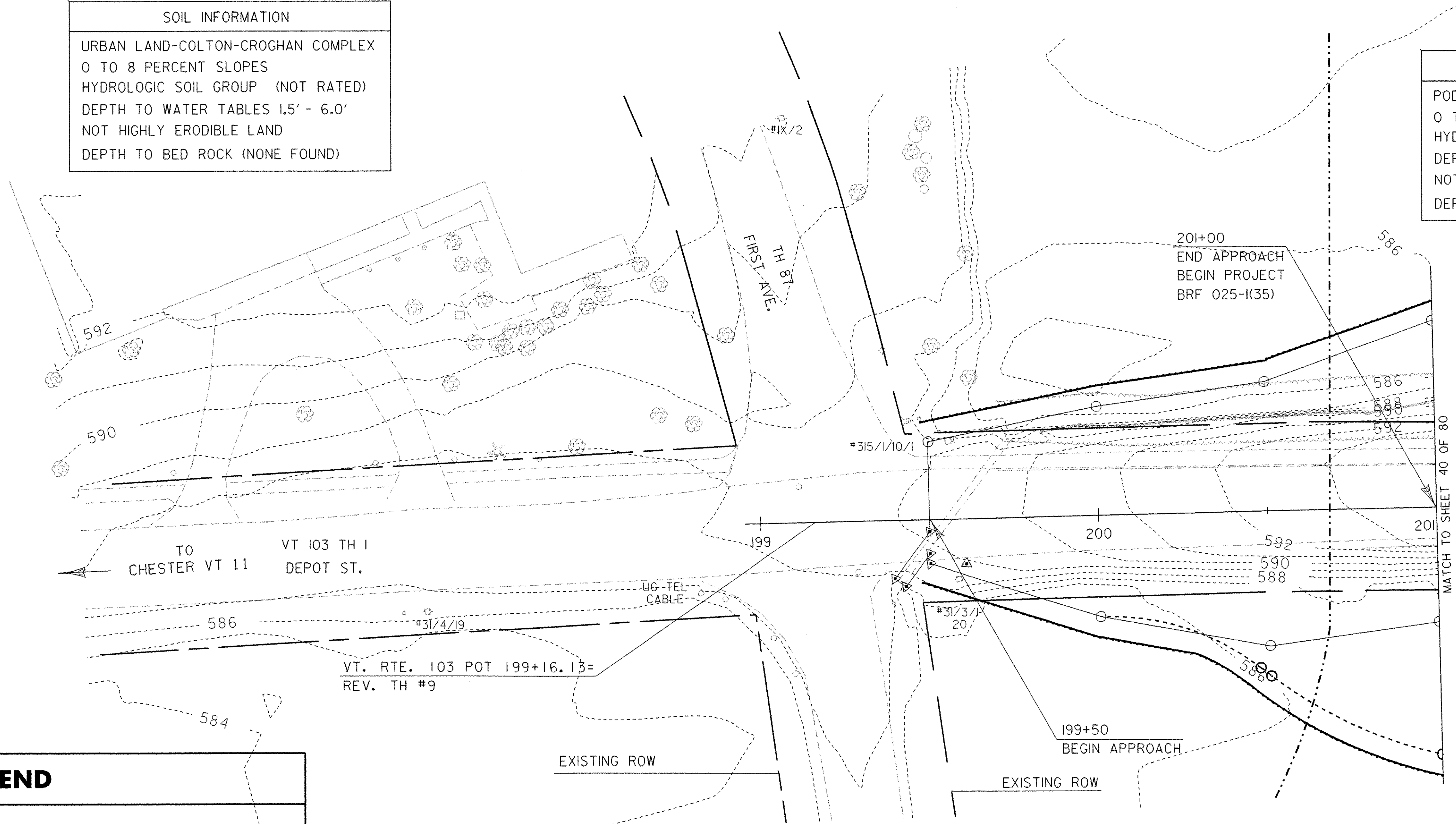
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 DRAWN BY L. BULLOCK DATE 11-09  
 SQUAD LEADER PORTALUPI  
 M:\1549101\VAOT-Chester\_Curv  
 \HWY\DRAW\z\z34bdr.dgn  
 DESIGN FILE NO.  
 IPARM DATE  
 NAME z f34ut3,i PLOTTED 28-MAY-2003  
 PROJ. NAME CHESTER  
 PROJ. NO. BRF 025-I(35)  
 SHEET 38 OF 79 SHEETS



**EROSION CONTROL  
EXISTING CONDITIONS & PERIMETER CONTROL PLAN 1**

| SOIL INFORMATION                  |
|-----------------------------------|
| URBAN LAND-COLTON-CROGHAN COMPLEX |
| 0 TO 8 PERCENT SLOPES             |
| HYDROLOGIC SOIL GROUP (NOT RATED) |
| DEPTH TO WATER TABLES 1.5' - 6.0' |
| NOT HIGHLY ERODIBLE LAND          |
| DEPTH TO BED ROCK (NONE FOUND)    |

| SOIL INFORMATION                  |
|-----------------------------------|
| PODUNK FINE SANDY LOAM            |
| 0 TO 3 PERCENT SLOPES             |
| HYDROLOGIC SOIL GROUP (B)         |
| DEPTH TO WATER TABLES 1.5' - 3.0' |
| NOT HIGHLY ERODIBLE LAND          |
| DEPTH TO BED ROCK 60'             |



**LEGEND**

- WETLANDS BOUNDARIES
- SILT FENCE
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- STAKED IN PLACE HAY BALES

NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

**PERIMETER CONTROL NOTES**

- 1.) IDENTIFY SENSITIVE AREAS AND AREAS PRONE TO EROSION
- 2.) CLEARLY DEMARCATe AREAS TO AVOID DISTURBANCE
- 3.) PROTECT ALL SENSITIVE AREAS AND WATER FEATURES FROM SEDIMENT
- 4.) DIVERT OR OTHERWISE KEEP OFF-SITE "RUN-ON" FROM AREAS TO BE DISTURBED
- 5.) PERIMETER CONTROLS TO BE INSTALLED PRIOR TO SOIL DISTURBANCE AND MAINTAINED UNTIL SITE IS PERMANENTLY STABILIZED TO THE SATISFACTION OF THE ENGINEER AND ON-SITE COORDINATOR

DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90  
DRAWN BY L. BULLOCK DATE 11-90  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\154901\VA0T-Chester\_Curv  
PRF FILE zfi34erLi DATE 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BRF 025-1(35)  
SHEET 39 OF 79 SHEETS



# EROSION CONTROL PLAN

## EXISTING CONDITIONS & PERIMETER CONTROL PLAN 2

### LEGEND

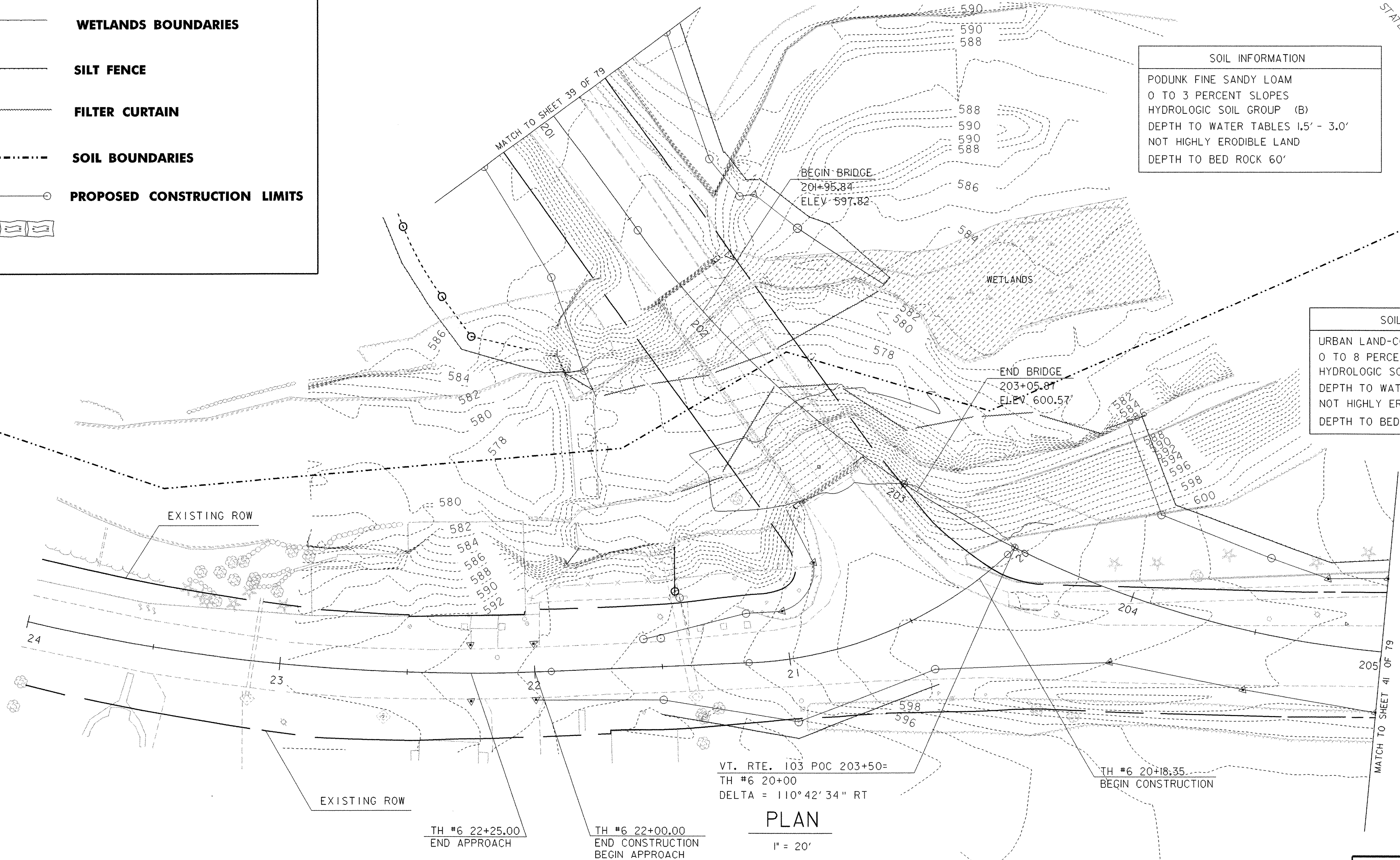
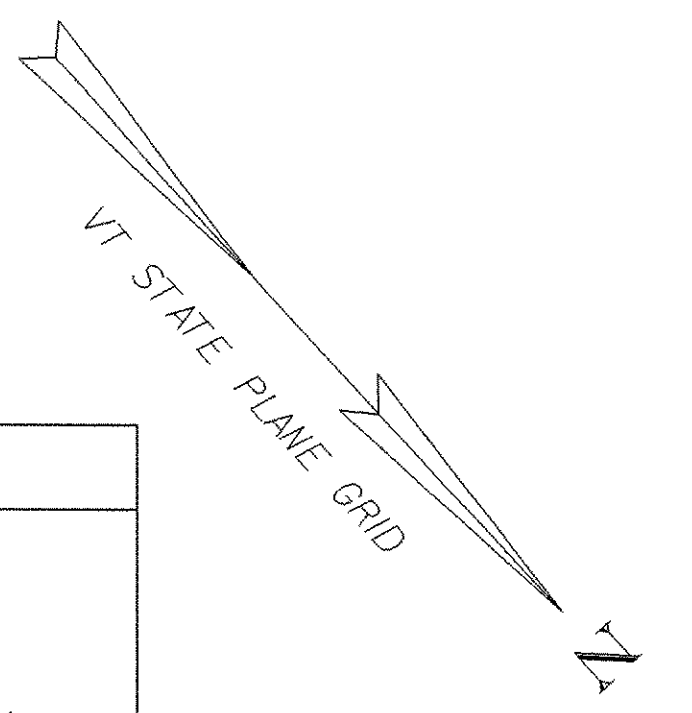
- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS

SOIL INFORMATION

PODUNK FINE SANDY LOAM  
0 TO 3 PERCENT SLOPES  
HYDROLOGIC SOIL GROUP (B)  
DEPTH TO WATER TABLES 1.5' - 3.0'  
NOT HIGHLY ERODIBLE LAND  
DEPTH TO BED ROCK 60'

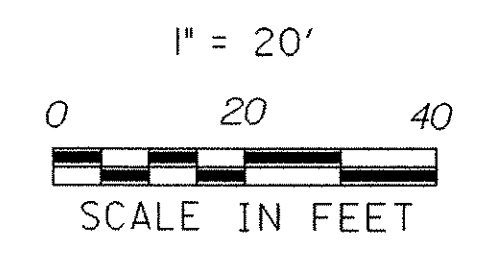
SOIL INFORMATION

URBAN LAND-COLTON-CROGHAN COMPLEX  
0 TO 8 PERCENT SLOPES  
HYDROLOGIC SOIL GROUP (NOT RATED)  
DEPTH TO WATER TABLES 1.5' - 6.0'  
NOT HIGHLY ERODIBLE LAND  
DEPTH TO BED ROCK (NONE FOUND)



VT. RTE. 103 POC 203+50=  
TH #6 20+00  
DELTA = 110°42'34" RT

PLAN



NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

DATUM

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92

DRAWN BY L. BULLOCK DATE 1/93

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\1549101\VAOT-Chester Curv

IPARM FILE z:\f134er2.1 DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

PROJ. NO. BRF 025-1(35)

SHEET 40 OF 79 SHEETS



# EROSION CONTROL PLAN

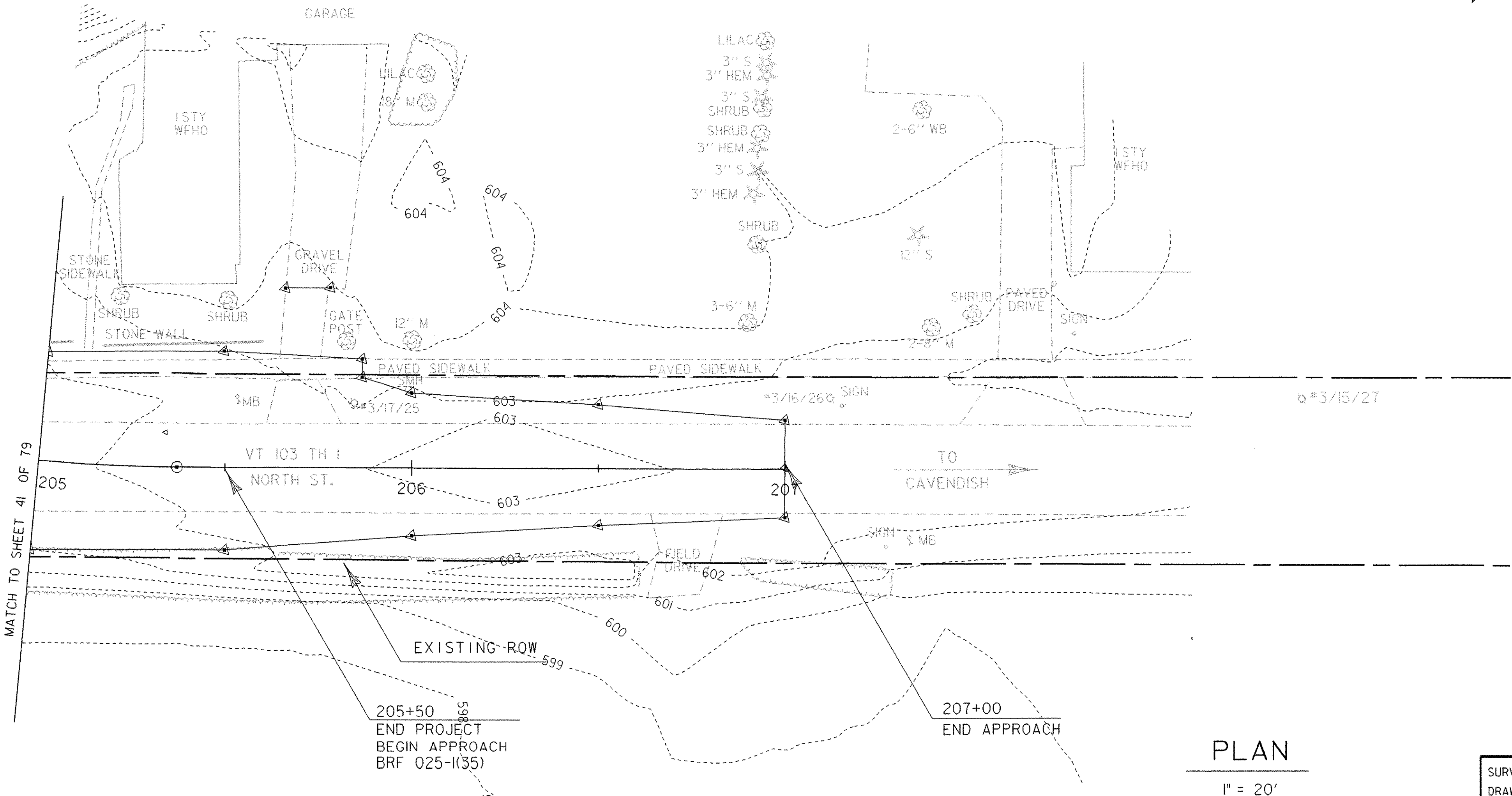
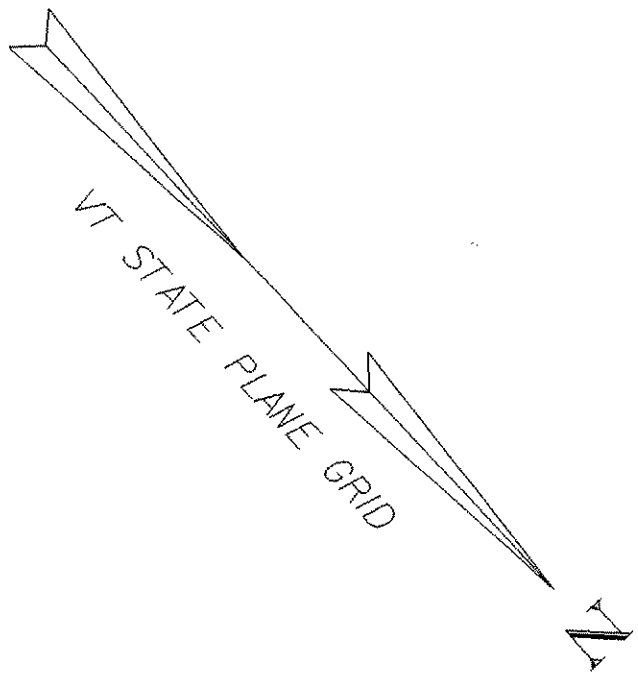
## EXISTING CONDITIONS & PERIMETER CONTROL PLAN 2

### LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- STAKED IN PLACE HAY BALES

### SOIL INFORMATION (THIS ENTIRE SHEET)

URBAN LAND-COLTON-CROGHAN COMPLEX  
0 TO 8 PERCENT SLOPES  
HYDROLOGIC SOIL GROUP (NOT RATED)  
DEPTH TO WATER TABLES 1.5' - 6.0'  
NOT HIGHLY ERODIBLE LAND  
DEPTH TO BED ROCK (NONE FOUND)



NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

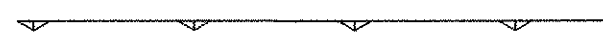
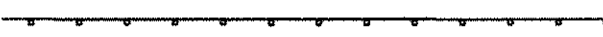
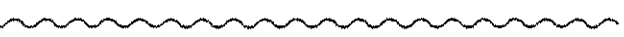
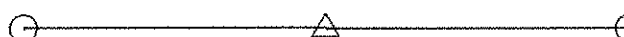
### PLAN

1" = 20'  
0 20 40  
SCALE IN FEET

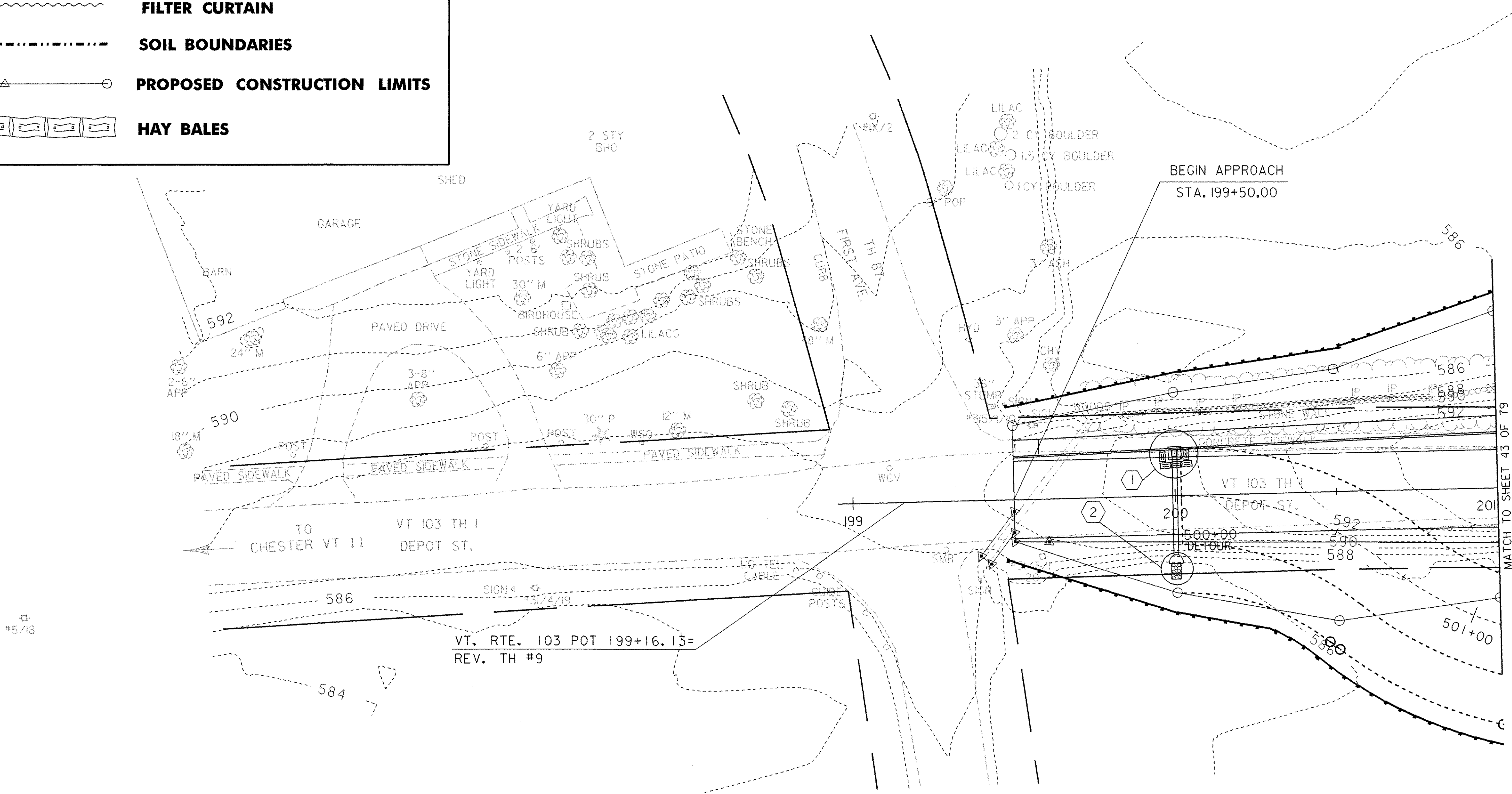
SURVEYED BY SHERIDAN DATE 08-90  
DRAWN BY L. BULLOCK DATE 11-90  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\J549101\VAOT-Chester\_Curv  
IPARM NAME z fi34er3.i DATE 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BRF 025-1(35)  
SHEET 41 OF 79 SHEETS



LEGEND

- **WETLANDS BOUNDARIES**
- **SILT FENCE**
- **FILTER CURTAIN**
- **SOIL BOUNDARIES**
- **PROPOSED CONSTRUCTION LIMITS**
- **HAY BALES**

PROPOSED EROSION CONTROL SHEET 1



EROSION AND SEDIMENT CONTROL SEQUENCE

| TASK                                                                                               | DATE REQ'D | TASK                                                        | DATE REQ'D |
|----------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------|------------|
| 1.) SET UP FIELD OFFICE AND CONTRACTOR STORAGE/WORKSITE LOCATION PROTECTED BY APPROPRIATE CONTROLS |            | • SEED AND MULCH SIDE SLOPES                                |            |
| 2.) INSTALL INITIAL EROSION CONTROL DEVICES INCLUDING SILT FENCE AND FILTER CURTAIN AS SHOWN       |            | 18.) REMOVE COFFERDAM                                       |            |
| 3.) CLEAR BRUSH, INSTALL GEOMATting, AND BEGIN CONSTRUCTION OF TEMPORARY BRIDGE AND APPROACHES     | X          | 19.) REMOVE SEDIMENT POND(S) - LANDFILL AT APPROVED SITE    |            |
| • INSTALL HAY BALE AND STONE CHECK DAM PROTECTION AT CULVERT INLETS                                |            | 20.) RESTORE STREAMBANK                                     | X          |
| 4.) BUILD AND LAUNCH TEMPORARY BRIDGE                                                              |            | 21.) PLACE GEOTEXTILE, STONE AND GRUBBING MATERIAL AS SHOWN |            |
| 5.) COMPLETE TEMPORARY ROADWAY APPROACHES                                                          |            | 22.) FORM / PLACE DECK AND APPROACH SLABS                   |            |
| 6.) PLACE EROSION MATTING ON SLOPES GREATER THAN 1:3, HAY MULCH ALL OTHER DISTURBED AREAS          | X          | 23.) COMPLETE APPURTENANCES (GUARDRAIL, ETC.)               |            |
| 7.) SEED SIDE SLOPES WITH TEMPORARY SEED MIX                                                       |            | 24.) INSTALL TEMPORARY PAVEMENT MARKINGS                    |            |
| 8.) SHIFT TRAFFIC TO TEMPORARY BRIDGE                                                              |            | 25.) REMOVE TEMPORARY BRIDGE                                |            |
| 9.) COMPLETE JERSEY BARRIER ALONG TEMPORARY ROAD                                                   |            | 26.) REMOVE TEMPORARY ROAD AND GEOTEXTILE                   |            |
| 10.) REMOVE EXISTING BRIDGE - PROTECT STREAM FROM DEBRIS                                           |            | 27.) REMOVE GEOTEXTILE                                      |            |
| 11.) CONCRETE RUBBLE TO BE LANDFILLED AT A SITE APPROVED BY VTTRANS ENV. SECTION                   |            | 28.) RESTORE WETLAND USING APPROVED WETLAND SEED MIX        | X          |
| 12.) CONSTRUCT SEDIMENTATION / DEWATERING POND(S)                                                  | X          | 29.) REMOVE INLET PROTECTION WORKS                          |            |
| 13.) INSTALL SHEET PILING                                                                          |            | 30.) GRADE, SEED AND MULCH ALL REMAINING DISTURBED AREAS    | X          |
| 14.) COMPLETE EXCAVATION                                                                           |            | 31.) RETAIN INITIAL EC MEASURES THROUGH THE WINTER          |            |
| 15.) INSTALL CONCRETE CLEANOUT AREA                                                                |            | 32.) INSTALL PAVEMENT WEAR COURSE                           |            |
| 16.) FORM / PLACE FOOTINGS                                                                         |            | 33.) REMOVE INITIAL EROSION CONTROL MEASURES                |            |
| 17.) FORM / PLACE ABUTMENTS AND WINGWALLS - BACKFILL                                               | X          |                                                             |            |
| • STRIP AND REMOVE PAVEMENT, GUARD RAILS ETC. - WASTE REMOVED TO APPROVED LOCATION                 |            |                                                             |            |
| • REMOVE SUBBASE - WATER TRUCK ON SITE FOR DUST CONTROL                                            |            |                                                             |            |
| • PLACE NEW BASE COURSE TO LINE AND GRADE                                                          |            |                                                             |            |
| • REFORM / INSTALL DITCHES                                                                         |            |                                                             |            |
| • SHAPE AND GRADE SIDE SLOPES AS REQUIRED                                                          |            |                                                             |            |
| • INSTALL EROSION MATTING WHERE / AS REQUIRED                                                      | X          |                                                             |            |
| • INSTALL GUARD RAIL AS REQUIRED                                                                   |            |                                                             |            |

NOTE: MONITOR ALL EROSION CONTROL WEEKLY AND AFTER EACH RAINSTORM AND CORRECT AS NECESSARY

• DENOTES WORK THAT CAN BE PERFORMED CONCURRENTLY

EROSION AND SEDIMENT CONTROL INDEX

| NO. | LOCATION        | DESCRIPTION                                        |
|-----|-----------------|----------------------------------------------------|
| (1) | 200+00.00 LEFT  | DROP INLET CONTROL (SEE STANDARD T-2)              |
| (2) | 200+00.00 RIGHT | OUTLET CONTROL (SEE DETAILS "J" ON SHEET 45 OF 79) |

DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90  
DRAWN BY L. BULLOCK DATE 11-90  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\154910\VA07-Chester\_Curv  
PRF FILE zfi34er4.1 DATE PLOTTED 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BRF 025-1(35)  
SHEET 42 OF 79 SHEETS

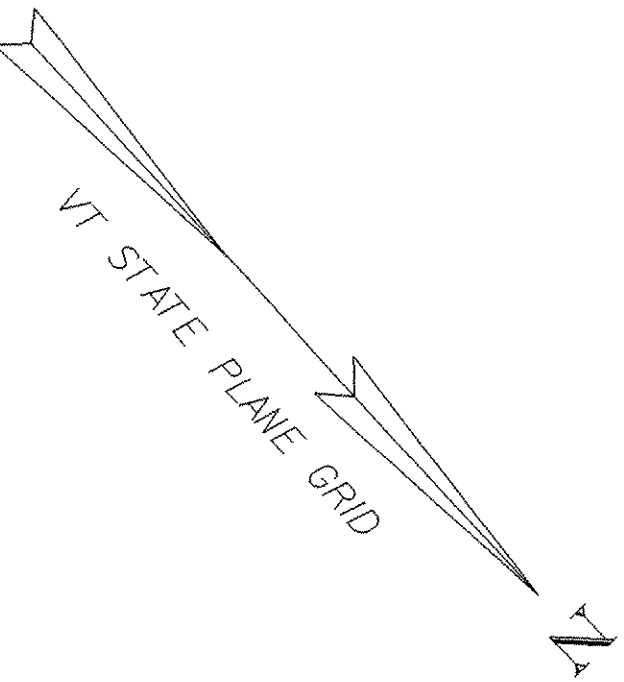
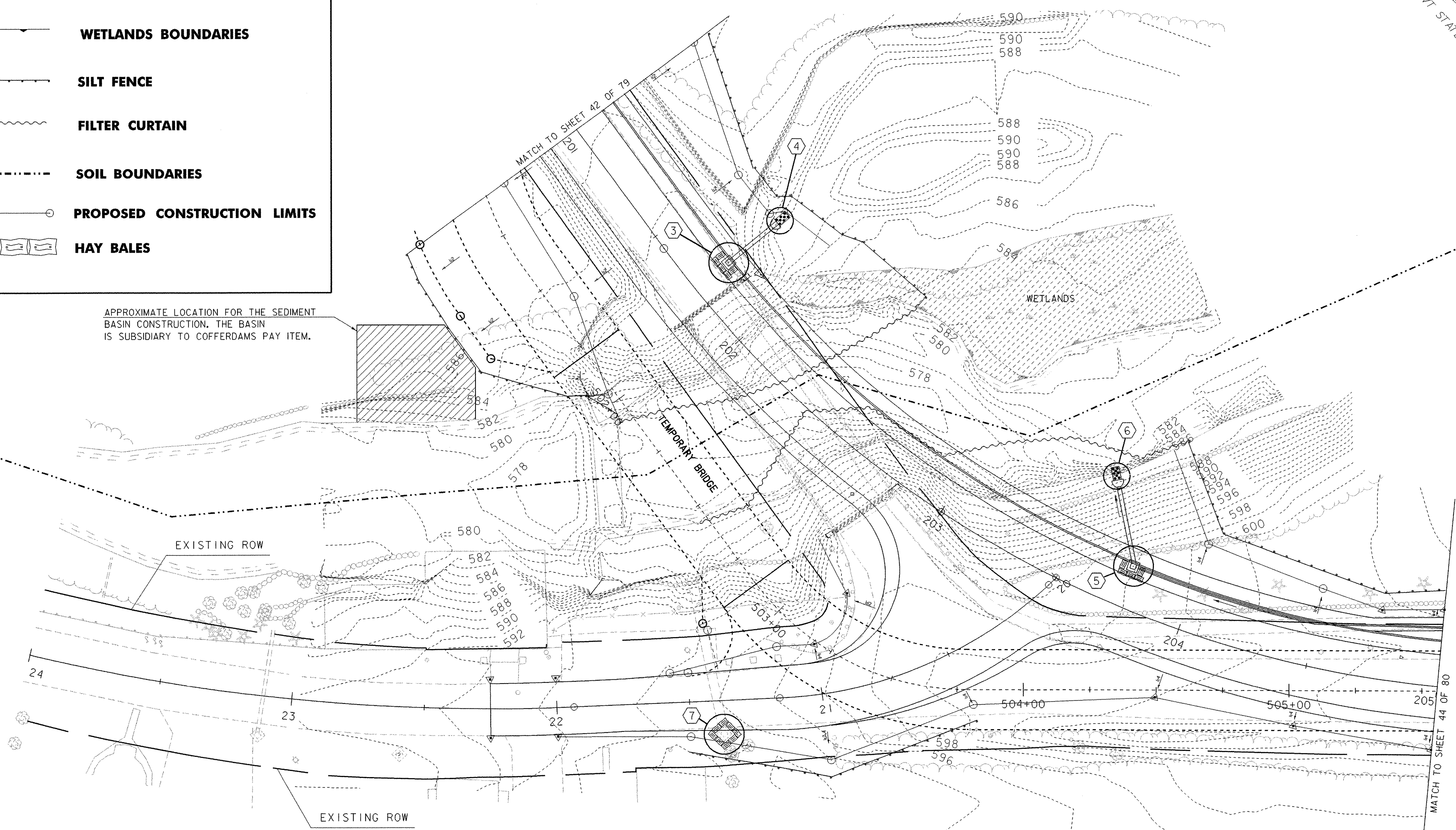


PROPOSED EROSION CONTROL SHEET 2

LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- HAY BALES

APPROXIMATE LOCATION FOR THE SEDIMENT BASIN CONSTRUCTION. THE BASIN IS SUBSIDIARY TO COFFERDAMS PAY ITEM.



NOTE: ALL DISTURBED AREAS WITH SLOPES GREATER THAN 1:3 WILL REQUIRE TEMPORARY EROSION MATTING (SEE DETAILS "C","EI", AND "E2")

DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

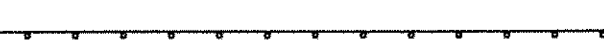
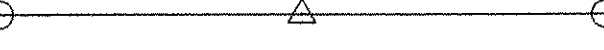
| EROSION AND SEDIMENT CONTROL INDEX |                |                                                      |
|------------------------------------|----------------|------------------------------------------------------|
| NO.                                | LOCATION       | DESCRIPTION                                          |
|                                    | VT. 103        |                                                      |
| 3                                  | 201+75.00 LEFT | DROP INLET CONTROL (SEE STANDARD T-2)                |
| 4                                  | 201+75.00 LEFT | OUT INLET CONTROL (SEE DETAIL "J" ON SHEET45 OF 79 ) |
| 5                                  | 203+75.00 LEFT | DROP INLET CONTROL (SEE STANDARD T-2)                |
| 6                                  | 203+55.00 LEFT | OUT INLET CONTROL (SEE DETAIL "J" ON SHEET45 OF 79 ) |
|                                    | TH 6           |                                                      |
| 7                                  | 21+37.30 LEFT  | DROP INLET CONTROL (SEE STANDARD T-2)                |

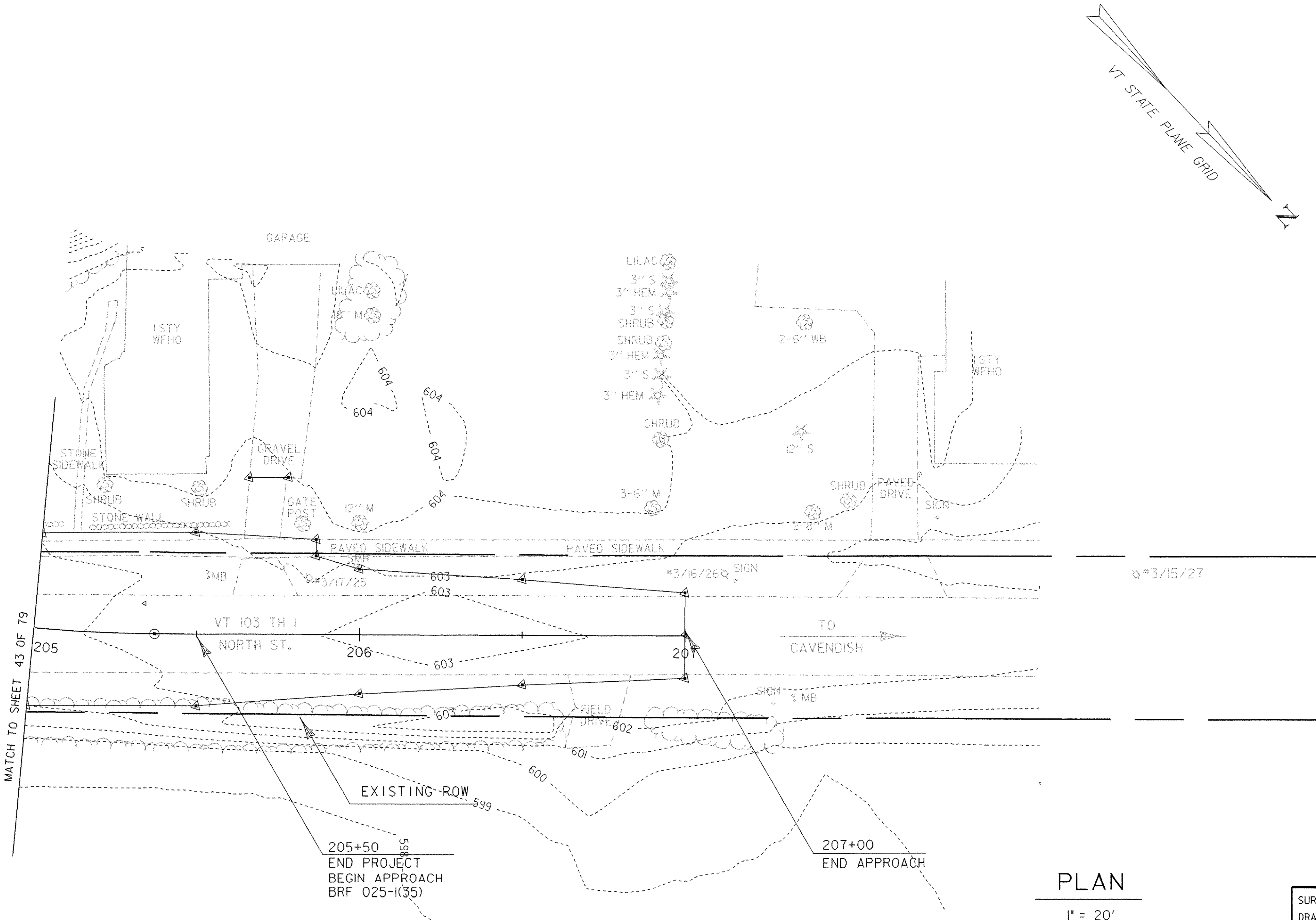
SURVEYED BY GILMAN DATE 12/92  
DRAWN BY L. BULLOCK DATE 1/93  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO.  
IPARM FILE z fi34er5,i DATE PLOTTED 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BR 025-1(35)  
SHEET 43 OF 79 SHEETS



# PROPOSED EROSION CONTROL SHEET 3

## LEGEND

-  **WETLANDS BOUNDARIES**
-  **SILT FENCE**
-  **FILTER CURTAIN**
-  **SOIL BOUNDARIES**
-  **PROPOSED CONSTRUCTION LIMITS**
-  **HAY BALES**



NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

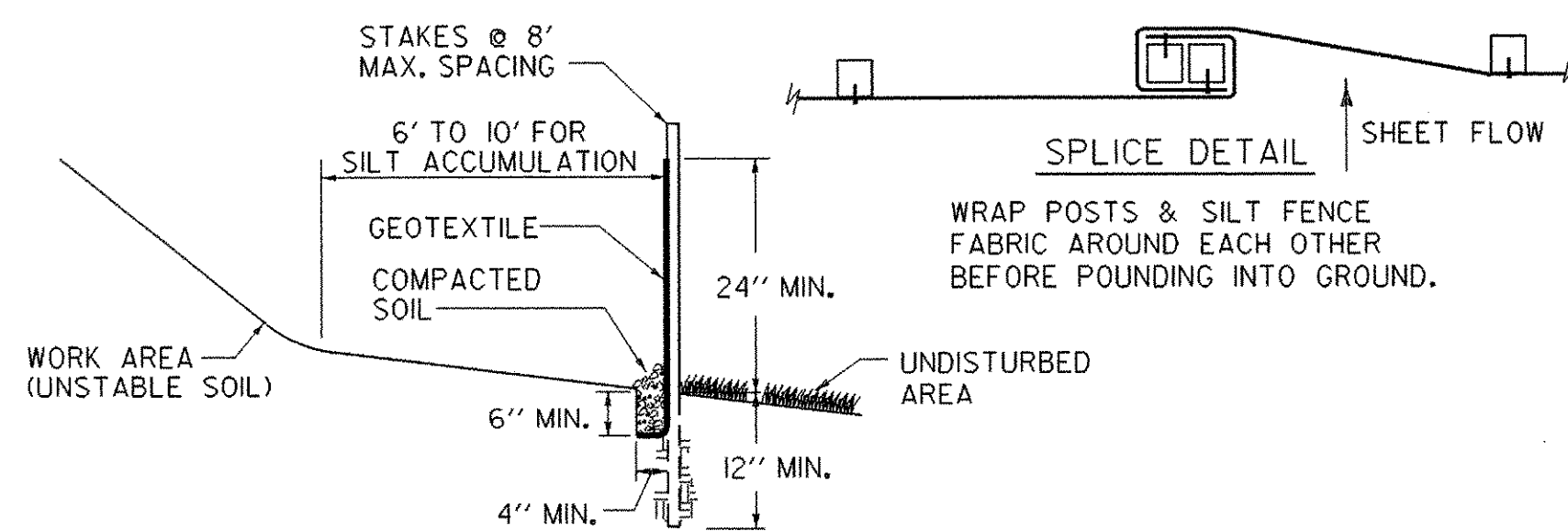
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

PLAN

1" = 20'  
0 20 40  
SCALE IN FEET

SURVEYED BY SHERIDAN DATE 08-90  
DRAWN BY L. BULLOCK DATE 11-90  
SQUAD LEADER PORTALUPI  
DESIGN FILE NO. M:\J549101\VA01-Chester\_Curv  
IPARM NAME z f134er6.i DATE 28-MAY-2003  
PROJ. NAME CHESTER  
PROJ. NO. BRF 025-1(35)  
SHEET 44 OF 79 SHEETS

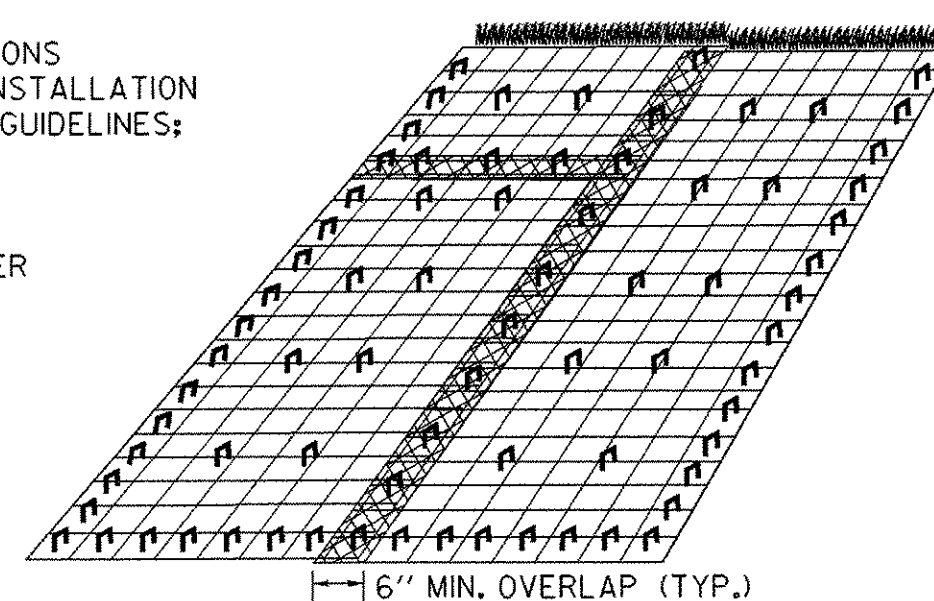




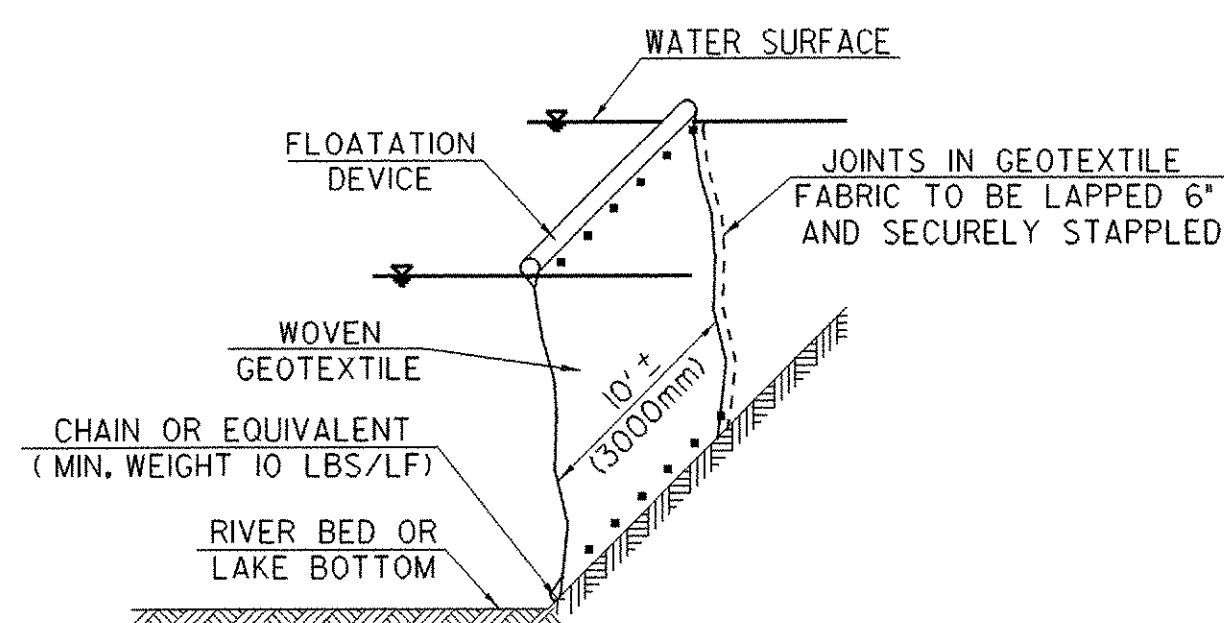
SILT FENCE

- NOTES :
1. DO NOT USE SILT FENCE IN STREAMS, DRAINAGE DITCHES, OR AREAS OF CONCENTRATED FLOW.
  2. BACK WITH STAKED-IN-PLACE HAY BALES OR WIRE FENCE IF ADDITIONAL SUPPORT IS NEEDED.
  3. MUST BE REMOVED WHEN SOIL IS STABILIZED.

- NOTES:
1. FOLLOW MANUFACTURERS RECOMMENDATIONS AND PROVIDE LITERATURE DESCRIBING INSTALLATION PROCEDURES OR USE THE FOLLOWING GUIDELINES:
  2. ALL FABRIC OVERLAPS SHALL BE 6" MINIMUM WITH STAPLES EVERY 20".
  3. STAPLE EDGES OF FABRIC EVERY 12".
  4. USE 40" MAX. STAPLE SPACING IN OTHER AREAS.
  5. SEE "EROSION MATTING FOR DITCHES" DETAIL FOR ANCHORING AT TOPS OF SLOPES.

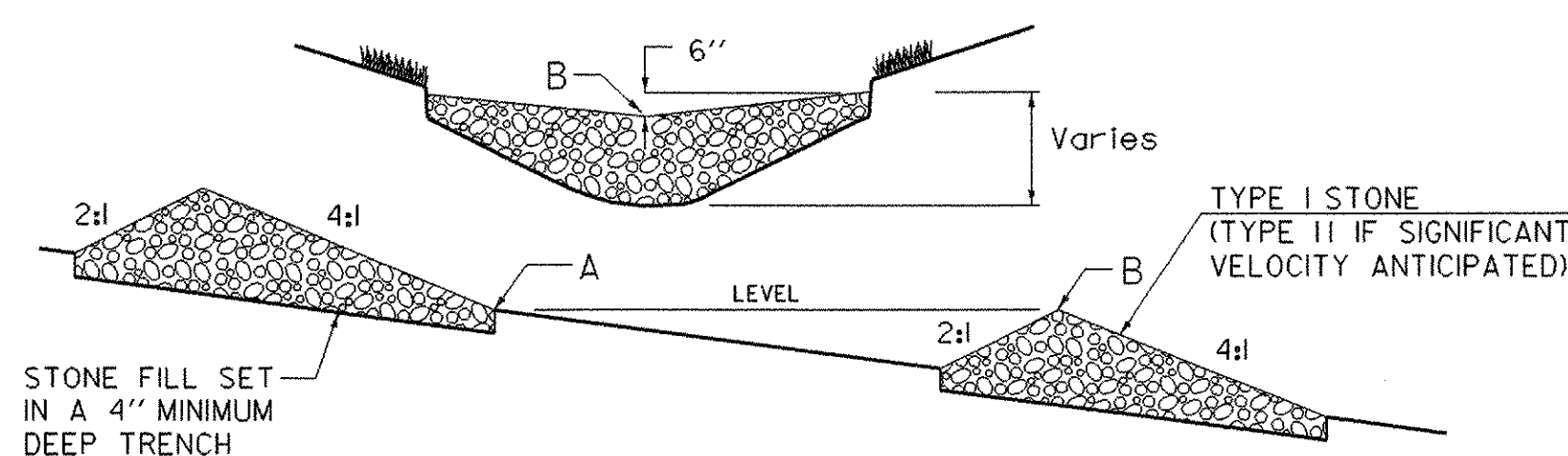


EROSION MATTING FOR SLOPES STEEPER THAN 1:3



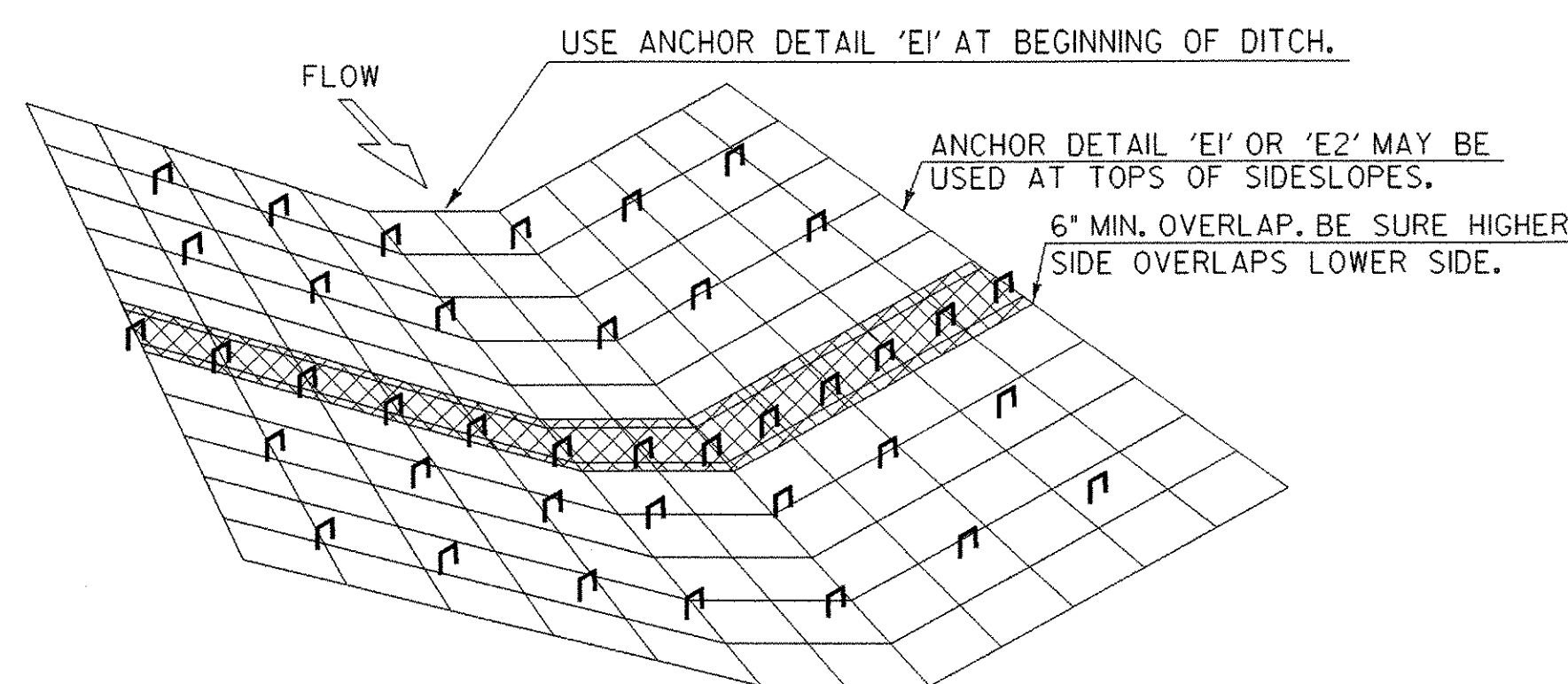
FILTER CURTAIN

1. NOT TO BE USED ACROSS THE FLOW OF WATER
2. HEIGHT SHOULD BE SUFFICIENT TO ALLOW FOR VARIATIONS IN THE BOTTOM AND RISING WATER
3. ANCHOR FIRMLY IN PLACE AS NEEDED
4. INSTALL PRIOR TO EARTH DISTURBING ACTIVITIES AND/ OR INSTALLATION OF COFFERDAM WHERE APPLICABLE
5. LEAVE IN PLACE UNTIL UP-SLOPE AREAS ARE STABLE AND COFFERDAM IS REMOVED
6. USE CARE DURING REMOVAL TO PREVENT THE RELEASE OF CAPTURED SEDIMENT AS MUCH AS POSSIBLE



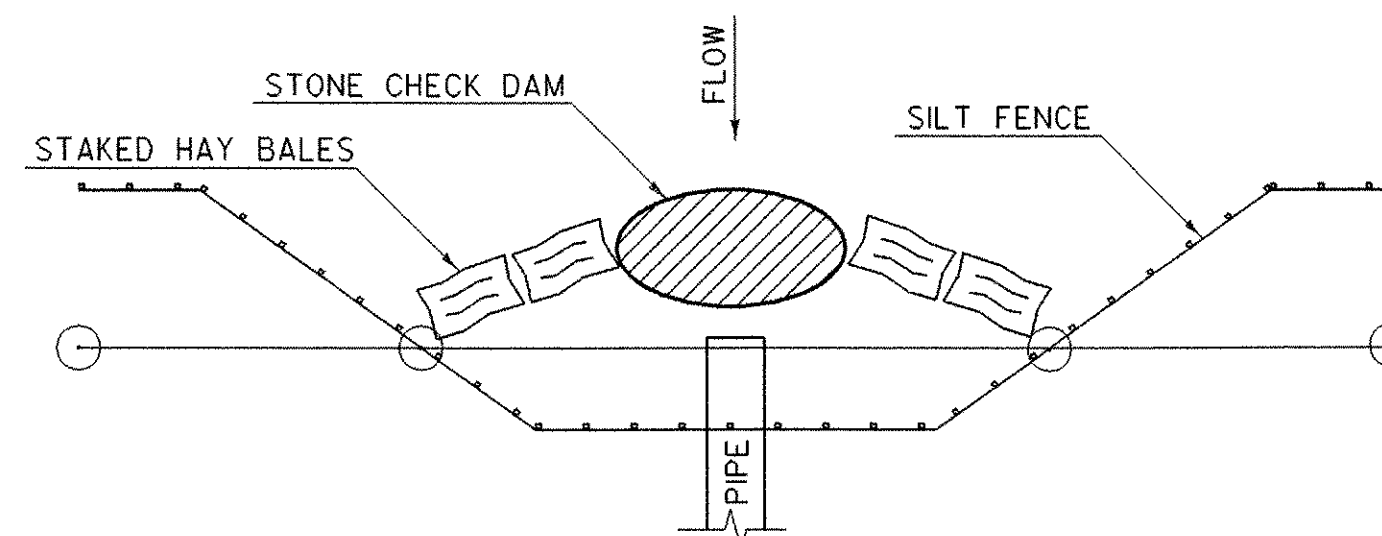
TEMPORARY STONE CHECK DAM

- NOTES :
1. CHECK DAMS TO BE USED DURING ESTABLISHMENT OF GRASS LINED DRAINAGE DITCHES
  2. LOCATE DOWNSTREAM STRUCTURE SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION "A" OF THE UPSTREAM STRUCTURE.

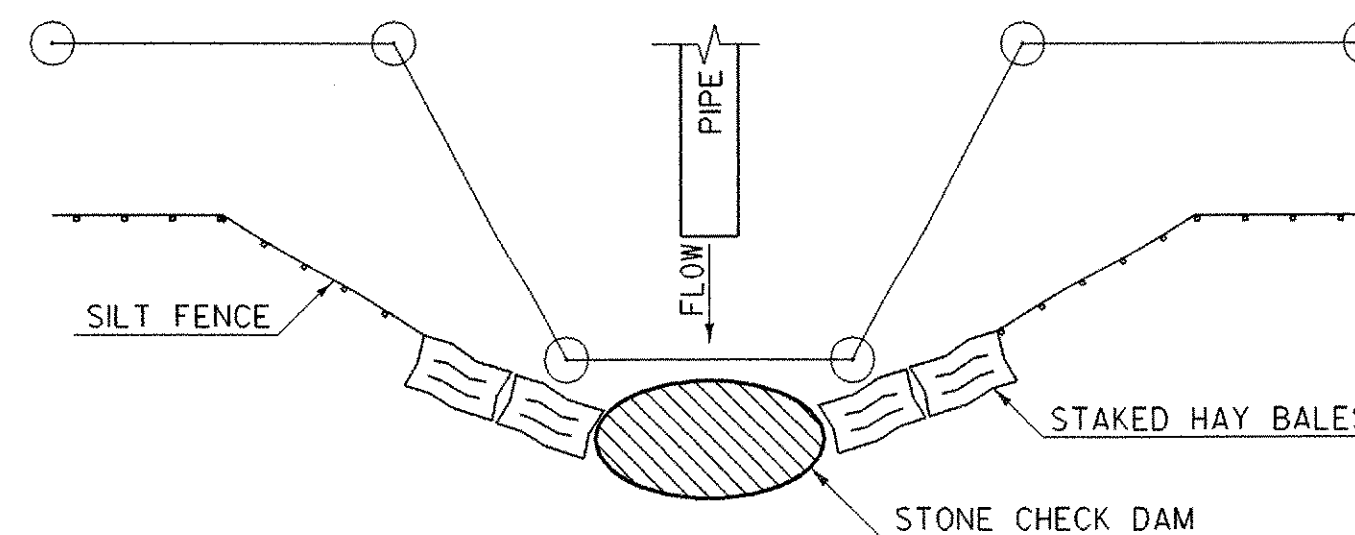


EROSION MATTING FOR DITCHES

1. TO BE USED WHERE SLOPE OF DITCHLINE EXCEEDS 5%
2. OVERLAPS SHALL BE 6" MINIMUM IN THE DIRECTION OF FLOW AND STAPLED EVERY 20" MIN. THROUGH BOTH FABRICS.
3. USE 40" MAX STAPLE SPACING IN OTHER AREAS.



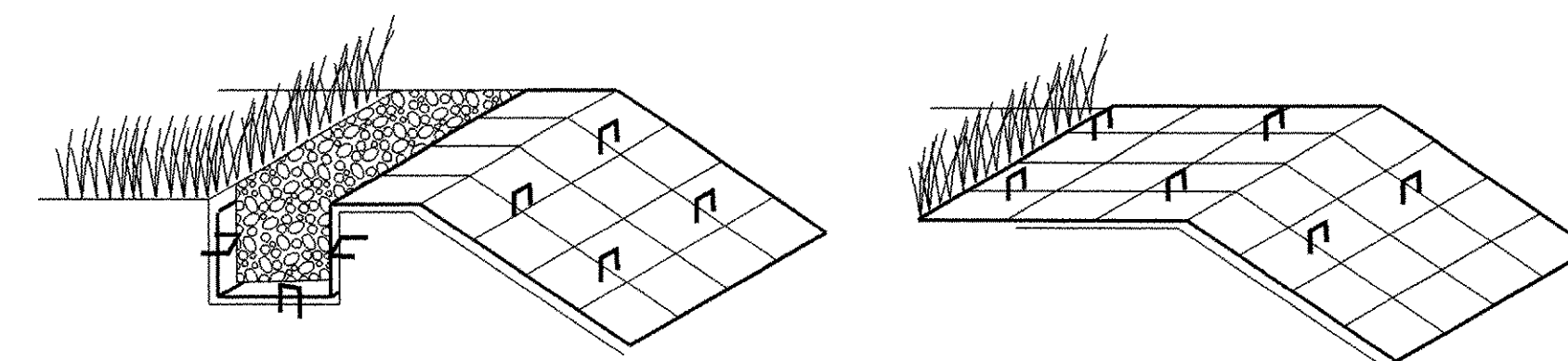
EXISTING PIPE INLET CONTROL



EXISTING PIPE OUTLET CONTROL

NOTE: REFER TO LATEST REVISIONS OF VERMONT STATE STANDARDS "T-1" AND "T-2" AND THE "VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" FOR ADDITIONAL EROSION CONTROL MEASURES.

HAY BALES AND SILT FENCE ARE NOT TO BE USED ACROSS AREAS OF CONCENTRATED FLOW.



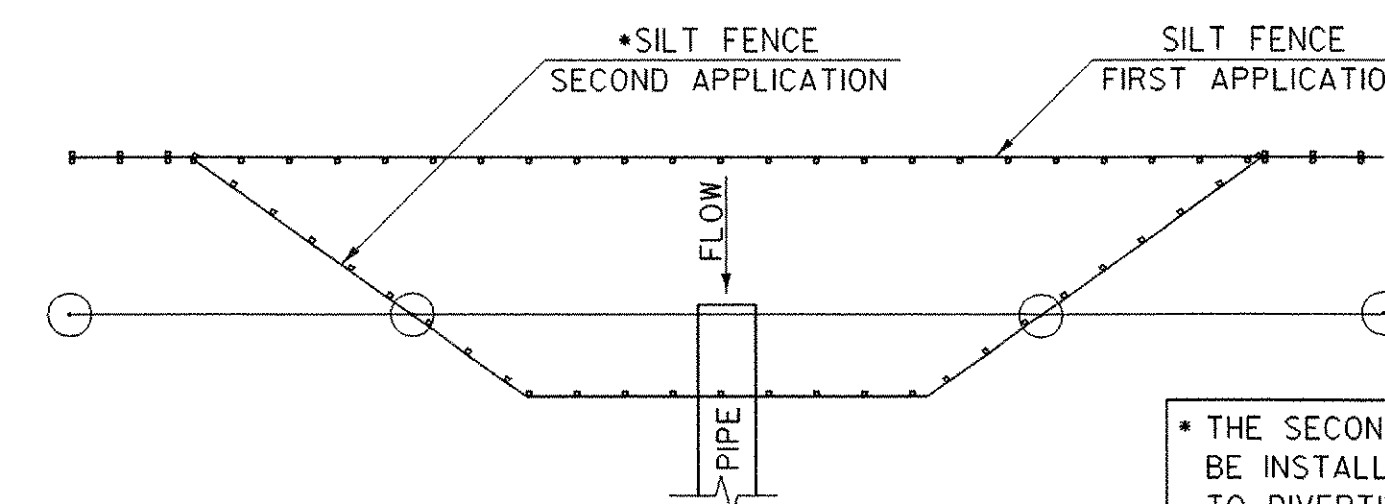
ANCHOR DETAIL 'E1'

INSERT & STAPLE FABRIC INTO 6" X 6" TRENCH PRIOR TO BACKFILLING & COMPACTING SOIL. USE 3 STAPLE PATTERN EVERY 20".

ANCHOR DETAIL 'E2'

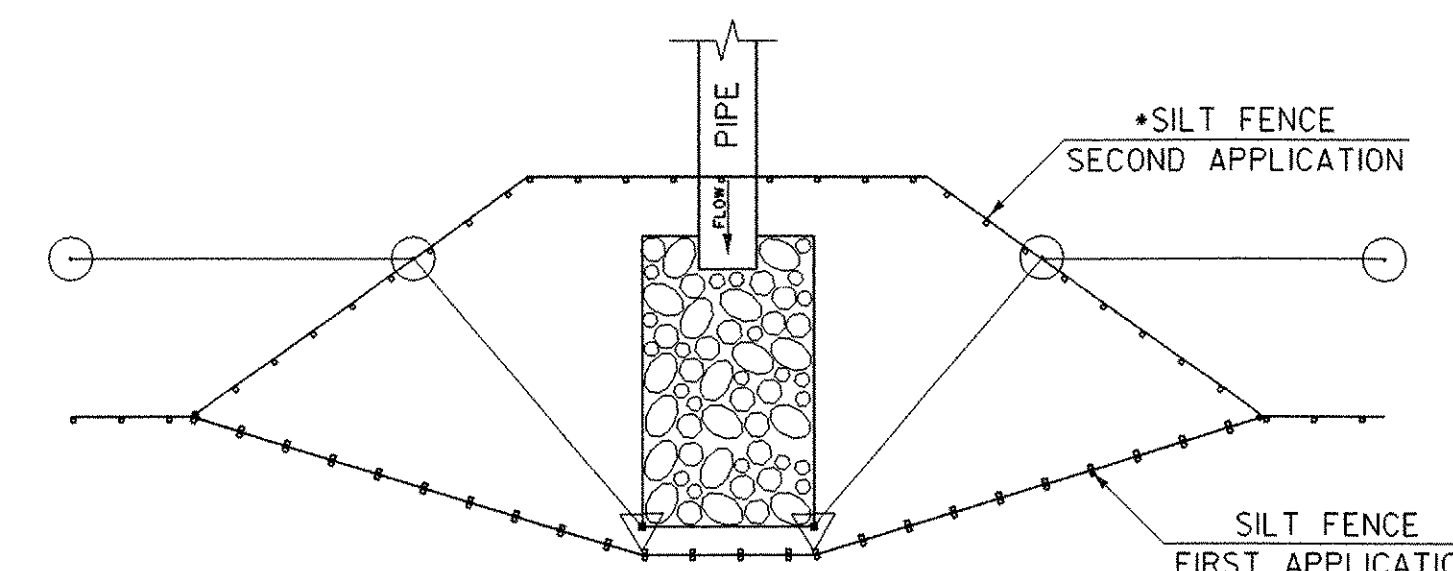
IF THE TOP OF SLOPE IS RELATIVELY FLAT EXTEND MATERIAL APPROXIMATELY 24" AND STAPLE EVERY 20" MINIMUM.

ANCHOR DETAILS FOR EROSION MATTING



PROPOSED PIPE INLET CONTROL

• THE SECOND APPLICATION OF SILT FENCE IS TO BE INSTALLED (REMOVE FIRST APPLICATION) PRIOR TO DIVERTING FLOW INTO NEW PIPE FOR BOTH PROPOSED INLET AND OUTLET CONTROLS



PROPOSED PIPE OUTLET CONTROL

**EROSION & SEDIMENT CONTROL DETAILS**

PROJECT NAME: CHESTER  
PROJECT NUMBER: BRF 025-1(35)

FILE NAME: 78b134/Structures/zf134bdr  
PROJECT LEADER: A. PORTALUPI  
DESIGNED BY:  
IPARM: zbl34erd.1

PLOT DATE: 28-MAY-2003  
DRAWN BY:  
CHECKED BY:  
SHEET 45 OF 79

NOTE: ALL DRAWINGS NOT TO SCALE



## SOIL CLASSIFICATION

| AASHTO |                                   |
|--------|-----------------------------------|
| A1     | Gravel and Sand                   |
| A3     | Fine Sand                         |
| A2     | Silty or Clayey Gravel and Sand   |
| A4     | Silty Soil - Low Compressibility  |
| A5     | Silty Soil - Highly Compressible  |
| A6     | Clayey Soil - Low Compressibility |
| A7     | Clayey Soil - Highly Compressible |

## ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|------------|------------------|
| <25        | Very Poor        |
| 25 to 50   | Poor             |
| 51 to 75   | Fair             |
| 76 to 90   | Good             |
| >90        | Excellent        |

## SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|------------------------------------|-------------|
| <250                               | Very Soft   |
| 250-500                            | Soft        |
| 500-1000                           | Med. Stiff  |
| 1000-2000                          | Stiff       |
| 2000-4000                          | Very Stiff  |
| >4000                              | Hard        |

## CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

| DENSITY (GRANULAR SOILS) |                  | CONSISTENCY (COHESIVE SOILS) |                  |
|--------------------------|------------------|------------------------------|------------------|
| N                        | DESCRIPTIVE TERM | N                            | DESCRIPTIVE TERM |
| <5                       | Very Loose       | <2                           | Very Soft        |
| 5-10                     | Loose            | 2-4                          | Soft             |
| 11-24                    | Med. Dense       | 5-8                          | Med. Stiff       |
| 25-50                    | Dense            | 9-15                         | Stiff            |
| >50                      | Very Dense       | 16-30                        | Very Stiff       |
|                          |                  | 31-60                        | Hard             |
|                          |                  | >60                          | Very Hard        |

## COMMONLY USED SYMBOLS

|       |                                   |
|-------|-----------------------------------|
| W     | Water Elevation                   |
| ⊕     | Standard Penetration Boring       |
| ⊙     | Auger Boring                      |
| ⊖     | Rod Sounding                      |
| S     | Sample                            |
| N     | Standard Penetration Test         |
|       | Blow Count Per Foot For:          |
|       | 2" O.D. Sampler                   |
|       | 1 3/8" I.D. Sampler               |
|       | Hammer Weight Of 140 Lbs.         |
|       | Hammer Fall Of 30"                |
| VS    | Field Vane Shear Test             |
| US    | Undisturbed Soil Sample           |
| B     | Blast                             |
| DC    | Diamond Core                      |
| MD    | Mud Drill                         |
| WA    | Wash Ahead                        |
| HSA   | Hollow Stem Auger                 |
| AX    | Core Size 1 1/8"                  |
| BX    | Core Size 1 3/8"                  |
| NX    | Core Size 2 1/8"                  |
| M     | Double Tube Core Barrel Used      |
| LL    | Liquid Limit                      |
| PL    | Plastic Limit                     |
| PI    | Plasticity Index                  |
| NP    | Non Plastic                       |
| w     | Moisture Content (Dry Wgt. Basis) |
| D     | Dry                               |
| M     | Moist                             |
| MTW   | Moist To Wet                      |
| W     | Wet                               |
| Sat   | Saturated                         |
| Bo    | Boulder                           |
| Gr    | Gravel                            |
| Sa    | Sand                              |
| Sl    | Silt                              |
| Cl    | Clay                              |
| HP    | Hardpan                           |
| Le    | Ledge                             |
| NLTD  | No Ledge To Depth                 |
| CNPF  | Can Not Penetrate Further         |
| TLOB  | To Ledge Or Boulder               |
| NR    | No Recovery                       |
| Rec.  | Recovery                          |
| ZRec. | Percent Recovery                  |
| RQD   | Rock Quality Designation          |
| CBR   | California Bearing Ratio          |
| <     | Less Than                         |
| >     | Greater Than                      |
| R     | Refusal (N > 100)                 |

## COLOR

|     |        |      |              |
|-----|--------|------|--------------|
| blk | Black  | pnk  | Pink         |
| bl  | Blue   | pu   | Purple       |
| brn | Brown  | rd   | Red          |
| dk  | Dark   | tn   | Tan          |
| gry | Gray   | wh   | White        |
| gn  | Green  | yel  | Yellow       |
| lt  | Light  | mltc | Multicolored |
| or  | Orange |      |              |

## DEFINITIONS (AASHTO)

**BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.

**BOULDER** - A rock fragment with an average dimension > 12 inches.

**COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.

**GRAVEL** - Rounded particles of rock < 3" and > 0.075" (#10 sieve).

**SAND** - Particles of rock < 0.075" (#10 sieve) and > 0.0029" (#200 sieve).

**SILT** - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

**CLAY** - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

**VARVED** - Alternate layers of silt and clay.

**HARDPAN** - Extremely dense soil, cemented layer, not softened when wet.

**MUCK** - Soft organic soil (containing > 10% organic material).

**MOISTURE CONTENT** - Weight of water divided by dry weight of soil.

**FLOWING SAND** - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

**STRIKE** - Angle from magnetic north to line of intersection of bed with a horizontal plane.

**DIP** - Inclination of bed with a horizontal plane.

## GENERAL NOTES

- The subsurface explorations shown herein were made between and by the Agency.
- Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
- Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

4. Engineering judgement was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

## BORING CHART

| HOLE NO. | ML STATION | OFFSET | GROUND ELEV. | ELEV. TLOB |
|----------|------------|--------|--------------|------------|
| B-1      | 202+00.00  | -25.00 | 584.70       | 554.70     |
| B-2      | 202+00.00  | 25.00  | 580.33       | 561.33     |
| B-3      | 203+75.00  | -25.00 | 598.09       | 568.09     |
| B-4      | 202+78.00  | 46.00  | 595.60       | 568.60     |
| B-5      | 203+00.00  | 3.00   | 595.19       | 561.19     |
| H-1      | 201+80.00  | -25.00 | 592.01       | 558.01     |
| H-2      | 201+80.00  | 25.00  | 594.38       | —          |
| H-4      | 203+25.00  | 3.00   | 592.83       | 563.83     |

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

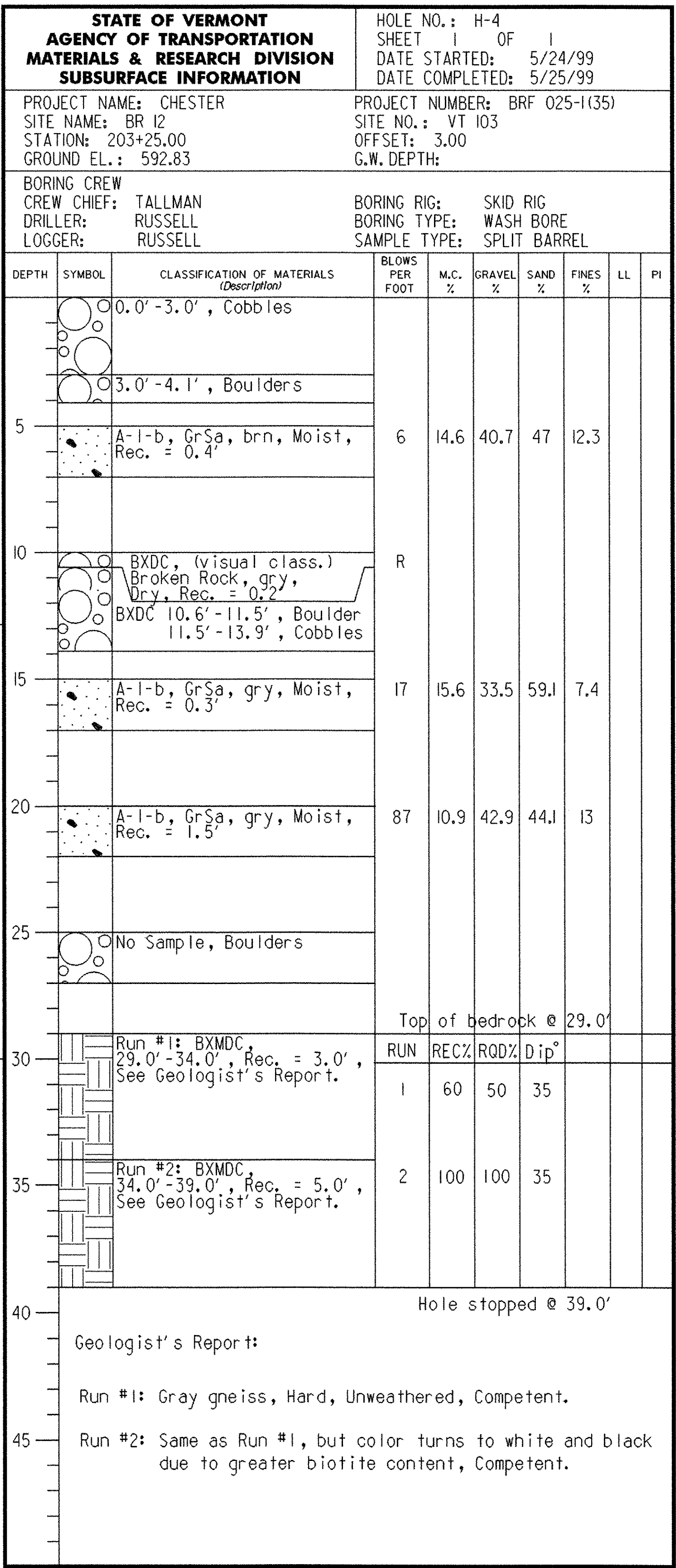
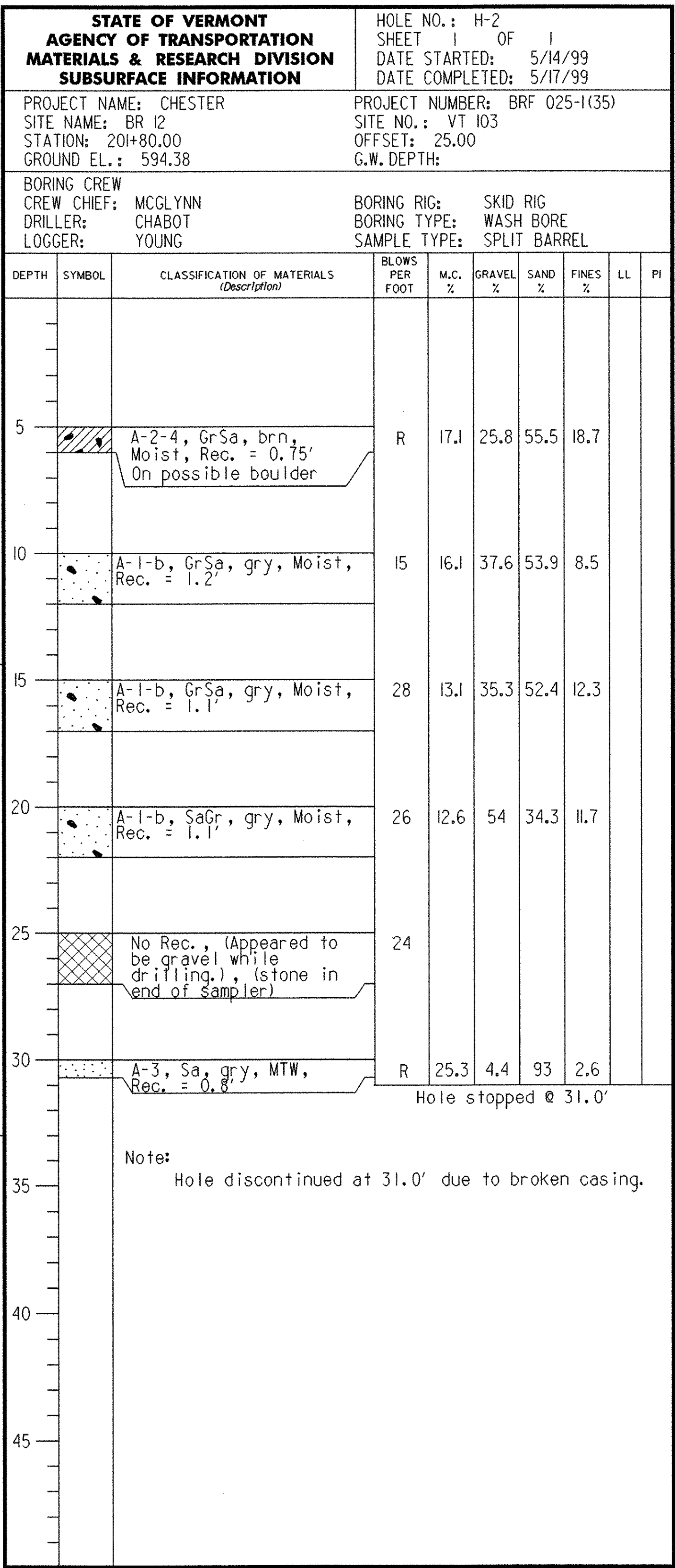
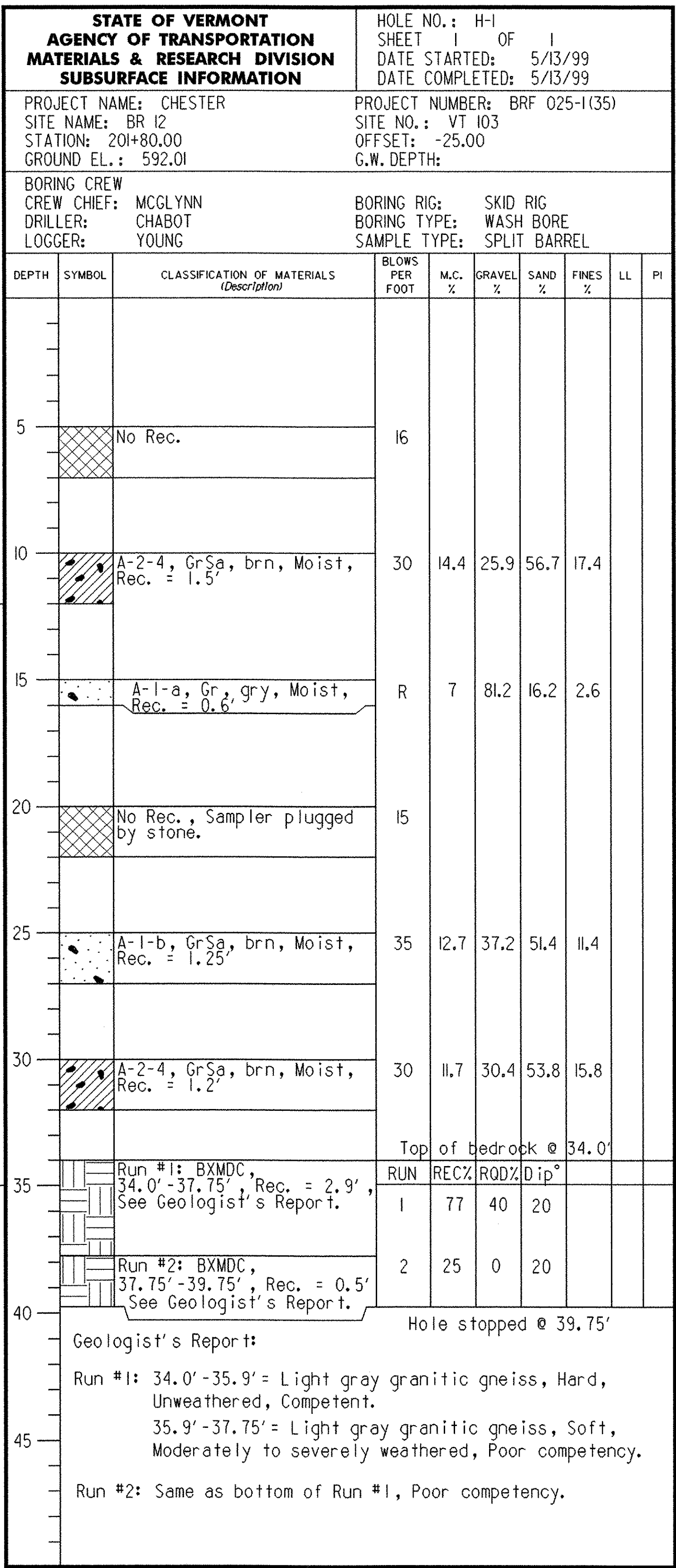
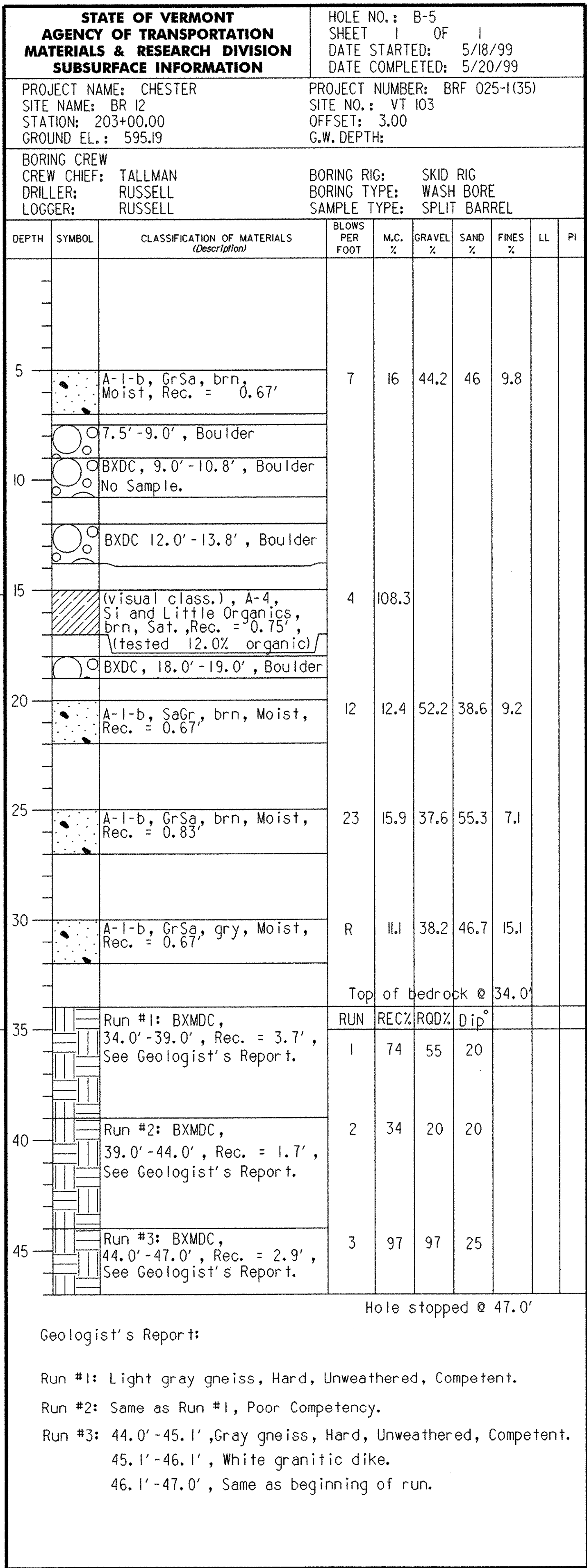
|                                |         |                                             |         |
|--------------------------------|---------|---------------------------------------------|---------|
| Town Of                        | CHESTER | Bridge No.                                  | 12      |
| Highway No.                    | VT 103  | Log Sta.                                    |         |
|                                |         | Surv. Sta.                                  | 202+50  |
| VT 103 OVER THE WILLIAMS RIVER |         |                                             |         |
| BORING INFORMATION SHEET       |         |                                             |         |
| Designed By                    | THL     | Drawn By                                    | THL     |
| Checked By                     | Date    | Bridge Design Supervisor                    | Date 98 |
| PROJECT                        |         | PROJECT NO.                                 |         |
| CHESTER                        |         | BRF 025-1K35                                |         |
| I.G.C. Info.                   |         | M:\87b134\Structures\zbi34cbp.dgn sbi34cbp1 |         |
| Bridge Sheet No. BR102         |         | Sheet 46 of 79                              |         |

PLOTTED 28-MAY-2003









LEGEND

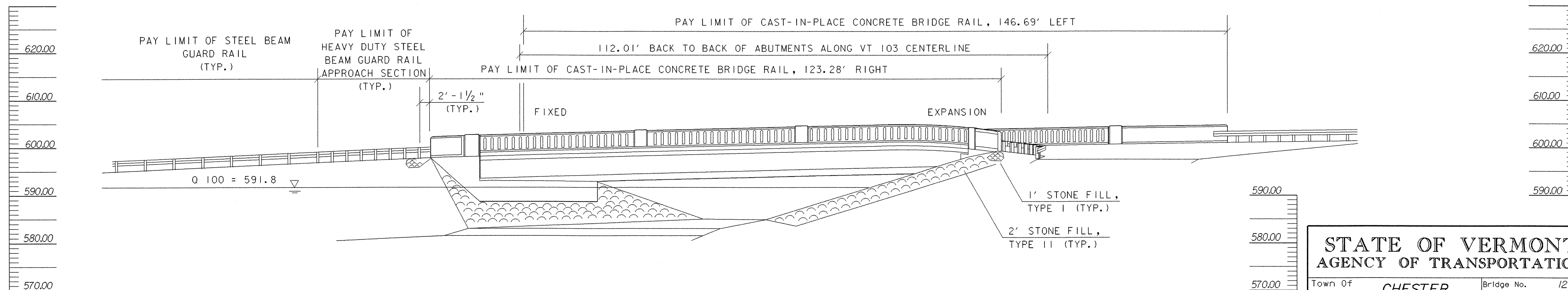
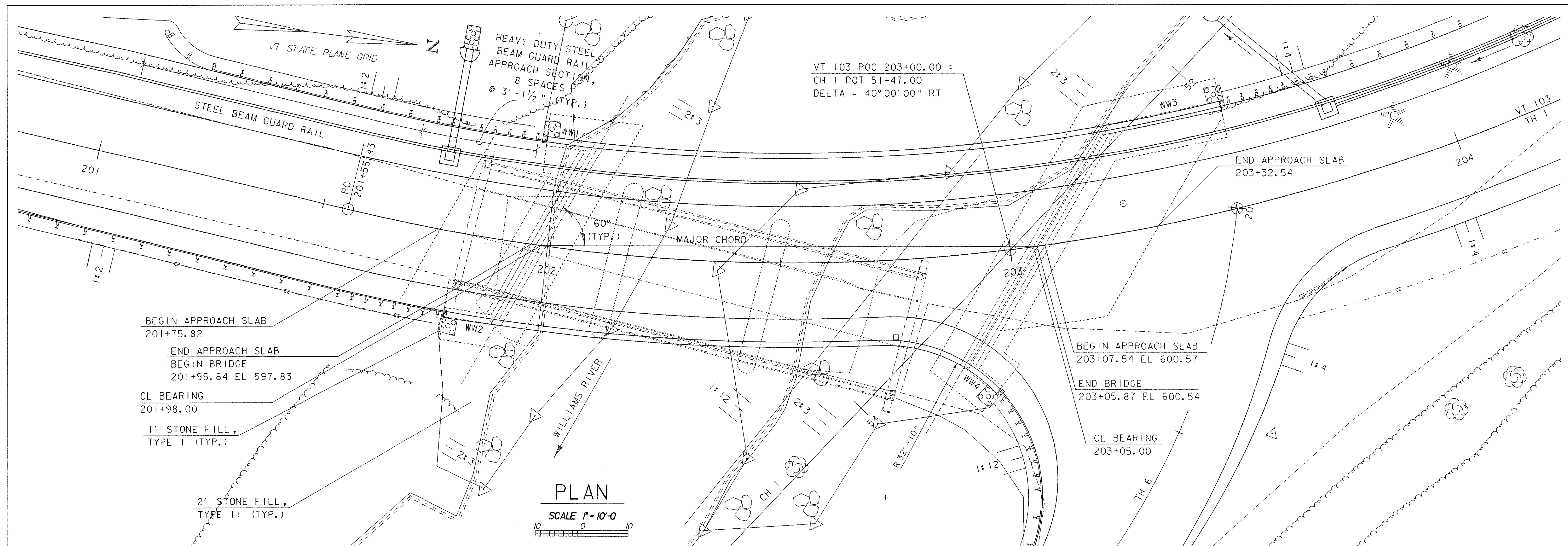
B.F. = BOTTOM OF FOOTING ELEVATION  
E.P.T. = ESTIMATED PILE TIP ELEVATION

NOTE

1. BOTTOM OF FOOTING  
ELEVATION = 580.00.

|                  |                           |         |             |
|------------------|---------------------------|---------|-------------|
| SURVEYED BY      | J. TOUCHETTE              | DATE    | 06/99       |
| DRAWN BY         | C.C. BENDA                | DATE    | 06/99       |
| SQUAD LEADER     |                           |         |             |
| DESIGN FILE NO.  | /str2/87bl34/zbl34cbo.dgn |         |             |
| IPARM            |                           | DATE    | 28-MAY-2003 |
| FILE             |                           | PLOTTED |             |
| PROJ. NAME       | CHESTER                   |         |             |
| PROJ. NO.        | BRF 025-1(35)             |         |             |
| BRIDGE SHEET NO. | BR104                     |         |             |
| SHEET            | 48 OF 79                  | SHEETS  |             |





# STATE OF VERMONT AGENCY OF TRANSPORTATION

|                                                                |           |                          |               |
|----------------------------------------------------------------|-----------|--------------------------|---------------|
| Town Of                                                        | CHESTER   | Bridge No.               | 12            |
| Highway No.                                                    | VT 103    | Log Sta.                 |               |
|                                                                |           | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER                                 |           |                          |               |
| PLAN AND ELEVATION                                             |           |                          |               |
| Designed By                                                    | THL / LKW | Drawn By                 | THL / PBD     |
| Checked By                                                     | T. GRANT  | Bridge Design Supervisor |               |
| PROJECT                                                        | CHESTER   | PROJECT NO.              | BRF 025-1(35) |
| I:\G:\Vermont\road\111\incab\111\87\34\Structures\zbl34cpe.dgn |           | zbl34cpe.dgn             |               |
| Bridge Sheet No. BR105                                         |           | Sheet 49 of 79           |               |



GENERAL NOTES

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

2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, INTO THE WILLIAMS RIVER, AS DIRECTED BY THE ENGINEER AND STANDARD SPECIFICATION, SECTION 105.

3. DESIGN IS FOR HS25 LOADING, USING LOAD FACTOR METHOD.

4. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH SECTION 506.03 OF THE STANDARD SPECIFICATIONS.

5. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINAL GRADE.

6. ANY BOLT HOLES IN THE WEB OF THE FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS COMPATIBLE WITH THE GIRDER STEEL. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

7. FASCIA OVERHANG BRACKETS SHALL BE SPACED AT A MAXIMUM OF 4 FEET AND SHALL BE DESIGNED BY THE CONTRACTOR.

8. ALL FIELD CONNECTIONS SHALL BE MADE USING 7/8 INCH DIAMETER BOLTS MEETING ASTM DESIGNATION A 325 (AASHTO M 164). HOLES SHALL BE 19/16 INCH DIAMETER. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR.

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

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

11. ALL REINFORCING STEEL IN THE CONCRETE DECK, SIDEWALK, APPROACH SLABS AND RAIL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17. 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.

12. REINFORCING PLACEMENT TOLERANCES SHALL BE:  
SPACING: +/- 1 INCH  
CLEARANCE: +/- 1/4 INCH

13. MINIMUM COVER FOR REINFORCING STEEL IN SUBSTRUCTURES SHALL BE 2" ALONG BACK FACES OF WALLS AGAINST EARTH AND 3" ELSEWHERE, UNLESS OTHERWISE DESIGNATED ON PLANS.

14. DECK AND SIDEWALK, SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. BRIDGE RAILING SHALL BE CONCRETE, HIGH PERFORMANCE CLASS AA. ALL OTHER CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE DESIGNATED ON THE PLANS.

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

16. THE FOLLOWING THICKNESS TOLERANCES SHALL BE ADHERED TO:  

| MATERIAL                         | THICKNESS TOLERANCE |
|----------------------------------|---------------------|
| BIT. CONC. PAVEMENT (ON BRIDGE)  | +/- 1/4"            |
| BIT. CONC. PAVEMENT (OFF BRIDGE) | +/- 1/4" LIFT       |
| GRANULAR BORROW                  | +/- 1"              |
| SUBBASE                          | +/- 1"              |

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

18. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F.

19. TRAFFIC WILL BE DETOURED, DURING CONSTRUCTION OF THE BRIDGE.

20. TRAFFIC SHALL BE ALLOWED ON THE NEW BRIDGE ONLY AFTER THE SPECIFIED CURE PERIOD HAS EXPIRED AND THE 28 DAY DESIGN STRENGTH HAS BEEN REACHED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.

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

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

23. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/2 INCH PER FOOT. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISH.

24. ALL STRUCTURAL STEEL, INCLUDING GIRDERS, CROSS FRAMES, STIFFENERS, AND LATERAL BRACING WITHIN A DISTANCE OF 7 FEET FROM THE END OF THE GIRDERS (EXPANSION END), SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513. THE COLOR OF PAINT WILL BE BROWN, COLOR CHIP 20059. GREASING SHALL BE DONE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513.06(d).

25. ITEM 529.15, "REMOVAL OF STRUCTURE", SHALL INCLUDE THE REMOVAL OF THE SUPERSTRUCTURE, REMOVAL OF THE PIERS, AND REMOVAL OF THE ABUTMENTS. REMOVE THE PIERS TO THE ELEVATIONS SHOWN ON THE PROFILE, AND REMOVE ABUTMENTS IN THEIR ENTIRETY (TO INCLUDE FOOTINGS).

26. DECK POURS ARE TO BE CONSTRUCTED IN ONE CONTINUOUS OPERATION WITH A MAXIMUM DURATION OF 8 HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A 96 HOUR DELAY BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF ANOTHER DECK POUR SHALL BE OBSERVED, AND TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINTS AS SHOWN ON SHEET 57 SHALL BE USED BETWEEN ADJACENT DECK POURS.
27. ALL OF THE EXISTING SUBSTRUCTURE INFORMATION SHOWN WITHIN THESE PLANS HAS BEEN OBTAINED THROUGH FIELD SURVEY AND FIELD MEASUREMENTS AND ARE ASSUMED TO BE CORRECT. HOWEVER, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CRITICAL TO THE CONSTRUCTION OF THE NEW STRUCTURE AND NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES WITH THE INFORMATION SHOWN IN THESE PLANS.
28. STEEL HP14 x 73 PILES SHALL BE DRIVEN TO A REQUIRED ULTIMATE CAPACITY EQUAL TO 425 KIPS. PILE TIP REINFORCEMENT SHALL CONFORM TO SUBSECTION 505.04(D).
29. POLYURETHANE JOINT SEALER, PER SUBSECTION 524.06(C), COLOR TO MATCH CONCRETE. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE.
30. TEMPORARY APPROACHES AND TEMPORARY BRIDGE SHALL HAVE MINIMUM OF 3 INCHES BITUMINOUS CONCRETE. MIX DESIGN SUBMITTAL AND COMPACTION MEASUREMENT REQUIREMENTS OF SECTION 406 OF THE PROJECT SPECIAL PROVISIONS ARE WAIVED FOR PAVEMENT PLACED ON THE TEMPORARY APPROACHES. WORK REQUIRED TO LATER REMOVE AND DISPOSE THE PAVEMENT ON TEMPORARY APPROACHES WILL NOT BE PAID FOR SEPARATELY AND IS CONSIDERED INCIDENTAL TO THE WORK PAID FOR UNDER ITEM 528.11 TWO-WAY TEMPORARY BRIDGE.

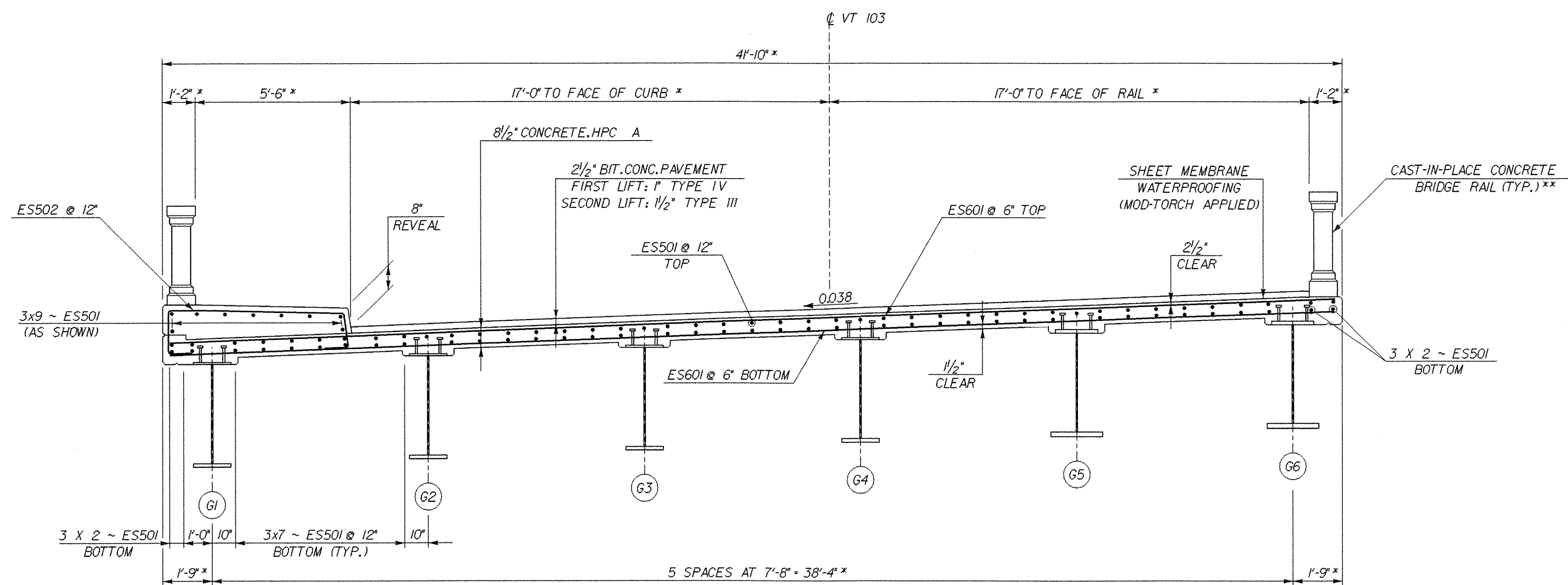
STATE OF VERMONT  
AGENCY OF TRANSPORTATION

|                                |                                   |                          |               |
|--------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                        | CHESTER                           | Bridge No.               | 12            |
| Highway No.                    | VT 103                            | Log Sta.                 |               |
|                                |                                   | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER |                                   |                          |               |
| GENERAL NOTES                  |                                   |                          |               |
| Designed By                    | L. WIXSON                         | Drawn By                 | P. DUSTIN     |
| Checked By                     | T. GRANT                          | Date                     | 10/00         |
|                                |                                   | Bridge Design Supervisor | M. ZYDEL      |
|                                |                                   | Date                     |               |
| PROJECT                        | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                   | M:\876134\Structures\zbl34cgn.dgn |                          | zbl34cgn.d    |
| Bridge Sheet No.               | BR106                             | Sheet                    | 50 of 79      |

PLOTTED 03-JUN-2003

  
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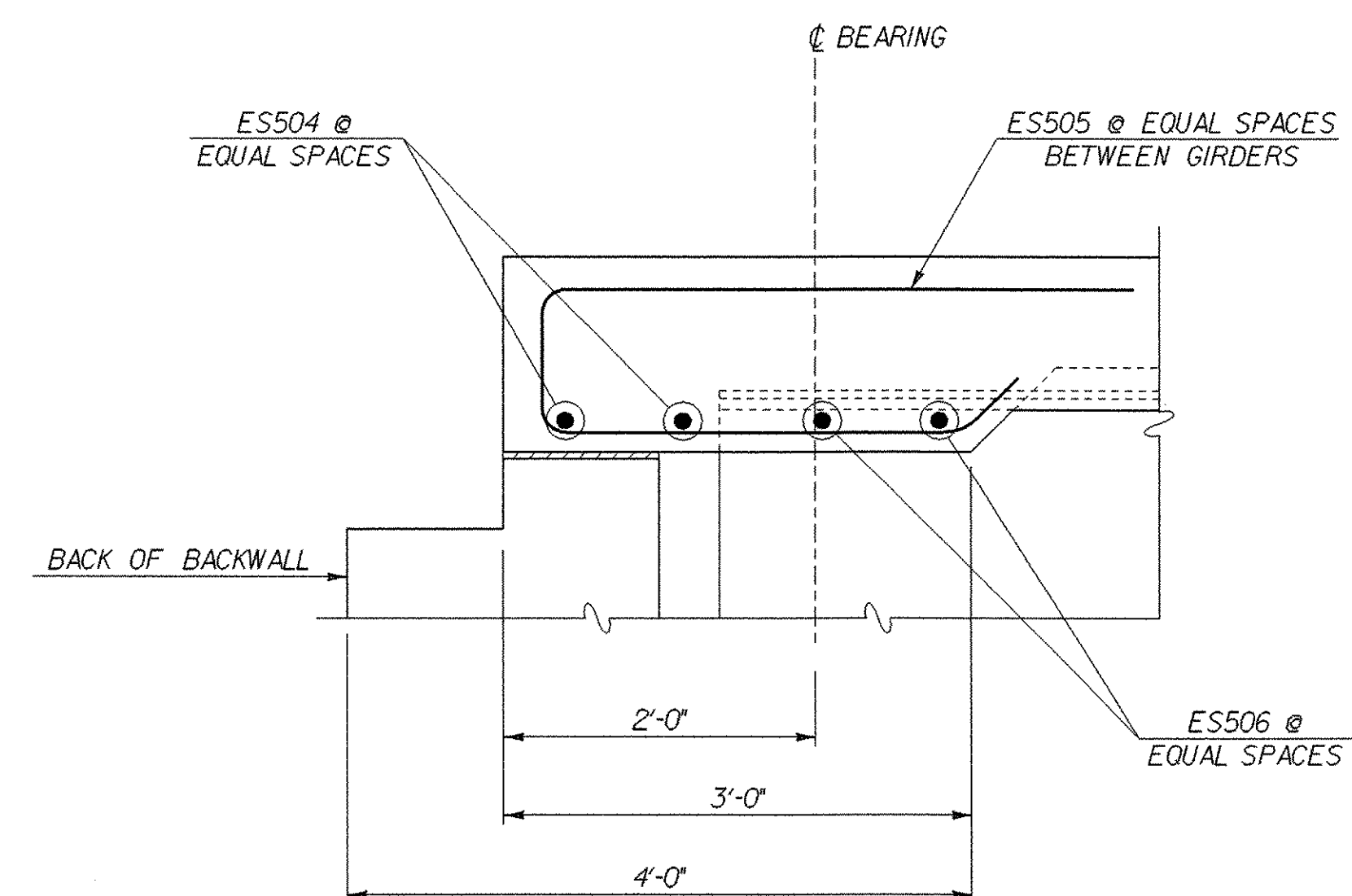




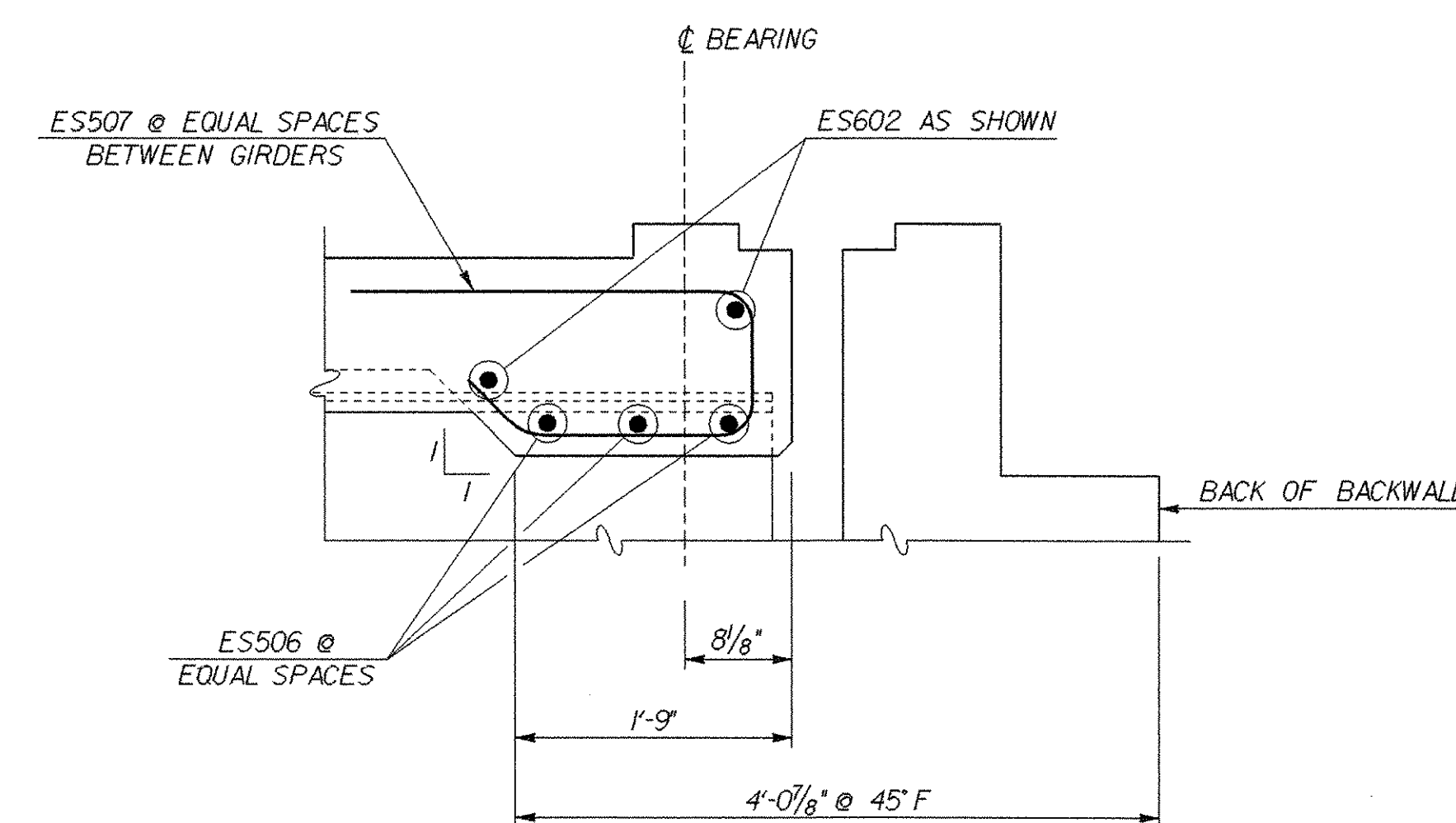
**BRIDGE TYPICAL SECTION**  
SCALE: 3/8" = 1'-0"

\* DIMENSIONS ARE RADIAL

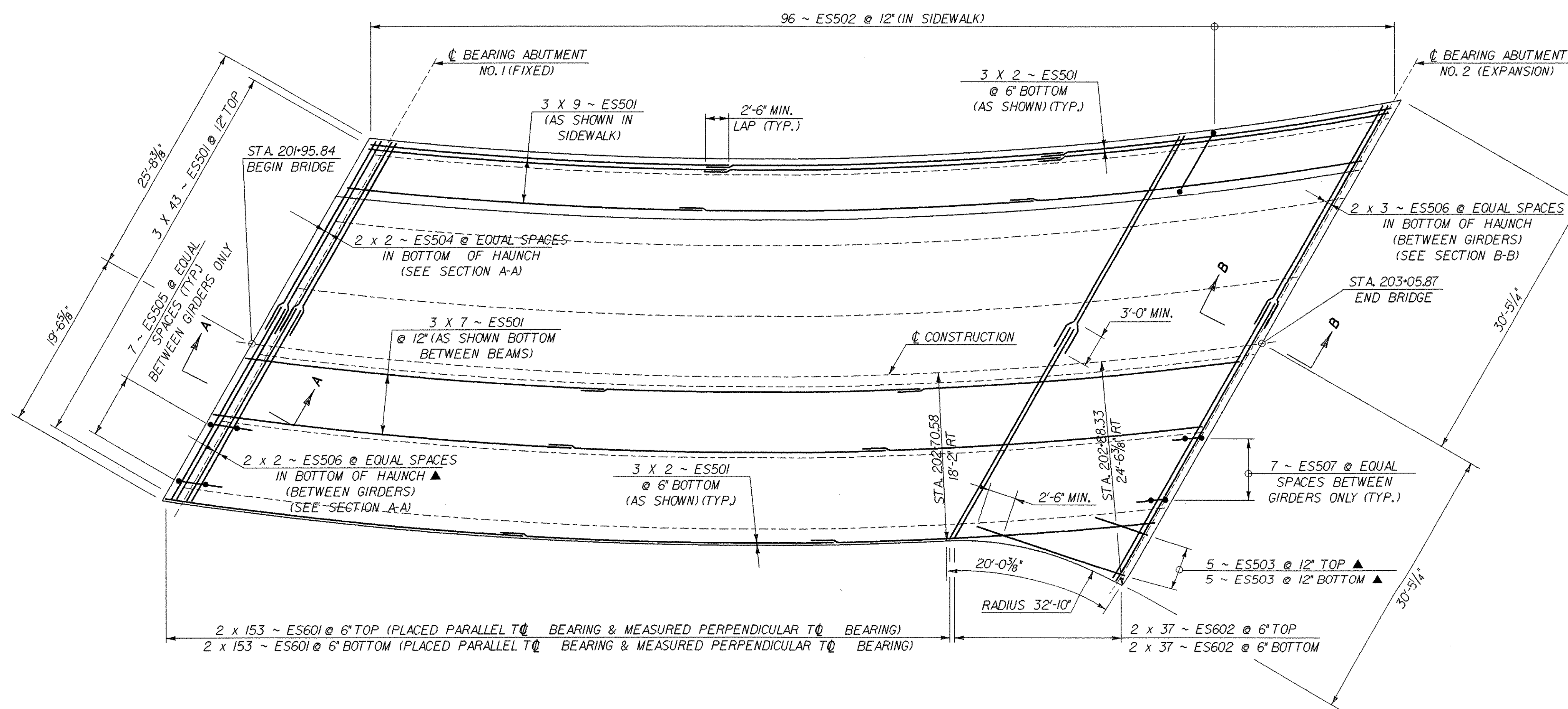
\*\* SEE SHEETS 68 AND 69 FOR REINFORCING STEEL DETAILS.



**SECTION A-A**  
SCALE: 1" = 1'-0"



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



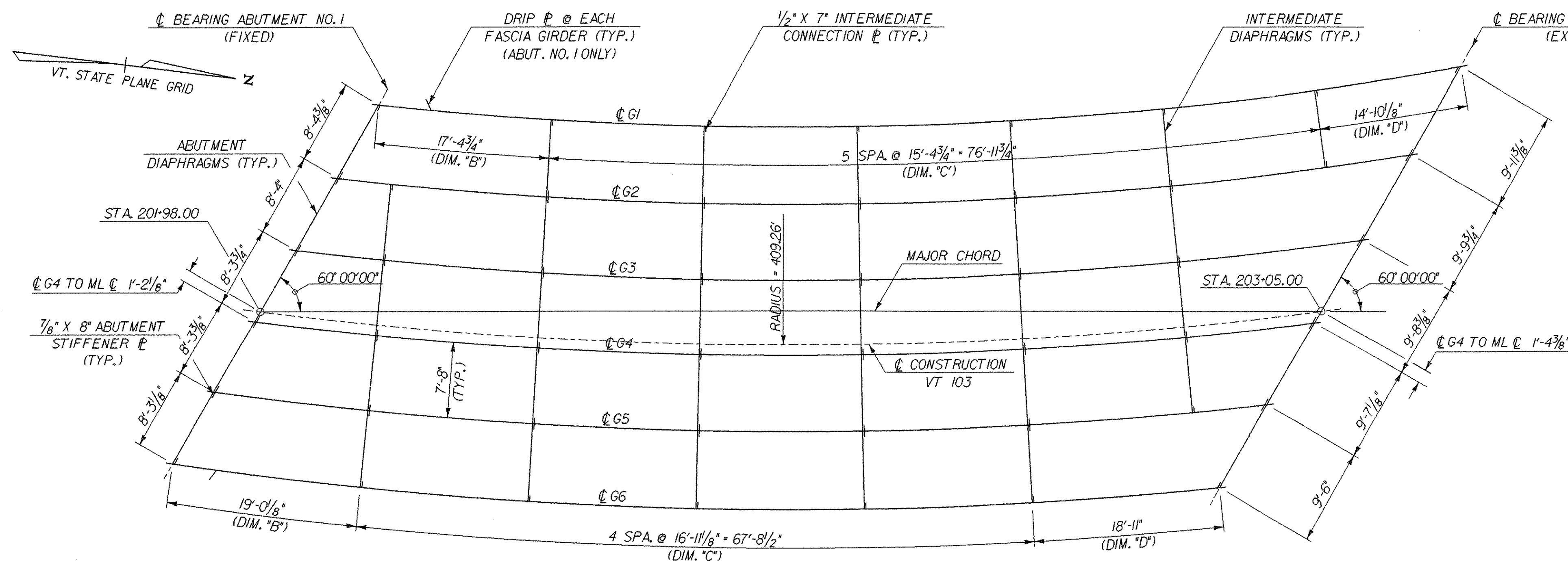
**DECK REINFORCING PLAN**  
SCALE: 1/8" = 1'-0"

# STATE OF VERMONT AGENCY OF TRANSPORTATION

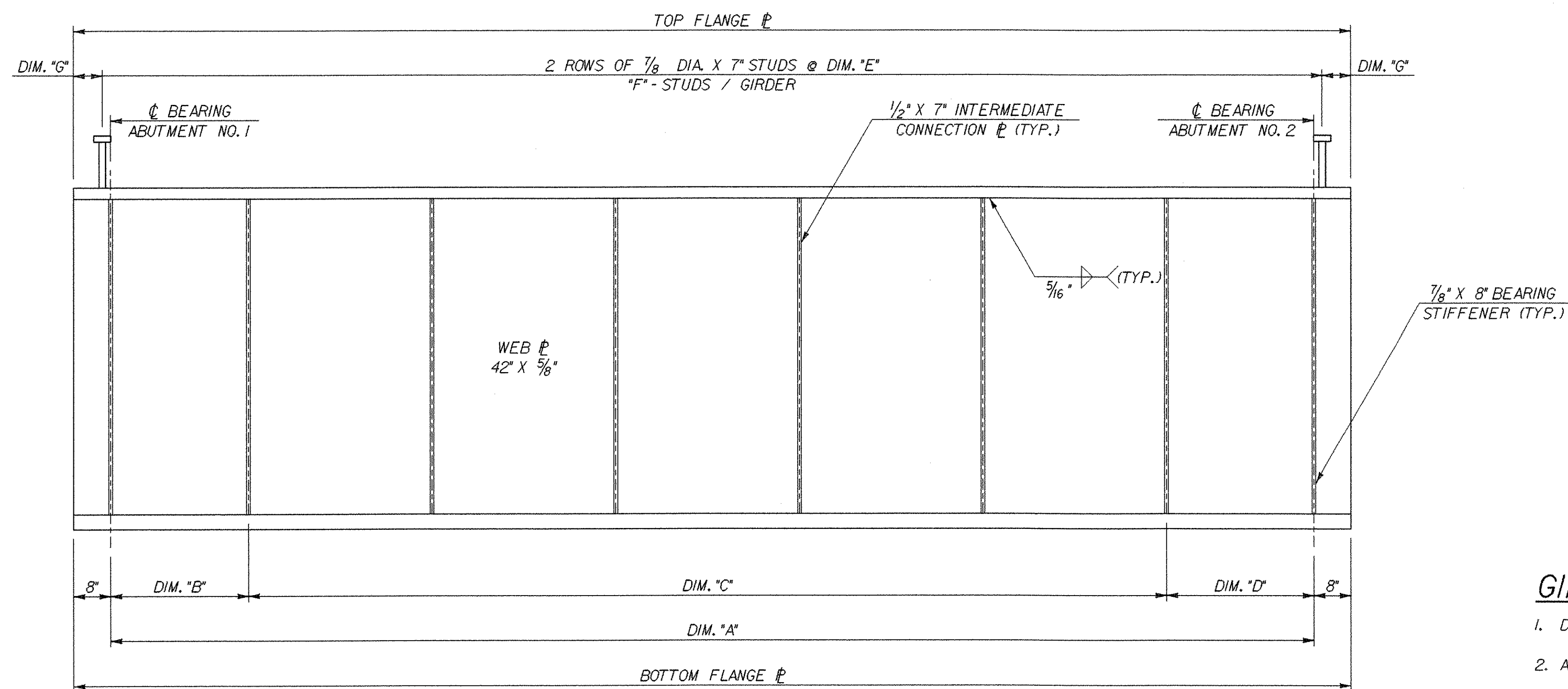
|                                |                                   |                          |               |
|--------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                        | CHESTER                           | Bridge No.               | 12            |
| Highway No.                    | VT 103                            | Log Sta.                 |               |
|                                |                                   | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER |                                   |                          |               |
| BRIDGE DECK DETAILS            |                                   |                          |               |
| Designed By                    | L. WILSON                         | Drawn By                 | P. DUSTIN     |
| Checked By                     | T. GRANT                          | Date                     | 10/00         |
|                                |                                   | Bridge Design Supervisor | M. ZYDEL Date |
| PROJECT                        | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                   | M:\87b134\Structures\zbl34cdd.dgn | zbl34cdd.dgn             |               |
| Bridge Sheet No.               | BR107                             | Sheet                    | 51 of 79      |
| PLOTTED                        | 28-MAY-2003                       |                          |               |

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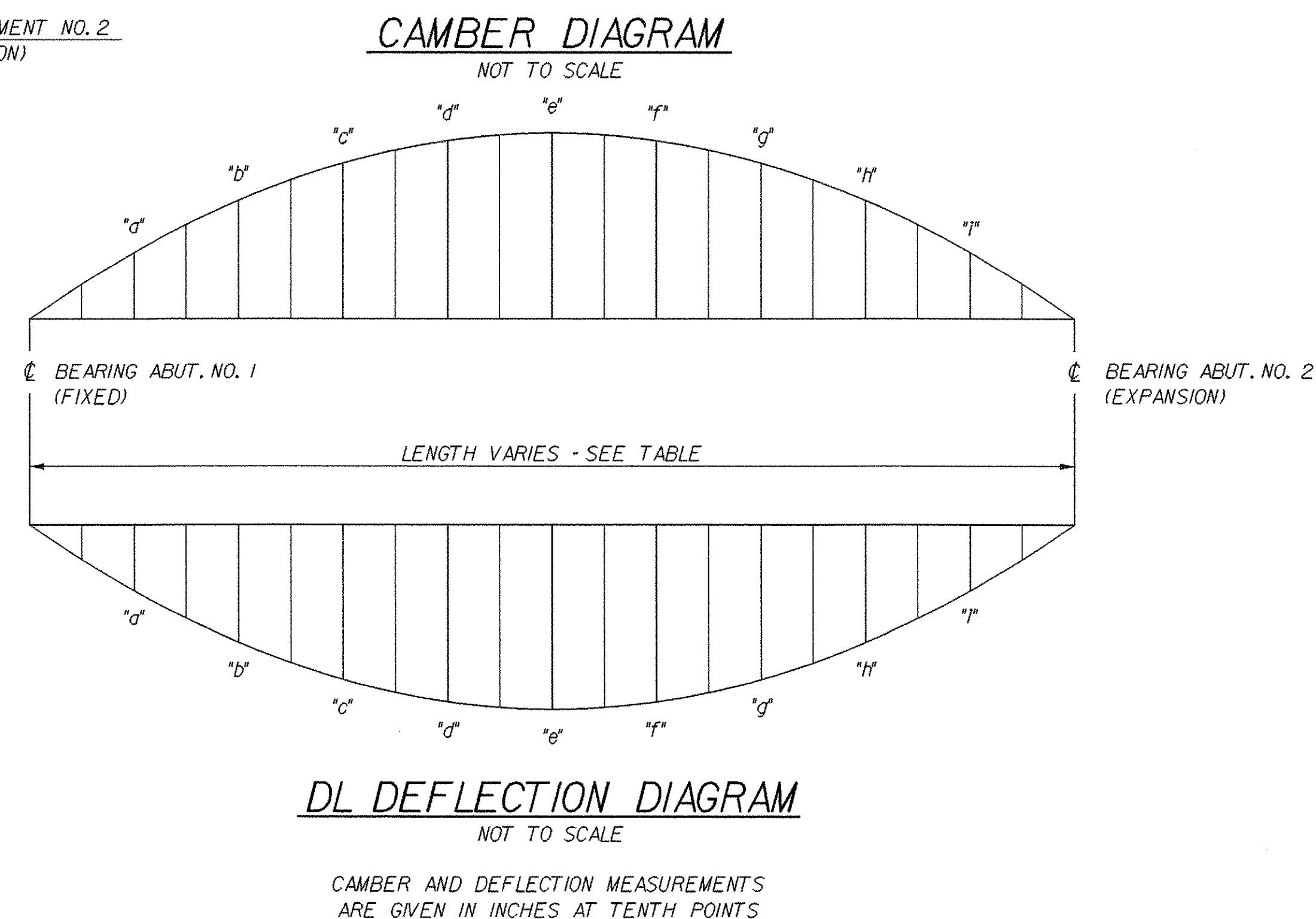


**FRAMING PLAN**  
SCALE: 1/8" = 1'-0"



**TYPICAL GIRDER ELEVATION**  
NOT TO SCALE

| GIRDER | RADIUS | DIM. "A"     | TOP FLANGE PLATE              | BOTTOM FLANGE PLATE           | DIM. "B"   | DIM. "C"                          | DIM. "D"    | DIM. "E" | "F" - NO. OF STUDS / GIRDER | DIM. "G"  |
|--------|--------|--------------|-------------------------------|-------------------------------|------------|-----------------------------------|-------------|----------|-----------------------------|-----------|
| G1     | 387.34 | 109'-3"      | 7/8" X 1'-4" X 110'-7"        | 1 1/2" X 1'-4" X 110'-7"      | 17'-4 3/4" | 5 SPA. @ 15'-4 3/4" = 76'-11 3/4" | 14'-10 1/2" | 12"      | 218                         | 15 1/2"   |
| G2     | 395.01 | 108'-4 3/4"  | 7/8" X 1'-4" X 109'-8 3/4"    | 1 1/2" X 1'-4" X 109'-8 3/4"  | 5'-5"      | 5 SPA. @ 15'-8 1/2" = 94'-3"      | 24'-5 1/4"  | 11"      | 236                         | 14 7/8"   |
| G3     | 402.67 | 107'-7 1/2"  | 7/8" X 1'-4" X 108'-11 1/2"   | 1 1/2" X 1'-4" X 108'-11 1/2" | 8'-10"     | 5 SPA. @ 16'-0 1/8" = 80'-0 5/8"  | 18'-8 7/8"  | 11"      | 234                         | 15 3/4"   |
| G4     | 410.34 | 106'-10 7/8" | 7/8" X 1'-4" X 108'-2 7/8"    | 1 1/2" X 1'-4" X 108'-2 7/8"  | 12'-2 7/8" | 5 SPA. @ 16'-3 3/4" = 81'-6 3/4"  | 13'-11 1/4" | 11"      | 232                         | 16 5/16"  |
| G5     | 418.01 | 106'-2 7/8"  | 1 1/2" X 1'-6" X 107'-6 7/8"  | 2" X 1'-10" X 107'-6 7/8"     | 15'-7 1/2" | 5 SPA. @ 16'-7 1/2" = 83'-1 1/2"  | 7'-5 7/8"   | 10 1/2"  | 242                         | 15 7/16"  |
| G6     | 425.67 | 105'-7 3/8"  | 1 1/2" X 1'-6" X 106'-11 3/8" | 2" X 1'-10" X 106'-11 3/8"    | 19'-0 1/8" | 4 SPA. @ 16'-11 1/8" = 67'-8 1/2" | 18'-10 3/4" | 11"      | 230                         | 14 11/16" |



| L = TOTAL LENGTH @ BRG. ABUT. NO. 1 TO @ BRG. ABUT. NO. 2 = 107'-0" |                    |     |         |        |         |        |        |         |         |        |                    |
|---------------------------------------------------------------------|--------------------|-----|---------|--------|---------|--------|--------|---------|---------|--------|--------------------|
| GIRDER NO.                                                          | @ BRG. ABUT. NO. 1 | "a" | "b"     | "c"    | "d"     | "e"    | "f"    | "g"     | "h"     | "i"    | @ BRG. ABUT. NO. 2 |
| 1                                                                   | CAMBER             | 0"  | 2 7/8"  | 4 5/8" | 6 1/4"  | 7 3/8" | 7 5/8" | 6 1/4"  | 4 3/4"  | 2 7/8" | 0"                 |
| 1                                                                   | DL DEFLECTION      | 0"  | 1 3/16" | 3 3/8" | 4 9/16" | 5 5/8" | 5 3/8" | 4 9/16" | 3 3/8"  | 1 3/4" | 0"                 |
| 2                                                                   | CAMBER             | 0"  | 2 7/8"  | 4 5/8" | 6 1/4"  | 7 1/8" | 7 1/2" | 7"      | 6 1/8"  | 4 1/2" | 2 5/8"             |
| 2                                                                   | DL DEFLECTION      | 0"  | 1 3/16" | 3 3/8" | 4 9/16" | 5 5/8" | 5 3/8" | 5 1/4"  | 4 1/2"  | 3 3/4" | 1 3/4"             |
| 3                                                                   | CAMBER             | 0"  | 2 5/8"  | 4 1/2" | 6 1/8"  | 7"     | 7 3/8" | 7"      | 5 7/8"  | 4 7/8" | 2 5/8"             |
| 3                                                                   | DL DEFLECTION      | 0"  | 1 3/4"  | 3 5/8" | 4 1/2"  | 5 3/8" | 5 1/8" | 5 1/16" | 4 7/16" | 3 3/8" | 1 3/4"             |
| 4                                                                   | CAMBER             | 0"  | 2 1/2"  | 4 3/8" | 5 7/8"  | 6 3/4" | 7 1/8" | 6 5/8"  | 5 3/4"  | 4 1/4" | 2 5/8"             |
| 4                                                                   | DL DEFLECTION      | 0"  | 1 1/16" | 3 1/4" | 4 3/8"  | 5 1/8" | 5 3/8" | 5 1/16" | 4 3/16" | 3 3/8" | 1 1/16"            |
| 5                                                                   | CAMBER             | 0"  | 2 5/8"  | 4 1/4" | 5 3/4"  | 6 5/8" | 7"     | 6 5/8"  | 5 5/8"  | 4 1/8" | 2 3/8"             |
| 5                                                                   | DL DEFLECTION      | 0"  | 1 3/4"  | 3 1/4" | 4 3/8"  | 5 1/8" | 5 1/8" | 5 1/16" | 4 3/16" | 3 3/8" | 1 5/8"             |
| 6                                                                   | CAMBER             | 0"  | 2 5/8"  | 4 3/8" | 5 7/8"  | 6 3/4" | 7"     | 6 3/4"  | 5 3/4"  | 4 3/4" | 2 1/2"             |
| 6                                                                   | DL DEFLECTION      | 0"  | 1 3/16" | 3 3/8" | 4 1/2"  | 5 1/4" | 5 1/2" | 5 1/16" | 4 1/16" | 3 3/8" | 1 1/16"            |

### GIRDER NOTES

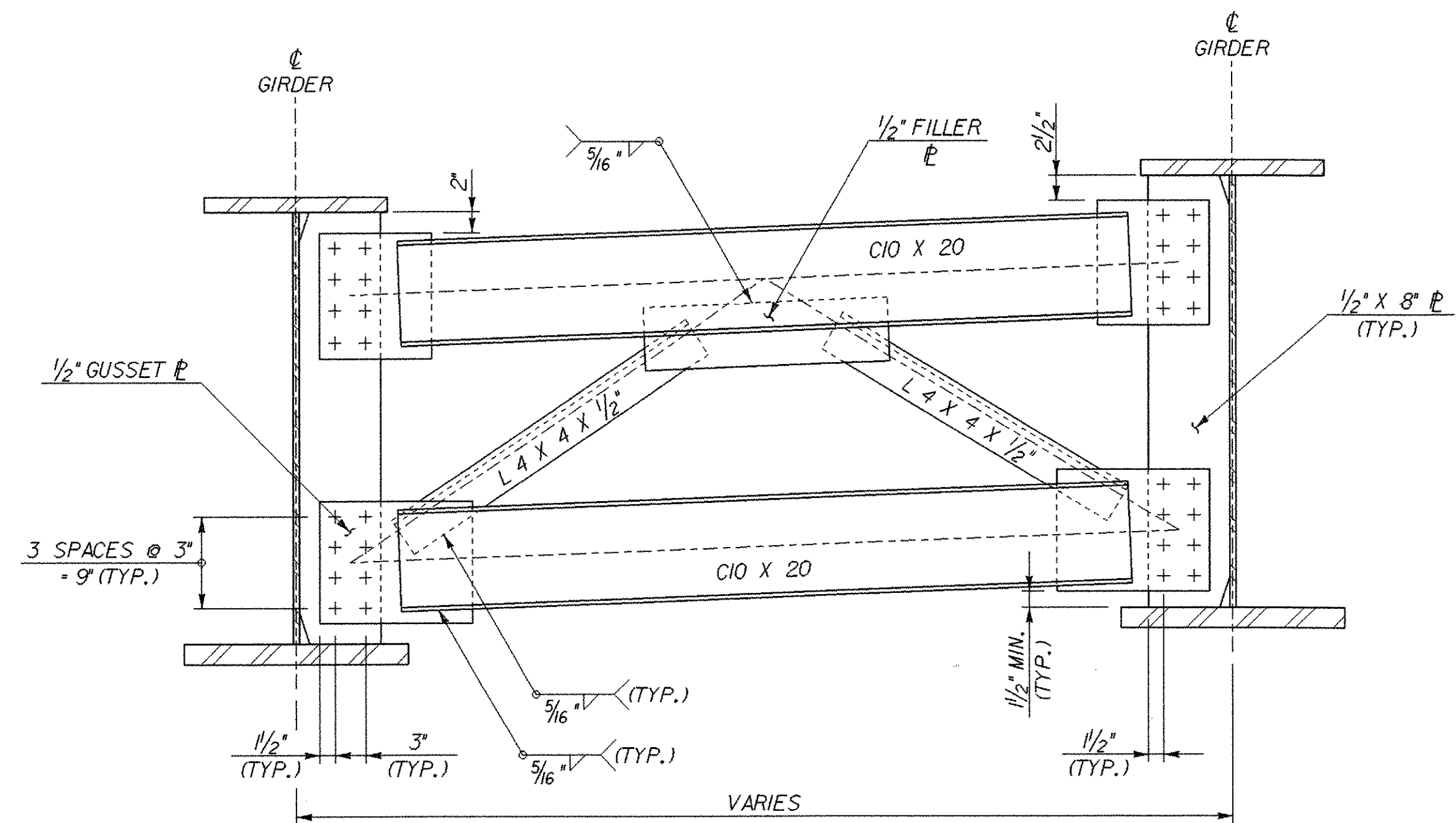
- DIMENSIONS ARE ALONG THE ARC OF GIRDERS.
- ALL NEW STEEL SHALL BE AASHTO M270 GRADE 50W.
- INTERMEDIATE CROSS FRAMES ARE ON RADIAL LINES FROM THE CENTER OF THE CURVE.
- BEARING STIFFENERS SHALL BE PLUMB AND PARALLEL TO THE @ BEARING IN THEIR FINAL POSITION.
- CONNECTION PLATES AT INTERMEDIATE CROSS FRAMES SHALL BE PERPENDICULAR TO FLANGES.
- ENDS OF GIRDERS SHALL BE FABRICATED TO BE PLUMB UNDER FULL DEAD LOAD AND SUPERIMPOSED DEAD LOAD.
- ALL CROSS FRAMES, TENSION FLANGES, AND WEBS SHALL HAVE "CHARPY V-NOTCH TEST" PERFORMED AS SPECIFIED IN SUBSECTION 714.01 AND 714.03.
- SHEAR CONNECTORS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT AND SHALL BE PAID AS ITEM 508.15, SHEAR CONNECTORS.
- ITEM 506.60, STRUCTURAL STEEL, SHALL INCLUDE GIRDERS, CONNECTION PLATES, DIAPHRAGMS, AND REQUIRED FASTENERS.

### STATE OF VERMONT AGENCY OF TRANSPORTATION

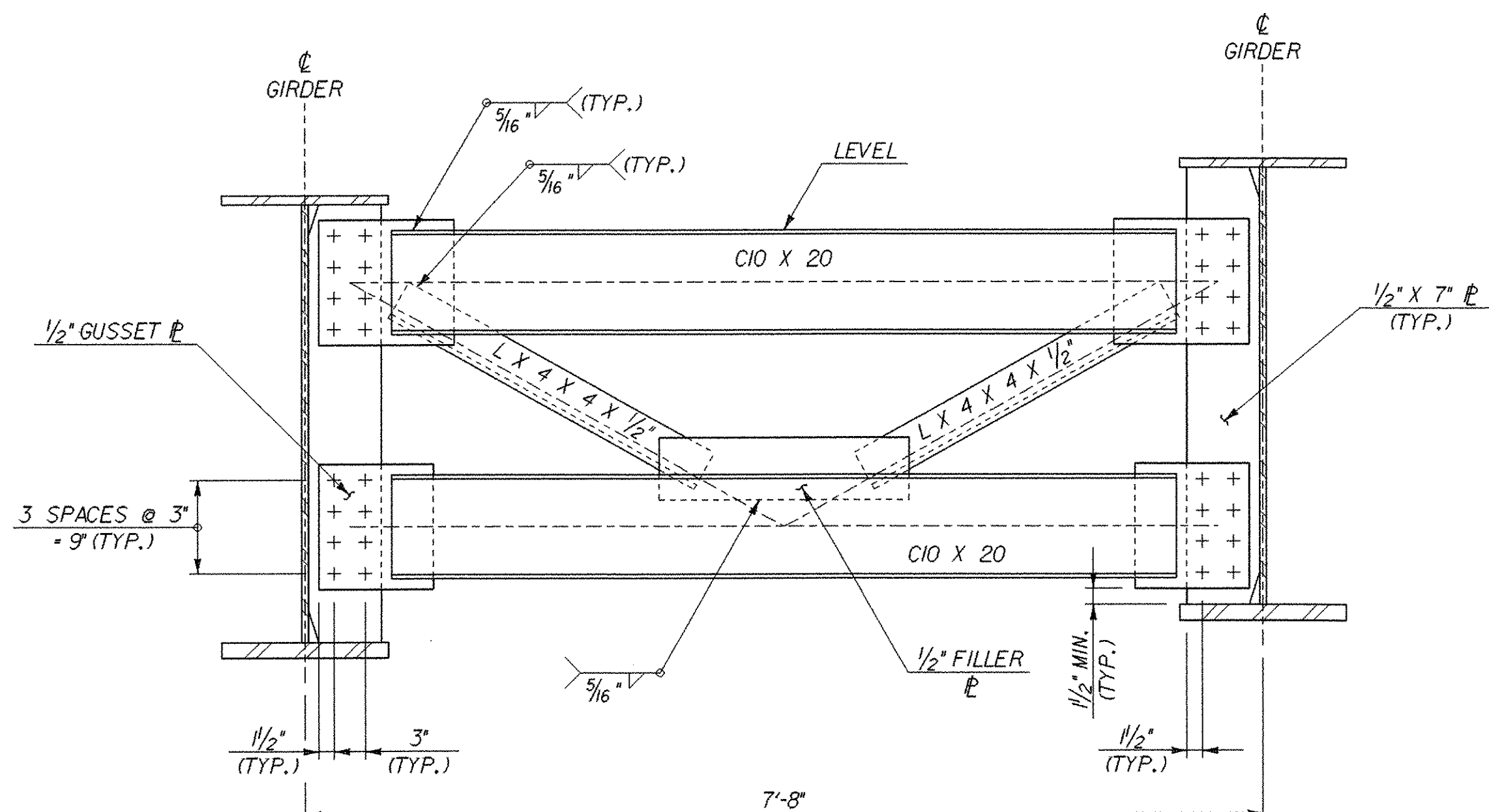
|                                   |  |         |                                  |                          |             |
|-----------------------------------|--|---------|----------------------------------|--------------------------|-------------|
| Town Of                           |  | CHESTER |                                  | Bridge No. 12            |             |
| Highway No.                       |  | VT 103  |                                  | Log Sta.                 |             |
|                                   |  |         |                                  | Surv. Sta.               |             |
| VT 103 OVER THE WILLIAMS RIVER    |  |         |                                  |                          |             |
| FRAMING PLAN AND GIRDER ELEVATION |  |         |                                  |                          |             |
| Designed By L.WIXSON              |  |         | Drawn By P.DUSTIN                |                          |             |
| Checked By                        |  | Date    |                                  | Bridge Design Supervisor |             |
| T. GRANT                          |  | 10/00   |                                  | M. ZYDEL Date            |             |
| PROJECT                           |  |         | PROJECT NO.                      |                          |             |
| CHESTER                           |  |         | BRF 025-(135)                    |                          |             |
| I.G.C. Info.                      |  |         | M:\67b134\Structures\2b134cf.pdg |                          | 2b134cf.pdg |
| Bridge Sheet No. BR108            |  |         | Sheet 52 of 79                   |                          |             |
| PLOTTED 28-MAY-2003               |  |         |                                  |                          |             |

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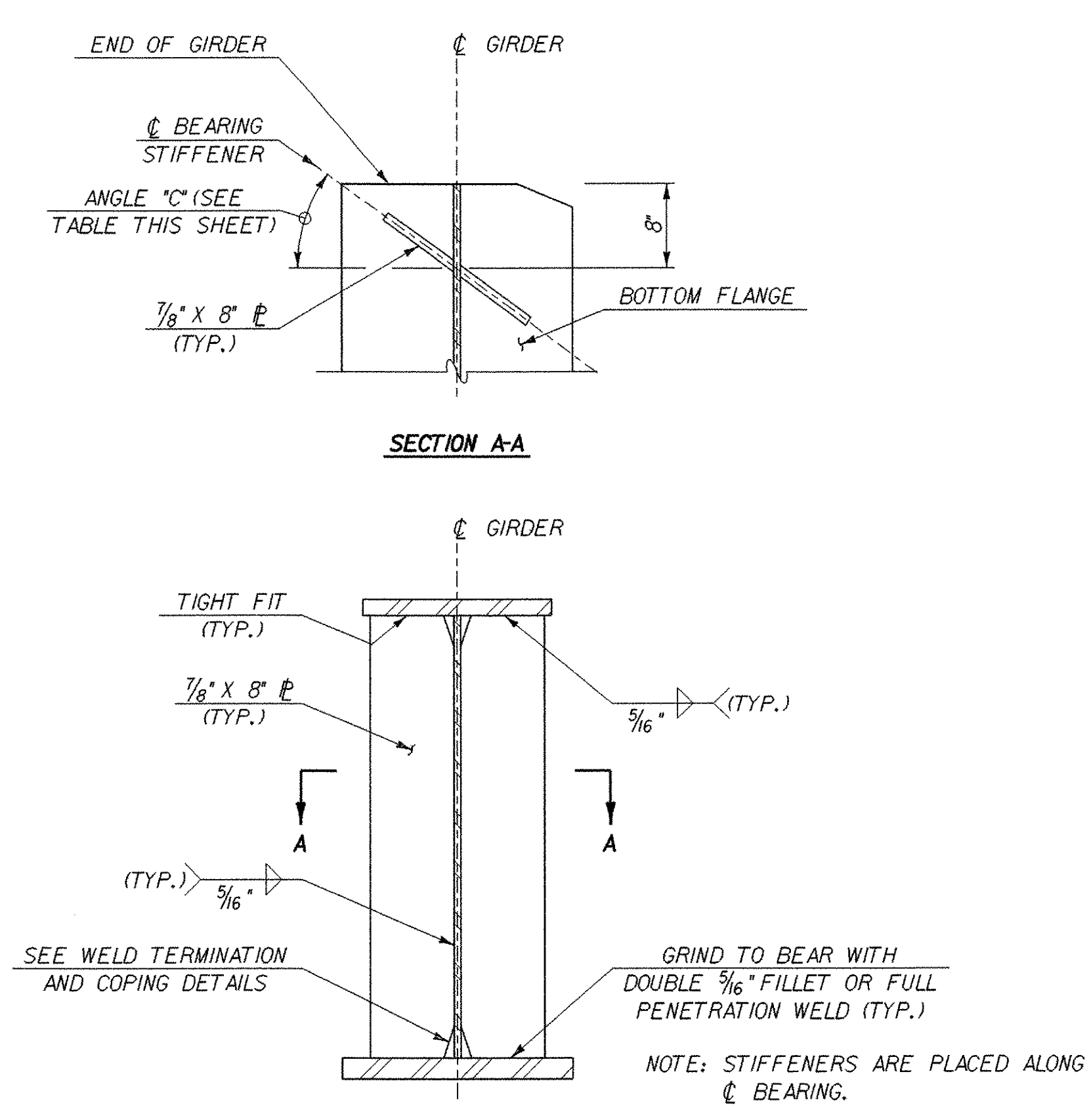


**ABUTMENT CROSS FRAME**  
SCALE: 1" = 1'-0"

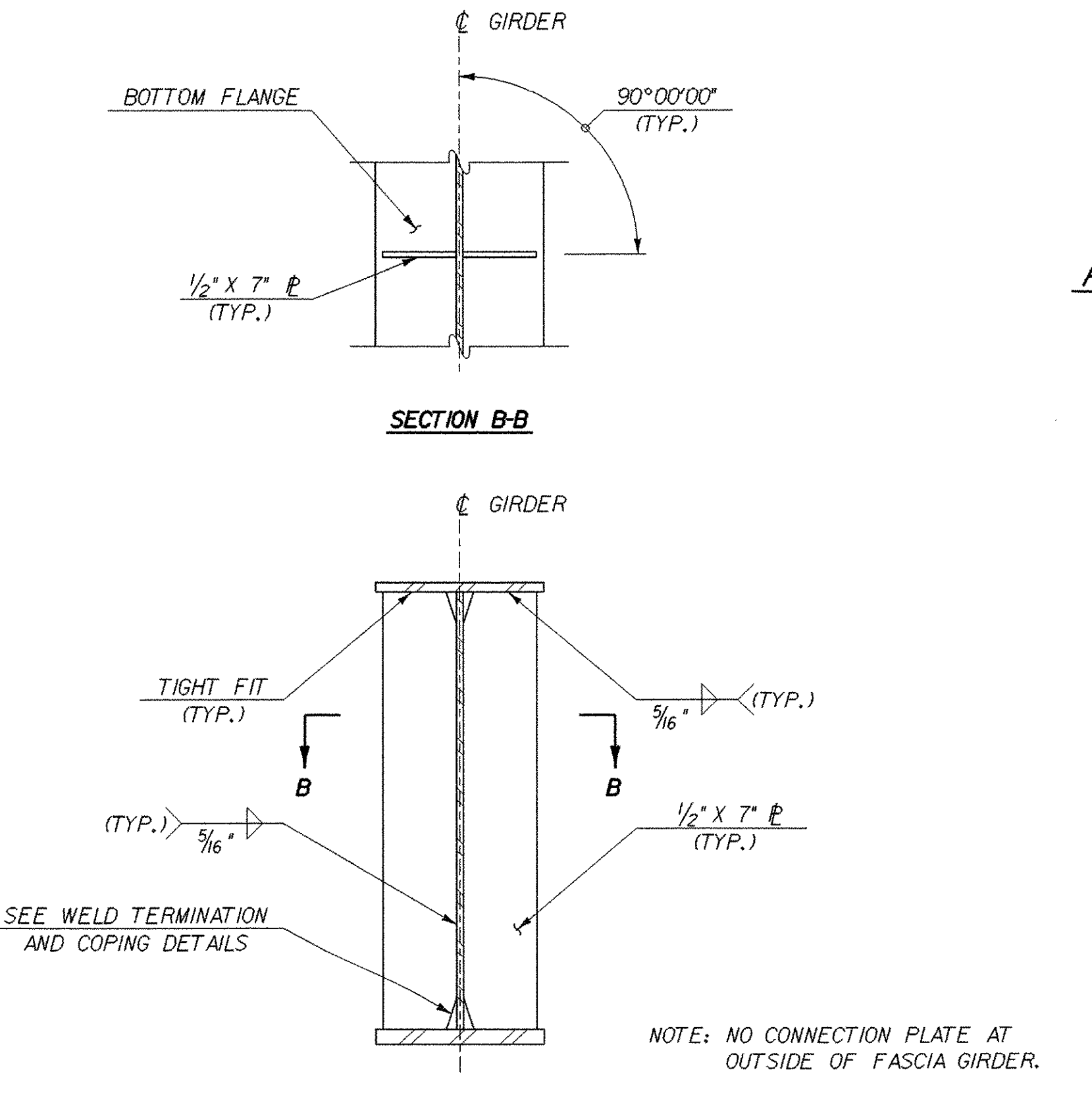


**INTERMEDIATE CROSS FRAME**  
SCALE: 1" = 1'-0"

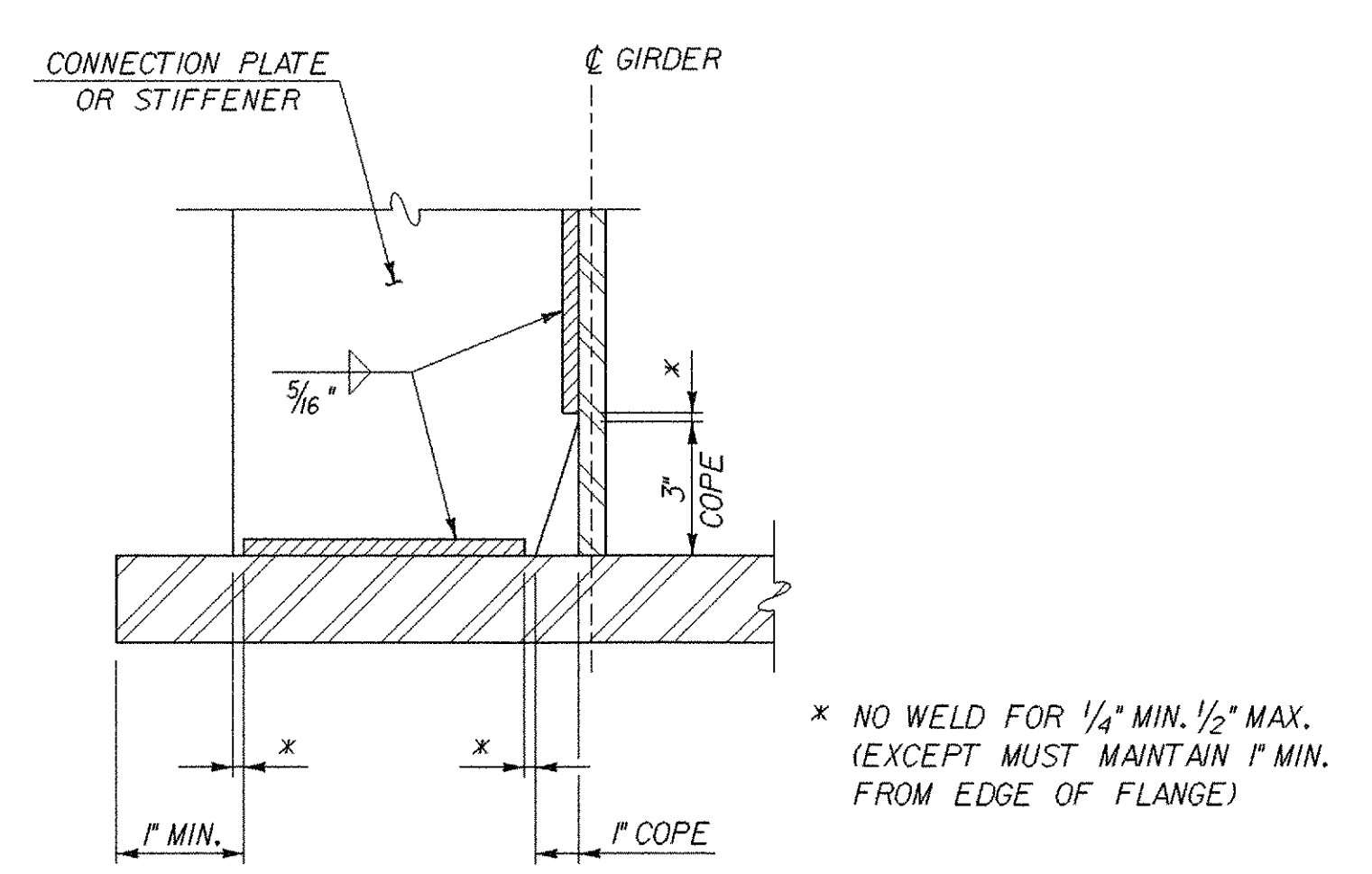
| TABLE OF BEARING STIFFENER ANGLES |                              |                              |
|-----------------------------------|------------------------------|------------------------------|
| GIRDER NO.                        | ABUTMENT NO. 1 DIMENSION "C" | ABUTMENT NO. 2 DIMENSION "C" |
| 1                                 | 23'51'37"                    | 40'01'13"                    |
| 2                                 | 23'22'10"                    | 39'05'34"                    |
| 3                                 | 22'53'55"                    | 38'12'43"                    |
| 4                                 | 22'26'50"                    | 37'22'27"                    |
| 5                                 | 22'00'50"                    | 36'34'32"                    |
| 6                                 | 21'35'50"                    | 35'48'49"                    |



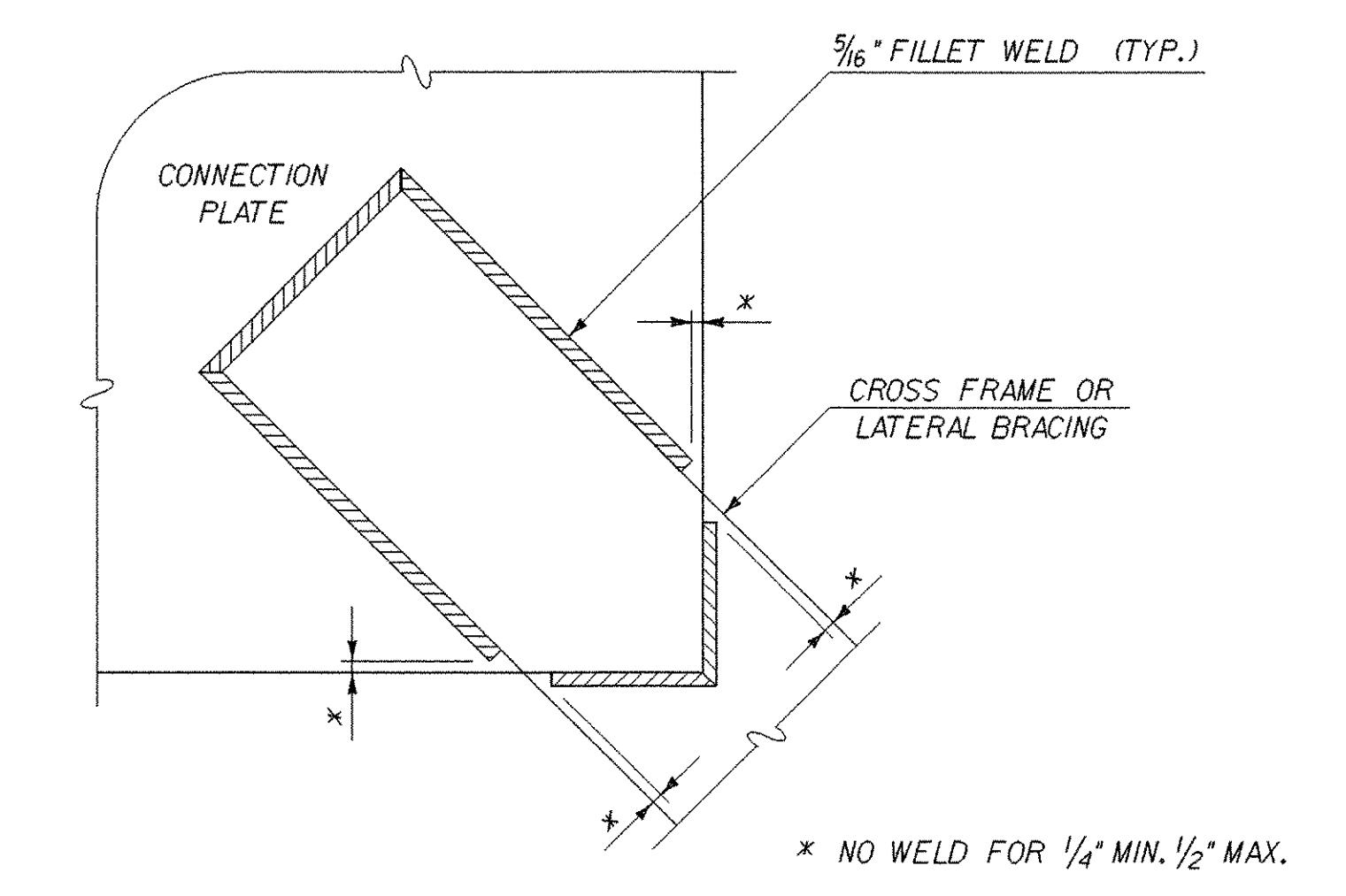
**ABUTMENT BEARING STIFFENER**  
SCALE: 1" = 1'-0"



**INTERMEDIATE CROSS FRAME CONNECTION PLATE**  
SCALE: 1" = 1'-0"



**WELD TERMINATION AND COPING DETAILS**  
SCALE: 3" = 1'-0"



**WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING**  
SCALE: 3" = 1'-0"

**NOTES**  
1. FOR SPACING OF CROSS FRAMES, SEE FRAMING PLAN DETAIL ON BRIDGE SHEET BR108.

|                                                      |                                          |                          |                      |
|------------------------------------------------------|------------------------------------------|--------------------------|----------------------|
| <b>STATE OF VERMONT<br/>AGENCY OF TRANSPORTATION</b> |                                          |                          |                      |
| Town Of                                              | <b>CHESTER</b>                           | Bridge No.               | <b>12</b>            |
| Highway No.                                          | <b>VT 103</b>                            | Log Sta.                 |                      |
|                                                      |                                          | Surv. Sta.               |                      |
| <b>VT 103 OVER THE WILLIAMS RIVER</b>                |                                          |                          |                      |
| <b>CROSS FRAME DETAILS</b>                           |                                          |                          |                      |
| Designed By                                          | <b>LWIXSON</b>                           | Drawn By                 | <b>P.DUSTIN</b>      |
| Checked By                                           | <b>T. GRANT</b>                          | Date                     | <b>10/00</b>         |
|                                                      |                                          | Bridge Design Supervisor | <b>M. ZYDEL</b>      |
| PROJECT                                              | <b>CHESTER</b>                           | PROJECT NO.              | <b>BRF 025-1(35)</b> |
| I.G.C. Info.                                         | <b>M:\87b134\Structures\zbl34ccf.dgn</b> |                          | <b>zbl34ccf.l</b>    |
| Bridge Sheet No.                                     | <b>BR109</b>                             | Sheet                    | <b>53 of 79</b>      |
| PLOTTED 28-MAY-2003                                  |                                          |                          |                      |

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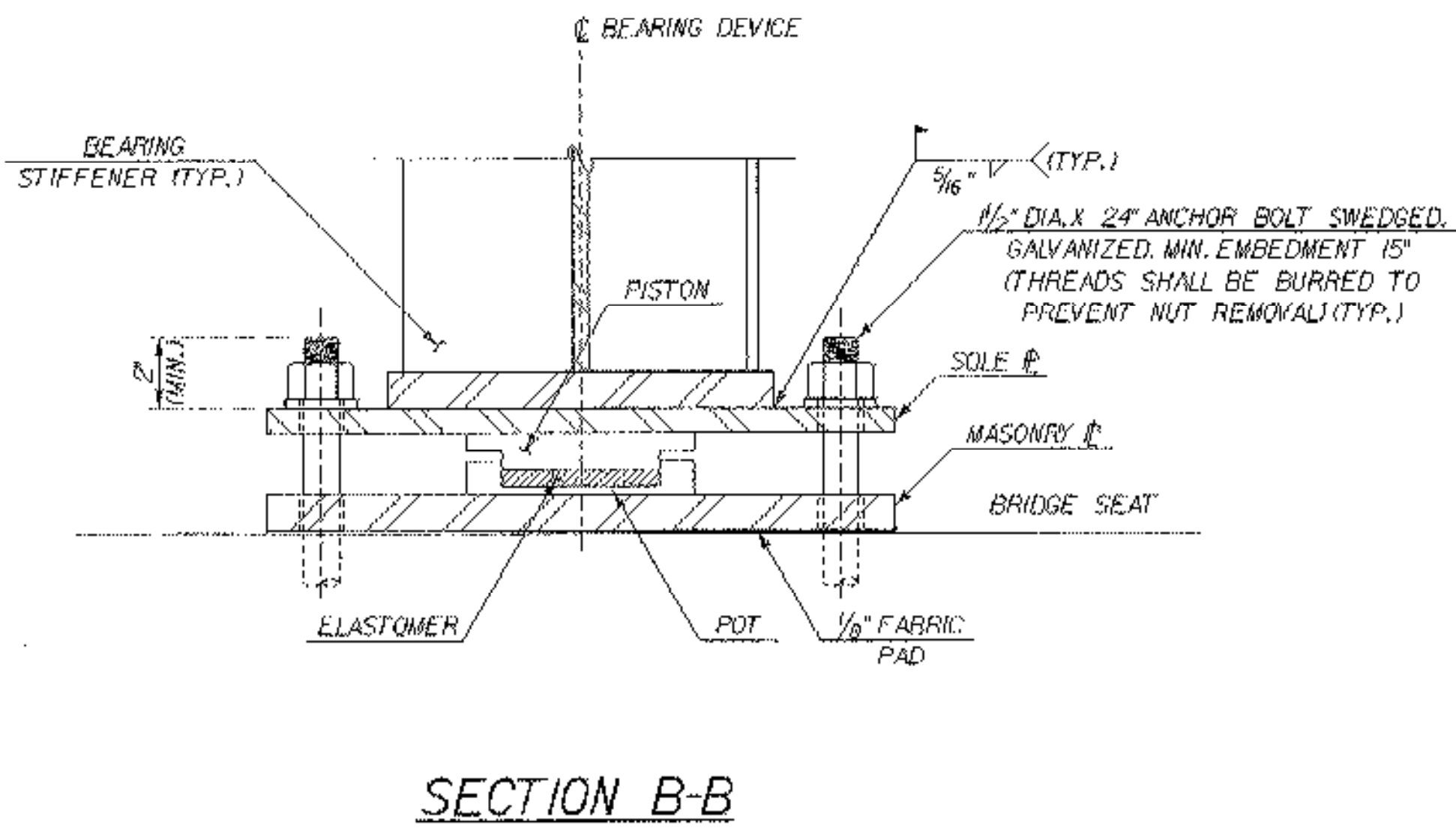
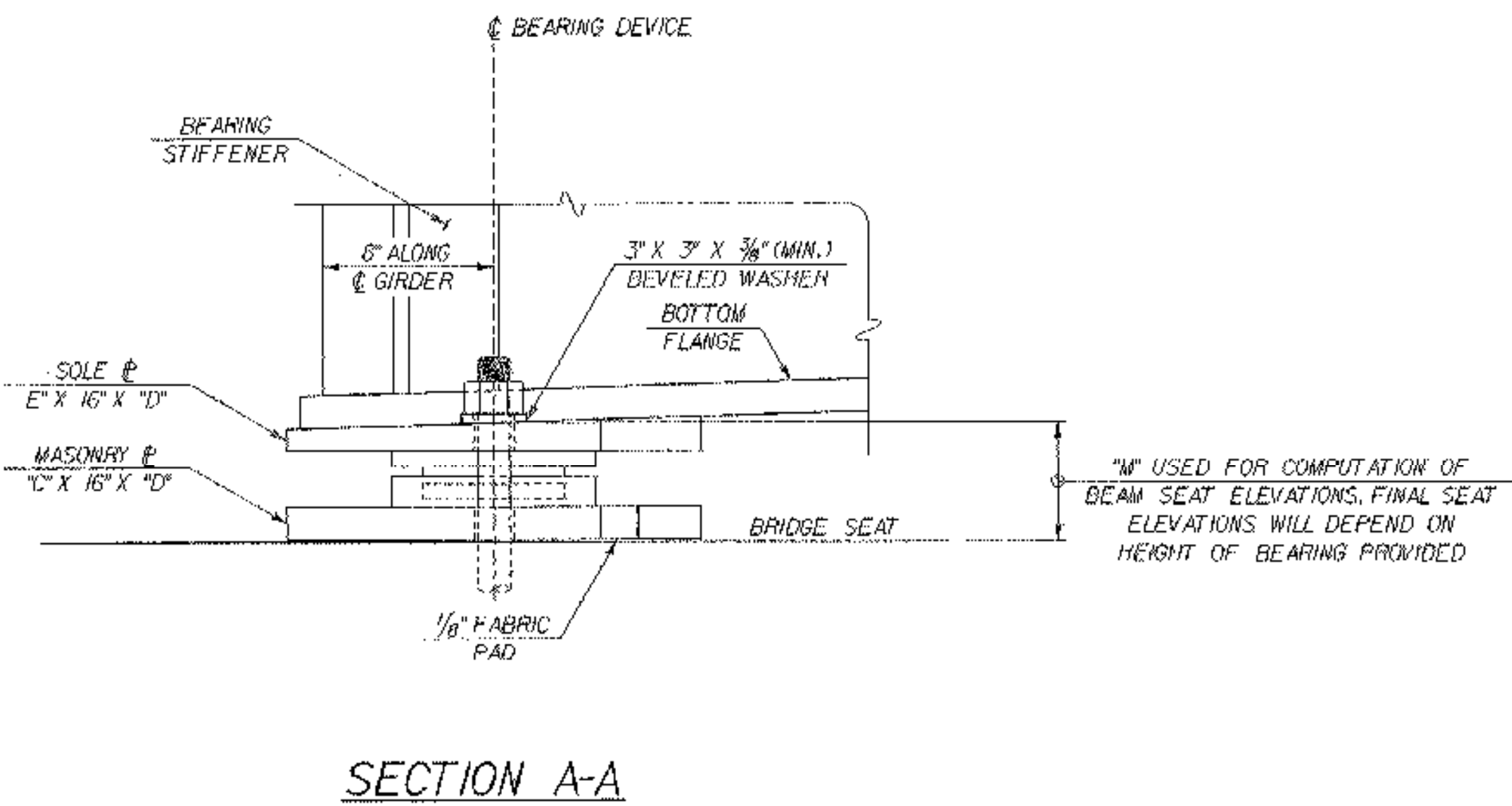
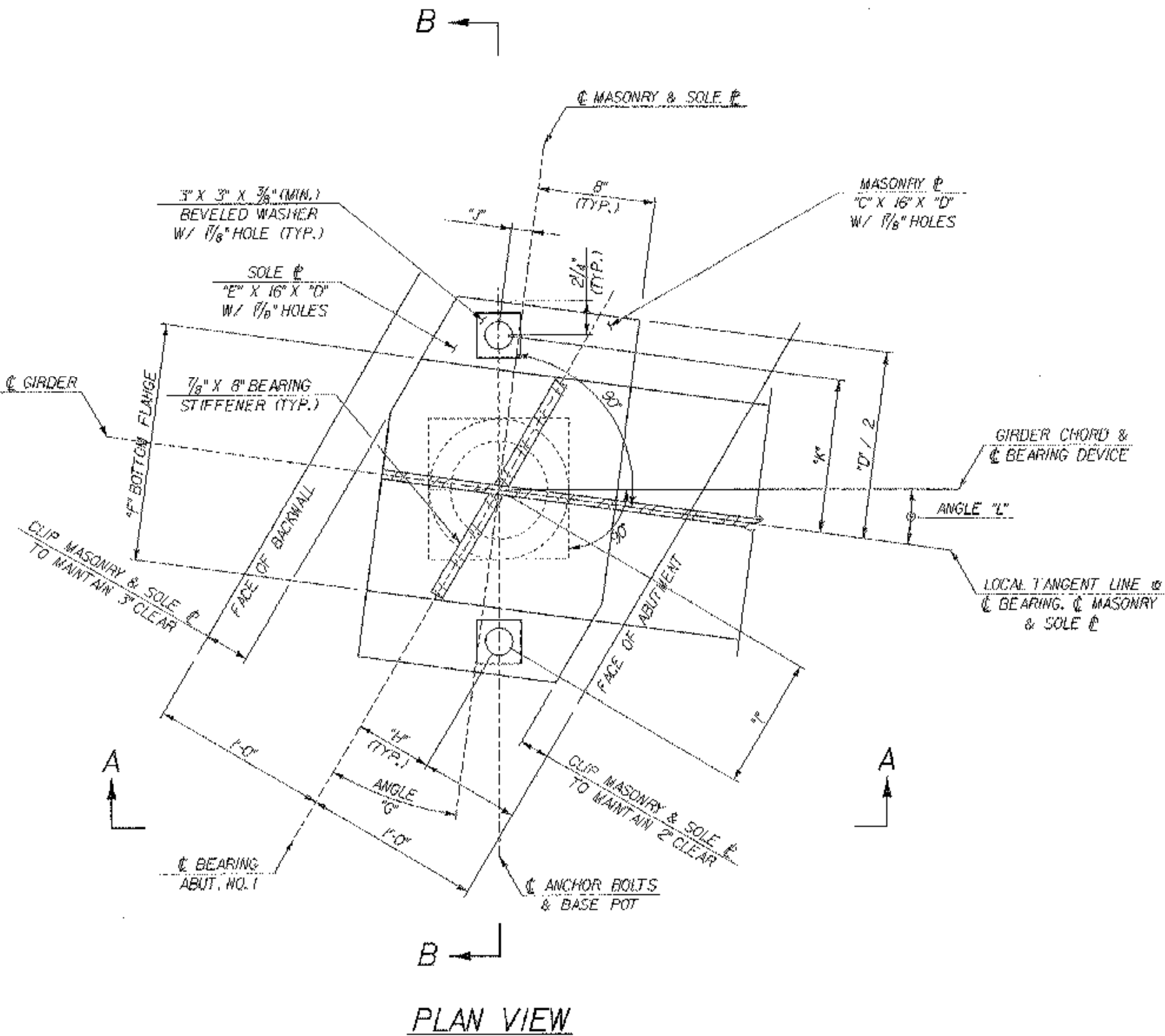
COSMEC POT BEARINGS

TABLE OF FIXED BEARING DIMENSIONS @ ABUTMENT NO.1

| GIRDER | PLATE THICKNESS DIM. "C" | PLATE LENGTH DIM. "D" | PLATE THICKNESS DIM. "E" | FLANGE WIDTH DIM. "F" | ANGLE "G" BETWEEN GIRD. & MASON. C. | HOLE DIM. "H" | HOLE DIM. "I" | HOLE DIM. "J" | HOLE DIM. "K" | ANGLE "L" BETWEEN GIRDER CHORD & LOCAL TANGENT @ GIRD. | HEIGHT "M" BETWEEN TOP OF BRIDGE SEAT & BOTTOM OF GIRDER FLANGE |
|--------|--------------------------|-----------------------|--------------------------|-----------------------|-------------------------------------|---------------|---------------|---------------|---------------|--------------------------------------------------------|-----------------------------------------------------------------|
| G1     | 1 1/2"                   | 25"                   | 1" TO 1 1/8"             | 16"                   | 23°51'37"                           | 4 1/2"        | 9 1/4"        | 1 1/2"        | 10 1/4"       | 8°04'48"                                               | 5 1/2"                                                          |
| G2     | 1 1/2"                   | 25"                   | 1" TO 1 1/8"             | 16"                   | 23°22'10"                           | 4 1/2"        | 9 1/4"        | 1 3/8"        | 10 1/4"       | 7°51'42"                                               | 5 1/2" 5 3/8"                                                   |
| G3     | 1 1/2"                   | 25"                   | 1" TO 1 1/8"             | 16"                   | 22°53'55"                           | 4 1/2"        | 9 1/4"        | 1 3/8"        | 10 1/4"       | 7°39'24"                                               | 5 1/2" 5 3/8"                                                   |
| G4     | 1 1/2"                   | 25"                   | 1" TO 1 1/8"             | 16"                   | 22°28'50"                           | 4 1/2"        | 9 1/4"        | 1 3/8"        | 10 1/4"       | 7°27'48"                                               | 5 1/2" 5 3/8"                                                   |
| G5     | 2 1/4"                   | 32"                   | 1" TO 1 1/8"             | 22"                   | 22°00'50"                           | 4 1/2"        | 1'-1"         | 1 3/4"        | 1'-1 1/4"     | 7°16'56"                                               | 6 1/4" 6 1/8"                                                   |
| G6     | 2 1/4"                   | 32"                   | 1" TO 1 1/8"             | 22"                   | 21°35'50"                           | 4 1/2"        | 1'-1"         | 1 3/8"        | 1'-1 1/4"     | 7°06'29"                                               | 6 1/4" 6 1/8"                                                   |

BEARING NOTES

1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 AND 731 AND SHALL BE PAID FOR UNDER THE ITEM 531.10, BEARING DEVICE ASSEMBLY.
2. THE FIELD WELD CONNECTING THE BOTTOM FLANGE WITH THE BEARING DEVICE SHALL BE MADE WITH E7018 RODS.
3. ALL BEARING DEVICES SHALL BE GALVANIZED OR METALIZED AS PER SECTION 531.04(b) AND 506.15(a) AND (b). AREAS OF GALVANIZING OR METALIZING DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(1).
4. ALTERNATE CONFIGURATIONS FOR BEARINGS MAY BE SUBMITTED FOR APPROVAL. ANY ALTERNATE SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE DESIGN LOADS AND CRITERIA SHOWN ON THIS SHEET, AND SHALL MAINTAIN THE ANCHORAGE SYSTEM SHOWN.
5. BRIDGE SEAT ELEVATIONS MAY BE REVISED TO ACCOMMODATE AN ALTERNATE CONFIGURATION. POT BEARING HEIGHTS VARY BETWEEN MANUFACTURERS AND NEED TO BE INCORPORATED APPROPRIATELY BY THE CONTRACTOR.
6. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
7. "A" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER THE CONCRETE SLAB, PAVEMENT, AND BRIDGE RAIL ARE PLACED. "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 1/8".
8. DESIGN CRITERIA:  
A. BASE PLATE TO CONCRETE MAXIMUM DESIGN PRESSURE = 1000 PSI  
B. MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIAN  
C. HORIZONTAL CAPACITY SHALL BE A MINIMUM OF 10% OF VERTICAL LOAD. GUIDE BARS SHALL BE DESIGNED FOR THIS CAPACITY.  
D. DESIGN LOAD PER BEARING = 182K AT ABUTMENT NO. 1 AND 193K AT ABUTMENT NO. 2.



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

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

|                                      |                                   |                          |               |
|--------------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                              | CHESTER                           | Bridge No.               | 12            |
| Highway No.                          | VT 103                            | Loc. Sta.                |               |
|                                      |                                   | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER       |                                   |                          |               |
| ABUTMENT NO. 1 FIXED BEARING DETAILS |                                   |                          |               |
| Designed By                          | L. WIXSON                         | Drawn By                 | P. DUSTIN     |
| Checked By                           | T. GRANT                          | Date                     | 10/00         |
|                                      |                                   | Bridge Design Supervisor | M. ZYDEL Date |
| PROJECT                              | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| LG.C. Info.                          | MA87b134 Structures 2b134ef b.dgn |                          | 2b134ef b.d   |
| Bridge Sheet No.                     | BR10                              | Sheet                    | 54 of 79      |
| PLOTTED 28-MAY-2003                  |                                   |                          |               |





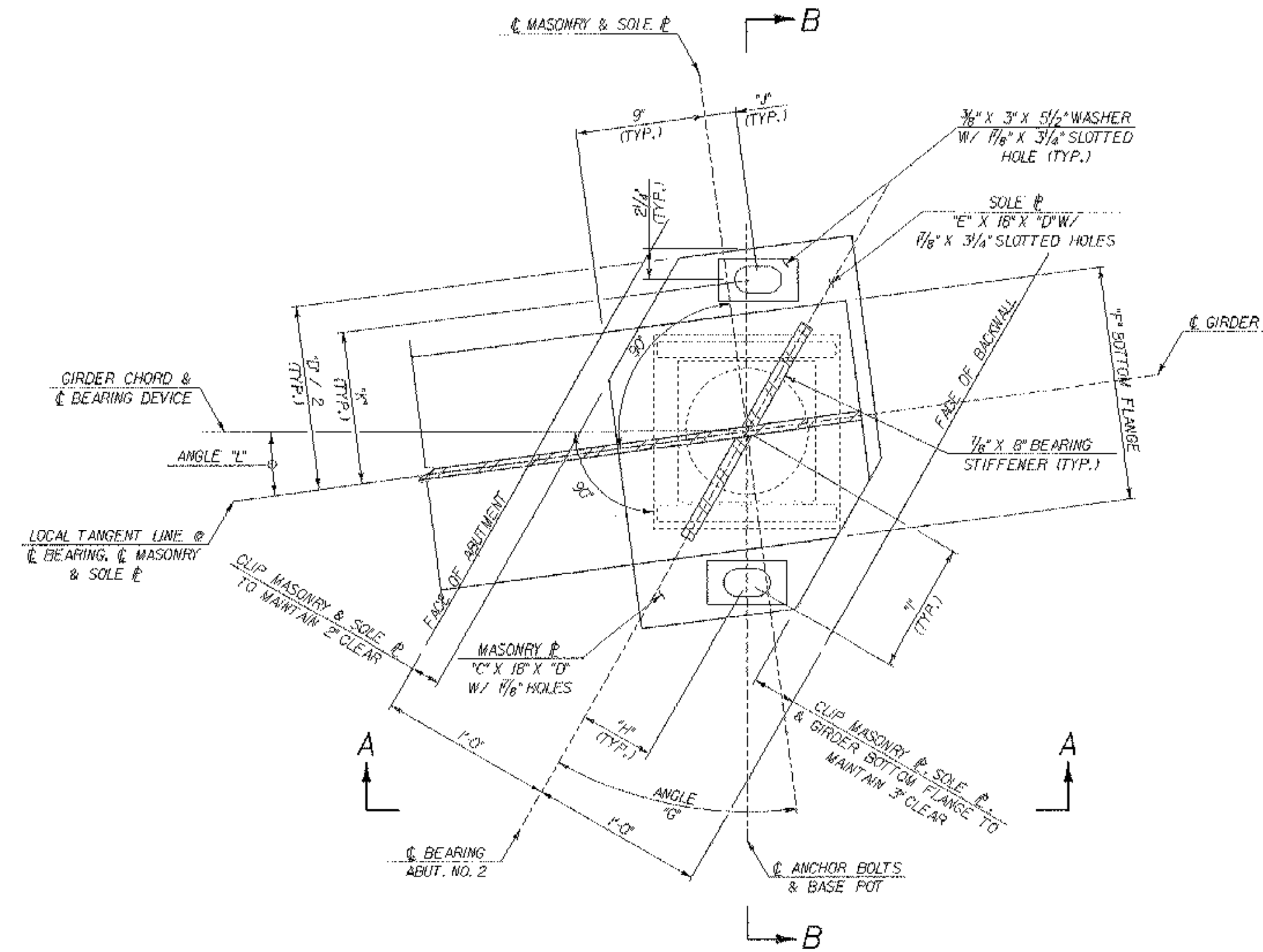
COSMEC POT BEARINGS USED

TABLE OF EXPANSION BEARING DIMENSIONS @ ABUTMENT NO. 2

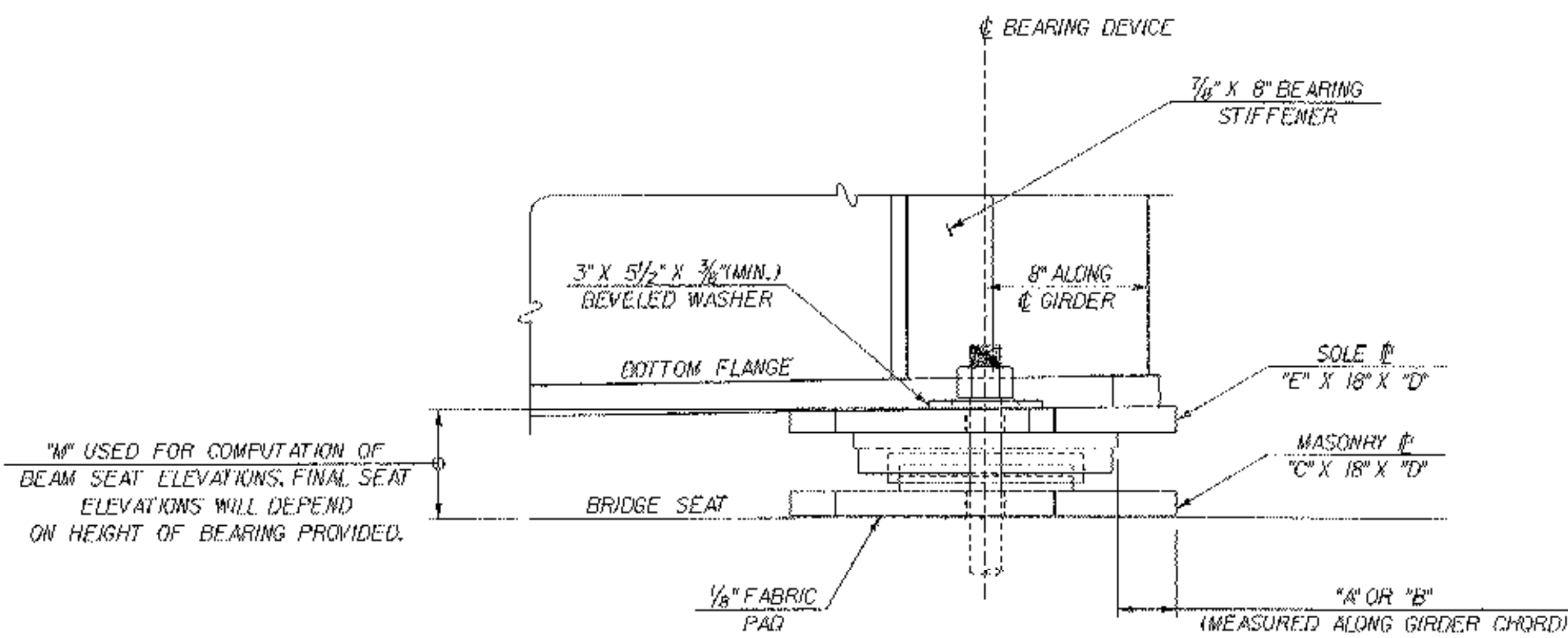
| GIRDER | PLATE THICKNESS DIM. "C" | PLATE LENGTH DIM. "D" | PLATE THICKNESS DIM. "E" | FLANGE WIDTH DIM. "F" | ANGLE "G" BETWEEN BRG. & CL. MAS. CL. | CL. HOLE DIM. "H" | CL. HOLE DIM. "I" | CL. HOLE DIM. "J" | CL. HOLE DIM. "K" | ANGLE "L" BETWEEN GIRDER CHORD & LOCAL TANGENT @ CL. BRG. | HEIGHT "M" BETWEEN TOP OF BRIDGE SEAT & BOTTOM OF GIRDER FLANGE |
|--------|--------------------------|-----------------------|--------------------------|-----------------------|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-----------------------------------------------------------|-----------------------------------------------------------------|
| G1     | 1/8"                     | 25"                   | 1" TO 1/4"               | 16"                   | 40°01'13"                             | 5 1/2"            | 8 3/4"            | 2 3/4"            | 10 1/4"           | 8°04'48"                                                  | 5 1/4" 6 3/16"                                                  |
| G2     | 1/8"                     | 25"                   | 1" TO 1/4"               | 16"                   | 39°05'34"                             | 5 5/8"            | 8 7/8"            | 2 1/2"            | 10 1/4"           | 7°51'42"                                                  | 5 1/4" 6 3/16"                                                  |
| G3     | 1/8"                     | 25"                   | 1" TO 1/4"               | 16"                   | 38°12'43"                             | 5 1/4"            | 8 5/8"            | 2 3/8"            | 10 1/4"           | 7°39'24"                                                  | 5 1/4" 6 3/16"                                                  |
| G4     | 1/8"                     | 25"                   | 1" TO 1/4"               | 16"                   | 37°22'21"                             | 5 5/8"            | 9"                | 2 1/8"            | 10 1/4"           | 7°27'48"                                                  | 5 1/4" 6 3/16"                                                  |
| G5     | 1/8"                     | 32"                   | 1" TO 1/4"               | 22"                   | 36°34'32"                             | 6 3/8"            | 1'-0 1/8"         | 4 9/8"            | 1'-13 1/4"        | 7°16'51"                                                  | 6" 7 5/16"                                                      |
| G6     | 1/8"                     | 32"                   | 1" TO 1/4"               | 22"                   | 35°48'49"                             | 5 5/8"            | 1'-0 1/8"         | 4 9/8"            | 1'-13 1/4"        | 7°06'29"                                                  | 6" 7 5/16"                                                      |

BEARING NOTES

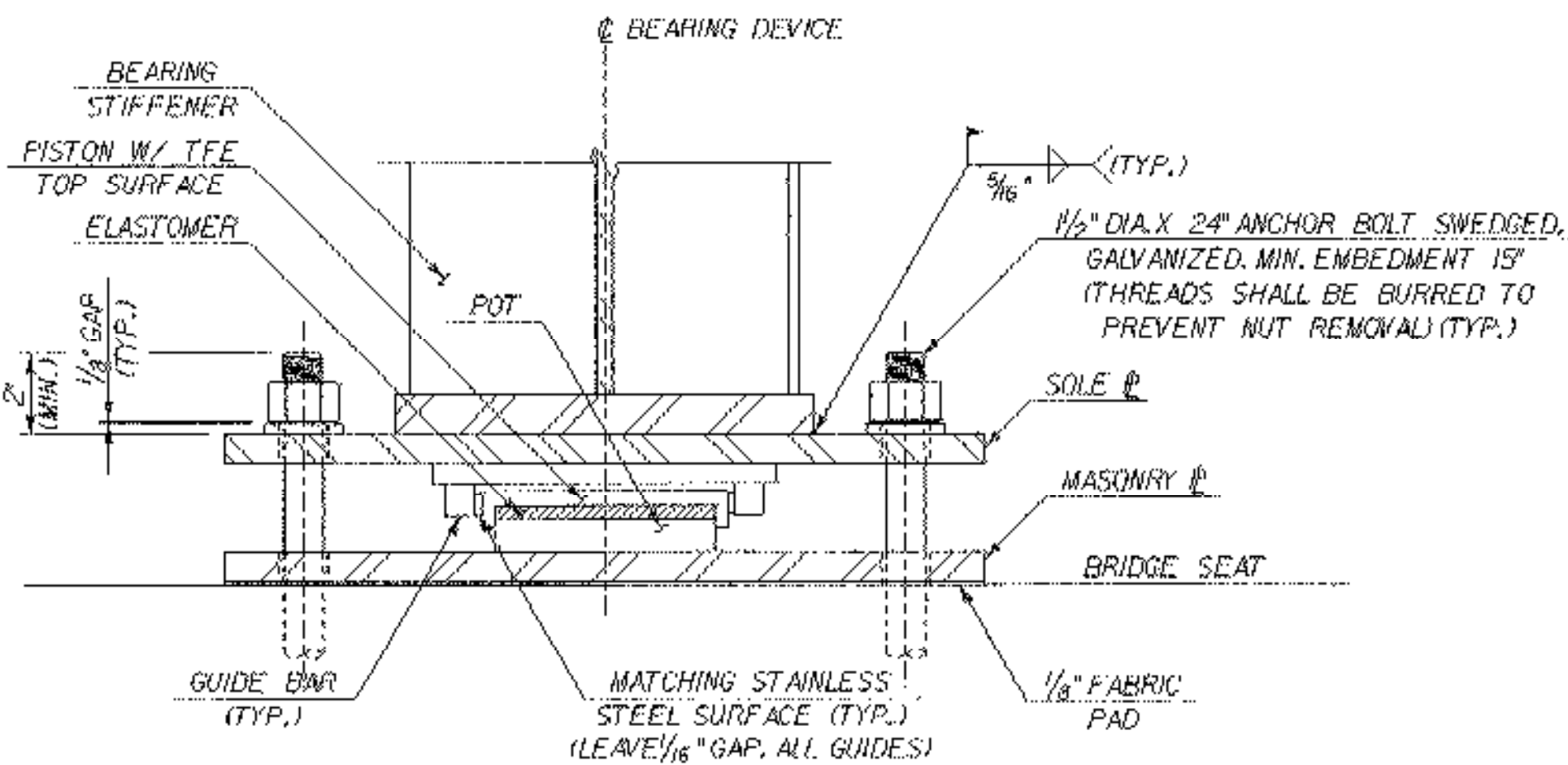
1. FOR BEARING NOTES, SEE BRIDGE SHEET 54 OF 79.



PLAN VIEW



SECTION A-A



SECTION B-B

EXPANSION BEARING DETAIL @ ABUTMENT NO. 2

SCALE: 2\"/>

ABUTMENT NO. 2  
TEMPERATURE SETTING TABLE

| TEMP.  | "A" DIST. | "B" DIST. |
|--------|-----------|-----------|
| 0° F   | 3 1/4"    | 3 3/8"    |
| 15° F  | 3 1/8"    | 3 3/8"    |
| 30° F  | 3"        | 3 5/8"    |
| 45° F  | 2 7/8"    | 3 1/2"    |
| 60° F  | 2 3/4"    | 3 3/8"    |
| 75° F  | 2 5/8"    | 3 1/4"    |
| 90° F  | 2 1/2"    | 3 1/8"    |
| 105° F | 2 3/8"    | 3"        |

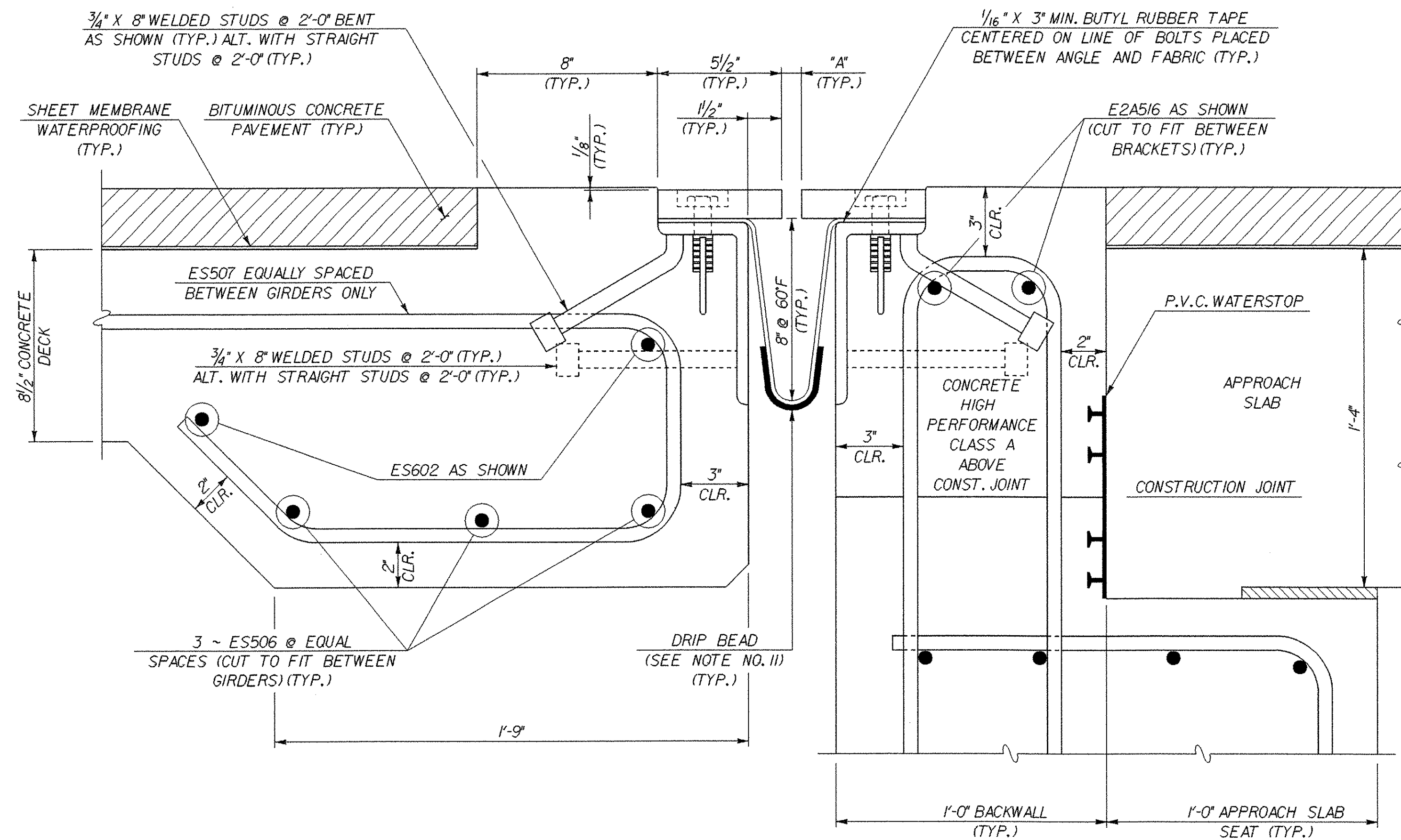
STATE OF VERMONT  
AGENCY OF TRANSPORTATION

|                                          |                                 |                          |               |
|------------------------------------------|---------------------------------|--------------------------|---------------|
| Town Of                                  | CHESTER                         | Bridge No.               | 12            |
| Highway No.                              | VT 103                          | Loc. Sta.                |               |
|                                          |                                 | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER           |                                 |                          |               |
| ABUTMENT NO. 2 EXPANSION BEARING DETAILS |                                 |                          |               |
| Designed By                              | L. WILSON                       | Drawn By                 | P. DUSTIN     |
| Checked By                               | T. GRANT                        | Date                     | 10/08         |
|                                          |                                 | Bridge Design Supervisor | M. ZYDEL Date |
| PROJECT                                  | CHESTER                         | PROJECT NO.              | BRF 025-K351  |
| LG.C. Info.                              | M:\87m3\Structures\zbl34\cebdgn |                          | zbl34cebd     |
| Bridge Sheet No.                         | BRM                             | Sheet                    | 55 of 79      |

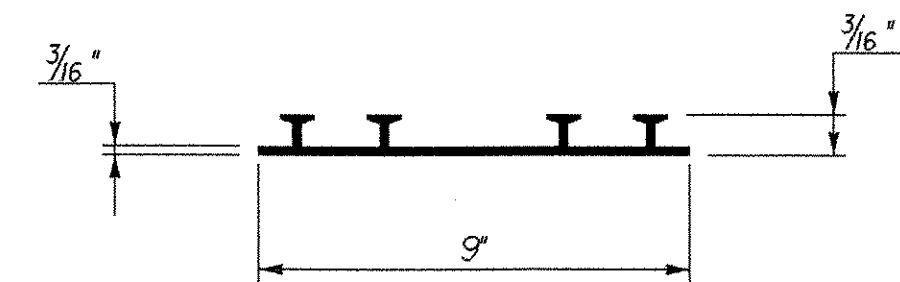
PLOTTED 2/8-MAR-2007

M  
MC FARLAND - JOHNSON, INC.





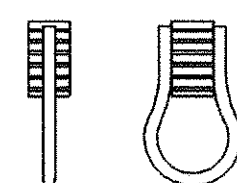
**TYPICAL SECTION BETWEEN GIRDERS**  
SCALE: 3" = 1'-0"



**P.V.C. WATERSTOP FOR CONST. JOINTS**  
SCALE: 3" = 1'-0"

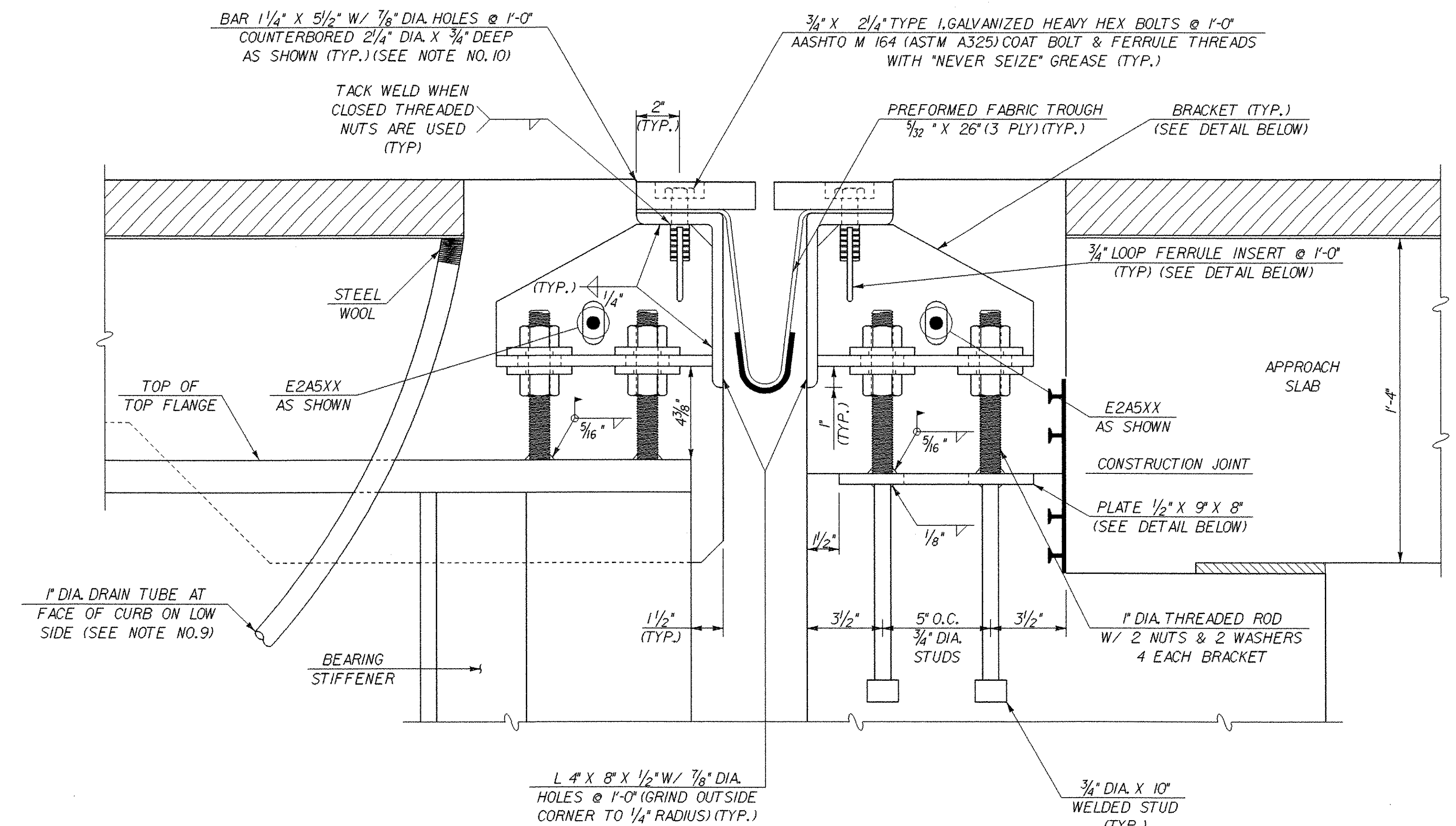
### EXPANSION JOINT NOTES

- 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. THE HIGH END OF THE FABRIC TROUGH SHALL BE CLOSED BY FOLDING.
- 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 506.15 (a) OR (b) UNLESS OTHERWISE SPECIFIED.
- 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 5/8" X 5 5/8" 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. 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 IN THE JOINT PLATE 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 COSTS FOR P.V.C. WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.



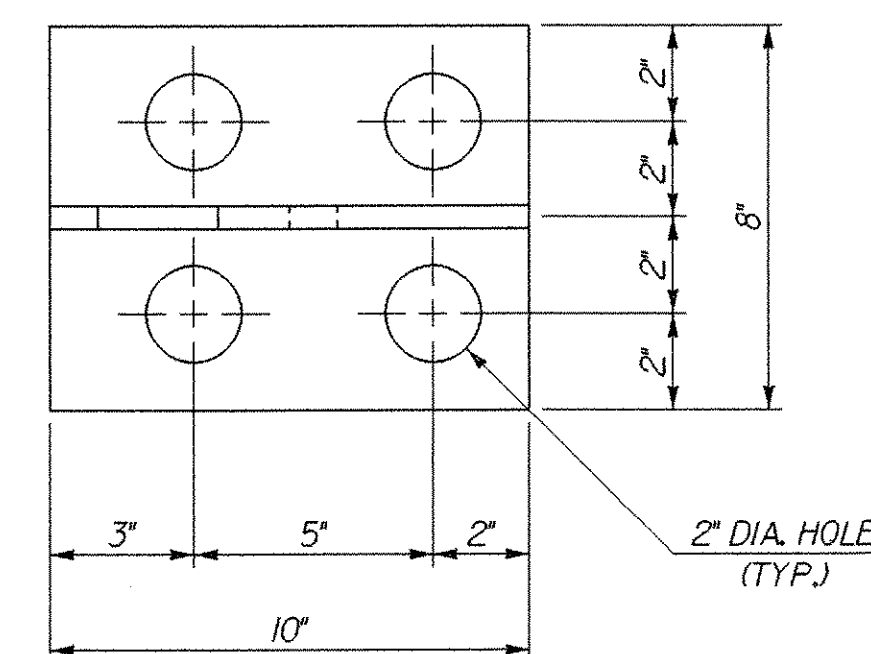
NOTE: CLOSED THREADED FERRULE NUTS WITHOUT ANCHOR LOOPS MAY BE USED.

**LOOP FERRULE INSERT DETAIL**  
SCALE: 3" = 1'-0"

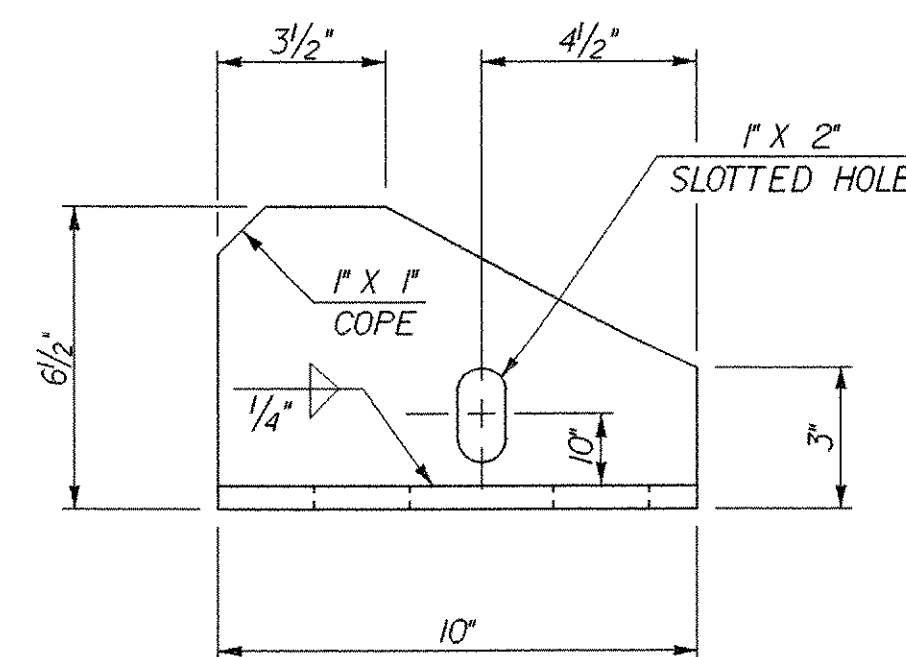


**TYPICAL SECTION AT GIRDERS**  
SCALE: 3" = 1'-0"

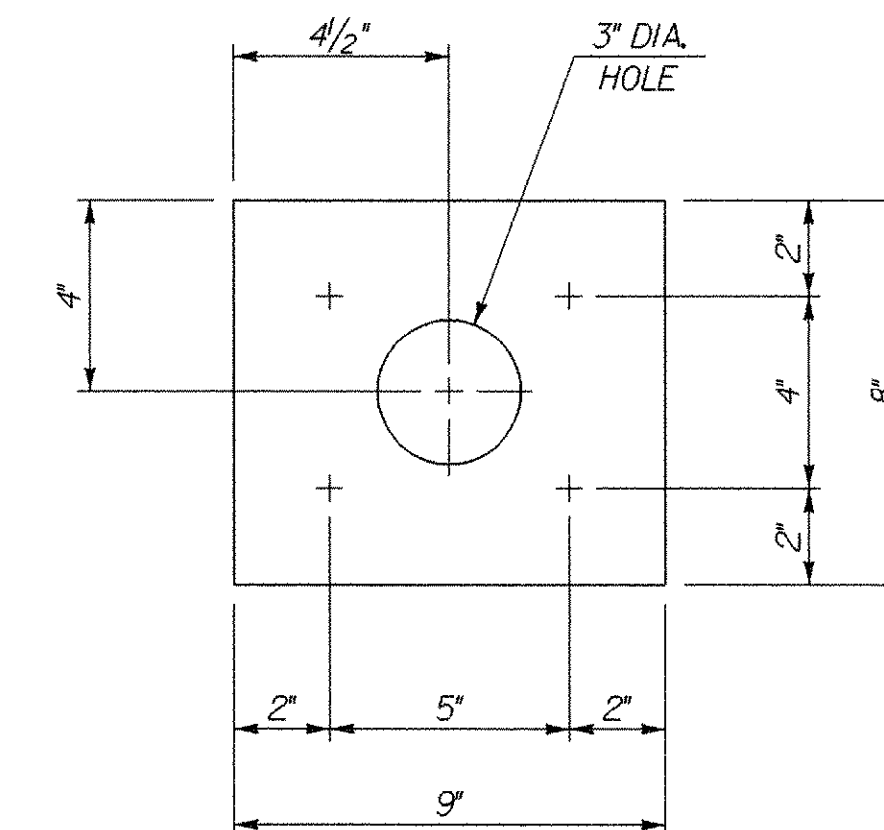
ALL PLATES 1/2" THICKNESS



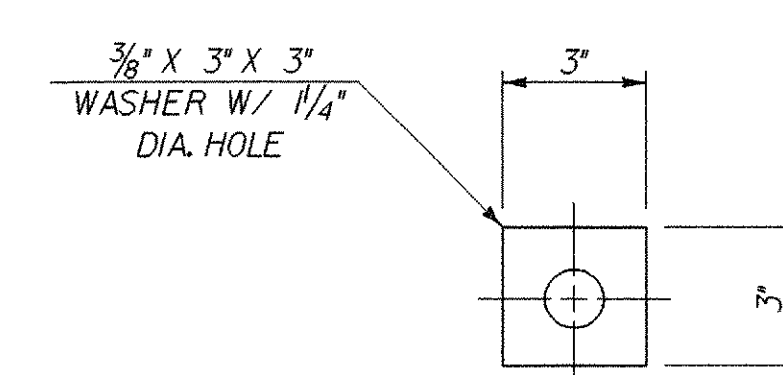
**BRACKET PLAN**  
SCALE: 3" = 1'-0"



**BRACKET ELEVATION**  
SCALE: 3" = 1'-0"



**PLATE PLAN**  
SCALE: 3" = 1'-0"



**WASHER FOR BRACKET**  
SCALE: 3" = 1'-0"

### JOINT DIMENSION TABLE

| TEMP.  | "A" DIST. |
|--------|-----------|
| 0° F   | 1 1/4"    |
| 15° F  | 1 1/8"    |
| 30° F  | 1"        |
| 45° F  | 7/8"      |
| 60° F  | 3/4"      |
| 75° F  | 5/8"      |
| 90° F  | 1/2"      |
| 105° F | 3/8"      |

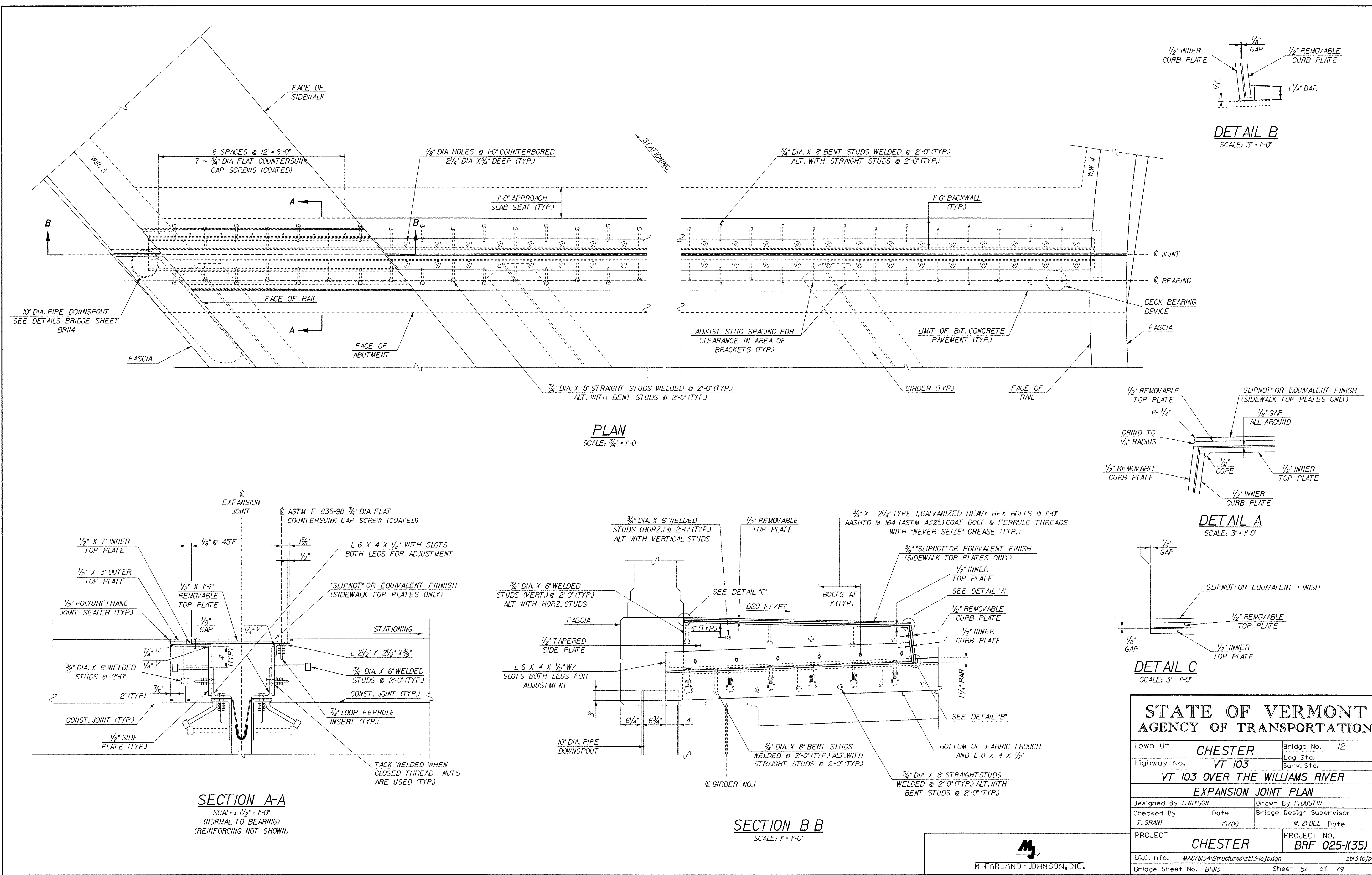
"A" IS THE SETTING BEFORE DEAD LOADS ARE IN PLACE.

### STATE OF VERMONT AGENCY OF TRANSPORTATION

|                                |                                  |                          |               |
|--------------------------------|----------------------------------|--------------------------|---------------|
| Town Of                        | CHESTER                          | Bridge No.               | 12            |
| Highway No.                    | VT 103                           | Log Sta.                 |               |
|                                |                                  | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER |                                  |                          |               |
| EXPANSION JOINT DETAILS        |                                  |                          |               |
| Designed By                    | L. WILSON                        | Drawn By                 | P. DUSTIN     |
| Checked By                     | T. GRANT                         | Date                     | 10/00         |
|                                |                                  | Bridge Design Supervisor | M. ZYDEL      |
|                                |                                  | Date                     |               |
| PROJECT                        | CHESTER                          | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                   | M:\87\34\Structures\zbl34c\j.dgn | zbl34c\j.dj              |               |
| Bridge Sheet No.               | BR112                            | Sheet                    | 56 of 79      |
| PLOTTED                        | 28-MAY-2003                      |                          |               |

**MJ**  
McFARLAND-JOHNSON, INC.

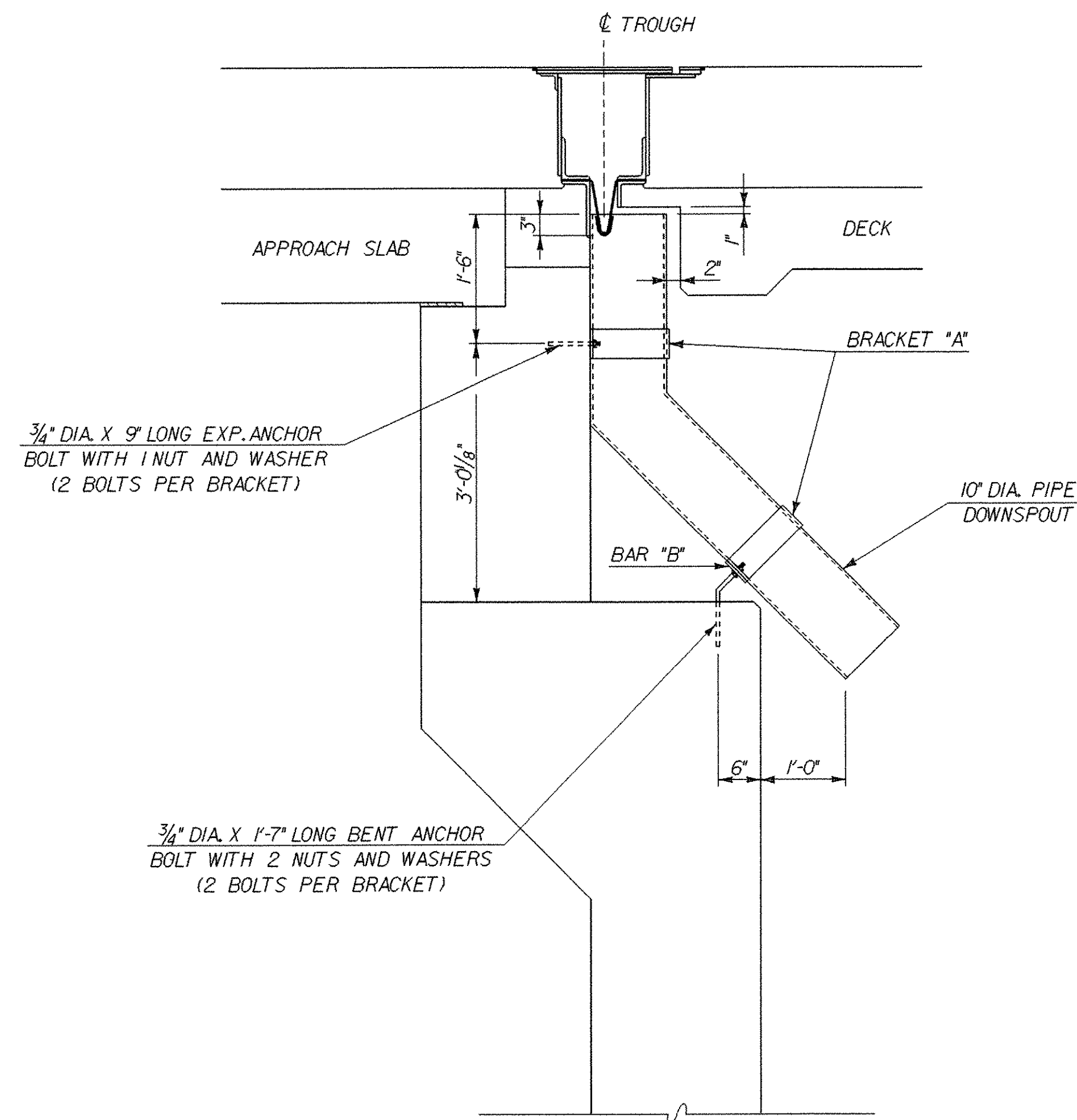




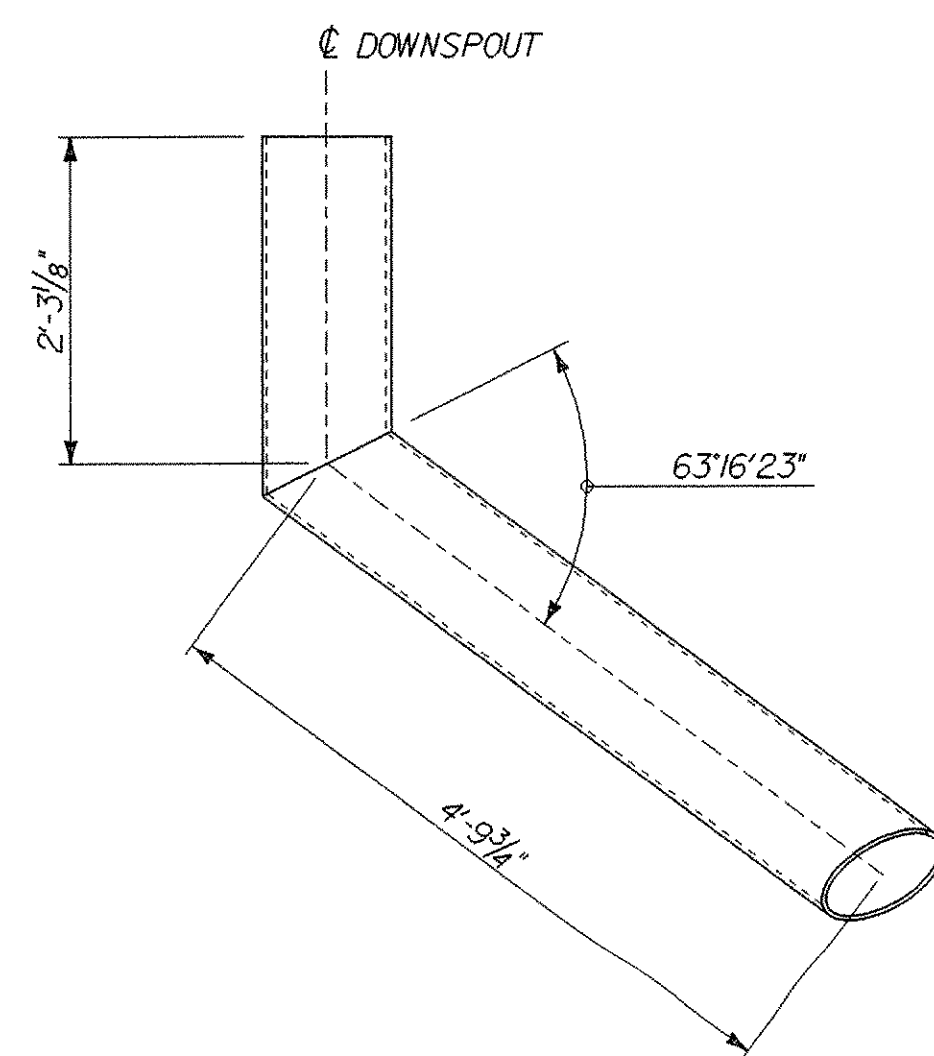
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION |                                   |                          |               |
|----------------------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                                      | CHESTER                           | Bridge No.               | 12            |
| Highway No.                                  | VT 103                            | Log Sta.                 |               |
| VT 103 OVER THE WILLIAMS RIVER               |                                   |                          |               |
| EXPANSION JOINT PLAN                         |                                   |                          |               |
| Designed By                                  | L.WIXSON                          | Drawn By                 | P.DUSTIN      |
| Checked By                                   | T. GRANT                          | Bridge Design Supervisor | M. ZYDEL      |
| PROJECT                                      | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                                 | M:\87b134\Structures\zbl34c\jpdgn | zbl34c\jpdgn             |               |
| Bridge Sheet No.                             | BR113                             | Sheet                    | 57 of 79      |
| PLOTTED 28-MAY-2003                          |                                   |                          |               |

**MJ**  
McFARLAND - JOHNSON, INC.

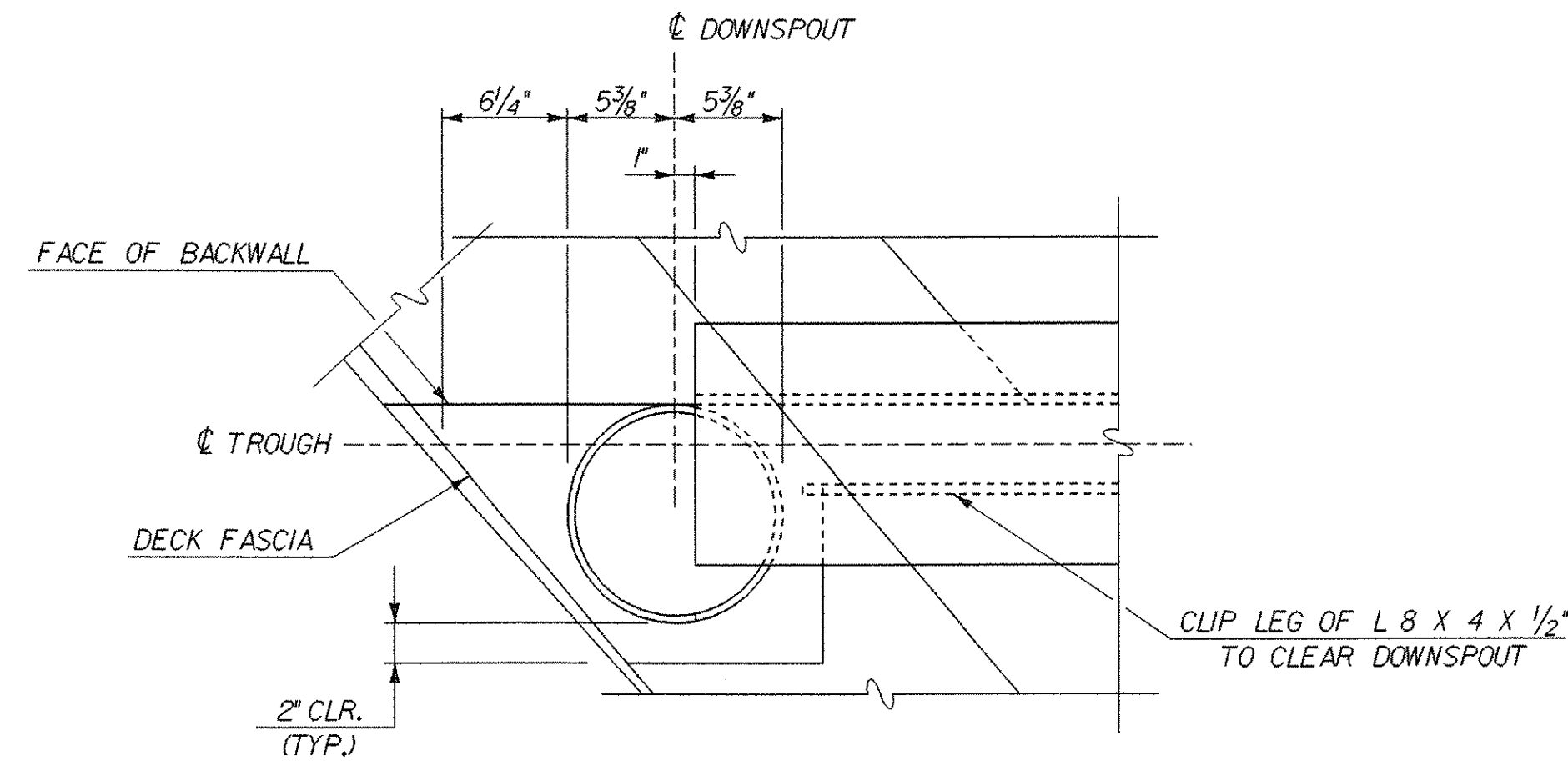




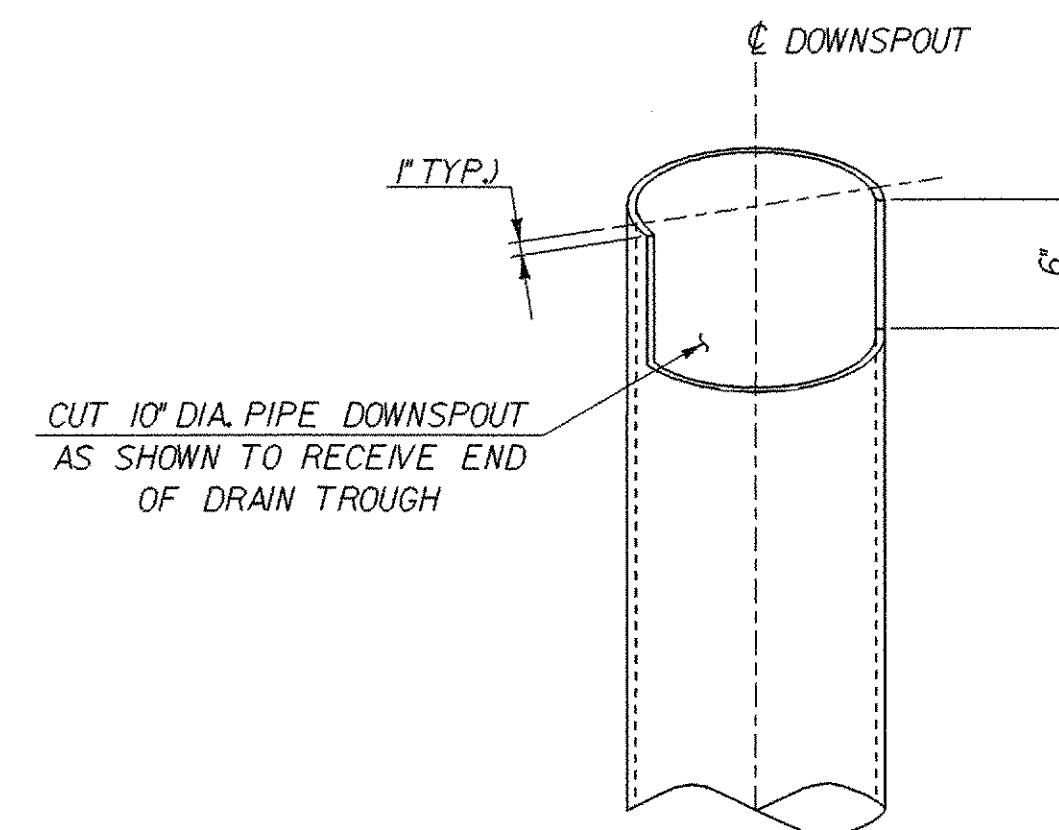
**DOWNSPOUT ELEVATION**  
SCALE: 3/4" = 1'-0"  
(PERPENDICULAR TO CENTERLINE TROUGH)



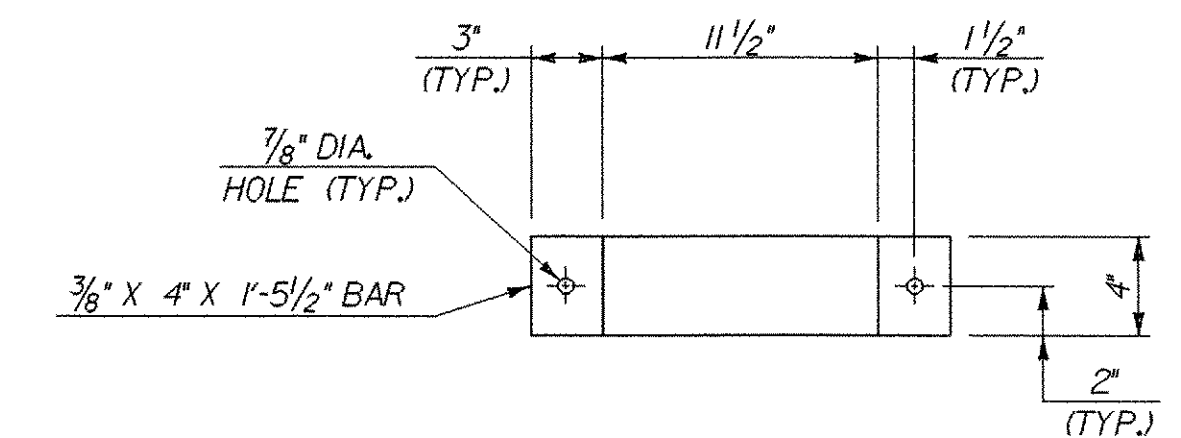
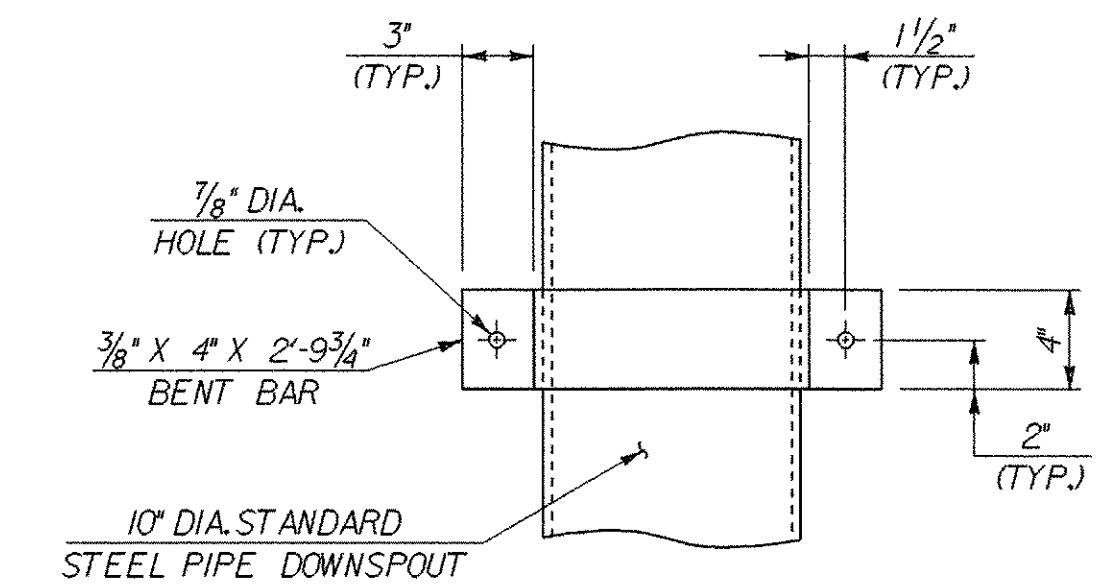
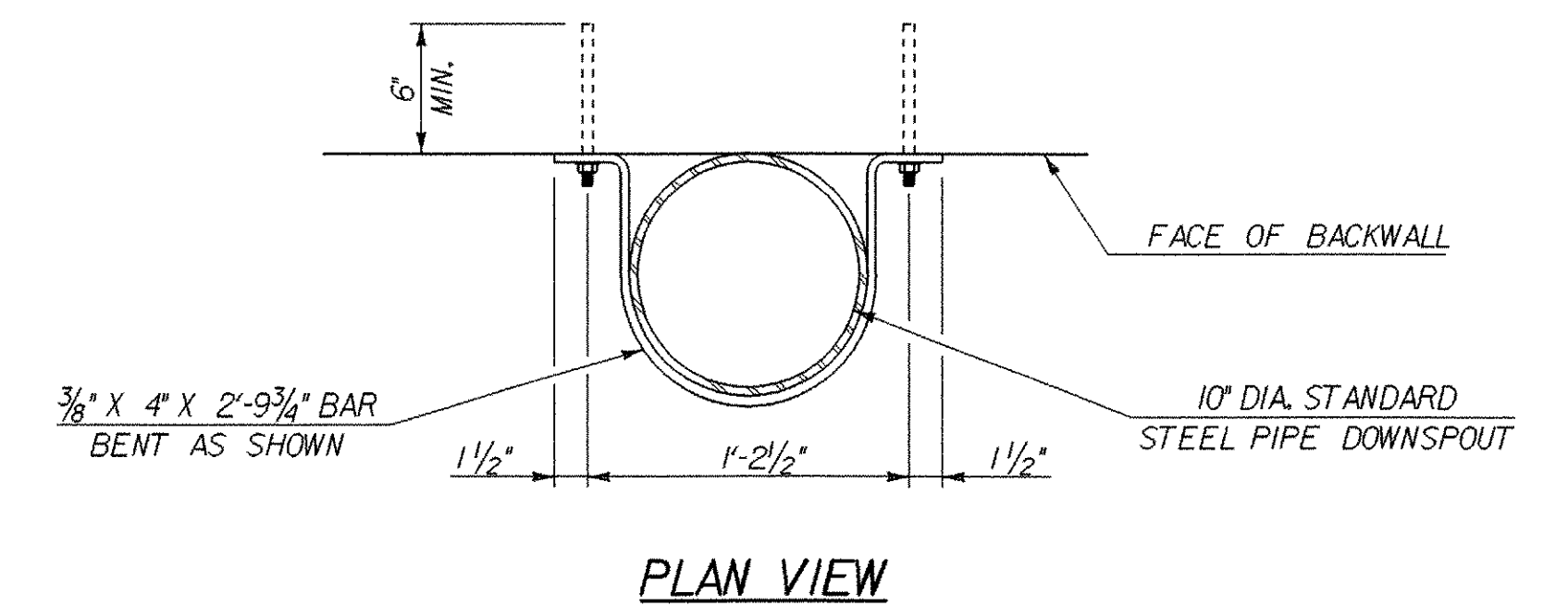
**DOWNSPOUT FABRICATION DETAIL**  
SCALE: 3/4" = 1'-0"



**PLAN VIEW OF DECK BOXOUT FOR DOWNSPOUT**  
SCALE: 1 1/2" = 1'-0"



**DOWNSPOUT CUTOUT FOR TROUGH**  
SCALE: 1 1/2" = 1'-0"



**DETAILS FOR ATTACHING DOWNSPOUT TO ABUTMENT**  
SCALE: 1 1/2" = 1'-0"

### DOWNSPOUT NOTES

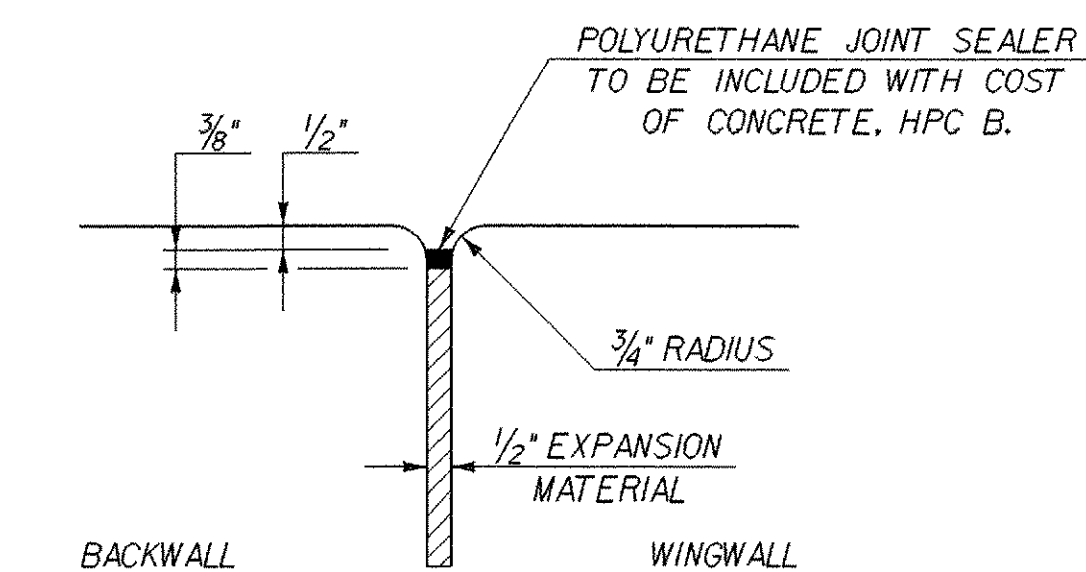
- HOLLOW STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A 501 OR A 53, TYPE S, GRADE B.
- ALL PLATES, BARS AND ANGLES SHALL CONFORM TO AASHTO M 270, GRADE 36.
- DOWNSPOUTS AND BRACKETS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123 AFTER FABRICATION.
- ALL BOLTS AND RELATED HARDWARE SHALL BE ASTM A 307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153 (AASHTO M 232).
- ANY PLACE WHERE THE GALVANIZING HAS BEEN REMOVED FROM THE DOWNSPOUT OR BRACKETS, BY CUTTING, BURNING, WELDING, PLACING OR ANY OTHER MEANS, SHALL BE REPAIRED AS PER SUPPLEMENTAL SPECIFICATION 513.06(f).
- PAYMENT FOR ALL MATERIALS AND LABOR RELATED TO THE DOWNSPOUT ARE TO BE SUBSIDIARY TO THE ITEM 516.10, "BRIDGE EXPANSION JOINT."

**MJ**  
MCFARLAND - JOHNSON, INC.

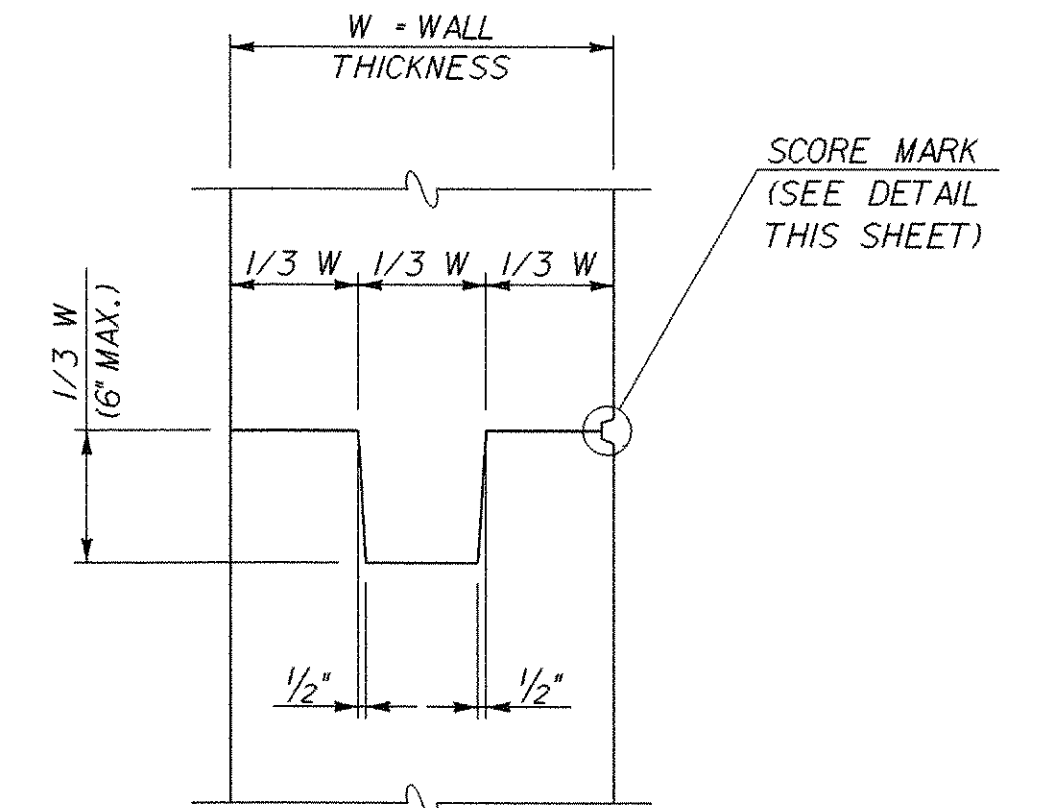
### STATE OF VERMONT AGENCY OF TRANSPORTATION

|                                |                                 |                          |               |
|--------------------------------|---------------------------------|--------------------------|---------------|
| Town Of                        | CHESTER                         | Bridge No.               | 12            |
| Highway No.                    | VT 103                          | Log Sta.                 |               |
|                                |                                 | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER |                                 |                          |               |
| DOWNSPOUT DETAILS              |                                 |                          |               |
| Designed By                    | S. DELIA                        | Drawn By                 | S. DELIA      |
| Checked By                     | J. GRANT                        | Bridge Design Supervisor | M. ZYDEL      |
| Date                           | 10/00                           | Date                     |               |
| PROJECT                        | CHESTER                         | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                   | MA87bl3AStructures\zbl34c\m.dgn | zbl34c\m.d               |               |
| Bridge Sheet No.               | BR114                           | Sheet                    | 58 of 79      |
| PLOTTED                        | 28-MAY-2003                     |                          |               |

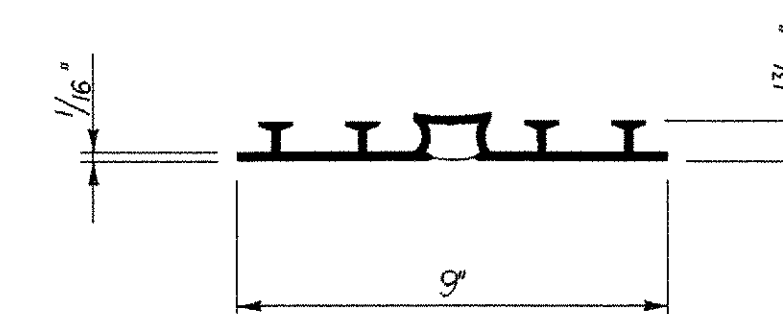




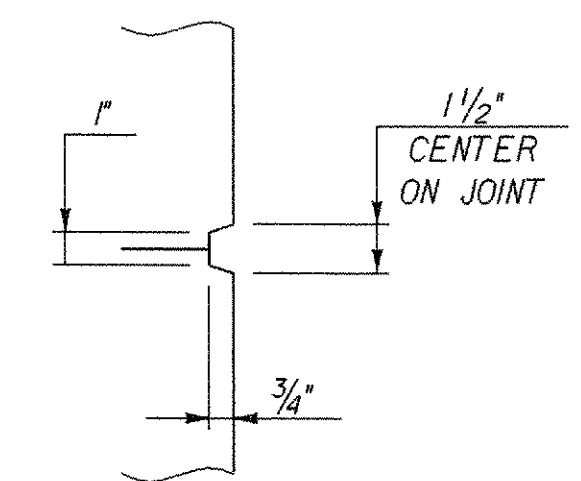
JOINT BETWEEN  
BACKWALL AND WINGWALL  
N.T.S.



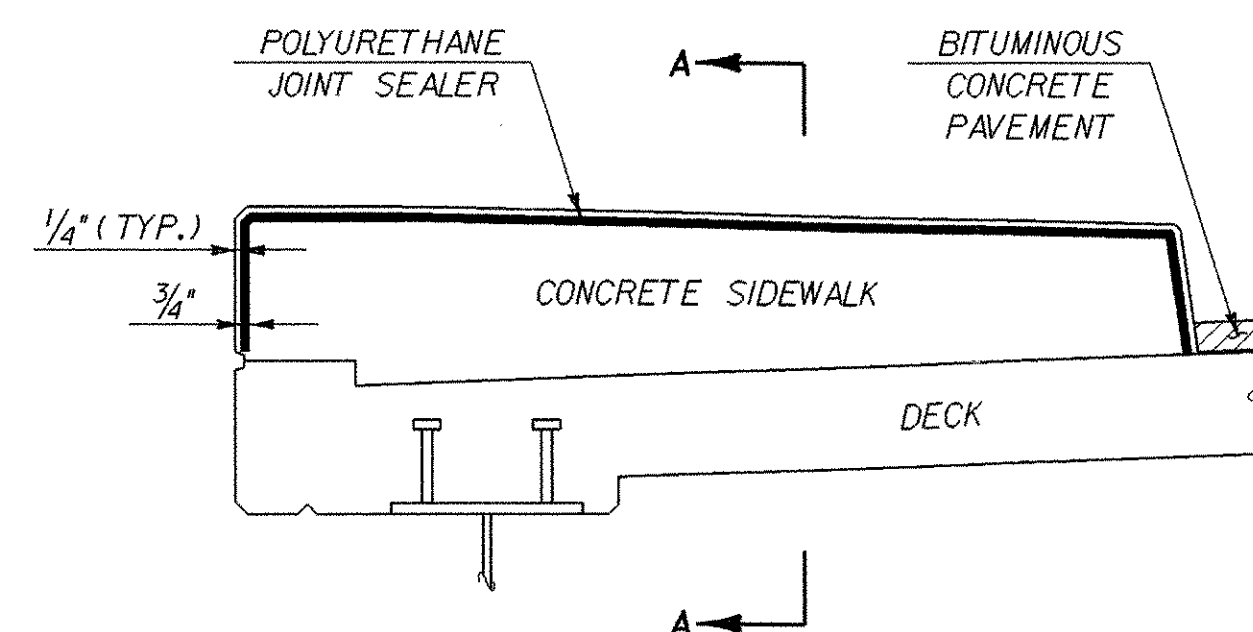
TYPICAL CONCRETE CONSTRUCTION JOINT  
SCALE: 1" = 1'-0"



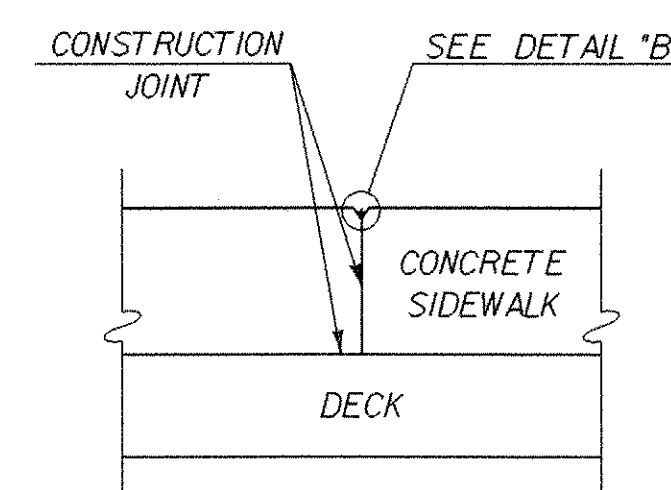
P.V.C. WATERSTOP FOR  
EXPANSION JOINTS  
SCALE: 3" = 1'-0"



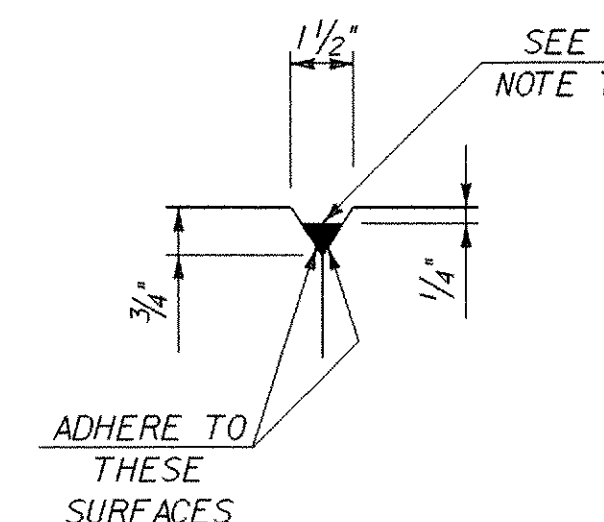
SCORE MARK DETAIL  
SCALE: 2" = 1'-0"



SECTION A-A

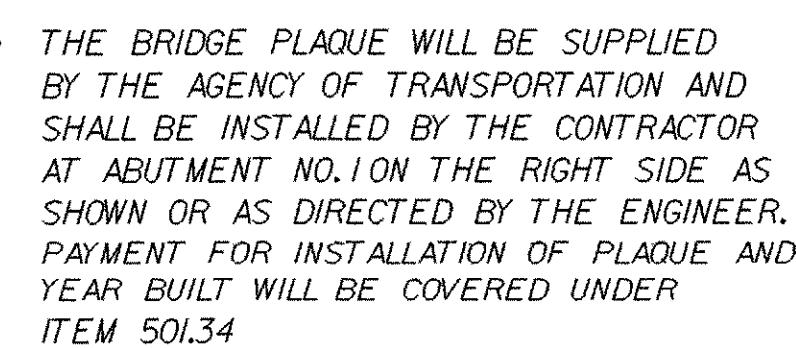


DETAIL 'B'



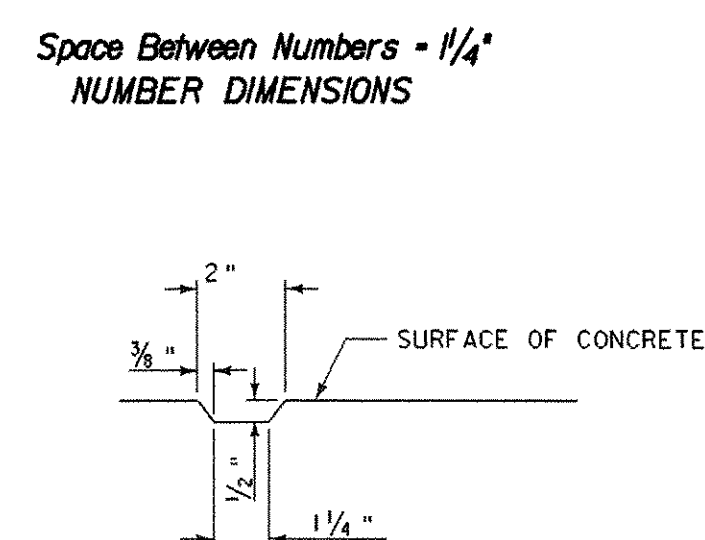
NOTES

1. THE COSTS FOR P.V.C.WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.
2. CONSTRUCTION JOINTS THROUGH CONCRETE SIDEWALK SHALL BE SPACED A MAXIMUM OF 20 FEET CENTER TO CENTER. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
3. LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE SIDEWALK CONSTRUCTION JOINTS.
4. POLYURETHANE MEMBRANE AND BLAST CLEANING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SHEET MEMBRANE WATERPROOFING (MOD-TORCH APPLIED).
5. SHEET MEMBRANE WATERPROOFING SHALL EXTEND TO FACE OF SIDEWALK AS SHOWN THIS SHEET.
6. CONCRETE IN SIDEWALK SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.
7. POLYURETHANE JOINT SEALER, PER SUBSECTION 524.06(c), COLOR TO MATCH CONCRETE. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE.



LOCATION OF YEAR BUILT  
AND BRIDGE PLAQUE

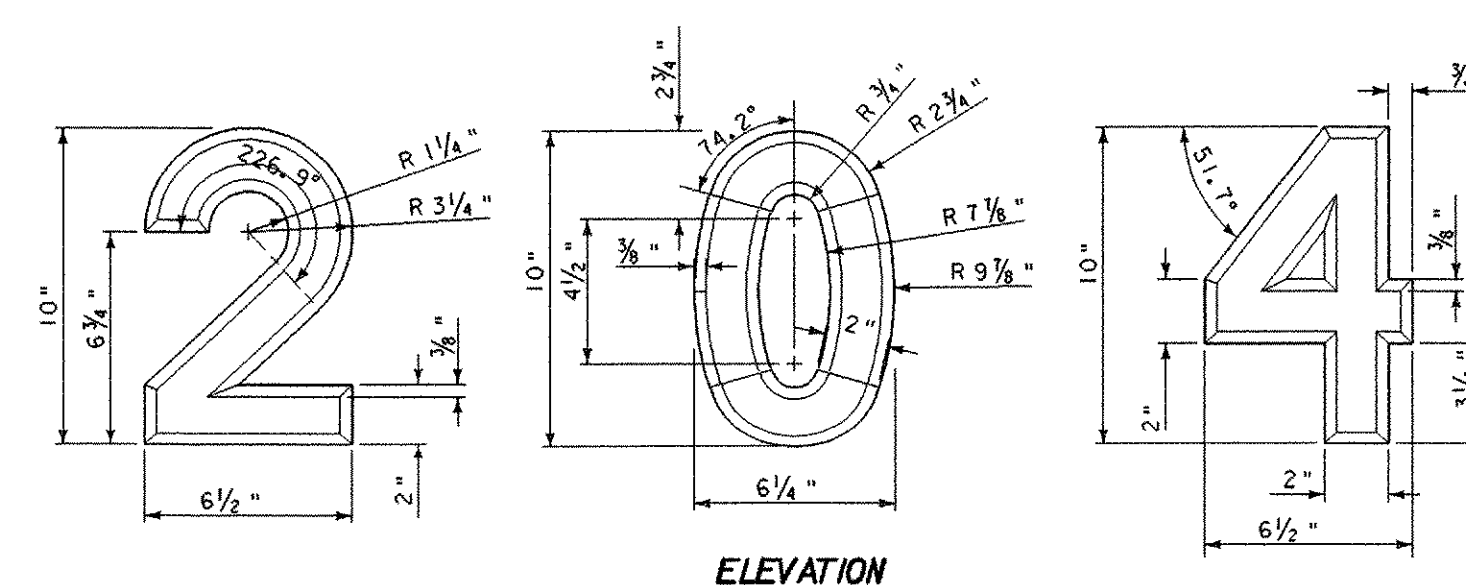
CONCRETE SIDEWALK CONSTRUCTION JOINT  
NOT TO SCALE



TYPICAL CROSS SECTION  
OF NUMBER

---

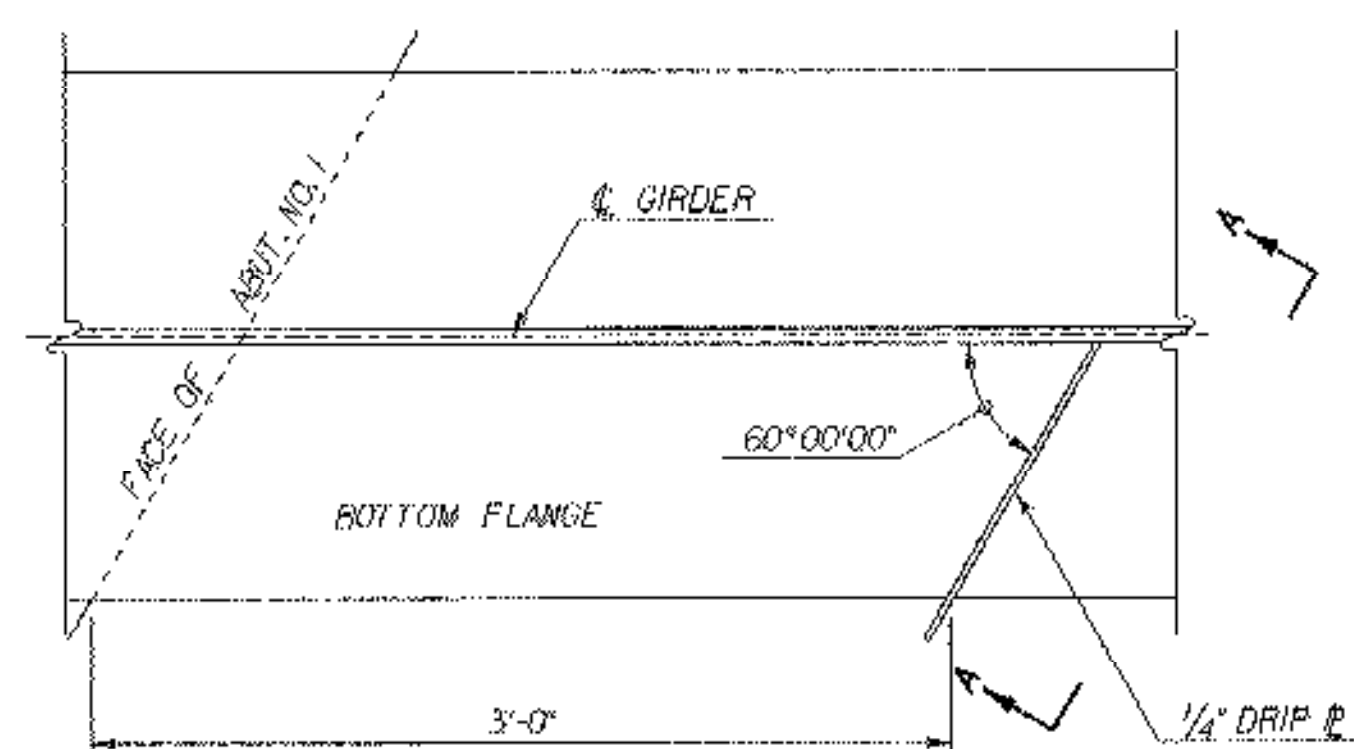
N.T.S.



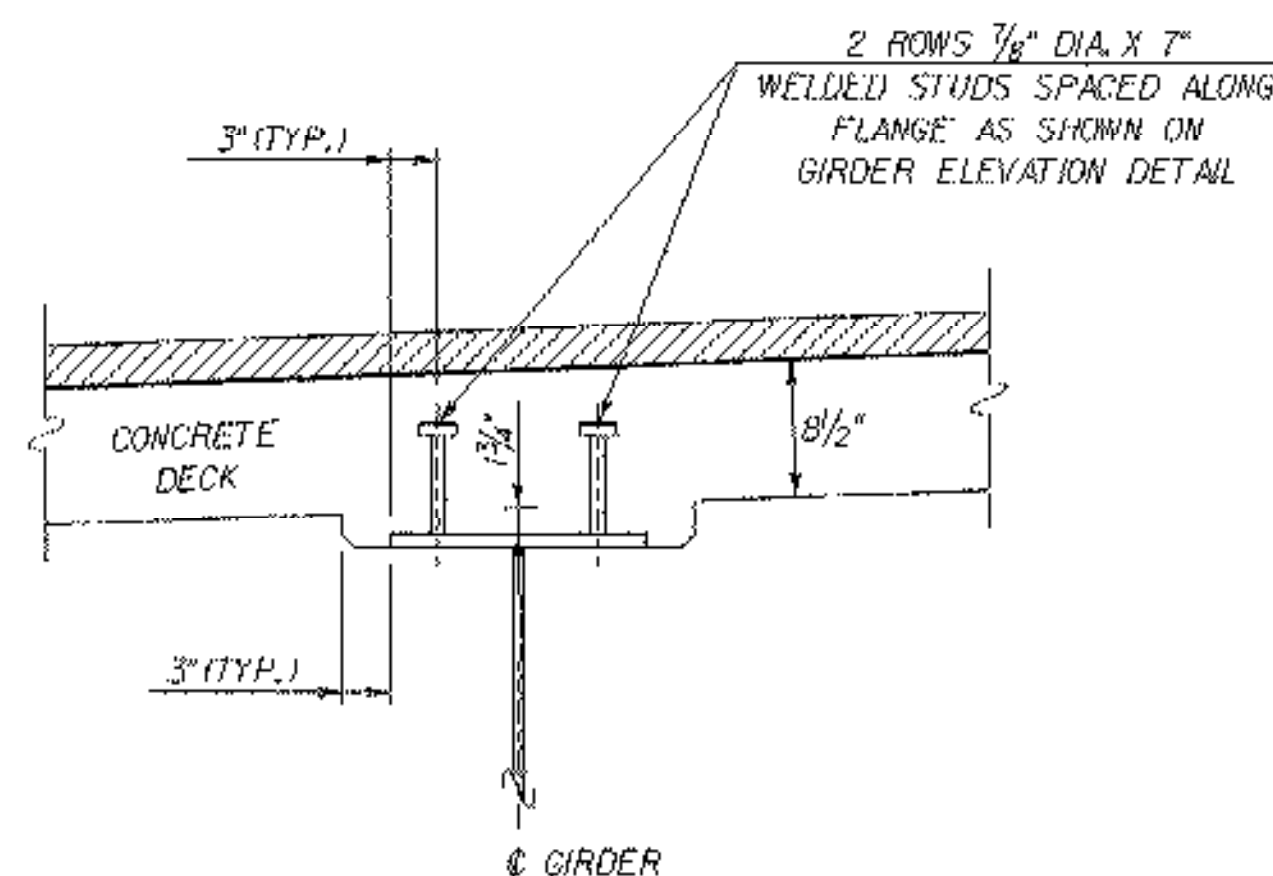
INCISED NUMBERS DETAIL  
N.T.S.

|                                              |                                 |                                           |
|----------------------------------------------|---------------------------------|-------------------------------------------|
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION |                                 |                                           |
| Town Of                                      | CHESTER                         | Bridge No. 12                             |
| Highway No.                                  | VT 103                          | Log Sta.                                  |
|                                              |                                 | Surv. Sta.                                |
| VT 103 OVER THE WILLIAMS RIVER               |                                 |                                           |
| MISCELLANEOUS DETAILS SHEET - I              |                                 |                                           |
| Designed By                                  | LLWIXSON                        | Drawn By P.DUSTIN                         |
| Checked By                                   | Date<br>T. GRANT 10/00          | Bridge Design Supervisor<br>M. ZYDEL Date |
| PROJECT                                      | CHESTER                         | PROJECT NO.<br>BRF 025-K(35)              |
| I.G.C. Info.                                 | MA87B134Structuresvzb134cml.dgn | zbi34cml.j                                |
| Bridge Sheet No.                             | BR115                           | Sheet 59 of 79                            |
| PLOTTED 28-MAY-2003                          |                                 |                                           |

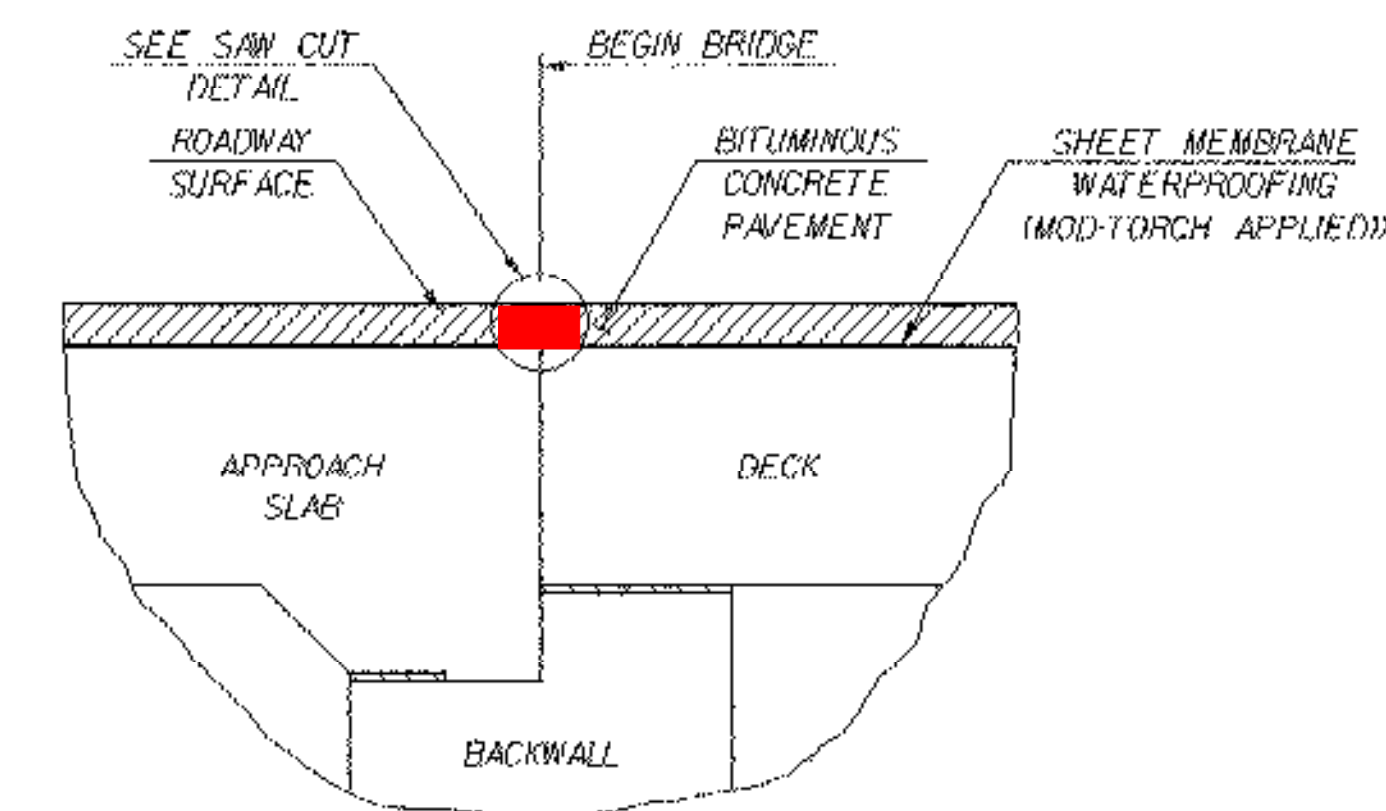




**DRIP PLATE PLAN**  
SCALE: 1/2" = 1'-0"

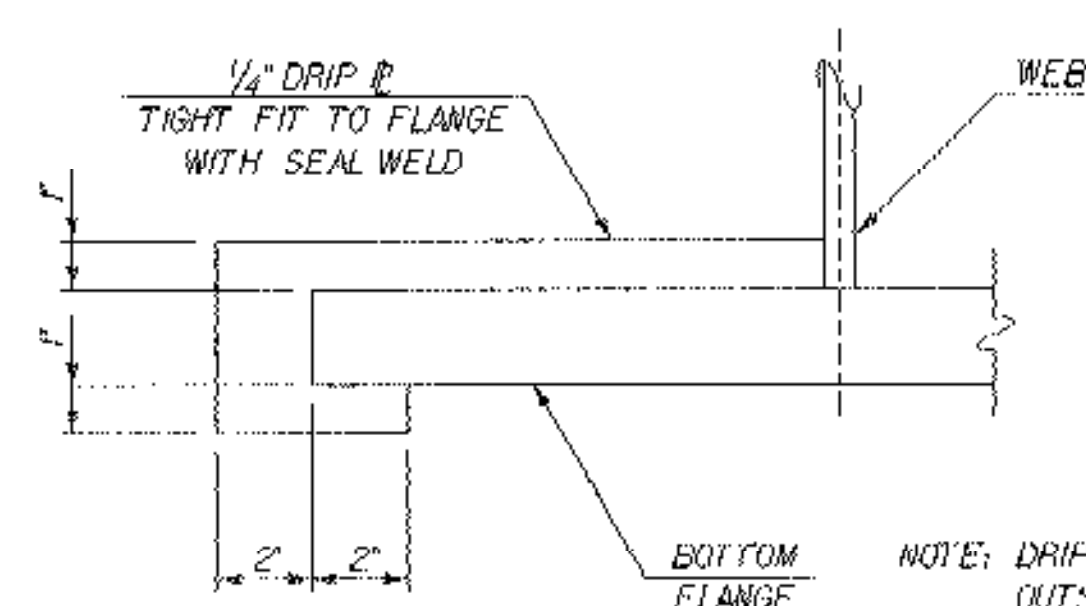


**BEAM HAUNCH AND SHEAR CONNECTOR DETAIL**  
SCALE: 1" = 1'-0"



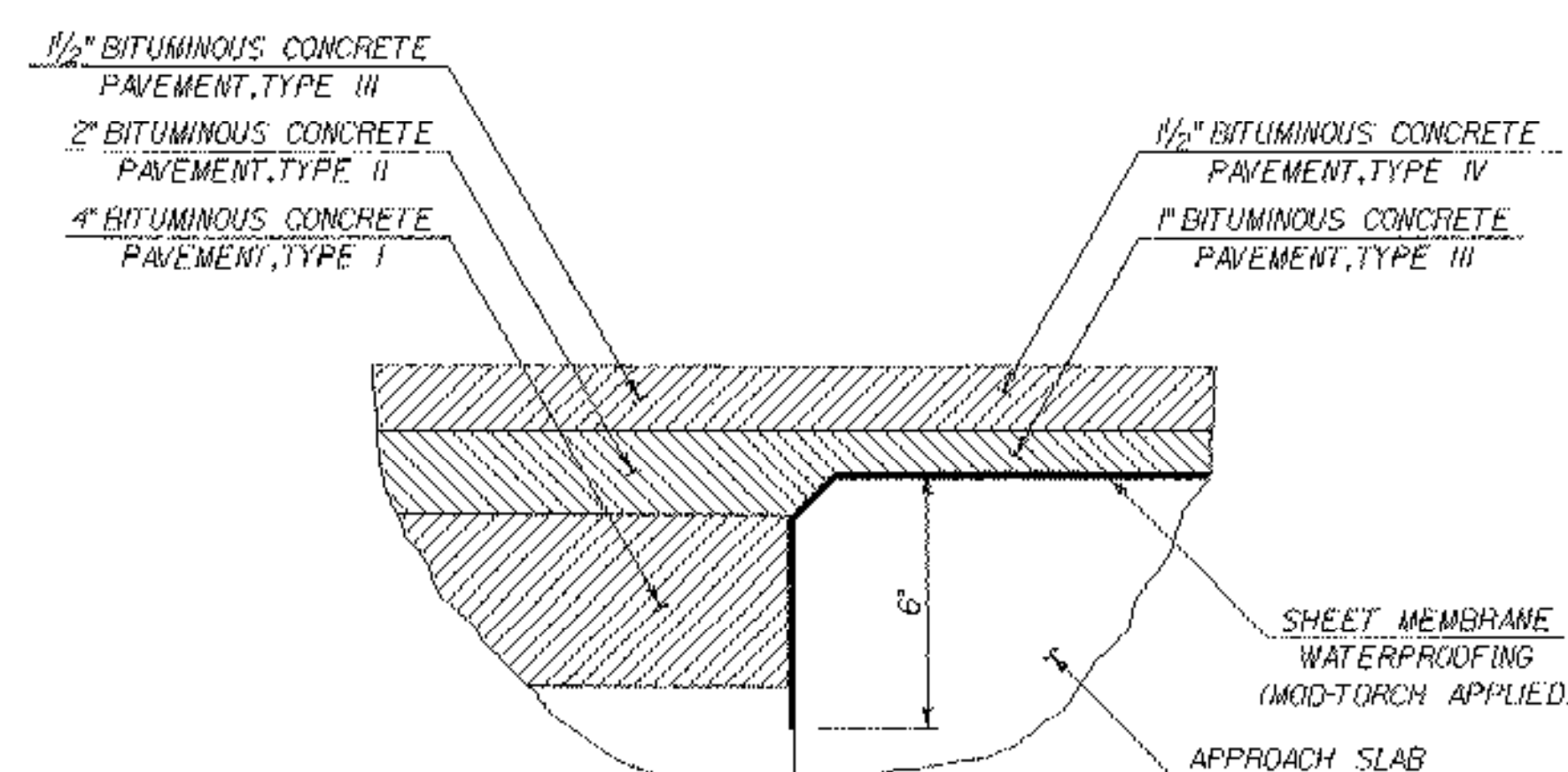
**DETAIL FOR JOINT IN PAVEMENT**  
SCALE: 1" = 1'-0"

ASPHALTIC PLUG JOINT SA/CO #1(II-10-04)

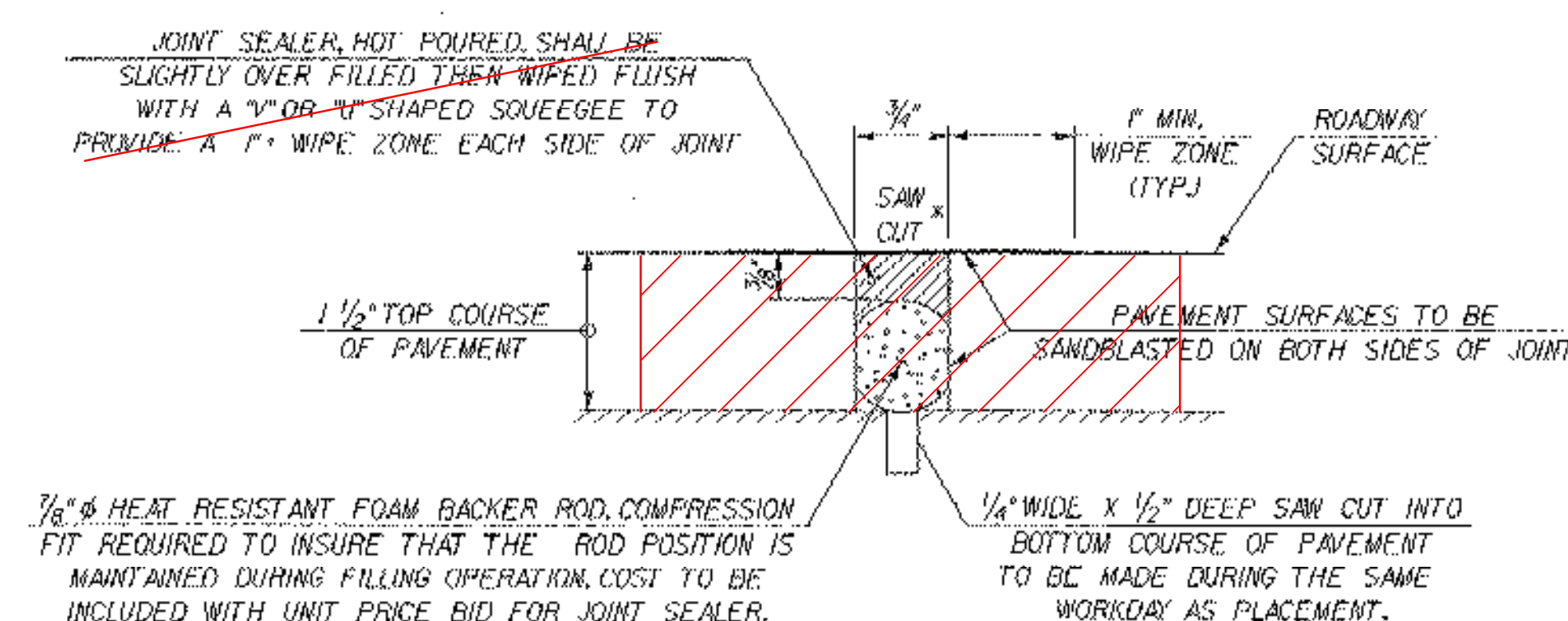


**DRIP PLATE SECTION A-A**  
SCALE: 3" = 1'-0"

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS. SEE FRAMING PLAN FOR LOCATION, BRIDGE SHEET BR108.

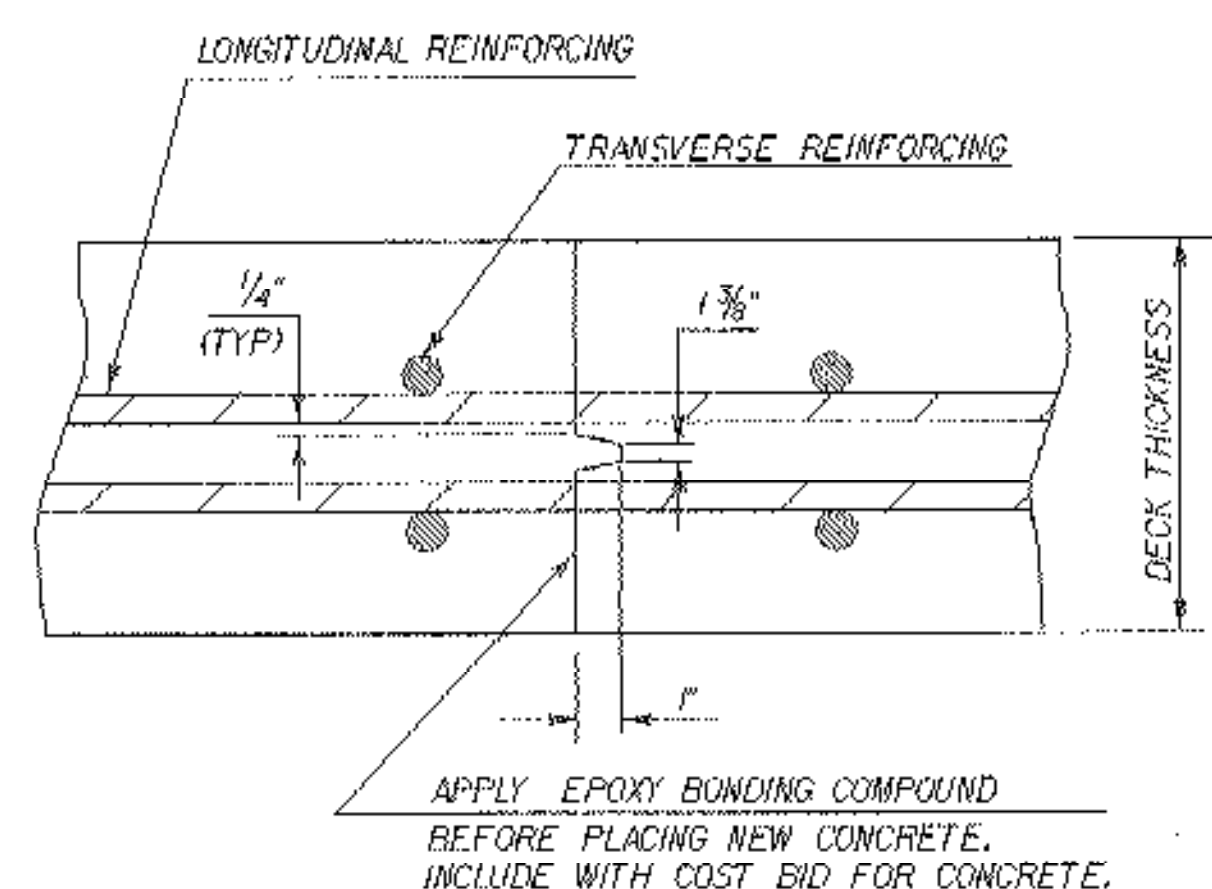


**SHEET MEMBRANE DETAIL AT END OF APPROACH SLAB**  
SCALE: 3" = 1'-0"

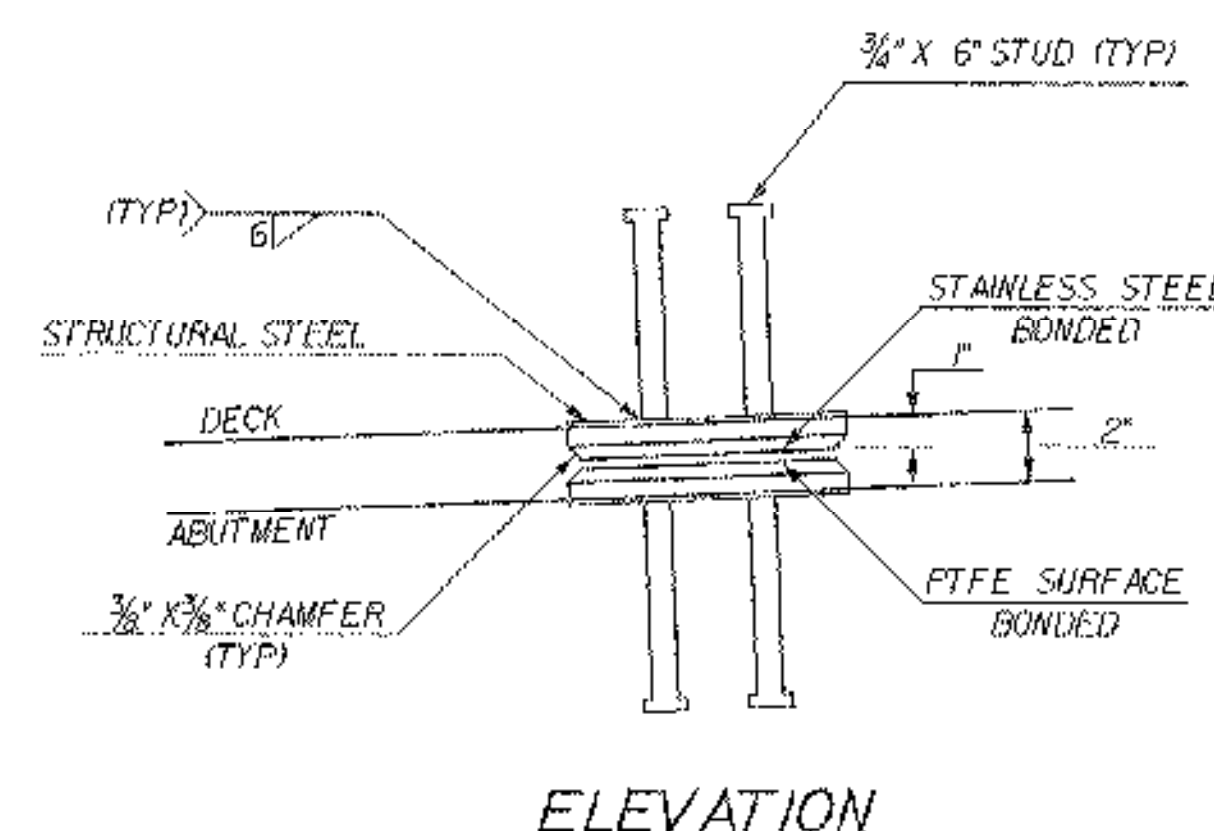


\* JOINT IS TO BE LOCATED ACCURATELY BY STRING Lining, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER. SEE VT SPECIFICATION 524 AND SPECIAL PROVISIONS.

**SAW CUT JOINT DETAIL**  
N.T.S.



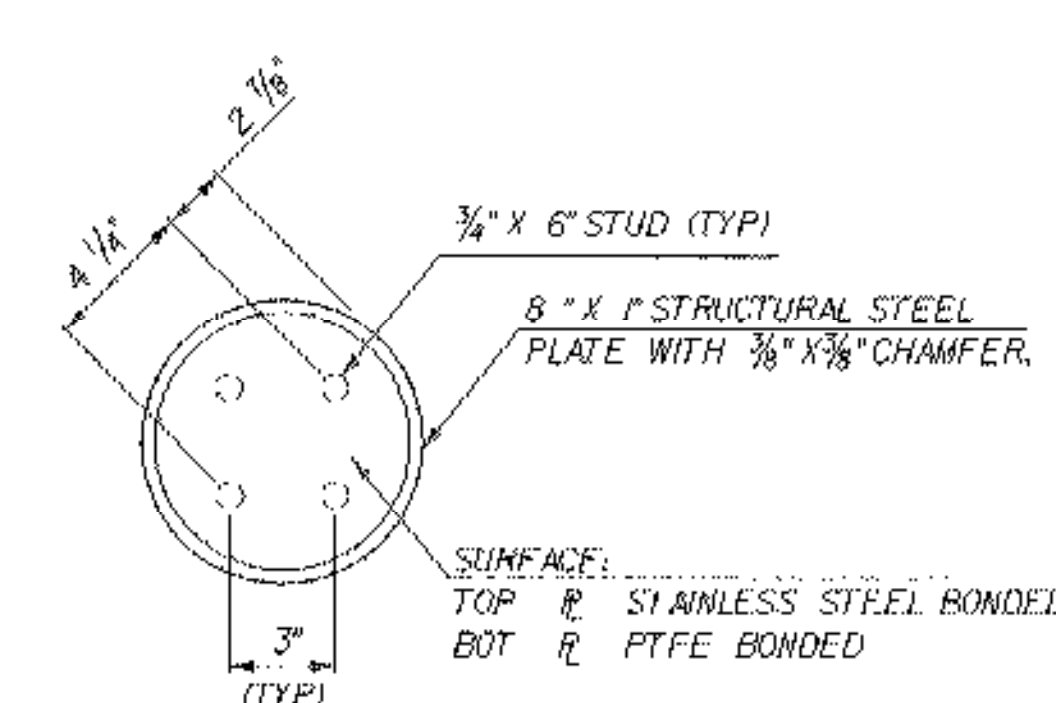
**TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS**  
N.T.S.



**ELEVATION**

SEE BEARING DETAIL SHEET 54 OF 79 FOR MORE INFORMATION

**DECK BEARING DEVICE DETAIL**  
N.T.S.



**PLAN**

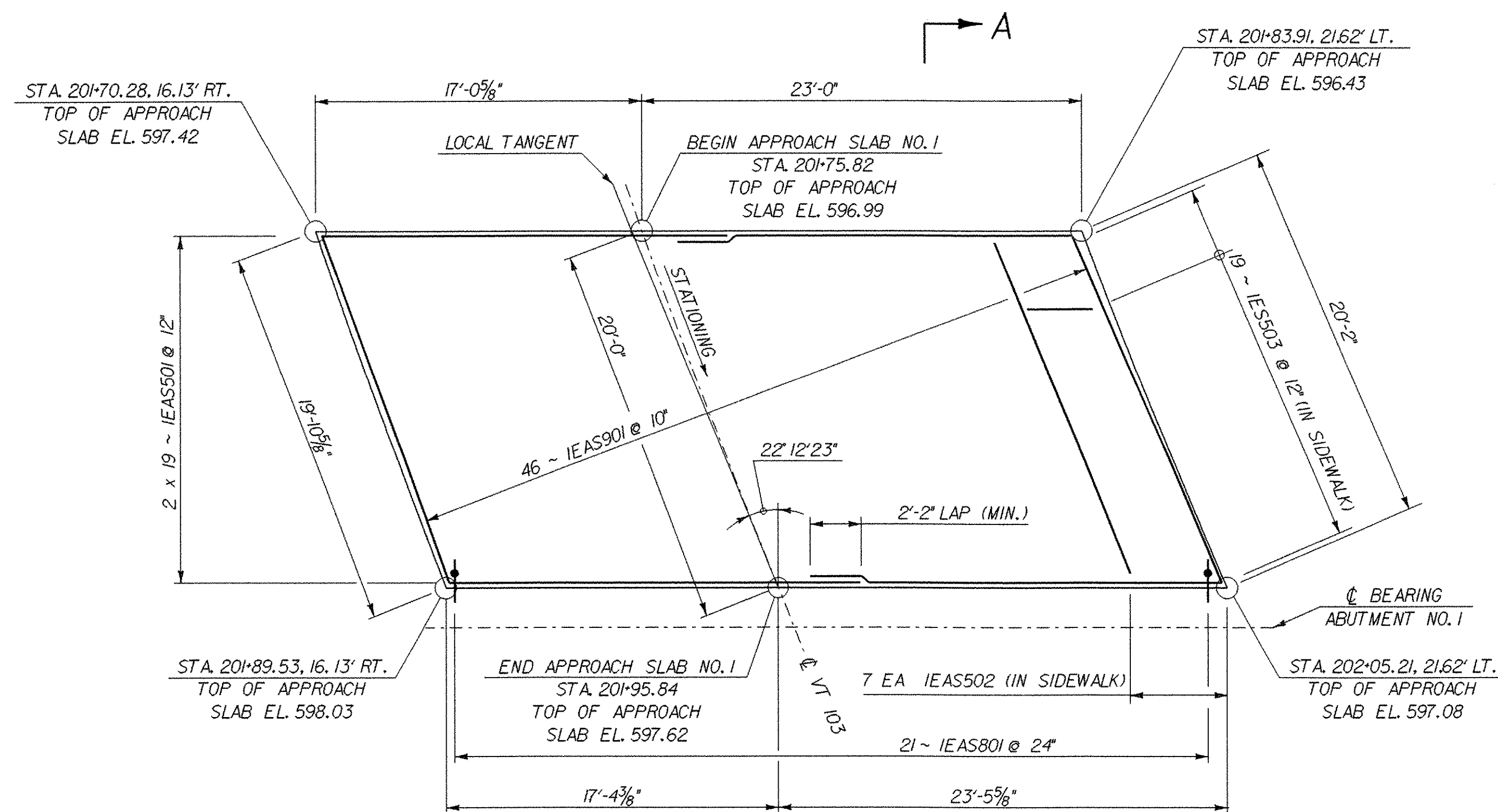
**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

|                                 |                                 |                          |               |
|---------------------------------|---------------------------------|--------------------------|---------------|
| Town of                         | CHESTER                         | Bridge No.               | 12            |
| Highway No.                     | VT 103                          | Log Sta.                 |               |
|                                 |                                 | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER  |                                 |                          |               |
| MISCELLANEOUS DETAILS SHEET - 2 |                                 |                          |               |
| Designed By                     | L. WIXSON                       | Drawn By                 | P. DUSTIN     |
| Checked By                      | T. GRANT                        | Date                     | 10/00         |
|                                 |                                 | Bridge Design Supervisor | M. ZYDEL      |
| PROJECT                         | CHESTER                         | PROJECT NO.              | BRF 025-1(35) |
| LG. C. Info.                    | 145871341Structures201340a2.dgn |                          | zbl340m21     |
| Bridge Sheet No.                | BR106                           | Sheet                    | 60 of 79      |

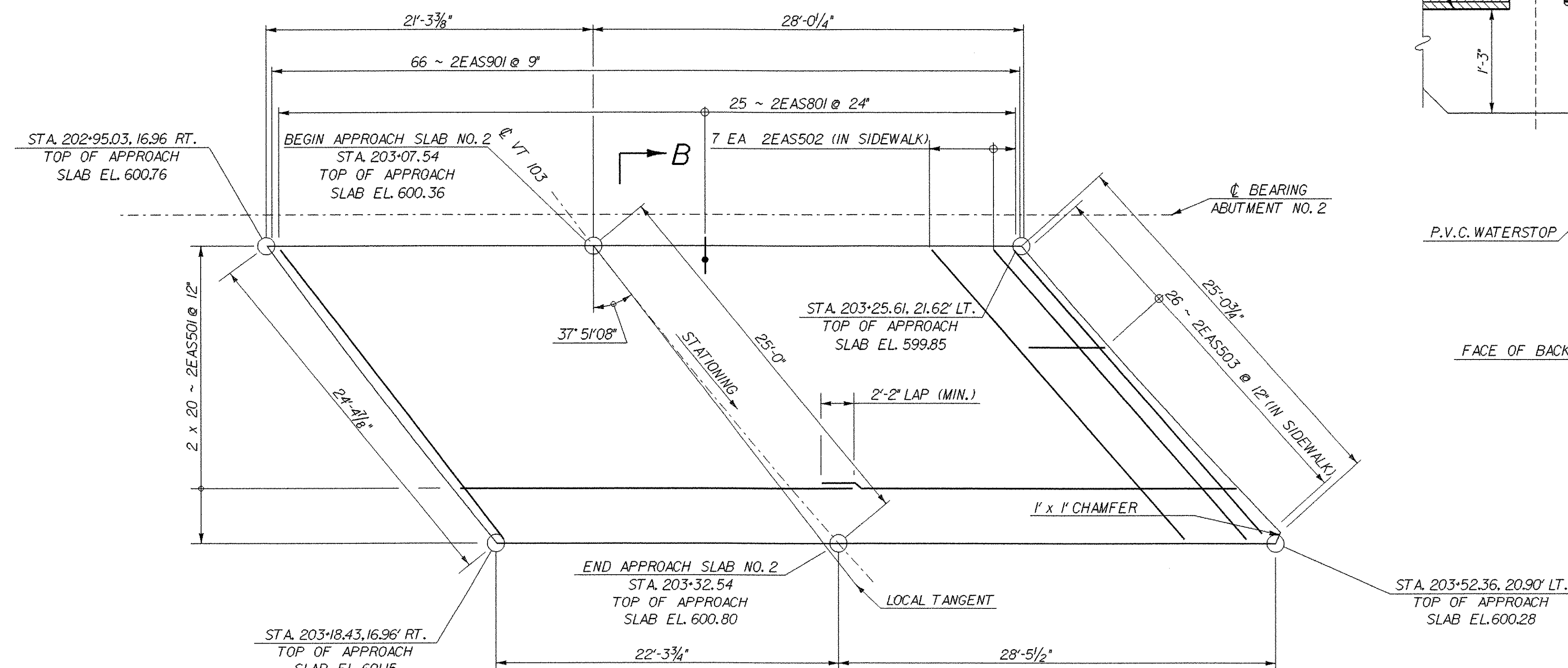
PLOTTED 28 MAY 2003

**MJP**  
MCFARLAND-JOHNSON, INC.

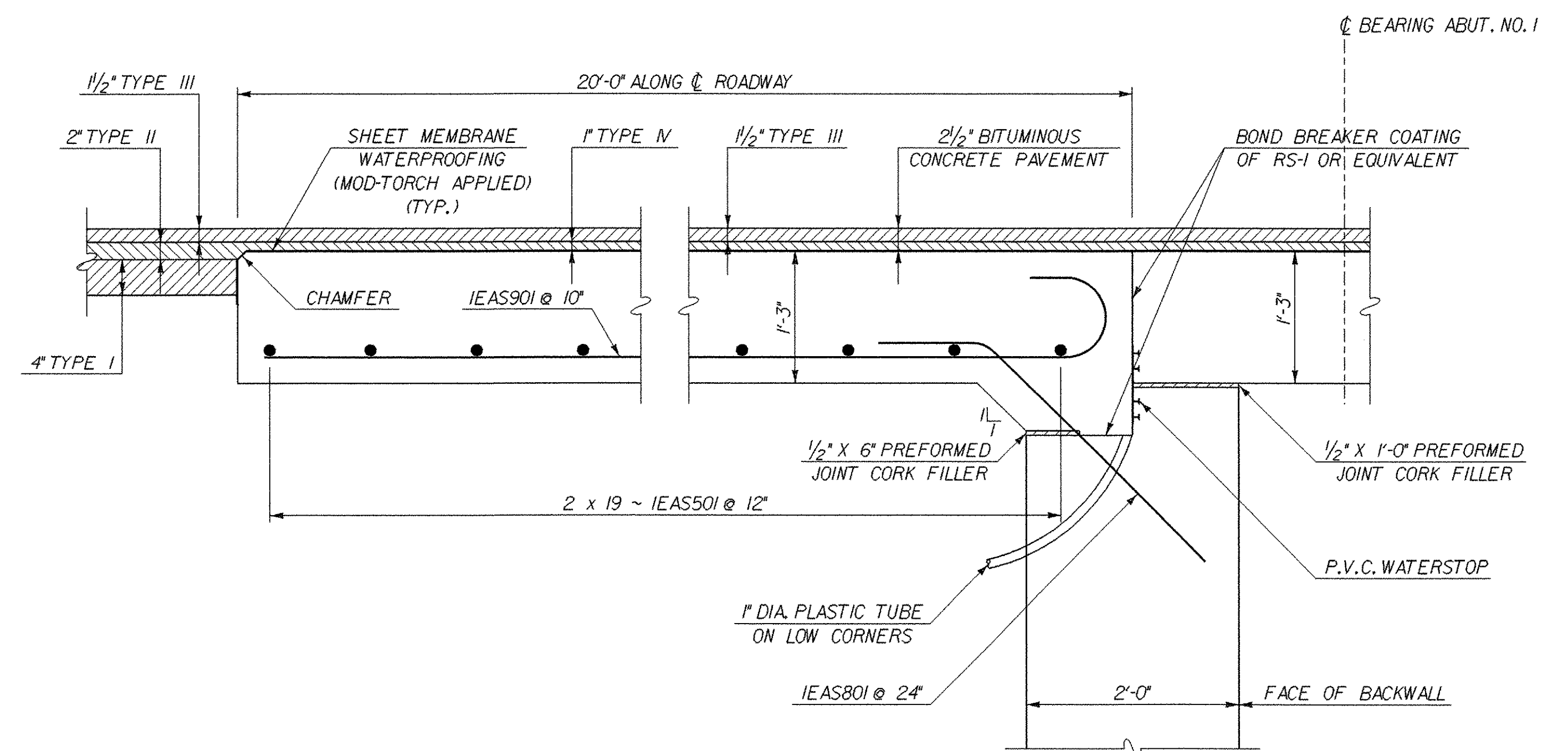




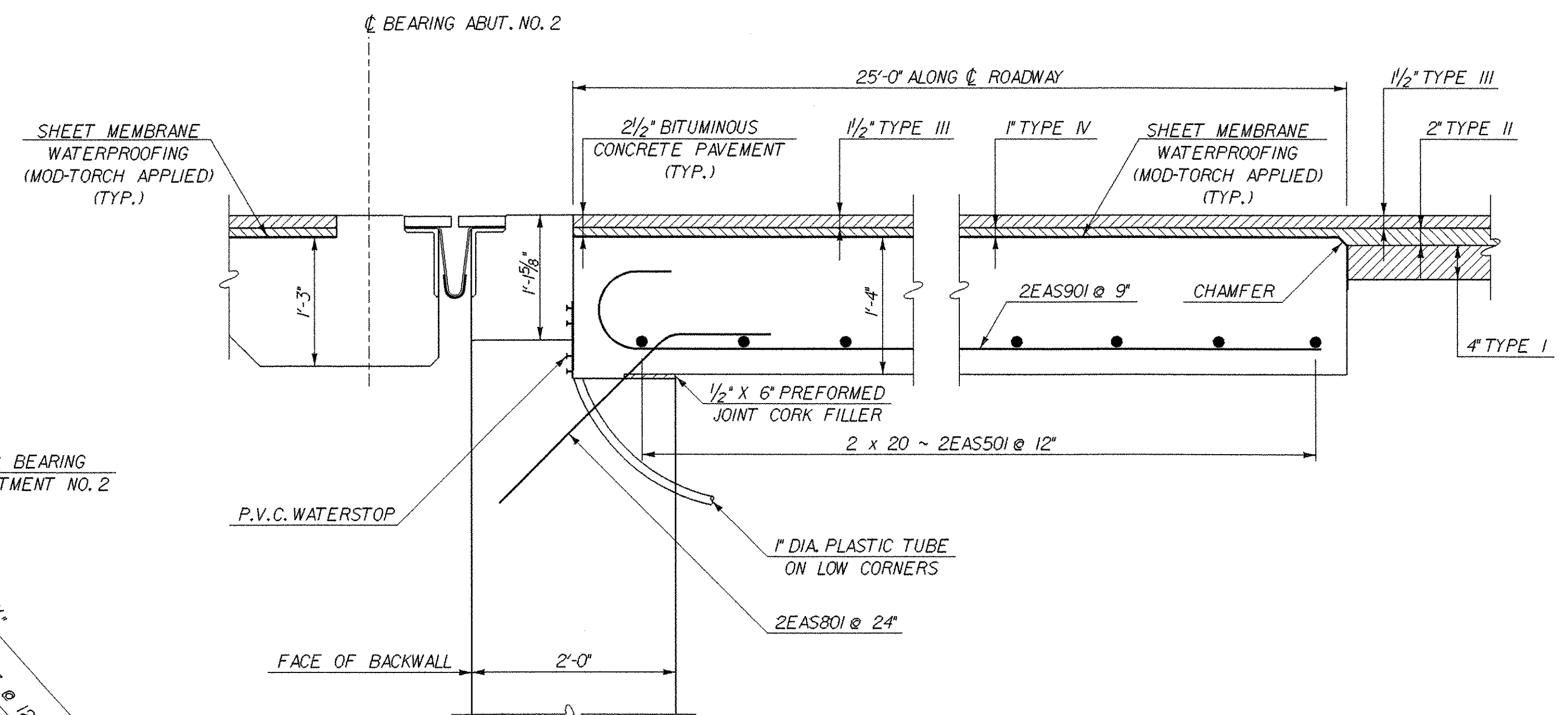
**APPROACH SLAB NO. 1 PLAN**  
SCALE: 3/16" = 1'-0"



**APPROACH SLAB NO. 2 PLAN**  
SCALE: 3/16" = 1'-0"



**SECTION A-A**  
SCALE: 1" = 1'-0"

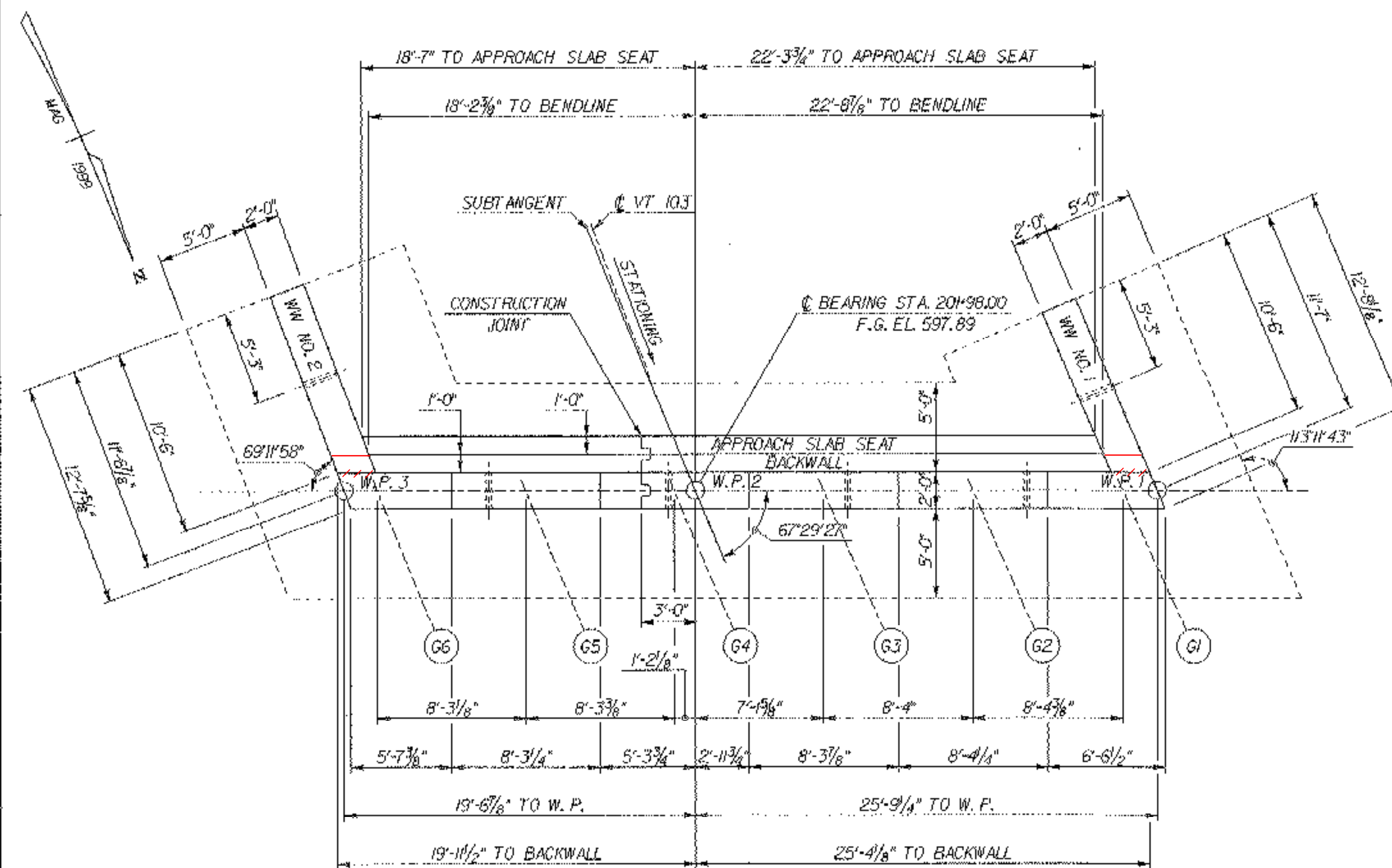


**SECTION B-B**  
SCALE: 1" = 1'-0"

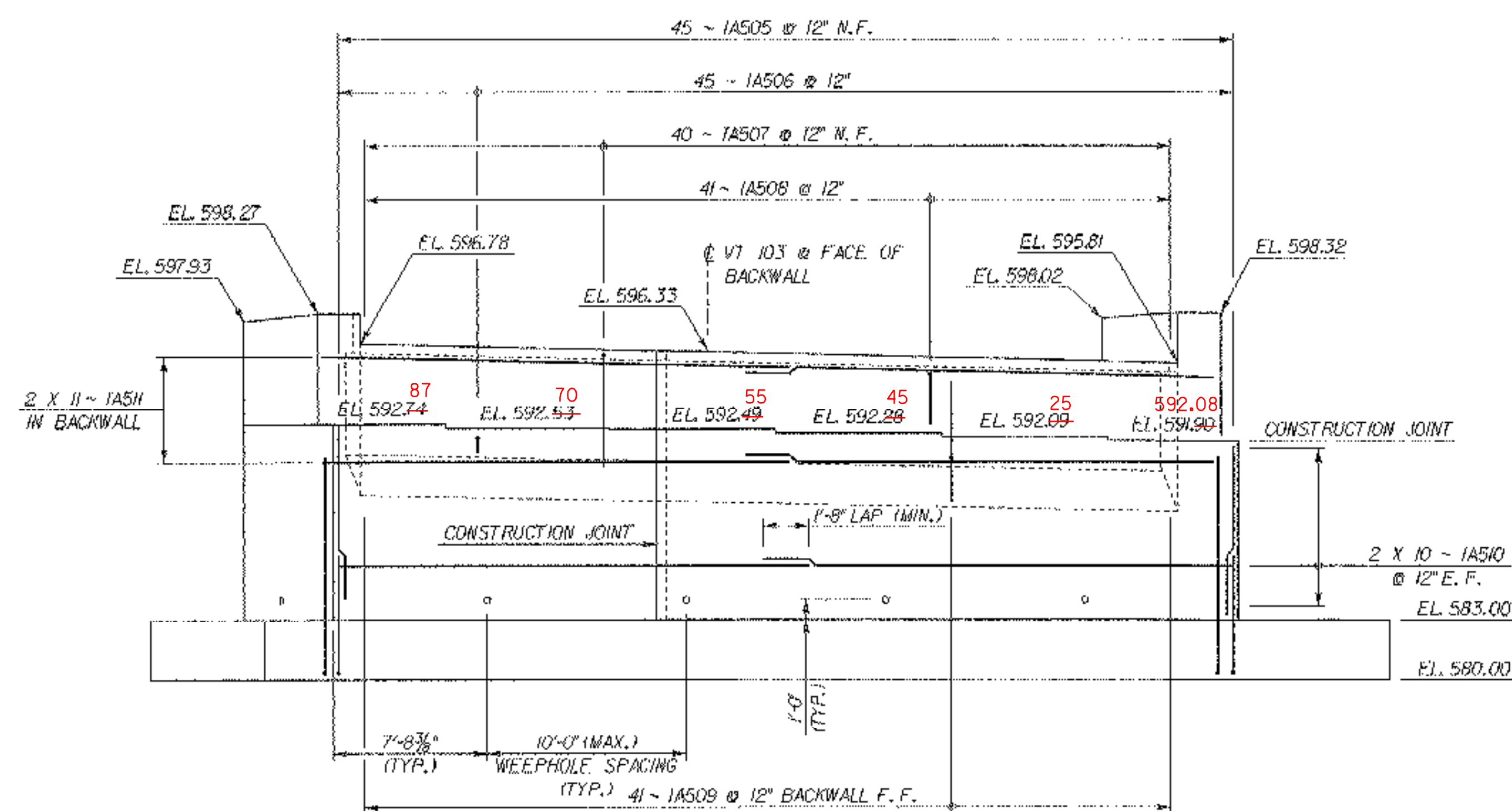
| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION |                                   |                          |               |
|----------------------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                                      | CHESTER                           | Bridge No.               | 12            |
| Highway No.                                  | VT 103                            | Log Sta.                 |               |
|                                              |                                   | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER               |                                   |                          |               |
| APPROACH SLAB DETAILS                        |                                   |                          |               |
| Designed By                                  | L.WIXSON                          | Drawn By                 | P.DUSTIN      |
| Checked By                                   | T. GRANT                          | Bridge Design Supervisor | M. ZYDEL      |
|                                              | 10/00                             | Date                     |               |
| PROJECT                                      | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                                 | M:\87b134\Structures\zbl340as.dgn | zbl340as.dgn             |               |
| Bridge Sheet No.                             | BR17                              | Sheet                    | 61 of 79      |
| PLOTTED 28-MAY-2003                          |                                   |                          |               |

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McFARLAND-JOHNSON, INC.

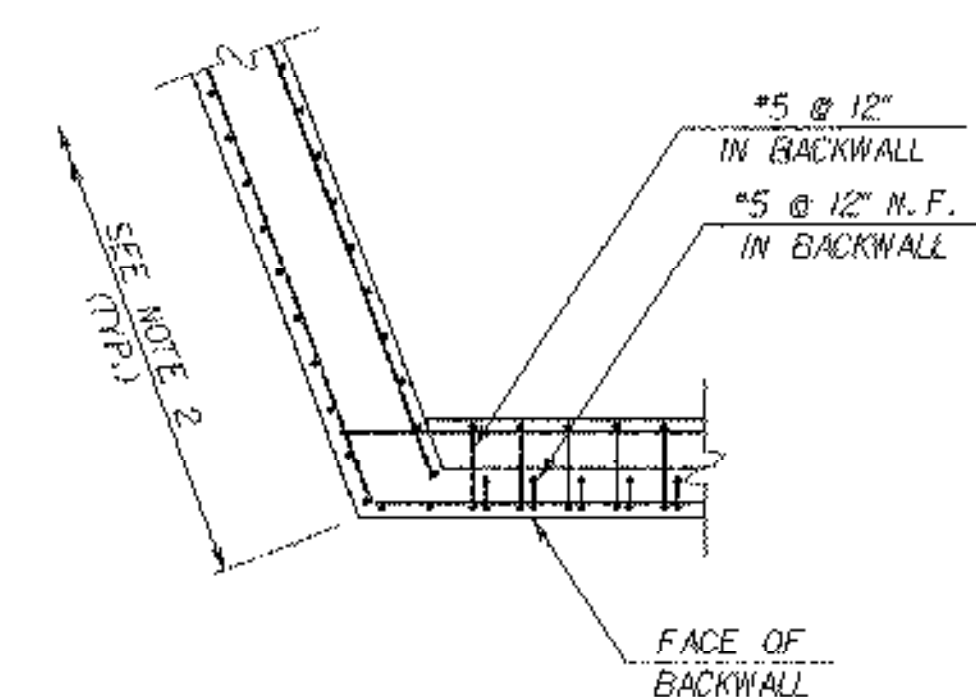




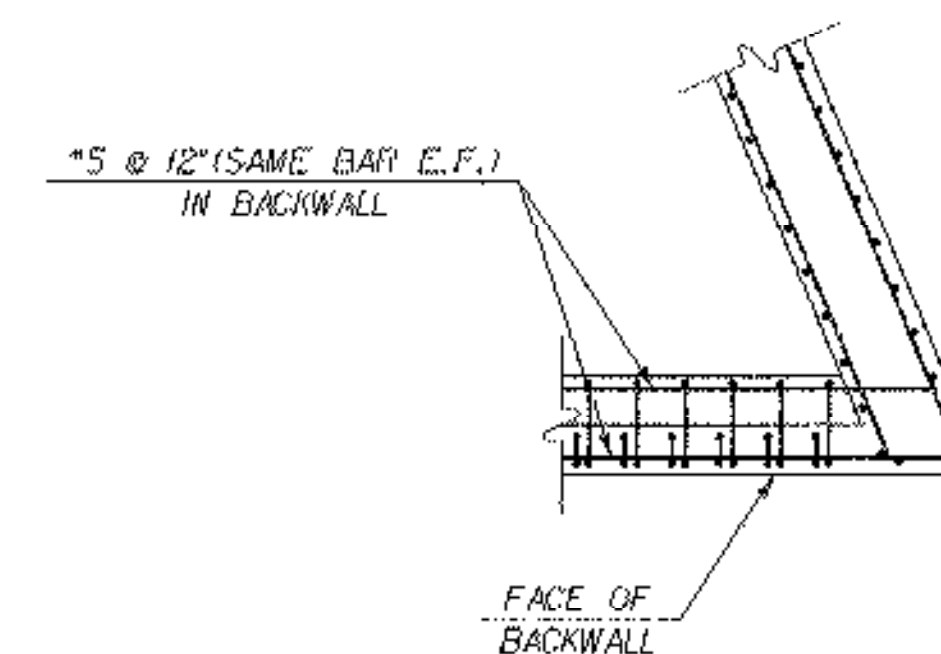
ABUTMENT NO. 1 PLAN  
SCALE: 3/16" = 1'-0"



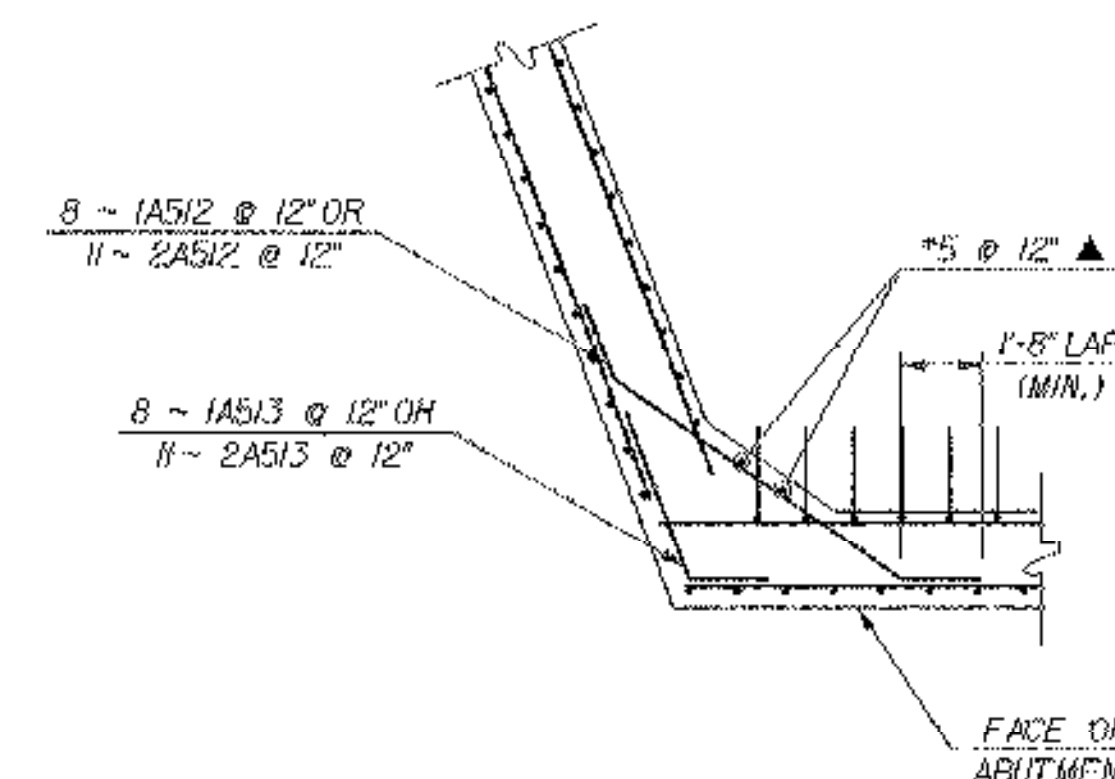
ABUTMENT NO. 1 ELEVATION  
SCALE: 3/16" = 1'-0"



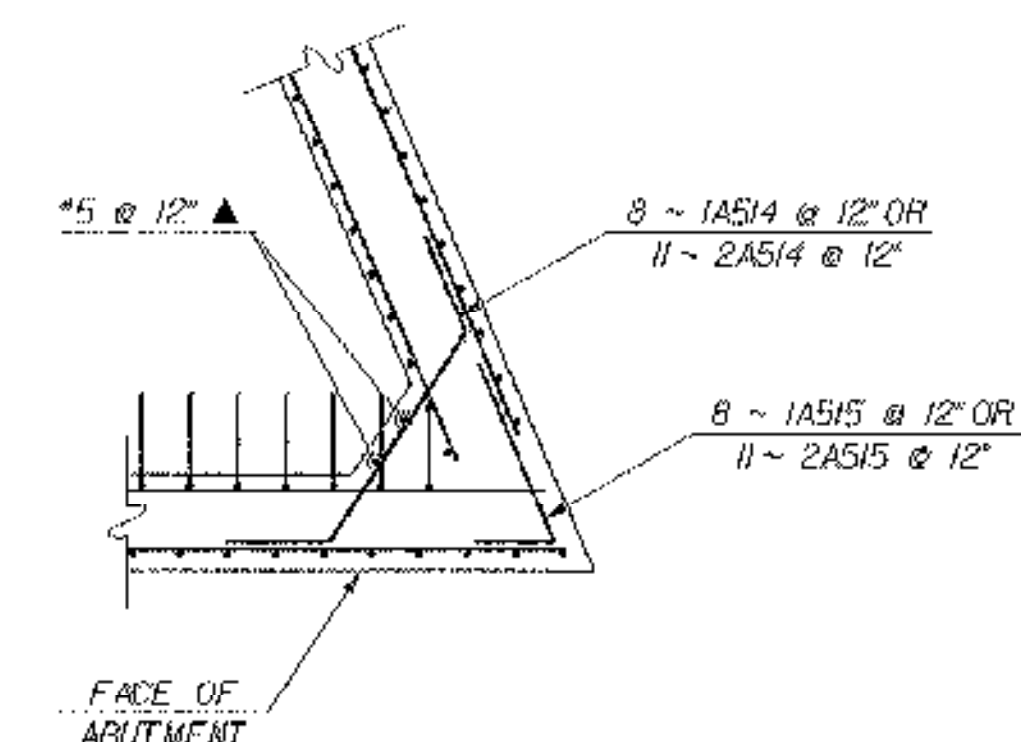
WINGWALL NO. 2 & 4  
CORNER DETAIL @ BACKWALL  
SCALE: 1/4" = 1'-0"



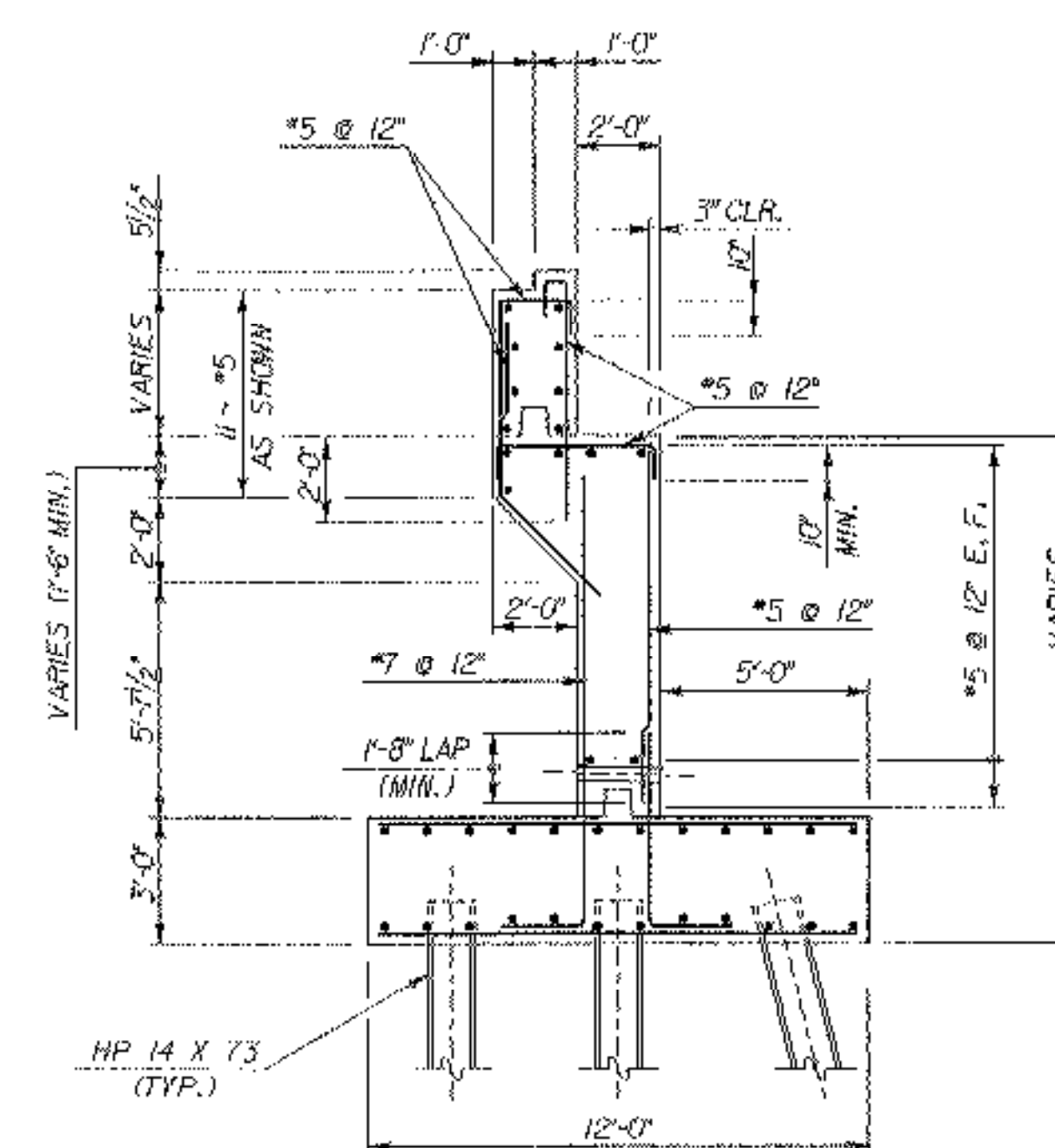
WINGWALL NO. 1 & 3  
CORNER DETAIL @ BACKWALL  
SCALE: 1/4" = 1'-0"



WINGWALL NO. 2 & 4  
CORNER DETAIL @ STEM  
SCALE: 1/4" = 1'-0"



WINGWALL NO. 1 & 3  
CORNER DETAIL @ STEM  
SCALE: 1/4" = 1'-0"



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

### LEGEND

N.F. - NEAR FACE  
F.F. - FAR FACE  
E.F. - EACH FACE  
▲ - CUT TO FIT IN FIELD

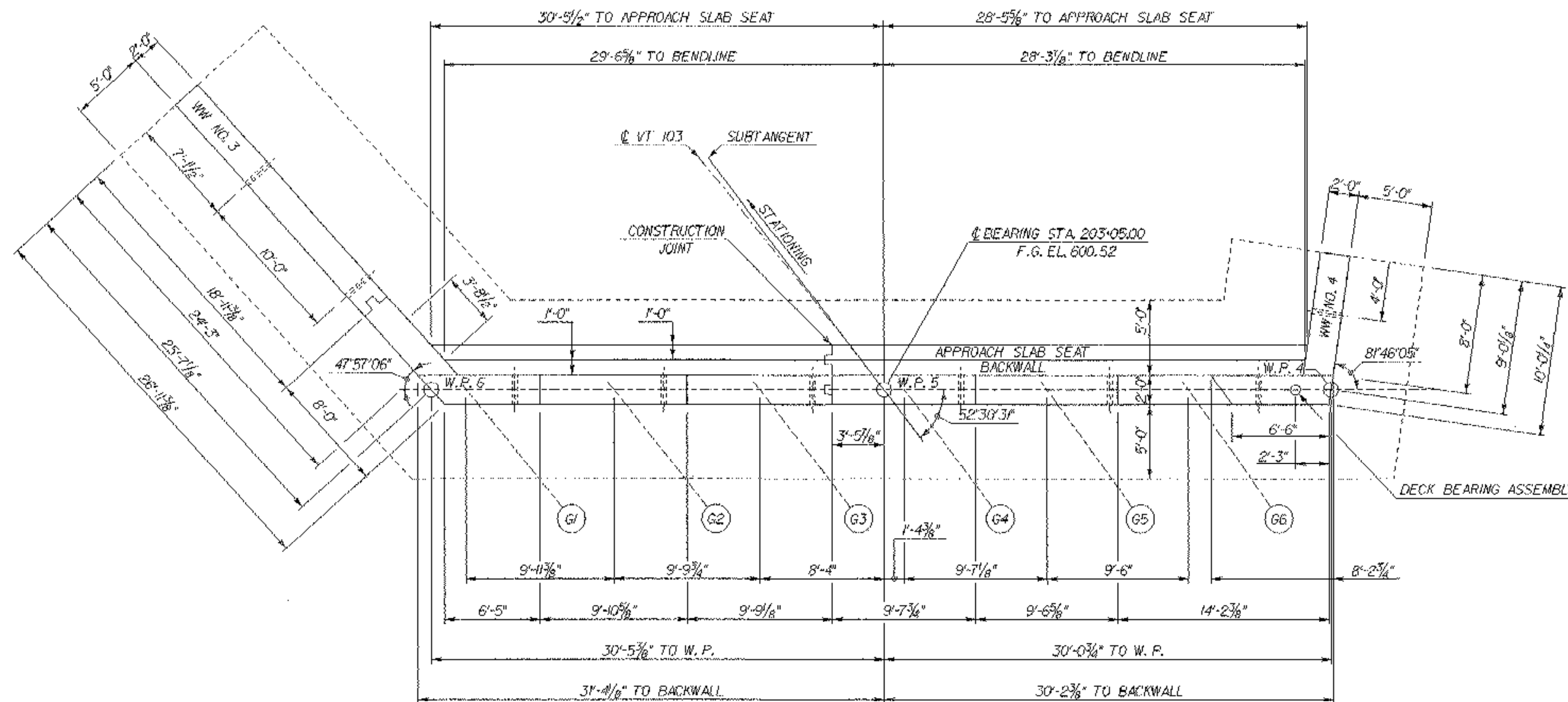
### NOTES

- FOR FOOTING REINFORCEMENT DETAILS, SEE SHEET 65 OF 79.
- FOR WINGWALL REINFORCEMENT DETAILS, SEE SHEET 64 OF 79.

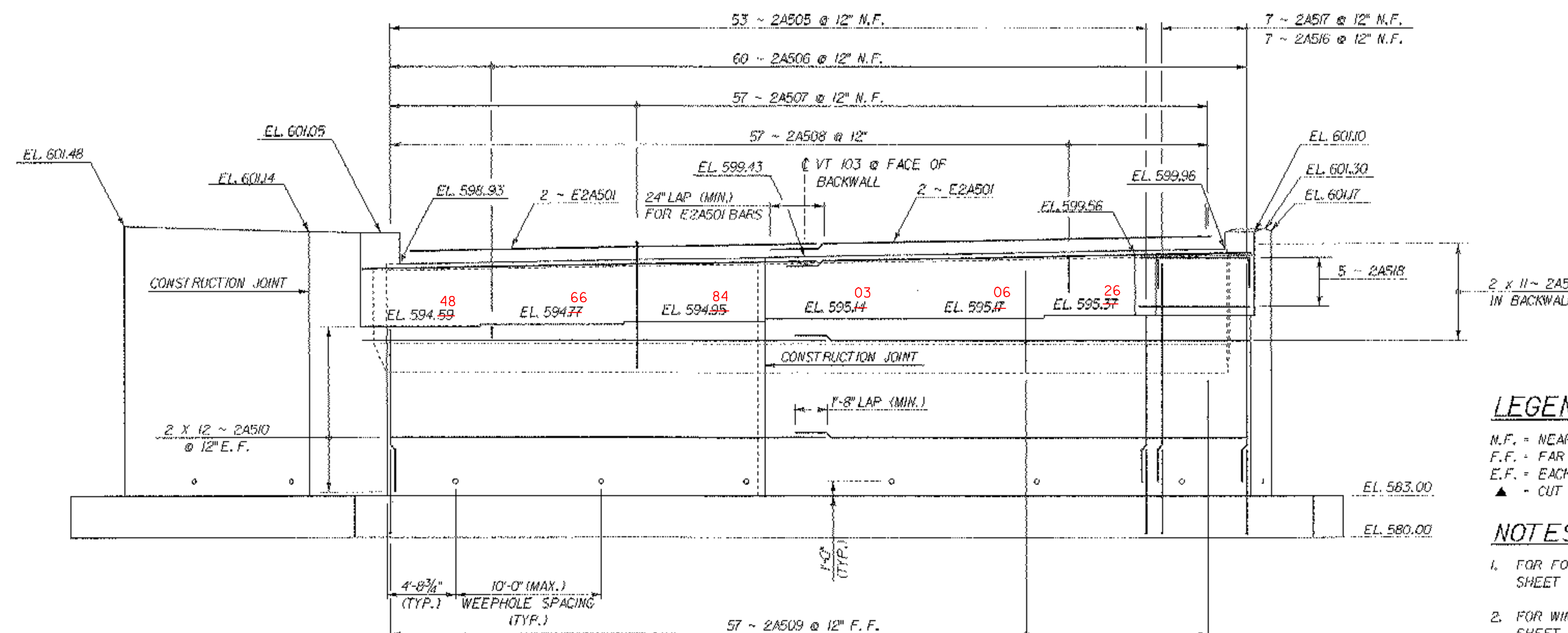
## STATE OF VERMONT AGENCY OF TRANSPORTATION

|                        |                                 |                          |               |
|------------------------|---------------------------------|--------------------------|---------------|
| Town of                | CHESTER                         | Bridge No.               | 12            |
| Highway No.            | VT 103                          | Log Sta.                 |               |
|                        | VT 103 OVER THE WILLIAMS RIVER  | Surv. Sta.               |               |
| ABUTMENT NO. 1 DETAILS |                                 |                          |               |
| Designed By            | L. WIXSON                       | Drawn By                 | P. DUSTIN     |
| Checked By             | T. GRANT                        | Date                     | 10/00         |
|                        |                                 | Bridge Design Supervisor | M. ZYDEL      |
| PROJECT                | CHESTER                         | PROJECT NO.              | BRF 025-1(35) |
| LG.C. Info.            | MA87b3-4Structures\zbl34col.dgn |                          | zbl34col.d    |
| Bridge Sheet No.       | BR118                           | Sheet                    | 62 of 79      |
| PLOTTED                | 28-MAR-2003                     |                          |               |



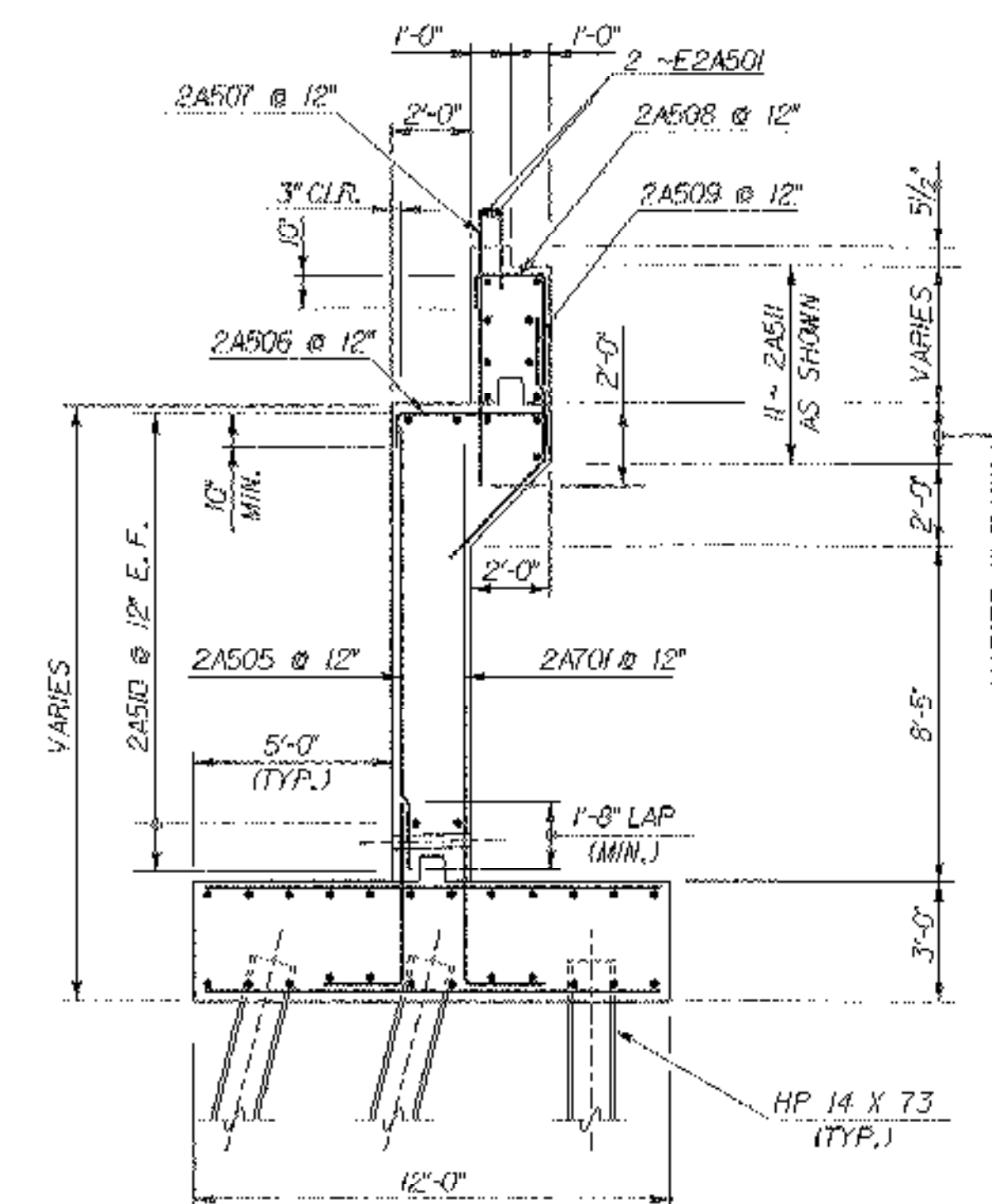


**ABUTMENT NO. 2 MASONRY**  
SCALE: 3/16" = 1'-0"

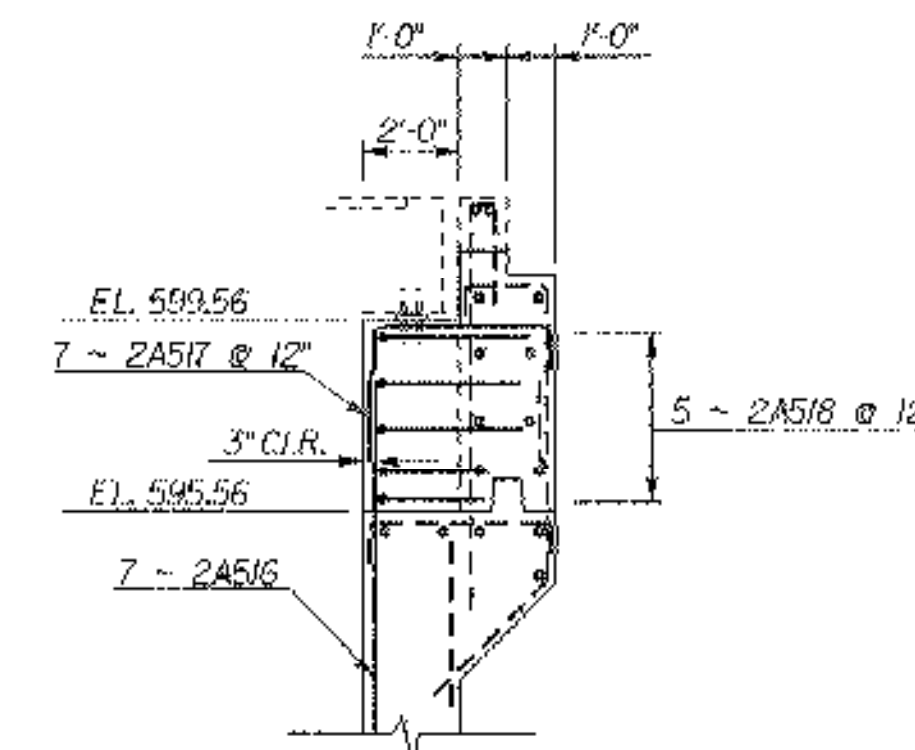


**ABUTMENT NO. 2 REINFORCING**  
SCALE: 3/16" = 1'-0"

NOTE: LOWER BM SEATS 0.1FT SO AS TO ALLOW FOR HIGHER POT BEARINGS BY COSMEC INC. ABUTMENT #2 ONLY



**ABUTMENT NO. 2 TYPICAL SECTION**  
SCALE: 1/4" = 1'-0"



**ABUTMENT NO. 2 EXTRUDED BACKWALL AT DECK BEARING**  
SCALE: 1/4" = 1'-0"

### LEGEND

N.F. = NEAR FACE  
F.F. = FAR FACE  
E.F. = EACH FACE  
▲ = CUT TO FIT IN FIELD

### NOTES

- FOR FOOTING REINFORCEMENT DETAILS, SEE SHEET 66 OF 79.
- FOR WINGWALL REINFORCEMENT DETAILS, SEE SHEET 64 OF 79.

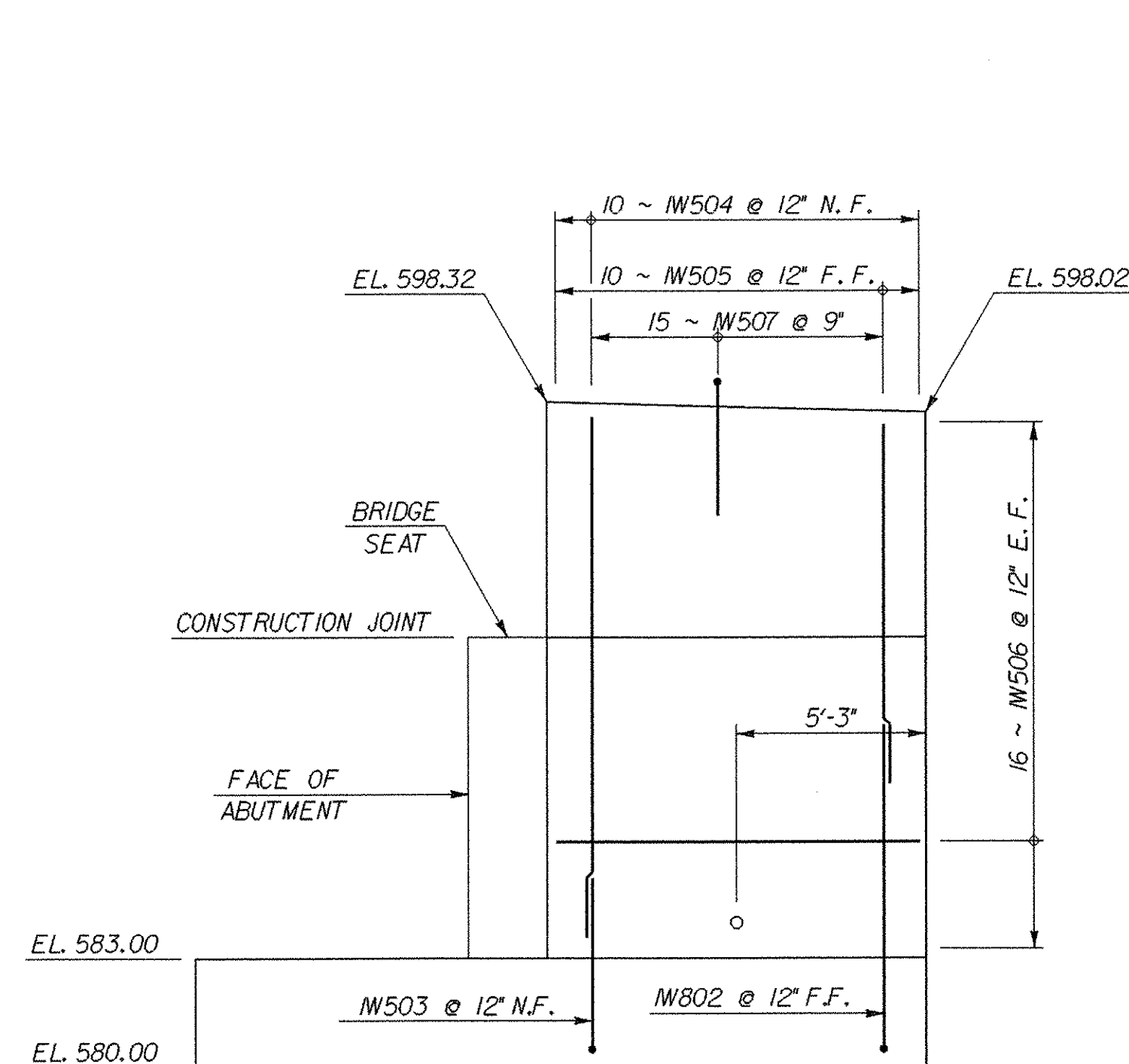
## STATE OF VERMONT AGENCY OF TRANSPORTATION

|                                |                        |              |               |
|--------------------------------|------------------------|--------------|---------------|
| Town Of                        | CHESTER                | Bridge No.   | 12            |
| Highway No.                    | VT 103                 | Log Sta.     |               |
| VT 103 OVER THE WILLIAMS RIVER |                        |              |               |
| ABUTMENT NO. 2 DETAILS         |                        |              |               |
| Designed By                    | L. WILSON              | Drawn By     | P. DUSTIN     |
| Checked By                     | T. GRANT               | Date         | 10/02         |
| Bridge Design Supervisor       | M. ZYDEL               | Date         |               |
| PROJECT                        | CHESTER                | PROJECT NO.  | BRF 025-1(35) |
| LOG. INFO.                     | MAINTENANCE STRUCTURES | 20134002.dgn | 20134002.d    |
| Bridge Sheet No.               | BR119                  | Sheet        | 63 of 79      |

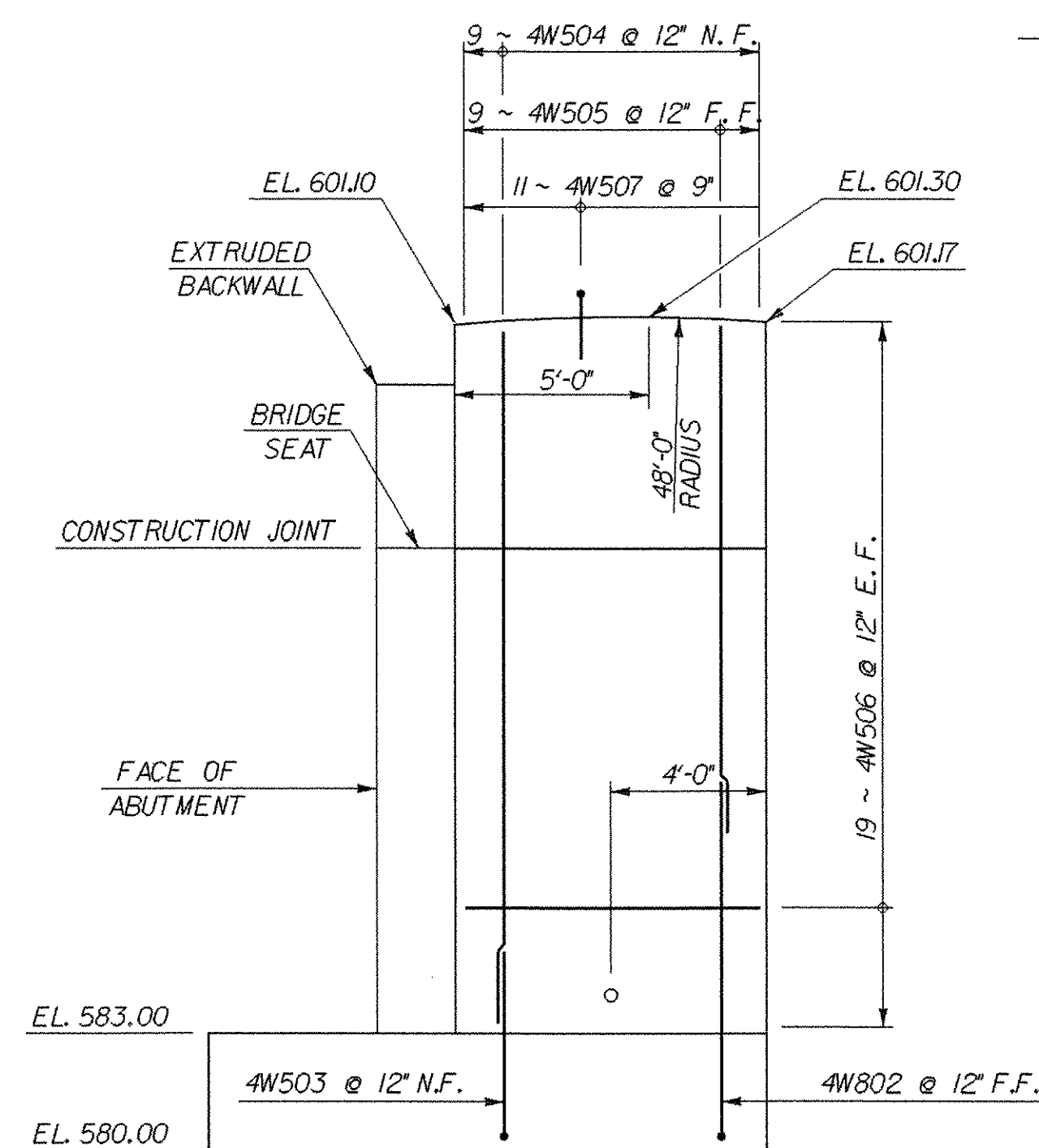
PLUTED 28-MAY-2003

**MJ**  
MCFARLAND-JOHNSON, INC.

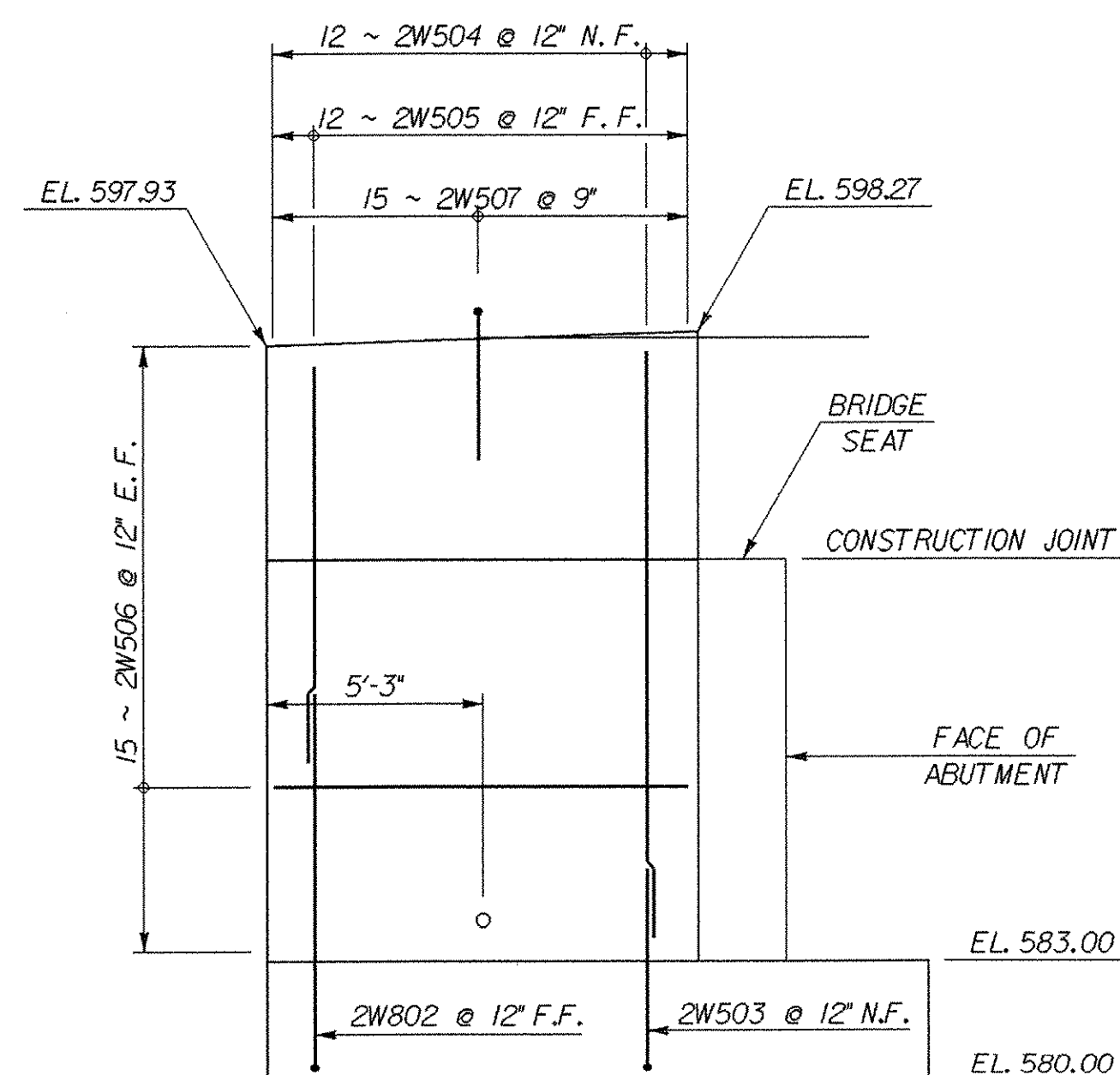




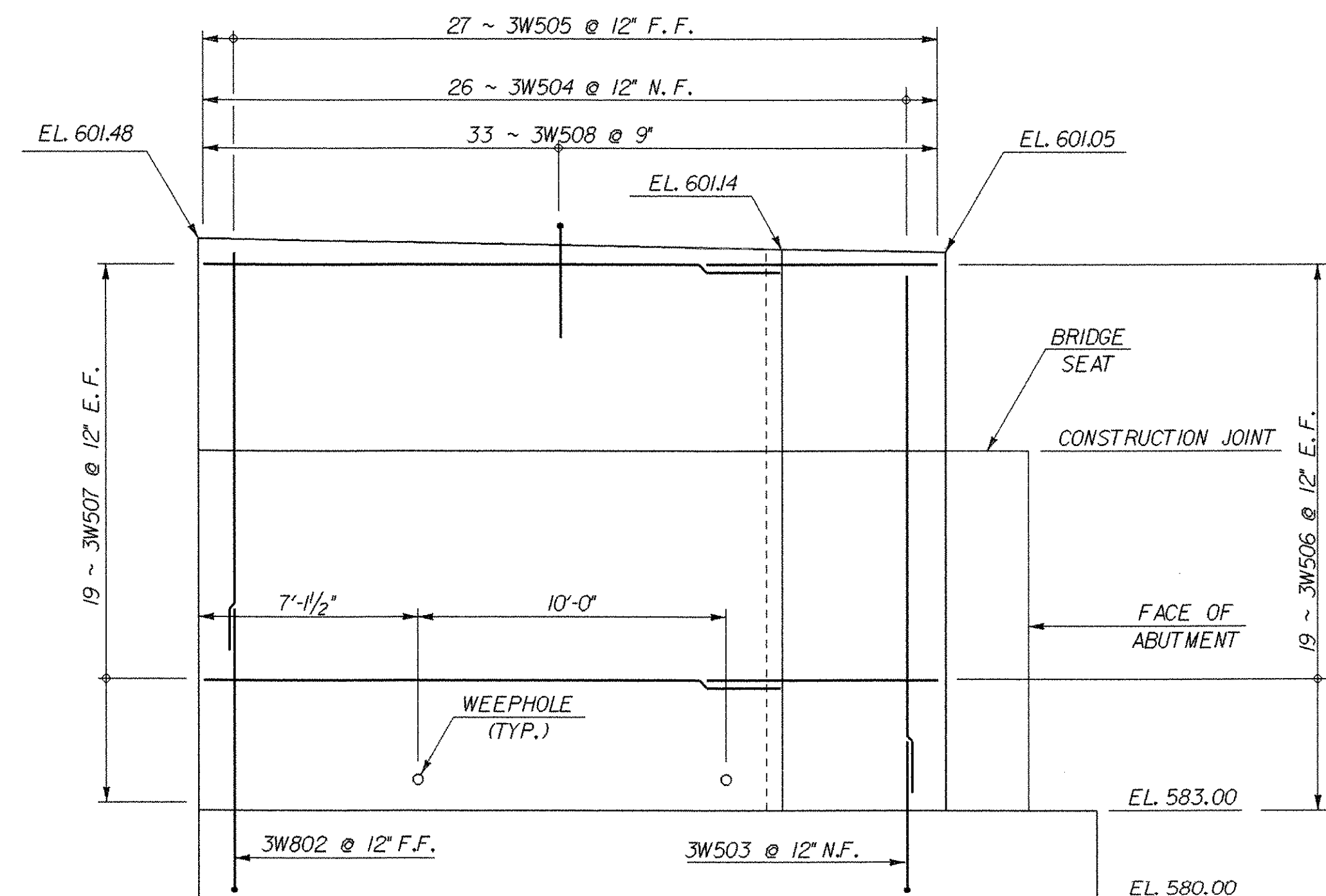
**WINGWALL NO. 1 ELEVATION**  
SCALE: 1/4" = 1'-0"



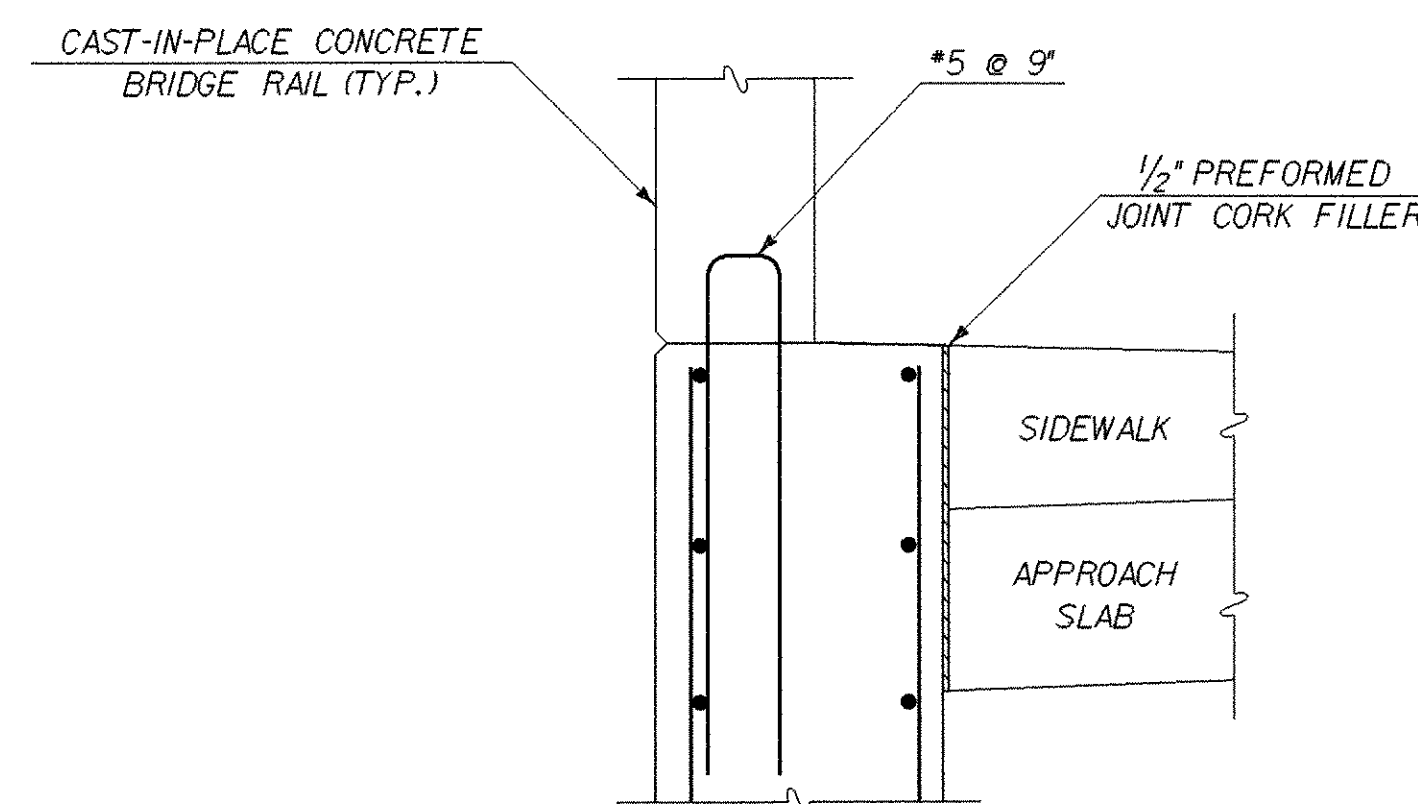
**WINGWALL NO. 4 ELEVATION**  
SCALE: 1/4" = 1'-0"



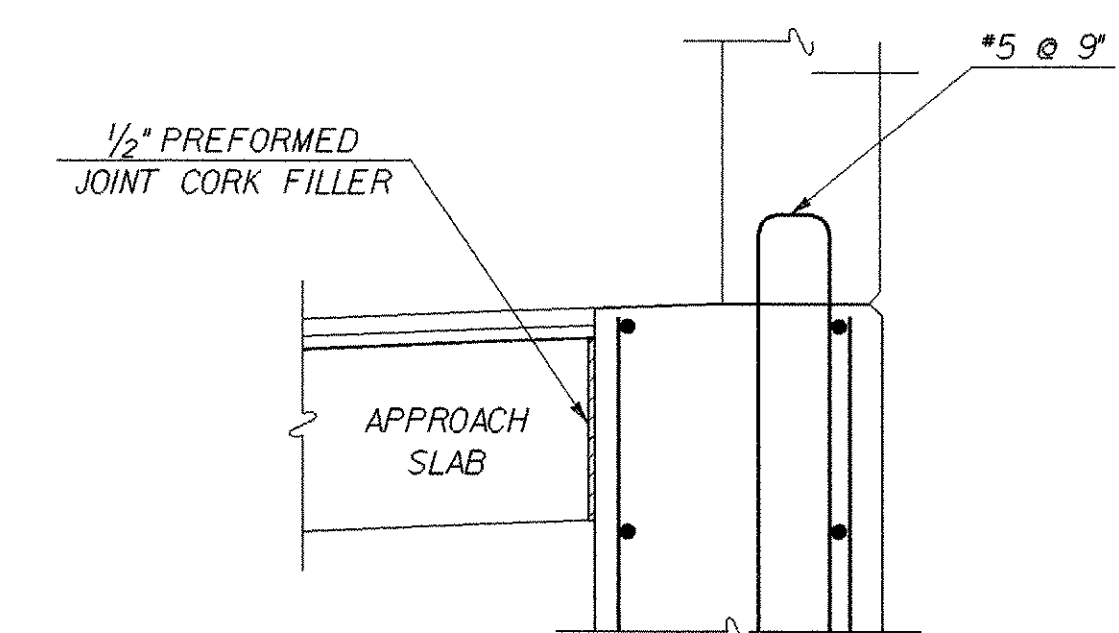
**WINGWALL NO. 2 ELEVATION**  
SCALE: 1/4" = 1'-0"



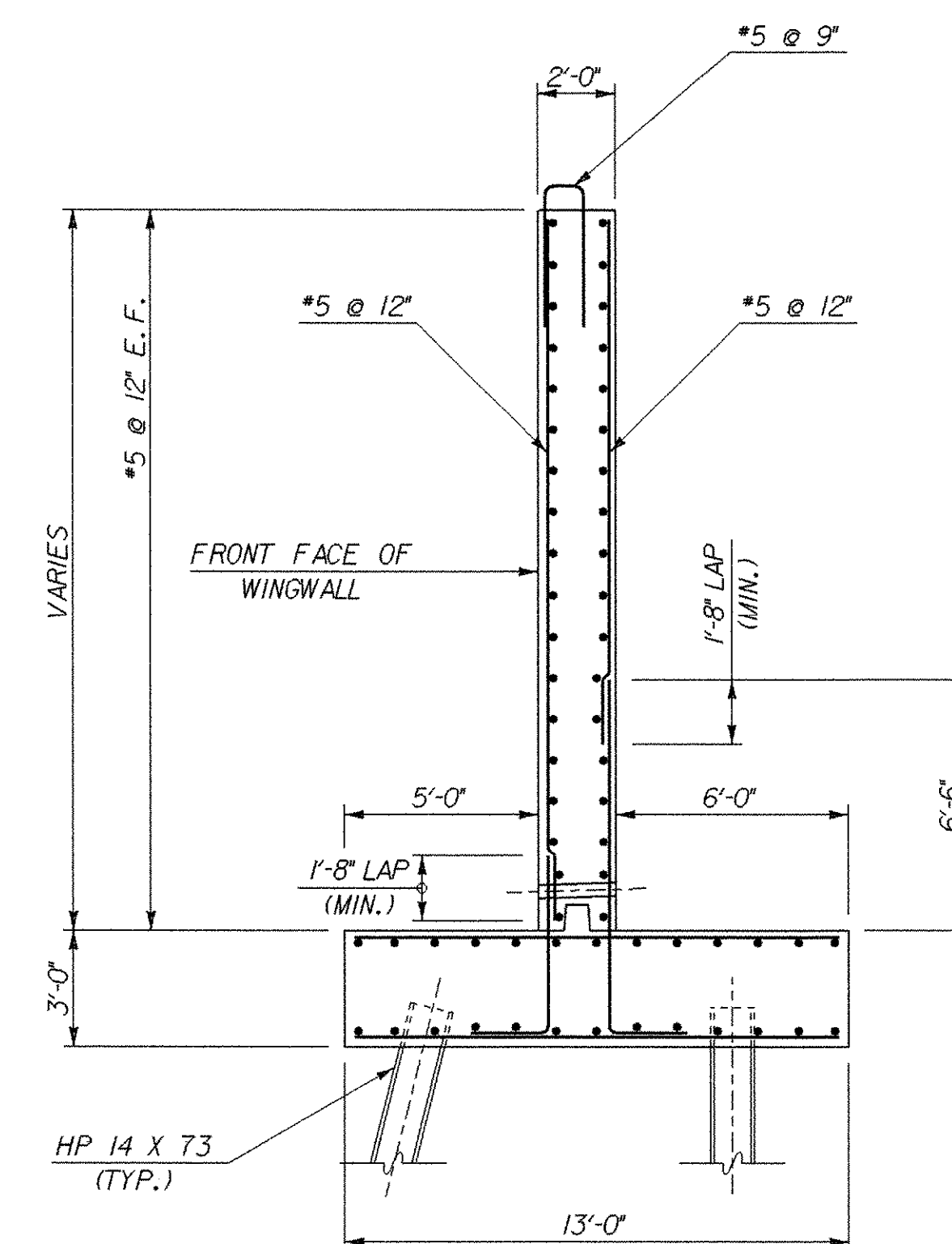
**WINGWALL NO. 3 ELEVATION**  
SCALE: 1/4" = 1'-0"



**SIDEWALK AND WINGWALL TYPICAL SECTION**  
SCALE: 3/4" = 1'-0"



**RAIL AND WINGWALL TYPICAL SECTION**  
SCALE: 3/4" = 1'-0"



**WINGWALL TYPICAL SECTION**  
SCALE: 1/4" = 1'-0"

**NOTES**

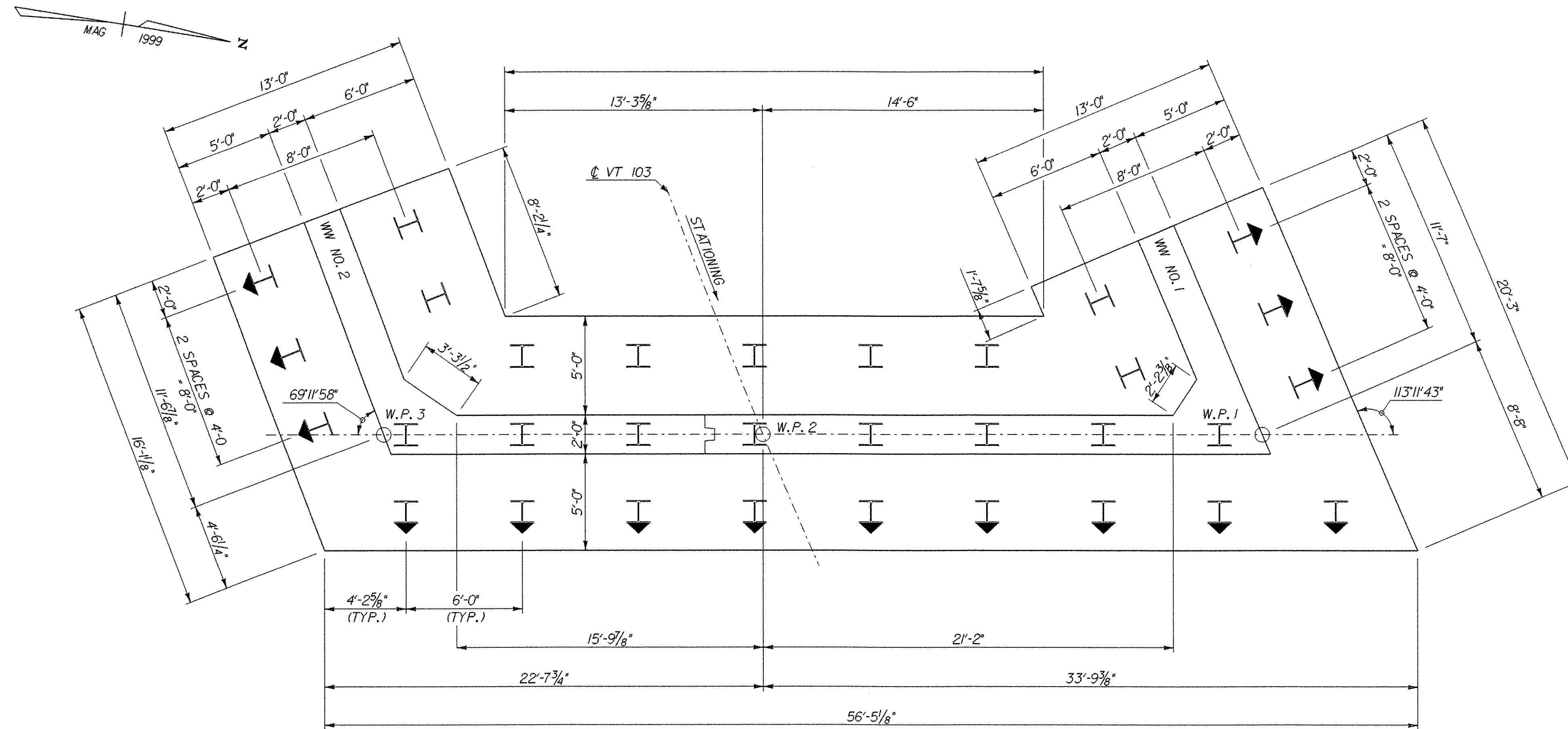
N.F. = NEAR FACE  
F.F. = FAR FACE  
E.F. = EACH FACE  
▲ = CUT TO FIT IN FIELD

**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

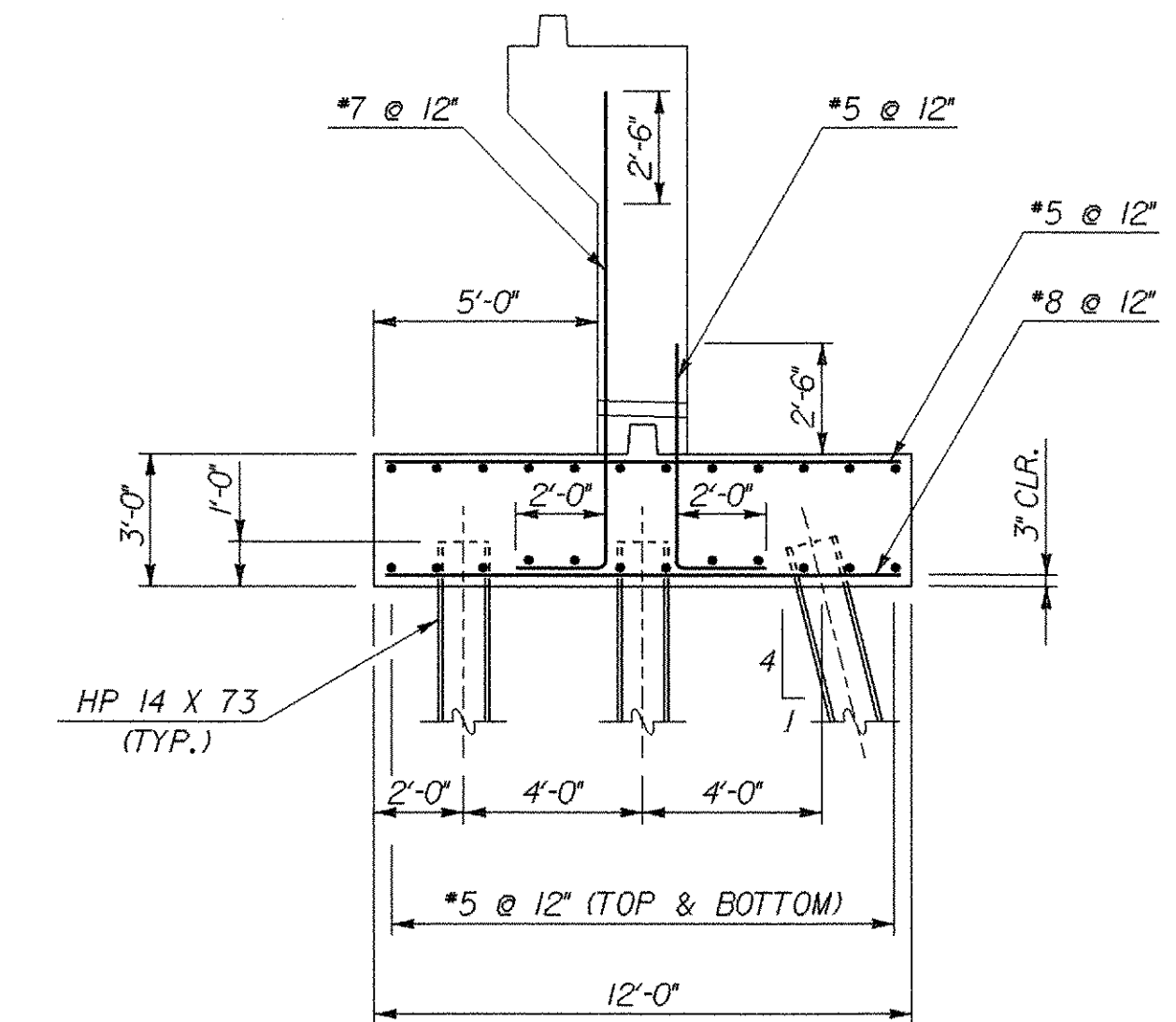
|                                |                                    |                          |               |
|--------------------------------|------------------------------------|--------------------------|---------------|
| Town Of                        | CHESTER                            | Bridge No.               | 12            |
| Highway No.                    | VT 103                             | Log Sta.                 |               |
|                                |                                    | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER |                                    |                          |               |
| WINGWALL DETAILS               |                                    |                          |               |
| Designed By                    | L.WIXSON                           | Drawn By                 | P.DUSTIN      |
| Checked By                     | T. GRANT                           | Bridge Design Supervisor | M. ZYDEL      |
| Date                           | 10/00                              | Date                     |               |
| PROJECT                        | CHESTER                            | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                   | M:\876134\Structures\zbl34.cdw.dgn | zbl34.cdw.dgn            |               |
| Bridge Sheet No.               | BR120                              | Sheet                    | 64 of 79      |
| PLOTTED                        | 28-MAY-2003                        |                          |               |

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McFARLAND-JOHNSON, INC.

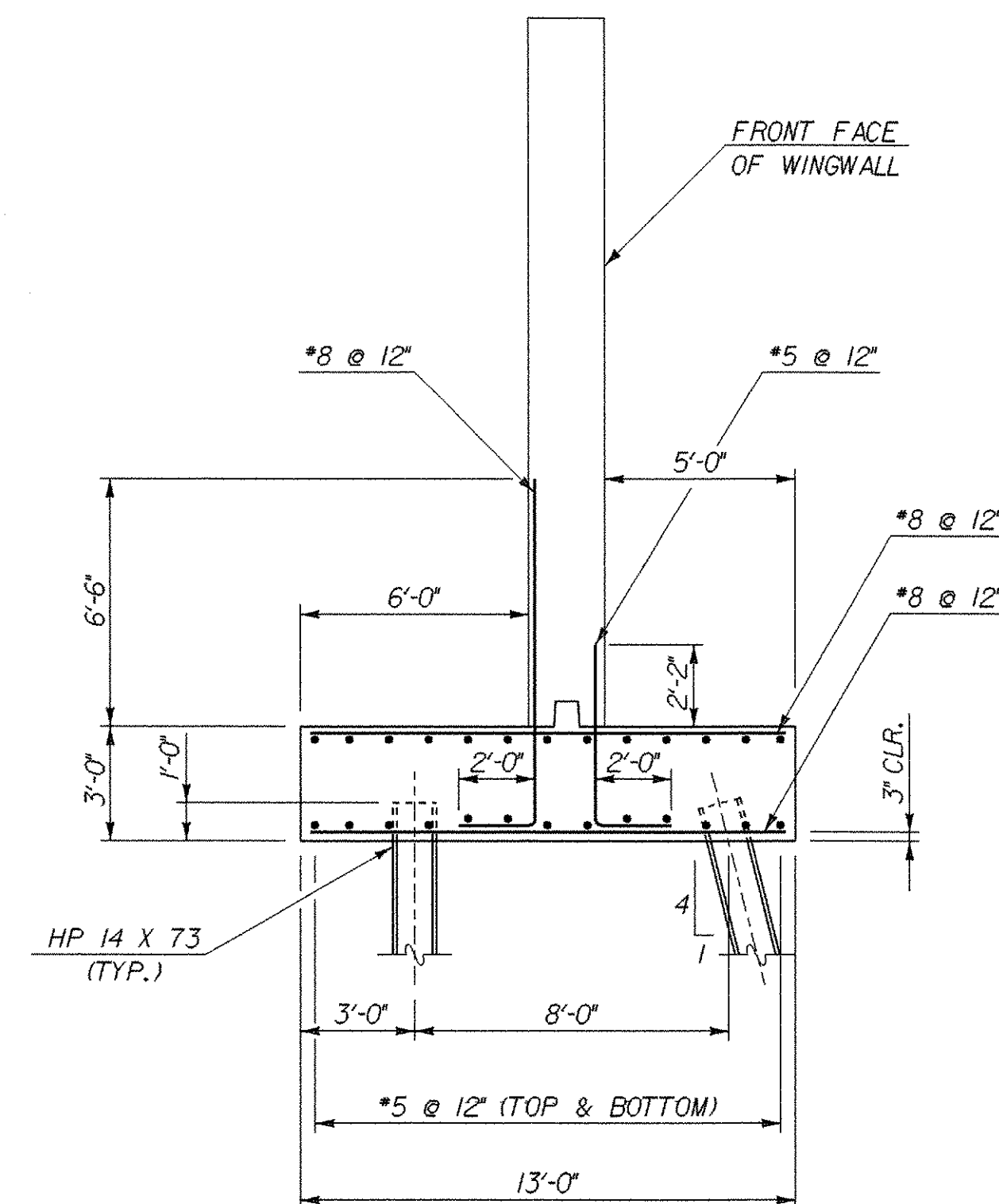




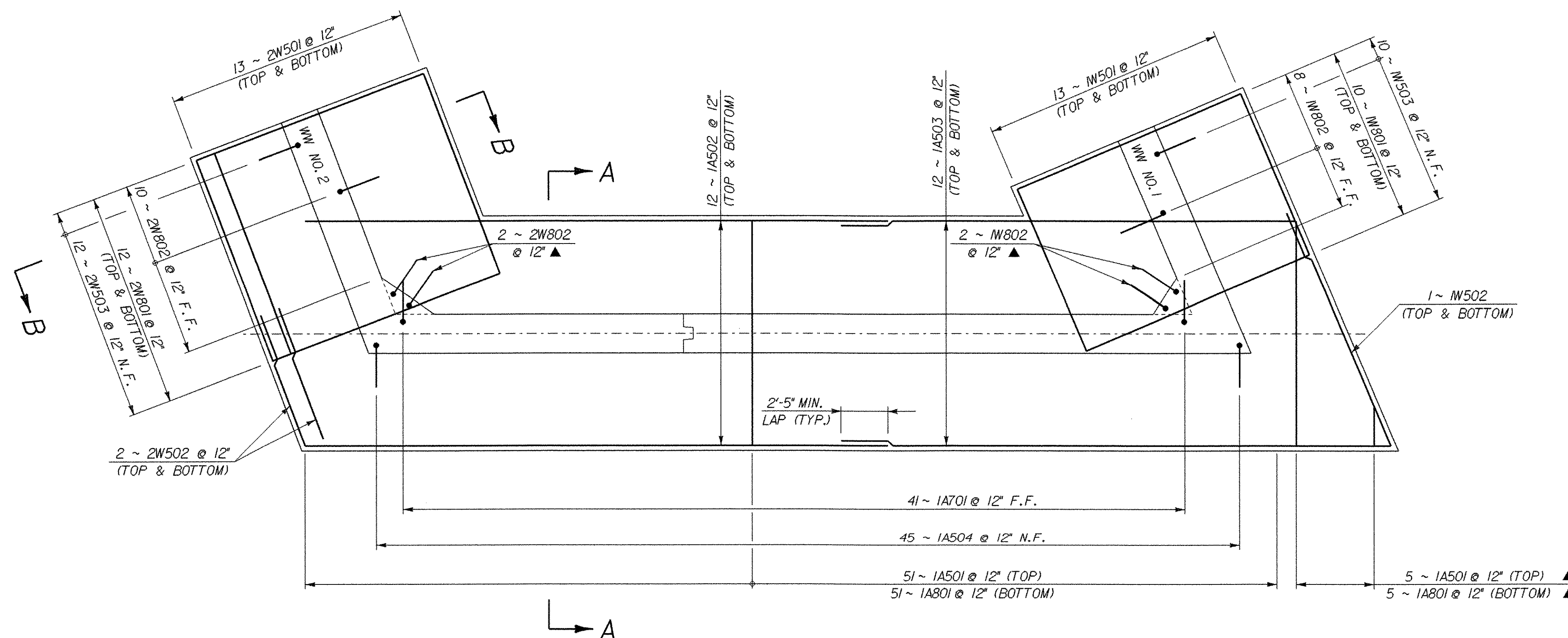
**FOOTING NO. 1 MASONRY**  
SCALE: 1/4" = 1'-0"



**SECTION A-A**  
SCALE: 1/4" = 1'-0"



**SECTION B-B**  
SCALE: 1/4" = 1'-0"



**FOOTING NO. 1 REINFORCING**  
SCALE: 1/4" = 1'-0"

**NOTES**

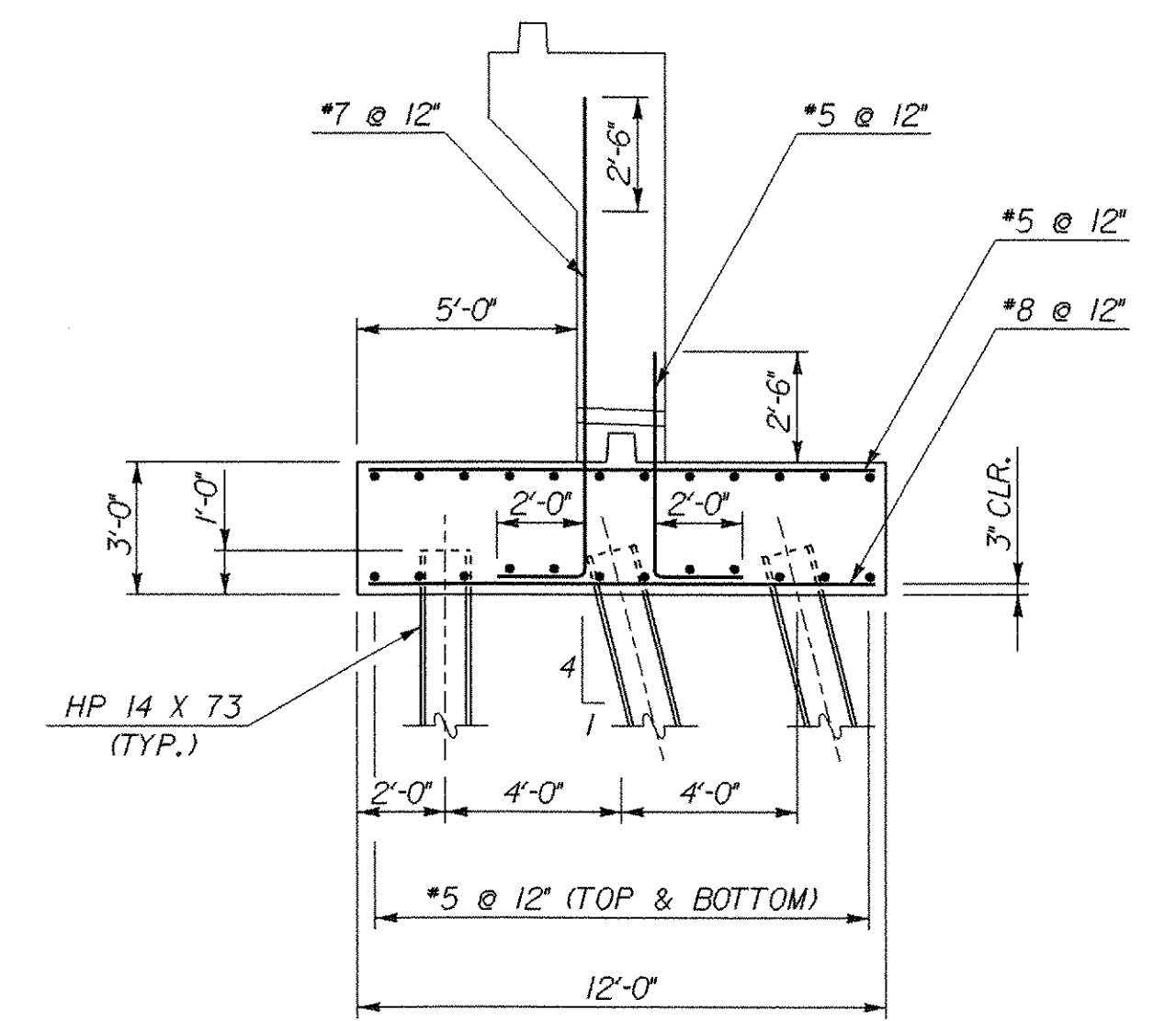
N.F. = NEAR FACE  
F.F. = FAR FACE  
E.F. = EACH FACE  
▲ = CUT TO FIT IN FIELD

**MJ**  
McFARLAND - JOHNSON, INC.

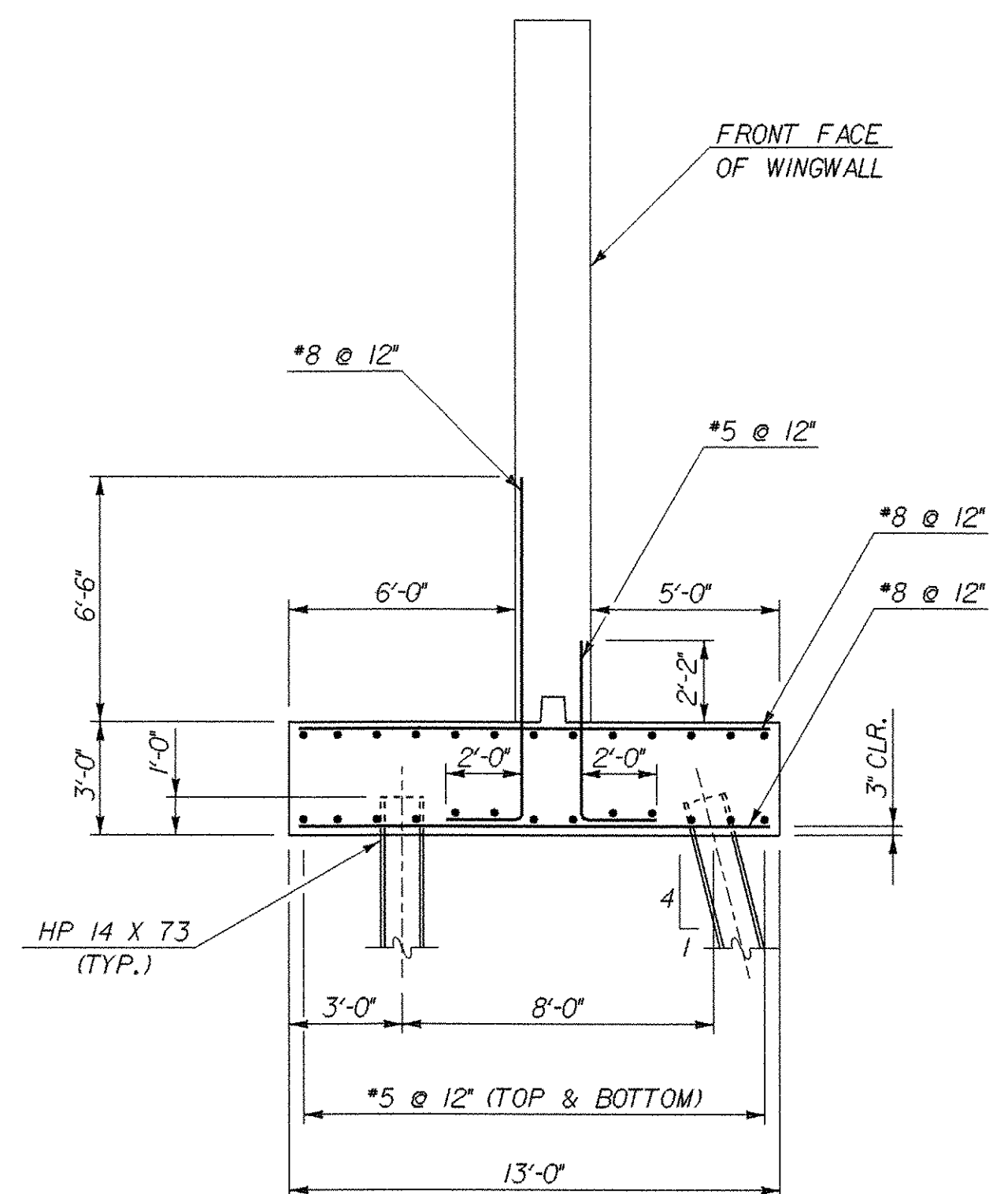
**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

|                                       |                                   |                          |               |
|---------------------------------------|-----------------------------------|--------------------------|---------------|
| Town Of                               | CHESTER                           | Bridge No.               | 12            |
| Highway No.                           | VT 103                            | Log Sta.                 |               |
|                                       |                                   | Surv. Sta.               |               |
| <b>VT 103 OVER THE WILLIAMS RIVER</b> |                                   |                          |               |
| <b>FOOTING NO. 1 DETAILS</b>          |                                   |                          |               |
| Designed By                           | L.WIXSON                          | Drawn By                 | P.DUSTIN      |
| Checked By                            | T. GRANT                          | Bridge Design Supervisor | M. ZYDEL      |
| Date                                  | 10/00                             | Date                     |               |
| PROJECT                               | CHESTER                           | PROJECT NO.              | BRF 025-1(35) |
| I.G.C. Info.                          | M:\87b134\Structures\zbl34cf1.dgn | zbl34cf1j                |               |
| Bridge Sheet No.                      | BR121                             | Sheet                    | 65 of 79      |
| PLOTTED                               | 28-MAY-2003                       |                          |               |

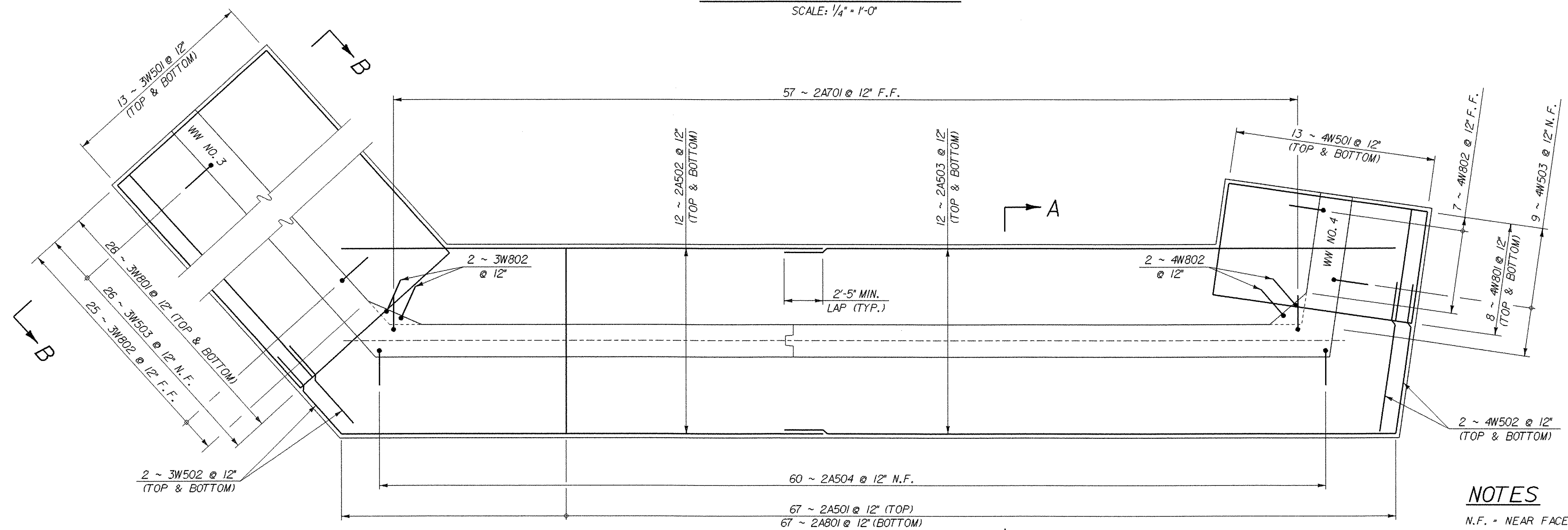




SECTION A-A  
SCALE:  $\frac{1}{4}" = 1'-0"$



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



FOOTING NO. 2 REINFORCING  
SCALE:  $\frac{1}{4}" = 1'-0"$

NOTES

N.F. = NEAR FACE  
F.F. = FAR FACE  
E.F. = EACH FACE  
▲ = CUT TO FIT IN FIELD

  
 MCFARLAND - JOHNSON, INC.

STATE OF VERMONT  
 AGENCY OF TRANSPORTATION

|         |         |            |    |
|---------|---------|------------|----|
| Town Of | CHESTER | Bridge No. | 12 |
|---------|---------|------------|----|

|             |        |            |  |
|-------------|--------|------------|--|
| Highway No. | VT 103 | Log Sta.   |  |
|             |        | Surv. Sta. |  |

VT 103 OVER THE WILLIAMS RIVER

## FOOTING NO. 2 DETAILS

|                      |                        |
|----------------------|------------------------|
| Designed By L.WIXSON | Drawn By P.DUSTIN      |
| Sheet No. 2          | Bridges Design Summary |

|            |       |                          |
|------------|-------|--------------------------|
| Checked By | Date  | Bridge Design Supervisor |
| T. GRANT   | 10/00 | M. ZYDEL Date            |

|         |             |
|---------|-------------|
| PROJECT | PROJECT NO. |
|---------|-------------|

|         |               |
|---------|---------------|
| CHESTER | BRF 025-1(35) |
|---------|---------------|

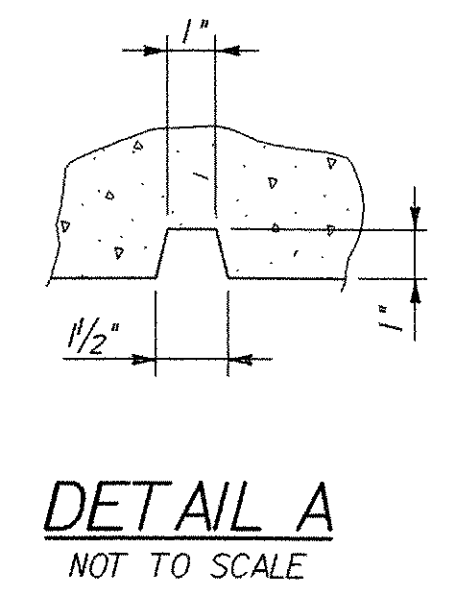
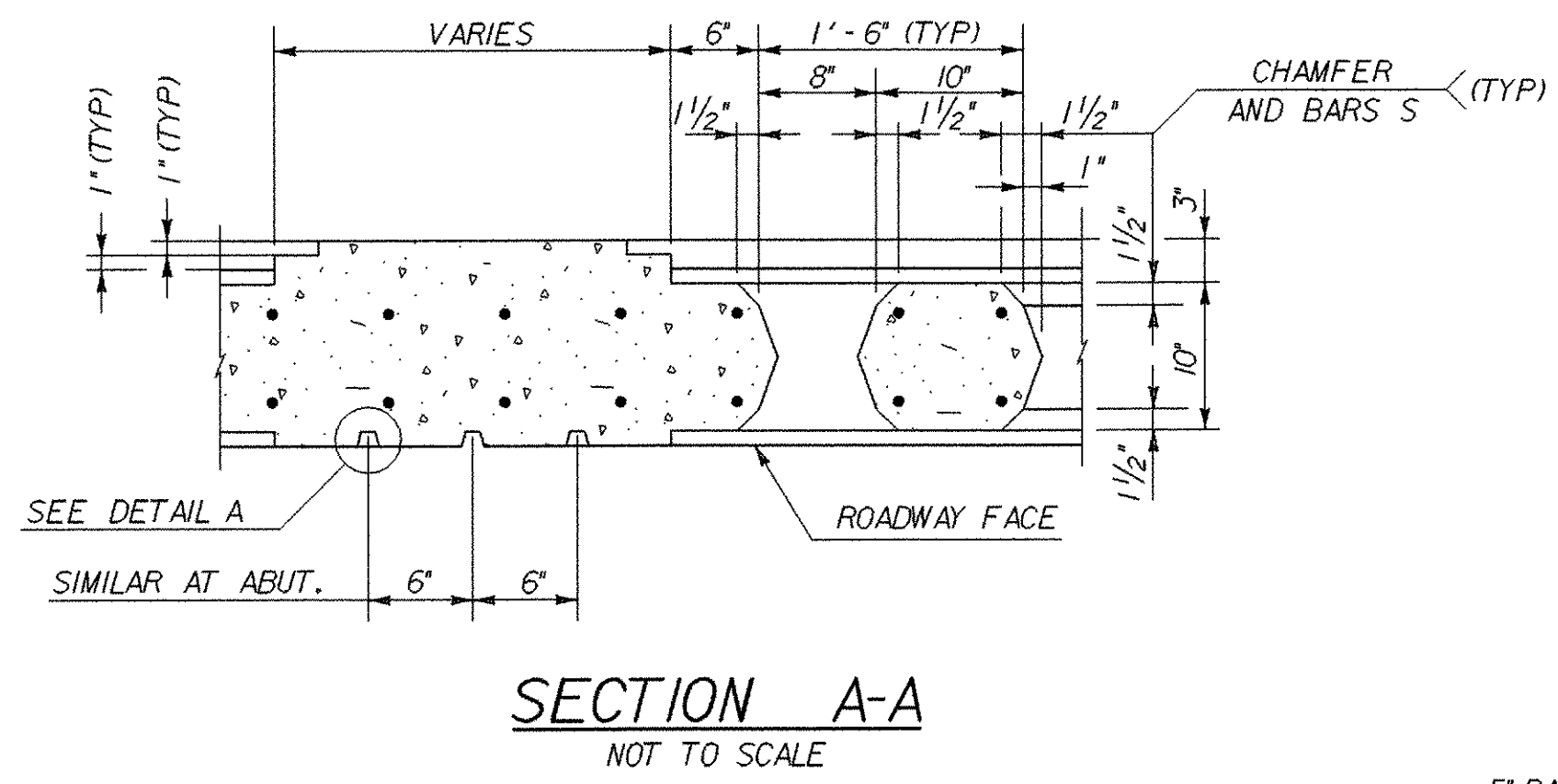
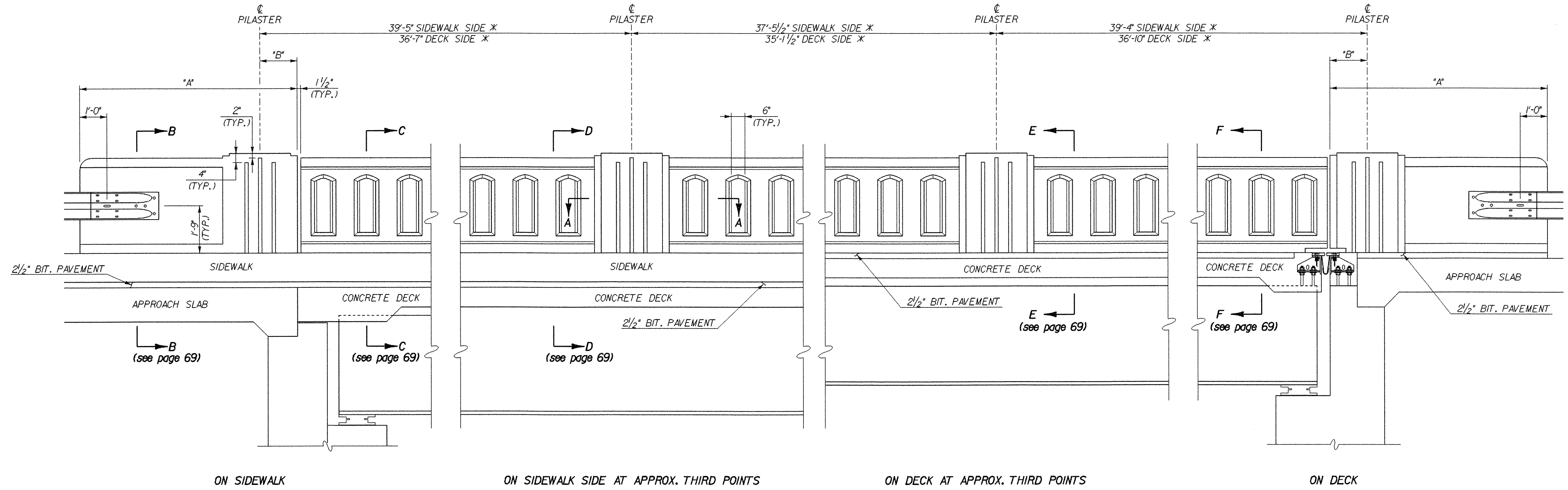
|              |                                   |            |
|--------------|-----------------------------------|------------|
| I.G.C. Info. | M:\87bl34\Structures\zbl34cf2.dgn | zbl34cf2.i |
|--------------|-----------------------------------|------------|

|                        |                |
|------------------------|----------------|
| Bridge Sheet No. BR/22 | Sheet 66 of 79 |
| PLOTTED 28-MAY-2003    |                |



| ITEM | NO.<br>PIECES | SIZE | LENGTH | MARK    | TYPE | A    | B     | C    | D                   | E | F | G    | H        | J        | K       | R       | O | ITEM | NO.<br>PIECES | SIZE | LENGTH | MARK  | TYPE | A | B    | C   | D              | E | F | G | H | J | K | R | O |
|------|---------------|------|--------|---------|------|------|-------|------|---------------------|---|---|------|----------|----------|---------|---------|---|------|---------------|------|--------|-------|------|---|------|-----|----------------|---|---|---|---|---|---|---|---|
| 1    |               |      |        |         |      |      |       |      | DECK                |   |   |      |          |          |         |         |   | 99   |               |      |        |       |      |   |      |     | WINGWALL NO. 2 |   |   |   |   |   |   |   |   |
| 2    |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 100  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 3    |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 101  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 4    | 273           | 5    | 39-0   | ES501   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 102  | 26            | 5    | 11-3   | 2W501 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 5    | 96            | 5    | 10-8   | ES502   | S6   | 0-10 | 1-7   | 6-2  | 1-3                 |   |   | 0-10 |          |          |         |         |   | 103  | 4             | 5    | 6-9    | 2W502 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 6    | ▲ 10          | 5    | 17-0   | ES503   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 104  | 12            | 5    | 6-11   | 2W503 | 17   |   | 4-11 | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 7    | 4             | 5    | 26-8   | ES504   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 105  | 12            | 5    | 14-9   | 2W504 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 8    | 36            | 5    | 8-4    | ES505   | 16   | 3-9  | 0-11  | 2-8  | 1-0                 |   |   |      | 0-0      |          | 0-0     |         |   | 106  | 12            | 5    | 10-3   | 2W505 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 9    | ▲ 10          | 5    | 32-0   | ES506   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 107  | 30            | 5    | 10-0   | 2W506 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 10   | 35            | 5    | 5-10   | ES507   | 16   | 2-6  | 0-11  | 1-5  | 1-0                 |   |   |      | 0-0      |          | 0-0     |         |   | 108  | 15            | 5    | 7-8    | 2W507 | 17   |   | 3-7  | 0-6 | 3-7            |   |   |   |   |   |   |   |   |
| 11   | 613           | 6    | 26-8   | ES601   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 109  | 24            | 8    | 12-6   | 2W801 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 12   | 148           | 6    | 32-0   | ES602   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 110  | ▲ 12          | 8    | 11-3   | 2W802 | 17   |   | 9-3  | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 13   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 111  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 14   |               |      |        |         |      |      |       |      | APPROACH SLAB NO. 1 |   |   |      |          |          |         |         |   | 112  |               |      |        |       |      |   |      |     | WINGWALL NO. 3 |   |   |   |   |   |   |   |   |
| 15   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 113  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 16   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 114  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 17   | 38            | 5    | 21-4   | 1EAS501 | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 115  | 26            | 5    | 26-0   | 3W501 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 18   | 8             | 5    | 19-8   | 1EAS502 | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 116  | 4             | 5    | 5-8    | 3W502 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 19   | 19            | 5    | 9-11   | 1EAS503 | S6   | 0-10 | 1-8   | 4-7  | 2-0                 |   |   | 0-10 |          |          |         |         |   | 117  | 26            | 5    | 6-11   | 3W503 | 17   |   | 4-11 | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 20   | 21            | 8    | 4-0    | 1EAS801 | 16   | 0-0  | 0-0   | 1-0  | 3-0                 |   |   |      |          |          |         |         |   | 118  | 26            | 5    | 17-10  | 3W504 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 21   | 46            | 9    | 19-10  | 1EAS901 | 1    | 0-4  | 19-6  |      |                     |   |   |      | 0-0      | 2-1 1/2  |         | 2-1 1/2 |   | 119  | 27            | 5    | 13-5   | 3W505 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 22   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 120  | 38            | 5    | 8-0    | 3W506 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 23   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 121  | 39            | 5    | 18-8   | 3W507 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 24   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 122  | 33            | 5    | 7-8    | 3W508 | 17   |   | 3-7  | 0-6 | 3-7            |   |   |   |   |   |   |   |   |
| 25   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 123  | 52            | 8    | 12-6   | 3W801 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 26   | 40            | 5    | 26-10  | 2EAS501 | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 124  | 27            | 8    | 11-3   | 3W802 | 17   |   | 9-3  | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 27   | 7             | 5    | 24-10  | 2EAS502 | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 125  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 28   | 26            | 5    | 11-2   | 2EAS503 | S6   | 0-10 | 1-9   | 5-8  | 2-1                 |   |   | 0-10 |          |          |         |         |   | 126  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 29   | 26            | 8    | 4-0    | 2EAS801 | 16   | 0-0  | 0-0   | 1-0  | 3-0                 |   |   |      | 2-1 1/2  |          |         | 2-1 1/2 |   | 127  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 30   | 67            | 9    | 24-9   | 2EAS901 | 1    | 0-4  | 23-8  |      |                     |   |   |      | 0-0      |          |         | 0-9     |   | 128  |               |      |        |       |      |   |      |     | WINGWALL NO. 4 |   |   |   |   |   |   |   |   |
| 31   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 129  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 32   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 130  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 33   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 131  | 26            | 5    | 8-0    | 4W501 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 34   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 132  | 4             | 5    | 8-3    | 4W502 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 35   | 56            | 5    | 11-6   | 1A501   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 133  | 9             | 5    | 6-11   | 4W503 | 17   |   | 4-11 | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 36   | 24            | 5    | 33-0   | 1A502   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 134  | 9             | 5    | 17-11  | 4W504 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 37   | 24            | 5    | 25-4   | 1A503   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 135  | 9             | 5    | 13-3   | 4W505 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 38   | 46            | 5    | 7-3    | 1A504   | 17   |      | 5-8   | 2-0  | 0-0                 |   |   |      |          |          |         |         |   | 136  | 38            | 5    | 7-6    | 4W506 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 39   | 45            | 5    | 8-4    | 1A505   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 137  | 11            | 5    | 7-8    | 4W507 | 17   |   | 3-7  | 0-6 | 3-7            |   |   |   |   |   |   |   |   |
| 40   | 45            | 5    | 5-2    | 1A506   | 17   |      | 0-10  | 3-6  | 0-10                |   |   |      |          |          |         |         |   | 138  | 16            | 8    | 12-6   | 4W801 | STR  |   |      |     |                |   |   |   |   |   |   |   |   |
| 41   | 40            | 5    | 7-4    | 1A507   | 17   |      | 0-10  | 0-7  | 5-11                |   |   |      |          |          |         |         |   | 139  | 9             | 8    | 11-3   | 4W802 | 17   |   | 9-3  | 2-0 | 0-0            |   |   |   |   |   |   |   |   |
| 42   | 41            | 5    | 5-6    | 1A508   | 17   |      | 3-2   | 1-6  | 0-10                |   |   |      |          |          |         |         |   | 140  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 43   | 41            | 5    | 7-4    | 1A509   | 16   | 0-0  | 0-0   | 4-6  | 2-10                |   |   |      | 2-0      |          | 2-0     |         |   | 141  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 44   | 40            | 5    | 23-6   | 1A510   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 142  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 45   | 22            | 5    | 23-6   | 1A511   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 143  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 46   | 8             | 5    | 13-8   | 1A512   | 22   |      | 1-8   | 7-4  | 1-8                 |   |   |      | 0-11 1/2 | 0-11 1/2 | 1-4 1/2 | 1-4 1/2 |   | 144  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 47   | 8             | 5    | 5-8    | 1A513   | 16   | 0-0  | 0-0   | 1-8  | 4-0                 |   |   |      | 1-5      |          | 3-9     |         |   | 145  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 48   | 8             | 5    | 9-6    | 1A514   | 22   |      | 2-2   | 5-2  | 2-2                 |   |   |      | 1-9 3/4  | 1-9 3/4  | 1-2 1/4 | 1-2 1/4 |   | 146  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 49   | 8             | 5    | 5-8    | 1A515   | 16   | 0-0  | 0-0   | 1-8  | 4-0                 |   |   |      | 1-7      |          | 3-8     |         |   | 147  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 50   | 42            | 7    | 12-11  | 1A701   | 17   |      | 10-11 | 2-0  | 0-0                 |   |   |      |          |          |         |         |   | 148  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 51   | 56            | 8    | 11-6   | 1A801   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 149  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 52   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 150  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 53   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 151  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 54   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 152  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 55   |               |      |        |         |      |      |       |      |                     |   |   |      |          |          |         |         |   | 153  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 56   | 67            | 5    | 11-6   | 2A501   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 154  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 57   | 24            | 5    | 32-0   | 2A502   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 155  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 58   | 24            | 5    | 36-0   | 2A503   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 156  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 59   | 60            | 5    | 7-3    | 2A504   | 17   |      | 5-3   | 2-0  | 0-0                 |   |   |      |          |          |         |         |   | 157  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 60   | 53            | 5    | 11-2   | 2A505   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 158  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 61   | 60            | 5    | 5-2    | 2A506   | 17   |      | 0-10  | 3-6  | 0-10                |   |   |      |          |          |         |         |   | 159  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 62   | 57            | 5    | 8-8    | 2A507   | 17   |      | 0-10  | 0-7  | 7-2                 |   |   |      |          |          |         |         |   | 160  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 63   | 57            | 5    | 6-4    | 2A508   | 17   |      | 4-0   | 1-6  | 0-10                |   |   |      |          |          |         |         |   | 161  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 64   | 57            | 5    | 7-4    | 2A509   | 16   | 0-0  | 0-0   | 4-6  | 2-10                |   |   |      | 2-0      |          | 2-0     |         |   | 162  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 65   | 48            | 5    | 31-0   | 2A510   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 163  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 66   | 22            | 5    | 31-6   | 2A511   | STR  |      |       |      |                     |   |   |      |          |          |         |         |   | 164  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |
| 67   | 11            | 5    | 14-6   | 2A512   | 22   |      | 1-8   | 11-2 | 1-8                 |   |   |      | 0-8 1/8  | 0-8 1/8  | 1-6 1/4 | 1-6 1/4 |   | 165  |               |      |        |       |      |   |      |     |                |   |   |   |   |   |   |   |   |

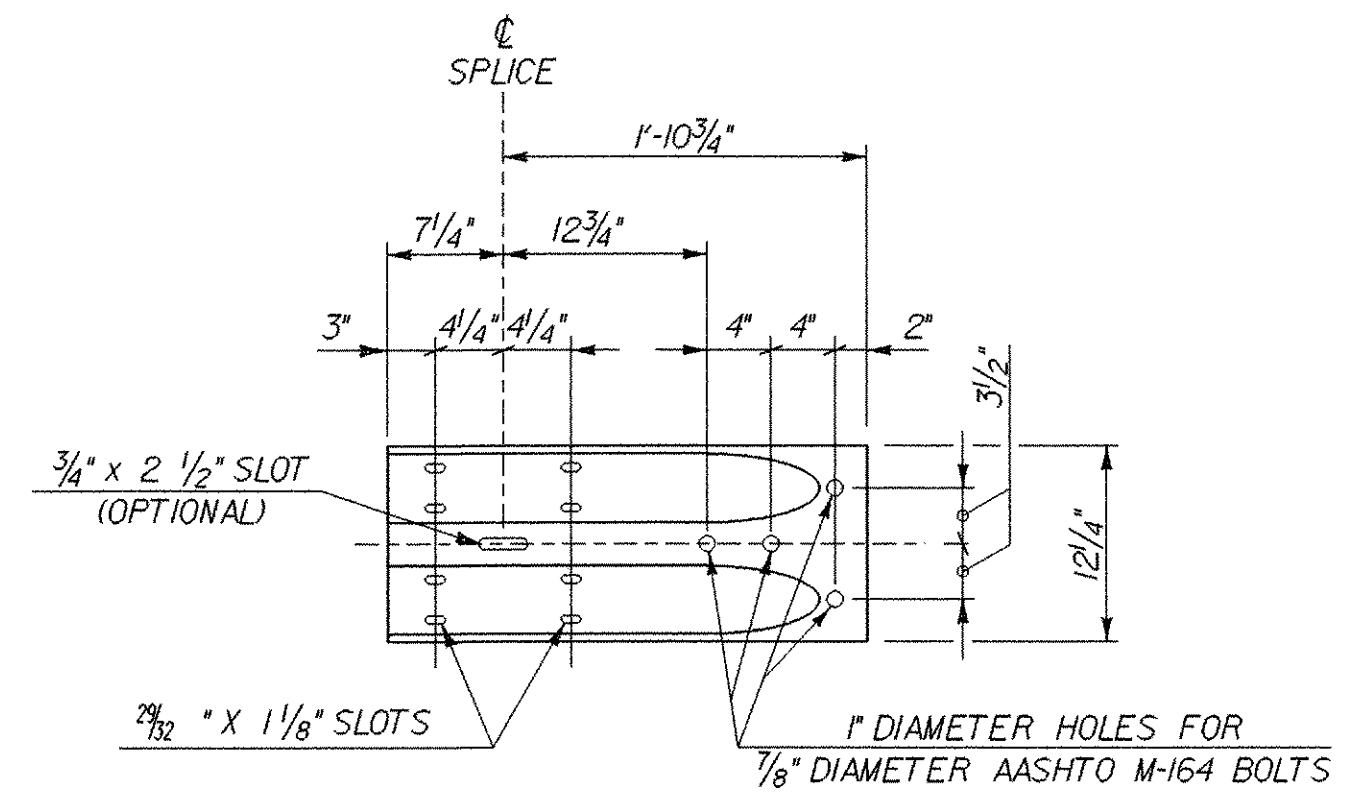
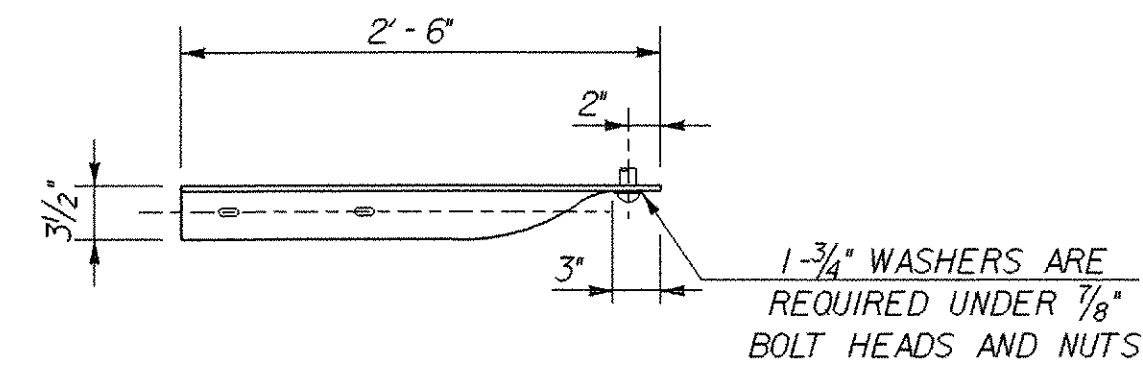




WINGWALL PILASTER TABLE

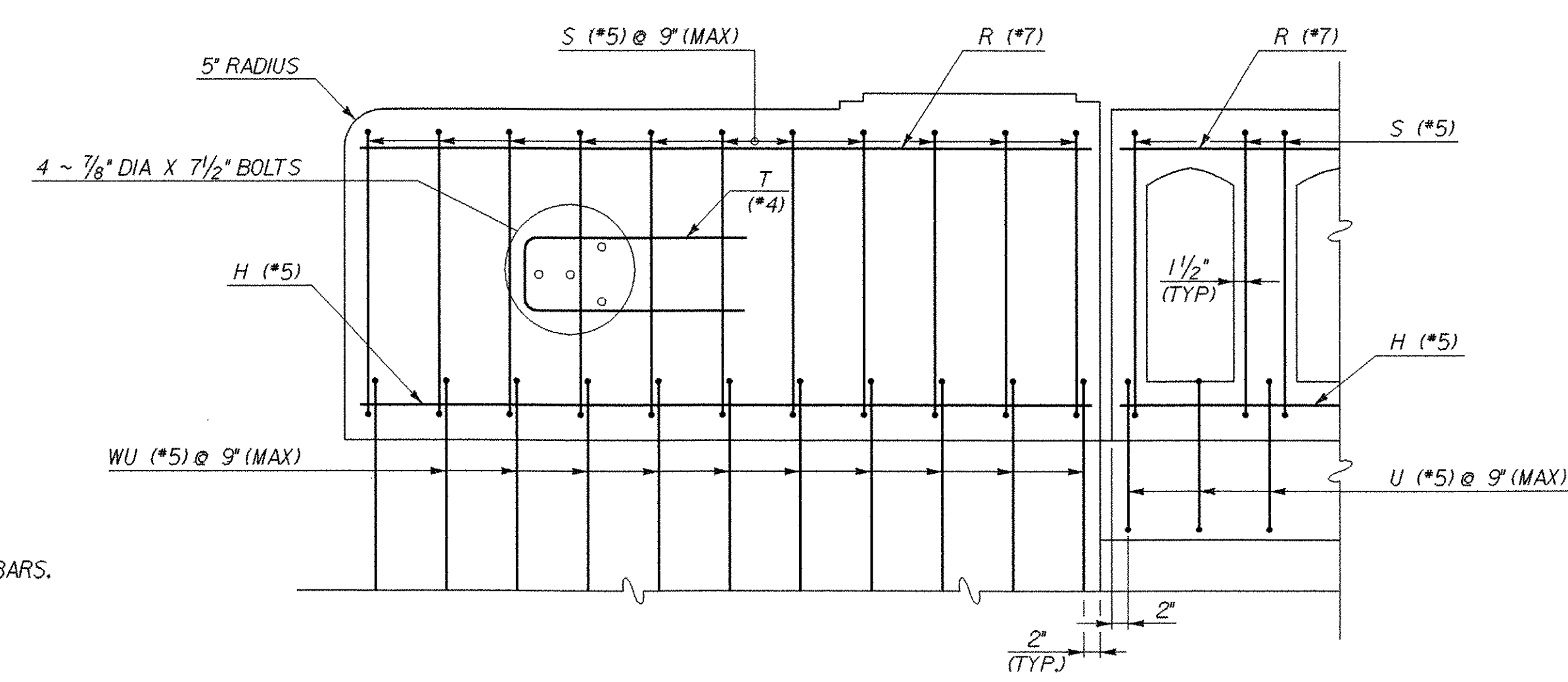
| W.W. NO. | "A" DIST. | "B" DIST.  |
|----------|-----------|------------|
| W.W. 1   | 9'-3"     | 1'-10 1/2" |
| W.W. 2   | 9'-3"     | 1'-4 1/2"  |
| W.W. 3   | 24'-4"    | 1'-4 1/2"  |
| W.W. 4   | 7'-8"     | 1'-4 1/2"  |

(X = MEASURED ALONG OUTSIDE FACE OF RAIL)



RAIL NOTES

- ALL PARTS OF THE RAILING INCLUDING REINFORCING, TERMINAL CONNECTOR, BOLTS, NUTS, AND WASHERS ARE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF RAIL.
- ALL CONCRETE FOR RAILING WALL SHALL BE CONCRETE, HIGH PERFORMANCE CLASS AA.
- DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
- SHOP DRAWINGS SHALL BE SUBMITTED FOR THIS RAIL.
- SEE PLAN AND ELEVATION, BRIDGE SHEET BR106 FOR PAY LIMIT DIMENSIONS.
- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- SECTIONS B-B TO F-F ON SHEET 69 OF 79.

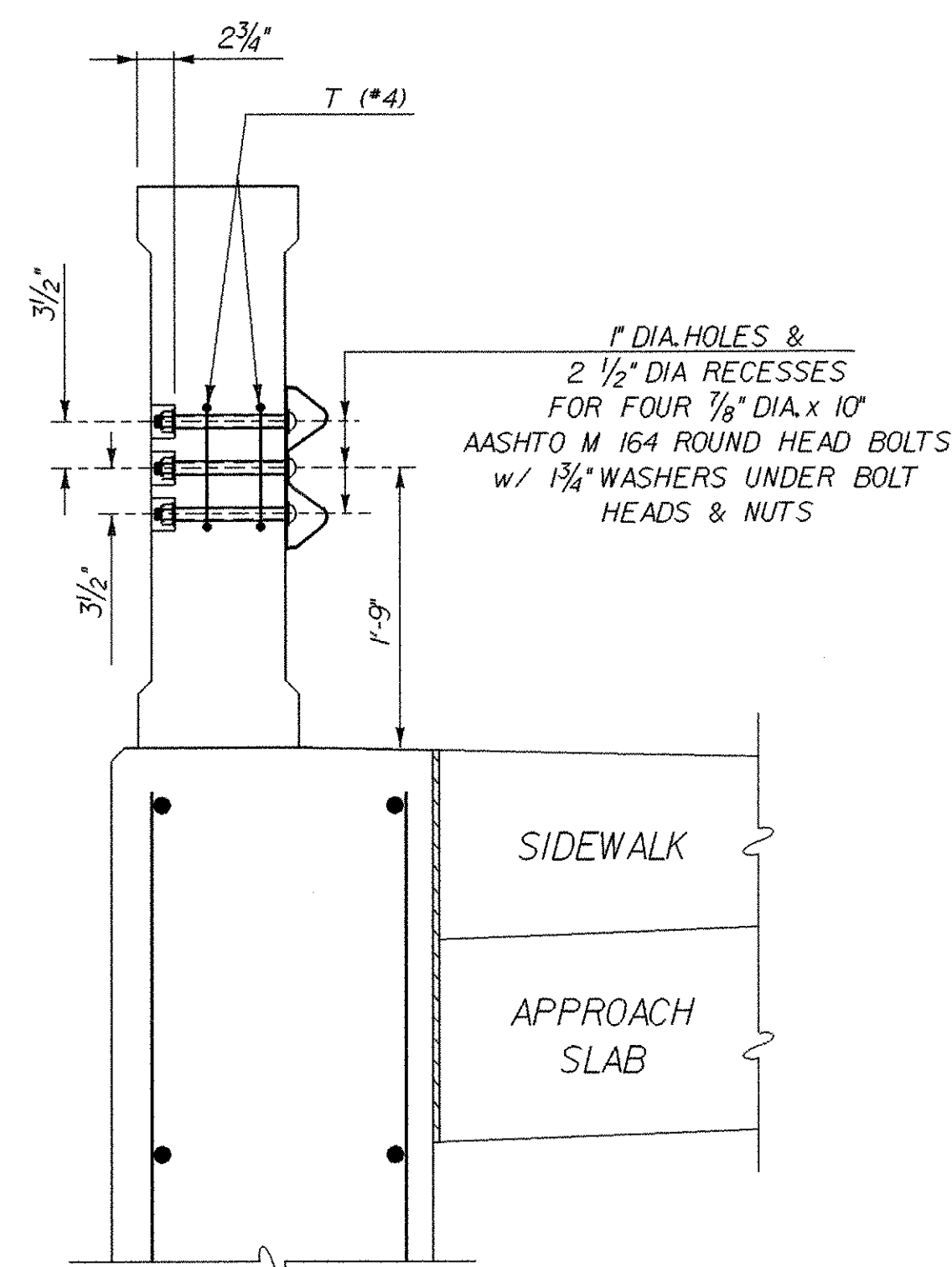


STATE OF VERMONT  
AGENCY OF TRANSPORTATION

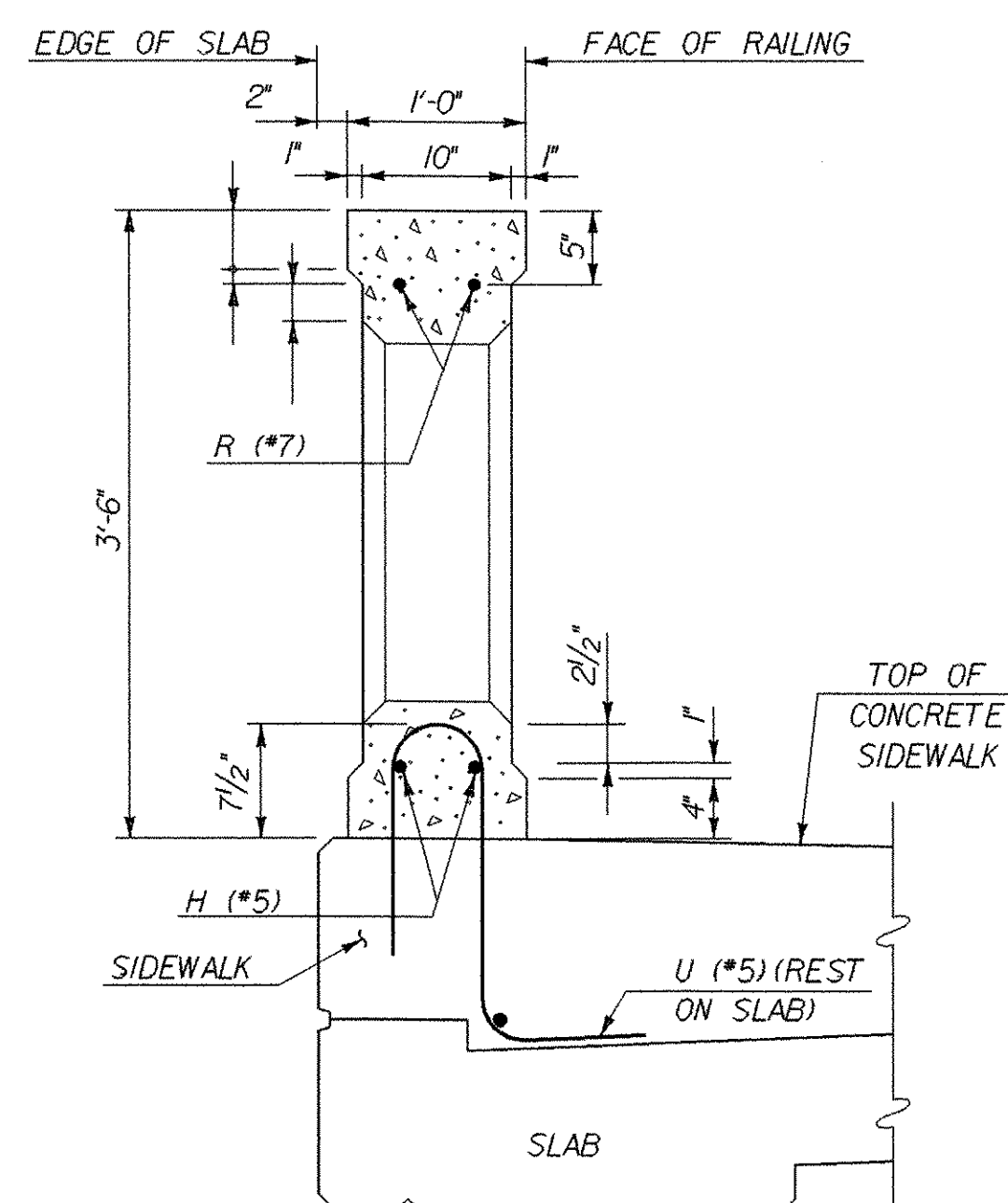
|                                       |           |                          |               |
|---------------------------------------|-----------|--------------------------|---------------|
| Town Of                               | CHESTER   | Bridge No.               | 12            |
| Highway No.                           | VT 103    | Log Sta.                 |               |
|                                       |           | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER        |           |                          |               |
| CAST-IN-PLACE CONCRETE BRIDGE RAILING |           |                          |               |
| Designed By                           | L. WIXSON | Drawn By                 | P. DUSTIN     |
| Checked By                            | T. GRANT  | Bridge Design Supervisor | M. ZYDEL      |
| PROJECT                               | CHESTER   | PROJECT NO.              | BRF 025-1(35) |
| I:\G.C. Files\103\103.dwg             |           | zbi34.dwg                |               |
| Bridge Sheet No. BR124                |           | Sheet 68 of 79           |               |

McFARLAND - JOHNSON, INC.

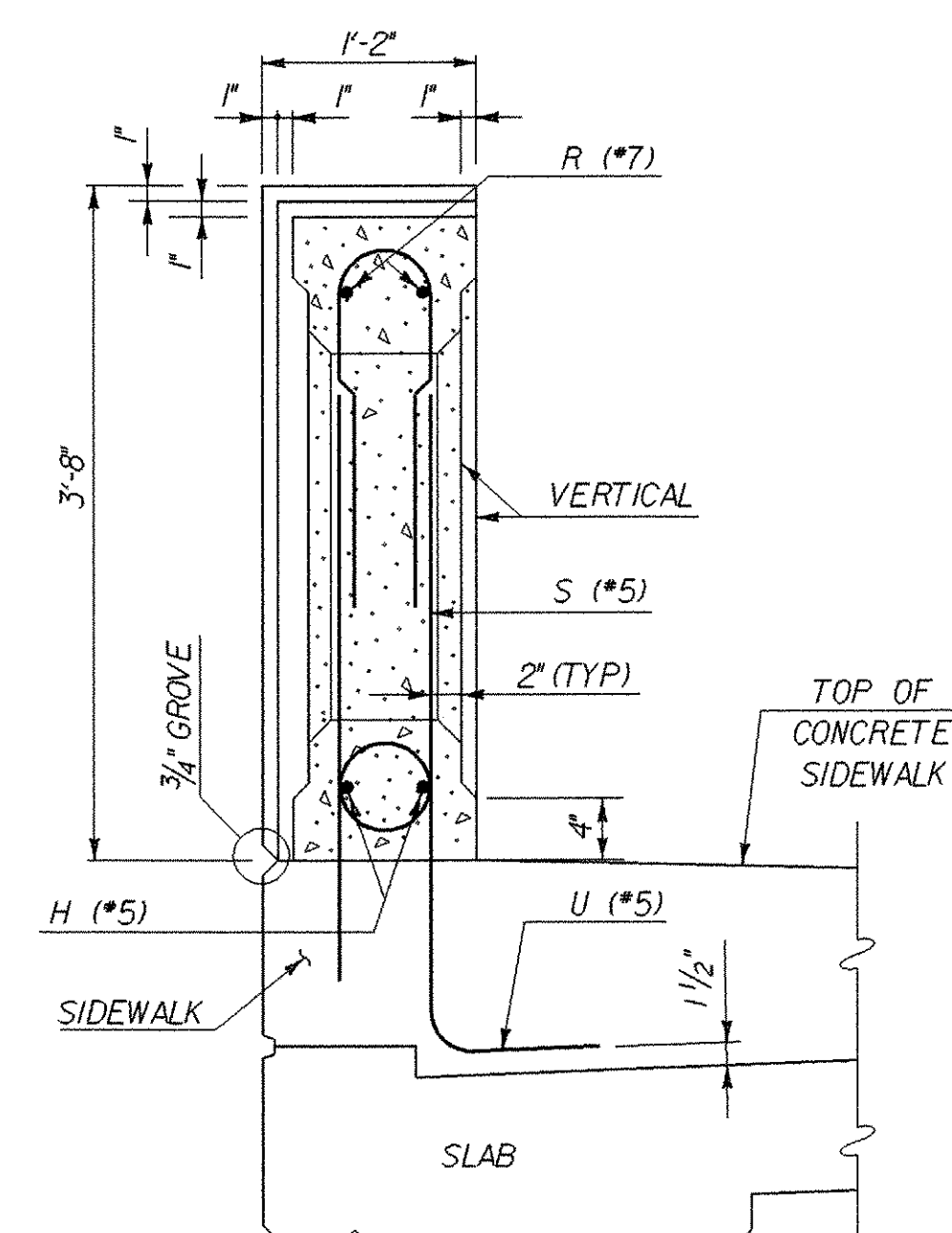




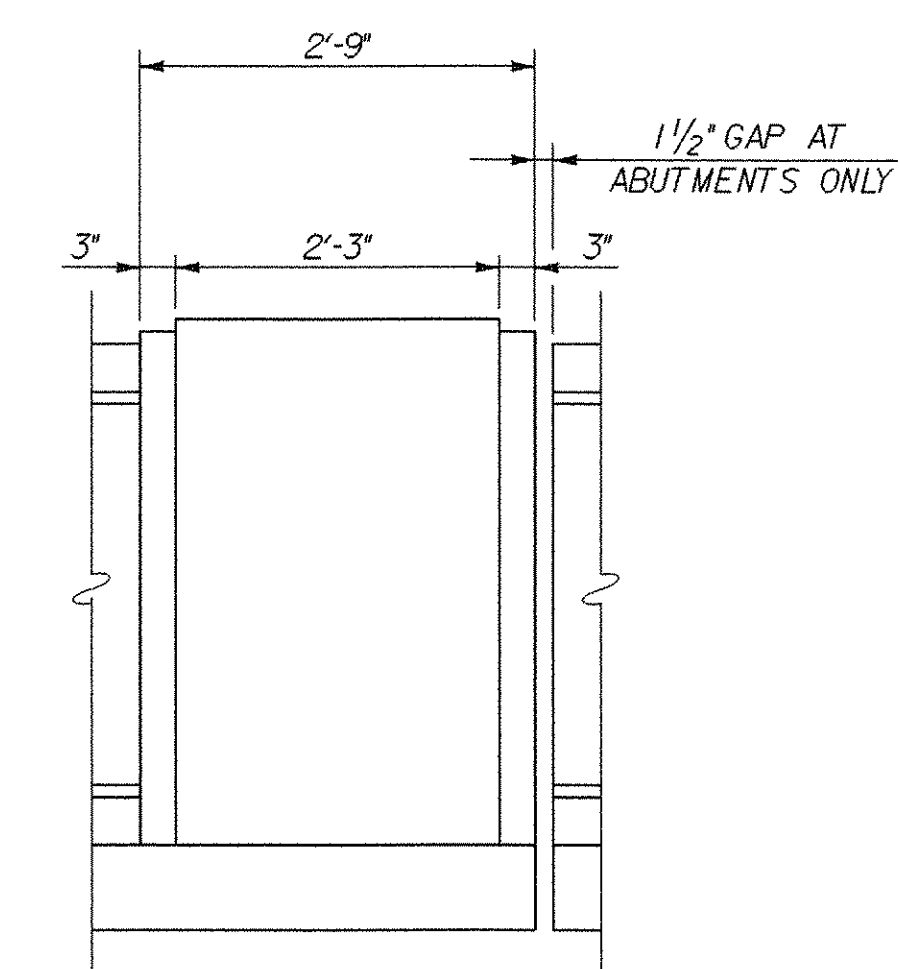
**SECTION B-B**  
SCALE: 1" = 1'-0"  
(SHOWING MBGF CONNECTION)



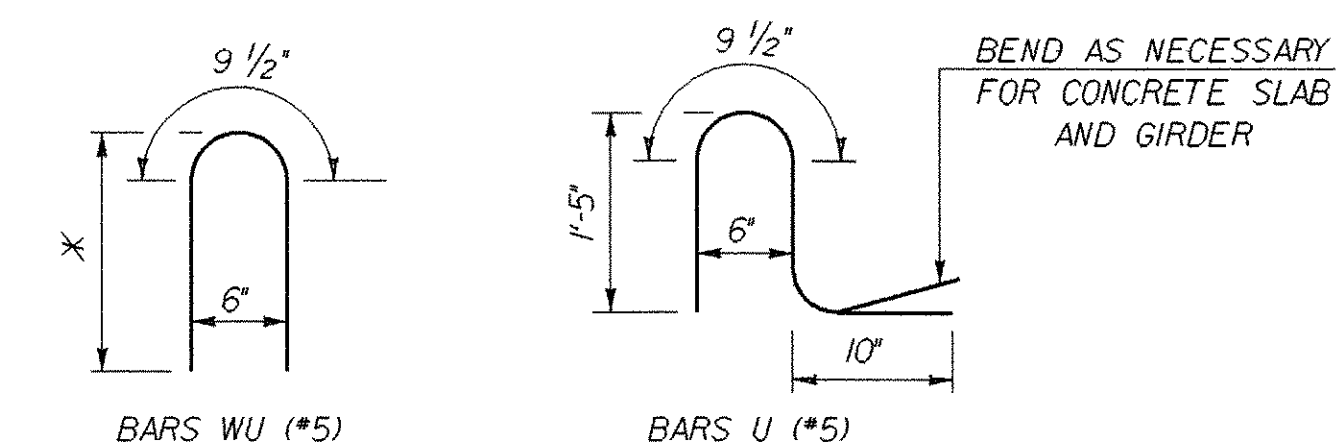
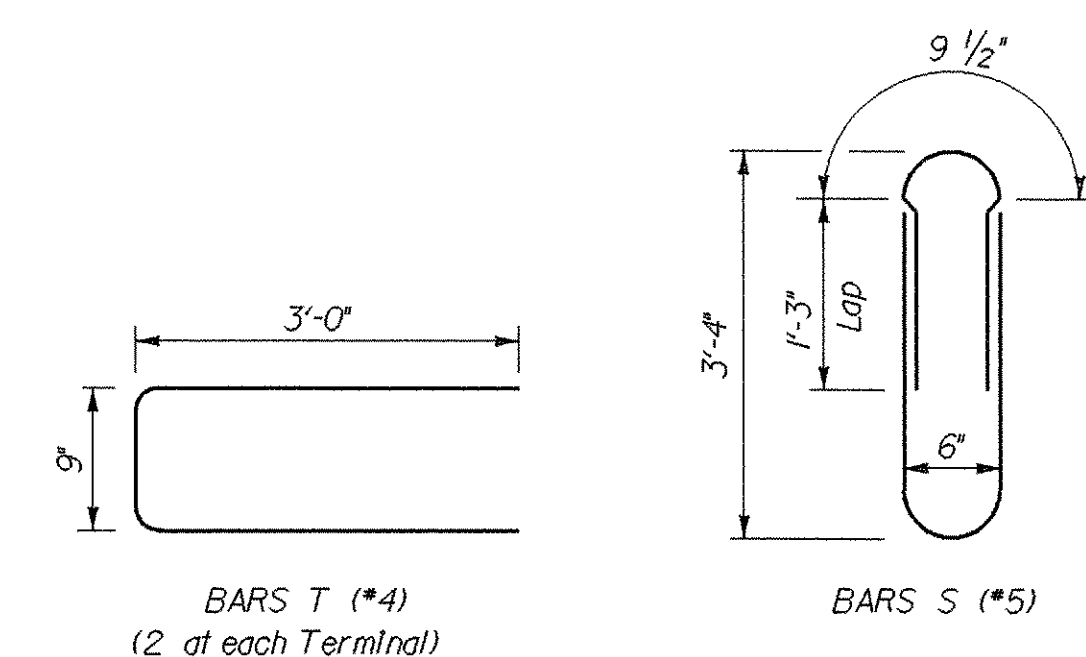
**SECTION C-C**  
SCALE: 1" = 1'-0"



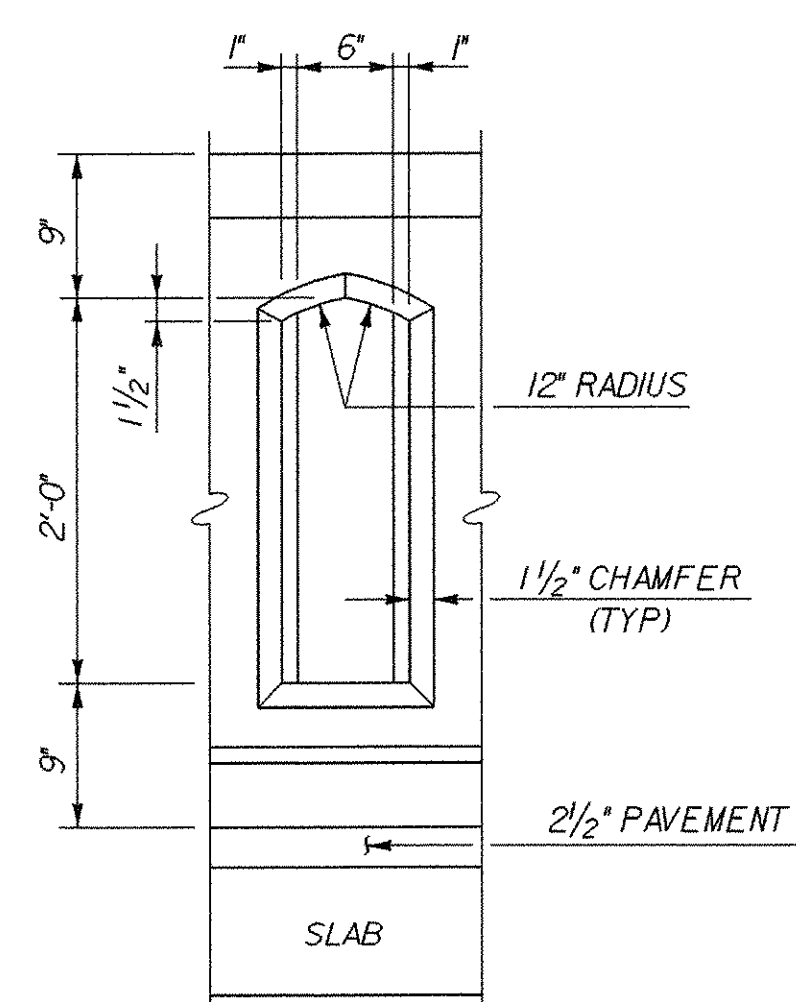
**SECTION D-D**  
SCALE: 1" = 1'-0"  
(SHOWING PILASTER)



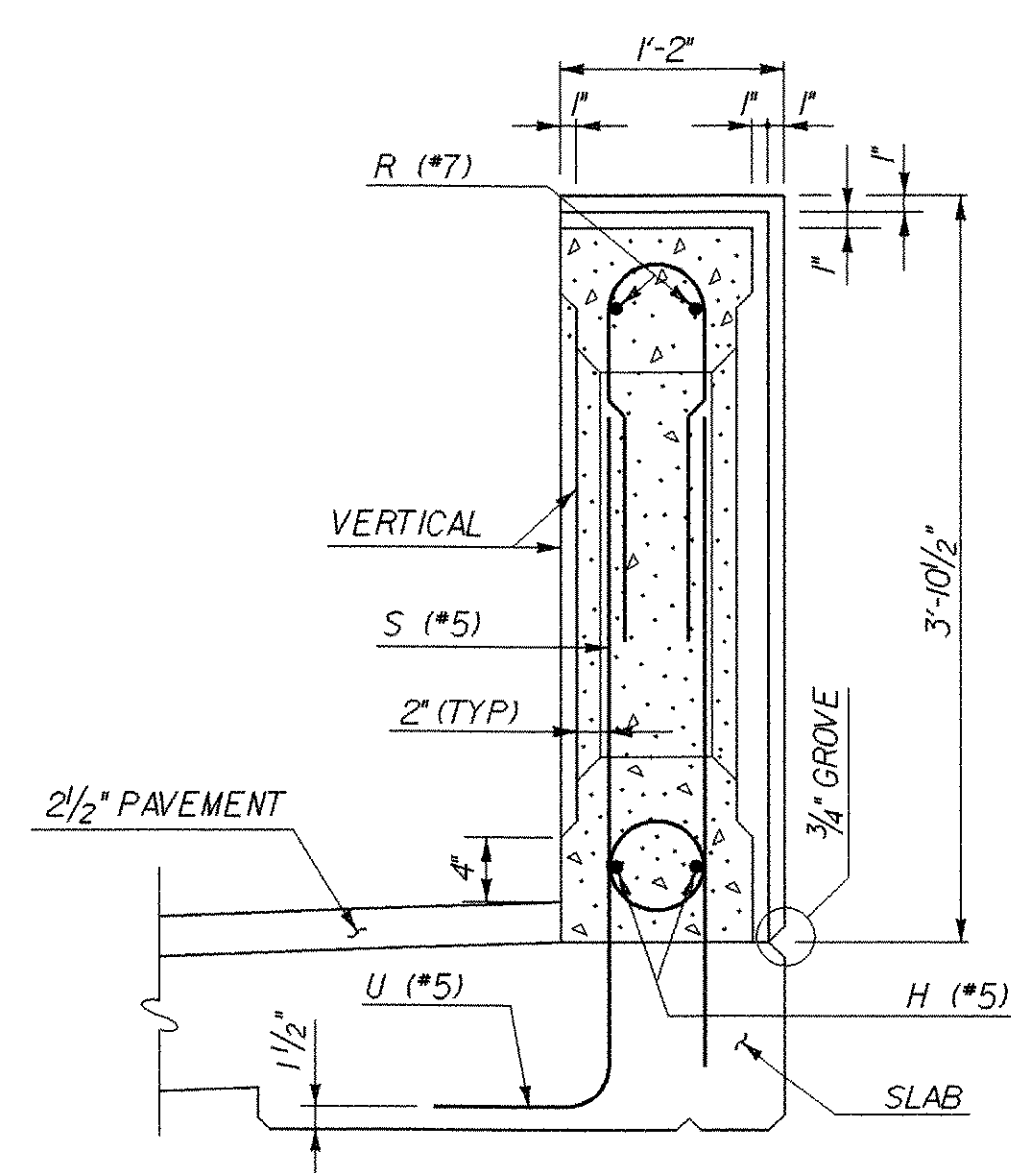
**EXTERIOR PILASTER ELEVATION**  
SCALE: 3/4" = 1'-0"  
(LOCATED AT ABUTMENTS AND 1/3 POINTS ON DECK)



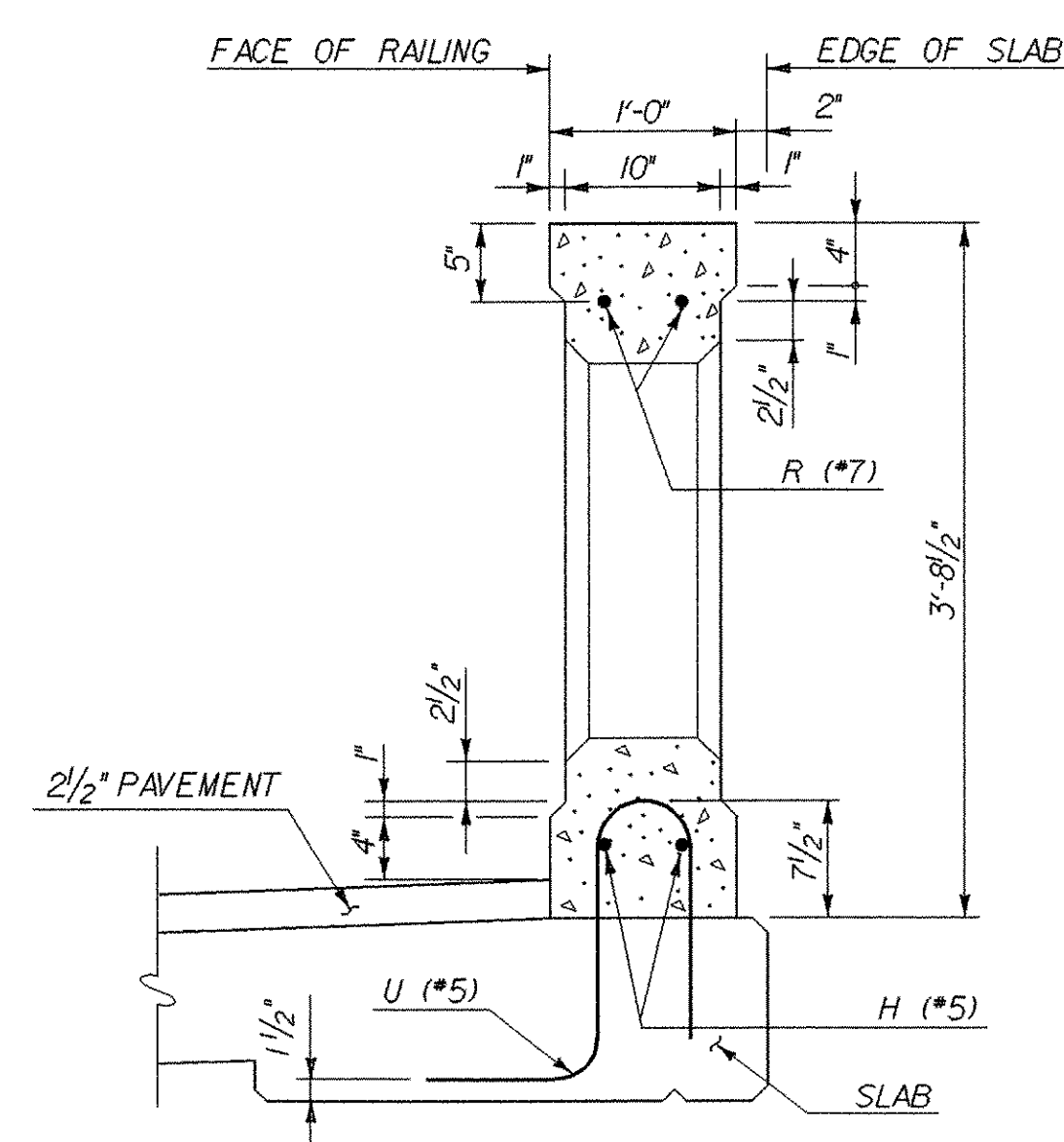
**REINFORCING BAR DETAILS**  
NOT TO SCALE  
(X: 1'-10" ON DECK, 2'-7" ON SIDEWALK)



**WINDOW DETAIL**  
SCALE: 1" = 1'-0"



**SECTION E-E**  
SCALE: 1" = 1'-0"  
(SHOWING PILASTER)



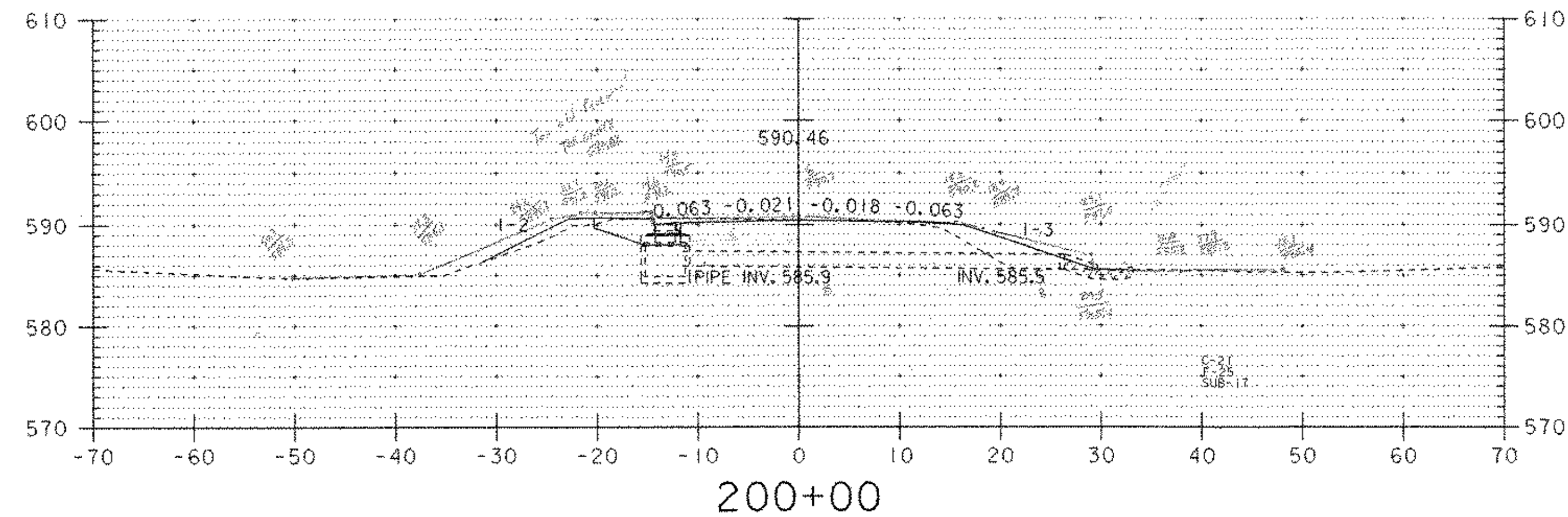
**SECTION F-F**  
SCALE: 1" = 1'-0"

| STATE OF VERMONT<br>AGENCY OF TRANSPORTATION                    |           |                          |               |
|-----------------------------------------------------------------|-----------|--------------------------|---------------|
| Town Of                                                         | CHESTER   | Bridge No.               | 12            |
| Highway No.                                                     | VT 103    | Log Sta.                 |               |
|                                                                 |           | Surv. Sta.               |               |
| VT 103 OVER THE WILLIAMS RIVER                                  |           |                          |               |
| CAST-IN-PLACE CONCRETE BRIDGE RAILING                           |           |                          |               |
| Designed By                                                     | L. WIXSON | Drawn By                 | P. DUSTIN     |
| Checked By                                                      | T. GRANT  | Bridge Design Supervisor | M. ZYDEL      |
| PROJECT                                                         | CHESTER   | PROJECT NO.              | BRF 025-1(35) |
| I:\G.C.\1000\cadd\11\ingocabinet\87bl34\Structures\zbl34cd2.dgn |           |                          |               |
| Bridge Sheet No. BRI25                                          |           | Sheet 69 of 79           |               |

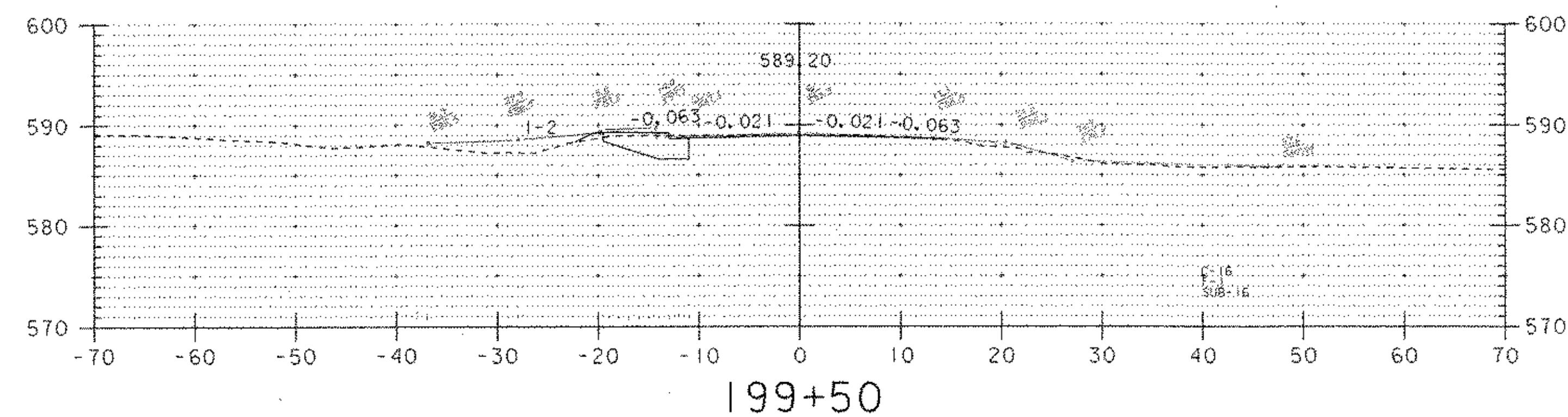
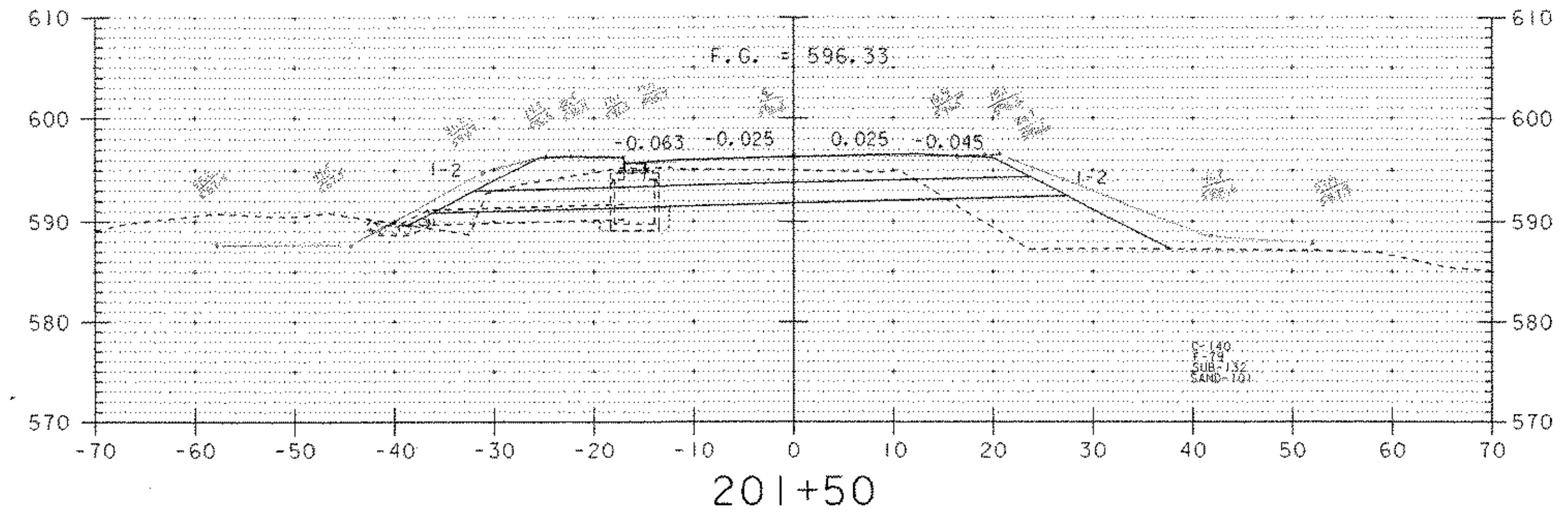


# VT 103

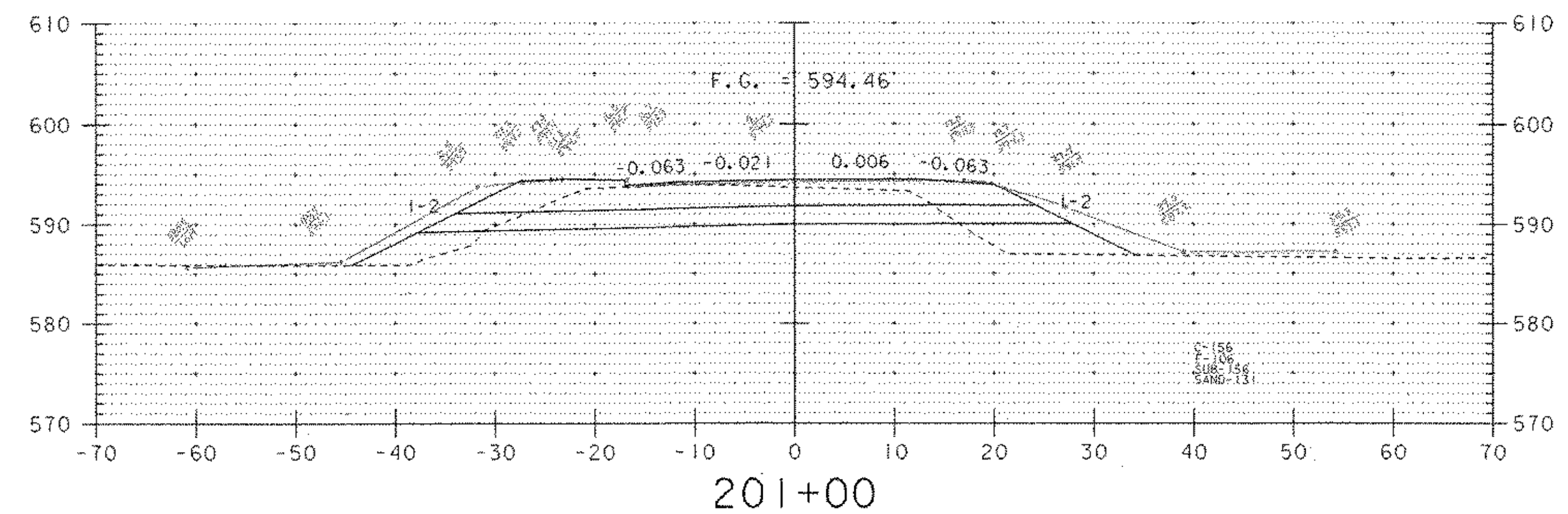
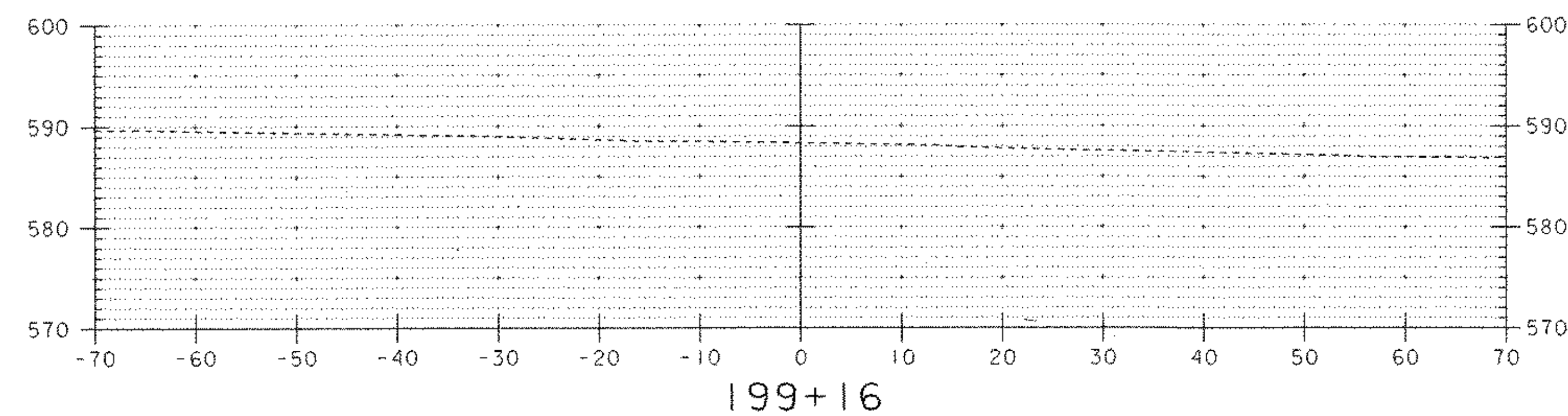
200+00.00 LT NEW DI



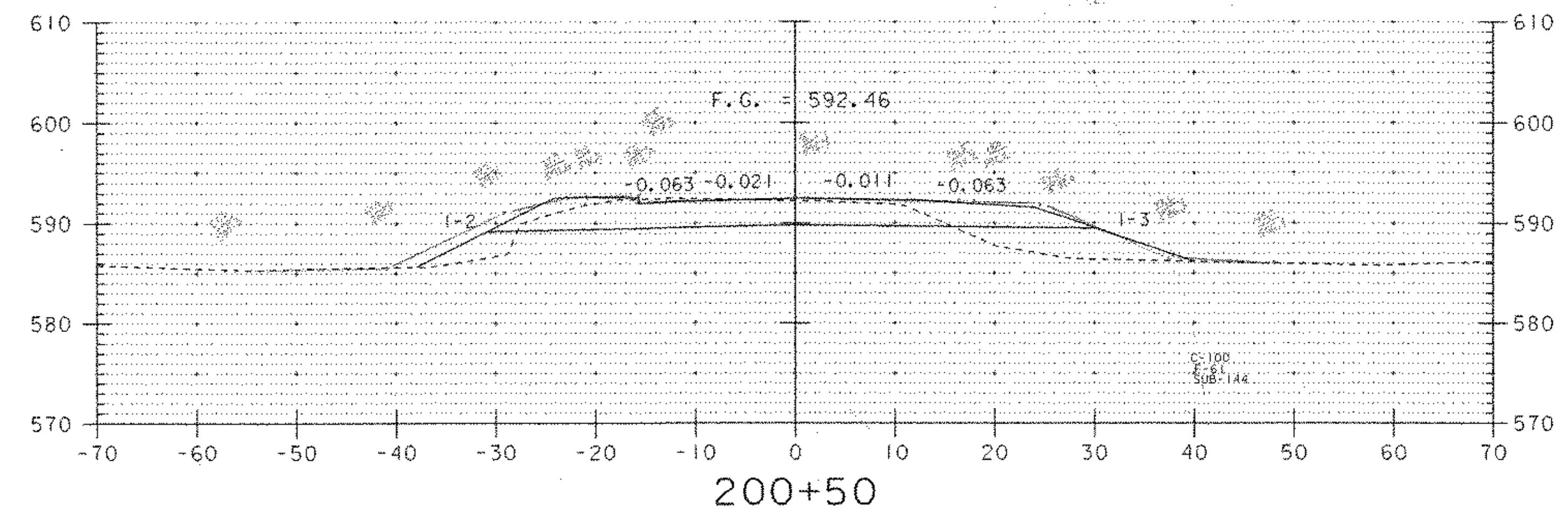
201+95.84 STOP ROADWAY/BEGIN BRIDGE  
201+75.00 LT NEW DI



199+50 BEGIN APPROACH



201+00 END APPROACH/BEGIN PROJECT/BEGIN ROADWAY



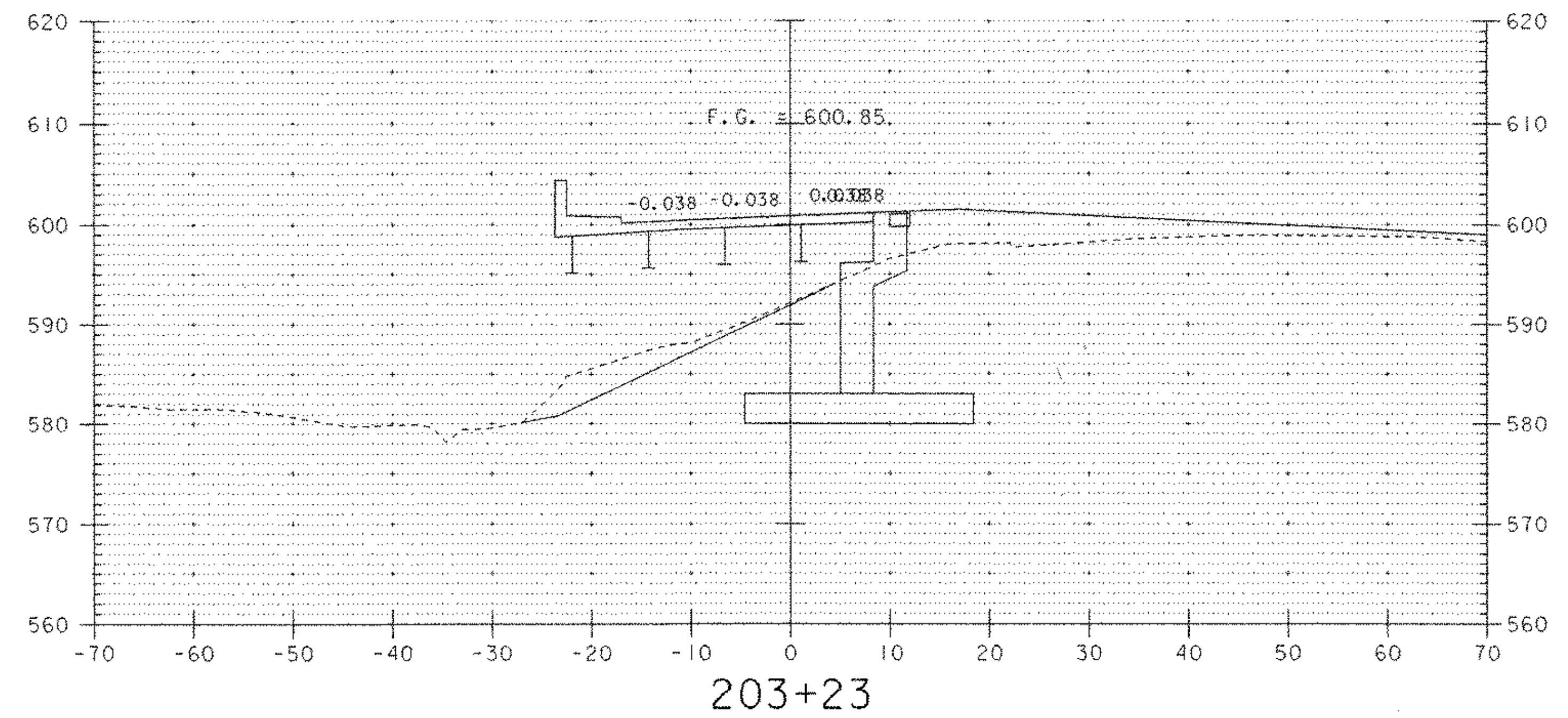
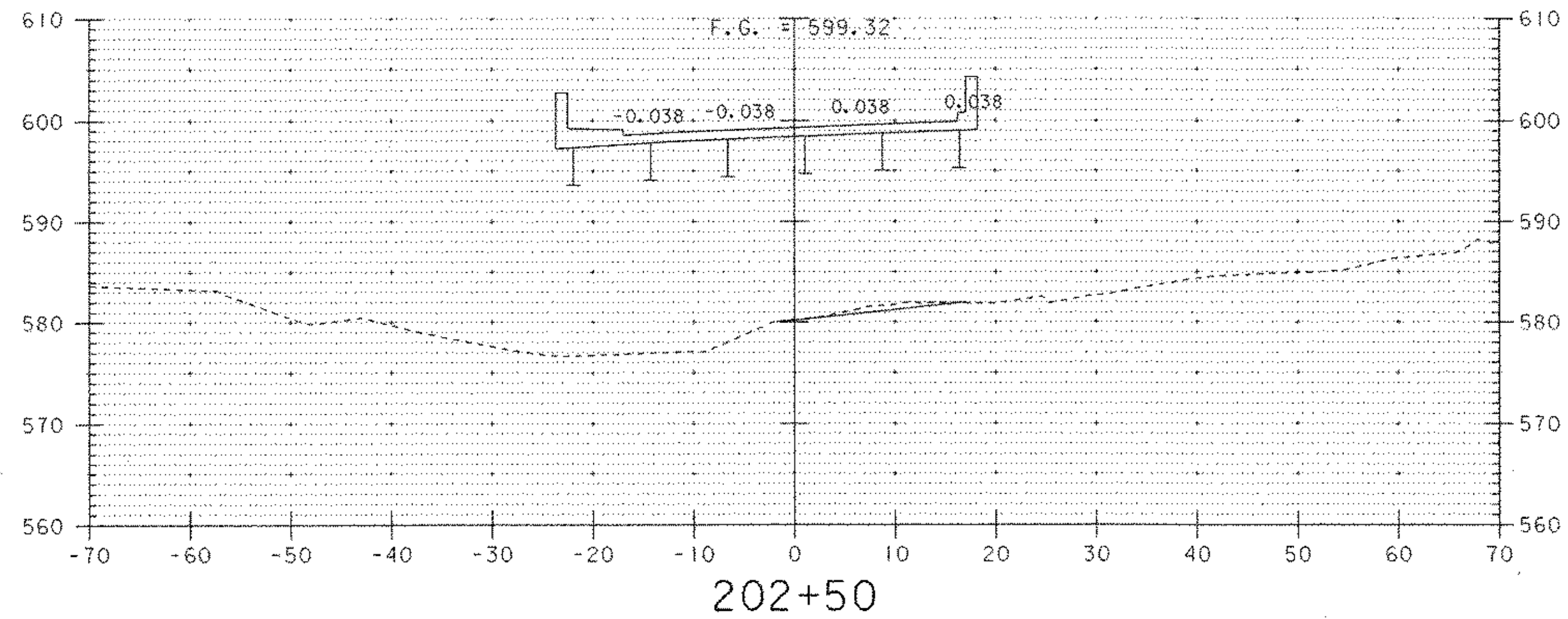
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

1"=10'  
1"=10'  
SCALE

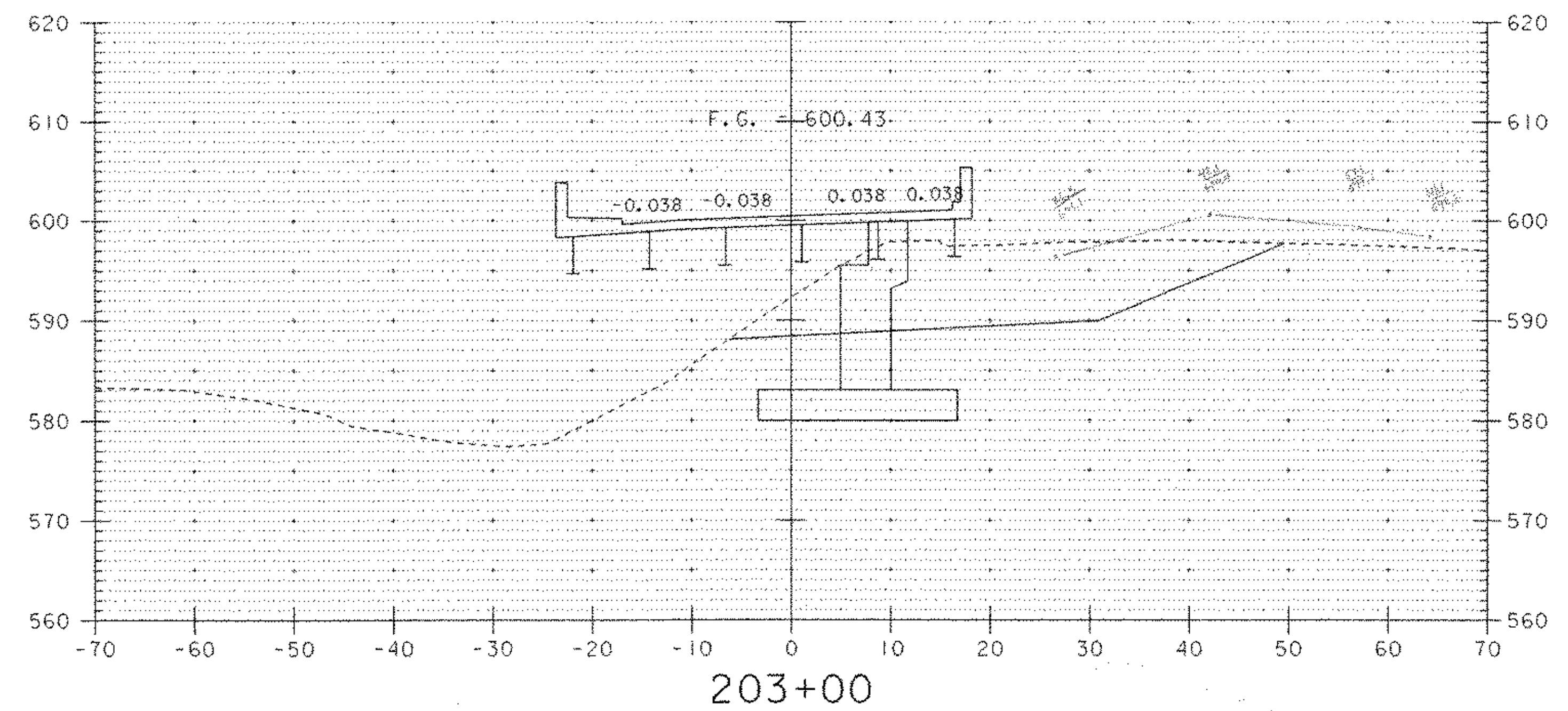
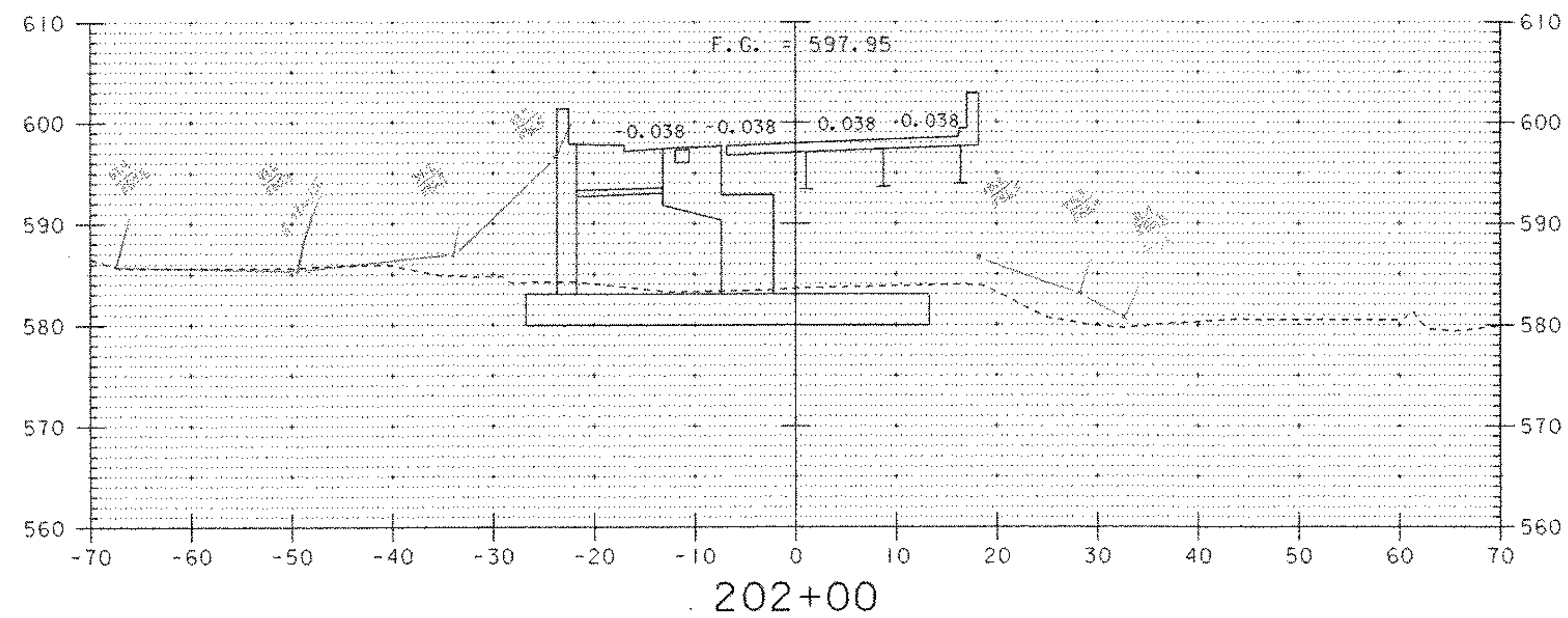
|                                                                      |                             |
|----------------------------------------------------------------------|-----------------------------|
| PROJECT: CHESTER                                                     | PROJECT NO.: BRF 025-1 (35) |
| DESIGN FILE NAME: M:\1549101\VA01 Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE: 28-MAY-2003      |
| IPARM FILE NAME: zfi34xs5                                            | SURVEY DATE: 8/90           |
| SURVEYED BY: SHERIDAN                                                | DRAWN BY: L. BULLOCK        |
| SQUAD LEADER: PORTALUP                                               | SHEET: 70 OF 79             |
| VT 103 SECTIONS                                                      |                             |



# VT 103



203+05.87 END BRIDGE/BEGIN ROADWAY



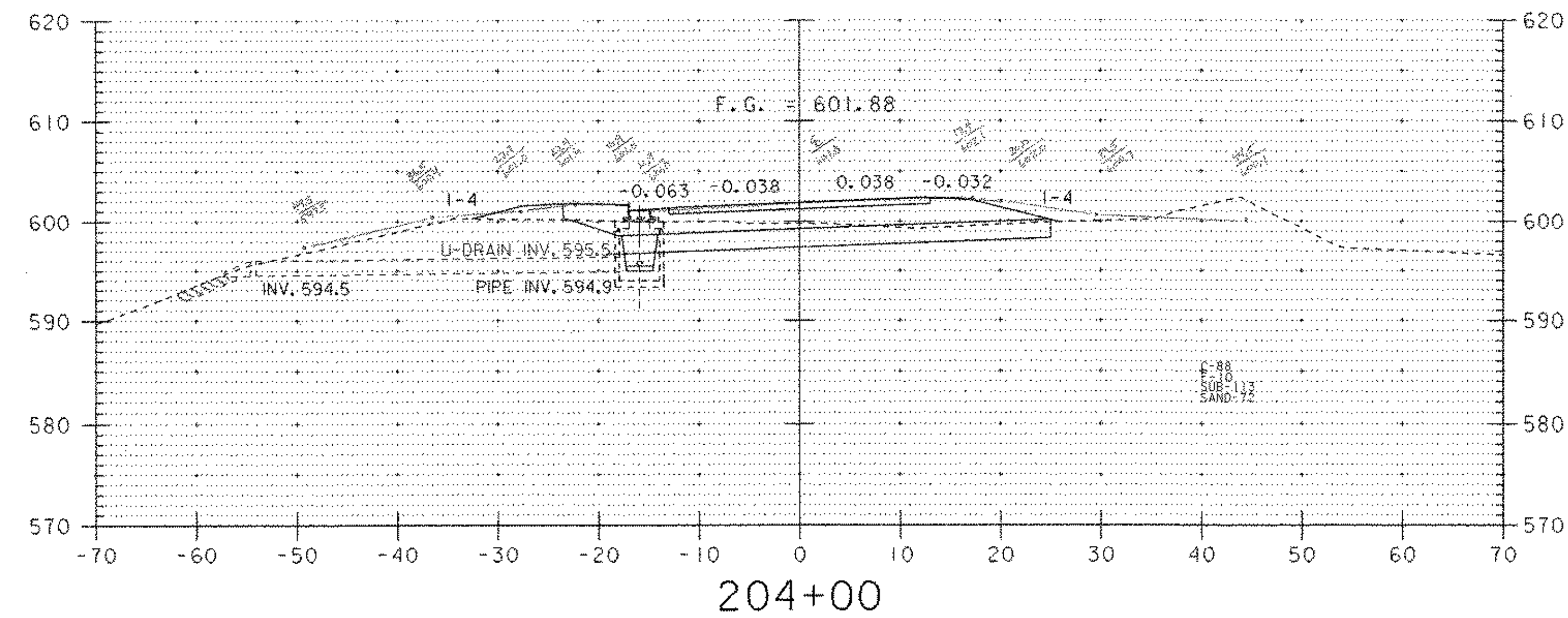
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

1"=10'  
SCALE

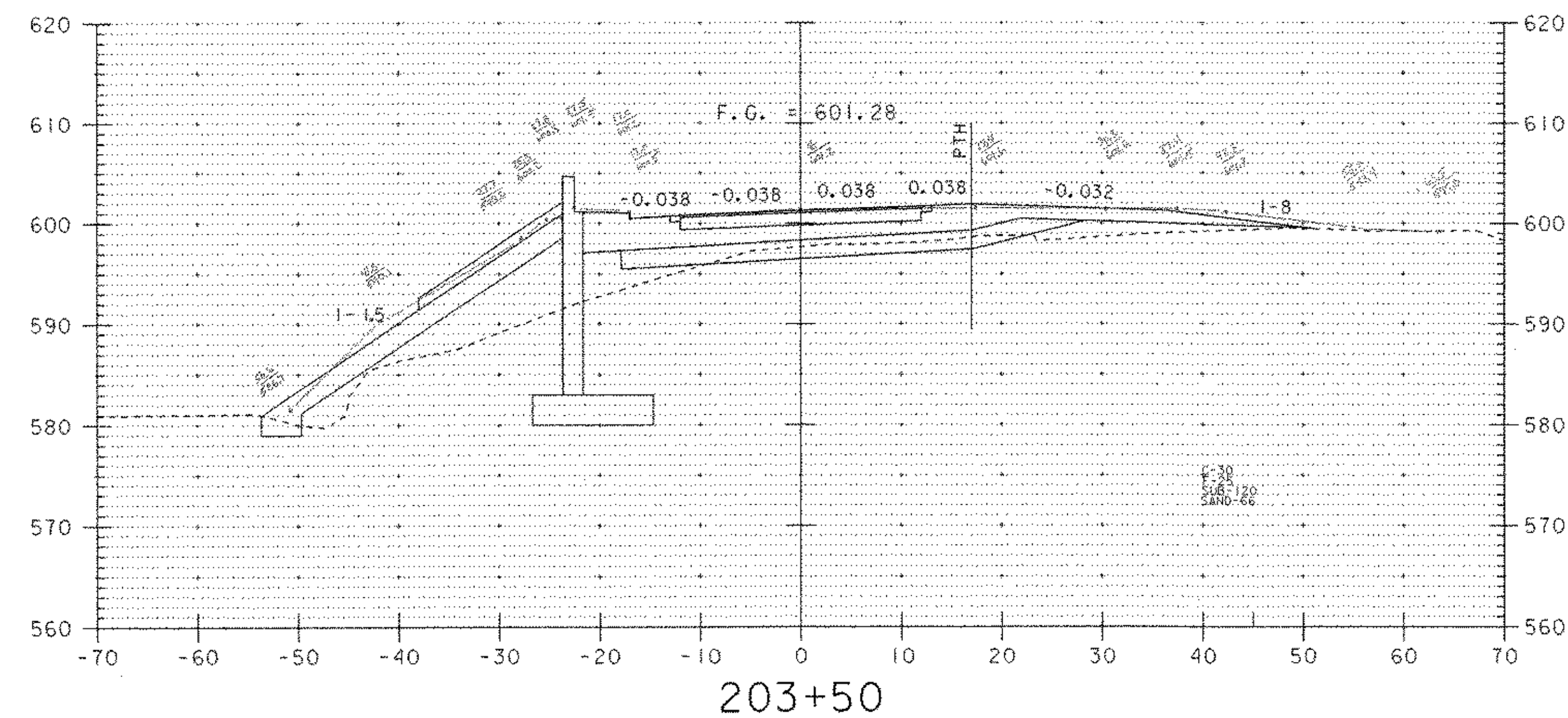
|                   |                                                   |              |               |
|-------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:          | CHESTER                                           | PROJECT NO.: | BRF 025-1(35) |
| DESIGN FILE NAME: | M:\154910\VA01 Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:  | zfi34xs2.i                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:      | SHERIDAN                                          | DRAWN BY:    | L. BULLOCK    |
| SQUAD LEADER:     | PORTALUPI                                         | SHEET:       | 71 OF 79      |
| VT 103 SECTIONS   |                                                   |              |               |



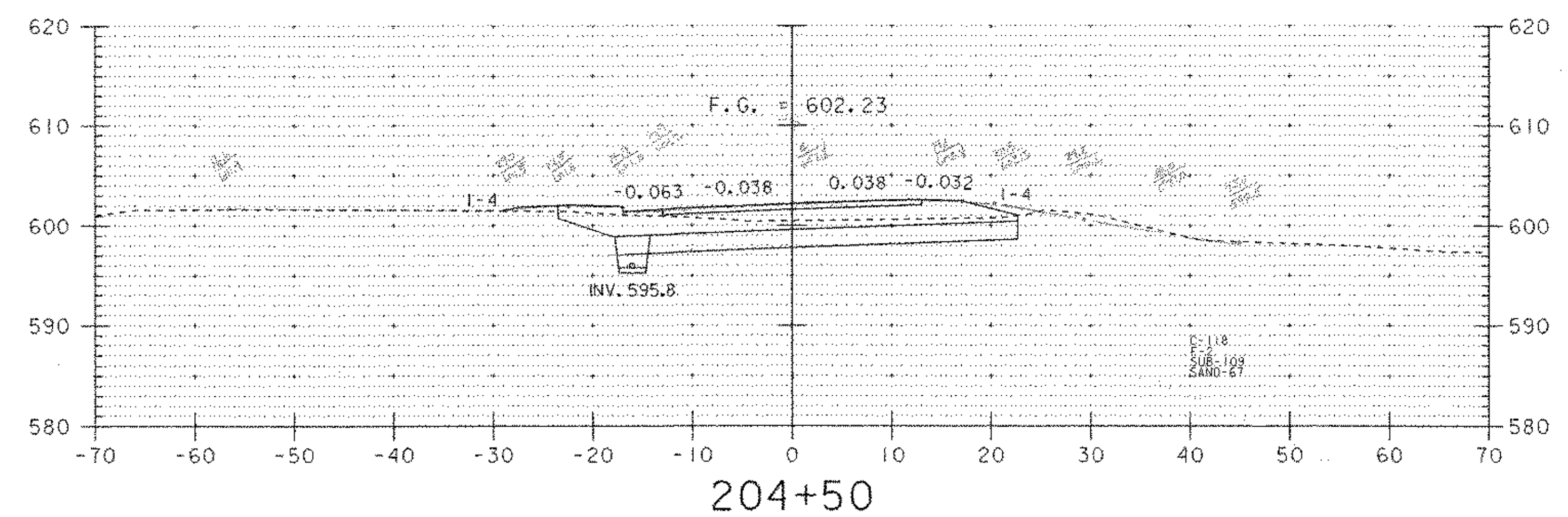
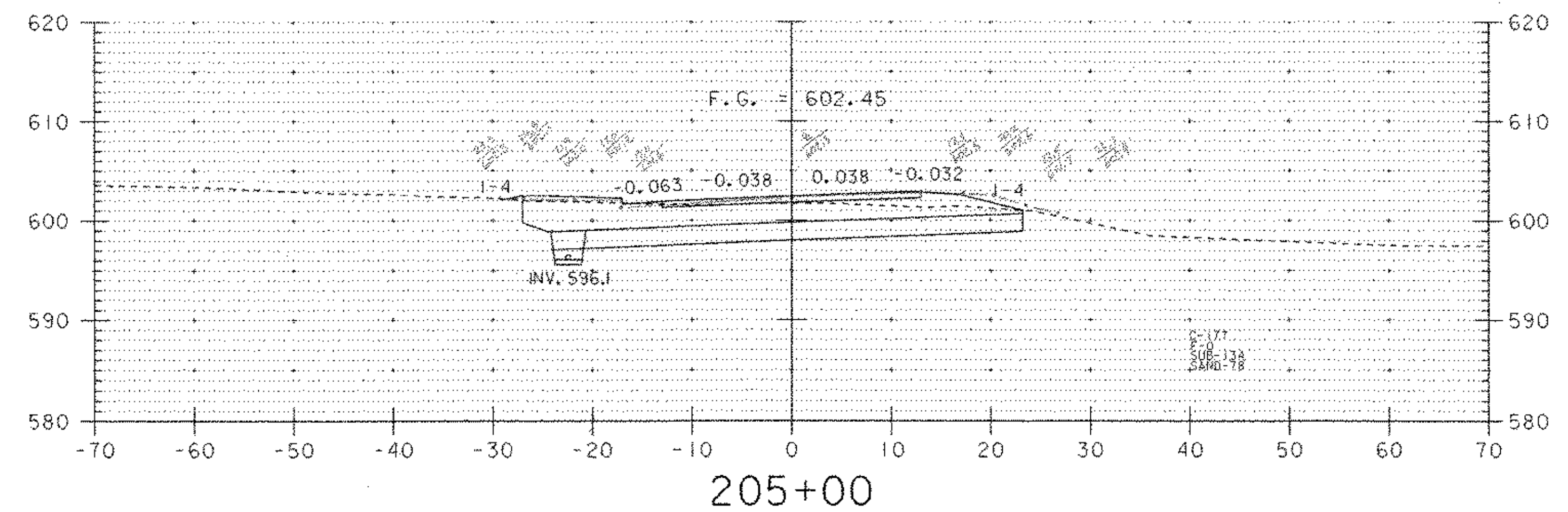
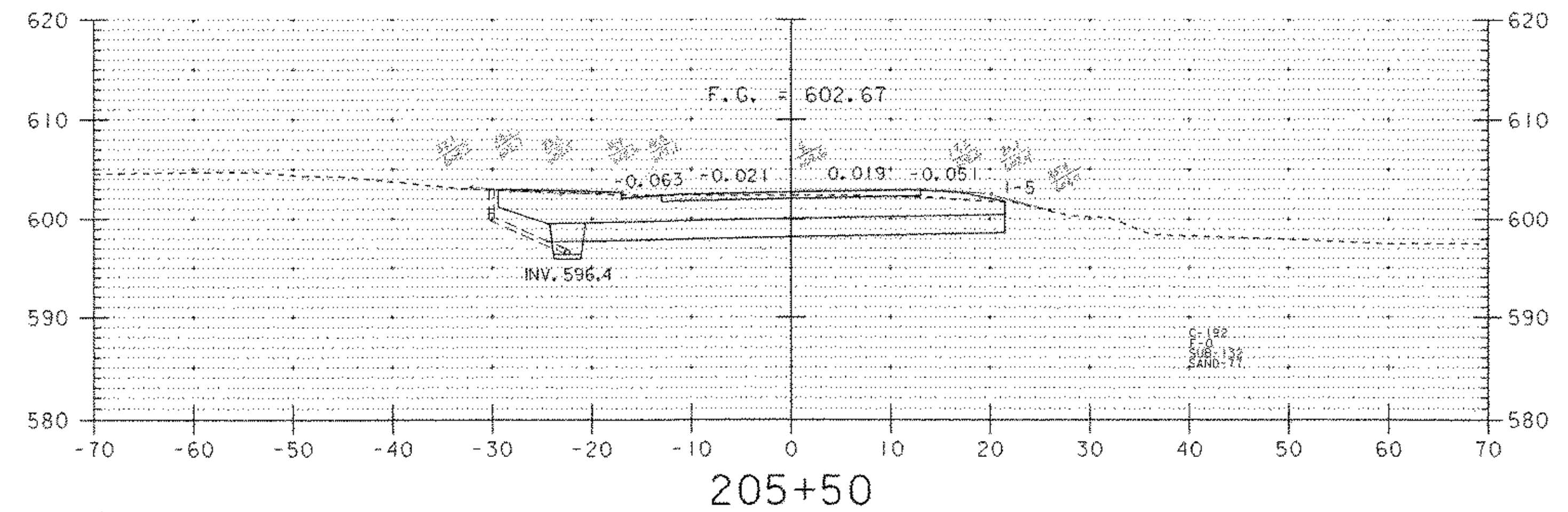
# VT 103



203+75 LT NEW DI (OUTLET U/D RUN INTO DI)



205+50 END ROADWAY/END PROJECT/BEGIN APPROACH



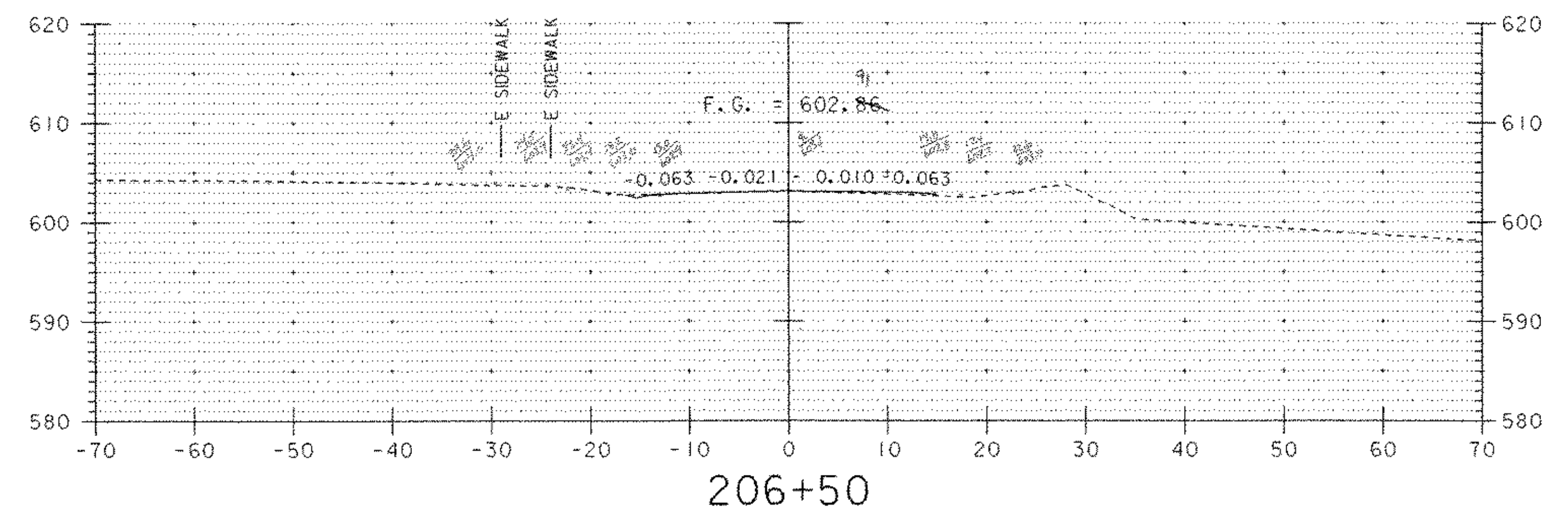
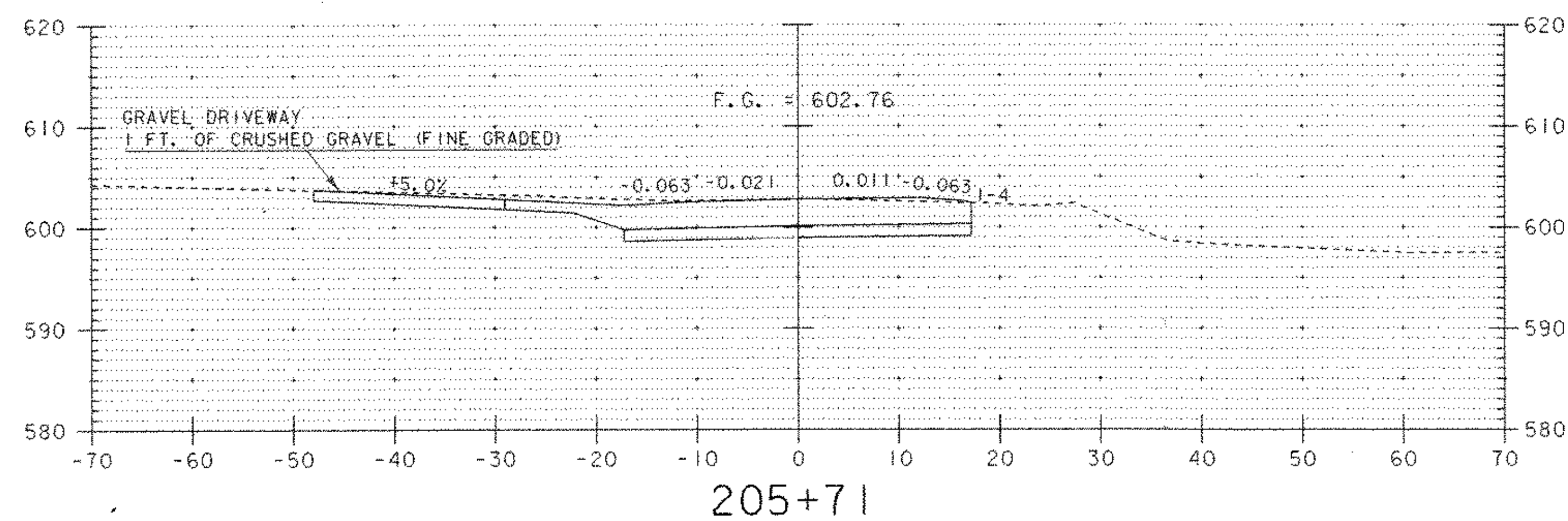
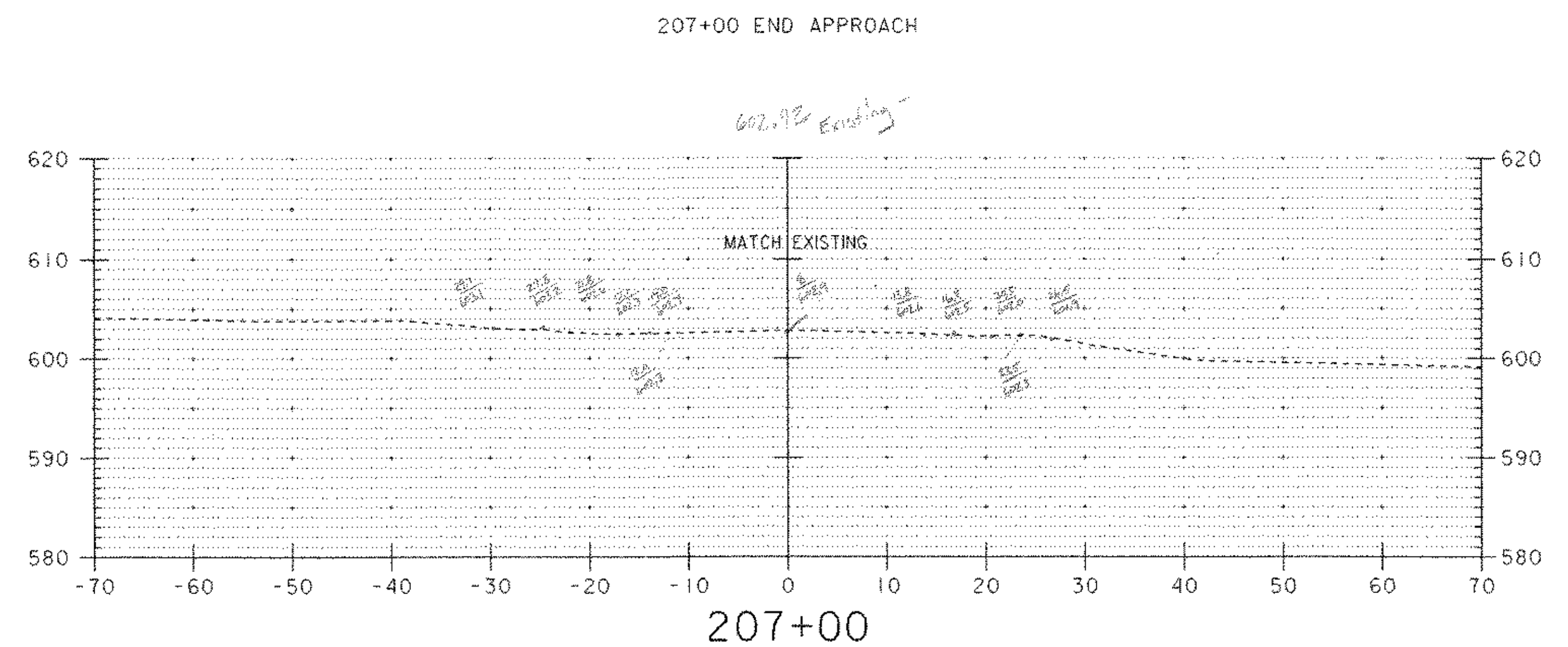
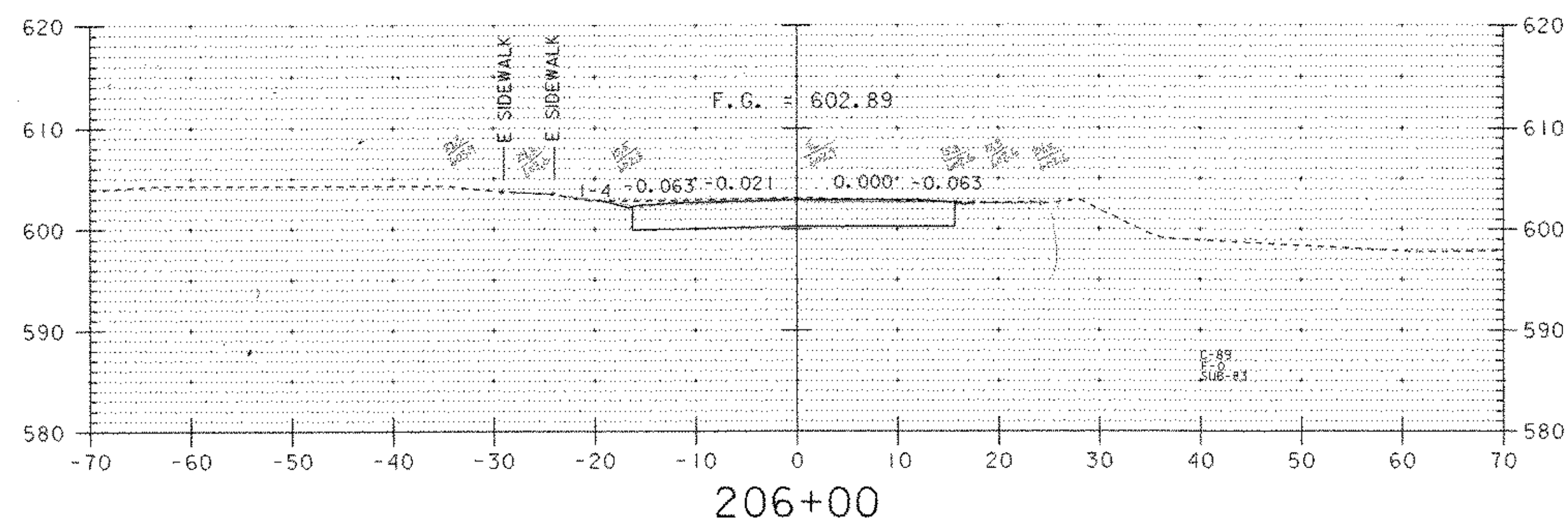
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

1"=10'  
1"=10'  
SCALE

|                                                                      |                             |
|----------------------------------------------------------------------|-----------------------------|
| PROJECT: CHESTER                                                     | PROJECT NO.: BRF 025-1 (35) |
| DESIGN FILE NAME: M:\1549101\VA0T Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE: 26-MAY-2003      |
| IPARM FILE NAME: zfi34xs3.i                                          | SURVEY DATE: 8/90           |
| SURVEYED BY: SHERIDAN                                                | DRAWN BY: L. BULLOCK        |
| SQUAD LEADER: PORTALUPI                                              | SHEET: 72 OF 79             |
| VT 103 SECTIONS                                                      |                             |



# VT 103



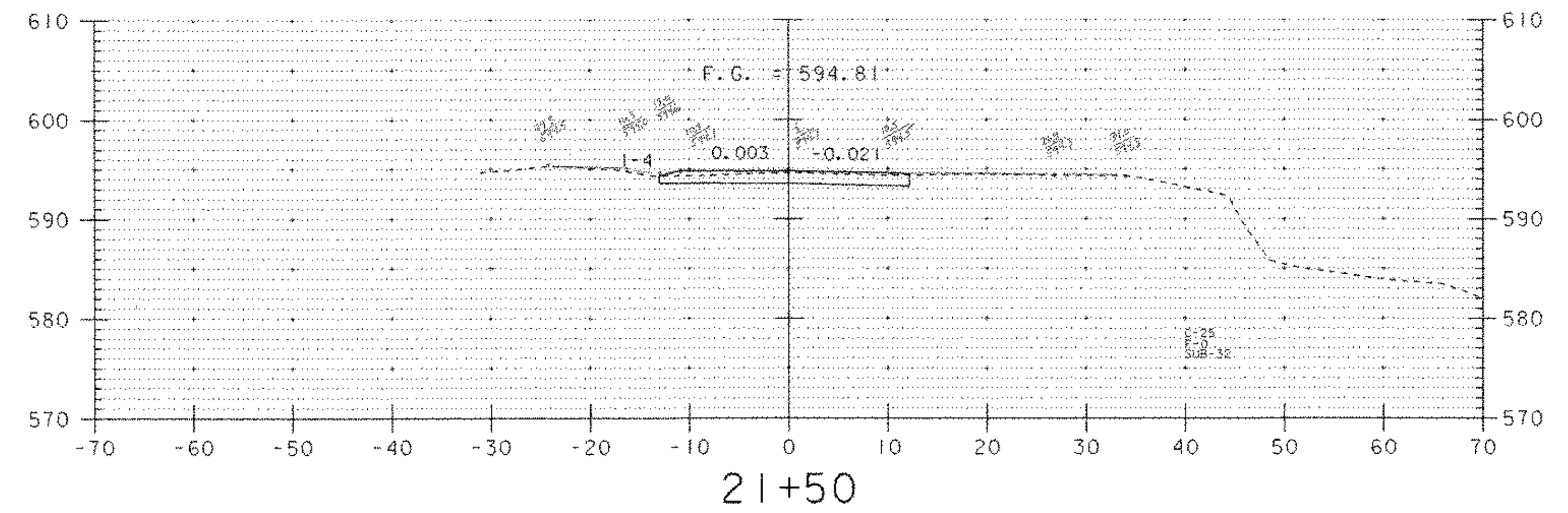
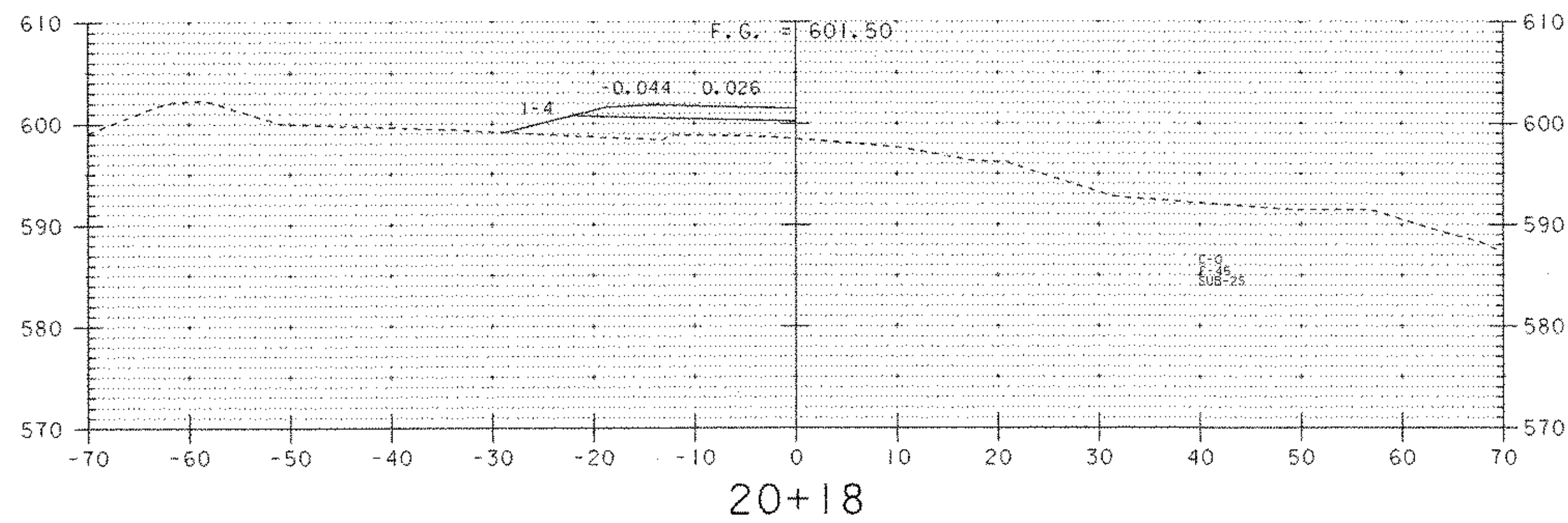
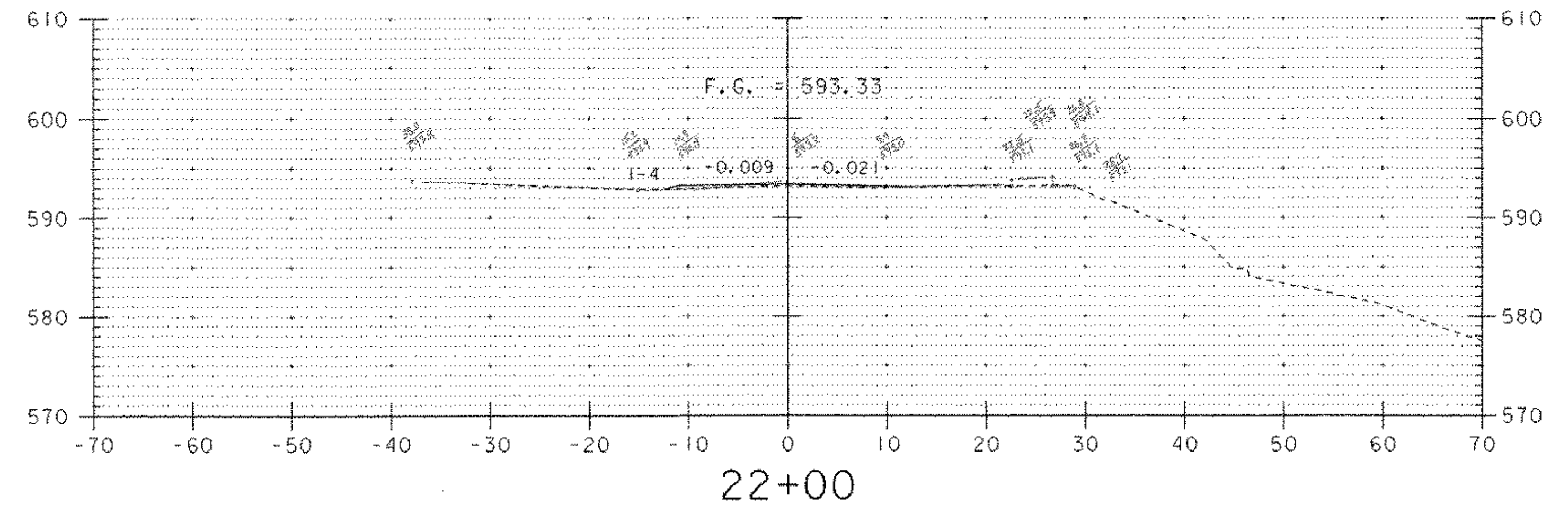
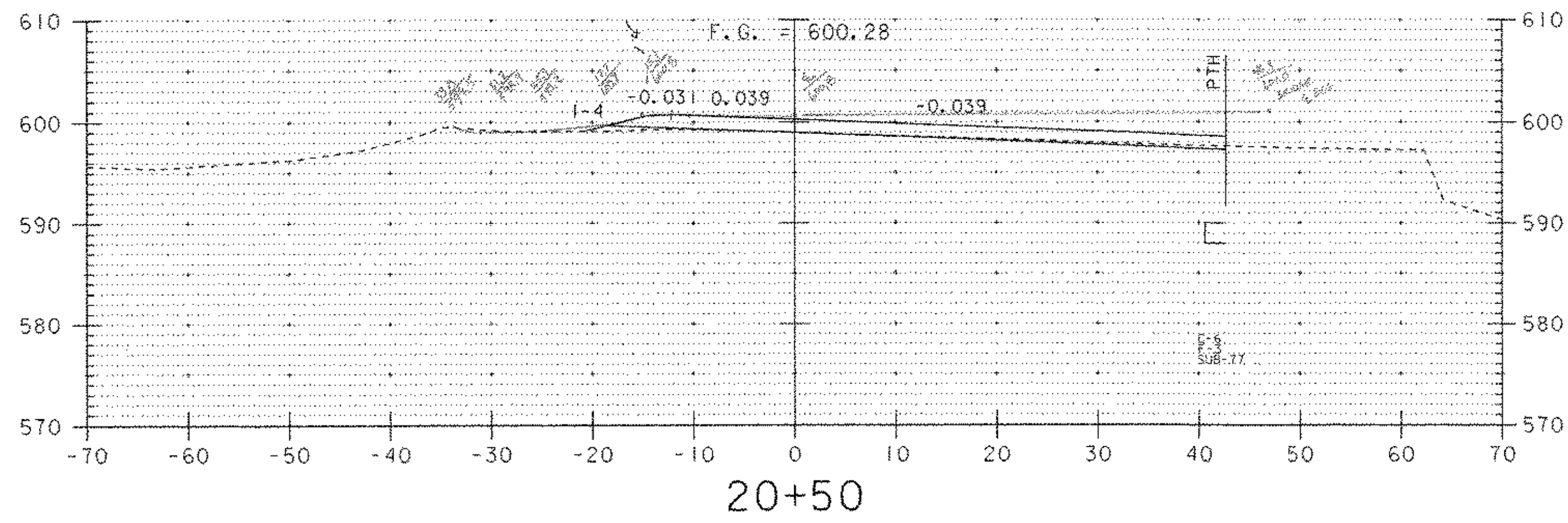
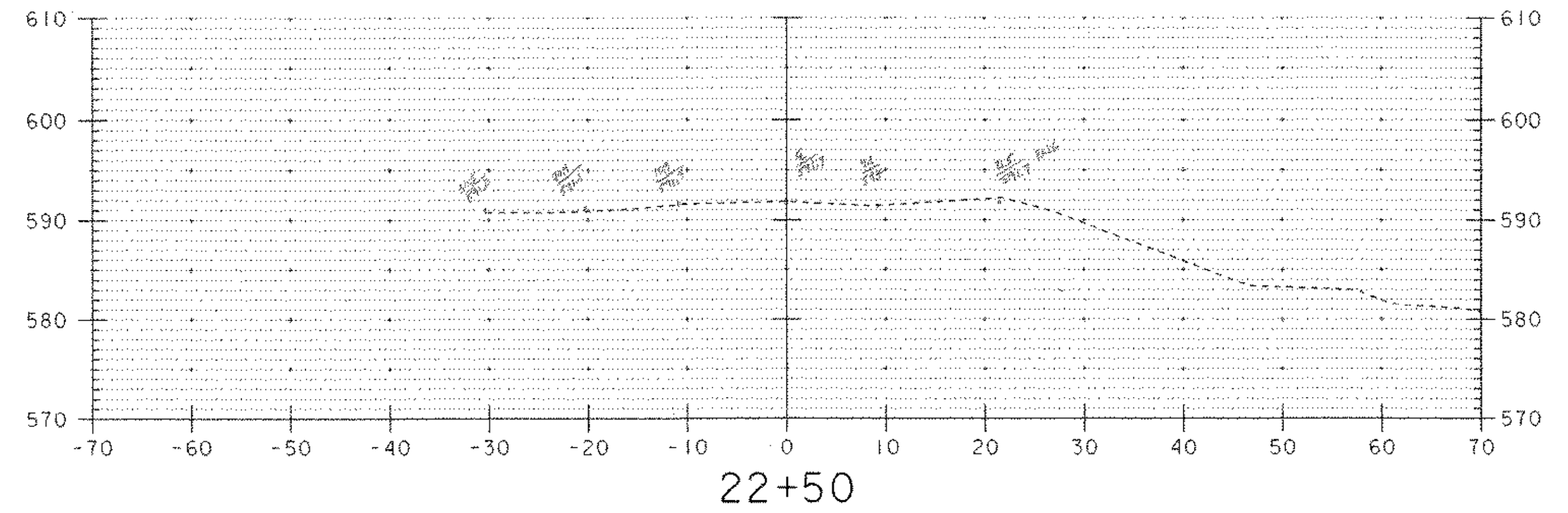
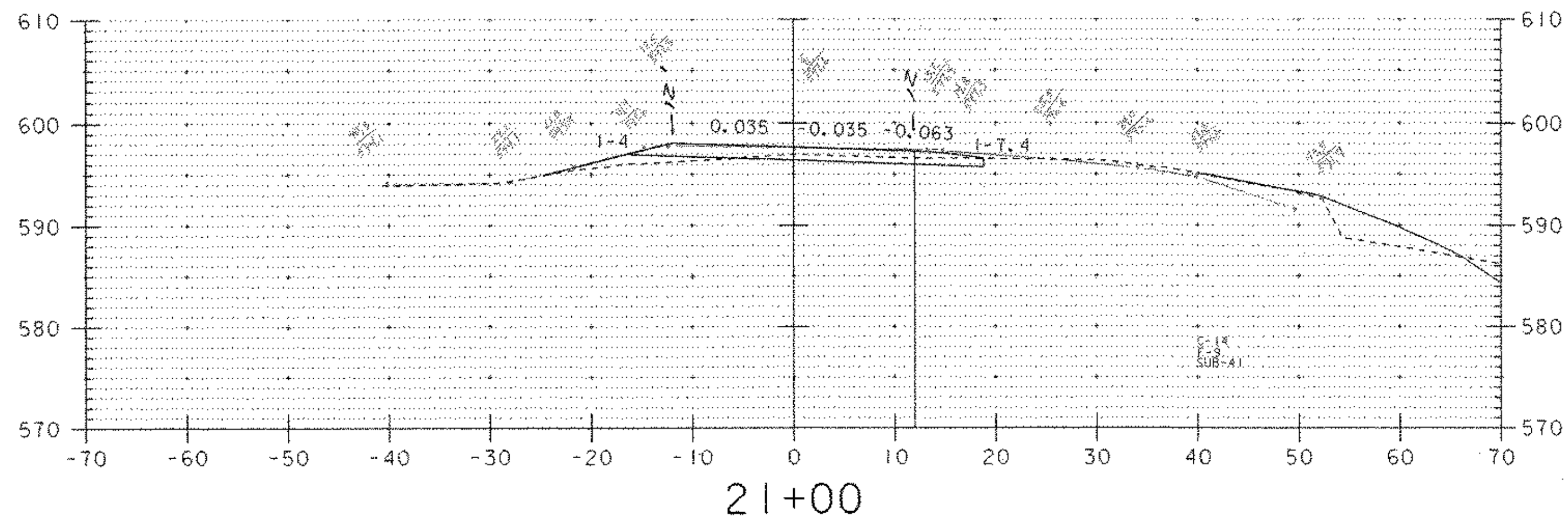
DATUM  
VERTICAL NCVD 1929  
HORIZONTAL NAD 1927

1"=10'  
1"=10'  
SCALE

|                                                                     |                            |
|---------------------------------------------------------------------|----------------------------|
| PROJECT: CHESTER                                                    | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\154910\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | PLOT DATE: 28-MAY-2003     |
| IPARM FILE NAME: zf134xs4.i                                         | SURVEY DATE: 8/90          |
| SURVEYED BY: SHERIDAN                                               | DRAWN BY: L. BULLOCK       |
| SQUAD LEADER: PORTALUPI                                             | SHEET: 73 OF 79            |
| VT 103 SECTIONS                                                     |                            |



# TH #6



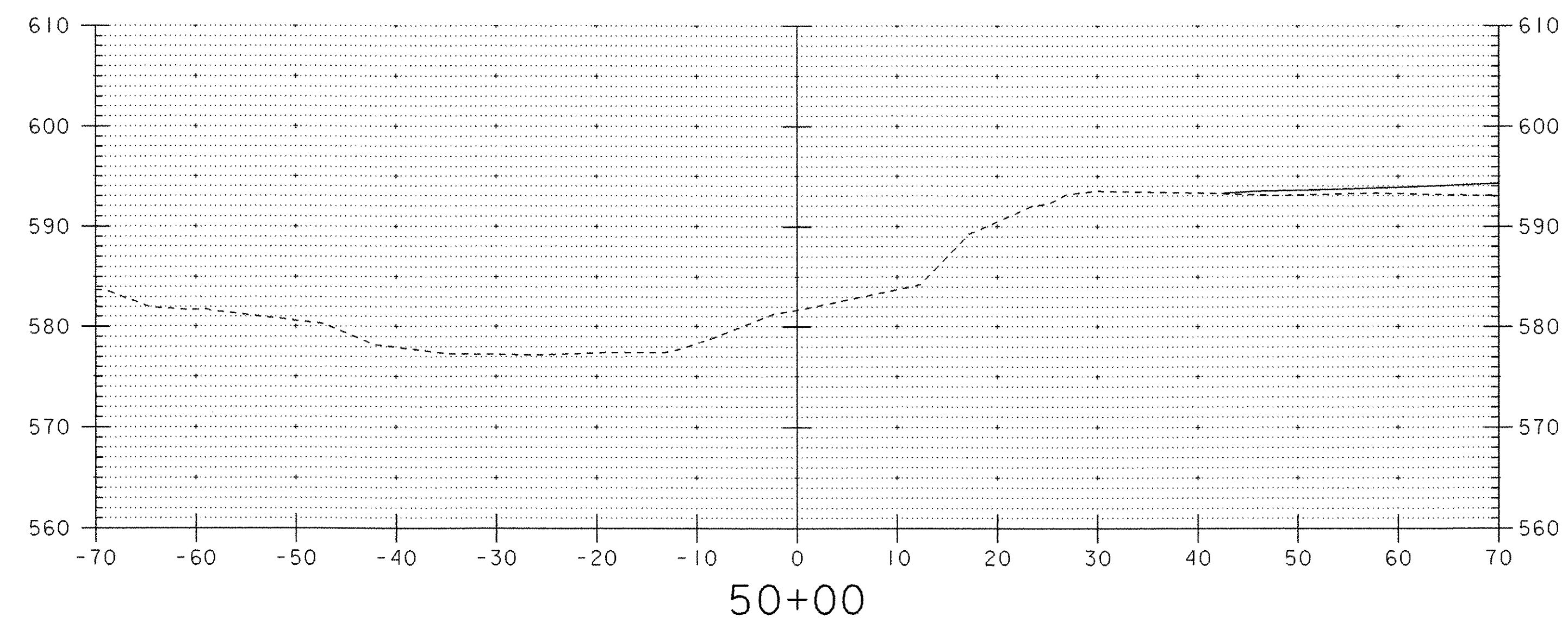
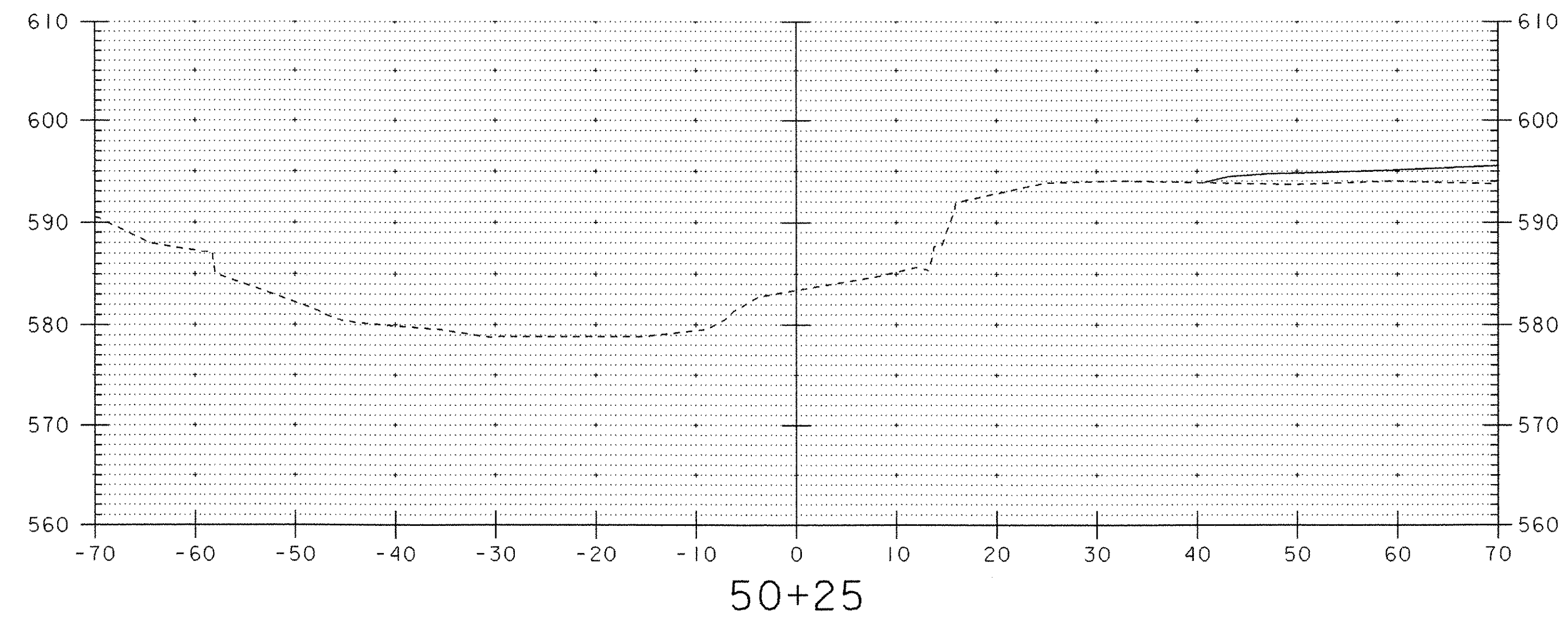
DATUM  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

1"=10'  
1"=10'  
SCALE

|                   |                                                   |              |               |
|-------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:          | CHESTER                                           | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME: | M:\154910\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:  | zf134xs6.l                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:      | SHERIDAN                                          | DRAWN BY:    | BULLOCK       |
| SQUAD LEADER:     | PORTALUPI                                         | SHEET:       | 74 OF 79      |
| TH #6 SECTIONS    |                                                   |              |               |



# CHANNEL LINE #1



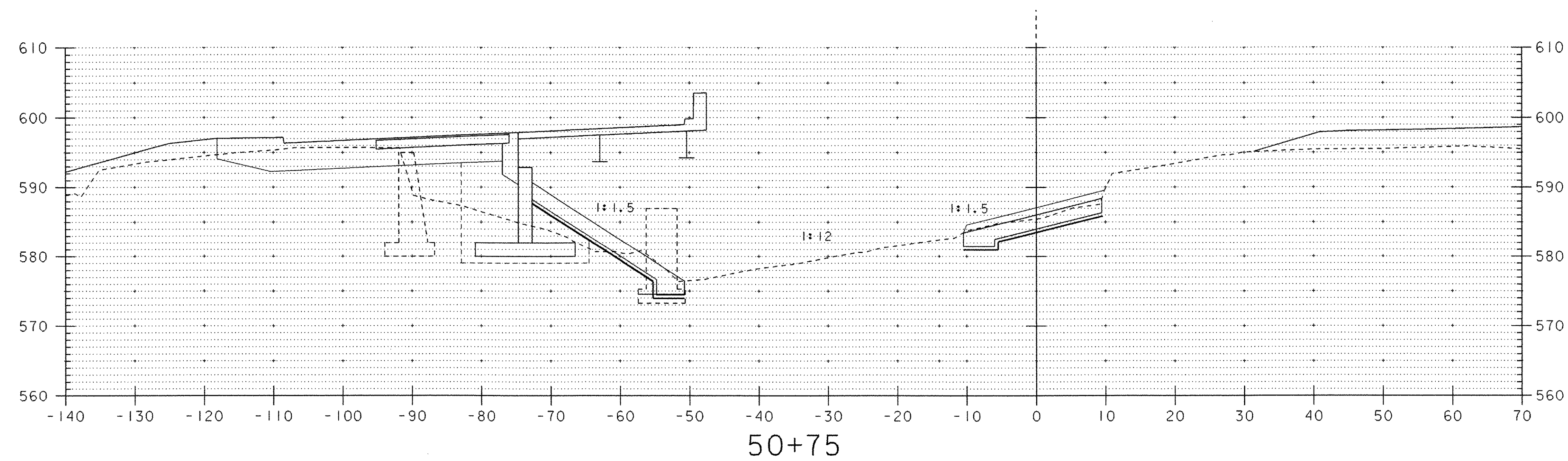
**DATUM**  
 VERTICAL NGVD 1929  
 HORIZONTAL NAD 1927

1"=10'  
 1"=10'  
 SCALE

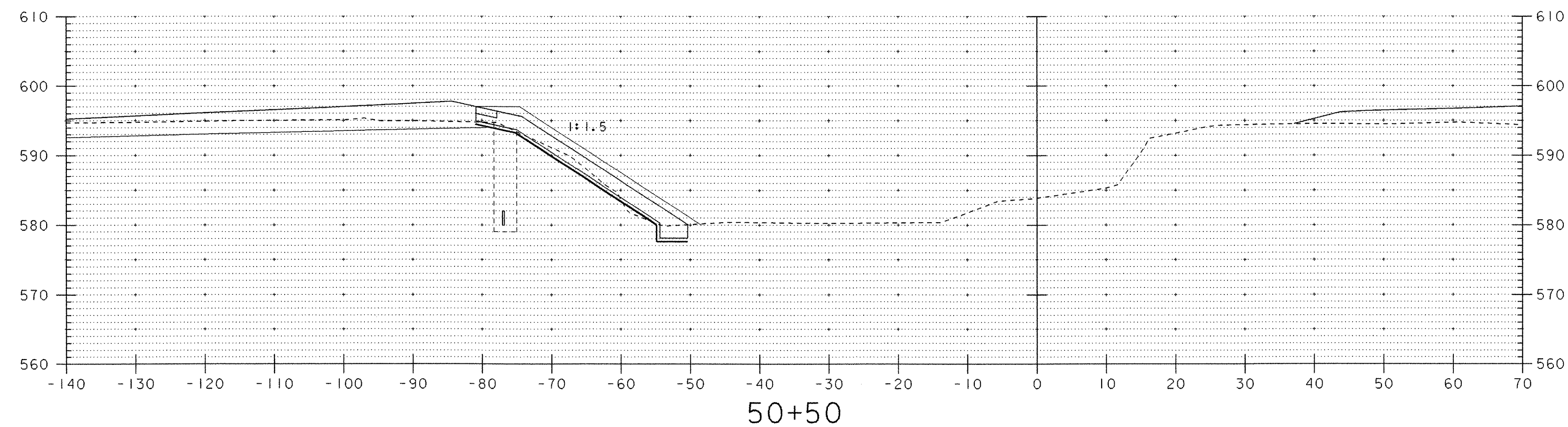
|                          |                                                   |              |               |
|--------------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:                 | CHESTER                                           | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME:        | M:\1549101\A0T Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:         | zfi34cla.i                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:             | SHERIDAN                                          | DRAWN BY:    | LACKEY        |
| SQUAD LEADER:            | PORTALUPI                                         | SHEET:       | 75 OF 79      |
| CHANNEL LINE #1 SECTIONS |                                                   |              |               |



# CHANNEL LINE #1



50+55 RT BEGIN  
 ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION  
 ITEM 706.04 STONE FILL, TYPE II  
 ITEM 649.31 GEOTEXTILE UNDER STONE FILL  
 ITEM 651.40 GRUBBING MATERIAL



50+50 LT  
 ITEM 706.40 STONE FILL, TYPE I  
 50+27 LT BEGIN  
 ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION  
 ITEM 706.04 STONE FILL, TYPE II  
 ITEM 649.31 GEOTEXTILE UNDER STONE FILL  
 ITEM 651.40 GRUBBING MATERIAL

**DATUM**  
 VERTICAL NGVD 1929  
 HORIZONTAL NAD 1927

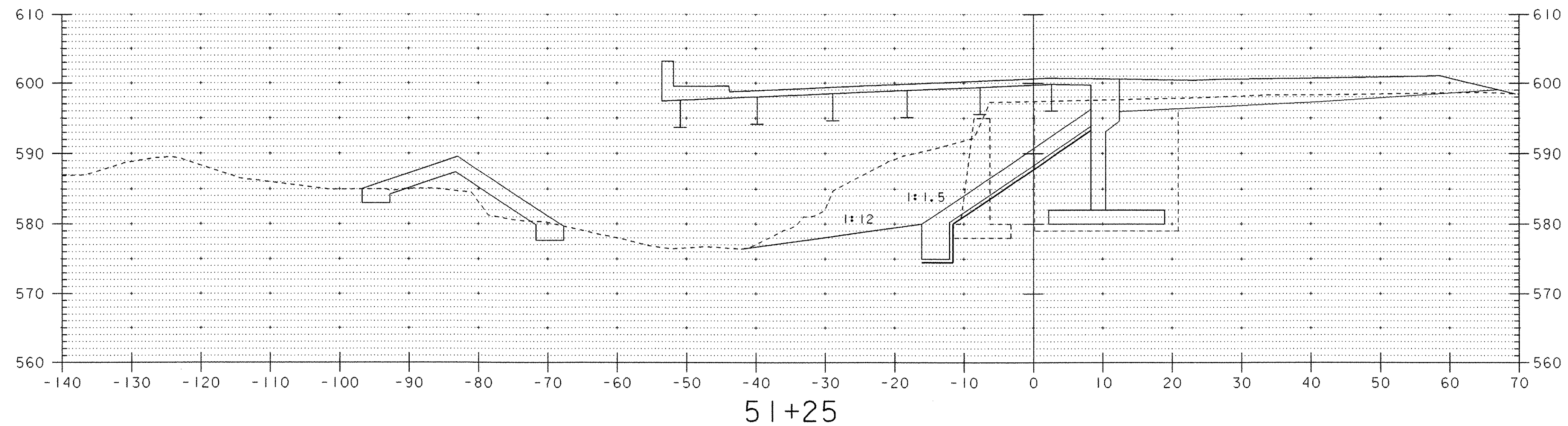
1"=10'  
 1"=10'  
 SCALE

|                          |                                                    |              |               |
|--------------------------|----------------------------------------------------|--------------|---------------|
| PROJECT:                 | CHESTER                                            | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME:        | M:\1549101\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:         | zf134clb.l                                         | SURVEY DATE: | 8/90          |
| SURVEYED BY:             | SHERIDAN                                           | DRAWN BY:    | LACKEY        |
| SQUAD LEADER:            | PORTALUPI                                          | SHEET:       | 76 OF 79      |
| CHANNEL LINE #1 SECTIONS |                                                    |              |               |

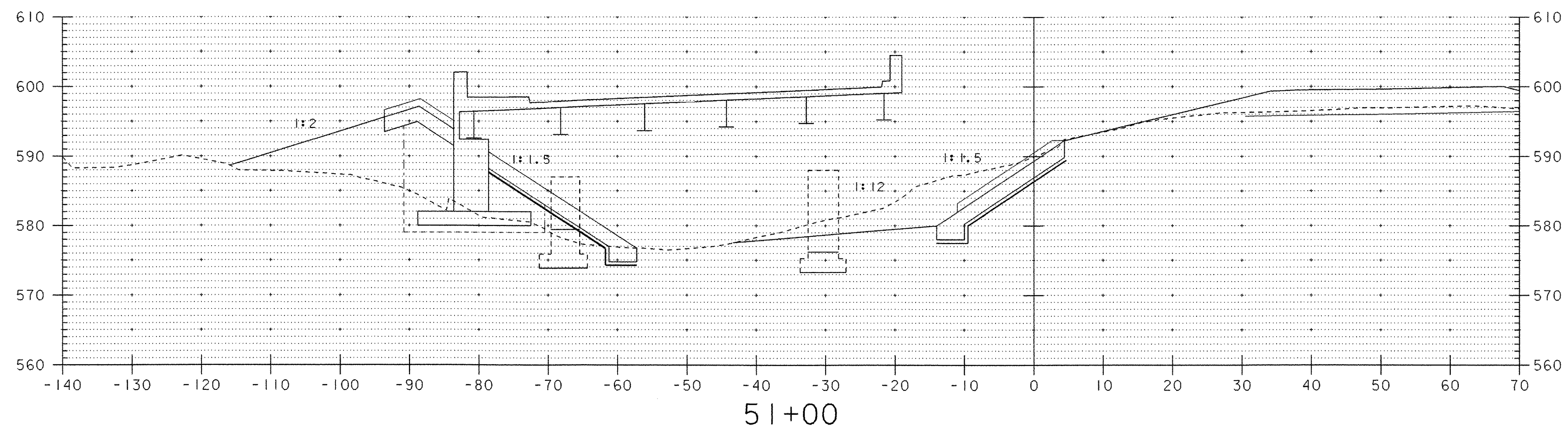


# CHANNEL LINE #1

51+45 LT END  
 ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION  
 ITEM 706.04 STONE FILL, TYPE II  
 ITEM 649.31 GEOTEXTILE UNDER STONE FILL  
 ITEM 651.40 GRUBBING MATERIAL



51+00 RT  
 ITEM 706.04 STONE FILL, TYPE II



50+97 LT  
 ITEM 706.04 STONE FILL, TYPE I

**DATUM**  
 VERTICAL NGVD 1929  
 HORIZONTAL NAD 1927

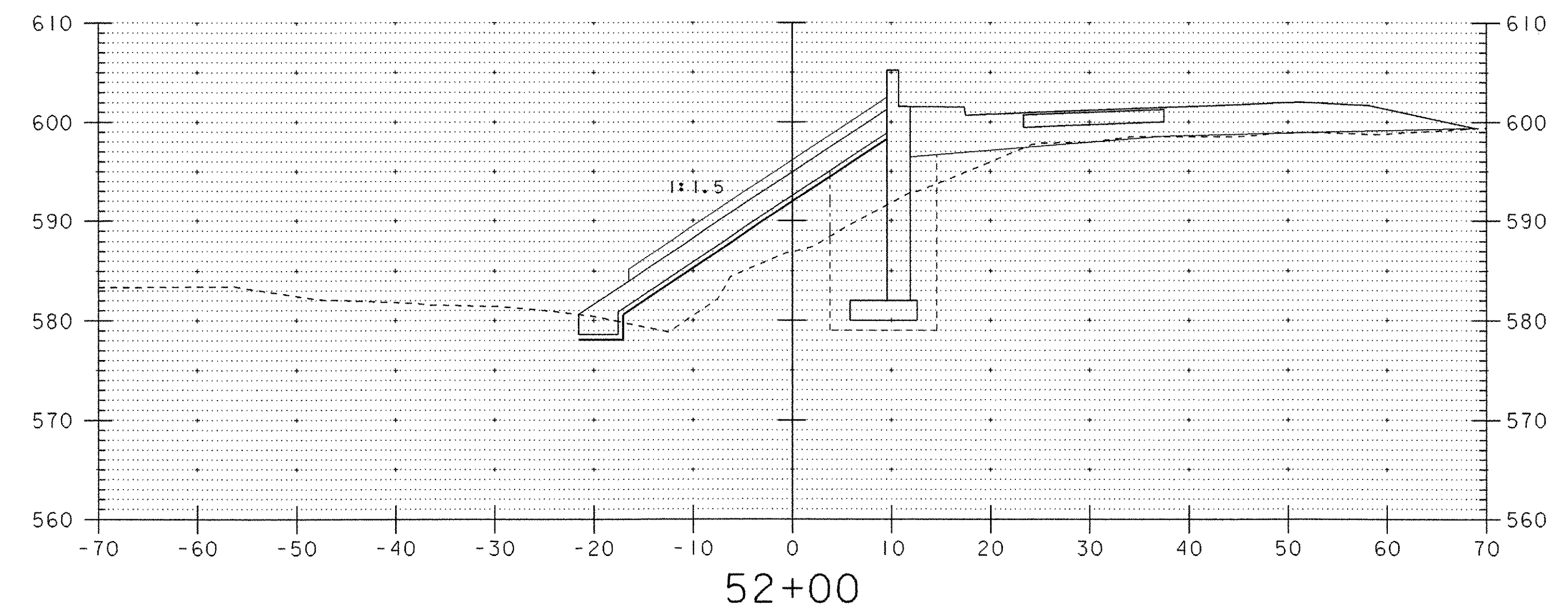
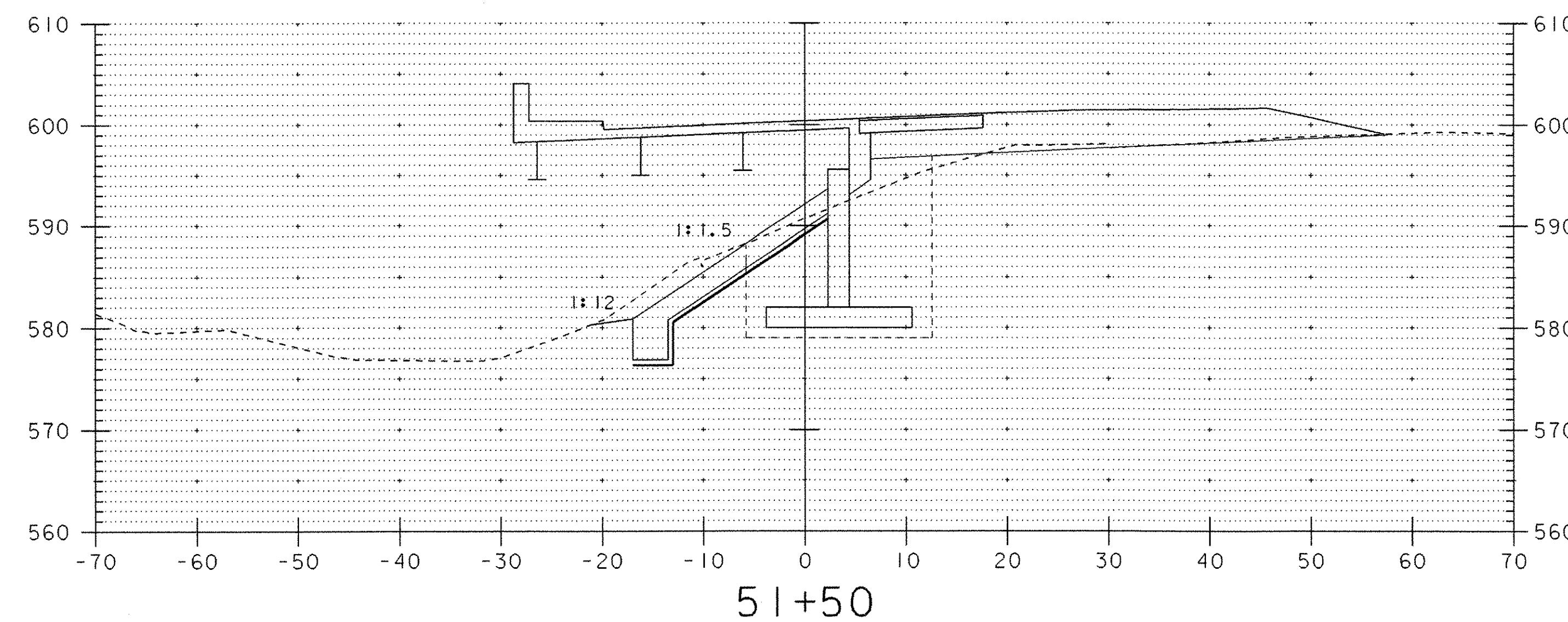
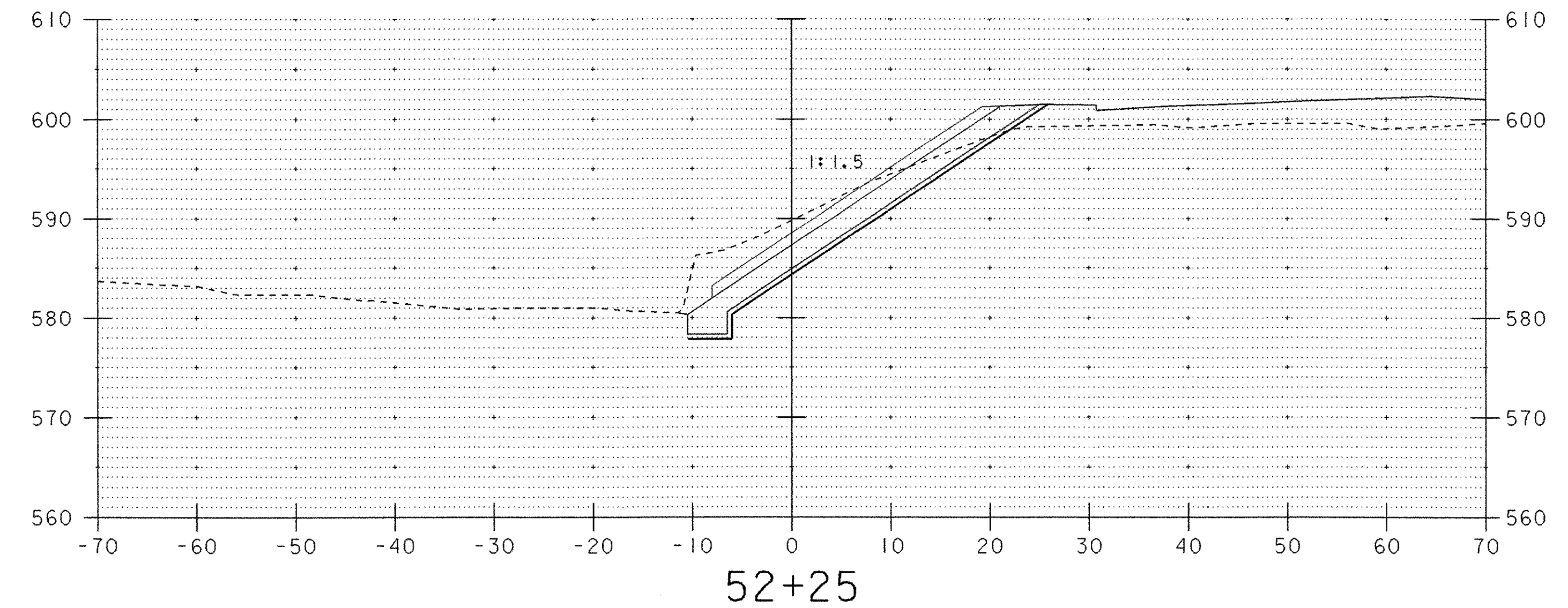
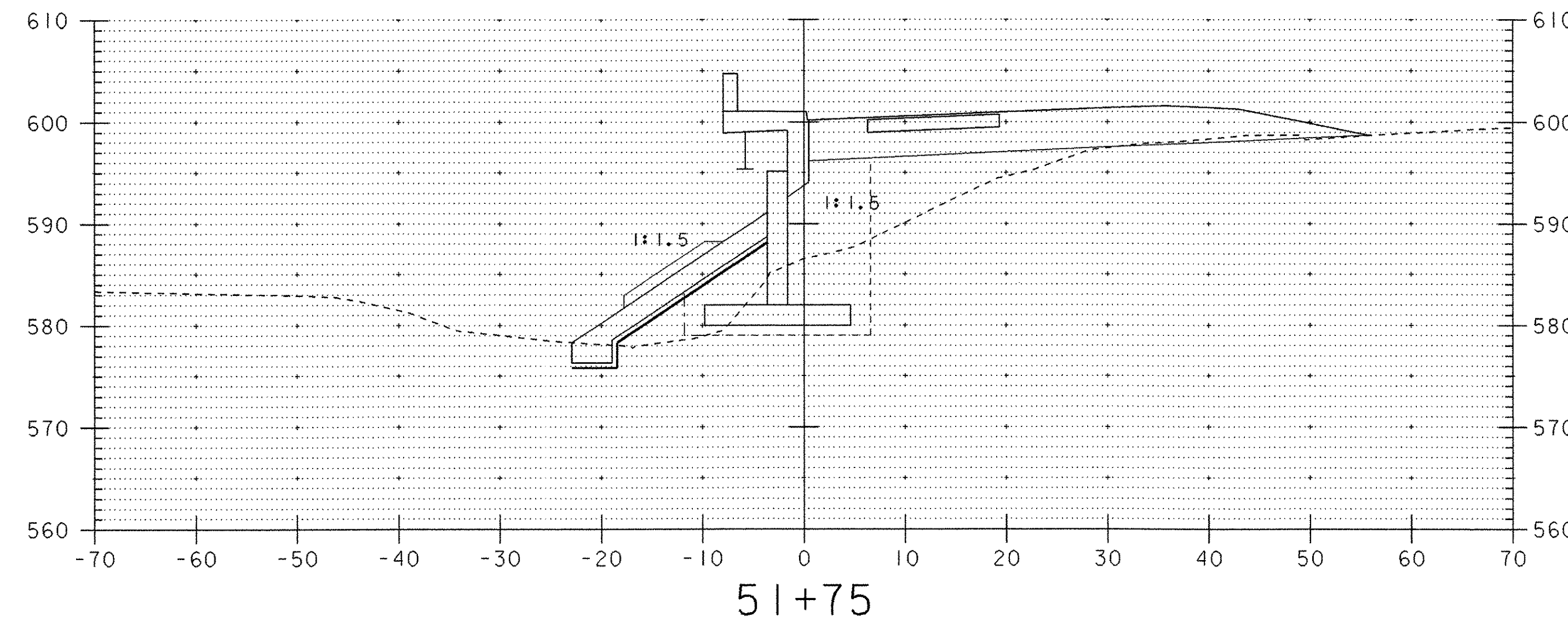
1"=10'  
 1"=10'  
 SCALE

|                          |                                                    |              |               |
|--------------------------|----------------------------------------------------|--------------|---------------|
| PROJECT:                 | CHESTER                                            | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME:        | M:\1549101\VAOT Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:         | zfi34cic.i                                         | SURVEY DATE: | 8/90          |
| SURVEYED BY:             | SHERIDAN                                           | DRAWN BY:    | BULLOCK       |
| SQUAD LEADER:            | PORTALUPI                                          | SHEET:       | 77 OF 79      |
| CHANNEL LINE #1 SECTIONS |                                                    |              |               |



# CHANNEL LINE #1

52+40 RT END  
 ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION  
 ITEM 706.04 STONE FILL, TYPE II  
 ITEM 649.31 GEOTEXTILE UNDER STONE FILL  
 ITEM 651.40 GRUBBING MATERIAL



52+00 RT  
 ITEM 706.04 STONE FILL, TYPE I

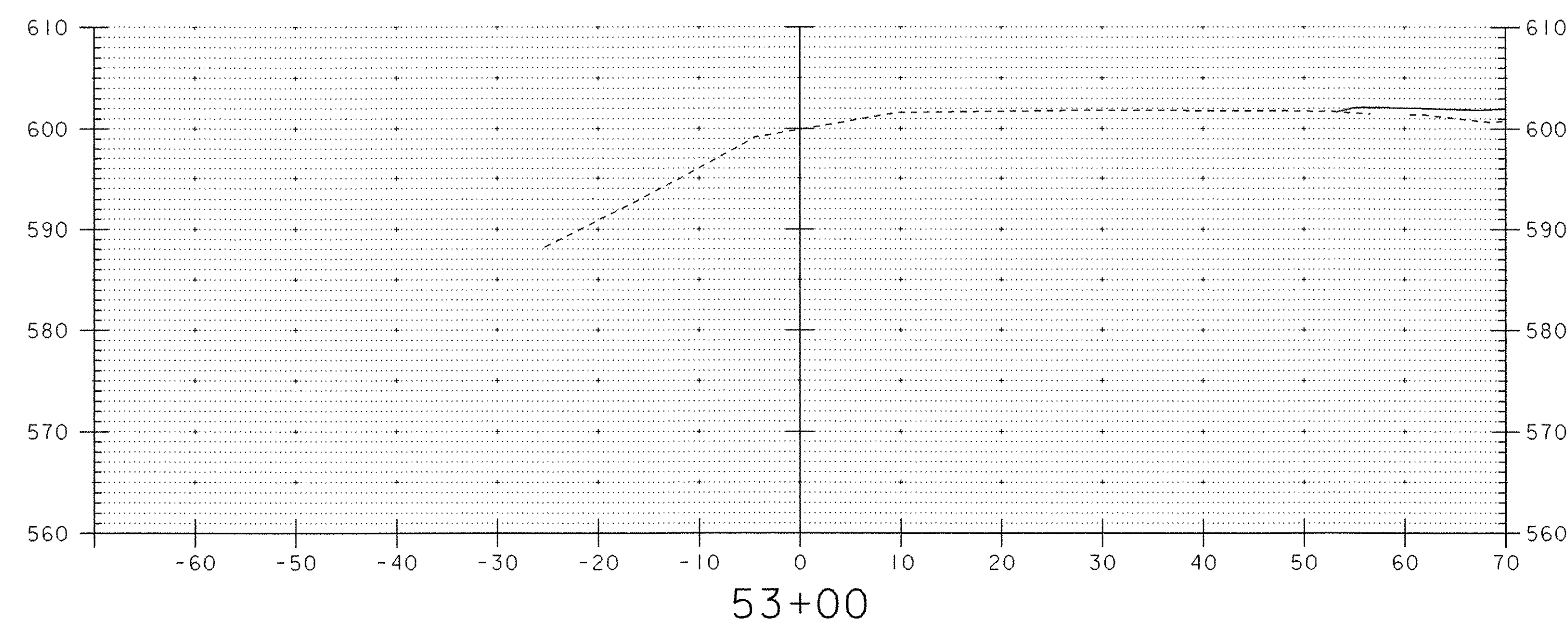
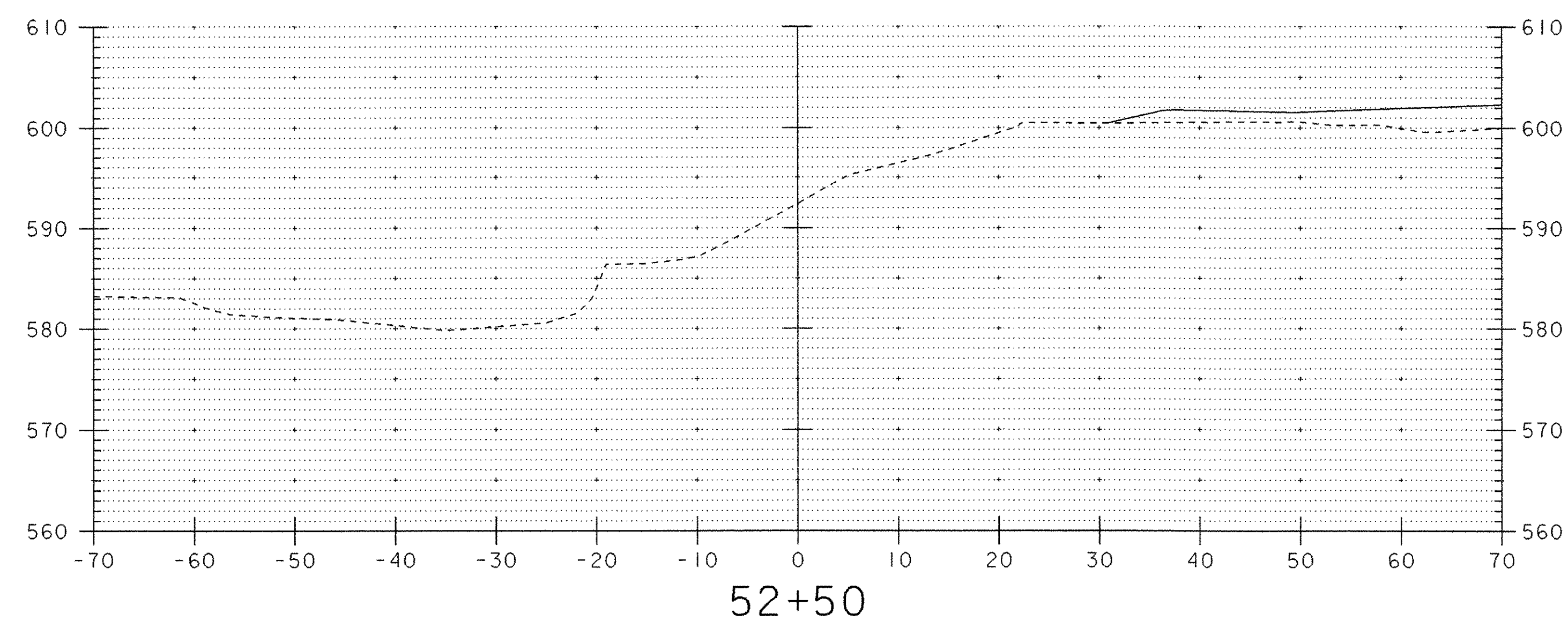
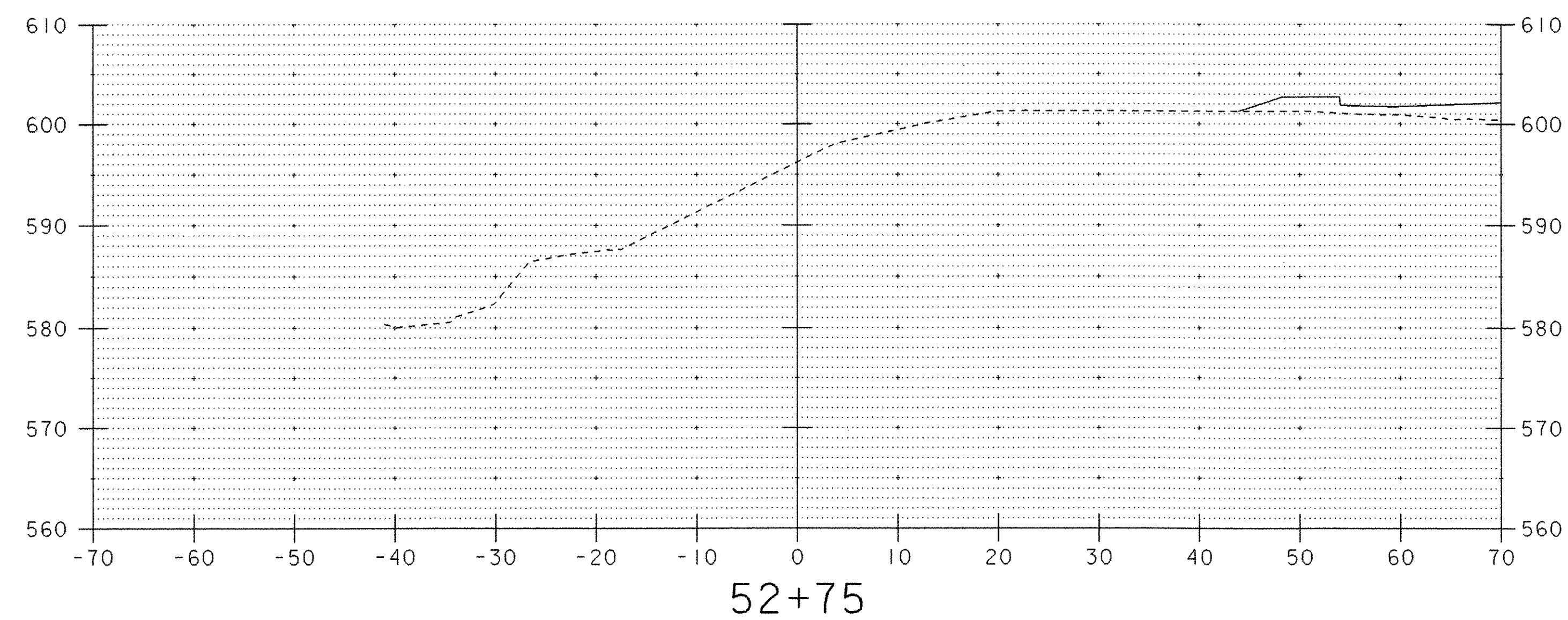
**DATUM**  
 VERTICAL NGVD 1929  
 HORIZONTAL NAD 1927

1"=10'  
 1"=10'  
 SCALE

|                          |                                                    |              |               |
|--------------------------|----------------------------------------------------|--------------|---------------|
| PROJECT:                 | CHESTER                                            | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME:        | M:\1549101\VAOT Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:         | zfi34cid.1                                         | SURVEY DATE: | 8/90          |
| SURVEYED BY:             | SHERIDAN                                           | DRAWN BY:    | LACKEY        |
| SQUAD LEADER:            | PORTALUPI                                          | SHEET:       | 78 OF 79      |
| CHANNEL LINE #1 SECTIONS |                                                    |              |               |



# CHANNEL LINE #1

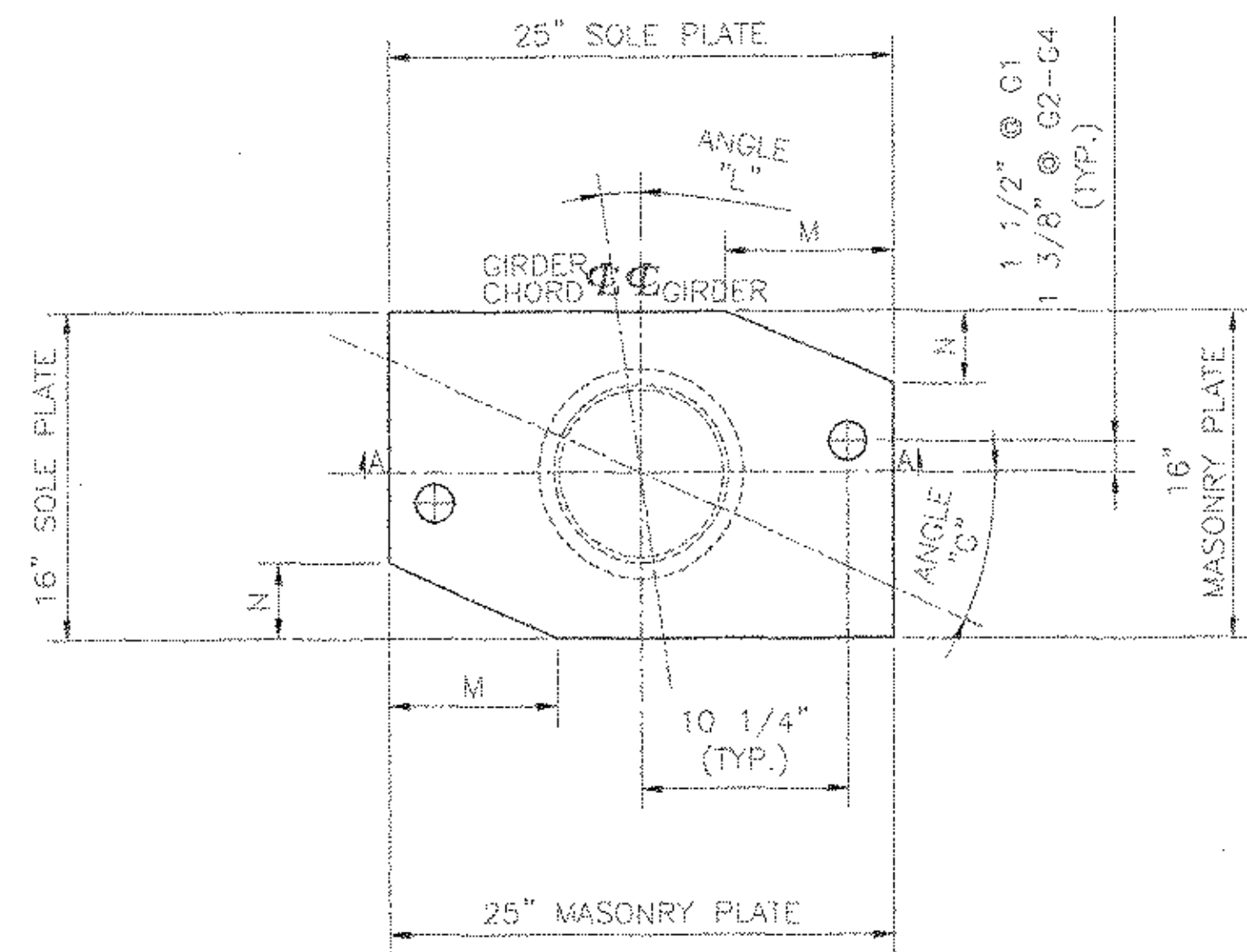


**DATUM**  
VERTICAL NGVD 1929  
HORIZONTAL NAD 1927

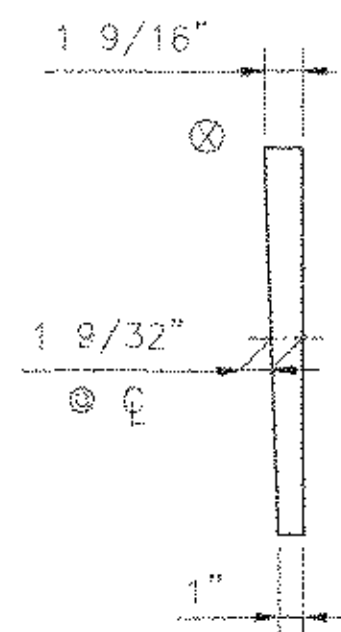
1"=10'  
1"=10'  
SCALE

|                          |                                                   |              |               |
|--------------------------|---------------------------------------------------|--------------|---------------|
| PROJECT:                 | CHESTER                                           | PROJECT NO.: | BRF025-1 (35) |
| DESIGN FILE NAME:        | M:\154910\VA01 Chester Curv\HWY\DRAW\zfi34xs5.dgn | PLOT DATE:   | 28-MAY-2003   |
| IPARM FILE NAME:         | zfi34cle.1                                        | SURVEY DATE: | 8/90          |
| SURVEYED BY:             | SHERIDAN                                          | DRAWN BY:    | BULLOCK       |
| SQUAD LEADER:            | PORTALUPI                                         | SHEET:       | 79 OF 79      |
| CHANNEL LINE #1 SECTIONS |                                                   |              |               |





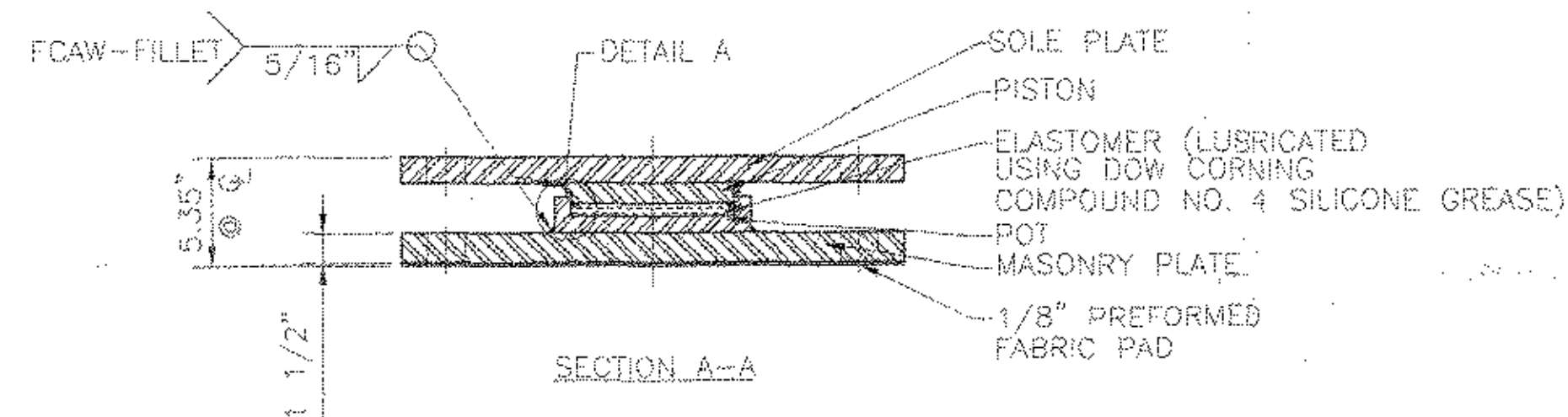
PLAN



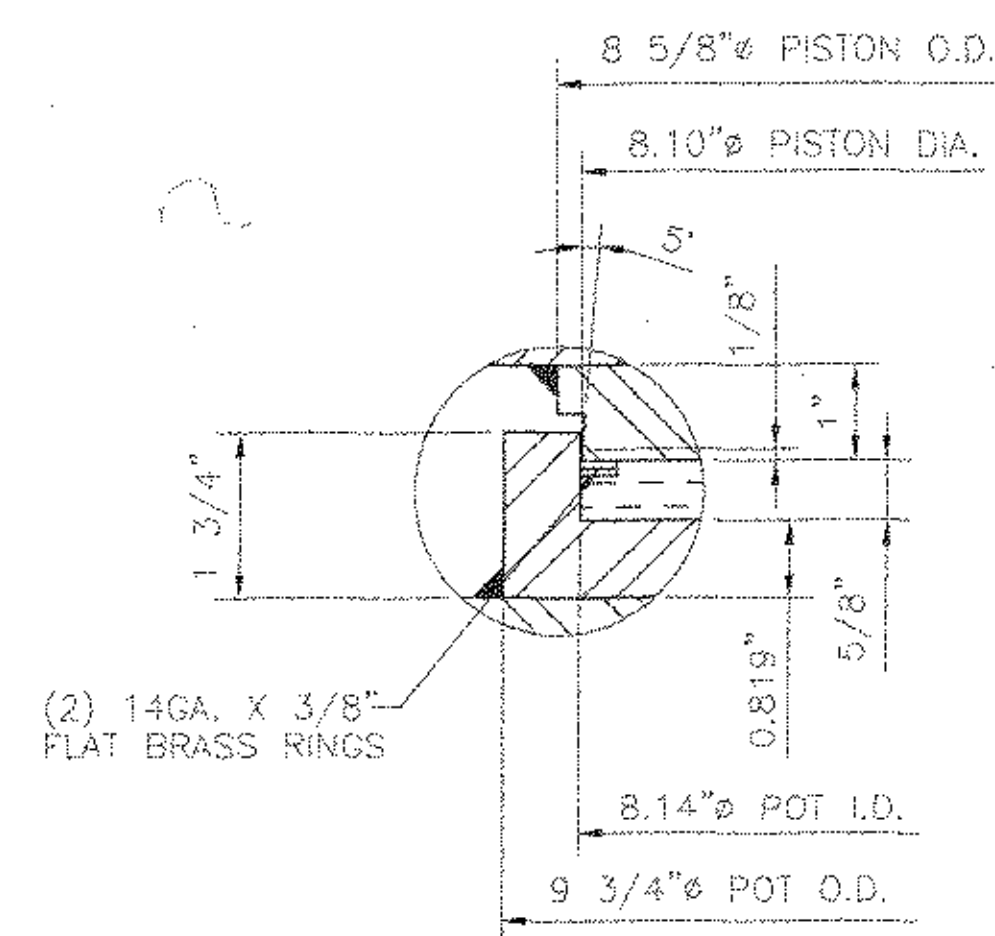
SIDE ELEVATION  
BEVELED SOLE PLATE ONLY

| GIRDER | ANGLE "L" | ANGLE "G" | M       | N        |
|--------|-----------|-----------|---------|----------|
| G1     | 8°04'48"  | 23°51'37" | 8 3/8"  | 3 11/16" |
| G2     | 7°51'42"  | 23°22'10" | 8 3/8"  | 3 11/16" |
| G3     | 7°39'24"  | 22°53'55" | 8 3/8"  | 3 11/16" |
| G4     | 7°27'48"  | 22°26'50" | 8 3/8"  | 3 11/16" |
| G5     | 7°16'51"  | 22°00'50" | 11 3/4" | 4 3/4"   |
| G6     | 7°06'29"  | 21°35'50" | 11 3/4" | 4 3/4"   |

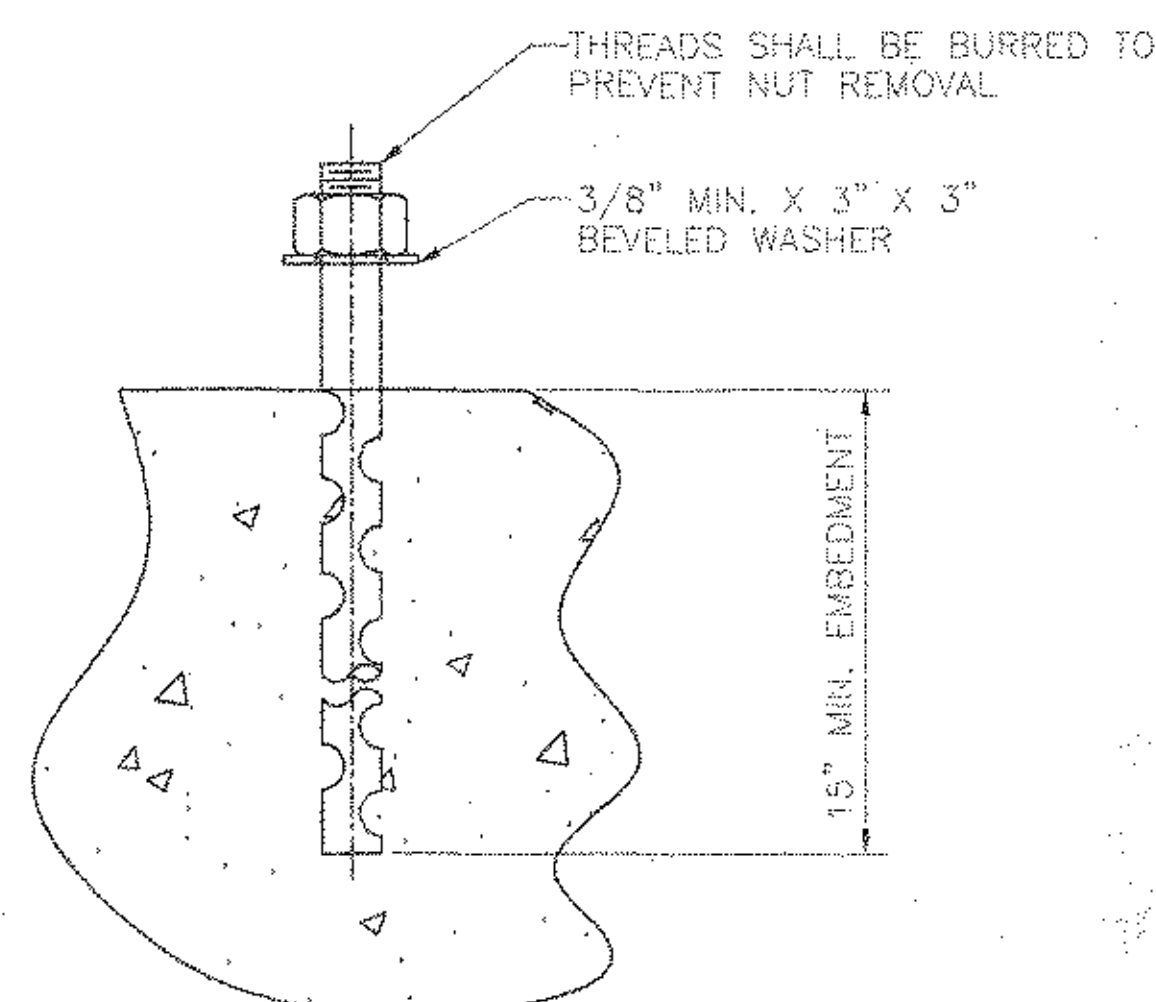
NOTE:  
OVERALL HEIGHTS DIFFER FROM  
THOSE SHOWN ON THE CONTRACT  
PLANS. CONTRACTOR SHALL  
ADJUST PEDESTAL HEIGHTS TO  
ACCURATELY REFLECT THE HEIGHTS  
OF BEARINGS SUPPLIED.



FIXED POT BEARING  
LOCATION - ABUT. 1, G1-G4  
QUANTITY - 4  
DESIGN LOAD - 182 KIPS  
HORIZONTAL LOAD - 19 KIPS  
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIAN

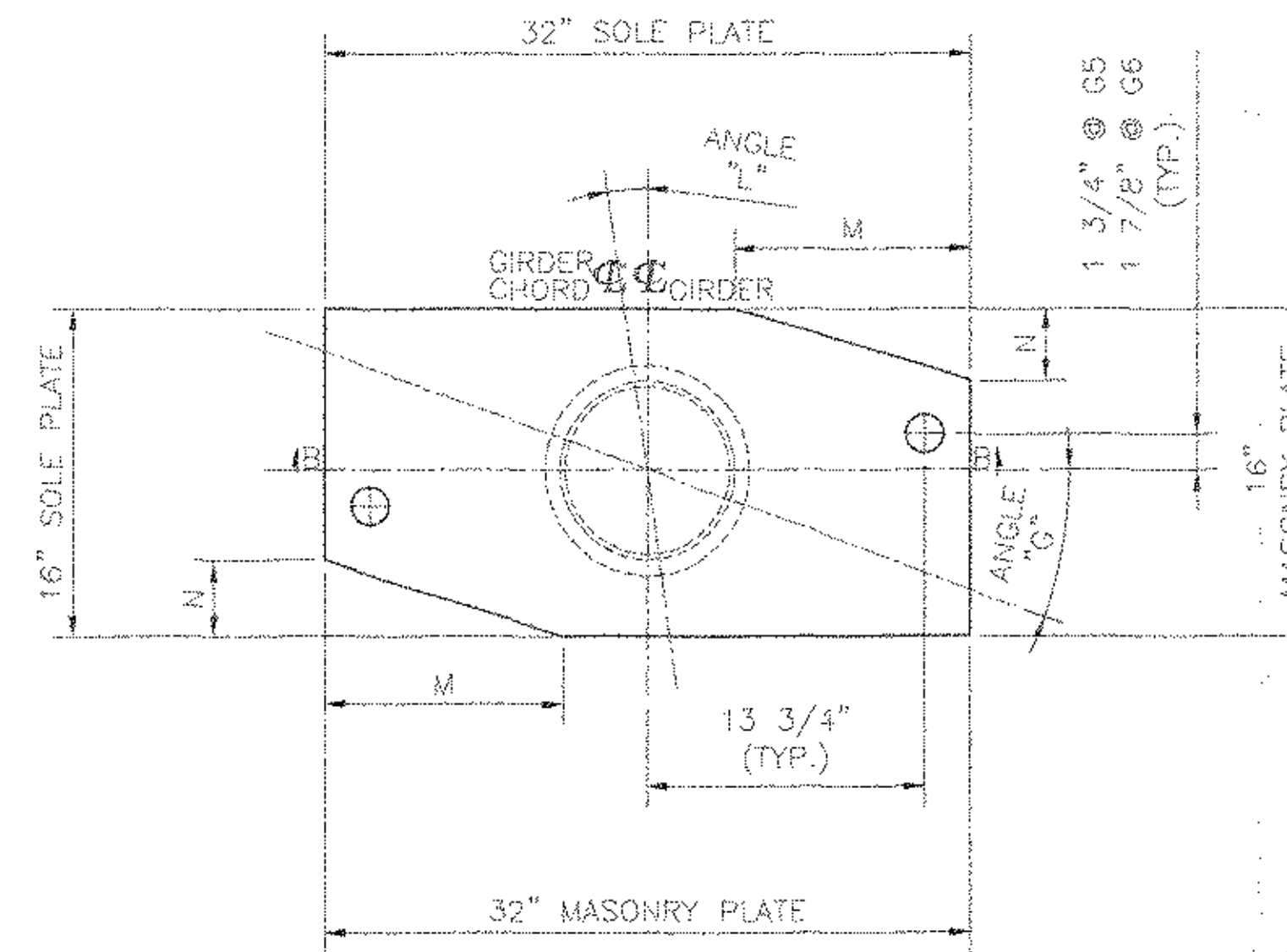


DETAIL A

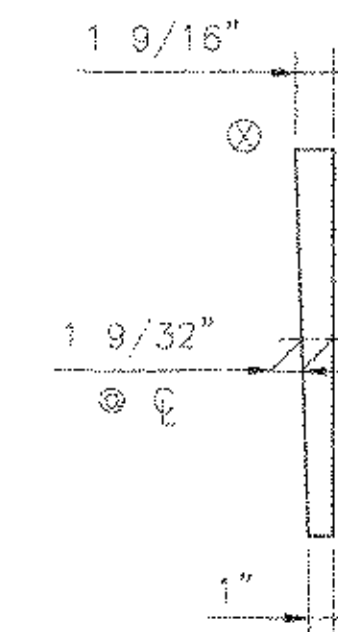


ANCHOR BOLT DETAIL  
N.T.S.

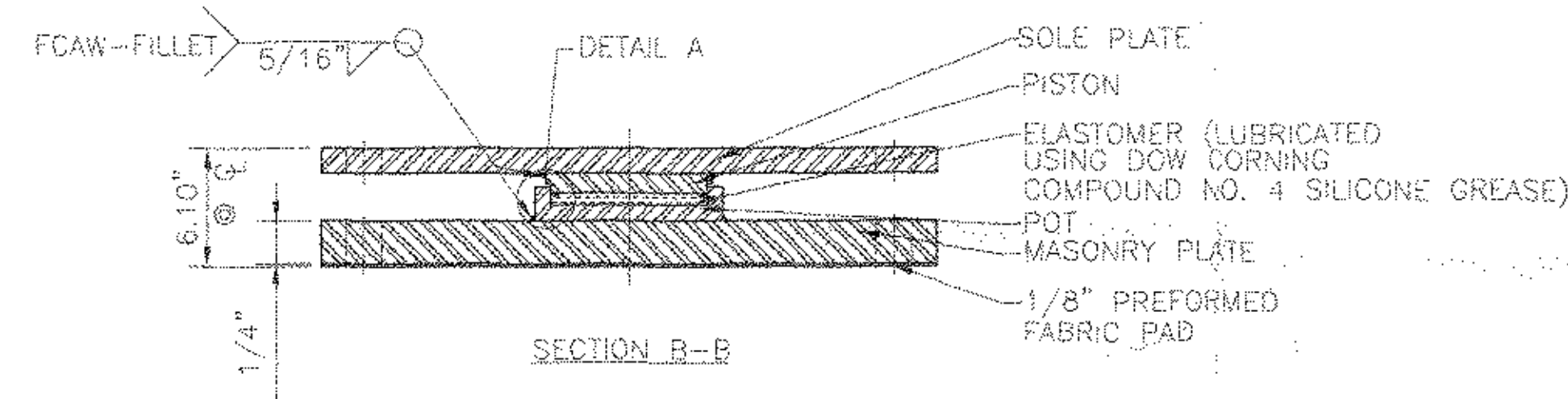
1 1/2" X 24" LONG ASTM F1554 GR. 55  
SWEDGED ANCHOR BOLT WITH 4" OF THREADS  
ONE END, ONE ASTM A563 HEAVY HEX NUT  
& ONE A36 PLATE WASHER.  
ALL GALVANIZED



PLAN



SIDE ELEVATION  
BEVELED SOLE PLATE ONLY



FIXED POT BEARING  
LOCATION - ABUT. 1, G5 & G6  
QUANTITY - 2  
DESIGN LOAD - 182 KIPS  
HORIZONTAL LOAD - 19 KIPS  
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIAN

MATERIAL:  
STEEL - ASTM A709 GR. 50W ZINC METALIZED  
ELASTOMER - AASHTO 50 DUROMETER NEOPRENE OR NATURAL RUBBER  
FLAT BRASS RINGS - ASTM B36 HALF HARD  
PREFORMED FABRIC PAD - AASHTO 18.4.10.1 DIV. II

- NOTES:
- BEARINGS MUST NOT BE DISASSEMBLED
  - ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b). AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f).
  - LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081
  - COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)
  - ⊗ INDICATES THICK END OF BEVELED SOLE PLATE

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

PROJ. NO. BRP 025-(135)  
HIGHWAY VT 103  
VT 103 OVER THE WILLIAMS RIVER  
TOWN OF CHESTER

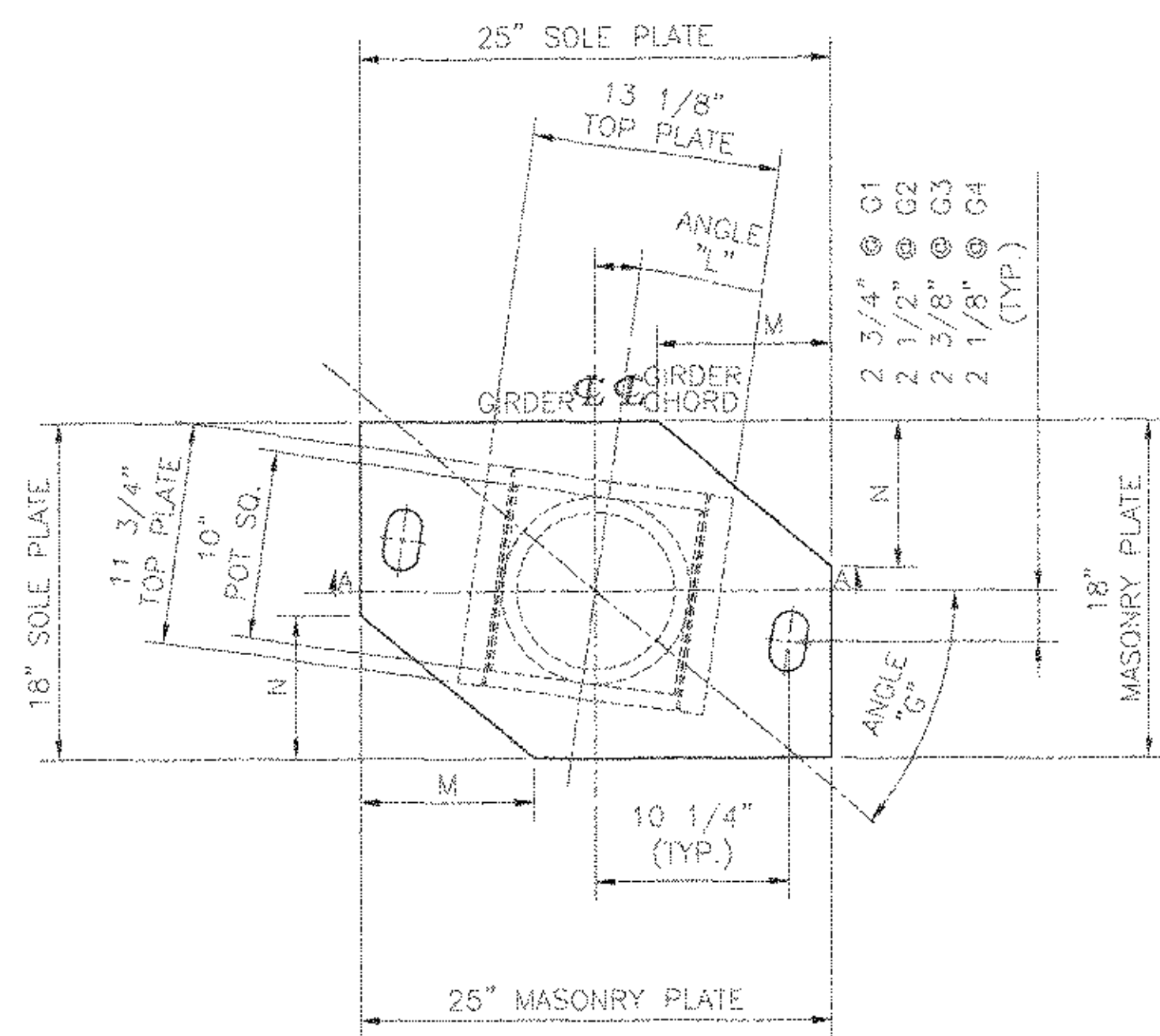
COSMEC, INC. 70 SOUTH STREET  
WALPOLE, MA. 02081

SCALE: 1/8" = 1" DRAWN BY: NH CHECKED BY: MCM  
SHEET: 1 OF 3 DATE: 8/18/03 DATE: 8/28/03

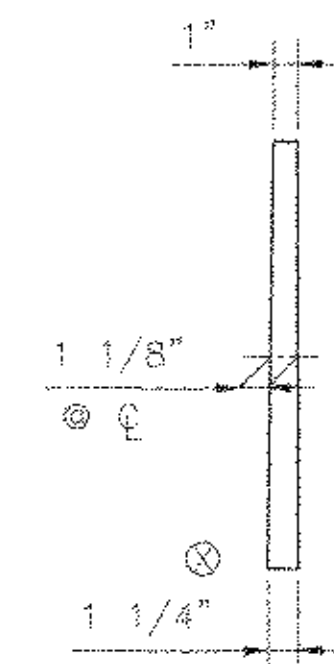
COSMEC POT BEARINGS

CUSTOMER: F.W. WHITCOMB S.D. NUMBER: 59903 DRAWING NUMBER: 3921 REV.



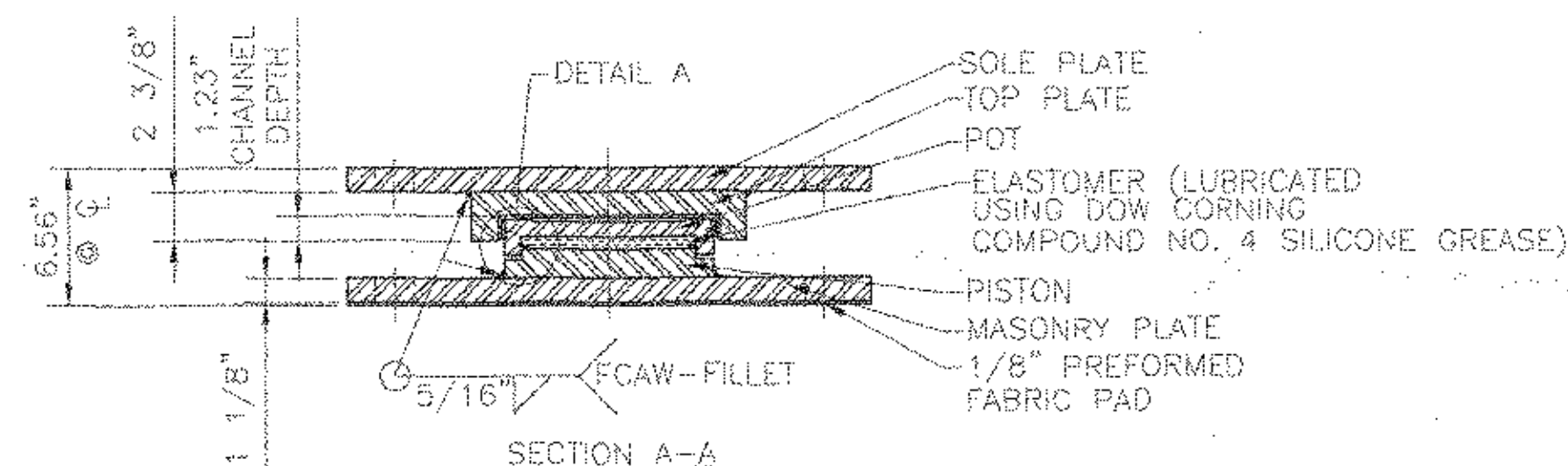


PLAN



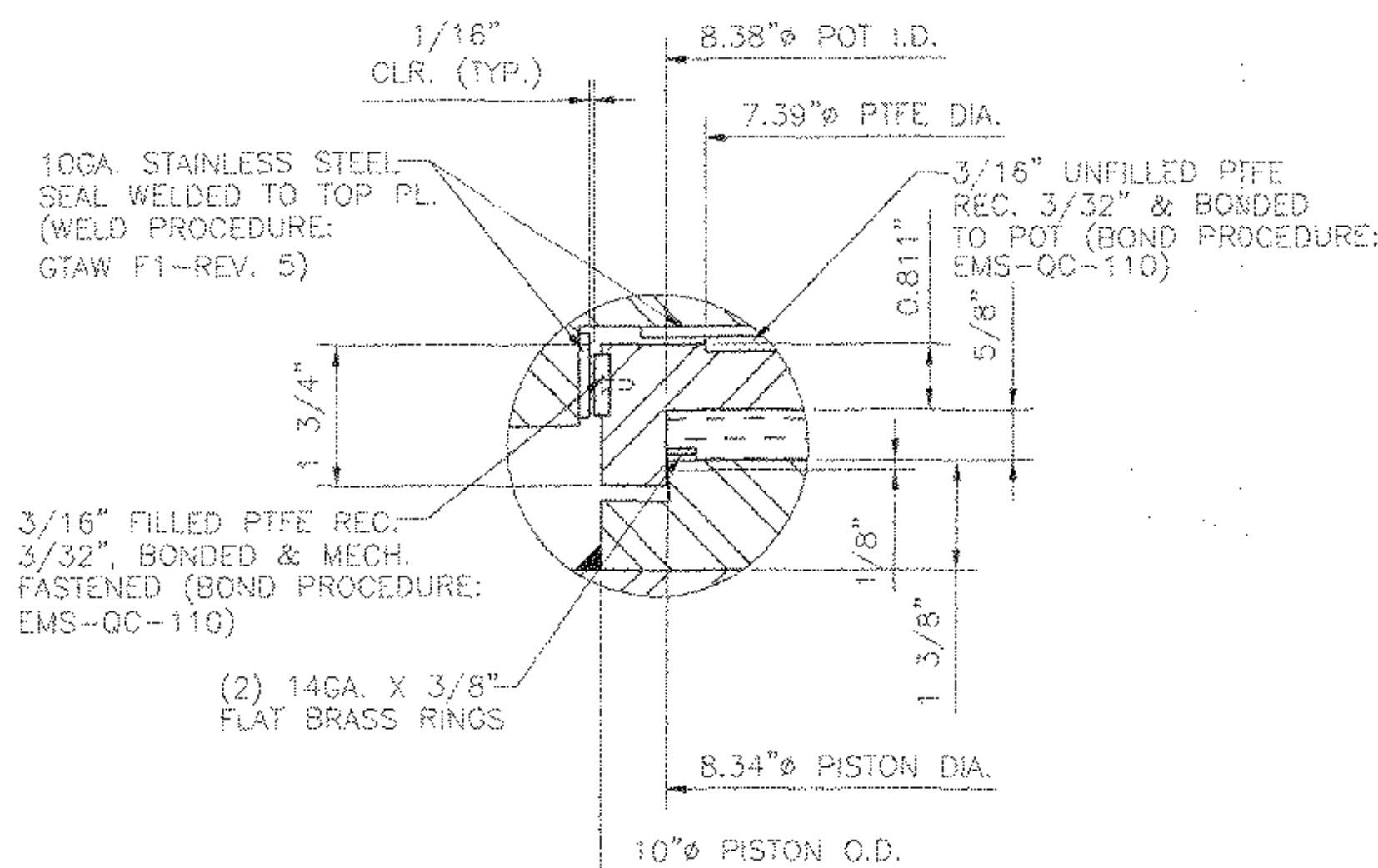
SIDE ELEVATION  
BEVELED SOLE PLATE ONLY

| GIRDER | ANGLE "L" | ANGLE "G" | M       | N        |
|--------|-----------|-----------|---------|----------|
| G1     | 8°04'48"  | 40°01'13" | 9 1/2"  | 7 3/4"   |
| G2     | 7°51'42"  | 39°05'34" | 9 1/2"  | 7 3/4"   |
| G3     | 7°39'24"  | 38°12'43" | 9 1/2"  | 7 3/4"   |
| G4     | 7°27'48"  | 37°22'27" | 9 1/2"  | 7 3/4"   |
| G5     | 7°16'51"  | 36°34'32" | 13 1/8" | 9 11/16" |
| G6     | 7°06'29"  | 35°48'49" | 13 1/8" | 9 11/16" |

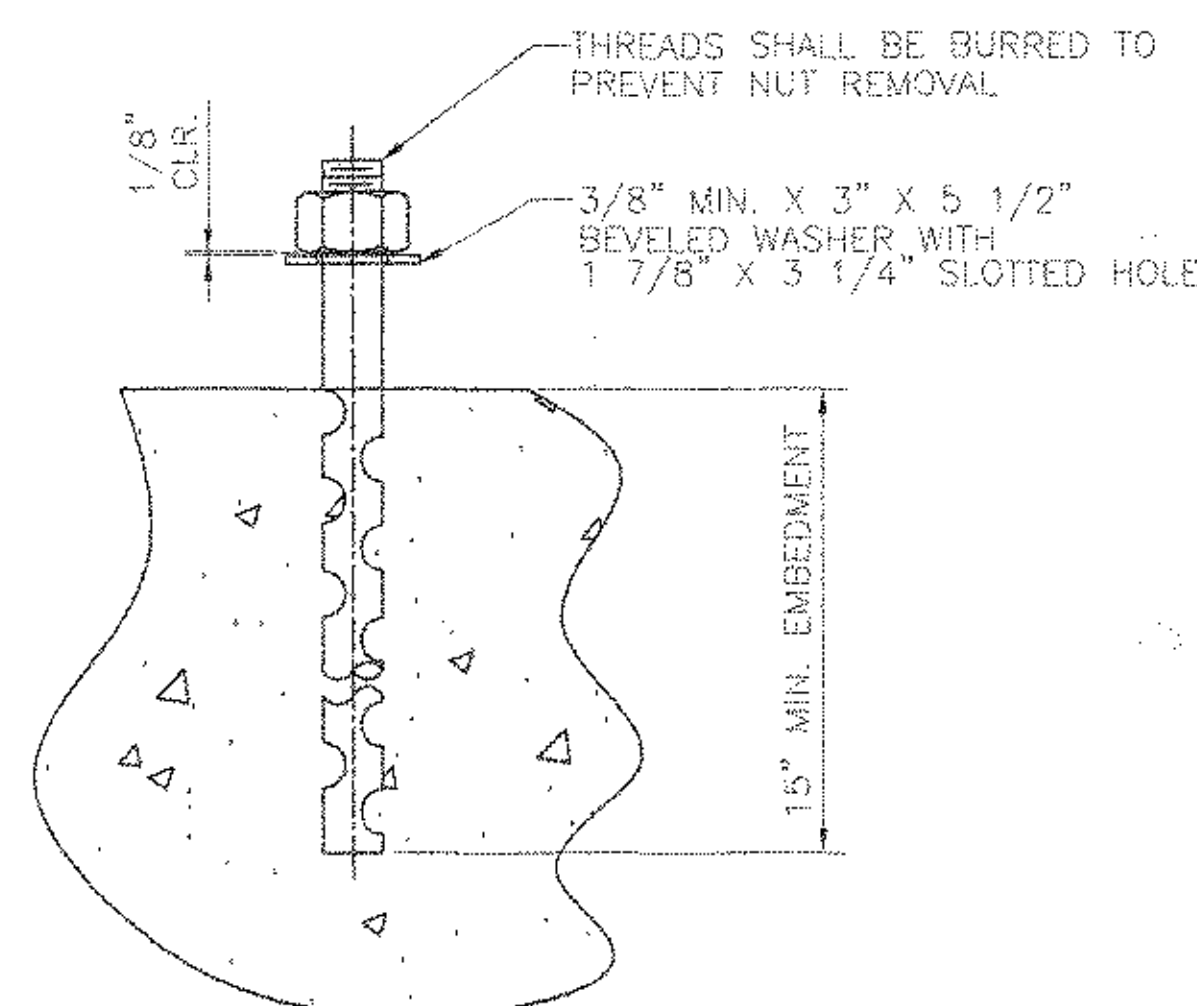


SECTION A-A

GUIDED EXPANSION POT BEARING  
LOCATION - ABUT. 1, G1-G4  
QUANTITY - 4  
DESIGN LOAD - 193 KIPS  
HORIZONTAL LOAD - 20 KIPS  
TOTAL LONGITUDINAL MOVEMENT - 1 3/4"  
TOTAL TRANSVERSE MOVEMENT - 1/8"  
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIAN

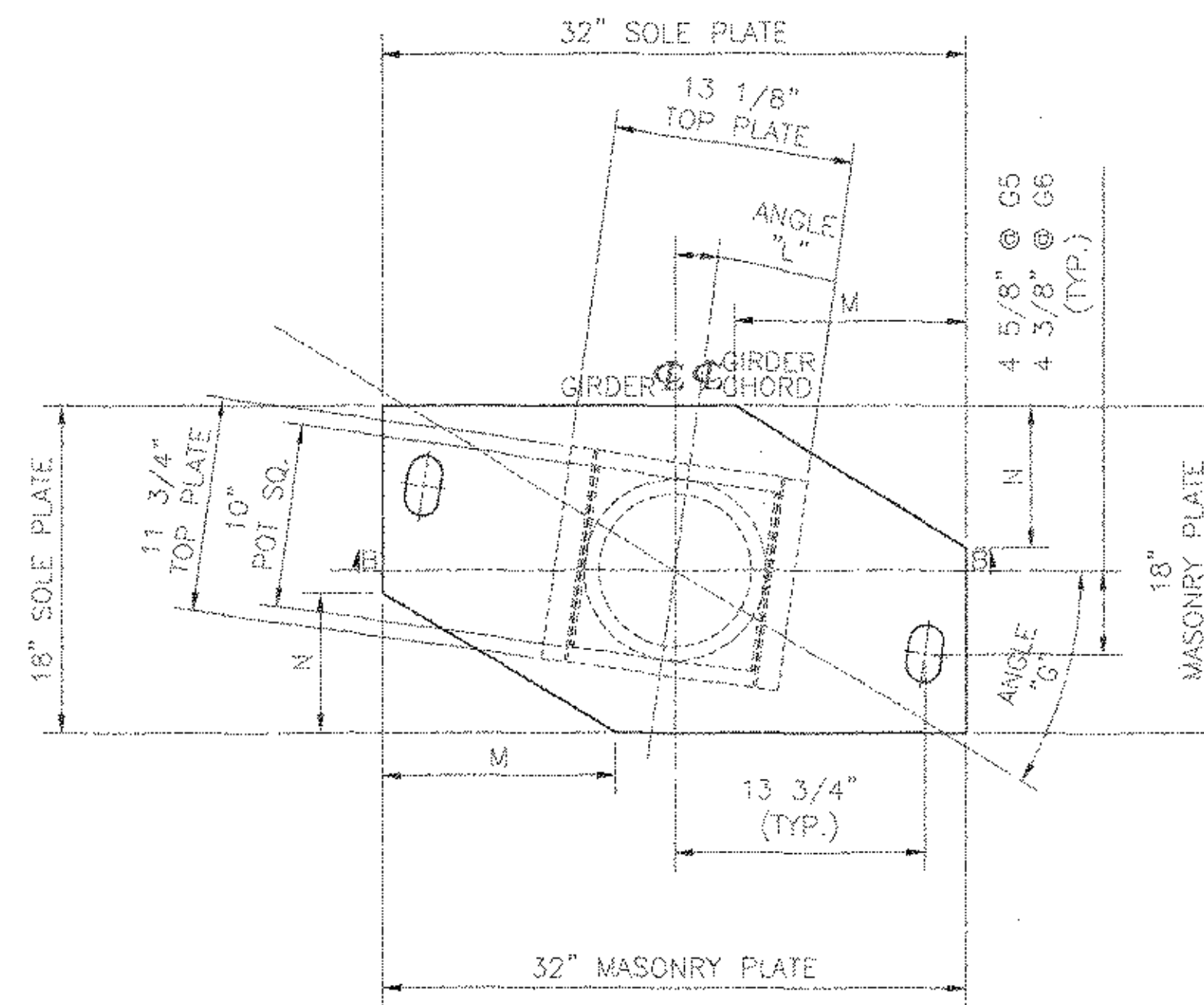


DETAIL A

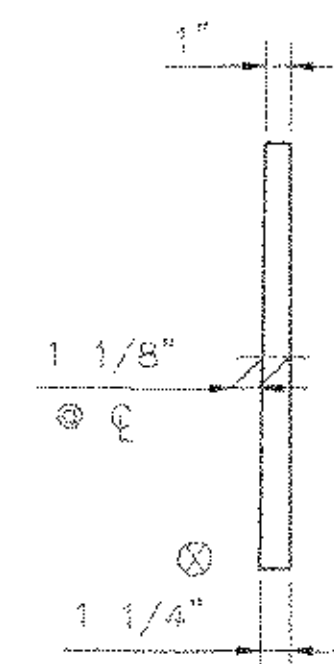


ANCHOR BOLT DETAIL  
N.T.S.

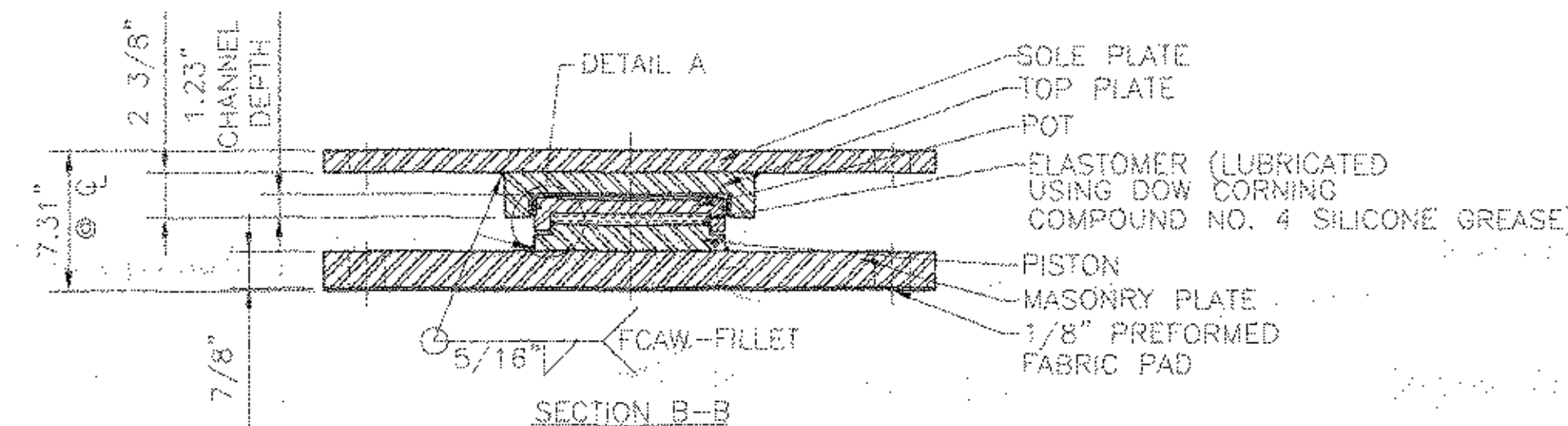
1 1/2" x 25" LONG ASTM F1554 GR. 55  
SWEDGED ANCHOR BOLT WITH 4" OF THREADS  
ONE END, ONE ASTM A563 HEAVY HEX NUT  
& ONE A36 PLATE WASHER.  
ALL GALVANIZED



PLAN



SIDE ELEVATION  
BEVELED SOLE PLATE ONLY



SECTION B-B

GUIDED EXPANSION POT BEARING  
LOCATION - ABUT. 1, G5 & G6  
QUANTITY - 2  
DESIGN LOAD - 193 KIPS  
HORIZONTAL LOAD - 20 KIPS  
TOTAL LONGITUDINAL MOVEMENT - 1 3/4"  
TOTAL TRANSVERSE MOVEMENT - 1/8"  
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIAN

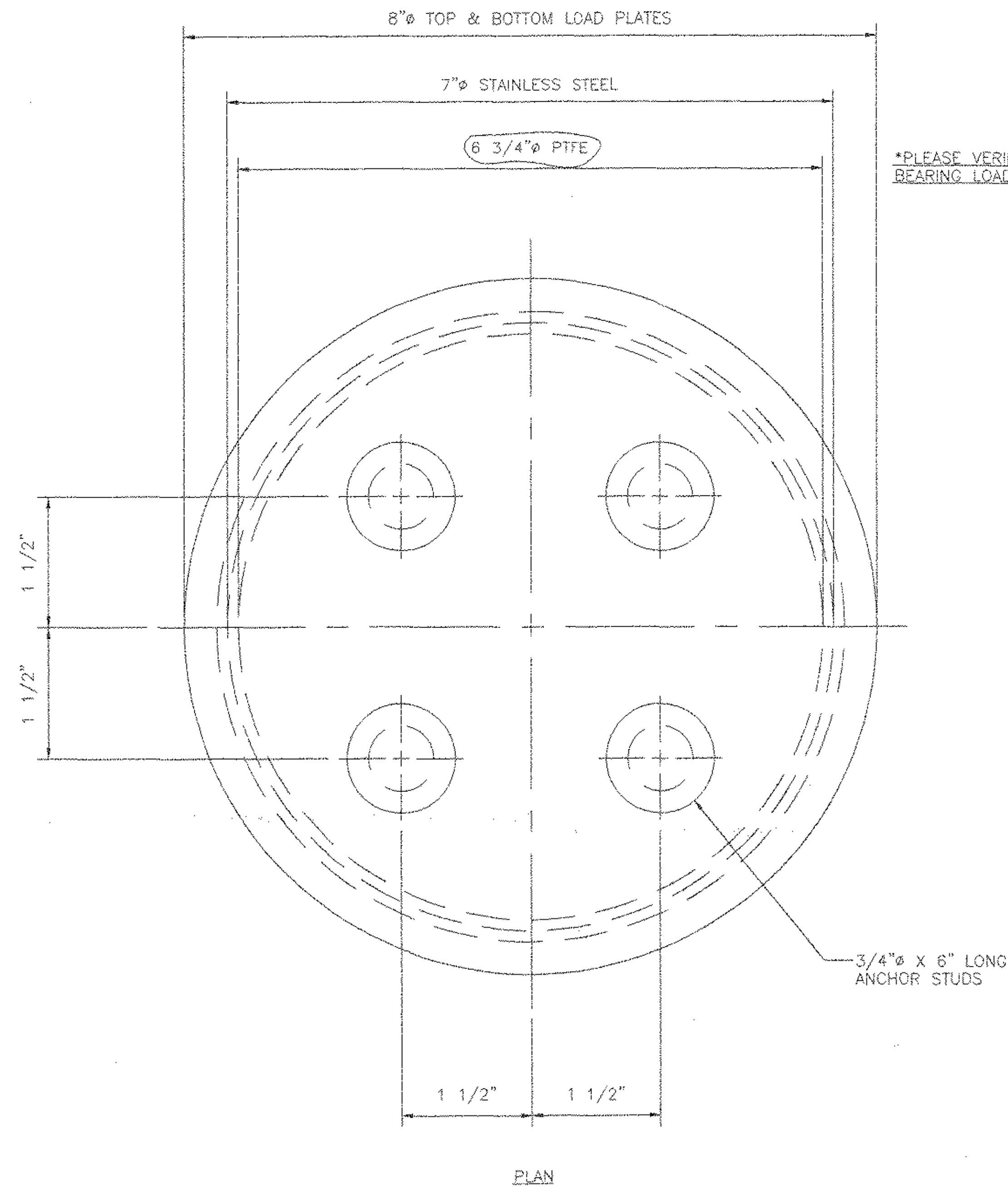
MATERIAL:  
STEEL - ASTM A709 GR. 50W ZINC METALIZED  
ELASTOMER - AASHTO 50 DUROMETER NEOPRENE OR NATURAL RUBBER  
FLAT BRASS RINGS - ASTM B36 HALF HARD  
PREFORMED FABRIC PAD - AASHTO 18.4.10.1 DIV. II  
STAINLESS STEEL - ASTM A240 TYPE 304, 20 RMS FINISH OR LESS  
PTFE - ASTM D1457 VIRGIN UNFILLED & FILLED

NOTES:  
1. BEARINGS MUST NOT BE DISASSEMBLED  
2. ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b).  
AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED  
PER SUPPLEMENTAL SPECIFICATION 513.06(f).  
3. LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081  
4. COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)  
5. Ø INDICATES THICK END OF BEVELED SOLE PLATE  
6. PROTECT PTFE & S.S. SURFACES FROM DIRT, WELD SPATTER, & ANY OTHER  
FOREIGN SUBSTANCES.

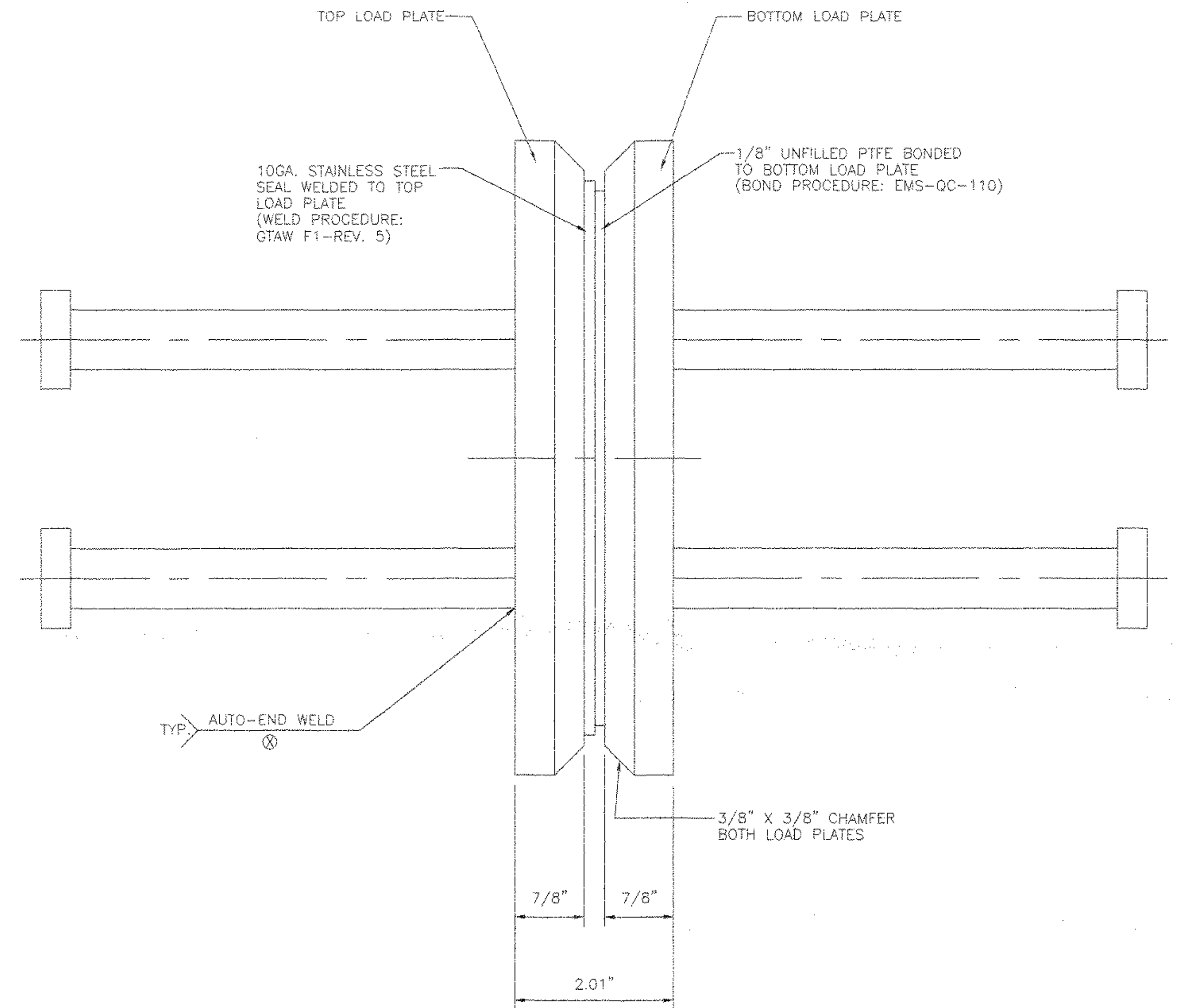
STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
PROJ. NO. BRP 025-I(35)  
HIGHWAY VT 103  
VT 103 OVER THE WILLIAMS RIVER  
TOWN OF CHESTER

COSMEC, INC. 70 SOUTH STREET  
WALPOLE, MA 02081  
SCALE: 1/8"=1"  
DRAWN BY: NH CHECKED BY: MCM  
SHEET: 2 OF 3 DATE: 8/18/03 DATE: 8/28/03  
COSMEC POT BEARINGS  
CUSTOMER: F.W. WHITCOMB S.D. NUMBER: 59903 DRAWING NUMBER: 3922 REV.





\*PLEASE VERIFY PTFE SIZE TO BEARING LOADS.



**MATERIAL:**  
 STEEL - ASTM A709 GR. 50W ZINC METALIZED  
 STAINLESS STEEL - ASTM A240 TYPE 304, 20 RMS FINISH OR LESS  
 PTFE - ASTM D1457 VIRGIN UNFILLED

**DECK BEARING DEVICE**  
 QUANTITY - 1  
 \* PLEASE VERIFY QUANTITY

- NOTES:**
1. BEARINGS MUST NOT BE DISASSEMBLED
  2. ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b). AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f).
  3. LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081
  4. COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)
  5. PROTECT PTFE & S.S. SURFACES FROM DIRT, WELD SPATTER, & ANY OTHER FOREIGN SUBSTANCES.

STATE OF VERMONT  
 AGENCY OF TRANSPORTATION  
 PROJ. NO. BRP 025-I(35)  
 HIGHWAY VT 103  
 VT 103 OVER THE WILLIAMS RIVER  
 TOWN OF CHESTER

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

|                         |                    |                      |
|-------------------------|--------------------|----------------------|
| SCALE: 1"=1"            | DRAWN BY: NH       | CHECK BY: MCM        |
| SHEET: 3 OF 3           | DATE: 8/22/03      | DATE: 8/28/03        |
| COSMEC PTFE BEARING     |                    |                      |
| CUSTOMER: F.W. WHITCOMB | S.D. NUMBER: 59903 | DRAWING NUMBER: 3923 |



|                                                   |                                   |
|---------------------------------------------------|-----------------------------------|
| WPS NUMBER: PCAW PI 210-2                         | ISSUE DATE: 11-21-03              |
| PROJECT: VT AOT NO. BRP-0125-12(3)                | ER JOB NO.: 4065                  |
| BASE METAL: ASTM A709 GR50.50.50W                 |                                   |
| WELDING PROCESS: PCAW                             |                                   |
| FILLER METAL: SPEC.: A5.79 ENAB 80-NH DUAL SHIELD |                                   |
| FLUX/SHIELDING GAS: 75% ARGON / 25% CO2           |                                   |
| CURRENT AND POLARITY: DCEP                        | ELEC. STICKOUT: 1/4" - 1/4"       |
| WELDING POSITION: 2F                              |                                   |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5, TABLE 4.4  | WPS QUALIFICATION: AWS D1.5, 5.13 |
| HEAT INPUT: 35 - 44.2 KILOJOUL/HI                 |                                   |

NOTES: 6MM FILLET

MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

|                                                |                                 |
|------------------------------------------------|---------------------------------|
| WPS NUMBER: SMAW P16 90-03                     | ISSUE DATE: 11-21-03            |
| PROJECT: VT AOT NO. BAF-0125-(35)              | SB JOB NO.: 4065                |
| BASE METAL: A709 GR36, 50, 50W                 |                                 |
| WELDING PROCESS: SMAW                          |                                 |
| FILLER METAL SPEC.: A5.5 E6018 C3              |                                 |
| FLUX/SHIELDING GAS: N/A                        |                                 |
| CURRENT AND POLARITY: DCEP                     | ELEC STICKOUT: N/A              |
| WELDING POSITION: 2P                           |                                 |
| PREHEAT AND INTERPASS TEMP.: AWS D15 TABLE 4.4 | WPS QUALIFICATION: PREQUALIFIED |
| HEAT INPUT: 38 - 130 KJ/INCH/IN                | SUPPLYING PQR#: N/A             |

NOTES:

MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

|                                                     |                                   |
|-----------------------------------------------------|-----------------------------------|
| WPS NUMBER: FCAW #10-J1                             | ISSUE DATE: 11-21-03              |
| PROJECT: VT AOT NO. BR6-0125-1(35)                  | EB JOB NO.: 4065                  |
| BASE METAL: ASTM A709 GR36,50,50W                   |                                   |
| WELDING PROCESS: FCAW                               |                                   |
| FILLER METAL SPEC.: A5.29 TSAB 60-80 Ni DUAL SHEILD |                                   |
| FLUX/SHIELDING GAS: 75% ARGON / 25% CO2             |                                   |
| CURRENT AND POLARITY: DCEP                          | ELEC STICKOUT: 1" ± 1/4"          |
| WELDING POSITION: 2F                                |                                   |
| PREHEAT AND INTERPASS TEMP.: AWS D1S TABLE 4.4      | WPS QUALIFICATION: AWS D1 S, 5.13 |
| HEAT INPUT: 35 - 44.2 KILOJOULES                    |                                   |

NOTES:

MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

|                                                |                                    |
|------------------------------------------------|------------------------------------|
| WPS NUMBER: SAW PL#4-I                         | ISSUE DATE: 11-21-03               |
| PROJECT: YT AOT NO. BRF-0125-(35)              | FB JOB NO.: 4063                   |
| BASE METAL: ASTM A709 GR50, 50,5W              |                                    |
| WELDING PROCESS: SUBMERGED ARC WELDING         |                                    |
| FILLER METAL SPEC: AWS A5.13 LINCOLN LA75      |                                    |
| FLUX/SHIELDING GAS: LINCOLN 960                |                                    |
| CURRENT AND POLARITY: DCEP                     | ELEC STICKOUT: 1" ± 1/4"           |
| WELDING POSITION: 2F                           |                                    |
| PREHEAT AND INTERPASS TEMP: AWS D1.5 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5, 5.13  |
| HEAT INPUT: 50.68 - 73.92 KJ/INCH/INCH         | SUPERHEATING PQR#: SAW A332-3 PL#8 |

NOTES: 8MM

MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT SPECIFICATIONS.

|                                                  |                                  |
|--------------------------------------------------|----------------------------------|
| WPS NUMBER: SAW P-426                            | ISSUE DATE: 11-21-03             |
| PROJECT: VT AOT NO. BRP-0125-175                 | EB JOB NO.: 4065                 |
| BASE METAL: ASTM A709 GR50, 50, 50               |                                  |
| WELDING PROCESS: SUBMERGED ARC WELDING           |                                  |
| FILLER METAL SPEC.: AWS A5.13 LINCOLN LA75       |                                  |
| FLUX: SHIELDING GAS LINCOLN 960                  |                                  |
| CURRENT AND POLARITY: DCEP                       | FLIP: STICKOUT: 1" ± 1/4"        |
| WELD BEAD POSITION: 2F                           |                                  |
| PREHEAT AND INTERPASS TEMPS.: AWS D1.3 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5 5.13 |
| HEAT INPUT: 50-68 - 71.92 KILOJOULES             | SUPPORTING PROC: SAW A532-3 PLUS |

NOTES:

MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT SPECIFICATIONS.

## 083 55



GENERAL NOTES:

STRUCTURAL STEEL:

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
2. ALL STRUCTURAL STEEL SHALL BE FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH SECTION 506.03 OF THE STANDARD SPECIFICATIONS.
3. ALL DIMENSIONS ARE GIVEN AT 68°F UNLESS OTHERWISE NOTED.
4. ALL MEMBERS AND/OR PLATES MARKED (CVN) AND ONLY THOSE MEMBERS MUST MEET THE CHARPY V-NOTCH REQUIREMENTS FOR MAIN MEMBERS AS INDICATED IN SECTION 714 OF THE VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS OF CONSTRUCTION.
5. ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GRADE 50W.
6. ALL FIELD CONNECTIONS SHALL BE MADE USING  $\frac{7}{8}$  INCH DIAMETER BOLTS MEETING ASTM DESIGNATION A325 TYPE 3 (AASHTO M164). HOLES SHALL BE  $\frac{1}{8}$  INCH DIAMETER.
7. ANY BOLT HOLES IN THE WEB OF THE FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEXAGONAL HEAD BOLTS COMPATIBLE WITH THE GIRDER STEEL. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

SHOP APPLIED PAINT SYSTEM:

1. ALL STRUCTURAL STEEL INCLUDING GIRDERS, CROSS FRAMES, STIFFENERS AND LATERAL BRACINGS WITHIN A DISTANCE OF 7'-0" FROM THE END OF THE GIRDER (EXPANSION ENDS) SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513. THE COLOR OF PAINT WILL BE BROWN, COLOR CHIP 20059. GREASING SHALL BE DONE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513.06(d). (BY OTHERS)
2. ALL COATINGS SHALL BE APPLIED WITHIN THE DRY FILM THICKNESS LIMITS SPECIFIED AND IN NO CASE SHALL THE ZINC PRIMER EXCEED THE SPECIFIED THICKNESS WITHIN THE AREAS OF FAYING CONTACT SURFACES (BOLTED JOINT CONNECTIONS).
3. FINAL SURFACE APPEARANCE OF NEW STEEL, PRIOR TO APPLICATION OF ANY PRIMER, SHALL BE AT LEAST EQUIVALENT TO A "NEAR WHITE" SURFACE PREPARATION GRADE SSPC-SP10 (ASTM D2200 GRADE Sa 2-1/2). THE SURFACE ROUGHNESS (PROFILE) SHALL BE WITHIN THE RANGE OF 0.038 TO 0.064mm (1.5 TO 2.5 mils).

SHOP APPLICATION:

1. FOR SHOP APPLIED SYSTEMS, THE EDGES OF PLATES AND OTHER SHAPES WITH SHARP DISCONTINUITIES SHALL BE STRIPED WITH AN INITIAL COATING APPLIED PRIOR TO THE APPLICATION OF OVERALL COATING. STRICT ATTENTION MUST BE PAID TO THE RECOAT TIMES OF ALL APPLIED MATERIALS WHEN COATING THESE DISCONTINUITIES. BOLTED CONNECTIONS SHALL ALSO HAVE ALL BOLT HEADS AND NUTS STRIPED IN A CIRCULAR MOTION FOLLOWING THE SAME PROCEDURE. FOR REHABILITATION APPLICATIONS, STRIPPING OF THE EDGES OF PLATES, OTHER SHAPES, BOLT HEADS OR NUTS WILL NOT BE REQUIRED IF THE METHOD OF APPLICATION PROVIDES ADEQUATE COVERAGE (THICKNESS) ON THE EDGES.
2. SURFACES WHICH WILL BE INACCESSIBLE AFTER ERECTION SHALL BE COATED PRIOR TO ERECTION WITH ALL THE COATS SPECIFIED FOR THE SYSTEM USED.
3. THE FAYING SURFACES ON GUSSET PLATES, CONNECTION PLATES, SIDEWALK BRACKET, AND SPLICE PLATES SHALL BE PREPARED AS CLASS "C", THESE SURFACES SHALL BE PROTECTED FROM DAMAGE AND CORROSION PRIOR TO THE CONNECTION.

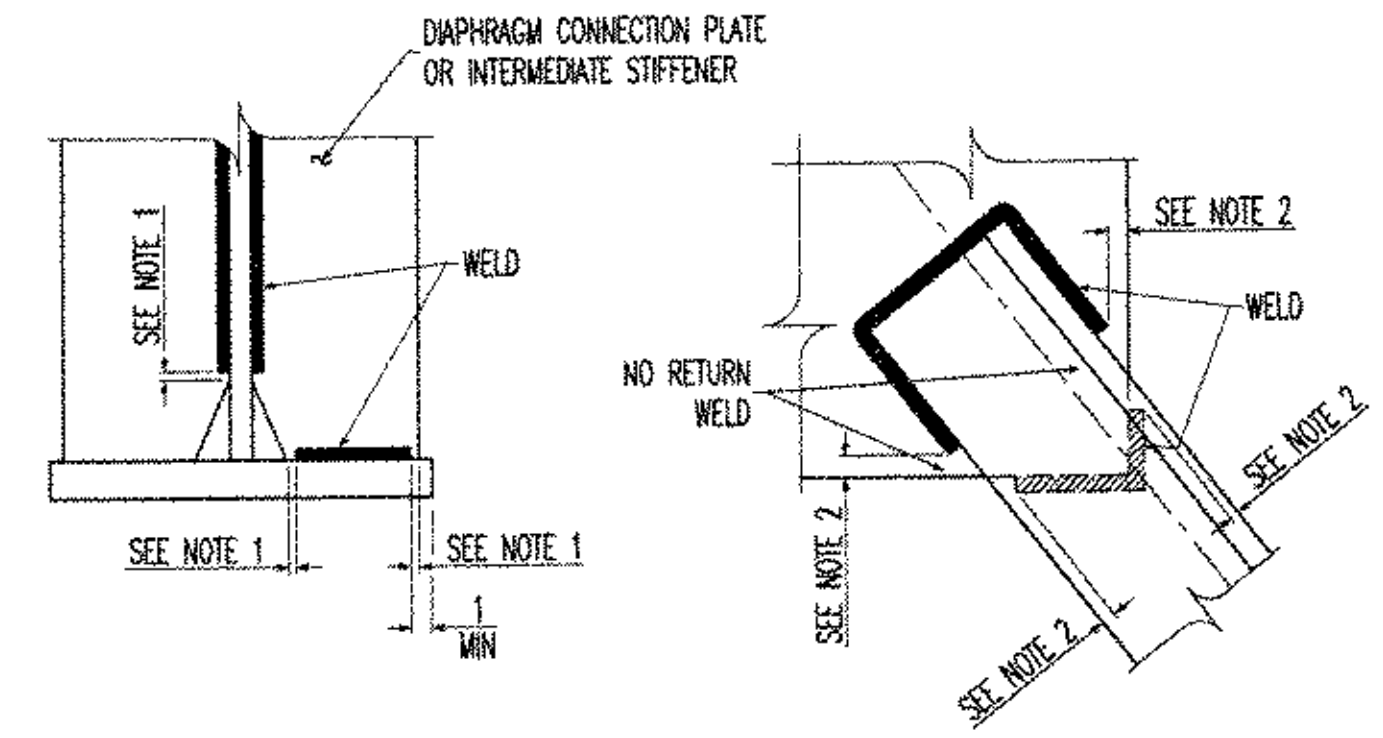
PAINT SYSTEM: AS MANUFACTURED BY CARBOLINE COMPANY:

PRIMER: CARBOZINC CZ11HS  
2-3 mils DFT

INTERMEDIATE: CARBOGUARD 893  
4-6 mils DFT

FINISH: CARBOTHANE 133HB  
3-5 mils

COLOR: BROWN, FEDERAL STANDARD 595, COLOR CHIP NO.20059

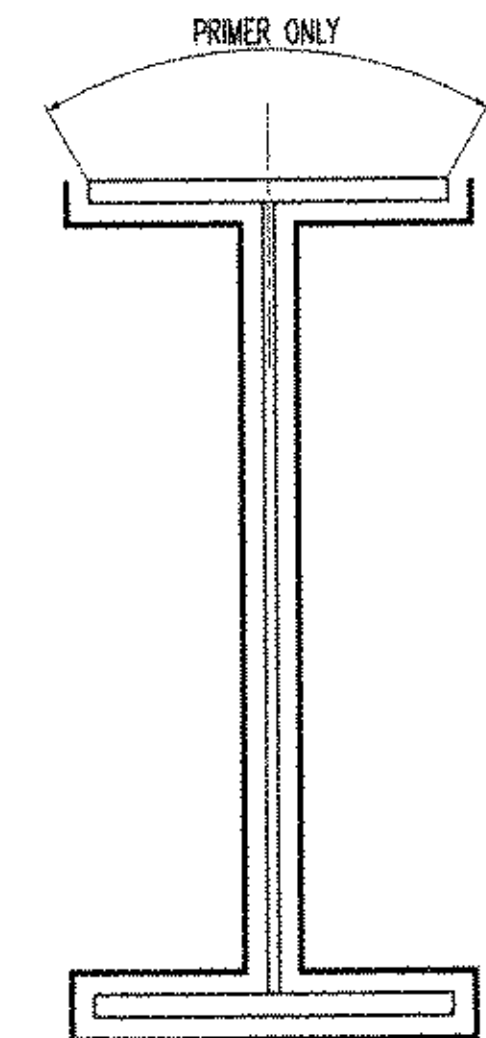


NOTE 1- NO WELD FOR  $\frac{1}{4}$  MIN.  $\frac{1}{4}$  MAX.  
(EXCEPT MUST MAINTAIN 1 MIN FROM EDGE OF FLANGE.)

NOTE 2- NO WELD FOR  $\frac{1}{4}$  MIN.  $\frac{1}{4}$  MAX.

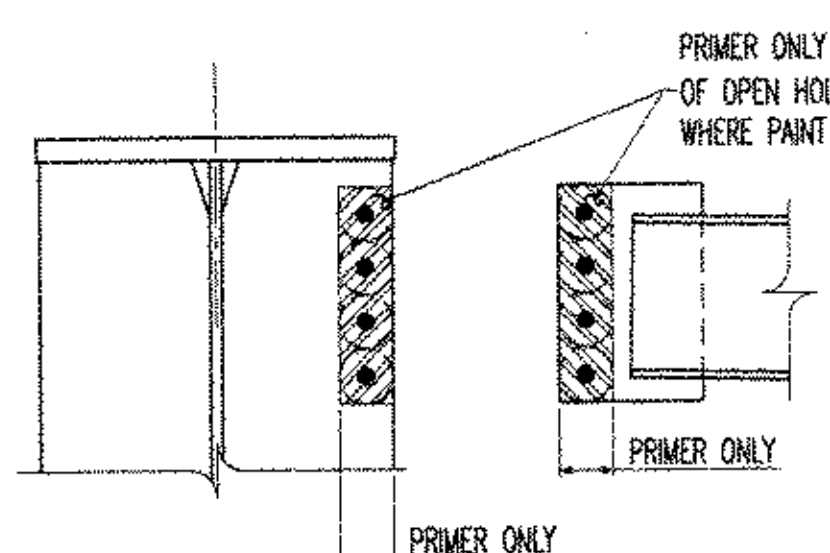
WELD TERMINATION DETAIL

NTS



PAINT ZONE DETAIL

NTS



FAYING SURFACES DETAIL

NTS

LIST OF ABBREVIATIONS

|        |                          |        |                        |
|--------|--------------------------|--------|------------------------|
| B      | BEAM                     | MAX    | MAXIMUM                |
| BC     | BOTTOM CHORD             | MIN    | MINIMUM                |
| BOB    | BOTTOM OF BASE PLATE     | ML     | MATERIAL LOOSE         |
| BOC    | BOTTOM OF CONCRETE       | MS     | MISCELLANEOUS          |
| BOP    | BOTTOM OF PLATE          | (NS)   | NEAR SIDE              |
| BOS    | BOTTOM OF STEEL          | NTS    | NOT TO SCALE           |
| BOT    | BOTTOM                   |        |                        |
| BR     | BRACE                    | O/ALL  | OVERALL                |
| BRG    | BEARING                  | OC     | ON CENTERS             |
| (BS)   | BOTH SIDES               | OD     | OUTSIDE DIAMETER       |
|        |                          | OH     | OPPOSITE HAND          |
| C      | COLUMN                   | OPNG   | OPENING                |
| C/C    | CENTERLINE               | OPP    | OPPOSITE               |
| CLR    | CLEAR                    |        |                        |
| CONC   | CONCRETE                 | PC     | POINT OF CURVE         |
| CONST  | CONSTRUCTION             | PL     | PLATE                  |
| CONT   | CONTINUOUS               | PR     | PORTAL                 |
| CONN   | CONNECTION               | PRJ    | PROJECTION             |
| CTR    | CENTER                   |        |                        |
| CVN    | CHARPY V-NOTCH REQUIRED  | R      | RISER                  |
|        |                          | R.D.   | RUNNING DIMENSION      |
|        |                          | REF    | REFERENCE              |
|        |                          | REQ'D  | REQUIRED               |
|        |                          | REV    | REVISION               |
| D      | DEPTH                    |        |                        |
| DET    | DETAIL                   | S      | STAIRS                 |
| DIAG   | DIAGONAL                 | SCH    | SCHEDULE               |
| DIA    | DIAMETER                 | SECT   | SECTION                |
| DN     | DOWN                     | SHT    | SHEET                  |
| DWG    | DRAWING                  | SP     | SPACE                  |
| EA     | EACH                     | SPA    | SPACING                |
| EL     | ELEVATION                | SPEC   | SPECIFICATION          |
| EM     | EMBEDDED MATERIAL        | SO     | SQUARE                 |
| EMB    | EMBEDDED                 | SR     | SAG ROD                |
| EQ     | EQUAL                    | SS     | STAINLESS STEEL        |
| EXIST  | EXISTING                 | ST     | STRINGER               |
|        |                          | STIFF  | STIFFENER              |
| F      | FRAME                    | STRUCT | STRUCTURAL             |
| FB     | FLOOR BEAM               | STL    | STEEL                  |
| FCM    | FRACTURE CRITICAL MEMBER | STD    | STANDARD               |
| FIN FL | FINISH FLOOR             | SW     | SIDEWALK BRACKET       |
| FLG    | FLANGE                   | SYMM   | SYMMETRICAL            |
| FLR    | FLOOR                    | SWT    | SHIPPING WEIGHT        |
| FP     | FLOOR PLATE              |        |                        |
| (FS)   | FAR SIDE                 | T      | TRUSS                  |
|        |                          | TC     | TOP CHORD              |
| G      | GIRT                     | THK    | THICKNESS              |
| GA     | GAUGE                    | THD    | THREAD                 |
| GALV   | GALVANIZED               | T&B    | TOP & BOTTOM           |
| GOSL   | GAUGE OUTSTANDING LEG    | TOC    | TOP OF CONCRETE        |
| GR     | GRATING                  | TOG    | TOP OF GRATING         |
| GRD    | GROUND                   | TOS    | TOP OF STEEL           |
|        |                          | TYP    | TYPICAL                |
| H      | HANGER                   |        |                        |
| HOR    | HORIZONTAL               | U.N.O. | UNLESS NOTED OTHERWISE |
| HR     | HANDRAIL                 |        |                        |
| HS     | HIGH-STRENGTH            | VERT   | VERTICAL               |
| ID     | INSIDE DIAMETER          | VB     | VERTICAL BRACING       |
| IN     | INCHES                   |        |                        |
|        |                          | WP     | WORKING POINT          |
| L      | LADDERS                  |        |                        |

☒ Reviewed  
☐ Rejected

☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit Specified Item

This review is only for general compliance with the design concept and the information given in the Construction Documents. Corrections or amendments made on the shop drawings during this review do not release the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of any assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and corrected at the job site. Information that pertains solely to the fabrication process or to the means, methods, techniques, equipment and procedures of construction, interpretation of the Work which had or all other items and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.  
Date: 12-17-03  
By: RSW

RESERVED FOR STAMPS

EASTERN BRIDGE LLC  
12-17-03

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

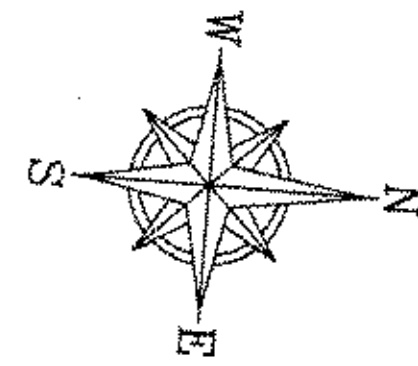
|     |          |                                    |     |      |           |     |
|-----|----------|------------------------------------|-----|------|-----------|-----|
| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR |
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |     |



PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: GENERAL NOTES  
DRAWN BY: D.B. 08/10/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET  
NUMBER: 084 54

NOTICE  
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

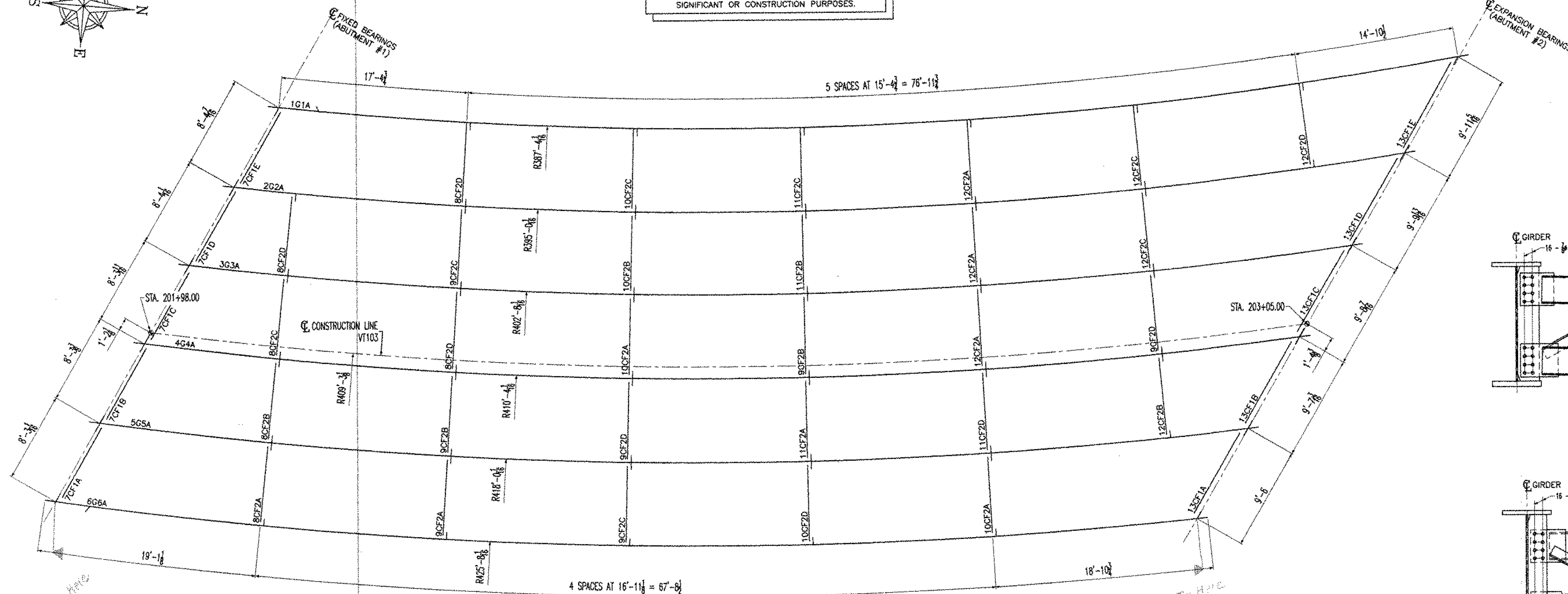




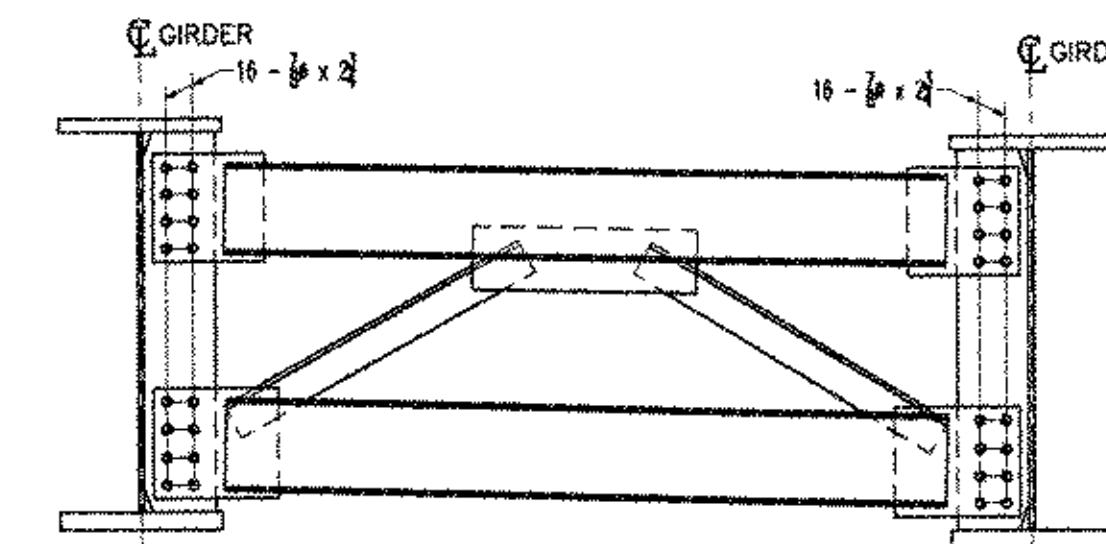
NOTE  
SMALL DISCREPANCIES MAY HAPPEN BETWEEN  
THIS DRAWING AND ENGINEER OF RECORD (EOR).  
SAID DISCREPANCIES ARE DUE TO ROUND OFF  
ERRORS ON EOR DRAWINGS AND ARE NOT  
SIGNIFICANT OR CONSTRUCTION PURPOSES.

| BILL OF MATERIAL |                 |           |            |      |                  |                  |  |  |  | Grade       | Length | Weight | Finish | Notes |
|------------------|-----------------|-----------|------------|------|------------------|------------------|--|--|--|-------------|--------|--------|--------|-------|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty  | Type of Material | Size of Material |  |  |  |             |        |        |        |       |
| E1               |                 |           |            | 928  | W.S. BOLTS       | 7/8"             |  |  |  | M164 TYPE 3 | 2 1/2  | 944    |        |       |
| E1               |                 |           |            | 320  | W.S. BOLTS       | 7/8"             |  |  |  | M164 TYPE 3 | 2 3/4  | 539    |        |       |
| E1               |                 |           |            | 1248 | W. HEX. NUTS     | 7/8"             |  |  |  | M291        |        |        |        |       |
| E1               |                 |           |            | 1248 | STD WASHER       | 7/8"             |  |  |  | M293        |        |        |        |       |

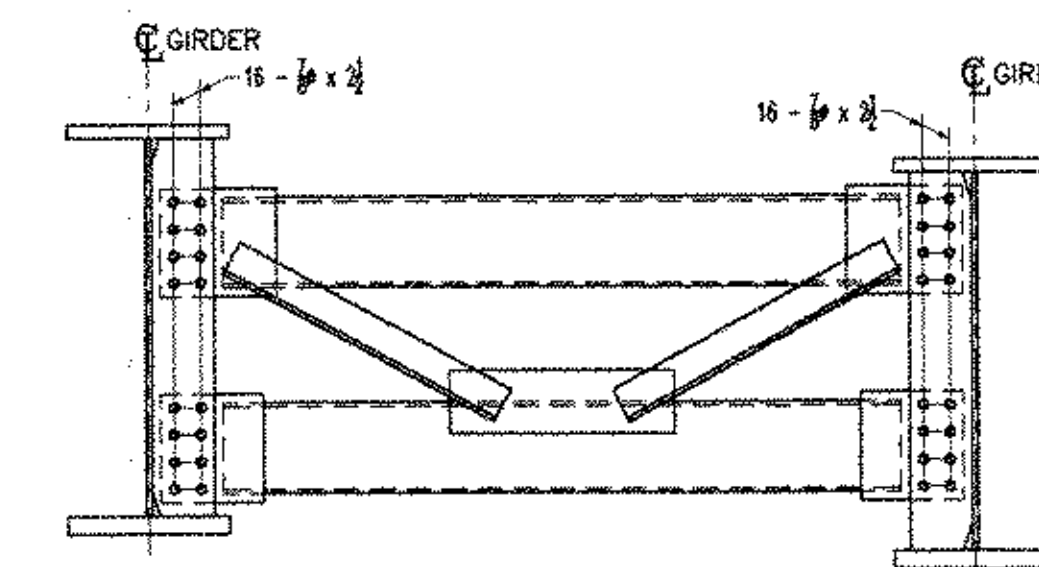
|              |      |
|--------------|------|
| TOTAL WEIGHT | -    |
| -CUTS        | -    |
| +FIELD BOLTS | 1283 |
| +WELD        | -    |
| NET TOTAL    | 1283 |



ERECTION FRAMING PLAN  
NTS



ABUTMENT CROSS FRAME  
NTS  
7CF1A SHOWN



INTERMEDIATE CROSS FRAME  
NTS  
8CF2A SHOWN

- NOTES:
- 1- GENERAL NOTES: SEE DRAWING GN1
  - 2- HOLES : 15/16" (U.N.O.)
  - 3- PROVIDE 1/8" GAP BETWEEN NUT AND BEVELED WASHER AT EXPANSION BEARINGS.
  - 4- THREADS SHALL BE BURIED TO PREVENT NUT REMOVAL (TYP)

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

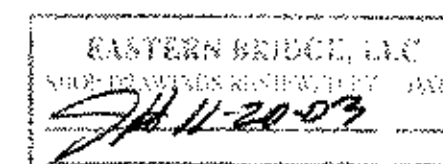
This drawing is made for general construction with the design contract. It is the contractor's responsibility to verify the dimensions and specifications of the materials and workmanship of the bridge. The contractor is responsible for the construction of the bridge in accordance with the design and specifications. The contractor is responsible for the construction of the bridge in accordance with the design and specifications. The contractor is responsible for the construction of the bridge in accordance with the design and specifications.

McFarland-Johnson, Inc.

Date: 12-17-03

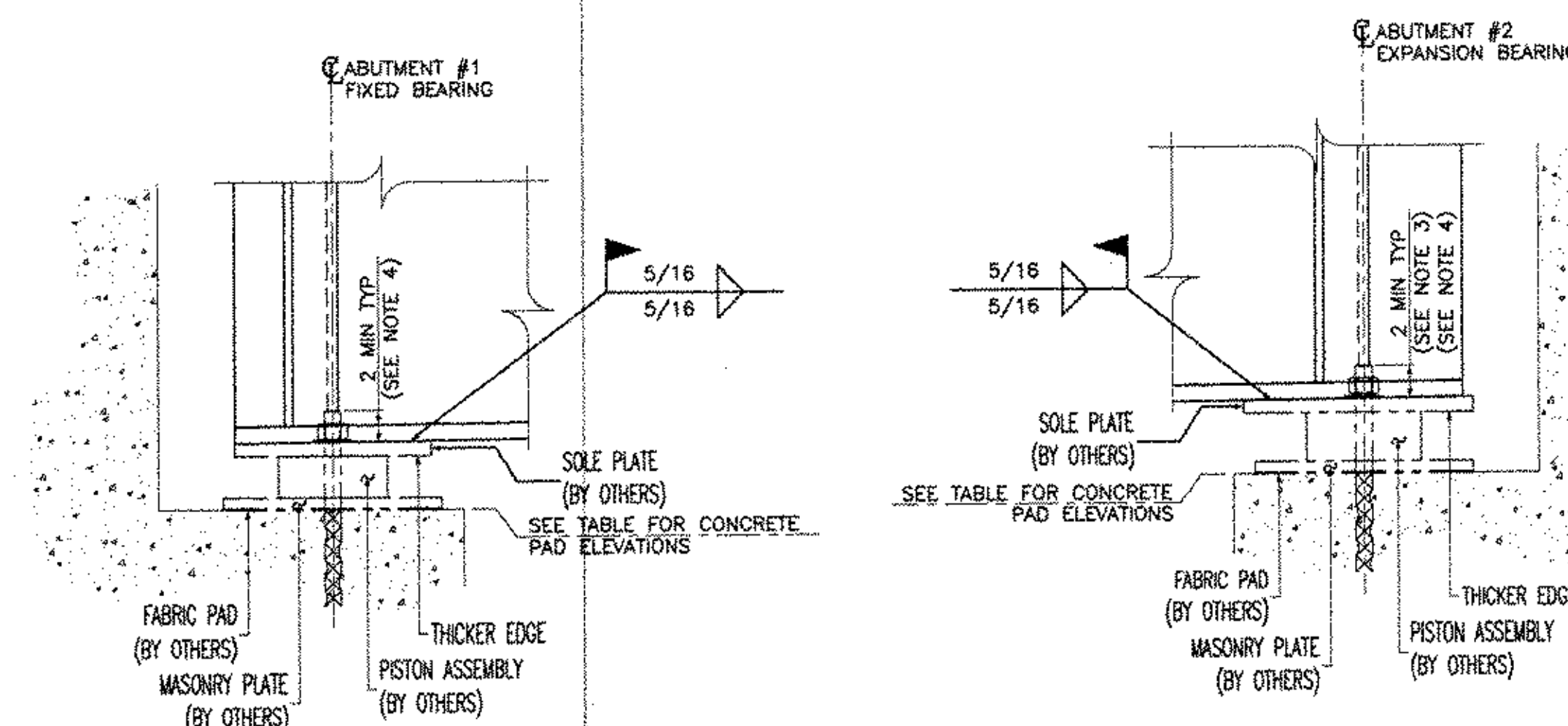
By: SFD

RESERVED FOR STAMPS



CONCRETE PAD ELEVATIONS (IN FEET)

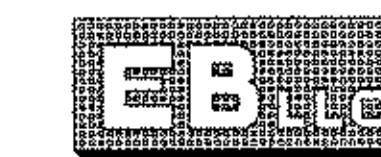
| GIRDER | ABUTMENT #1 | ABUTMENT #2 |
|--------|-------------|-------------|
| 1G1A   | 591.90'     | 594.59'     |
| 2G2A   | 592.09'     | 594.77'     |
| 3G3A   | 592.28'     | 594.95'     |
| 4G4A   | 592.49'     | 595.14'     |
| 5G5A   | 592.53'     | 595.17'     |
| 6G6A   | 592.74'     | 595.37'     |



TYPICAL GIRDER ELEVATION  
NTS  
LOOKING WEST

NOTICE

This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.



EASTERN BRIDGE LLC  
RURAL RTE 2 BOX 302  
CLAREMONT, NH 03743  
603-542-5202

PROJECT: BRIDGE #12 VT 103-TN OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: ERECTION FRAMING PLAN

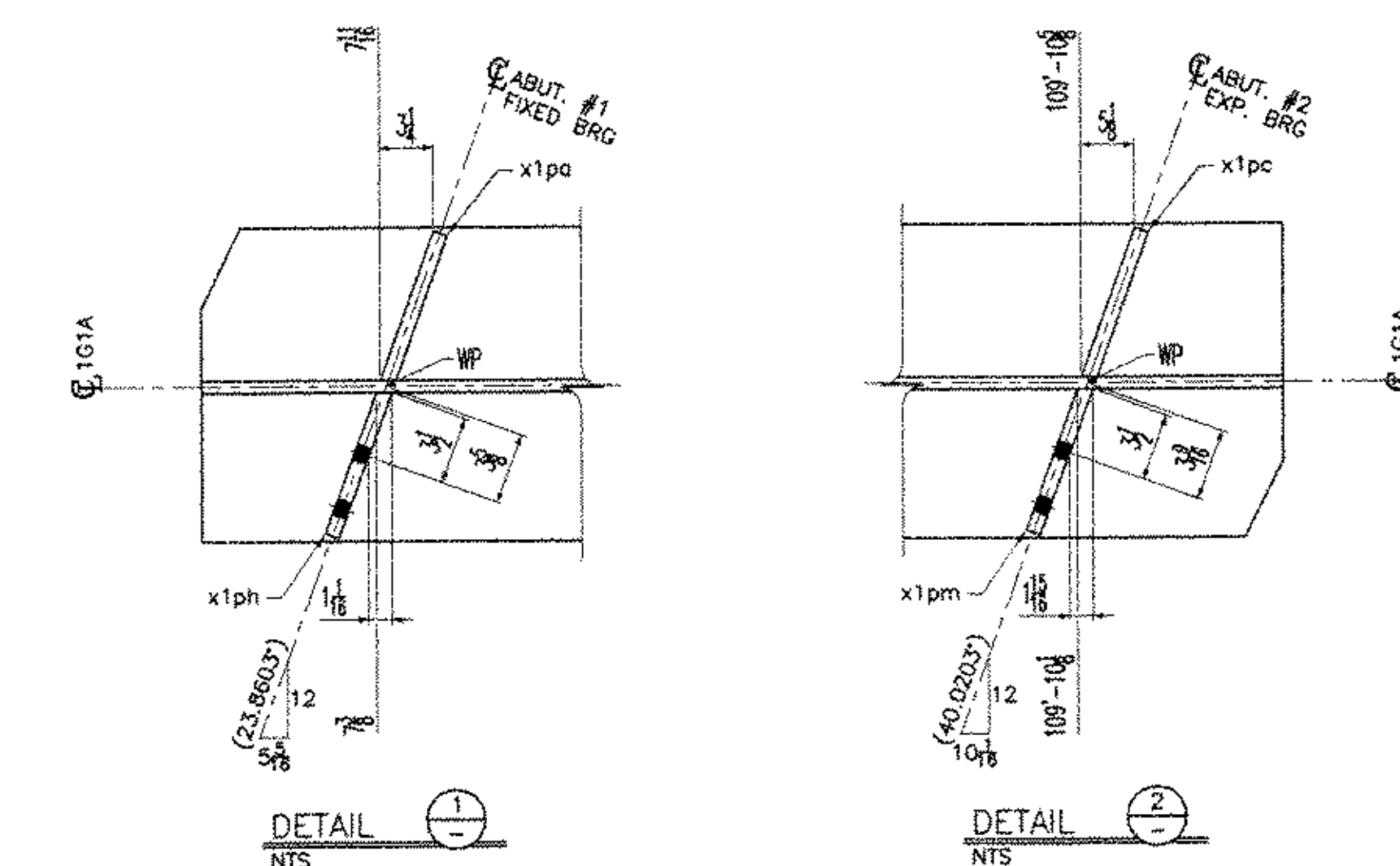
DRAWN BY: D.B. 10/07/03 JOB

CHECKED BY: L.D. 11/17/03 NUMBER: 4065

SHEET NUMBER: E1



| BILL OF MATERIAL |                 |           |            |     |                  |                  |            |            |              |                   |       |  |  |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|------------|------------|--------------|-------------------|-------|--|--|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade      | Length     | Weight       | Finish            | Notes |  |  |
| 1                |                 | 1G1A      | wc1a       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 36'-1 3/8  | 3223         | (CVN)             | 1     |  |  |
| 1                |                 | 1G1A      | wc1b       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 74'-7      | 6657         | (CVN)             | 2     |  |  |
| 1                |                 | 1G1A      | tf1a       | 1   | PL Plate         | 7/8x16           | M270-GR50W | 74'-7 1/16 | 3550         |                   | 4     |  |  |
| 1                |                 | 1G1A      | tf1b       | 1   | PL Plate         | 7/8x16           | M270-GR50W | 36'-1      | 1718         |                   | 3     |  |  |
| 1                |                 | 1G1A      | bf1a       | 1   | PL Plate         | 1 1/2x16         | M270-GR50W | 72'-7 3/16 | 5924         | (CVN)             | 8     |  |  |
| 1                |                 | 1G1A      | bf1b       | 1   | PL Plate         | 1 1/2x16         | M270-GR50W | 37'-11 3/4 | 3099         | (CVN)             | 7     |  |  |
| 1                |                 | 1G1A      | x1pa       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83           | (CVN)             | 11    |  |  |
| 1                |                 | 1G1A      | x1pc       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83           | (CVN)             | 11    |  |  |
| 1                |                 | 1G1A      | x1ph       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83           | (CVN)             | 11    |  |  |
| 1                |                 | 1G1A      | x1pm       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83           | (CVN)             | 11    |  |  |
| 1                |                 | 1G1A      | x1pn       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6       | 42           | (CVN)             | 12    |  |  |
| 1                |                 | 1G1A      | x1pp       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6       | 42           | (CVN)             | 12    |  |  |
| 1                |                 | 1G1A      | x1ps       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6       | 42           | (CVN)             | 12    |  |  |
| 1                |                 | 1G1A      | x1pt       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6       | 42           | (CVN)             | 12    |  |  |
| 1                |                 | 1G1A      | x1pv       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6       | 42           | (CVN)             | 12    |  |  |
| 1                |                 | 1G1A      | x1py       | 1   | PL Plate         | 1/4x3 1/2        | M270-GR50W | 0'-11      | 3            |                   | 23    |  |  |
|                  |                 |           |            |     |                  |                  |            |            | TOTAL WEIGHT | 24758             |       |  |  |
|                  |                 |           |            |     |                  |                  |            |            | -CUTS        | 28                |       |  |  |
|                  |                 |           |            |     |                  |                  |            |            | +FIELD BOLTS | REFER TO 'E1' DWG |       |  |  |
|                  |                 |           |            |     |                  |                  |            |            | +WELD        | 130               |       |  |  |
|                  |                 |           |            |     |                  |                  |            |            | NET TOTAL    | 24860             |       |  |  |



- NOTES:  
 1- GENERAL NOTES: SEE DRAWING GN1  
 2- HOLES: 15/16" (U.N.O.)  
 3- : PAINT ZONE (SEE DRAWING GN1)

☒ Reviewed  
☐ Rejected  
☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit Specific Items

This review is only for general conformance with the design, contract, and the applicable code of practice. It does not constitute a warranty or a guarantee of the accuracy or completeness of the information provided. The reviewer is not responsible for the accuracy or completeness of the information provided. The reviewer is not responsible for the accuracy or completeness of the information provided.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC & SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR |
|-----|----------|------------------------------------|-----|------|-----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |     |
| 2   | 11/14/03 | NUMBER: 4065                       |     |      |           |     |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: MCFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: GIRDER 1G1A

DRAWN BY: D.B. 10/22/03

CHECKED BY: L.D. 11/14/03

JOB NUMBER: 4065

SHEET NUMBER: 1.1



EASTERN BRIDGE LLC

RURAL RTE 2, BOX 302

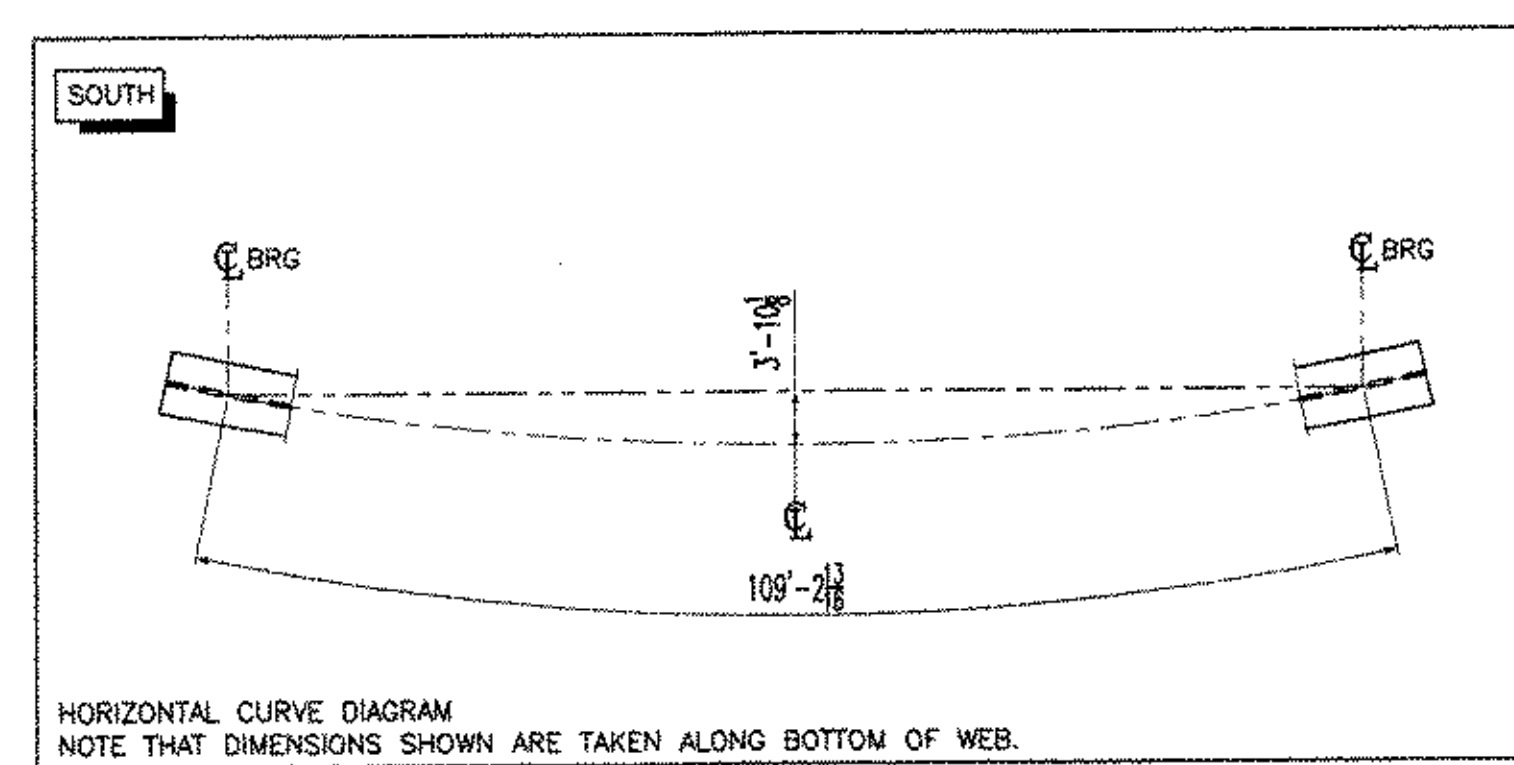
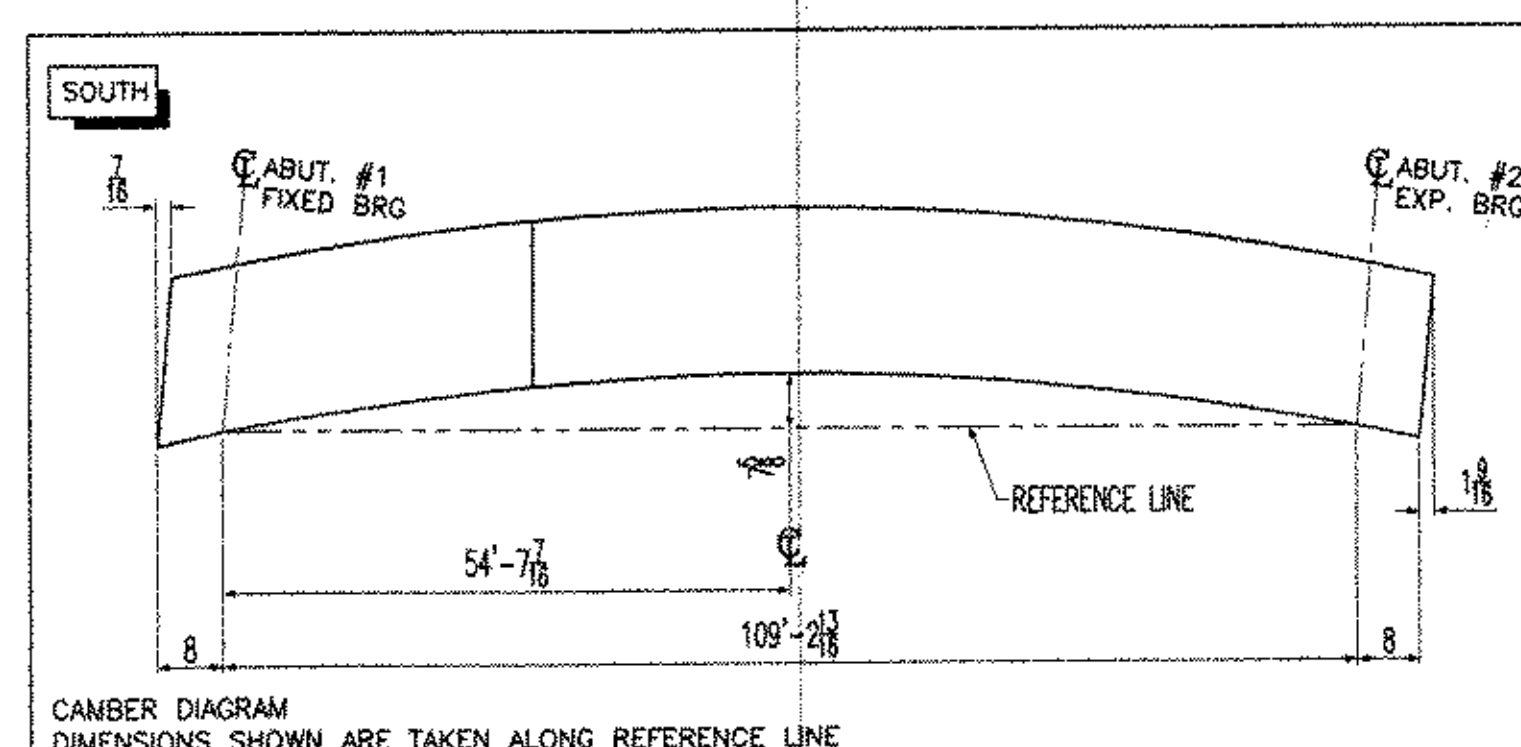
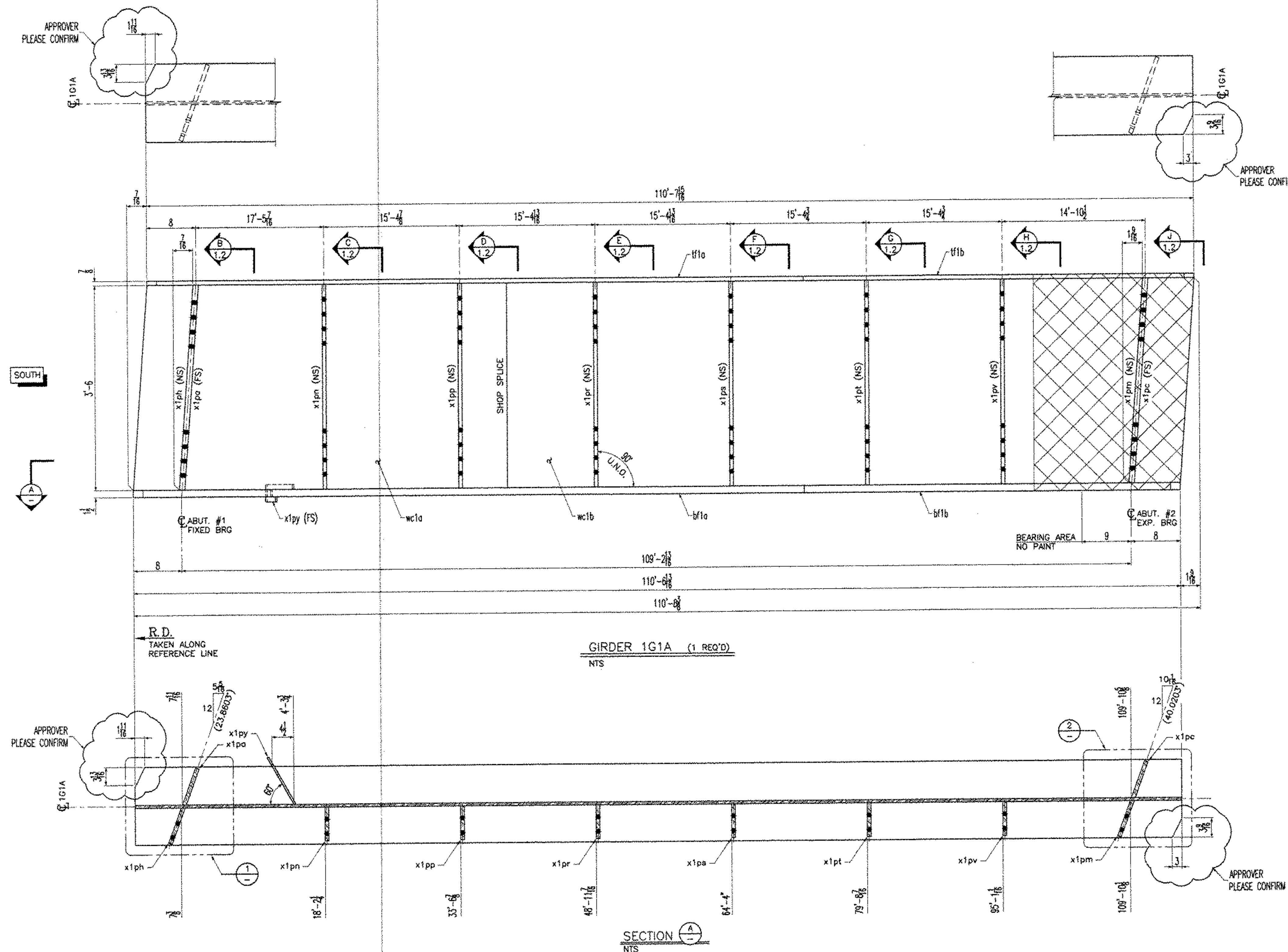
CLAREMONT, NH 03743

603-542-5202

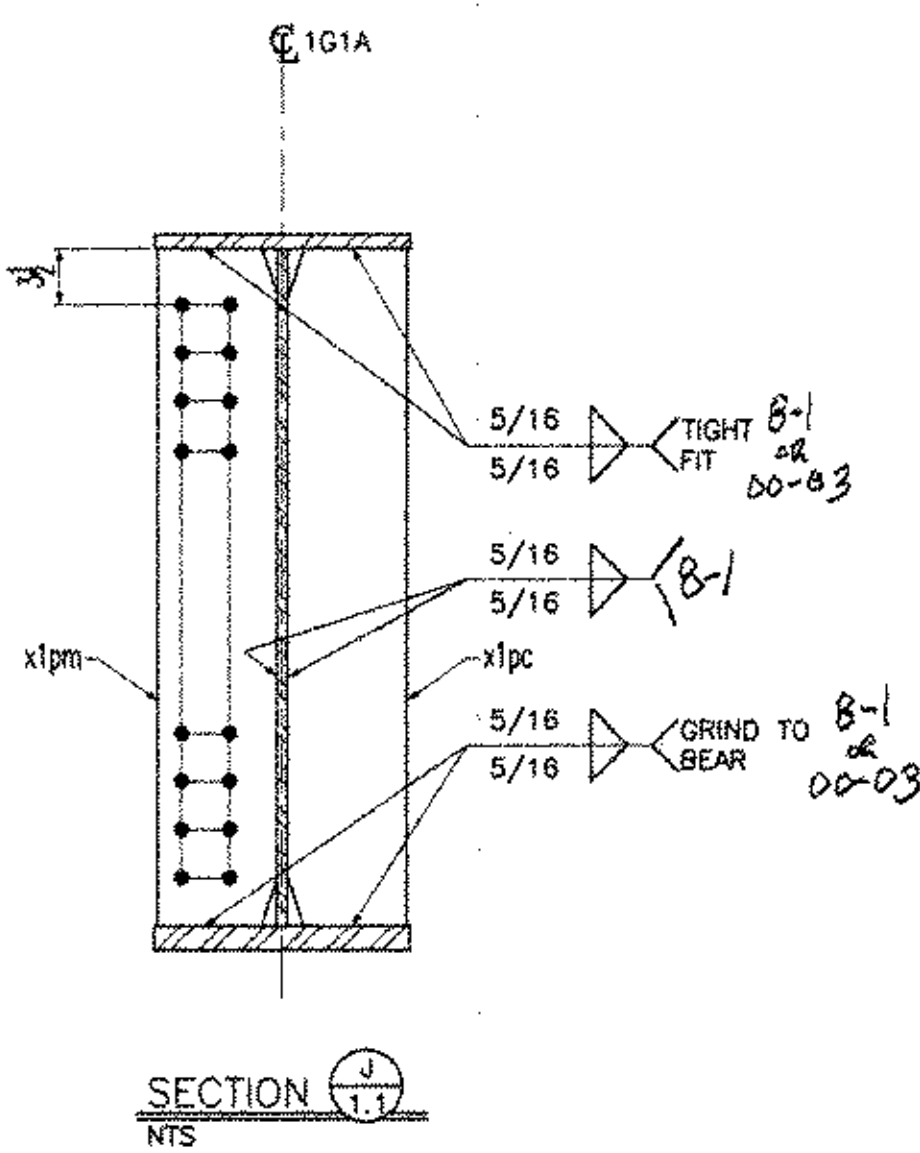
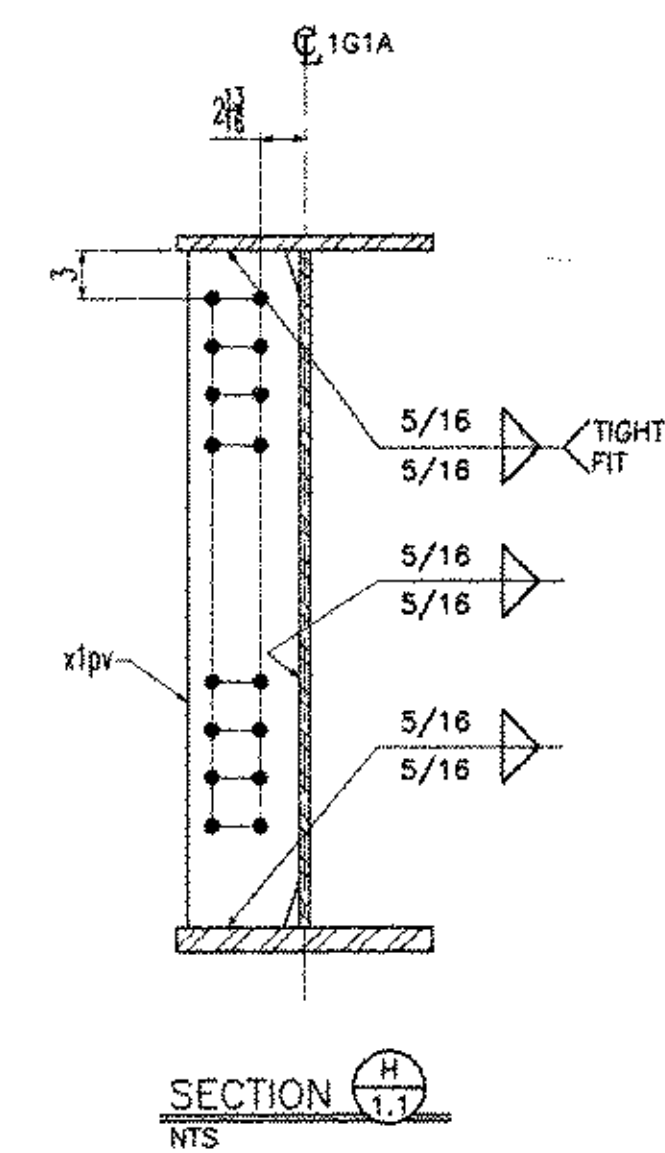
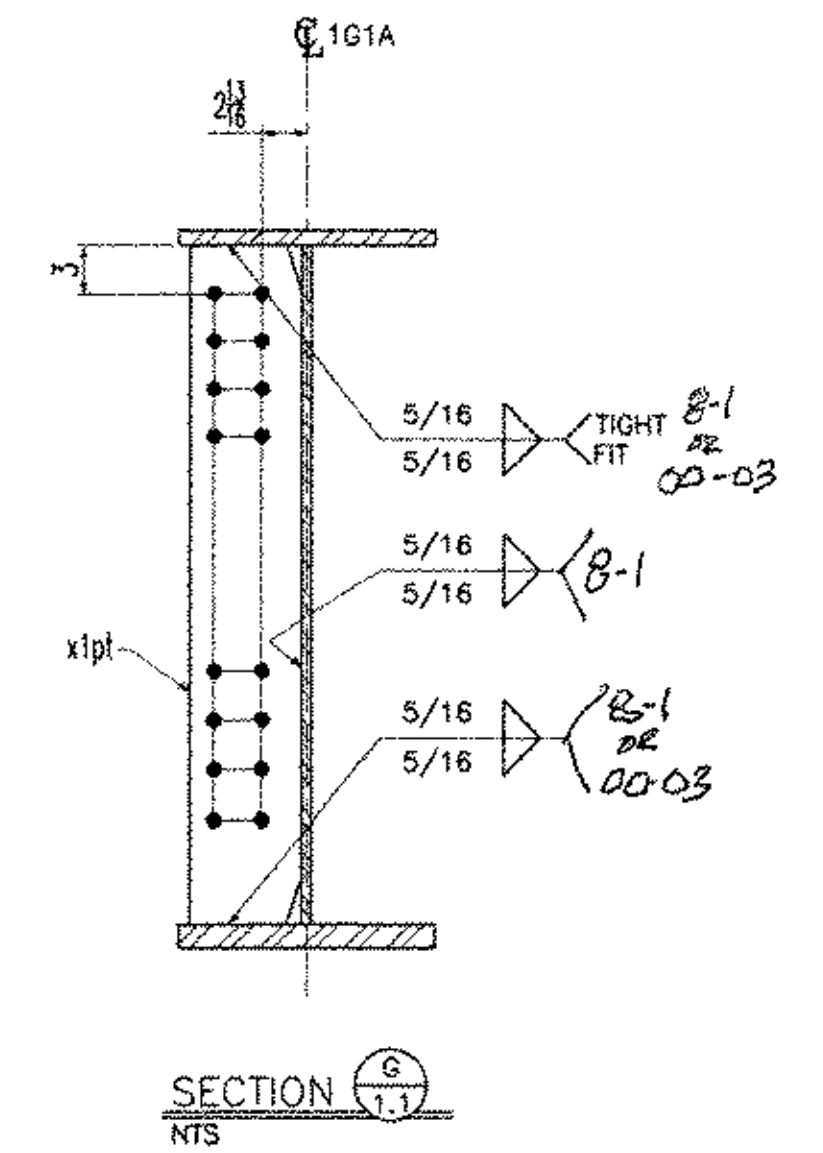
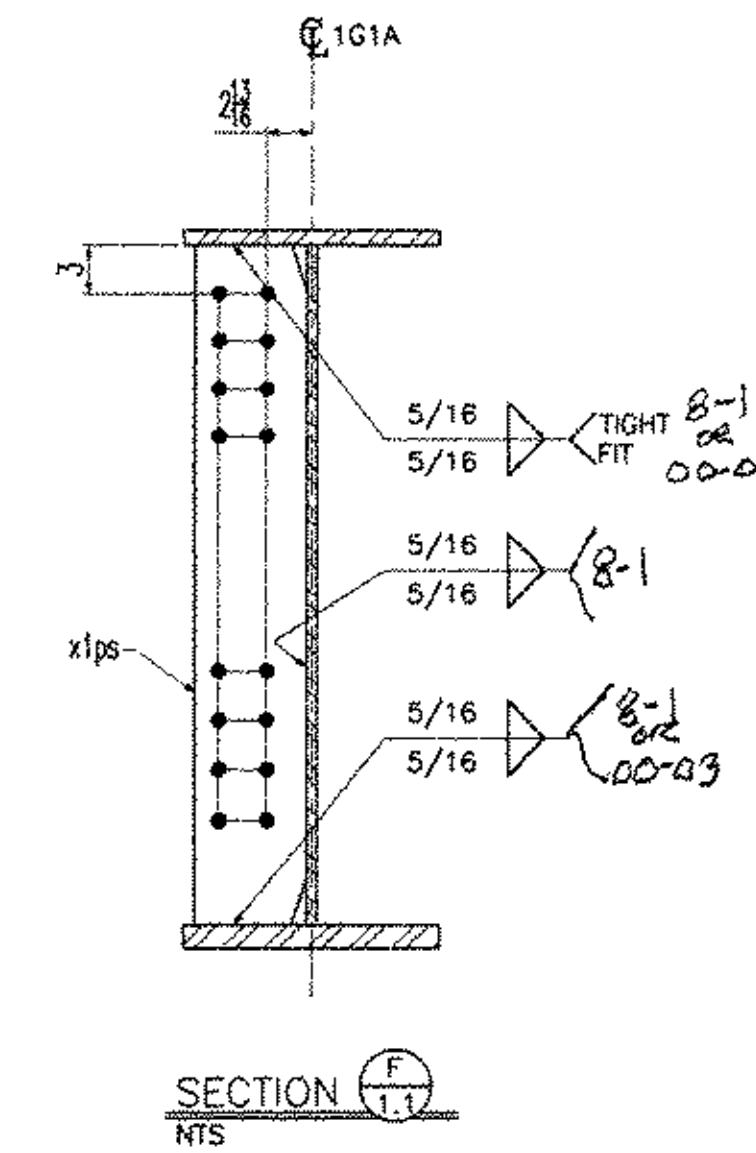
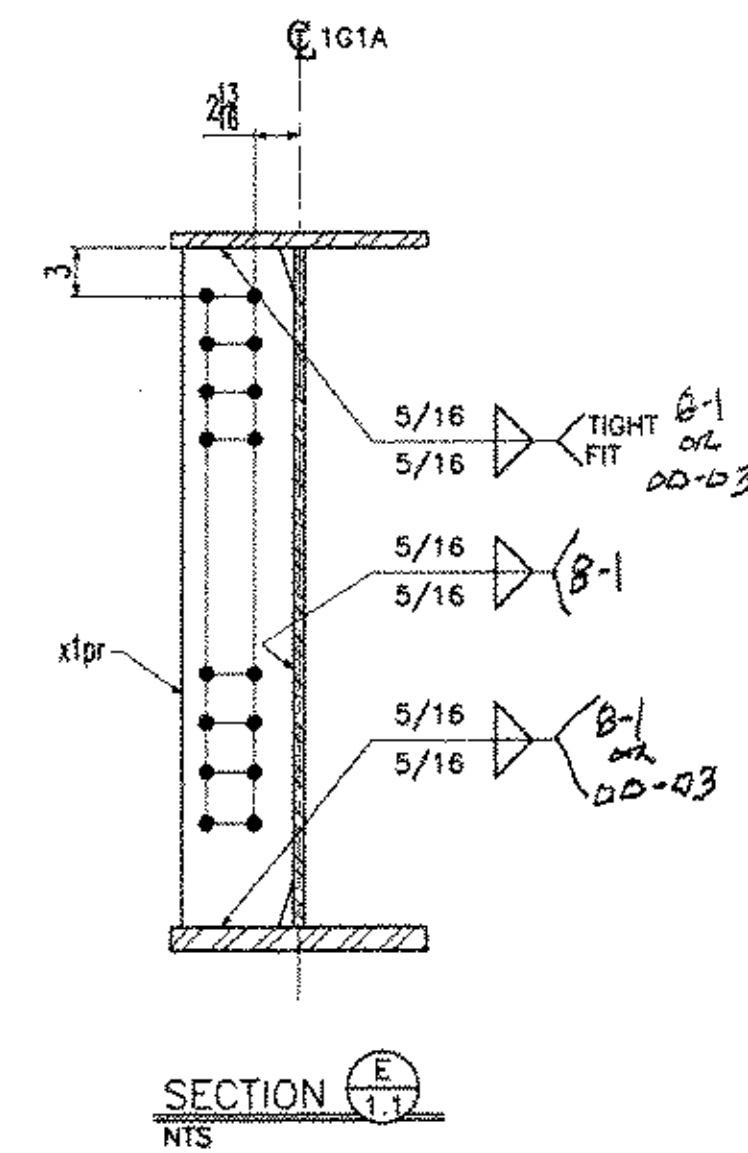
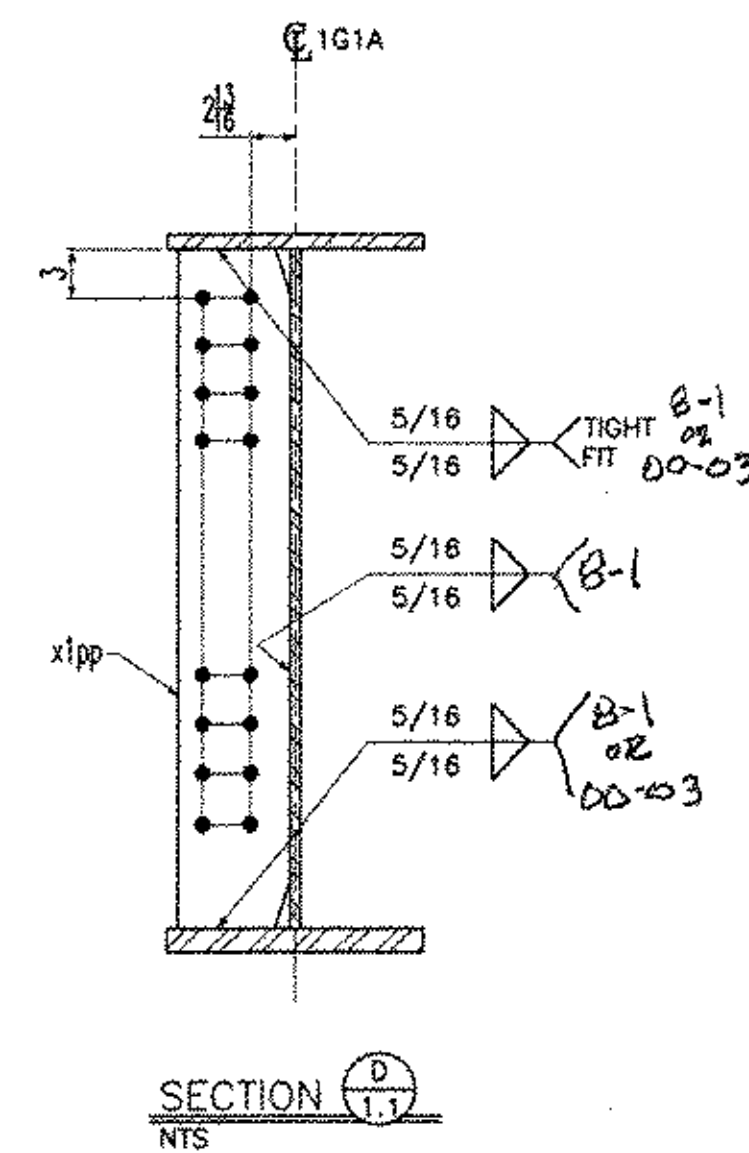
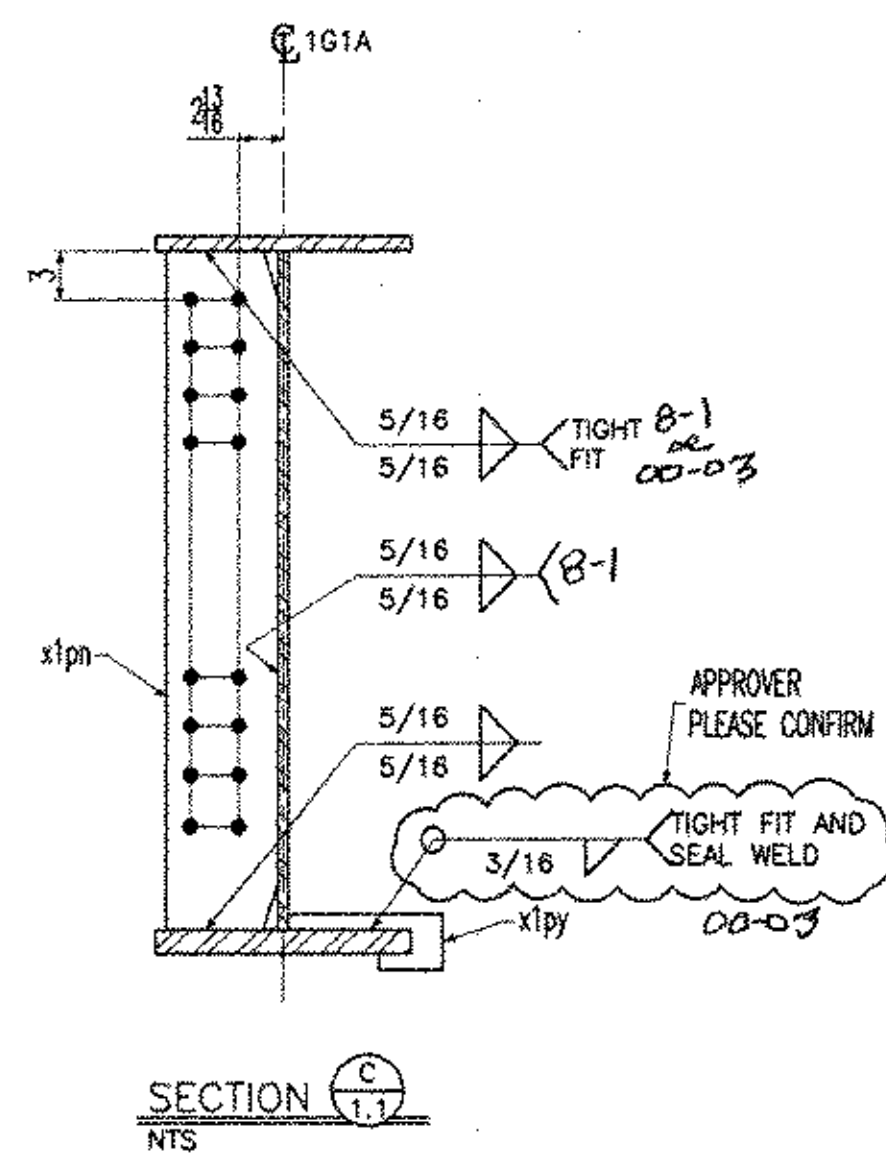
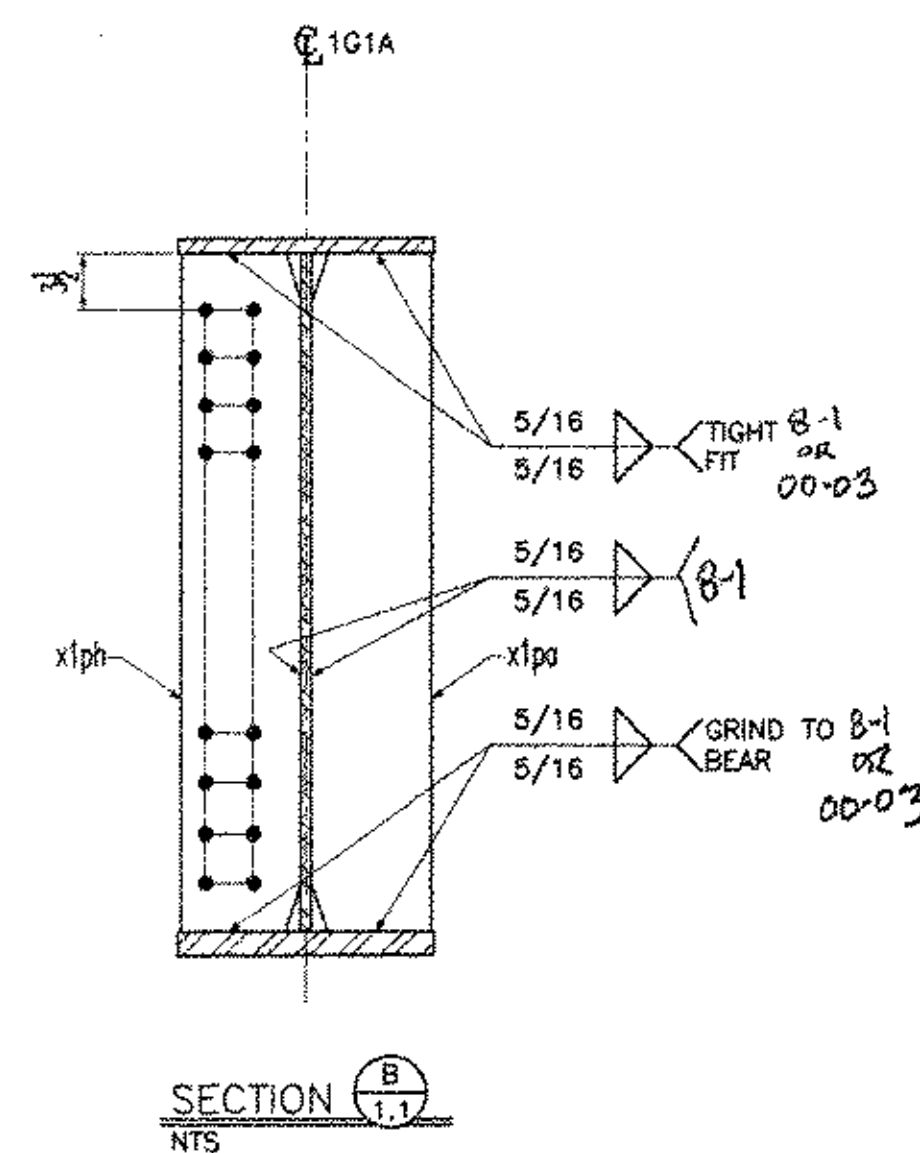
# NOTICE

This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

WORK WITH DRAWING 1.2







NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

☒ Reviewed  
☐ Rejected  
☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit Specification

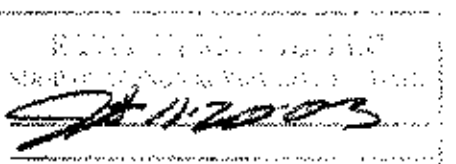
This review is only for general conformance with the design, quantity and the information given in the Construction Documents. Contractors or suppliers are responsible for the shop drawings, except the review does not release the contractor from compliance with the requirements of the plans and specifications. Review of shop drawings 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 only to the fabrication process or to the repair, modification, maintenance, and procedures of construction, coordination of the work, and that of all other trades and pertaining all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS



DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|----------|------------------------------------|-----|------|-----------|----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |          |     |
|     |          |                                    |     |      |           |          |     |
|     |          |                                    |     |      |           |          |     |
|     |          |                                    |     |      |           |          |     |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: McFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: GIRDER 1G1A

DRAWN BY: D.B. 10/22/03

CHECKED BY: L.D. 11/14/03

JOB NUMBER: 4065

SHEET NUMBER: 1.2

# NOTICE

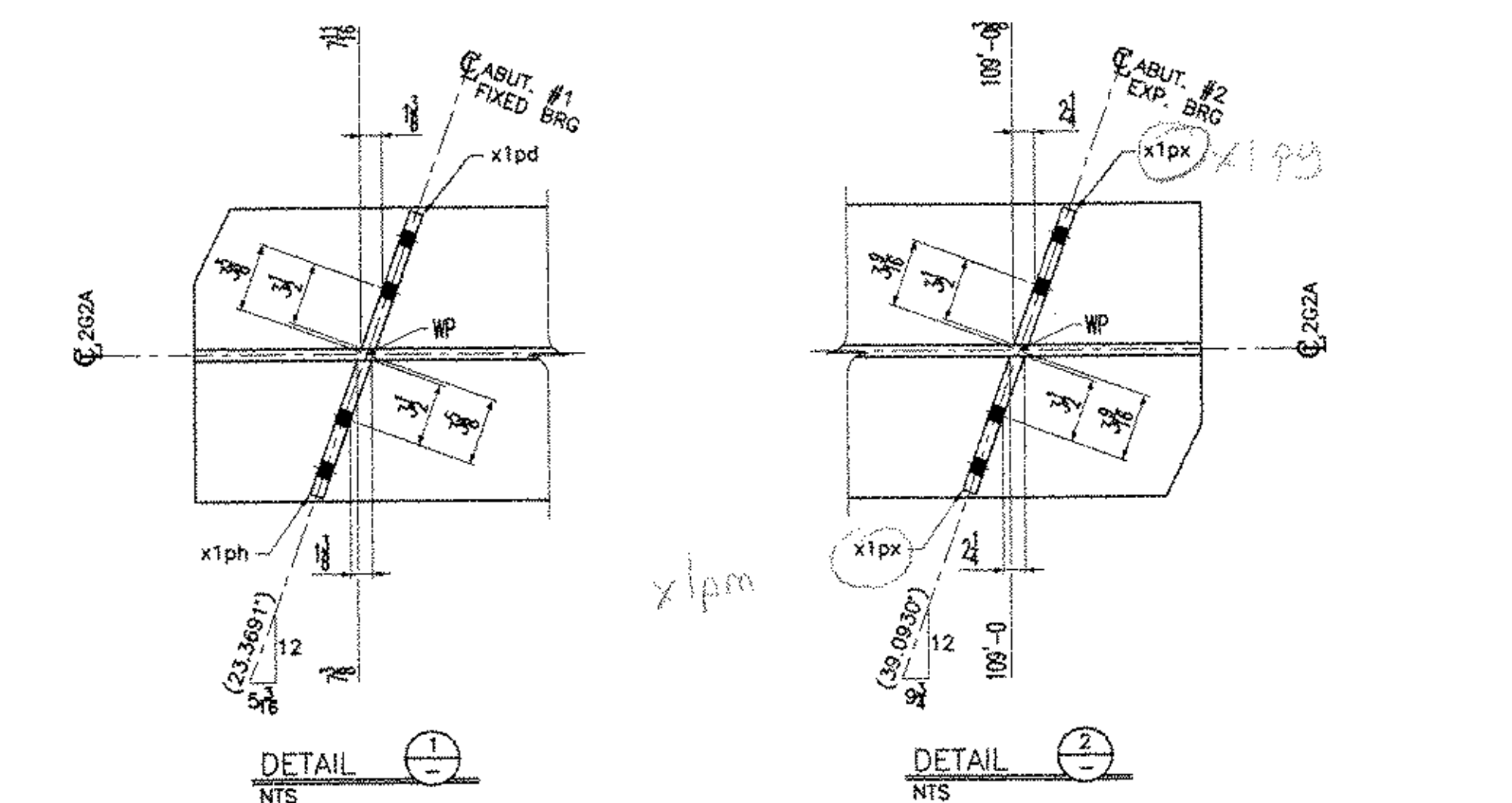
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WORK WITH DRAWING 1.1



| BILL OF MATERIAL |                 |           |            |            |                  |                  |       |             |                   |        |       |  |  |
|------------------|-----------------|-----------|------------|------------|------------------|------------------|-------|-------------|-------------------|--------|-------|--|--|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty        | Type of Material | Size of Material | Grade | Length      | Weight            | Finish | Notes |  |  |
| 2                |                 | 2G2A      | wc2a       | 1 PL Plate | 5/8x42           | M270-GR50W       |       | 35'-10"     | 3198              | (CVN)  | 1     |  |  |
| 2                |                 | 2G2A      | wc2b       | 1 PL Plate | 5/8x42           | M270-GR50W       |       | 74'-0 1/4"  | 6606              | (CVN)  | 2     |  |  |
| 2                |                 | 2G2A      | bf2a       | 1 PL Plate | 7/8x16           | M270-GR50W       |       | 74'-0 1/4"  | 3523              |        | 4     |  |  |
| 2                |                 | 2G2A      | bf2b       | 1 PL Plate | 7/8x16           | M270-GR50W       |       | 35'-9 5/8"  | 1704              |        | 3     |  |  |
| 2                |                 | 2G2A      | bf2c       | 1 PL Plate | 1 1/2x16         | M270-GR50W       |       | 72'-0 3/8"  | 5874              | (CVN)  | 8     |  |  |
| 2                |                 | 2G2A      | bf2b       | 1 PL Plate | 1 1/2x16         | M270-GR50W       |       | 37'-8 5/16" | 3076              | (CVN)  | 7     |  |  |
| 2                |                 | 2G2A      | x1pd       | 1 PL Plate | 7/8x8            | M270-GR50W       |       | 3'-6"       | 83                | (CVN)  | 11    |  |  |
| 2                |                 | 2G2A      | x1pg       | 1 PL Plate | 7/8x8            | M270-GR50W       |       | 3'-6"       | 83                | (CVN)  | 11    |  |  |
| 2                |                 | 2G2A      | x1ph       | 1 PL Plate | 7/8x8            | M270-GR50W       |       | 3'-6"       | 83                | (CVN)  | 11    |  |  |
| 2                |                 | 2G2A      | x1pm       | 1 PL Plate | 7/8x8            | M270-GR50W       |       | 3'-6"       | 83                | (CVN)  | 11    |  |  |
| 2                |                 | 2G2A      | x1pn       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x1ps       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x1pt       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x1pz       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pa       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pb       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pc       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pd       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pf       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pg       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2ph       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pk       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| 2                |                 | 2G2A      | x2pm       | 1 PL Plate | 1/2x7            | M270-GR50W       |       | 3'-6"       | 42                | (CVN)  | 12    |  |  |
| TOTAL WEIGHT     |                 |           |            |            |                  |                  |       |             | 24817             |        |       |  |  |
| - CUTS           |                 |           |            |            |                  |                  |       |             | 30                |        |       |  |  |
| + FIELD BOLTS    |                 |           |            |            |                  |                  |       |             | REFER TO 'E1' DWG |        |       |  |  |
| + WELD           |                 |           |            |            |                  |                  |       |             | 142               |        |       |  |  |
| NET TOTAL        |                 |           |            |            |                  |                  |       |             | 24929             |        |       |  |  |

|               |                   |
|---------------|-------------------|
| TOTAL WEIGHT  | 24817             |
| - CUTS        | 30                |
| + FIELD BOLTS | REFER TO 'E1' DWG |
| + WELD        | 142               |
| NET TOTAL     | 24929             |



- NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES: 15/16" (U.N.O.)  
3- : PAINT ZONE (SEE DRAWING GN1)

☐ Reinsured  
☐ Rejected  
☐ Furnish as Connected  
☐ Reviso and Reconnect  
☐ Submit Specification

This contract is for general construction with the design concept and the submittal given to the Construction Documents. Contractors or others, who rely on the shop drawings during the review do not release the contractor from their responsibility for the accuracy of the design and specifications. Revisions of a design or specification shall not be made without the approval of the design engineer. The contractor is responsible for the construction to be completed and corrected in the field. Revisions and changes shall be the responsibility of the contractor. Revisions and changes shall be the responsibility of the contractor. Revisions and changes shall be the responsibility of the contractor.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR      |
|-----|----------|------------------------------------|-----|------|-----------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL |
| 2   |          |                                    |     |      |           |          |
| 3   |          |                                    |     |      |           |          |
| 4   |          |                                    |     |      |           |          |
| 5   |          |                                    |     |      |           |          |
| 6   |          |                                    |     |      |           |          |
| 7   |          |                                    |     |      |           |          |
| 8   |          |                                    |     |      |           |          |
| 9   |          |                                    |     |      |           |          |
| 10  |          |                                    |     |      |           |          |

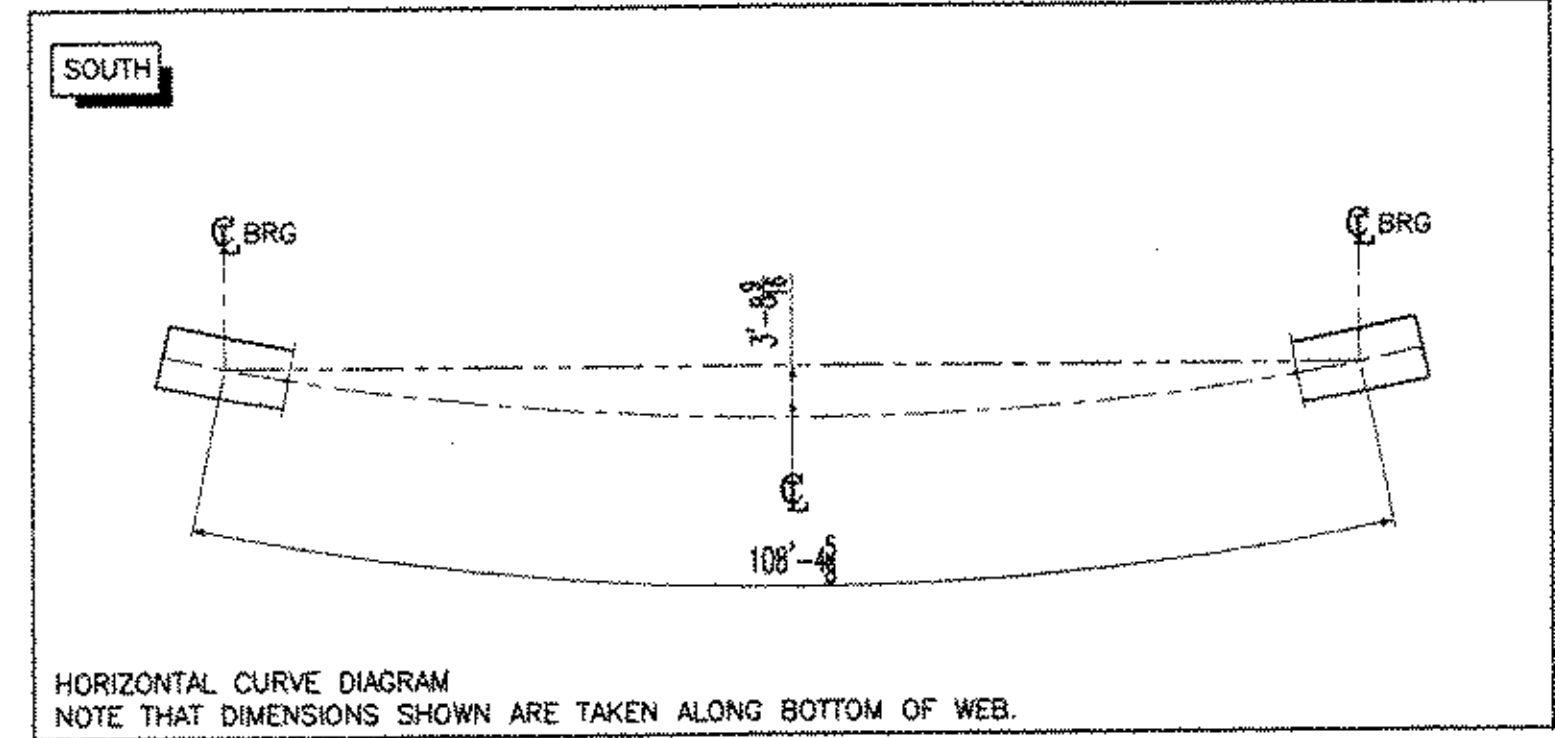
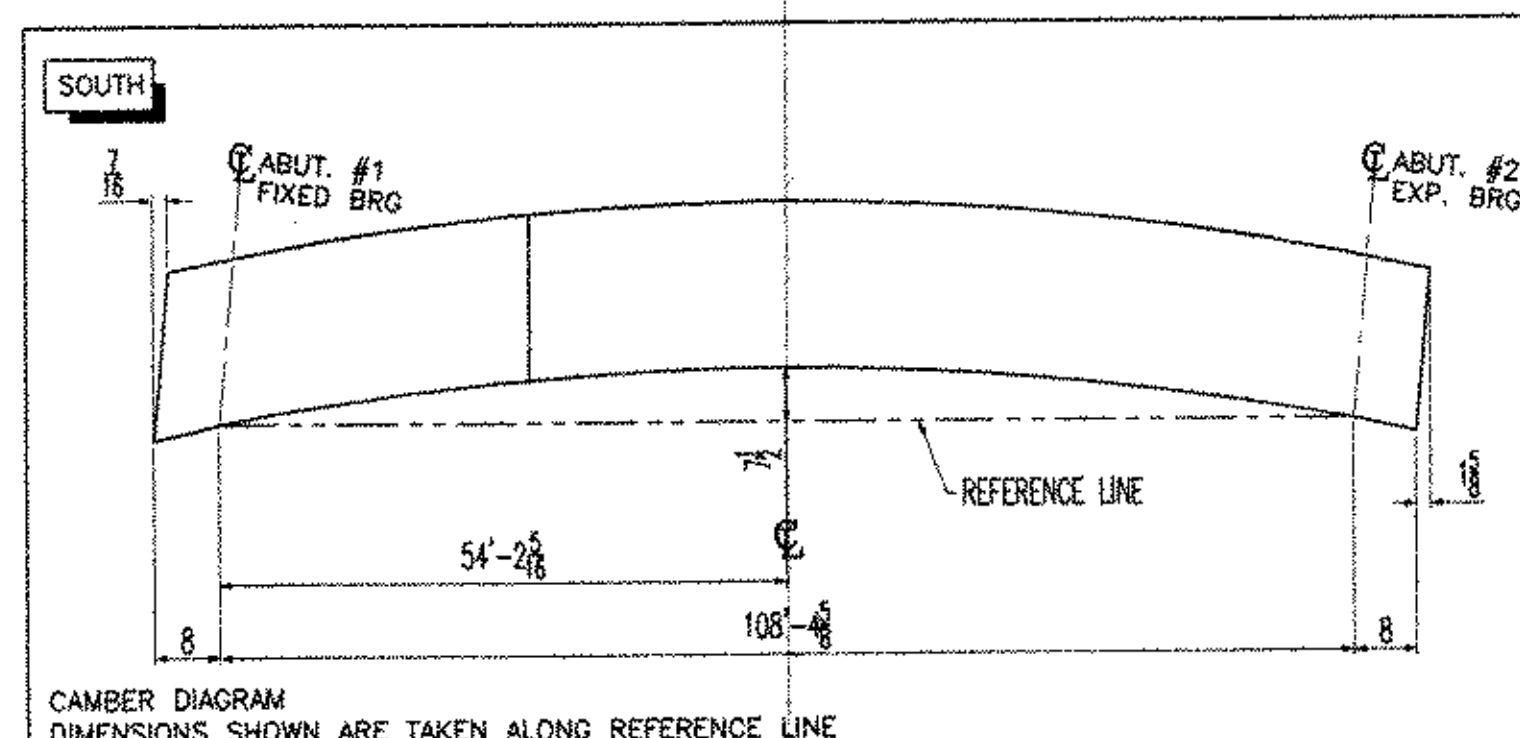
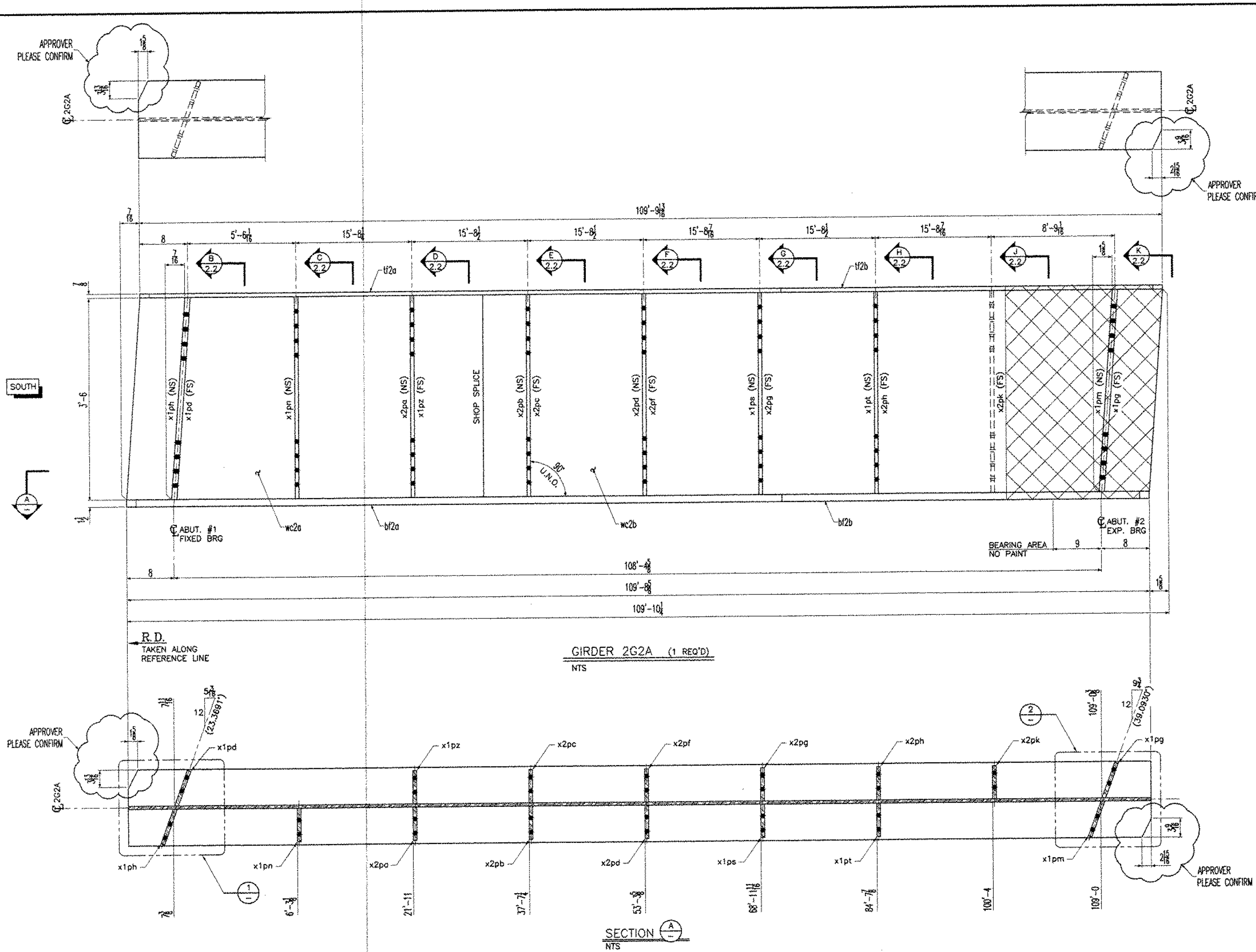
|                                                   |                   |
|---------------------------------------------------|-------------------|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |                   |
| LOCATION: CHESTER, VERMONT                        |                   |
| ENGINEER: MCFARLAND-JOHNSON, INC.                 |                   |
| CUSTOMER: EASTERN BRIDGE LLC                      |                   |
| DRAWING TITLE: GIRDER 2G2A                        |                   |
| DRAWN BY: D.B. 10/22/03                           | JOB               |
| CHECKED BY: L.D. 11/14/03                         | NUMBER: 4065      |
|                                                   | SHEET NUMBER: 2.1 |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-642-5202

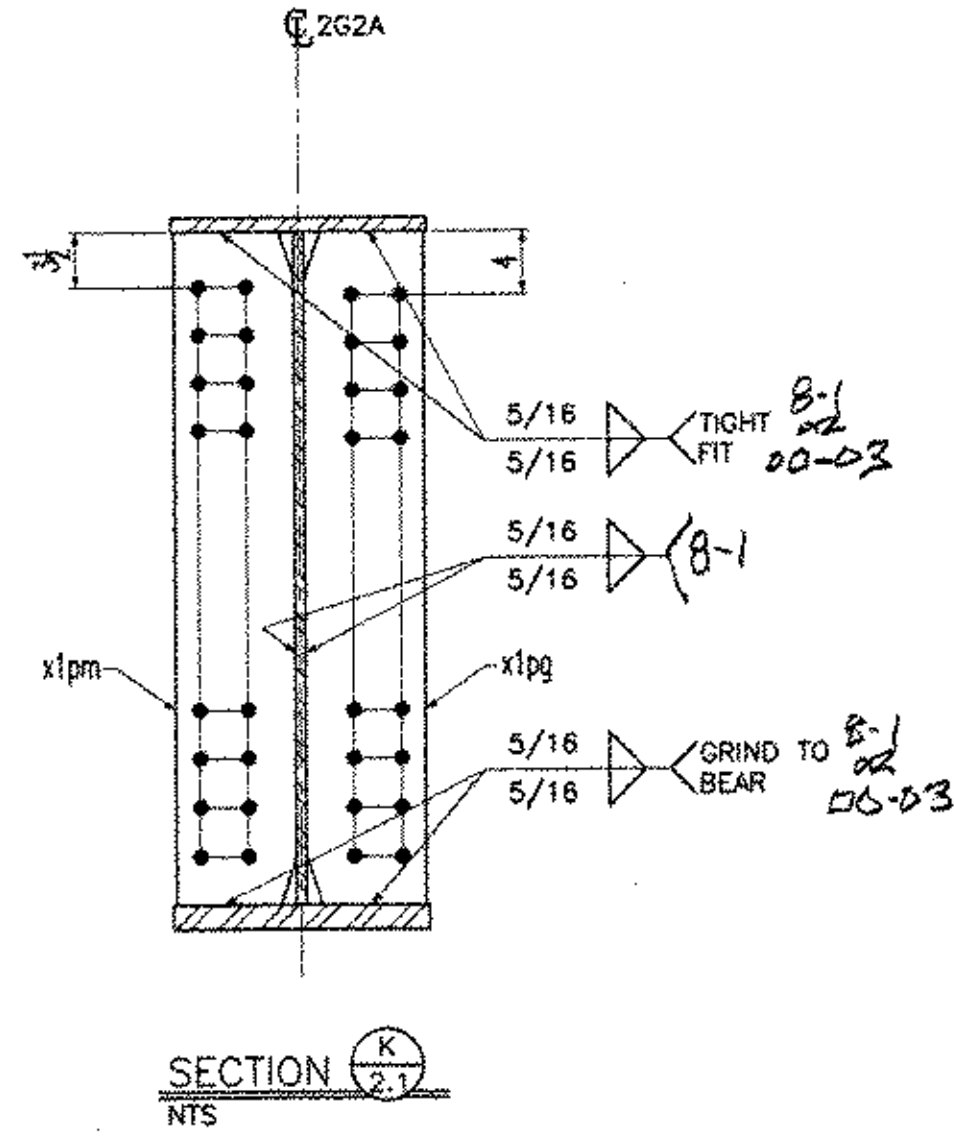
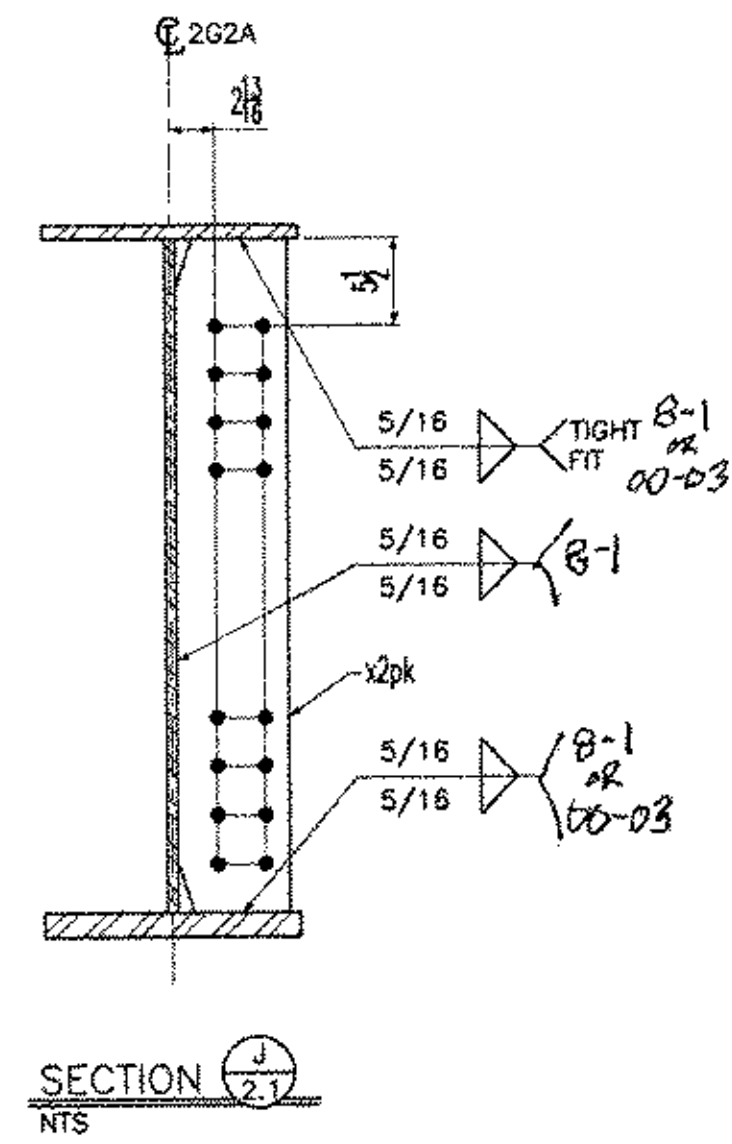
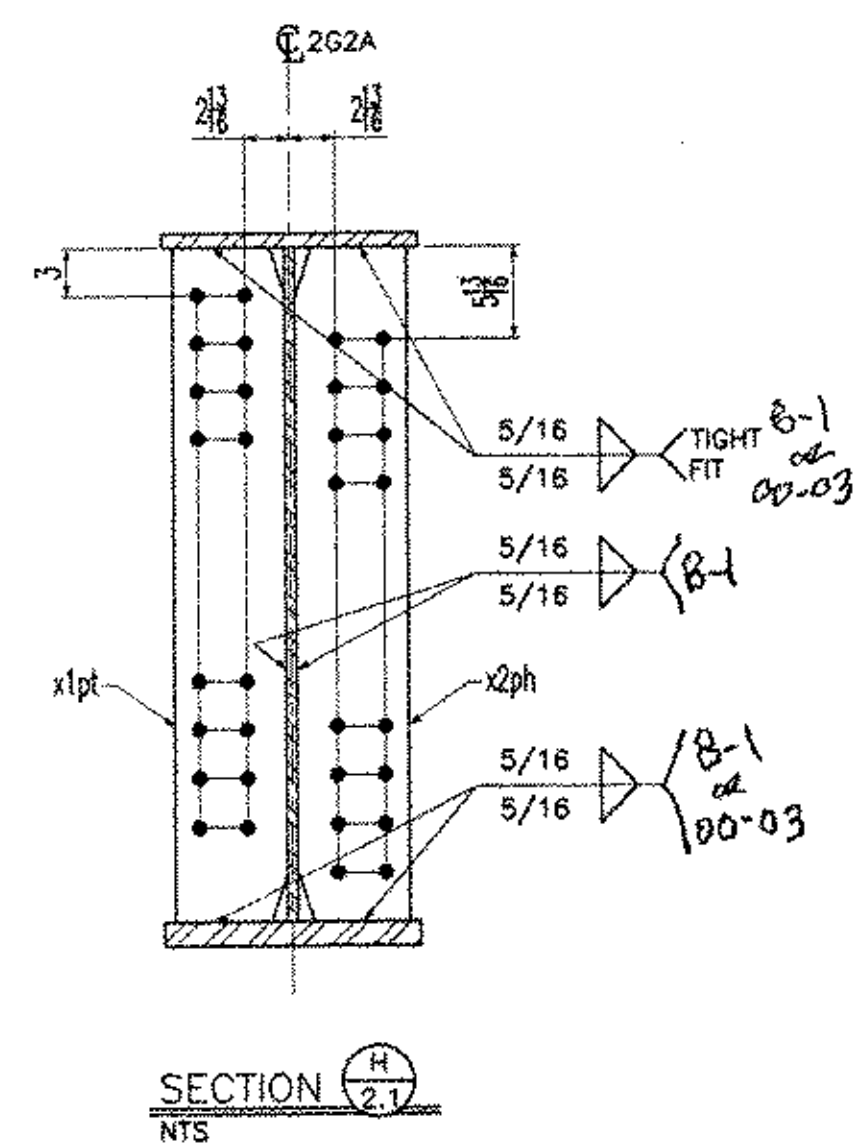
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WORK WITH DRAWING 2.2



08855





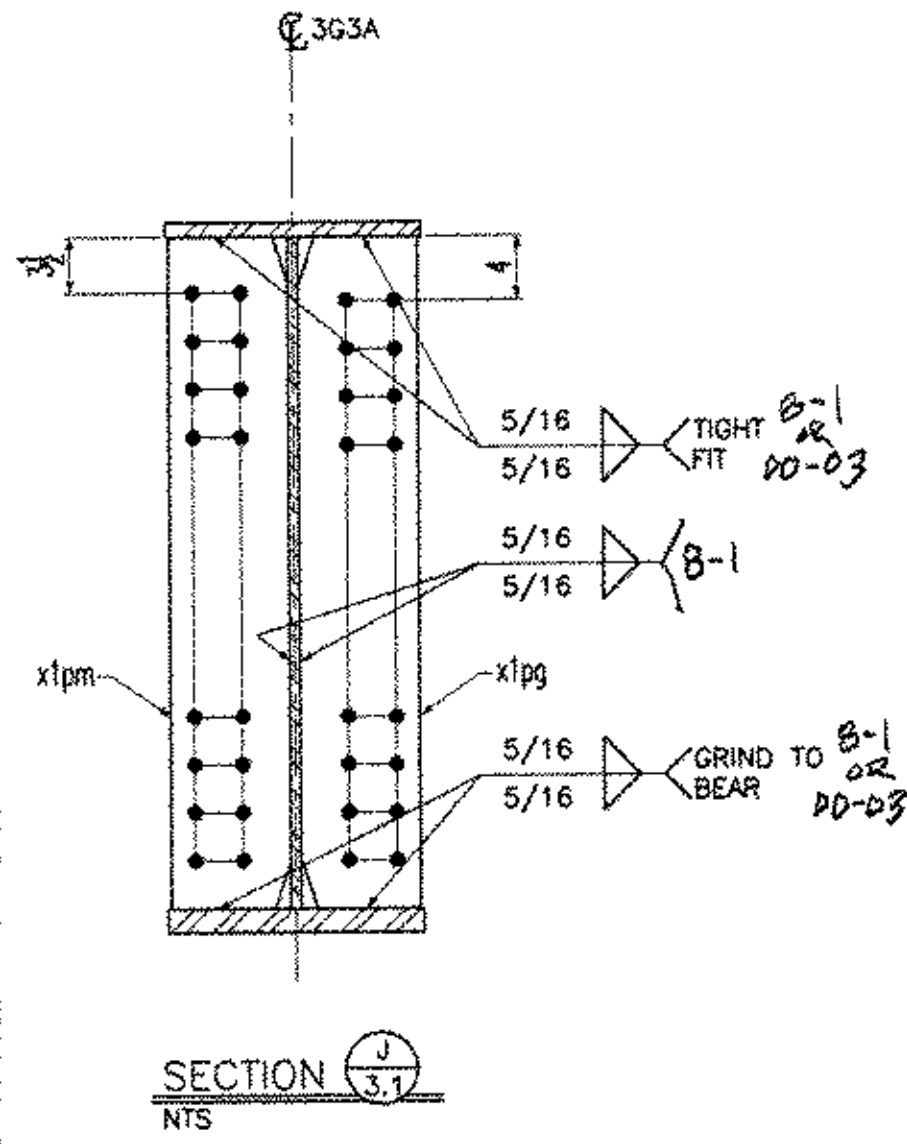
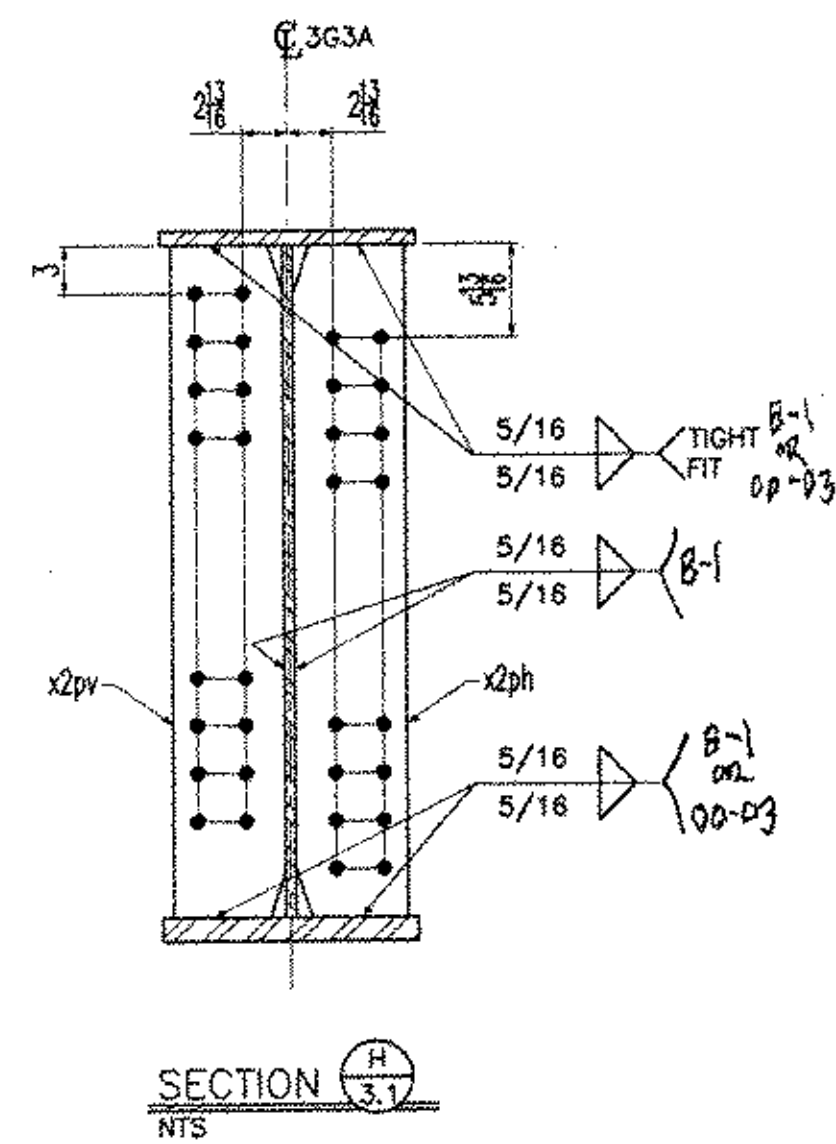
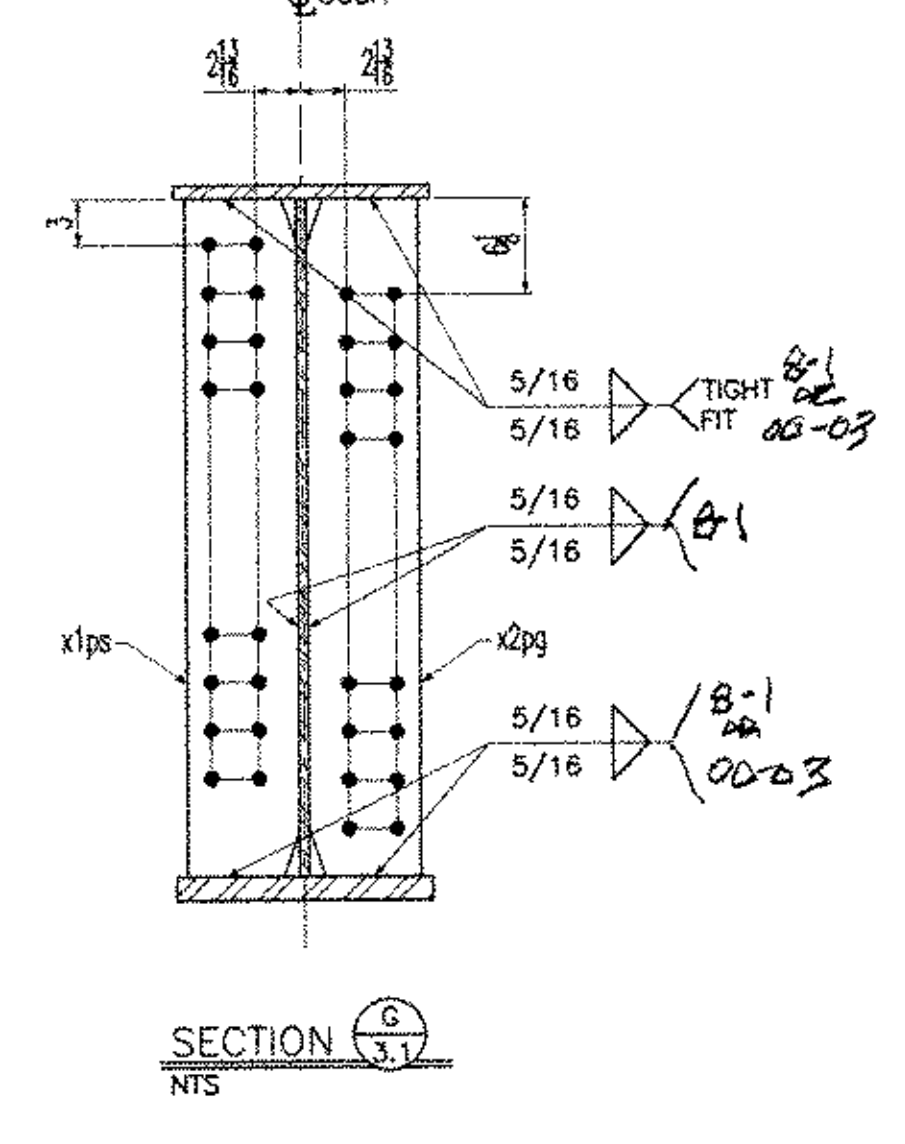
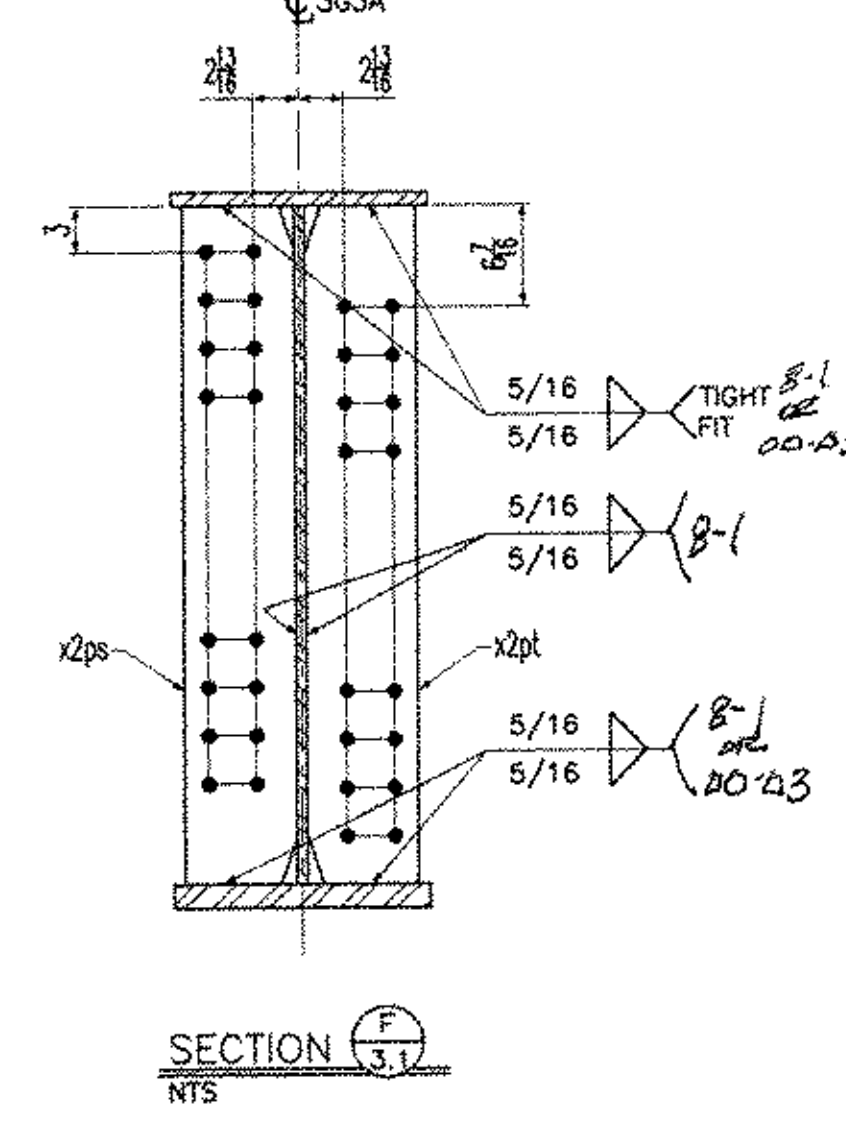
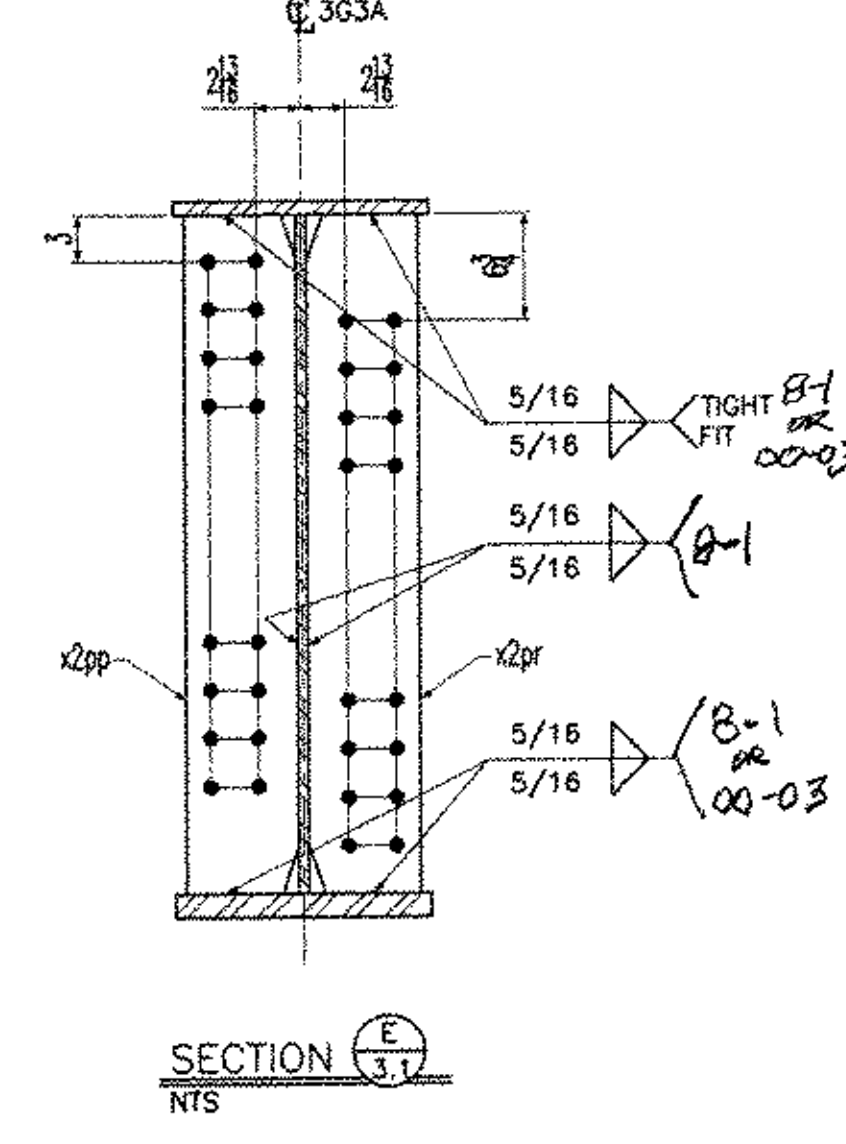
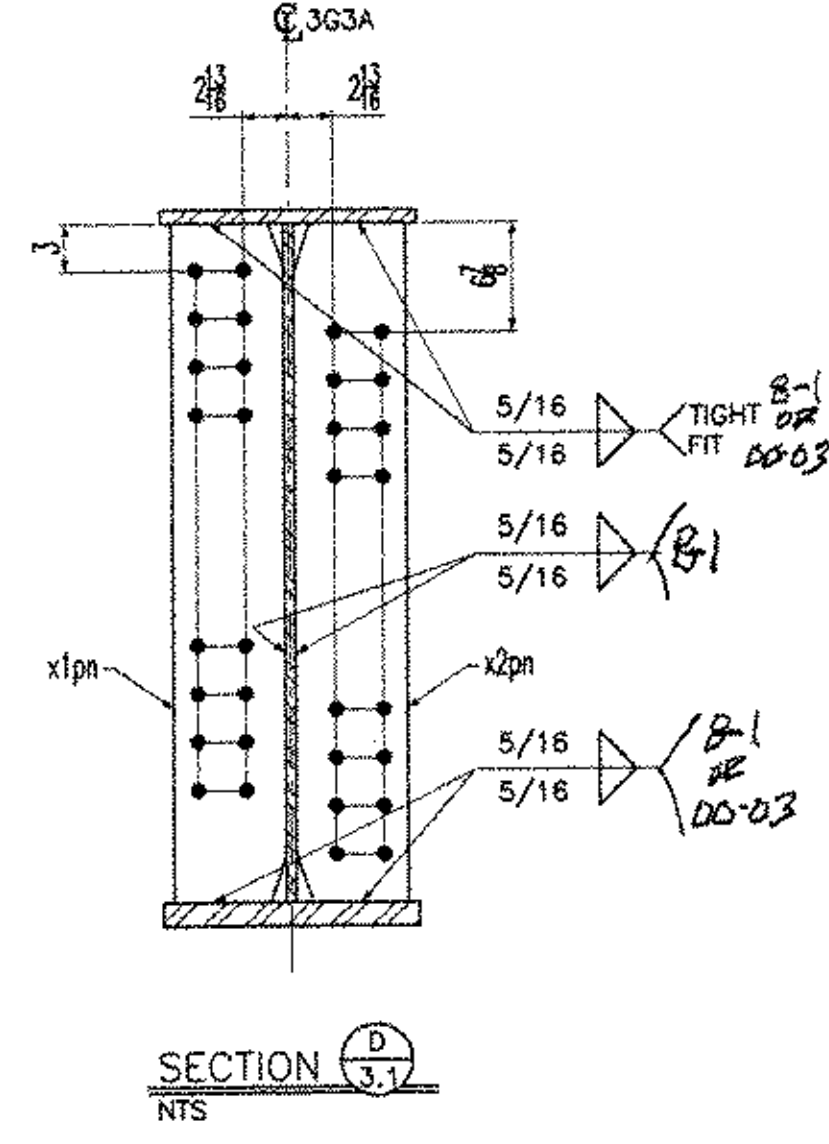
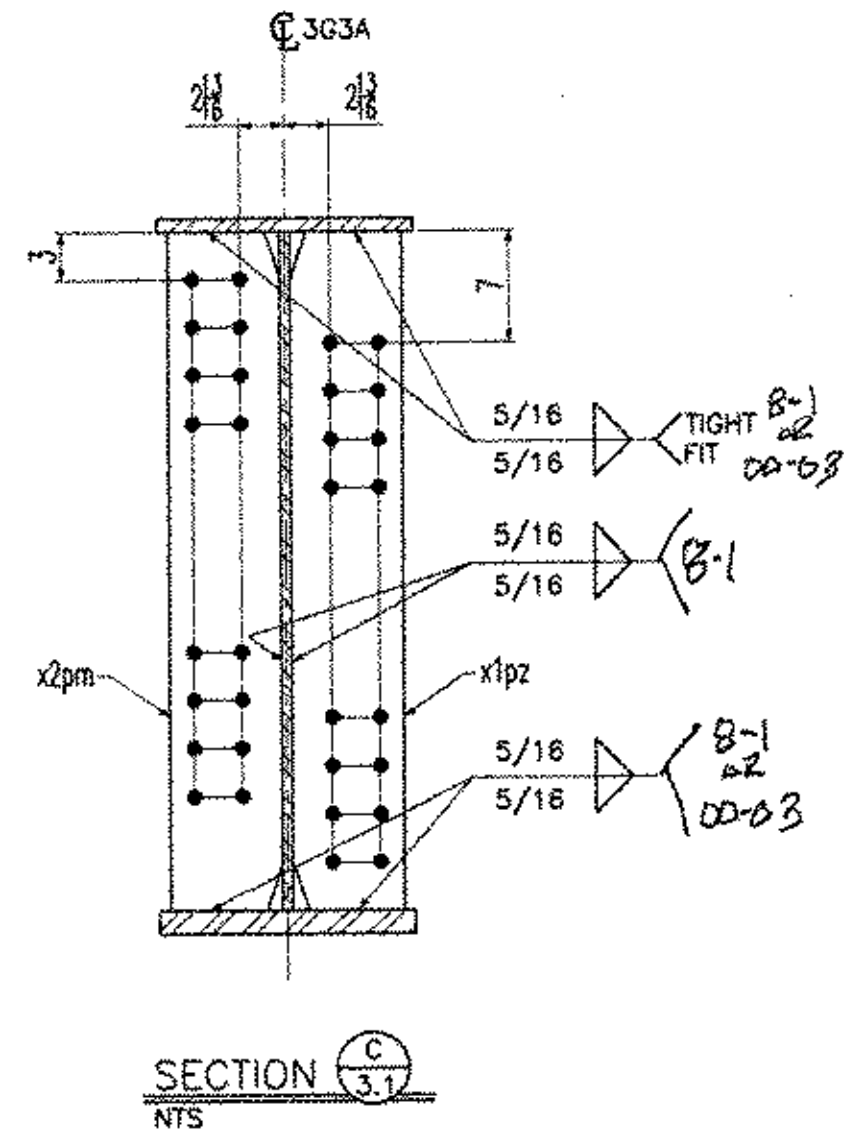
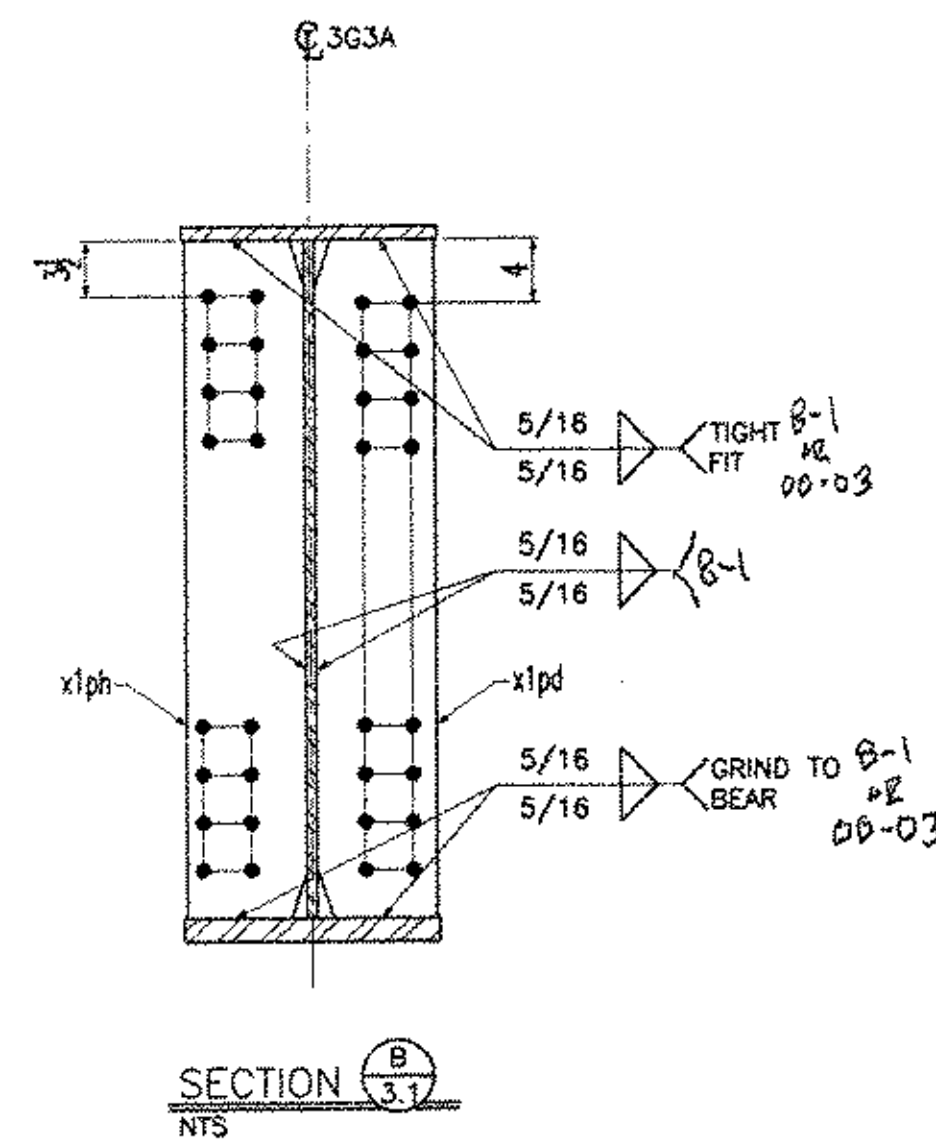
WORK WITH DRAWING 2.1

08955









NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES: 15/16" (U.N.O.)

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

This record is only for general reference with the design team and the information herein is not to be used for construction. It is the responsibility of the design team to ensure that the information herein is accurate and that the information is used for the intended purpose. The design team is responsible for the accuracy of the information and the information is not to be used for construction.

McFarland-Johnson, Inc.  
Date: 12-17-03  
By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|----------|------------------------------------|-----|------|-----------|----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |          |     |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-342-5202

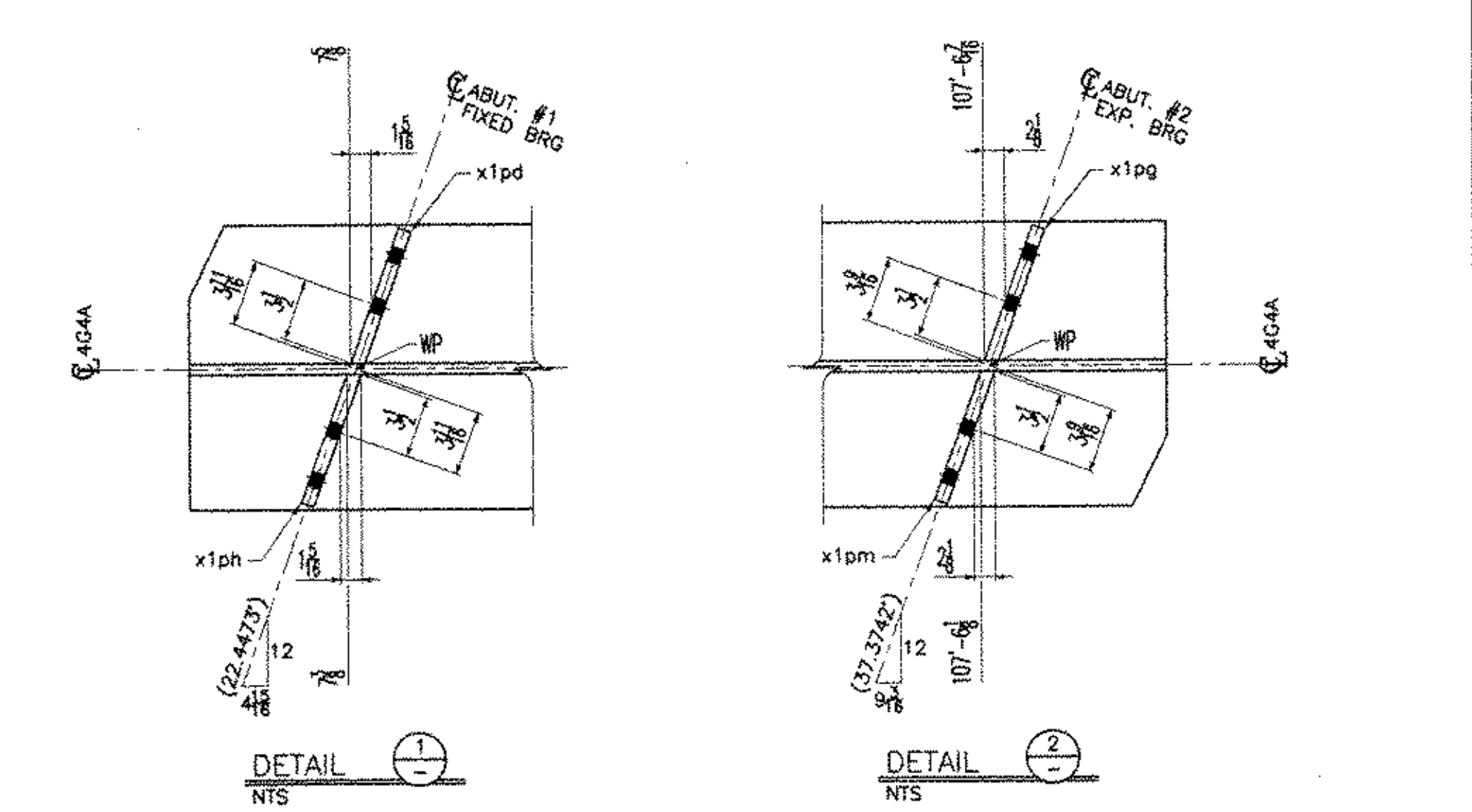
NOTICE  
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

WORK WITH DRAWING 3.1

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: GIRDER 3G3A  
DRAWN BY: D.B. 10/27/03  
CHECKED BY: L.D. 11/14/03  
JOB NUMBER: 4065  
SHEET NUMBER: 3.2



| Drawing Number | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade      | Length      | Weight            | Finish | Notes |
|----------------|-----------------|-----------|------------|-----|------------------|------------------|------------|-------------|-------------------|--------|-------|
| 4              |                 | 4G4A      | wc4a       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 35'-3 7/16  | 3149              | (CVN)  | 1     |
| 4              |                 | 4G4A      | wc4b       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 73'-0 13/16 | 6521              | (CVN)  | 2     |
| 4              |                 | 4G4A      | tf4a       | 1   | PL Plate         | 7/8x16           | M270-GR50W | 73'-0 7/8   | 3478              |        | 4     |
| 4              |                 | 4G4A      | tf4b       | 1   | PL Plate         | 7/8x16           | M270-GR50W | 35'-3       | 1678              |        | 3     |
| 4              |                 | 4G4A      | bf4a       | 1   | PL Plate         | 1 1/2x16         | M270-GR50W | 71'-1 1/16  | 5801              | (CVN)  | 8     |
| 4              |                 | 4G4A      | bf4b       | 1   | PL Plate         | 1 1/2x16         | M270-GR50W | 37'-1 11/16 | 3030              | (CVN)  | 7     |
| 4              |                 | 4G4A      | x1pd       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |
| 4              |                 | 4G4A      | x1pg       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |
| 4              |                 | 4G4A      | x1ph       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |
| 4              |                 | 4G4A      | x1pm       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |
| 4              |                 | 4G4A      | x1pz       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x2ps       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x2pv       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x2py       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x2pz       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pa       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pb       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pc       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pd       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pf       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| 4              |                 | 4G4A      | x3pg       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |
| TOTAL WEIGHT   |                 |           |            |     |                  |                  |            |             | 24493             |        |       |
| - CUTS         |                 |           |            |     |                  |                  |            |             | 25                |        |       |
| + FIELD BOLTS  |                 |           |            |     |                  |                  |            |             | REFER TO 'E1' DWG |        |       |
| + WELD         |                 |           |            |     |                  |                  |            |             | 139               |        |       |
| NET TOTAL      |                 |           |            |     |                  |                  |            |             | 24607             |        |       |



NOTES:  
 1- GENERAL NOTES: SEE DRAWING GN1  
 2- HOLES: 15/16" (U.N.O.)  
 3- : PAINT ZONE (SEE DRAWING GN1)

☒ Reviewed  
☐ Rejected

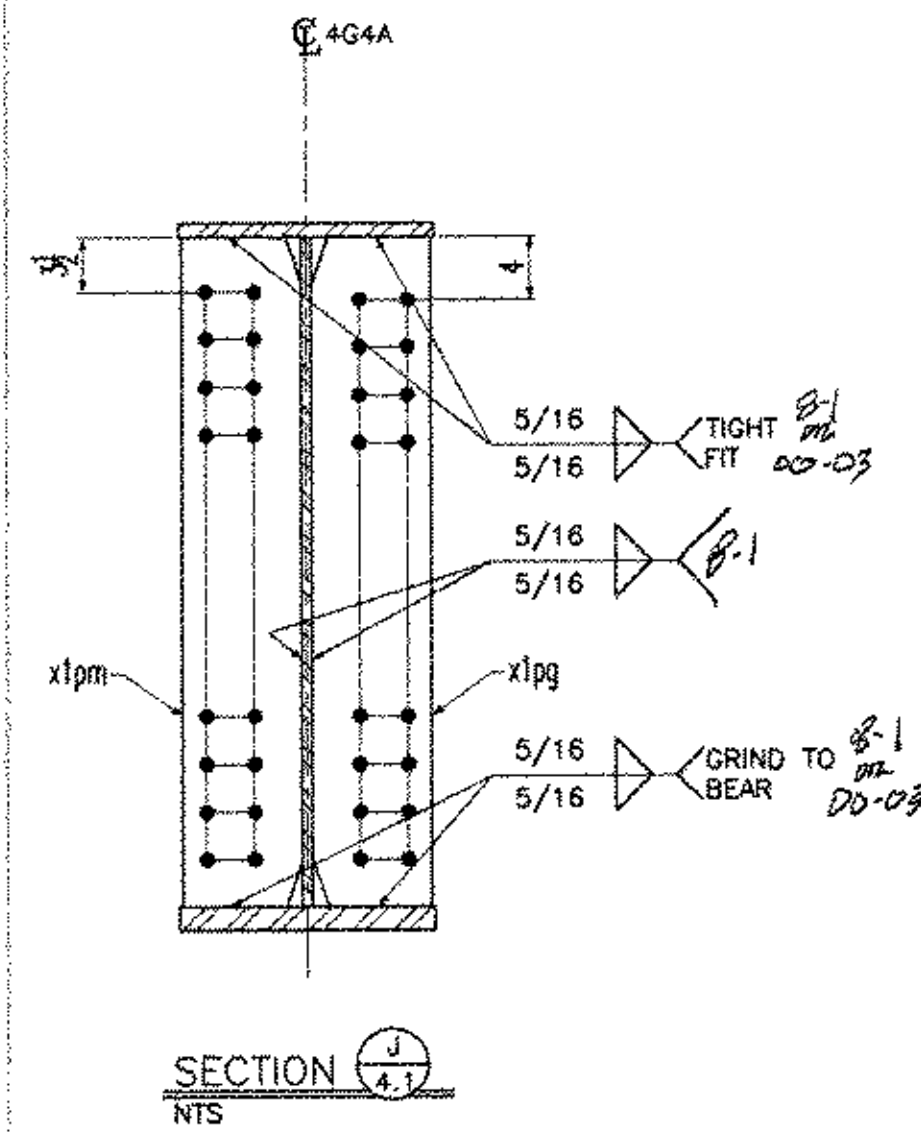
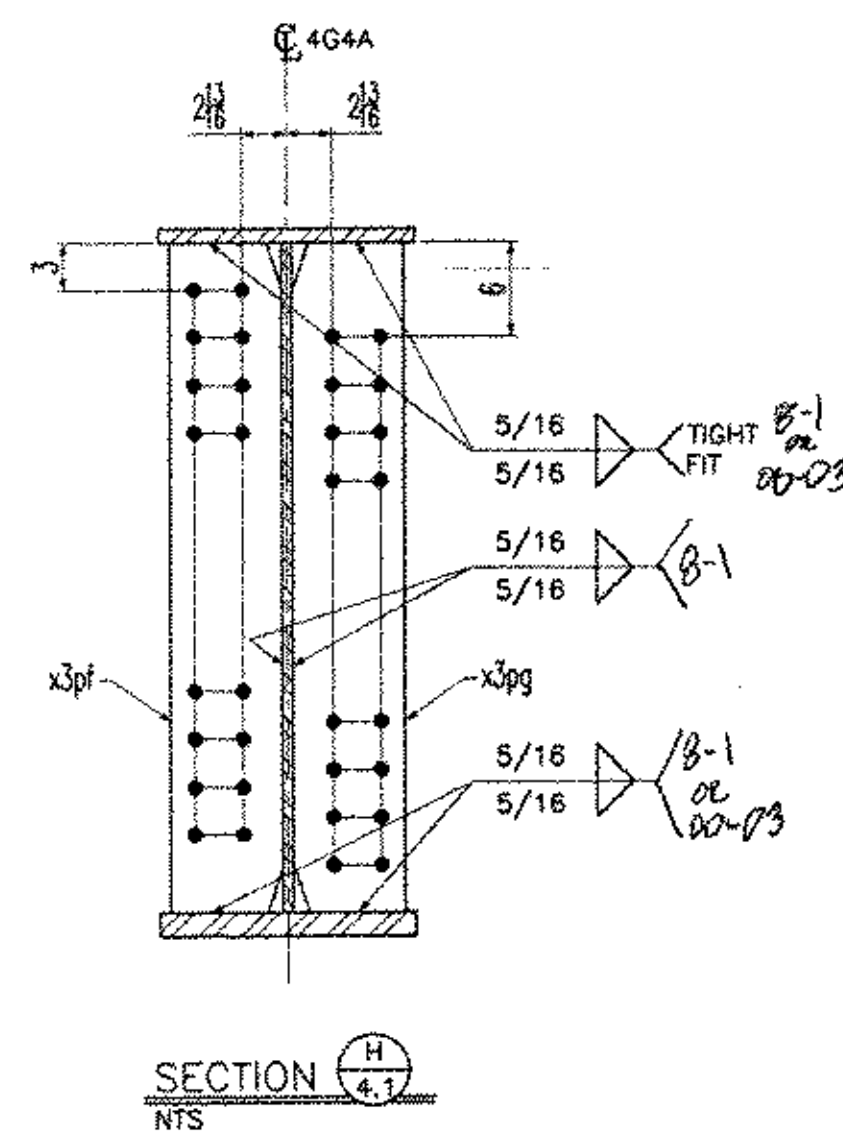
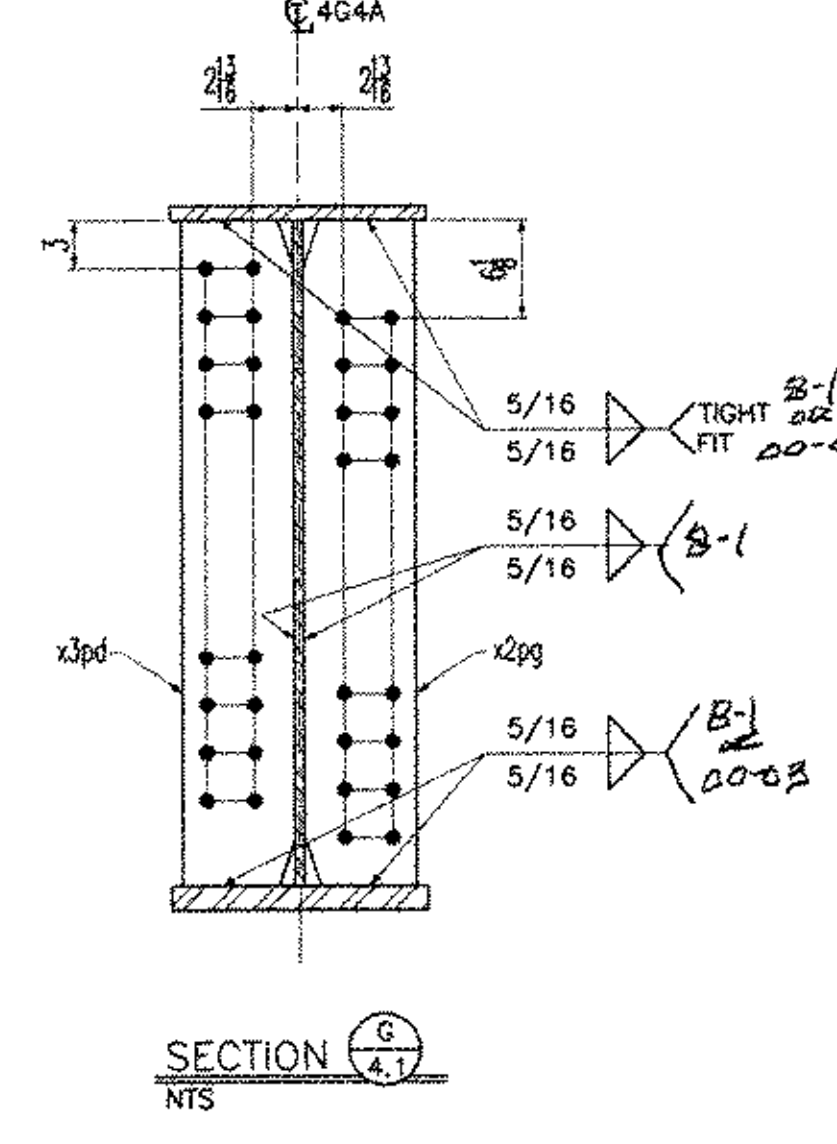
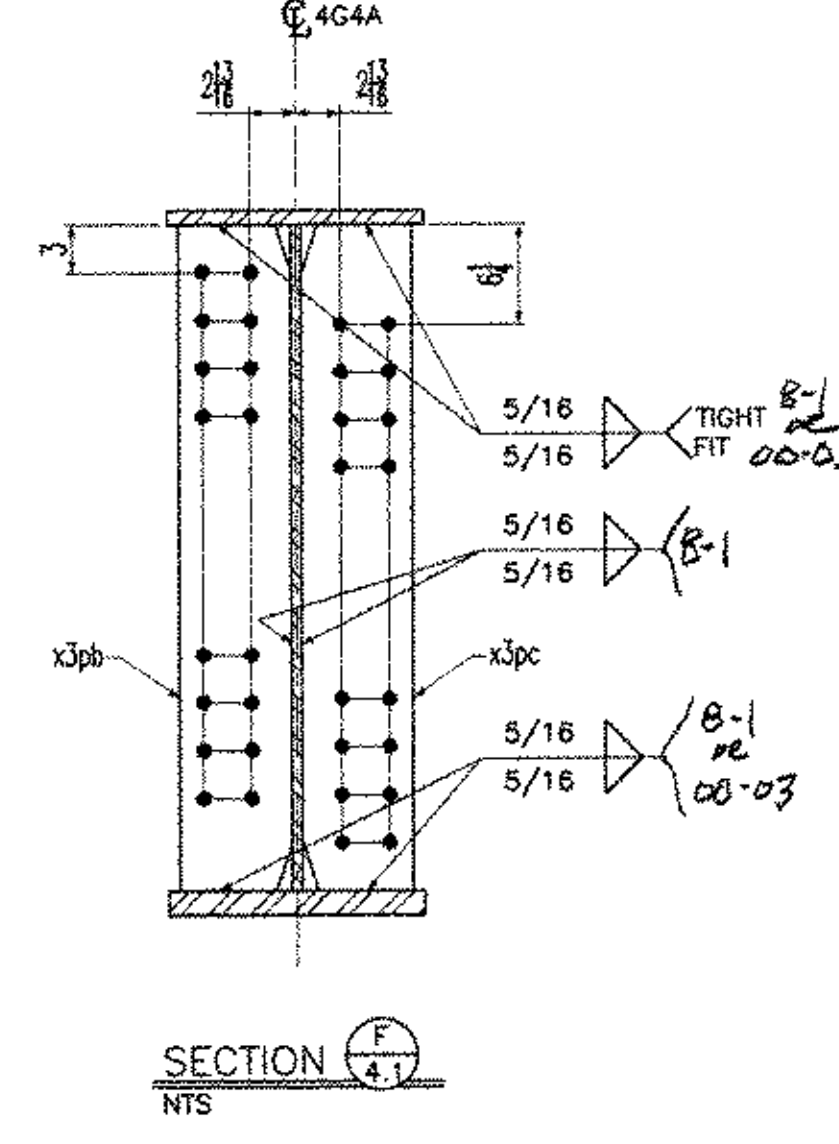
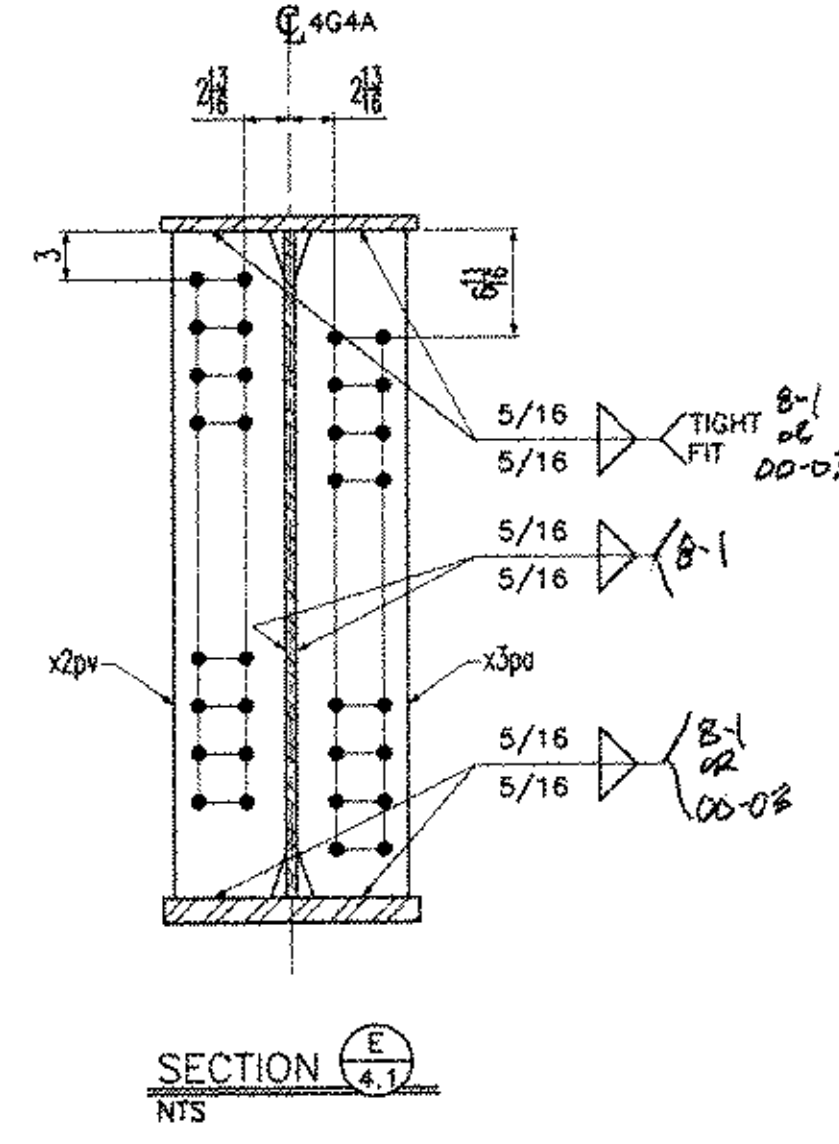
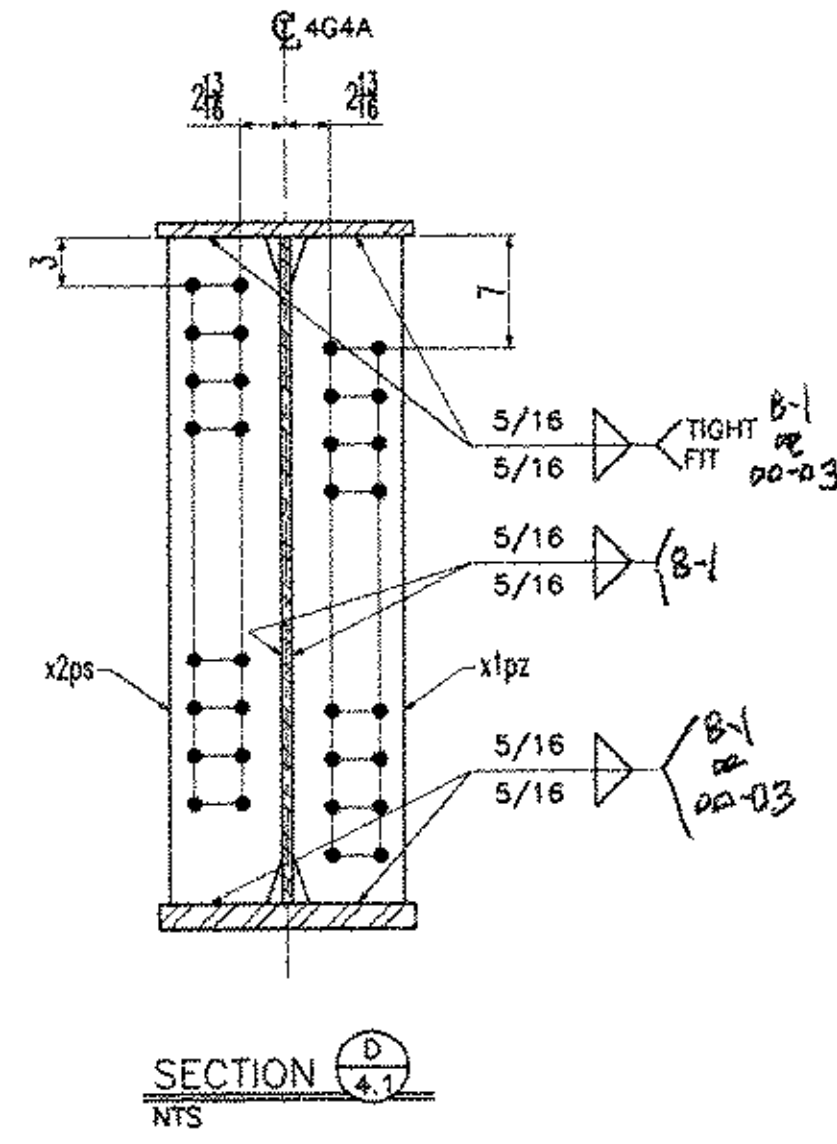
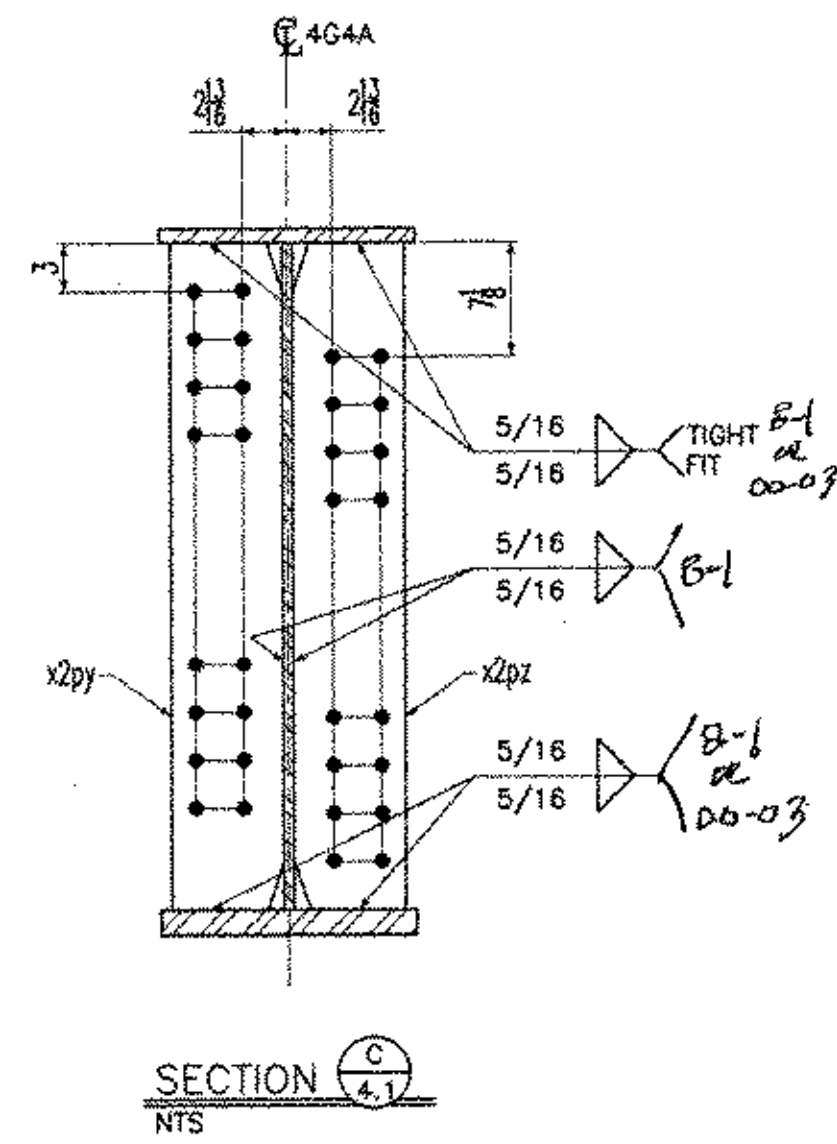
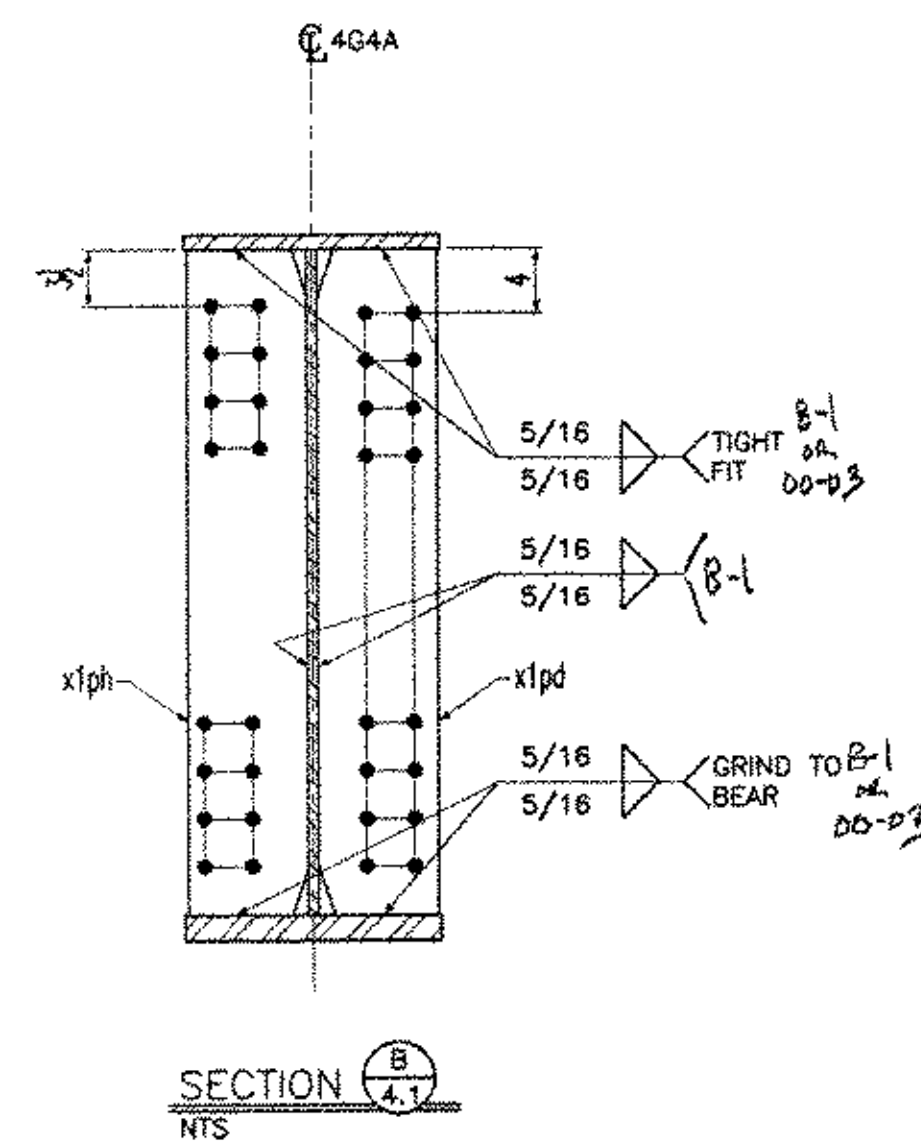
☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit Specified as is

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McFarland-Johnson, Inc.  
 Date: 12-17-03  
 By: RSW  
 RESERVED FOR STAMPS

| DRAWINGS PREPARED BY:                                                                    |  |  |  | PROJECT: BRIDGE #12 VT 103-TN OVER WILLIAMS RIVER |  |  |  |
|------------------------------------------------------------------------------------------|--|--|--|---------------------------------------------------|--|--|--|
| AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 |  |  |  | #030731-EAS                                       |  |  |  |
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NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16# (U.N.O.)

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

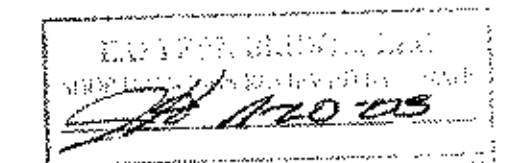
This review is only for general conformance with the design criteria and the information given in the Construction Documents. Corrections or comments must be on the site drawings during the review. Do not release the construction from the review until the requirements of the plans and specifications. Review of a specific item shall not constitute approval of the entire project. The contractor is responsible for compliance with the specifications and for the proper installation of the materials and workmanship. The contractor shall be responsible for the proper installation of the materials and workmanship. The contractor shall be responsible for the proper installation of the materials and workmanship.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS



DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE | DESCRIPTION |
|-----|------|-------------|
| 1   |      |             |
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| QTY | DATE     | ISSUED TO                          | FOR      |
|-----|----------|------------------------------------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |
| 2   |          |                                    |          |
| 3   |          |                                    |          |
| 4   |          |                                    |          |
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NOTICE  
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

WORK WITH DRAWING 4.1



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: MCFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: GIRDER 4G4A

DRAWN BY: D.B. 10/28/03 JOB

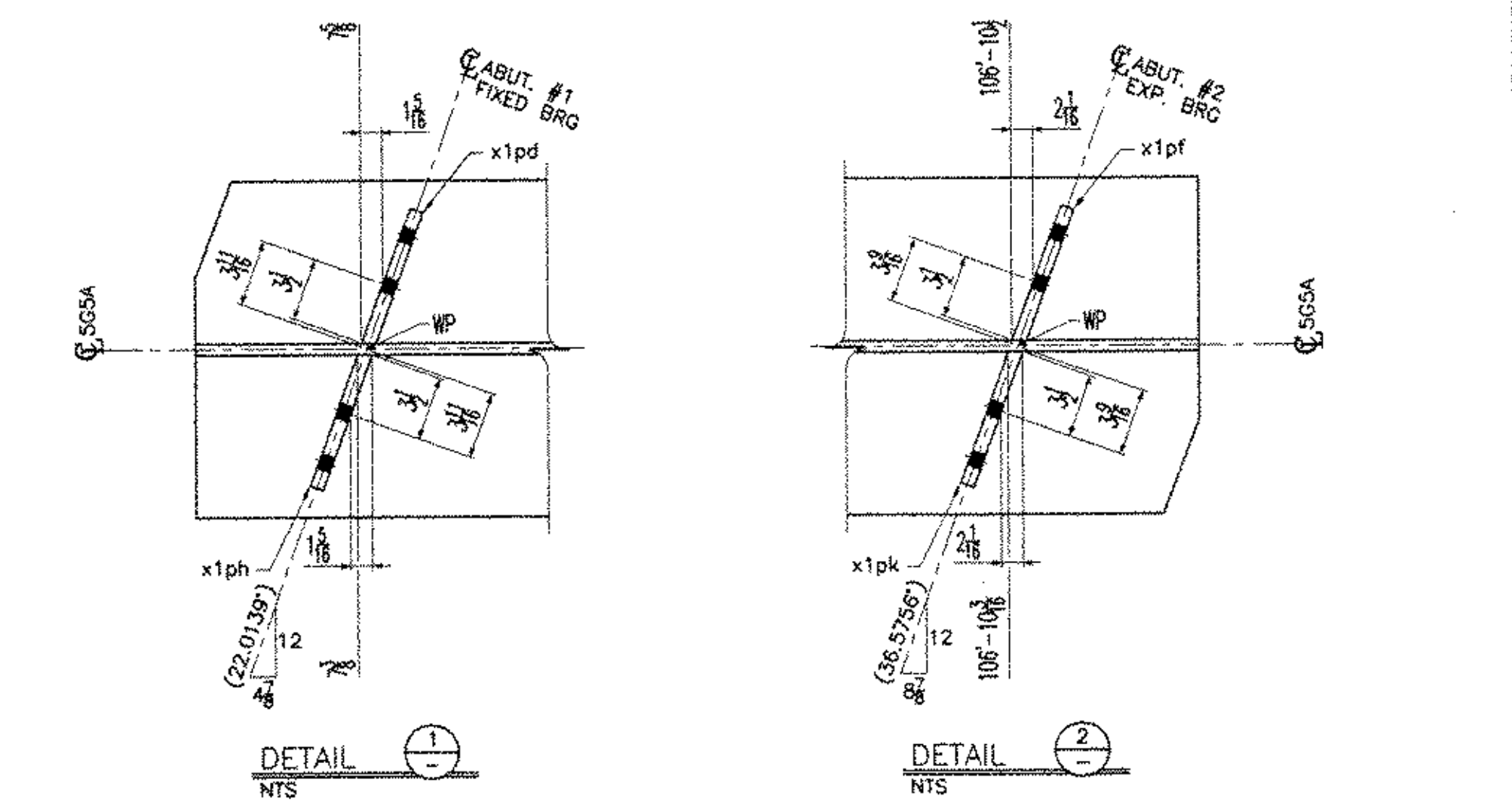
CHECKED BY: L.D. 11/14/03 NUMBER: 4065

SHEET NUMBER: 4.2

09355



| BILL OF MATERIAL |                 |           |            |     |                  |                  |            |             |                   |        |       |  |  |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|------------|-------------|-------------------|--------|-------|--|--|
| Drawing Number   | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade      | Length      | Weight            | Finish | Notes |  |  |
| 5                |                 | SG5A      | wc5a       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 35'-1 7/16  | 3134              | (CVN)  | 1     |  |  |
| 5                |                 | SG5A      | wc5b       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 72'-6 13/16 | 6477              | (CVN)  | 2     |  |  |
| 5                |                 | SG5A      | tf5a       | 1   | PL Plate         | 1 1/2x18         | M270-GR50W | 72'-6 15/16 | 6663              |        | 6     |  |  |
| 5                |                 | SG5A      | tf5b       | 1   | PL Plate         | 1 1/2x18         | M270-GR50W | 35'-1       | 3221              |        | 5     |  |  |
| 5                |                 | SG5A      | bf5a       | 1   | PL Plate         | 2x22             | M270-GR50W | 70'-7       | 10559             | (CVN)  | 10    |  |  |
| 5                |                 | SG5A      | bf5b       | 1   | PL Plate         | 2x22             | M270-GR50W | 36'-11 3/4  | 5532              | (CVN)  | 9     |  |  |
| 5                |                 | SG5A      | x1pd       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |  |  |
| 5                |                 | SG5A      | x1pf       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |  |  |
| 5                |                 | SG5A      | x1ph       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |  |  |
| 5                |                 | SG5A      | x1pk       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6        | 83                | (CVN)  | 11    |  |  |
| 5                |                 | SG5A      | x2pp       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pc       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pg       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pk       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pm       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pn       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pp       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3pr       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| 5                |                 | SG5A      | x3ps       | 1   | PL Plate         | 1/2x7            | M270-GR50W | 3'-6        | 42                | (CVN)  | 12    |  |  |
| TOTAL WEIGHT     |                 |           |            |     |                  |                  |            |             | 36380             |        |       |  |  |
| - CUTS           |                 |           |            |     |                  |                  |            |             | 32                |        |       |  |  |
| + FIELD BOLTS    |                 |           |            |     |                  |                  |            |             | REFER TO 'E1' DWG |        |       |  |  |
| + WELD           |                 |           |            |     |                  |                  |            |             | 137               |        |       |  |  |
| NET TOTAL        |                 |           |            |     |                  |                  |            |             | 36485             |        |       |  |  |



NOTES:  
 1- GENERAL NOTES: SEE DRAWING GN1  
 2- HOLES: 15/16" (U.N.O.)  
 3- [Hatched Area] : PAINT ZONE (SEE DRAWING GN1)

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

This review is only for general compliance with the design and specifications. It does not constitute an approval of the design or construction. The reviewer is not responsible for the design or construction of the project. The reviewer is responsible for the design and specifications of the project. The reviewer is responsible for the design and specifications of the project. The reviewer is responsible for the design and specifications of the project.

By: RSW Date: 12-17-03

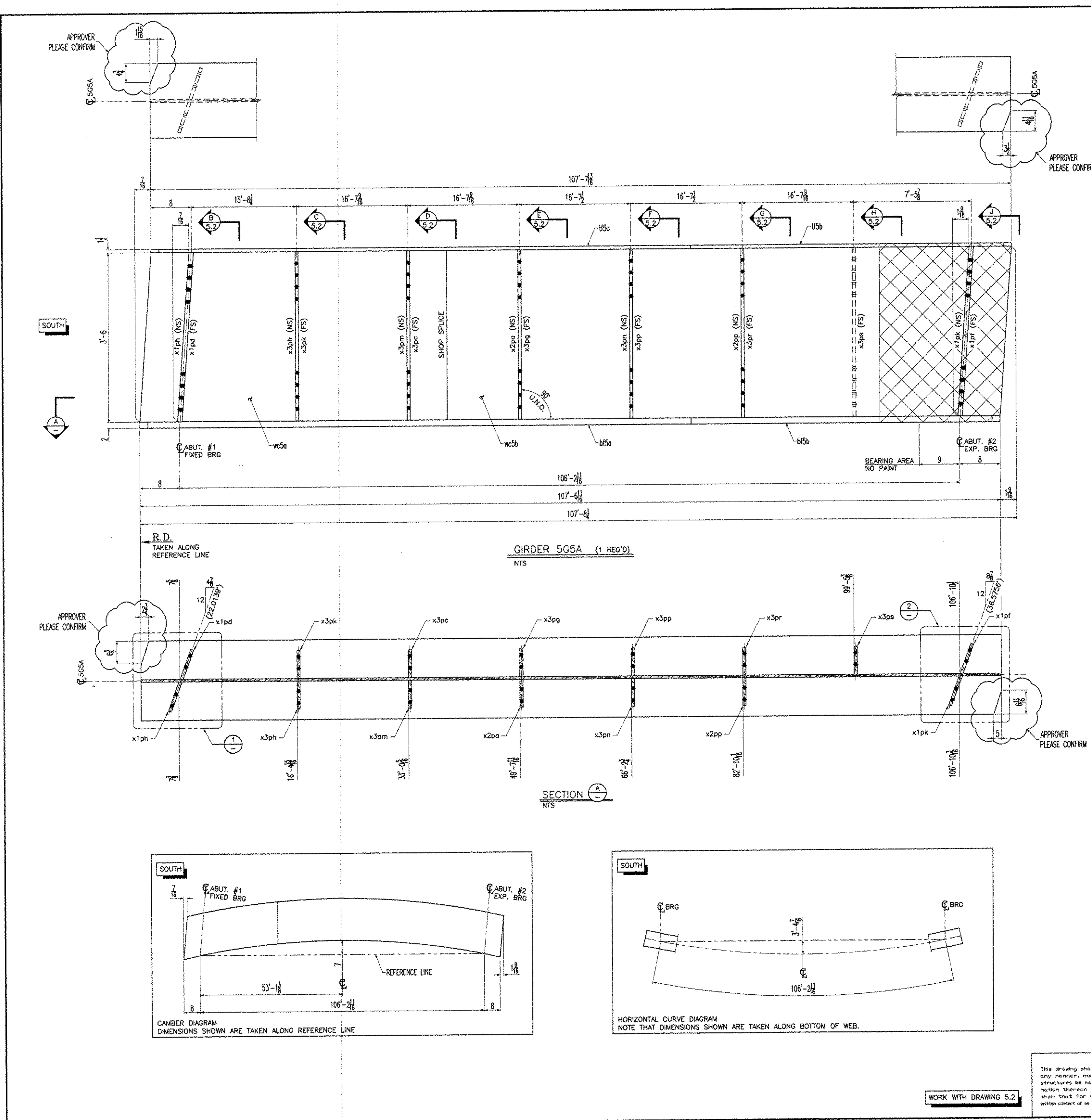
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
 AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

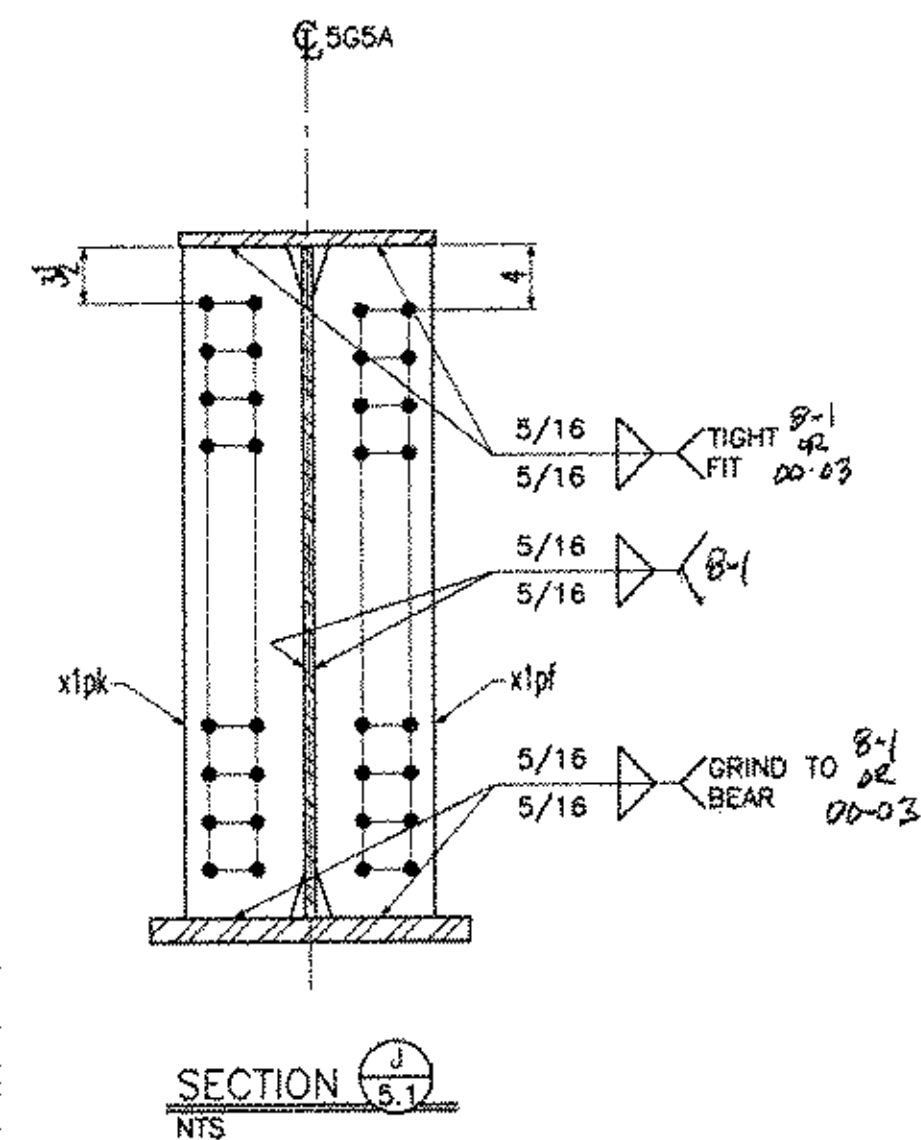
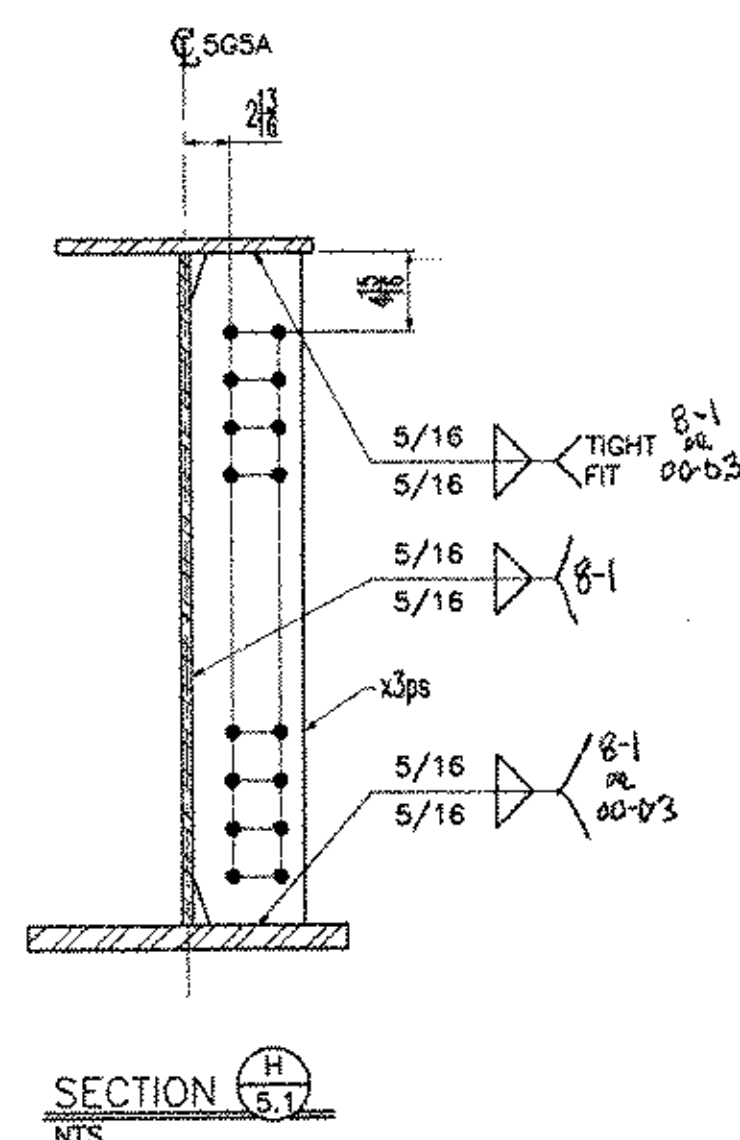
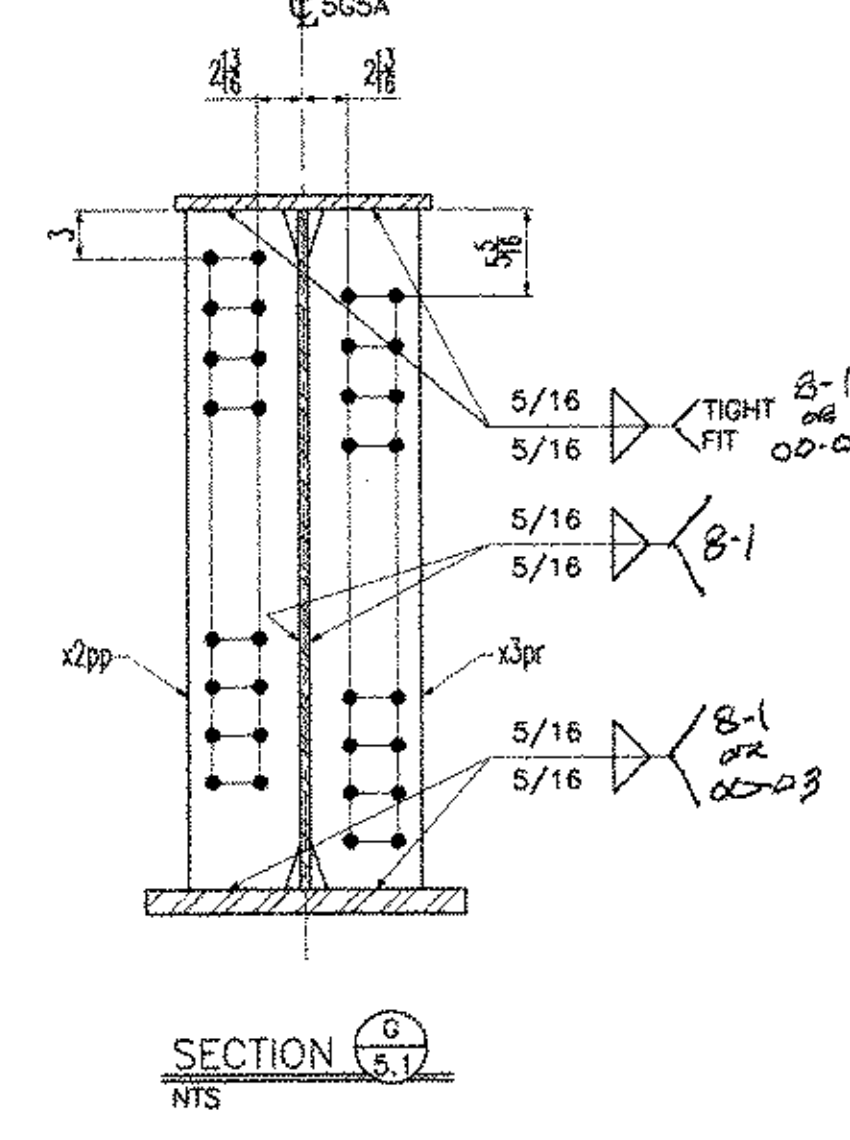
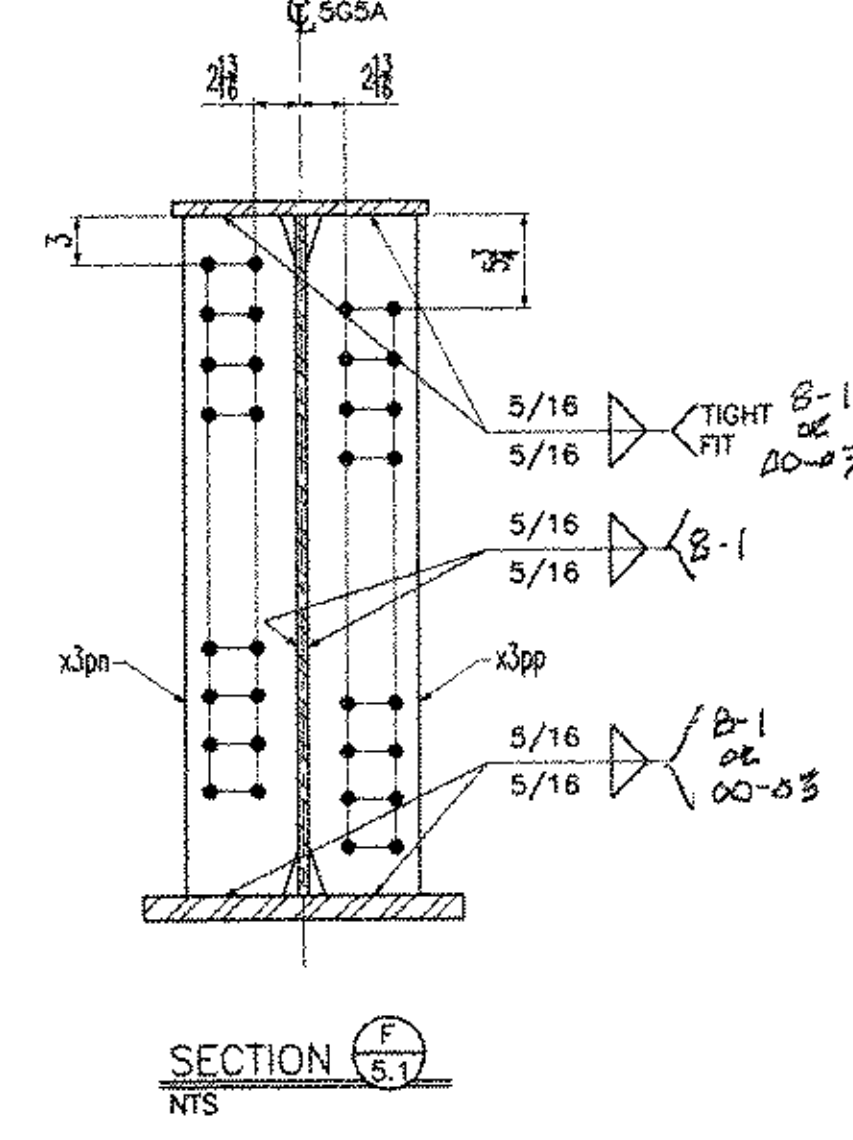
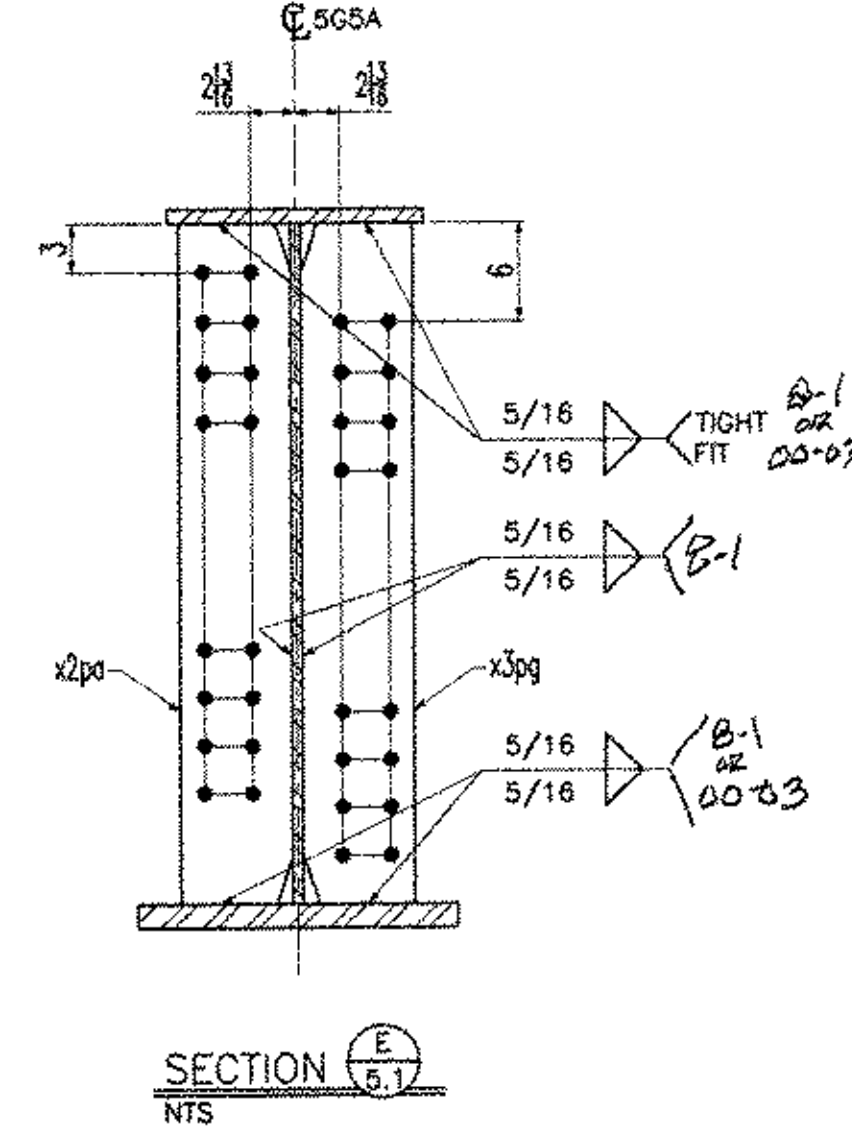
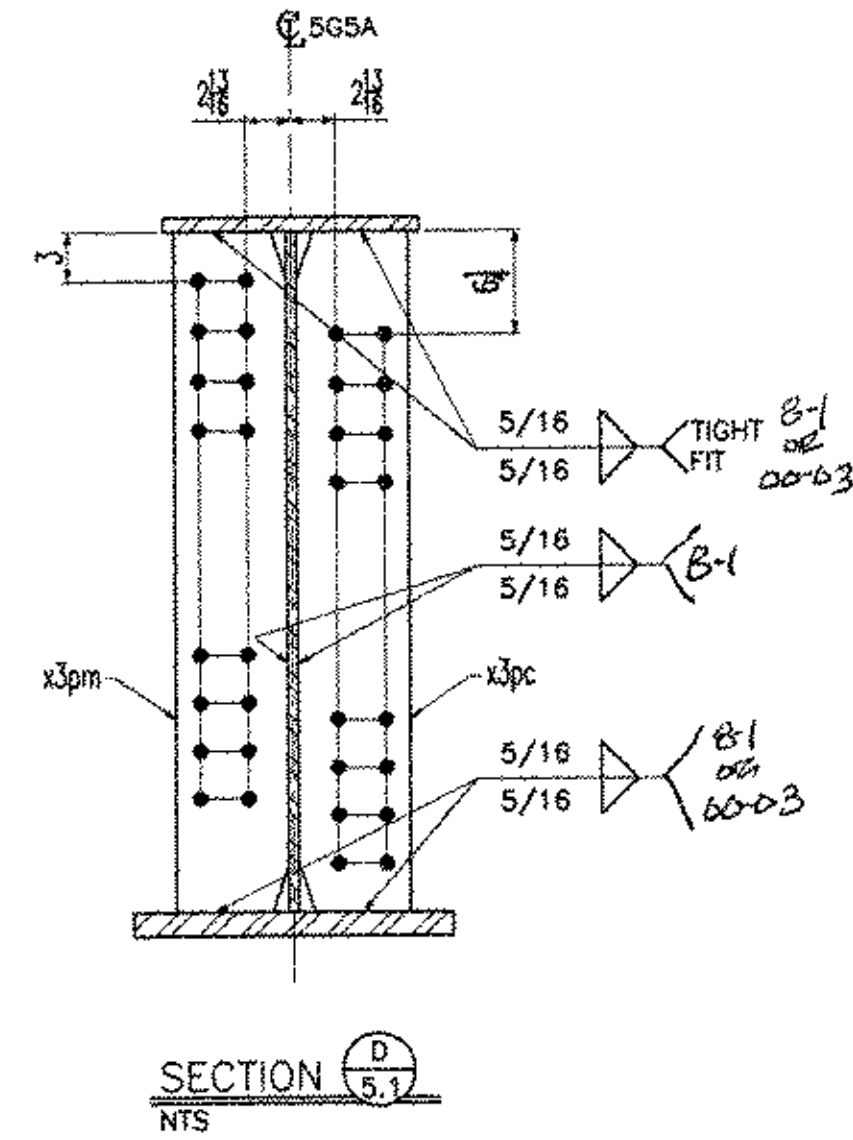
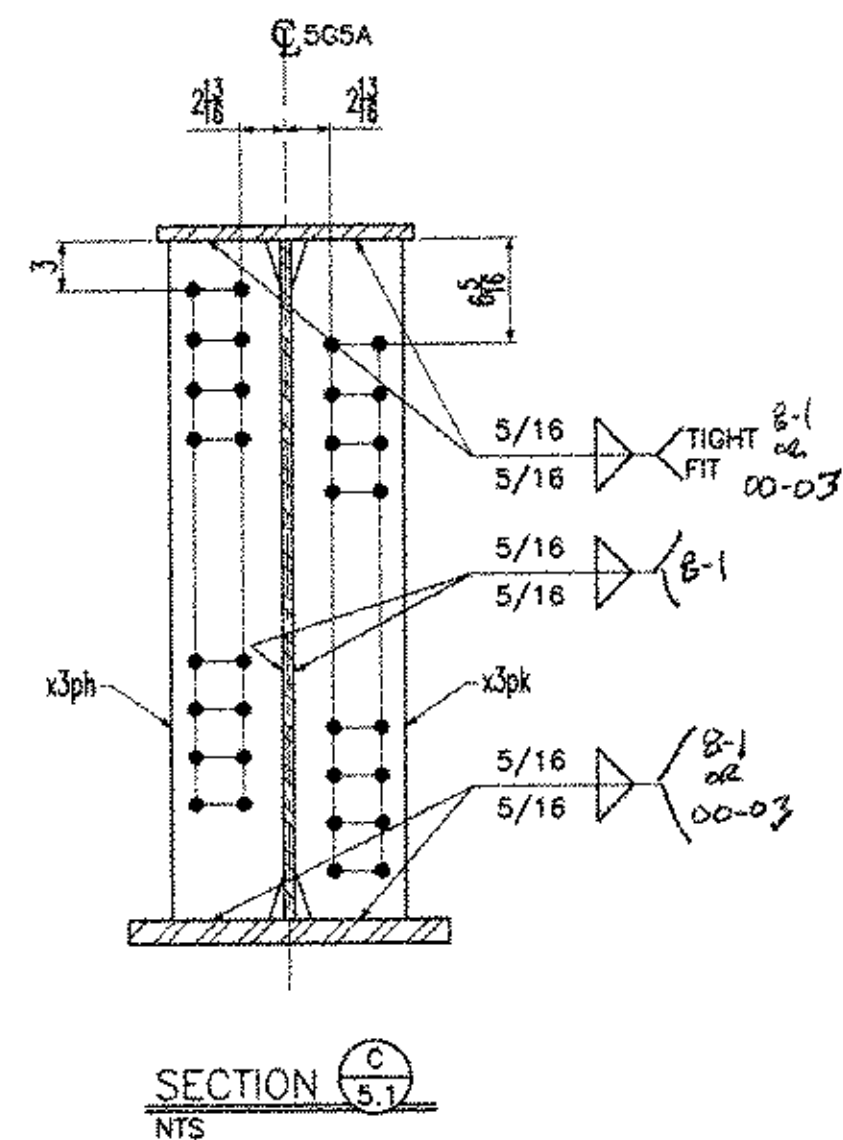
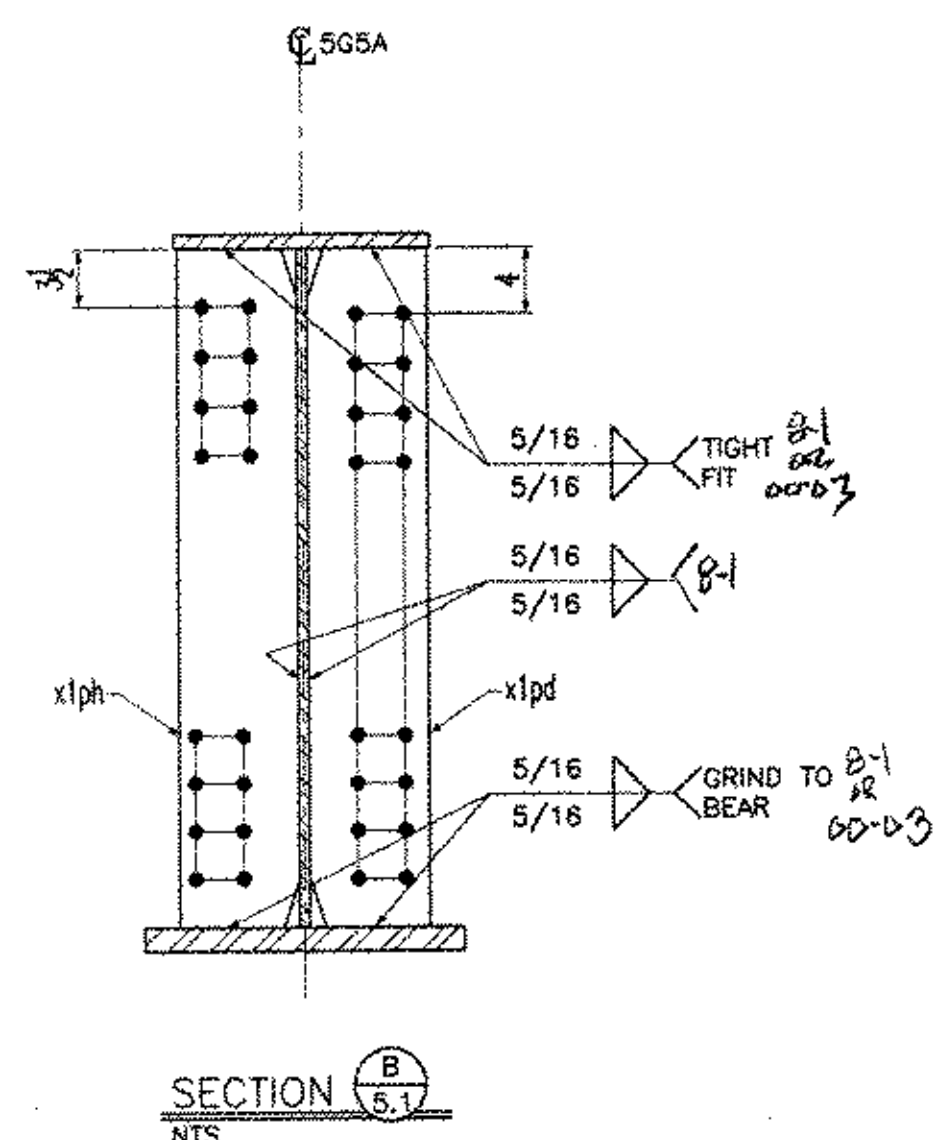
| REV | DATE | DESCRIPTION | QTY | DATE | ISSUED TO | FOR |
|-----|------|-------------|-----|------|-----------|-----|
|     |      |             |     |      |           |     |

PROJECT: BRIDGE #12 VT 103-TN OVER WILLIAMS RIVER  
 LOCATION: CHESTER, VERMONT  
 ENGINEER: McFARLAND-JOHNSON, INC.  
 CUSTOMER: EASTERN BRIDGE LLC  
 DRAWING TITLE: GIRDER 5G5A  
 DRAWN BY: D.B. 10/28/03 JOB  
 CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: 5.1

EB LLC  
 EASTERN BRIDGE LLC  
 RURAL RTE 2, BOX 302  
 CLAREMONT, NH 03743  
 603-542-5202







NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

☒ Reviewed  
☐ Rejected  
☐ Furnish as Constructed  
☐ Revise per: 1-1, 1-2, 1-3  
☐ Material Spec: 1-1, 1-2, 1-3

The owner or user of these drawings shall be responsible for the proper interpretation and use of the drawings. The engineer or architect shall be responsible for the design and construction of the project. The manufacturer shall be responsible for the fabrication and erection of the project. The contractor shall be responsible for the installation and maintenance of the project.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

ANEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE | DESCRIPTION |
|-----|------|-------------|
| 1   |      |             |
| 2   |      |             |
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| 8   |      |             |
| 9   |      |             |
| 10  |      |             |

| QTY | DATE     | ISSUED TO                          | FOR      |
|-----|----------|------------------------------------|----------|
| 8   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |
|     |          |                                    |          |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: GIRDER 5G5A  
DRAWN BY: D.B. 10/29/03 JOB  
CHECKED BY: - NUMBER: 4065

SHEET  
NUMBER: 5.2

# NOTICE

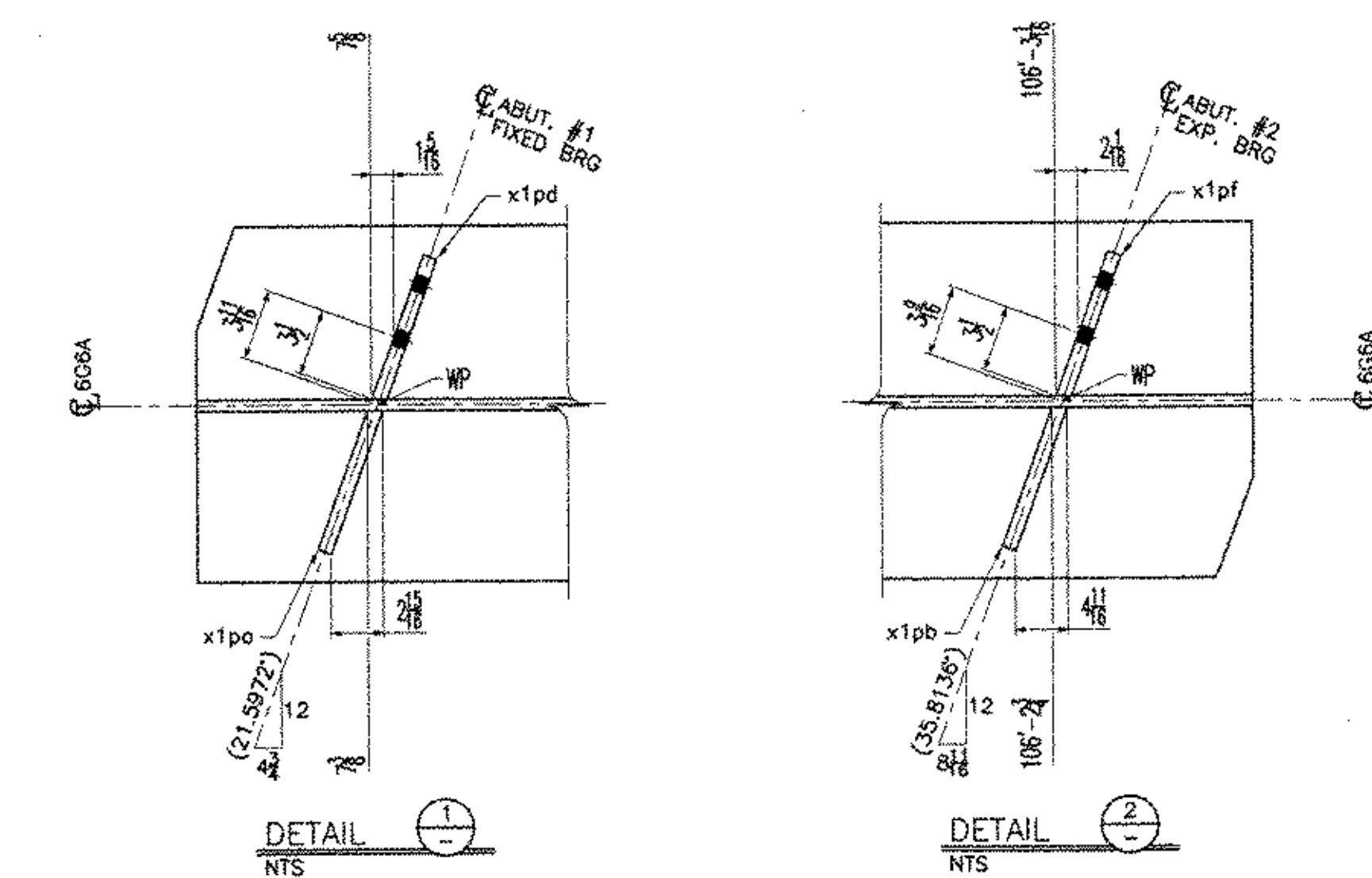
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WORK WITH DRAWING 5.1



| BILL OF MATERIAL |                 |           |            |     |                  |                  |            |            |        |        |       |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|------------|------------|--------|--------|-------|
| Drawing Number   | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade      | Length     | Weight | Finish | Notes |
| 6                |                 | 6G6A      | wc6a       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 33'-10 3/8 | 3022   | (CVN)  | 1     |
| 6                |                 | 6G6A      | wc6b       | 1   | PL Plate         | 5/8x42           | M270-GR50W | 73'-2 9/16 | 6530   | (CVN)  | 2     |
| 6                |                 | 6G6A      | tf6a       | 1   | PL Plate         | 1 1/2x18         | M270-GR50W | 73'-2 9/16 | 6720   |        | 6     |
| 6                |                 | 6G6A      | tf6b       | 1   | PL Plate         | 1 1/2x18         | M270-GR50W | 33'-10     | 3105   |        | 5     |
| 6                |                 | 6G6A      | bf6a       | 1   | PL Plate         | 2x22             | M270-GR50W | 71'-2 5/8  | 10654  | (CVN)  | 10    |
| 6                |                 | 6G6A      | bf6b       | 1   | PL Plate         | 2x22             | M270-GR50W | 35'-8 3/4  | 5345   | (CVN)  | 9     |
| 6                |                 | 6G6A      | x1pa       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83     | (CVN)  | 11    |
| 6                |                 | 6G6A      | x1pb       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83     | (CVN)  | 11    |
| 6                |                 | 6G6A      | x1pd       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83     | (CVN)  | 11    |
| 6                |                 | 6G6A      | x1pf       | 1   | PL Plate         | 7/8x8            | M270-GR50W | 3'-6       | 83     | (CVN)  | 11    |
| 6                |                 | 6G6A      | x2pn       | 1   | PL Plate         | 1 1/2x7          | M270-GR50W | 3'-6       | 42     | (CVN)  | 12    |
| 6                |                 | 6G6A      | x3pa       | 1   | PL Plate         | 1 1/2x7          | M270-GR50W | 3'-6       | 42     | (CVN)  | 12    |
| 6                |                 | 6G6A      | x3pt       | 1   | PL Plate         | 1 1/2x7          | M270-GR50W | 3'-6       | 42     | (CVN)  | 12    |
| 6                |                 | 6G6A      | x3pv       | 1   | PL Plate         | 1 1/2x7          | M270-GR50W | 3'-6       | 42     | (CVN)  | 12    |
| 6                |                 | 6G6A      | x3py       | 1   | PL Plate         | 1 1/2x7          | M270-GR50W | 3'-6       | 42     | (CVN)  | 12    |
| 6                |                 | 6G6A      | x3pz       | 1   | PL Plate         | 1 1/4x4          | M270-GR50W | 1'-2 1/2   | 4      |        | 23    |

|               |                   |
|---------------|-------------------|
| TOTAL WEIGHT  | 35918             |
| - CUTS        | 32                |
| + FIELD BOLTS | REFER TO 'E1' DWG |
| + WELD        | 124               |
| NET TOTAL     | 36010             |



- NOTES:
- 1- GENERAL NOTES: SEE DRAWING GN1
  - 2- HOLES : 15/16" (U.N.O.)
  - 3- : PAINT ZONE (SEE DRAWING GN1)

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

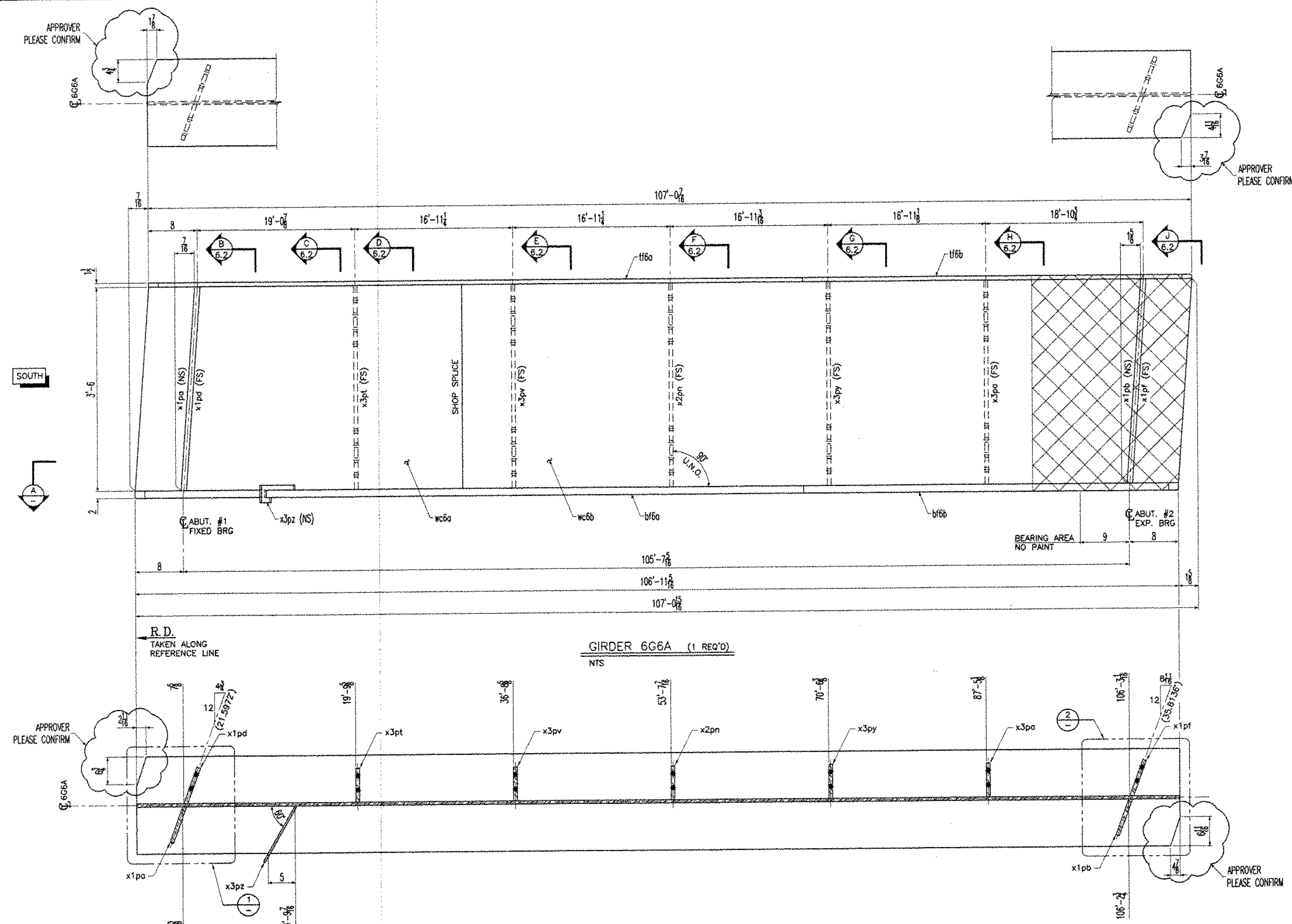
This review is only for general conformity with the design and does not constitute an approval of the design or the construction of the project. The reviewer is not responsible for the design or the construction of the project. The reviewer is not responsible for the design or the construction of the project.

McFarland-Johnson, Inc.  
Date: 12-17-03  
By: RSU  
RESERVED FOR STAMPS

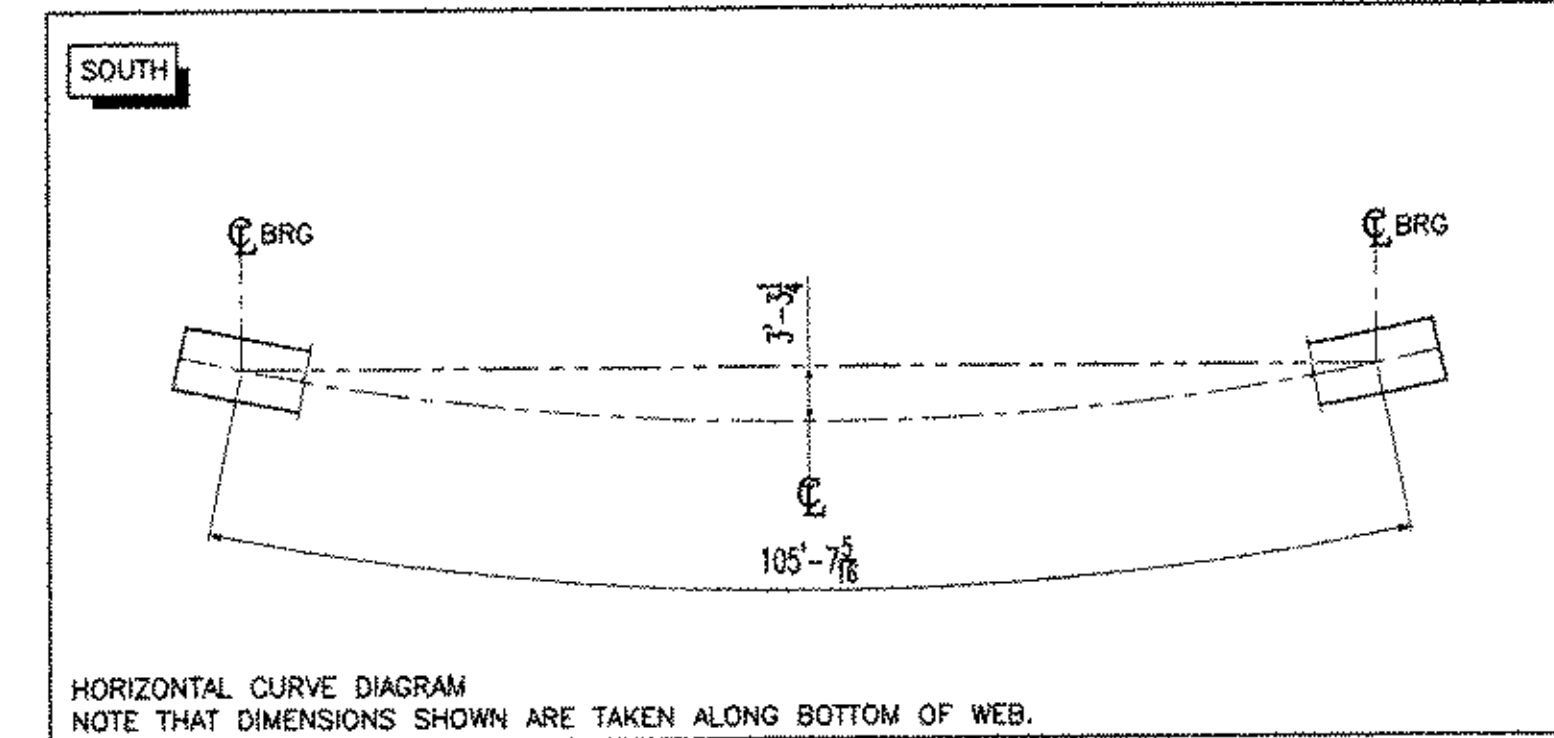
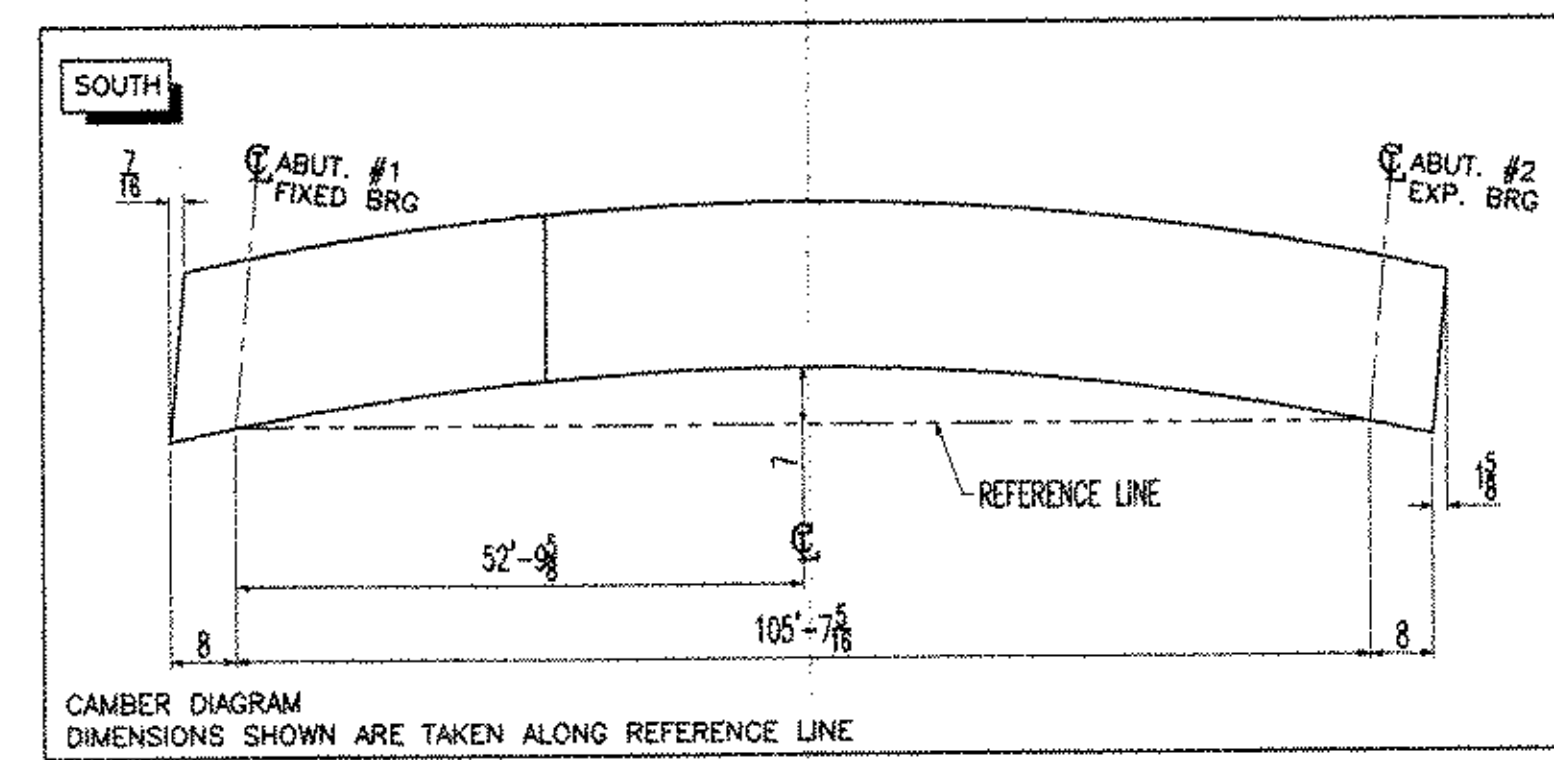
DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR      |
|-----|----------|------------------------------------|-----|------|-----------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: GIRDER 6G6A  
DRAWN BY: D.B. 10/29/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: 6.1



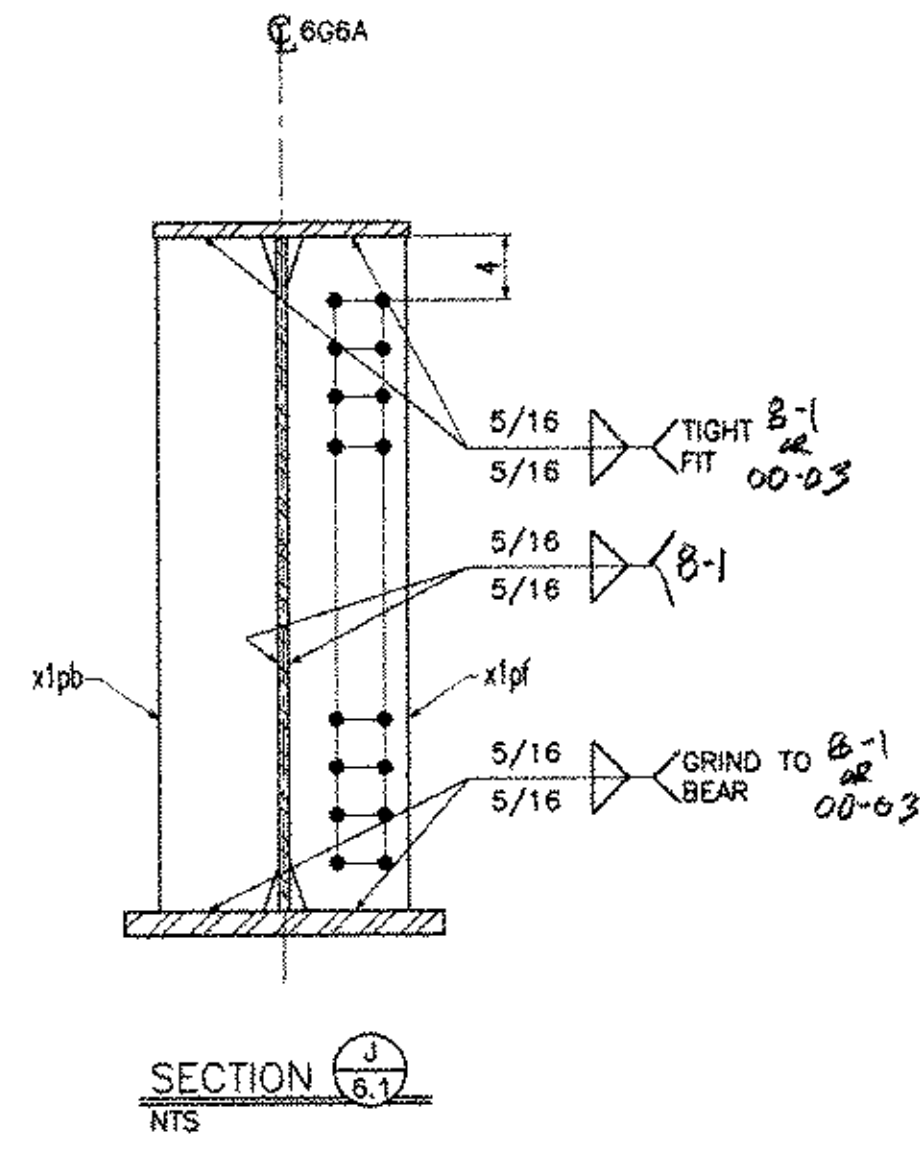
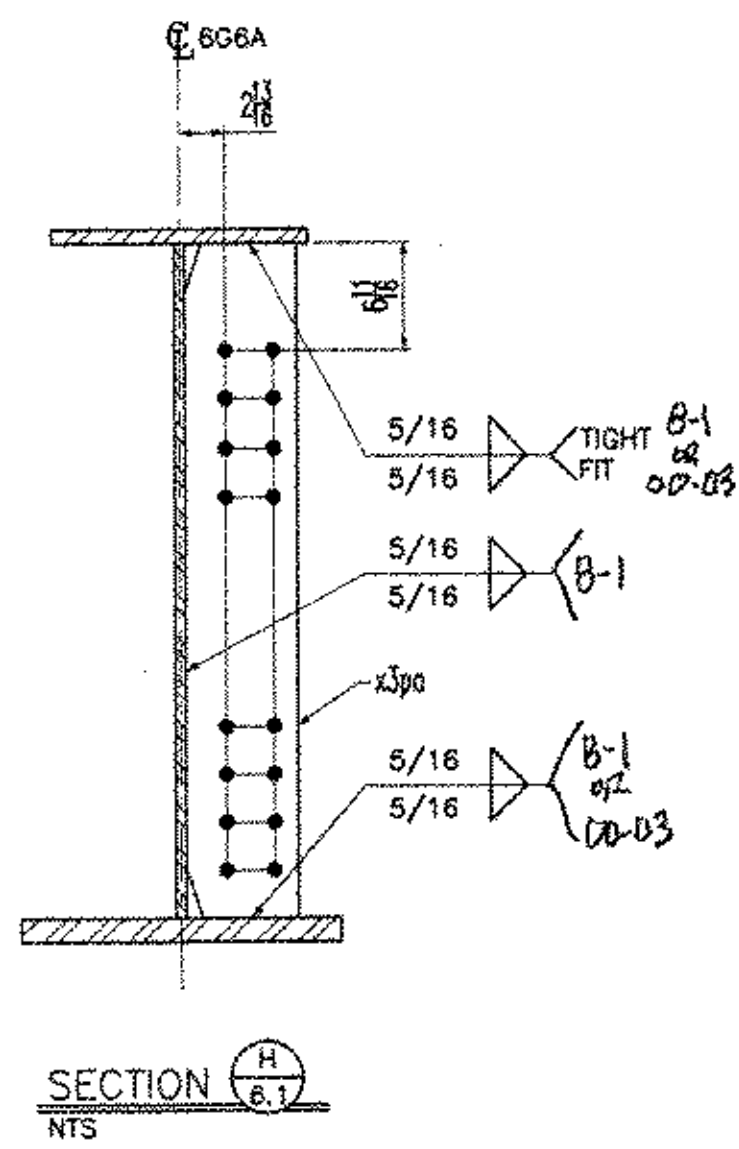
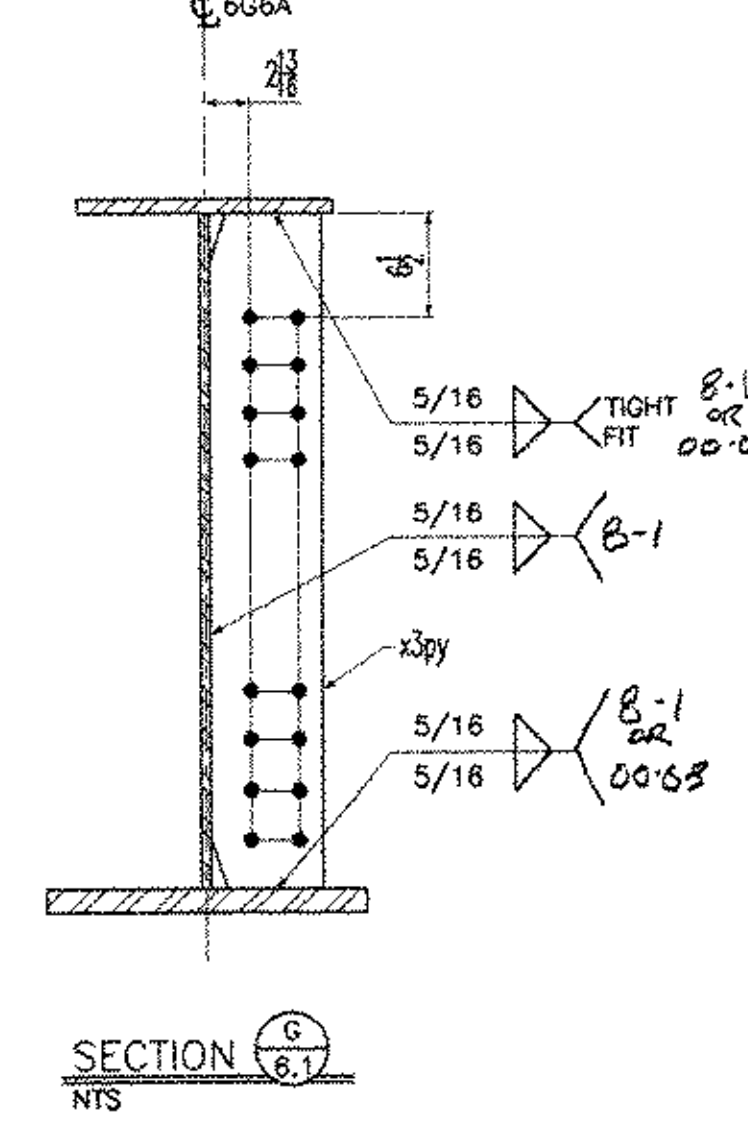
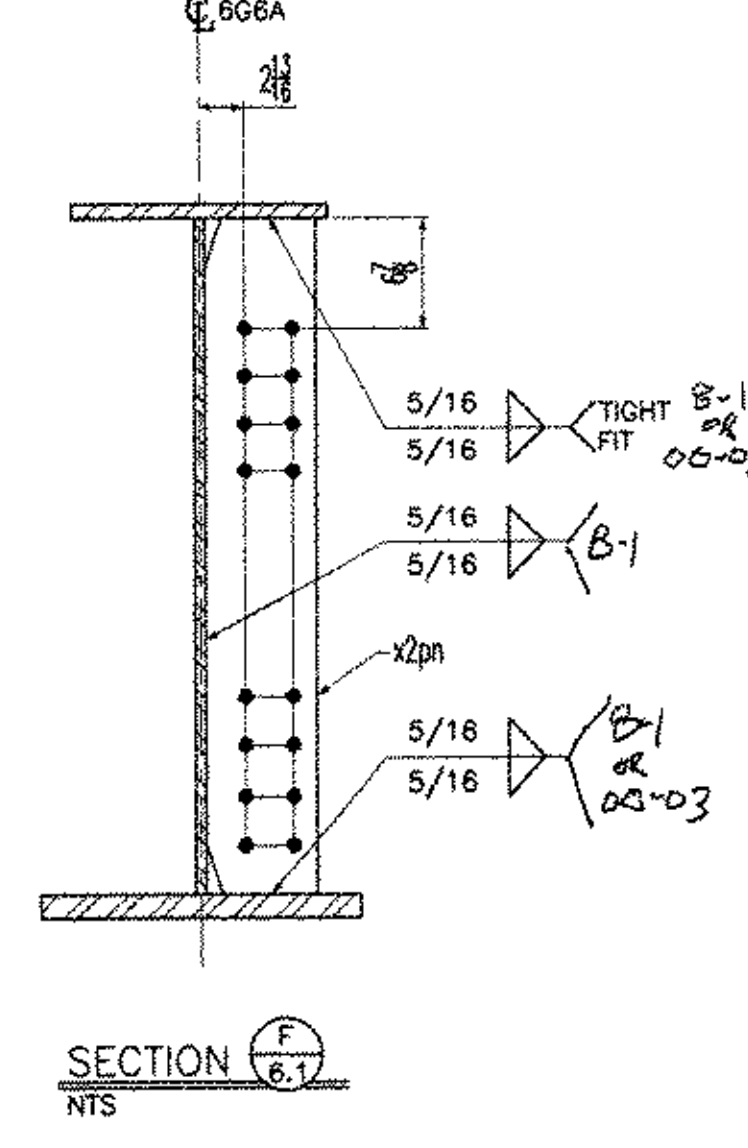
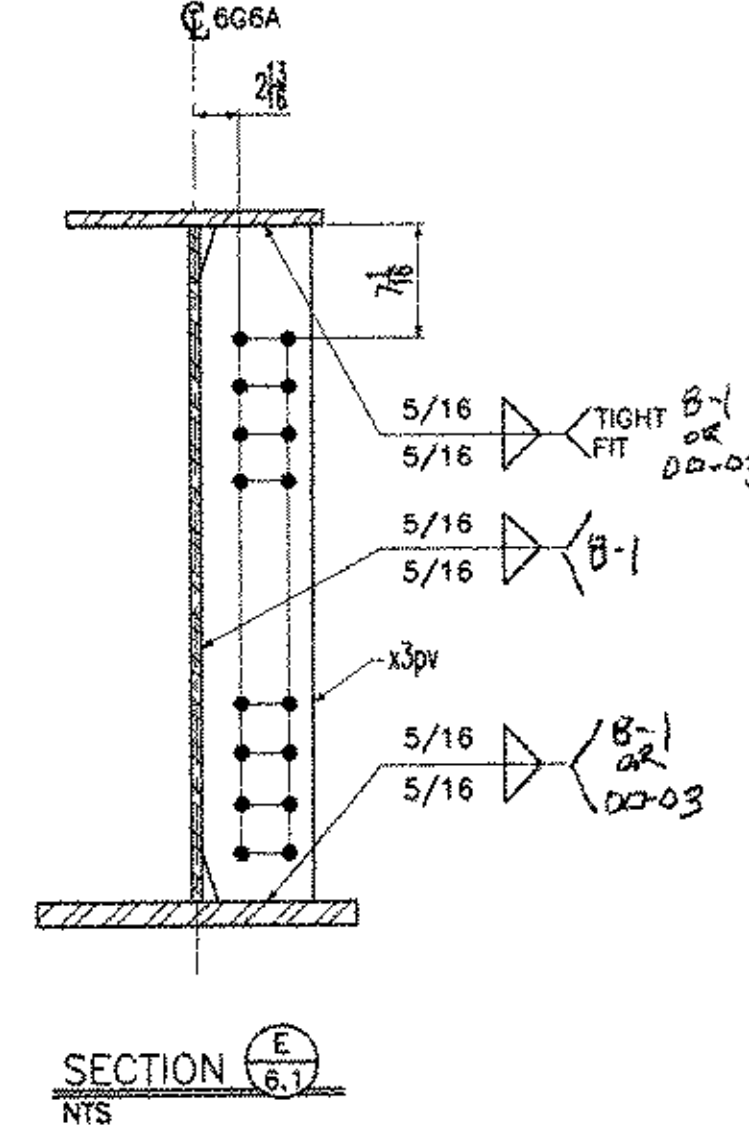
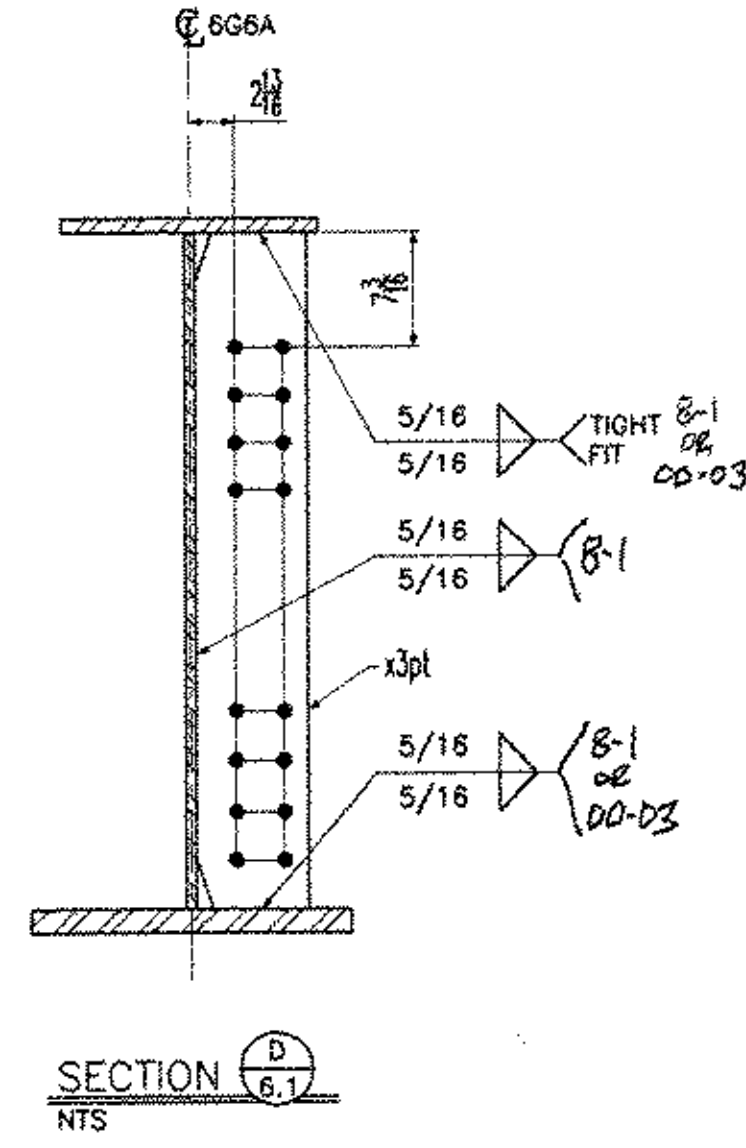
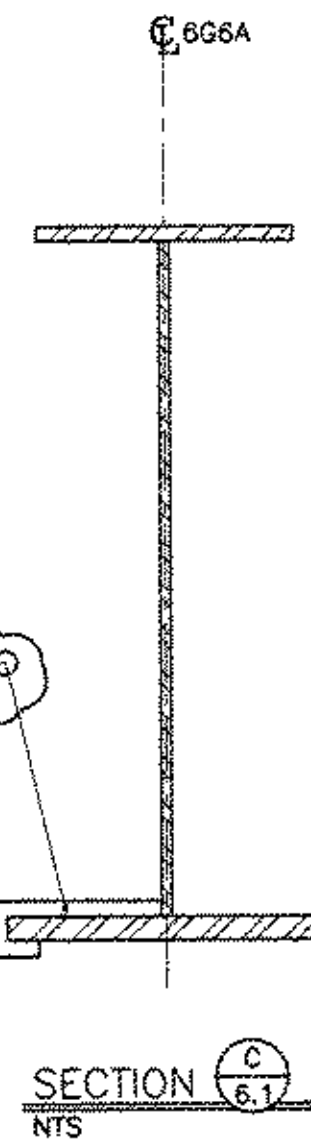
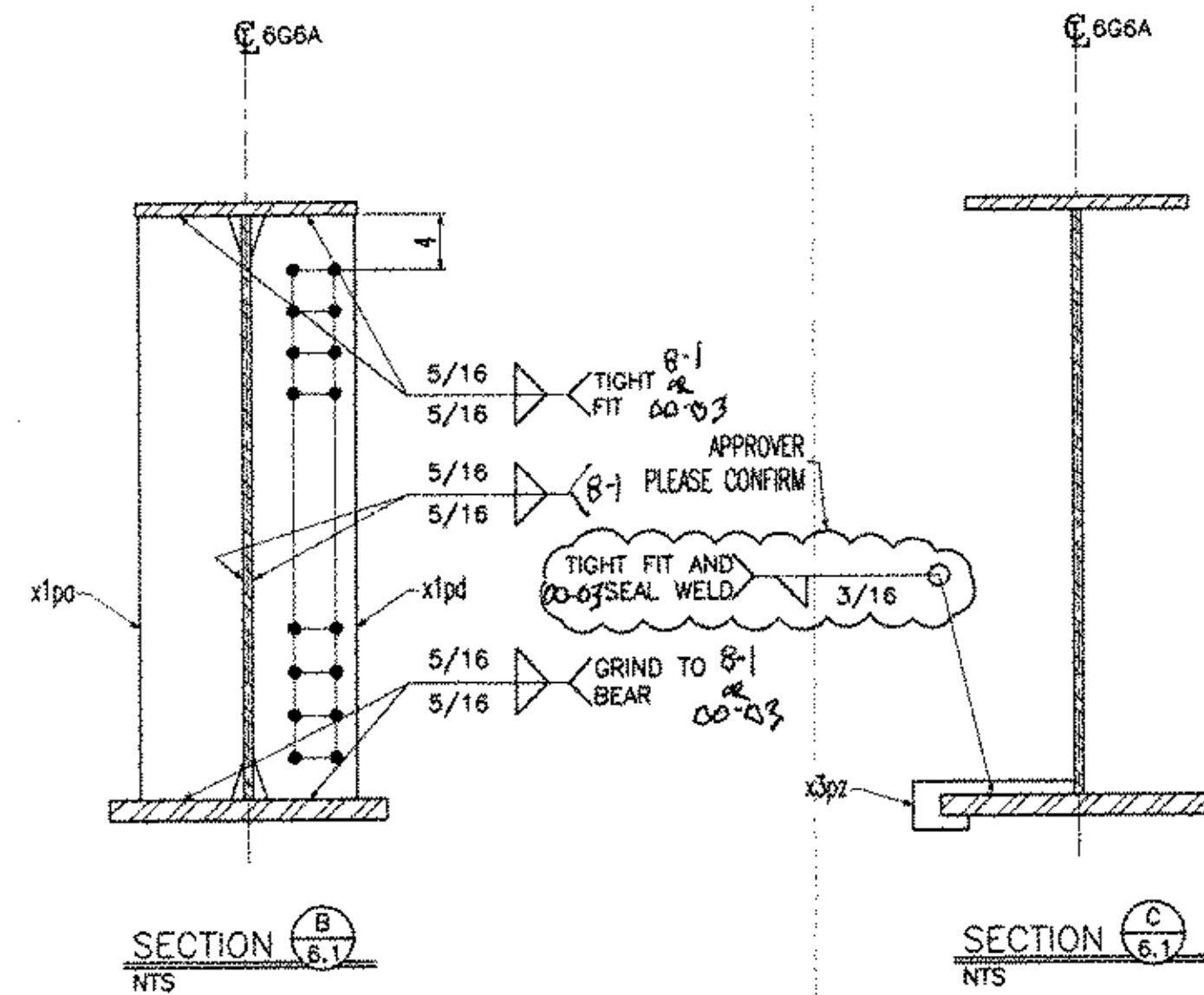
SECTION A-A  
NTS



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WORK WITH DRAWING 6.2





NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.D.)

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

This review is only for general performance with the design concept and the information placed on the Construction Documents. Corrections or additions made on the shop drawings during the review do not release the contractor from compliance with the requirements of the plans and specifications. Review of a shop drawing shall not be construed as an endorsement of the item or a warranty. The contractor is responsible for dimensions to be confirmed and verified at the project location and for the accuracy of the information and for the proper use of the information. The contractor shall be responsible for the accuracy of the information and for the proper use of the information.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR      |
|-----|----------|------------------------------------|-----|------|-----------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

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WORK WITH DRAWING 6.1

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: MCFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: GIRDER 6G6A

DRAWN BY: D.B. 10/29/03

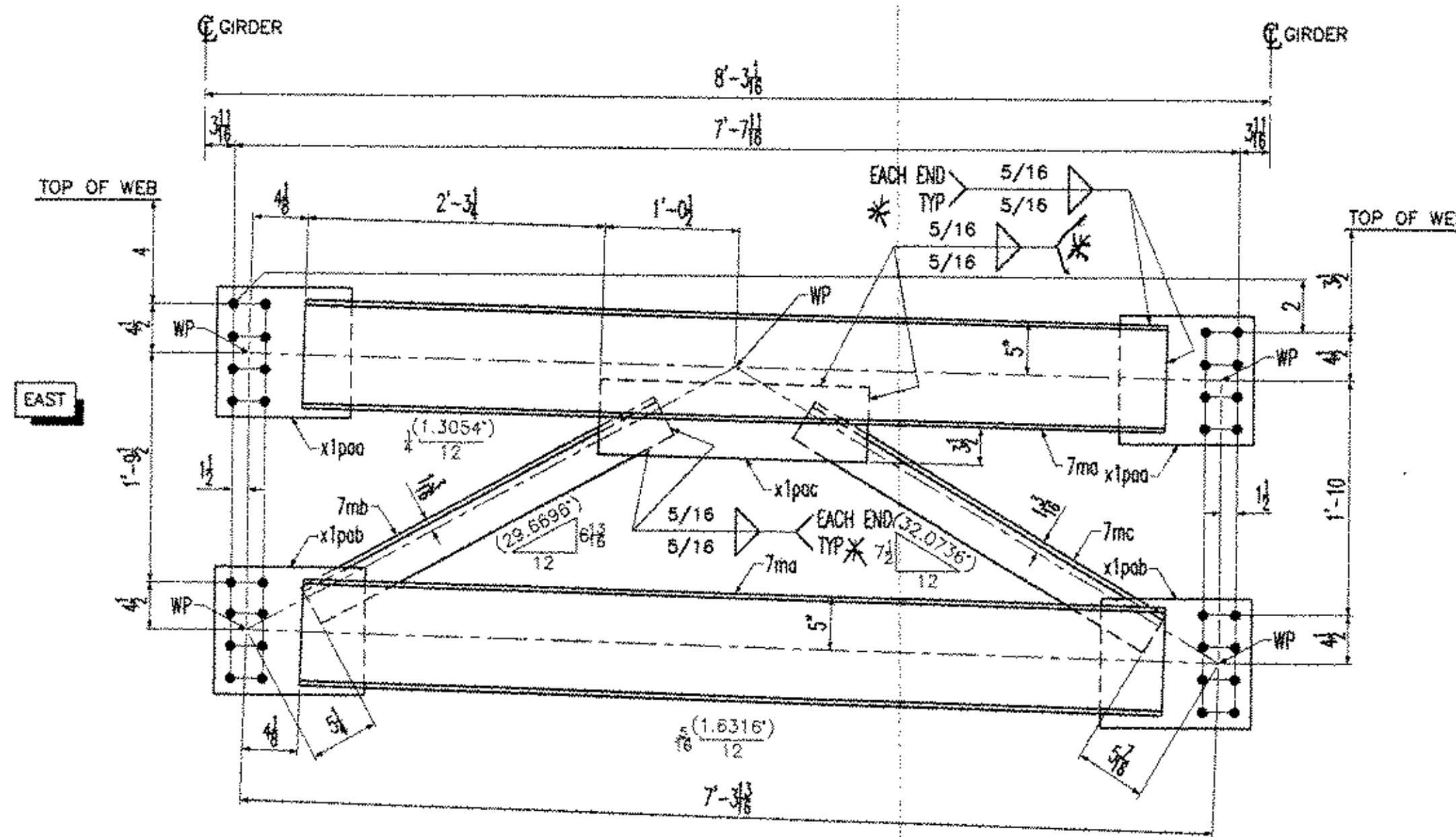
CHECKED BY: L.D. 11/14/03

JOB NUMBER: 4065

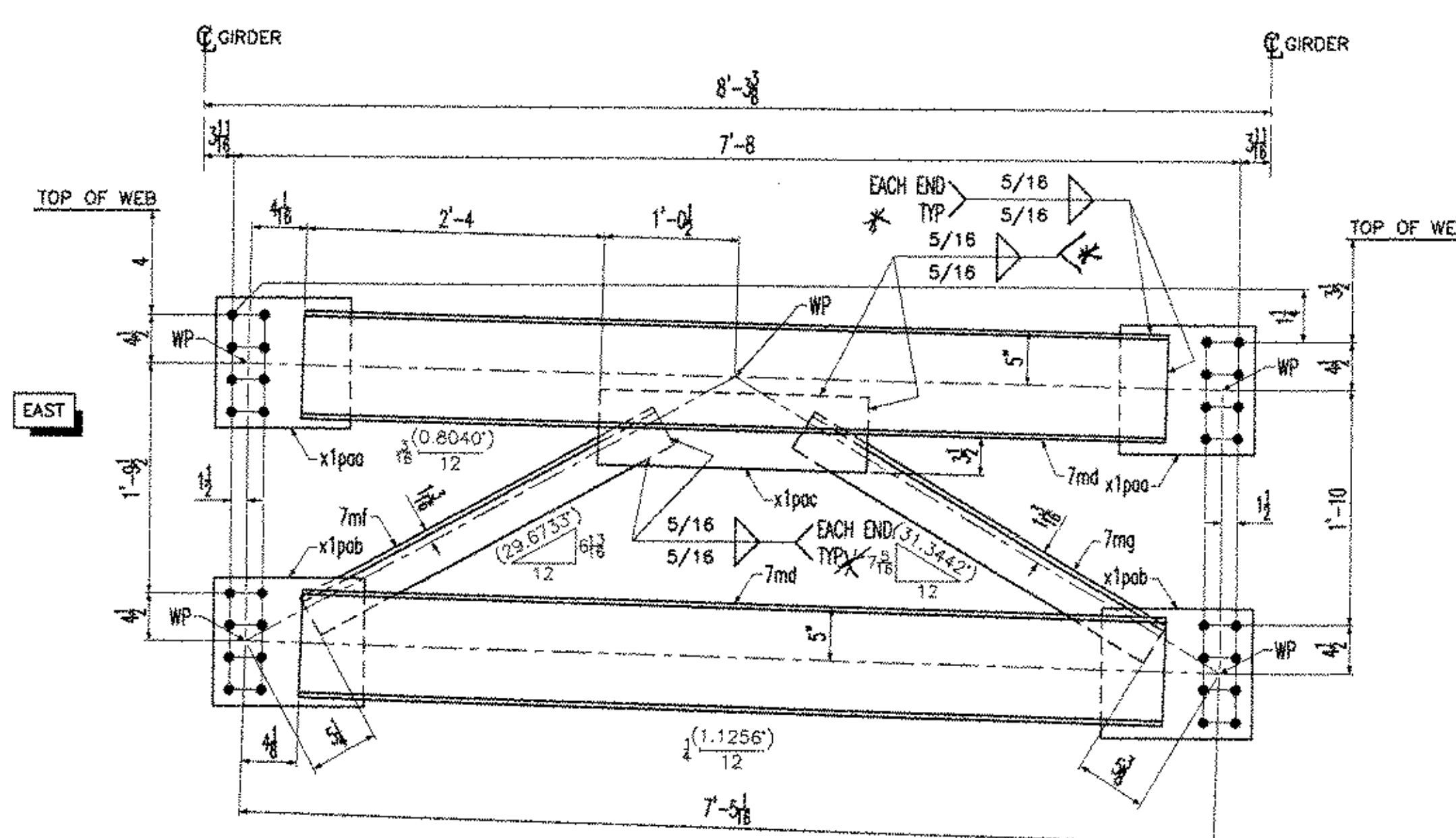
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09755

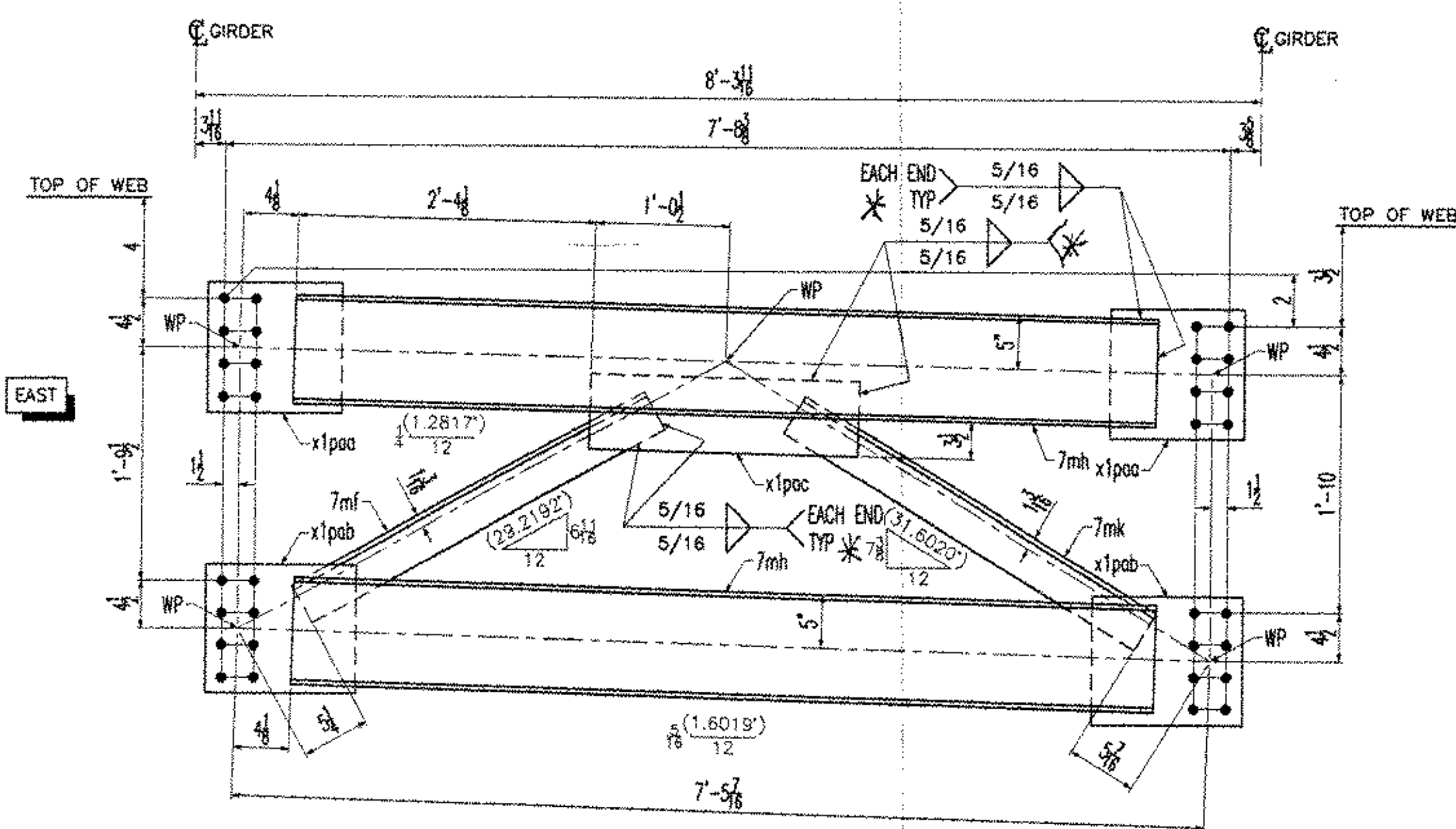




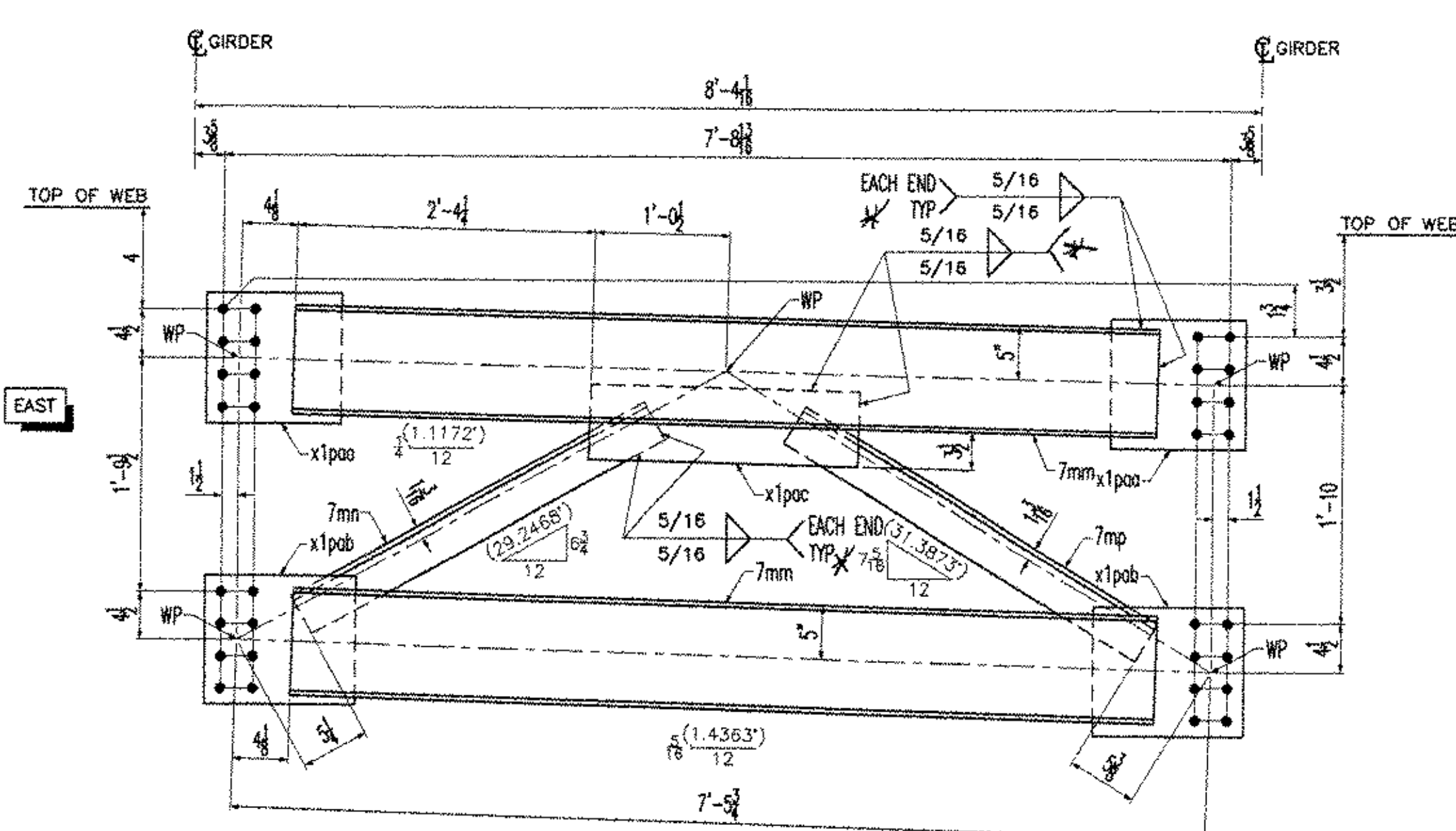
ITEM 7CF1A (1 REQ'D)  
NTS



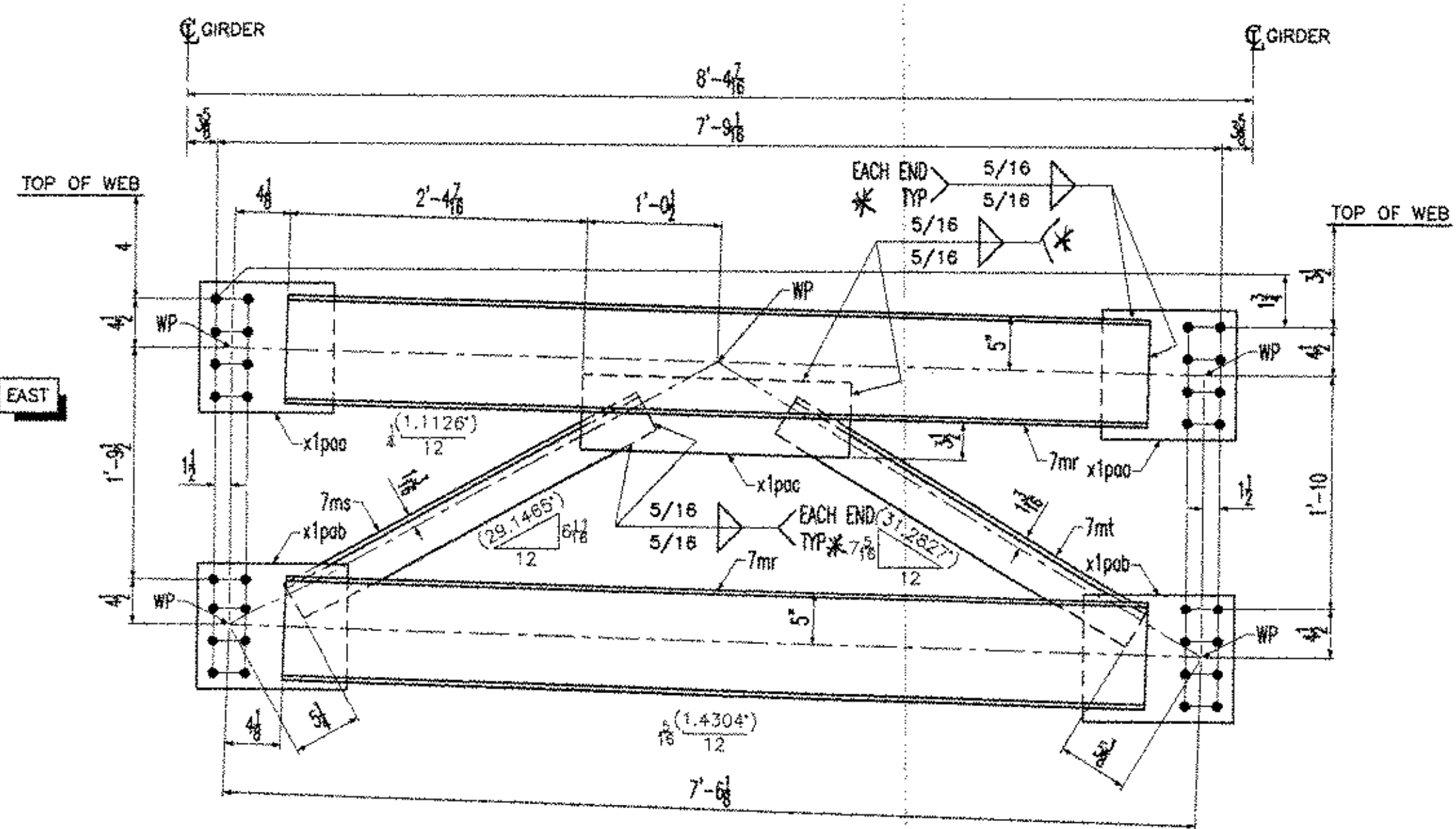
ITEM 7CF1B (1 REQ'D)  
NTS



ITEM 7CF1C (1 REQ'D)  
NTS



ITEM 7CF1D (1 REQ'D)  
NTS



ITEM 7CF1E (1 REQ'D)  
NTS

\* ALL CROSS FRAME FILLET WELDS:  
WPS 10-1 OR 00-03

| BILL OF MATERIAL |                 |           |            |     |                  |                  |             |            |        |        |       |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|-------------|------------|--------|--------|-------|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade       | Length     | Weight | Finish | Notes |
| 7                |                 | 7CF1A     | 7ma        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-7 9/16  | 266    | (CVN)  | 19    |
| 7                |                 | 7CF1A     | 7mb        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-1 1/4   | 39     | (CVN)  | 16    |
| 7                |                 | 7CF1A     | 7mc        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2 5/16  | 41     | (CVN)  | 16    |
| 7                |                 | 7CF1A     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2  | 20     | (CVN)  | 14    |
| 7                |                 | 7CF1A     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1       | 22     | (CVN)  | 14    |
| 7                |                 | 7CF1A     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1       | 25     | (CVN)  | 13    |
| 7                |                 | 7CF1B     | 7md        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-8 15/16 | 270    | (CVN)  | 19    |
| 7                |                 | 7CF1B     | 7mf        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2       | 40     | (CVN)  | 16    |
| 7                |                 | 7CF1B     | 7mg        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2 3/4   | 41     | (CVN)  | 16    |
| 7                |                 | 7CF1B     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2  | 20     | (CVN)  | 14    |
| 7                |                 | 7CF1B     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1       | 22     | (CVN)  | 14    |
| 7                |                 | 7CF1B     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1       | 25     | (CVN)  | 13    |
| 7                |                 | 7CF1C     | 7mh        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-9 3/16  | 271    | (CVN)  | 19    |
| 7                |                 | 7CF1C     | 7mi        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2       | 40     | (CVN)  | 16    |
| 7                |                 | 7CF1C     | 7mk        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-3 1/16  | 41     | (CVN)  | 16    |
| 7                |                 | 7CF1C     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2  | 20     | (CVN)  | 14    |
| 7                |                 | 7CF1C     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1       | 22     | (CVN)  | 14    |
| 7                |                 | 7CF1C     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1       | 25     | (CVN)  | 13    |
| 7                |                 | 7CF1D     | 7mn        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-9 9/16  | 272    | (CVN)  | 19    |
| 7                |                 | 7CF1D     | 7mo        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2 3/16  | 40     | (CVN)  | 16    |
| 7                |                 | 7CF1D     | 7mp        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-3 1/8   | 41     | (CVN)  | 16    |
| 7                |                 | 7CF1D     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2  | 20     | (CVN)  | 14    |
| 7                |                 | 7CF1D     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1       | 22     | (CVN)  | 14    |
| 7                |                 | 7CF1D     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1       | 25     | (CVN)  | 13    |
| 7                |                 | 7CF1E     | 7mr        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-9 15/16 | 273    | (CVN)  | 19    |
| 7                |                 | 7CF1E     | 7ms        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-2 3/8   | 41     | (CVN)  | 16    |
| 7                |                 | 7CF1E     | 7mt        | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-3 5/16  | 42     | (CVN)  | 16    |
| 7                |                 | 7CF1E     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2  | 20     | (CVN)  | 14    |
| 7                |                 | 7CF1E     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1       | 22     | (CVN)  | 14    |
| 7                |                 | 7CF1E     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1       | 25     | (CVN)  | 13    |

|               |                  |
|---------------|------------------|
| TOTAL WEIGHT  | 2093             |
| - CUTS        |                  |
| + FIELD BOLTS | REFER TO 'E' DWG |
| + WELD        | 30               |
| NET TOTAL     | 2123             |

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

Reviewed  
Rejected

Furnish as Corrected  
Revise and Resubmit  
Submit Specification

This review is only for general compliance with the design criteria. It is not a substitute for the design engineer's review. The reviewer is not responsible for the design of the structure or the materials used. The reviewer is responsible for the design of the structure or the materials used. The reviewer is responsible for the design of the structure or the materials used.

McFarland-Johnson, Inc.

Date: 12-17-03

By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE     | DESCRIPTION                        |
|-----|----------|------------------------------------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |

| QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|------|-----------|----------|-----|
|     |      |           |          |     |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

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PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: MCFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: ABUTMENT CROSS FRAMES

DRAWN BY: D.B.

10/31/03 JOB

CHECKED BY: L.D.

11/14/03 NUMBER: 4085

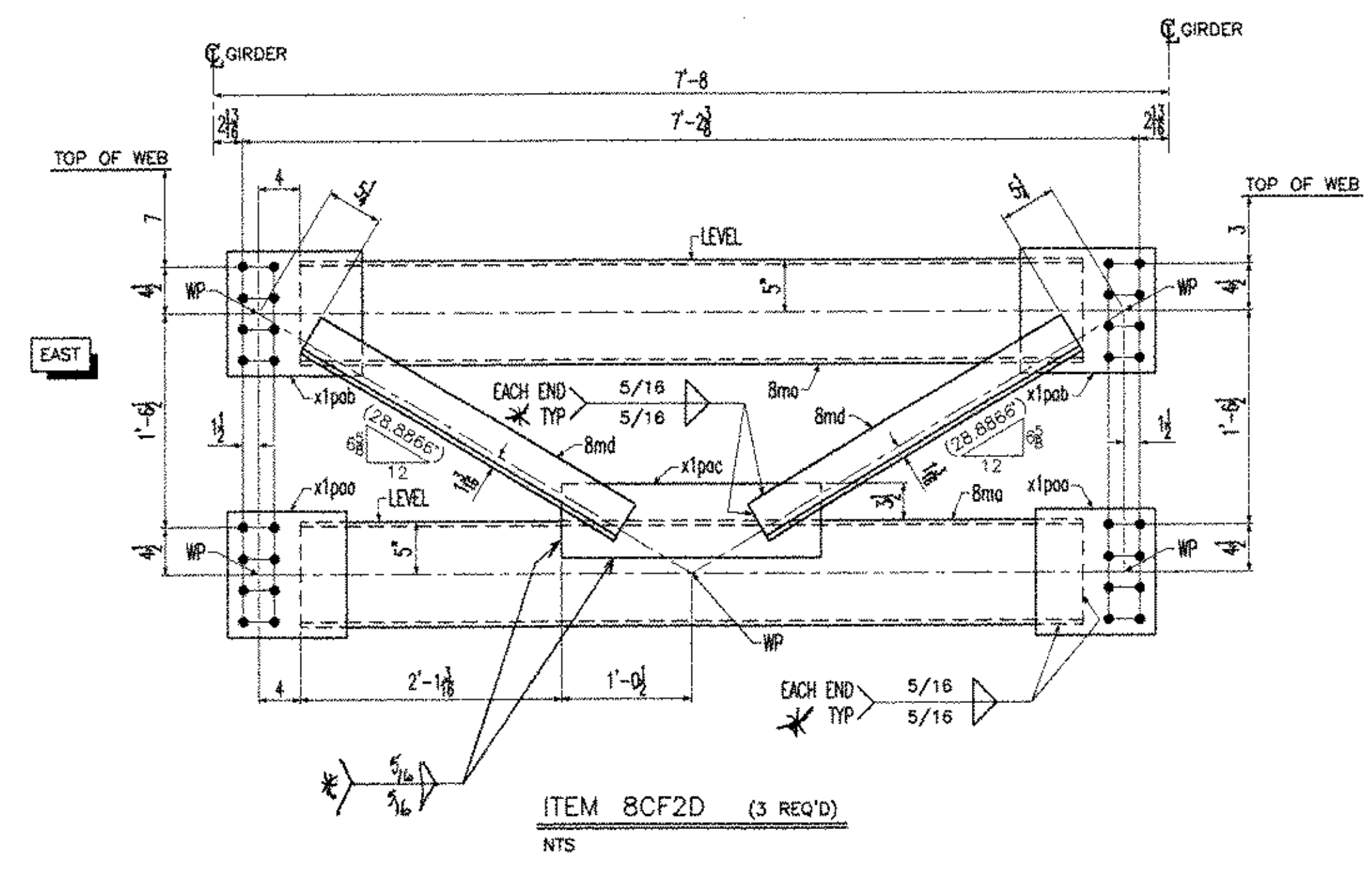
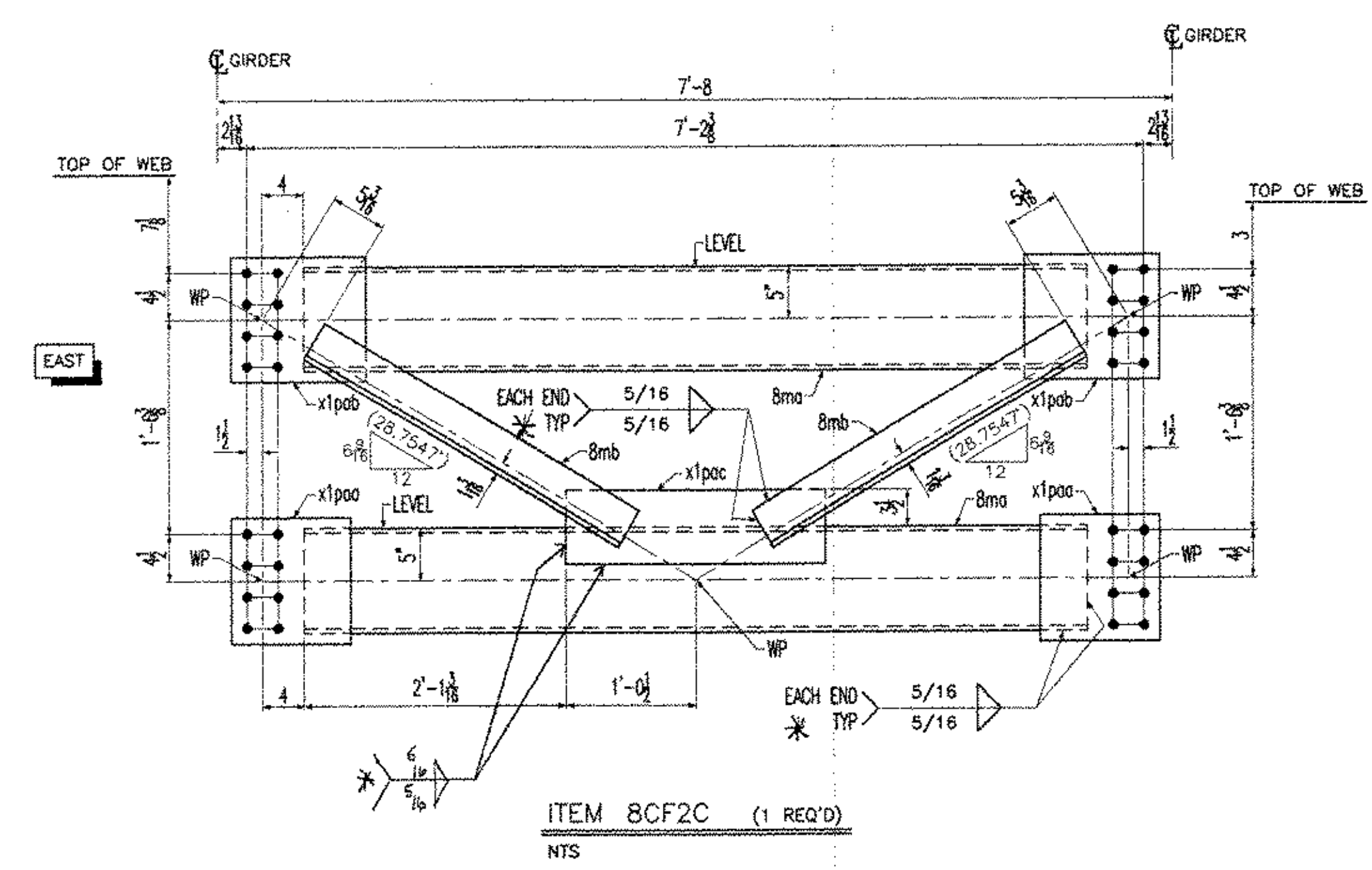
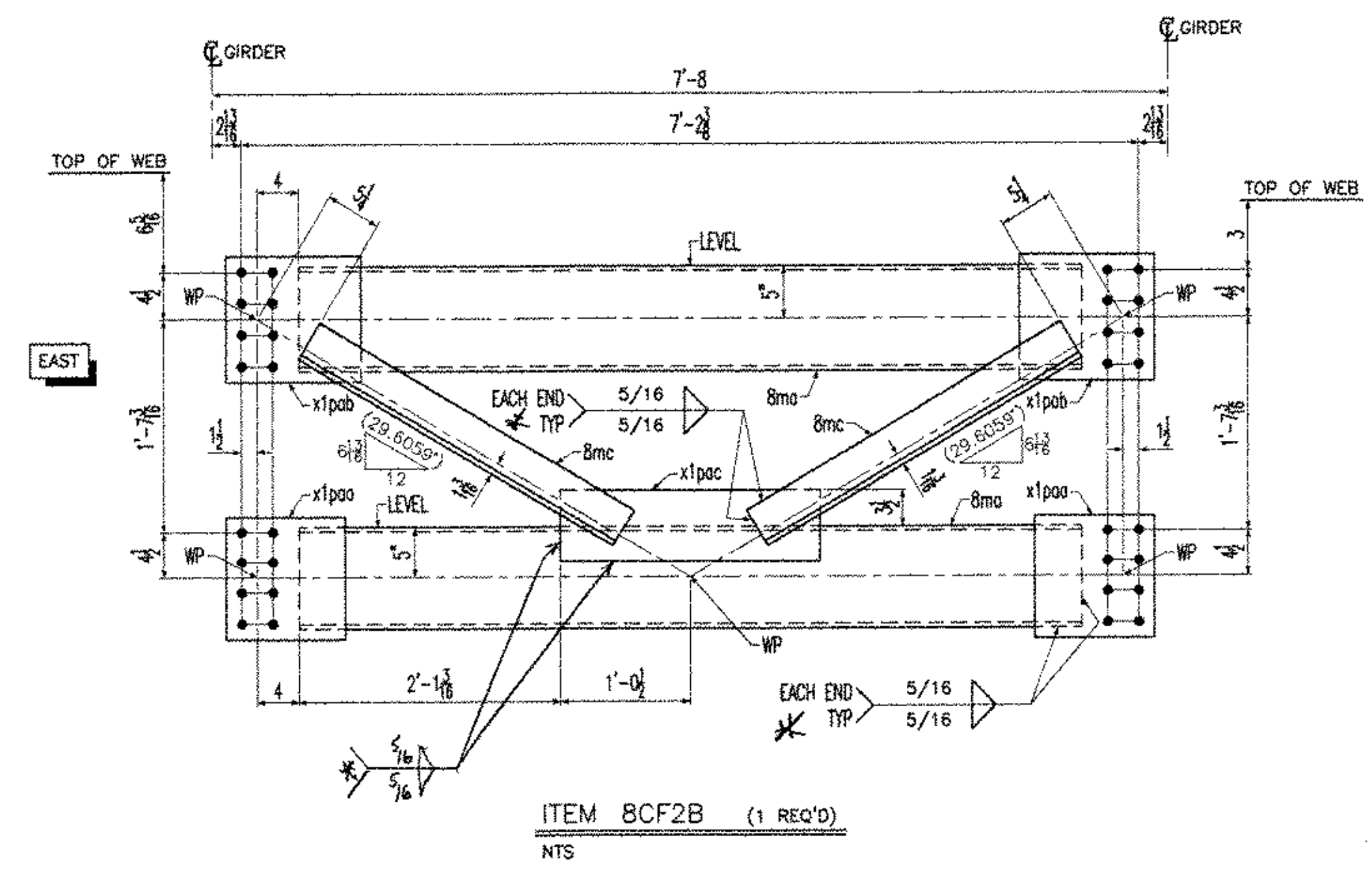
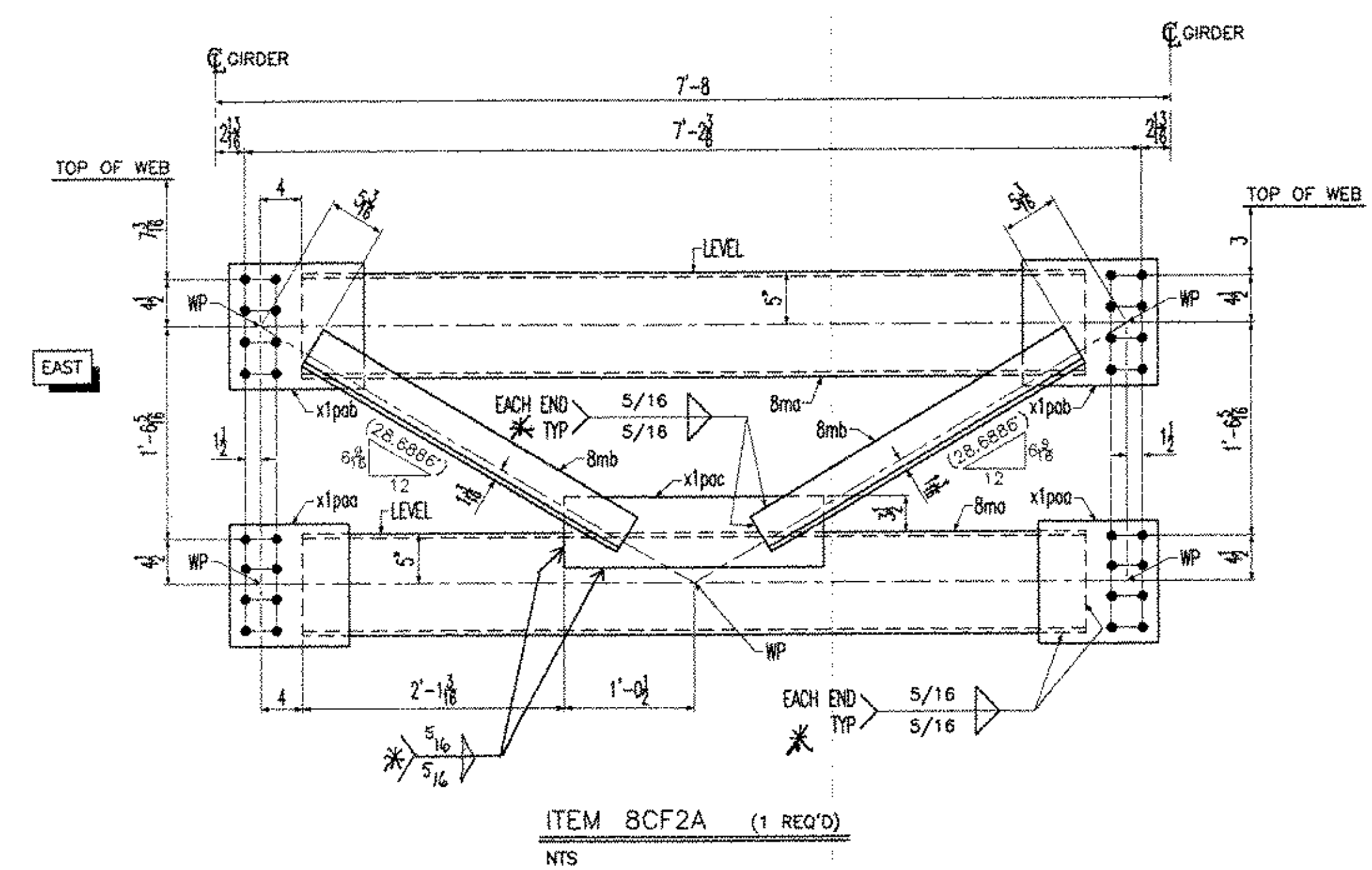
SHEET NUMBER: 7

09855



| BILL OF MATERIAL |                 |           |            |     |                  |                  |             |             |        |        |       |  |  |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|-------------|-------------|--------|--------|-------|--|--|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade       | Length      | Weight | Finish | Notes |  |  |
| 8                |                 | 8CF2A     | 8ma        | 2   | Channels         | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |  |  |
| 8                |                 | 8CF2A     | 8mb        | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 5/16  | 73     | (CVN)  | 15    |  |  |
| 8                |                 | 8CF2A     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | (20)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2A     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | (22)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2A     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |  |  |
| 8                |                 | 8CF2B     | 8ma        | 2   | Channels         | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |  |  |
| 8                |                 | 8CF2B     | 8mc        | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 11/16 | 73     | (CVN)  | 15    |  |  |
| 8                |                 | 8CF2B     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | (20)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2B     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | (22)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2B     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |  |  |
| 8                |                 | 8CF2C     | 8ma        | 2   | Channels         | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |  |  |
| 8                |                 | 8CF2C     | 8mb        | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 5/16  | 73     | (CVN)  | 15    |  |  |
| 8                |                 | 8CF2C     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | (20)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2C     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | (22)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2C     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |  |  |
| 8                |                 | 8CF2D     | 8ma        | 6   | Channels         | 10x20            | M270M-GR50W | 6'-3 3/8    | 753    | (CVN)  | 18    |  |  |
| 8                |                 | 8CF2D     | 8md        | 6   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 3/8   | 219    | (CVN)  | 15    |  |  |
| 8                |                 | 8CF2D     | x1paa      | 6   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | (60)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2D     | x1pab      | 6   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | (66)   | (CVN)  | 14    |  |  |
| 8                |                 | 8CF2D     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |  |  |

|               |                  |
|---------------|------------------|
| TOTAL WEIGHT  | 2346             |
| - CUTS        |                  |
| + FIELD BOLTS | REFER TO 'E' DWG |
| + WELD        | 36               |
| NET TOTAL     | 2382             |



\* ALL CROSSFRAME FLET WEARDS:  
WRS 10-1 & 20-03

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

|          |                      |
|----------|----------------------|
| Reviewed | Furnish as Connected |
| Rejected | Revise and Resubmit  |
|          | Submit Specimen      |

The contractor is responsible for general compliance with the drawings and specifications. The contractor shall be responsible for the accuracy of the information furnished by the contractor. The contractor shall be responsible for the accuracy of the information furnished by the contractor. The contractor shall be responsible for the accuracy of the information furnished by the contractor.

Date: 12-17-03  
By: RSW  
RESERVED FOR STAMPS

| DRAWINGS PREPARED BY:                                                                                |          |                                    |          |
|------------------------------------------------------------------------------------------------------|----------|------------------------------------|----------|
| AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS |          |                                    |          |
| REV                                                                                                  | DATE     | DESCRIPTION                        | FOR      |
| 1                                                                                                    | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |
| 2                                                                                                    | 11/14/03 | ISSUED TO                          | FOR      |

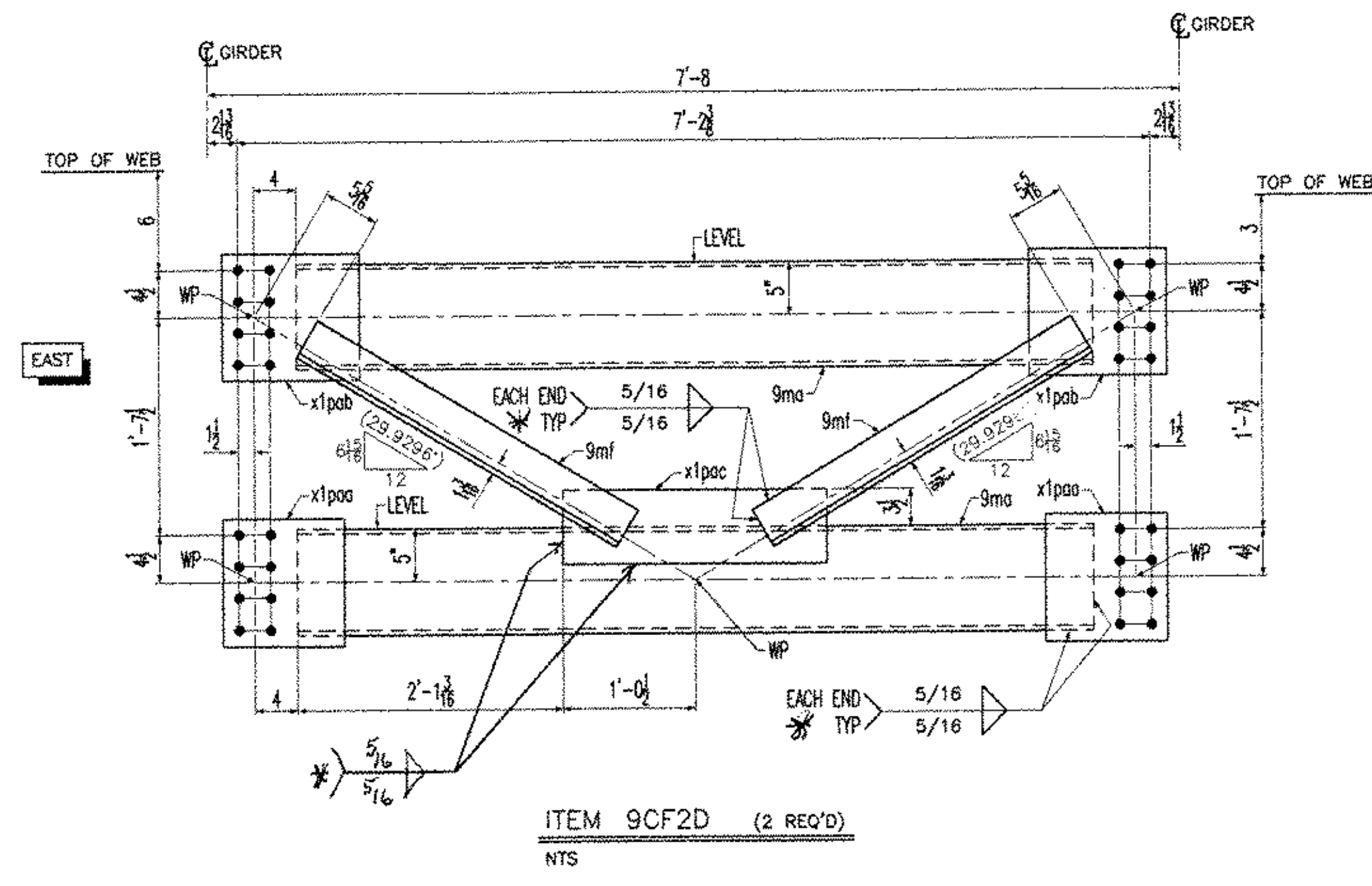
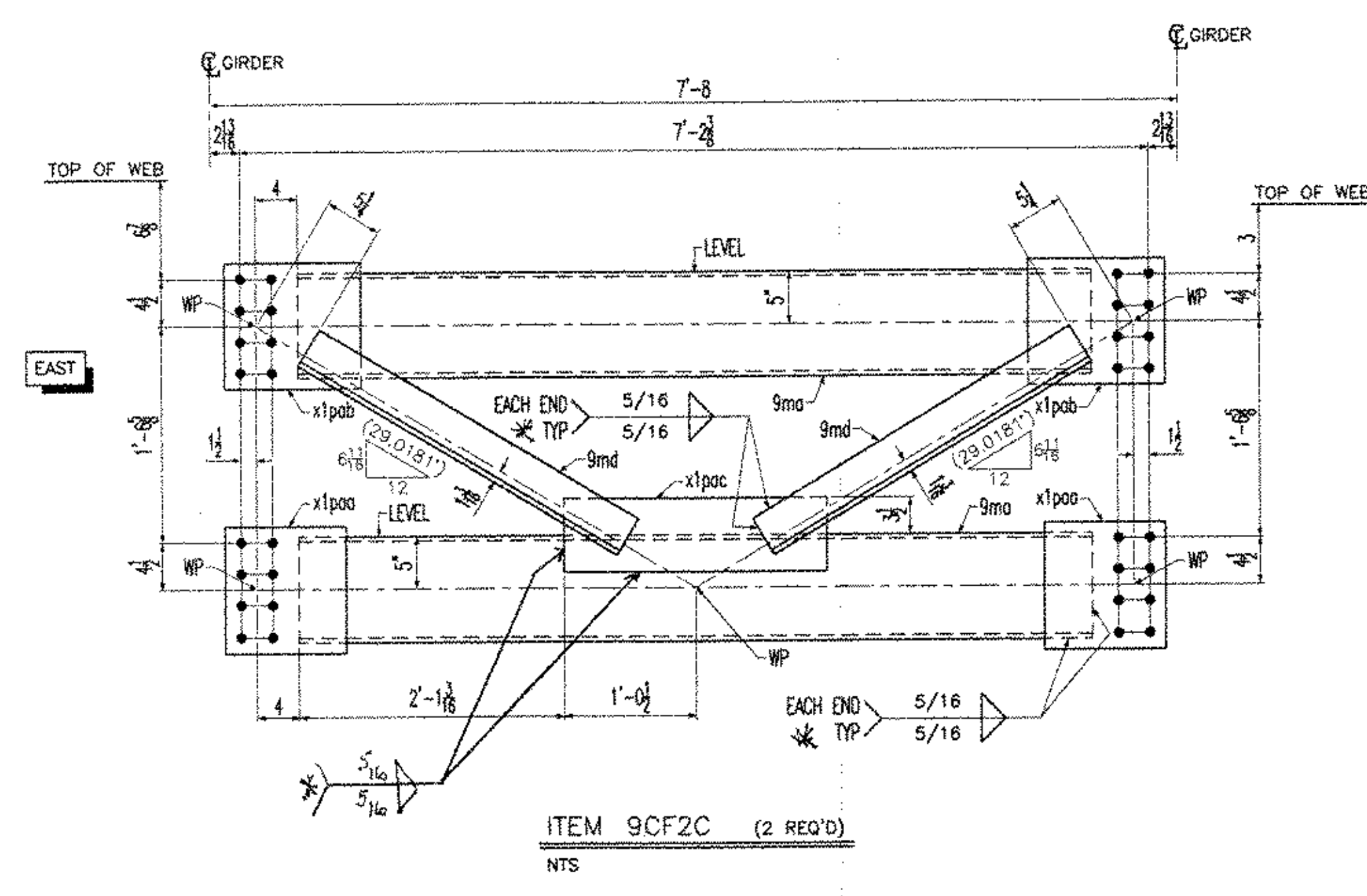
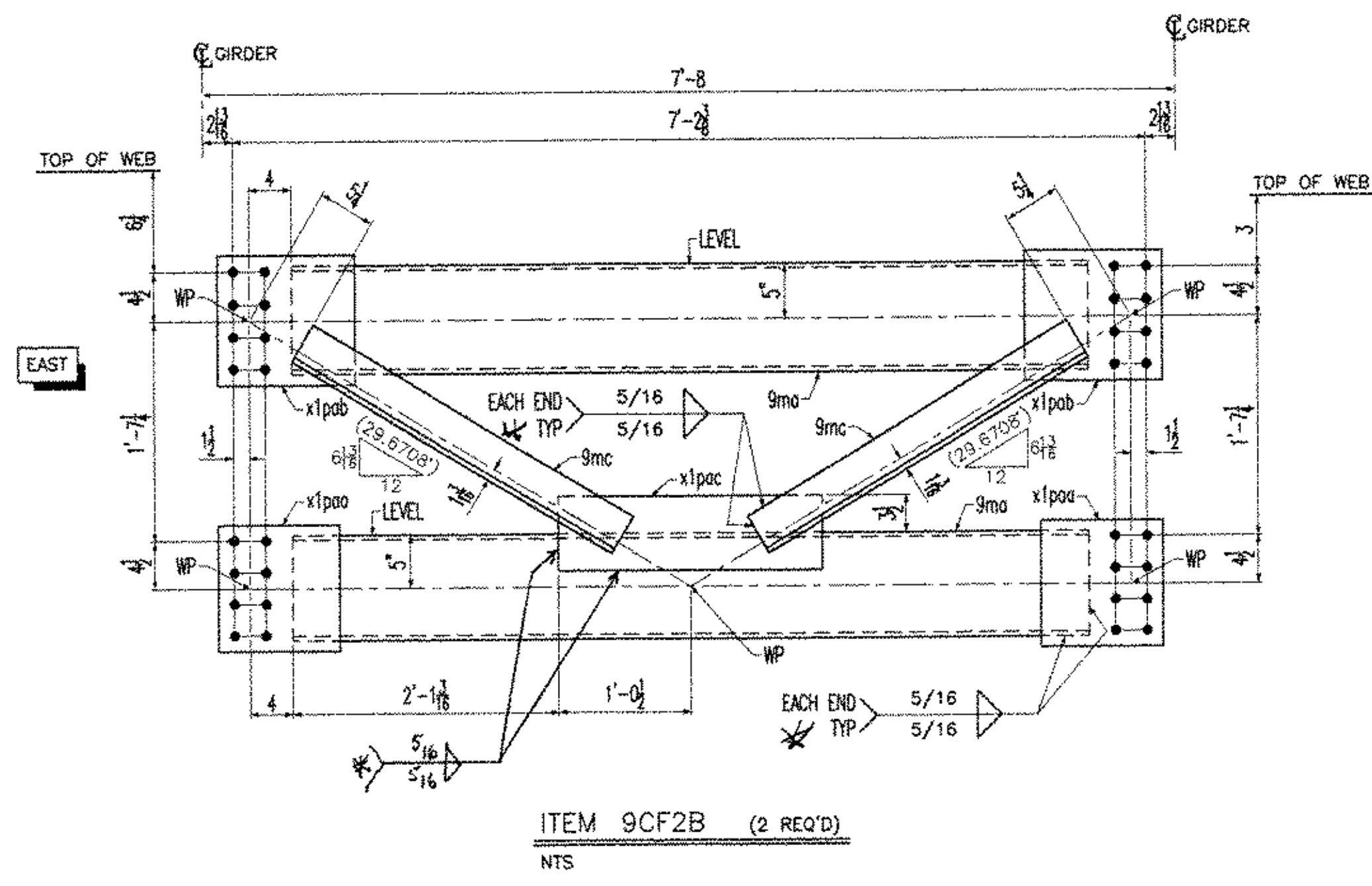
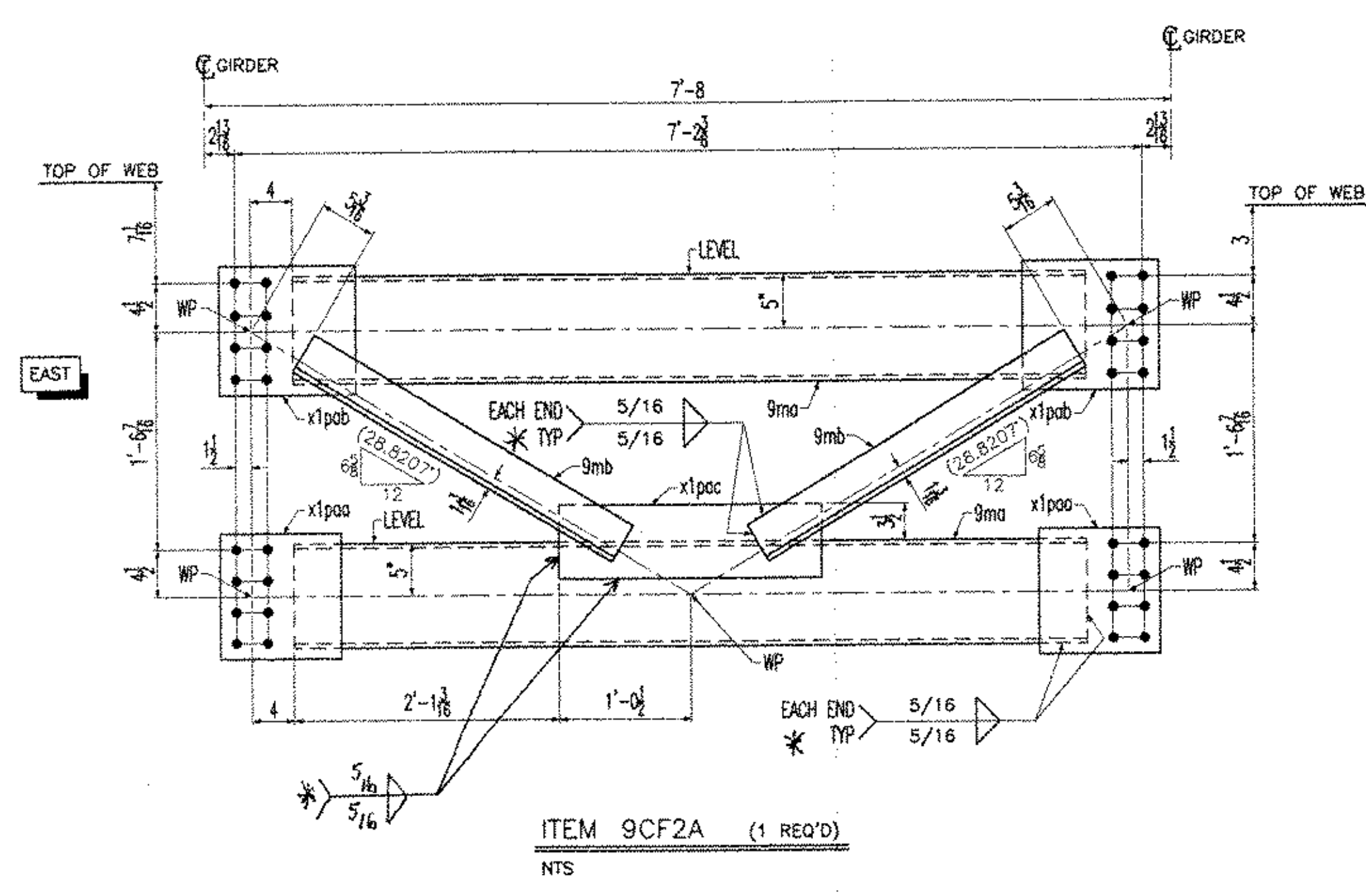
|                                                   |                  |          |              |           |
|---------------------------------------------------|------------------|----------|--------------|-----------|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | DRAWN BY: D.B.   | 10/31/03 | JOB          | SHEET     |
| LOCATION: CHESTER, VERMONT                        | CHECKED BY: L.D. | 11/14/03 | NUMBER: 4065 | NUMBER: 8 |
| ENGINEER: McFARLAND-JOHNSON, INC.                 |                  |          |              |           |
| CUSTOMER: EASTERN BRIDGE LLC                      |                  |          |              |           |
| DRAWING TITLE: INTERMEDIATE CROSS FRAMES          |                  |          |              |           |

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| BILL OF MATERIAL |                 |           |            |     |                  |                  |             |             |        |        |       |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|-------------|-------------|--------|--------|-------|
| Drawing Number   | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade       | Length      | Weight | Finish | Notes |
| 9                |                 | 9CF2A     | 9ma        | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |
| 9                |                 | 9CF2A     | 9mb        | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 3/8   | 73     | (CVN)  | 15    |
| 9                |                 | 9CF2A     | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 9                |                 | 9CF2A     | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 9                |                 | 9CF2A     | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 9                |                 | 9CF2B     | 9ma        | 4   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 502    | (CVN)  | 18    |
| 9                |                 | 9CF2B     | 9mc        | 4   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 11/8  | 147    | (CVN)  | 15    |
| 9                |                 | 9CF2B     | x1paa      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 40     | (CVN)  | 14    |
| 9                |                 | 9CF2B     | x1pab      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 44     | (CVN)  | 14    |
| 9                |                 | 9CF2B     | x1pac      | 2   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 50     | (CVN)  | 13    |
| 9                |                 | 9CF2C     | 9ma        | 4   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 502    | (CVN)  | 18    |
| 9                |                 | 9CF2C     | 9md        | 4   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 7/16  | 146    | (CVN)  | 15    |
| 9                |                 | 9CF2C     | x1paa      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 40     | (CVN)  | 14    |
| 9                |                 | 9CF2C     | x1pab      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 44     | (CVN)  | 14    |
| 9                |                 | 9CF2C     | x1pac      | 2   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 50     | (CVN)  | 13    |
| 9                |                 | 9CF2D     | 9ma        | 4   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 502    | (CVN)  | 18    |
| 9                |                 | 9CF2D     | 9mf        | 4   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 13/16 | 147    | (CVN)  | 15    |
| 9                |                 | 9CF2D     | x1paa      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 40     | (CVN)  | 14    |
| 9                |                 | 9CF2D     | x1pab      | 4   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 44     | (CVN)  | 14    |
| 9                |                 | 9CF2D     | x1pac      | 2   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 50     | (CVN)  | 13    |

|              |                  |
|--------------|------------------|
| TOTAL WEIGHT | 2739             |
| -CUTS        |                  |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD        | 42               |
| NET TOTAL    | 2781             |



\*ALL CROSSFRAME FLUET WELDS:  
WPS 10-1 or 00-03

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

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

This review is only for general compliance with the design and does not constitute an approval of the design or the construction of the structure. The reviewer is not responsible for the design or the construction of the structure. The reviewer is responsible for the design and the construction of the structure. The reviewer is responsible for the design and the construction of the structure.

Date: 12-17-03  
 By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|----------|------------------------------------|-----|------|-----------|----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |          |     |

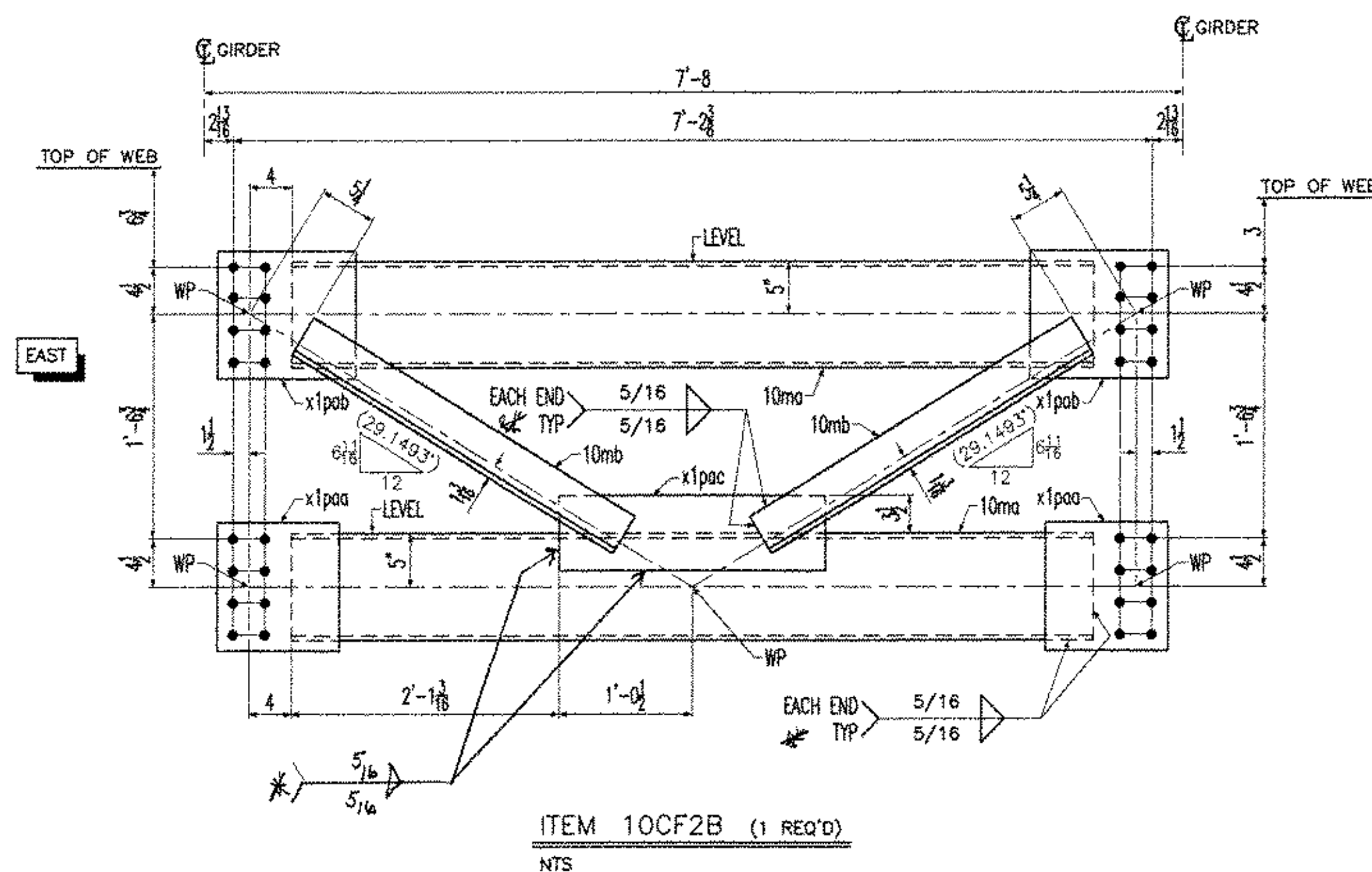


EASTERN BRIDGE LLC  
 RURAL RTE 2, BOX 302  
 CLAREMONT, NH 03743  
 603-542-5202

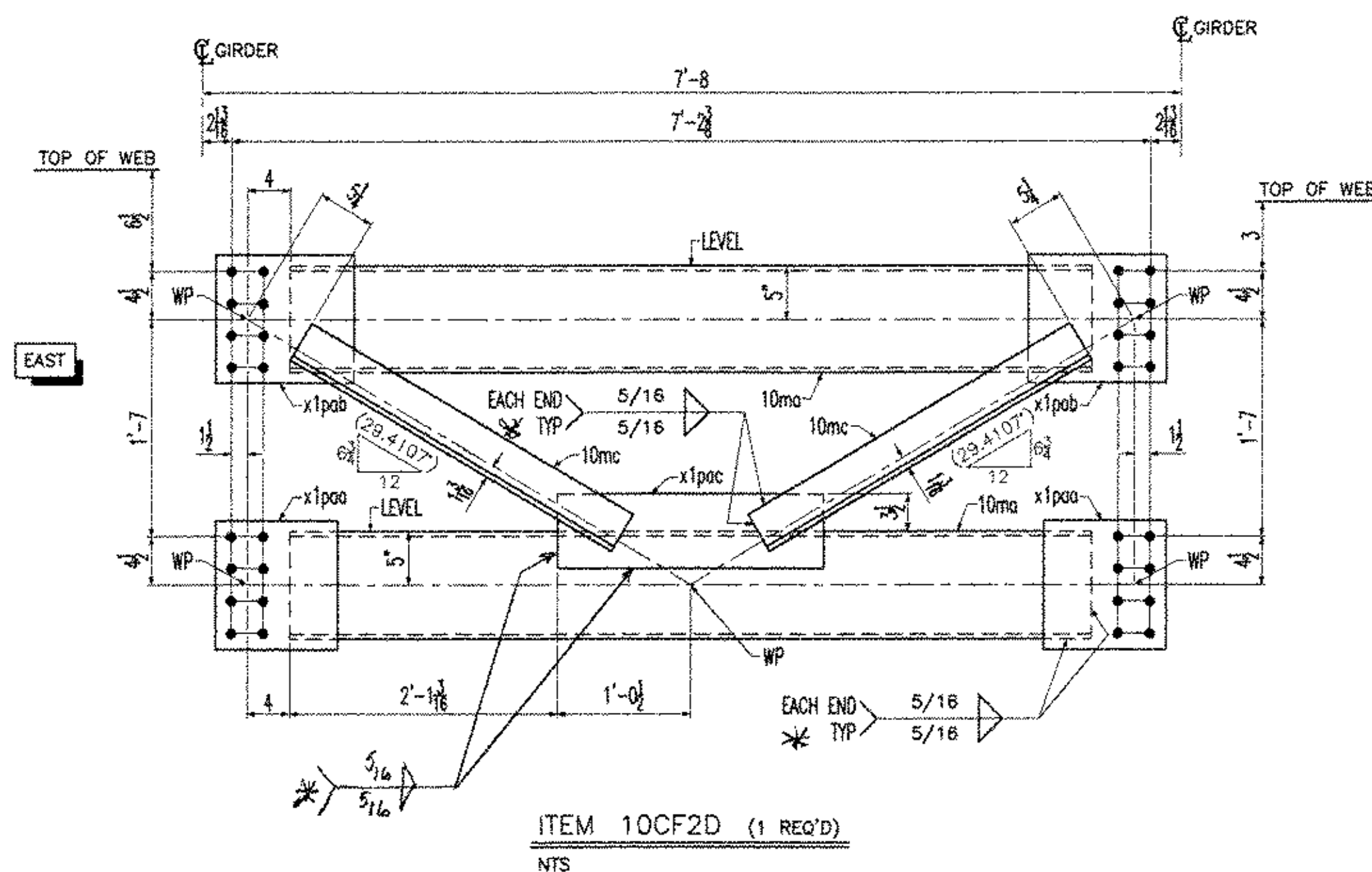
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PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
 LOCATION: CHESTER, VERMONT  
 ENGINEER: McFARLAND-JOHNSON, INC.  
 CUSTOMER: EASTERN BRIDGE LLC  
 DRAWING TITLE: INTERMEDIATE CROSS FRAMES  
 DRAWN BY: D.B. 10/31/03 JOB  
 CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: 9



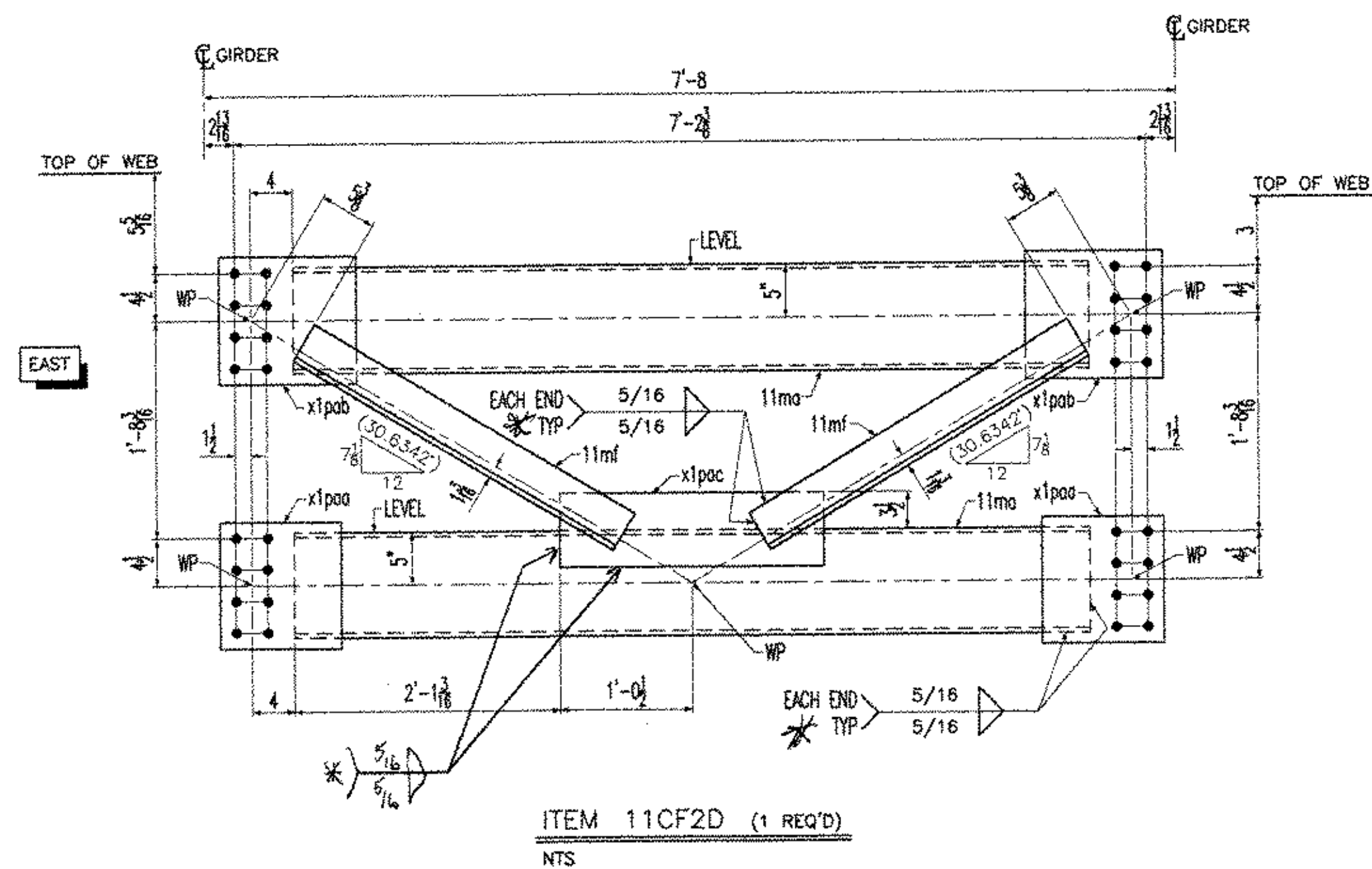
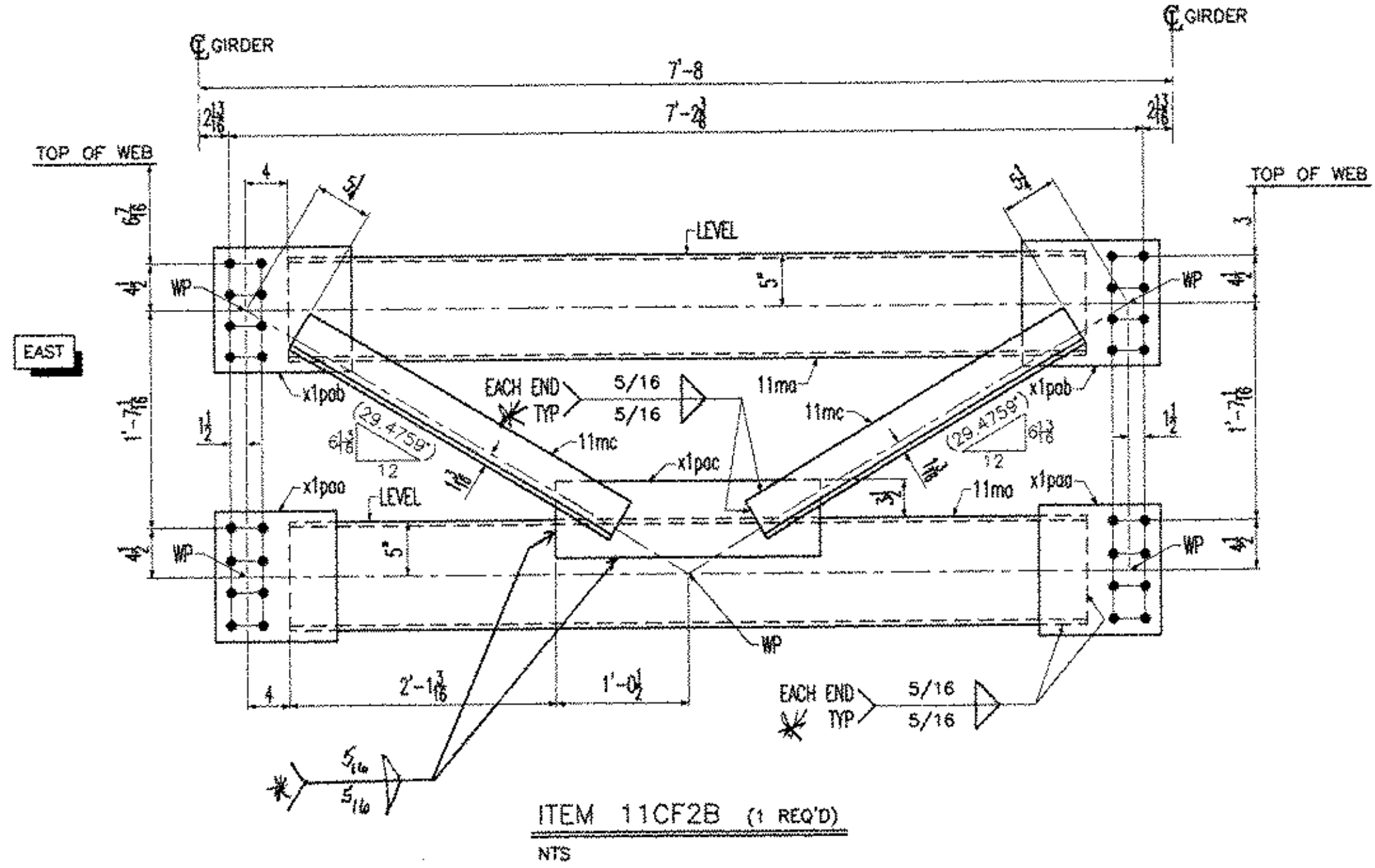


|              |                  |
|--------------|------------------|
| TOTAL WEIGHT | 1886             |
| -CUTS        |                  |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD        | 30               |
| NET TOTAL    | 1916             |



10/52





| BILL OF MATERIAL |                 |           |            |     |                  |                  |             |             |        |        |       |
|------------------|-----------------|-----------|------------|-----|------------------|------------------|-------------|-------------|--------|--------|-------|
| Drawing Number   | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade       | Length      | Weight | Finish | Notes |
| 11               |                 | 11CF2A    | 11ma       | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |
| 11               |                 | 11CF2A    | 11mb       | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 15/16 | 73     | (CVN)  | 15    |
| 11               |                 | 11CF2A    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 11               |                 | 11CF2A    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 11               |                 | 11CF2A    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 11               |                 | 11CF2B    | 11ma       | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |
| 11               |                 | 11CF2B    | 11mc       | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 5/8   | 73     | (CVN)  | 15    |
| 11               |                 | 11CF2B    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 11               |                 | 11CF2B    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 11               |                 | 11CF2B    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 11               |                 | 11CF2C    | 11ma       | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |
| 11               |                 | 11CF2C    | 11md       | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-10 9/16  | 73     | (CVN)  | 15    |
| 11               |                 | 11CF2C    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 11               |                 | 11CF2C    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 11               |                 | 11CF2C    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 11               |                 | 11CF2D    | 11ma       | 2   | C Channels       | 10x20            | M270M-GR50W | 6'-3 3/8    | 251    | (CVN)  | 18    |
| 11               |                 | 11CF2D    | 11mf       | 2   | L Angles         | 4x4x1/2          | M270M-GR50W | 2'-11 1/8   | 73     | (CVN)  | 15    |
| 11               |                 | 11CF2D    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 11               |                 | 11CF2D    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 11               |                 | 11CF2D    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |

|              |                  |
|--------------|------------------|
| TOTAL WEIGHT | 1564             |
| --CUTS       |                  |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD        | 24               |
| NET TOTAL    | 1588             |

☒ Reviewed ☐ Furnish as Created  
☐ Rejector ☐ Revise and Resubmit  
☐ Submit Separately

This review is made for general performance and is not intended to be a detailed analysis of the information provided. The information provided is for general performance and is not intended to be a detailed analysis of the information provided. The information provided is for general performance and is not intended to be a detailed analysis of the information provided.

doi:10.1017/S0022292412001799

~~SECRET~~ 17-17-03

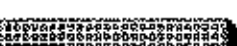
RSU?

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC F&C SERVICES LTD. 4785 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

[illegible]

|                                                                                       |                                                   |                     |
|---------------------------------------------------------------------------------------|---------------------------------------------------|---------------------|
|  | PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |                     |
|                                                                                       | LOCATION: CHESTER, VERMONT                        |                     |
|                                                                                       | ENGINEER: McFARLAND-JOHNSON, INC.                 |                     |
|                                                                                       | CUSTOMER: EASTERN BRIDGE LLC                      |                     |
|                                                                                       | DRAWING TITLE: INTERMEDIATE CROSS FRAMES          |                     |
| DRAWN BY: D.B. 10/31/03                                                               |                                                   | SHEET<br>NUMBER: 11 |
| CHECKED BY: L.D. 11/14/03                                                             |                                                   |                     |
| EASTERN BRIDGE LLC<br>RURAL RTE 2, BOX 302<br>CLAREMONT, NH 03743                     |                                                   |                     |

**NOTICE**

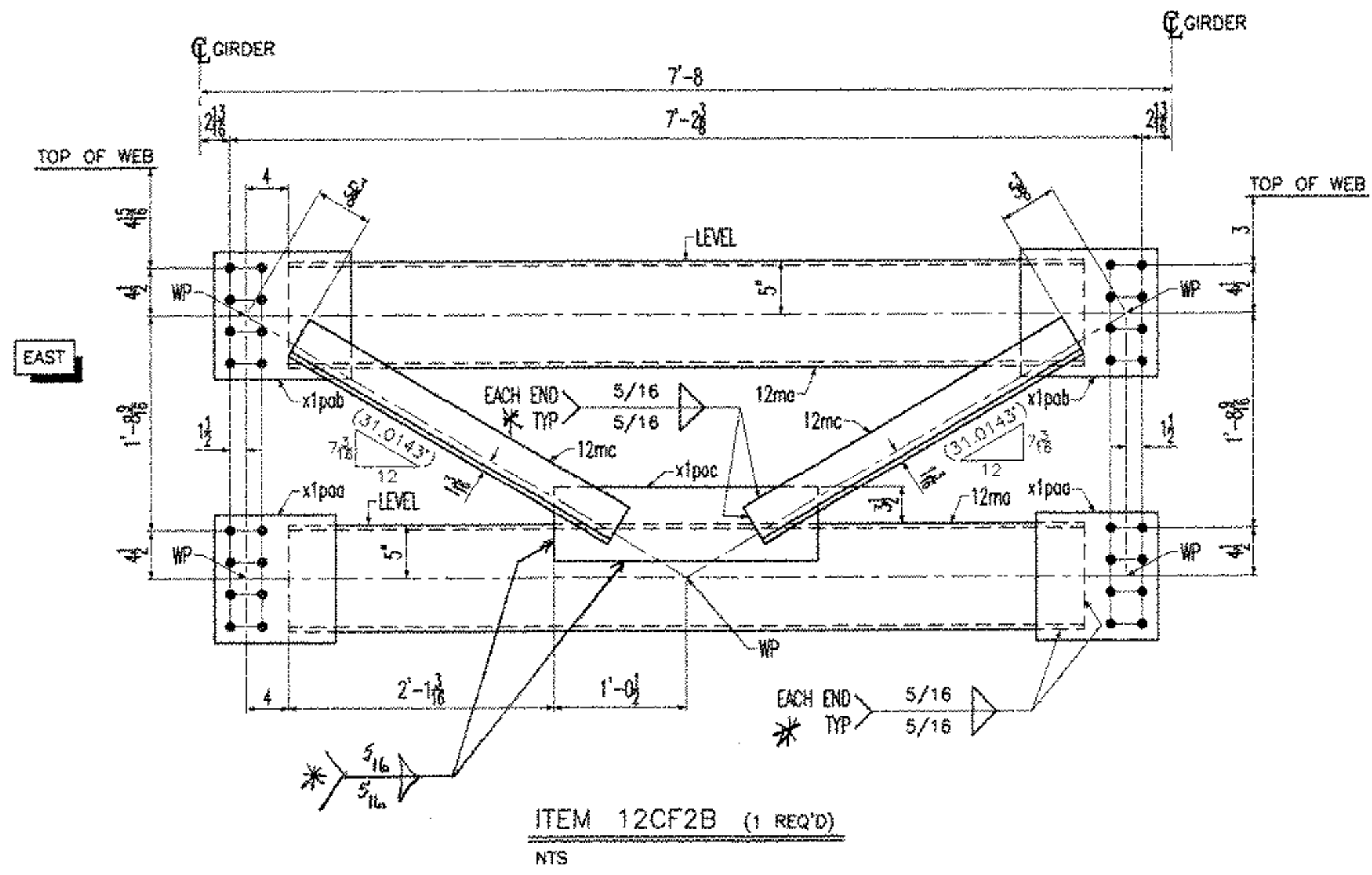
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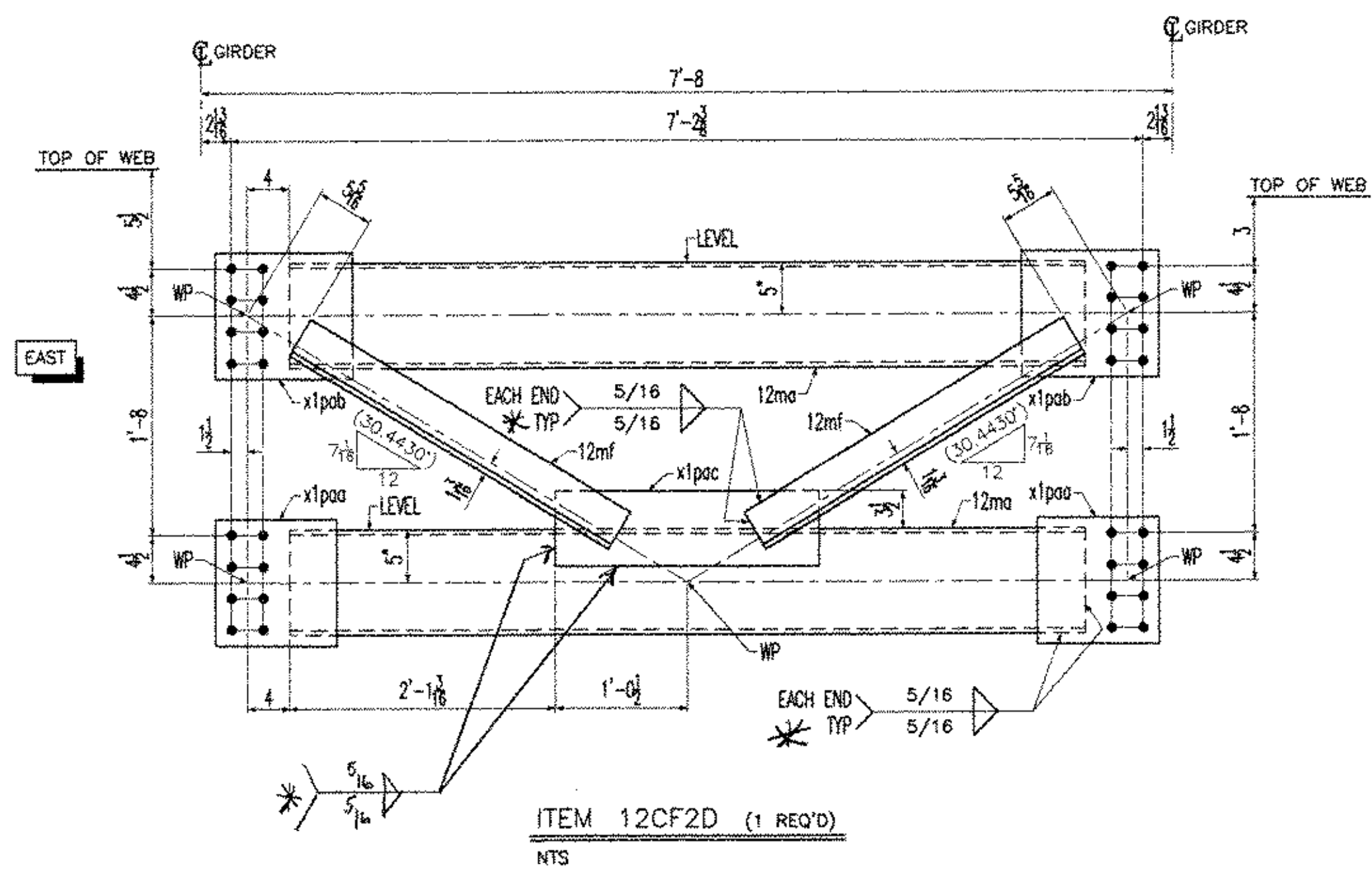
EASTERN BRIDGE LL  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603 542 5200

10255



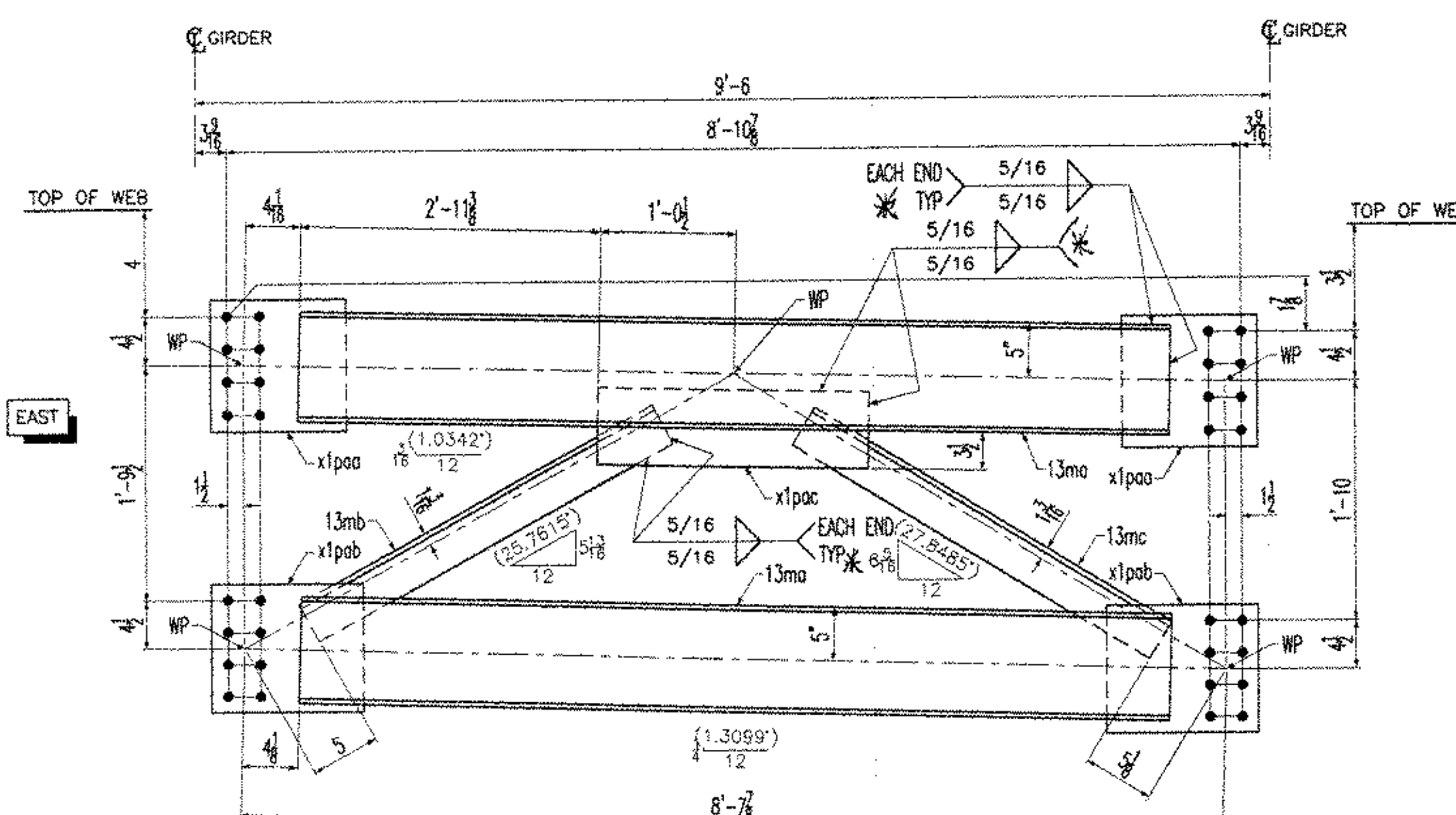


|              |                  |
|--------------|------------------|
| TOTAL WEIGHT | 2744             |
| -CUTS        |                  |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD        | 42               |
| NET TOTAL    | 2786             |

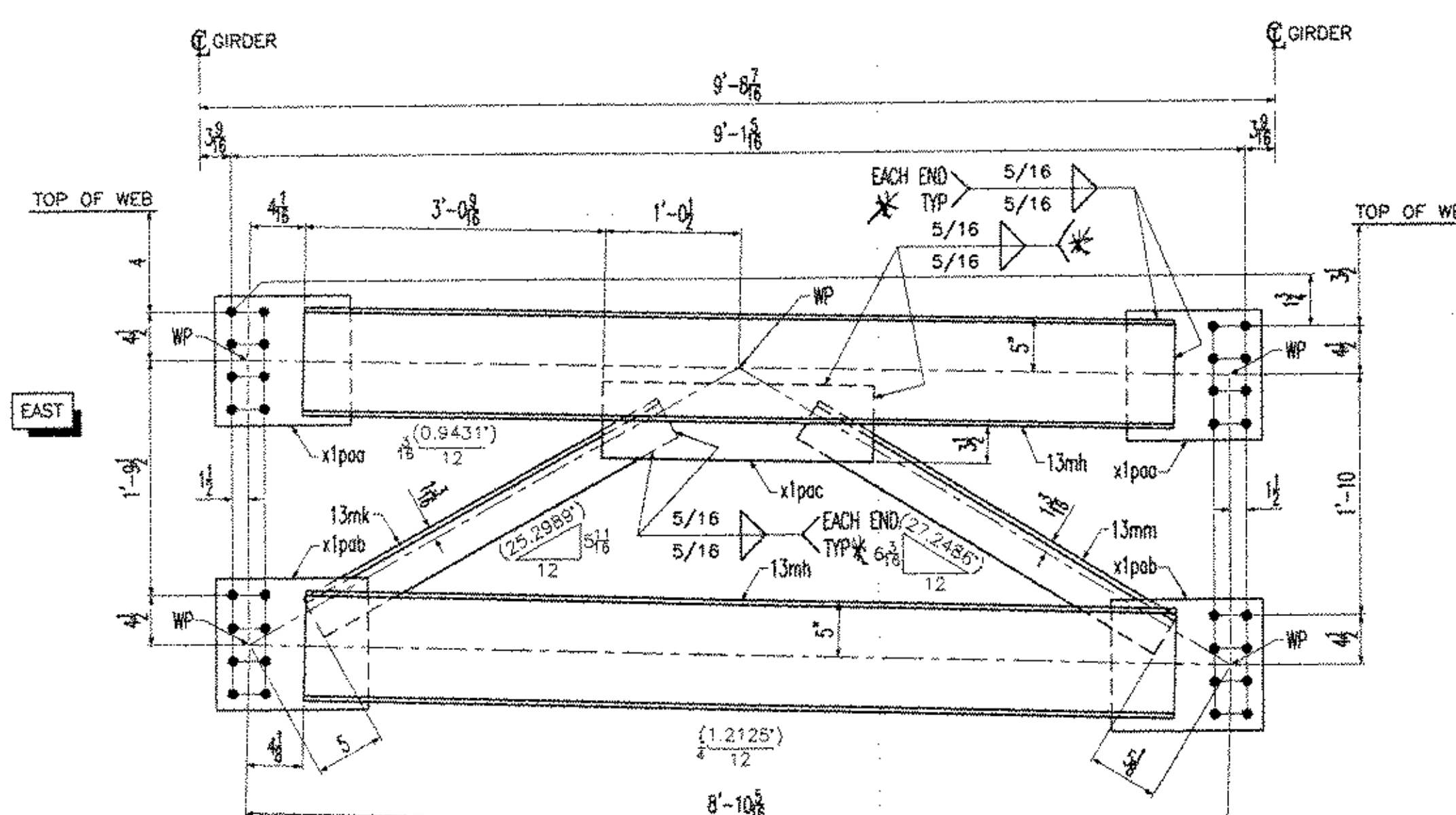


10355

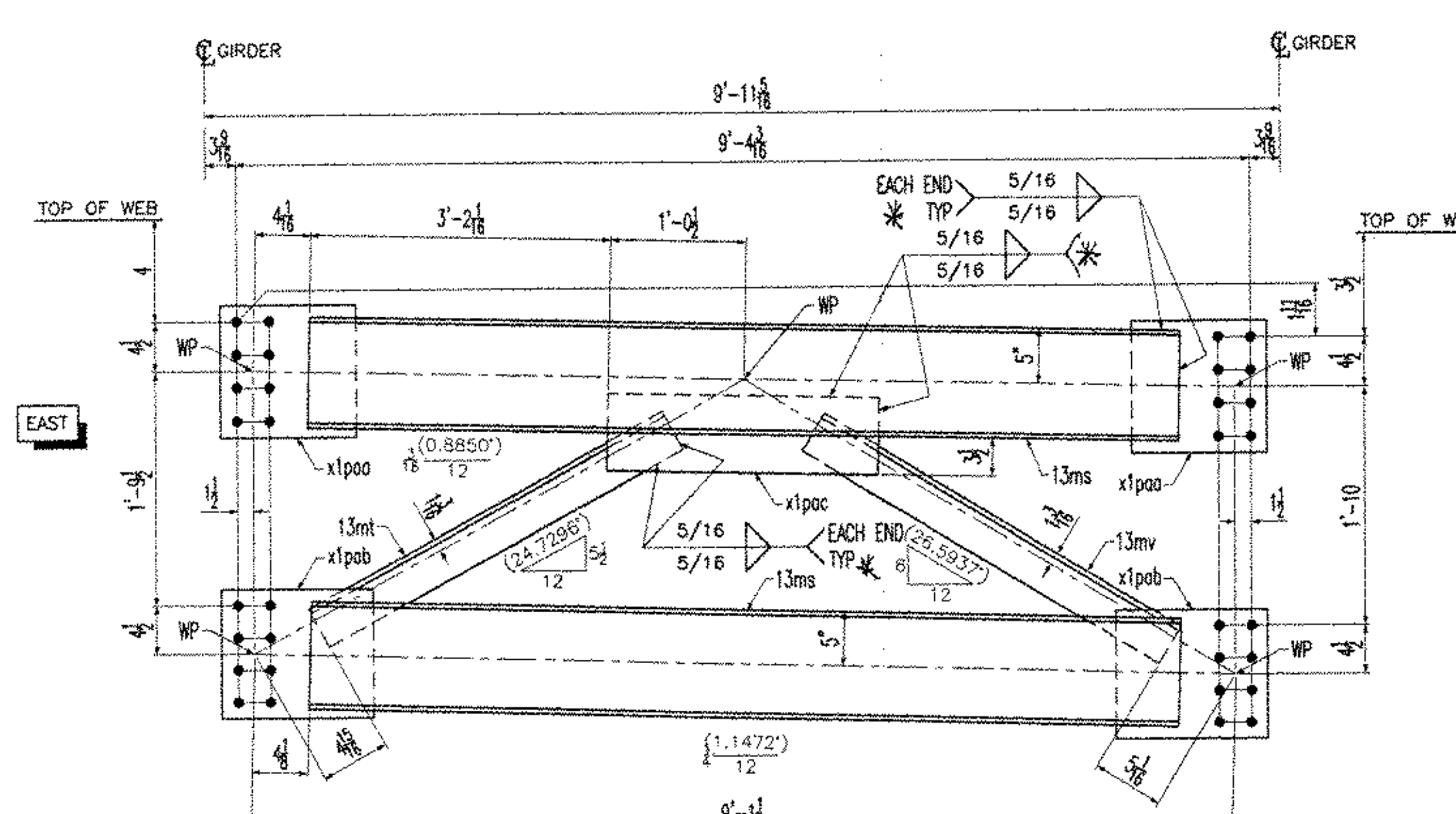




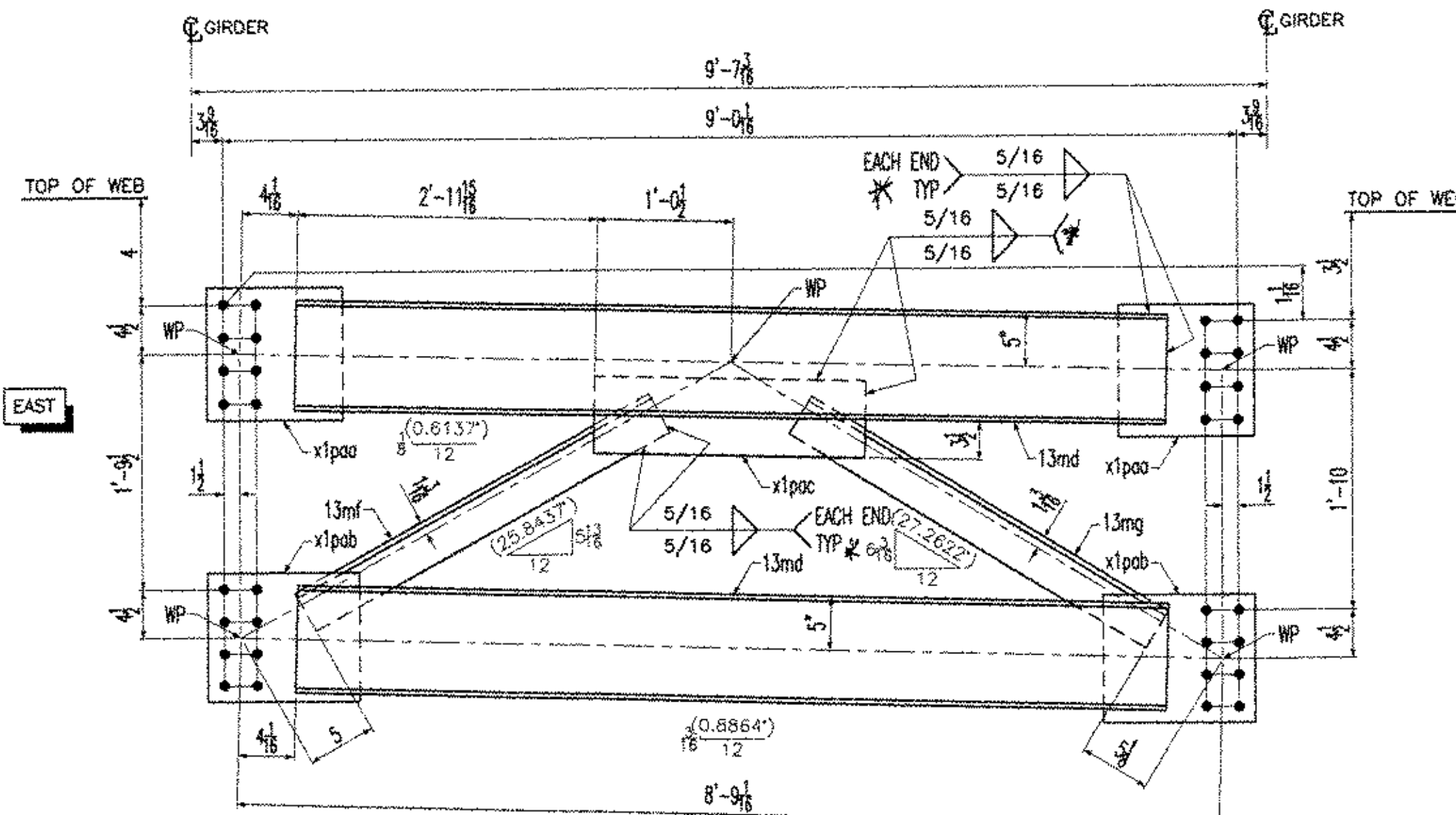
ITEM 13CF1A (1 REQ'D)  
NTS



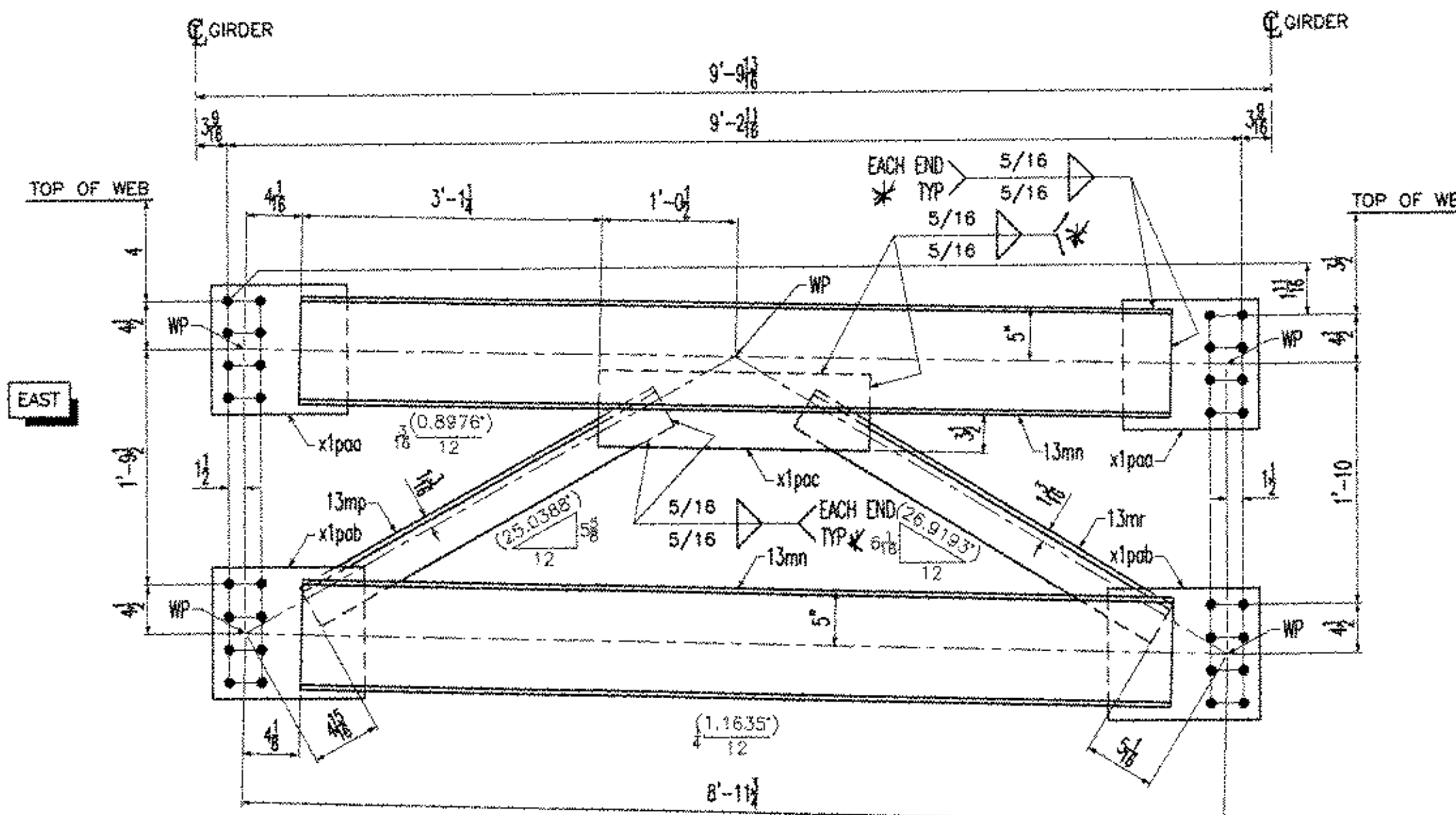
ITEM 13CF1C (1 REQ'D)  
NTS



ITEM 13CF1E (1 REQ'D)  
NTS



ITEM 13CF1B (1 REQ'D)  
NTS



ITEM 13CF1D (1 REQ'D)  
NTS

\* ALL CROSSFRAME FILLET WELDS:  
WPS 10-1 & 20-03

| Drawing Number | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade       | Length      | Weight | Finish | Notes |
|----------------|-----------------|-----------|------------|-----|------------------|------------------|-------------|-------------|--------|--------|-------|
| 13             |                 | 13CF1A    | 13ma       | 2   | C Channels       | 10x20            | M270M-GR50W | 7'-11 11/16 | 319    | (CVN)  | 20    |
| 13             |                 | 13CF1A    | 13mb       | 2   | C Channels       | 4x4x1/2          | M270M-GR50W | 3'-8 5/8    | 47     | (CVN)  | 17    |
| 13             |                 | 13CF1A    | 13mc       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-9 9/16   | 48     | (CVN)  | 17    |
| 13             |                 | 13CF1A    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 13             |                 | 13CF1A    | x1pac      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 13             |                 | 13CF1A    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 13             |                 | 13CF1B    | 13md       | 2   | C Channels       | 10x20            | M270M-GR50W | 8'-0 15/16  | 323    | (CVN)  | 20    |
| 13             |                 | 13CF1B    | 13mf       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-9 5/16   | 48     | (CVN)  | 17    |
| 13             |                 | 13CF1B    | 13mg       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-10       | 49     | (CVN)  | 17    |
| 13             |                 | 13CF1B    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 13             |                 | 13CF1B    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 13             |                 | 13CF1B    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 13             |                 | 13CF1C    | 13mh       | 2   | C Channels       | 10x20            | M270M-GR50W | 8'-2 3/16   | 327    | (CVN)  | 20    |
| 13             |                 | 13CF1C    | 13mk       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-9 13/16  | 48     | (CVN)  | 17    |
| 13             |                 | 13CF1C    | 13mm       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-10 11/16 | 49     | (CVN)  | 17    |
| 13             |                 | 13CF1C    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 13             |                 | 13CF1C    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 13             |                 | 13CF1C    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 13             |                 | 13CF1D    | 13mn       | 2   | C Channels       | 10x20            | M270M-GR50W | 8'-3 9/16   | 332    | (CVN)  | 20    |
| 13             |                 | 13CF1D    | 13mp       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-10 1/2   | 49     | (CVN)  | 17    |
| 13             |                 | 13CF1D    | 13mr       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-11 5/16  | 50     | (CVN)  | 17    |
| 13             |                 | 13CF1D    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 13             |                 | 13CF1D    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 13             |                 | 13CF1D    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |
| 13             |                 | 13CF1E    | 13ms       | 2   | C Channels       | 10x20            | M270M-GR50W | 8'-5 1/8    | 337    | (CVN)  | 20    |
| 13             |                 | 13CF1E    | 13mt       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 3'-11 3/16  | 50     | (CVN)  | 17    |
| 13             |                 | 13CF1E    | 13mv       | 1   | L Angles         | 4x4x1/2          | M270M-GR50W | 4'-0        | 51     | (CVN)  | 17    |
| 13             |                 | 13CF1E    | x1paa      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 0'-11 1/2   | 20     | (CVN)  | 14    |
| 13             |                 | 13CF1E    | x1pab      | 2   | PL Plate         | 1/2x12           | M270M-GR50W | 1'-1        | 22     | (CVN)  | 14    |
| 13             |                 | 13CF1E    | x1pac      | 1   | PL Plate         | 1/2x7            | M270M-GR50W | 2'-1        | 25     | (CVN)  | 13    |

|               |                  |
|---------------|------------------|
| TOTAL WEIGHT  | 2462             |
| - CUTS        |                  |
| + FIELD BOLTS | REFER TO 'E' DWG |
| + WELD        | 30               |
| NET TOTAL     | 2492             |

NOTES:  
1- GENERAL NOTES: SEE DRAWING GNT  
2- HOLES : 15/16" (U.N.O.)

☒ Revised  
☐ Rejected  
☐ Furnish as Corroded  
☐ Revised and Rejected  
☐ Submit Specified to 11

This drawing is for general information only. The user is responsible for the accuracy of the information. The user is responsible for the accuracy of the information. The user is responsible for the accuracy of the information.

Date: 12-17-03  
 By: RSW

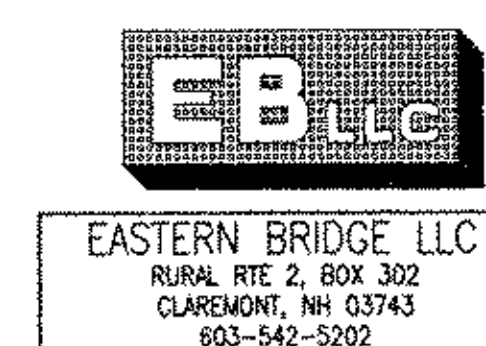
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR |
|-----|----------|------------------------------------|-----|------|-----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |     |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
 LOCATION: CHESTER, VERMONT  
 ENGINEER: McFARLAND-JOHNSON, INC.  
 CUSTOMER: EASTERN BRIDGE LLC  
 DRAWING TITLE: ABUTMENT CROSS FRAMES  
 DRAWN BY: D.B. 10/31/03 JOB  
 CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: 13

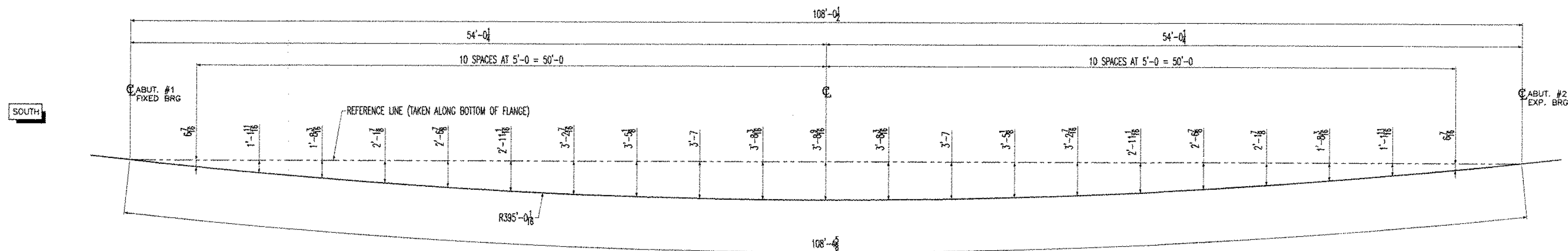
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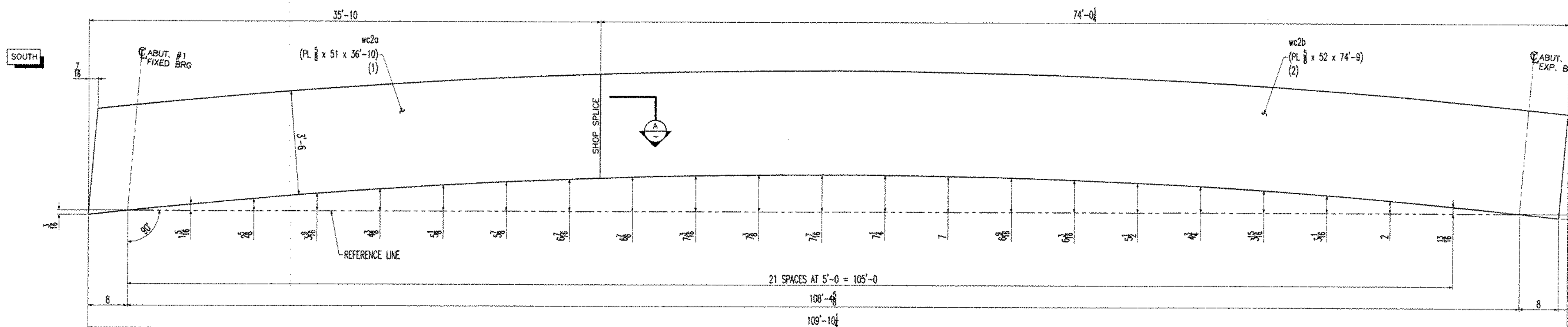




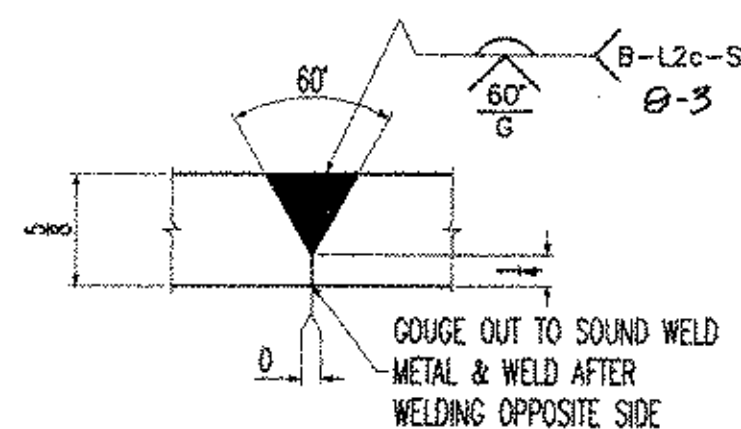




HORIZONTAL CURVE DIAGRAM FOR 2G2A (1 REQ'D)  
NTS



CAMBER DIAGRAM FOR GIRDER 2G2A (1 REQ'D)  
NTS



SECTION A-A  
NTS

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)

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

This drawing is only for general reference with the design concept and the information shown in the Construction Documents. Corrections or additions made on this drawing during the construction process do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a drawing shall not constitute approval of the assembly of which the item is a component. The Contractor is responsible for the construction of the project. Information and materials used in the fabrication process or in the erection, installation, completion, and operation of the project shall be the responsibility of the Contractor. The Contractor shall be responsible for the safety and satisfaction of the project.

McFarland-Johnson, Inc.

Date: 12-17-03

By: SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3

#030731-EAS

| REV | DATE     | DESCRIPTION                        |
|-----|----------|------------------------------------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |
| 2   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |

| QTY | DATE     | ISSUED TO                          | FOR      |
|-----|----------|------------------------------------|----------|
| 8   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |
| 8   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |



EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

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PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER

LOCATION: CHESTER, VERMONT

ENGINEER: MCFARLAND-JOHNSON, INC.

CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 2G2A

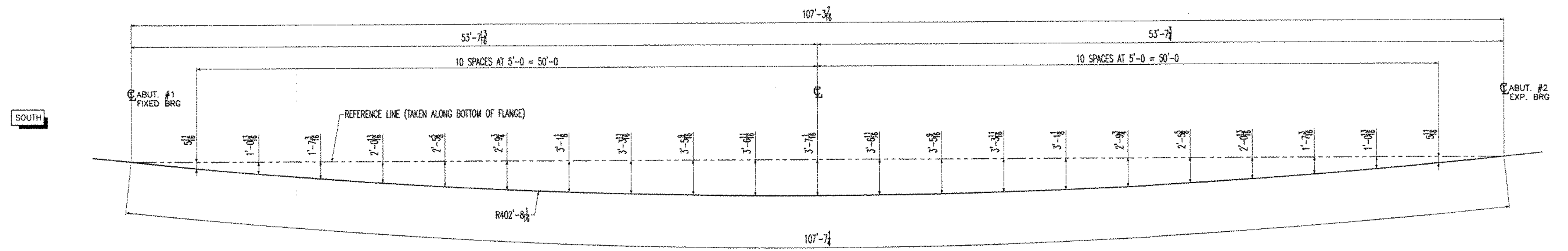
DRAWN BY: D.B. 10/22/03 JOB

CHECKED BY: L.D. 11/14/03 NUMBER: 4065

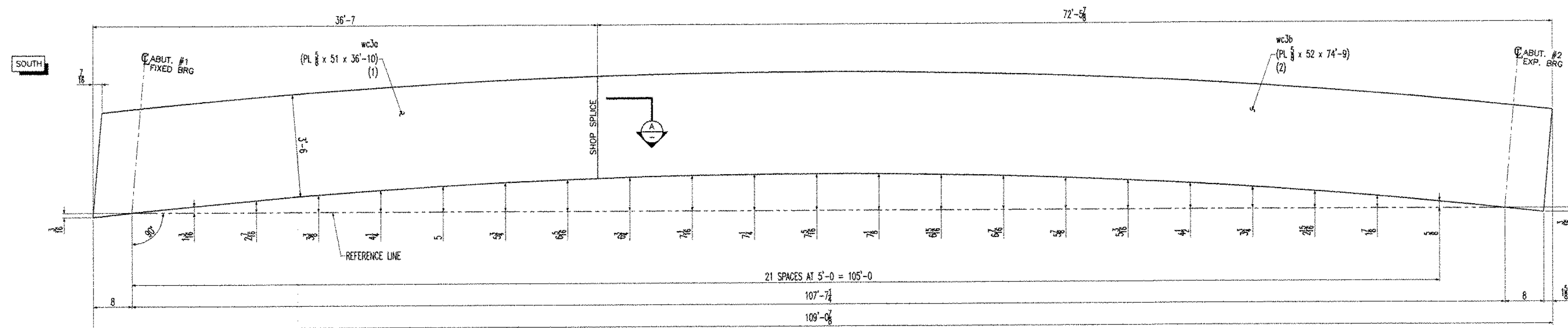
SHEET  
NUMBER: WC2

106 55

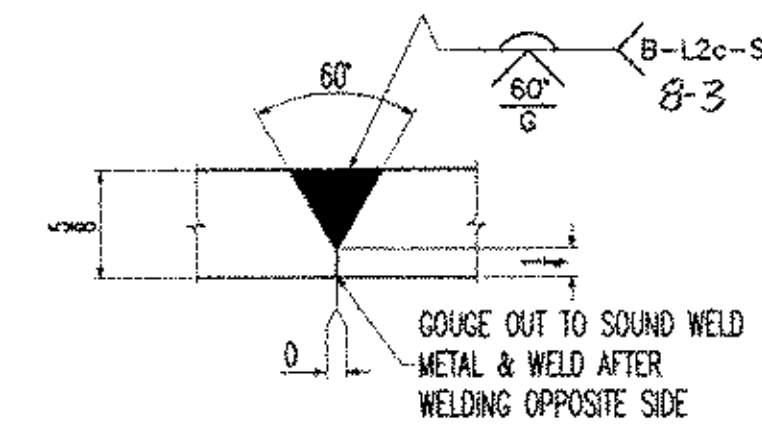




HORIZONTAL CURVE DIAGRAM FOR 3G3A (1 REQ'D)  
NTS



CAMBER DIAGRAM FOR GIRDER 3G3A (1 REQ'D)  
NTS



SECTION A-A  
NTS

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NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16\"/>

|                                              |                                               |
|----------------------------------------------|-----------------------------------------------|
| <input checked="" type="checkbox"/> Reviewed | <input type="checkbox"/> Furnish as Corrected |
| <input type="checkbox"/> Rejected            | <input type="checkbox"/> Revise and Resubmit  |
| <input type="checkbox"/> Submit Spacing Item |                                               |

This drawing is only for general reference with the design and shall not be used for construction. Corrections of errors shall be made on the shop drawing. The reviewer shall not be responsible for the accuracy of the information provided on this drawing. The reviewer shall not be responsible for the accuracy of the information provided on this drawing. The reviewer shall not be responsible for the accuracy of the information provided on this drawing.

By: SFD Date: 12-17-03

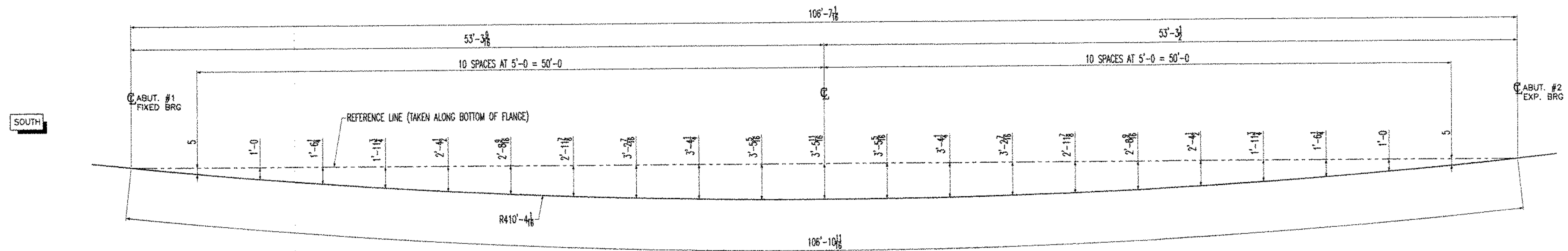
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

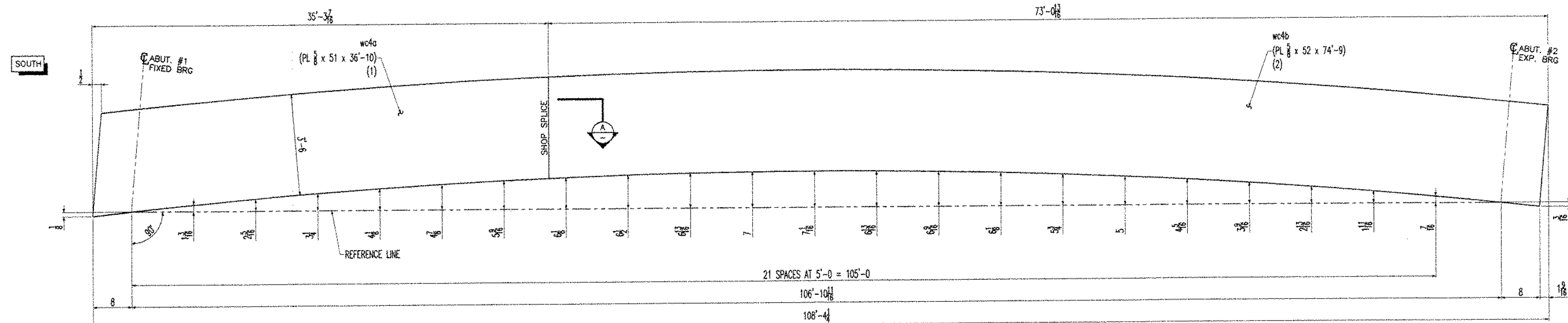
| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR |
|-----|----------|------------------------------------|-----|------|-----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |     |
|     |          |                                    |     |      |           |     |
|     |          |                                    |     |      |           |     |
|     |          |                                    |     |      |           |     |

|                                                       |                   |
|-------------------------------------------------------|-------------------|
| PROJECT: BRIDGE #12 VT 103-TN OVER WILLIAMS RIVER     |                   |
| LOCATION: CHESTER, VERMONT                            |                   |
| ENGINEER: McFARLAND-JOHNSON, INC.                     |                   |
| CUSTOMER: EASTERN BRIDGE LLC                          |                   |
| DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 3G3A |                   |
| DRAWN BY: D.B.                                        | 10/28/03          |
| CHECKED BY: L.D.                                      | 11/14/03          |
| NUMBER: 4065                                          | SHEET NUMBER: WC3 |

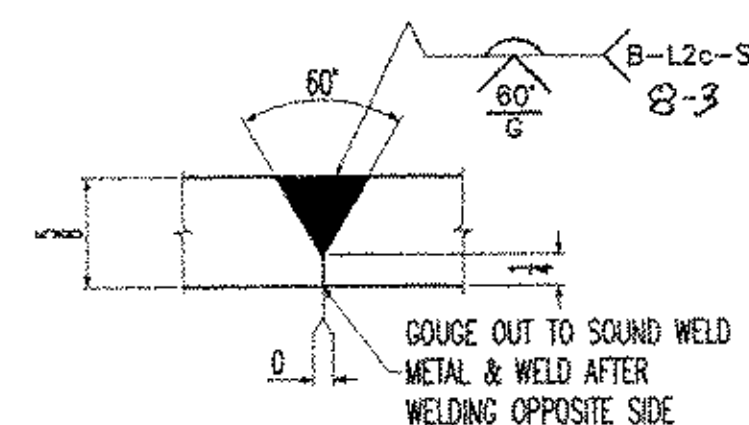




HORIZONTAL CURVE DIAGRAM FOR 4G4A (1 REQ'D)  
NTS



CAMBER DIAGRAM FOR GIRDER 4G4A (1 REQ'D)  
NTS



SECTION A-A  
NTS

NOTICE  
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16\"/>

☒ Reviewed  
☐ Rejected  
☐ Furnish as Corrected  
☐ Revise and Re-submit  
☐ Submit Specimen for Test

The user is only for general reference with the design engineer and the user shall not be held responsible for any errors or omissions on the part of the user. The user shall not be held responsible for any errors or omissions on the part of the user. The user shall not be held responsible for any errors or omissions on the part of the user.

McFarland-Johnson, Inc.  
Date: 12-17-03  
By: SFD

RESERVED FOR STAMPS

12/17/03  
12/17/03

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR      |
|-----|----------|------------------------------------|-----|------|-----------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL |
|     |          |                                    |     |      |           |          |
|     |          |                                    |     |      |           |          |
|     |          |                                    |     |      |           |          |



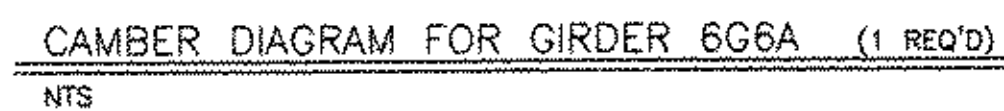
EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
803-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 4G4A  
DRAWN BY: D.B. 10/28/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET  
NUMBER: WC4







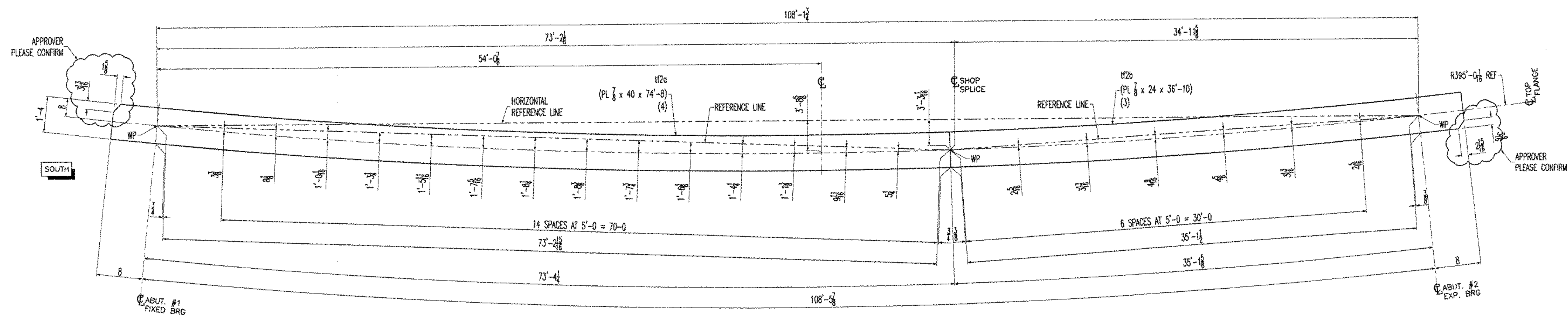


110 55

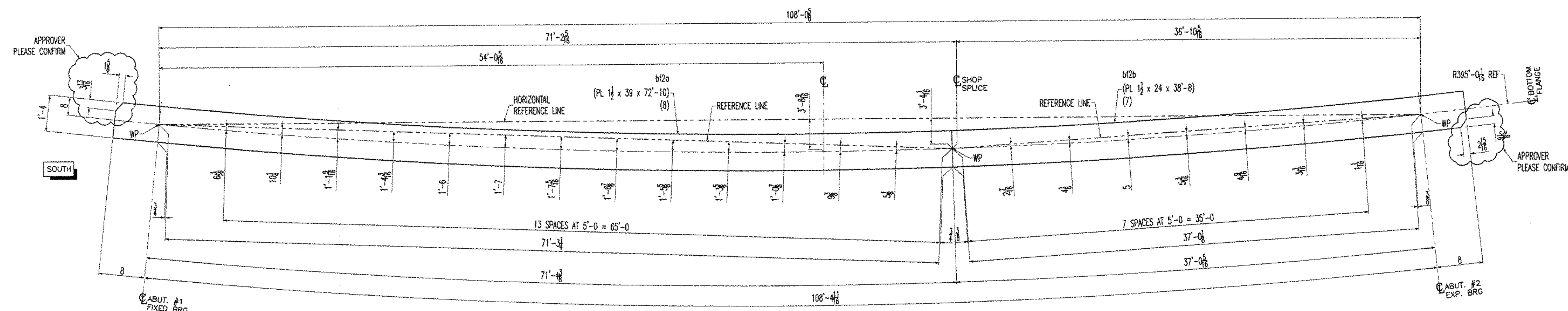




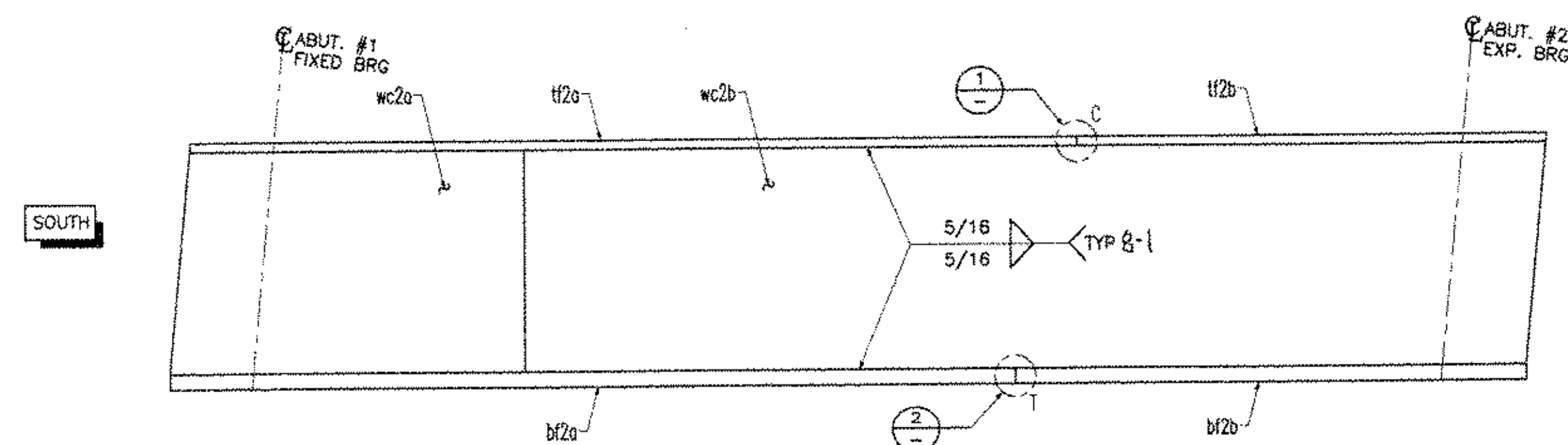




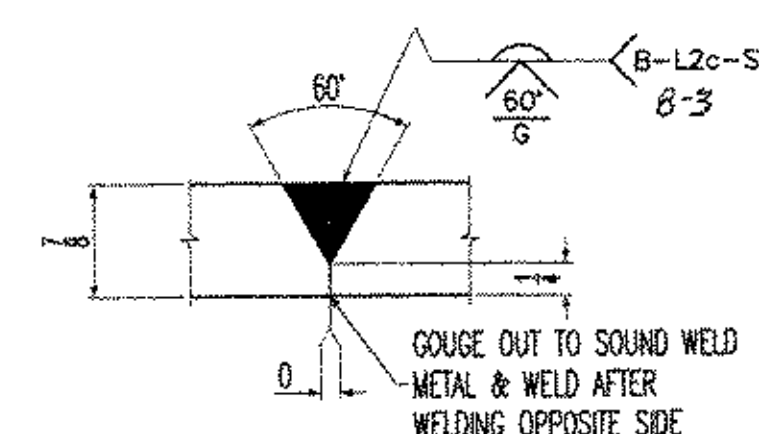
TOP FLANGE SPlicing DIAGRAM FOR GIRDER 2G2A (1 REQ'D)  
NTS



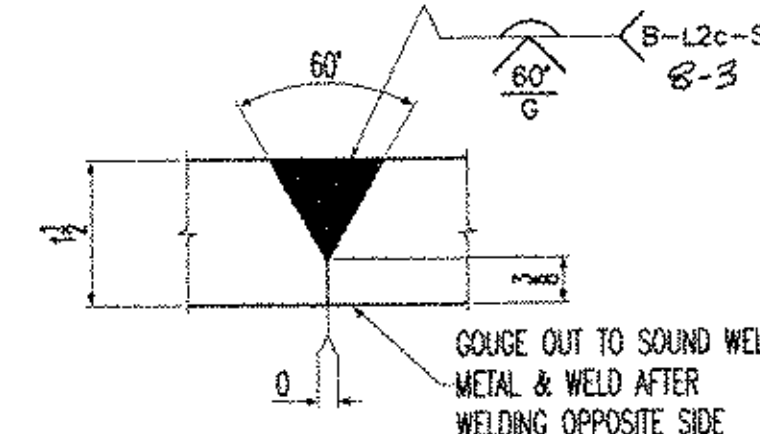
BOTTOM FLANGE SPlicing DIAGRAM FOR GIRDER 2G2A (1 REQ'D)  
NTS



FLANGE DIAGRAM FOR 2G2A (1 REQ'D)  
NTS



DETAIL 1  
NTS



DETAIL 2  
NTS

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- NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES : 15/16" (U.N.O.)  
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

Reviewed ☒ Revised ☐ Submit ☐  
Furnish as Connected ☐ Revise and Resubmit ☐ Submit ☐

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Date: 12-17-03  
By: SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

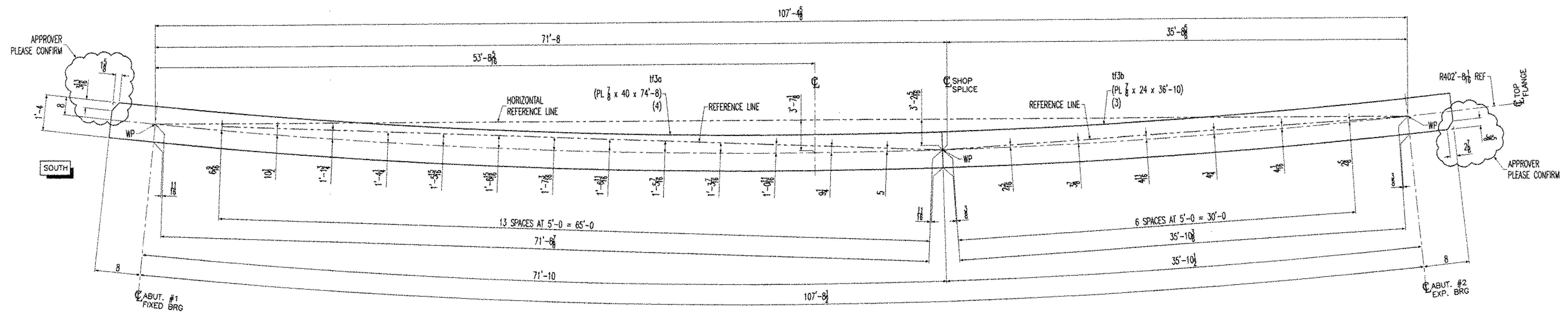
| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR               |
|-----|----------|------------------------------------|-----|------|-----------|-------------------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL          |
| 2   | 11/14/03 | NUMBER: 4065                       |     |      |           | SHEET NUMBER: FS2 |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: McFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: FLANGE SPlicing DIAGRAM FOR GIRDER 2G2A  
DRAWN BY: D.B. 10/22/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: FS2

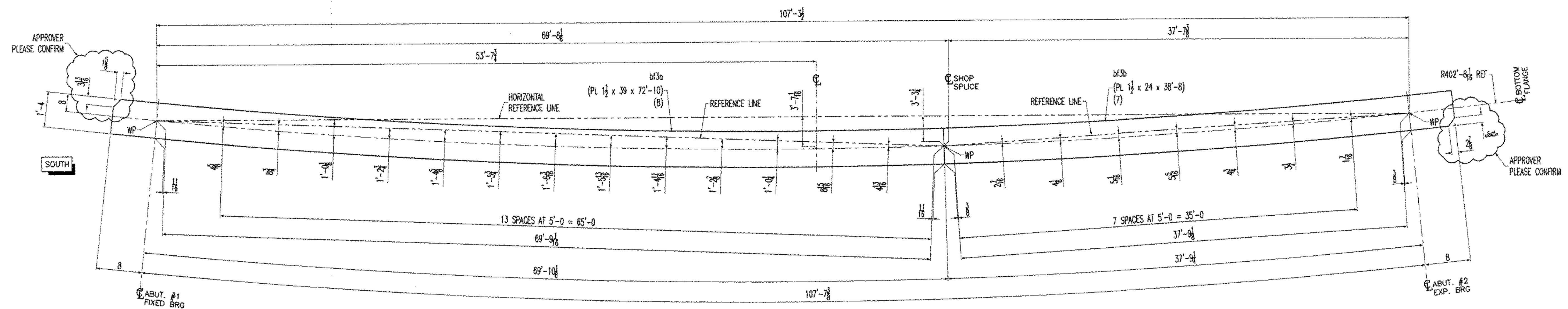


EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
803-542-5202

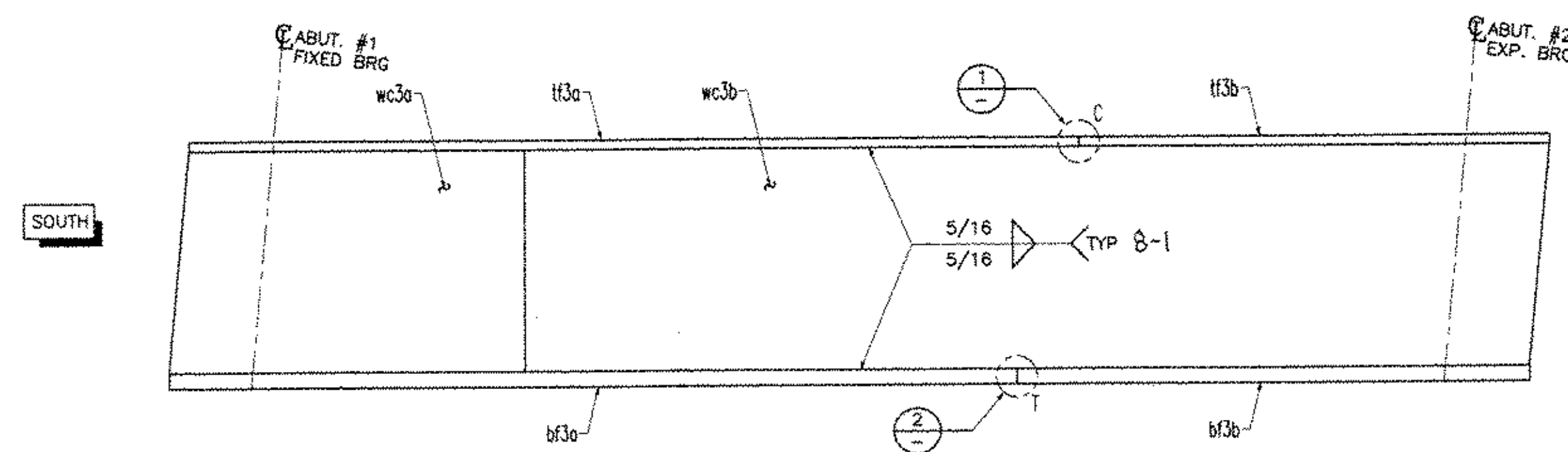




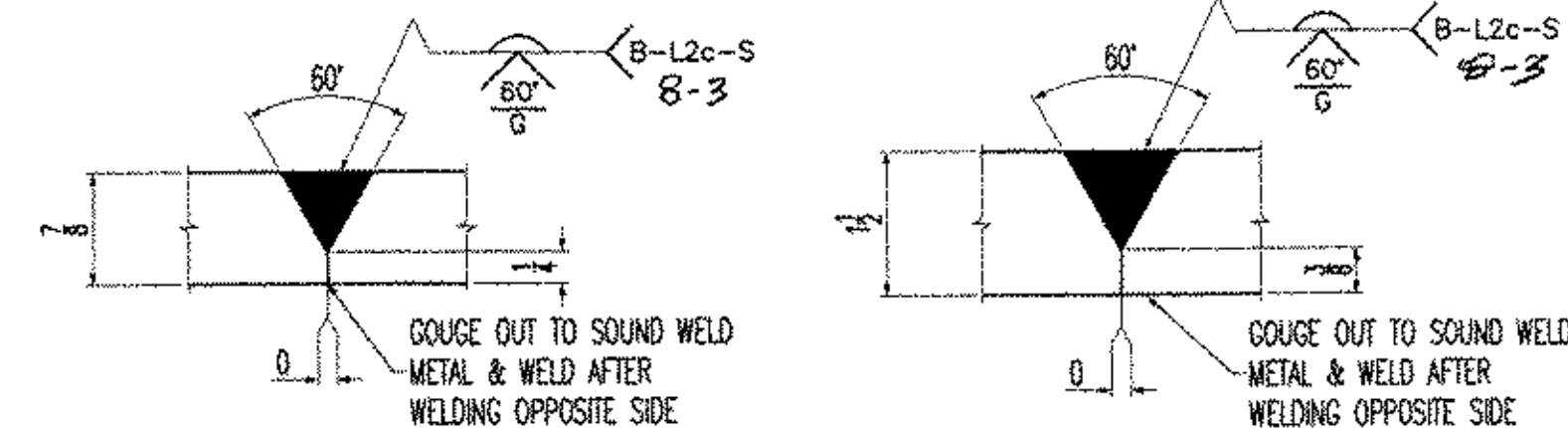
TOP FLANGE SPlicing DIAGRAM FOR GIRDER 3G3A (1 REQ'D)  
NTS



BOTTOM FLANGE SPlicing DIAGRAM FOR GIRDER 3G3A (1 REQ'D)  
NTS



FLANGE DIAGRAM FOR 3G3A (1 REQ'D)  
NTS



DETAIL 1  
NTS

DETAIL 2  
NTS

NOTICE  
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

- NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES: 15/16" (U.N.O.)  
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

Reviewed  
Rejected  
Furnish as Corrected  
Revise and Resubmit  
Submit Splice

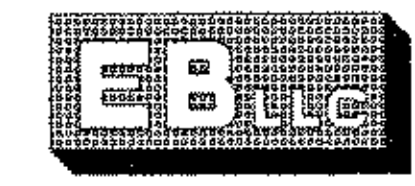
This drawing is for general construction with the exception of the information provided in the Construction Documents. Construction Documents shall be the sole authority for the design and construction of the project. The design and construction of the project shall not be based on the information provided in this drawing. The design and construction of the project shall be the responsibility of the contractor. The design and construction of the project shall be the responsibility of the contractor.

Date: 12-17-03  
By: SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR      |
|-----|----------|------------------------------------|-----|------|-----------|----------|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           | APPROVAL |



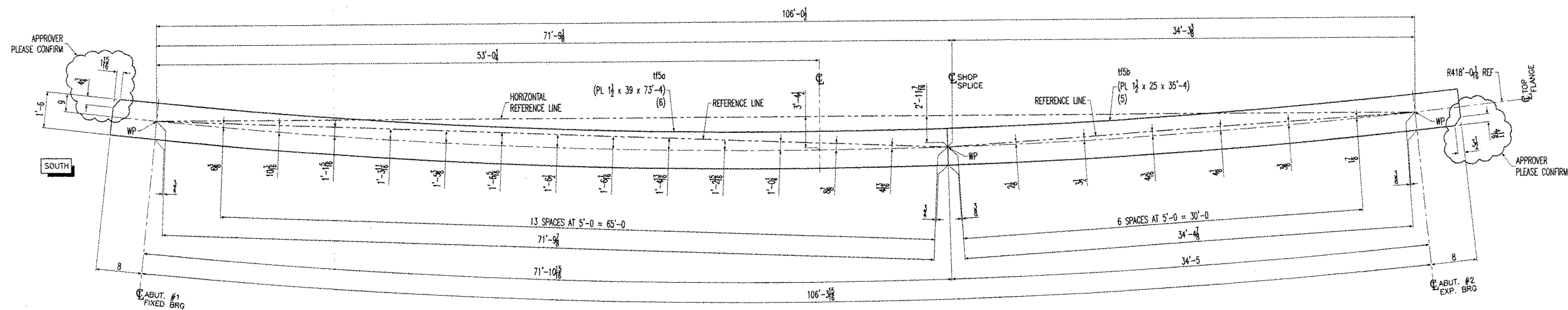
EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: FLANGE SPlicing DIAGRAM FOR GIRDER 3G3A  
DRAWN BY: D.B. 10/28/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: FS3

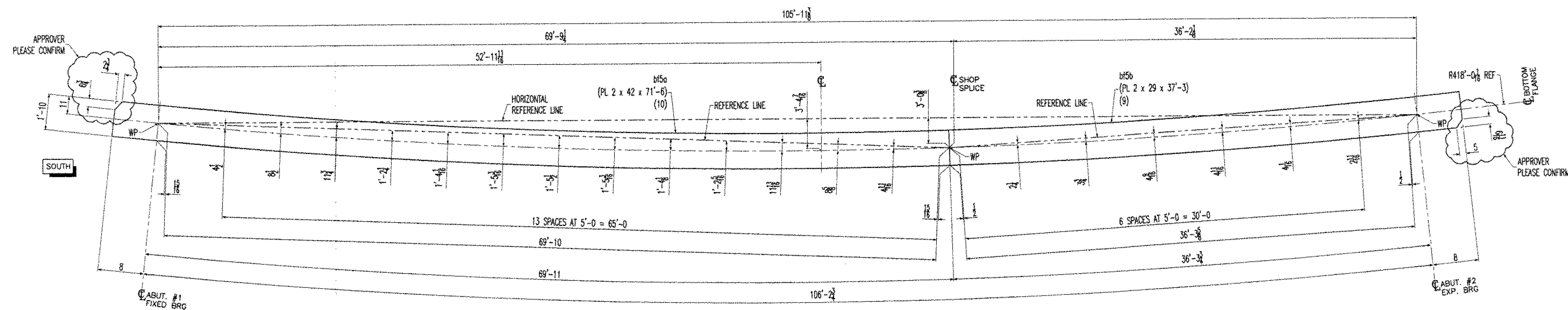




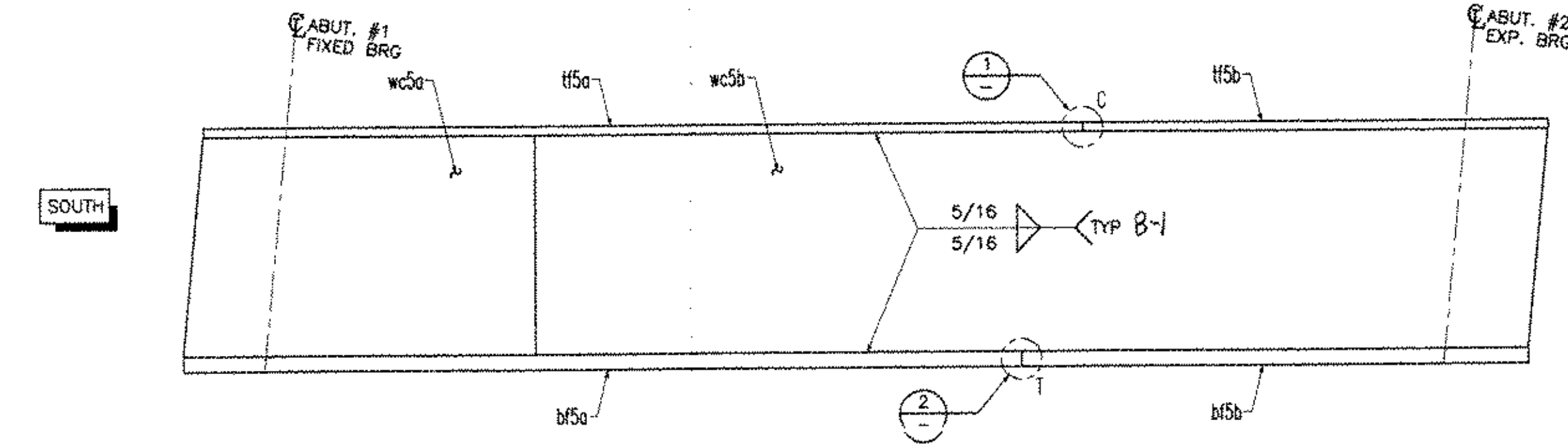




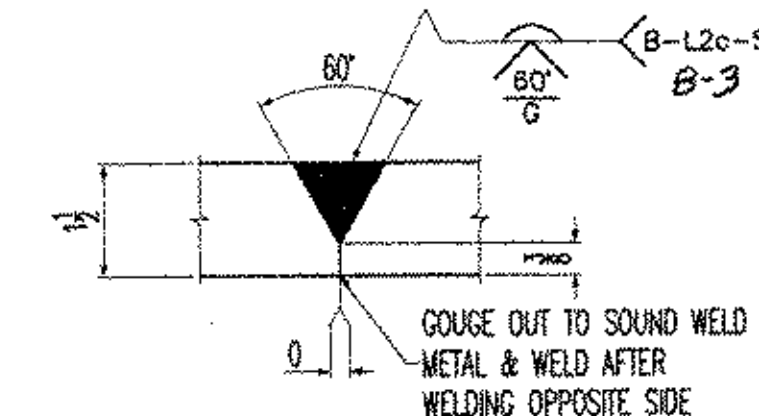
TOP FLANGE SPlicing DIAGRAM FOR GIRDER 5G5A (1 REQ'D)  
NTS



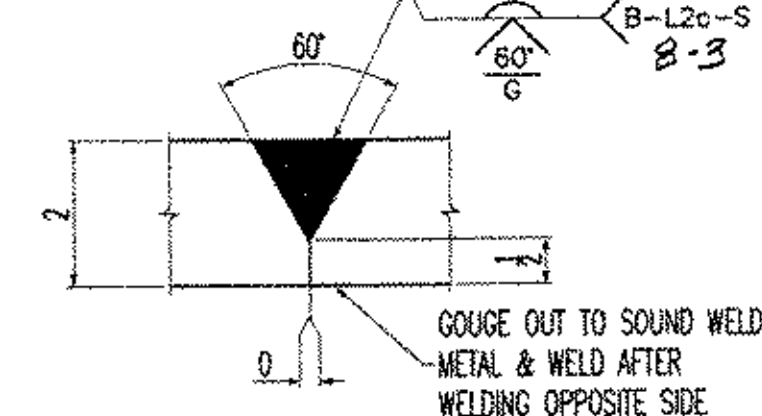
BOTTOM FLANGE SPlicing DIAGRAM FOR GIRDER 5G5A (1 REQ'D)  
NTS



FLANGE DIAGRAM FOR 5G5A (1 REQ'D)  
NTS



DETAIL 1  
NTS



DETAIL 2  
NTS

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- NOTES:  
1- GENERAL NOTES: SEE DRAWING 0N1  
2- HOLES: 15/16" (U.N.O.)  
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

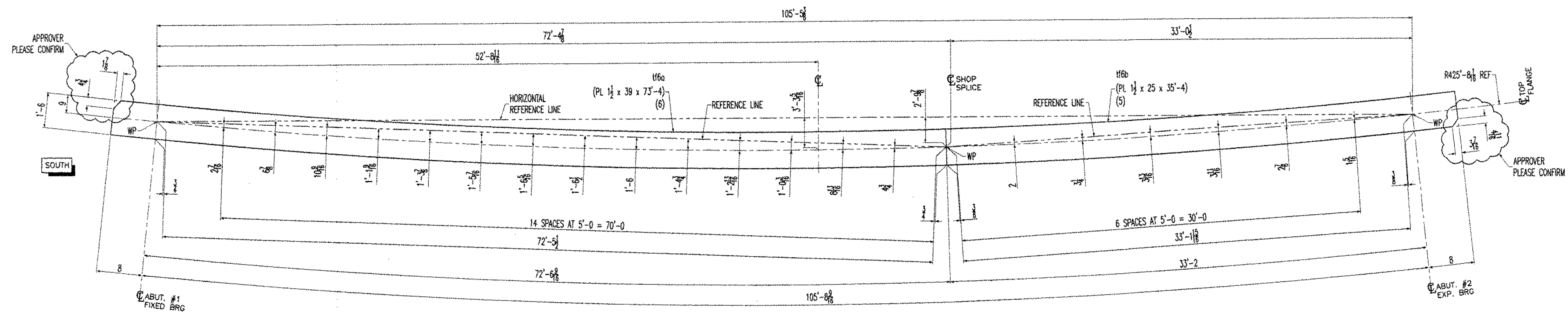
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|----------|---------|----------------------|-------------|
| Reviewed | Revised | Furnish as Connected | Revised and |
| 12-17-03 | SFD     | RESERVED FOR STAMPS  |             |

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

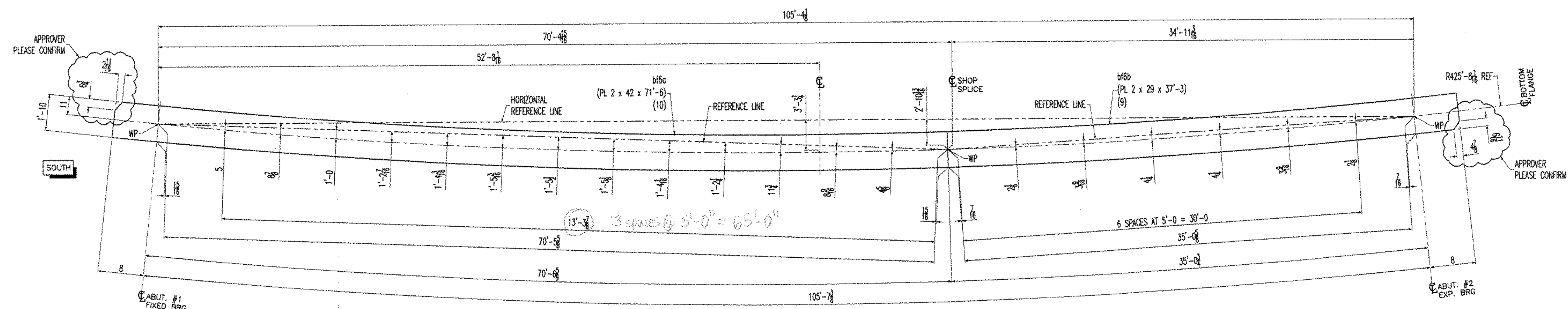
| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|----------|------------------------------------|-----|------|-----------|----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |          |     |

|                                                        |                            |                                   |                              |
|--------------------------------------------------------|----------------------------|-----------------------------------|------------------------------|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER      | LOCATION: CHESTER, VERMONT | ENGINEER: MCFARLAND-JOHNSON, INC. | CUSTOMER: EASTERN BRIDGE LLC |
| DRAWING TITLE: FLANGE SPlicing DIAGRAM FOR GIRDER 5G5A | DRAWN BY: D.B.             | 10/29/03                          | JOB                          |
| CHECKED BY: L.D.                                       | 11/14/03                   | NUMBER: 4065                      | SHEET NUMBER: F55            |





TOP FLANGE SPlicing DIAGRAM FOR GIRDER 6G6A (1 REQ'D)  
NTS



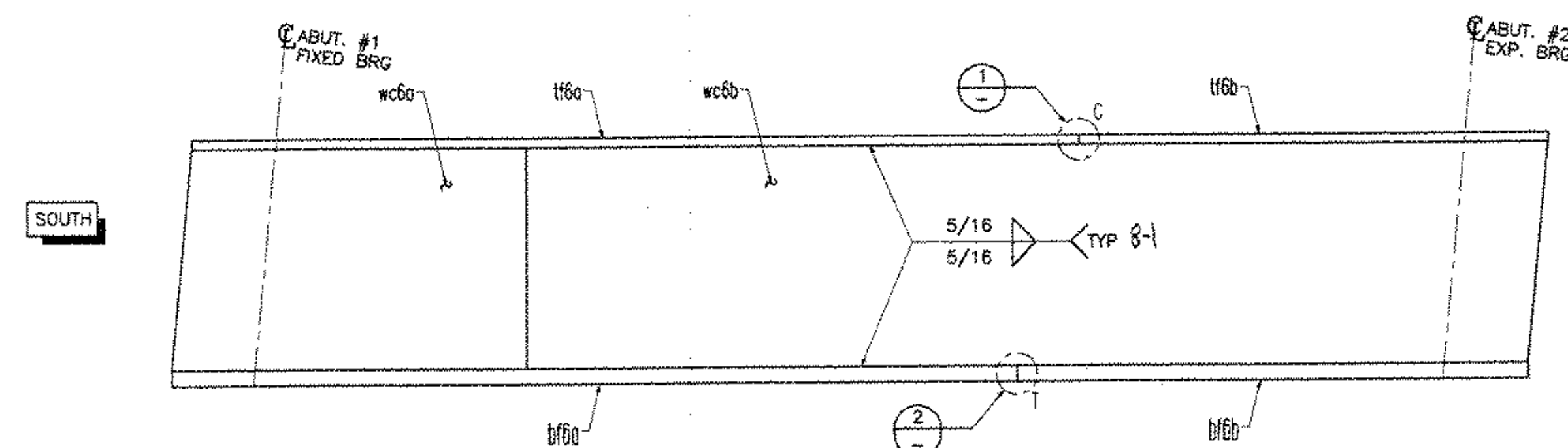
BOTTOM FLANGE SPlicing DIAGRAM FOR GIRDER 6G6A (1 REQ'D)  
NTS

NOTES:  
1- GENERAL NOTES: SEE DRAWING G01  
2- HOLES : 15/16 (U.N.O.)  
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

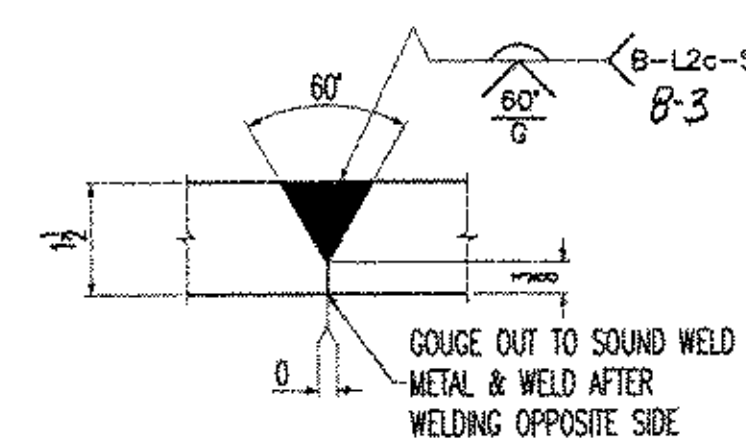
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|-----------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Reviewed | <input checked="" type="checkbox"/> Furnish as Corrected |
| <input type="checkbox"/> Rejected | <input type="checkbox"/> Revise and Resubmit             |
|                                   | <input type="checkbox"/> Submit Specimen                 |

This report is for general information only. It does not constitute a contract. The information provided is for the use of the client and is not to be used for any other purpose. The client is responsible for the accuracy of the information provided and for the results of the work performed. The client is also responsible for the safety of the work performed and for the results of the work performed.

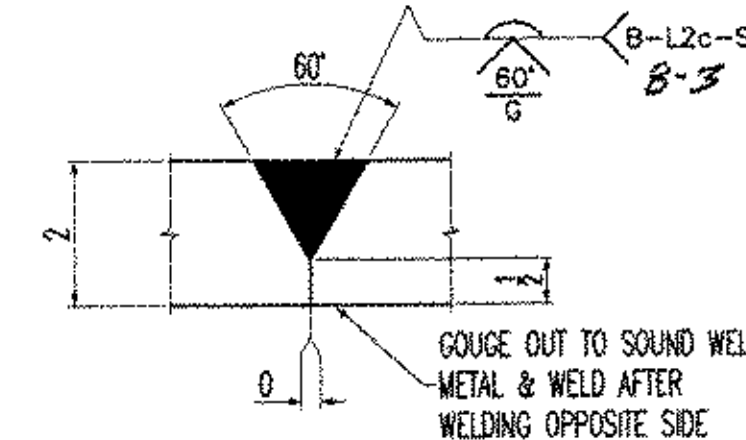
McFarland-Johnson, Inc.  
Date: 12-17-03  
By: SFD  
RESERVED FOR STAMPS



FLANGE DIAGRAM FOR 6G6A (1 REQ'D)  
NTS



DETAIL 1  
NTS



DETAIL 2  
NTS

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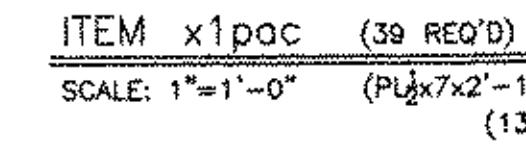
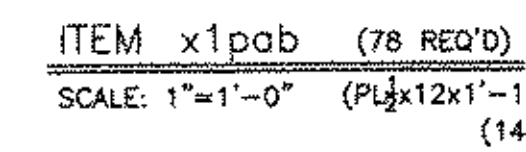
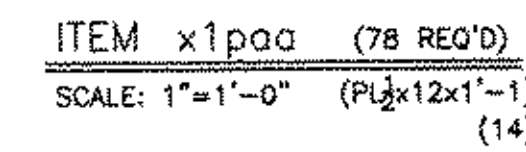
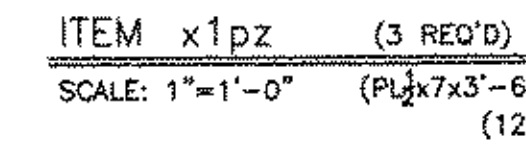
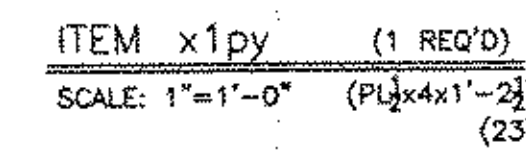
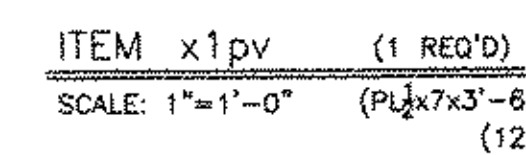
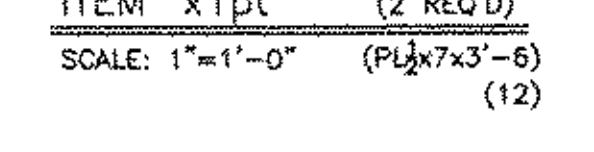
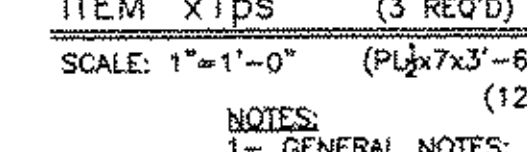
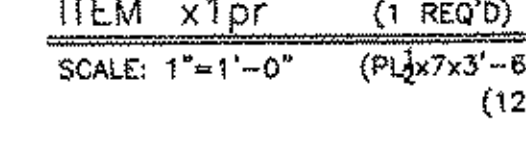
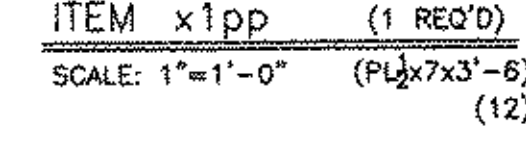
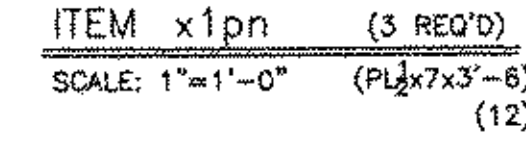
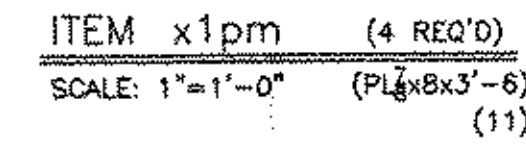
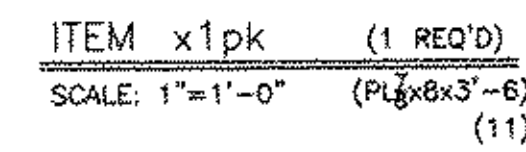
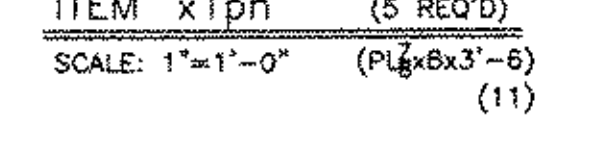
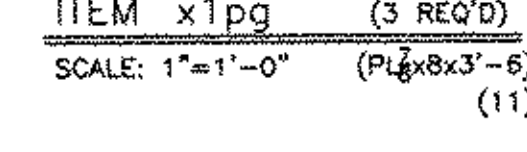
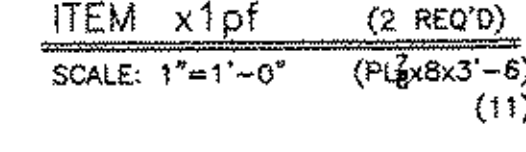
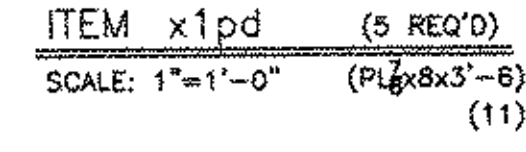
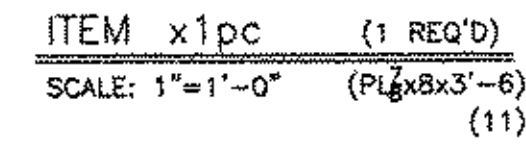
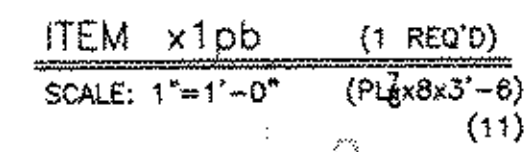
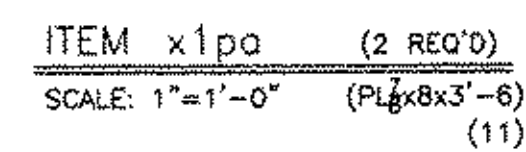
DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | FOR |
|-----|----------|------------------------------------|-----|------|-----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |     |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: McFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: FLANGE SPlicing DIAGRAM FOR GIRDER 6G6A  
DRAWN BY: D.B. 10/29/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065 SHEET NUMBER: FS6

EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202





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030731-EAS

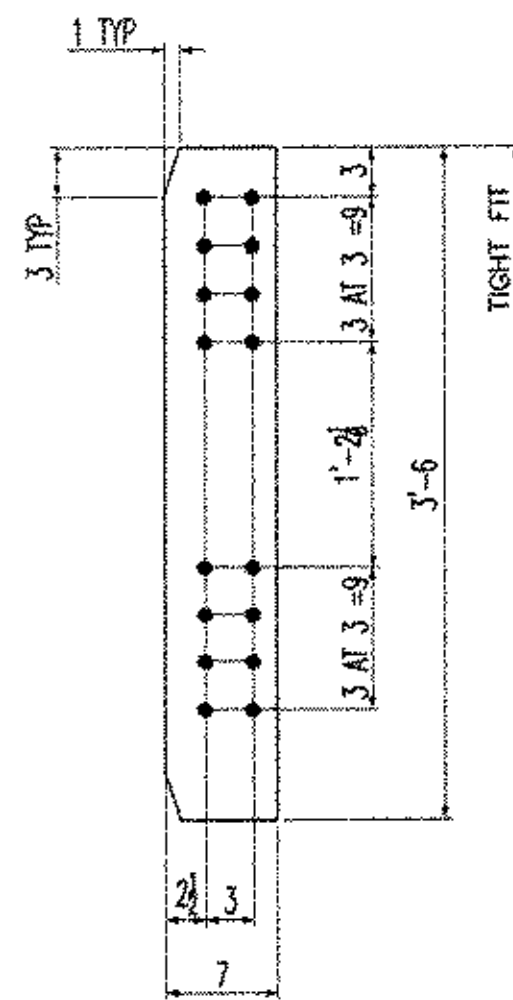
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|     |          |                                    |          |
| 81  | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |
| QTY | DATE     | ISSUED TO                          | FOR      |

EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

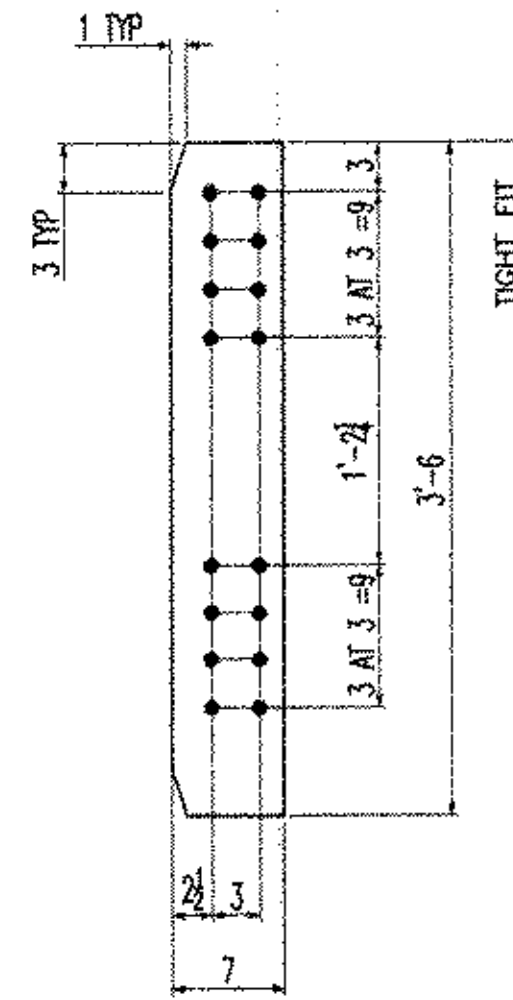
SHEET  
NUMBER: X1

11735

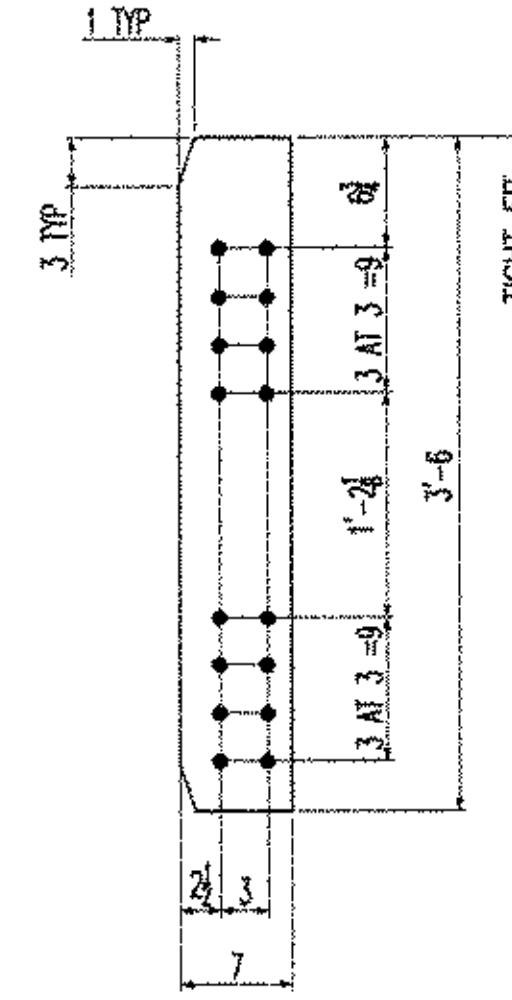




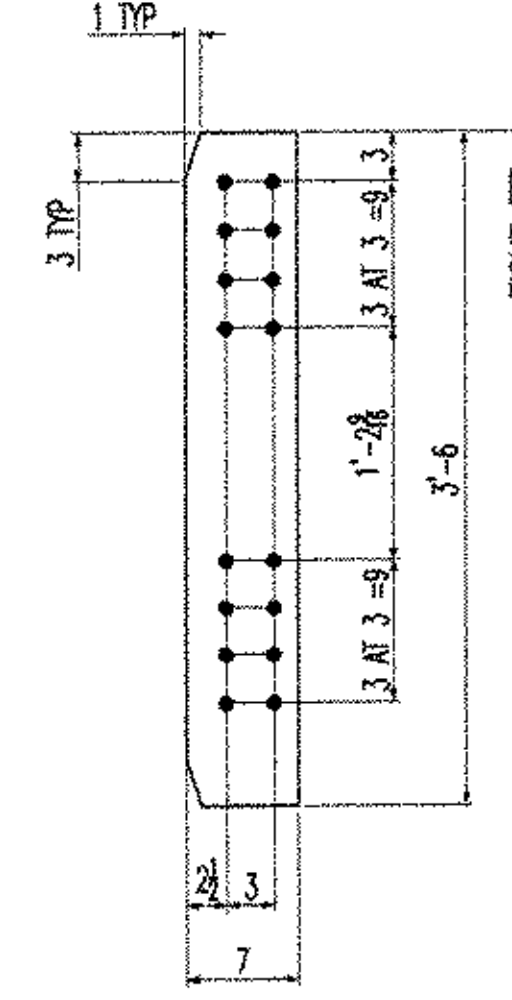
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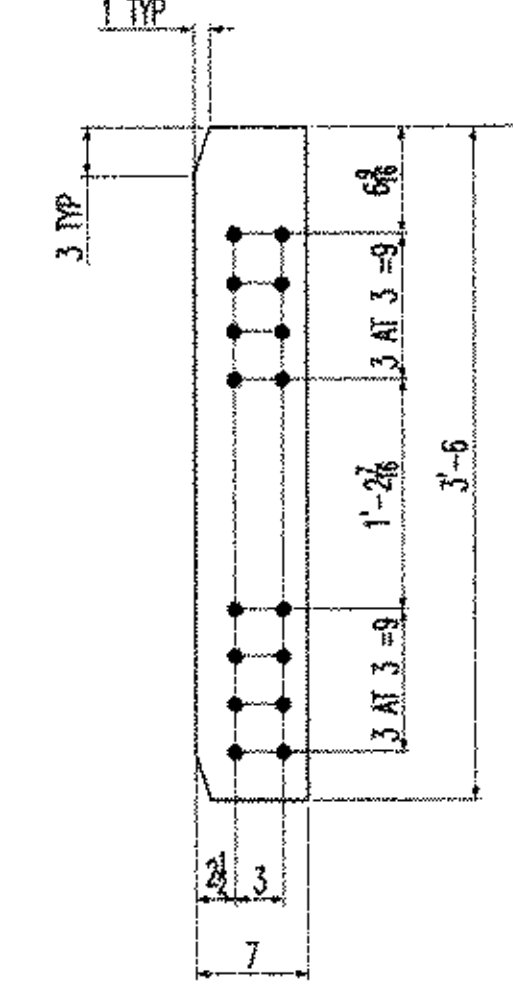
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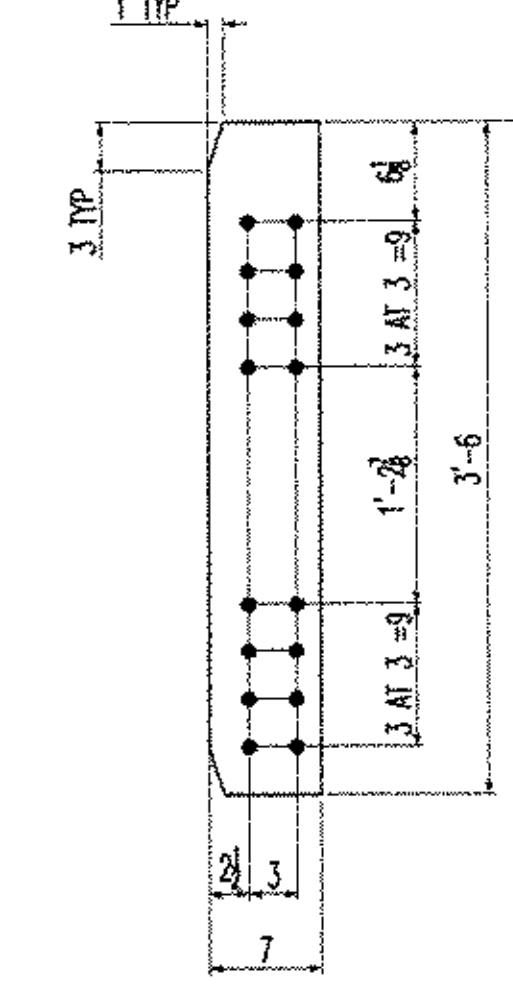
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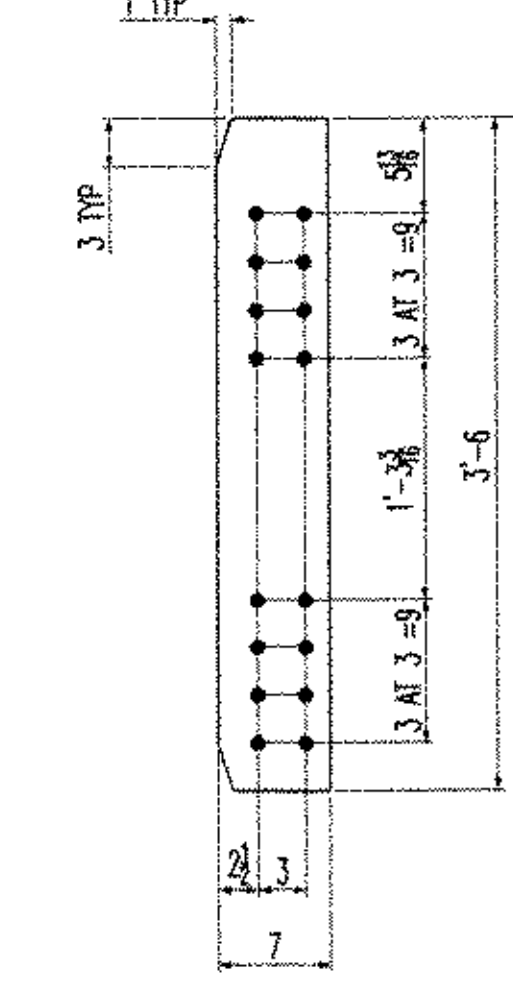
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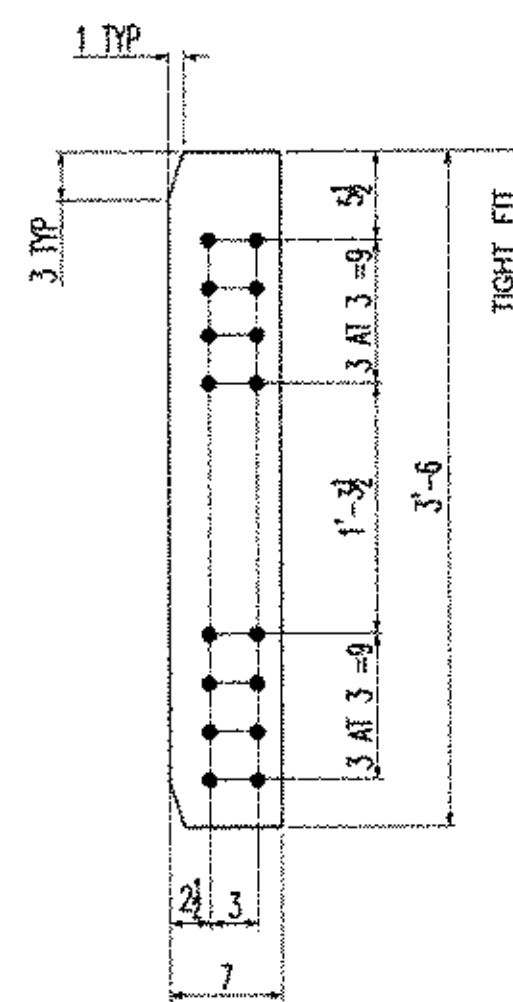
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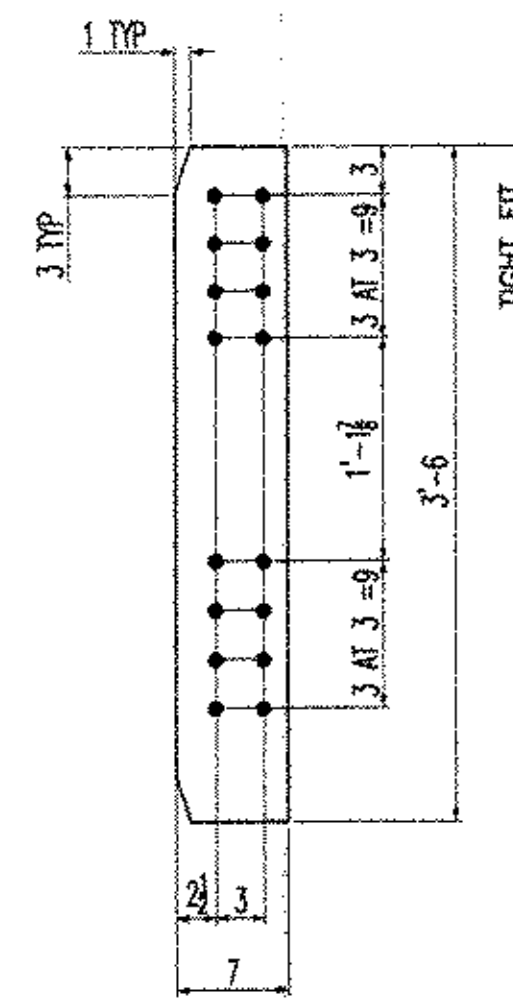
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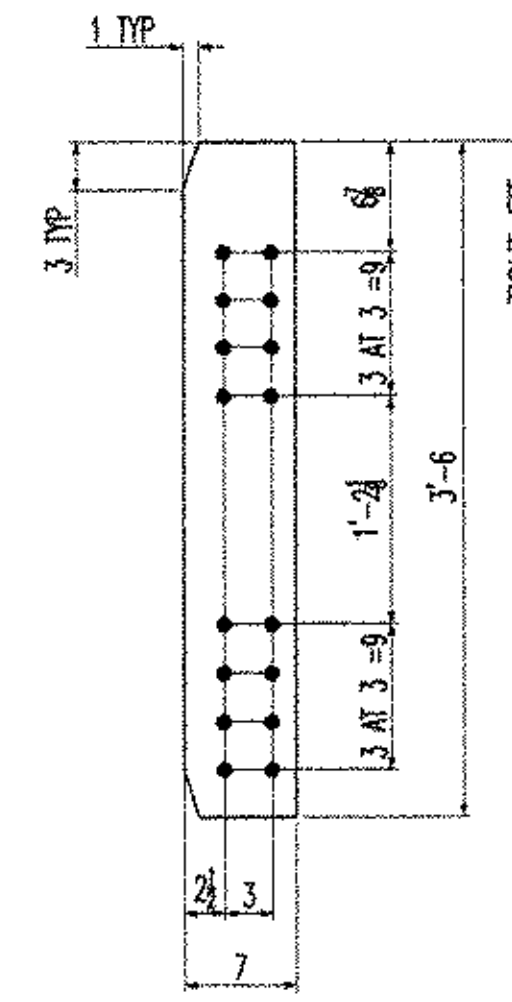
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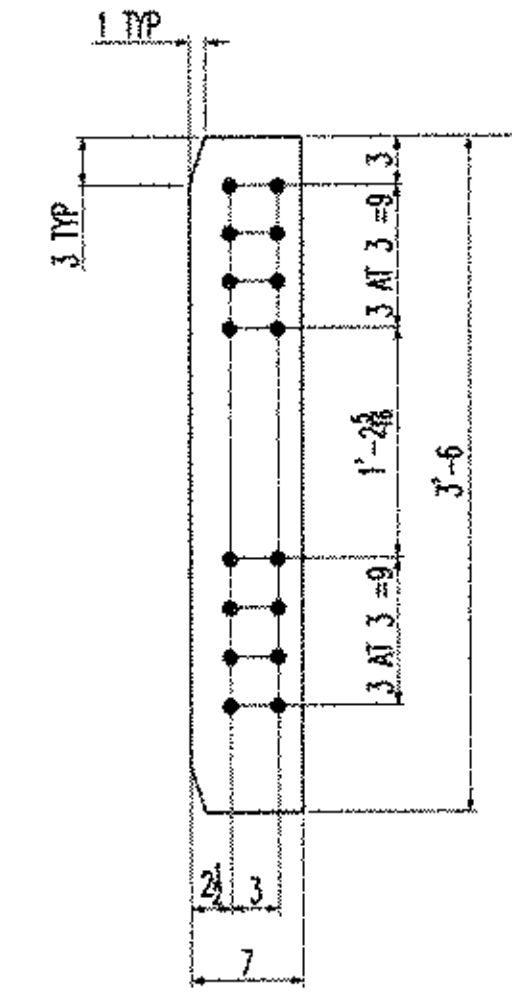
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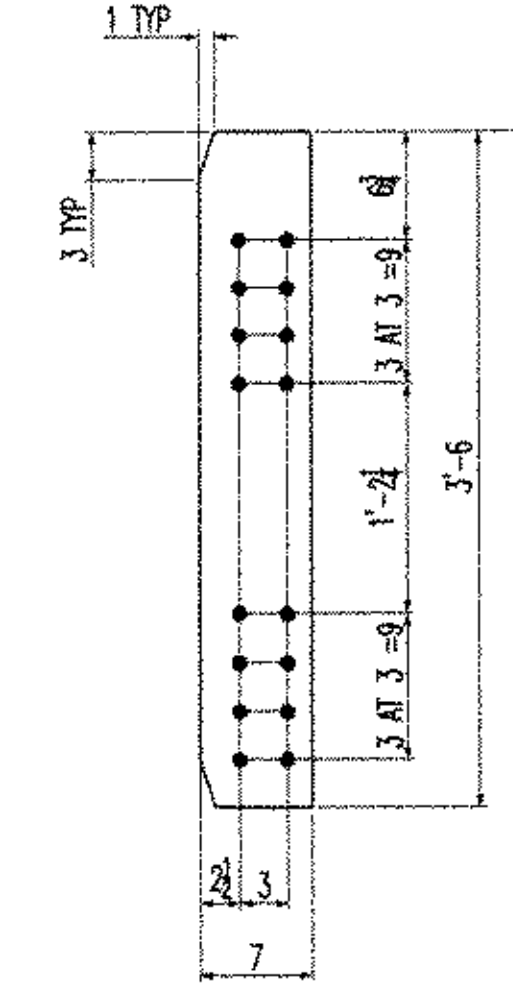
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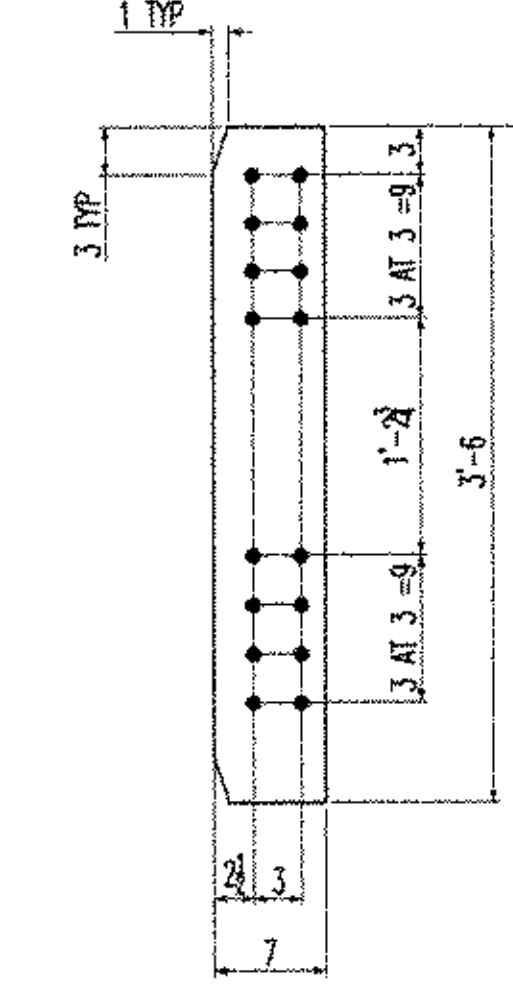
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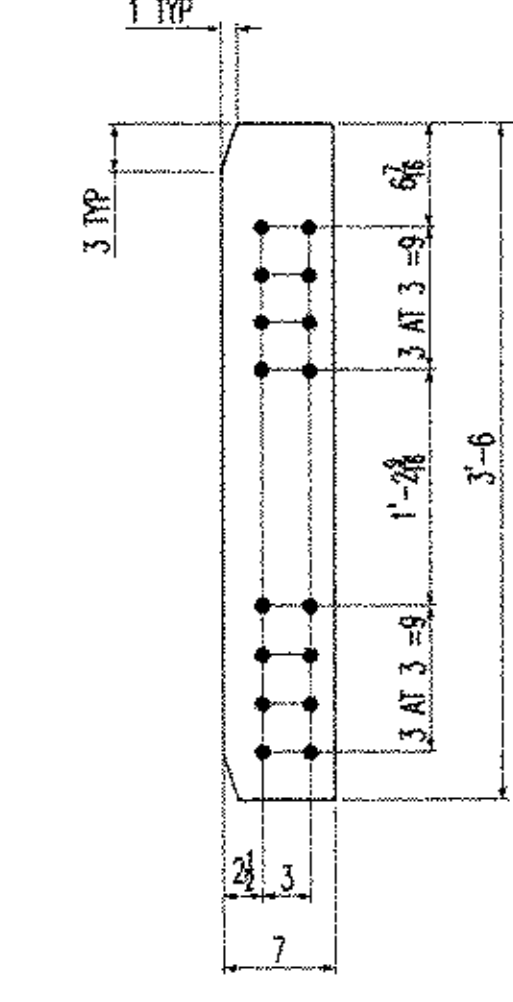
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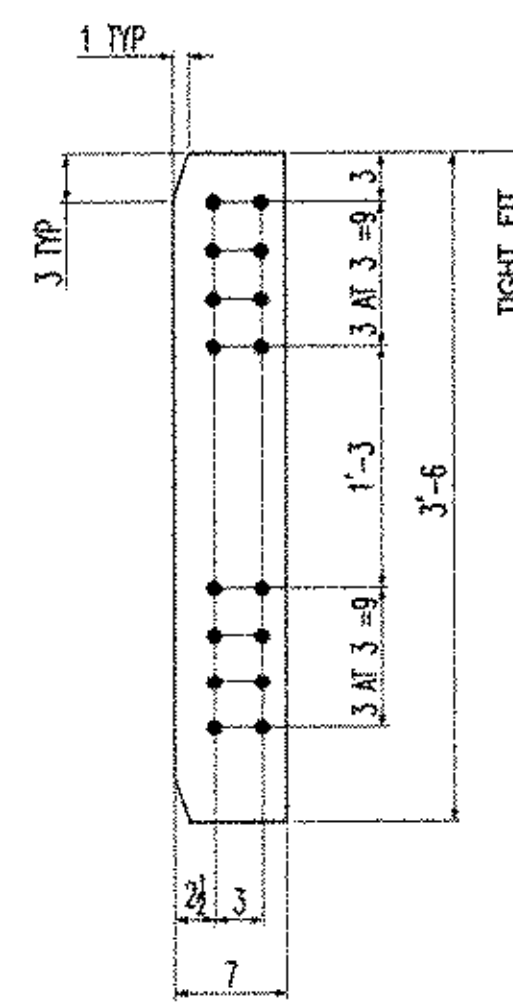
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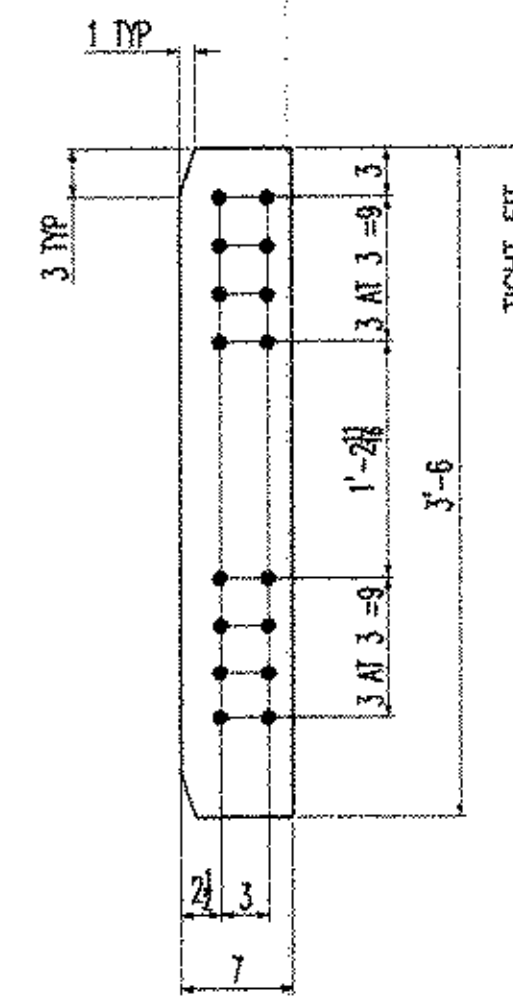
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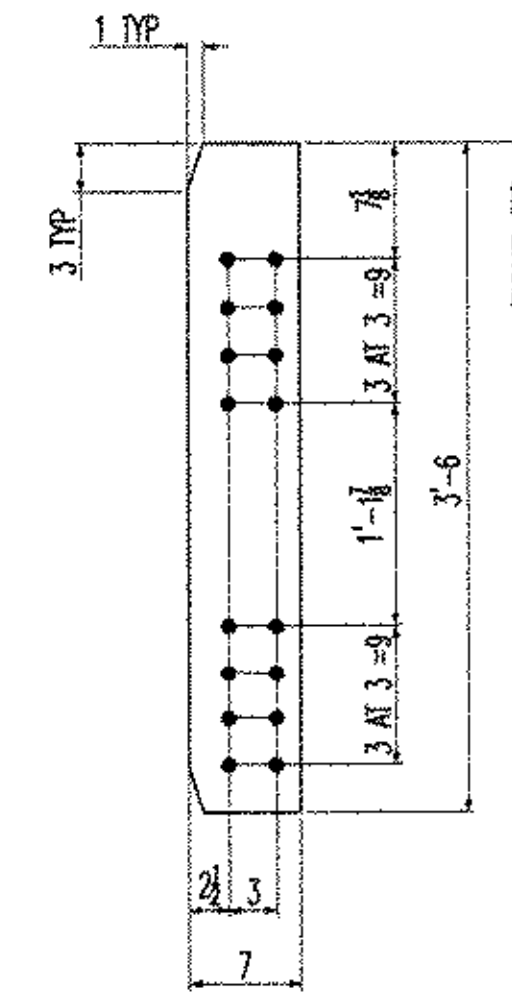
ITEM x2pt (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2"x7"x3'-6") (12)



ITEM x2pv (2 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2"x7"x3'-6") (12)



ITEM x2py (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2"x7"x3'-6") (12)



ITEM x2pz (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2"x7"x3'-6") (12)

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES: 15/16" (U.N.O.)

☒ Reviewed  
☐ Revised  
☐ Rejected

☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit for Approval

This drawing is for general reference only. It is not to be used for construction. The contractor is responsible for the design and construction of the bridge. The engineer is responsible for the design and construction of the bridge. The contractor is responsible for the design and construction of the bridge. The engineer is responsible for the design and construction of the bridge.

12-17-03  
By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:  
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

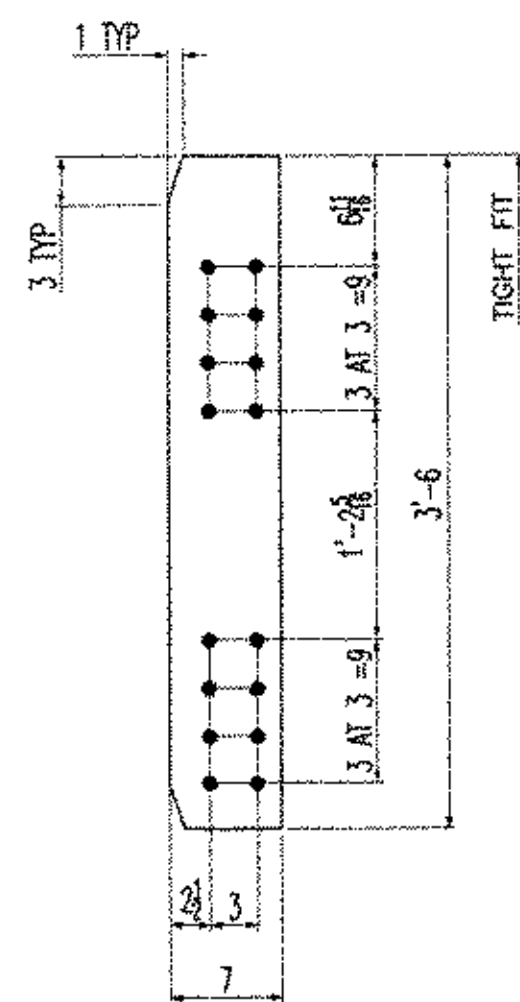
| REV | DATE    | DESCRIPTION              | QTY | DATE | ISSUED TO | FOR      |
|-----|---------|--------------------------|-----|------|-----------|----------|
| 1   | 12/1/03 | FW Whitcomb Construction |     |      |           | Approval |

PROJECT: BRIDGE #12 VT 193-TH OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: MCFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC  
DRAWING TITLE: DETAILS  
DRAWN BY: D.B. 10/22/03  
CHECKED BY: L.D. 11/14/03  
JOB NUMBER: 4065  
SHEET NUMBER: X2

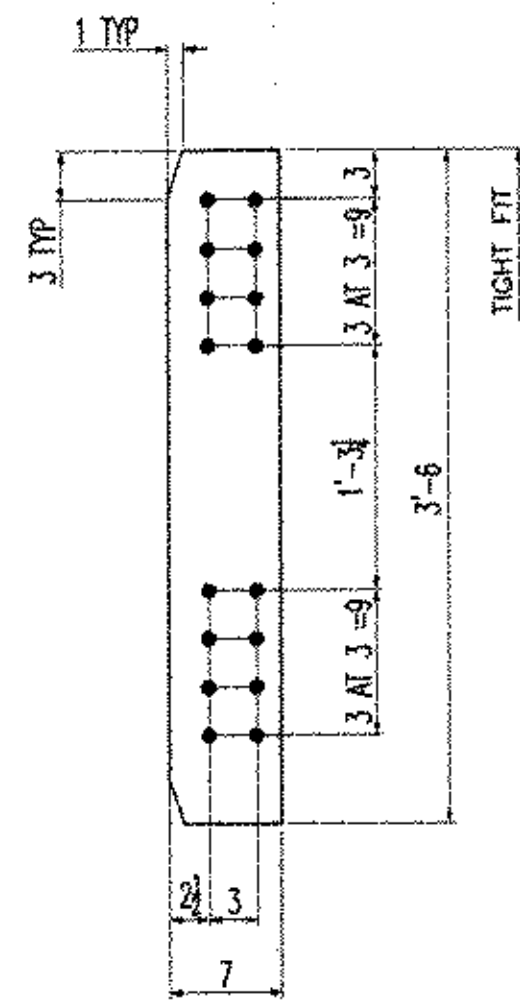
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EASTERN BRIDGE LLC  
RURAL RTE 2, BOX 302  
CLAREMONT, NH 03743  
603-542-5202

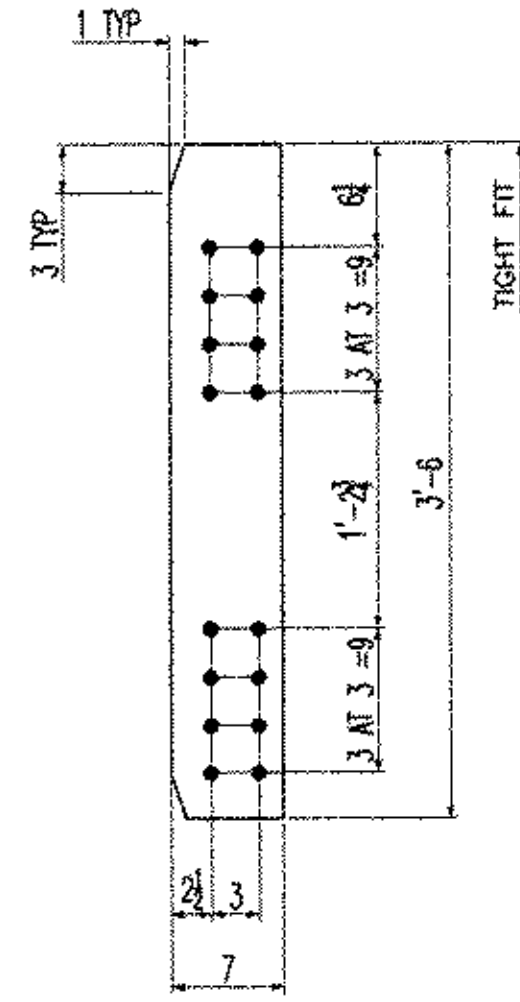




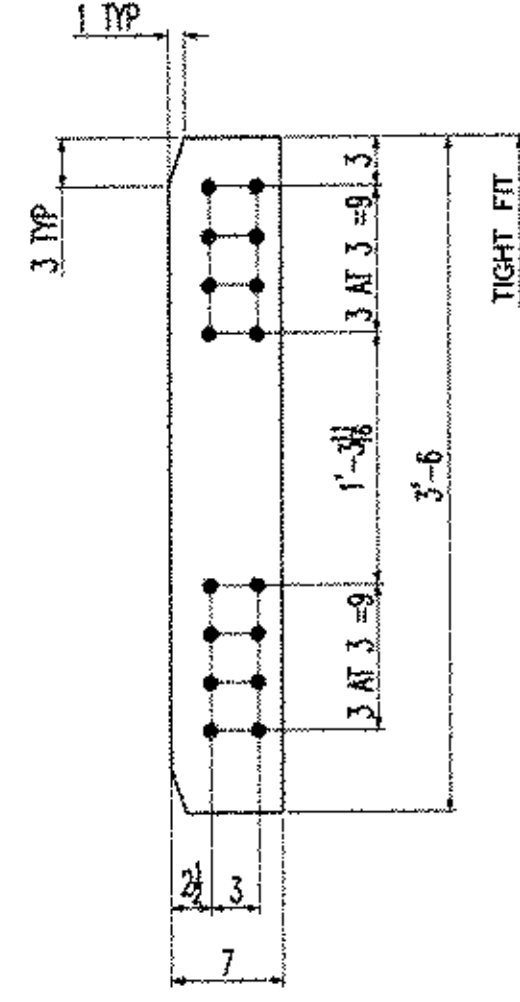
ITEM x3pa (2 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



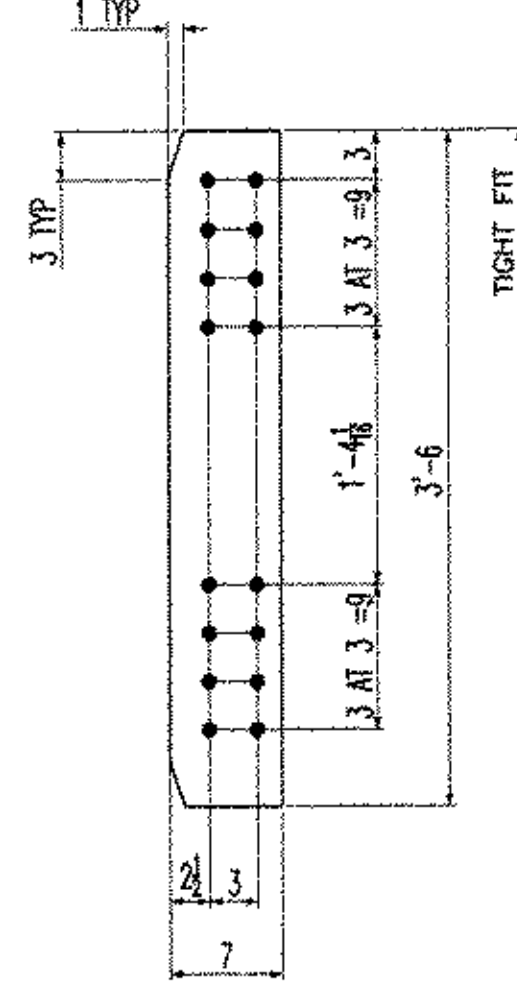
ITEM x3pb (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



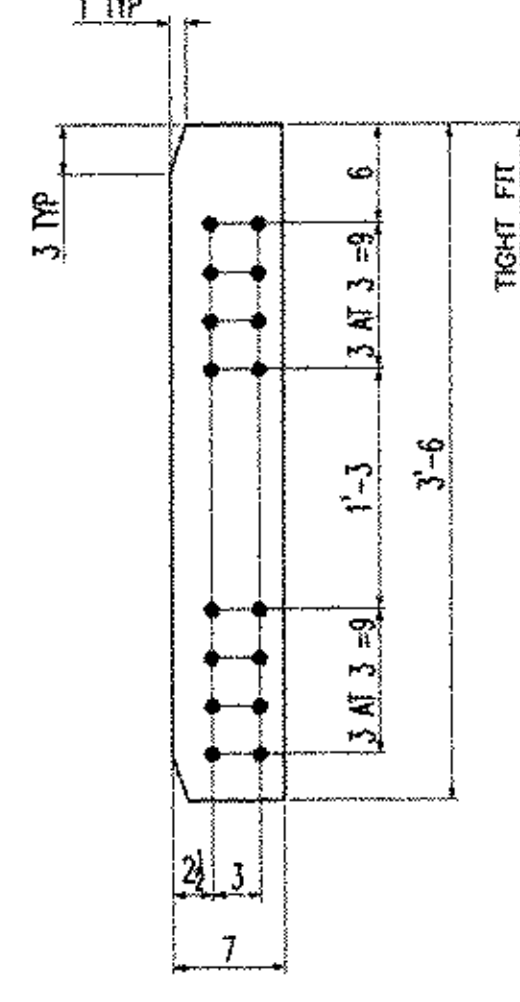
ITEM x3pc (2 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



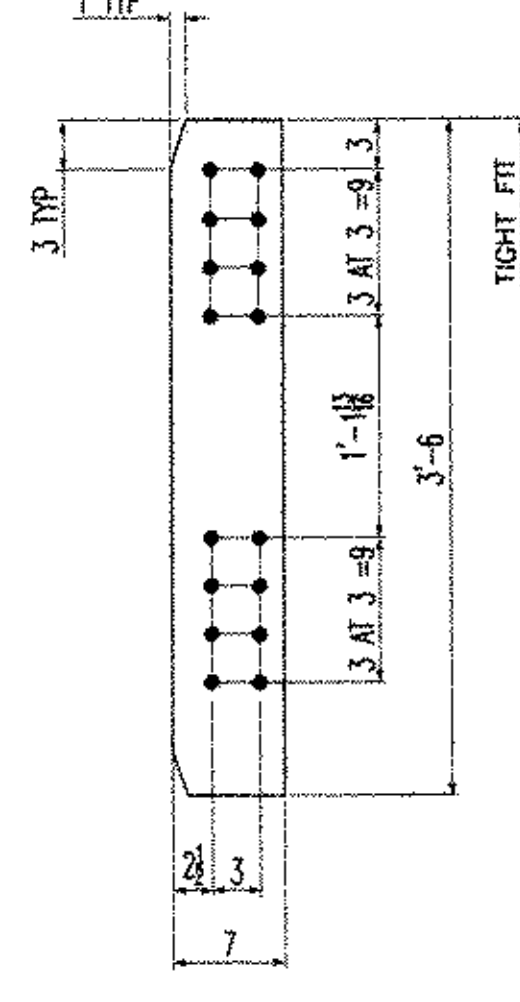
ITEM x3pd (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



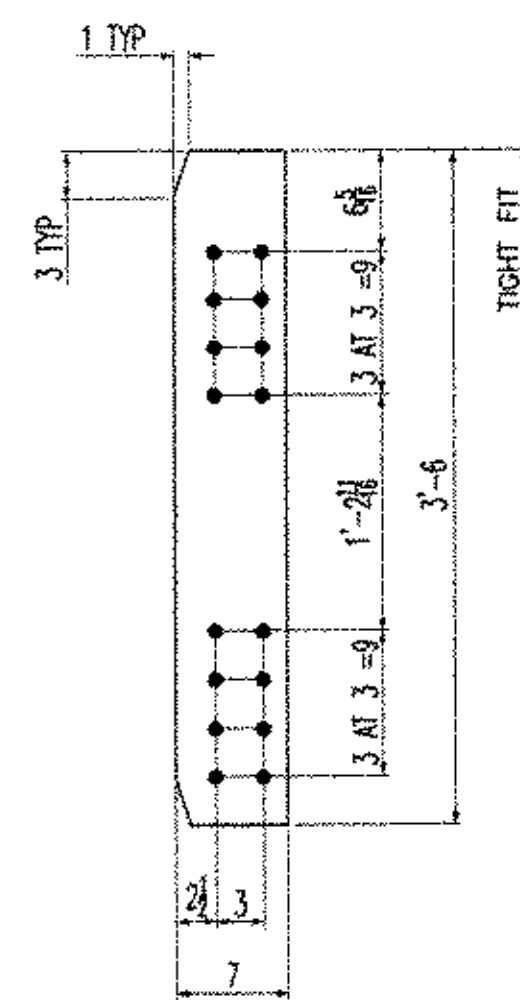
ITEM x3pf (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



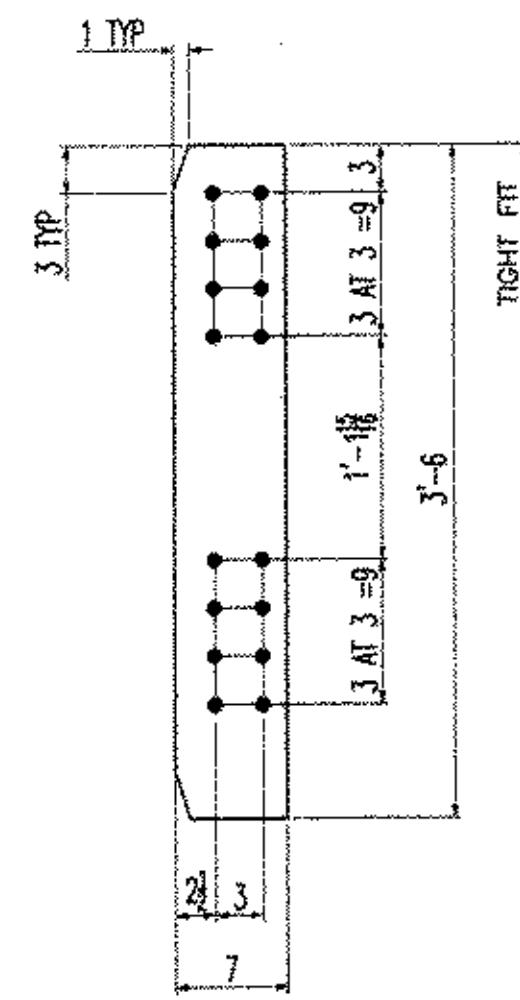
ITEM x3pg (2 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



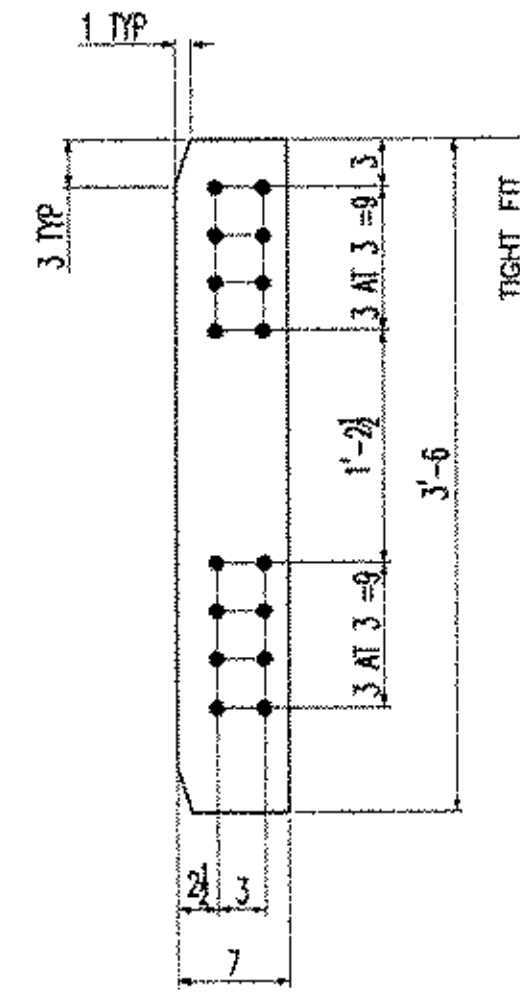
ITEM x3ph (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



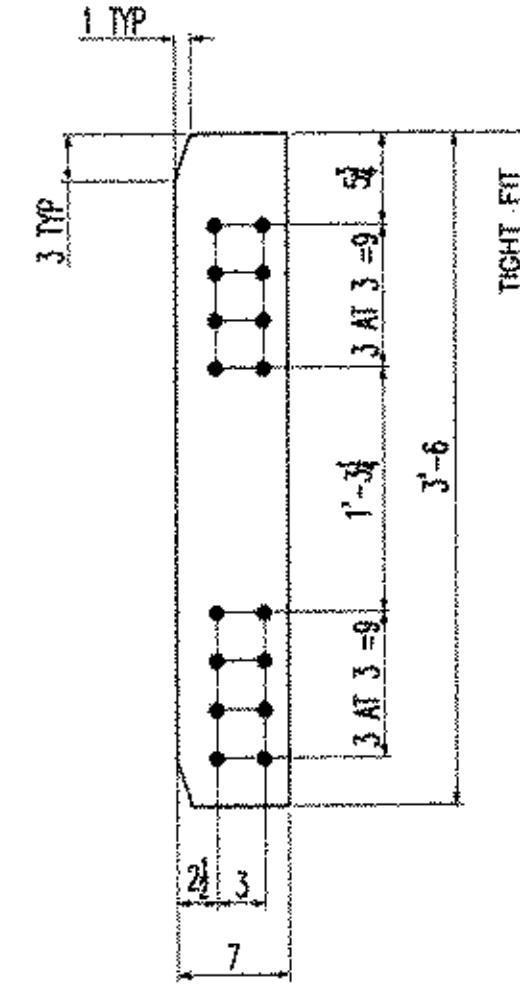
ITEM x3pk (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



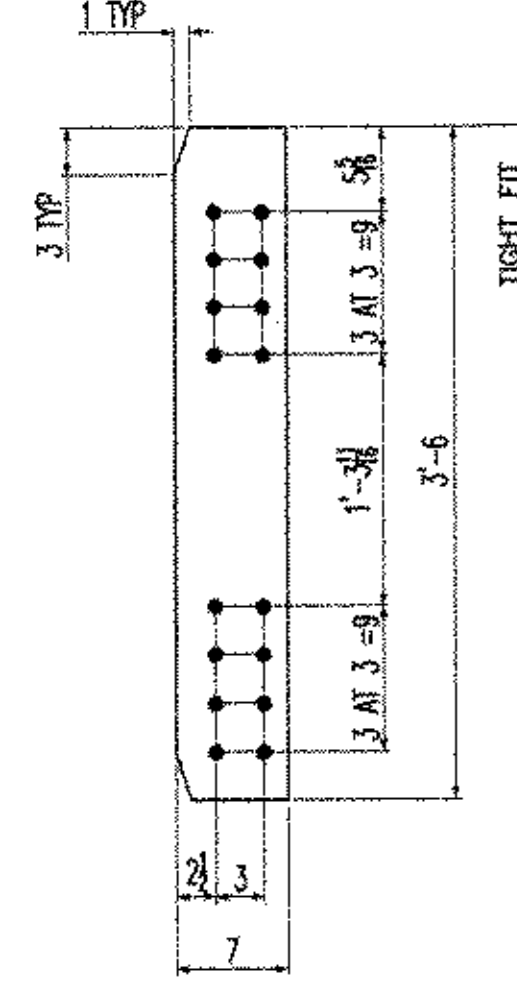
ITEM x3pm (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



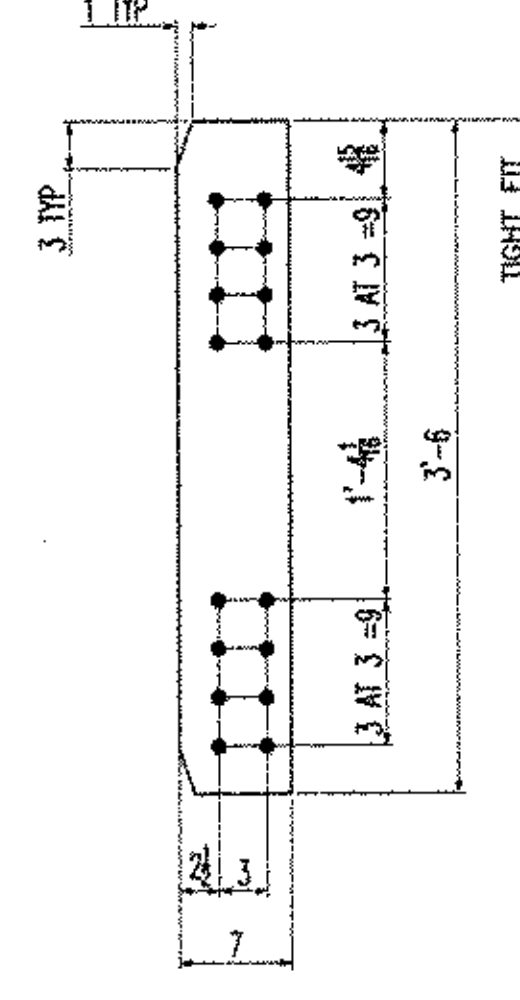
ITEM x3pn (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



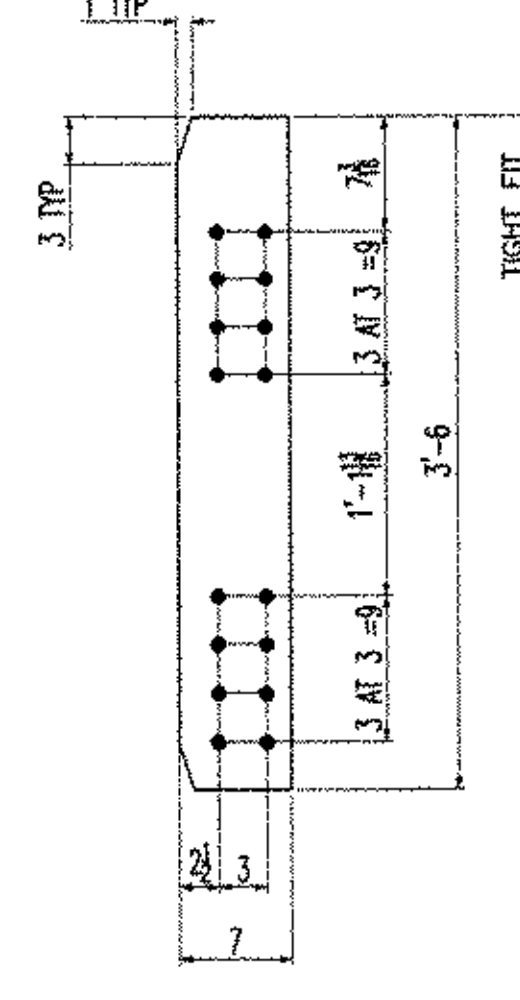
ITEM x3pp (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



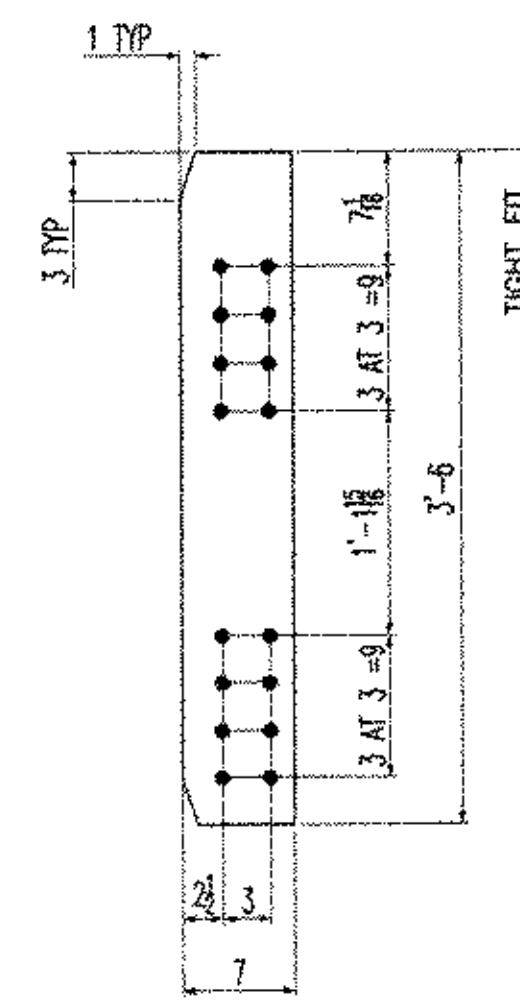
ITEM x3pr (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



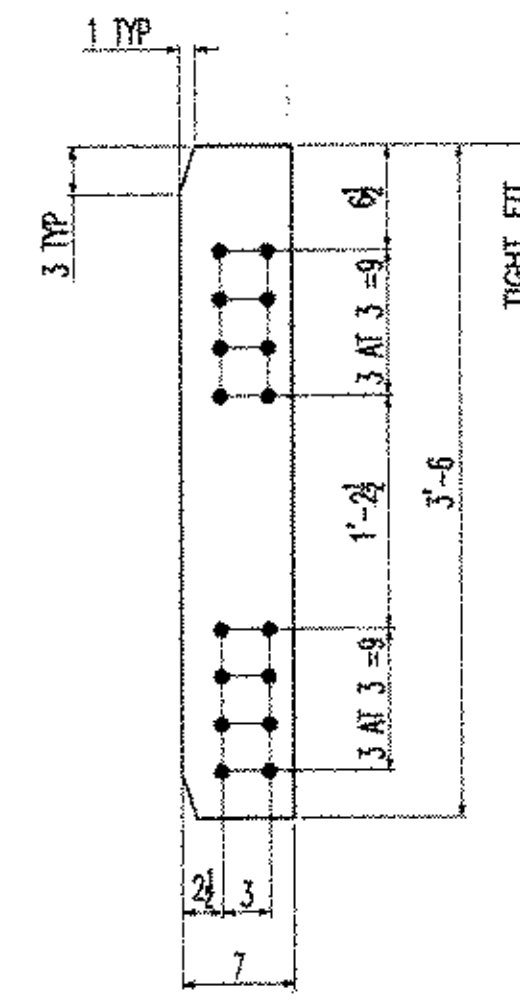
ITEM x3ps (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



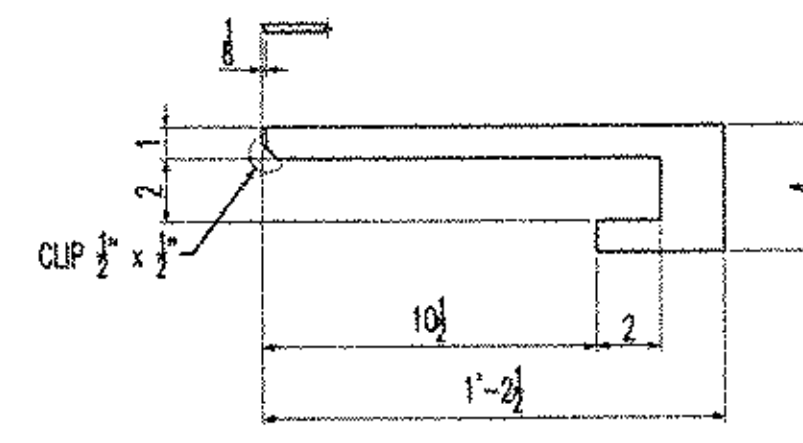
ITEM x3pt (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



ITEM x3pv (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



ITEM x3py (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 7 x 3'-6)  
(12)



ITEM x3pz (1 REQ'D)  
SCALE: 1"=1'-0" (PL 1/2 x 4 x 1'-2 1/2)  
(23)

NOTES:  
1- GENERAL NOTES: SEE DRAWING GN1  
2- HOLES: 15/16" (U.N.O.)

☒ Reviewed  
☐ Rejected  
☐ Furnish as Corrected  
☐ Revise and Resubmit  
☐ Submit Spec

This drawing is for general information only. It is not to be used for construction. The contractor is responsible for obtaining all necessary permits and for obtaining all necessary information from the project engineer. The project engineer is responsible for the accuracy of the information provided. The project engineer is not responsible for the accuracy of the information provided by the contractor.

EASTERN BRIDGE, LLC  
12-17-03  
RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE     | DESCRIPTION                        | QTY | DATE | ISSUED TO | APPROVAL | FOR |
|-----|----------|------------------------------------|-----|------|-----------|----------|-----|
| 1   | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. |     |      |           |          |     |

PROJECT: BRIDGE #12 VT 103-TN OVER WILLIAMS RIVER  
LOCATION: CHESTER, VERMONT  
ENGINEER: McFARLAND-JOHNSON, INC.  
CUSTOMER: EASTERN BRIDGE LLC

DRAWING TITLE: DETAILS  
DRAWN BY: D.B. 10/28/03 JOB  
CHECKED BY: L.D. 11/14/03 NUMBER: 4065

SHEET NUMBER: X3

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