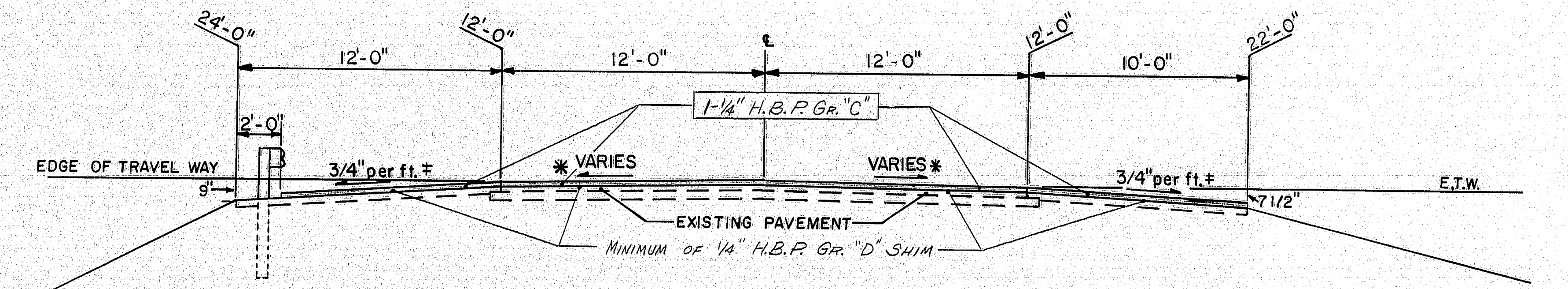
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 2 | 28 |

# 1-1/2" HOT BITUMINOUS OVERLAY


24'-0"
12'-0"
12'-0"
℄
12'-0"
12'-0"
10'-0"
22'-0"
2'-0"
1-1/4" H.B.P. Gr. "C"
EDGE OF TRAVEL WAY
9"
3/4" per ft. ‡
✱ VARIES
VARIES ✱
3/4" per ft. ‡
E.T.W.
7 1/2"
EXISTING PAVEMENT
MINIMUM OF 1/4" H.B.P. Gr. "D" SHIM

**12' SHLD. - GUARDRAIL**

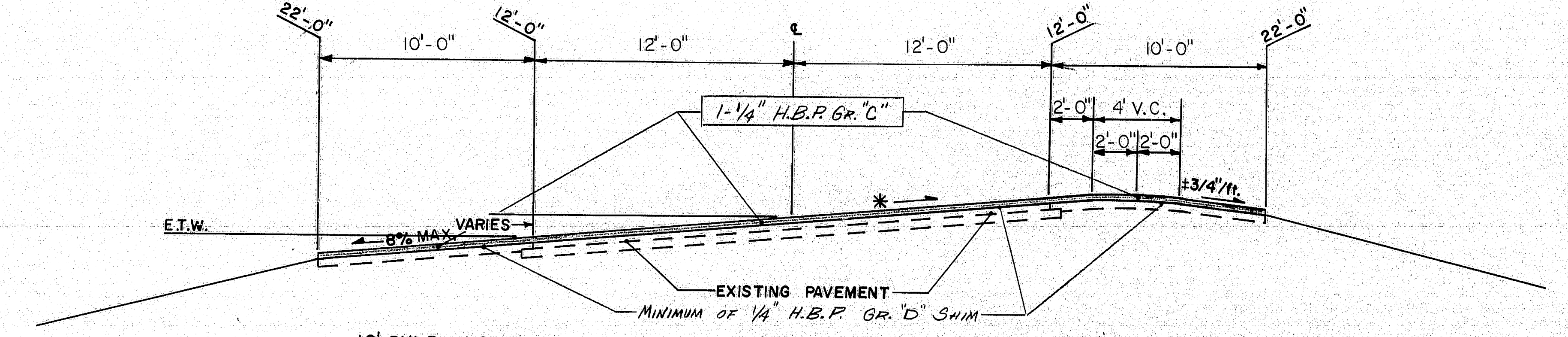
Sta 365+25 to Sta 367+13 Lt.
407+58 to 412+00 Rt.
412+00 to 414+37 Lt. & Rt.
414+37 to 416+55 Rt.
437+67 to 439+50 Rt.
438+35 to 439+90 Lt.
462+39 to 463+60 Lt.
463+25 to 464+39 Rt.

**NORMAL**

**10' SHLD. - NORMAL**

Sta 365+00 to Sta 365+25 Lt.
365+00 to 365+50 Rt.
377+00 to 392+65 Lt. & Rt.
392+65 to 394+48 Lt.
394+48 to 406+50 Lt. & Rt.
406+50 to 412+00 Lt.
414+37 to 416+55 Lt.

Sta 416+55 to Sta 427+33 Lt. & Rt.
427+33 to 428+00 Rt.
437+85 to 438+35 Lt.
464+00 to 464+60 Lt.
464+60 to 464+87 Lt. & Rt.
464+87 to 465+25 Rt.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22'-0"
1-1/4" H.B.P. Gr. "C"
2'-0"
4' V.C.
2'-0"
2'-0"
‡3/4"/ft.
E.T.W.
8% MAX.
VARIES
✱
EXISTING PAVEMENT
MINIMUM OF 1/4" H.B.P. Gr. "D" SHIM

**10' SHLD. - LOW SIDE**

Sta 365+50 to Sta 366+25 Rt.
368+25 to 377+00 Rt.
428+00 to 437+50 Rt.
446+07 to 454+37 Lt.
465+25 to 473+50 Rt.

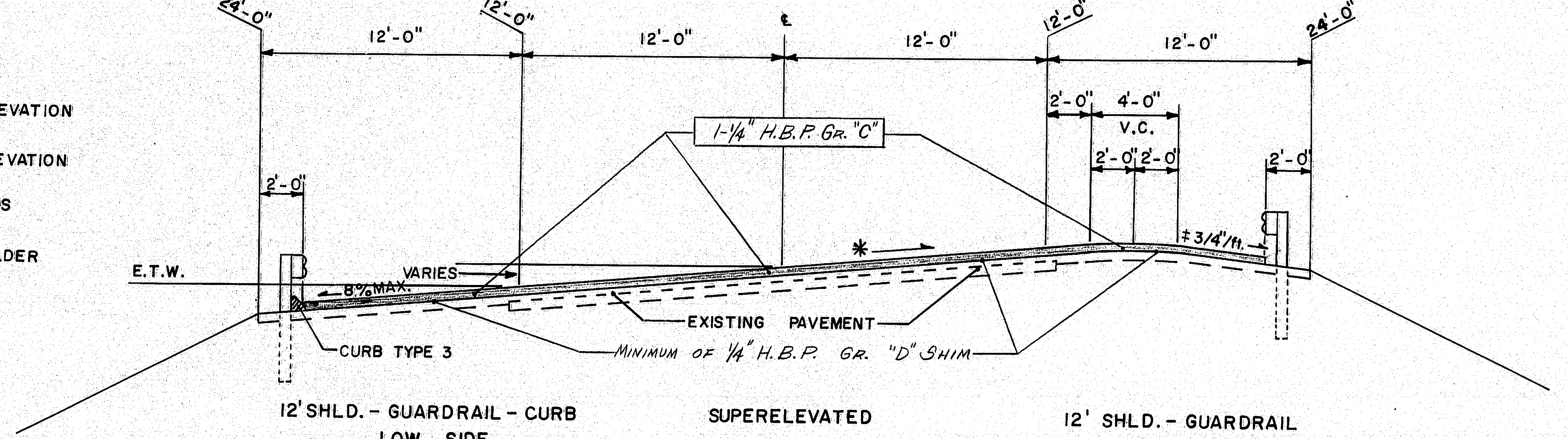
**SUPERELEVATED**

**10' SHLD. - HIGH SIDE**

Sta 367+38 to Sta 375+50 Lt.
428+00 to 437+00 Lt.
446+27 to 454+86 Rt.
468+35 to 469+93 Lt.

## NOTES

1. ✱: -1/8" per ft. TO -1/2" per ft. OR AS REQUIRED FOR SUPERELEVATION
2. ‡: -1/4" per ft. TO -3/4" per ft. OR AS REQUIRED BY SUPERELEVATION
3. THE PAVEMENT & BASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
4. WHEN SUPERELEVATION EXCEEDS 3/4"/ft. THE LOW SIDE SHOULDER SHALL HAVE THE SAME SLOPE.
5. CROWN FOR NORMAL AND SUPERELEVATED SECTIONS FOR ALL COURSES SHALL BE STRAIGHT.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24'-0"
1-1/4" H.B.P. Gr. "C"
2'-0"
2'-0"
4'-0"
V.C.
2'-0"
2'-0"
2'-0"
‡3/4"/ft.
E.T.W.
VARIES
8% MAX.
✱
EXISTING PAVEMENT
CURB TYPE 3
MINIMUM OF 1/4" H.B.P. Gr. "D" SHIM

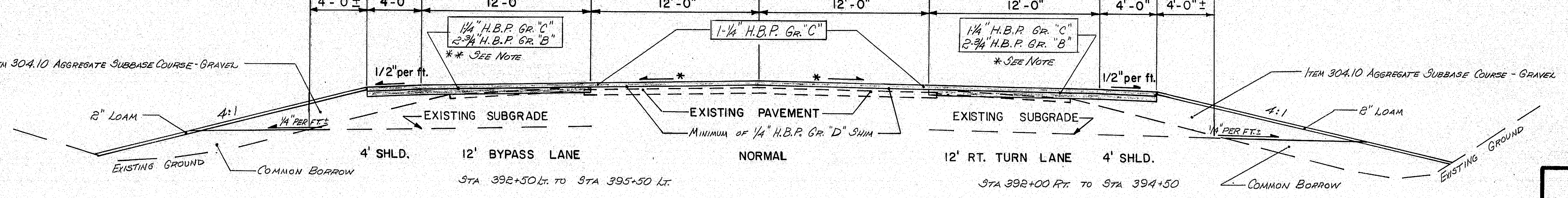
**12' SHLD. - GUARDRAIL - CURB**
**LOW SIDE**

Sta 366+50 to Sta 368+00 Rt.
439+90 to 445+76 Lt.
454+86 to 456+83 Lt.

**SUPERELEVATED**

**12' SHLD. - GUARDRAIL**
**HIGH SIDE**

Sta 440+00 to Sta 446+07 Rt.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4'-0"±
4'-0"
12'-0"
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12'-0"
12'-0"
12'-0"
24'-0"
28'-0"
32'-0"±
4'-0"
4'-0"±
1-1/4" H.B.P. Gr. "C"
2-3/4" H.B.P. Gr. "B"
✱✱ See Note
1-1/4" H.B.P. Gr. "C"
1-1/4" H.B.P. Gr. "C"
2-3/4" H.B.P. Gr. "B"
✱ See Note
Item 304.10 Aggregate Subbase Course - Gravel
1/2" per ft.
4:1
2" Loam
1/4" per ft.±
EXISTING SUBGRADE
Existing Ground
Common Borrow
✱
✱
EXISTING PAVEMENT
MINIMUM OF 1/4" H.B.P. Gr. "D" SHIM
EXISTING SUBGRADE
1/2" per ft.
Item 304.10 Aggregate Subbase Course - Gravel
4:1
2" Loam
1/4" per ft.±
Existing Ground
Common Borrow

**4' SHLD.** **12' BYPASS LANE**

Sta 392+50 Lt. to Sta 395+50 Lt.

**NORMAL**

**12' RT. TURN LANE** **4' SHLD.**

Sta 392+00 Rt. to Sta 394+50

✱✱ Payment for Removal of 4" Bituminous Macadam Shoulder will be made under Item 203.24, Common Excavation. Any Fine Grading of Exist. Gravel Deemed Necessary by the Engineer Will Not Be Paid For Separately and Considered Incidental to Item 304.10.

104-103

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CUMBERLAND - YARMOUTH
TYPICAL SECTIONS

SHEET OF AUGUSTA, MAINE

| PROJECT DESIGN ENGINEER | | BY | DATE |
|---|---|---|---|
| PLANS | DESIGN - DETAILED | R.H.W. | Feb. '88 |
| | CHECKED | | |
| | REVISIONS | | |
| | FIELD CHANGES | | |

BRUNING 44-132 45710-1

Cumberland - Yarmouth Route 1

PROJECT NOS. RS-RSG-0141(5) & RS-0141(6)

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 202.127 | REMOVING OF EXISTING BITUMINOUS PAVEMENT (1863 SY) | 1 | L.S. |
| 202.128 | REMOVING OF EXISTING CONCRETE - CURBS & SIDEWALKS | 1 | L.S. |
| 202.14 | REMOVING EXISTING RAILINGS - PROPERTY OF CONTRACTOR | 555 | L.F. |
| 203.20 | COMMON EXCAVATION | 410 | C.Y. |
| 203.24 | COMMON BORROW | 200 | C.Y. |
| 203.25 | GRANULAR BORROW | 50 | C.Y. |
| 304.10 | AGGREGATE SUBBASE COURSE - GRAVEL | 400 | C.Y. |
| 403.07 | HOT BITUMINOUS PAVEMENT, GRADING B | 275 | TON |
| 403.08 | HOT BITUMINOUS PAVEMENT, GRADING C | 3850 | TON |
| 403.10 | HOT BITUMINOUS PAVEMENT, GRADING D | 2747 | TON |
| 403.101 | HOT BITUM. PAVT., GRAD. D (SIDEWALKS, SHIMS, DRIVES, ETC) | 6 | TON |
| 409.15 | BITUMINOUS TACK COAT, APPLIED | 1070 | GAL. |
| 502.42 | STRUC CONC RDWAY & SIDEWALK SLABS ON STEEL BRIDGES | 39 | C.Y. |
| 502.4711 | SILICA FUME ADDITIVE | 1 | L.S. |
| 503.12 | REINFORCING STEEL FAB. & DELIVERED | 4300 | LB. |
| 503.13 | REINFORCING STEEL PLACING | 4300 | LB. |
| 506.142 | FIELD PAINTING EXISTING STRUCTURAL STEEL (280,000 lb) | 1 | L.S. |
| 507.092 | ALUMINUM BRIDGE RAILING, 2 BAR | 531 | L.F. |
| 508.13 | MEMBRANE WATERPROOFING (1082 SY) | 1 | L.S. |
| 515.20 | PROTECTIVE COATING FOR CONCRETE SURFACES | 23 | S.Y. |
| 518.21 | REHAB. OF STR. CONCRETE SUBSTRUCTURE | 206 | S.F. |
| 518.30 | REHAB. OF STR. CONCRETE SLAB - TO REINF. STEEL | 487 | S.F. |
| 518.31 | REHAB. OF STR. CONCRETE SLAB - TO BELOW REINF. STEEL | 195 | S.F. |
| 520.24 | BRIDGE JOINT MODIFICATION | 2 | EACH |
| 526.301 | TEMPORARY CONCRETE BARRIER TYPE I (1000 L.F.) | 1 | L.S. |
| 603.16 | 15 INCH CULVERT PIPE OPTION I | 12 | L.F. |
| 603.17 | 18 INCH CULVERT PIPE OPTION I | 30 | L.F. |
| 603.175 | 18 INCH RCP CLASS III | 4 | L.F. |
| 603.185 | 21 INCH RCP CLASS III | 108 | L.F. |
| 603.195 | 24 INCH RCP CLASS III | 18 | L.F. |
| * ~~603.205~~ | ~~30 INCH RCP CLASS III~~ | ~~164~~ | ~~L.F.~~ |
| 603.42 | 30 INCH RCP CLASS IV | 164 | L.F. |
| 603.712 | REMOVE HEADWALL, EXTEND 15 INCH METAL PIPE | 4 | EACH |
| 603.721 | REMOVING METAL END SECTION | 4 | EACH |
| 603.723 | CUTTING CORRUGATED METAL PIPE | 3 | EACH |
| 604.249 | CATCH BASIN TYPE F6-C | 1 | EACH |
| 606.17 | GUARD RAIL TYPE 3b - SINGLE RAIL | 275 | L.F. |
| 606.178 | GUARD RAIL BEAM | 150 | L.F. |
| 606.22 | GUARD RAIL TYPE 3b - OVER 15 FOOT RADIUS | 25 | L.F. |
| 606.35 | GUARD RAIL DELINEATOR POST | 10 | EACH |
| 606.351 | GUARD RAIL DELINEATOR POST - REMOVE & RESET | 20 | EACH |
| 606.364 | GUARD RAIL, REMOVE, MODIFY & RESET | 4753 | L.F. |
| 606.3645 | GUARD RAIL, REMOVE, AND RESET | 1 | L.S. |
| 606.367 | REPLACE UNUSABLE EXISTING GUARD RAIL POST | 10 | EACH |
| 606.751 | WIDEN SHOULDER FOR BREAKAWAY CABLE TERMINAL | 20 | EACH |
| 606.77 | BREAKAWAY CABLE TERMINAL | 20 | EACH |
| 609.31 | CURB TYPE 3 | 250 | L.F. |
| 610.08 | PLAIN RIPRAP | 15 | C.Y. |
| 610.18 | STONE DITCH PROTECTION | 15 | C.Y. |
| 612.06 | BITUMINOUS SEALING - BLACK | 30 | S.Y. |
| 613.319 | TEMPORARY EROSION CONTROL BLANKET | 100 | S.Y. |
| 615.07 | LOAM | 150 | C.Y. |

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 616.08 | SODDING | 80 | S.Y. |
| 618.14 | SEEDING METHOD NUMBER 2 | 25 | UNITS |
| 619.12 | MULCH | 27 | UNITS |
| 627.61 | 4 INCH SOLID WHITE PAVEMENT MARKING LINE | 22050 | L.F. |
| 627.63 | 4 INCH SOLID YELLOW PAVEMENT MARKING LINE | 12150 | L.F. |
| 627.64 | 4 INCH BROKEN YELLOW PAVEMENT MARKING LINE | 6600 | L.F. |
| 627.67 | REMOVING PAVEMENT MARKINGS | 250 | S.F. |
| 627.68 | TEMP. 4 INCH PAINTED PAVT MARKING LINE, YELLOW OR WHITE | 37000 | L.F. |
| 629.05 | HAND LABOR, STRAIGHT TIME | 4 | M.H. |
| 631.12 | ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) | 35 | HOURS |
| 631.14 | GRADER (INCLUDING OPERATOR) | 2 | HOURS |
| 631.172 | TRUCK - LARGE (INCLUDING OPERATOR) | 35 | HOURS |
| 631.22 | FRONT END LOADER (INCLUDING OPERATOR) | 2 | HOURS |
| 631.32 | CULVERT CLEANER (INCLUDING OPERATOR) | 12 | HOURS |
| 638.01 | EMBEDDED WORK IN STRUCTURES | 1 | L.S. |
| 639.19 | FIELD OFFICE TYPE B | 1 | EACH |
| 639.22 | TESTING FACILITIES BITUMINOUS MIXES | 1 | L.S. |
| 639.23 | TESTING FACILITIES CONCRTE | 1 | L.S. |
| 643.72 | TEMPORARY TRAFFIC SIGNAL | 1 | L.S. |
| 652.30 | FLASHING ARROW BOARD | 2 | EACH |
| 652.31 | TYPE I BARRICADE | 70 | EACH |
| 652.311 | TYPE II BARRICADE | 30 | EACH |
| 652.33 | DRUM | 40 | EACH |
| 652.34 | CONE | 60 | EACH |
| 652.35 | CONSTRUCTION SIGNS | 1000 | S.F. |
| 652.36 | MAINTENANCE OF TRAFFIC CONTROL DEVICES | 75 | C.D. |
| 652.37 | WARNING LIGHTS | 2 | GP. |
| 652.38 | FLAGGER | 1000 | M.H. |
| 656.50 | BALED HAY, IN PLACE | 6 | EACH |
| 656.51 | SAND BAG, IN PLACE | 6 | EACH |
| 658.20 | ACRYLIC LATEX COLOR FINISH, GREEN | 27 | S.Y. |
| 659.10 | MOBILIZATION | 1 | L.S. |

* CHANGED ON 6 JUNE '89 FROM CLASS III TO IV - RHW

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5)<br>RS-0141(6) | 3 | 28 |

# SUMMARY OF EXCAVATION AND BORROW

**COMMON EXCAVATION FOR ESTIMATE**

| | | |
|---|---|---|
| COMMON EXCAVATION (FROM CROSS SECTIONS) | 10 c.y. | |
| LOAM SALVAGE IN FILL | 186 c.y. | |
| REMOVAL OF MACADAM SHOULDERS | 134 c.y. | |
| TOTAL COMMON EXCAVATION | | 330 c.y. |

**FILL FOR BORROW CALCULATIONS**

| | | |
|---|---|---|
| COMMON FILL (FROM CROSS SECTIONS) | 99 c.y. | |
| LOAM SALVAGE IN FILL | 38 c.y. | |
| TOTAL FILL | | 137 c.y. |

**AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS**

| | | |
|---|---|---|
| (1) TOTAL COMMON EXCAVATION | | 330 c.y. |
| DEDUCTIONS: | | |
| LOAM SALVAGE IN FILL | 186 c.y. | |
| REMOVAL OF MACADAM SHOULDERS | 134 c.y. | |
| (2) TOTAL DEDUCTIONS | | 320 c.y. |
| TOTAL AVAILABLE COMMON EXCAVATION (1) minus (2) | | 10 c.y. |
| TOTAL AVAILABLE NON-ROCK EXCAVATION | | 10 c.y. |

**COMPUTATION OF COMMON BORROW FOR ESTIMATE**

| | | |
|---|---|---|
| TOTAL FILL | | 137 c.y. |
| TOTAL AVAILABLE NON-ROCK EXCAV. | 10 c.y. x 0.85 = 9 c.y. | |
| TOTAL AVAILABLE EXCAVATION | | 9 c.y. |
| TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION | | 128 c.y. |
| COMMON BORROW FOR REGRADING DITCHES | | 40 c.y. |
| COMMON BORROW = | 168 x 1.15 = | 193 c.y. |

104-104

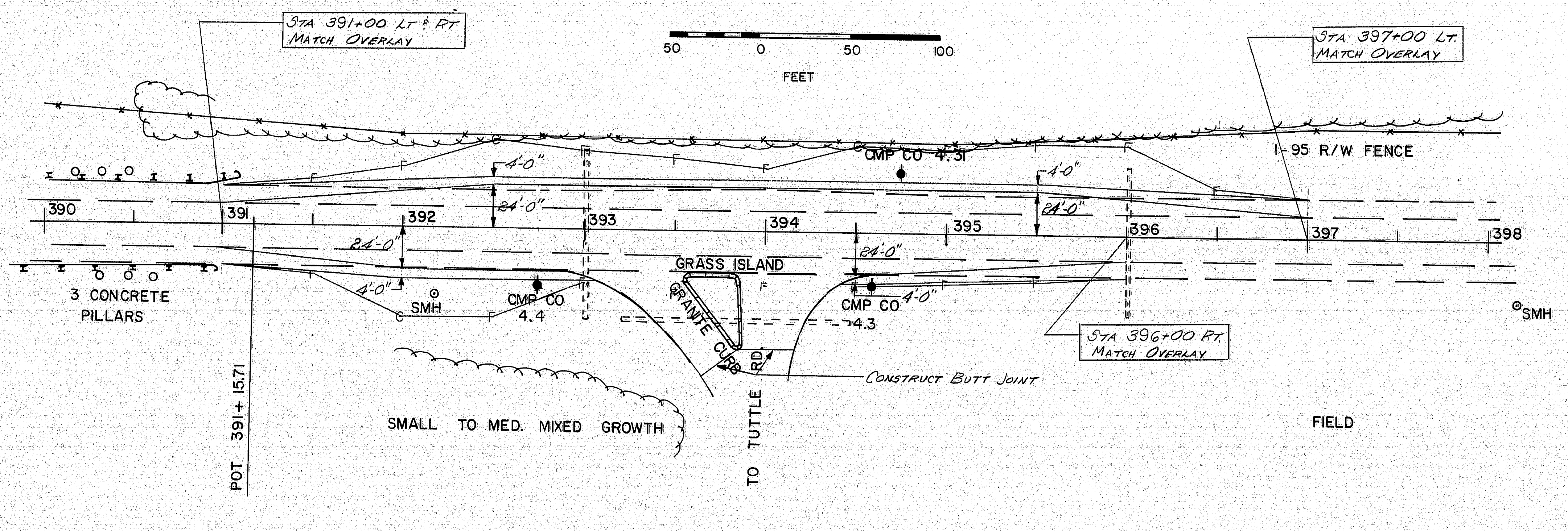
BRUNING 44-132 45710-1

203-1 2000

CUMBERLAND - YARMOUTH RTE. 1

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 4 | 28 |

## BYPASS AND RIGHT TURN LANES



### GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE:

   CENTRAL MAINE POWER COMPANY
   NEW ENGLAND TELEPHONE COMPANY
   PORTLAND WATER DISTRICT
   PUBLIC CABLE TV, INC.

   ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.

2. ALL JOINTS BETWEEN EXISTING AND PROPOSED HOT BITUMINOUS PAVEMENTS SHALL BE BUTTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT WILL BE INCIDENTAL TO ITEM 403.
3. A VARIABLE DEPTH SHIM DEPTH SHIM COURSE (ITEM 403.10) SHALL BE APPLIED PRIOR TO PLACING THE 1 1/4" HOT BITUMINOUS PAVEMENT.
4. ANY EXISTING PAVED WIDENINGS TO BE RESURFACED AS DIRECTED.
5. A 3' PAVED LIP SHALL BE PLACED AT ALL GRAVEL ENTRANCES EXCEPT WOODS AND FIELD ENTRANCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. ESTIMATED STRUCTURAL EXCAVATION REQUIRED 540 C.Y..
7. ALL OPEN THROAT CATCH BASINS SHALL HAVE THE THROAT SECTION BRICKED UP TO THE GRATE AND THE DITCH LINE SHALL BE GRADED TO THE CATCH BASIN AS DIRECTED BY THE ENGINEER. THE BRICKING SHALL BE INCIDENTAL TO ITEM 603 AND THE GRADING SHALL BE PAID FOR AS COMMON BORROW.
8. PLACE 12" AGGREGATE SUBBASE COURSE GRAVEL AND HOT BITUMINOUS PAVEMENT GRADING "D" WITH ACRYLIC LATEX COLOR FINISH-GREEN AROUND CATCH BASINS IN GRASSED AREAS (3' OUTSIDE OF FRAME, 2" THICK).
9. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL BE PAID FOR AS GRANULAR BORROW.
10. EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).
11. SOD INLETS AND OUTLETS OF ALL DRIVEWAY CULVERTS UNLESS OTHERWISE DIRECTED.
12. LOAM AREAS SHALL BE SEEDED WITH METHOD NUMBER NO. #2 AND MULCHED UNLESS OTHERWISE NOTED.
13. LOAM HAS BEEN ESTIMATED FOR 100% OF THE FILL SLOPE AREA. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE ENGINEER. LOAM DEPTHS ARE 2" AND ARE CONSIDERED NOMINAL.
14. BREAKAWAY CABLE TERMINALS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARD RAIL.
15. ALL EXISTING TOPSOIL TO A DEPTH OF 6 INCHES WITHIN THE FILL SLOPE AREA FROM STATION 391+00 TO STATION 397+00 SHALL BE CONSIDERED AS LOAM SALVAGE.

    TOTAL LOAM REQUIRED 150 C.Y.
    ESTIMATED AVAILABLE SALVAGED TOPSOIL 186 C.Y.

16. EXISTING 30' RADIUS GUARD RAIL ENDS AND TERMINAL ENDS REMAINING SHALL BE STOCKPILED FOR PICKUP BY MAINTENANCE DIVISION #6.
17. ONE GUARDRAIL DELINEATOR POST SHALL BE INSTALLED AT EACH GUARD RAIL END AND AT UNDERDRAIN OUTLET
18. CURB TYPE 3 TO BE INSTALLED WITH MOLD 2 AND SEALED WITH BITUMINOUS SEALING BLACK, WHEN DIRECTED.
19. WHERE DEEMED NECESSARY BY THE ENGINEER, WINTER SAND SHALL BE REMOVED FROM THE EDGES OF SHOULDERS AND DISPOSED OF. PAYMENT WILL BE MADE UNDER THE APPROPRIATE HOURLY RENTAL ITEMS.
20. PLANS AND PROFILE SHEETS OF THE PREVIOUSLY CONSTRUCTED PROJECT FOR THIS PROJECT AREA ARE AVAILABLE ON REQUEST. EXISTING PROJECT IS I-95-4(6).

### ITEM 606.17 GUARD RAIL TYPE 3b - SINGLE RAIL

| | |
|---|---|
| STA 365+25 TO 365+50 LT., | 25 L.F. |
| STA 389+07 TO 389+82 RT., | 75 L.F. |
| STA 389+45 TO 389+95 LT., | 50 L.F. |
| STA 390+82 TO 391+32 RT., | 50 L.F. |
| STA 390+95 TO 391+70 LT., | 75 L.F. |
| STA. 454+32 TO 454+57 LT., | 25 L.F. |

### ITEM 606.77 BREAKAWAY CABLE TERMINAL

STA 365+00 TO 365+25 LT.
STA 367+12.5 TO 367+37.5 LT.
STA 366+25 TO 366+50 RT.
STA 368+00 TO 368+25 RT.
STA 388+82 TO 389+07 RT.
STA 389+20 TO 389+45 LT.
STA 391+32 TO 391+57 RT.
STA 391+70 TO 391+95 LT.
STA 407+08,59' RT. TO 407+20,40' RT.
STA 416+50 TO 416+75 RT.
STA 411+75 TO 412+00 LT.
STA 414+37.5 TO 414+62.5 LT.
STA 437+67 TO 437+92 RT.
STA 446+07 TO 446+32 RT.
STA 438+02 TO 438+27 LT.
STA 445+89 TO 446+14 LT.
STA 454+07 TO 454+37 LT.
RAMP STA 12+49 TO 12+74 RT.
STA 464+00 TO 464+25 LT.
STA 464+39 TO 464+64 RT.

### ITEM 606.751 WIDEN SHOULDER FOR B.C.T.

USE STATION LOCATIONS ON ITEM 606.77 B.C.T.

DITCHING AS DIRECTED BY THE ENGINEER TO BE PAID FOR UNDER APPROPRIATE EQUIPMENT RENTAL ITEMS.

ANTICIPATED AREA OF DITCHING IS:

STA 394+47± RT. TO STA 399+85± RT. 564' LENGTH

STA 474+30 AT 18" ACCMP LOCATION
THE FRONT SLOPE FROM THE SHOULDER TO THE PIPE END SHALL BE GRADED AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE HOURLY RENTAL ITEMS.

### ITEM 606.364 GUARD RAIL, REMOVE, MODIFY AND RESET

| | | |
|---|---|---|
| STA 365+50 TO 367+12.5 LT., | 162.5 L.F. | |
| STA 366+50 TO 368+00 RT., | 150 L.F. | |
| STA 389+82 TO 390+82 RT., | 100 L.F. | |
| STA 389+95 TO 390+95 LT., | 100 L.F. | |
| STA 407+20,40' RT TO 407+60 RT., | 37.5 L.F. | ATTACH TO EXISTING |
| STA 407+60 TO 414+40,50' RT., | 700 L.F. | |
| STA 414+60,50' RT. TO 416+50 RT., | 212.5 L.F. | |
| STA 412+00 TO 414+37.5 LT., | 237.5 L.F. | |
| STA 437+92 TO 446+07 RT., | 815 L.F. | |
| STA 438+27 TO 445+89 LT., | 762.5 L.F. | |
| STA 454+57 TO 457+32 LT., | 275 L.F. | |
| RAMP STA 12+74 TO 457+58 RT., | 337.5 L.F. | |
| STA 460+14 TO 464+00 LT., | 387.5 L.F. | |
| STA 460+40 TO 462+80, 53' RT., | 287.5 L.F. | |
| STA 463+20, 50' RT. TO 464+39 RT., | 162.5 L.F. | |

### ITEM 603.16 15" CULVERT PIPE, OPT. I

| | |
|---|---|
| STA 445+25 LT. | 12 L.F. |
| STA 424+50 RT. | 16 L.F. |

### ITEM 603.17 18" CULVERT PIPE, OPT. I

STA 376+50 RT. - DRIVE 30 L.F. (REMOVE EXISTING)

### ITEM 603.175 18" RCP CLASS III

STA 470+91 LT. 4 L.F. (REMOVE 4' RCP SECTION W/ HEADWALL - EXISTING)
STA. 470+91 RT. 14 L.F. (REMOVE 14' ACCMP - EXISTING)

### ITEM 603.185 21" RCP CLASS III

STA 365+62 CROSS PIPE 108 L.F. (REMOVE EXISTING 18" x 110')

### ITEM 603.195 24" RCP CLASS III

STA 374+52 RT. 4 L.F. (REMOVE 4' R.C.P. SECTION W/ HEADWALL EXISTING)

### ITEM 603.42 30" RCP CLASS IV

STA 366+73 CROSS PIPE 164 L.F. (REMOVE EXISTING 48" x 158')

### ITEM 603.712 REMOVE HEADWALL, EXTEND 15" METAL PIPE

STA 424+38 RT.
STA 424+62 RT.
STA 449+79 RT.
STA 450+25 RT.

### ITEM 603.721 REMOVING METAL END SECTION

STA 400+53 LT.
STA 439+75 RT.
STA 444+50 RT.

### ITEM 603.723 CUTTING CORRUGATED METAL PIPE

| | |
|---|---|
| STA 400+53, RT. | REMOVE 4' OF 36" CMP |
| STA 400+53 LT. | REMOVE 4' OF 36" CMP |
| STA 468+55, 39' RT. | REMOVE 2' OF 18" CMP |

### ITEM 604.249 CATCH BASIN TYPE F6-C

STA 445+25 LT.

### ITEM 609.31 CURB TYPE 3

REPLACEMENT CURB

| | |
|---|---|
| STA 443+50± LT. TO STA 444+50± LT. | 100 L.F. |
| STA 454+69± LT. TO STA 455+70± LT. | 100 L.F. |
| STA 460+40± RT. TO STA 460+75± LT. | 35 L.F. |

### ITEM 610.08 PLAIN RIPRAP

STA 445+25 LT. DOWNSPOUT
STA 366+80 30" RCP CROSSPIPE
- AT INLET & OUTLET

### OPEN THROAT CATCH BASIN LOCATIONS

STA 382+50 RT.
STA 426+50 RT.
STA 468+50 LT.

SEE APPLICABLE GENERAL NOTES

### CONCRETE HEADWALL REMOVAL LOCATIONS *

| | |
|---|---|
| STA 374+52 RT. | ATTACHED TO 24" RCP |
| STA 376+38 RT.<br>STA 376+62 RT. | ATTACHED TO 18" CMP |
| STA 470+91 LT. | ATTACHED TO 18" RCP |

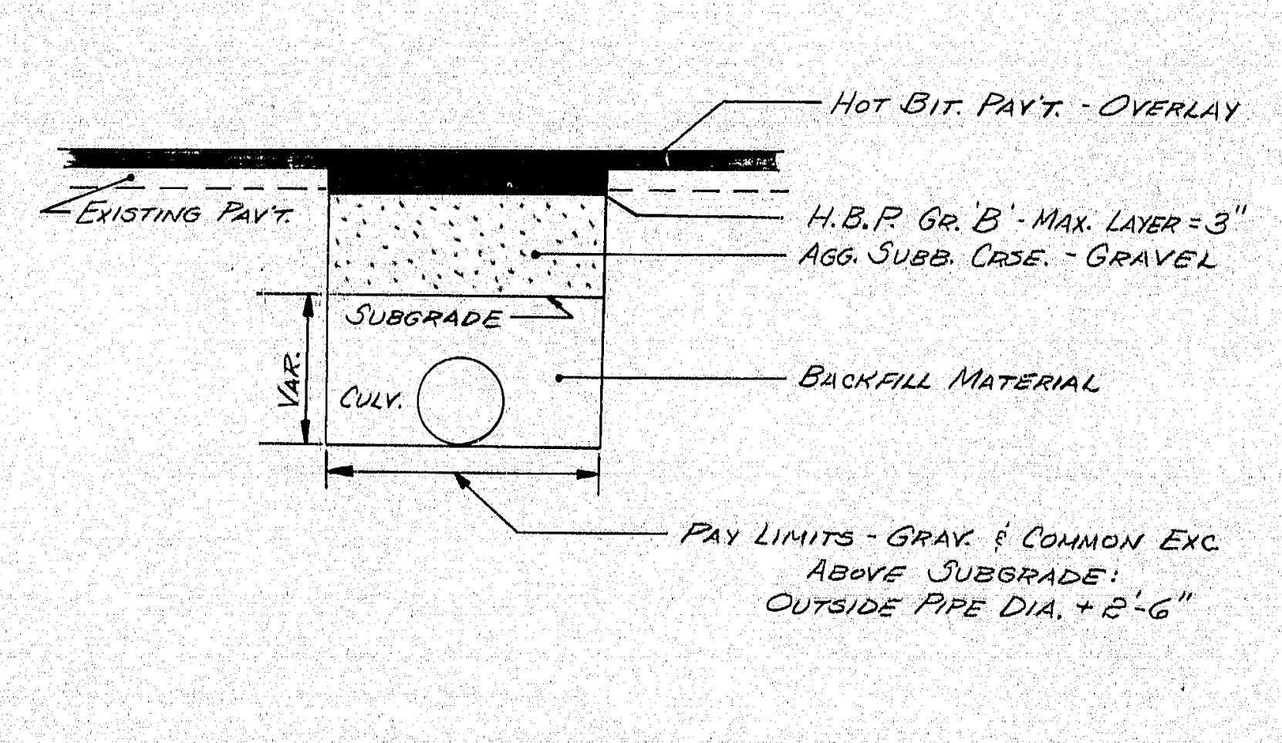
REPAIR OF WASHOUT ON FILL SLOPE STA 365+25± RT AS DIRECTED BY THE ENGINEER TO BE PAID FOR UNDER APPROPRIATE HOURLY EQUIPMENT RENTAL ITEMS. REPLACEMENT MATERIAL SHALL BE AGGREGATE SUBBASE COURSE - GRAVEL, RIPRAP, STONE DITCH PROTECTION, LOAM, SEED AND MULCH AND PAID FOR UNDER RESPECTIVE ITEMS.

* ALL CONCRETE HEADWALL REMOVAL AT THE ABOVE STATIONS WILL BE CONSIDERED INCIDENTAL TO ITEM 603.

STA 454±30 RT. - RAMP 2 & 463±00 RT. - RAMP 3
OVERLAY RAMP AND CONSTRUCT BUTT JOINT 25' FROM EDGE OF SHOULDER, RTE. 1.

STA 455±60 RT. - RAMP 1
OVERLAY RAMP AND CONSTRUCT BUTT JOINT 25' FROM CURB BULL NOSE

### CULVERT INSTALLATION IN OVERLAY SECTION


HOT BIT. PAV'T. - OVERLAY
EXISTING PAV'T.
H.B.P. GR. 'B' - MAX. LAYER = 3"
AGG. SUBB. CRSE. - GRAVEL
SUBGRADE
VAR.
CULV.
BACKFILL MATERIAL
PAY LIMITS - GRAV. & COMMON EXC.
ABOVE SUBGRADE:
OUTSIDE PIPE DIA. + 2'-6"

104-105

REVISED AS-BUILT 3/'91

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION NOTES
GENERAL NOTES
SPECIAL PLAN DETAILS

SHEET OF AUGUSTA, MAINE

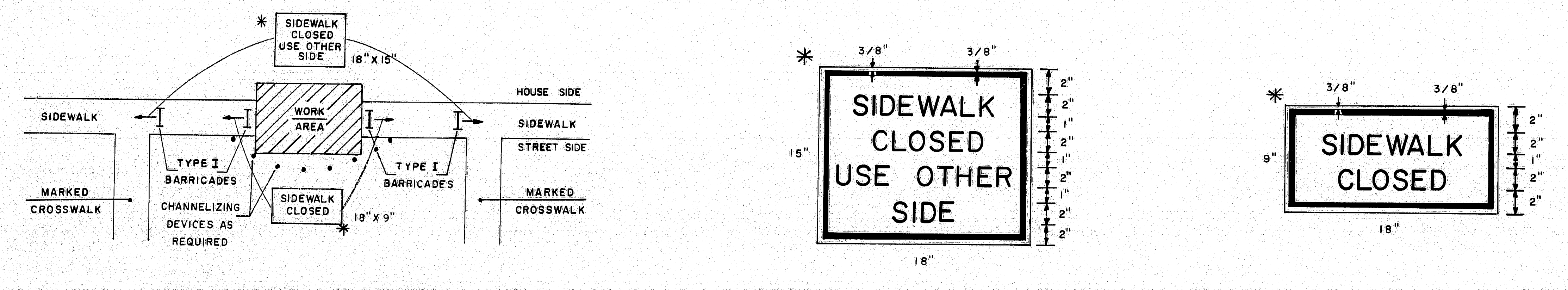
CUMBERLAND - YARMOUTH RTE. 1

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN - DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

BRUNING 45710-1

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 11 | 28 |

* NON-REFLECTORIZED WHITE BACKGROUND, BLACK TEXT AND BORDER-2" SERIES "C" UPPER CASE LETTERS

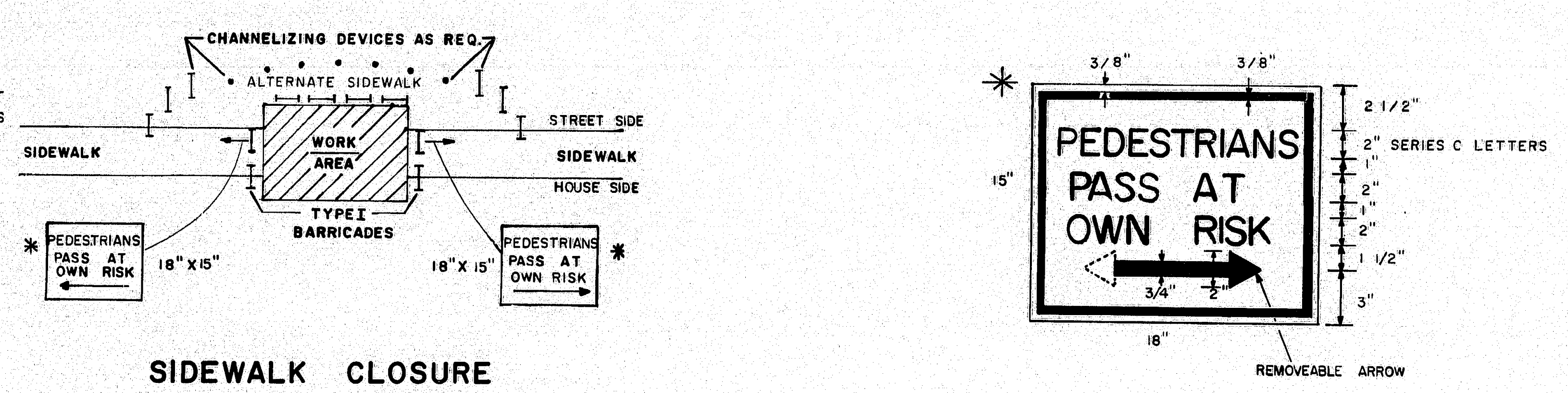


* SIDEWALK CLOSED USE OTHER SIDE
18" X 15"
HOUSE SIDE
SIDEWALK
WORK AREA
SIDEWALK
STREET SIDE
TYPE I BARRICADES
TYPE I BARRICADES
MARKED CROSSWALK
CHANNELIZING DEVICES AS REQUIRED
SIDEWALK CLOSED
18" X 9"
MARKED CROSSWALK
*
3/8"
3/8"
SIDEWALK CLOSED USE OTHER SIDE
15"
18"
2"
2"
1"
2"
1"
2"
1"
2"
2"
*
3/8"
3/8"
SIDEWALK CLOSED
9"
18"
2"
2"
1"
2"
2"

**SIDEWALK CLOSURE**
**WITHOUT ALTERNATE SIDEWALK**

A

* NON-REFLECTORIZED WHITE BACK GROUND, BLACK TEXT AND BORDER-2" SERIES C UPPER CASE LETTERS

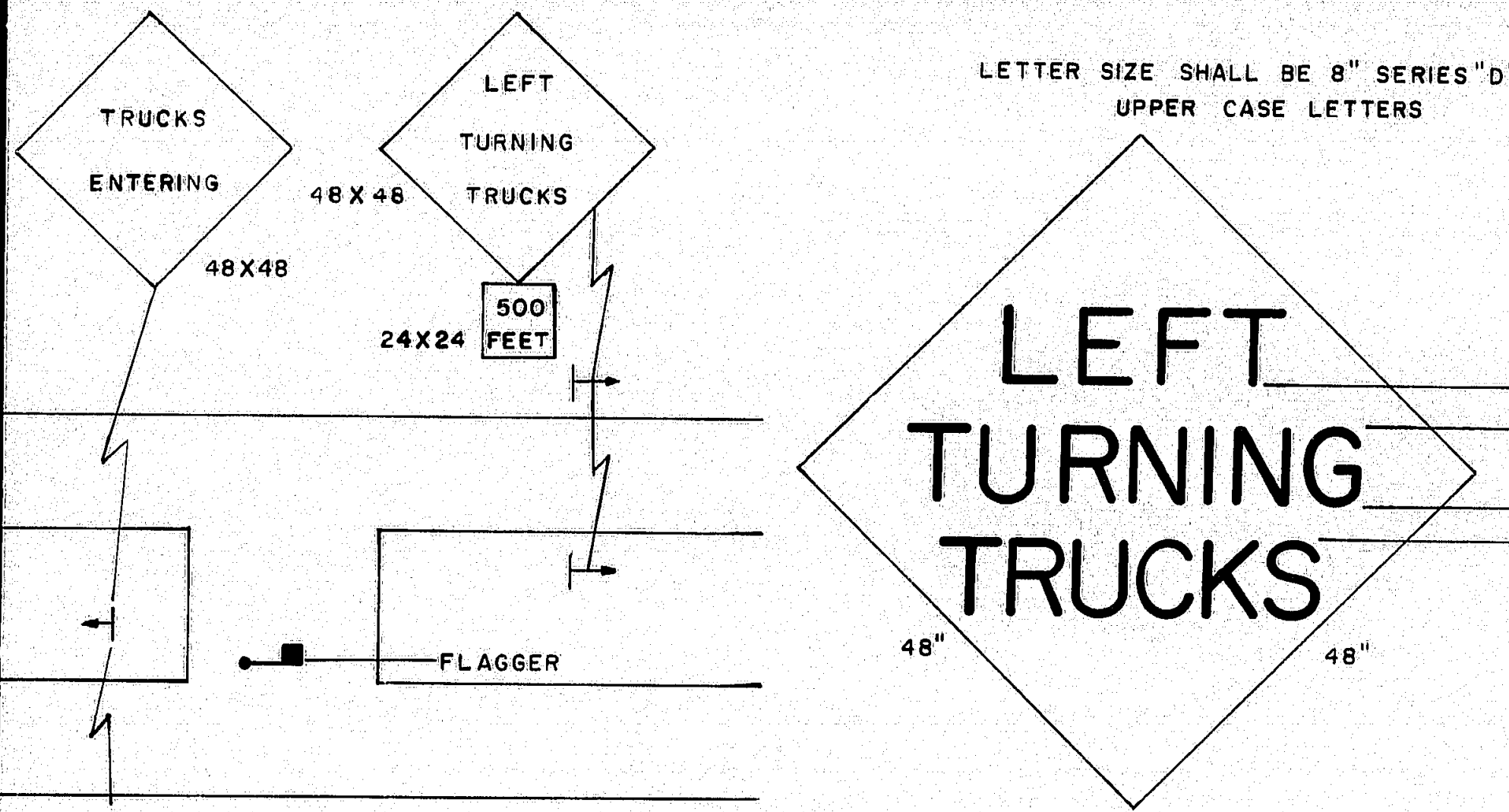


CHANNELIZING DEVICES AS REQ.
ALTERNATE SIDEWALK
STREET SIDE
SIDEWALK
WORK AREA
SIDEWALK
HOUSE SIDE
TYPE I BARRICADES
* PEDESTRIANS PASS AT OWN RISK
18" X 15"
18" X 15"
PEDESTRIANS PASS AT OWN RISK *
*
3/8"
3/8"
PEDESTRIANS PASS AT OWN RISK
15"
18"
2 1/2"
2" SERIES C LETTERS
1"
2"
1"
2"
1 1/2"
3"
3/4"
2"
REMOVEABLE ARROW

**SIDEWALK CLOSURE**
**WITH ALTERNATE SIDEWALK**

B

LETTER SIZE SHALL BE 8" SERIES "D" UPPER CASE LETTERS

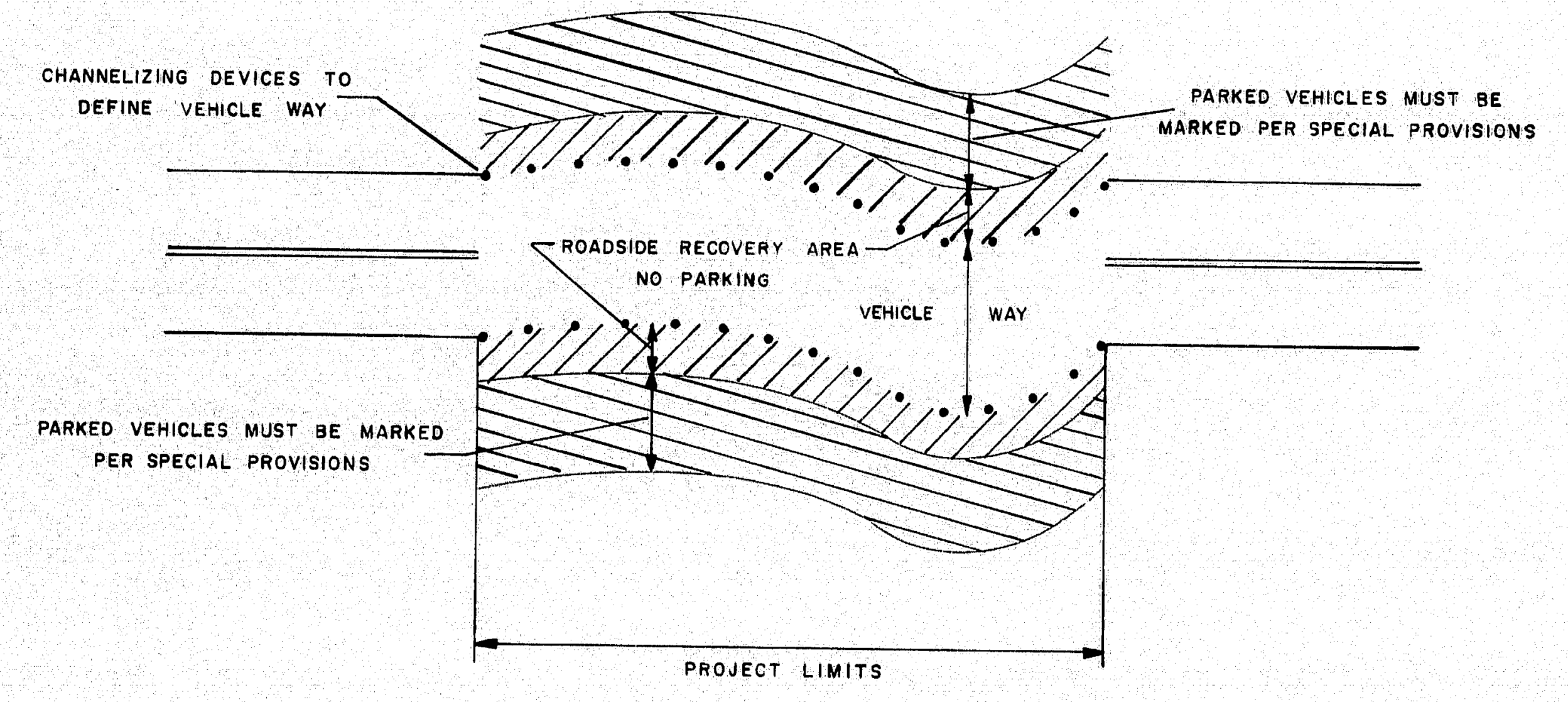


TRUCKS ENTERING
48X48
LEFT TURNING TRUCKS
48 X 48
500 FEET
24X24
FLAGGER
LEFT TURNING TRUCKS
4 3/4"
4 3/4"
48"
48"

**MEDIAN CROSSOVER**

E

ALL DIMENSIONS AND OTHER REQUIREMENTS AS SPECIFIED IN THE SPECIAL PROVISIONS



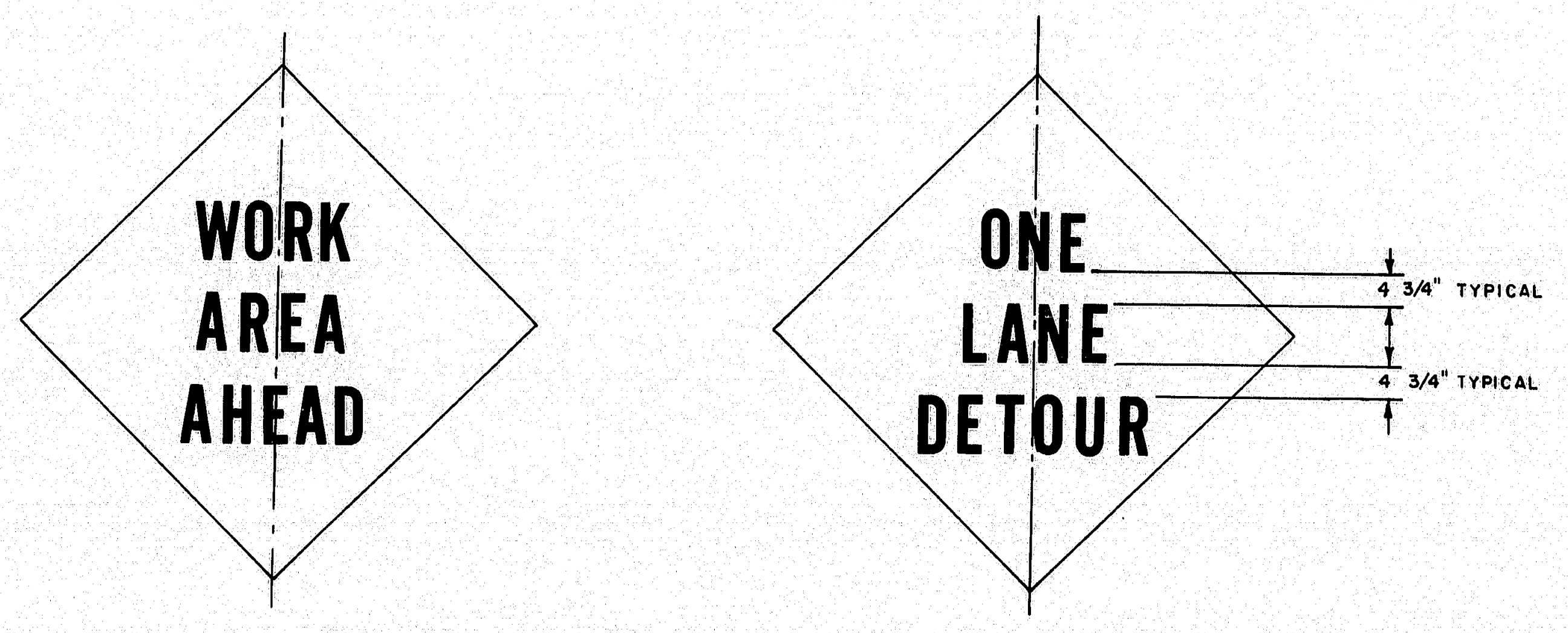
CHANNELIZING DEVICES TO DEFINE VEHICLE WAY
PARKED VEHICLES MUST BE MARKED PER SPECIAL PROVISIONS
ROADSIDE RECOVERY AREA NO PARKING
VEHICLE WAY
PARKED VEHICLES MUST BE MARKED PER SPECIAL PROVISIONS
PROJECT LIMITS

**ROADSIDE RECOVERY AREA**

C

JANUARY 1968

CONSTRUCTION WARNING SIGN DETAIL



WORK AREA AHEAD
ONE LANE DETOUR
4 3/4" TYPICAL
4 3/4" TYPICAL

1. Letter size shall be 8" Series 'D'.
2. Border dimensions and legend design shall conform to "Standard Highway Signs".

D

GENERAL NOTES

1. Distances shown for sign placement are nominal, exact locations shall be determined by the Engineer.

2. Grades on temporary roadways through the construction zone used by the public shall not exceed 10 percent.

3. Advisory speed consistant with prevailing conditions shall be as determined by the Engineer.

4. Use shaded signs when specified in the Special Provisions. ▨

5. The length of tapers shall be determined from the following formulae:

   If S is equal to or less than 40 MPH
   L = (W x S x S) / 60

   If S is equal to or greater than 45 MPH
   L ≐ WS

   Where:

   L = taper length in feet
   S = operating speed in MPH
   W = width of roadway to be closed in feet

   Taper lengths shall be rounded to the nearest five feet.

   It may be required to extend lane closure tapers to provide a smooth transition where geometric alignment reduces sight distance.

6. The maximum longitudinal spacing of channelizing devices shall conform to the following:
   - (a) 50 feet through work areas
   - (b) A distance in tapers equal to the numerical value of the operating speed, i.e., 45 MPH = 45 feet
   - (c) In all areas not covered above maximum spacing shall be as follows:

| Radius of curve | Spacing |
|---|---|
| 50' to 300' | 25' |
| 301' to 700' | 50' |
| 701' to 1000' | 75' |
| over 1000' | 5 times the operating speed |

   The maximum transverse spacing in tapers shall be determined from the the following formula:

   D = (W x S) / L

   Where:

   D = transverse spacing in feet
   W = width of roadway to be closed in feet
   L = taper length in feet
   S = operating speed in MPH

7. BORDER DIMENSIONS AND LEGEND DESIGN SHALL CONFORM TO THE STANDARD HIGHWAY SIGNS BOOKLET.

104-106

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN - DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

| 3-4-80 | GENERAL NOTES | REVISIONS | |
|---|---|---|---|
| 4/3/80 PF | A,B,C,GN | | |

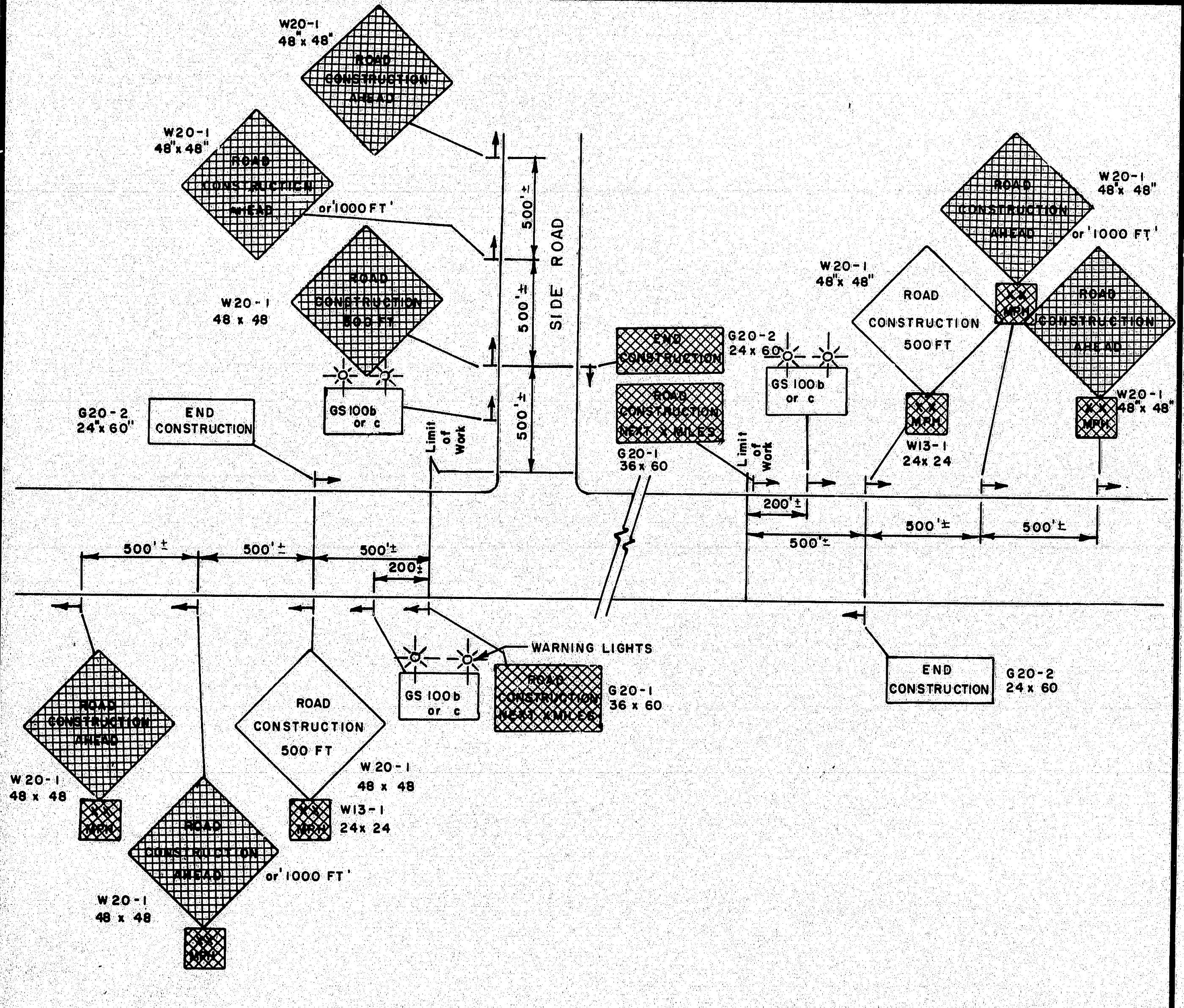
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES

SHEET OF AUGUSTA, MAINE (HD - 10)

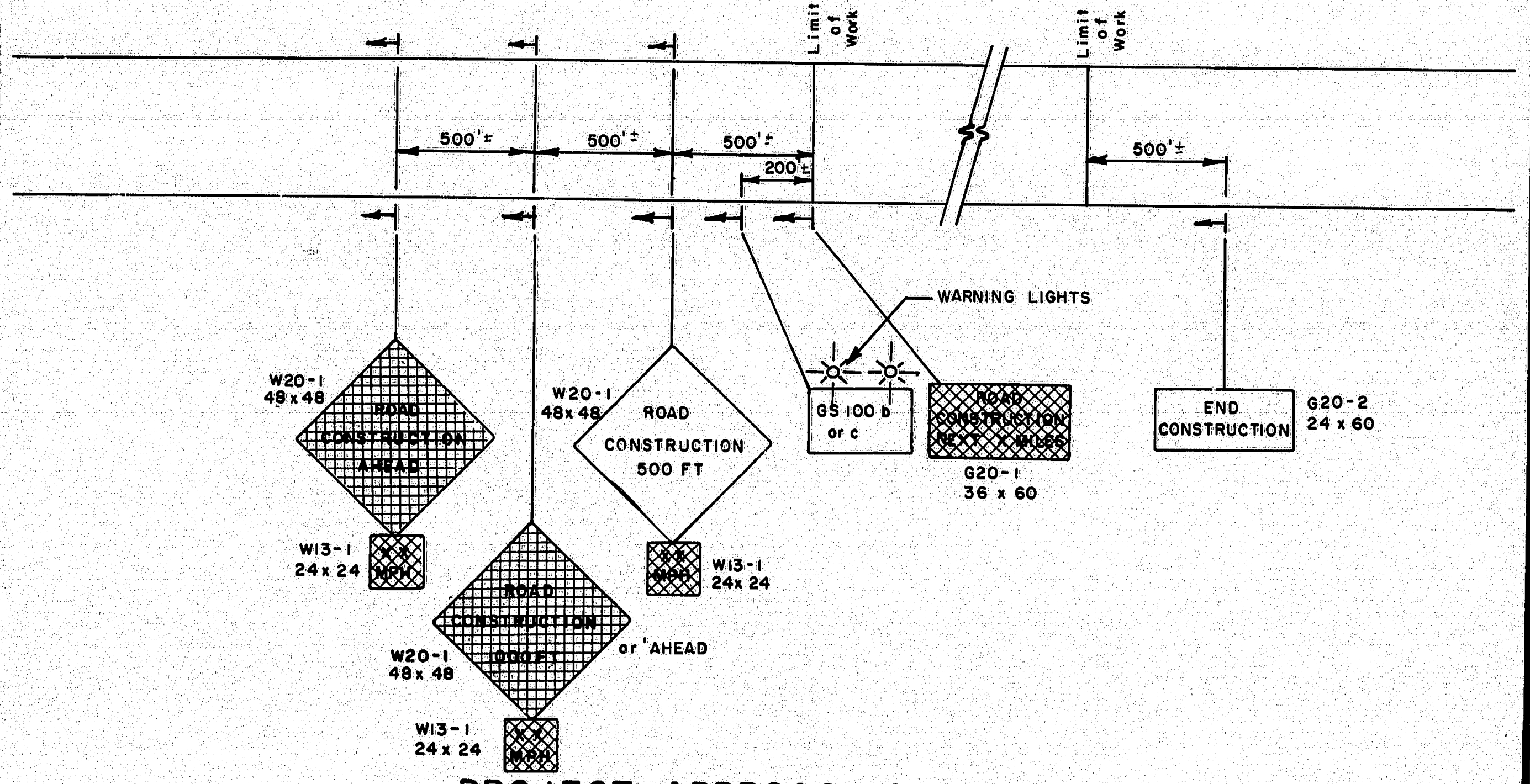
CUMBERLAND - YARMOUTH RTE. 1

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 12 | 28 |


W20-1
48"x 48"
ROAD CONSTRUCTION AHEAD
or 1000 FT'
ROAD CONSTRUCTION 500 FT
SIDE ROAD
500'±
G20-2
24"x 60"
END CONSTRUCTION
GS 100b or c
Limit of Work
G20-2
24 x 60
ROAD CONSTRUCTION NEXT X MILES
G20-1
36 x 60
W13-1
24x 24
XX MPH
200'±
WARNING LIGHTS
W20-1
48 x 48

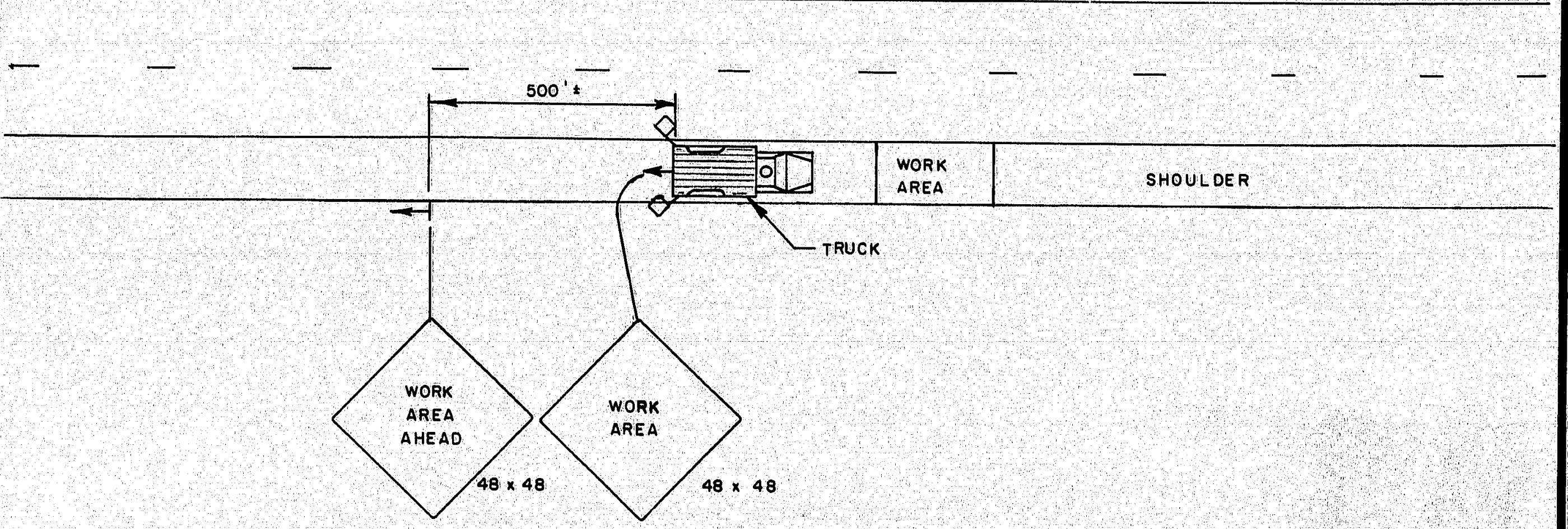
## PROJECT APPROACH SIGNING
Two Way Traffic

A


Limit of Work
500'±
200'±
WARNING LIGHTS
W20-1
48 x 48
ROAD CONSTRUCTION AHEAD
ROAD CONSTRUCTION 500 FT
GS 100 b or c
ROAD CONSTRUCTION NEXT X MILES
G20-1
36 x 60
END CONSTRUCTION
G20-2
24 x 60
W13-1
24 x 24
XX MPH
ROAD CONSTRUCTION 1000 FT
or 'AHEAD

## PROJECT APPROACH SIGNING
Expressway

B


500'±
WORK AREA
SHOULDER
TRUCK
WORK AREA AHEAD
48 x 48
WORK AREA
48 x 48

## SHOULDER WORK - MOBILE

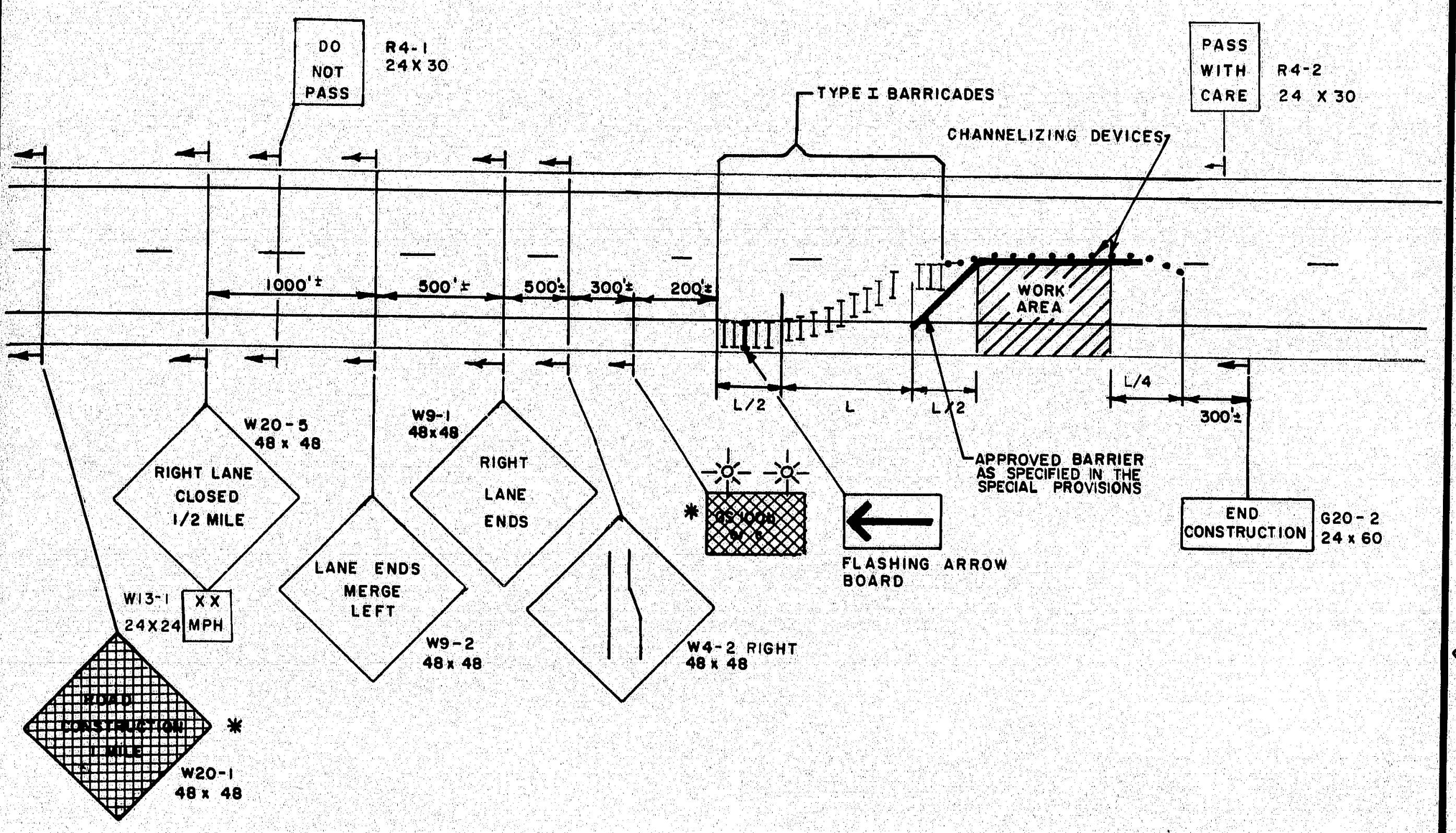
C

NOTE

✱ OMIT W20-1 AND GS-100 C OR B IF LANE CLOSURE SIGNING ARRAY IS WITHIN PROJECT LIMITS.

ALTER PAVEMENT MARKINGS AS REQUIRED. MAINTAIN 15 FT LATERAL CLEARANCE.

USE SIMILAR SIGNING FOR LEFT LANE CLOSURE.


DO NOT PASS
R4-1
24 X 30
TYPE I BARRICADES
CHANNELIZING DEVICES
PASS WITH CARE
R4-2
24 X 30
1000'±
500'±
500'±
300'±
200'±
WORK AREA
L/2
L
L/2
L/4
300'±
APPROVED BARRIER AS SPECIFIED IN THE SPECIAL PROVISIONS
END CONSTRUCTION
G20-2
24 x 60
W20-5
48 x 48
RIGHT LANE CLOSED 1/2 MILE
W9-1
48x48
RIGHT LANE ENDS
LANE ENDS MERGE LEFT
W9-2
48 x 48
W4-2 RIGHT
48 x 48
FLASHING ARROW BOARD
W13-1
24X24
XX MPH
ROAD CONSTRUCTION 1 MILE
W20-1
48 x 48

## EXPRESSWAY LANE CLOSURE

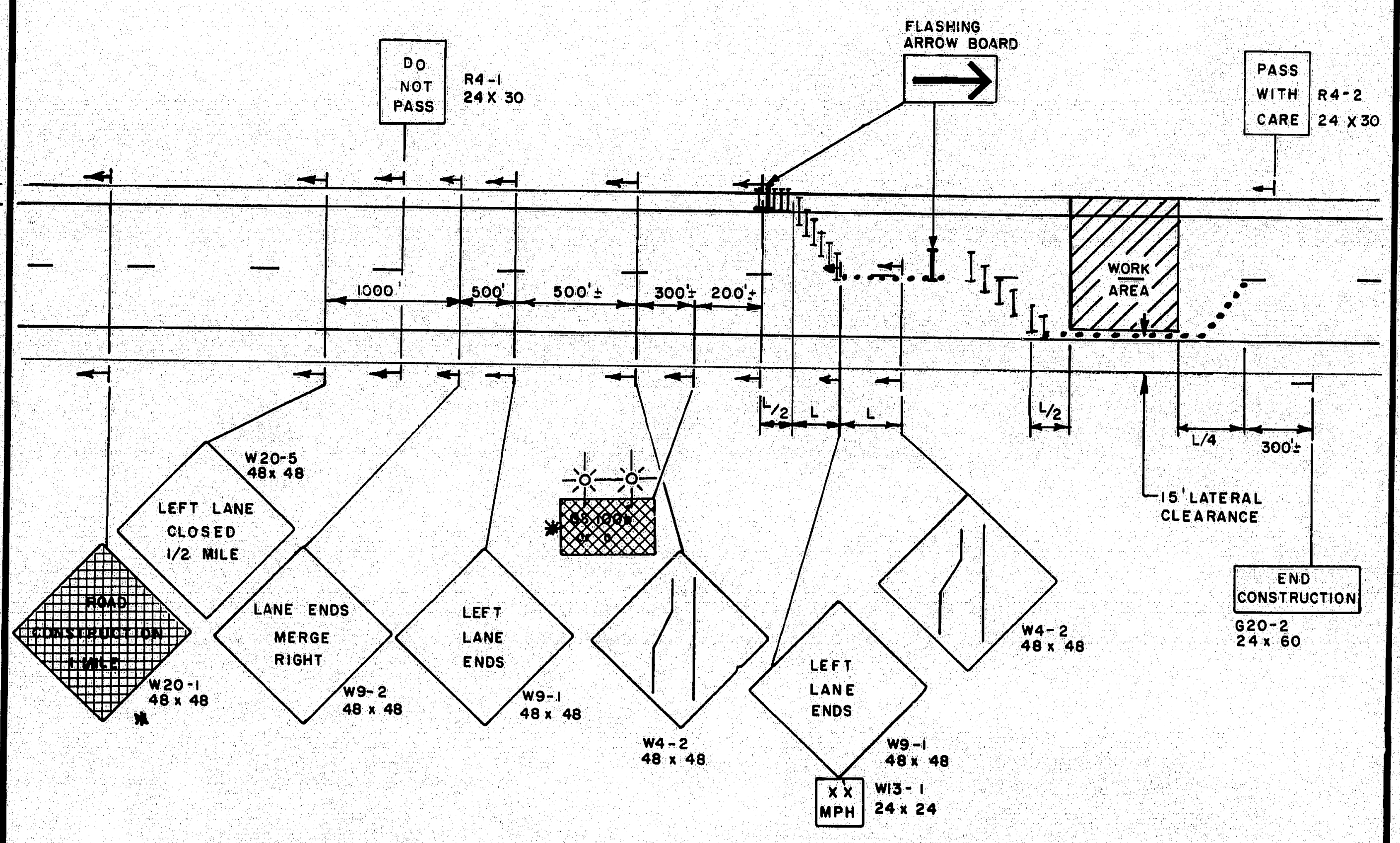
D

NOTE

W20-1 AND GS-100B OR C SHALL BE USED ONLY WHEN THE CLOSURE IS THE ACTUAL CONSTRUCTION PROJECT AND NOT A PART THEREOF.

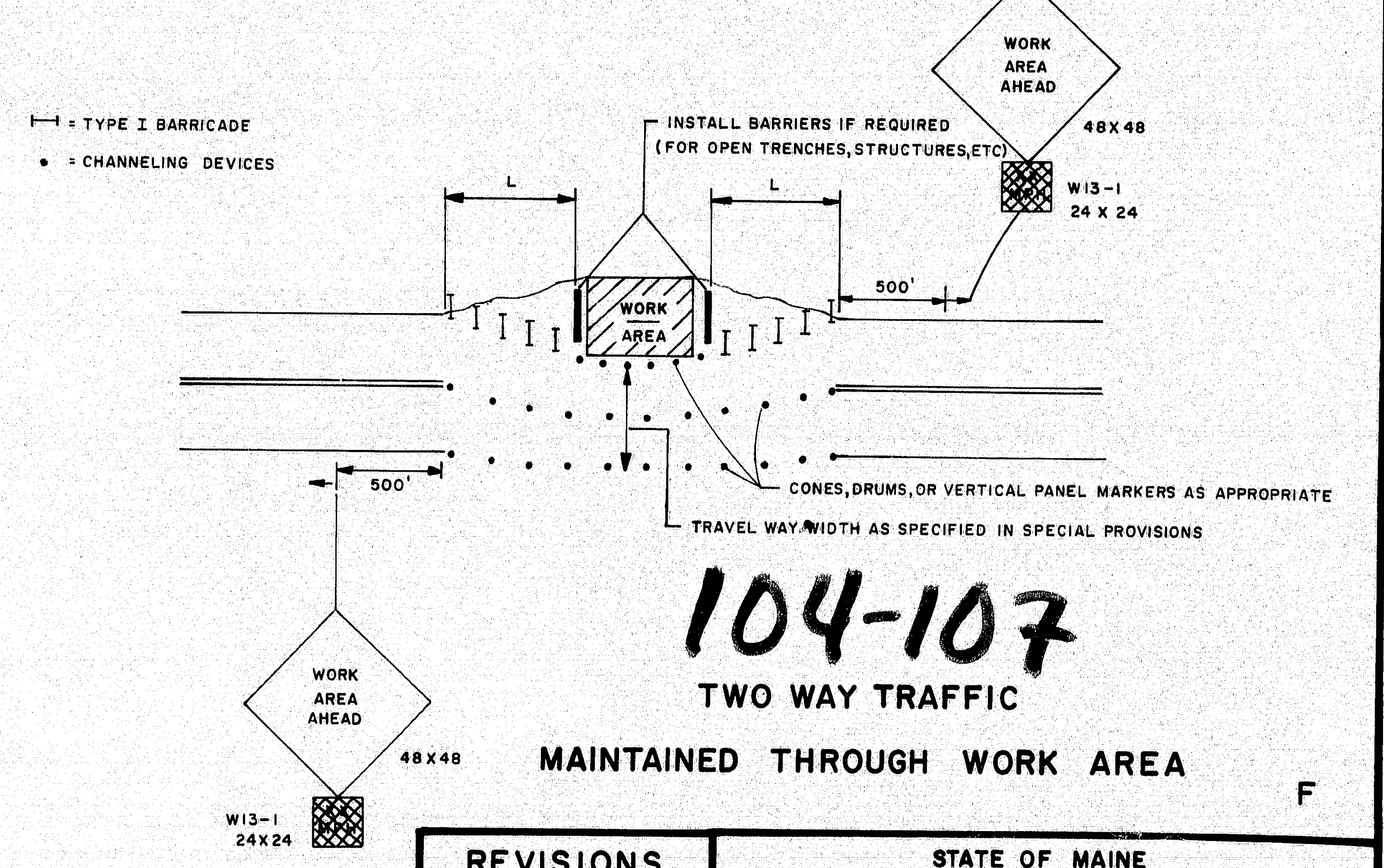
ALTER PAVEMENT MARKINGS AS NECESSARY.

USE SIMILAR SIGNING FOR RIGHT LANE CLOSURE.


DO NOT PASS
R4-1
24 X 30
FLASHING ARROW BOARD
PASS WITH CARE
R4-2
24 X 30
1000'
500'
500'±
300'±
200'±
WORK AREA
L/2
L
L
L/2
L/4
300'±
15' LATERAL CLEARANCE
END CONSTRUCTION
G20-2
24 x 60
W20-5
48x 48
LEFT LANE CLOSED 1/2 MILE
LANE ENDS MERGE RIGHT
W9-2
48 x 48
LEFT LANE ENDS
W9-1
48 x 48
W4-2
48 x 48
ROAD CONSTRUCTION 1 MILE
W20-1
48 x 48
XX MPH
W13-1
24 x 24

## TWO LANE CLOSURE - UTILIZING RIGHT SHOULDER

E


= TYPE I BARRICADE
= CHANNELING DEVICES
INSTALL BARRIERS IF REQUIRED (FOR OPEN TRENCHES, STRUCTURES, ETC)
WORK AREA AHEAD
48X48
W13-1
24 X 24
L
500'
WORK AREA
CONES, DRUMS, OR VERTICAL PANEL MARKERS AS APPROPRIATE
TRAVEL WAY WIDTH AS SPECIFIED IN SPECIAL PROVISIONS

104-107

## TWO WAY TRAFFIC
## MAINTAINED THROUGH WORK AREA

F

| REVISIONS | |
|---|---|
| 1-28-80 | |
| 3-4-80 | PLATE "F" |
| 4/3/80 PF | D,E |
| | |
| | |
| | |
| | |
| | |
| | |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

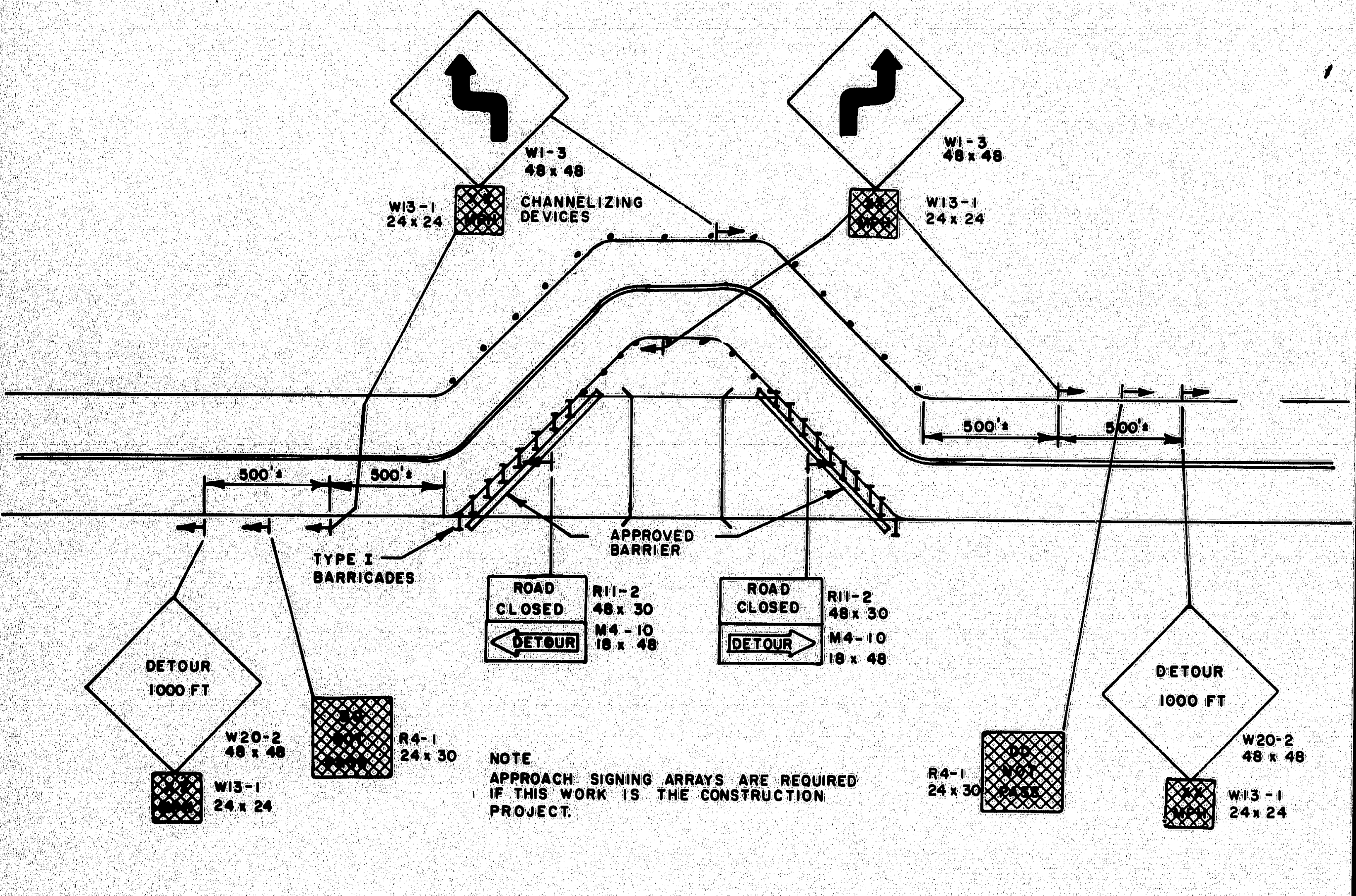
SHEET OF AUGUSTA, MAINE (HD-11)

CUMBERLAND - YARMOUTH RTE. 1

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN - DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

JANUARY 1968

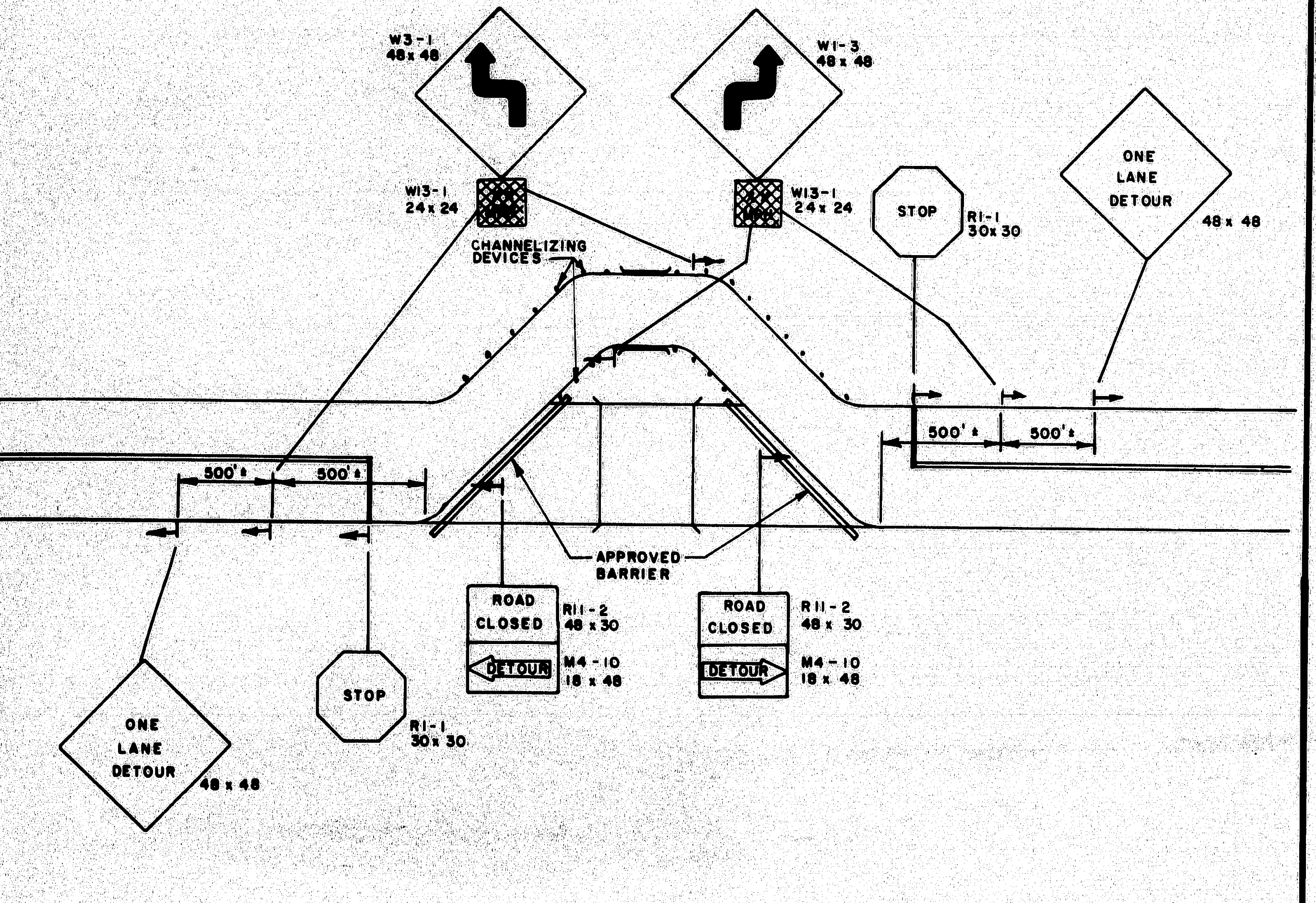
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 13 | 28 |


W1-3
48 x 48
W13-1
24 x 24
CHANNELIZING
DEVICES
W1-3
48 x 48
W13-1
24 x 24
500'±
500'±
500'±
500'±
TYPE I
BARRICADES
APPROVED
BARRIER
ROAD CLOSED
R11-2
48 x 30
DETOUR
M4-10
18 x 48
ROAD CLOSED
R11-2
48 x 30
DETOUR
M4-10
18 x 48
DETOUR
1000 FT
W20-2
48 x 48
W13-1
24 x 24
R4-1
24 x 30
R4-1
24 x 30
DETOUR
1000 FT
W20-2
48 x 48
W13-1
24 x 24

NOTE
APPROACH SIGNING ARRAYS ARE REQUIRED IF THIS WORK IS THE CONSTRUCTION PROJECT.

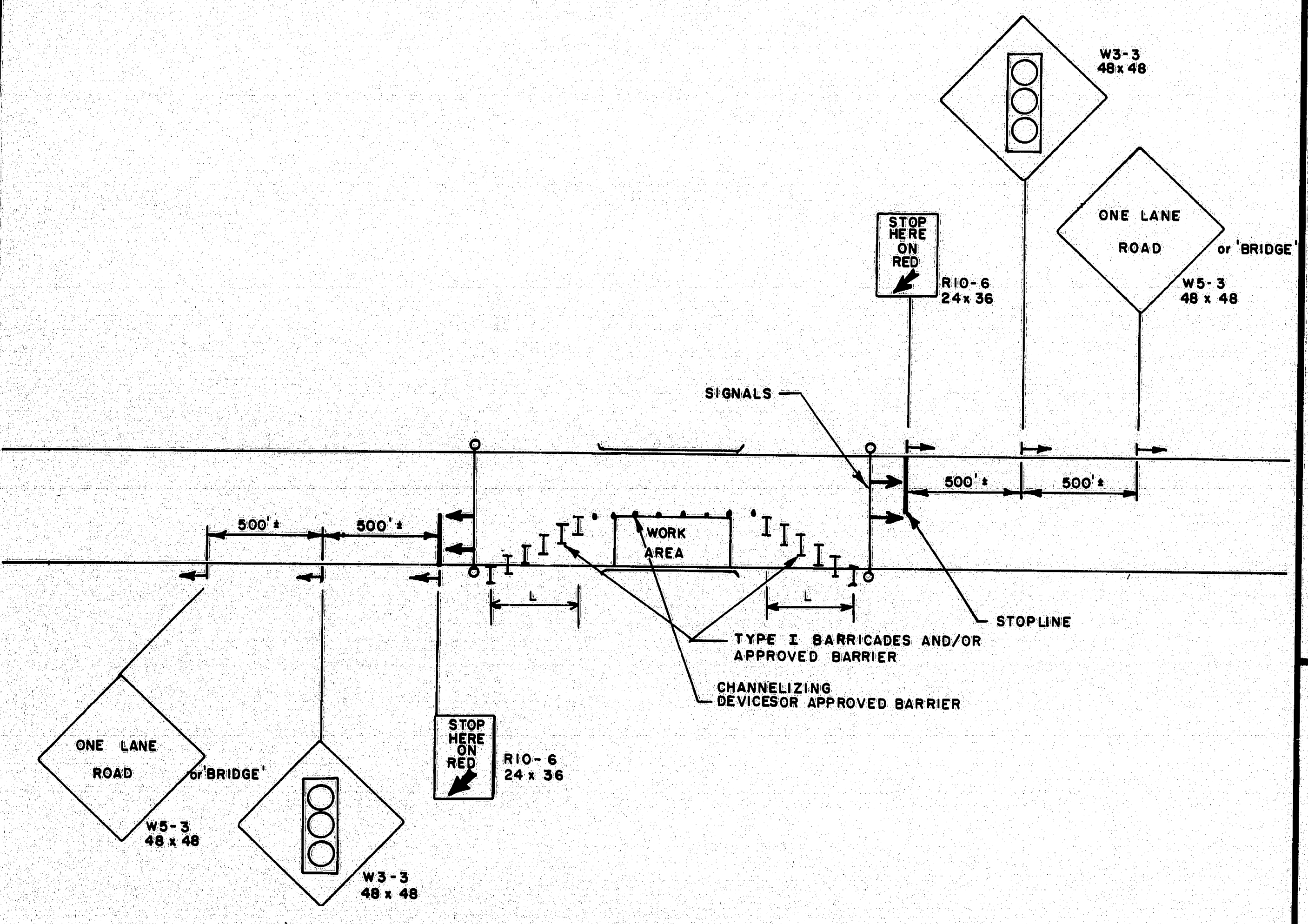
TWO WAY TWO LANE DETOUR

A


W3-1
48 x 48
W1-3
48 x 48
W13-1
24 x 24
W13-1
24 x 24
STOP
R1-1
30 x 30
ONE
LANE
DETOUR
48 x 48
CHANNELIZING
DEVICES
500'±
500'±
500'±
500'±
APPROVED
BARRIER
ROAD CLOSED
R11-2
48 x 30
DETOUR
M4-10
18 x 48
ROAD CLOSED
R11-2
48 x 30
DETOUR
M4-10
18 x 48
ONE
LANE
DETOUR
48 x 48
STOP
R1-1
30 x 30

ONE WAY DETOUR

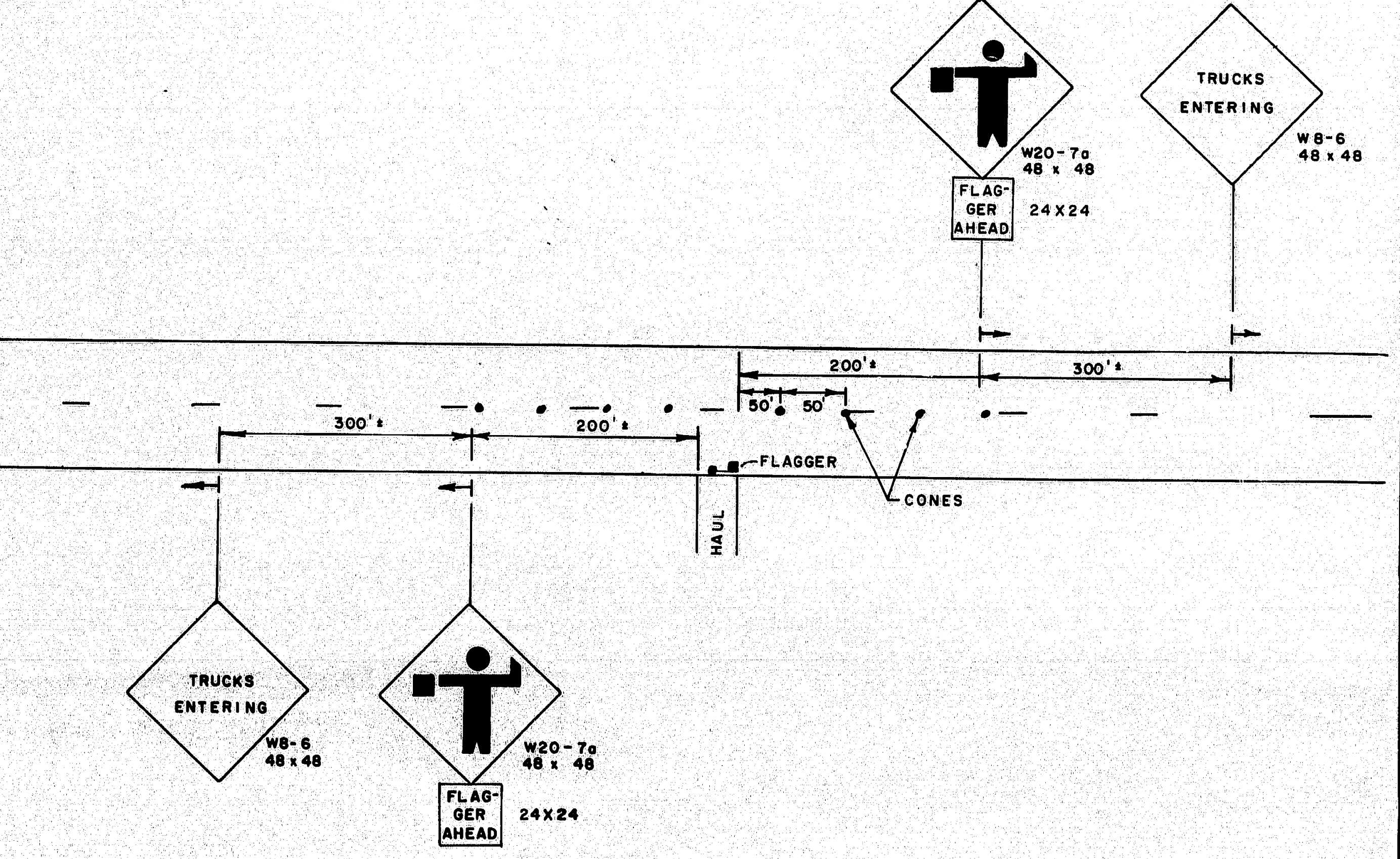
E


W3-3
48 x 48
STOP HERE ON RED
R10-6
24 x 36
ONE LANE
ROAD
or 'BRIDGE'
W5-3
48 x 48
SIGNALS
500'±
500'±
500'±
500'±
WORK
AREA
L
L
STOPLINE
TYPE I BARRICADES AND/OR
APPROVED BARRIER
CHANNELIZING
DEVICESOR APPROVED BARRIER
ONE LANE
ROAD
or 'BRIDGE'
W5-3
48 x 48
W3-3
48 x 48
STOP HERE ON RED
R10-6
24 x 36

TWO WAY TRAFFIC
LANE CLOSURE
WITH TEMPORARY TRAFFIC SIGNALS

B

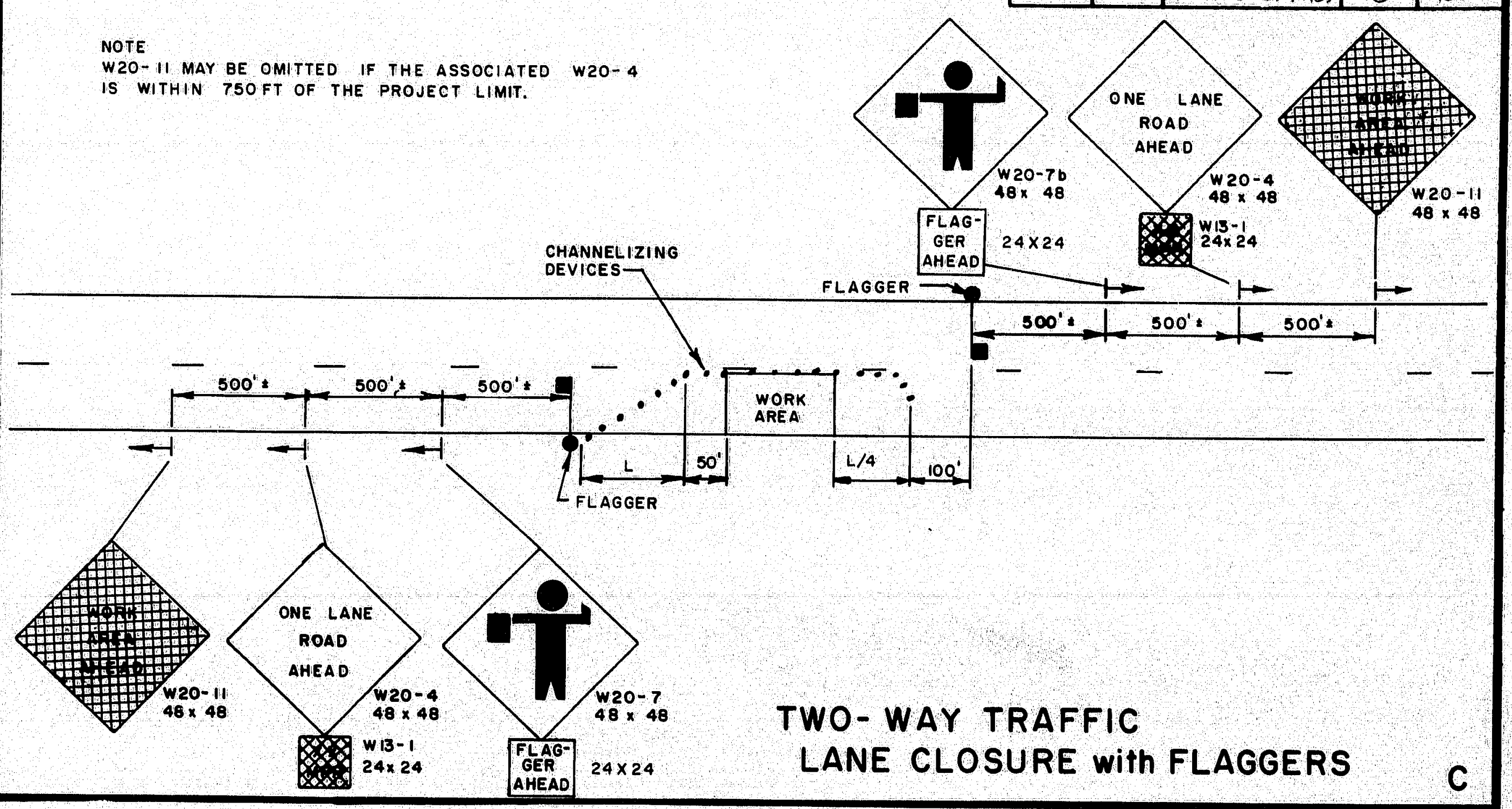
NOTE
WHEN HAUL ROAD IS NOT IN USE -
1. CLOSE HAUL ROAD WITH TYPE I BARRICADES
2. COVER OR REMOVE SIGNS.


W20-7a
48 x 48
FLAG-
GER
AHEAD
24X24
TRUCKS
ENTERING
W8-6
48 x 48
200'±
300'±
50'
50'
300'±
200'±
FLAGGER
CONES
HAUL
TRUCKS
ENTERING
W8-6
48 x 48
W20-7a
48 x 48
FLAG-
GER
AHEAD
24X24

HAUL ROADS

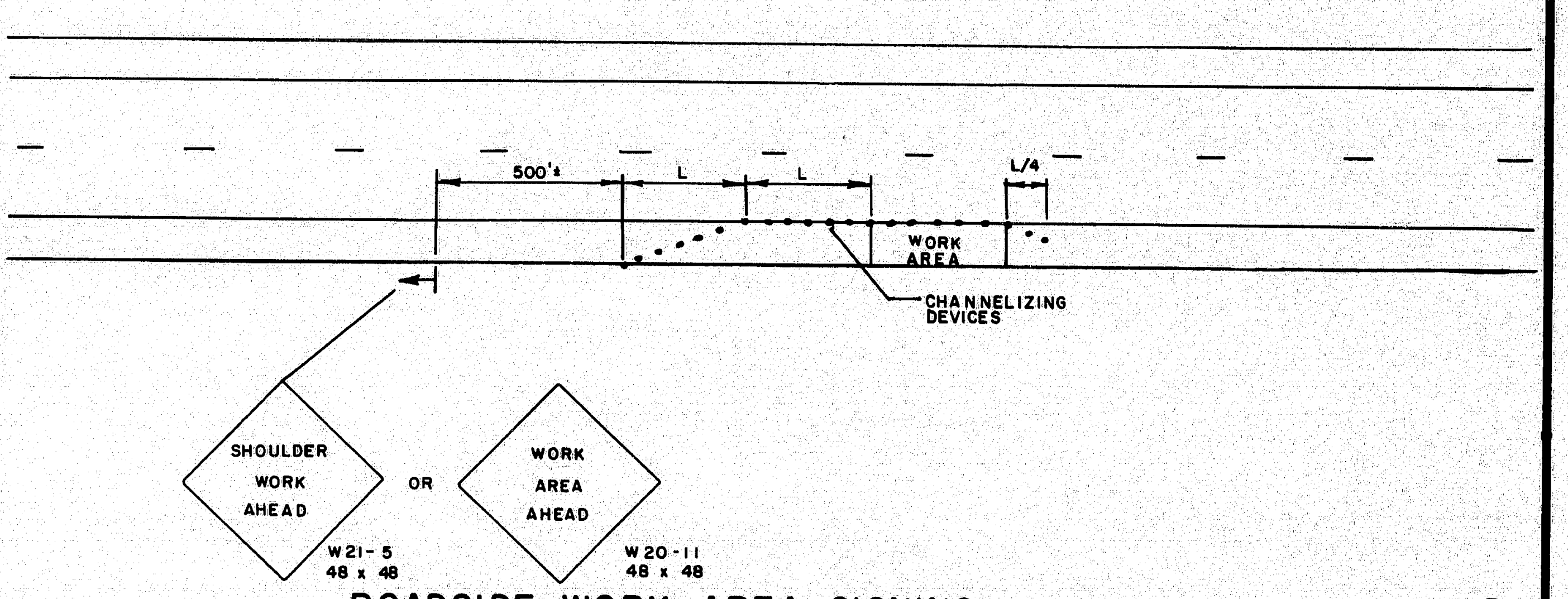
F

NOTE
W20-11 MAY BE OMITTED IF THE ASSOCIATED W20-4 IS WITHIN 750 FT OF THE PROJECT LIMIT.


W20-7b
48 x 48
FLAG-
GER
AHEAD
24X24
ONE LANE
ROAD
AHEAD
W20-4
48 x 48
W13-1
24 x 24
W20-11
48 x 48
CHANNELIZING
DEVICES
FLAGGER
500'±
500'±
500'±
500'±
500'±
500'±
WORK
AREA
L
50'
L/4
100'
FLAGGER
W20-11
48 x 48
ONE LANE
ROAD
AHEAD
W20-4
48 x 48
W13-1
24 x 24
W20-7
48 x 48
FLAG-
GER
AHEAD
24X24

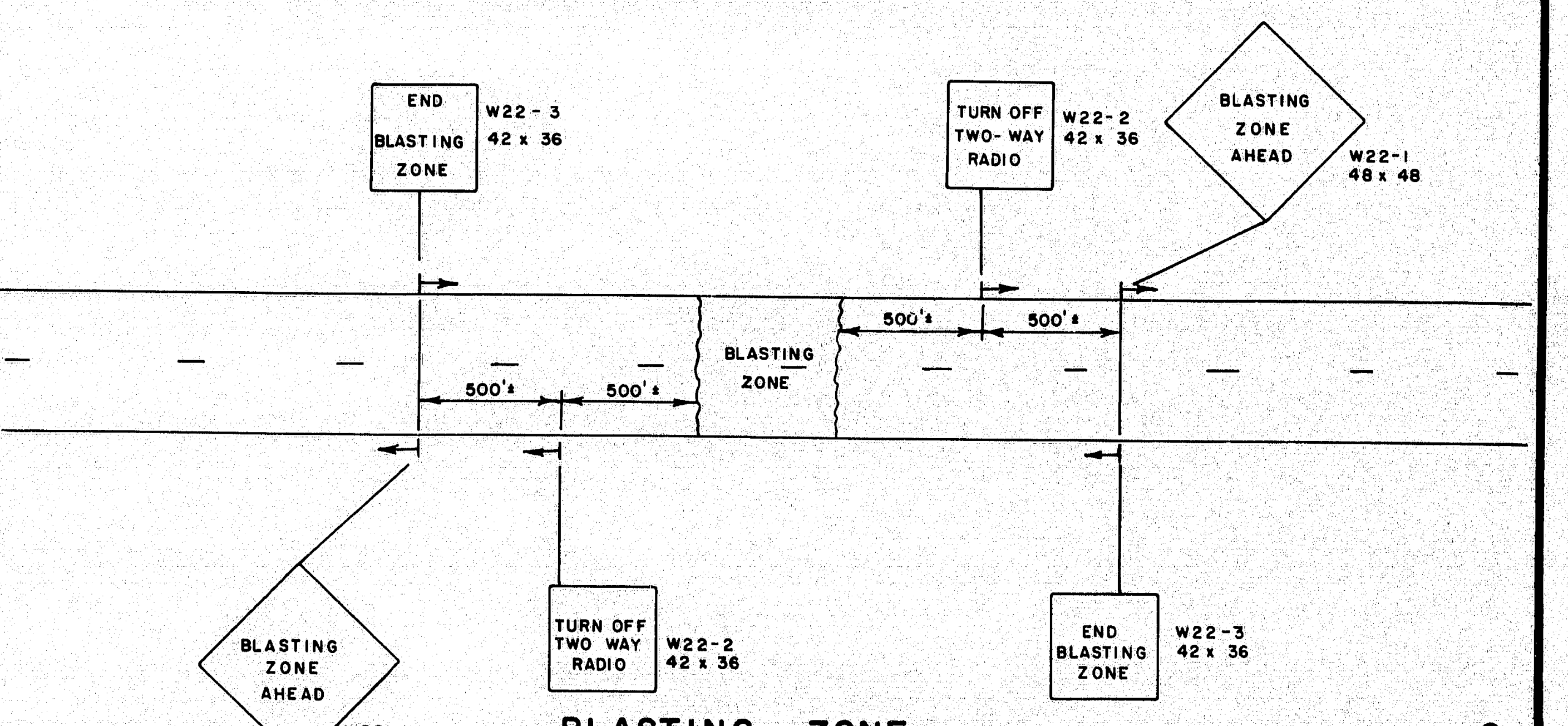
TWO-WAY TRAFFIC
LANE CLOSURE with FLAGGERS

C


500'±
L
L
L/4
WORK
AREA
CHANNELIZING
DEVICES
SHOULDER
WORK
AHEAD
W21-5
48 x 48
OR
WORK
AREA
AHEAD
W20-11
48 x 48

ROADSIDE WORK AREA SIGNING

D


END
BLASTING
ZONE
W22-3
42 x 36
TURN OFF
TWO-WAY
RADIO
W22-2
42 x 36
BLASTING
ZONE
AHEAD
W22-1
48 x 48
500'±
500'±
BLASTING
ZONE
500'±
500'±
BLASTING
ZONE
AHEAD
W22-1
48 x 48
TURN OFF
TWO WAY
RADIO
W22-2
42 x 36
END
BLASTING
ZONE
W22-3
42 x 36

BLASTING ZONE

G

NOTE
SIMILAR SIGN SEQUENCE SHALL BE ERECTED ON ALL SIDE ROADS WITHIN 1000FT OF THE BLASTING ZONE.

104-108

| REVISIONS | |
|---|---|
| 4/3/80 PF | B,C,D |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

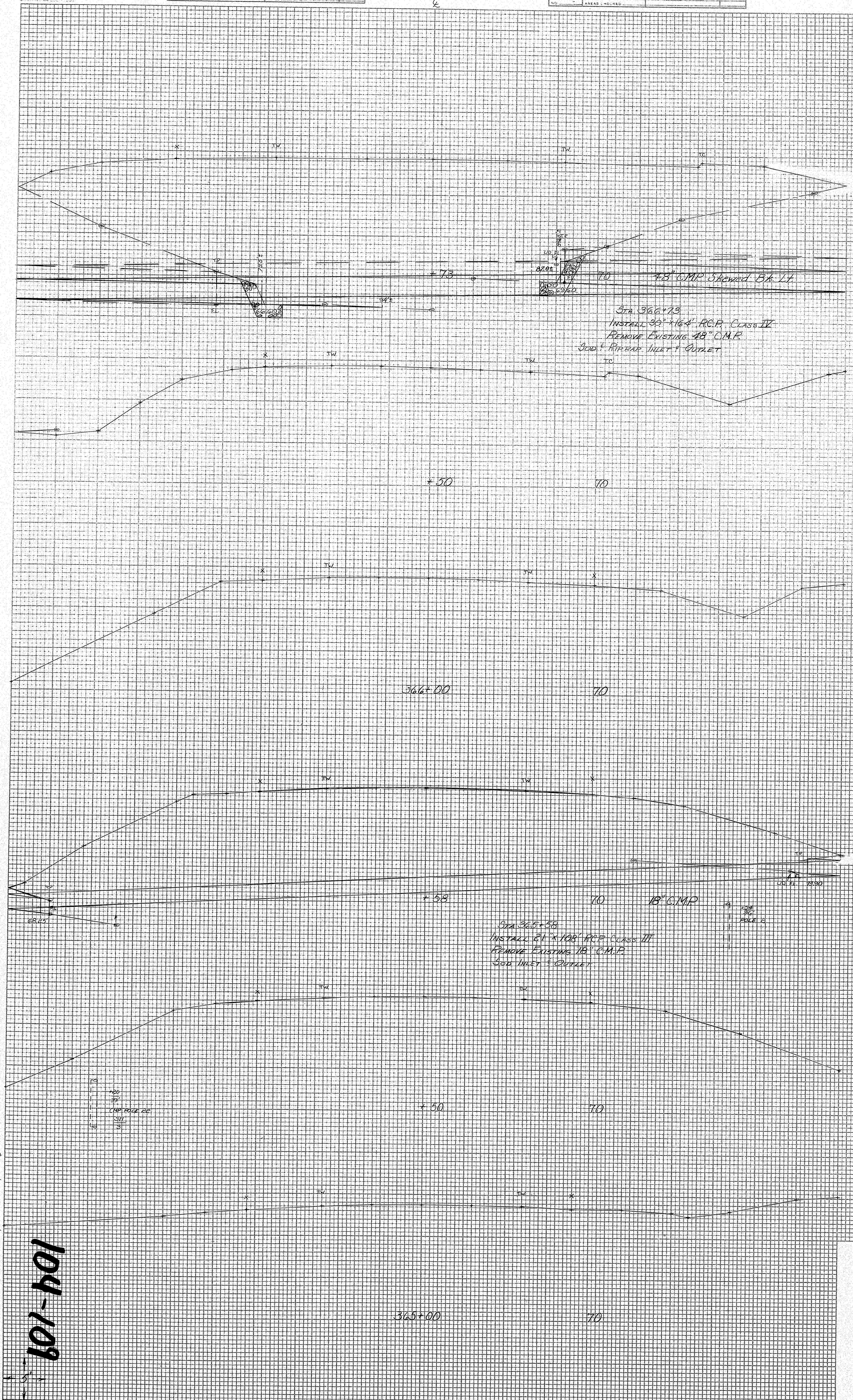
SHEET OF AUGUSTA, MAINE (HD-12)

CUMBERLAND-YARMOUTH RTE. 1

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN-DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | Ellingwood & Crew | 11-87 |
| | PLOTTED | J.Russell | 1-88 |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | | |
| | PLOTTED | | |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |


℄
T.W.
T.C.
X
T.P.
82.5±
UD. F.L.
87.0±
F.L.
69.60
+73
70
48" CMP Skewed Bk. Lt.
+50
70
366+00
70
+58
70
18" C.M.P.
+54
36'
POLE 2
UD. F.L. 73.90
68.25
+50
70
+20
39'
CMP POLE 22
511
3
365+00
70
℄

Sta 366+73
Install 30" × 164' R.C.P. Class IV
Remove Existing 48" C.M.P.
Sod & Riprap Inlet & Outlet

Sta 365+58
Install 21" × 108' RCP Class III
Remove Existing 18" C.M.P.
Sod Inlet & Outlet

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 15 | 28 |

Cumberland Yarmouth

104-109

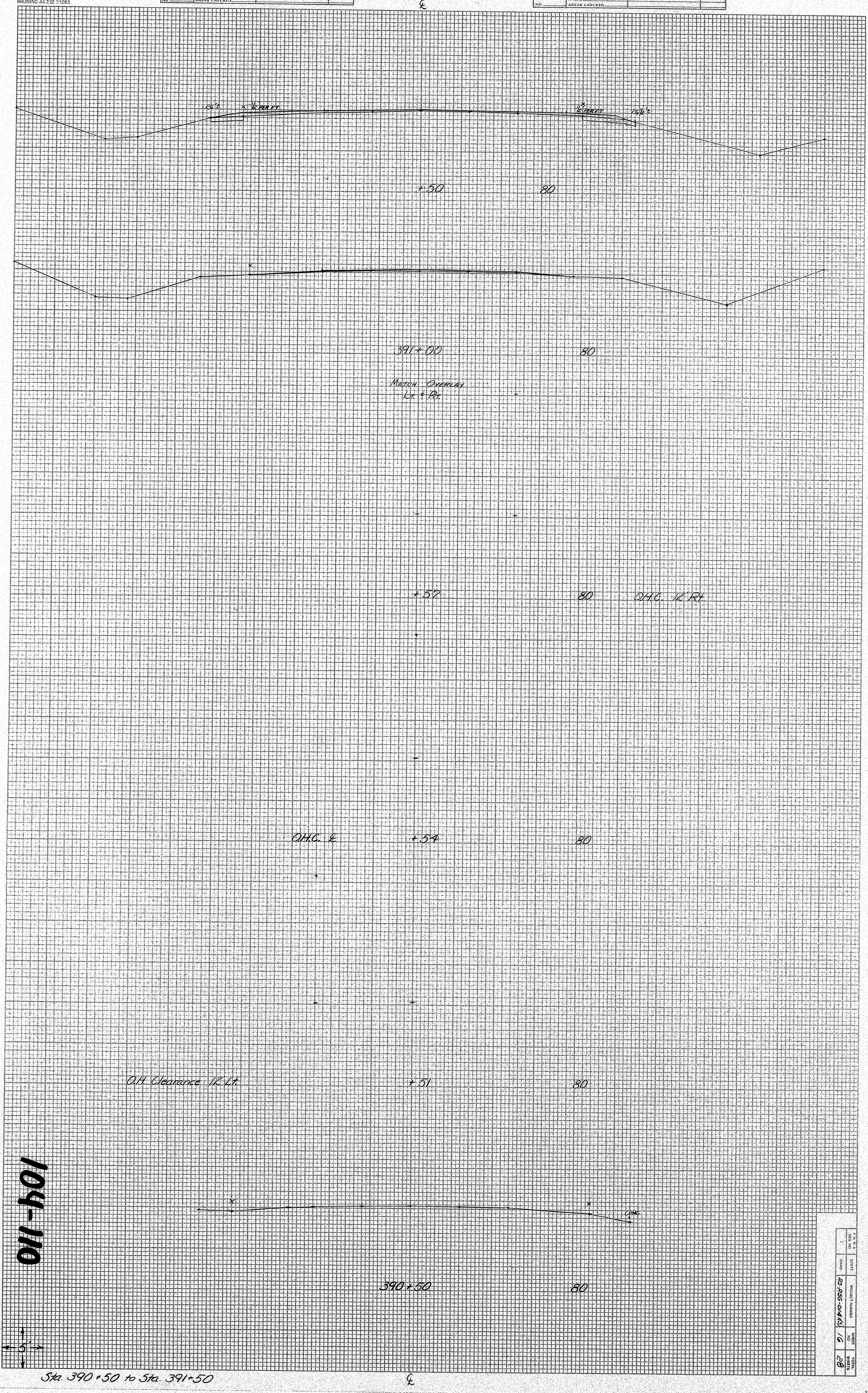
Sta. 365+00 to 366+73

[redacted]

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | Ellingwood & Crew | 12-87 |
| | PLOTTED | J. Russell | 1-88 |
| | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | | |
| | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

BRUNING 44.232 71283


℄
26'±
1/2" PER FT.
1/2" PER FT.
26 1/2'±
+50
80
391+00
80
Match Overlay
Lt. & Rt.
+57
80
O.H.C. 12 Rt.
O.H.C. ℄
+54
80
O.H. Clearance 12 Lt.
+51
80
CONC
390+50
80
5
℄

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-014(5) | 16 | 28 |

104-110

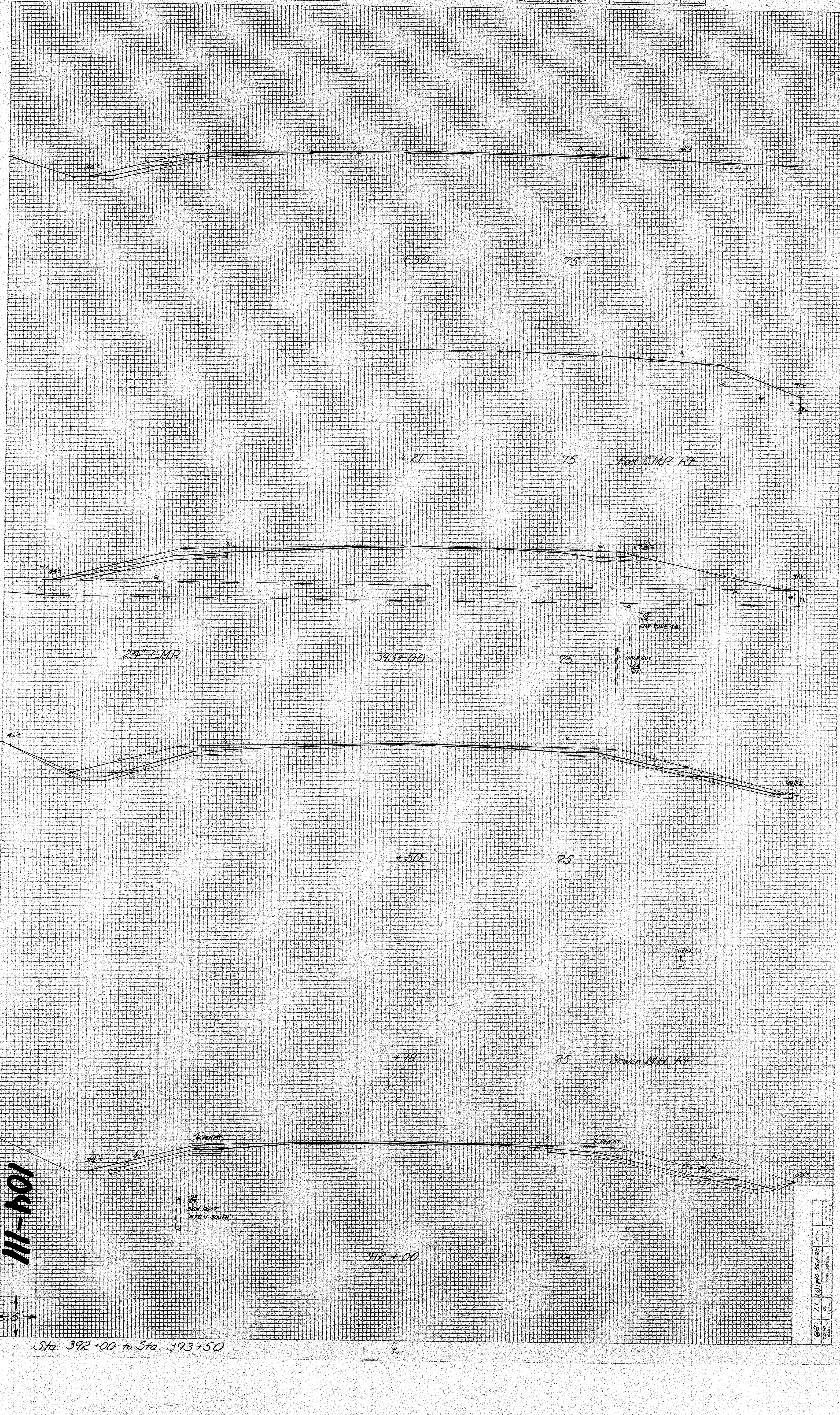
Cumberland Yarmouth

Sta. 390+50 to Sta. 391+50

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | Ellingwood & Crew | 12-87 |
| | PLOTTED | J. Russell | 1-88 |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | | |
| | PLOTTED | | |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

BRUNING 44 232 71283


℄
40'±
35'±
+50
75
TOP
FL
+21
75
End C.M.P. Rt
TOP
44'±
FL
29½'±
TOP
FL
+75
28'
CMP POLE 44
POLE GUY
+64
27'
24" C.M.P.
393+00
75
49'±
49½'±
+50
75
COVER
+18
75
Sewer M.H. Rt
38½'±
4:1
½" PER FT.
½" PER FT.
4:1
50'±
+93
27'
SIGN POST
'RTE 1 SOUTH'
392+00
75
5'
℄

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 17 | 28 |

Sta. 392+00 to Sta. 393+50

Cumberland Yarmouth

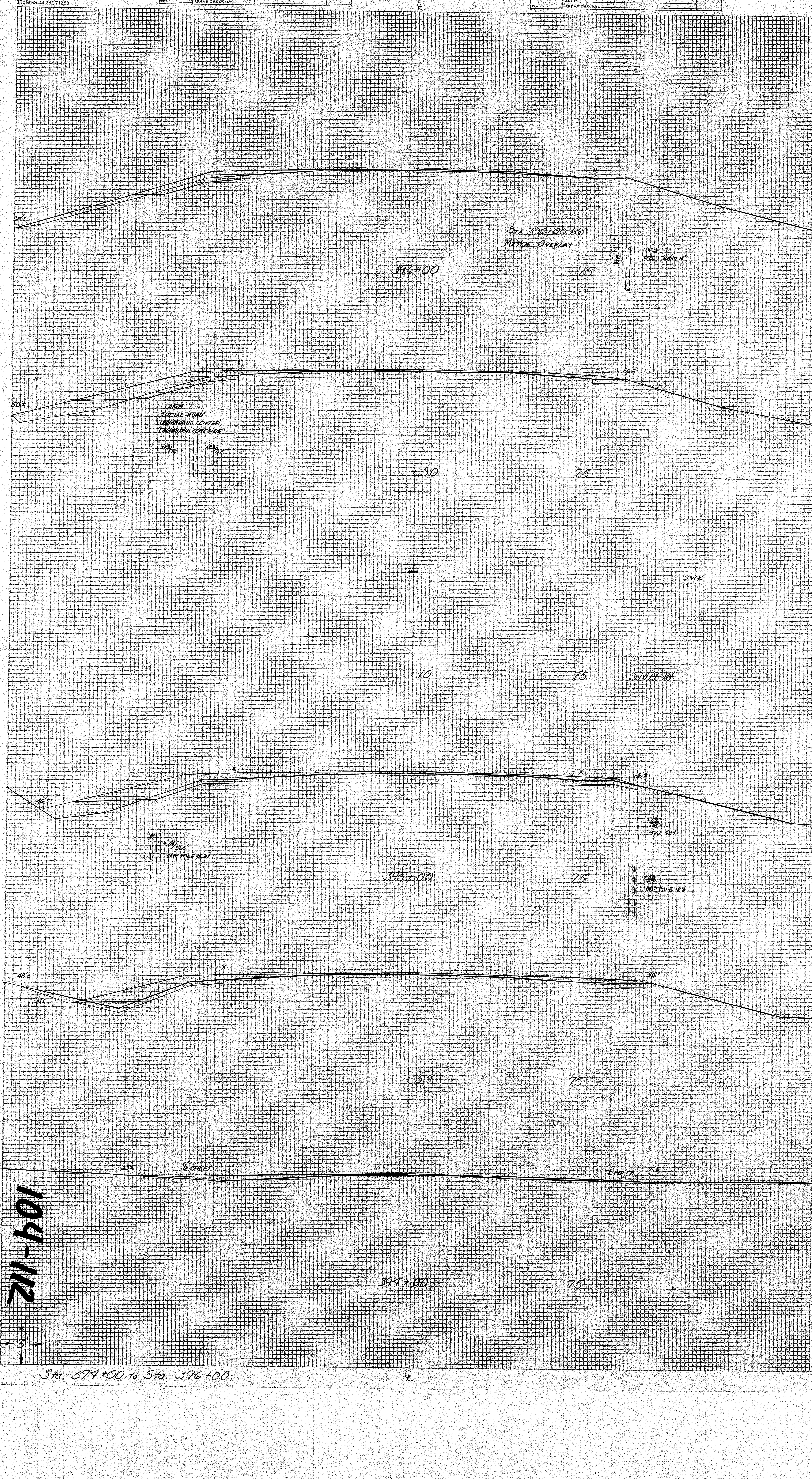
104-111

[redacted]

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | Ellingwood & Crew | 12-87 |
| NOTE BOOK | PLOTTED | J. Kossell | 1-88 |
| | TEMPLATE | | |
| | AREAS | | |
| NO. | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | | |
| NOTE BOOK | PLOTTED | | |
| | TEMPLATE | | |
| | AREAS | | |
| NO. | AREAS CHECKED | | |

BRUNING 44-232 71283


℄
50'±
STA 396+00 RT
MATCH OVERLAY
SIGN
'RTE 1 NORTH'
+87/26'
396+00
75
50'±
26'±
SIGN
'TUTTLE ROAD'
'CUMBERLAND CENTER'
'FALMOUTH FORESIDE'
+23/32'
+23/27'
+50
75
COVER
+10
75
S.M.H. Rt.
46'±
28'±
+69/28'
POLE GUY
+74/31.5'
CNP POLE 4.31
395+00
75
+58/27'
CNP POLE 4.3
48'±
31'
30'±
+50
75
35'±
1/2" PER FT.
-1/2" PER FT.
30'±
394+00
75
5
℄

| [illegible] | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 18 | 28 |

4

Sta. 394+00 to Sta. 396+00

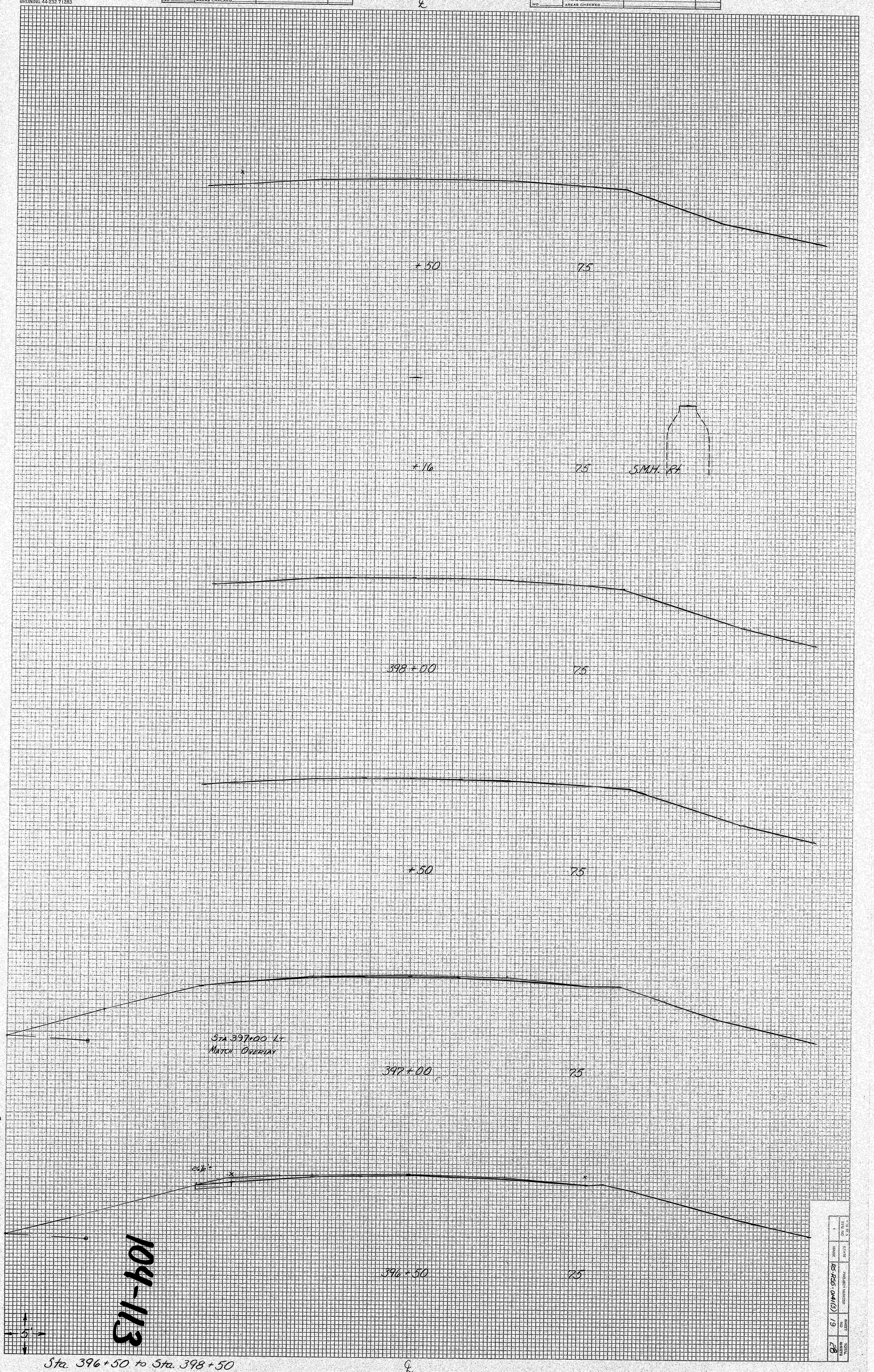
104-112

Cumberland Yarmouth

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | Ellingwood & Crew | 12-87 |
| | PLOTTED | J. Russell | 1-88 |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| | SURVEYED | | |
| | PLOTTED | | |
| NOTE BOOK | TEMPLATE | | |
| | AREAS | | |
| NO | AREAS CHECKED | | |

BRUNING 44-232 71283


℄
+50
75
+16
75
S.M.H. R4
398+00
75
+50
75
Sta. 397+00 Lt.
Match Overlay
397+00
75
edge
396+50
75
5'
℄

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 19 | 28 |

5

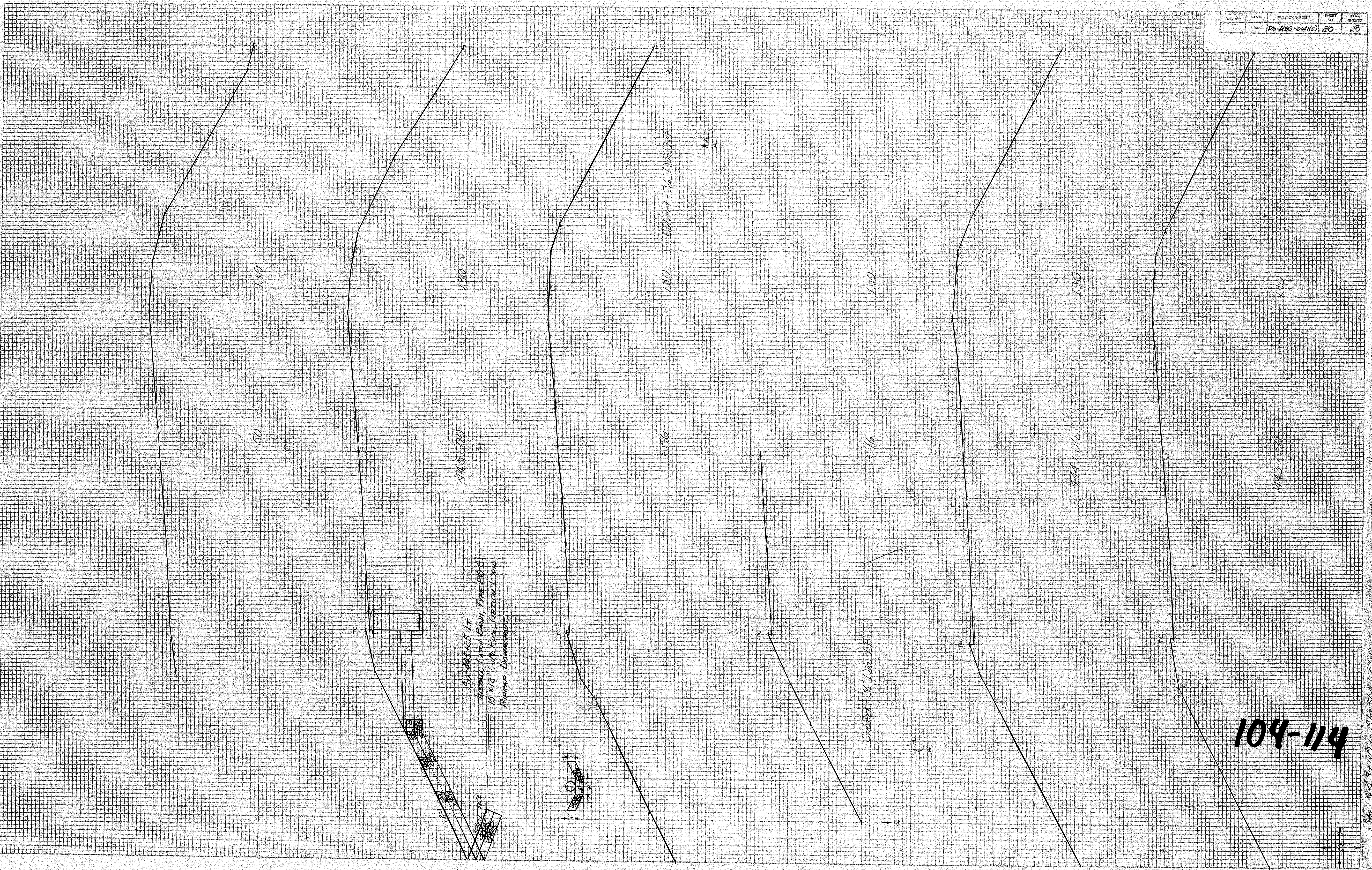
Sta. 396+50 to Sta. 398+50

104-113

Cumberland Yarmouth

[redacted]

| F H W A REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 20 | 28 |


130
+50
445+00
130
+50
Culvert-36" Dia. Rt.
FL
130
+16
Culvert-36" Dia. Lt.
FL
130
444+00
130
443+50
℄
℄
TC
TC
TC
TC
TC
TC
5'

STA 445+25 LT.
INSTALL CATCH BASIN, TYPE F6-C;
15"x12" CORR. PIPE, OPTION I AND
RIPRAP DOWNSPOUT.

104-114

ORIGINAL SURVEY
NOTE BOOK
NO.

| | BY | DATE |
|---|---|---|
| SURVEYED | Witham & Crew | 12-87 |
| PLOTTED | J. Russell | 2-88 |
| TEMPLATE | | |
| AREAS | | |
| AREAS CHECKED | | |

FINAL SURVEY
NOTE BOOK
NO.

| | BY | DATE |
|---|---|---|
| SURVEYED | | |
| PLOTTED | | |
| TEMPLATE | | |
| AREAS | | |
| AREAS CHECKED | | |

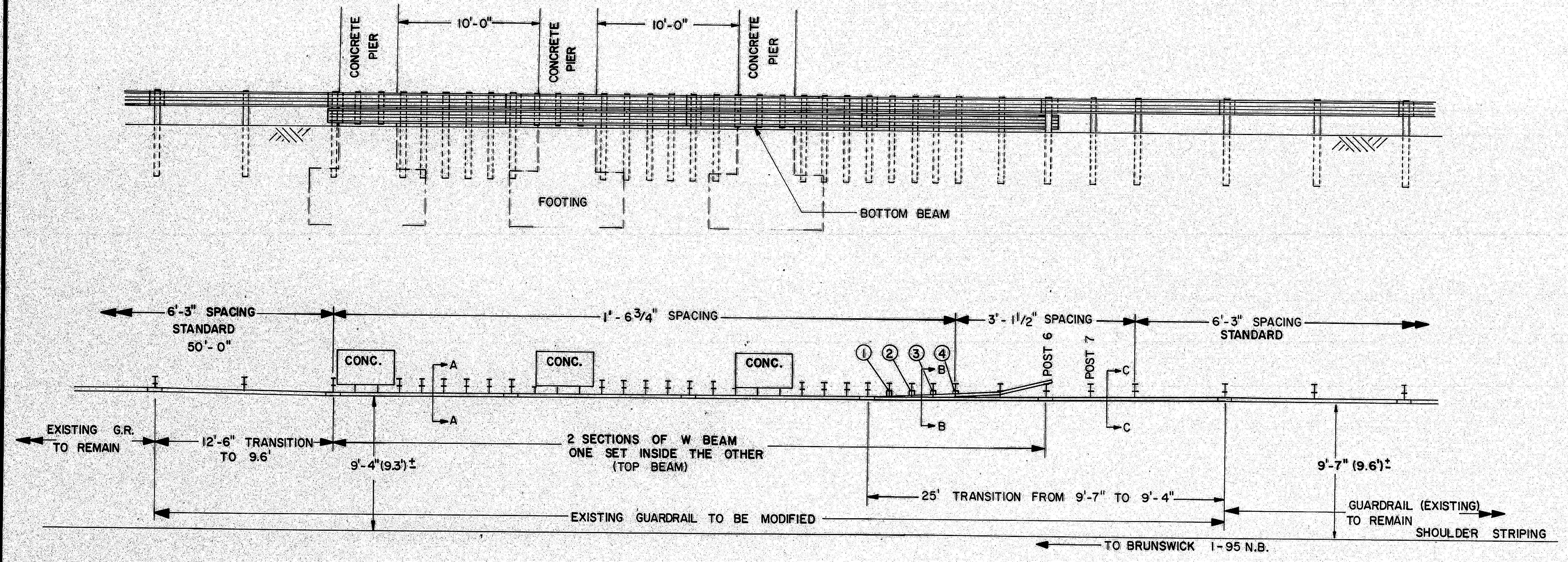
Sta. 443+50 to Sta. 445+50

Cumberland Yarmouth

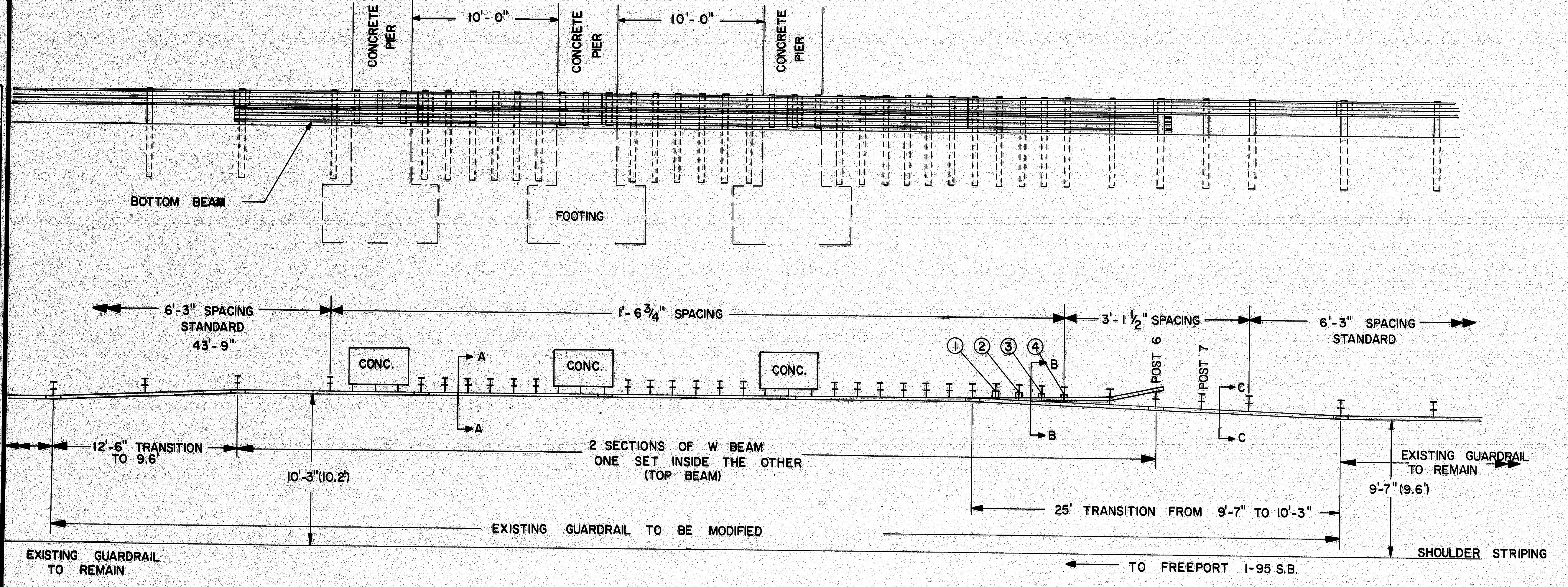
[redacted]

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 21 | 28 |

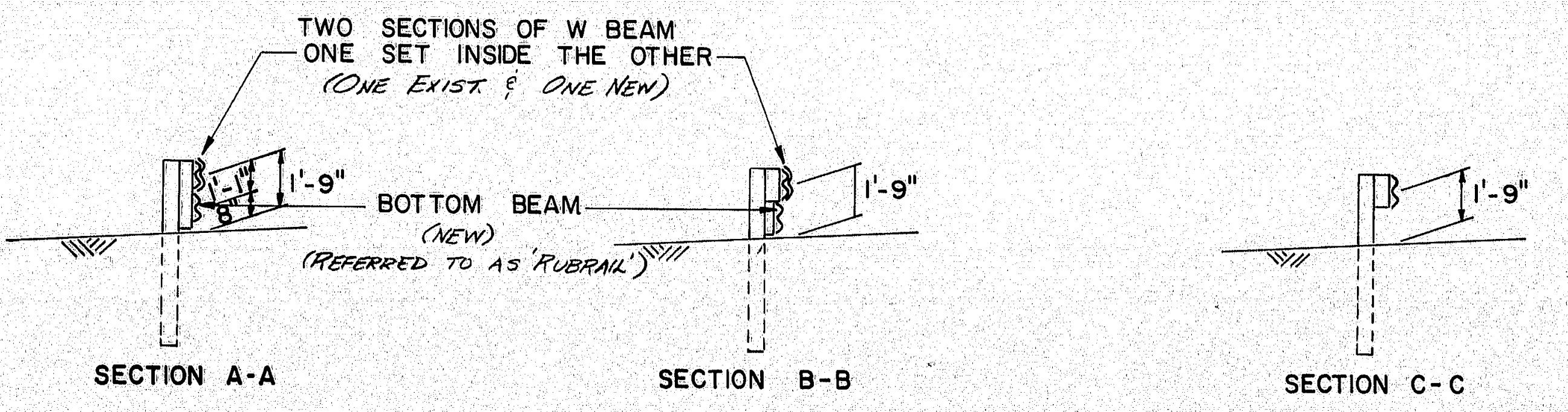
## DURHAM ROAD OVERPASS, BRUNSWICK


CONCRETE PIER
10'-0"
CONCRETE PIER
10'-0"
CONCRETE PIER
FOOTING
BOTTOM BEAM
6'-3" SPACING STANDARD 50'-0"
1'-6 3/4" SPACING
3'-1 1/2" SPACING
6'-3" SPACING STANDARD
CONC.
CONC.
CONC.
A
A
① ② ③ ④
B
B
POST 6
POST 7
C
C
EXISTING G.R. TO REMAIN
12'-6" TRANSITION TO 9.6'
9'-4"(9.3')±
2 SECTIONS OF W BEAM ONE SET INSIDE THE OTHER (TOP BEAM)
25' TRANSITION FROM 9'-7" TO 9'-4"
9'-7" (9.6')±
EXISTING GUARDRAIL TO BE MODIFIED
GUARDRAIL (EXISTING) TO REMAIN
SHOULDER STRIPING
TO BRUNSWICK I-95 N.B.

**NORTHBOUND**
**PIER 3**


CONCRETE PIER
10'-0"
CONCRETE PIER
10'-0"
CONCRETE PIER
BOTTOM BEAM
FOOTING
6'-3" SPACING STANDARD 43'-9"
1'-6 3/4" SPACING
3'-1 1/2" SPACING
6'-3" SPACING STANDARD
CONC.
CONC.
CONC.
A
A
① ② ③ ④
B
B
POST 6
POST 7
C
C
12'-6" TRANSITION TO 9.6'
10'-3"(10.2')
2 SECTIONS OF W BEAM ONE SET INSIDE THE OTHER (TOP BEAM)
25' TRANSITION FROM 9'-7" TO 10'-3"
EXISTING GUARDRAIL TO REMAIN
9'-7"(9.6')
EXISTING GUARDRAIL TO BE MODIFIED
EXISTING GUARDRAIL TO REMAIN
SHOULDER STRIPING
TO FREEPORT I-95 S.B.

**SOUTHBOUND**
**PIER 1**


TWO SECTIONS OF W BEAM ONE SET INSIDE THE OTHER (ONE EXIST. & ONE NEW)
1'-1"
8"
1'-9"
BOTTOM BEAM (NEW) (REFERRED TO AS 'RUBRAIL')
1'-9"
1'-9"

SECTION A-A

SECTION B-B

SECTION C-C

**BOTTOM BEAM WOOD BLOCKS**
1'-2" x 4 1/2"

| POST | THICKNESS * |
|---|---|
| ① | 5" |
| ② | 4" |
| ③ | 3" |
| ④ | 2" |

* Thickness is measured from the back of the bottom rail to the face of the post.

NOTES:

1. BOTTOM BEAM BLOCKS ARE OFFSET DRILLED TO SIT SQUARELY ON THE POST FLANGE. BLOCKS ARE ATTACHED WITH 5/8" CARRIAGE BOLTS.
2. THE RUBRAIL MAY BE SHOP BENT IN THE LAST 3 FEET TO FACILITATE INSTALLATION.
3. POSTS 1, 2, 3, 4 AND 6 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKS AND/OR LOWER BEAM.
4. AT POST 7, BACK-UP PLATE BOLTED TO BLOCK ONLY.
5. OFFSET BRACKETS WITH LENGTH 2' - 4" ARE TO BE USED THROUGHOUT THE DOUBLE BEAM SECTION WITH THE **EXCEPTION** BEING IN THE TRANSITION WHEN WOODBLOCKS ARE INSTALLED.
6. OFFSET BRACKETS ONLY WILL BE BOLTED TO THE RAIL WHEN IN FRONT OF THE PIER; POSTS WILL NOT BE SET IN FRONT OF THE PIER COLUMNS.
7. OFFSET BRACKETS ARE TO BE DIRECTLY CENTERED ON THE COLUMNS OF BAYVIEW STREET OVERPASS PIER; DIMENSIONS AS TO SPACING ARE INCLUDED ON THE DETAIL.
8. ALL POSTS FOR THE BAYVIEW STREET LOCATION SHALL BE NEW AND 7'-0". THE EXISTING POSTS AT THIS LOCATION MAY BE USED TO PROVIDE CLOSER POST SPACING ON ROUTE 1 GUARD RAIL LOCATIONS OR AT THE DURHAM ROAD LOCATION.
9. IF GUARD RAIL POSTS, WHEN DRIVEN, CONFLICT WITH THE TOP OF EXISTING PIER FOOTINGS, THE TOP OF THE POST SHALL BE CUT AS DIRECTED BY THE ENGINEER SUCH THAT IT WILL BE 28" ABOVE FINISHED GRADE. PAYMENT FOR CUTTING POSTS WILL BE CONSIDERED INCIDENTAL TO ITEM 603.3645.
10. ALL ADDITIONAL HARDWARE REQUIRED TO COMPLETE THE INSTALLATIONS SHALL BE AS PER THE SPECIAL PROVISIONS, STANDARD SPECIFICATIONS, AND STANDARD DETAILS.

104-115

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIAL GUARDRAIL DETAILS
DURHAM ROAD
OVER I-95

SHEET OF AUGUSTA, MAINE

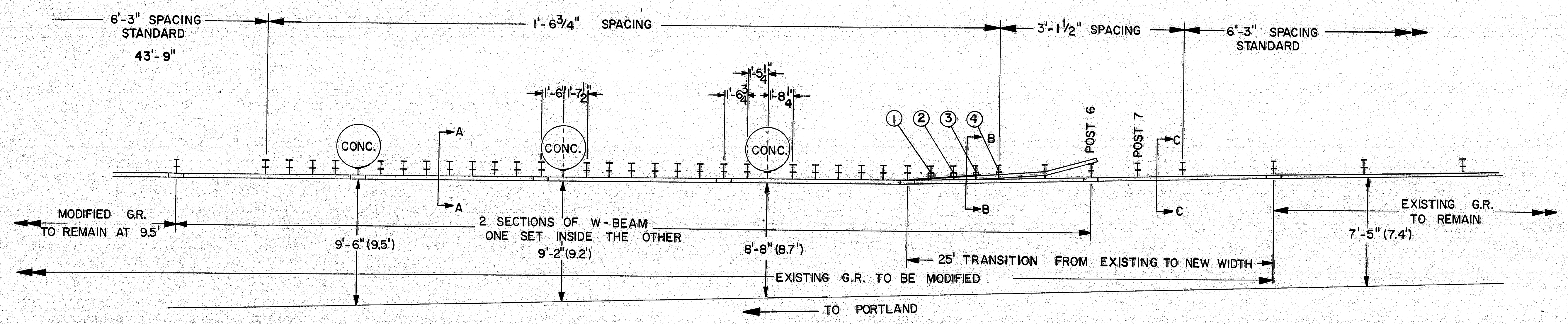
| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS |  |  |
| DESIGN-DETAILED | R.H.W. | MAR89 |
| CHECKED |  |  |
| REVISIONS |  |  |
| FIELD CHANGES |  |  |

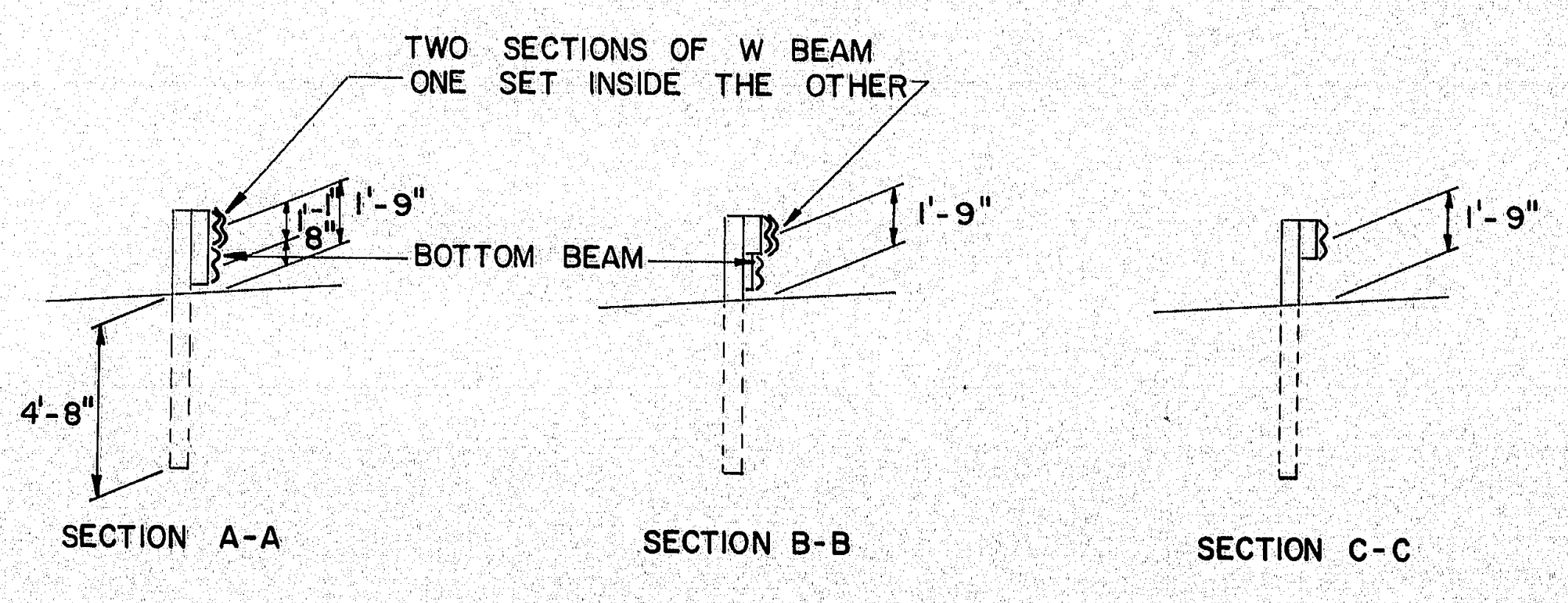
45710-1

BRUNING

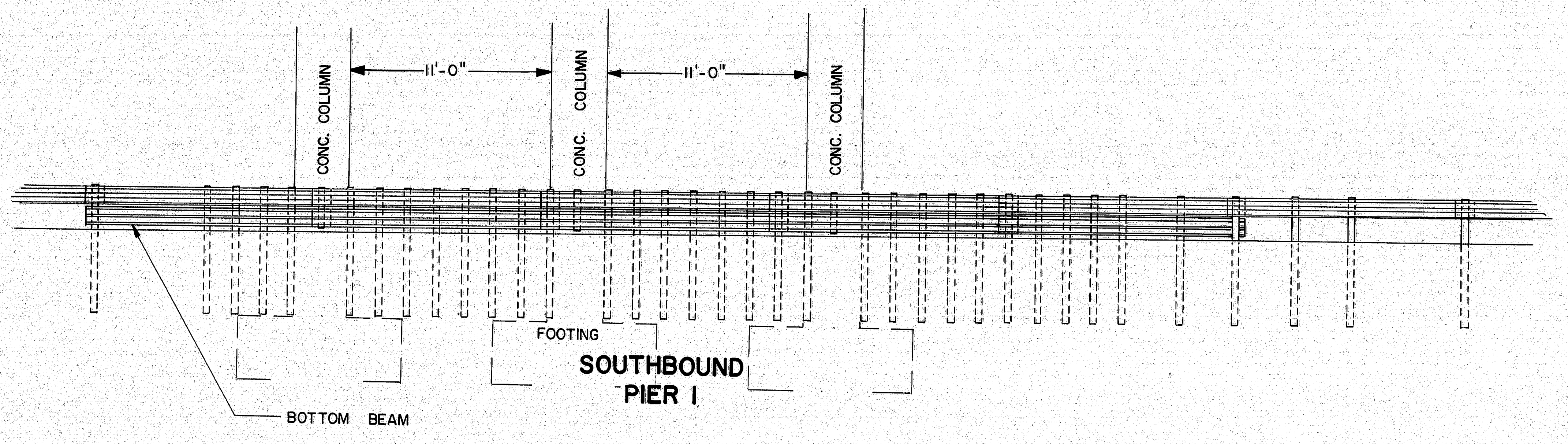
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-RSG-0141(5) | 22 | 28 |

## BAYVIEW STREET OVERPASS, YARMOUTH


6'-3" SPACING STANDARD
43'-9"
1'-6¾" SPACING
3'-1½" SPACING
6'-3" SPACING STANDARD
1'-6"
1'-7½"
1'-5¼"
1'-6¾"
1'-8¼"
CONC.
CONC.
CONC.
A
A
① ② ③ ④
B
B
POST 6
POST 7
C
C
MODIFIED G.R. TO REMAIN AT 9.5'
2 SECTIONS OF W-BEAM ONE SET INSIDE THE OTHER
9'-6" (9.5')
9'-2" (9.2')
8'-8" (8.7')
EXISTING G.R. TO REMAIN
7'-5" (7.4')
25' TRANSITION FROM EXISTING TO NEW WIDTH
EXISTING G.R. TO BE MODIFIED
TO PORTLAND


TWO SECTIONS OF W BEAM ONE SET INSIDE THE OTHER
1'-9"
1'-1"
8"
BOTTOM BEAM
4'-8"
SECTION A-A
1'-9"
SECTION B-B
1'-9"
SECTION C-C

SEE GUARDRAIL DETAIL, DURHAM ROAD FOR NOTES AND BOTTOM BEAM WOOD BLOCK WIDTHS.


CONC. COLUMN
11'-0"
CONC. COLUMN
11'-0"
CONC. COLUMN
FOOTING
SOUTHBOUND PIER I
BOTTOM BEAM

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS DESIGN - DETAILED | | |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

BRUNING 45710-1

104-116

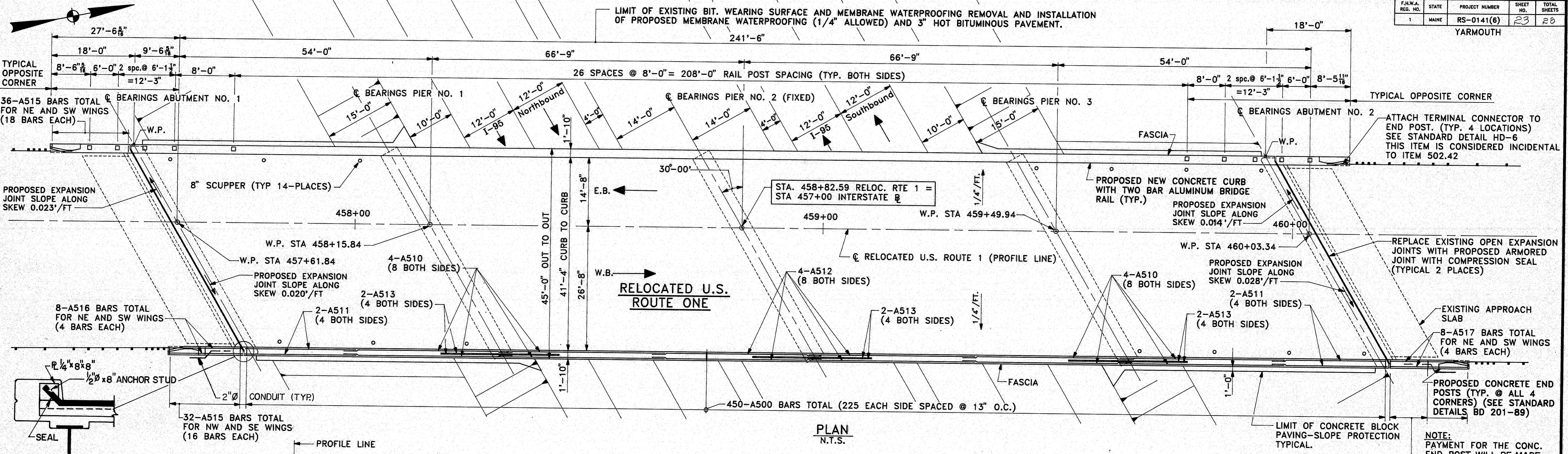
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

### SPECIAL GUARDRAIL DETAILS
### BAYVIEW STREET
### OVER I-95

SHEET OF AUGUSTA, MAINE

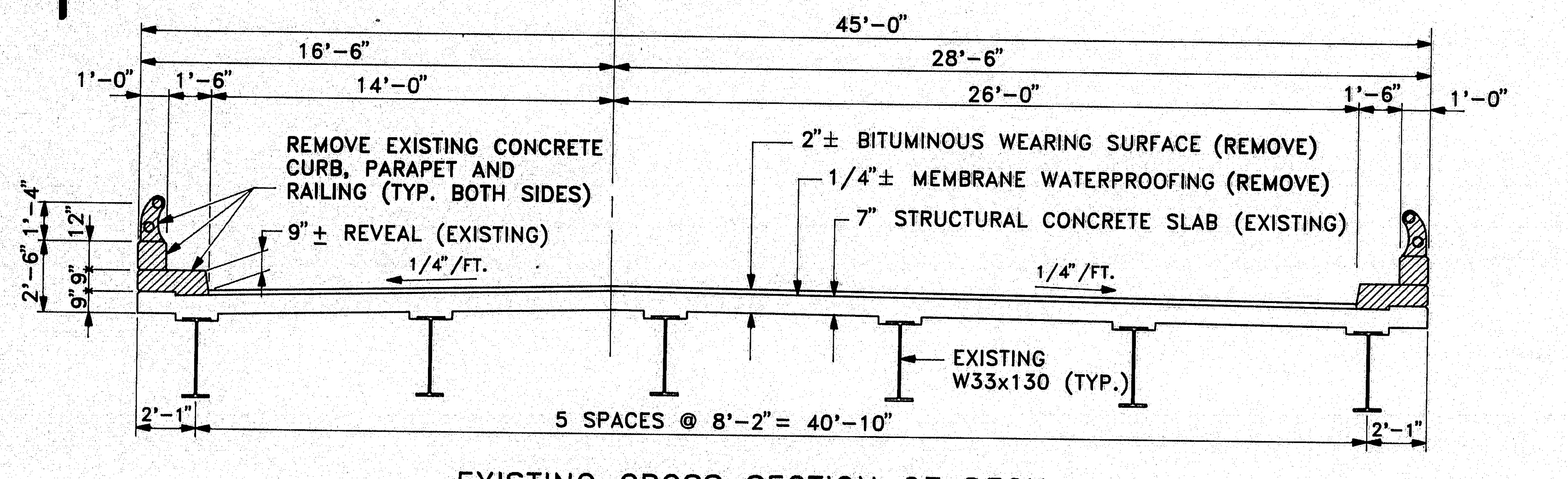
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-0141(6) | 23 | 28 |

YARMOUTH

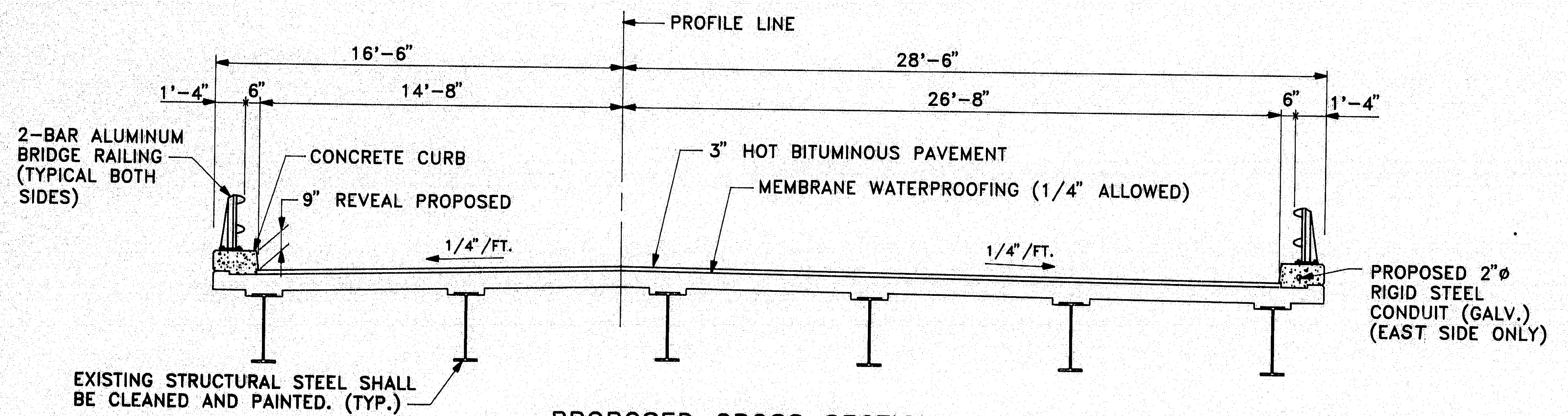

LIMIT OF EXISTING BIT. WEARING SURFACE AND MEMBRANE WATERPROOFING REMOVAL AND INSTALLATION OF PROPOSED MEMBRANE WATERPROOFING (1/4" ALLOWED) AND 3" HOT BITUMINOUS PAVEMENT.
241'-6"
27'-6 5/16"
18'-0"
9'-6 5/16"
54'-0"
66'-9"
66'-9"
54'-0"
18'-0"
TYPICAL OPPOSITE CORNER
8'-6 5/16"
6'-0"
2 spc.@ 6'-1 1/2" =12'-3"
8'-0"
26 SPACES @ 8'-0"= 208'-0" RAIL POST SPACING (TYP. BOTH SIDES)
8'-0"
2 spc.@ 6'-1 1/2" =12'-3"
6'-0"
8'-5 11/16"
TYPICAL OPPOSITE CORNER
36-A515 BARS TOTAL FOR NE AND SW WINGS (18 BARS EACH)
℄ BEARINGS ABUTMENT NO. 1
W.P.
℄ BEARINGS PIER NO. 1
15'-0"
10'-0"
12'-0"
I-95
12'-0"
Northbound
1'-10"
4'-0"
14'-0"
℄ BEARINGS PIER NO. 2 (FIXED)
14'-0"
4'-0"
12'-0"
I-95
12'-0"
Southbound
10'-0"
℄ BEARINGS PIER NO. 3
15'-0"
℄ BEARINGS ABUTMENT NO. 2
FASCIA
W.P.
ATTACH TERMINAL CONNECTOR TO END POST. (TYP. 4 LOCATIONS) SEE STANDARD DETAIL HD-6 THIS ITEM IS CONSIDERED INCIDENTAL TO ITEM 502.42
PROPOSED EXPANSION JOINT SLOPE ALONG SKEW 0.023'/FT
8" SCUPPER (TYP 14-PLACES)
30°-00'
STA. 458+82.59 RELOC. RTE 1 = STA 457+00 INTERSTATE ℄
1/4"/FT.
E.B.
14'-8"
458+00
459+00
W.P. STA 459+49.94
PROPOSED NEW CONCRETE CURB WITH TWO BAR ALUMINUM BRIDGE RAIL (TYP.)
PROPOSED EXPANSION JOINT SLOPE ALONG SKEW 0.014'/FT
460+00
W.P. STA 458+15.84
W.P. STA 457+61.84
W.P. STA 460+03.34
℄ RELOCATED U.S. ROUTE 1 (PROFILE LINE)
REPLACE EXISTING OPEN EXPANSION JOINTS WITH PROPOSED ARMORED JOINT WITH COMPRESSION SEAL (TYPICAL 2 PLACES)
PROPOSED EXPANSION JOINT SLOPE ALONG SKEW 0.020'/FT
4-A510 (8 BOTH SIDES)
45'-0" OUT TO OUT
41'-4" CURB TO CURB
26'-8"
W.B.
RELOCATED U.S. ROUTE ONE
4-A512 (8 BOTH SIDES)
4-A510 (8 BOTH SIDES)
PROPOSED EXPANSION JOINT SLOPE ALONG SKEW 0.028'/FT
2-A513 (4 BOTH SIDES)
2-A511 (4 BOTH SIDES)
2-A513 (4 BOTH SIDES)
1/4"/FT.
2-A511 (4 BOTH SIDES)
2-A513 (4 BOTH SIDES)
EXISTING APPROACH SLAB
8-A516 BARS TOTAL FOR NE AND SW WINGS (4 BARS EACH)
8-A517 BARS TOTAL FOR NE AND SW WINGS (4 BARS EACH)
℘ 1/4"x8"x8"
1/2"ø x8" ANCHOR STUD
SEAL
2"ø
CONDUIT (TYP.)
1'-10"
FASCIA
1'-0"
PROPOSED CONCRETE END POSTS (TYP. @ ALL 4 CORNERS) (SEE STANDARD DETAILS BD 201-89)
32-A515 BARS TOTAL FOR NW AND SE WINGS (16 BARS EACH)
450-A500 BARS TOTAL (225 EACH SIDE SPACED @ 13" O.C.)
LIMIT OF CONCRETE BLOCK PAVING-SLOPE PROTECTION TYPICAL.
36-A515 BARS TOTAL FOR NE AND SW WINGS (18 BARS EACH)

PLAN
N.T.S.

NOTE:
PAYMENT FOR THE CONC. END POST WILL BE MADE UNDER ITEMS 502.42, 503.12, AND 503.13.


PROFILE LINE
45'-0"
16'-6"
28'-6"
1'-0"
1'-6"
14'-0"
26'-0"
1'-6"
1'-0"
REMOVE EXISTING CONCRETE CURB, PARAPET AND RAILING (TYP. BOTH SIDES)
2"± BITUMINOUS WEARING SURFACE (REMOVE)
1/4"± MEMBRANE WATERPROOFING (REMOVE)
7" STRUCTURAL CONCRETE SLAB (EXISTING)
9"± REVEAL (EXISTING)
1/4"/FT.
1/4"/FT.
2'-6"
1'-4"
12"
9"
9"
EXISTING W33x130 (TYP.)
2'-1"
5 SPACES @ 8'-2"= 40'-10"
2'-1"

EXISTING CROSS SECTION OF DECK
N.T.S.


PROFILE LINE
16'-6"
28'-6"
1'-4"
6"
14'-8"
26'-8"
6"
1'-4"
2-BAR ALUMINUM BRIDGE RAILING (TYPICAL BOTH SIDES)
CONCRETE CURB
9" REVEAL PROPOSED
3" HOT BITUMINOUS PAVEMENT
MEMBRANE WATERPROOFING (1/4" ALLOWED)
1/4"/FT.
1/4"/FT.
PROPOSED 2"ø RIGID STEEL CONDUIT (GALV.) (EAST SIDE ONLY)
EXISTING STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED. (TYP.)

PROPOSED CROSS SECTION
N.T.S.

## SYMBOLS

▨ EXISTING CONCRETE TO BE REMOVED

░ NEW CONCRETE

PROJECT DESIGN ENGINEER
PLANS
DESIGN- DETAILED
CHECKED
REVISIONS
FIELD CHANGES
BY JEB
DATE

## SCOPE OF WORK

- REMOVE AND REPLACE EXISTING BITUMINOUS CONCRETE WEARING SURFACE AND MEMBRANE WATERPROOFING WITH A PROPOSED MEMBRANE WATERPROOFING (1/4" ALLOWED) AND 3" HOT BITUMINOUS PAVEMENT.
- CLEAN AND PAINT EXISTING STRUCTURAL STEEL INCLUDING BEARINGS.
- REPLACE EXISTING OPEN ARMORED JOINTS WITH PROPOSED ARMORED JOINT WITH COMPRESSION SEAL.
- REPLACE EXISTING SUBSTANDARD CONCRETE CURB AND ALUMINUM BRIDGE RAIL SYSTEM WITH PROPOSED 1'-10" WIDE CONCRETE CURBS AND STANDARD 2-BAR ALUMINUM RAIL.
- REHABILITATE CRACKED, SPALLED, OR OTHERWISE DETERIORATED CONCRETE ON ABUTMENTS AND TOP OF CONCRETE BRIDGE DECK, AS DIRECTED BY THE ENGINEER.
- RESET SLOPE PAVING AS DIRECTED BY THE ENGINEER THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH *SUBSECTION 104.03, EXTRA WORK.*

## INDEX OF SHEETS

| | |
|---|---|
| GENERAL PLAN | 1 |
| DETAILS AND ESTIMATE OF QUANTITIES | 2 |
| REINFORCING STEEL SCHEDULE | 3 |

## BRIDGE STANDARD DETAILS

BD 401-89 – ALUMINUM BRIDGE RAILING
BD 201-89 – CONCRETE END POSTS
BD 301-89 – EXPANSION DEVICE

## HIGHWAY STANDARD DETAILS

HD-6 – TYPE 3 GUARD RAIL

## TEMPORARY SIGNALS

THE TEMPORARY SIGNAL CONTROLLER SHALL BE A TWO - PHASE PRETIMED CONTROLLER. IT SHALL OPERATE AS SHOWN TO THE RIGHT.

SEQUENCE OF OPERATION

| INTERVAL / HEADS | 1 | 2 | 3 | 4 | 5 | 6 | 1 |
|---|---|---|---|---|---|---|---|
| NB | G | Y | R | R | R | R | G |
| SB | R | R | R | G | Y | R | Y |
| TIMING 70 SECOND DIAL | 17 | 3 | 15 | 17 | 3 | 15 | |

WHERE
G=GREEN
Y=YELLOW
R=RED

## UTILITIES

CENTRAL MAINE POWER CO.

## SPECIFICATION

| | |
|---|---|
| DESIGN: | AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1983 AND INTERIM SPECIFICATIONS THRU 1988. |
| CONTRACT: | STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, HIGHWAYS AND BRIDGES, REVISION OF JULY 1988. |

## DESIGN LOADING

| | |
|---|---|
| LIVE LOAD (EXISTING) | H20-S16-44 MODIFIED |

## MATERIALS

| | |
|---|---|
| CONCRETE: | CLASS A |
| REINFORCING STEEL: | ASTM A615 GRADE 60 |
| STRUCTURAL STEEL: | ASTM A36 |

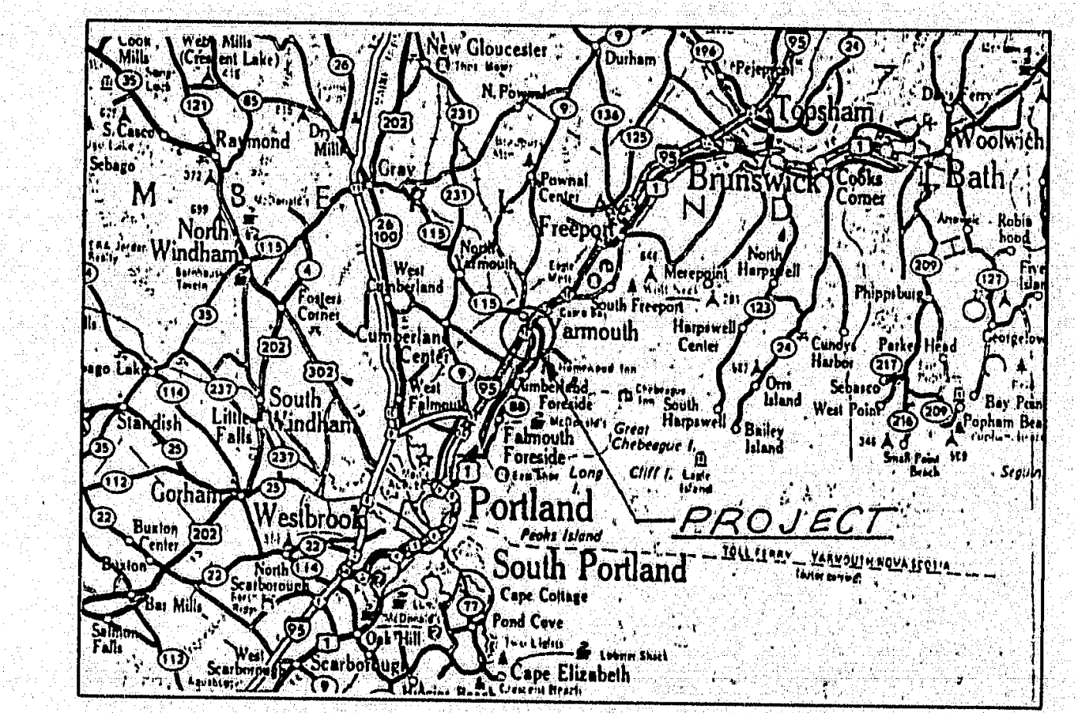
## BASIC ALLOWABLE STRESSES

| | |
|---|---|
| CONCRETE: | f'c= 1200 psi |
| REINFORCING STEEL: | fy=24,000 psi |
| STRUCTURAL STEEL: | Fy=18,000 psi |

## TRAFFIC DATA

| | |
|---|---|
| AADT 1987 | 7,280 |
| AADT 2007 | 14,560 |
| DESIGN HOURLY VOLUME | 1,602 |
| PERCENT TRUCKS | 5 |
| DIRECTIONAL DISTRIBUTION (%) | 80 |
| DESIGN SPEED (MPH) | 50 |
| 18 KIP EQUIVALENT P2.5 | 118 |

PLANS OF THE EXISTING BRIDGE ARE AVAILABLE FOR THE CONTRACTOR'S REFERENCE AT THE BRIDGE DESIGN OFFICE IN AUGUSTA. THE PLANS ARE REPRODUCTIONS OF ORIGINAL DRAWINGS AS PREPARED FOR THE CONSTRUCTION OF THE BRIDGE AND IT IS VERY UNLIKELY THAT THE PLANS WILL SHOW ANY CONSTRUCTION FIELD CHANGES OR ANY ALTERATIONS WHICH MAY HAVE BEEN MADE TO THE BRIDGE DURING ITS LIFE SPAN.


New Gloucester
Durham
Topsham
Woolwich
Bath
Raymond
Gray
Pownal Center
Freeport
Brunswick
Cooks Corner
North Windham
West Cumberland
Yarmouth
Cumberland Center
South Windham
Falmouth Foreside
Gorham
Westbrook
Portland
South Portland
Cape Elizabeth
Scarborough
PROJECT

LOCATION MAP
0 5 10 15 MILES
SCALE

104-117

Pin No. 2804.00
Bridge No. 5804

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Kimball Chase
ONE CATE STREET
PORTSMOUTH, N.H. 03801
(603) 431-2520

RELOCATED U.S. ROUTE 1
over
INTERSTATE-95
YARMOUTH, MAINE
CUMBERLAND COUNTY
GENERAL PLAN

SHEET 1 OF 3 AUGUSTA, MAINE

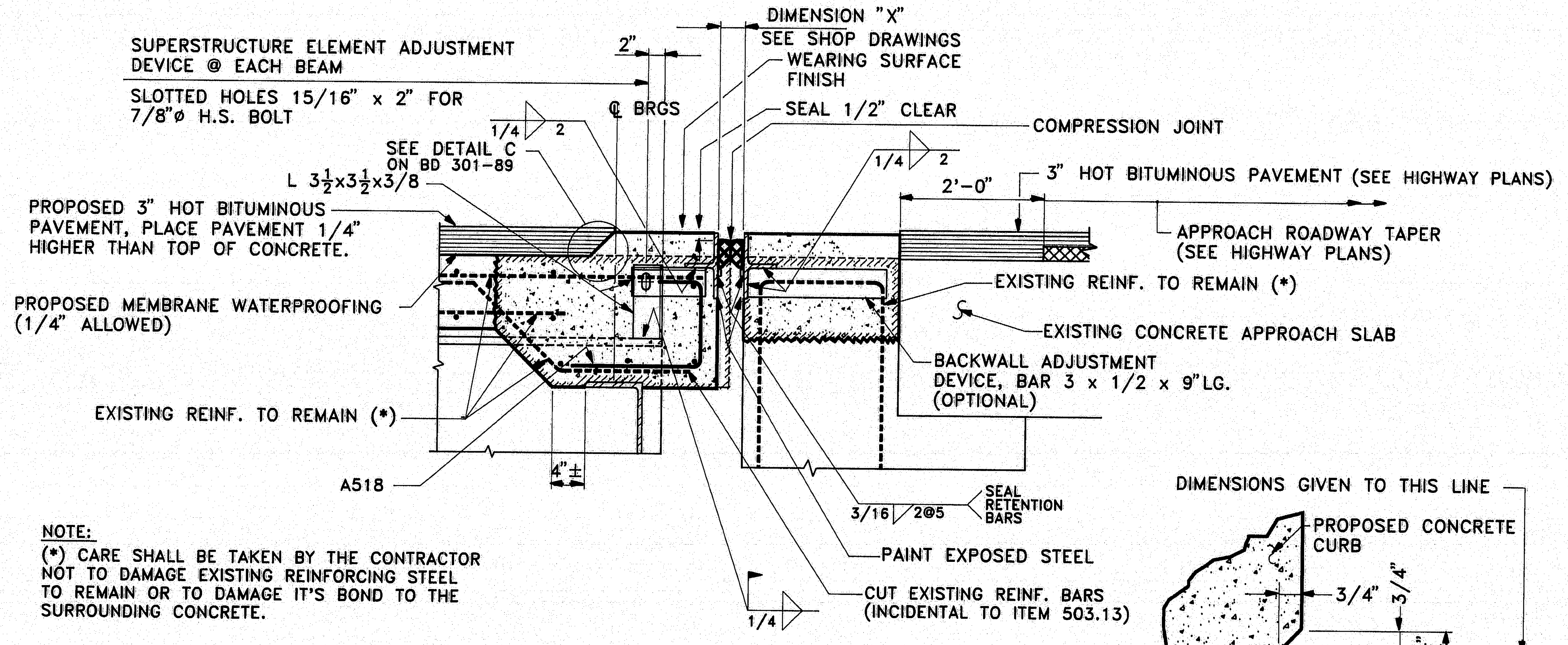
REVISED AS-BUILT 1990 by 3/'92

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-0141(6) | 24 | 28 |

YARMOUTH

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 202.127 | REMOVING OF EXISTING BITUMINOUS PAVEMENT | 1 | L.S. |
| 202.128 | REMOVING OF EXISTING CONCRETE-CURBS & SIDEWALKS | 1 | L.S. |
| 202.14 | REMOVING OF EXISTING RAILINGS- PROPERTY OF CONT. | 555 | L.F. |
| 403.10 | HOT BITUMINOUS PAVEMENT, GRADING D | 247 | TON |
| 502.42 | STRUCT. CONC. RDWY & SIDEWALK SLAB ON STEEL BRIDGES | 39 | CY |
| 502.4711 | SILICA FUME ADDITIVE | 1 | L.S. |
| 503.12 | REINFORCING STEEL, FABRICATED AND DELIVERED | 4300 | lbs. |
| 503.13 | REINFORCING STEEL, PLACING | 4300 | lbs. |
| 506.142 | FIELD PAINTING EXISTING STRUCTURAL STEEL | 1 | L.S. |
| 507.092 | ALUMINUM BRIDGE RAILING, 2 BAR | 531 | L.F. |
| 508.13 | MEMBRANE WATERPROOFING | 1 | L.S. |
| 515.20 | PROTECTIVE COATING FOR CONCRETE SURFACE | 23 | S.Y. |
| 518.21 | REHAB. OF STRUCTURAL CONCRETE SUBSTRUCTURE | 206 | S.F. |
| 518.30 | REHAB. OF STRUCT. CONC. SLAB TO REINFORCING STEEL | 487 | S.F. |
| 518.31 | REHAB. OF STRUCT. CONC. SLAB TO BELOW REINF. STEEL | 195 | S.F. |
| 520.24 | BRIDGE JOINT MODIFICATION | 2 | EA |
| 526.301 | TEMPORARY CONCRETE BARRIER TYPE I | 1 | L.S. |
| | | | |
| 627.61 | 4 INCH SOLID WHITE PAVEMENT MARKING LINE | 500 | L.F. |
| 627.63 | 4 INCH SOLID YELLOW PAVEMENT MARKING LINE | 500 | L.F. |
| 627.67 | REMOVING PAVEMENT MARKING | 250 | S.F. |
| 627.68 | TEMP 4" PAINTED PAVE MARKING LINE, WHITE OR YELLOW | 500 | L.F. |
| | | | |
| 638.01 | EMBEDDED WORK IN STRUCTURE | 1 | L.S. |
| 639.19 | FIELD OFFICE TYPE B | .4 | EA |
| 639.23 | TESTING FACILITIES CONCRETE | 1 | L.S. |
| 643.72 | TEMPORARY TRAFFIC SIGNAL | 1 | L.S. |
| 652.30 | FLASHING ARROW BOARD | 2 | EA |
| 652.31 | TYPE I BARRICADE | 50 | EA |
| 652.311 | TYPE II BARRICADE | 10 | EA |
| 652.33 | DRUM | 10 | EA |
| 652.34 | CONE | 40 | EA |
| 652.35 | CONSTRUCTION SIGNS | 500 | S.F. |
| 652.36 | MAINTENANCE OF TRAFFIC CONTROL DEVICES | 30 | CD |
| 652.37 | WARNING LIGHTS | 2 | GP |
| 652.38 | FLAGGER | 300 | MH |
| 659.10 | MOBILIZATION | .4 | L.S. |
| | | | |
| | | | |

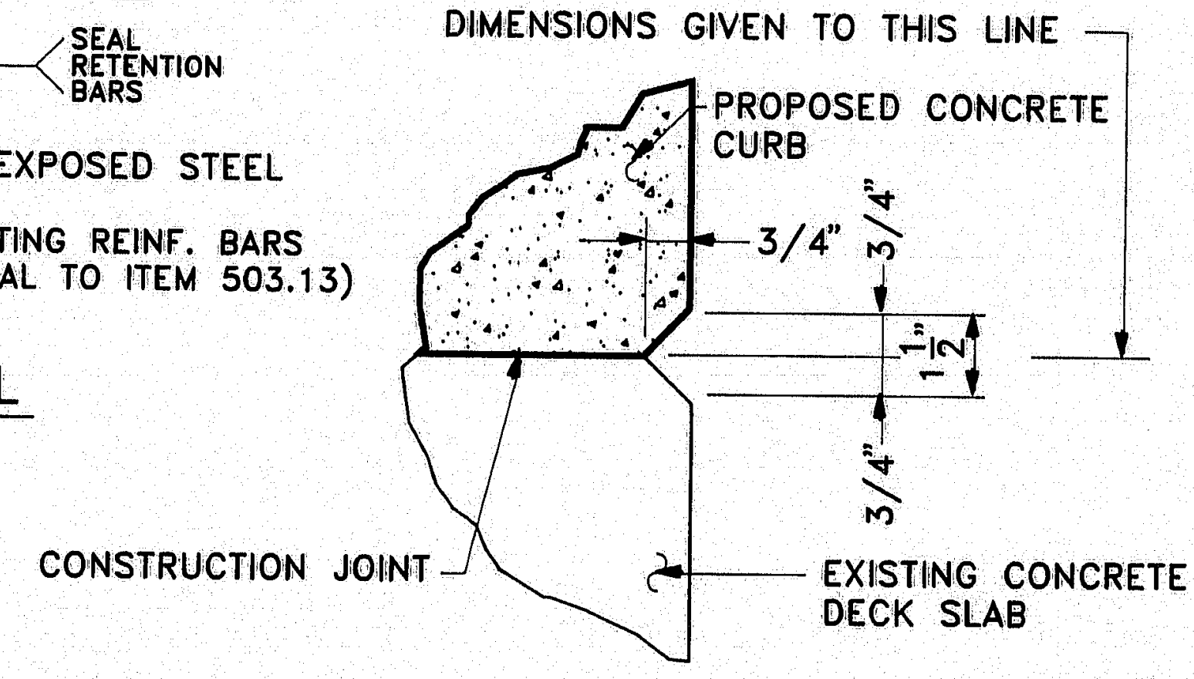


SUPERSTRUCTURE ELEMENT ADJUSTMENT DEVICE @ EACH BEAM
SLOTTED HOLES 15/16" x 2" FOR 7/8"ø H.S. BOLT
2"
DIMENSION "X" SEE SHOP DRAWINGS
WEARING SURFACE FINISH
SEAL 1/2" CLEAR
COMPRESSION JOINT
℄ BRGS
1/4 2
SEE DETAIL C ON BD 301-89
L 3½x3½x3/8
PROPOSED 3" HOT BITUMINOUS PAVEMENT, PLACE PAVEMENT 1/4" HIGHER THAN TOP OF CONCRETE.
PROPOSED MEMBRANE WATERPROOFING (1/4" ALLOWED)
EXISTING REINF. TO REMAIN (*)
A518
4"±
1/4 2
2'-0"
3" HOT BITUMINOUS PAVEMENT (SEE HIGHWAY PLANS)
APPROACH ROADWAY TAPER (SEE HIGHWAY PLANS)
EXISTING REINF. TO REMAIN (*)
EXISTING CONCRETE APPROACH SLAB
BACKWALL ADJUSTMENT DEVICE, BAR 3 x 1/2 x 9"LG. (OPTIONAL)
3/16 2@5
SEAL RETENTION BARS
PAINT EXPOSED STEEL
CUT EXISTING REINF. BARS (INCIDENTAL TO ITEM 503.13)
1/4

NOTE:
(*) CARE SHALL BE TAKEN BY THE CONTRACTOR NOT TO DAMAGE EXISTING REINFORCING STEEL TO REMAIN OR TO DAMAGE IT'S BOND TO THE SURROUNDING CONCRETE.

PROPOSED EXPANSION JOINT DETAIL

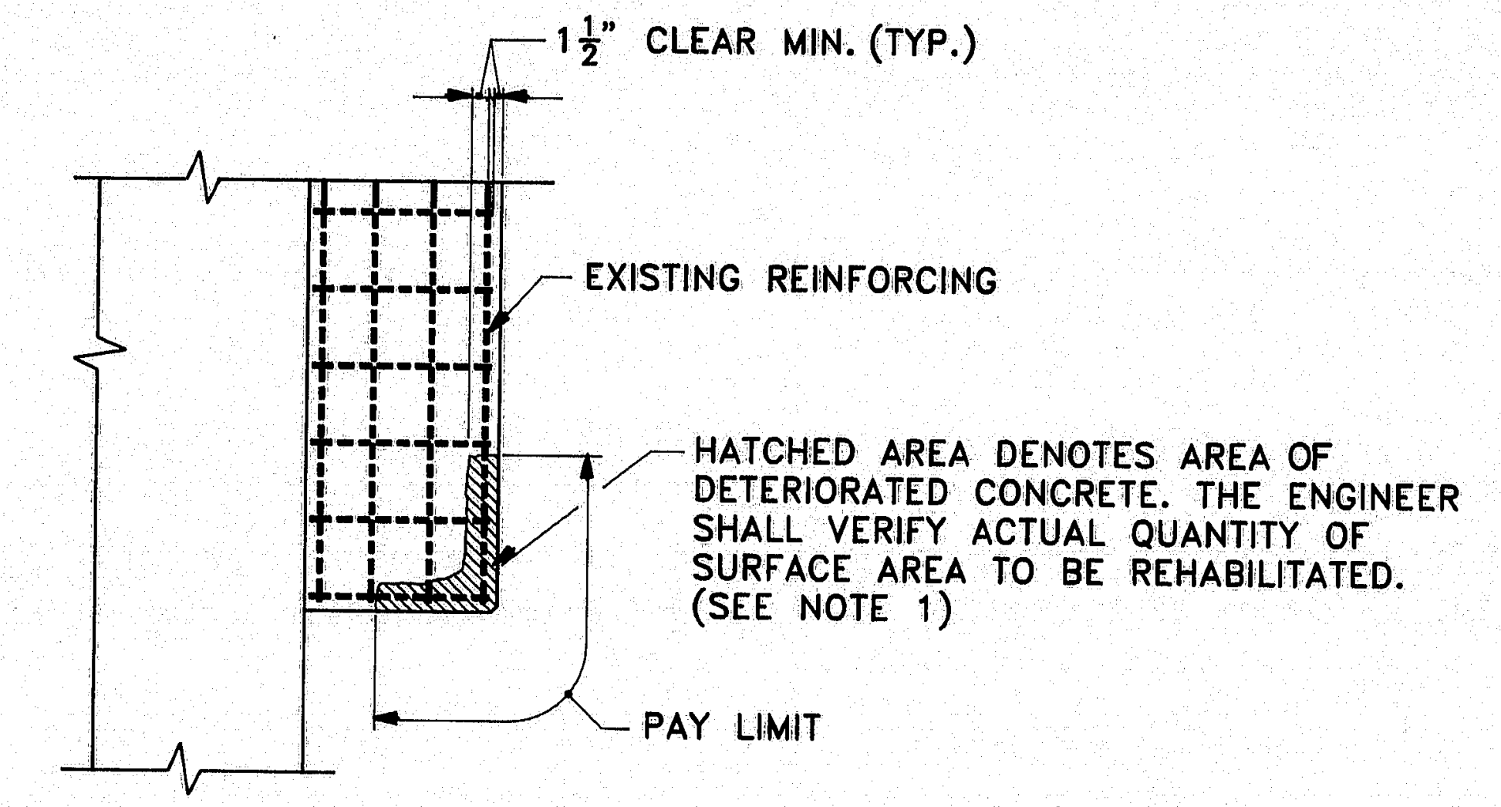
(SEE STANDARD SHT. BD 301-89 FOR DETAILS NOT SHOWN)



DIMENSIONS GIVEN TO THIS LINE
PROPOSED CONCRETE CURB
3/4"
3/4"
1½"
3/4"
CONSTRUCTION JOINT
EXISTING CONCRETE DECK SLAB

TYPICAL V-CUT DETAIL

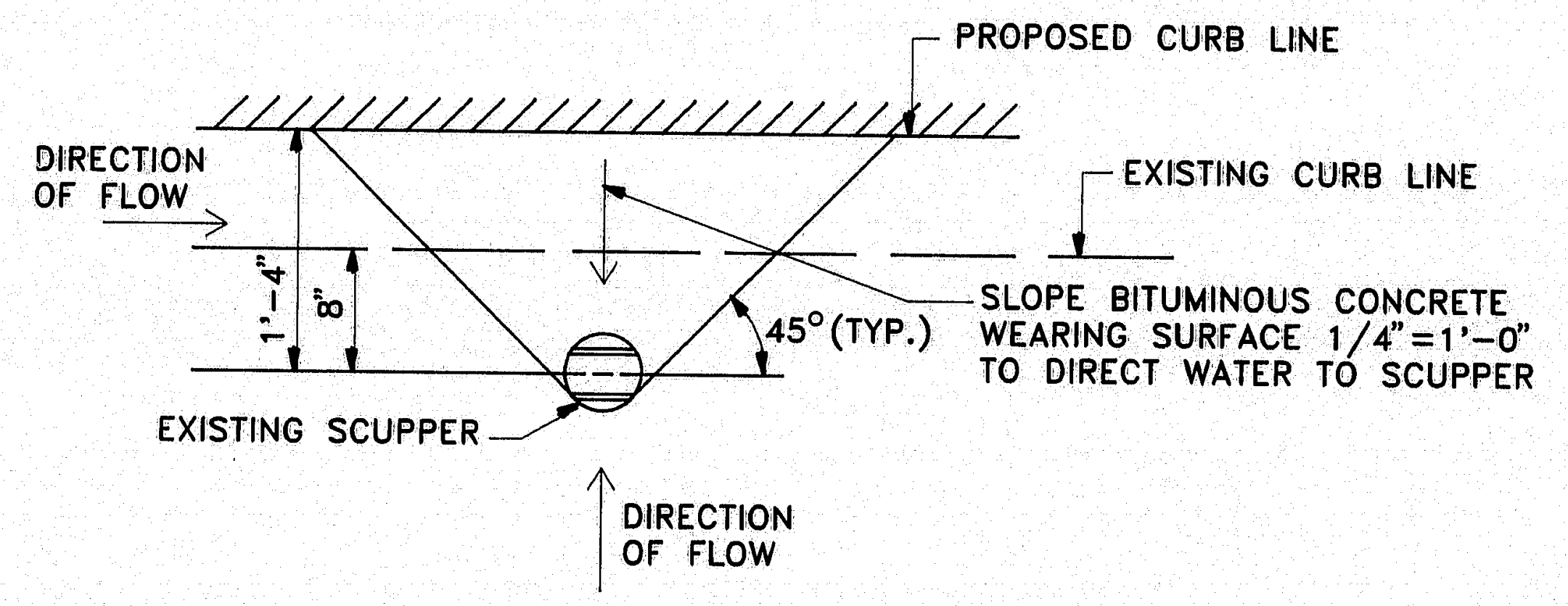
N.T.S.



1½" CLEAR MIN. (TYP.)
EXISTING REINFORCING
HATCHED AREA DENOTES AREA OF DETERIORATED CONCRETE. THE ENGINEER SHALL VERIFY ACTUAL QUANTITY OF SURFACE AREA TO BE REHABILITATED. (SEE NOTE 1)
PAY LIMIT

TYPICAL ABUTMENT REHABILITATION – PLAN

N.T.S.



PROPOSED CURB LINE
EXISTING CURB LINE
DIRECTION OF FLOW
1'-4"
8"
45° (TYP.)
SLOPE BITUMINOUS CONCRETE WEARING SURFACE 1/4"=1'-0" TO DIRECT WATER TO SCUPPER
EXISTING SCUPPER
DIRECTION OF FLOW

DRAINAGE MODIFICATION DETAIL

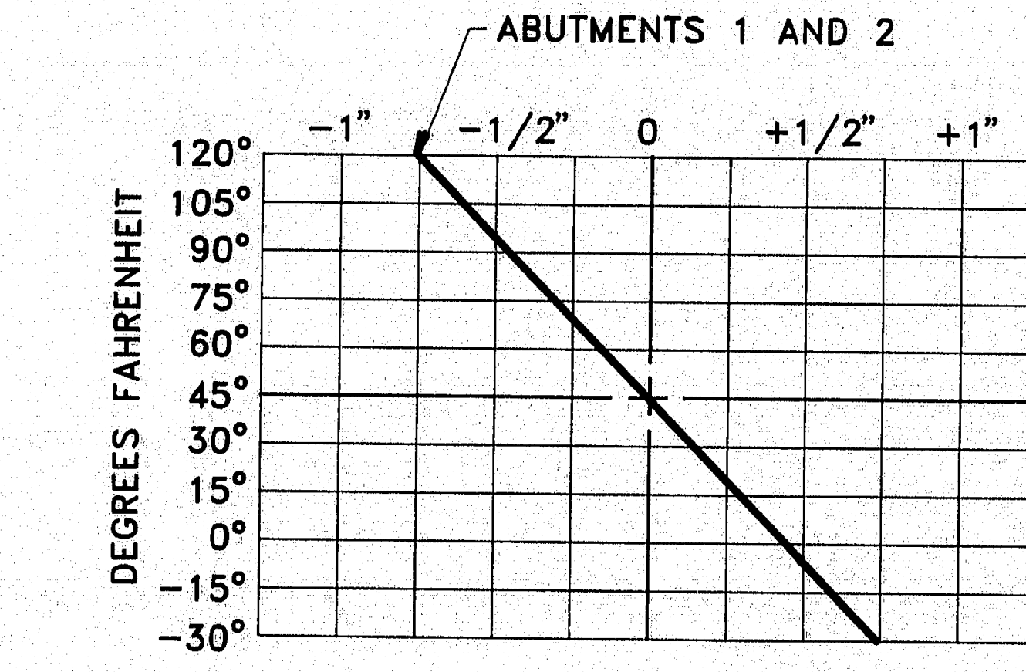
N.T.S.

## SUPERSTRUCTURE NOTES

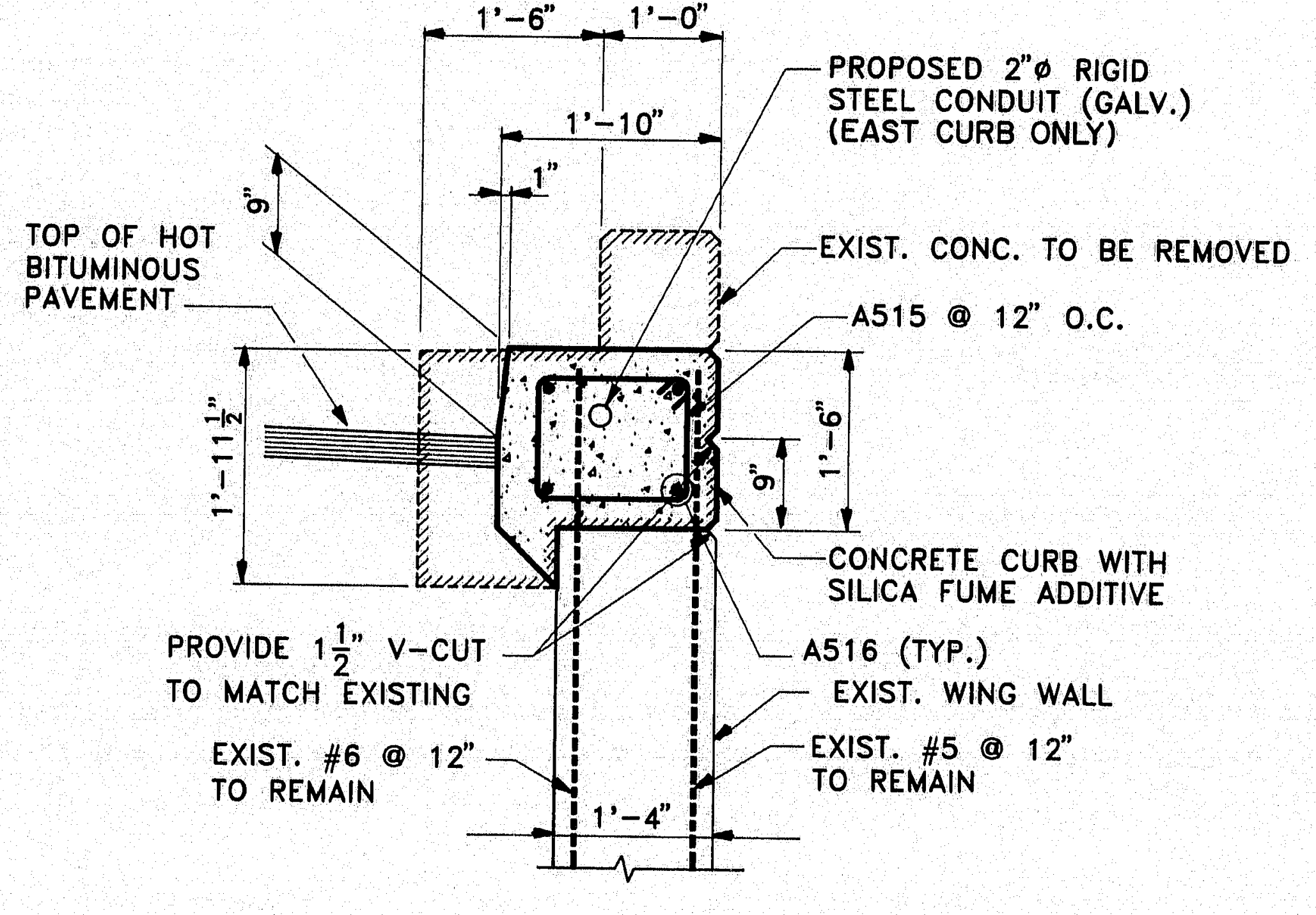
1. THE SEALS TO BE FURNISHED SHALL HAVE A MINIMUM MOVEMENT RATING OF:
   ABUTMENT NUMBER 1: 1.50 INCHES
   ABUTMENT NUMBER 2: 1.50 INCHES
2. THE SEAL SHALL BE APPROVED BY THE ENGINEER PRIOR TO FABRICATION OF THE JOINT ARMOR.
3. THE JOINT OPENING WILL VARY DEPENDING ON THE DIMENSIONS OF THE SEAL SELECTED BY THE CONTRACTOR. THE JOINT OPENING SHALL BE SET ACCORDING TO THE OPENING SHOWN ON THE APPROVED SHOP DETAIL DRAWINGS.
4. THE COMPRESSION SEAL ADJUSTMENT CHART SHOWS THE ADJUSTMENT NECESSARY FOR THE JOINT OPENING SHOWN ON THE SHOP DETAIL DRAWINGS FOR TEMPERATURES OTHER THAN 45°F. ADJUSTMENT IS TO BE MEASURED PARALLEL TO THE CENTERLINE OF CONSTRUCTION.
5. JOINT ARMOR SHALL BE FABRICATED AND DELIVERED TO THE SITE IN THREE (3) SECTIONS. INSTALLATION OF JOINT ARMOR SHALL BE PERFORMED TO ALLOW ONE LANE, 2-WAY TRAFFIC OVER THE BRIDGE DURING CONSTRUCTION. THE THREE SECTIONS OF JOINT ARMOR ARE TO BE WELDED IN THE FIELD TO PRODUCE ONE CONTINUOUS SECTION. WELDS ARE TO BE GROUND SMOOTH AND PAINTED PRIOR TO COMPRESSION SEAL INSTALLATION.
6. COMPRESSION SEALS SHALL BE INSTALLED IN ONE CONTINUOUS LENGTH EXTENDING THE FULL WIDTH OF THE BRIDGE LESS 12 INCHES FROM THE OUTSIDE OF EACH FASCIA. SPLICING OF THE COMPRESSION SEAL IS NOT ALLOWED. A TEMPORARY INTERRUPTION OF TRAFFIC IS ANTICIPATED TO FACILITATE THE INSTALLATION.

## NOTES

1. IF THE DEPTH OF DETERIORATED CONCRETE EXTENDS TO THE REINFORCING BARS, THEN REMOVE CONCRETE TO A MINIMUM DEPTH OF 1" BEYOND THE REINFORCING STEEL.
2. AFTER THE EXISTING BITUMINOUS PAVEMENT HAS BEEN REMOVED, THE CONTRACTOR MAY BE DIRECTED BY THE ENGINEER TO REHABILITATE AREAS OF THE DECK. PAYMENT WILL BE MADE UNDER ITEMS 518.30 OR 518.31 WHICHEVER IS APPLICABLE.
3. PROPOSED REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" UNLESS OTHERWISE INDICATED.
4. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO ALL EXPOSED SURFACES OF CONCRETE PATCHING AND THE IMMEDIATE SURROUNDING AREA AS DIRECTED BY THE ENGINNER.

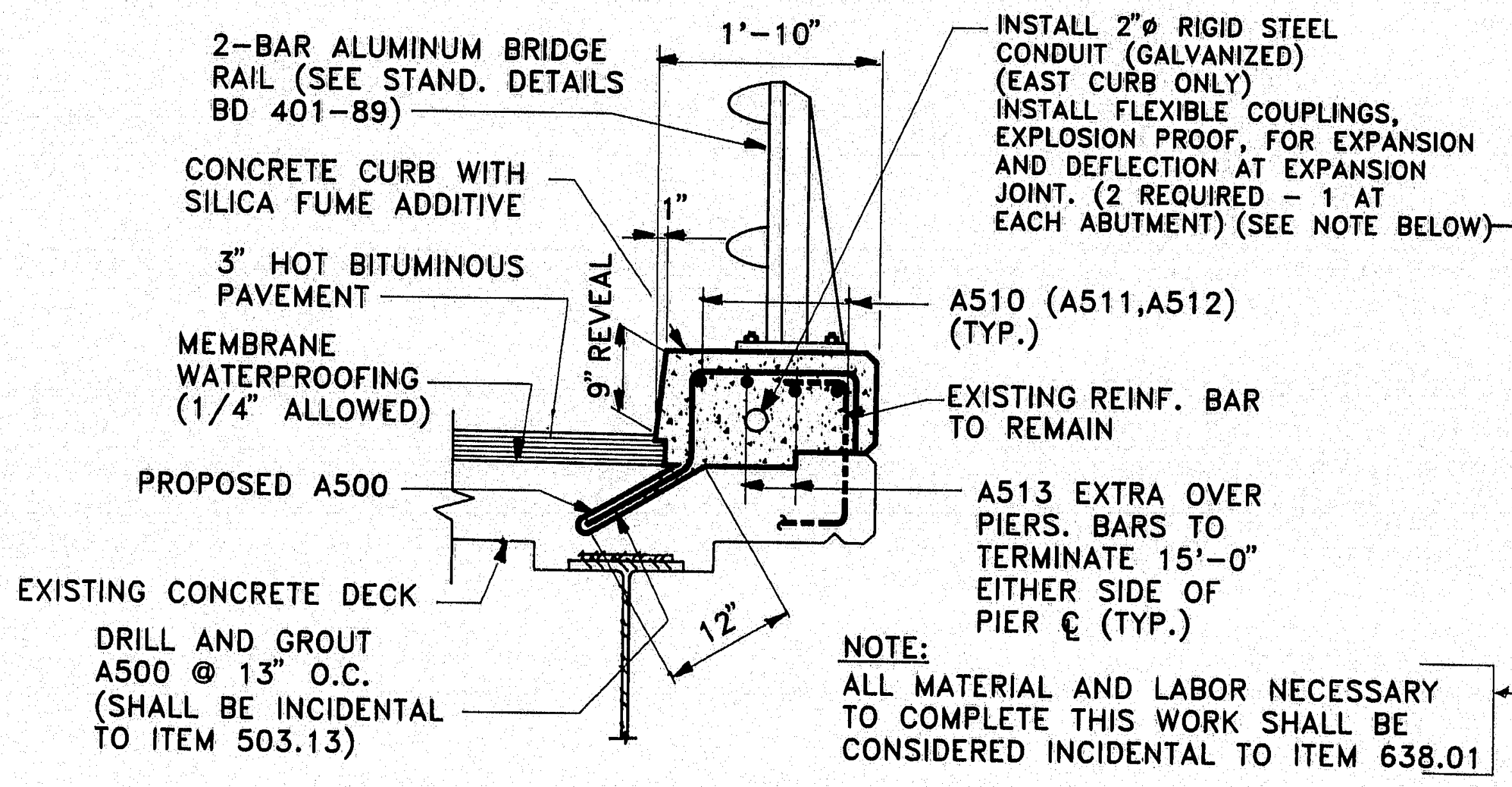


COMPRESSION SEAL ADJUSTMENT CHART



1'-6"
1'-0"
1'-10"
1"
9"
TOP OF HOT BITUMINOUS PAVEMENT
PROPOSED 2"ø RIGID STEEL CONDUIT (GALV.) (EAST CURB ONLY)
EXIST. CONC. TO BE REMOVED
A515 @ 12" O.C.
1'-11½"
9"
1'-6"
CONCRETE CURB WITH SILICA FUME ADDITIVE
PROVIDE 1½" V-CUT TO MATCH EXISTING
A516 (TYP.)
EXIST. WING WALL
EXIST. #6 @ 12" TO REMAIN
EXIST. #5 @ 12" TO REMAIN
1'-4"

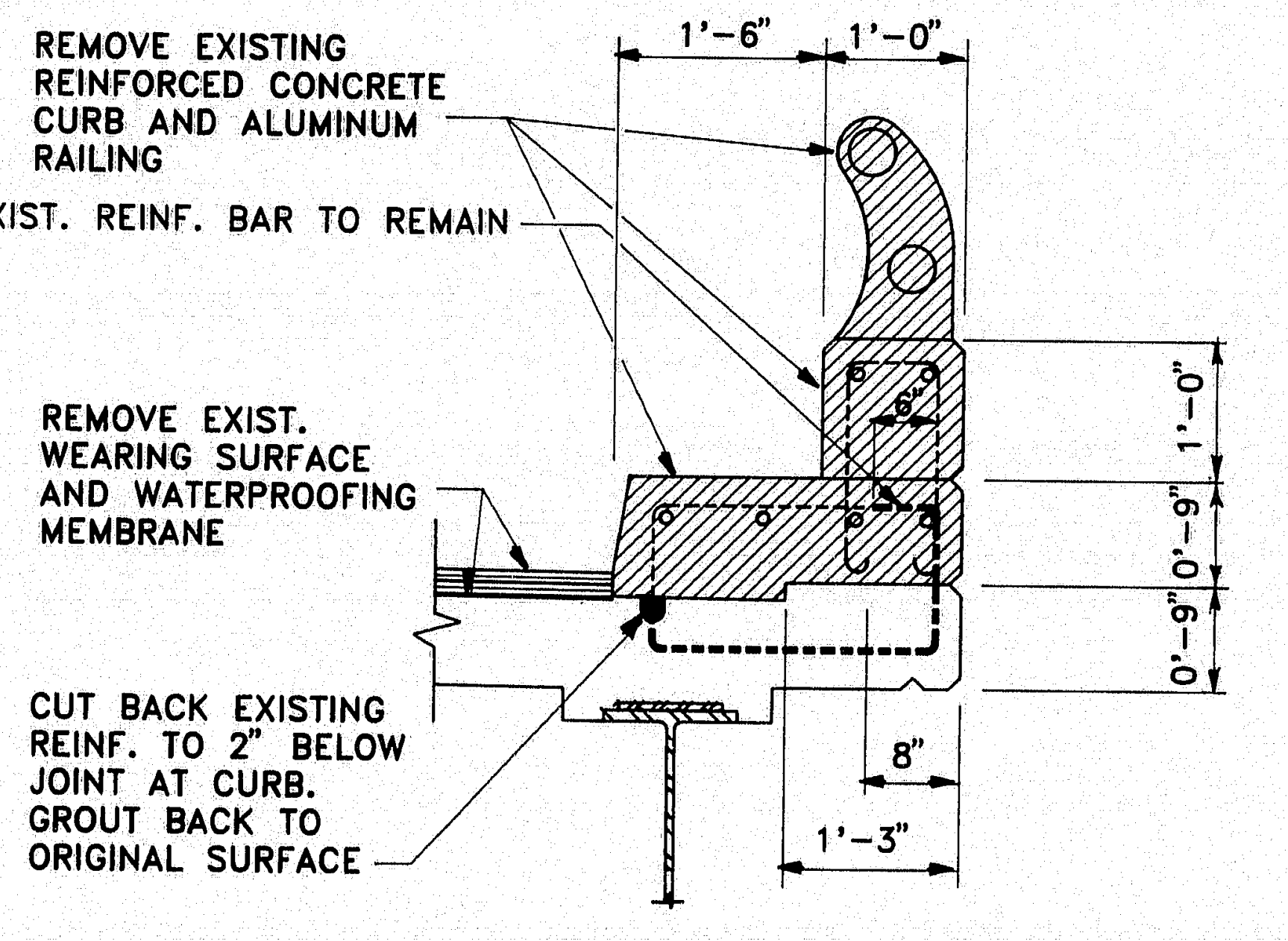
RETURN WING MODIFICATIONS



2-BAR ALUMINUM BRIDGE RAIL (SEE STAND. DETAILS BD 401-89)
1'-10"
CONCRETE CURB WITH SILICA FUME ADDITIVE
1"
3" HOT BITUMINOUS PAVEMENT
9" REVEAL
MEMBRANE WATERPROOFING (1/4" ALLOWED)
PROPOSED A500
EXISTING CONCRETE DECK
12"
DRILL AND GROUT A500 @ 13" O.C. (SHALL BE INCIDENTAL TO ITEM 503.13)
INSTALL 2"ø RIGID STEEL CONDUIT (GALVANIZED) (EAST CURB ONLY) INSTALL FLEXIBLE COUPLINGS, EXPLOSION PROOF, FOR EXPANSION AND DEFLECTION AT EXPANSION JOINT. (2 REQUIRED – 1 AT EACH ABUTMENT) (SEE NOTE BELOW)
A510 (A511,A512) (TYP.)
EXISTING REINF. BAR TO REMAIN
A513 EXTRA OVER PIERS. BARS TO TERMINATE 15'-0" EITHER SIDE OF PIER ℄ (TYP.)

NOTE:
ALL MATERIAL AND LABOR NECESSARY TO COMPLETE THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 638.01

PROPOSED CURB SECTION



REMOVE EXISTING REINFORCED CONCRETE CURB AND ALUMINUM RAILING
1'-6"
1'-0"
EXIST. REINF. BAR TO REMAIN
6"
1'-0"
0'-9"
0'-9"
REMOVE EXIST. WEARING SURFACE AND WATERPROOFING MEMBRANE
CUT BACK EXISTING REINF. TO 2" BELOW JOINT AT CURB. GROUT BACK TO ORIGINAL SURFACE
8"
1'-3"

EXISTING CURB SECTION

PROJECT DESIGN ENGINEER
DESIGN- DETAILED
CHECKED
REVISIONS
FIELD CHANGES
PLANS
BY
DATE

Pin No. 2804.00
Bridge No. 5804

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Kimball Chase
ONE CATE STREET
PORTSMOUTH, N.H. 03801
(603) 431-2520

RELOCATED U.S. ROUTE 1
over
INTERSTATE-95
YARMOUTH, MAINE
CUMBERLAND COUNTY
DETAILS & EST. OF QUANTITIES

SHEET 2 OF 3 AUGUSTA, MAINE

104-118

REVISED AS BUILT 1990 by 3/'92

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | RS-0141(6) | 25 | 28 |

YARMOUTH

# REINFORCING STEEL SCHEDULE

## STRAIGHT BARS

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| SUPERSTRUCTURE | | | |
| A510 | 16 | 36'-0" | HORIZ. CURB |
| A511 | 8 | 23'-0" | HORIZ. CURB |
| A512 | 8 | 33'-9" | HORIZ. CURB |
| A513 | 12 | 30'-0" | HORIZ. CURB |
| A516 | 8 | 15'-6" | HORIZ. RETURN WING |
| A517 | 8 | 17'-0" | HORIZ. RETURN WING |
| END POST | | | |
| EP400 | 24 | 2'-0" | |
| EP405 | 24 | 1'-10" | |

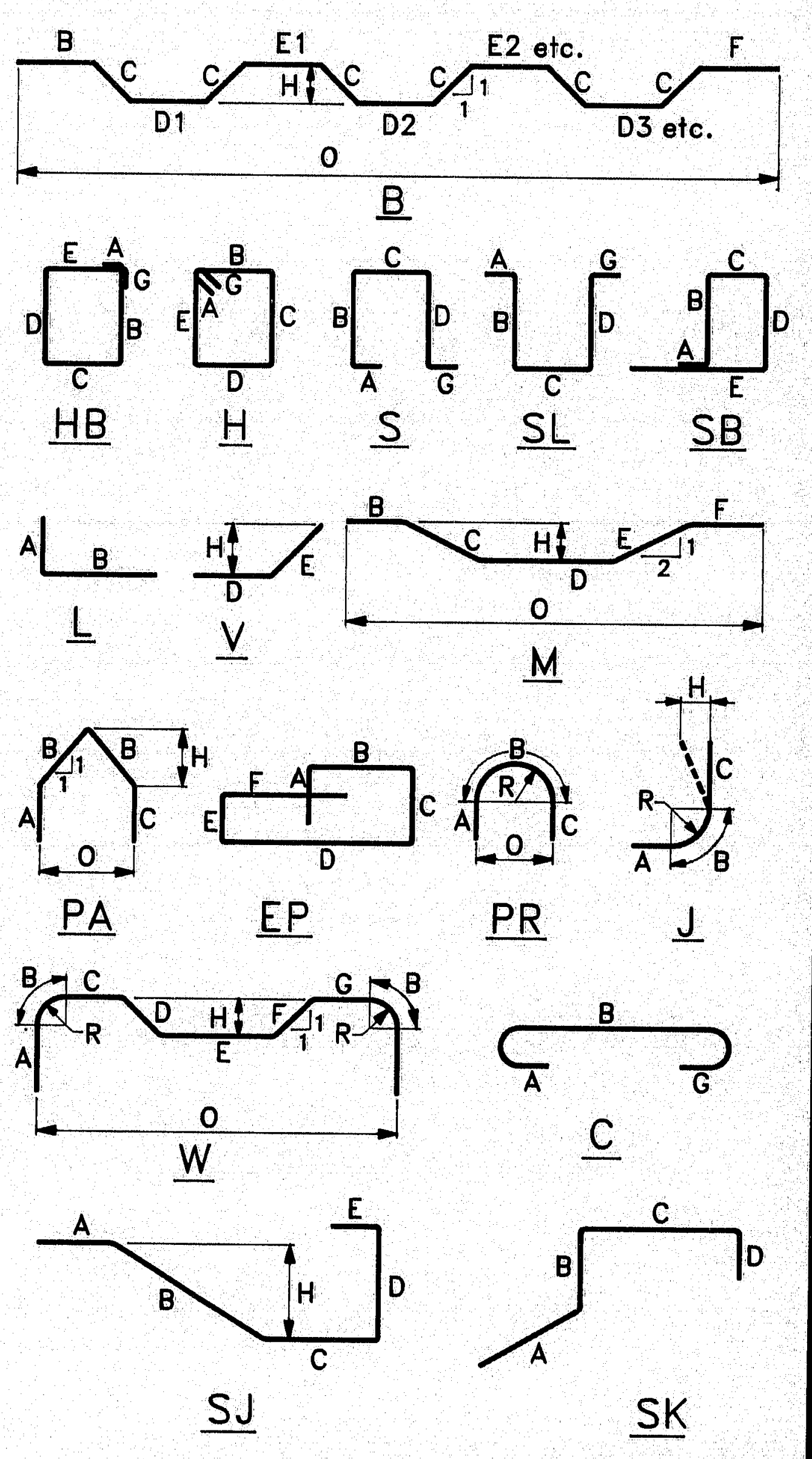
| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|

## BENT BARS

| MARK | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | O | R | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUPERSTRUCTURE | | | | | | | | | | | | | | |
| A500 | 450 | 3'-10½" | SK | 1'-0" | 0'-10" | 1'-6" | 0'-6½" | — | — | — | — | — | — | VERTICAL CURB |
| A515 | 68 | 6'-1" | H | 0'-5½" | 1'-2" | 1'-5" | 1'-2" | 1'-5" | — | 0'-5½" | — | — | — | RETURN WING |
| A518 | 106 | 2'-3" | S | 0 | 0'-6" | 0'-6" | 1'-3" | — | — | 0 | — | — | — | EXPANSION JOINTS |
| END POST | | | | | | | | | | | | | | |
| EP401 | 16 | 4'-11" | S | 0 | 2'-0" | 0'-11" | 2'-0" | — | — | 0 | — | — | — | |
| EP402 | 8 | 4'-6" | S | 0 | 2'-0" | 0'-6" | 2'-0" | — | — | 0 | — | — | — | |
| EP500 | 16 | 7'-10" | S | 0 | 5'-6" | 0'-7" | 1'-9" | — | — | 0 | — | — | — | |
| EP501 | 16 | 6'-8" | SJ | 0 | 3'-1" | 2'-7" | 1'-0" | 0 | — | — | 0'-8" | — | — | |
| EP502 | 16 | 4'-7" | S | 0 | 1'-10" | 0'-11" | 1'-10" | — | — | 0 | — | — | — | |
| EP503 | 8 | 4'-2" | S | 0 | 1'-10" | 0'-6" | 1'-10" | — | — | 0 | — | — | — | |

## TYPE-BENDING DIAGRAMS



ALL DIMENSIONS ARE OUT TO OUT OF REINF. BAR

BENDING DETAILS AND HOOKS SHALL CONFORM TO THE RECOMMENDATIONS OF THE CURRENT REVISION OF ACI STANDARD 318.

REINFORCING BAR: ASTM A615 GRADE 60

## GENERAL NOTES

1. FIRST DIGIT(S) FOLLOWING THE LETTER OF THE MARK INDICATES SIZE OF REINF. BAR.
   MARK (A502) BAR SIZE-#5
   MARK (P1001) BAR SIZE-#10
   MARK (S603) BAR SIZE-#6
2. EACH TRUSS BAR, TYPE B, MAY BE REPLACED BY TWO (2) STRAIGHT BARS (ONE TOP & ONE BOTTOM) OF THE SAME BAR SIZE AS THE TRUSS BAR. PAYMENT IN EITHER CASE SHALL BE BASED ON TRUSS BARS AS SCHEDULED ON PLANS.

Pin No. 2804.00
Bridge No. 5804

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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RELOCATED U.S. ROUTE 1
over
INTERSTATE-95
YARMOUTH, MAINE
CUMBERLAND COUNTY
REINFORCING STEEL SCHEDULE

SHEET 3 OF 3 AUGUSTA, MAINE

104-119

PROJECT DESIGN ENGINEER
PLANS
DESIGN- DETAILED JEB
CHECKED
REVISIONS
FIELD CHANGES
BY
DATE