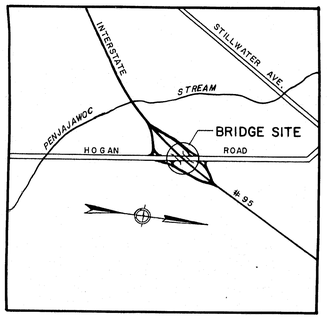
| B.P.R. REG.NO. | STATE | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 37 | 109 |

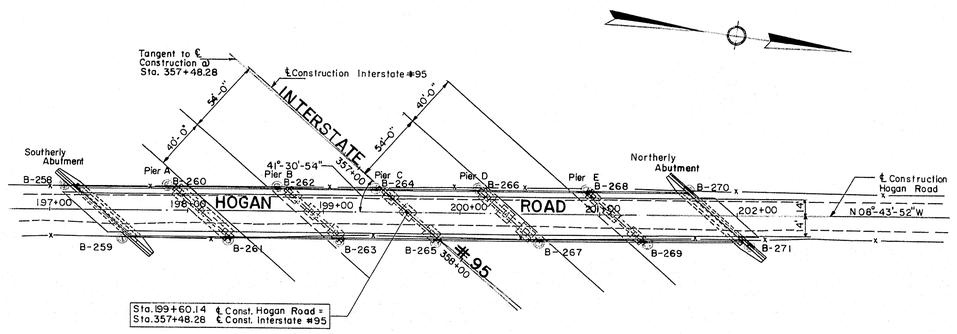
# BANGOR INTERSTATE



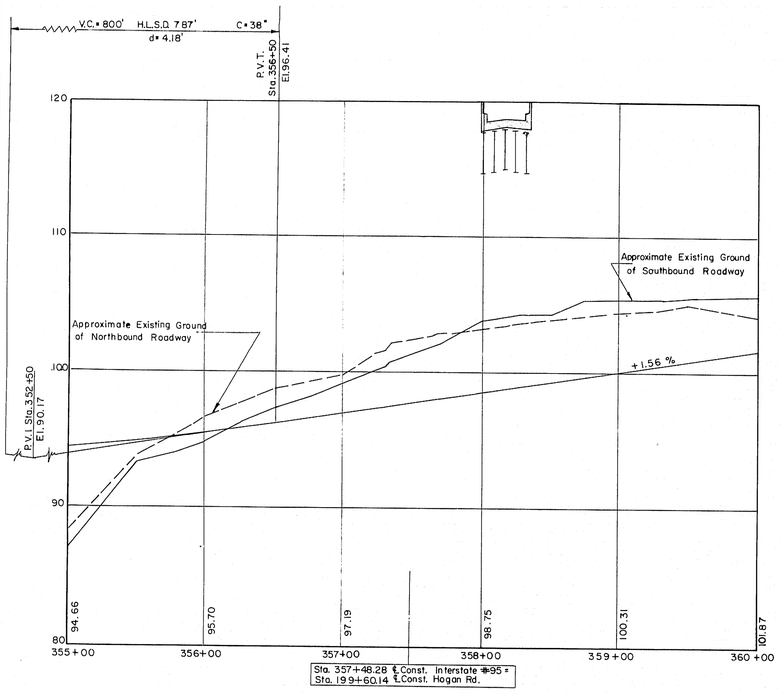

LOCATION MAP
No Scale

INTERSTATE #95 ℄ CONSTRUCTION
CURVE DATA:

Δ = 34°-34'-30"
D = 1°-00'-00"
R = 5729.578'
L = 3457.500'
T = 1783.194'

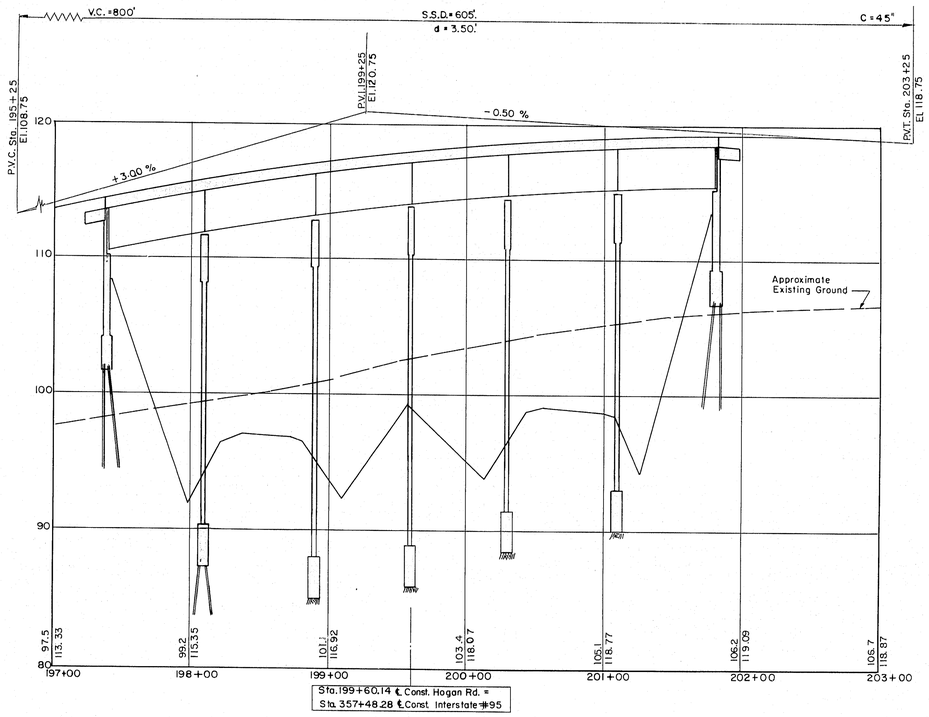



KEY PLAN
Scale 1"=50'-0"




PROFILE ALONG INTERSTATE #95 (℄ ROADWAYS)

Scales: Hor. 1"= 50'-0"
Vert. 1"= 5'-0"




PROFILE ALONG HOGAN ROAD

Scales: Hor. 1"= 50'-0"
Vert. 1"= 5'-0"

## GENERAL NOTES

**FOUNDATION:**

Foundations may be altered, if necessary, to suit conditions encountered in construction.

**DESIGN:**

In accordance with the specifications of the American Association of State Highway Officials for H20-S16-44 loading (1957 Edition) modified for military requirements.

Design Stresses: Structural Steel fs = 18,000 psi
Reinforcing Steel fs = 18,000 psi
Concrete (n=10) fc = 1,200 psi

**CONSTRUCTION:**

State of Maine Standard Specifications to be followed except as noted in Special Provisions

**REINFORCEMENT:**

All bars shall have deformations conforming to A.S.T.M. Designation A305.
Unless otherwise shown on plans, reinforcing bars shall be lapped 20 diameters to make a splice, except that main reinforcing bars near the top of slabs and beams having more than 12" of concrete under the bars shall be lapped 35 diameters to make a splice.

**STRUCTURAL STEEL:**

Wherever cover plates and/or shear connectors are welded to beams, beams and plates shall be Weldable Structural Steel A.S.T.M. Designation A373.

**BENCH MARK:**

BM S-11 Horizontal RR. spike in pole (Double poles) 0.8 mile east of Stillwater Avenue on Hogan Road, 25' north of centerline on Hogan Road.
Elevation = 95.04 U.S.G.S. Datum.

## ESTIMATED QUANTITIES
( NOT GUARANTEED )

| | | |
|---|---|---|
| STRUCTURAL EARTH EXCAVATION, PIERS | 430 | CU.YDS. |
| STRUCTURAL ROCK EXCAVATION, PIERS | 130 | CU.YDS. |
| GRAVEL BASE COURSE-IN PLACE MEASUREMENT | 490 | CU.YDS. |
| BITUMINOUS CONCRETE SURFACE COURSE, TYPE A | 170 | TONS |
| MEMBRANE WATERPROOFING (3 PLY) | 1,400 | SQ. YDS. |
| PORTLAND CEMENT CONCRETE, ABUTMENTS AND RETAINING WALLS | 200 | CU. YDS. |
| PORTLAND CEMENT CONCRETE, PIERS | 350 | CU YDS. |
| PORTLAND CEMENT CONCRETE, ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES | 610 | CU.YDS. |
| PORTLAND CEMENT | 1,740 | BBLS. |
| BRIDGE DRAINAGE | 1 | LUMP SUM |
| STRUCTURAL STEEL, FABRICATED AND DELIVERED | 687,100 | LBS. |
| STRUCTURAL STEEL, ERECTION | 687,100 | LBS. |
| BRONZE OR COPPER-ALLOY BEARING AND EXPANSION PLATES, DELIVERED | 1,600 | LBS. |
| BRONZE OR COPPER-ALLOY BEARING AND EXPANSION PLATES, PLACING | 1,600 | LBS. |
| REINFORCING STEEL, DELIVERED | 196,100 | LBS. |
| REINFORCING STEEL, PLACING | 196,100 | LBS. |
| SHEAR CONNECTORS, DELIVERED AND PLACED | 1 | LUMP SUM |
| STEEL H-BEAM PILES (42 LBS./FT.) | 1,340 | LIN.FT. |
| FRENCH DRAINS | 80 | CU.YDS. |
| ALUMINUM RAILING | 905 | LIN.FT. |
| SLOPE PAVING FOR BRIDGES | 770 | SQ.YDS. |

FINAL AS BUILT PLANS

| DESIGN | CHECK G.B. | BRIDGE NO |
|---|---|---|
| DRAWN D.A.T. | APPROVED W.A.H. C.J.M. | SURVEY PLOT |

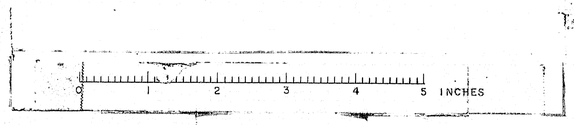
STATE HIGHWAY COMMISSION
INTERSTATE #95
UNDER
HOGAN RD.
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY
KEY PLAN & PROFILES

SHEET 1 OF 9 AUGUSTA, MAINE

APPROVED BY Wm. A. Henderson DATE 12-23-58

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

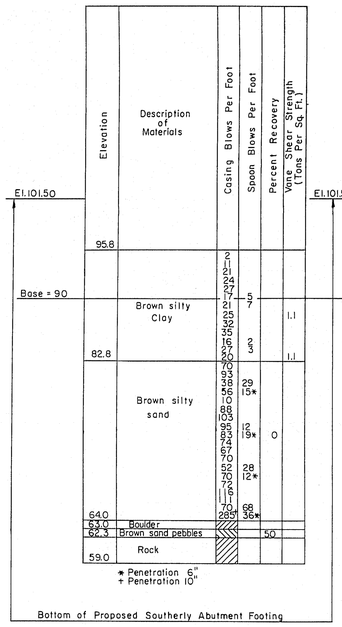
M-1207



| B.P.R. REG. NO | STATE | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 38 | 109 |

**BANGOR INTERSTATE**

## B-258

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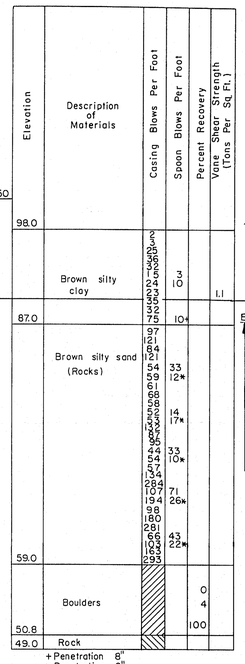


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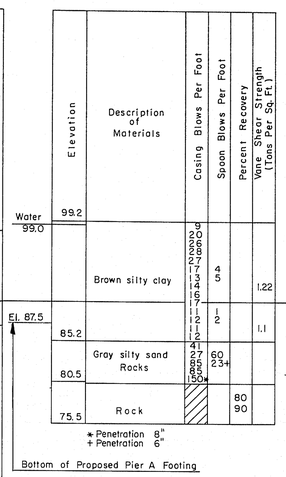


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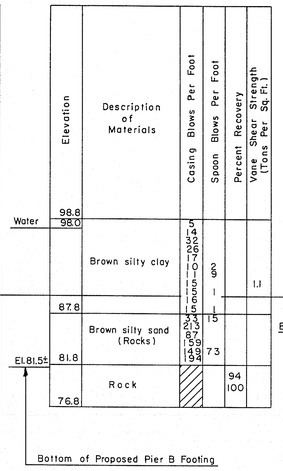


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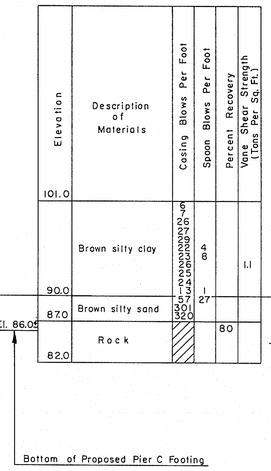


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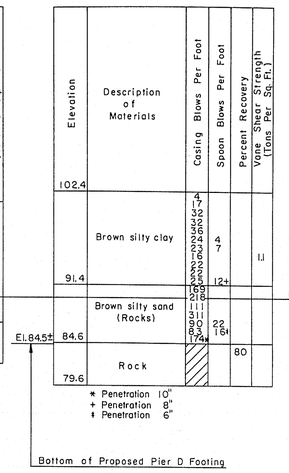


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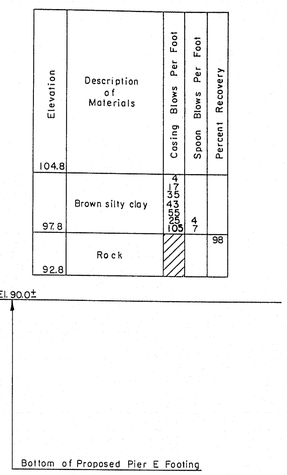
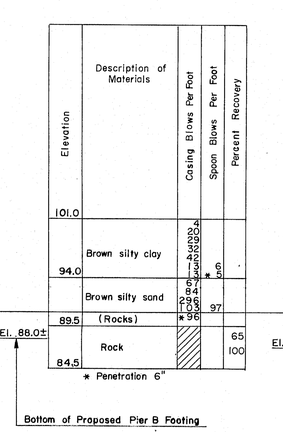



## B-260




## B-263

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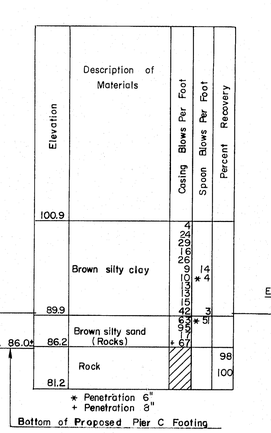


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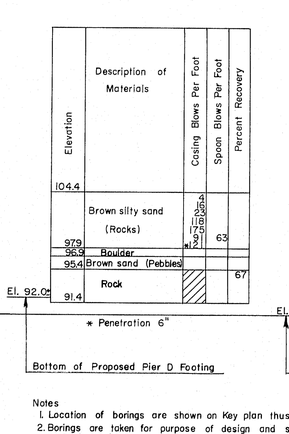


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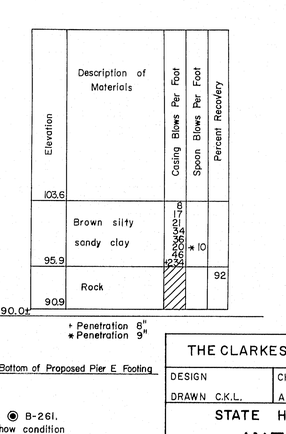


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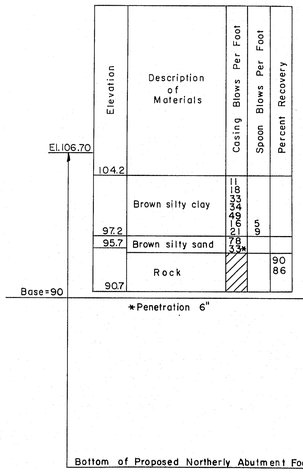


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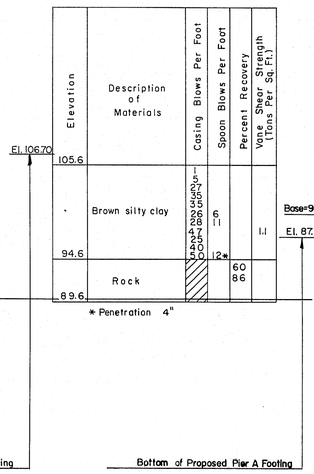
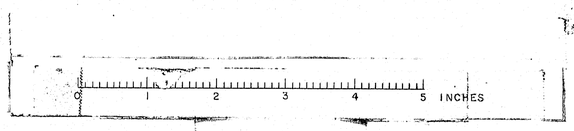



## BORING LOG

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




Notes

1. Location of borings are shown on Key plan thus ◉ B-261.
2. Borings are taken for purpose of design and show condition at boring points only, but do not necessarily show nature of materials to be encountered during construction.
3. The Contractor is to form his own opinion of the character of the material, and to make his own interpretation of the borings.
4. The Engineer does not warrant the findings as being accurate or complete.
5. Figures in boring columns indicate blows per foot on 2½" casing or 1" spoon produced by a 356 # hammer with a fall of 14" and 12 respectively.
6. Borings were taken by the Maine State Highway Commission during the month of May 1958.

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| DESIGN | CHECK G.B. | BRIDGE NO. |
|---|---|---|
| DRAWN C.K.L. | APPROVED WAH-CJM | SURVEY PLOT |

STATE HIGHWAY COMMISSION

# INTERSTATE # 95

UNDER

# HOGAN RD.

IN THE CITY OF

## BANGOR

## PENOBSCOT COUNTY

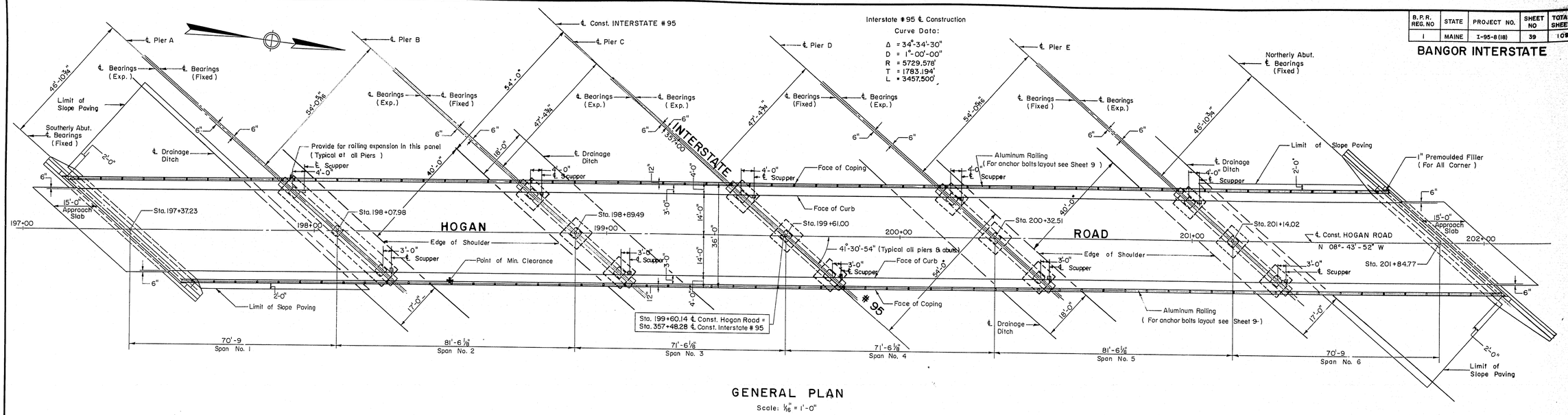
BORING DATA

SHEET 2 OF 9 AUGUSTA, MAINE

M-1208

| B.P.R. REG. NO | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| I | MAINE | I-95-8(18) | 39 | 109 |

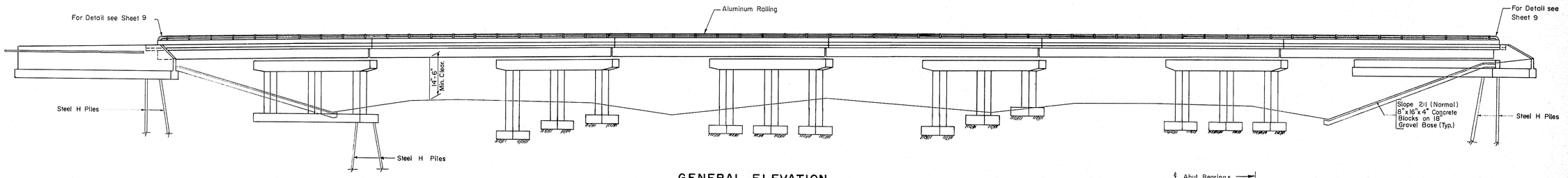
# BANGOR INTERSTATE




## GENERAL PLAN

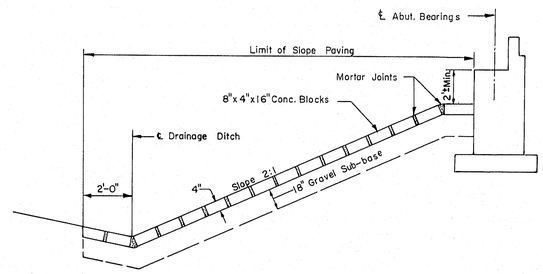
Scale: 1/16" = 1'-0"

Note: Interstate dimensions are radial dimensions.




## GENERAL ELEVATION

Scale: 1/16" = 1'-0"




## SLOPE PAVING DETAIL

No Scale

Note: Slope Paving to stop at ledge if encountered during construction.

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| DESIGN | CHECK G.B. | BRIDGE NO. |
|---|---|---|
| DRAWN E.K. | APPROVED W.A.H. C.J.M. | SURVEY PLOT |

STATE HIGHWAY COMMISSION

# INTERSTATE # 95

UNDER

# HOGAN RD.

IN THE CITY OF

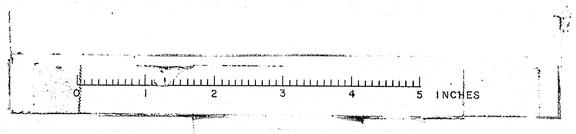
# BANGOR

# PENOBSCOT COUNTY

GENERAL PLAN AND ELEVATION

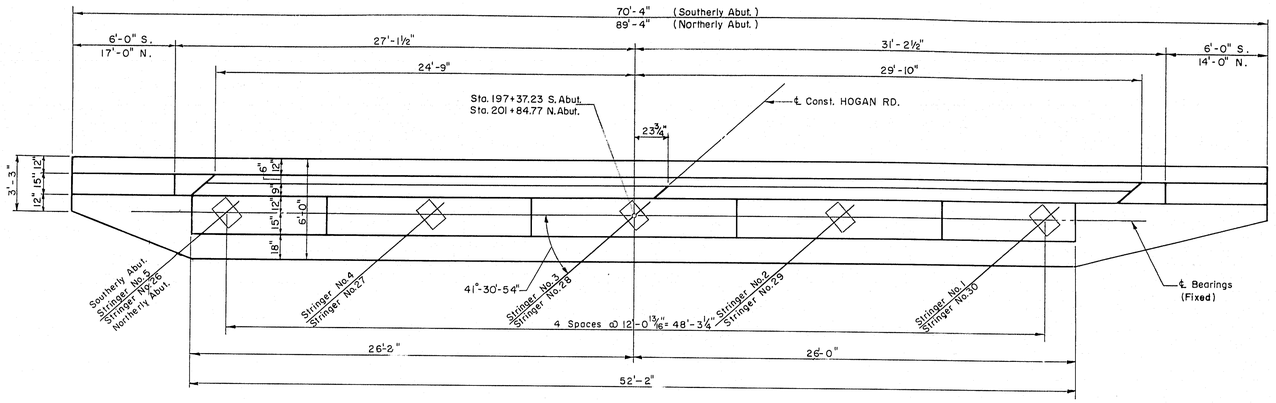
SHEET 3 OF 9 AUGUSTA, MAINE

M-1209



| B.P.R. REG. NO | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 40 | 109 |

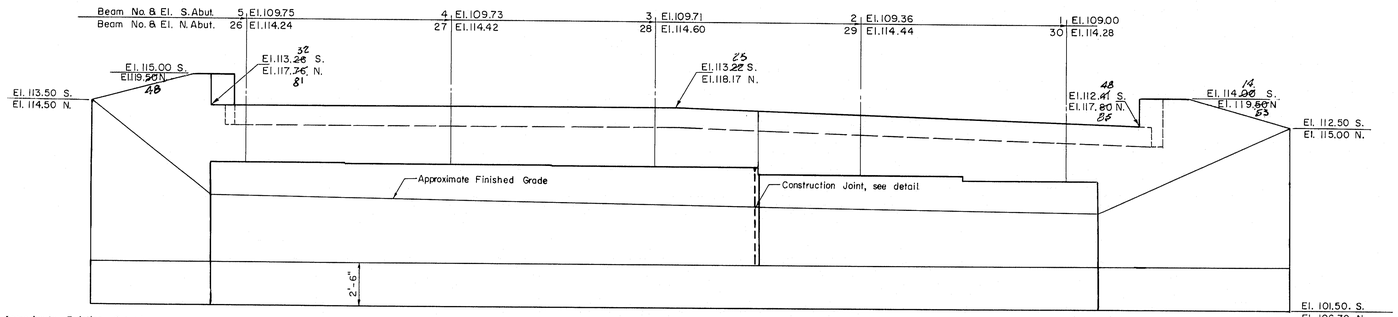
BANGOR INTERSTATE




## SOUTHERLY ABUTMENT PLAN
## NORTHERLY ABUTMENT PLAN (SIMILAR)

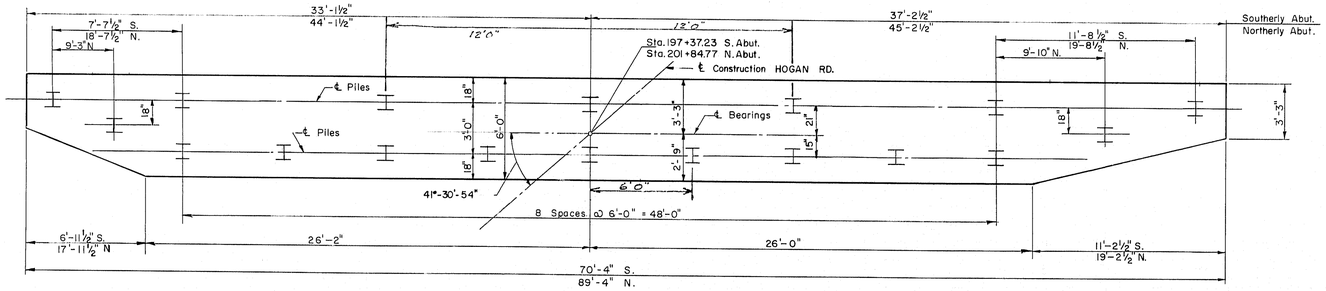
Scale: ¼" = 1'-0"

Notes:
1. Embankment under abutment to be constructed to El. 101.50 S. Abut. and El. 106.70 N. Abut. before piles are driven.
2. All piles to be driven to ledge.
3. All piles to be 10BP42 Steel Piles.
4. Maximum pile load = 35 Tons.
5. Front piles to be battered 2 on 12
6. Cap all piles ( See detail )




## SOUTHERLY ABUTMENT ELEVATION
## NORTHERLY ABUTMENT ELEVATION ( SIMILAR )

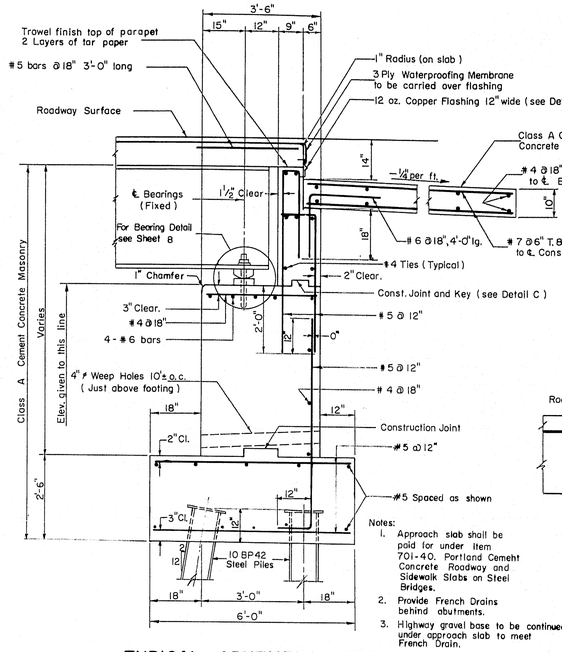
Scale: ¼" = 1'-0"




## SOUTHERLY ABUTMENT PILE PLAN
## NORTHERLY ABUTMENT PILE PLAN (SIMILAR )

Scale: ¼" = 1'-0"

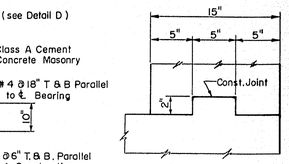
Total number of piles Southerly abutment 16
Total number of piles Northerly abutment 18




## TYPICAL ABUTMENT SECTION

Scale: ½" = 1'-0"

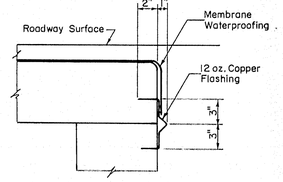
Notes:
1. Approach slab shall be paid for under Item 701-40. Portland Cemeht Concrete Roadway and Sidewalk Slabs on Steel Bridges.
2. Provide French Drains behind abutments.
3. Highway gravel base to be continued under approach slab to meet French Drain.




## DETAIL C

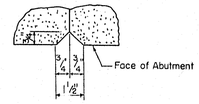
Scale: 1½" = 1'-0"

Note: Concrete in backwall not to be placed until Structural Steel has been erected.
Construction joint to be at or above Bridge Seat Elevation.



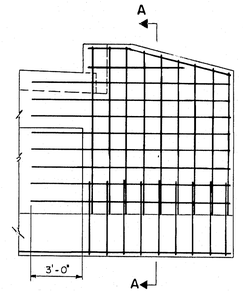

## DETAIL D

Scale: 1½" = 1'-0"



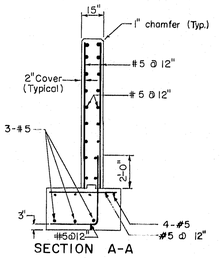

## DETAIL A
## ( CONSTRUCTION JOINT )

Scale: 3" = 1'-0"

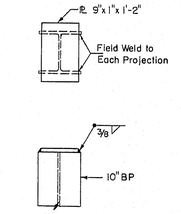



## WING REINFORCING LAYOUT

Scale: ¼" = 1'-0"

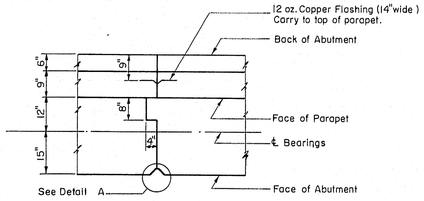



## SECTION A-A




## PILE CAP DETAILS

Scale: ¾" = 1'-0"




Reinforcing to run through construction joint.

## ABUTMENT CONSTRUCTION JOINT

Scale: ½" = 1'-0"

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

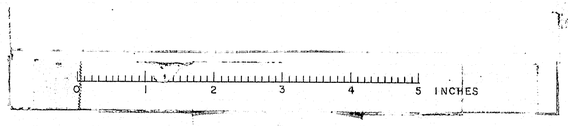
| | | |
|---|---|---|
| DESIGN D.S. R.L.M. | CHECK G.B. | BRIDGE NO. |
| DRAWN E.K. | APPROVED W.A.H. C.J.M. | SURVEY PLOT |

STATE HIGHWAY COMMISSION

# INTERSTATE # 95
UNDER
# HOGAN RD.
IN THE CITY OF
## BANGOR
## PENOBSCOT COUNTY
## ABUTMENTS

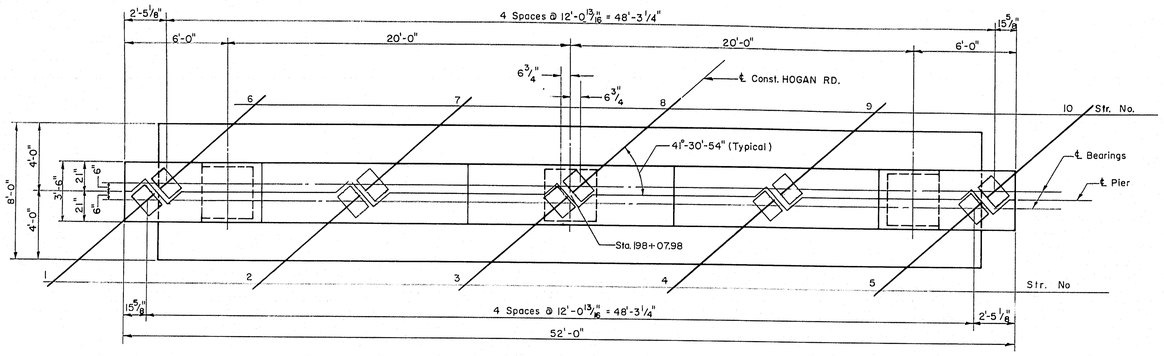
SHEET 4 OF 9 AUGUSTA, MAINE

M-1210



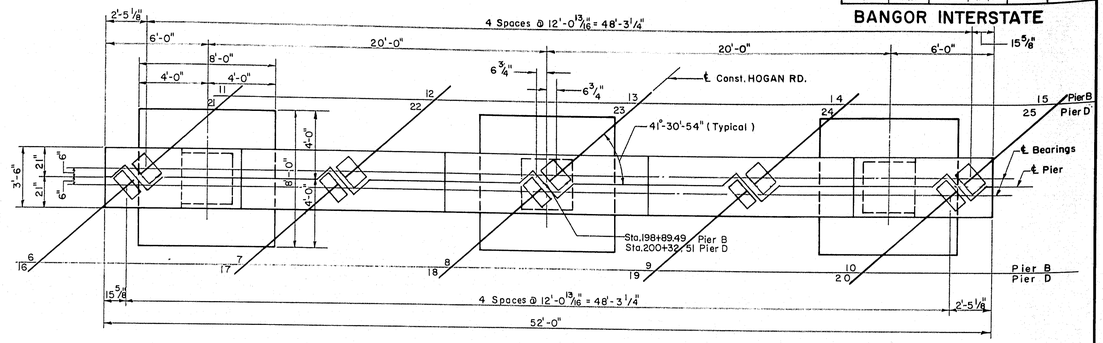
| B.P.R. REG.NO. | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 41 | 109 |

**BANGOR INTERSTATE**




PLAN PIER A

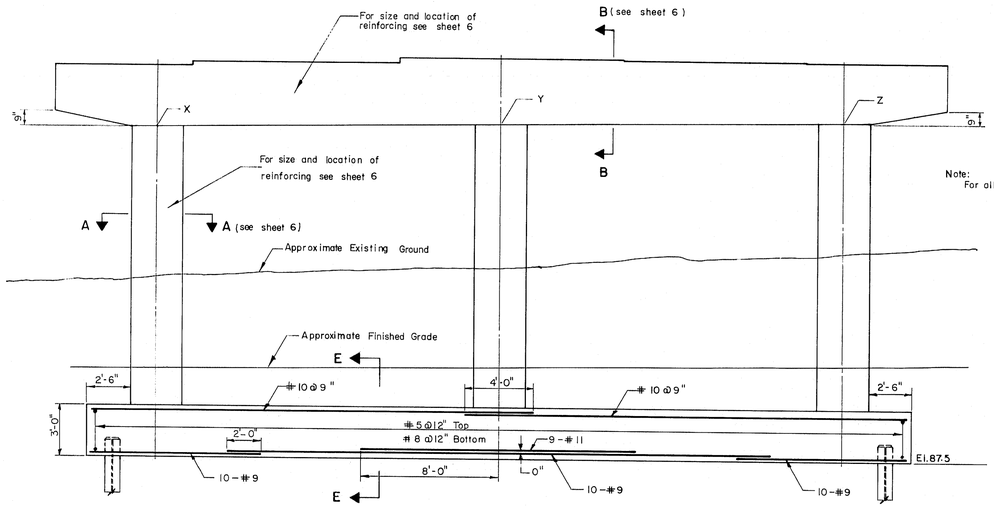
Scale: 1/4" = 1'-0"




PLAN PIER B

PLAN PIER D (SIMILAR)

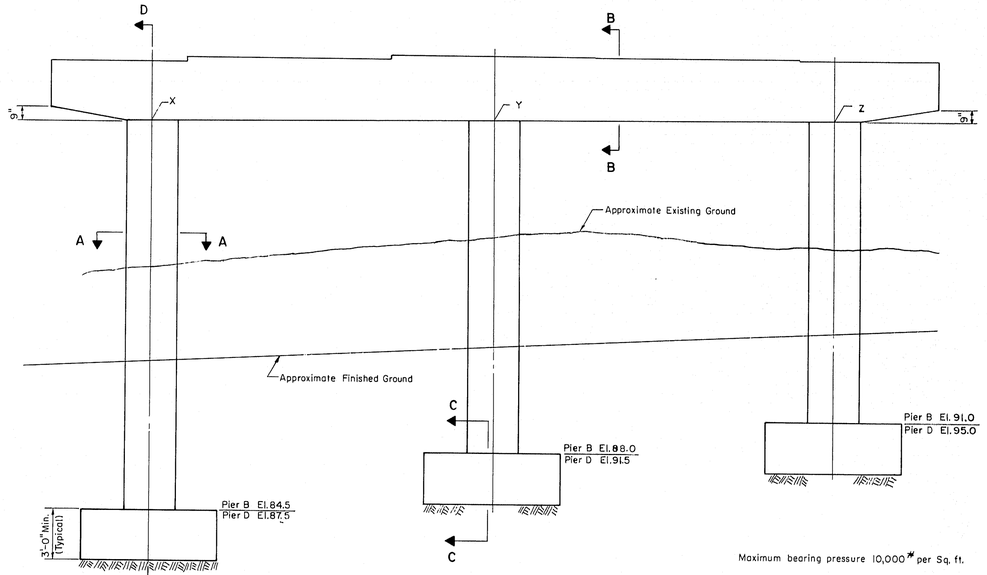
Scale: 1/4" = 1'-0"




ELEVATION PIER A

Scale: 1/4" = 1'-0"

Note:
For all elevations see sheet 6.



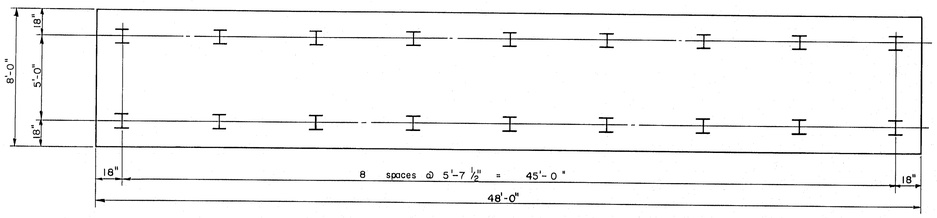

ELEVATION PIER B

ELEVATION PIER D (SIMILAR)

Scale 1/4" = 1'-0"

Note: For Sections see sheet 6
For size and location of reinforcing not shown see sheet 6

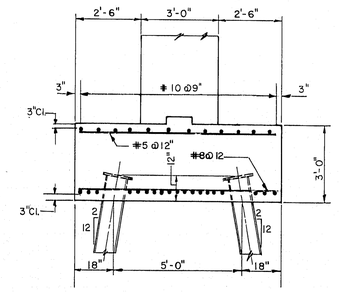
Maximum bearing pressure 10,000# per Sq. ft.




PILE PLAN PIER A

Scale: 1/4" = 1'-0"

Notes :
1. All piles to be driven to ledge.
2. All piles to be 10BP42.
3. Maximum pile load 34 Tons.
4. All piles to be battered 2" on 12".
5. Cap all piles (see detail sheet 4)




SECTION E-E

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

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| DESIGN G.B. & D.M.S. | CHECK D.M.S. & G.B. | BRIDGE NO. |
|---|---|---|
| DRAWN E.K. | APPROVED W.A.H. C.J.M. | SURVEY |
| | | PLOT |

STATE HIGHWAY COMMISSION

# INTERSTATE #95

UNDER

# HOGAN RD.

IN THE CITY OF

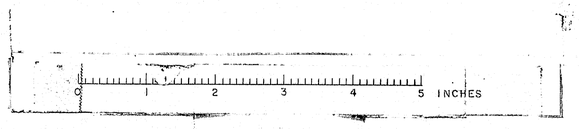
BANGOR

PENOBSCOT COUNTY

PIERS A, B & D

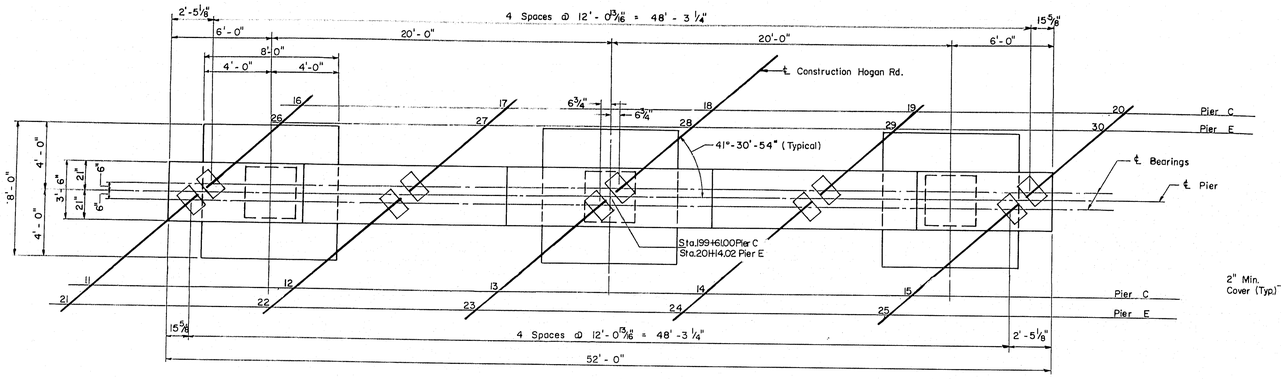
SHEET 5 OF 9 AUGUSTA, MAINE

M-1211

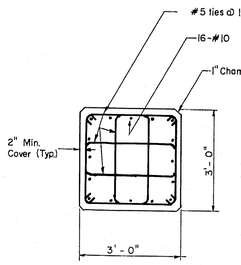


| B.P.R. REG. NO | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 42 | 109 |

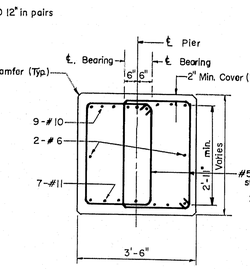
**BANGOR INTERSTATE**



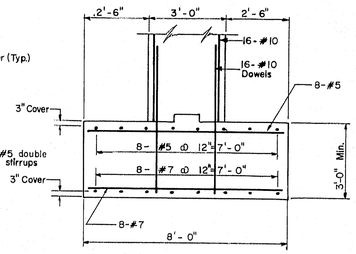

PLAN PIER C
PLAN PIER E (SIMILAR)
Scale: 1/4" = 1'-0"



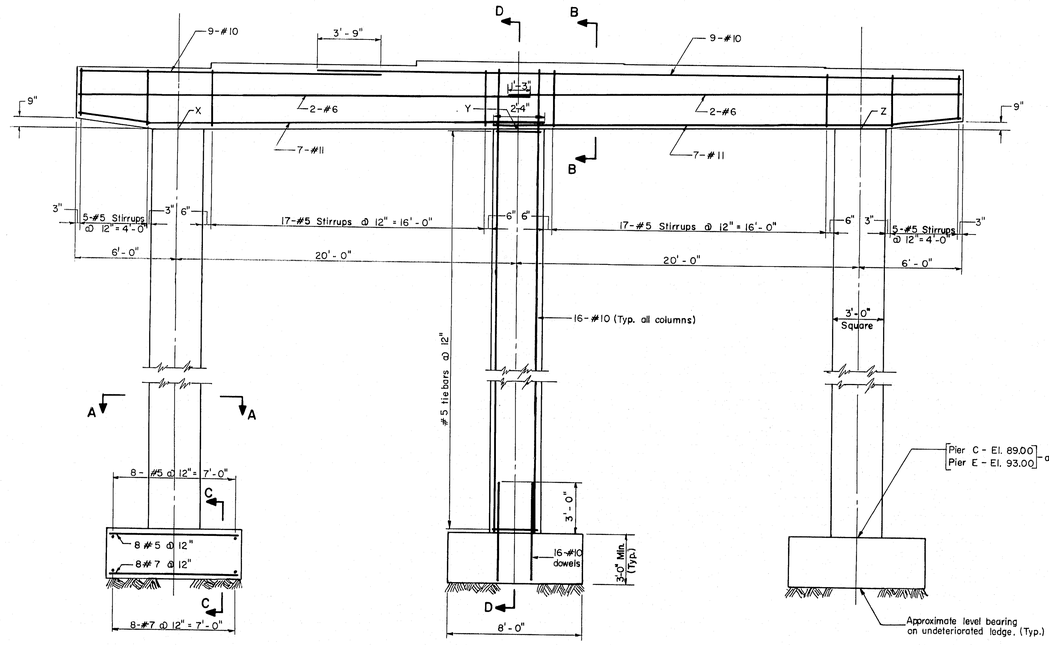

SECTION A-A
Scale: 1/2" = 1'-0"




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

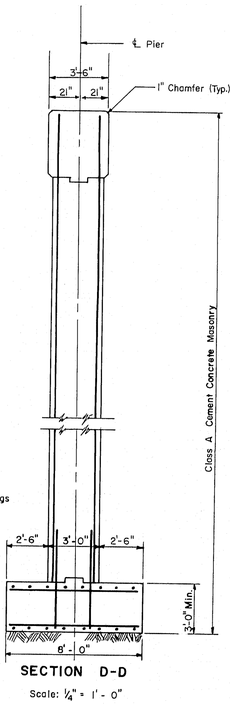



SECTION C-C
Scale: 3/8" = 1'-0"




ELEVATION PIER C
ELEVATION PIER E (SIMILAR)
Scale: 1/4" = 1'-0"

Maximum Bearing Pressure 10,000 psf.




SECTION D-D
Scale: 1/4" = 1'-0"

## SCHEDULE OF BEAM SEAT ELEVATIONS

| Beam No. | Pier A | | Beam No. | Pier B | | Beam No. | Pier C |
|---|---|---|---|---|---|---|---|
| 1 | 110.36 | 110.43 | 6 | 111.73 | 111.78 | 11 | 112.68 |
| 2 | 110.69 | 110.76 | 7 | 112.03 | 112.07 | 12 | 112.95 |
| 3 | 111.02 | 111.09 | 8 | 112.33 | 112.37 | 13 | 113.22 |
| 4 | 111.01 | 111.08 | 9 | 112.28 | 112.33 | 14 | 113.15 |
| 5 | 111.00 | 111.07 | 10 | 112.24 | 112.28 | 15 | 113.08 |

| Pier C | Beam No. | Pier D | | Beam No. | Pier E | | Beam No. |
|---|---|---|---|---|---|---|---|
| 112.68 | 16 | 113.43 | 113.43 | 21 | 114.00 | 113.97 | 26 |
| 112.95 | 17 | 113.69 | 113.69 | 22 | 114.21 | 114.18 | 27 |
| 113.22 | 18 | 113.91 | 113.91 | 23 | 114.42 | 114.38 | 28 |
| 113.15 | 19 | 113.81 | 113.81 | 24 | 114.29 | 114.25 | 29 |
| 113.08 | 20 | 113.71 | 113.71 | 25 | 114.15 | 114.12 | 30 |

| Elevations at Top of Columns | | | |
|---|---|---|---|
| Pier | Elev. X | Elev. Y | Elev. Z |
| A | 106.86 | 107.18 | 107.50 |
| B | 108.23 | 108.49 | 108.74 |
| C | 109.18 | 109.38 | 109.58 |
| D | 109.93 | 110.07 | 110.21 |
| E | 110.47 | 110.55 | 110.62 |

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| DESIGN G.B. - D.S. | CHECK G.B. | BRIDGE NO. |
|---|---|---|
| DRAWN DAT.-REM. | APPROVED WAH-CJM | SURVEY PLOT |

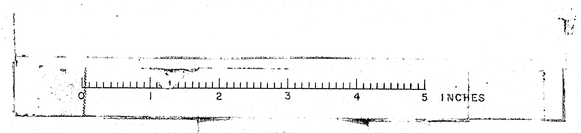
STATE HIGHWAY COMMISSION

# INTERSTATE #95
UNDER
# HOGAN RD.
IN THE CITY OF
**BANGOR**
**PENOBSCOT COUNTY**

**PIERS C AND E**

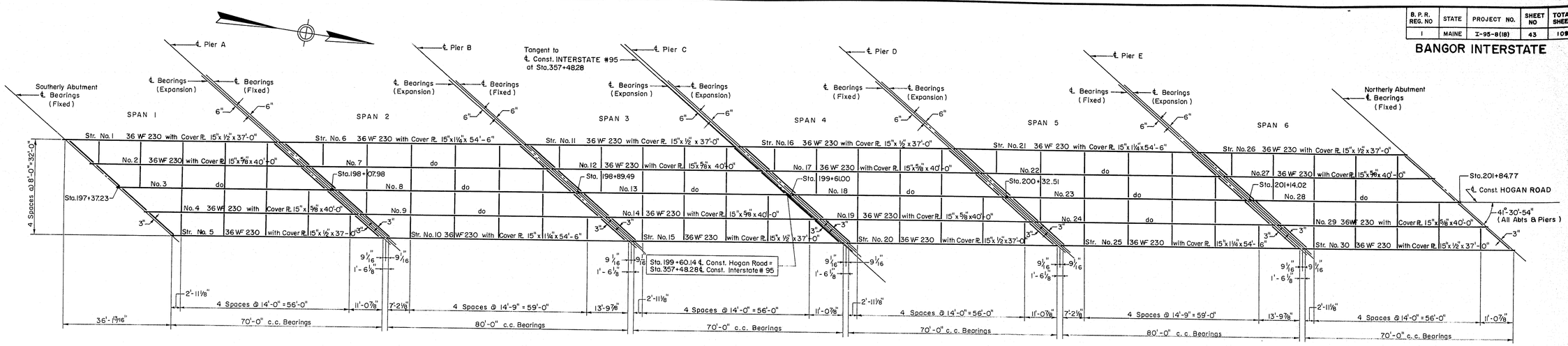
SHEET 6 OF 9 AUGUSTA, MAINE

M-12.12



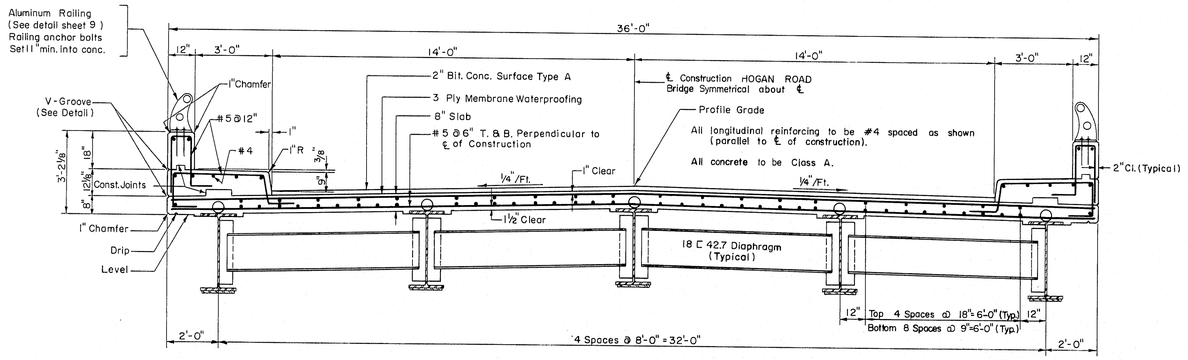
| B. P. R. REG. NO | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 43 | 109 |

# BANGOR INTERSTATE



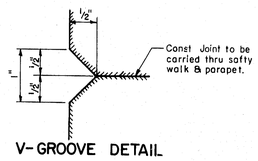

## FRAMING PLAN

Scale: 1/16" = 1'-0"




## TYPICAL CROSS SECTION

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




## V-GROOVE DETAIL

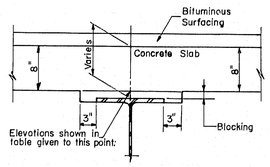
Not to Scale

## ELEVATIONS OF BOTTOM OF ROADWAY SLAB

| Beam No. | ℄ Brg. * | 1/4 Point | 1/2 Point | 3/4 Point | ℄ Brg. |
|---|---|---|---|---|---|
| 1 | 112.56 | 113.00 | 113.38 | 113.69 | 113.96 |
| 2 | 112.92 | 113.35 | 113.72 | 114.03 | 114.29 |
| 3 | 113.28 | 113.70 | 114.06 | 114.37 | 114.62 |
| 4 | 113.29 | 113.71 | 114.07 | 114.36 | 114.61 |
| 5 | 113.31 | 113.72 | 114.07 | 114.36 | 114.60 |
| 6 | 113.99 | 114.44 | 114.82 | 115.11 | 115.32 |
| 7 | 114.32 | 114.76 | 115.14 | 115.42 | 115.62 |
| 8 | 114.65 | 115.08 | 115.45 | 115.72 | 115.91 |
| 9 | 114.64 | 115.06 | 115.42 | 115.68 | 115.87 |
| 10 | 114.62 | 115.04 | 115.39 | 115.65 | 115.83 |
| 11 | 115.34 | 115.66 | 115.92 | 116.12 | 116.26 |
| 12 | 115.64 | 115.95 | 116.21 | 116.40 | 116.54 |
| 13 | 115.93 | 116.24 | 116.49 | 116.67 | 116.81 |
| 14 | 115.89 | 116.19 | 116.43 | 116.61 | 116.74 |
| 15 | 115.85 | 116.14 | 116.37 | 116.54 | 116.67 |
| 16 | 116.29 | 116.56 | 116.76 | 116.90 | 117.00 |
| 17 | 116.56 | 116.81 | 117.02 | 117.15 | 117.24 |
| 18 | 116.82 | 117.07 | 117.27 | 117.40 | 117.48 |
| 19 | 116.75 | 117.00 | 117.18 | 117.31 | 117.38 |
| 20 | 116.68 | 116.91 | 117.10 | 117.22 | 117.28 |
| 21 | 117.01 | 117.27 | 117.45 | 117.54 | 117.56 |
| 22 | 117.25 | 117.50 | 117.68 | 117.76 | 117.77 |
| 23 | 117.49 | 117.73 | 117.90 | 117.97 | 117.97 |
| 24 | 117.39 | 117.62 | 117.79 | 117.85 | 117.84 |
| 25 | 117.28 | 117.52 | 117.67 | 117.73 | ~~117.74~~ 117.71 |
| 26 | 117.56 | 117.71 | 117.80 | 117.83 | 117.81 |
| 27 | 117.77 | 117.91 | 118.00 | 118.02 | 117.99 |
| 28 | 117.98 | 118.11 | 118.19 | 118.20 | 118.17 |
| 29 | 117.85 | 117.97 | 118.04 | 118.05 | 118.01 |
| 30 | 117.71 | 117.83 | 117.90 | 117.90 | 117.85 |

*Low station end of beam.

Note: After the structural steel is erected and before forms are built or concrete is placed, elevations on the top flange of the beams are to be obtained at the points indicated in the table. The difference between these elevations and those shown in the table give the actual blocking distance from the top of the beam to the bottom of the slab.




## DETAIL OF HAUNCH

Scale: 1" = 1'-0"

NOTES:

1. All intermediate diaphragms to be 18 C 42.7, for detail see Sheet 8
2. All end diaphragms to be 15 C 33.9, for detail see Sheet 8
3. For Cover Plate and Shear Connector details see Sheet 8
4. All beams to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile, and in no case with less camber than is likely to remain permanent. The proposed camber diagram shall be submitted to the Engineer for approval.
5. Parapets and sidewalks to have transverse construction joints 20'± on centers. Joints are not to be located under railing posts. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered ½". Reinforcing steel to be carried thru joints.
6. All concrete in the deck slab of each span shall be placed in one continuous operation.

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| DESIGN D. S.-H.L. | CHECK G.B. | BRIDGE NO. |
|---|---|---|
| DRAWN E. K. | APPROVED W.A.H. C.J.W. | SURVEY PLOT |

STATE HIGHWAY COMMISSION

INTERSTATE #95

UNDER

HOGAN RD.

IN THE CITY OF

BANGOR

PENOBSCOT COUNTY

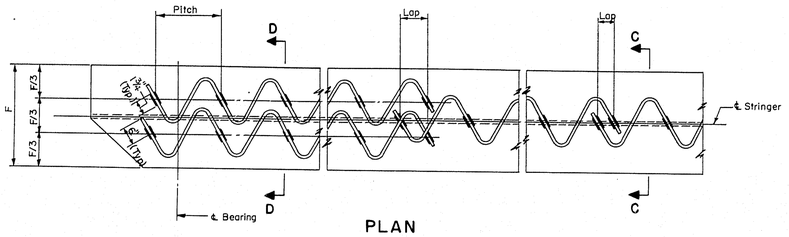
FRAMING PLAN & TYPICAL CROSS SECTION

SHEET 7 OF 9 AUGUSTA, MAINE

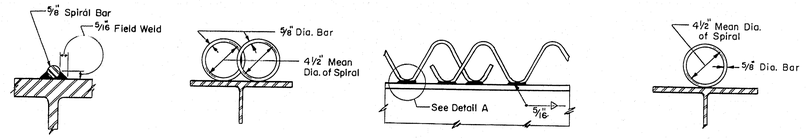
M-1213

| B. P. R. REG. NO | STATE | PROJECT NO. | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 44 | 109 |

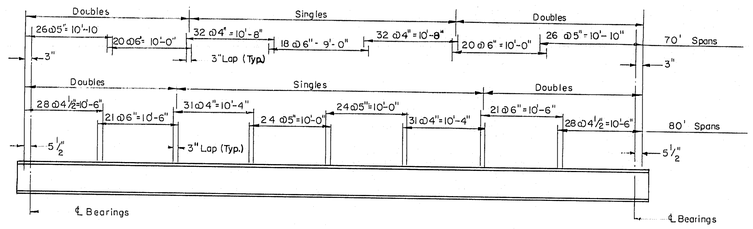
BANGOR INTERSTATE




PLAN

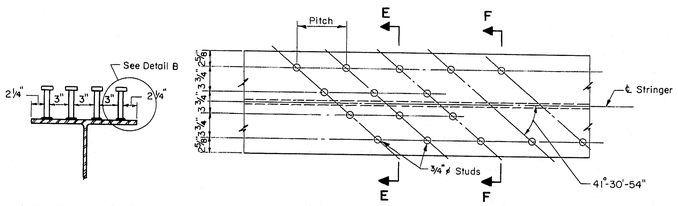



DETAIL A SECTION D-D ELEVATION SECTION C-C

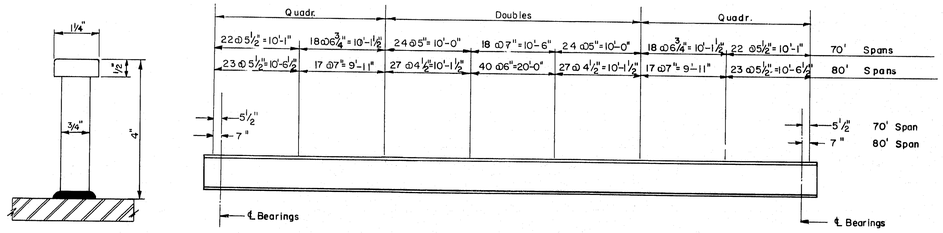



## TYPICAL SPIRAL SHEAR CONNECTORS
## ( DETAILS & LAYOUT )

NOT TO SCALE



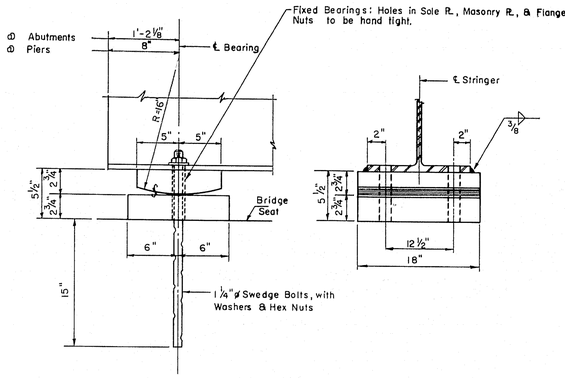

SECTION E-E PLAN SECTION F-F




DETAIL B

## TYPICAL STUD SHEAR CONNECTORS
## ( DETAILS & LAYOUT )

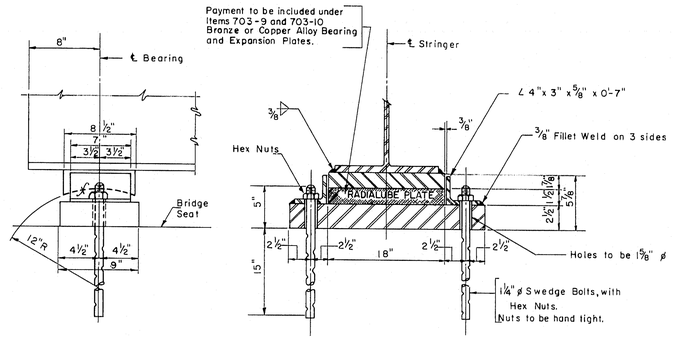
NOT TO SCALE




FIXED BEARING DETAIL

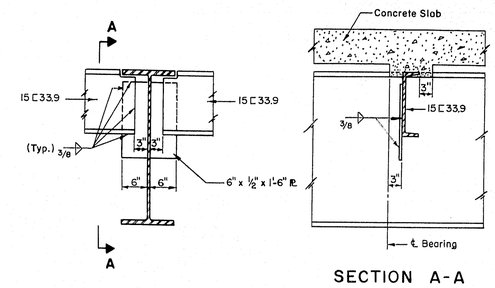
Scale 1½"=1'-0"

Note: All anchor bolts to be centered true before bearing plates are set in position. Top flange of stringers to be cut parallel to ℄ of bearings.




EXPANSION BEARING DETAIL

Scale: 1½"=1'-0"

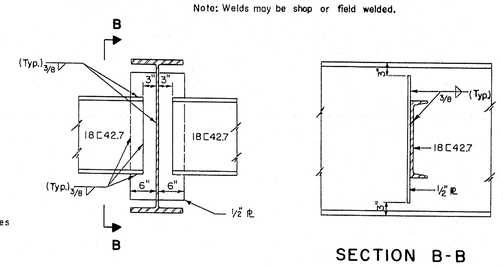



SECTION A-A

## WELDED END DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"

Note: Welds may be shop or field welded.

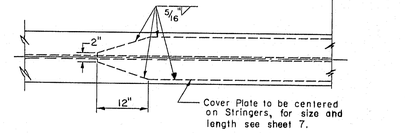



SECTION B-B

## WELDED DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"

Note: Welds may be shop or field welded.




COVER PLATE DETAIL

NOT TO SCALE

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| | | |
|---|---|---|
| DESIGN D.M.S. | CHECK G.B. | BRIDGE NO. |
| DRAWN E.K. | APPROVED W.A.H. C.J.M. | SURVEY PLOT |

STATE HIGHWAY COMMISSION

INTERSTATE #95

UNDER

HOGAN RD.

IN THE CITY OF

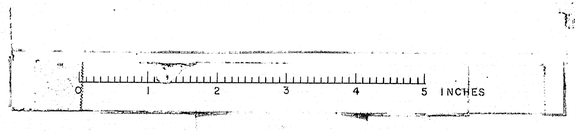
BANGOR

PENOBSCOT COUNTY

SUPERSTRUCTURE DETAILS

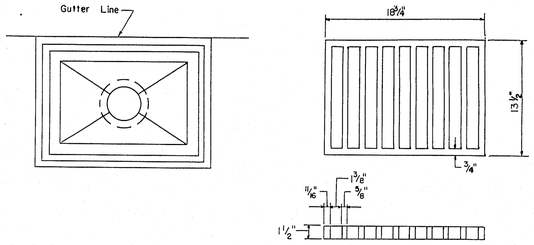
SHEET 8 OF 9 AUGUSTA, MAINE

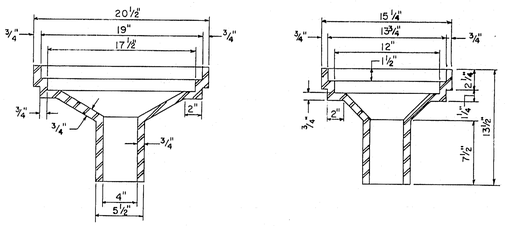
M-1214



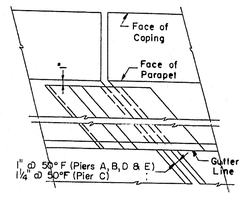
| B.P.R. REG. NO. | STATE | PROJECT NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | I-95-8(18) | 45 | 109 |

BANGOR INTERSTATE

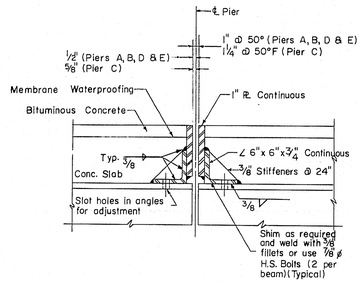


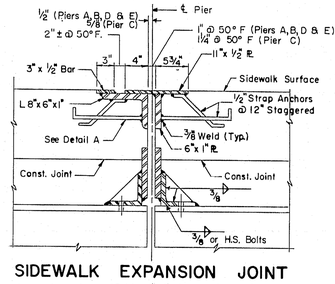

SCUPPER DETAILS
Scale: 1½" = 1'- 0"




PLAN OF EXPANSION JOINT
Scale: 1" = 1' - 0"

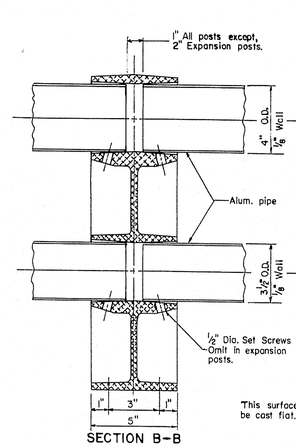



ROADWAY EXPANSION JOINT
Scale: 1" = 1' - 0"

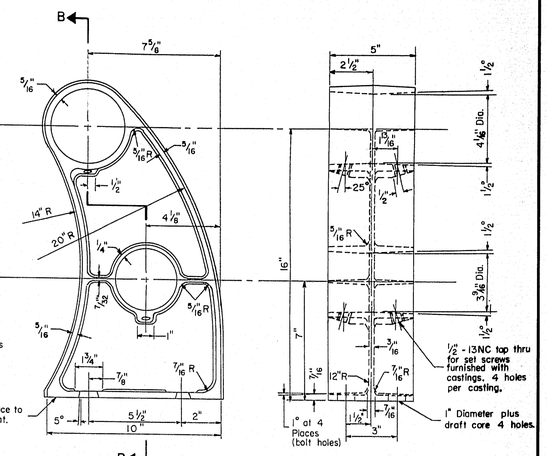



SIDEWALK EXPANSION JOINT
Scale: 1"= 1'-0"

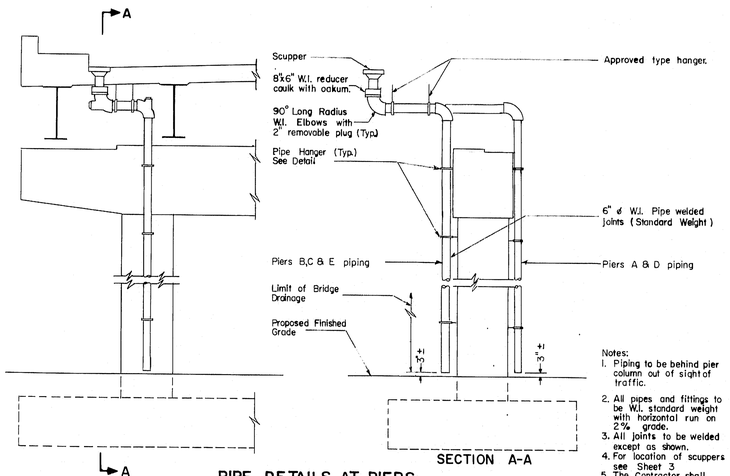
Note: Similar joint to be carried down face of curb to within 1" of roadway surface.




SECTION B-B



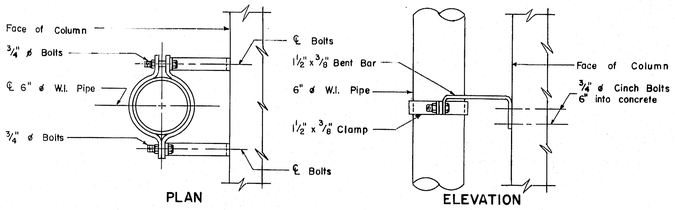

ALUMINUM RAIL DETAILS
Scale: 3"= 1'- 0"




PIPE DETAILS AT PIERS
Scale 1/4" = 1' - 0"

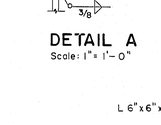
SECTION A-A

Notes:
1. Piping to be behind pier column out of sight of traffic.
2. All pipes and fittings to be W.I. standard weight with horizontal run on 2% grade.
3. All joints to be welded except as shown.
4. For location of scuppers see Sheet 3.
5. The Contractor shall submit complete drawings of the piping system to the Engineer for approval.



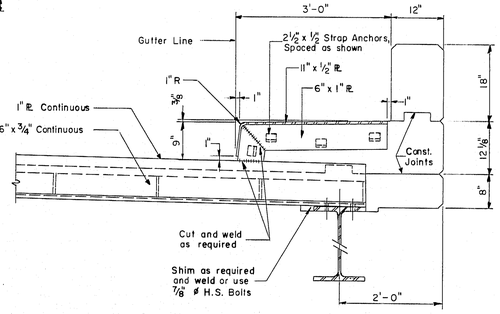

PLAN ELEVATION

PIPE HANGER DETAILS
Scale: 1½" = 1'- 0"

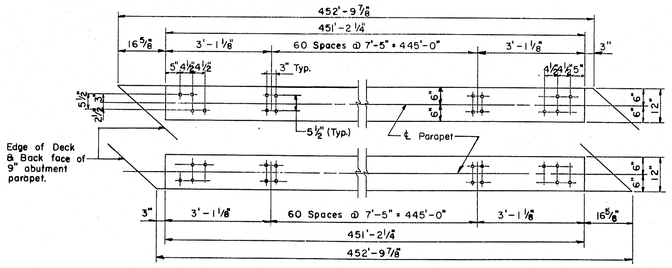



DETAIL A
Scale: 1" = 1'- 0"

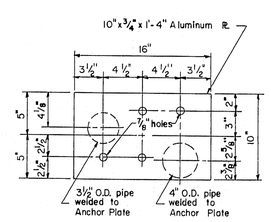
Note: All welds to be ⅜" fillets.

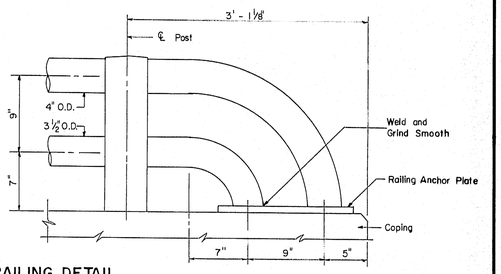



SIDEWALK EXPANSION JOINT DETAIL
Scale: ¾" = 1' - 0"




RAILING LAYOUT
Scale: 1½"= 1'-0"




END RAILING DETAIL
Scale: 1½" = 1'- 0"

Notes:
1. Any variation in railing dimensions shall be submitted for approval.
2. All anchor bolts, nuts and washers to be aluminum alloy.
3. All anchor bolts to be ¾" ø bolts set 11" in concrete.

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.

| | | |
|---|---|---|
| DESIGN R.L.M.– H.L. | CHECK G.B. | BRIDGE NO. |
| DRAWN R.E.M. | APPROVED W.A.H. C.J.M. | SURVEY PLOT |

STATE HIGHWAY COMMISSION

INTERSTATE #95

UNDER

HOGAN RD.

IN THE CITY OF

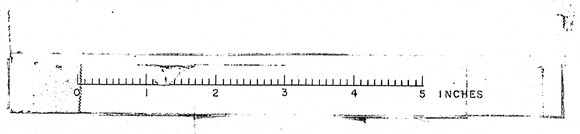
BANGOR

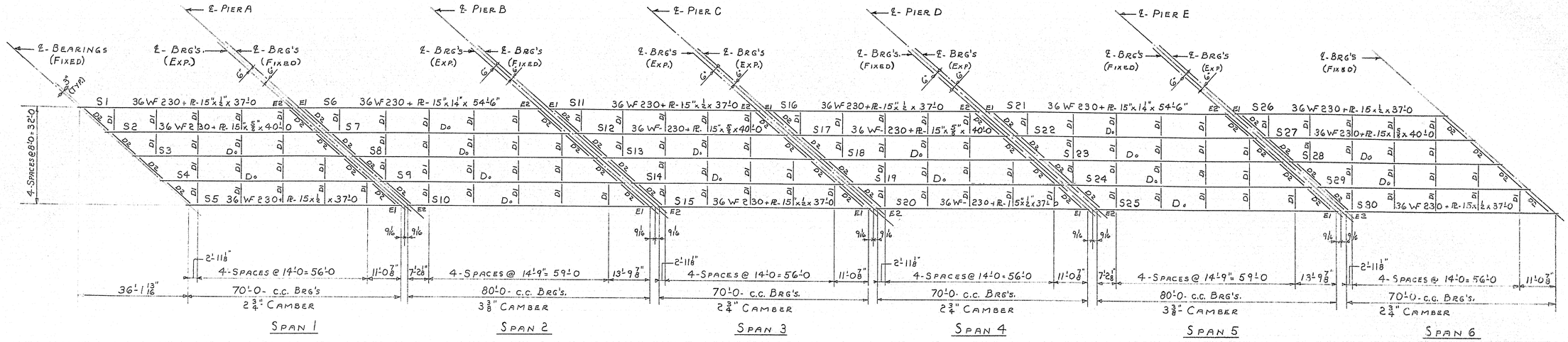
PENOBSCOT COUNTY

DETAILS

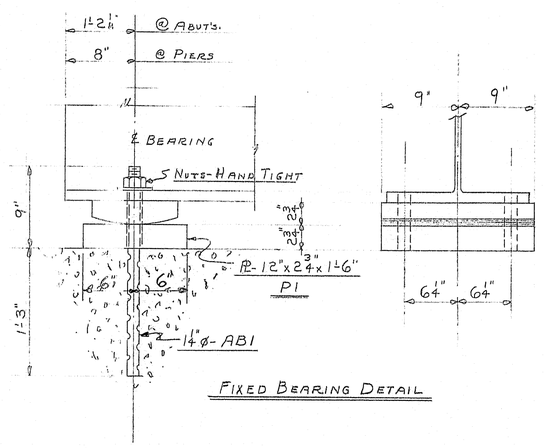
SHEET 9 OF 9 AUGUSTA, MAINE

M-1215

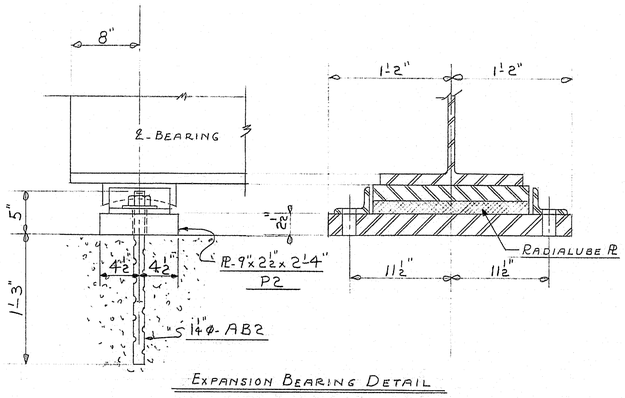




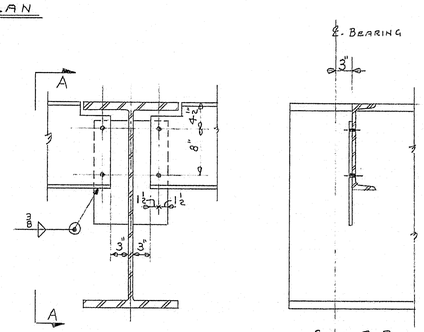

## FRAMING PLAN




FIXED BEARING DETAIL




EXPANSION BEARING DETAIL

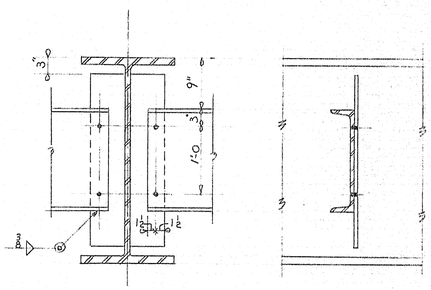



DETAIL @ END DIAPHRAGM

ALL END DIAPHRAGMS- 15C-33.9




SECT. A-A




DETAIL @ INTER. DIAPHRAGMS.

ALL INTER. DIAPHRAGMS- 18C-42.7

NOTES:
CAMBER SHOWN IS MINIMUM LIKELY TO REMAIN PERMANENT

APPR. AS NOTED 3-3-59

FRAMING PLAN

Bancroft & Martin Rolling Mills Company
Brewer, Maine

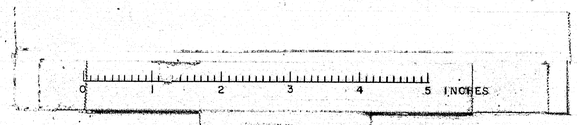
HOGAN ROAD BRIDGE
INTERSTATE NO 95 -(I-95-8(13) 180)
BANGOR MAINE

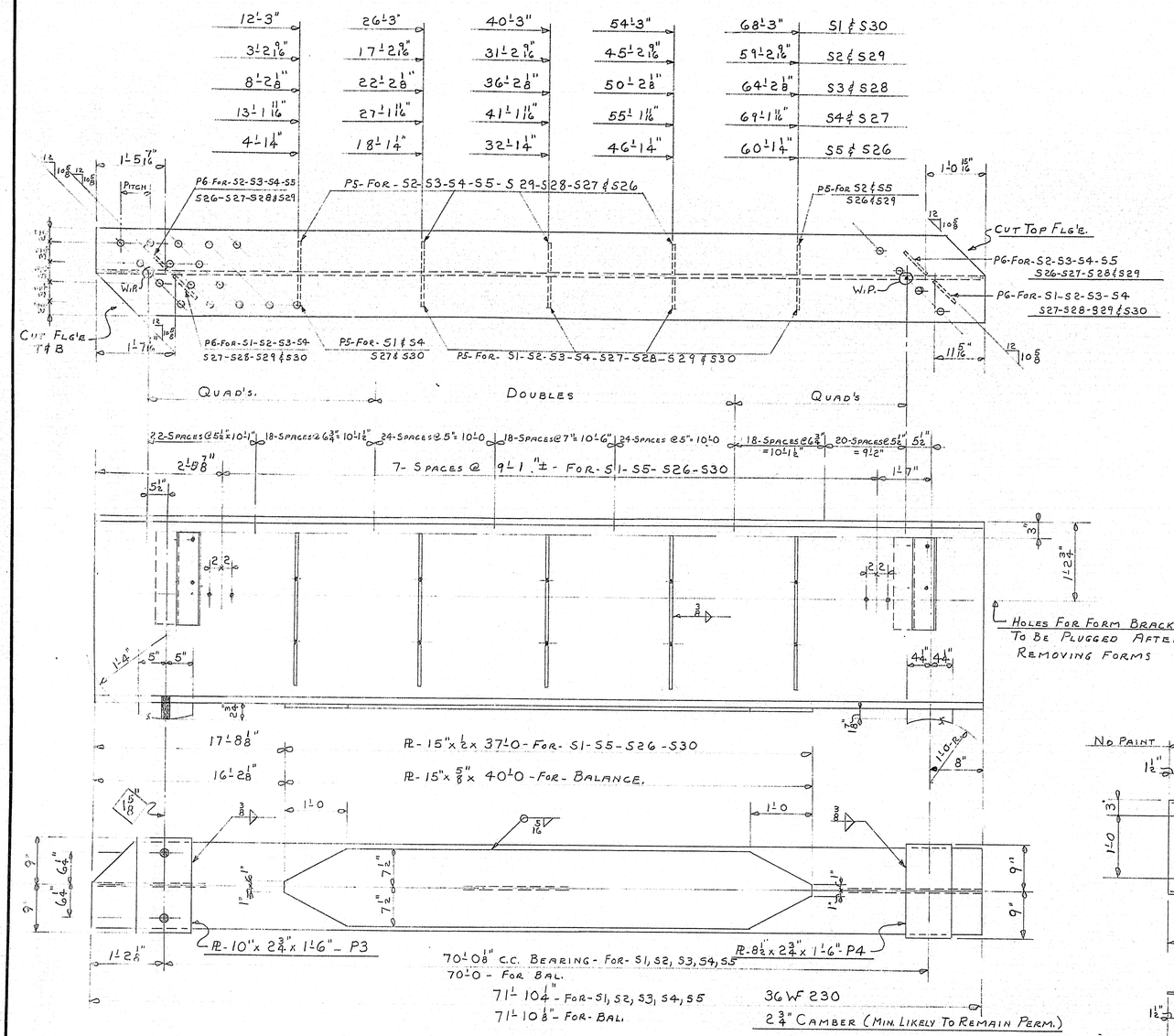
CUSTOMER H. B. FLEMING INC.
DESIGNER C. LARKESON ENG. CO. INC.
ORDER VERBAL DWG. B9-20-E1

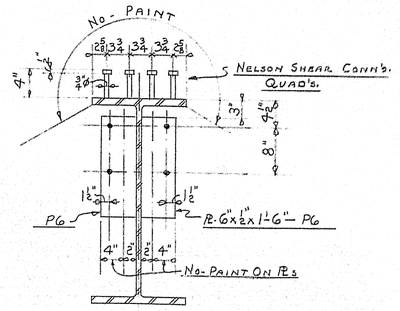
4- FIELD 3-6-59
2- F/A- 2-27-59
2- F/A- 2-16-59

| | | |
|---|---|---|
| DRAWN | 2-3-59 | D.C. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

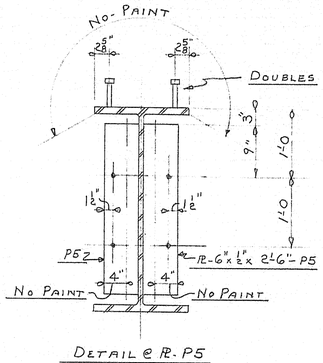
77-34



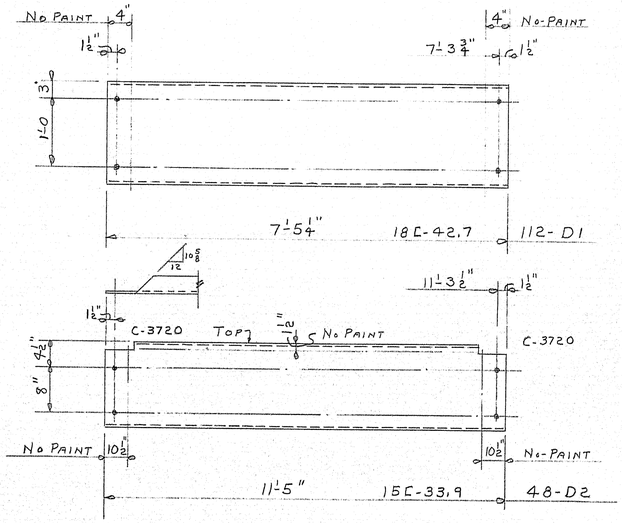



DETAIL @ PL- P6




DETAIL @ PL- P5




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | WT. DEDUCT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1 | 1 | | 36WF230 | 71 10 1/4 | | 52# | 2 3/4" CAMBER. |
| S2 | 1 | | Do | 71 10 1/4 | | 50# | |
| S3 | 1 | | Do | 71 10 1/4 | | 50# | |
| S4 | 1 | | Do | 71 10 1/4 | | 50# | |
| S5 | 1 | | Do | 71 10 1/4 | | 52# | |
| S26 | 1 | | Do | 71 10 1/8 | | 52# | |
| S27 | 1 | | Do | 71 10 1/8 | | 56# | |
| S28 | 1 | | Do | 71 10 1/8 | | 50# | |
| S29 | 1 | | Do | 71 10 1/8 | | 50# | |
| S30 | 1 | | Do | 71 10 1/8 | | 52# | |
| | 10 | P3 | PL-10 x 2 3/4 | 1 6 | | 182# | |
| | 10 | P4 | PL-8 1/2 x 2 3/4 | 1 6 | | 160# | |
| | 72 | P5 | PL-6 x 1/2 | 2 6 | | 14# | |
| | 32 | P6 | Do | 1 6 | | 6 1/2# | |
| | 4 | | PL-15 x 1/2 | 37 0 | | 89# | |
| | 6 | | PL-15 x 5/8 | 40 0 | | 165 1/2# | |
| D1 | 112 | | 18C-42.7 | 7 5 1/4 | | 38 1/2 LB | |
| D2 | 48 | | 15C-33.9 | 11 5 | | 610 | |
| | 1 | | 5/16" WELD | 785 0 | | | @.36" PER. FT. |
| | 1 | | 3/8" WELD | 511 0 | | | @.50" PER. FT. |
| | 4500 | | 3/4" STUDS | 0 4 | | | NELSON SHEAR CONN's. |
| FIELD | 650 | | 3/4" BOLT | 0 2 | | | NOT INCLUDED IN PAY WT. |

BILL OF MATERIAL — DWG. B9-20-S1

SHOP CONNECTIONS: WELD
FIELD CONNECTIONS:
HOLES: 15/16" ø UNLESS NOTED
PAINT: STATE OF MAINE SPEC's.

APP. AS NOTED- 3-3-59

4-SHOP-3-6-59
4-DIST-3-6-59
2-F/A- 2-27-59
2-F/A- 2-16-59

| | | |
|---|---|---|
| DRAWN | 2-4-59 | D.C. |
| REVISION | 2-27-59 | D.C |
| REVISION | | |
| REVISION | | |

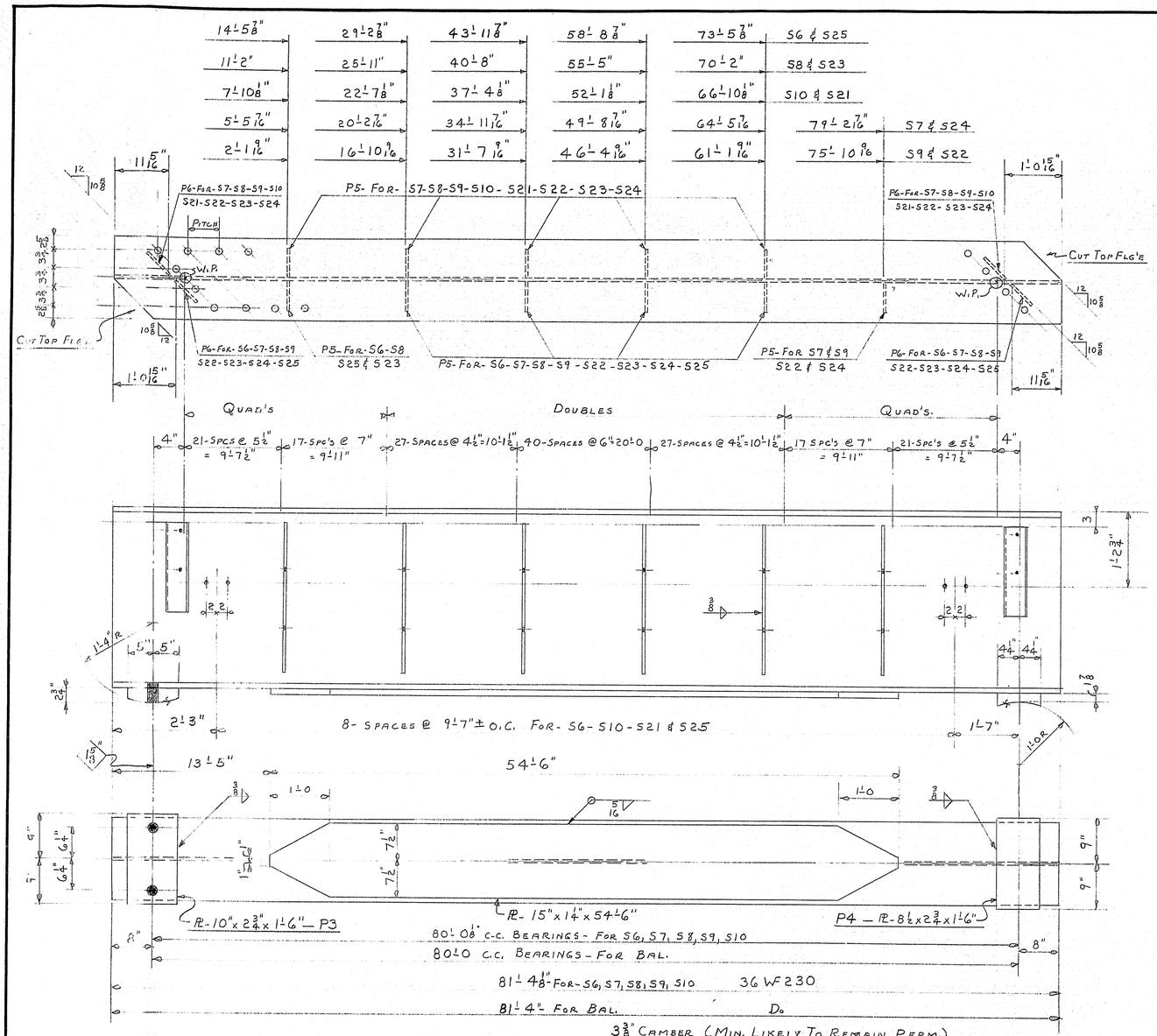
STRINGERS- SPANS 1 & 6

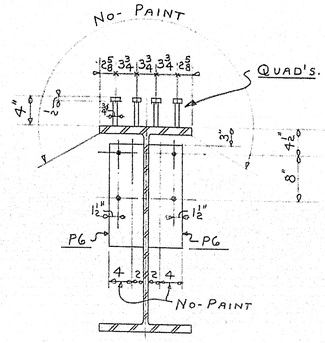
Bancroft & Martin Rolling Mills Company
Brewer, Maine

HOGAN ROAD BRIDGE
INTERSTATE NO 95-(I-95-3(19) 180)
BANGOR MAINE

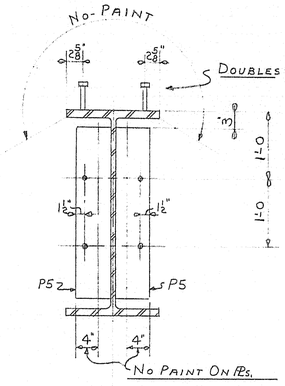
CUSTOMER H.B. FLEMING INC.
DESIGNER CLARKESON ENG. CO. INC.
ORDER VERBAL
DWG. B9-20-S1

MODERN BLUE PRINT CO. 21000H

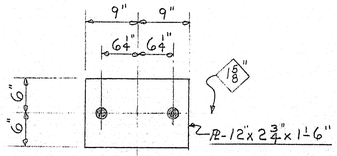


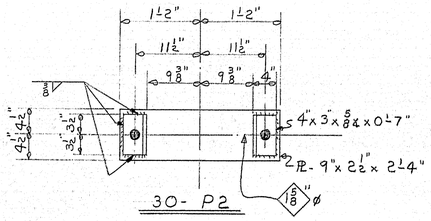

DETAIL @ PL- P6




DETAIL @ PL- P5




30 - P1




30- P2

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | WT. DEDUCT. | REMARKS |
|---|---|---|---|---|---|---|---|---|
| S6 | 1 | | 36WF230 | 81 | 4 1/8 | | 29# | CAMBER-3 3/8" |
| S7 | 1 | | Do | 81 | 4 1/8 | | 26 1/2# | |
| S8 | 1 | | Do | 81 | 4 1/8 | | 26 1/2# | |
| S9 | 1 | | Do | 81 | 4 1/8 | | 26 1/2# | |
| S10 | 1 | | Do | 81 | 4 1/8 | | 29# | |
| S21 | 1 | | Do | 81 | 4 | | 29# | |
| S22 | 1 | | Do | 81 | 4 | | 26 1/2# | |
| S23 | 1 | | Do | 81 | 4 | | 26 1/2# | |
| S24 | 1 | | Do | 81 | 4 | | 26 1/2# | |
| S25 | 1 | | Do | 81 | 4 | | 29# | |
| | 10 | | PL-15x1 1/4 | 54 | 6 | | 550# | |
| | 10 | P3 | PL-10x2 3/4 | 1 | 6 | | 182# | |
| | 10 | P4 | PL-8 1/2 x 2 3/4 | 1 | 6 | | 160# | |
| | 80 | P5 | PL-6x1/2 | 2 | 6 | | 15 1/2# | |
| | 32 | P6 | Do | 1 | 6 | | 6 1/2# | |
| P1 | 30 | | PL-12x2 3/4 | 1 | 6 | | 97# | |
| P2 | 30 | | PL- 9x2 1/2 | 2 | 4 | | 88# | |
| | 60 | P2 | 4x3x5/8 | 0 | 7 | | 22# | |
| P7 | 52 | | PL 9x1 | 1 | 2 | | | NO-FAB- PILE CAP PLs |
| | 4480 | | 3/4" STUDS | 0 | 4 | | | NELSON SHEAR. CONN'S. |
| | 1 | | 5/16" WELD | 1097 | 0 | | | @ 36# PER. FT. |
| | 1 | | 3/8" WELD | 616 | 0 | | | @ 50# PER. FT. |
| AB1 | 60 | | 1 1/4" ø ROD | 2 | 0 | | | |
| AB2 | 60 | | Do | 1 | 8 | | | |
| | 120 | | 1 1/4" HEX NUTS | | | | | |
| | 120 | | 1 1/4" WASHERS | | | | | |
| | | | ITEMS-703-9 & 703-10 | | | | | |
| P2 | 30 | | PL-7x1 1/2 | 1 | 6 | | | RADIALUBE PL. |

SHOP CONNECTIONS: WELD
FIELD CONNECTIONS:
HOLES: 15/16" ø UNLESS NOTED
PAINT: STATE OF ME. SPEC's.

APP. AS NOTED 3-3-59

STRINGERS- SPANS 2 & 5

Bancroft & Martin Rolling Mills Company
Brewer, Maine

HOGAN ROAD BRIDGE
INTERSTATE No 95-(I-95-8(13)180)
BANGOR MAINE

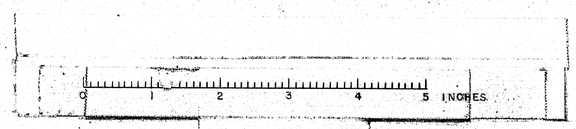
CUSTOMER H. B. FLEMING INC.
DESIGNER CLARKESON ENG. CO. INC.
ORDER VERBAL
DWG. B9-20-S2

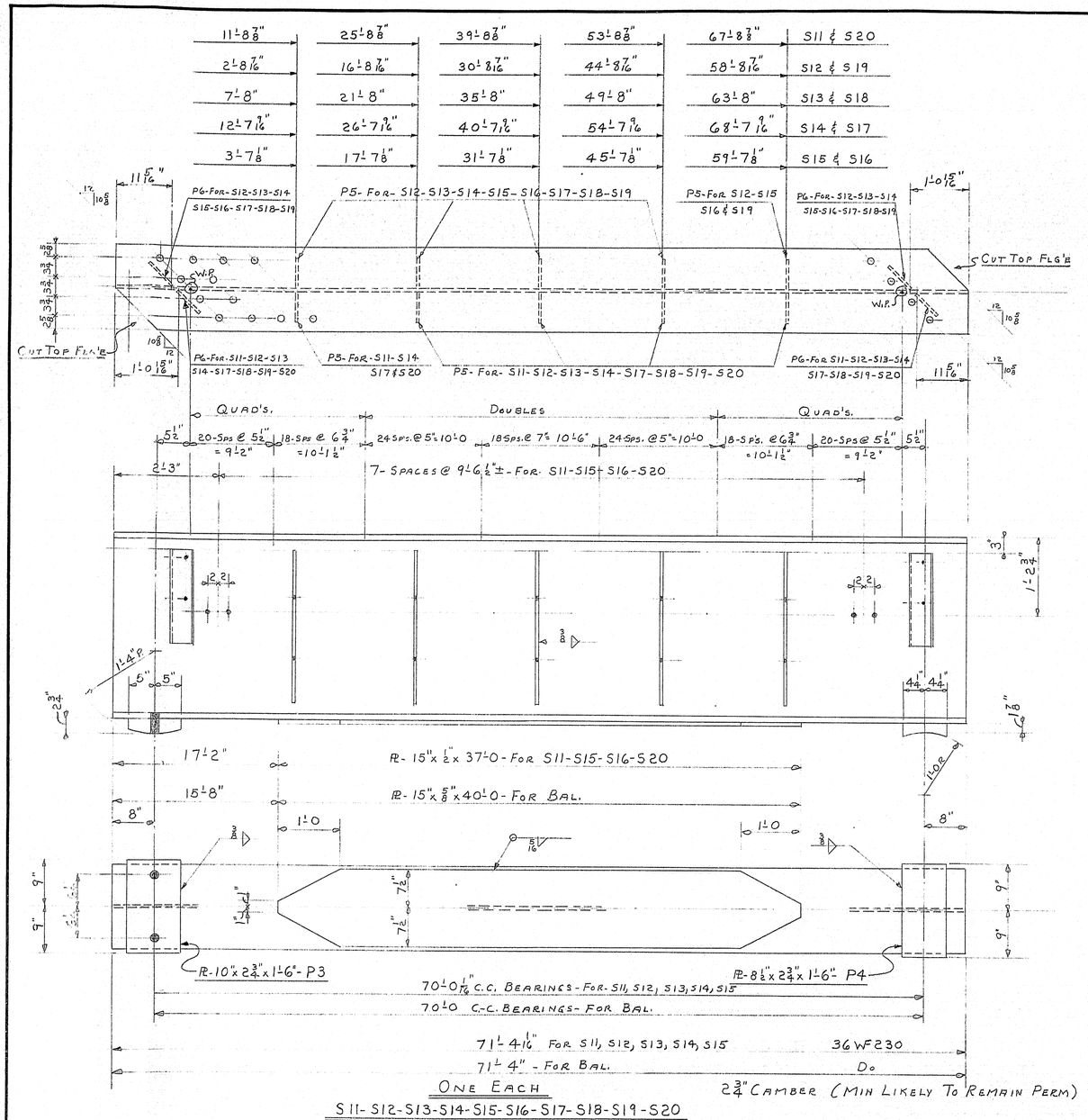
4-SHOP 3-6-59
4- DIST. 3-6-59
2- F/A- 2-27-59
2-F/A- 2-16-59

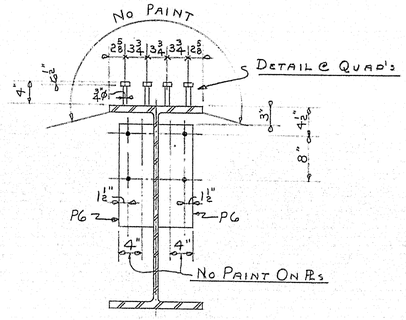
| | | |
|---|---|---|
| DRAWN | 2-5-59 | D.C. |
| REVISION | 2-27-59 | D.L. |
| REVISION | | |
| REVISION | | |

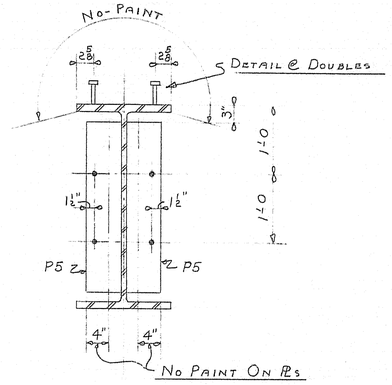
77-36

MODERN BLUE PRINT CO. JACKSONVILLE, FLA.






| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | WT. DEDUCT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S11 | 1 | | 36-WF 230 | 71 4 1/16 | | 28 1/2 # | 2 3/4" CAMBER |
| S12 | 1 | | D° | 71 4 1/16 | | 26 1/2 # | |
| S13 | 1 | | D° | 71 4 1/16 | | 26 1/2 # | |
| S14 | 1 | | D° | 71 4 1/16 | | 26 1/2 # | |
| S15 | 1 | | D° | 71 4 1/16 | | 28 1/2 # | |
| S16 | 1 | | D° | 71 4 | | 28 1/2 # | |
| S17 | 1 | | D° | 71 4 | | 26 1/2 # | |
| S18 | 1 | | D° | 71 4 | | 26 1/2 # | |
| S19 | 1 | | D° | 71 4 | | 26 1/2 # | |
| S20 | 1 | | D° | 71 4 | | 28 1/2 # | |
| | 4 | | PL-15 x 1/2 | 37 0 | | 89 # | |
| | 6 | | PL-15 x 5/8 | 40 0 | | 165 1/2 # | |
| | 10 | P3 | PL-10 x 2 3/4 | 1 6 | | 182 # | |
| | 10 | P4 | PL- 8 1/2 x 2 3/4 | 1 6 | | 160 # | |
| | 72 | P5 | PL-6 x 1/2 | 2 6 | | 14 # | |
| | 32 | P6 | D° | 1 6 | | 6 1/2 # | |
| | 4420 | | 3/4" STUDS | 0 4 | | | NELSON SHEAR CONN's. |
| | 1 | | 5/16" WELD | 785 0 | | | @ .36 # PER FT. |
| | 1 | | 3/8" WELD | 511 0 | | | @ .50 # PER FT. |

**BILL OF MATERIAL** DWG. B9-20-53

SHOP CONNECTIONS: WELD
FIELD CONNECTIONS:
HOLES: 13/16" ø - EXCEPT AS NOTED
PAINT: STATE OF ME. SPEC's.

APPR. AS NOTED 3-3-59

4-SHOP-3/6/59
4-FIELD-3/6/59
2-F/A-2-27-59
2-F/A-2-16-59

| | | |
|---|---|---|
| DRAWN | 2-5-59 | D.C. |
| REVISION | 2-27-59 | D.C |
| REVISION | | |
| REVISION | | |

STRINGERS - SPANS 3 & 4

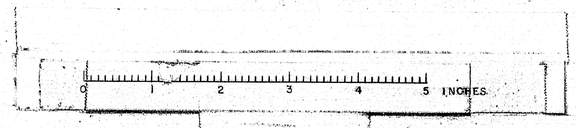
Bancroft & Martin Rolling Mills Company
Brewer, Maine

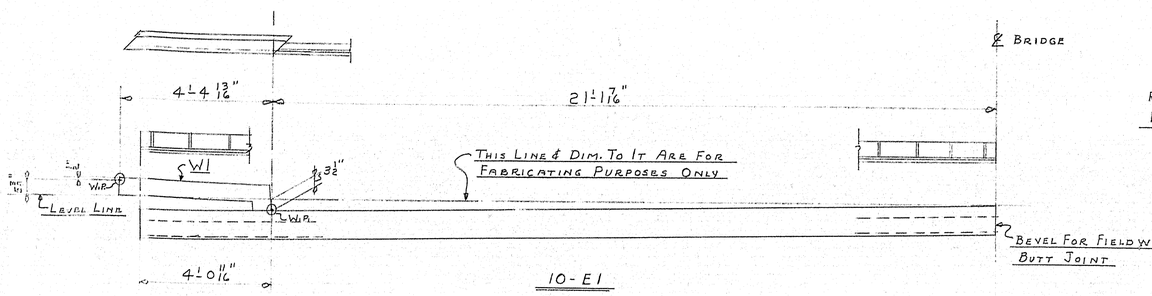
HOGAN ROAD BRIDGE
INTERSTATE No 95 - (I-95-8(18) 180)
BANGOR MAINE

CUSTOMER H.B. FLEMING INC.
DESIGNER CLARKESON ENG. Co. INC.

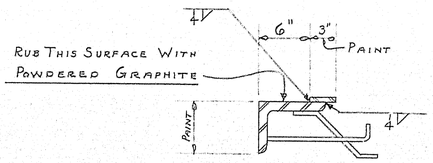
ORDER VERBAL DWG. B9-20-53

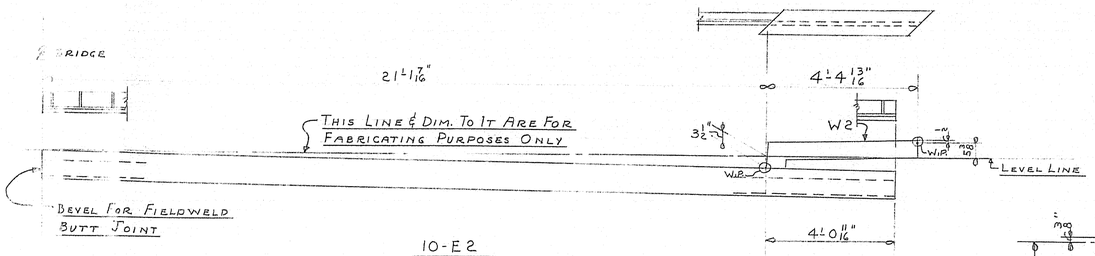
MODERN BLUE PRINT CO. 210004



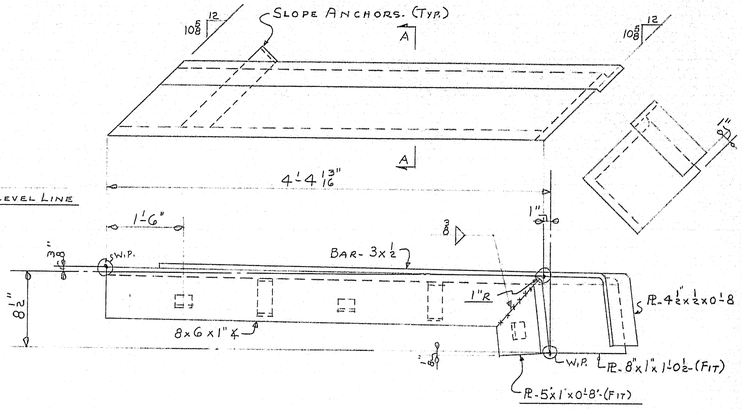



10-E1



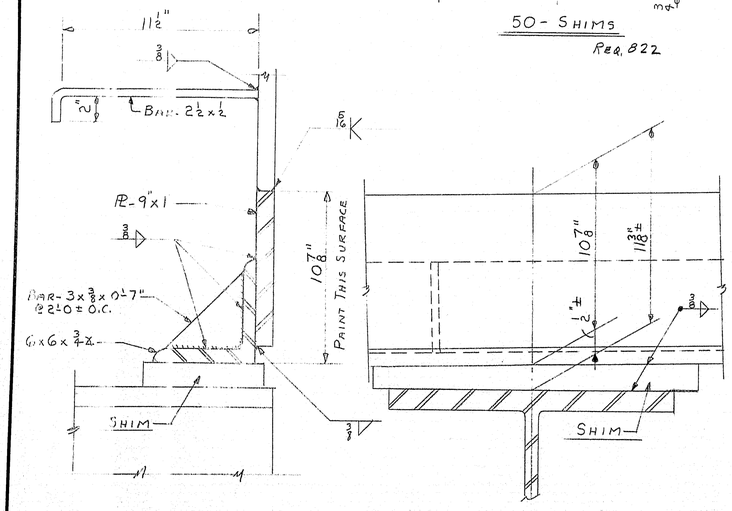



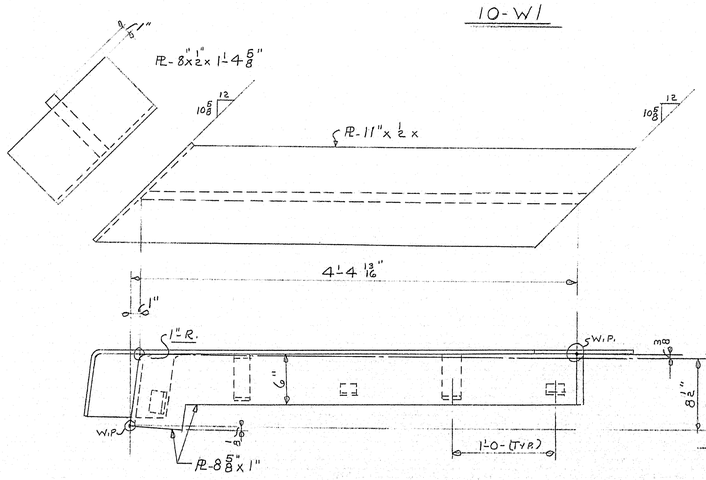

10-E2




10-W1




10-W2

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | WT. DEDUCT | REMARKS |
|---|---|---|---|---|---|---|---|
| E1 | 10 | | PL-9"x1" | 25 2 1/4 | | | |
| E2 | 10 | | Do | 25 2 1/4 | | | |
| | 10 | E1 | 6x6x3/4∠ | 25 2 1/4 | | | |
| | 10 | E2 | Do | 25 2 1/4 | | | |
| SHIMS | 50 | | PL-15"x3/4" | 2 0 | | 1711# | Req. #822 |
| | 10 | W1 | 8x6x1/4∠ | 5 0 3/4 | | 330 | |
| | 10 | W1 | PL-8x1 | 1 0 1/2 | | | FIT |
| | 10 | W1 | PL-5x1 | 0 8 | | 41# | FIT |
| | 10 | W1 | BAR-3x1/2 | 4 8 13/16 | | 14# | |
| | 10 | W1 | PL-4 1/2x1/2 | 0 8 | | | |
| | 10 | W2 | PL-8 5/8x1 | 4 5 15/16 | | 370 | |
| | | | | | | | |
| | 10 | W2 | PL-11x1/2 | 5 4 1/4 | | 195 | |
| | 10 | W2 | PL-8x1/2 | 1 4 5/8 | | | |
| | | | | | | | |
| | 60 | | BAR-2 1/2x1/2 | 1 1 1/2 | | | |
| | 40 | | Do | 1 0 | | | |
| | 260 | | BAR-3x3/8 | 0 7 | | 249# | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | 1 | | 3/8" WELD | 1822 0 | | | @ .150# PER FT. |
| | 1 | | 1/4" WELD | 195 0 | | | @ .25# PER FT. |

BILL OF MATERIAL DWG. B9-20-S4

SHOP CONNECTIONS: WELD
FIELD CONNECTIONS: Do
HOLES:
PAINT: STATE OF ME. SPEC'S.

APPR. 3-16-59

4-SHOP 3-20-59
4-DIST-3-20-59
2-F/A-3-10-59
2-F/A-2/16-59

| | | |
|---|---|---|
| DRAWN | 2-6-59 | D.C. |
| REVISION | 3-10-59 | D.C. |
| REVISION | | |
| REVISION | | |

EXPANSION DAMS

Bancroft & Martin Rolling Mills Company
Brewer, Maine

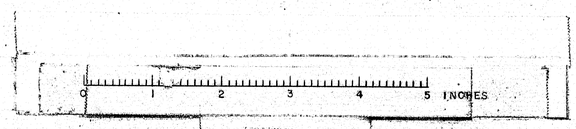
HOGAN ROAD BRIDGE
INTERSTATE No. 95-(I-95-2(18)180)
BANGOR MAINE

CUSTOMER H.B. FLEMING INC.
DESIGNER CLARKESON ENG. CO. INC.

ORDER VERBAL DWG. B9-20-S4

MODERN BLUE PRINT CO. 21000H

77-38



| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 1 | 53 |

# STATE OF MAINE
# DEPARTMENT OF TRANSPORTATION

## BUREAU OF HIGHWAYS

## BANGOR
## PENOBSCOT COUNTY
## MAINE FEDERAL AID URBAN
## PROJECT NO. IR-95-8(129)175
## HOGAN ROAD / I95

"AS BUILT" 1983

TOTAL LENGTH 2.0 MILES

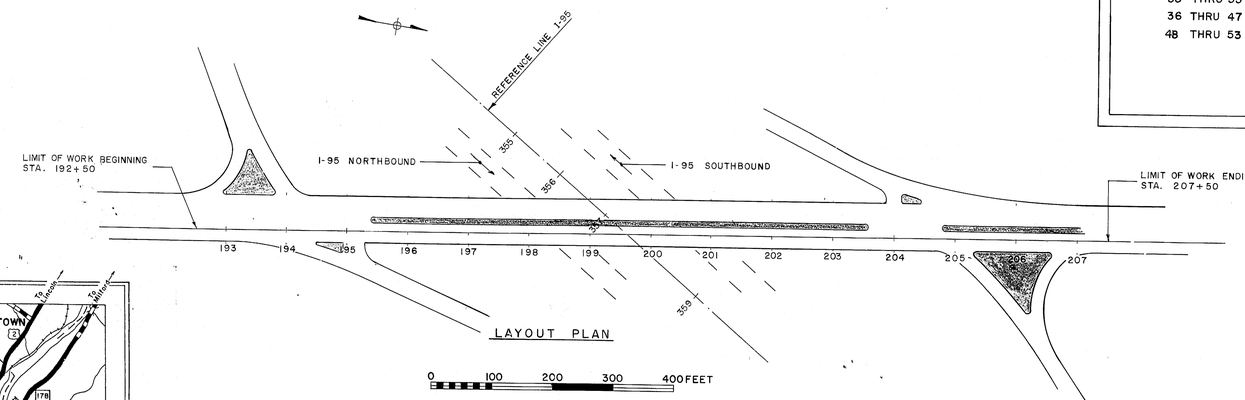
SCALES
- PLAN 1 IN = 25 FT.
- PROFILE (HOR.) 1 IN = 25 FT.
- PROFILE (VER.) 1 IN = 5 FT.
- CROSS SECTIONS 1 IN = 5 FT.

### CONVENTIONAL SIGNS

| | |
|---|---|
| COUNTY LINES | TRAVELLED WAY-PROPOSED |
| TOWN LINES | UNDERGROUND UTILITIES-EXISTING |
| PROPERTY LINES | UNDERGROUND UTILITIES-PROPOSED |
| R/W LINES-EXISTING | RAILROAD-SINGLE TRACK |
| R/W LINES-NEW-ACCESS CONTROL | RAILROAD-DOUBLE TRACK |
| R/W LINES-NEW-NO ACCESS CONTROL | UTILITY POLE-EXISTING |
| CULVERT-EXISTING | UTILITY POLE-JOINT OCCUPANCY J |
| CULVERT-PROPOSED | PROPOSED UTILITY POLE-TEMPORARY x |
| CURBING-EXISTING | PROPOSED UTILITY POLE-PERMANENT |
| CURBING-PROPOSED | TREES (hardwood, softwood) |
| TRAVELLED WAY EXISTING | WOODS |

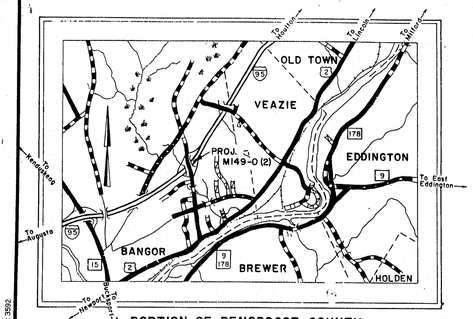
### INDEX OF SHEETS


| | |
|---|---|
| 1 | TITLE |
| 2 | ESTIMATED QUANTITIES |
| 3 | GENERAL PLAN & ELEVATION |
| 4 | PROFILE ALONG ℄ SOUTHBOUND LANE |
| 5 | FOUNDATION SURVEY |
| 6 | BORING DETAILS |
| 7 | TRANSVERSE SECTIONS |
| 8 THRU 9 | EXISTING BRIDGE RENOVATIONS |
| 10 | PLAN ABUTMENT 1 |
| 11 | PLAN ABUTMENT 2 |
| 12 | ELEVATION ABUTMENTS 1 & 2 |
| 13 | PIER 1 |
| 14 | PIER 2 |
| 15 | PIER 3 |
| 16 | PIER 4 |
| 17 | PIER 5 |
| 18 | TYPICAL APPROACH SLAB |
| 19 | TYPICAL STRINGER ELEVATION |
| 20 THRU 21 | SUPERSTRUCTURE |
| 22 THRU 24 | REINFORCING STEEL SCHEDULES |
| 25 | TYPICAL SECTIONS |
| 26 | GEOMETRIC LAYOUT TABLE |
| 27 THRU 28 | GEOMETRIC LAYOUT PLAN |
| 29 | ROAD PROFILE |
| 30 THRU 35 | ROAD CROSS SECTIONS |
| 36 THRU 47 | STANDARD ROAD DETAILS |
| 48 THRU 53 | STANDARD BRIDGE DETAILS (BD101-74, BD103-79, BD104-77, BD113-78, BD114-77, BD120-79. |


LAYOUT PLAN

0 100 200 300 400 FEET




A PORTION OF PENOBSCOT COUNTY

GRAPHIC SCALE 0 1 2 3 4 MILES

BRUNING 44-132 3592
JANUARY 1969

### TRAFFIC DATA

| | |
|---|---|
| A.D.T. | 1980 - 12,740 |
| A.D.T. | 2000 - 19,110 |
| D.H.V. | 1911 |
| T. (%) | 5 |
| D. (%) | 62 |
| V. | |
| P.S.D. (%) | |
| 18 KIPS | 246 (4 LANES) |

NOTE:
ALL WORK CONTEMPLATED UNDER THIS CONTRACT TO BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968) AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Jerge N. Cyr
COMMISSIONER — DATE SEPT. 29, 1981

Richard A. Coleman
CHIEF ENGINEER — SEPT. 29, 1981

STATE OF MAINE * RICHARD A. COLEMAN 3550 REGISTERED PROFESSIONAL ENGINEER *

R93-439

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

DIVISION ADMINISTRATOR DATE

Note;
Pages 5, 6, & 7 were missing
When received,
WR

203-1 2080

| F. H. W. A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 2 | 53 |

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 202.12 | Removal of Existing Structural Concrete | 217 | C.Y. |
| 202.13 | Removal of Existing Railings (Retained by Dept.) | 910 | L.F. |
| 202.201 | Removing Bituminous Pavement (Including Membrane Waterproofing) | 1400 | S.Y. |
| 202.202 | Removing Pavement Surface | 380 | S.Y. |
| 203.20 | Common Excavation | 290 | C.Y. |
| 203.24 | Common Borrow | 3200 | C.Y. |
| 203.26 | Gravel Borrow | 1070 | C.Y. |
| 206.031 | Structural Earth Excavation - Abutments, Retaining Walls, Box Culverts and Structural Plate Units | 119 | C.Y. |
| 206.10 | Structural Earth Excavation - Piers | 1014 | C.Y. |
| 206.11 | Structural Rock Excavation - Piers | 28 | C.Y. |
| 301.09 | Plant Mix Bituminous Base Course, Grading A | 290 | Ton |
| 304.10 | Aggregate Subbase Course - Gravel | 925 | C.Y. |
| 403.07 | Hot Bituminous Pavement, Grading B | 340 | Ton |
| 403.08 | Hot Bituminous Pavement, Grading C | 160 | Ton |
| 403.10 | Hot Bituminous Pavement, Grading D | 60 | Ton |
| 403.101 | Hot Bituminous Pavement, Grading D (Sidewalks, Drives, etc.) | 160 | Ton |
| 410.15 | Emulsified Asphalt, Applied | 190 | Gal. |
| 410.161 | Cover Coat Material, Sand (Leveling) | 16 | C.Y. |
| 501.212 | Steel H-Beam Piles 42 lbs/Ft. | 1530 | L.F. |
| 502.21 | Structural Concrete, Abuts. & Retaining Walls | 340 | C.Y. |
| 502.23 | Structural Concrete, Piers | 430 | C.Y. |
| 502.26 | Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges | 1 | L.S. |
| 502.31 | Structural Concrete, Approach Slabs | 1 | L.S. |
| 502.42 | Structural Concrete, Roadway and Sidewalk Slab on Steel Bridges | 90 | C.Y. |
| 502.44 | Wearing Surface Concrete | 328 | C.Y. |
| 502.60 | Structural Concrete Pier Repairs | 2200 | S.F. |
| 503.12 | Reinforcing Steel, Fab. & Delivered | 241,300 | Lb. |
| 503.13 | Reinforcing Steel, Placing | 241,300 | Lb. |
| 504.70 | Structural Steel, Fab. & Delivered | 1 | L.S. |
| 504.71 | Structural Steel, Erection | 1 | L.S. |
| 504.781 | Structural Steel (Armored Joint Modifications) | 5 | Each |
| 505.08 | Shear Connectors | 1 | L.S. |
| 506.181 | Field Painting New Structural Steel | 1 | L.S. |
| 506.182 | Field Painting Existing Structural Steel | 1 | L.S. |
| 506.16 | Surface Preparation of Existing Structural Steel | 400 | M.H. |
| 509.191 | Aluminum Bridge Railing, Type "A" | 919 | L.F. |
| 512.07 | French Drains (Stones Only) | 21 | C.Y. |
| 513.12 | Concrete Block Slope Protection | 460 | S.Y. |
| 513.13 | Repair of Concrete Block Slope Protection | 50 | S.Y. |
| 514.06 | Curing Box for Concrete Cylinders | 1 | Each |
| 515.30 | Protective Coating for Concrete Surfaces | 3950 | S.Y. |
| 520.20 | Expansion Devices | 1 | L.S. |
| 609.164 | Rebuilding Catch Basins | 1 | Ea. |
| 605.10 | 6 Inch Underdrain Outlet | 40 | L.F. |
| 606.35 | Guard Rail Delineator Post | 1 | Ea. |
| 606.36 | Guard Rail, Removed and Reset | 500 | L.F. |
| * 606.361 | Replace Unusable Existing Guard Rail Posts | 5 | Ea. |
| * 606.56 | Guard Rail Type 3 - Single Rail | 25 | L.F. |
| * 606.60 | Guard Rail Type 3 - Circular - Greater than 45 Foot Radius | 85 | L.F. |
| 607.17 | Chain Link Fence - 4 feet | 4000 | L.F. |

* Undetermined Location

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 607.36 | Bracing Assembly, Type I - Chain Link Fence - 4 Feet | 4 | Each |
| 607.37 | Bracing Assembly, Type II - Chain Link Fence - 4 Feet | 20 | Each |
| 609.13 | Vertical Bridge Curb - Type 1 | 894 | L.F. |
| 609.17 | Sloped Bridge Curb - Type 1 | 905 | L.F. |
| 609.27 | Curb Transition Section C - Type 1 | 4 | Each |
| 609.34 | Curb Type 5 | 1090 | L.F. |
| 609.35 | Curb - Circular - Type 5 | 64 | L.F. |
| 609.40 | Easething Curb Type 5 | 323 | L.F. |
| 615.07 | Loam | 330 | C.Y. |
| 616.05 | Sodding | 112 | S.Y. |
| 618.14 | Seeding, Method Number 2 | 31 | Unit |
| 619.15 | Temporary Seeding | 15 | Lb. |
| 619.16 | Mulch | 46 | Unit |
| 629.05 | Hand Labor, Straight Time | 20 | M.H. |
| | Traffic Officers | 60 | M.H. |
| * 631.10 | Air Compressor (Inc. Operator) | 80 | Hr. |
| * 631.11 | Air Tool (Inc. Operator) | 80 | Hr. |
| * 631.12 | All Purpose Excavator (Inc. Operator) | 30 | Hr. |
| * 631.13 | Bulldozer (Inc. Operator) | 20 | Hr. |
| * 631.19 | Grader (Inc. Operator) | 10 | Hr. |
| * 631.191 | Truck - small (Inc. Operator) | 20 | Hr. |
| * 631.192 | Truck - large (Inc. Operator) | 10 | Hr. |
| * 631.22 | Front End Loader (Inc. Operator) | 20 | Hr. |
| 632.05 | Warning Lights | 4 | Grp. |
| 634.160 | Highway Lighting System | 1 | L.S. |
| 637.07 | Sprinkling | 60 | M.G. |
| 637.09 | Calcium Chloride | 5 | Ton |
| 639.09 | Field Office, Type B | 1 | Each |
| 639.12 | Testing Facilities, Bituminous Mixes | 1 | L.S. |
| 645.61 | 4 Inch Solid White Paint Marking Line | 1600 | L.F. |
| 645.62 | 4 Inch Broken White Paint Marking Line | 1200 | L.F. |
| 645.63 | 4 Inch Solid Yellow Paint Marking Line | 1200 | L.F. |
| 645.65 | White or Yellow Paint and Curb Marking | 302 | S.F. |
| 645.66 | Removing 4 Inch Paint Marking Line | 200 | L.F. |
| 652.30 | Flashing Arrow Board | 2 | Each |
| 652.31 | Type I Barricades | 80 | Each |
| 652.33 | Drums | 10 | Each |
| 652.34 | Cones | 60 | Each |
| 652.35 | Construction Signs | 1300 | S.F. |
| 652.36 | Maintenance of Traffic Control Devices | 270 | C.D. |
| * 656.50 | Baled Hay, in place | 10 | Each |
| * 656.51 | Sandbags, in place | 6 | Each |
| 656.55 | Dumped Stone | 4 | C.Y. |
| 656.60 | Temporary Berms | 100 | L.F. |
| 656.62 | Temporary Slope Drains | 100 | L.F. |
| 658.801 | Seed and Application, Method A | 5 | Unit |
| 659.20 | Acrylic Latex Color Finish, Green | 335 | S.Y. |
| 664.10 | Mobilization | 1 | L.S. |
| 660.21 | On-the-Job Training (Bid) | 1,000 | M.H. |

## SUMMARY OF EXCAVATION AND BORROW

Common Excavation for Estimate

Cut + Excavation from Cross Sections — 54
Grubbing — 104
Total Common Excavation — 290

Fill for Common Borrow, Gravel Borrow

Common Fill (from Cross Sections) — 2490
Grubbing (Fill Areas) — 134
Total Fill — 3,215

Rock Excavation for Estimate

Structural Rock Excavation, Piers — 28
Total Rock Excavation — 28

Available Common Excavation for Common Borrow, Gravel Borrow

(1) Total Common Excavation — 290
(2) Total Deductions — 0
Total Available Common Excavation (1) minus (2) — 290
Total Available Borrow Excavation (1)+(1)MAX(5)/A) = — 4,400
Total Available for Gravel Borrow — 990

Common Borrow or Gravel Borrow for Estimate

Total Fill — 3215
Total Available Common Borrow Excavation (5%)(2.5%) = — 116
Total Available Gravel Borrow Excavation (55)(1.5) = — 97
Total Available Borrow — 165
Total Available Borrow Excavation — 2824
Total Borrow Needed — 391
Total Gravel Borrow Needed — 1124

### GENERAL NOTES

1. The utilities involved in this contract are:
   Bangor Hydro Electric Co.
   New England Telephone
   Bangor Water District
   City of Bangor (Sewers, Street Lights and Fire Alarms)
   Maine Utility Gas Co.
   All utility facilities shall be adjusted by the respective utilities unless noted.
2. Warning lights shall be installed at the following locations:
   Each end of project
3. The normal grubbing width in fills shall be variable left and variable right except when subgrade is less than 2 feet above old ground the grubbing width shall extend to the subgrade limits. The grubbing depth has been estimated as 6 inches in field areas and 12 inches in wooded areas.
4. One guardrail delineator post shall be installed at each guardrail end.
5. Loam shall be placed as shown on the plans or as designated by the Engineer.
6. Loam depths are as follows:
   Under sod — 4 inches
   Seeded areas Method No. 2 — 4 inches
   Depths shown are nominal.
7. All slopes shall be seeded with seeding, Method No. 2 unless otherwise noted.
8. Mulch shall be applied in areas seeded by seeding Method No. 2.
9. Acrylic latex color finish green shall be placed on all paved islands.
10. Place sod strip 1 foot wide behind curb when inlands are not paved.
11. No payment for structural excavation shall be made except as provided in Supplemental Specification 206.
12. All joints between existing and proposed hot bituminous pavements shall be butted as shown on the plans unless otherwise directed by the Engineer.

R93-440

### SUMMARY LUMP SUM ITEMS

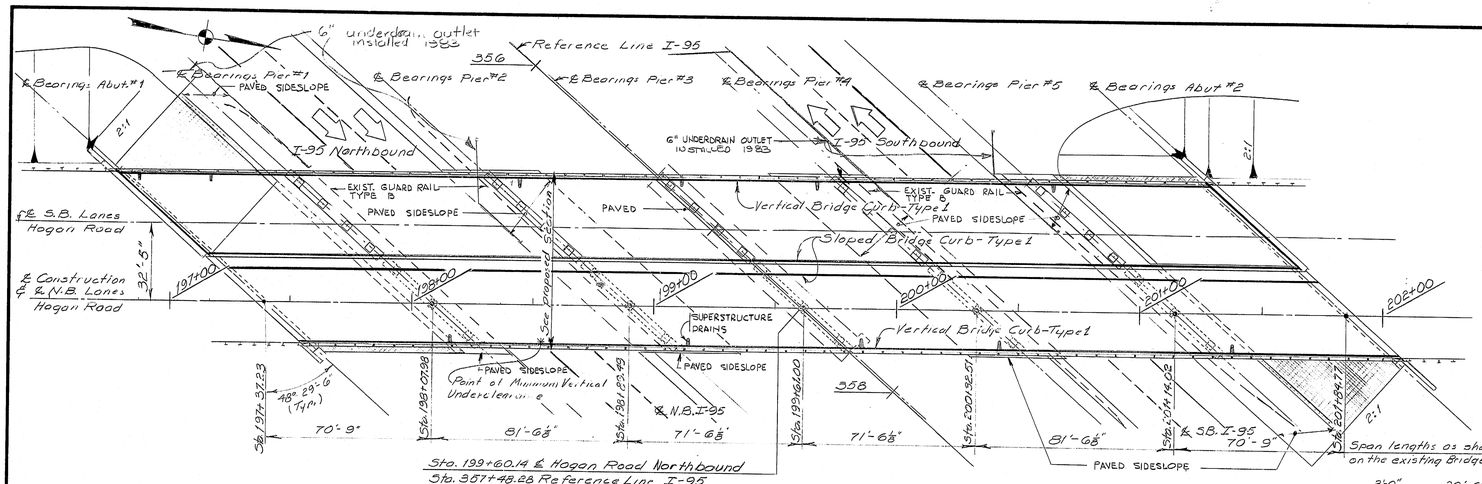
| Item No | Description | Quantity | Unit |
|---|---|---|---|
| 502.26 | Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridge | 600 | C.Y. |
| 502.31 | Structural Concrete, Approach Slabs | 25 | C.Y. |
| 504.70 | Structural Steel, Fabricated and Delivered | 458,000 | Lbs. |
| 504.71 | Structural Steel, Erection | 458,000 | Lbs. |
| 505.08 | Shear Connect. | 6,588 | Each |
| 520.20 | Expansion Devices | 2 | Each |

DRAWING 44-132.45710-1

Bangor – Hogan Road NH-1190(2)

2006

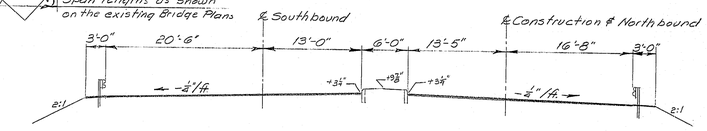
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 3 | 53 |




## PLAN

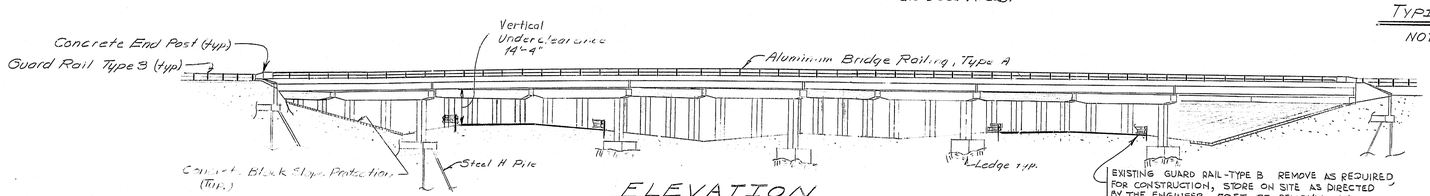
25' 0' 25' 50'

NOTE: Provide 1 foot Wide Sodding Behind Wingwalls, Concrete Block Slope Protection, and Paving That Abuts Loam And Seed Areas. Provide 4 foot Strip of Sodding Centered Along Ditch Lines Extending Through Loam and Seed Areas.

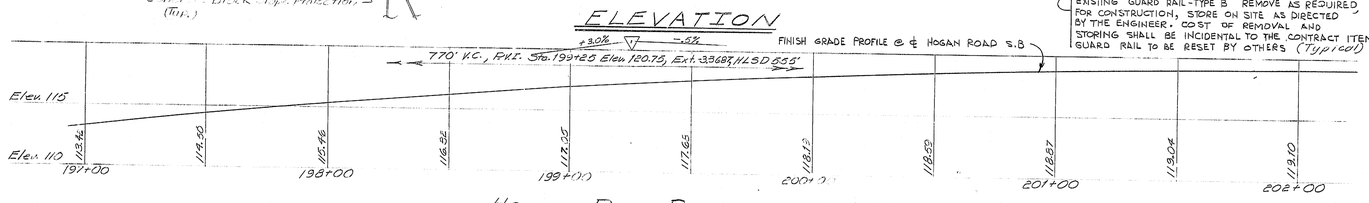



## TYPICAL APPROACH SECTION AT THE BRIDGE

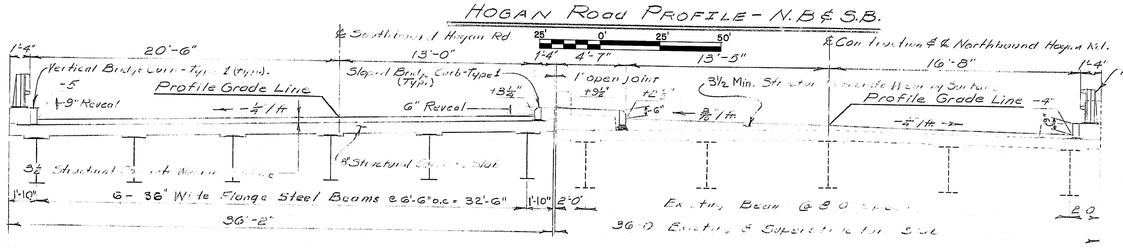
NOTE: Approaches shall match the bridge template at the back of backwalls.




## ELEVATION

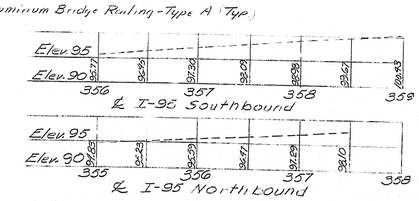



## HOGAN ROAD PROFILE - N.B. & S.B.




## TYPICAL SECTION

12" 6" 1' 5'




## INTERSTATE PROFILES

25' 0' 25' 50' 75'

## SPECIFICATIONS

DESIGN: AASHTO Specifications for Highway Bridges 1977 and Interim Specifications 1978 & 1979.
CONTRACT: State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968.

## DESIGN LOADING

LIVE LOAD: ---------- H 25

## MATERIALS

CONCRETE: Wearing Surface --- Class AA
Slope Protection --- Class Y
All other Class A
REINFORCING STEEL: ASTM A615 Grade 60
STRUCTURAL STEEL: Beams -- ASTM A572 Grade 50
High Strength Bolts -- ASTM A325
All other ------ -- ASTM A36

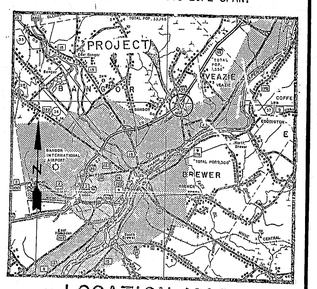
## BASIC ALLOWABLE STRESSES

CONCRETE: ------- $f_c$ = 1200 psi n = 9 .
REINFORCING STEEL: -------- $f_s$ = 24,000 psi
STRUCTURAL STEEL: ASTM A572 -- $f_s$ = 27,000 psi
ASTM A36 -- $f_s$ = 20,000 psi
ASTM A325 -- $f_v$ = 25,000 psi

## TRAFFIC DATA

AADT 1980 - 13,740
AADT 2000 - 19,110
DHV - 1,911
T(%) - 5
D(%) - 62
18 Kip - 246 (4 Lanes)

PLANS OF THE EXISTING BRIDGE ARE AVAILABLE FOR THE CONTRACTOR'S REFERENCE AT THE BRIDGE DESIGN OFFICE IN AUGUSTA. PLANS ARE REPRODUCTIONS OF ORTIGINAL 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.




LOCATION MAP

scale of miles

Revised to Interstate 1983 TAL

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| DESIGN - DETAILED | L Aud | 9-79 |
| CHECKED | | |
| REVISIONS | | |
| FIELD CHANGES | | |

PLANS

JANUARY 1968

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

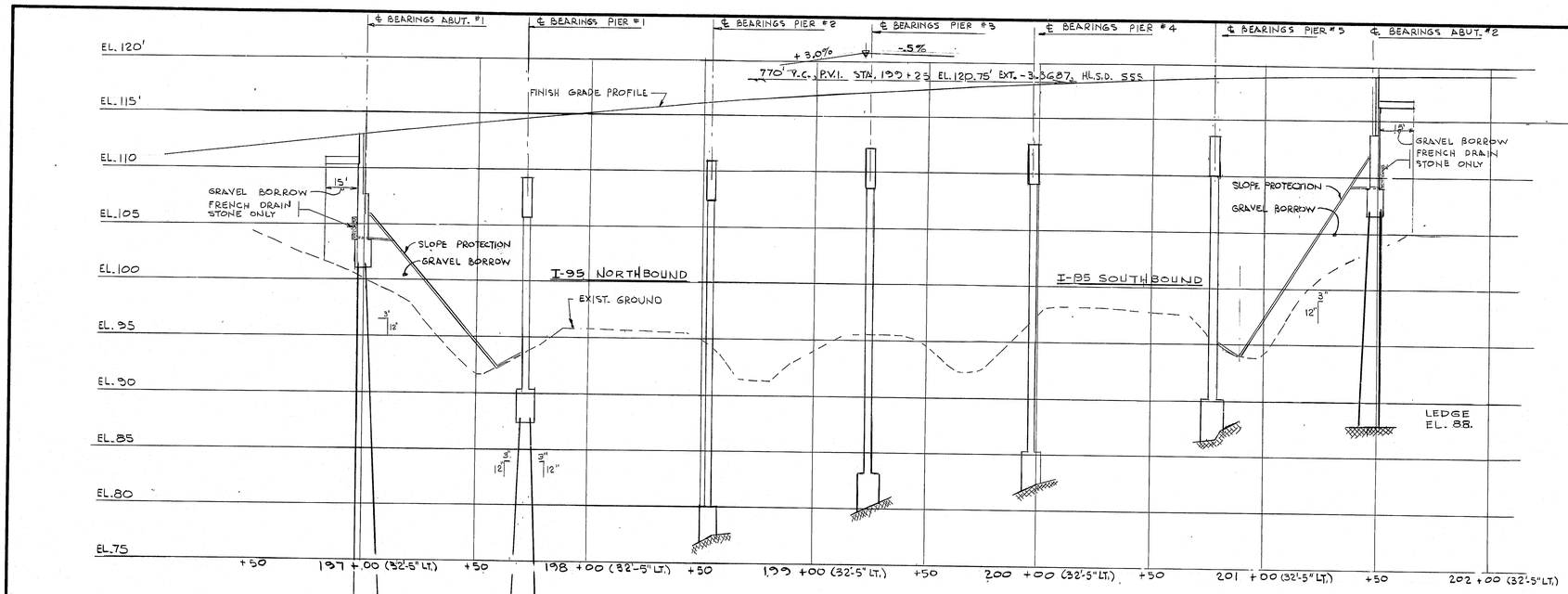
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
GENERAL PLAN & ELEVATION

SHEET 3 OF 53 AUGUSTA, MAINE

R93-441

3561 3000

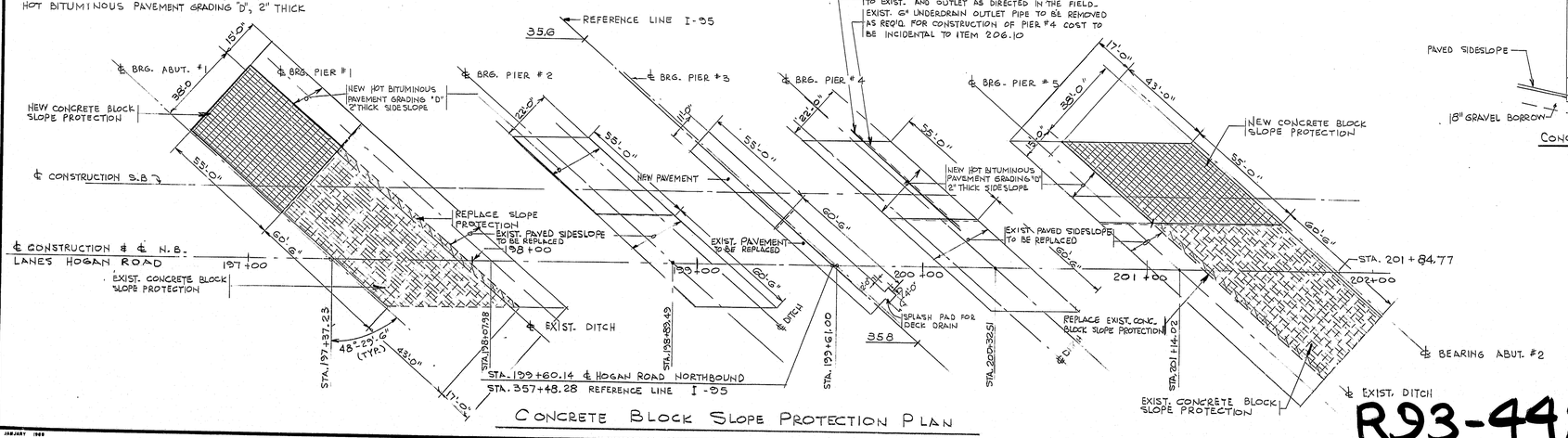
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 4 | 53 |



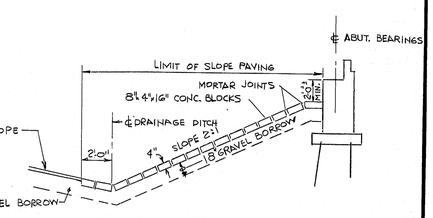

PROFILE ALONG ℄ SOUTHBOUND LANE

HORIZ. 25 0 25 50 75
VERT. 5 0 5 10 15

NOTE:
ALL NEW & REPLACED PAVEMENT SHALL BE HOT BITUMINOUS PAVEMENT GRADING "D", 2" THICK




CONCRETE BLOCK SLOPE PROTECTION PLAN




CONC. BLOCK SLOPE PROTECTION DETAIL
NO SCALE

"AS BUILT" 1983 L.V.R.

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

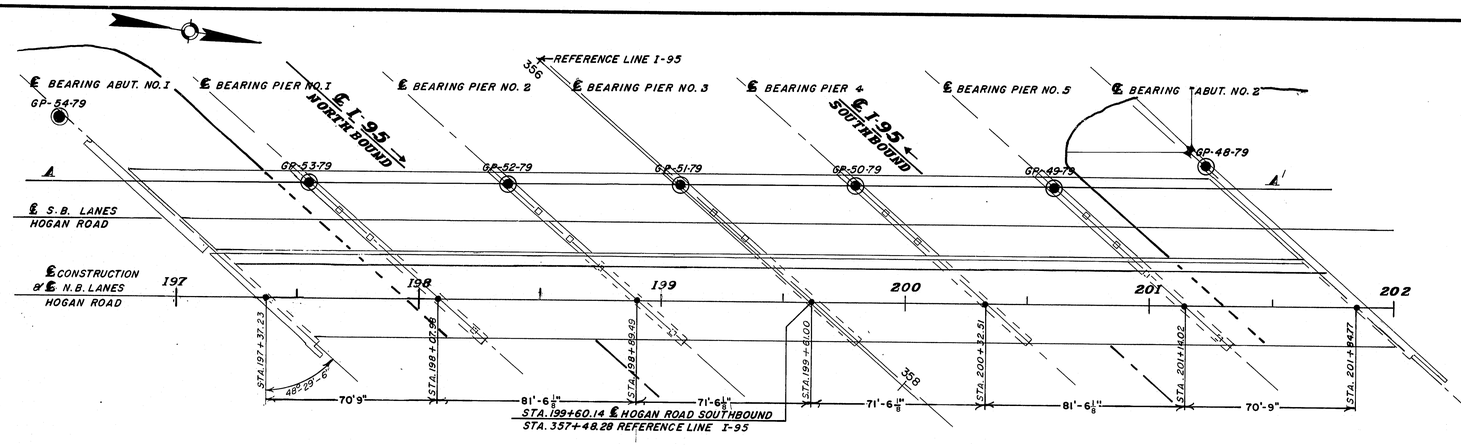
PROFILE ALONG ℄ SOUTHBOUND LANE

SHEET 4 OF 53 AUGUSTA, MAINE

R93-442

JANUARY 1988

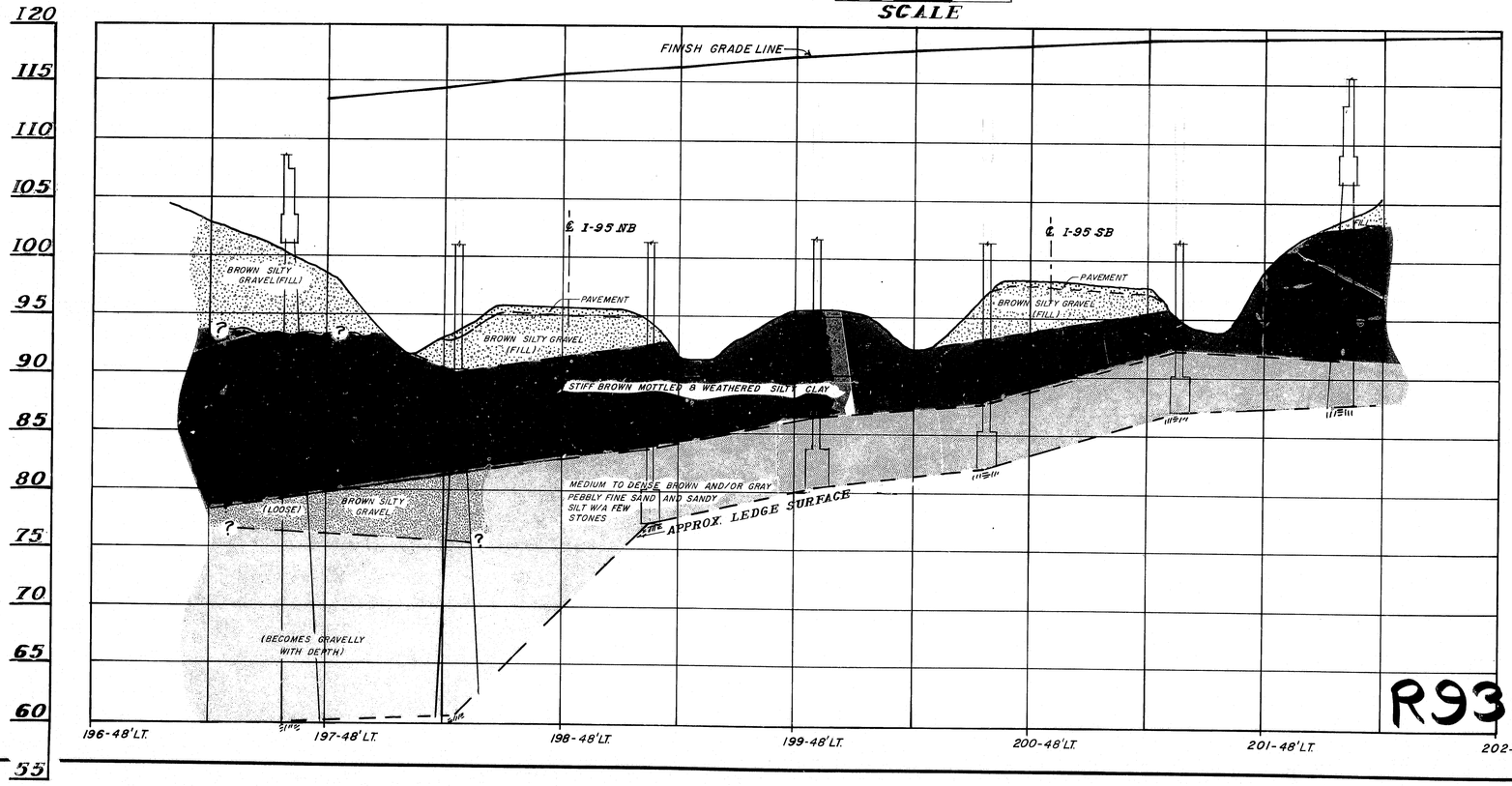
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 5 | 53 |




PLAN

25 0 25 50

SCALE




PROFILE ALONG LINE A-A'

HORIZ 25 0 25 50
VERT 5 0 5 10

SCALE

## BORING NOTES

All samples and vanes are made ahead of casing
4" casing used
Number of blows required to drive extra heavy casing one foot with 400 ft.lbs. of energy per blow
SPT S.P.H. Sampler no. 1290's
3-1/2" O.D. 16ga. seamless tubing
MD Unsuccessful sample attempt and type of sampler
Number of blows required to drive spoon or tubing one foot with 350 ft.lbs. of energy per blow
Field vane test
'Bottom of boring (may not be bottom of soil strata)
71% Location cored by diamond bit and percent recovery of rock

## SHEAR NOTES

Field vane shear strengths
X Laboratory vane shear strengths
Shear strengths in excess of capacity of equipment
O One half unconfined compressive strengths

## WATER CONTENT NOTES

O Natural water content, given as percent of dry weight
O Plastic and liquid limits
Ignition losses are given as percent of dry weight

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
FOUNDATION SURVEY

SHEET 5 OF 53 AUGUSTA, MAINE

R93-443

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 6 | 53 |

ELEVATION

## BORING GP-54-79 STATION 196+52 74' LT.

DRIVING RESISTANCE Blows/Ft. 20 40 | VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8 | WATER CONTENT Percent 20 40

ELEV. 91.86

BROWN SILTY GRAVEL (FILL)

65

1U

PENET. 2ND / 1ST

STIFF BROWN-GRAY WEATHERED MOTTLED SILTY CLAY W/MANY SILT LINES AND LENSES

76

81

2U

H

3U

61

82

72

LOOSE BROWN SILTY GRAVEL

MD

MEDIUM TO DENSE GRAY-BROWN PEBBLY FINE SAND AND SILT W/A FEW SMALL ROCKS

1D

(FRACTURED ROCK)

2D

125

88

195

241

300+

LEDGE ELEV. 57.5

90% LEDGE: METASILTSTONE W/WIDE QUARTZ VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-53-79 STATION 197+55 48' LT.

DRIVING RESISTANCE Blows/Ft. 20 40 | VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8 | WATER CONTENT Percent 20 40

ELEV. 93.72

PAVEMENT

79

67

BROWN SILTY GRAVEL (FILL)

1U

STIFF BROWNISH-GRAY WEATHERED & MOTTLED SILTY CLAY

62

2U

(BROWN SAND LAYERS & LINES) MEDIUM CONSISTENCY GRAY SILTY CLAY

106

145

MD

DENSE BROWN SILTY GRAVEL

150

68

80

96

89

1D

MEDIUM DENSITY GRAY CLAYEY SANDY SILT W/PEBBLES AND ANGULAR ROCKS

72

69

129

145

2D

105

89

100

120

MEDIUM DENSITY BROWN SILTY SAND AND FINE GRAVEL

235

3D

185

130

220

4D

1.5"

500

LEDGE ELEV. 60.7

88% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-52-79 STATION 198+37 48' LT.

DRIVING RESISTANCE Blows/Ft. 20 40 | VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8 | WATER CONTENT Percent 20 40

ELEV. 94.75

BROWN SILTY GRAVEL (FILL)

1U

STIFF GRAYISH-BROWN WEATHERED & MOTTLED SILTY CLAY W/FEW SILT LENSES

2U

12"

124

128

89

MEDIUM DENSITY GRAY & BRN SILTY PEBBLY FINE SAND & ANGULAR LEDGE FRAGMENTS

1D

62

70

65/6"

LEDGE ELEV. 77.3

97% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-51-79 STATION 199+08-48' LT.

DRIVING RESISTANCE ——— Blows/Ft. 20 40 60 80 100

ELEV. 95.54

STIFF BROWNISH-GRAY MOTTLED & WEATHERED SILTY CLAY W/ MANY SANDY SILT LINES & LAYERS

LL = 33.4%
PL = 20.1%

LAB VANE .420 TSF .864 TSF .516 TSF .600 TSF

WC 32.5% 32.0% 31.6% 32.9%

FIELD VANE +.535 TSF

1U

2U

WC=7.9%

133

121

DENSE BROWN AND GRAY PEBBLY SILTY FINE SAND W/A FEW ROCKS

1D

124

151

2D

383

1"

141

1"

LEDGE ELEV. 80.5

93% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-50-79 STATION 199+80 48' LT.

DRIVING RESISTANCE ——— Blows/Ft. 20 40 60 80 100

ELEV. 96.76

BROWN SILTY GRAVEL (FILL)

1D

LL=33.1
PL=19.4

MEDIUM TO STIFF GRAY-BROWN SILTY CLAY

2D

213

DENSE BROWN PEBBLY SILTY FINE SAND W/ANGULAR GRAVEL

150

171

161

LEDGE ELEV. 82.3

97% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-49-79 STATION 200+61 48' LT.

DRIVING RESISTANCE ——— Blows/Ft. 20 40 60 80 100

ELEV. 95.42

STIFF BROWN SILTY CLAY

1D

MEDIUM TO DENSE BROWN PEBBLY SILTY FINE SAND W/A FEW STONES

160

126

145

2D

280

4"

LEDGE ELEV. 87.1

80% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

## BORING GP-48-79 STATION 201+23 58' LT.

DRIVING RESISTANCE Blows/Ft. 20 40 | VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8 | WATER CONTENT Percent 20 40

ELEV. 102.38

70

66

STIFF GRAYISH-BROWN WEATHERED SILTY CLAY

1U

2U

104

102

MEDIUM DENSITY BROWN SAND OVER PEBBLY CLAYEY SILTY FINE SAND W/ANGULAR ROCKS

127

124

1D

167

LEDGE ELEV. 85.6

100% LEDGE: METASILTSTONE W/QUARTZ & CALCITE VEINS & HIGH ANGLE OF FOLIATION

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

**HOGAN ROAD BRIDGE**
OVER
**INTERSTATE 95**
IN THE CITY OF
**BANGOR**
**PENOBSCOT COUNTY**
BORING DETAILS

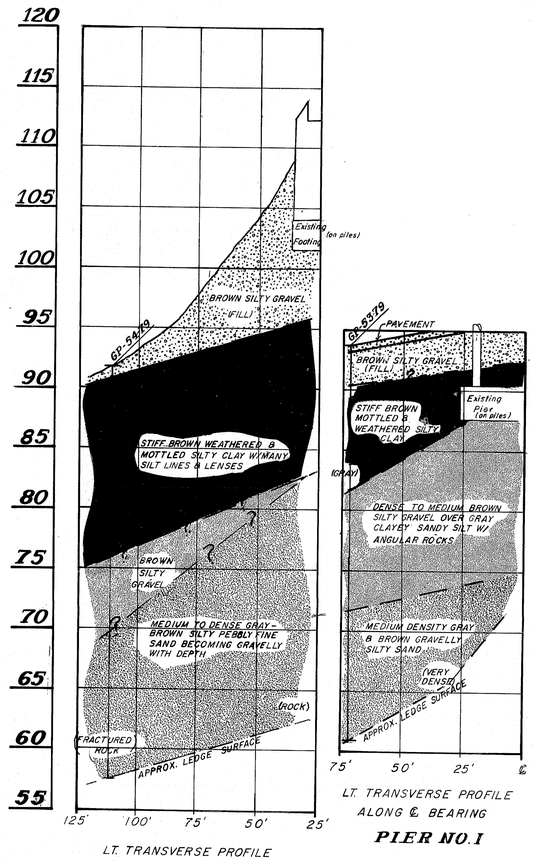
SHEET 6 OF 53 AUGUSTA, MAINE

R93-444

JANUARY 1969

253-1 2000

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8 (129) | 7 | 53 |



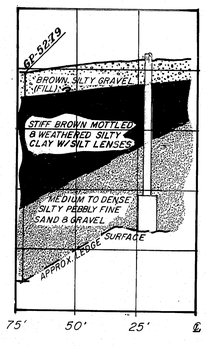

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**ABUT. NO. 1**



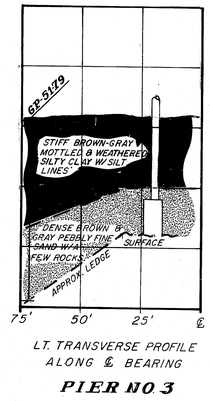

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**PIER NO. 1**



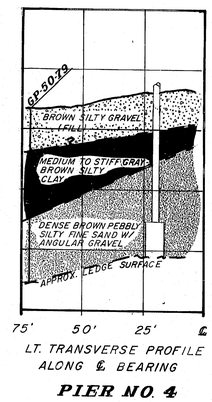

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**PIER NO. 2**



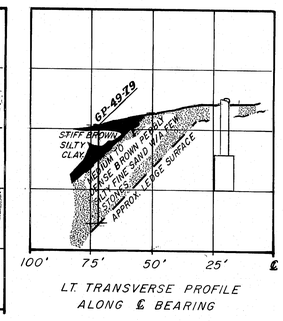

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**PIER NO. 3**



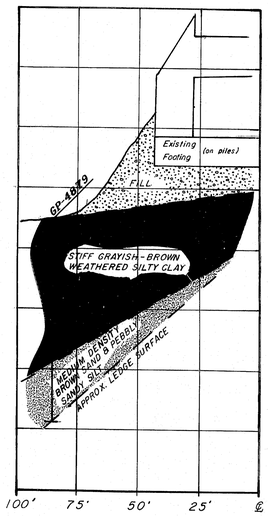

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**PIER NO. 4**



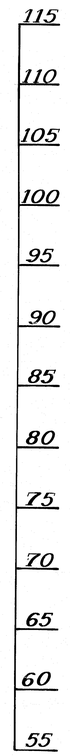

LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**PIER NO. 5**

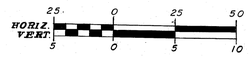



LT. TRANSVERSE PROFILE
ALONG ℄ BEARING

**ABUT. NO. 2**




## TRANSVERSE SECTIONS LEFT OF EXISTING CONST. ℄




**SCALE**

**NOTE:** ALL STRATIFICATIONS ARE DERIVED FROM CURRENT BORING INFORMATION ALONG WITH BORING INFORMATION FROM 1958.

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

JANUARY 1988

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

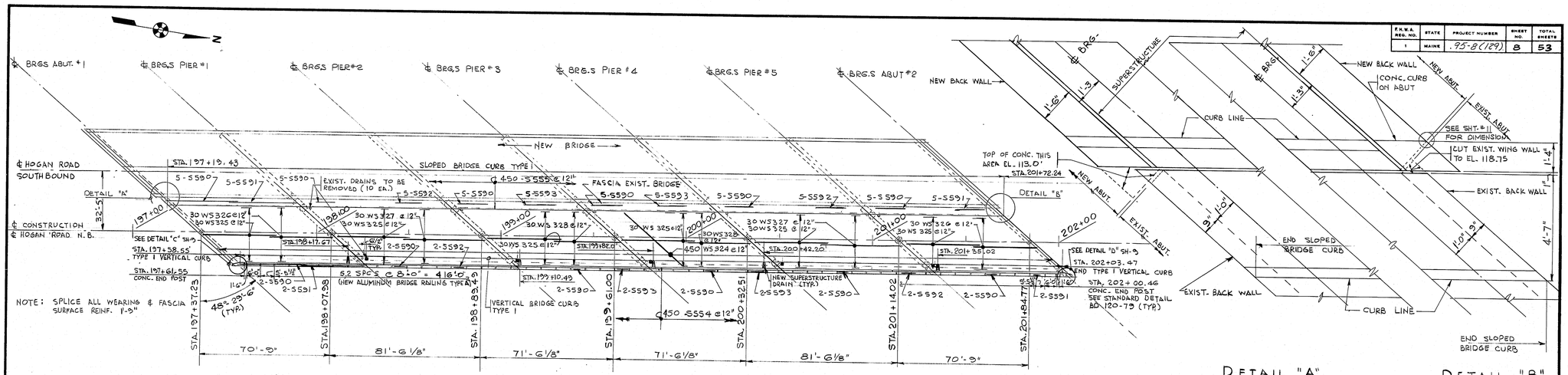
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
TRANSVERSE SECTIONS

SHEET 7 OF 53 AUGUSTA, MAINE

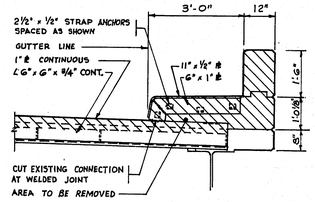
R93-445

2R3-1 2R89

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | .95-B(129) | 8 | 53 |

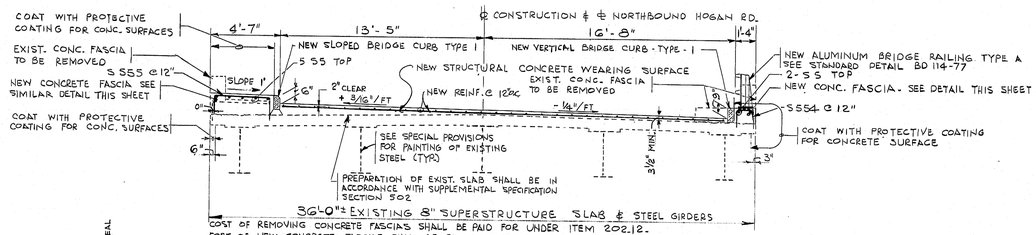



EXISTING BRIDGE PLAN




EXISTING SIDEWALK EXPANSION JOINT DETAIL

NOTE: SEE SHEET 9 FOR NEW EXPANSION JOINT DETAILS. SEE DECK EXPANSION DEVICE DETAIL THIS SHEET FOR CUTTING EXIST. 1" CONT. ℄.




36'-0"± EXISTING 8" SUPERSTRUCTURE SLAB & STEEL GIRDERS

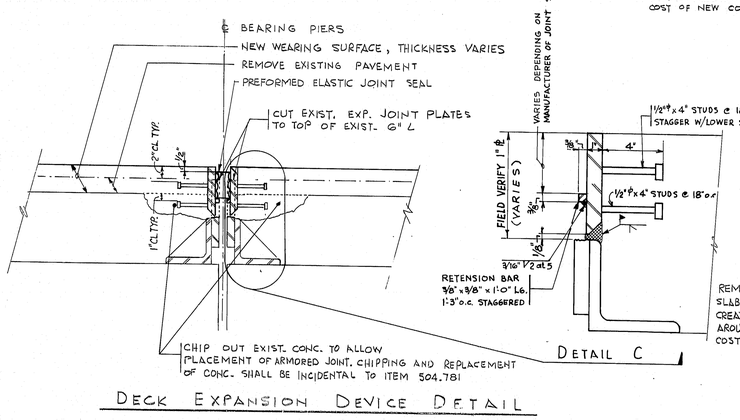
COST OF REMOVING CONCRETE FASCIA'S SHALL BE PAID FOR UNDER ITEM 202.12.
COST OF NEW CONCRETE FASCIAS SHALL BE PAID FOR UNDER ITEM 502.42.
COST OF NEW CONCRETE WEARING SURFACE SHALL BE PAID FOR UNDER ITEM. 502.44

EXISTING BRIDGE TYPICAL SECTION

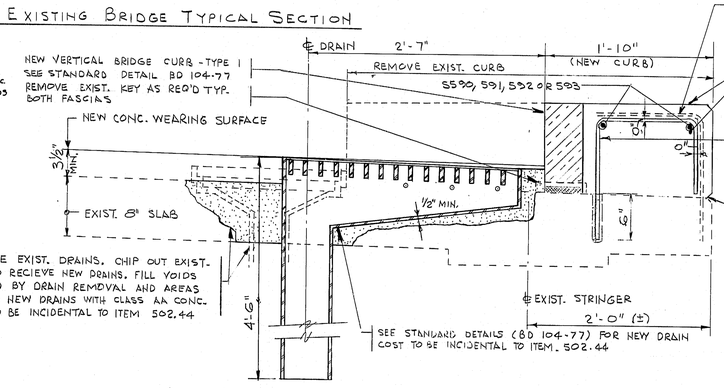
EXISTING BRIDGE SEALS

1. THE SEALS TO BE FURNISHED SHALL HAVE A MINIMUM MOVEMENT RATING OF:
   PIERS 1 TO 5 1/4 INCHES
2. 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 "ARMORED JOINT" SHOP DETAIL DRAWINGS.
3. THE SEAL SHALL BE APPROVED BY THE ENGINEER PRIOR TO FABRICATION OF THE ARMORED JOINT.

SEE SHEET 9 FOR ADDITIONAL NOTES




DECK EXPANSION DEVICE DETAIL




NEW BRIDGE DRAIN AND FASCIA DETAIL
(DETAIL SIMILAR FOR MEDIAN)

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

JANUARY 1988

"AS BUILT" 1983

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
EXISTING BRIDGE RENOVATION

SHEET 8 OF 53 AUGUSTA, MAINE

R93-446

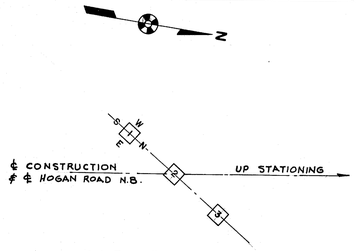
BRD-1 8900

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 9 | 53 |

## COLUMN REPAIR SCHEDULE

| PIER | COL. FACE | ESTIMATED DIMENSIONS T | W | B | X | W |
|---|---|---|---|---|---|---|
| 1 | 1/S | 16 | 3(F) | | | |
| | 1/E | 16 | 3(F) | | | |
| | 1/W | 16 | 3(F) | | | |
| | 2/E | 8 | 3(F) | | | |
| | 2/N | 10 | 1 1/2(R) | | | |
| | 2/W | 16 | 3(F) | | | |
| | 3/E | 7 | 3(F) | | | |
| | 3/W | 17 | 3(F) | | | |
| 2 | 1/S | 15 | 3(F) | | | |
| | 1/E | 15 | 3(F) | | | |
| | 2/S | | | 4 | 2 | 3(F) |
| | 2/E | 17 | 3(F) | | | |
| | 2/N | 6 | 1 1/2(R) | | | |
| | 2/W | 5 | 3(F) | | | |
| | 3/E | 17 | 3(F) | | | |
| | 3/N | 7 | 3(F) | | | |
| | 3/W | 17 | 3(F) | | | |
| 3 | 1/S | 20 | 3(F) | | | |
| | 1/E | 20 | 3(F) | | | |
| | 1/W | 20 | 3(F) | | | |
| | 2/S | | | 7 | 4 | 3(F) |
| | 2/E | 20 | 3(F) | | | |
| | 2/W | 20 | 3(F) | | | |
| | 3/E | 20 | 3(F) | | | |
| | 3/W | 20 | 3(F) | | | |
| 4 | 1/S | 18 | 3(F) | | | |
| | 1/E | 18 | 1 1/2(R) | | | |
| | 1/W | 18 | 3(F) | | | |
| | 2/S | | | 5 | 0 | 3(F) |
| | 2/E | 18 | 3(F) | | | |
| | 2/W | 18 | 3(F) | | | |
| | 3/S | | | 8 | 0 | 3(F) |
| | 3/E | 15 | 1L | | | |
| | 3/N | 12 | 1L | | | |
| | 3/W | 15 | 3(F) | | | |
| 5 | 1/S | 18 | 3(F) | | | |
| | 1/E | 18 | 1 1/2(R) | | | |
| | 1/W | 18 | 3(F) | | | |
| | 2/S | | | 6 | 0 | 3(F) |
| | 2/E | 18 | 3(F) | | | |
| | 2/N | | | 8 | 0 | 3(F) |
| | 2/W | 12 | 3(F) | | | |
| | 3/S | 17 | 3(F) | | | |
| | 3/E | 17 | 3(F) | | | |
| | 3/N | 12 | 3(F) | | | |
| | 3/W | 17 | 3(F) | | | |

(F) FULL WIDTH
(L) DIMENSION FROM LEFT EDGE
(R) DIMENSION FROM RIGHT EDGE
ALL DIMENSIONS ARE IN FEET.




LAYOUT KEY PLAN EXISTING COLUMN REPAIR

NOTES:

(1) CHAMFER ALL EXPOSED EDGES OF CONCRETE A CONSISTENT DIMENSION BETWEEN 1/2" AND 3/4" INCLUSIVE, UNLESS OTHERWISE INDICATED.

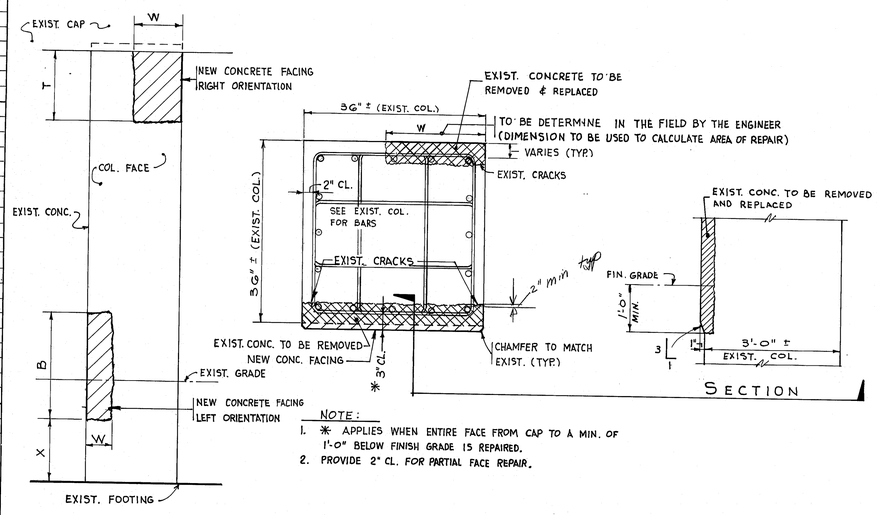
(2) REINFORCING STEEL SHALL BE A MINIMUM COVER OF 2", UNLESS OTHERWISE INDICATED.

(3) PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO TOP OF CONCRETE CURBS, BRIDGE FASCIAS, AND WEARING SURFACE.

(4) MORTAR FOR BEDDING AND FOR JOINTS IN THE GRANITE CURB SHALL CONTAIN AN APPROVED NONSHRINK ADDITIVE.

(5) DIMENSIONS LISTED FOR THE COLUMN REPAIRS ARE ESTIMATED AND SHALL BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER TO ASSURE THAT ALL LOOSE AND SPALLING CONCRETE IS REMOVED.

(6) ALL NEW CONCRETE SHALL BE CLASS AA.

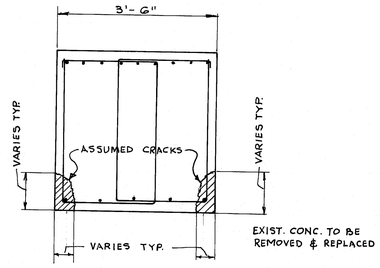



NOTE:
1. * APPLIES WHEN ENTIRE FACE FROM CAP TO A MIN. OF 1'-0" BELOW FINISH GRADE IS REPAIRED.
2. PROVIDE 2" CL. FOR PARTIAL FACE REPAIR.

COLUMN ELEVATION

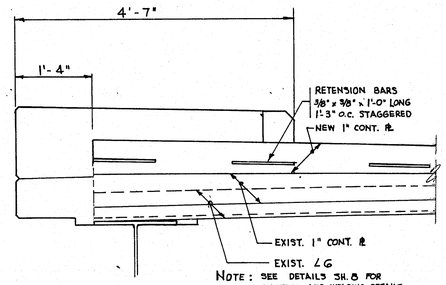
COLUMN SECTION

## EXISTING PIER COLUMN REPAIR - TYPICAL DETAILS

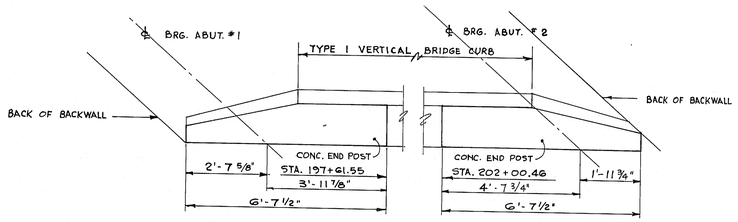



## EXISTING PIER CAP REPAIR - TYPICAL DETAIL

NOTE : LENGTH OF REPAIR TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ESTIMATED QUANTITIES HAVE BEEN CALCULATED ASSUMING ALL EXISTING CAPS WILL NEED REPAIR ON BOTH FACES FOR FULL LENGTH OF CAP EXCEPT FOR CANTILEVERS.

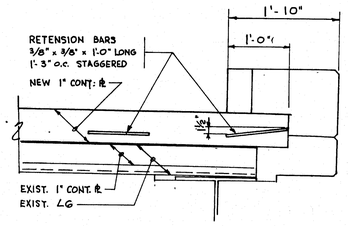



MEDIAN EXPANSION JOINT DETAIL




DETAIL C DETAIL D

CONCRETE END POST
SEE SH. 8 FOR LOCATION




FASCIA EXPANSION JOINT DETAIL

PROJECT DESIGN ENGINEER

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

JANUARY 1988

"AS BUILT" 1983

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

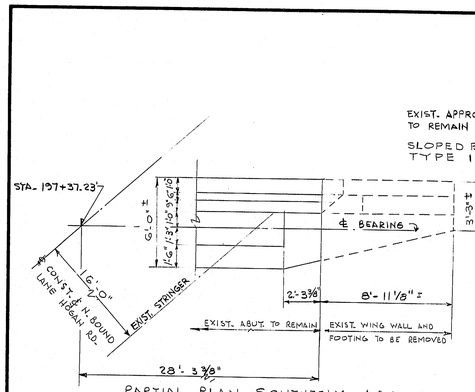
EXISTING BRIDGE RENOVATIONS

SHEET 9 OF 53 AUGUSTA, MAINE

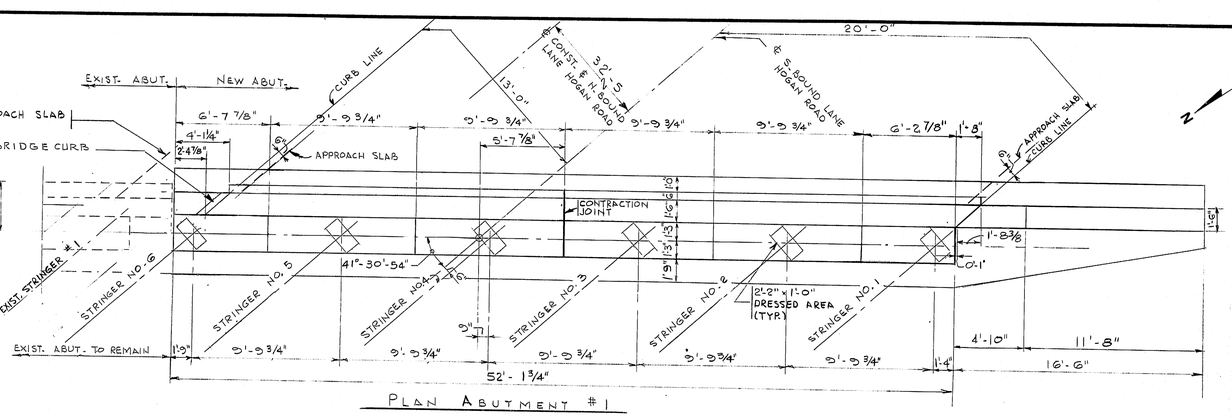
R93-447

BRI-1 1986

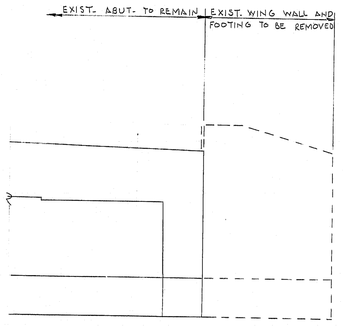
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(128) | 10 | 53 |



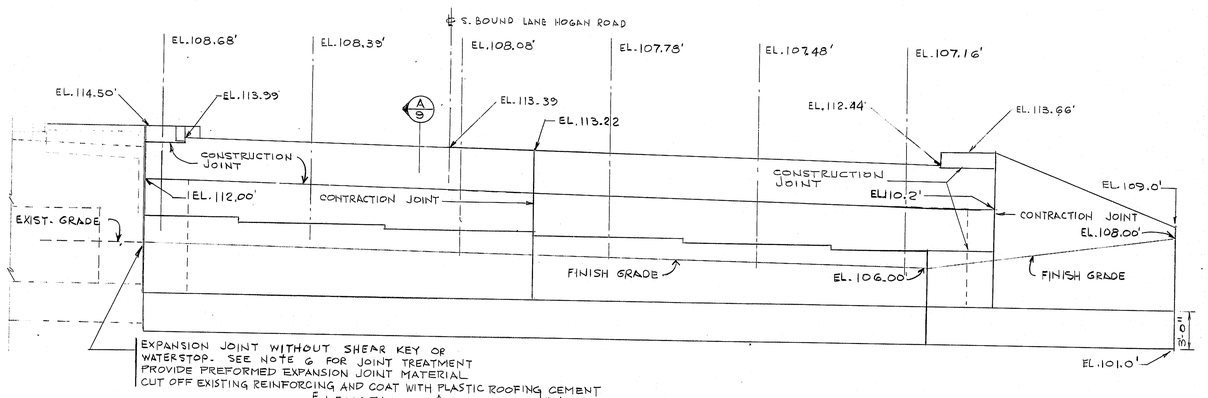

PARTIAL PLAN SOUTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)



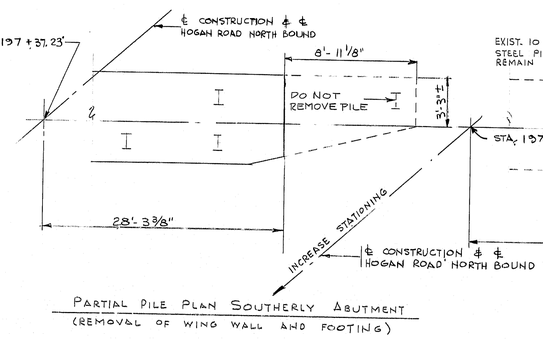

PLAN ABUTMENT #1



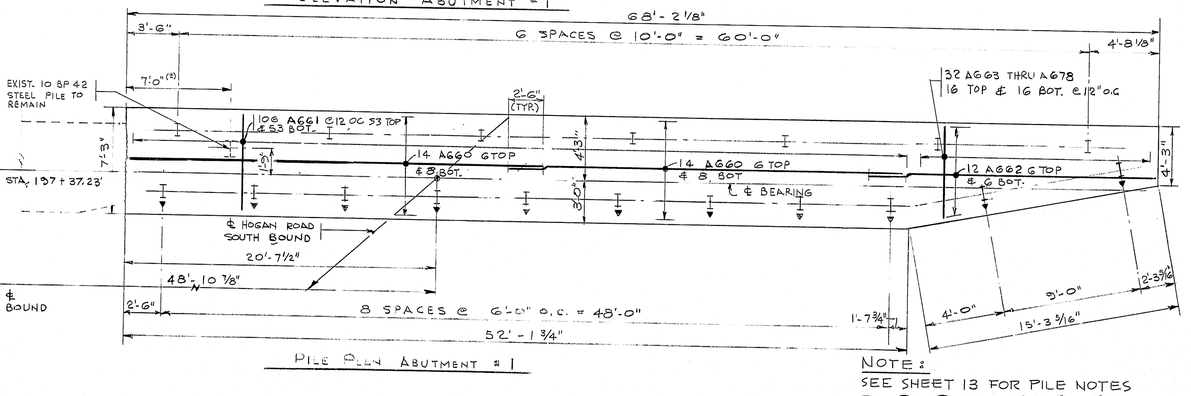

PARTIAL ELEVATION SOUTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)




ELEVATION ABUTMENT #1




PARTIAL PILE PLAN SOUTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)




PILE PLAN ABUTMENT #1

NOTE:
SEE SHEET 13 FOR PILE NOTES

R93-448

ABUTMENT NOTES

1. CHAMFER ALL EXPOSED EDGES OF CONCRETE A CONSISTENT DIMENSION BETWEEN 1/2" AND 3/4" INCLUSIVE, UNLESS OTHERWISE INDICATED.
2. REINFORCING STEEL SHALL HAVE 2" COVER UNLESS OTHERWISE INDICATED.
3. PLACE REINFORCING STEEL IN BRIDGE SEATS TO CLEAR ANCHOR BOLTS.
4. BREAK BOND AT VERTICAL CONTRACTION JOINTS BY A METHOD APPROVED BY THE ENGINEER.
5. POLYVINYLCHLORIDE WATERSTOPS, AS SHOWN ON STANDARD DETAIL BD 104-77, SHALL BE PLACED IN ALL VERTICAL CONTRACTION AND CONSTRUCTION JOINTS.
6. COVER EXPANSION JOINTS ON THE BACK WITH TWO LAYERS OF HEAVY ROOFING, 10" WIDE. COAT THE CONCRETE AND BACK OF EACH LAYER AS APPLIED WITH PLASTIC ROOFING CEMENT. RECESS THE AREA COVERED 1/4".
7. WATERSTOPS ARE NOT REQUIRED IN HORIZONTAL CONSTRUCTION JOINTS.
8. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO TOP OF CONCRETE CURBS, TOP OF ABUTMENT BACKWALLS, AND 1 FOOT BELOW TOP OF BACKWALLS ON BACK SIDE.
9. PLACE 4" DIAMETER DRAINS IN BREASTWALL AND WINGS AT 10' MAXIMUM SPACING. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
10. WELDING OF REINFORCING STEEL WILL BE ALLOWED IN THE TOP 2' OF THE ABUTMENT BACKWALL.
11. THE TOP PORTION OF THE ABUTMENT BACKWALL SHALL BE PLACED AFTER ALL SUPERSTRUCTURE STRUCTURAL SLAB CONCRETE IS IN PLACE AND AFTER ALL NECESSARY ADJUSTMENTS TO THE JOINT ARMOR HAVE BEEN MADE, UNLESS ANOTHER METHOD, WHICH ALLOWS FOR THE PROPER ALIGNMENT AND ADJUSTMENT OF THE JOINT ARMOR, IS APPROVED BY THE ENGINEER.

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

JANUARY 1988

"AS BUILT" 1983

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

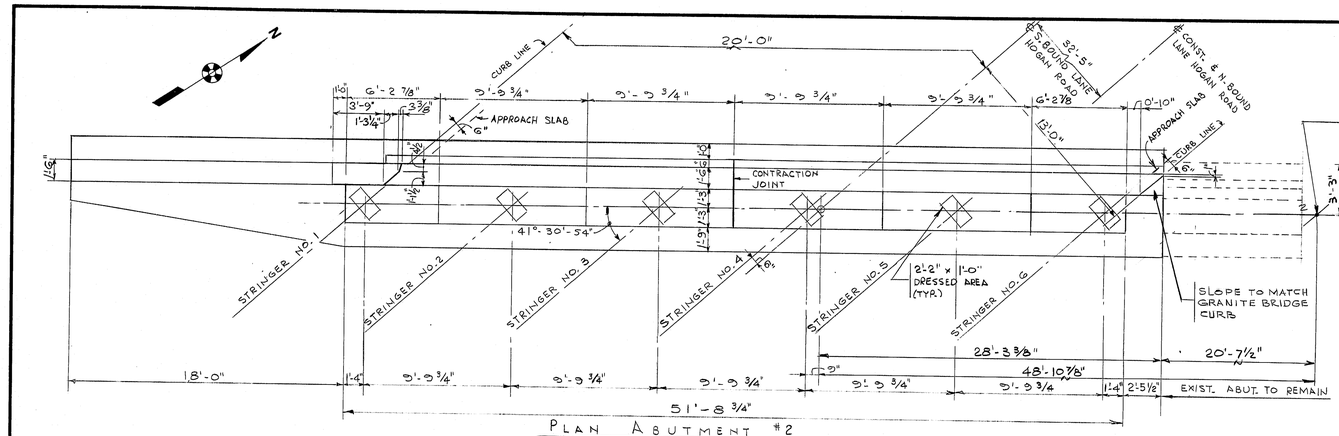
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

PLAN ABUTMENT #1

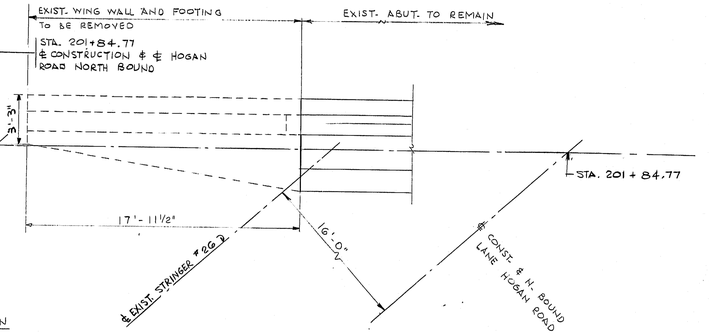
SHEET 10 OF 53 AUGUSTA, MAINE

2003-1 2000

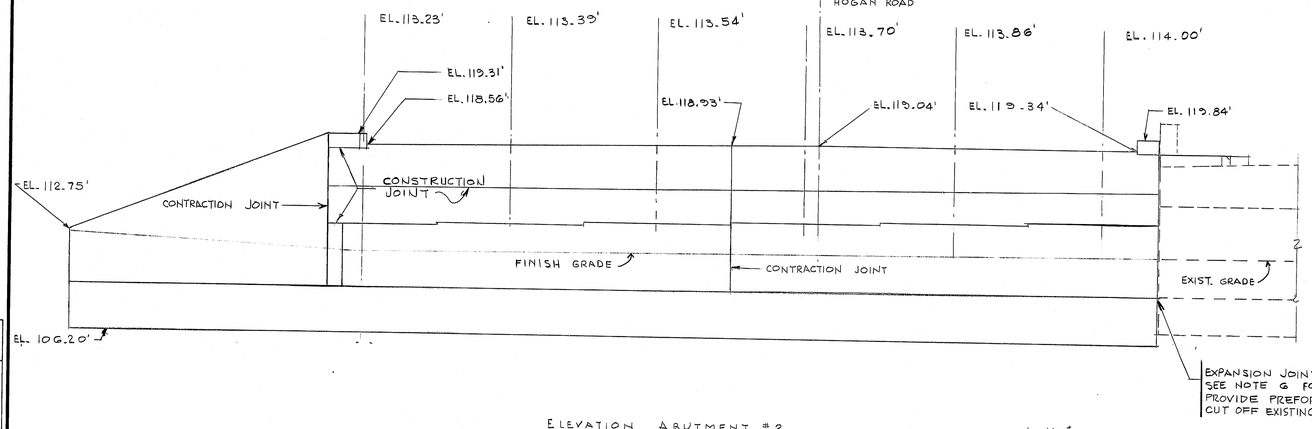
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 11 | 53 |



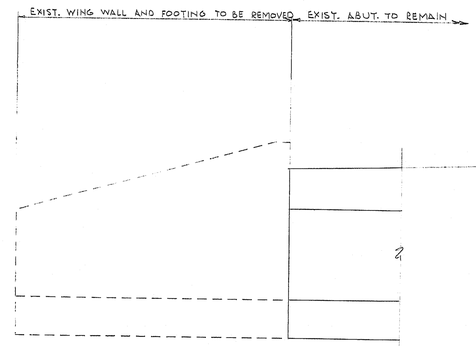

PLAN ABUTMENT #2



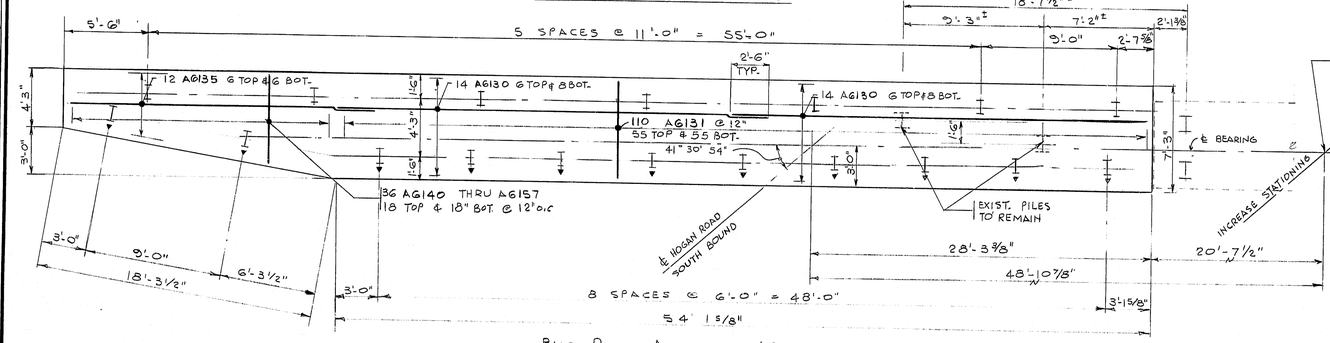

PARTIAL PLAN NORTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)



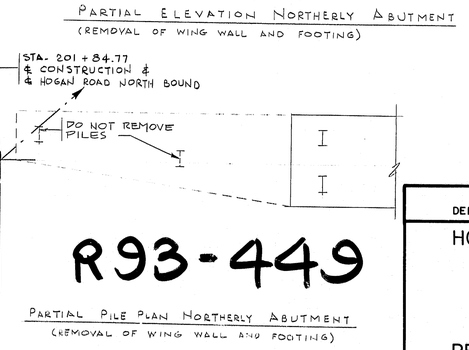

ELEVATION ABUTMENT #2




PARTIAL ELEVATION NORTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)




PILE PLAN ABUTMENT #2




PARTIAL PILE PLAN NORTHERLY ABUTMENT
(REMOVAL OF WING WALL AND FOOTING)

NOTE:
SEE SHEET 13 FOR PILE NOTES

PROJECT DESIGN ENGINEER — PLANS

| BY | DATE |
|---|---|
| DESIGN - DETAILED | |
| CHECKED | |
| REVISIONS | |
| FIELD CHANGES | |

JANUARY 1988

"AS BUILT" 1983 LB

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# R93-449

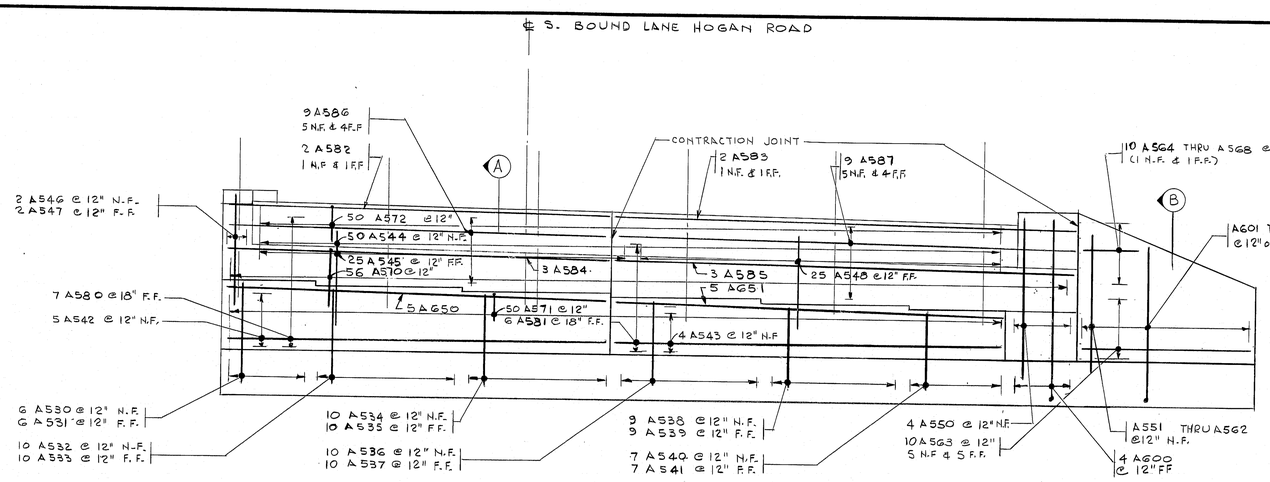
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

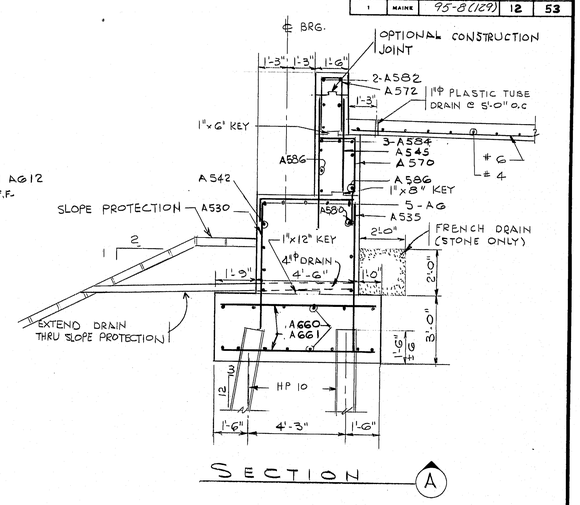
PLAN ABUTMENT #2

SHEET 11 OF 53 AUGUSTA, MAINE

8B3-1 2000

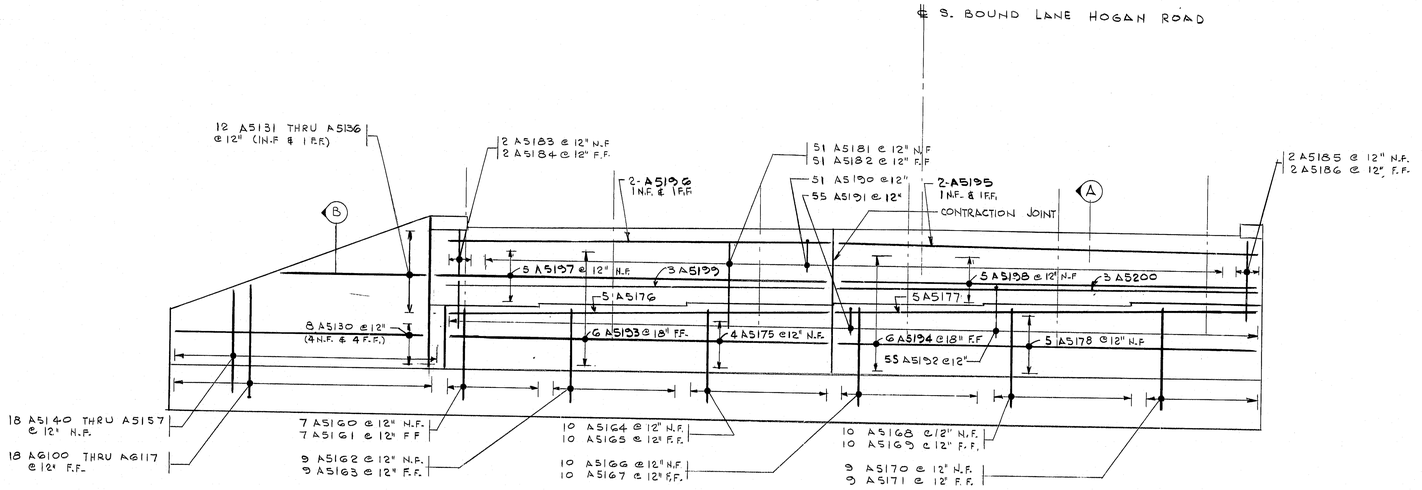
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 12 | 53 |



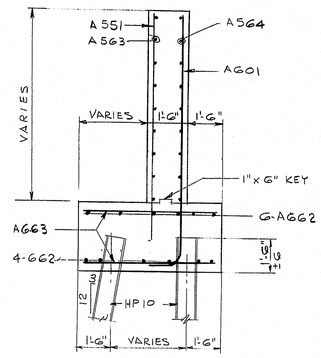




SECTION A

## ELEVATION ABUTMENT #1




## ELEVATION ABUTMENT # 2




"AS BUILT" 1983 LR

SECTION B

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

JANUARY 1983

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

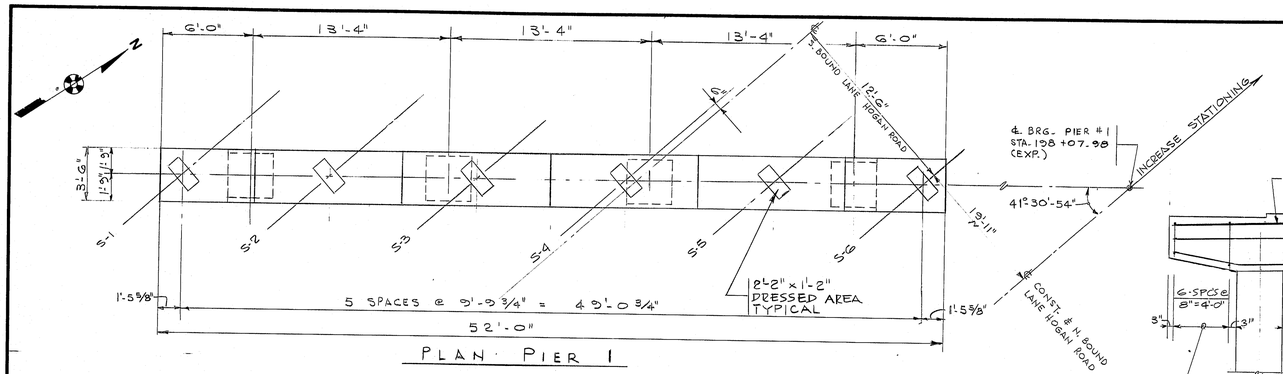
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

ELEVATION ABUTMENT #1 & #2

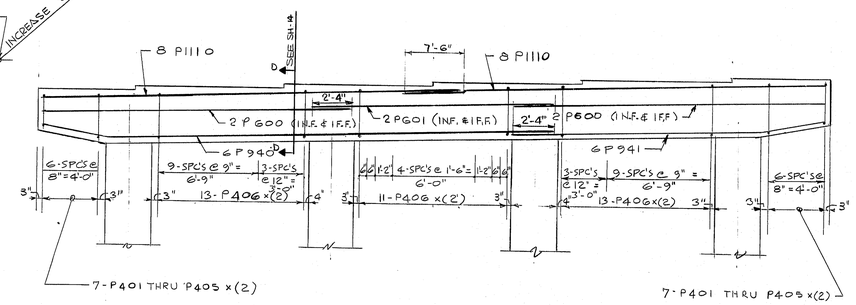
SHEET 12 OF 53 AUGUSTA, MAINE

R93-450

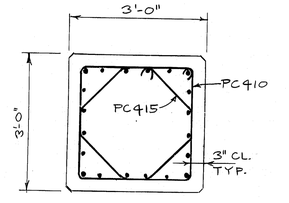
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 13 | 53 |




PLAN PIER 1




TYPICAL PIER CAP REINFORCING




SECTION B-B

PIER NOTES

1. CHAMFER ALL EXPOSED EDGES OF CONCRETE A CONSISTENT DIMENSION BETWEEN 1/2" AND 3/4" INCLUSIVE, UNLESS OTHERWISE INDICATED.
2. REINFORCING STEEL SHALL HAVE 2" MINIMUM COVER UNLESS OTHERWISE INDICATED.
3. PLACE REINFORCING STEEL ON BRIDGE SEATS TO CLEAR ANCHOR BOLTS.
4. MAXIMUM CALCULATED FOOTING PRESSURE 5.5 TONS PER SQUARE FOOT.
5. PIER FOOTINGS MAY BE LOWERED A MAXIMUM OF 2'-0" WITHOUT CONSIDERATION TO REDESIGN.

PILE NOTES

1. PILES SHALL BE DRIVEN TO LEDGE OR PRACTICAL REFUSAL.
2. ALL PILES SHALL HAVE POINTED REINFORCED PILE TIPS AS SHOWN ON STANDARD DETAIL BD 104-77.
3. ALTERNATE TYPES OF POINTED REINFORCED PILE TIPS MAY BE USED IF THEY HAVE AT LEAST THE CROSS-SECTIONAL AREA OF THE POINTED REINFORCED PILE TIP SHOWN ON THE PLANS, AND ARE APPROVED BY ENGINEER.
4. ESTIMATED DRIVEN LENGTHS OF PILES ARE DETERMINED FROM AVAILABLE SOILS INFORMATION WITH NO ALLOWANCE FOR UNCERTAIN PILE PENETRATION.
5. EMBEDMENT OF PILES IN FOOTINGS MAY VARY BETWEEN 1'-0" AND 2'-0", AND THE ACTUAL EMBEDMENT LENGTH UP TO A MAXIMUM OF 1'-6" WILL BE INCLUDED IN THE MEASUREMENT FOR PAYMENT.
6. PILES MARKED THUS H▶, SHALL BE BATTERED 3" PER FOOT IN THE DIRECTION OF THE ARROW.
7. MAXIMUM PILE LOADS: 55.5 TONS.
8. FOLLOWING ARE PILE LOCATIONS, NUMBER OF PILES REQUIRED, SIZE OF PILES AND ESTIMATED DRIVEN LENGTHS:

ABUTMENT NUMBER 1

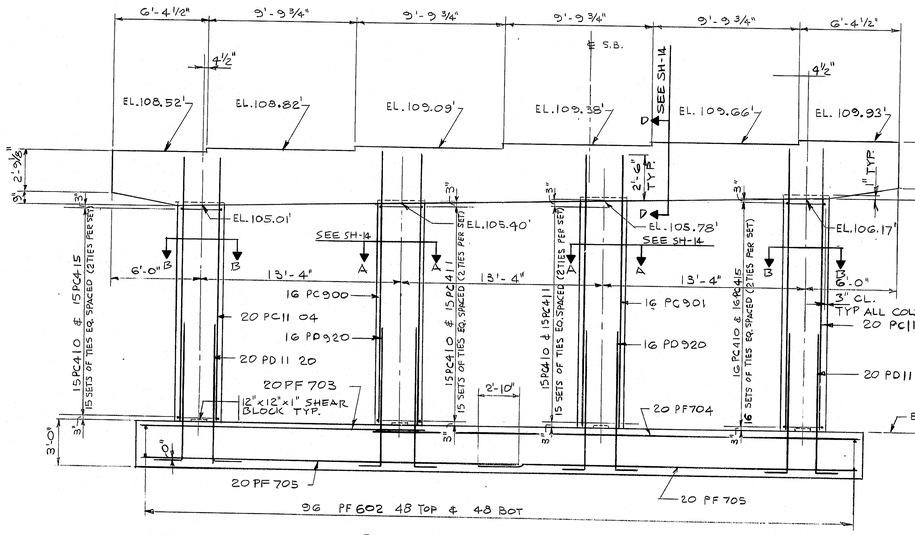
3 - HP 10 X 42 @ 40 FEET
3 - HP 10 X 42 @ 41 FEET
3 - HP 10 X 42 @ 42 FEET
3 - HP 10 X 42 @ 44 FEET
3 - HP 10 X 42 @ 46 FEET
3 - HP 10 X 42 @ 47 FEET

PIER NUMBER 1

4 - HP 10 X 42 @ 25 FEET
3 - HP 10 X 42 @ 27 FEET
4 - HP 10 X 42 @ 29 FEET
3 - HP 10 X 42 @ 31 FEET

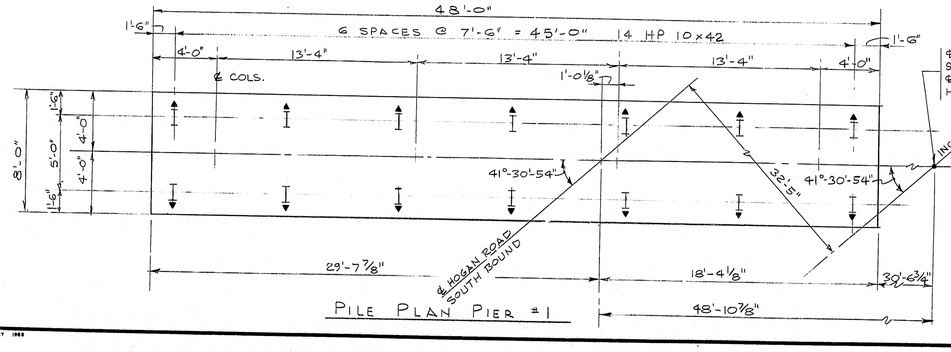
ABUTMENT NUMBER 2

3 - HP 10 X 42 @ 15 FEET
3 - HP 10 X 42 @ 17 FEET
3 - HP 10 X 42 @ 19 FEET
3 - HP 10 X 42 @ 21 FEET
3 - HP 10 X 42 @ 23 FEET
3 - HP 10 X 42 @ 25 FEET

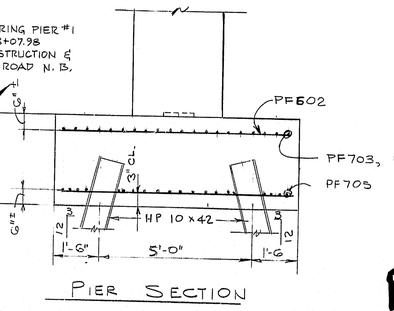



ELEVATION PIER 1

FOR LEDGE ELEVS SEE BK 95/6545 LR




PILE PLAN PIER #1




PIER SECTION

R93-451

AS BUILT 1983 LR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

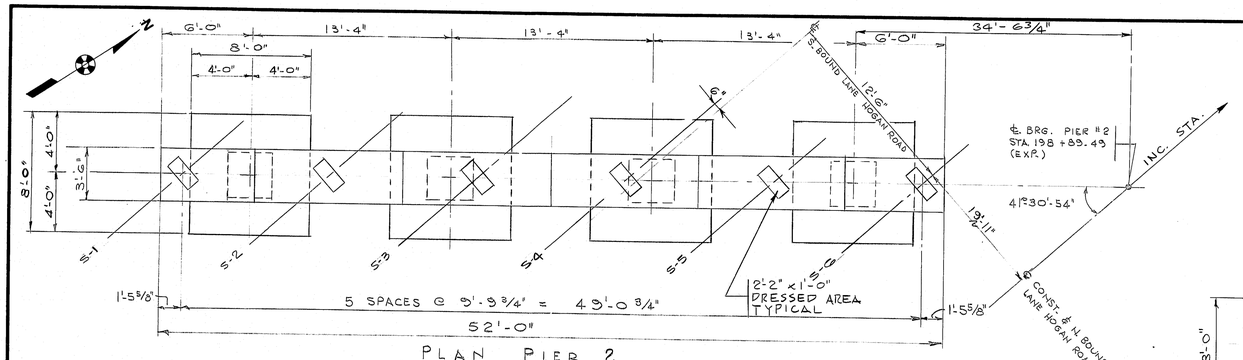
# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
PENOBSCOT COUNTY
PIER #1

SHEET 13 OF 53 AUGUSTA, MAINE

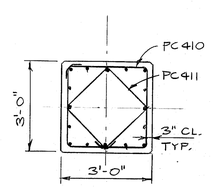
PROJECT DESIGN ENGINEER
PLANS
DESIGN - DETAILED BY
CHECKED
REVISIONS
FIELD CHANGES
DATE

JANUARY 1983

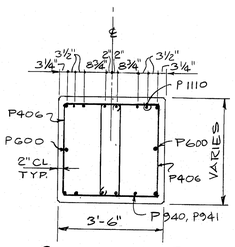
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(109) | 14 | 53 |



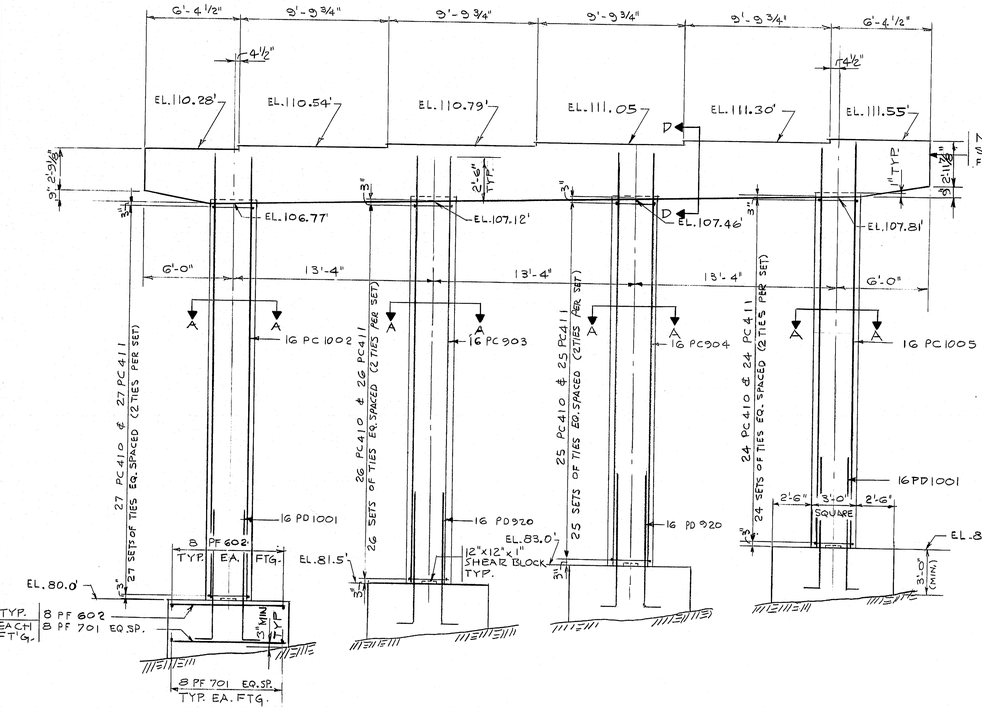

PLAN PIER 2



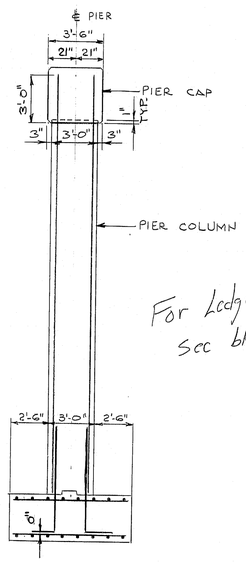

SECTION A-A




SECTION D-D




ELEVATION PIER 2




For Ledge Elevs
See bk 95/6545
LR

"AS BUILT" 1983 LR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

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

PLANS

JANUARY 1988

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

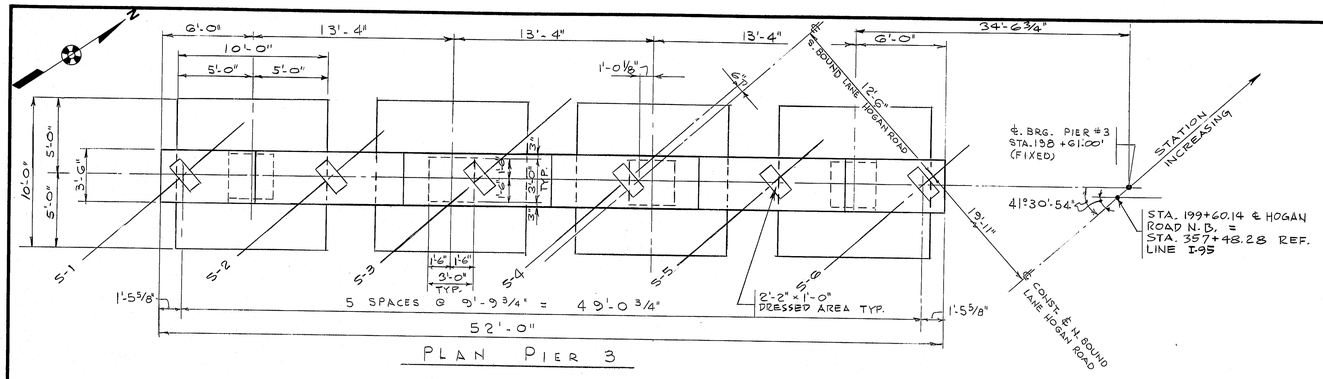
HOGAN ROAD BRIDGE
OVER
INTERSTATE 95
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY
PIER #2

SHEET 14 OF 53 AUGUSTA, MAINE

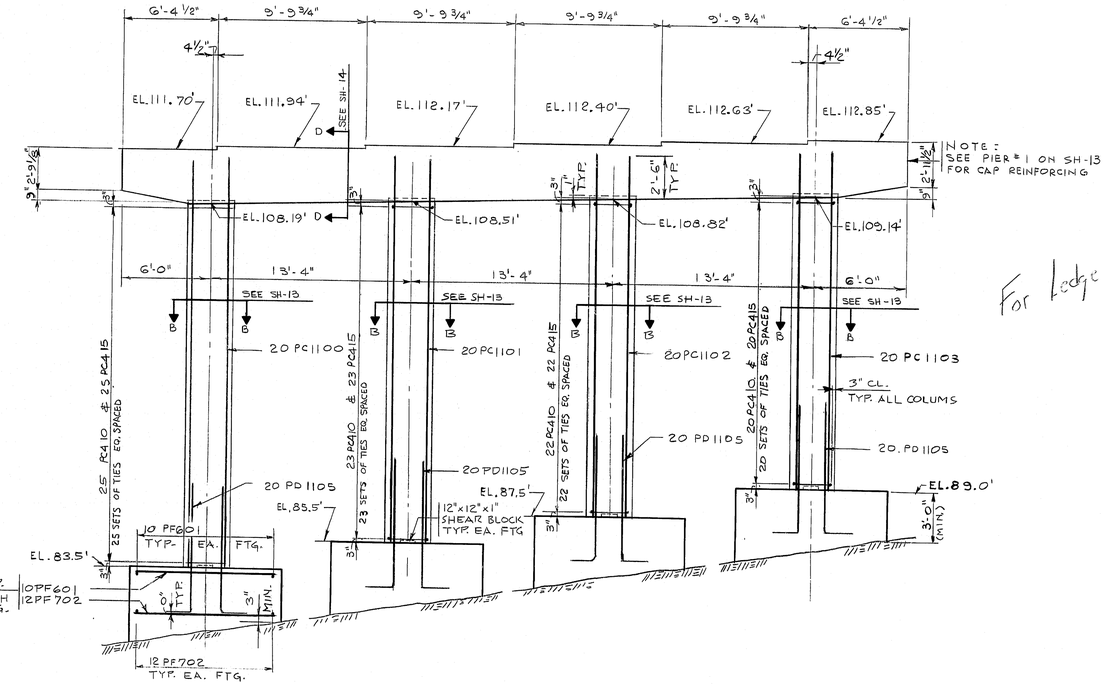
R93-452

BRI-1 1986

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 15 | 53 |




PLAN PIER 3




ELEVATION PIER # 3

For Ledge Elevs. see dr 95/6545 LR

"AS BUILT" 1983 LR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

PIER #3

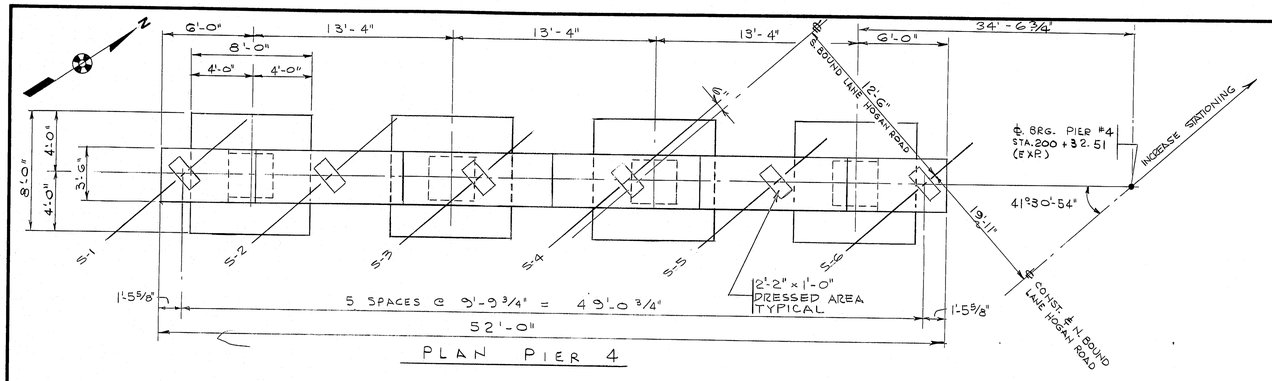
SHEET 15 OF 53 AUGUSTA, MAINE

R93-453

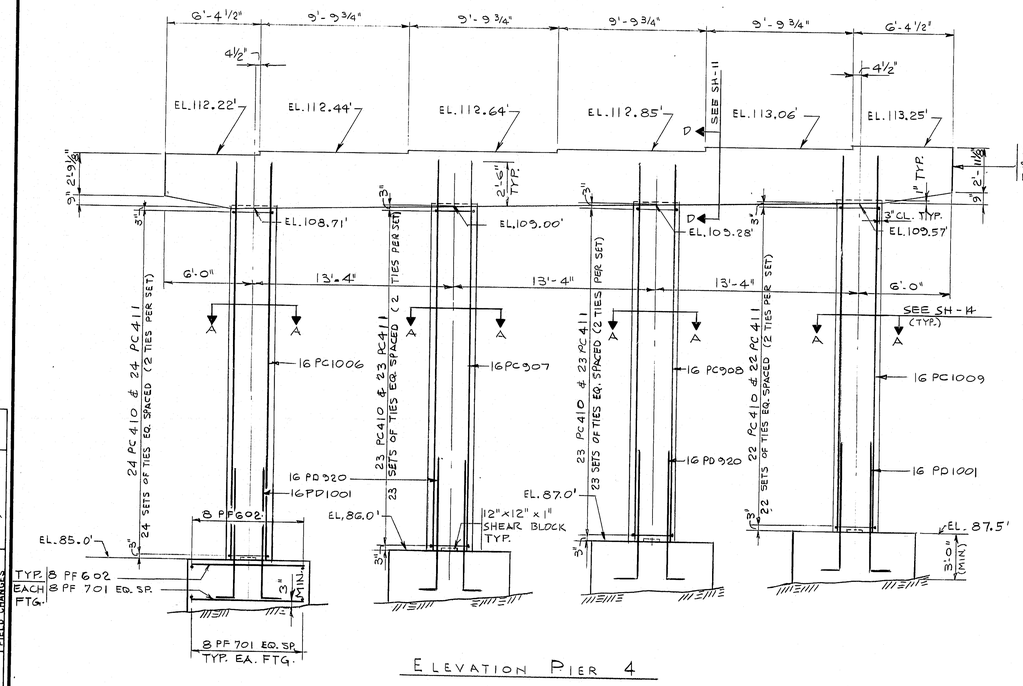
| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS | DESIGN - DETAILED | |
| | CHECKED | |
| | REVISIONS | |
| | FIELD CHANGES | |

JANUARY 1983

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 16 | 53 |




PLAN PIER 4




ELEVATION PIER 4

For ledge Elev. See bk 95/6545 LR

"AS BUILT" 1983 LR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

PIER # 4

SHEET 16 OF 53 AUGUSTA, MAINE

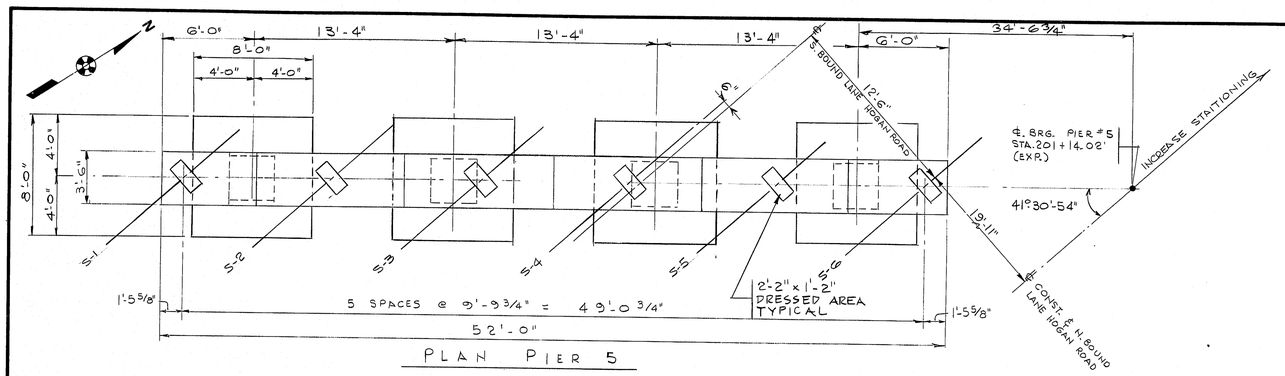
R93-454

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

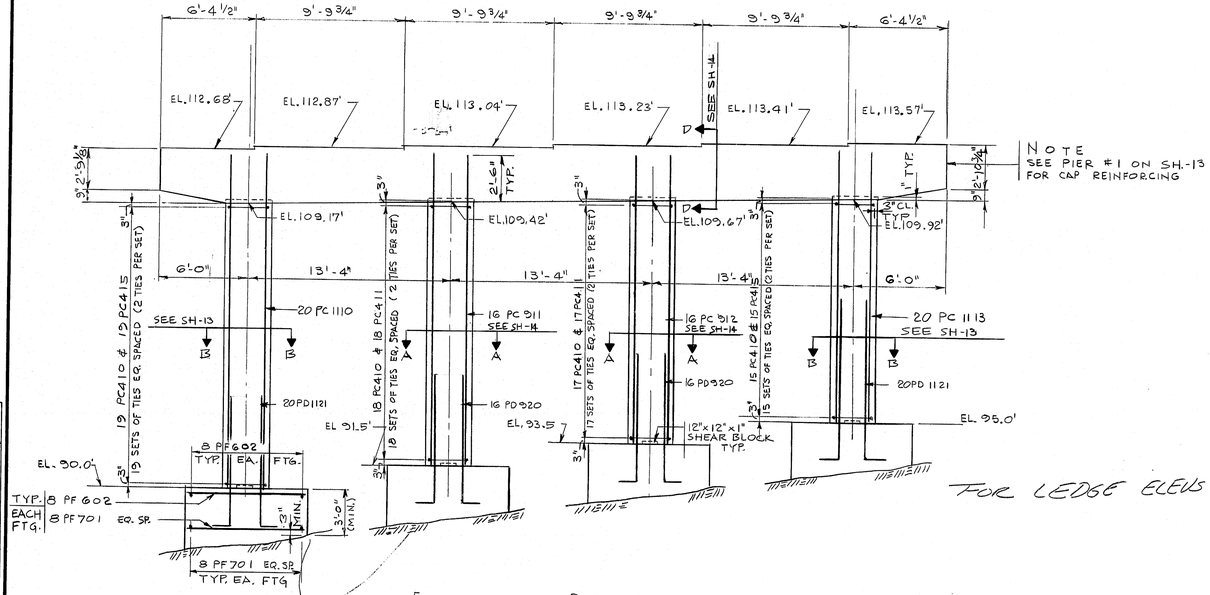
JANUARY 1988

803-1 8/88

| F.H.W.A. REQ. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B (189) | 17 | 53 |




PLAN PIER 5




ELEVATION PIER 5

FOR LEDGE ELEVS SEE BOOK 957/6545 LR

These Two
Columns founded
on concrete fill

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

JANUARY 1988

"AS BUILT" 1983 LR


CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

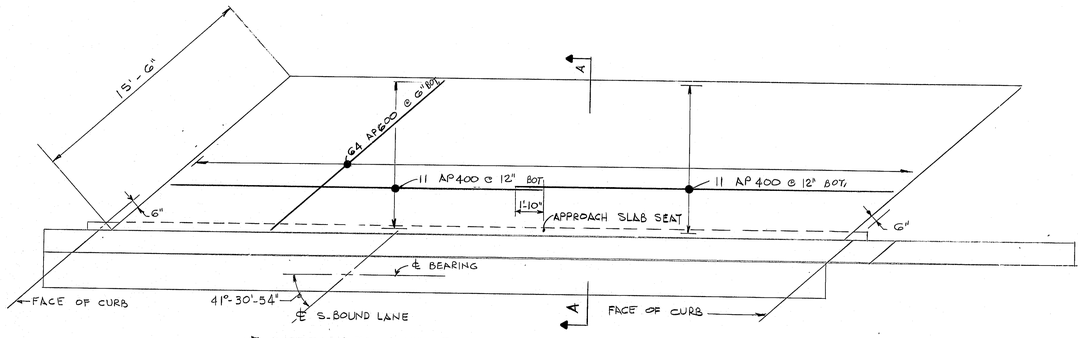
PIER #5

SHEET 17 OF 53 AUGUSTA, MAINE

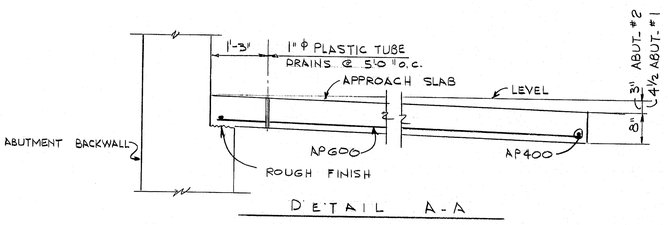
R93-455

DB-1 2000

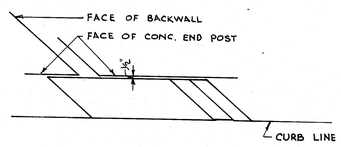
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 18 | 53 |




TYPICAL APPROACH SLAB
(2 REQ'D. 1 ABUT #1 & 1 ABUT #2)

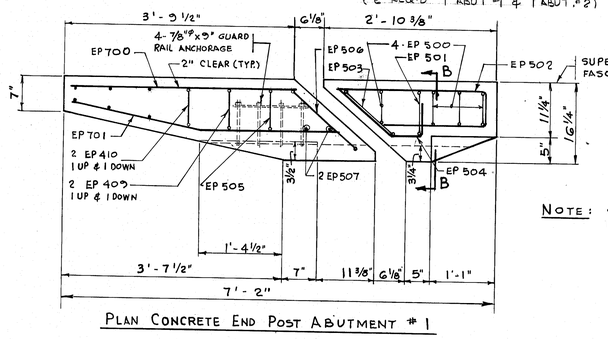



DETAIL A-A



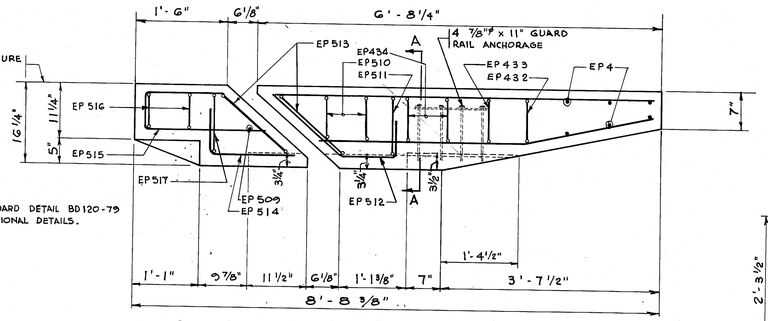

CURB EXPANSION DAM DETAIL

NOTE: SEE SPECIAL PROVISION SECTION 716 FOR ADDITIONAL CURB EXPANSION DAM DETAIL.

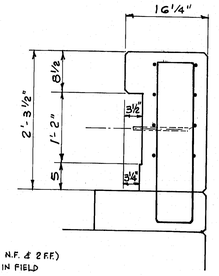



PLAN CONCRETE END POST ABUTMENT # 1

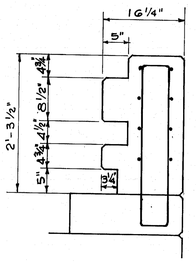
NOTE: SEE STANDARD DETAIL BD120-79 FOR ADDITIONAL DETAILS.



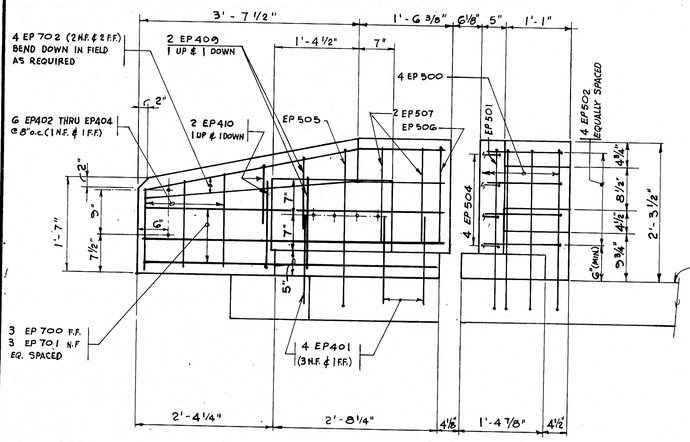

PLAN CONCRETE END POST ABUTMENT # 2



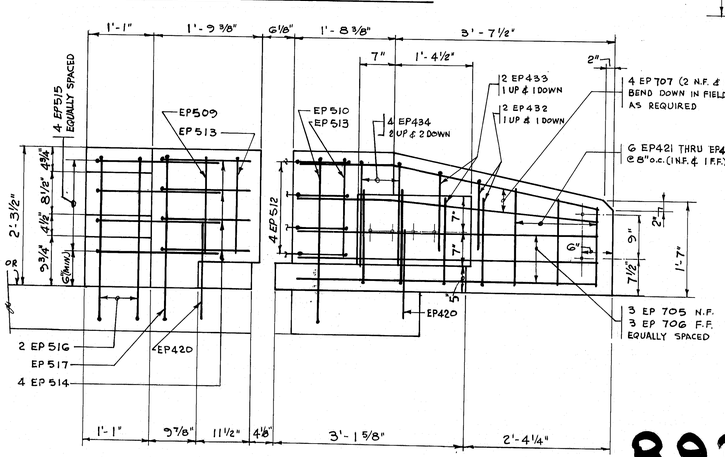

SECTION A-A




SECTION B-B




ELEVATION CONCRETE END POST ABUTMENT # 1




ELEVATION CONCRETE END POST ABUTMENT #2

R93-456

"AS BUILT" 1983 L.R.


CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HOGAN ROAD BRIDGE
OVER
INTERSTATE 95
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY

TYPICAL APPROACH SLAB

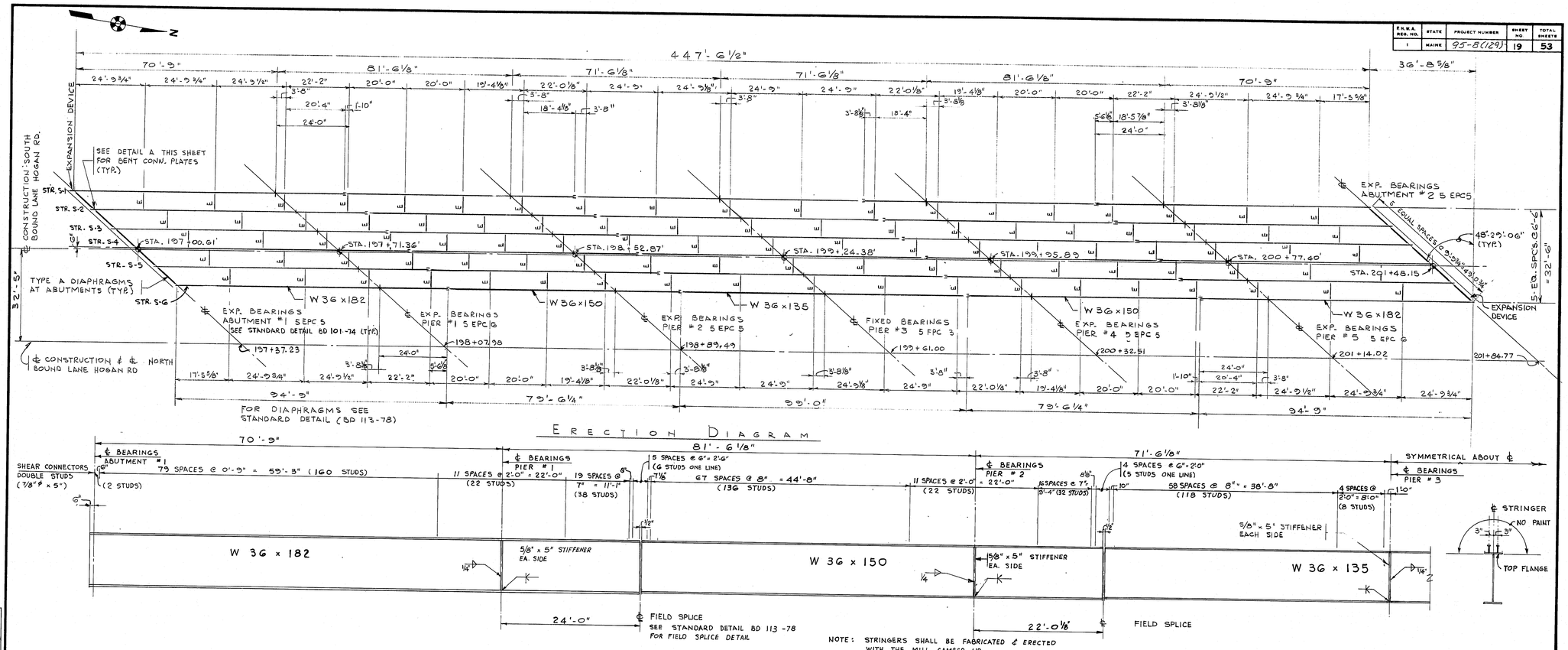
SHEET 18 OF 53 AUGUSTA, MAINE

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

JANUARY 1988

BSI-1 2000

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 19 | 53 |




## ERECTION DIAGRAM




NOTE: STRINGERS SHALL BE FABRICATED & ERECTED WITH THE MILL CAMBER UP.

## STRUCTURAL STEEL NOTES

1. BEARING STIFFENERS SHALL BE PLUMB AFTER ERECTION AND DEAD LOADING OF THE STRUCTURE.
2. CROSS FRAME OR DIAPHRAGM CONNECTION PLATES MAY BE EITHER PLUMB OR NORMAL TO THE TOP FLANGE.
3. FINAL CUTS OF WEBS AND FLANGES AT BOLTED SPLICES ARE TO BE MADE AT TIME OF SHOP ASSEMBLY, WITH ABUTTING MEMBERS IN THE EXACT RELATIVE POSITION FOR ERECTION.
4. FILLER PLATES MAY BE ASTM A36 STEEL AND MILL TESTS FOR FILLER PLATE MATERIAL WILL NOT BE REQUIRED.
5. THE BEARING SETTING CHART INDICATES THE REQUIRED FINAL POSITION OF THE BEARINGS. IT IS ANTICIPATED THAT THE BEARINGS AT ABUTMENT NUMBER 1 (AND AT ABUTMENT NUMBER 2) WILL MOVE 1/16" AWAY FROM THE FIXED BEARINGS DUE TO THE PLACEMENT OF THE SUPERSTRUCTURE CONCRETE. NO SEPARATE PAYMENT WILL BE MADE FOR RESETTING BEARINGS TO THE FINAL POSITION IF AN ADJUSTMENT IS REQUIRED.

### BASIC ALLOWABLE STRESSES

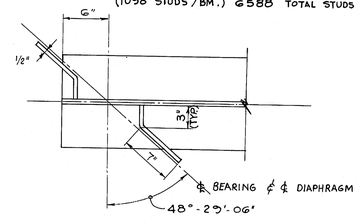
| | | |
|---|---|---|
| STRUCTURAL STEEL: | ASTM A572 GR 50 . . . . . | Fs = 27,000 PSI |
| | ASTM A36 . . . . . | Fs = 20,000 PSI |
| | ASTM A325 . . . . . | Fv = 25,000 PSI |

### MATERIALS

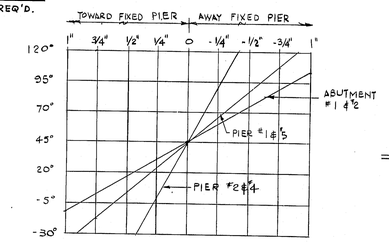
| | | |
|---|---|---|
| STRUCTURAL STEEL: | BEAMS . . . . . | ASTM A572 (GRADE 50) |
| | HIGH-STRENGTH BOLTS . . . . . | ASTM A325 |
| | ALL OTHER . . . . . | ASTM A36 |

## TYPICAL STRINGER ELEVATION

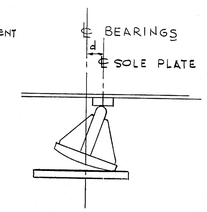
(1098 STUDS/BM.) 6588 TOTAL STUDS REQ'D.




DIAPHRAGM CONNECTION DETAIL "A"




EXPANSION PEDESTAL SETTING CHART




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

AS BUILT 1983 L.R.

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

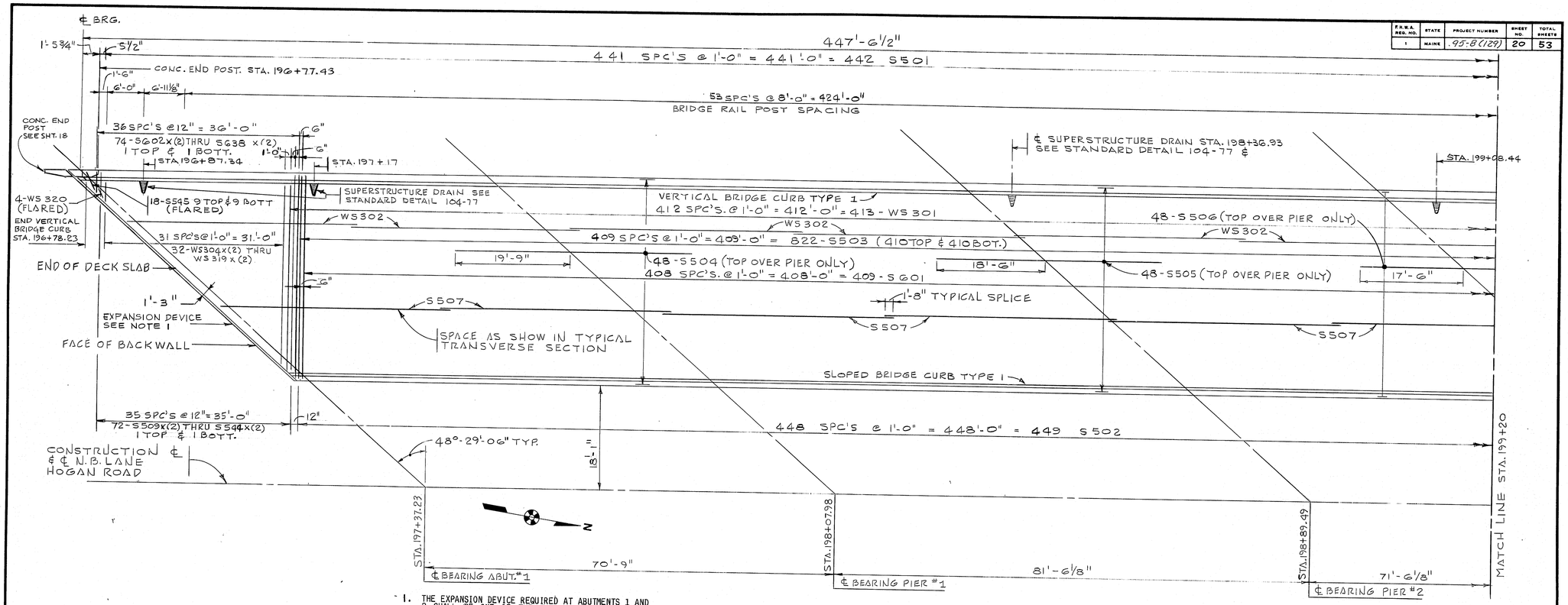
TYPICAL STRINGER ELEVATION

SHEET 19 OF 53 AUGUSTA, MAINE

R93-457

JANUARY 1988

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | .95-8(129) | 20 | 53 |




1. THE EXPANSION DEVICE REQUIRED AT ABUTMENTS 1 AND 2 SHALL BE ONE OF THE FOLLOWING: ACMA STRIP SEAL, WABO-MAURER STRIP SEAL, OR ONFLEX 45. THE EXPANSION DEVICE SHALL MEET THE REQUIREMENTS OF SPECIAL PROVISIONS SECTION 520 AND THE APPLICABLE SECTION OF 716.

PLAN

## BOTTOM OF SLAB ELEVATIONS

| LOCATION | ABUT 1 | .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | PIER 1 | .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | PIER 2 | .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | PIER 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR 1 | 111.53 | 111.72 | 111.90 | 112.07 | 112.24 | 112.40 | 112.54 | 112.68 | 112.82 | 112.95 | 113.09 | 113.27 | 113.45 | 113.62 | 113.80 | 113.96 | 114.10 | 114.24 | 114.36 | 114.49 | 114.61 | 114.74 | 114.86 | 114.99 | 115.11 | 115.22 | 115.33 | 115.43 | 115.52 | 115.61 | 115.70 |
| STR 2 | 111.84 | 112.02 | 112.20 | 112.38 | 112.54 | 112.69 | 112.84 | 112.97 | 113.11 | 113.24 | 113.38 | 113.55 | 113.73 | 113.90 | 114.07 | 114/23 | 114.37 | 114.50 | 114.63 | 114.75 | 114.87 | 114.99 | 115.11 | 115.24 | 115.36 | 115.47 | 115.57 | 115.67 | 115.76 | 115.84 | 115.93 |
| STR 3 | 112.14 | 112.33 | 112.50 | 112.67 | 112.83 | 112.99 | 113.13 | 113.26 | 113.39 | 113.52 | 113.66 | 113.83 | 114.00 | 114.18 | 114.34 | 114.50 | 114.64 | 114.77 | 114.89 | 115.00 | 115.13 | 115.24 | 115.36 | 115.49 | 115.60 | 115.71 | 115.81 | 115.91 | 115.99 | 116.08 | 116.16 |
| STR 4 | 112.45 | 112.63 | 112.80 | 112.97 | 113.13 | 113.28 | 113.42 | 113.55 | 113.68 | 113.81 | 113.94 | 114.11 | 114.28 | 114.45 | 114.61 | 114.76 | 114.90 | 115.03 | 115.15 | 115.26 | 115.38 | 115.49 | 115.61 | 115.73 | 115.85 | 115.95 | 116.05 | 116.14 | 116.23 | 116.31 | 116.39 |
| STR 5 | 112.75 | 112.93 | 113.10 | 113.26 | 113.42 | 113.57 | 113.70 | 113.84 | 113.96 | 114.09 | 114.22 | 114.38 | 114.55 | 114.72 | 114.88 | 115.03 | 115.16 | 115.29 | 115.40 | 115.51 | 115.63 | 115.74 | 115.86 | 115.97 | 116.09 | 116.19 | 116.29 | 116.37 | 116.46 | 116.54 | 116.62 |
| STR 6 | 113.05 | 113.22 | 113.39 | 113.56 | 113.71 | 113.85 | 113.99 | 114.12 | 114.24 | 114.36 | 114.49 | 114.65 | 114.82 | 114.98 | 115.14 | 115.29 | 115.42 | 115.54 | 115.66 | 115.76 | 115.88 | 115.99 | 116.10 | 116.22 | 116.32 | 116.43 | 116.52 | 116.61 | 116.69 | 116.76 | 116.84 |

| .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | PIER 4 | .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | PIER 5 | .1L | .2L | .3L | .4L | .5L | .6L | .7L | .8L | .9L | ABUTMENT 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 115.80 | 115.91 | 116.01 | 116.10 | 116.19 | 116.27 | 116.34 | 116.41 | 116.48 | 116.55 | 116.65 | 116.75 | 116.84 | 116.93 | 117.00 | 117.06 | 117.11 | 117.15 | 117.19 | 117.24 | 117.29 | 117.35 | 117.41 | 117.46 | 117.50 | 117.54 | 117.56 | 117.58 | 117.59 | 117.59 |
| 116.03 | 116.13 | 116.23 | 116.33 | 116.41 | 116.49 | 116.56 | 116.63 | 116.69 | 116.76 | 116.85 | 116.95 | 117.04 | 117.12 | 117.19 | 117.25 | 117.30 | 117.34 | 117.38 | 117.42 | 117.47 | 117.53 | 117.58 | 117.63 | 117.67 | 117.71 | 117.73 | 117.75 | 117.75 | 117.75 |
| 116.26 | 116.36 | 116.46 | 116.55 | 116.63 | 116.71 | 116.78 | 116.84 | 116.90 | 116.97 | 117.06 | 117.15 | 117.24 | 117.32 | 117.39 | 117.44 | 117.49 | 117.53 | 117.56 | 117.60 | 117.65 | 117.70 | 117.75 | 117.80 | 117.84 | 117.87 | 117.89 | 117.91 | 117.91 | 117.91 |
| 116.49 | 116.58 | 116.68 | 116.77 | 116.85 | 116.92 | 116.99 | 117.05 | 117.11 | 117.17 | 117.26 | 117.35 | 117.44 | 117.51 | 117.58 | 117.63 | 117.67 | 117.71 | 117.74 | 117.78 | 117.83 | 117.88 | 117.93 | 117.97 | 118.01 | 118.04 | 118.06 | 118.07 | 118.07 | 118.06 |
| 116.71 | 116.81 | 116.90 | 116.99 | 117.06 | 117.13 | 117.20 | 117.26 | 117.31 | 117.38 | 117.46 | 117.55 | 117.63 | 117.71 | 117.77 | 117.82 | 117.86 | 117.89 | 117.92 | 117.96 | 118.00 | 118.05 | 118.09 | 118.14 | 118.17 | 118.20 | 118.21 | 118.22 | 118.22 | 118.22 |
| 116.93 | 117.03 | 117.12 | 117.20 | 117.28 | 117.34 | 117.41 | 117.46 | 117.52 | 117.58 | 117.66 | 117.74 | 117.82 | 117.90 | 117.96 | 118.00 | 118.04 | 118.07 | 118.10 | 118.13 | 118.17 | 118.21 | 118.26 | 118.30 | 118.33 | 118.36 | 118.37 | 118.38 | 118.37 | 118.37 |

TOP OF WEB — BOTT. OF SLAB ELEV.

X DIMENSION NOT TO BE USED FOR CONSTRUCTION

X ℄ ABUT. #1 = 3"
X ℄ PIER #1 = 3⅛"
" #2 = 2⅞"
" #3 = 3¾"
" #4 = 2⅞"
" #5 = 3⅛"
X ℄ ABUT #2 = 3"

BLOCKING DETAIL

"AS BUILT" 1983 GR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
SUPERSTRUCTURE

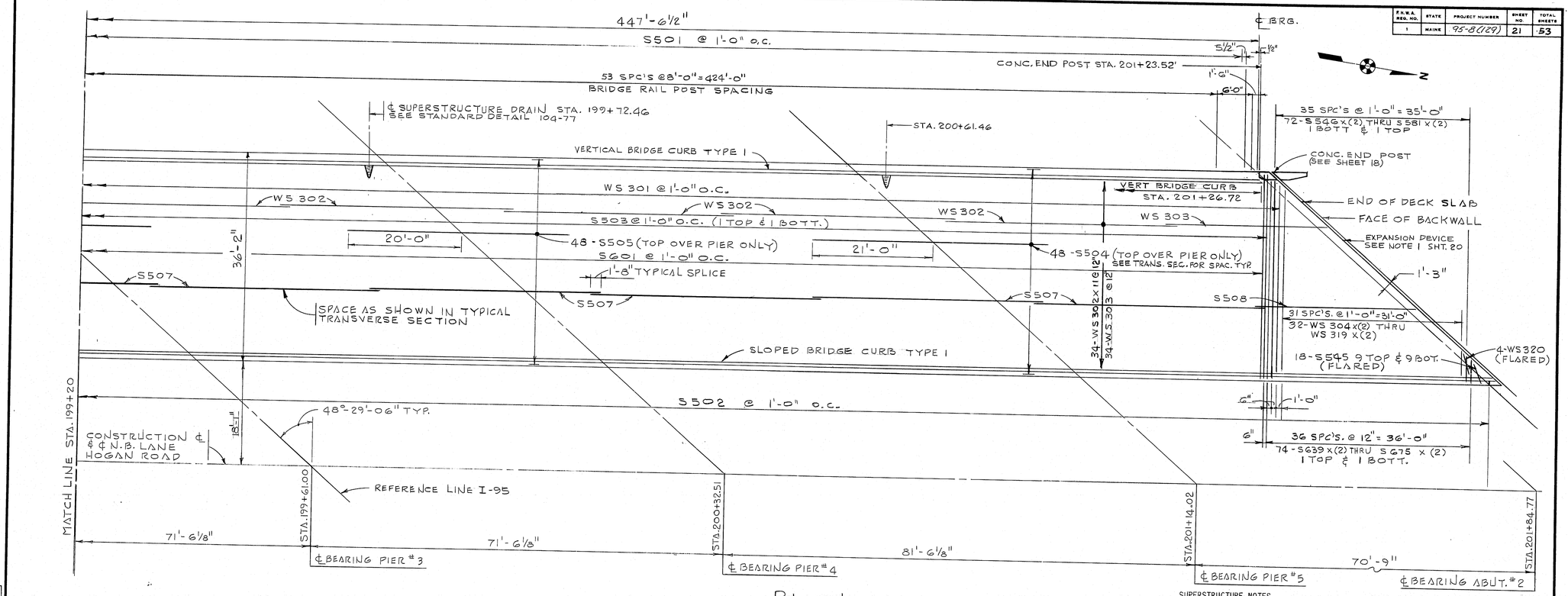
SHEET 20 OF 53 AUGUSTA, MAINE

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

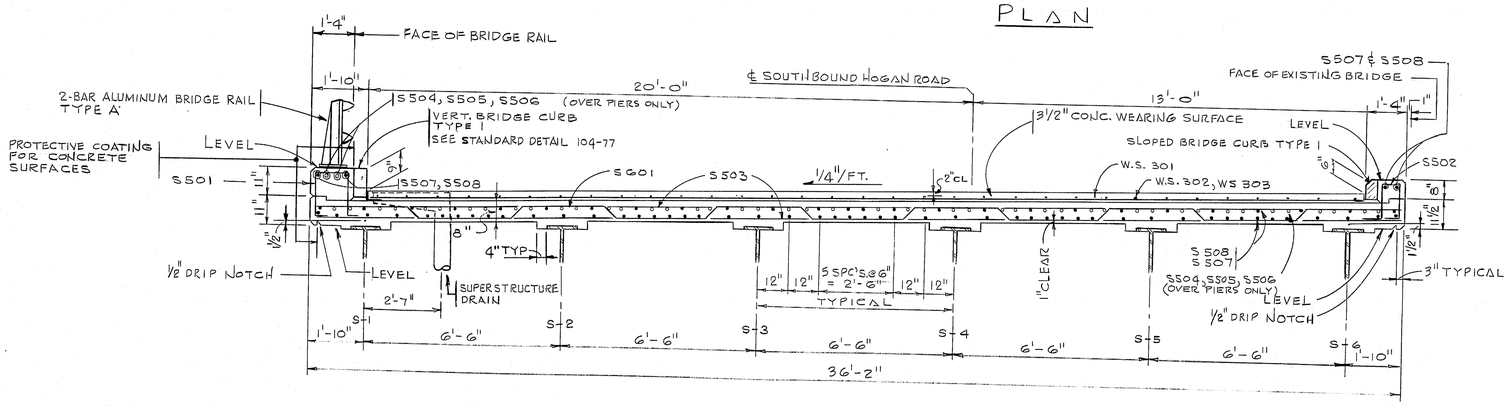
R93-458

JANUARY 1988

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 21 | 53 |




PLAN




TRANSVERSE SECTION

COST OF CONCRETE FASCIAS SHALL BE PAID FOR UNDER ITEM 502.26
COST OF CONCRETE WEARING SURFACE SHALL BE PAID FOR UNDER ITEM 502.44

SUPERSTRUCTURE NOTES

1. CHAMFER ALL EXPOSED EDGES OF CONCRETE A CONSISTENT DIMENSION BETWEEN 1/2" AND 3/4" INCLUSIVE, UNLESS OTHERWISE INDICATED.
2. FORM A 1" V-GROOVE ON THE FASCIAS AT THE HORIZONTAL JOINT BETWEEN THE CURB AND SLAB.
3. REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2", UNLESS OTHERWISE INDICATED.
4. SANDBLAST THE TOP OF THE ROADWAY SLAB AND CLEAN THOROUGHLY BEFORE PLACING STRUCTURAL CONCRETE WEARING SURFACE. PAYMENT TO BE INCIDENTAL TO THE APPLICABLE STRUCTURAL CONCRETE WEARING SURFACE PAY ITEM.
5. THE SUPERSTRUCTURE SLAB SHALL BE PLACED CONTINUOUSLY AND SHALL BE KEPT PLASTIC ONE COMPLETE SPAN BACK OF THAT BEING PLACED. APPROVED SET RETARDING ADMIXTURES SHALL BE USED WHEN AUTHORIZED BY THE ENGINEER, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
6. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO TOP OF CONCRETE CURBS, BRIDGE FASCIAS AROUND TO DRIP NOTCH, AND WEARING SURFACE.
7. MORTAR FOR BEDDING AND FOR JOINTS IN THE GRANITE CURB SHALL CONTAIN AN APPROVED NONSHRINK ADDITIVE.
8. ADJUST REINFORCING STEEL TO FIT AROUND THE DRAINS IN A MANNER APPROVED BY THE ENGINEER. DO NOT CUT TRANSVERSE REINFORCING BARS.

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY
SUPERSTRUCTURE

SHEET 21 OF 53 AUGUSTA, MAINE

R93-459

"AS BUILT" 11/93 LR

CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

JANUARY 1988

BRS-1 2000

# REINFORCING STEEL SCHEDULE

## STRAIGHT BARS

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| ABUTMENT | | | # 1 |
| AG60 | 28 | 27'-0" | FTG. |
| AG61 | 106 | 6'-9" | FTG. |
| AG62 | 12 | 18'-9" | WING WALL FTG. |
| AG63 | 2 | 6'-7" | |
| AG64 | | 6'-5" | |
| AG65 | | 6'-2" | |
| AG66 | | 6'-0" | |
| AG67 | | 5'-10" | |
| AG68 | | 5'-8" | |
| AG69 | | 5'-5" | |
| AG70 | | 5'-3" | |
| AG71 | | 5'-1" | |
| AG72 | | 4'-11" | |
| AG73 | | 4'-8" | |
| AG74 | | 4'-6" | |
| AG75 | | 4'-4" | |
| AG76 | | 4'-2" | |
| AG77 | | 3'-11" | |
| AG78 | 2 | 3'-9 | WING WALL FTG. |
| AG50 | 5 | 25'-4" | ABUTMENT PROPER |
| AG51 | 5 | 25'-4" | ABUTMENT PROPER |
| AG30 | 6 | 6'-3" | ABUTMENT PROPER |
| AG31 | 6 | 7'-1" | |
| AG32 | 10 | 5'-11" | |
| AG33 | 10 | 6'-9" | |
| AG34 | 10 | 5'-7" | |
| AG35 | 10 | 6'-5" | |
| AG36 | 10 | 5'-4" | |
| AG37 | 10 | 6'-2" | |
| AG38 | 9 | 5'-0" | |
| AG39 | 9 | 5'-10" | |
| AG40 | 7 | 4'-9" | |
| AG41 | 7 | 5'-7" | |
| AG42 | 5 | 25'-4" | |
| AG43 | 4 | 25'-4" | |
| AG44 | 50 | 6'-2" | |
| AG45 | 25 | 3'-7" | |
| AG46 | 2 | 6'-9" | |
| AG47 | 2 | 4'-2" | |
| AG48 | 25 | 5'-4" | ABUTMENT PROPER |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| A550 | 4 | 11'-2" | WING WALL |
| A551 | 1 | 10'-11" | |
| A552 | 1 | 10'-6" | |
| A553 | 1 | 10'-2" | |
| A554 | 1 | 9'-9" | |
| A555 | 1 | 9'-4" | |
| A556 | 1 | 8'-11" | |
| A557 | 1 | 8'-6" | |
| A558 | 1 | 8'-2" | |
| A559 | 1 | 7'-9" | |
| A560 | 1 | 7'-4" | |
| A561 | 1 | 6'-11 | |
| A562 | 1 | 6'-6" | |
| A563 | 10 | 11'-4" | |
| A564 | 2 | 10" | |
| A565 | 2 | 3'-4" | |
| A566 | 2 | 5'-10" | |
| A567 | 2 | 8'-5" | |
| A568 | 2 | 10'-11" | WING WALL |
| A580 | 7 | 25'-4" | ABUTMENT PROPER |
| A581 | 6 | 30'-2" | |
| A582 | 2 | 25'-4" | |
| A583 | 2 | 30'-2" | |
| A584 | 3 | 25'-4" | |
| A585 | 3 | 30'-2" | |
| A586 | 3 | 25'-4" | |
| A587 | 3 | 30'-2" | ABUTMENT PROPER |
| PIERS | | #1 THRU #5 | |
| P1110 | 16 | 29'-7" | PIER CAP |
| | X5 | APPLIES TO P1110 | |
| PG00 | 4 | 20'-4" | PIER CAP |
| PG01 | 2 | 15'-8" | PIER CAP |
| | X5 | APPLIES TO PG00 & PG01 | |
| PC1100 | 20 | 27'-2" | PIER # 3 COL. |
| PC1101 | 20 | 25'-6" | PIER # 3 COL. |
| PC1102 | 20 | 23'-10" | PIER # 3 COL. |
| PC1103 | 20 | 22'-8" | PIER #3 COL. |
| PC1104 | 20 | 17'-0" | PIER #1 COL. |
| PC1105 | 20 | 18'-6" | PIER #1 COL. |
| PC900 | 16 | 17'-5" | PIER #1 COL. |
| PC901 | 16 | 17'-9" | PIER #1 COL. |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| PC1002 | 16 | 29'-3" | PIER #2 COL. |
| PC903 | 16 | 28'-1" | PIER #2 COL. |
| PC904 | 16 | 26'-11" | PIER #2 COL. |
| PC1005 | 16 | 25'-9" | PIER #2 COL. |
| PC1006 | 16 | 26'-2" | PIER #4 COL. |
| PC907 | 16 | 25'-6" | PIER #4 COL. |
| PC908 | 16 | 24'-9" | PIER #4 COL. |
| PC1009 | 16 | 24'-7" | PIER #4 COL. |
| PC1110 | 20 | 21'-8" | PIER #5 COL. |
| PC911 | 16 | 20'-5" | PIER #5 COL. |
| PC912 | 16 | 18'-8" | PIER #5 COL. |
| PC1113 | 20 | 17'-5" | PIER #5 COL. |
| PF701 | 192 | 7'-6" | PIER # 2, 4, & 5 FTG. |
| PF702 | 96 | 9'-6" | PIER # 3 FTG. |
| PF703 | 20 | 18'-6" | PIER #1 FTG. |
| PF704 | 20 | 30'-10" | |
| PF705 | 40 | 25'-2" | PIER # 1 FTG |
| PF601 | 80 | 5'-6" | PIER # 3 FTG |
| PF602 | 288 | 7'-6" | PIER #1, #2, #4, # 5 FTG. |

## BENT BARS

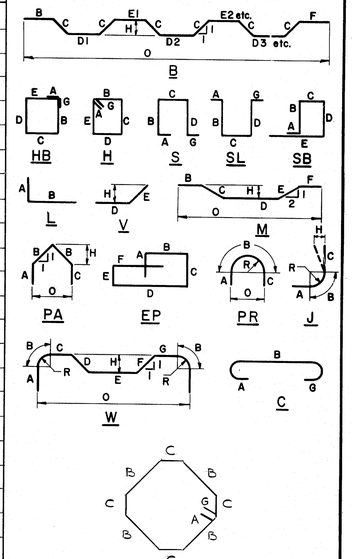
| MARK | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | O | R | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AG00 | 4 | 13'-2" | L | 12'-2" | 1'-0" | | | | | | | | | ABUTMENT #1 WING WALL |
| AG01 | 1 | 12'-9" | L | 11'-9" | | | | | | | | | | |
| AG02 | 1 | 12'-4" | L | 11'-4" | | | | | | | | | | |
| AG03 | 1 | 12'-0" | L | 11'-0" | | | | | | | | | | |
| AG04 | 1 | 11'-7" | L | 10'-7" | | | | | | | | | | |
| AG05 | 1 | 11'-2" | L | 10'-2" | | | | | | | | | | |
| AG06 | 1 | 10'-9" | L | 9'-9" | | | | | | | | | | |
| AG07 | 1 | 10'-4" | L | 9'-4" | | | | | | | | | | |
| AG08 | 1 | 10'-0" | L | 9'-0" | | | | | | | | | | |
| AG09 | 1 | 9'-7" | L | 8'-7" | | | | | | | | | | |
| AG10 | 1 | 9'-2" | L | 8'-2" | | | | | | | | | | |
| AG11 | 1 | 8'-9" | L | 7'-9" | | | | | | | | | | |
| AG12 | 1 | 8'-4" | L | 7'-4" | 1'-0" | | | | | | | | | ABUTMENT #1 WING WALL |
| A570 | 56 | 6'-7" | L | 1'-8" | 4'-11" | | | | | | | | | ABUTMENT #1 |
| A571 | 50 | 5'-10" | L | 1'-10" | 4'-0" | | | | | | | | | ABUTMENT #1 |
| A572 | 50 | 5'-8" | S | | 2'-3" | 1'-2" | 2'-3" | | | | | | | ABUTMENT #1 |
| PD1001 | 64 | 12'-6" | L | 10'-8" | 1'-10" | | | | | | | | | PIER # 2 & 4 DOWEL |
| PD1105 | 80 | 14'-5" | L | 12'-5" | 2'-0" | | | | | | | | | PIER #3 DOWEL |
| PD1120 | 40 | 14'-2" | L | 12'-2" | 2'-0" | | | | | | | | | PIER #1 DOWEL |
| PD1121 | 40 | 14'-5 | L | 12'-5" | 2'-0" | | | | | | | | | PIER # 5 DOWEL |
| PD920 | 128 | 10'-7" | L | 9'-0" | 1'-7" | | | | | | | | | COL DOWEL FOR PIER #1, #2, #4, #5 |
| P940 | 6 | 33'-8" | V | | | | 29'-4" | 4'-4" | | | 10 5/8" | | | PIER CAPS |
| P941 | 6 | 20'-4" | V | | | | 16'-0" | 4'-4" | | | 10 5/8" | | | PIER CAPS |
| | X5 | APPLIES TO P940 & P941 (PIER CAP) | | | | | | | | | | | | |
| P401 | 4 | 9'-9" | H | 6" | 1'-11" | 2'-5½" | 1'-11" | 2'-5½" | | 6" | | | | PIER CAP |
| P402 | 4 | 10'-1" | H | 6" | 1'-11" | 2'-7½" | 1'-11" | 2'-7½" | | 6" | | | | |
| P403 | 4 | 10'-5" | H | 6" | 1'-11" | 2'-9½" | 1'-11" | 2'-9½" | | 6" | | | | |
| P404 | 4 | 10'-9" | H | 6" | 1'-11" | 2'-11½" | 1'-11" | 2'-11½" | | 6" | | | | |
| P405 | 4 | 11'-1" | H | 6" | 1'-11" | 3'-1½" | 1'-11" | 3'-1½" | | 6" | | | | |
| P406 | 74 | 11'-2" | H | 6" | 1'-11" | 3'-2" | 1'-11" | 3'-2" | | 6" | | | | PIER CAP |
| | X5 | APPLIES TO P501 THRU P506 (PIER CAP) | | | | | | | | | | | | |
| PC410 | 414 | 11'-0" | H | 6" | 2'-6" | 2'-6" | 2'-6" | 2'-6" | | 6" | | | | COL. TIES FOR PIER #1, 2, 3, 4, 5 |
| PC411 | 259 | 8'-6" | H | 6" | 1'-10" | 1'-10" | 1'-10" | 1'-10" | | 6" | | | | COL. TIES FOR PIER #1, 2, 3, 4, 5 |
| PC415 | 155 | 8'-10" | R | 6" | 1'-3½" | 0'-8" | | | | 6 | | | | COL. TIES FOR PIER #1, 3, 5 |

| MARK | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | O | R | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

R93-460

| FHWA REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(189) | 22 | 53 |

## TYPE-BENDING DIAGRAMS




All dimensions are out to out of reinf. bar.

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

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. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

"AS BUILT" 1983 I.R


CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HOGAN ROAD BRIDGE
OVER
INTERSTATE 95
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY

REINFORCING STEEL SCHEDULE

SHEET 22 OF 53 AUGUSTA, MAINE

PLANS — DESIGN - DETAIL — CHECKED — REVISIONS — FIELD CHANGES — BY — DATE

# REINFORCING STEEL SCHEDULE

## STRAIGHT BARS

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| ABUTMENT # 2 | | | |
| AG130 | 28 | 28'-3" | FTG. |
| AG131 | 110 | 6'-3" | FTG. |
| AG135 | 12 | 20'-3" | WING WALL FTG. |
| AG140 | 2 | 3'-10" | WING WALL FTG. |
| AG141 | | 4'-0" | |
| AG142 | | 4'-2" | |
| AG143 | | 4'-4" | |
| AG144 | | 4'-6" | |
| AG145 | | 4'-8" | |
| AG146 | | 4'-10" | |
| AG147 | | 5'-0" | |
| AG148 | | 5'-2" | |
| AG149 | | 5'-4" | |
| AG150 | | 5'-6" | |
| AG151 | | 5'-8" | |
| AG152 | | 5'-10 | |
| AG153 | | 6'-0" | |
| AG154 | | 6'-2" | |
| AG155 | | 6'-4" | |
| AG156 | | 6'-6" | |
| AG157 | 2 | 6'-8" | WING WALL FTG. |
| A5130 | 8 | 16'-8" | WING WALL |
| A5131 | 2 | 15'-0" | |
| A5132 | 2 | 12'-6" | |
| A5133 | 2 | 9'-11" | |
| A5134 | 2 | 7'-4" | |
| A5135 | 2 | 4'-9 | |
| A5136 | 2 | 2'-2" | WING WALL |
| A5140 | 1 | 5'-2" | WING WALL |
| A5141 | 1 | 5'-7" | |
| A5142 | 1 | 6'-0" | |
| A5143 | 1 | 6'-4" | |
| A5144 | 1 | 6'-9" | |
| A5145 | 1 | 7'-2" | |
| A5146 | 1 | 7'-6" | |
| A5147 | 1 | 7'-11" | |
| A5148 | 1 | 8'-4" | |
| A5149 | 1 | 8'-8" | |
| A5150 | 1 | 9'-1" | WING WALL |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| A5151 | 1 | 9'-6" | WING WALL |
| A5152 | 1 | 9'-10" | |
| A5153 | 1 | 10'-3" | |
| A5154 | 1 | 10'-8" | |
| A5155 | 1 | 11'-0" | |
| A5156 | 1 | 11'-5" | |
| A5157 | 1 | 11'-8" | WING WALL |
| A5160 | 7 | 5'-1" | ABUTMENT PROPER |
| A5161 | 7 | 5'-11" | |
| A5162 | 9 | 5'-3" | |
| A5163 | 9 | 6'-1" | |
| A5164 | 10 | 5'-5" | |
| A5165 | 10 | 6'-3" | |
| A5166 | 10 | 5'-7" | |
| A5167 | 10 | 6'-5" | |
| A5168 | 10 | 5'-8" | |
| A5169 | 10 | 6'-6" | |
| A5170 | 9 | 5'-10" | |
| A5171 | 9 | 6'-8" | ABUTMENT PROPER |
| A5175 | 4 | 25'-7" | ABUTMENT PROPER |
| A5176 | 5 | 25'-7" | |
| A5177 | 5 | 27'-9" | |
| A5178 | 5 | 27'-9" | ABUTMENT PROPER |
| A5181 | 51 | 5'-11" | ABUTMENT PROPER |
| A5182 | 51 | 4'-7" | |
| A5183 | 2 | 7'-0" | |
| A5184 | 2 | 5'-8" | |
| A5185 | 2 | 6'-8" | |
| A5186 | 2 | 5'-4" | ABUTMENT PROPER |
| A5193 | 6 | 26'-6" | ABUTMENT PROPER |
| A5194 | 6 | 27'-9" | |
| A5195 | 2 | 27'-9" | |
| A5196 | 2 | 26'-6" | |
| A5197 | 5 | 26'-6" | |
| A5198 | 5 | 27'-9" | |
| A5199 | 3 | 26'-6" | |
| A5200 | 3 | 27'-9" | ABUTMENT PROPER |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| AP600 | 128 | 15'-0" | APPROACH SLABS |
| AP400 | 44 | 24'-10" | APPROACH SLABS |
| SUPERSTRUCTURE | | | |
| S602 | 2 | 35'-5" | SLAB |
| S603 | | 34'-7" | |
| S604 | | 33'-8" | |
| S605 | | 32'-10" | |
| S606 | | 31'-11" | |
| S607 | | 31'-1" | |
| S608 | | 30'-2" | |
| S609 | | 29'-3" | |
| S610 | | 28'-4" | |
| S611 | | 27'-6" | |
| S612 | | 26'-7" | |
| S613 | | 25'-9" | |
| S614 | | 24'-10" | |
| S615 | | 24'-0" | |
| S616 | | 23'-1" | |
| S617 | | 22'-2" | |
| S618 | | 21'-3" | |
| S619 | | 20'-5" | |
| S620 | | 19'-6" | |
| S621 | | 18'-8" | |
| S622 | | 17'-9" | |
| S623 | | 16'-10" | |
| S624 | | 15'-11" | |
| S625 | | 15'-1" | |
| S626 | | 14'-2" | |
| S627 | | 13'-4" | |
| S628 | | 12'-5" | |
| S629 | | 11'-6" | |
| S630 | | 10'-7" | |
| S631 | | 9'-9" | |
| S632 | | 8'-10" | |
| S633 | | 8'-0" | |
| S634 | | 7'-1" | |
| S635 | | 6'-3" | |
| S636 | | 5'-4" | |
| S637 | | 4'-5" | |
| S638 | | 3'-6" | |
| S639 | | 35'-8" | |
| S640 | | 34'-10" | |
| S641 | | 33'-11" | |
| S642 | | 33'-1" | |
| S643 | | 32'-2" | |
| S644 | | 31'-4" | |
| S645 | | 30'-5" | |
| S646 | 2 | 29'-6" | SLAB |

## BENT BARS

| MARK | NO. | LENGTH | TYPE | A | B | C' | D | E | F | G | H | O | R | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AG100 | 1 | 7'-0" | L | 6'-0 | 1'-0" | | | | | | | | | ABUTMENT # 2 WING WALL |
| AG101 | 1 | 7'-5" | L | 6'-5 | | | | | | | | | | |
| AG102 | 1 | 7'-11" | L | 6'-11" | | | | | | | | | | |
| AG103 | 1 | 8'-2" | L | 7'-2" | | | | | | | | | | |
| AG104 | 1 | 8'-7" | L | 7'-7" | | | | | | | | | | |
| AG105 | 1 | 9'-0" | L | 8'-0" | | | | | | | | | | |
| AG106 | 1 | 9'-4" | L | 8'-4" | | | | | | | | | | |
| AG107 | 1 | 9'-9" | L | 8'-9" | | | | | | | | | | |
| AG108 | 1 | 10'-2" | L | 9'-2" | | | | | | | | | | |
| AG109 | 1 | 10'-6" | L | 9'-6" | | | | | | | | | | |
| AG110 | 1 | 10'-11" | L | 9'-11" | | | | | | | | | | |
| AG111 | 1 | 11'-4" | L | 10'-4" | | | | | | | | | | |
| AG112 | 1 | 11'-8" | L | 10'-8" | | | | | | | | | | |
| AG113 | 1 | 12'-1" | L | 11'-1" | | | | | | | | | | |
| AG114 | 1 | 12'-6" | L | 11'-6" | | | | | | | | | | |
| AG115 | 1 | 12'-10" | L | 11'-10" | | | | | | | | | | |
| AG116 | 1 | 13'-3" | L | 12'-3" | | | | | | | | | | |
| AG117 | 1 | 13'-6" | L | 12'-6" | 1'-0" | | | | | | | | | ABUTMENT #2 WING WALL |
| A5190 | 51 | 5'-2" | S | | 2'-0" | 1'-2" | 2'-0" | | | | | | | ABUTMENT PROPER |
| A5191 | 55 | 5'-2" | L | 1'-0" | 4'-2" | | | | | | | | | ↓ |
| A5192 | 55 | 5'-2" | L | 1'-8" | 3'-6" | | | | | | | | | ABUTMENT PROPER |
| S601 | 409 | 37'-6" | B | | 3'-0" | 7" | 3'-0" | 2'-8" | 3'-0" | | 5" | 35'-10" | | SUPERSTRUCTURE |
| S501 | 442 | 5'-1" | S | 6" | 1'-6" | 1'-1" | 1'-6" | | | 6" | | | | SUPERSTRUCTURE |
| S502 | 449 | 3'-11" | S | 6" | 1'-2" | 7" | 1'-2" | | | 6" | | | | SUPERSTRUCTURE |
| S554 | 450 | 3'-2" | S | | 1'-4" | 1'-0" | 10" | | | | | | | EXIST. SUPERSTRUCTURE |
| S555 | 450 | 6'-3" | S | | 1'-0" | 7" | 1'-5" | | | | | | | EXIST. SUPERSTRUCTURE |
| MARK | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | O | R | LOCATION |

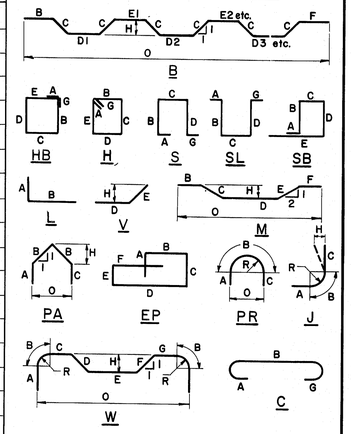
R93-461

| DATE | BY | |
|---|---|---|
| | | DESIGN - DETAIL |
| | | CHECKED |
| | | REVISIONS |
| | | FIELD CHANGES |

PLANS

| FHWA REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 23 | 53 |

## TYPE-BENDING DIAGRAMS




All dimensions are out to out of reinf. bar

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

## GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 603) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

"AS BUILT" 1983 LR


CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

HOGAN ROAD BRIDGE
OVER
INTERSTATE 95
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY

REINFORCING STEEL SCHEDULE

SHEET 23 OF 53 AUGUSTA, MAINE

# REINFORCING STEEL SCHEDULE

## STRAIGHT BARS

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| SUPERSTRUCTURE | | | |
| S647 | 2 | 28'-7" | SLAB |
| S648 | ↑ | 27'-9" | ↑ |
| S649 | | 26'-10" | |
| S650 | | 26'-0" | |
| S651 | | 25'-1" | |
| S652 | | 24'-3" | |
| S653 | | 23'-4" | |
| S654 | | 22'-5" | |
| S655 | | 21'-6" | |
| S656 | | 20'-8" | |
| S657 | | 19'-9" | |
| S658 | | 18'-11" | |
| S659 | | 18'-0" | |
| S660 | | 17'-1" | |
| S661 | | 16'-2" | |
| S662 | | 15'-4" | |
| S663 | | 14'-5" | |
| S664 | | 13'-7" | |
| S665 | | 12'-8" | |
| S666 | | 11'-9" | |
| S667 | | 10'-10" | |
| S668 | | 10'-0" | |
| S669 | | 9'-1" | |
| S670 | | 8'-3" | |
| S671 | | 7'-4" | |
| S672 | | 6'-6" | |
| S673 | | 5'-7" | |
| S674 | ↓ | 4'-8" | ↓ |
| S675 | 2 | 3'-9" | SLAB |
| | | | |
| | | | |
| | | | |
| S503 | 820 | 35'-10" | SLAB |
| S504 | 96 | 40'-9" | ↕ |
| S505 | 96 | 38'-6" | |
| S506 | 48 | 35'-0" | |
| S507 | 880 | 40'-0" | |
| S508 | 80 | 27'-7" | |
| S509 | 2 | 35'-0" | |
| S510 | ↕ | 34'-2" | |
| S511 | | 33'-3" | |
| S512 | | 32'-5" | |
| S513 | | 31'-6" | |
| S514 | | 30'-7" | |
| S515 | | 29'-9" | |
| S516 | ↓ | 28'-10" | ↓ |
| S517 | 2 | 27'-11" | SLAB |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| S518 | 2 | 27'-1" | SLAB |
| S519 | ↑ | 26'-2" | ↑ |
| S520 | | 25'-4" | |
| S521 | | 24'-5" | |
| S522 | | 23'-7" | |
| S523 | | 22'-8" | |
| S524 | | 21'-9" | |
| S525 | | 21'-10" | |
| S526 | | 20'-0" | |
| S527 | | 19'-1" | |
| S528 | | 18'-3" | |
| S529 | | 17'-4" | |
| S530 | | 16'-5" | |
| S531 | | 15'-6" | |
| S532 | | 14'-8" | |
| S533 | | 13'-9" | |
| S534 | | 12'-11" | |
| S535 | | 12'-0" | |
| S536 | | 11'-1" | |
| S537 | | 10'-2" | |
| S538 | | 9'-4" | |
| S539 | | 8'-5" | |
| S540 | | 7'-7" | |
| S541 | | 6'-8" | |
| S542 | | 5'-10" | |
| S543 | ↓ | 4'-11" | ↓ |
| S544 | 2 | 4'-0" | |
| S545 | 36 | 4'-0" | |
| S546 | 2 | 35'-3" | |
| S547 | ↑ | 34'-5" | |
| S548 | | 33'-6" | |
| S549 | | 32'-8" | |
| S550 | | 31'-9" | |
| S551 | | 30'-11" | |
| S552 | | 30'-0" | ↕ |
| S553 | | 29'-1" | |
| S554 | | 28'-2" | |
| S555 | | 27'-4" | |
| S556 | | 26'-5" | |
| S557 | | 25'-7" | |
| S558 | | 24'-8" | |
| S559 | | 23'-10" | |
| S560 | | 22'-11" | |
| S561 | | 22'-0" | |
| S562 | | 21'-1" | |
| S563 | | 20'-3" | |
| S564 | | 19'-4" | |
| S565 | ↓ | 18'-6" | ↓ |
| S566 | 2 | 17'-7" | SLAB |

| MARK | NO. | LENGTH | LOCATION |
|---|---|---|---|
| S567 | 2 | 16'-8" | SLAB |
| S568 | ↑ | 15'-9" | ↑ |
| S569 | | 14'-11" | |
| S570 | | 14'-0" | |
| S571 | | 13'-2" | |
| S572 | | 12'-5" | |
| S573 | | 11'-4" | |
| S574 | | 10'-5" | |
| S575 | | 9'-7" | |
| S576 | | 8'-8" | |
| S577 | | 7'-10" | |
| S578 | | 6'-11" | |
| S579 | | 6'-1" | |
| S580 | ↓ | 5'-2" | ↓ |
| S581 | 2 | 4'-3" | SLAB |
| | | | |
| | | | |
| WS301 | 413 | 32'-8" | WEARING SURFACE |
| WS302 | 374 | 40'-0" | ↕ |
| WS303 | 34 | 27'-7" | |
| WS304 | 4 | 30'-9" | |
| WS305 | ↑ | 29'-0" | |
| WS306 | | 27'-3" | |
| WS307 | | 25'-5" | |
| WS308 | | 23'-8" | |
| WS309 | | 21'-10" | |
| WS310 | | 20'-1" | |
| WS311 | | 18'-4" | |
| WS312 | | 16'-6" | |
| WS313 | | 14'-9" | |
| WS314 | | 13'-0" | |
| WS315 | | 11'-2" | |
| WS316 | | 9'-5" | |
| WS317 | | 7'-8" | |
| WS318 | | 6'-10" | |
| WS319 | ↓ | 4'-1" | ↓ |
| WS320 | 8 | 4'-0" | WEARING SURACE |
| | | | |
| WS324 | 450 | 44'-4" | WEARING SURFACE EXIST. |
| WS325 | 180 | 40'-0" | ↕ |
| WS326 | 60 | 33'-9" | |
| WS327 | 60 | 42'-9" | |
| WS328 | 60 | 32'-9" | WEARING SURFACE EXIST. |
| | | | |
| S590 | 42 | 40'-0" | EXIST. SUPERTRUCTURE |
| S591 | 14 | 38'-9" | ↕ |
| S592 | 14 | 42'-9" | |
| S593 | 14 | 32'-9" | EXIST. SUPERSTRUCTURE |

## BENT BARS

| MARK | NO. | LENGTH | TYPE | A | B | C' | D | E | F | G | H | O | R | LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EP500 | 4 | 7'-4" | H | 6" | 6" | 2'-8" | 6" | 2'-8" | | 6" | | | | CONC. END POST ABUT. # 1 |
| EP501 | 1 | 7'-8" | H | 6" | 8" | 2'-8" | 8" | 2'-8" | | 6" | | | | ↕ |
| EP502 | 4 | 4'-9¼" | S | | 2'-6" | 7¼" | 1'-8" | | | | | | | |
| EP503 | 1 | 5'-2" | S | | 2'-1" | 1'-0" | 2'-1" | | | | | | | |
| EP504 | 4 | 2'-0" | V | | | 6" | 5" | 1'-1" | | | 8" | | | |
| EP505 | 1 | 7'-7" | H | 6" | 7½" | 2'-8" | 7½" | 2'-8" | | 6" | | | | ↓ |
| EP506 | 1 | 4'-5" | S | | 1'-6" | 1'-5" | 1'-6" | | | | | | | CONC. END POST ABUT. # 1 |
| | | | | | | | | | | | | | | |
| EP701 | 3 | 4'-5" | V | | | | 2'-4" | 2'-1" | | | 5 3/4" | | | CONC. END POST ABUT. # 1 |
| EP702 | 4 | 4'-5" | V | | | | 2'-4 | 2'-1" | | | * FIELD BEND AS REQ'D | | | ↕ |
| EP403 | 2 | 4'-1½" | S | | 1'-9" | 7½" | 1'-9" | | | | | | | |
| EP410 | 2 | 3'-10½" | S | | 1'-8" | 6½" | 1'-8" | | | | | | | CONC. END POST ABUT. # 1 |
| | | | | | | | | | | | | | | |
| EP510 | 2 | 7'-7" | H | 6" | 7½" | 2'-8" | 7½" | 2'-8" | | 6" | | | | CONC. END POST ABUT. # 2 |
| EP511 | 1 | 3'-1 | S | | 1'-1" | 11" | 1'-1" | | | | | | | ↕ |
| EP512 | 4 | 2'-11" | V | | | 6" | 11" | 1'-6" | | 12¼" | | | | |
| EP513 | 2 | 6'-6" | S | 1'-0" | 2'-7" | 1'-5" | 1'-6" | | | | | | | |
| EP514 | 4 | 1'-11" | L | 6 | 1'-5" | | | | | | | | | |
| EP515 | 4 | 3'-9 | S | | | 1'-3" | 7" | 1'-11" | | | | | | |
| EP516 | 2 | 7'-8" | H | 6" | 6" | 2'-8" | 6" | 2'-8" | | 6" | | | | |
| EP517 | 1 | 8'-2" | H | 6" | 11" | 2'-8" | 11" | 2'-8" | | 6" | | | | CONC. END POST ABUT. # 2 |
| | | | | | | | | | | | | | | |
| EP705 | 3 | 5'-6" | V | | | | 3'-5" | 2'-1" | | | 5 3/4" | | | CONC. END POST ABUT. # 2 |
| EP707 | 4 | 5'-6 | V | | | | 3'-5" | 2'-1" | | | * FIELD BEND AS REQ'D | | | ↕ |
| EP432 | 2 | 3'-10½ | S | | 1'-8" | 6½" | 1'-8" | | | | | | | |
| EP433 | 2 | 4'-1½" | S | | 1'-9" | 7½" | 1'-9 | | | | | | | |
| EP434 | 4 | 4'-5½" | S | | 1'-11" | 7½" | 1'-11" | | | | | | | CONC. END POST ABUT. # 2 |
| | | | | | | | | | | | | | | |
| STRAIGHT BARS | | | | | | | | | | | | | | |
| EP700 | 3 | 3'-5½" | | | | | | | | | | | | CONC. END POST ABUT. # 1 |
| EP706 | 3 | 6'-4" | | | | | | | | | | | | CONC. END POST ABUT. # 2 |
| | | | | | | | | | | | | | | |
| EP507 | 2 | 1'-8½" | | | | | | | | | | | | CONC. END POST ABUT. # 1 |
| EP509 | 1 | 1'-8½" | | | | | | | | | | | | CONC. END POST ABUT. # 2 |
| | | | | | | | | | | | | | | |
| EP401 | 4 | 1'-6" | | | | | | | | | | | | CONC. END POST ABUT. # 1 |
| EP402 | 2 | 1'-3" | | | | | | | | | | | | ↕ |
| EP403 | 2 | 1'-5" | | | | | | | | | | | | |
| EP404 | 2 | 1'-6½ | | | | | | | | | | | | CONC. END POST ABUT. # 1 |
| | | | | | | | | | | | | | | |
| EP420 | 2 | 1'-6" | | | | | | | | | | | | CONC. END POST ABUT. # 2 |
| EP421 | 2 | 1'-3" | | | | | | | | | | | | ↕ |
| EP422 | 2 | 1'-5" | | | | | | | | | | | | |
| EP423 | 2 | 1'-6½" | | | | | | | | | | | | CONC. END POST ABUT. # 2 |
| | | | | | | | | | | | | | | |
| MARK | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | O | R | LOCATION |

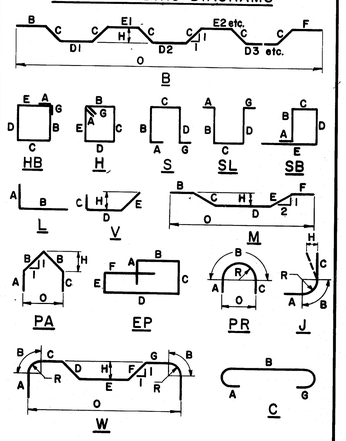
R93-462

| DATE | BY | DESIGN - DETAIL / CHECKED / REVISIONS / FIELD CHANGES |
|---|---|---|
| | | |

PLANS

| FHWA REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 24 | 53 |

## TYPE-BENDING DIAGRAMS




All dimensions are out to out of reinf. bar.

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

## GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 603) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

"AS BUILT" 1983 C.R.


CARROLL E. TAYLOR & ASSOCIATES
CONSULTING ENGINEERS
410 SUMMER STREET
AUBURN MAINE

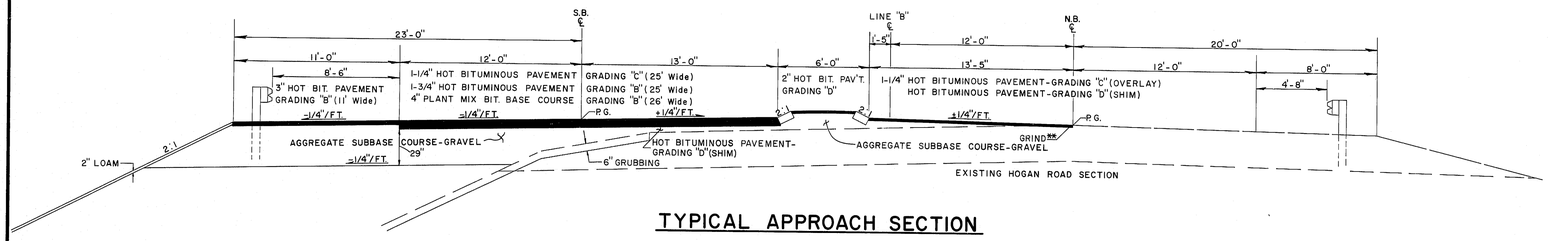

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# HOGAN ROAD BRIDGE
OVER
# INTERSTATE 95
IN THE CITY OF
# BANGOR
# PENOBSCOT COUNTY

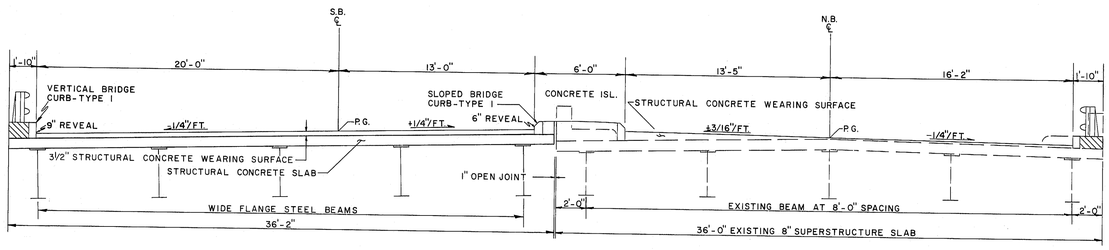
REINFORCING STEEL SCHEDULE

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 25 | 53 |

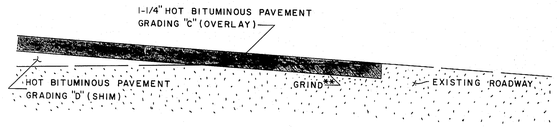
# 1-1/4" & 3" HOT BITUMINOUS PAVEMENT*

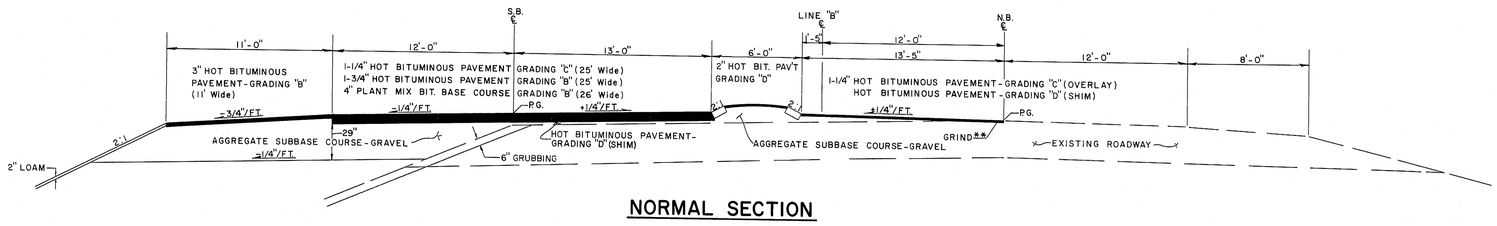



## TYPICAL APPROACH SECTION




## TYPICAL BRIDGE SECTION




## NORMAL SECTION

*THE PAVEMENT AND BASE DEPTH AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.

**REMOVE PAVEMENT SURFACE WITH PLANING MACHINE OR GRINDER TO MAXIMUM DEPTH OF 1-1/4" OR AS DIRECTED BY THE ENGINEER AND THEN OVERLAY WITH HOT BITUMINOUS PAVEMENT.

"AS BUILT" 1983 LR

| PROJECT DESIGN ENGINEER | | BY | DATE |
|---|---|---|---|
| PLANS | DESIGN - DETAILED | W.O.P. | 12-82 |
| | CHECKED | W.S.M. | 12-82 |
| | REVISIONS | | |
| | FIELD CHANGES | | |

BRUNING 44-132-45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SHEET 5 OF 53 AUGUSTA, MAINE

R93-463

BANGOR HOGAN ROAD

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 26 | 53 |

| CURVE NUMBER | COGO NUMBER | Δ | D | T | L | R | E | P.I. STA. | P.I. OFFSET | P.C. STA. | P.C. OFFSET | P.T. STA. | P.T. OFFSET | CENTER OF CURVE STA. | CENTER OF CURVE OFFSET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 102 | 2°-12'-15" Lt | 0°-30'-00" | 220.44 | 440.83 | 11459.16 | 2.12 | 191+00.00 | 0.0 | 189+79.78 | 8.95 Lt | 193+20.44 | 0.0 | 193+20.44 | 11459.16 Lt | Survey Center Line - Hogan Road |
| 2 | 106 | 2°-36'-43.7" Lt | 0°-30'-00" | 261.26 | 522.43 | 11459.16 | 2.98 | 189+00.10 | 9.71 Lt | 186+39.03 | 12.75 Lt | 191+61.35 | 9.58 Lt | 190+79.45 | 11468.94 Lt | Line "B" |
| 3 | 107 | 0°-24'-34.3" Rt | 0°-10'-00" | 122.86 | 245.71 | 34377.47 | 0.22 | 195+00.00 | 12.00 Lt | 193+77.15 | 11.12 Lt | 196+22.86 | 12.00 Lt | 196+22.86 | 34365.47 Rt | Line "B" |
| 4 | 304 | 3°-05'-33.7" Lt | 2°-45'-57.0" | 55.92 | 111.81 | 2071.37 | 0.75 | 193+44.10 | 22.80 Lt | 192+88.27 | 22.49 Lt | 194+00.00 | 26.30 Lt | 192+73.97 | 2093.80 Lt | Southbound Center Line |
| 5 | 305 | 3°-30'-07.0" Rt | 1°-45'-00.1" | 100.00 | 200.12 | 3273.99 | 1.53 | 194+09.91 | 32.42 Lt | 194+00.00 | 26.30 Lt | 196+00.00 | 32.42 Lt | 196+00.00 | 3241.57 Rt | Southbound Center Line |
| 6 | 332 | 2°-37'-03.8" Lt | 1°-18'-01.8" | 100.66 | 201.28 | 4405.64 | 1.15 | 206+00.66 | 32.42 Lt | 205+00.00 | 32.42 Lt | 207+01.22 | 37.01 Lt | 205+00.00 | 4438.06 Lt | Southbound Center Line |
| 7 | 333 | 2°-37'-03.4" Rt | 1°-30'-00" | 87.27 | 174.52 | 3819.77 | 1.00 | 207+85.40 | 41.00 Lt | 207+01.28 | 37.01 Lt | 208+75.47 | 41.00 Lt | 208+75.47 | 3778.77 Rt | Southbound Center Line |
| 8 | 157 | 44°-05'-34" Lt | 11°-27'-33" | 202.48 | 384.78 | 500.00 | 39.44 | 193+93.99 | 5.91 Rt | 193+20.34 | 182.70 Lt | 195+78.13 | 90.13 Rt | 197+84.00 | 368.56 Lt | Ramp C & D Control Edge |
| 9 | 261 | 32°-03'-32" Rt | 5°-43'-46.5" | 287.30 | 559.53 | 1000.00 | 40.45 | 205+18.28 | 28.22 Lt | 202+62.73 | 159.50 Lt | 208+45.18 | 218.69 Rt | 199+05.77 | 729.98 Rt | Ramp A & B Control Edge |
| 10 | 73-00 | 146°-30'-52.2" Lt | 2864°-47'-20.3" | 6.72 | 5.13 | 2.00 | 5.01 | 192+84.59 | 37.50 Lt | 192+91.91 | 41.61 Lt | 192+03.29 | 38.04 Lt | 192+88.13 | 40.03 Lt | Ramp C - Island |
| 11 | 70-00 | 124°-23'-20.4" Lt | 2864°-47'-20.3" | 3.70 | 4.34 | 2.00 | 2.20 | 193+00.85 | 46.31 Lt | 193+04.07 | 46.01 Lt | 193+05.47 | 40.26 Lt | 193+03.92 | 48.00 Lt | Ramp C - Island |
| 12 | 86-00 | 146°-17'-36.5" Rt | 2864°-47'-20.3" | 16.64 | 5.80 | 2.00 | 14.76 | 194+33.45 | 20.00 Rt | 194+49.61 | 23.94 Rt | 194+50.00 | 20.00 Rt | 194+50.00 | 22.00 Rt | Ramp D - Island |
| 13 | 84-00 | 86°-55'-40.2" Rt | 1145°-54'-56.1" | 4.79 | 9.50 | 5.00 | 1.89 | 194+01.42 | 22.00 Rt | 194+96.68 | 20.00 Rt | 194+01.68 | 24.73 Rt | 194+86.68 | 25.00 Rt | Ramp D - Island |
| 14 | 65-00 | 5°-46'-40.8" Lt | 81°-51'-04" | 3.53 | 7.06 | 70.00 | 0.09 | 194+01.87 | 28.26 Rt | 194+91.68 | 24.73 Rt | 194+92.91 | 31.75 Rt | 195+61.58 | 20.98 Rt | Ramp D - Island |
| 15 | 85-00 | 117°-02'-51" Rt | 1900°-51'-33.5" | 4.90 | 6.13 | 3.00 | 2.75 | 194+93.16 | 36.50 Rt | 194+92.41 | 31.75 Rt | 194+88.51 | 35.06 Rt | 194+80.44 | 32.21 Rt | Ramp D - Island |
| 16 | 150-00 | 4°-20'-34.7" Lt | 11°-06'-13.8" | 20.24 | 40.46 | 516.00 | 0.40 | 194+80.28 | 26.78 Rt | 194+89.51 | 35.06 Rt | 194+49.61 | 23.94 Rt | 193+27.34 | 525.25 Rt | Ramp D - Island |
| 17 | 65-00 | 78°-24'-03.3" Lt | 143°-14'-22" | 32.62 | 54.73 | 40.00 | 11.62 | 195+15.27 | 43.79 Rt | 195+62.60 | 12.00 Rt | 195+44.94 | 57.36 Rt | 195+61.58 | 20.98 Rt | Ramp D - Left Edge of Pavement |
| 18 | 150-00 | 24°-50'-15.3" Rt | 11°-27'-33" | 110.79 | 218.06 | 500.00 | 12.13 | 194+34.56 | 24.47 Rt | 193+23.77 | 25.26 Rt | 195+35.31 | 70.55 Rt | 193+27.34 | 525.25 Rt | Ramp D - Right Edge of Pavement |
| 19 | 130-00 | 177°-52'-41.5" Lt | 2864°-47'-20.3" | —— | 6.21 | 2.00 | —— | —— | —— | 195+41.93 | 17.42 Lt | 195+42.00 | 13.42 Lt | 195+42.00 | 15.42 Lt | Median Island |
| 20 | 131-00 | 2°-07'-18.6" Lt | 1°-57'-46.3" | 54.06 | 108.10 | 2919.00 | 0.50 | 195+85.94 | 19.42 Lt | 196+50.00 | 19.42 Lt | 195+41.93 | 17.42 Lt | 194+10.00 | 2899.58 Rt | Median Island |
| 21 | 132-00 | 180°-00'-00" Lt | 1900°-51'-33.5" | 9.42 | 3.00 | —— | —— | —— | —— | 203+60.00 | 13.42 Lt | 203+60.00 | 19.42 Lt | 203+60.00 | 16.42 Lt | Median Island |
| 22 | 187-00 | 3°-08'-17.7" Rt | 4°-07'-30.3" | 38.05 | 76.03 | 1388.96 | 0.52 | 206+38.05 | 13.42 Lt | 206+76.04 | 15.50 Lt | 206+00.00 | 13.42 Lt | 206+00.00 | 140+3.37 Lt | Median Island Extension |
| 23 | 190-00 | 180°-00'-00" Rt | 1900°-51'-33.5" | 9.42 | 3.00 | —— | —— | —— | —— | 204+80.00 | 13.42 Lt | 204+80.00 | 19.42 Lt | 204+60.00 | 16.42 Lt | Median Island Extension |
| 24 | 194-00 | 2°-37'-03.8" Lt | 13°-17'-46.1" | 100.96 | 201.88 | 441.8.69 | 1.15 | 206+00.96 | 19.42 Lt | 205+00.00 | 19.42 Lt | 207+01.81 | 24.03 Lt | 205+00.00 | 4933.06 Lt | Median Island Extension |
| 25 | 360-00 | 42°-31'-25" Rt | 1145°-54'-56.1" | 4.39 | 7.20 | 5.00 | 1.65 | 204+10.63 | 52.42 Lt | 204+15.06 | 52.42 Lt | 204+10.10 | 56.77 Lt | 204+15.06 | 57.42 Lt | Ramp A - Island |
| 26 | 359-00 | 5°-43'-18.2" Lt | 110°-11'-03.0" | 2.60 | 5.19 | 52.00 | 0.06 | 204+09.77 | 59.34 Lt | 204+10.10 | 56.77 Lt | 204+09.17 | 61.87 Lt | 204+15.06 | 57.42 Lt | Ramp A - Island |
| 27 | 361-00 | 122°-34'-42.4" Rt | 1900°-51'-33.6" | 5.48 | 6.42 | 3.00 | 3.24 | 204+09.93 | 67.20 Lt | 204+09.17 | 61.87 Lt | 204+13.09 | 65.39 Lt | 203+58.55 | 50.00 Lt | Ramp A - Island |
| 28 | 190-00 | 3°-17'-50.5" Lt | 11°-06'-13.8" | 14.86 | 29.72 | 516.00 | 0.21 | 204+27.11 | 60.45 Lt | 204+13.00 | 65.39 Lt | 204+41.39 | 56.34 Lt | 204+12.09 | 62.56 Lt | Ramp A - Island |
| 29 | 362-00 | 163°-55'-10.2" Rt | 2864°-47'-20.6" | 14.16 | 5.72 | 2.00 | 12.30 | 204+55.00 | 52.42 Lt | 204+41.39 | 56.34 Lt | 204+40.84 | 52.42 Lt | 205+84.32 | 552.15 Lt | Ramp A - Island |
| 30 | CC-359 | 66°-10'-36.4" Rt | 204°-37'-40.0" | 18.24 | 32.34 | 29.00 | 5.42 | 203+69.62 | 62.20 Lt | 203+78.74 | 72.84 Lt | 203+85.98 | 49.42 Lt | 204+40.84 | 54.42 Lt | Ramp A - Island |
| 31 | CC-157 | 1°-23'-52.5" Rt | 5°-40'-21.9" | 12.00 | 24.01 | 994.00 | 0.07 | 203+64.94 | 79.70 Lt | 203+54.98 | 86.49 Lt | 203+74.74 | 72.84 Lt | 203+58.55 | 50.00 Lt | Ramp A - Right Edge of Pavement |
| 32 | CC-170 | 33°-01'-36.4" Lt | 11°-27'-33.0" | 149.23 | 288.21 | 500.00 | 21.51 | 204+51.61 | 47.83 Lt | 203+24.80 | 124.77 Lt | 205+99.67 | 52.38 Lt | 205+84.32 | 552.15 Lt | Ramp A - Right Edge of Pavement |
| 33 | CC-260 | 1°-59'-17.3" Rt | 5°-43'-46.5" | 17.35 | 34.70 | 1000.00 | 0.15 | 206+93.36 | 16.45 Lt | 207+10.65 | 18.00 Lt | 206+76.04 | 15.50 Lt | 206+21.29 | 1014.00 Lt | Ramp A - Left Edge of Pavement |
| | | | | | | | | | | | | | | | | Median Island Extension |

Note:
All stations and offsets are taken off the Hogan Road Survey Center Line, which STA 193+20.44 is on STA 224+38.95 and forward tangent line extended backwards.

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

BRUNING 44-132 45710

AS BUILT 1183 LR

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

GEOMETRIC LAYOUT TABLE

R93-464

SHEET 26 OF 53 AUGUSTA, MAINE

Bangor Hogan Road N.H. 04-1190(2)

| F.H.W.A. REQ. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(169) | 27 | 53 |

Sta. 192+00 to Sta. 194+05 Lt.
Remove and Reset Curb Type 5 (110.51 Lin. Ft.)
Excavate and Replace with
- Aggregate Subbase Course - Gravel
- 4" Plant Mix Bituminous Base
- Hot Bituminous Pavement

Note: When existing paved shoulders are less than 4" below proposed Trav. Way finished grade, excavate the existing 3" of pavement on shoulders and enough gravel to place 3" Hot Bituminous Pavement and 4" Plant Mix Bituminous Base. Payment for the fine grading of the gravel will be incidental to Item 403.

Note: Replace the existing woven wire fence with 6' Chain Link fence starting at the box culvert on the westerly side of the Hogan Road Interchange and go westerly for 3000 feet on each side of the Interstate along the Right-of-Way.

Sta. 192+37 Lt.
Rebuilding Catch Basins
Use Existing Frame and Grate.

Sta. 194+25± to Sta. 196+75± Lt.
Remove and Reset Guard Rail (250 Lin. Ft.)

Sta. 194+50 Lt. to Bridge
Removing Pavement Surface with Planing Machine or Grinder to Maximum Depth of 1½" or as Directed by the Engineer and then Overlay with Hot Bituminous Pavement.

Sta. 195+00 to Sta. 197+00 Lt.
Bench Existing Inslope as Directed by Engineer.

Sta. 195+40 to Sta. 197+11.43 Lt.
Construct Island with
Curb Type 5 (330.68 Lin. Ft.)
Curb-Circular-Type 5 (a. 21 Lin. Ft.)

Sta. 197+03.15 to Sta. 197+11.15, 19.43' Lt.
Sta. 197+11.43 to Sta. 197+19.43, 13.93' Lt.
Install two Curb Transition Section "C"-Type 1. One each side of island.

Note: From Sta. 197+00 to Sta. 202+00 See Bridge Sheets.

Sta. 195+40 to Sta. 197+19.43 Lt.
Pave Island with
2" Hot Bituminous Pavement - Grading "D"
Acrylic Latex Color Finish, Green.

Existing PVC Conduit to I-95 Lighting

Existing Junction Box

Relocate Existing Street Light Pole and Guy. Extend Signal Span Wire and Attach to Pole. Relocate Street Light and Bracket Arm.

Relocate Street Light Pole, Street Light, Guy, Bracket Arm and Aerial Feed.

STA. 194+43.91 HOGAN ROAD =
STA. 14+60.60 RAMP "C" =
STA. 3+20.03 RAMP "D"

STA. 194+50.00 SURVEY ℄ 23.57' LT. =
STA. 194+49.80 SOUTHBOUND

STA. 196+50.00 SURVEY ℄ 32.42' LT. =
STA. 196+50.00 SOUTHBOUND
PI Δ = 2°-32'-03" RT.

Existing Signal Pole
Existing Light Pole
Existing 2" PVC Conduit

Grade to drain, excavate, loam and seed.

Remove and reset guard rail to fit new embankment.

Sta. 197+34, Env. Maine Federal Aid Urban Project No. DP-1490(1) Section 1-Contract 2 = Sta. 197+34, Bangor Maine Federal Aid Urban Project No. M-149-0(2).

Existing Traffic Signal Pole, Controller Cabinet, and Guy. Existing Street Light Service and Disconnect Located on Traffic Signal Pole.

Existing Junction Box

Existing PVC Conduit to Lighting on I-95.

Sta. 194+93.09 to Sta. 197+00 Lt.
Construct Island with
Curb Type 5 (334.12 Lin. Ft.)
Curb-Circular-Type 5 (0.00 Lin. Ft.)
Pave with 2" Hot Bituminous Pavement - Grading D; Acrylic Latex Color Finish, Green.

Sta. 192+50
Limit of Work

Sta. 192+75
90' Rt.
B.H.E.-J

Sta. 194+65
85' Rt.
B.H.E.-J

Sta. 196+55
85' Rt.
B.H.E.-J

Sta. 198+35
85' Rt.
B.H.E.-J

PAGE WIRE R/W FENCE-EXISTING

NOTE - Install Pavement Markings as Shown.

KEY to PAVEMENT MARKINGS
4"Y - 4" Yellow - Centerline or Edgeline
4"W - 4" White - Laneline or Edgeline
12"W - 12" White - Stopline
ONLY - ONLY Message
↑ or ↱ - Left or Right Arrow
↑ - Thru Arrow
↑ or ↱ - Thru and Left or Right Arrow

| PROJECT DESIGN ENGINEER | | BY | DATE |
|---|---|---|---|
| PLANS | DESIGN - DETAILED | W.S.P./M.S.M. | 5/91 |
| | CHECKED | | |
| | REVISIONS | | |
| | FIELD CHANGES | | |

BRUNING 44-132 45710

0 50' 75' 100'
SCALE

"AS BUILT" 1983 L.R.

R93-465

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

GEOMETRIC LAYOUT PLAN

SHEET 27 OF 53 AUGUSTA, MAINE

BANGOR - HOGAN ROAD

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 28 | 53 |

Sta. 201+99.99 to Sta. 201+74.99, 19.42' Lt.
Sta. 201+76.26 to Sta. 201+90.62, 13.42' Lt.
Install two Curb Transition Sections (Type 1, One each side of Island.

Note: Repair existing Warren Wire Fence with 6' Chain Link Fence starting at the box culvert on the westerly side of the Hogan Road Interchange and go westerly for 3000 feet on each side of the Interstate along the Right-of-Way.

Sta 201+99.99 to Sta 203+63 Lt.
Pave Island with
2" Hot Bituminous Pavement - Grad "D"
Acrylic Latex Color Finish, Green.

Sta 201+74.98 to Sta 203+63 Lt.
Construct Island with
Curb Type 5 (384.79 Lin. Ft.)
Curb-Circular-Type 5 (9.42 Lin. Ft.)

Bridge to Sta 204+75 Lt.
Removing Pavement Surface with Planing Machine or Grinder to Maximum Depth of 1½" or as Directed by the Engineer and then Overlay with Hot Bituminous Pavement

Note: From Sta. 197+00 to Sta 202+00 See Bridge Sheets.

Sta 201+25 t to Sta 203+50 Lt.
Remove and Reset Guard Rail (225 L.F.)

Sta 204+29.00 to Sta 204+42.94 Lt. Construct Island with
Curb Type 5 (383.9 Lin. Ft.)
Curb-Circular-Type 5 (18.34 Lin. Ft.)
Pave with 2" Hot Bituminous Pavement - Grad "D"
Item 403.101 Acrylic Latex Color Finish, Green

Extend New Island
Sta. 204+77 to Sta. 204+80 13.42 Lt. to 19.42 Lt. Curb-Circular-Type 5 (9.42 Lin. Ft.), Sta. 204+80 to Sta. 206+00 19.42 Lt. Curb Type 5 (120 Lin. Ft.), Sta. 206+00 19.42 Lt. to Sta. 206+100 13.42 Lt. Curb Type 5 (120 Lin. Ft.), Sta. 206+100 13.42 Lt. to Sta. 207+10.65 19 Lt. Reset Existing Curb Type 5 (101.65 Lin. Ft.), Sta. 206+100 19.42 Lt. to Sta 207+01.81 24.03 Lt. Existing Curb Type 5 (101.89 Lin. Ft.)

RAMP "A"
N. 18°-27'-36" E.
PRC STA. 19+44.09 RAMP "A" APPROACH
PT STA. 22+32.23 RAMP "A" APPROACH
STA. 202+10.65 12" LT. SURVEY ℄ = STA. 202+10.48 LINE "B" BACK = P.C. STA. 202+09.81 LINE "B" AHEAD LINE "B" EQUATION + 0.67
PRC STA. 18+72.88 RAMP "A"
STA. 202+09.81 EDGE OF LANE = STA. 202+10.65 SURVEY ℄
PRC STA. 18+90.45 RAMP "A"
Grade to drain, excavate, loam, & seed
Relocate Existing Wood Pole G21, Street Light and Bracket Arm and Aerial Feed
Existing 2" PVC To I-95 Lighting (Conduit).
BANGOR WATER DISTRICT EASEMENT
PAGE WIRE R/W FENCE-EXISTING
12" WATER LINE
STA. 205+00.00 SOUTHBOUND = SURVEY ℄ 32.42' LT.
PRC STA. 207+01.29
Existing Junction Box
Existing Signal Pole
Signal Span Wire
Existing PVC Conduit
Tan. = 20.00'
Tan. = 180.00'
EXISTING GRANITE EDGING
Existing Junction Box
Existing Signal Pole, Guy and Controller.
STA. 204+89.24 HOGAN ROAD = STA. 21+50.80 RAMP "A" = STA. 11+24.58 RAMP "B"
Sta 204+77 56 Rt. B.H.E.-J
Sta 207+00 49 Rt. B.H.E.-J
Sta 207+50 Limit of Work
Existing 2" PVC Conduit To I-95 Lighting
Retain 15"x68' CULVERT
R=1000'
RAMP "B"
PT STA. 14+06.19 RAMP "B"
AS BUILT 1983

Existing Granite Curb To Face Of Curb
N. 8°-43'-52" W.
201 Southbound ℄
201 Northbound ℄
GRANITE CURB
EXISTING SIDEWALK
GUARDRAIL
HOGAN ROAD
SURVEY ℄
Remove and Reset Guard Rail to fit new end post
I-95 SOUTHBOUND
I-95 NORTHBOUND
Sta 200+40 70 Rt. B.H.E.-J
Sta 202+55 64 Rt. B.H.E.-J

Sta 201+99, Basin Maine Federal Aid Urban Project No. U.P. 1990(1) Section 2-Contract 2 =
Sta 201+99, Line Maine Federal Aid Urban Project No. M-140-0(12)

NOTE
Install Pavement Markings as Shown.
Street Light Service and Disconnect is Located on Traffic Signal Pole With Controller.
Relocation of (4) Wood Poles, Street Lights and Bracket Arms Will Be Paid For Under Item No 634.190.

| PROJECT DESIGN ENGINEER | | BY | DATE |
|---|---|---|---|
| PLANS | DESIGN - DETAILED | WSS | 1985 |
| | CHECKED | | |
| | REVISIONS | | |
| | FIELD CHANGES | | |

0 50' 75' 100'
SCALE

TRUE NORTH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

GEOMETRIC LAYOUT PLAN

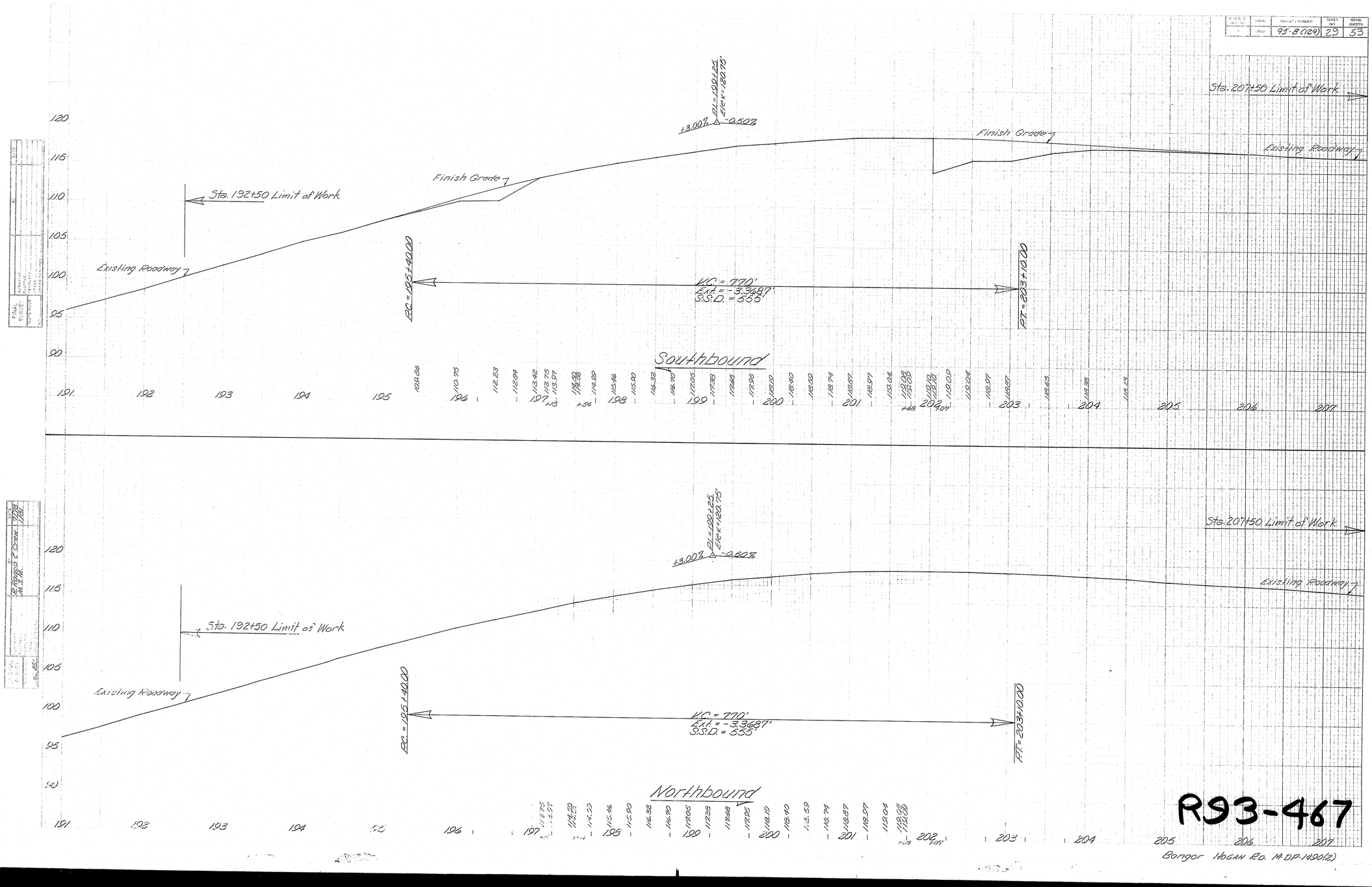
SHEET 28 OF 53 AUGUSTA, MAINE

R93-466

BANGOR - HOGAN ROAD

BRUNING 44-132 45710

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| MAINE | 95-8(129) | 29 | 53 |




R93-467

Bangor Hogan Rd. M.DP.1490(2)

R93-468

Sta 191+00 to Sta 192+63

Bangor Hydro Co. M.D.P. 1400(2)

| | | | |
|---|---|---|---|
| U.S.R.A. R.I.S. No. | STATE | PROJECT NUMBER | SHEET NO. |
| 1 | MAINE | 93-A(2)E-25 | 30 |

TOTAL SHEETS 53

BASE LINE
Route 1
Station
at RP

Sta. 192+63 End of Work

Sta. 192+50 Limit of Work

Sta. 191+00

Existing 24" RCP

24"x26" RCE/MP

24"x26" RCE/MP

| | | | | |
|---|---|---|---|---|
| SB℄ | 12' | 10.00 | NB℄ | Line "E" |
| SB℄ | 12' | 10.16 | NB℄ | Line "E" |
| SB℄ | 12' | 8.24 | NB℄ | Line "E" |
| SB℄ | 12' | 9.22 | NB℄ | Line "E" |
| SB℄ | 11.84 | 7.19 | NB℄ | Line "E" |

| | | | |
|---|---|---|---|
| 743 | 90 | | |
| 750 | 90 | | |
| 750 | 86 | | |
| 1922+00 | 86 | | |
| 750 | 86 | | |
| 701+00 | 86 | | |

| ORIGINAL SURVEY | |
|---|---|
| SURVEYED | |
| PLOTTED | |
| NOTE BOOK | |
| AREAS | |
| AREAS CHECKED | |
| NO. 881 | |

| | |
|---|---|
| BY | Ronco & Crew |
| | M.S.M. |
| DATE | 11/18 |
| | 11/30 |

| FINAL SURVEY | |
|---|---|
| SURVEYED | |
| PLOTTED | |
| TSHT/LATE | |
| NOTE BOOK | |
| AREAS | |
| AREAS CHECKED | |
| NO. | |

| | |
|---|---|
| BY | |
| DATE | |

R93-469

Bangor Hydro Elec. Co. (2)

| FED. AID PROJ. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 51 | 53 |

Sta 193+00 to Sta 194+50

Sta. 192+90 to Sta 193+05 Lft. Remove and Reset Curb Type 3 - 110.5 Lin. Ft. Excavate and Replace with Aggregate Subbase Course (Gravel) 4" P.S.H.M.A. Bit. Base 3" Hot Bit. Pavement

Sta. 193+37 Lft. Rebuilding Catch Basins Use Existing Frame and Grate

Sta. 194+48.09 to Sta. 194+92.41 Lft. Construct Island with Curb. Type 3 - 84.12 Lin. Ft. Curb Outside - Type 3 = 19.52 Lin. Ft. Pave with 2" Hot Bituminous Pavement, Grading 'D' Item 403.101 Acrylic Latex Color Finish: Green

Sta. 194+50 Lft. to Purdee Removing Pavement Surface with Planing Machine or Grinder to max. depth of 1½" or as Directed by the Engineer and then Overlay with Hot Bituminous Pavement.

Note: When existing Paved Shoulders are less than 4" below proposed Trav Way Finished Grade, excavate the existing 3" of Pavement on shoulders and enough gravel to place 3" Hot Bituminous Pavement and 4" Plant Mix Bit. Base. Payment for the fine grading of the gravel will be incidental to Item 403

Sta 194+25± to Sta 194+75± Lft Remove and Reset Guard Rail (250 Lin. Ft)

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK 881 | SURVEYED | Rodgo & Crew | 7/18/80 |
| | PLOTTED | M.S.M | |
| | TEMPLATE | | |
| | AREAS | | |
| | AREAS CHECKED | | |

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

R93-470

Bangor Hoark Rd. M-1400(2)

Sta 195+00 to Sta 197+00

| FAP # | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 93-3 (129) | 32 | 53 |

Sta. 195+40 to Sta. 197+10.43 Lt.
Raise Island with
2" Lift Bituminous Pavement-Grading D"
Acrylic Latex Color Finish, Green

Sta. 197+05.15 to Sta. 197+11.15, 10.02 Lt.
Sta. 197+11.43 to Sta. 197+19.43 Lt. Variable
Two Curb Transition Section C or Type I
One-Each Side of Island

Note:
From Sta. 197+10 to Sta. 201+10 See Bridge Sheets

Sta. 195+40 to 197+10
Bench Existing Inslope as
Directed by Engineer

Note: Remove and Reset County Road
to Its New Line and Grade

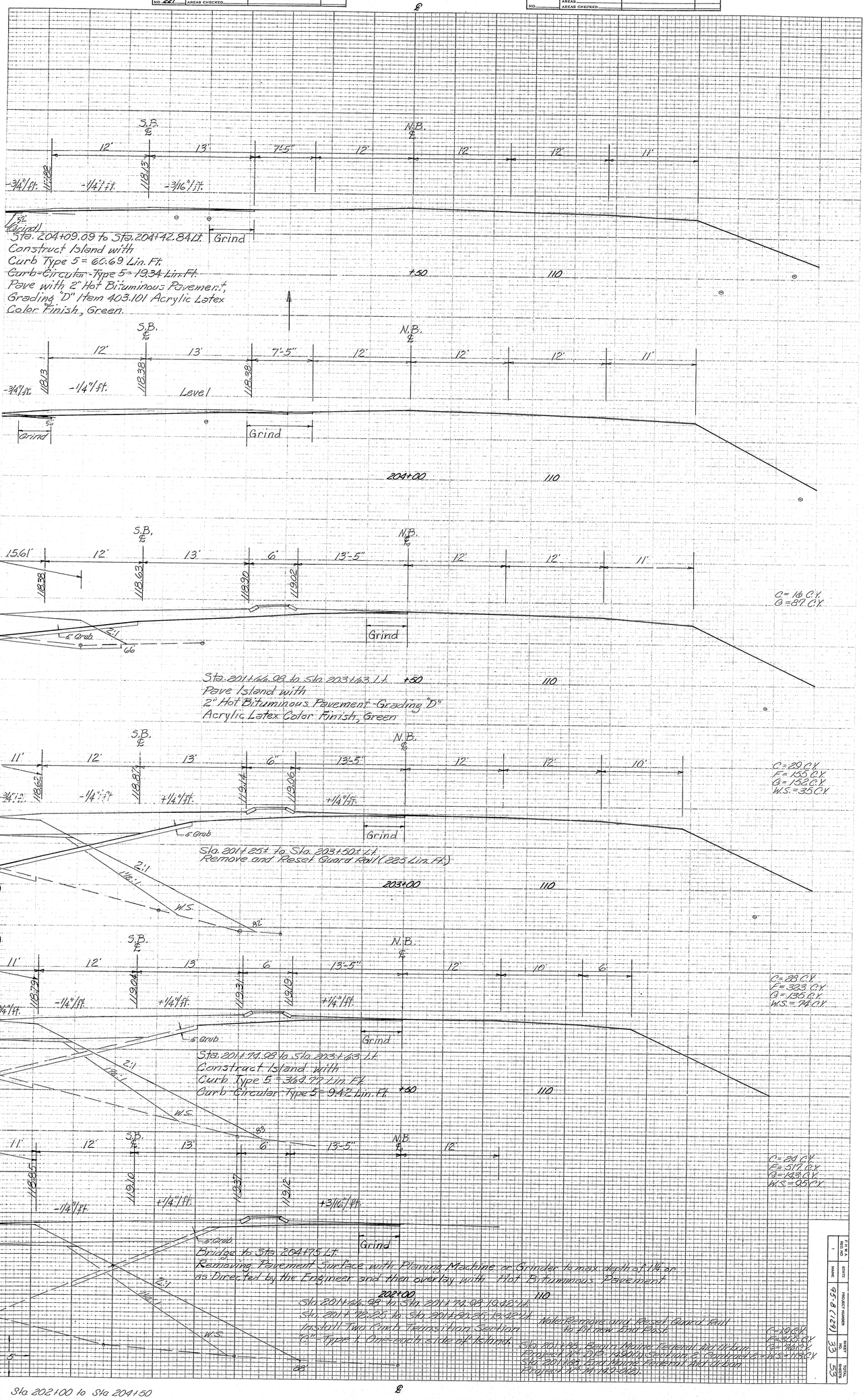
Sta. 195+40 to Sta. 197+10 Left
Mobilization, Construction Staking, Maintenance of Detour, Traffic Control, Erosion Control, Seeding, Mulching, Fertilizing, Liming, Removal and Disposal of Existing Structures, Removal and Disposal of Existing Pavement, Mulch Anchoring, Excavation, Borrow, Gravel Base Course, Type D Aggregate Shoulders, Curb Type 5, Curb Transition Section C, Curb Type I, Curb-Circular Type 5, Bituminous Pavement Grading D, Bituminous Pavement Grading E, Bituminous Pavement Grading F, Bituminous Pavement Grading G, Bituminous Pavement Grading H, Bituminous Pavement Grading I, Bituminous Pavement Grading J, Bituminous Pavement Grading K, Bituminous Pavement Grading L, Bituminous Pavement Grading M, Bituminous Pavement Grading N, Bituminous Pavement Grading O, Bituminous Pavement Grading P, Bituminous Pavement Grading Q, Bituminous Pavement Grading R, Bituminous Pavement Grading S, Bituminous Pavement Grading T, Bituminous Pavement Grading U, Bituminous Pavement Grading V, Bituminous Pavement Grading W, Bituminous Pavement Grading X, Bituminous Pavement Grading Y, Bituminous Pavement Grading Z, Bituminous Pavement Grading AA, Bituminous Pavement Grading BB, Bituminous Pavement Grading CC, Bituminous Pavement Grading DD, Bituminous Pavement Grading EE, Bituminous Pavement Grading FF, Bituminous Pavement Grading GG, Bituminous Pavement Grading HH, Bituminous Pavement Grading II, Bituminous Pavement Grading JJ, Bituminous Pavement Grading KK, Bituminous Pavement Grading LL, Bituminous Pavement Grading MM, Bituminous Pavement Grading NN, Bituminous Pavement Grading OO, Bituminous Pavement Grading PP, Bituminous Pavement Grading QQ, Bituminous Pavement Grading RR, Bituminous Pavement Grading SS, Bituminous Pavement Grading TT, Bituminous Pavement Grading UU, Bituminous Pavement Grading VV, Bituminous Pavement Grading WW, Bituminous Pavement Grading XX, Bituminous Pavement Grading YY, Bituminous Pavement Grading ZZ, Bituminous Pavement Grading AAA, Bituminous Pavement Grading BBB, Bituminous Pavement Grading CCC, Bituminous Pavement Grading DDD, Bituminous Pavement Grading EEE, Bituminous Pavement Grading FFF, Bituminous Pavement Grading GGG, Bituminous Pavement Grading HHH, Bituminous Pavement Grading III, Bituminous Pavement Grading JJJ, Bituminous Pavement Grading KKK, Bituminous Pavement Grading LLL, Bituminous Pavement Grading MMM, Bituminous Pavement Grading NNN, Bituminous Pavement Grading OOO, Bituminous Pavement Grading PPP, Bituminous Pavement Grading QQQ, Bituminous Pavement Grading RRR, Bituminous Pavement Grading SSS, Bituminous Pavement Grading TTT, Bituminous Pavement Grading UUU, Bituminous Pavement Grading VVV, Bituminous Pavement Grading WWW, Bituminous Pavement Grading XXX, Bituminous Pavement Grading YYY, Bituminous Pavement Grading ZZZ, Bituminous Pavement Grading AAAA, Bituminous Pavement Grading BBBB, Bituminous Pavement Grading CCCC, Bituminous Pavement Grading DDDD, Bituminous Pavement Grading EEEE, Bituminous Pavement Grading FFFF, Bituminous Pavement Grading GGGG, Bituminous Pavement Grading HHHH, Bituminous Pavement Grading IIII, Bituminous Pavement Grading JJJJ, Bituminous Pavement Grading KKKK, Bituminous Pavement Grading LLLL, Bituminous Pavement Grading MMMM, Bituminous Pavement Grading NNNN, Bituminous Pavement Grading OOOO, Bituminous Pavement Grading PPPP, Bituminous Pavement Grading QQQQ, Bituminous Pavement Grading RRRR, Bituminous Pavement Grading SSSS, Bituminous Pavement Grading TTTT, Bituminous Pavement Grading UUUU, Bituminous Pavement Grading VVVV, Bituminous Pavement Grading WWWW, Bituminous Pavement Grading XXXX, Bituminous Pavement Grading YYYY, Bituminous Pavement Grading ZZZZ.

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK 221 | SURVEYED | R.S.M. | 7/18/00 |
| | PLOTTED | | |
| | TSHEETS | | |
| | AREAS | | |
| | AREAS CHECKED | | |

| FINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | | |
| | TSHEETS | | |
| | AREAS | | |
| | AREAS CHECKED | | |

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | RDGG & CREW | 11/79 |
| NO. 221 | PLOTTED | M.S.A. | 11/80 |
| | TEMPLATE | | |
| | AREAS | | |
| | AREAS CHECKED | | |

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




R93-471

Bergor Heavy Eq. 14.DP.1901(2)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

R93-472

Bangor Mown Ea MDA (1008)

Sta. 205+00 to Sta. 207+50

Extend Median Island
Sta. 204+77 to Sta. 204+80 13.42 Ft. & 19.42 Ft. Curb Circular Type 5 = 942 Lin. Ft.
Sta. 204+80 to Sta. 206+10 13.42 Ft. Curb Type 5 = 120 Lin. Ft.
Sta. 204+80 to Sta. 206+10 19.42 Ft. Curb Type 5 = 120 Lin. Ft.
Sta. 206+10 13.42 Ft. to Sta. 207+00.65 18.21 Ft. Resetting Curb Type 5 = 110.65 Lin. Ft.
Sta. 206+10 19.42 Ft. to Sta. 207+10.81 24.05 Ft. Resetting Curb Type 5 = 104.88 Lin. Ft.

| ITEM NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8 (129) | 34 | 53 |

Sta. 207+50 Limit of Work

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| SURVEYED | | RGRCG & Crew | 7/78 |
| PLOTTED | | | 11/80 |
| NOTE BOOK: TRAVERSE | | | |
| AREAS | | | |
| NO. 881 | AREAS CHECKED | | |

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

R93-473

Bangor Hsgw #2 MDA #001(2)

Sta 208100 to 210+50

| F.A.P. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 33 | 53 |

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| SURVEYED | Ragon & Crew | | 11/96 |
| PLOTTED | M.E.M. | | 11/96 |
| TEMPLATE | | | |
| NOTE BOOK | | | |
| AREAS | | | |
| NO. 821 | AREAS CHECKED | | |

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

105 208+00 105 +50 105 N.B. ℄ S.B. ℄ Island

105 210+00 105 +50 105 N.B. ℄ S.B. ℄ Island

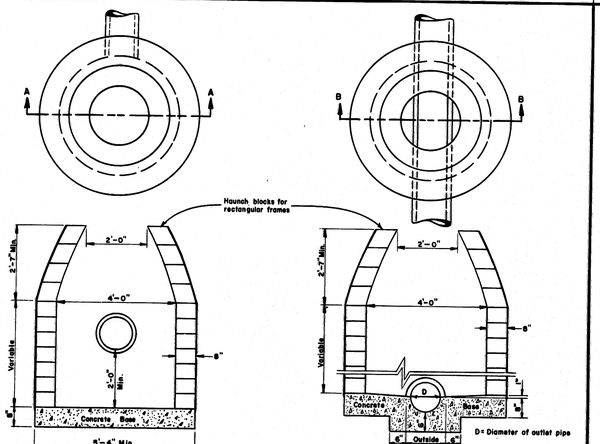
**GENERAL NOTES — ALL CATCH BASINS AND MANHOLES**

1. Any Catch Basin in excess of 8' in depth shall, if directed be provided with steps similar to those detailed for Manholes.
2. Frames, Grates & Covers shall be considered as part of the structure, and no separate payment shall be made.

**GENERAL NOTES — PRECAST CATCH BASINS AND MANHOLES**

1. Drain holes in precast sumps to be not over 3" in diameter, and shall be plugged with mortar when constructed.
2. All precast sections of less than 8" wall thickness shall have tongue and groove joints.
3. Cone and Ring sections wall thickness min. 4", max. 8"
4. Minimun wall thickness of sump may be 4" as specified in A.S.T.M. C-478, however, if concrete blocks are used around the inlet and outlet pipes, the wall thickness of sump shall be 8".
5. Wall around inlet and outlet pipes may be built of 8" concrete blocks or a precast ring with an opening 2" larger than the outside diameter of the pipe may be used.
6. Lift Holes shall be provided.

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-01(129) | 2A | 13 |




SECTION A-A
SHAPE "1"




SECTION B-B
SHAPE "2"

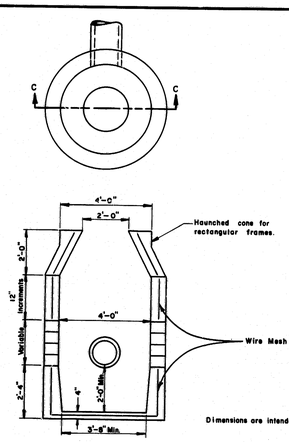
Dimensions are intended to be nominal.

D= Diameter of outlet pipe

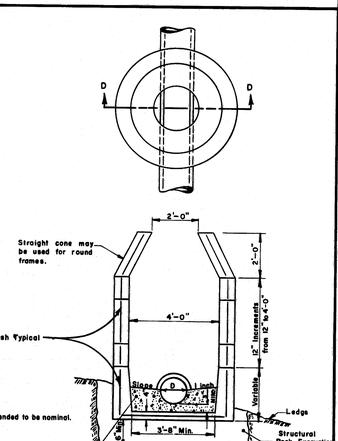
For culverts 24" in dia. and larger this dimension shall be 9'-4".

## CATCH BASINS (Concrete Blocks or Bricks)

A




SECTION C-C
SHAPE "3"




Dimensions are intended to be nominal.

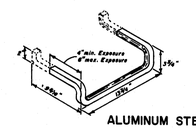
Concrete to be either field placed or precast.

D= Diameter of outlet pipe

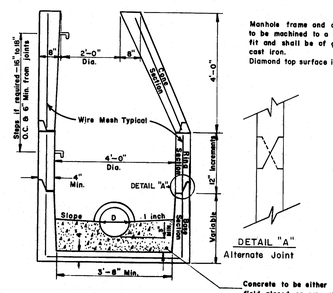
SECTION D-D
SHAPE "4"

## CATCH BASINS (Precast Units)

B




ALUMINUM STEPS



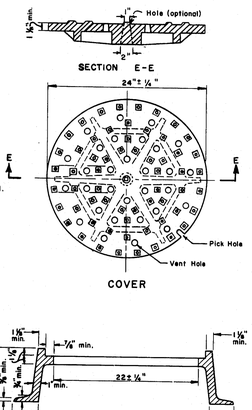

D= Diameter of outlet pipe

SHAPE "5"



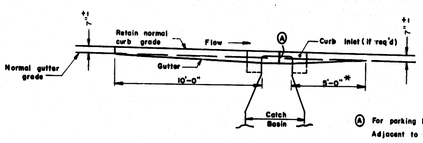

Dimensions are intended to be nominal

## MANHOLE

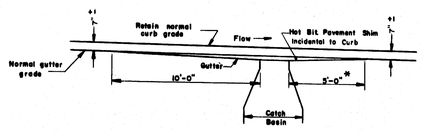



MANHOLE TOP "D" FRAME

C




AT CURB INLETS



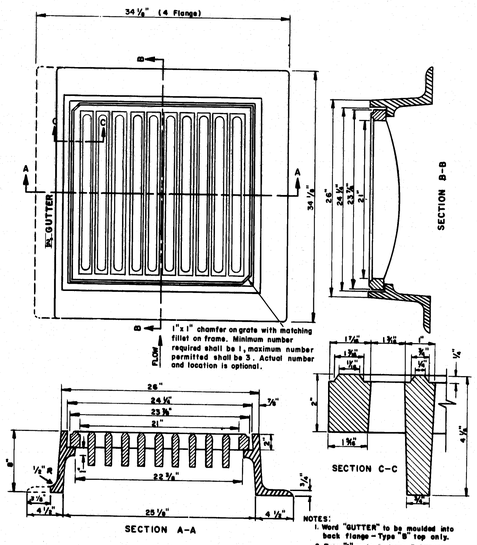

AT CURB WITHOUT INLET STONES

* If at bottom of sag, this dimension to be 10'-0"

NOTE: PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT. CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF THE GUTTER. THE GRATES SHALL BE DEPRESSED 3" BELOW THE NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. DIMENSIONS ARE INTENDED TO BE NOMINAL.

## GUTTER GRADE TRANSITION AT CATCH BASIN

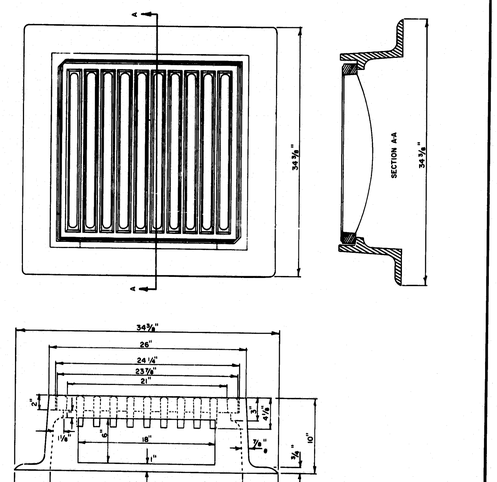
A-D




NOTES:
1. Word "GUTTER" to be moulded into back flange - Type "B" top only.
2. Type "A" grate to have 3 flanges
3. Type "B" grate to have 4 flanges.
4. Frame and grate to be of gray cast iron.
5. Dimensions are intended to be nominal.

## TYPE "A" & "B" CATCH BASIN TOPS
( PARALLEL BAR GRATES )

E




1. Open throat shall be constructed on side away from the direction of traffic. All other sides shall be grated flush with the top of C.B. grate.
2. Frame shall be gray cast iron.
3. Grate shall be same as type "A" and "B".
4. Dimensions are intended to be nominal.
5. When volume of water warrants, 6" opening may be increased.

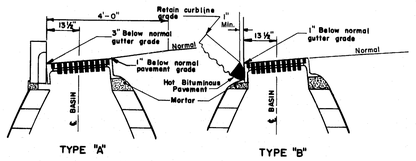
## TYPE "C" CATCH BASIN TOPS

F

| STRUCTURE | TOP | | | | SHAPE | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CATCH BASIN | A | B | C | D | 1 | 2 | 3 | 4 | 5 |
| Type A-1 | X | | | | X | | X | | |
| Type A-2 | X | | | | | X | | X | |
| Type B-1 | | X | | | X | | X | | |
| Type B-2 | | X | | | | X | | X | |
| Type C-1 | | | X | | X | | X | | |
| Type C-2 | | | X | | | X | | X | |
| | | | | | | | | | |
| MANHOLE | | | | X | | X | | X | X |

TABLE OF CATCH BASIN TYPES
( COMBINATION OF TOPS AND SHAPES)

For Type "E" & Type "F" C.B. See Sheet No. 3




TYPE "A" TYPE "B"

Dimension are intended to be nominal.

## CATCH BASIN TOP INSTALLATION

1G

| REVISIONS | |
|---|---|
| CATCH BASINS TOPS A, B, C, | 10-21-69 |
| PLATE 'E' | 4-21-71 |
| PLATE 'D-E' | 8-26-75 |
| PLATE C | 10-14-75 |
| PLATE "D-G" | 7/31/78 |
| | |
| | |
| | |

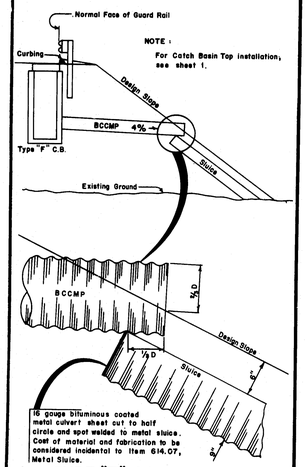
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

# STANDARD DETAILS

## CATCH BASINS AND MANHOLES

AUG. 1969 (1)

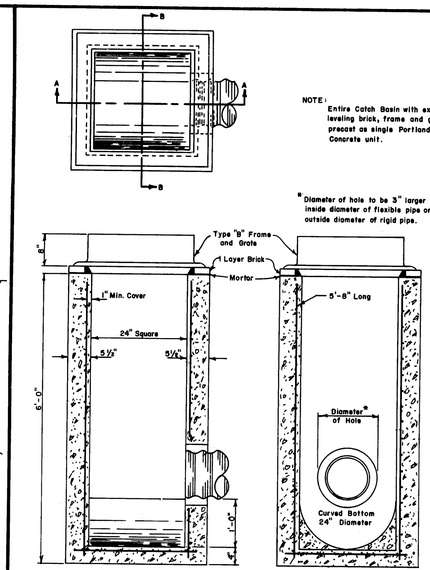
R93-474




## TYPE "F" CATCH BASIN WITH OUTLET PIPE (SLUICE OPTIONAL)

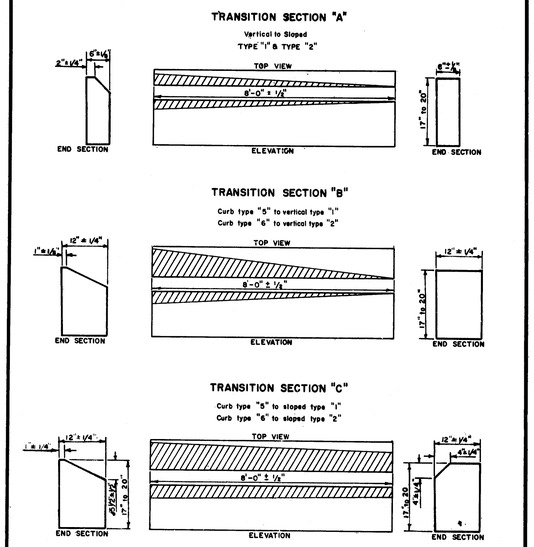
(SEE SHEET NO. 2 FOR STANDARD SLUICE DRAWING)

3-A




## CATCH BASIN TYPE "F"

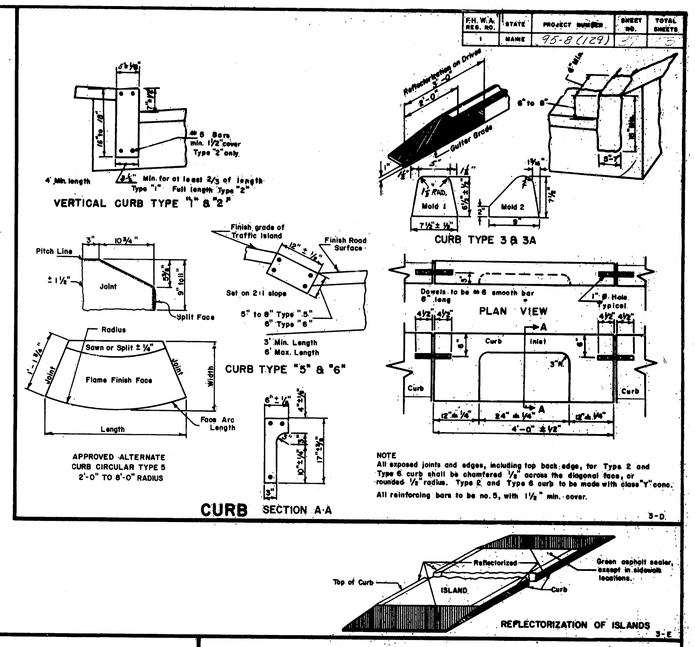
3-B




## CURB TRANSITION

NOTE - TYPE 2 CURB
Precast concrete curb to be made with class "Y" concrete.
All reinf. bars to be #5, 1½" min. cover.

3-C

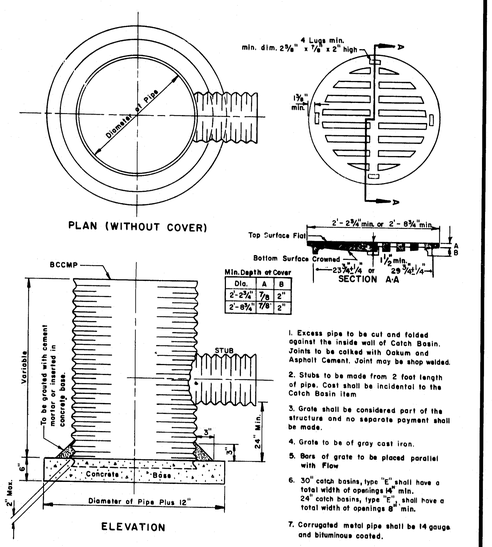






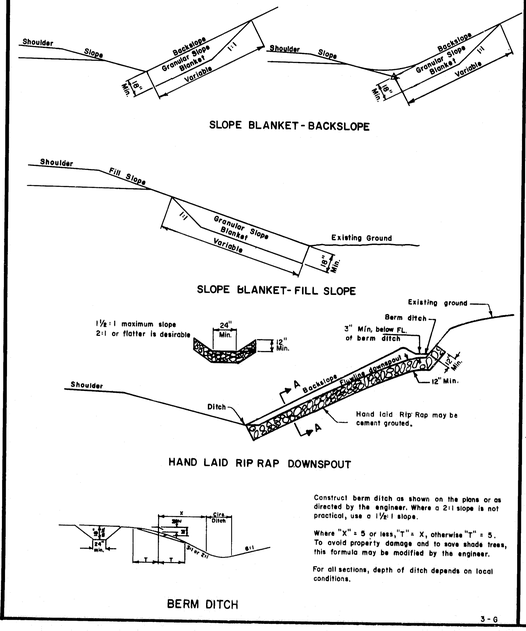
## REFLECTORIZATION OF ISLANDS

3-E

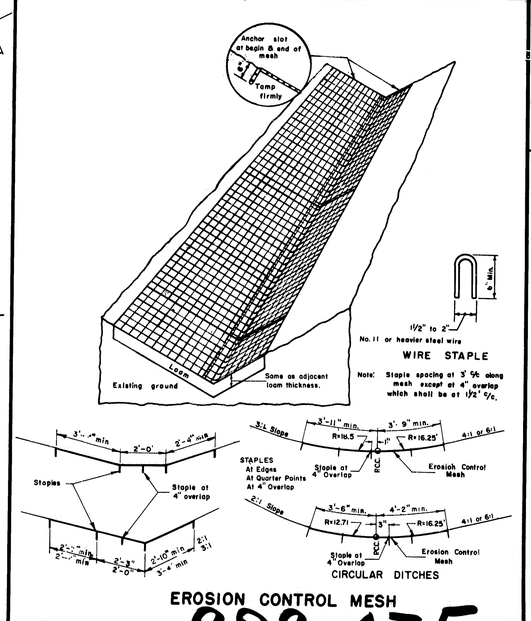



## CATCH BASIN TYPE "E"

3-F




3-G




## EROSION CONTROL MESH

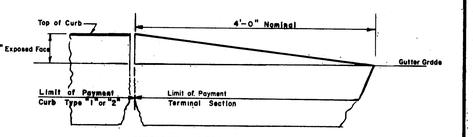
R93-475

3-H

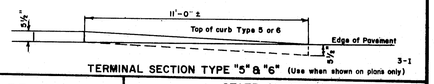
| CURB TYPES (1&2), (5&6) ON CURVES | | | | |
|---|---|---|---|---|
| | RADIUS OF CURVE | LENGTH | PAID FOR AS | STONE IS CUT OR CAST |
| 1 & 2 | 0' To 60' Incl. | 4' Min. | Circular | Arc To Fit Curve |
| | Over 60' To 160' | 4' To 6' | Straight Pieces | |
| 5 & 6 | 0' To 8' Incl. | 2' Min. | Circular | To Fit Curve |
| | Over 8' To 30' Incl. | 12" Min. Chord | Circular | Straight Pieces, Radial Ends |
| | Over 30' And Under 160' | 2' To 3' | Straight | Straight Pieces |
| | 160' And Over | 3' To 6' | Straight | Straight Pieces |

3-J

## TERMINAL CURB SECTION




TERMINAL SECTION TYPE "1" & "2"




TERMINAL SECTION TYPE "5" & "6" (Use when shown on plans only)

3-I

| REVISIONS | |
|---|---|
| Plate 3-G | 12-23-69 |
| Plate 3-F | 5-27-70 |
| Plate 3J | 7-15-70 |
| PLATE 3G | 3-4-71 |
| PLATE 3H | 8-28-73 |
| PLATE 3H | 6-26-75 |
| PLATE D | 8-8-75 |
| PLATE D&I | 11-24-75 |
| PLATE 3D | 7/31/78 |
| PLATE 3I | 8/3/79 |

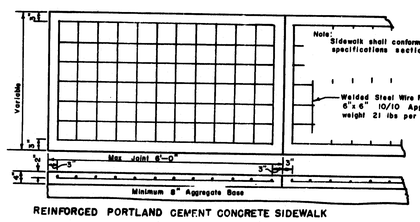
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

# STANDARD DETAILS

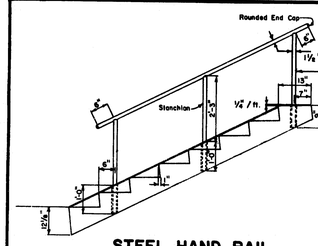
## CURB, DITCHES AND SLOPES, AND CATCH BASINS TYPE "E"

AUG. 1969

3




REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK

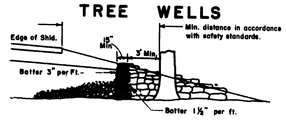



NOTES:
1. Stanchions shall be placed at a maximum horizontal distance of 5'-0". When more than two stanchions are used, spacing shall be equal between end posts and adjacent stanchions.
2. Stanchions shall be used when seven or more steps occurs.
3. Stanchions and end posts to be placed vertically and in center of parapet wall
4. All stanchions and rails shall be coated with an approved black enamel paint.

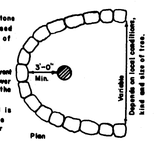
## STEEL HAND RAIL

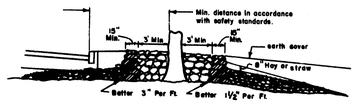
5-A

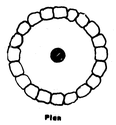
## TREE WELLS




NOTES:
1. Selected ledge excavation, crushed stone or other porous material shall be used to fill around the old ground area of the tree from the tree wall to the perimeter of the branches.
2. An 8" layer of hay or straw to prevent infiltration of fines shall be placed over the rock fill except in areas under the roadway and shoulders.
3. If drainage away from the tree well is necessary, underdrain outlet pipe shall be used, and will be paid for under item 605.10.



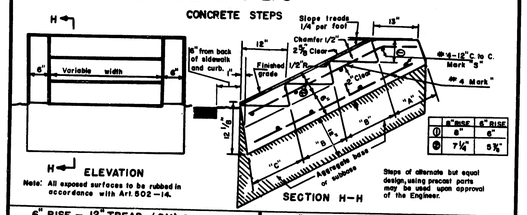



Plan

To be paid for under item
610.09 Hand laid riprap.
605.10 6" Underdrain Outlet

5-E

## CONCRETE STEPS




| 6" RISE | 6" RISE |
|---|---|
| 6" | 6" |
| 7⅛" | 5⅞" |

Note: All exposed surfaces to be rubbed in accordance with Art. 502-14.

6" RISE — 12" TREAD (2:1) SLOPE

8" RISE — 12" TREAD (1½:1) SLOPE

REINFORCING STEEL

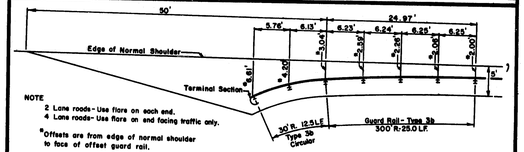
| Mark | Size | Number | Length (Each) |
|---|---|---|---|
| R | ø 4 .668 lbs. per ft. | 2 Each parapet 1 Each ft. of width | 11" For "A" +13.4 For each "B" +12" For "C" |
| S | ø 4 .668 lbs. per ft. | 2 For "A" 2 For each "B" 2 For "C" | 4 Each parapet +12" per ft. of width |

| Mark | Size | Number | Length (Each) |
|---|---|---|---|
| R | ø 4 .668 lbs. per ft. | 2 Each parapet 1 Each ft. of width | 11" For "A" +16½" For each "B" +12" For "C" |
| S | ø 4 .668 lbs. per ft. | 2 For "A" 2 For each "B" 2 For "C" | 4 Each parapet + 12" per ft. of width |

CONCRETE CLASS "A"

| Section | Steps per ft. of width | Parapet each wall |
|---|---|---|
| "A" Header | .030 cu. yds. | .015 cu. yds. |
| "B" Each intec step | .030 cu. yds. | .020 cu. yds. |
| "C" Footer | .030 cu. yds. | .020 cu. yds. |

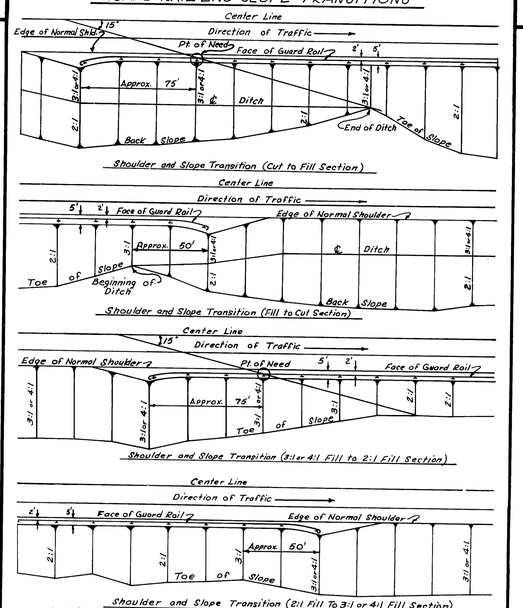
| Section | Steps per ft. of width | Parapet each wall |
|---|---|---|
| "A" Header | .038 cu. yds. | .018 cu. yds. |
| "B" Each intec step | .035 cu. yds. | .024 cu. yds. |
| "C" Footer | .035 cu. yds. | .024 cu. yds. |




## GUARD RAIL END TRANSITION

5-B

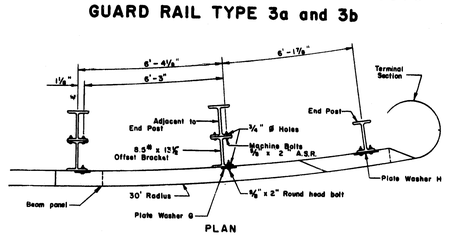
## GUARD RAIL END SLOPE TRANSITIONS




NOTE:
The Transitions are a design guide only; These slope Transitions shall be used with Beam Type Guard Rail.

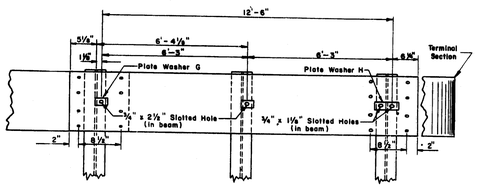
5-F

## END BEAM ASSEMBLY - SPACING OF POSTS GUARD RAIL TYPE 3a and 3b



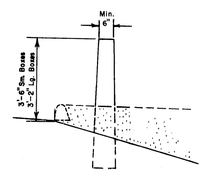

To be used in all locations except on the end away from traffic on 4 lane divided.

NOTE: Offset Bracket shall be installed on all posts, except end post.

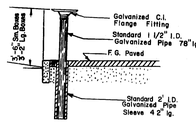



ELEVATION

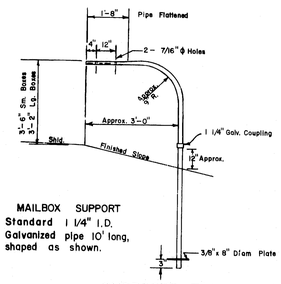
5-C




WOOD POST
( Single Post - Type Ia, )




STEEL PIPE POST
(Single post - Type Ic.)



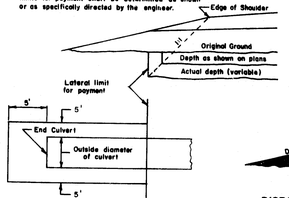

MAILBOX SUPPORT
Standard 1 1/4" I.D. Galvanized pipe 10' long, shaped as shown.

SUPPORTS FOR MAILBOXES

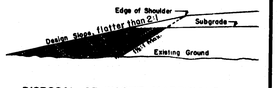
5G

## MUCK EXCAVATION
PAYMENT LIMITS

NOTE:
When muck is excavated to a depth greater or less than what is shown on the plans, the vertical limits for payment shall be determined as shown or as specifically directed by the engineer.

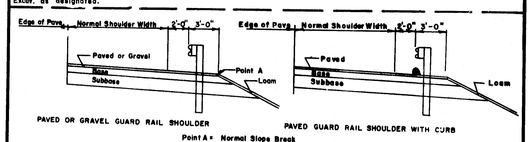



When directed by the engineer, waste material shall be used in this area, except that waste shall not be placed in fills designed with slopes of 2:1 or less. No additional payment will be made for this work.




DISPOSAL OF WASTE MATERIALS

Excavation for pipe culverts in grubbing and muck areas. Pay Earth Excav. or Muck Excav. as designated.




PAVED OR GRAVEL GUARD RAIL SHOULDER

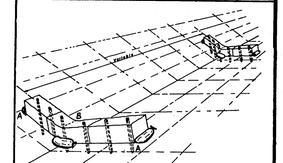
PAVED GUARD RAIL SHOULDER WITH CURB

Point A = Normal Slope Break

## LOCATION OF GUARD RAIL

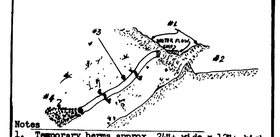
5-H

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 33 | 35 |



EROSION CHECK TO BE OF BALES OF HAY SECURED TO THE GROUND WITH 2-4' LONG GRADE STAKES FOR EACH BALE. SAND BAG AS REQUIRED. PLACE SUFFICIENT BALES TO ESTABLISH ELEVATIONS AT 'A' AT LEAST 6 INCHES ABOVE OVERFLOW AT 'B'.

## EROSION CHECK for DITCH




Notes
1. Temporary berms approx. 24"± wide x 12"± high (Compacted with wheel or track)
2. Crescent shaped berm length as required to contain surface drainage & direct into end section.
3. Collapsible pipe or equal.
4. Discharge in drainage ditch, on stabilized area or on dumped stone as designated by Engineer.

## TEMPORARY BERM and SLOPE DRAIN

## TEMPORARY EROSION CONTROL

5-D

| REVISIONS | |
|---|---|
| PLATE H | 11-3-77 |
| PLATE G-H | 6-1-78 |
| Plate 5-A | 12-24-69 |
| PLATE 5B | 1-27-71 |
| PLATE 5 H | 5-12-71 |
| PLATE 5 B | 1-19-72 |
| PLATE 5G | 6-7-72 |
| PLATE 5D | 6-7-72 |
| PLATE 5D+C | 10-22-74 |
| PLATE A,B,F,H | 3-18-75 |
| PLATE 5 H | 6-26-75 |
| PLATE G | 10-14-75 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

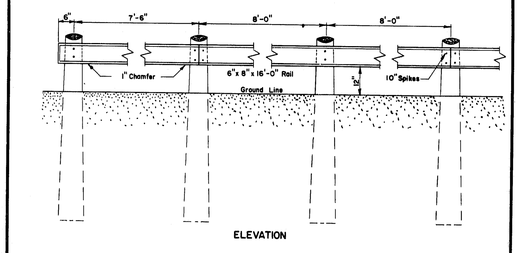
# STANDARD DETAILS

GUARD RAIL, MUCK EXCAVATION
CONCRETE STEPS & SIDEWALK
GUYING TREES
TREE WELLS, EROSION CONTROL,
MAILBOX SUPPORTS.

AUG. 1969 (5)

R93-476

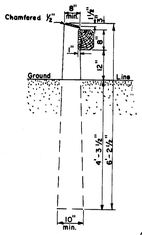
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 24 | 25 |




ELEVATION

PLAN

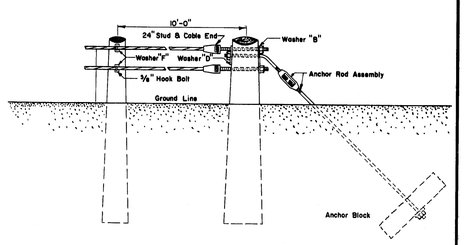
NOTE:
1. This guardrail should not be used adjacent to public highways. Location should be limited to driveways, dead ended roads, etc.
2. Unless otherwise specified, all exposed wood above ground, both posts and rails shall be painted with 2 coats of white paint.




*FOR TYPE 6 GUARD RAIL SEE STANDARD DETAIL SHEET 21*

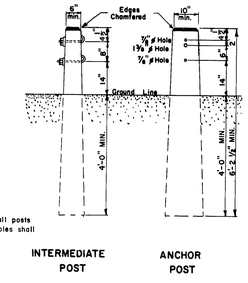
## GUARD RAIL type "5"

A




ELEVATION

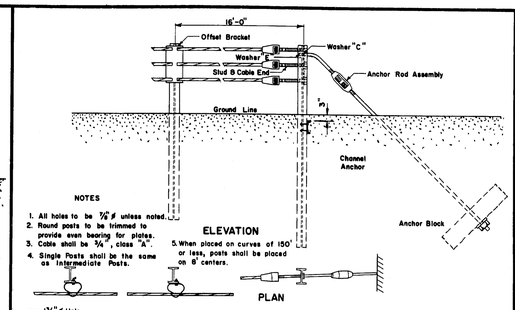
NOTES
1. Anchor posts shall be White Oak.
2. Alignment - see types 2a, 2b and 2c.
3. Posts to be trimmed to provide even bearing for plates.
4. Unless otherwise specified all wood above ground to be painted with 2 coats of white paint,- for type 1a.
5. Single Posts shall be the same as Intermediate Posts.
6. Cable shall be ¾" class "A".
7. When type 1,1a,2 and 2a wood posts are to be installed in paved areas or behind bituminous curb the posts shall be installed prior to the placing of pavement or bituminous curb.
8. Use of this guardrail should be limited to very low volume highways.
9. If the Contractor chooses to drive posts , then all posts on the project , whether driven or placed in dug holes shall be set with the larger diameter at the top




## GUARD RAIL type "1a"-"1b"

INTERMEDIATE POST ANCHOR POST

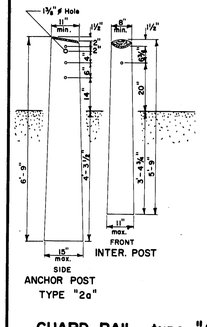
B



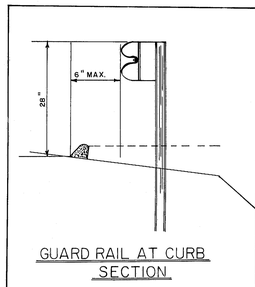

NOTES
1. All holes to be ⅞" ø unless noted.
2. Round posts to be trimmed to provide even bearing for plates.
3. Cable shall be ¾", class "A".
4. Single Posts shall be the same as Intermediate Posts.
5. When placed on curves of 150' or less, posts shall be placed on 8' centers.

ELEVATION

PLAN




ANCHOR POST TYPE "2a"



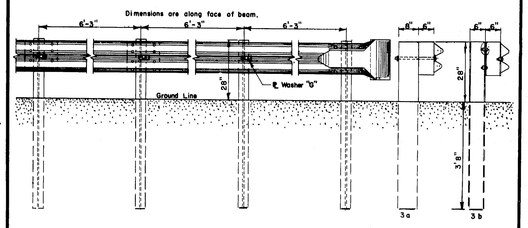

GUARD RAIL AT CURB SECTION

## GUARD RAIL type "2a"

C

FOR BEAM TYPE GUARD RAIL

Beam Type Guard Rail set on radius of 150' or less to be Circular

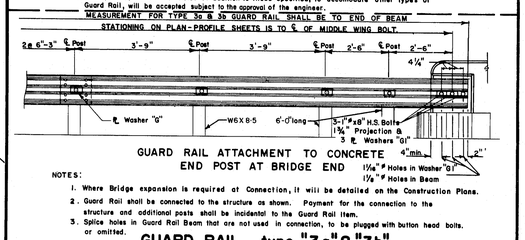



NOTE:
Intermediate post spacing shall be 6'-3" unless otherwise shown.

ELEVATION

1. Posts for type "3a" Guard Rail shall be 6"x 8" and offset blocks for type "3a" Guard Rail shall be 6"x 6".
2. Posts and offset brackets for type "3b" Guard Rail shall be W6 X 8.5
3. Steel posts punched with holes in addition to those specified, to accomodate other types of Guard Rail, will be accepted subject to the approval of the engineer.

MEASUREMENT FOR TYPE 3a & 3b GUARD RAIL SHALL BE TO END OF BEAM STATIONING ON PLAN-PROFILE SHEETS IS TO ℄ OF MIDDLE WING BOLT.



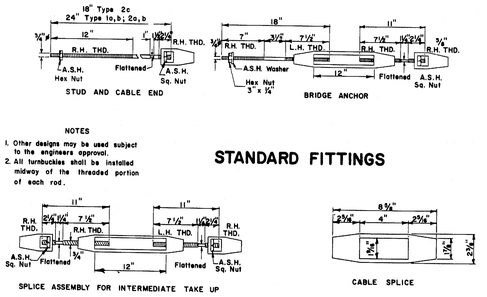

GUARD RAIL ATTACHMENT TO CONCRETE END POST AT BRIDGE END

1⅛" ø Holes in Washer "G"
1⅞" ø Holes in Beam

NOTES:
1. Where Bridge expansion is required at Connection, it will be detailed on the Construction Plans.
2. Guard Rail shall be connected to the structure as shown. Payment for the connection to the structure and additional posts shall be incidental to the Guard Rail Item.
3. Splice holes in Guard Rail Beam that are not used in connection, to be plugged with button head bolts, or omitted.

## GUARD RAIL type "3a" & "3b"

D




STUD AND CABLE END BRIDGE ANCHOR

## STANDARD FITTINGS

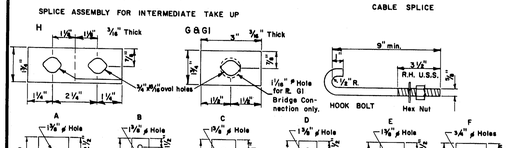
NOTES
1. Other designs may be used subject to the engineers approval.
2. All turnbuckles shall be installed midway of the threaded portion of each rod.




SPLICE ASSEMBLY FOR INTERMEDIATE TAKE UP



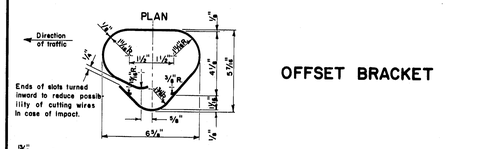

CABLE SPLICE

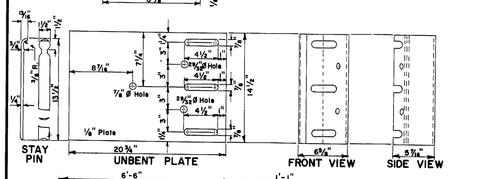


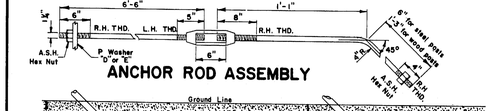

NOTES
1. All holes to be ⅞" ø unless otherwise noted.
2. Holes shall be drilled or punched before galvanizing.

## PLATE WASHERS

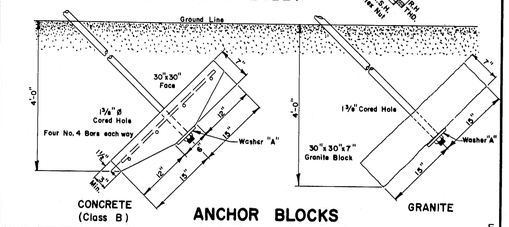
E



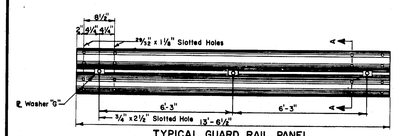



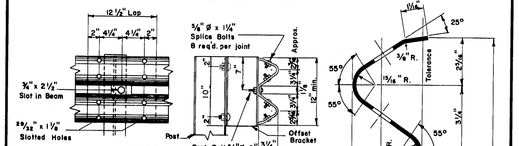

## ANCHOR ROD ASSEMBLY




F

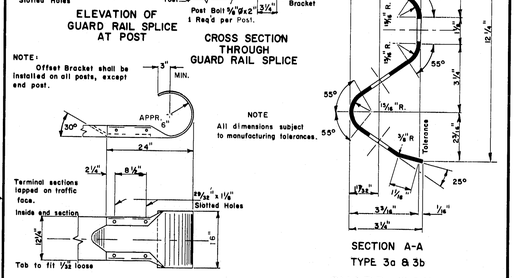



TYPICAL GUARD RAIL PANEL
NO. 12 MIN. GAUGE GUARD RAIL BEAM



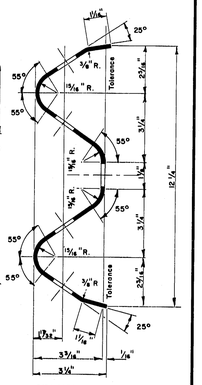

ELEVATION OF GUARD RAIL SPLICE AT POST

CROSS SECTION THROUGH GUARD RAIL SPLICE




GUARD RAIL- TERMINAL END SECTION

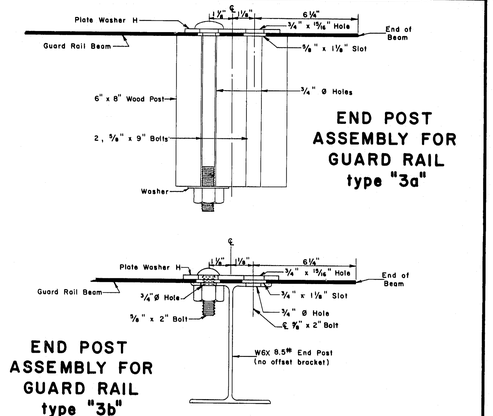
NOTE
All dimensions subject to manufacturing tolerances.




SECTION A-A TYPE 3a & 3b

## GUARD RAIL BEAM DETAIL

G




H

| REVISIONS | |
|---|---|
| PLATE 'D' | 11-22-71 |
| —11— | 2-17-72 |
| PLATES C,D,G,H | 10-22-74 |
| PLATE 'C' | 10-14-75 |
| PLATE 'D' | 8-17-76 |
| PLATE 'B' | 6-1-78 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

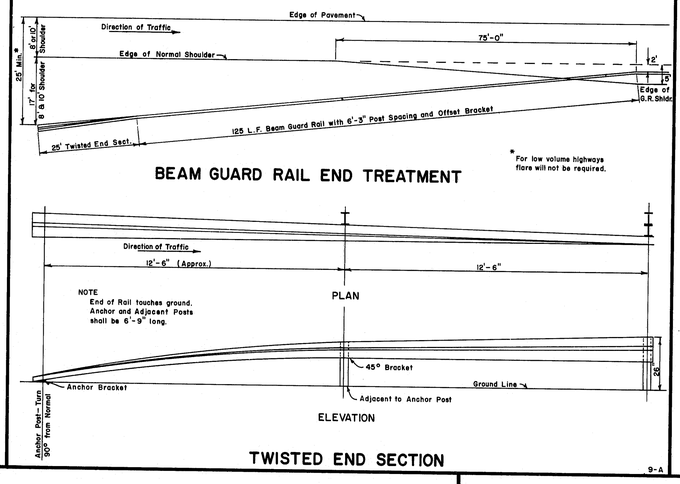
# STANDARD DETAILS

GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

AUG. 1969 (6)

R93-477

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 10 | 53 |

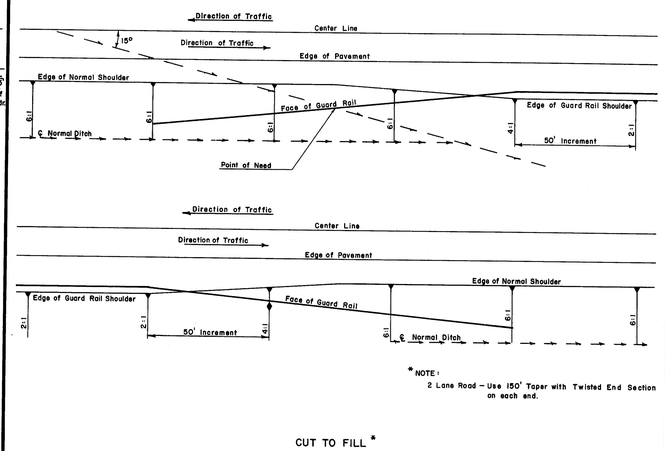



* For low volume highways flare will not be required.

## BEAM GUARD RAIL END TREATMENT

## TWISTED END SECTION

9-A

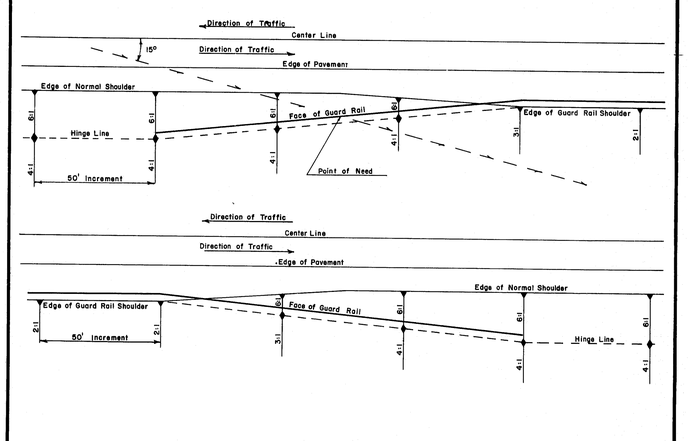



* NOTE:
2 Lane Road – Use 150' Taper with Twisted End Section on each end.

CUT TO FILL *

## BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

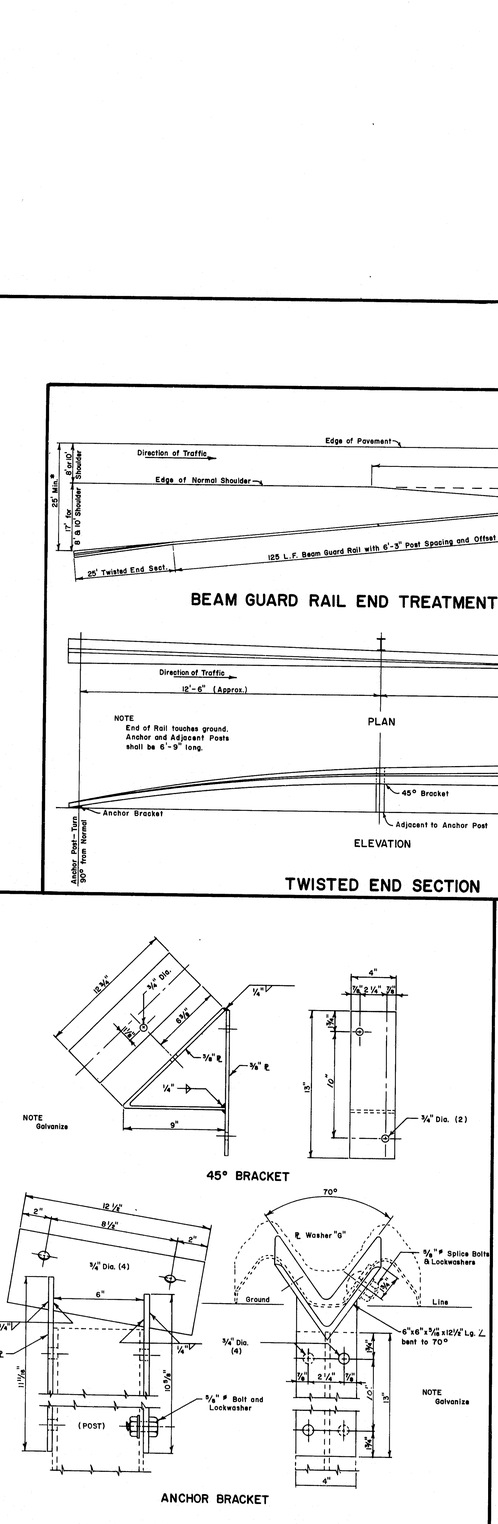
9-B




LOW FILL TO HIGH FILL*

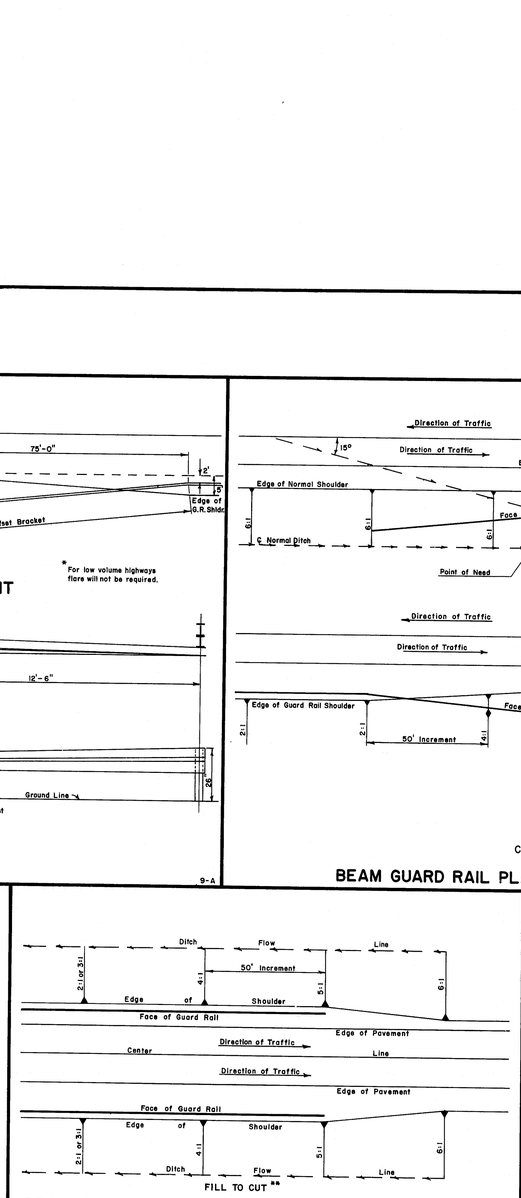
## BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

9-C



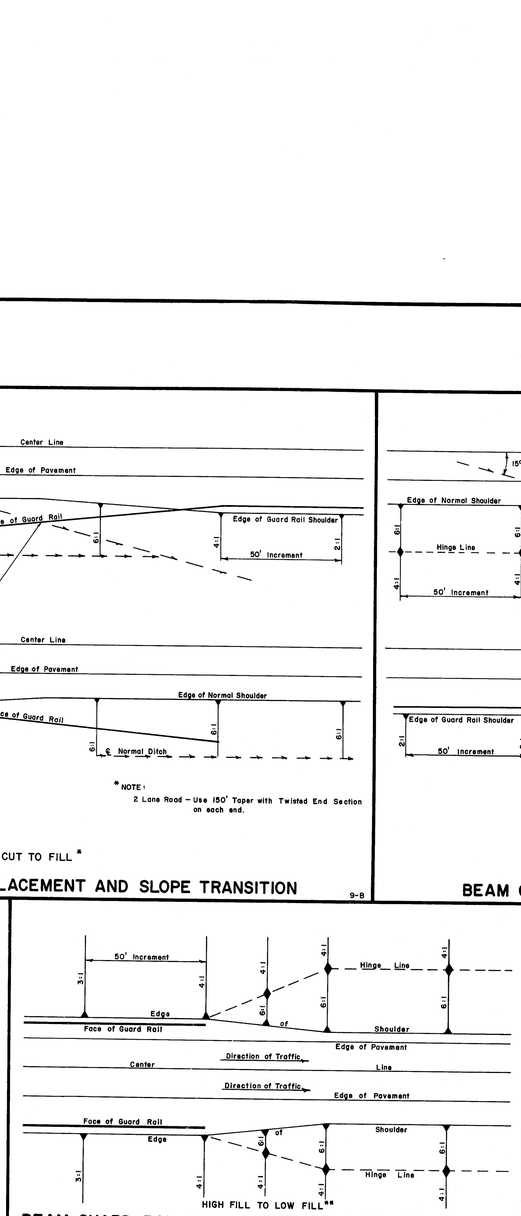

## TWISTED END SECTION ANCHOR DETAIL

9-D




## BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

9-E




** NOTE:
The 25' Twisted End Section and the first 125' of Guard Rail and facing traffic is on a 10:1 taper.

## BEAM GUARD RAIL PLACEMENT AND SLOPE TRANSITION

9-F




9-G

| REVISIONS | |
|---|---|
| Added Plates 9E & 9F | NOV. 1969 |
| PLATE 9G | 12-20-71 |
| PLATE 9G | 1-19-72 |
| PLATE 9G | 10-22-74 |
| PLATE D | 10-14-75 |
| | |
| | |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

# STANDARD DETAILS

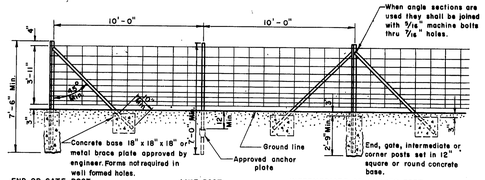
BEAM GUARD RAIL END TREATMENT

R93-478

AUG. 1969

9

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 41 | 63 |




END OR GATE POST LINE POST INTERMEDIATE OR CORNER POST

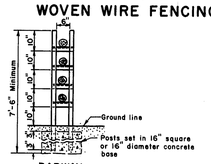
END, INTERMEDIATE AND CORNER POSTS - 2½" x 2½" x ¼" angle or nominal diameter 2" galvanized steel pipe minimum weight of 3.65 pounds per foot with approved top cap, length 7'-6"

GATE POSTS - 3½" x 3½" x 5/16" rolled angle section, or nominal diameter 2½" galvanized steel pipe with minimum weight of 5.79 pounds per foot. Pipe shall be filled with concrete and have an approved top cap, length 7'-6"

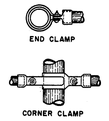
BRACES - 1¾" x 1¾" x ¼" rolled angle section, or nominal diameter 1¼" galvanized steel pipe with minimum weight of 2.27 pounds per foot.

LINE POSTS - Standard studded "T" post with minimum weight of 1.33 pounds per foot or standard lug "U" post with minimum weight of 1.12 pounds per foot, length 7'-0"

## WOVEN WIRE FENCING - METAL POSTS




BARWAY

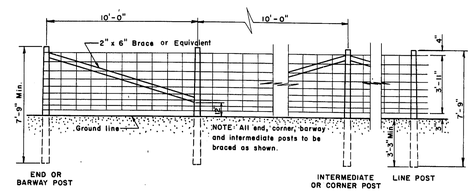



BRACE CLAMPS - PIPE POSTS

BARWAYS- Metal posts shall be installed for a 16'-0" opening. Barway posts and braces shall conform to requirements of "Gate Posts" and "Braces" under "Woven Wire Fencing - Metal Posts." Cross bar supports for barways shall be 1¾" x 1¾" x ¼" rolled angle section. When round gate posts are used, length of cross bar supports shall equal center to center of gate posts plus 2 inches and they shall be attached to the barway post with 3/8" x 4½" machine bolts. When angle section gate posts are used, the length of cross bar supports shall be equal to the out to out dimensions of the angle sections and shall be attached with 5/16" x 1" machine bolts. All bracing shall conform to the requirements of "Woven Wire Fencing - Metal Posts." Cross bars shall be as required for "Barways - Wood Posts."

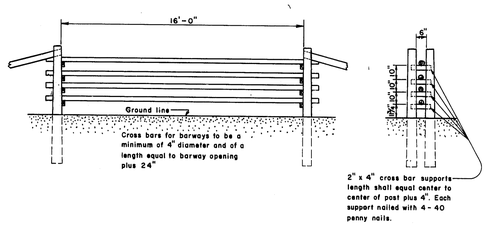
## BARWAYS - METAL POSTS

B



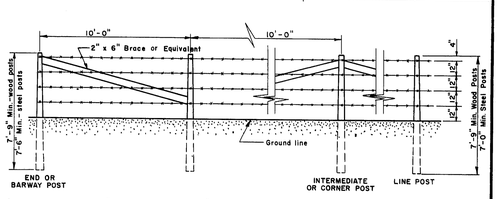

## WOVEN WIRE FENCING - WOOD POSTS

Staples for wood posts to be 9 ga. 1½", placed according to the specifications.



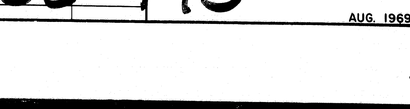

## BARWAYS - WOOD POSTS

C




"Barbed Wire - Metal Posts" shall be constructed with the post and wire spacing shown above. Metal posts and braces shall conform to all the requirements noted and shown for "Woven Wire Fencing - Metal Posts," including concrete bases.

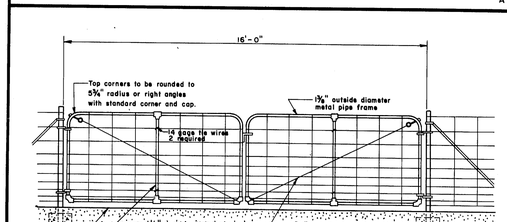
## BARBED WIRE FENCING - WOOD POSTS AND BARBED WIRE FENCING - METAL POSTS




BRACING - TYPE I
Used at Gates, Barways and Terminals.

BRACING - TYPE II
Used at Corners, Intermediate Points, and changes in Vertical Alignment

D




Gate posts, braces and anchorages to be as specified under "woven wire fencing - metal posts."

All gates shall be installed with the top hinge pin pointing down.

Wire for gates shall conform to A.S.T.M. A116, class 1, design no. 1047-12-11.

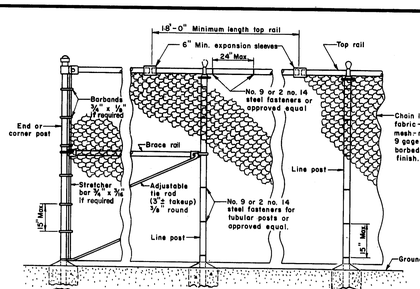
The required fittings for fence and gates shall be steel or malleable iron of approved standard type.

Gates shall be furnished with standard fork latch and one piece of ¾" straight link, alloy steel chain, 24" long. One end shall be attached to gate frame and attached to the other end shall be a snap lock or other approved fastening device.

## DRIVE GATEWAYS - 16 FEET

## INTERMEDIATE BRACING

E

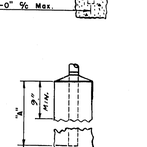



END OR CORNER POSTS: Nominal 2" diameter, galvanized steel pipe, minimum 3.65 pounds per linear foot or 2¼" x 2" "H" section, 4.10 lbs./l.f., or 3½" x 3½" "L" section with with integral fabric loops 5.14 lbs./l.f.

LINE POSTS: Nominal 1¼" diameter, galvanized steel pipe, minimum weight 2.72 pounds per linear foot or 1⅞" x 1⅝" steel "H" section 2.70 lbs./l.f. or 1⅞" x 1⅝" "C" section, 2-2.81 lbs./l.f.

TOP & BRACE RAILS: Nominal 1¼" diameter, galvanized steel pipe, minimum weight 2.27 lbs/ l.f. or 1⅞" x 1¼" EI shaped, rolled formed section.

STRETCHER BARS: Length to be 1" less than full height of frabic. One stretcher bar for each gate and end post, and two stretcher bars for corner and bracing.

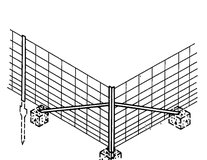



"A" = 2'-6" for 4' fence; 3'-0" for 6' fence and 5'-0" for all end and gate posts.

LINE, GATE AND END POST BASE

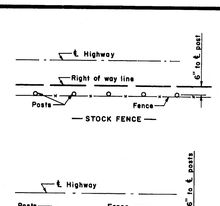
## CHAIN LINK FENCE

F

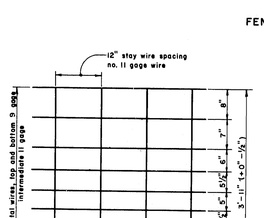


CORNER POST

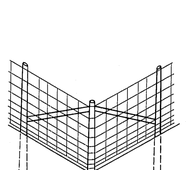
BRACING ASSEMBLY for METAL POST




FENCE LOCATION WITH RESPECT TO RIGHT OF WAY LINE




WOVEN WIRE FENCE



CORNER POST

BRACING ASSEMBLY for WOOD POST

G

GENERAL NOTES: FENCING

1. When ledge is encountered, steel posts shall be set and grouted 12" deep unless the posts penetrate the ground to the depth indicated on the drawings.
2. When wood posts are used, braces shall be attached to posts with a minimum of 4, 40 penny nails per attachment.
3. When the word *"standard"* is used, it shall be interpreted as if it were followed by the expression *"to the fence industry."*
4. Woven Wire and Barbed Wire Fencing shall be attached to wood posts with 9 gauge 1½" galvanized staples.
5. Concrete for post foundations shall be class B.
6. In well formed holes with vertical walls, forms will be required only at the top 9 inches. Holes which cannot be well formed shall have forms for the full depth of the base.

SPACING OF FENCE POSTS ON CURVES:

| Radius of curve at fence location | Normal post spacing |
|---|---|
| Over 500 feet | 10 feet |
| Over 200 feet to 500 feet | 8 feet |
| Over 100 feet to 200 feet | 6 feet |
| 100 feet or less | 5 feet |

H

| REVISIONS | |
|---|---|
| PLATE F | 8-10-70 |
| PLATES B,D,F,H | 7-10-72 |
| PLATE F | 3-24-76 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

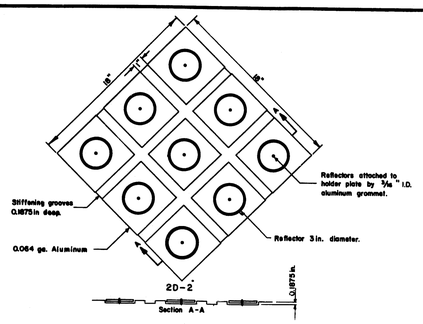
# STANDARD DETAILS

## FENCING

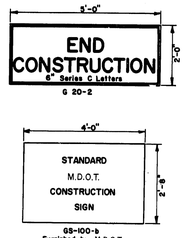
R93-479

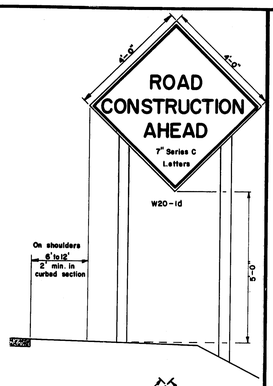
AUG. 1969

10



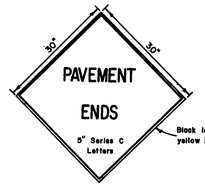

HAZARD MARKER



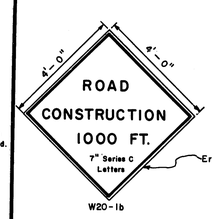

NOTE

SIGNING IN AN AREA WHERE BLASTING IS NECESSARY SHALL BE PLACED AS OUTLINED IN THE "MANUAL", AND THE PRECAUTIONS OF SUBSECTION 107.12 OF THE STANDARD SPECIFICATIONS SHALL BE OBSERVED.




GENERAL NOTE
Construction Signs
1. Sign Borders - All signs shall have borders conforming to the sizes and spacing as shown below:
a. 30"x30" Sign - 3/4" Border, 1/2" Space from sign edge.
b. 2' x 5' Sign - 3/8" Border, 7/8" Space from sign edge.
c. 3' x 4' Sign - 3/4" Border, 1" Space from sign edge.
d. 4'x 4' Sign - 1 1/4" Border, 3/4" Space from sign edge.

A




CONSTRUCTION SIGNS

B

GENERAL NOTES - BARRICADES

1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation, Federal Highway Administration, 1971.
2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 16 minimum gauge galvanized steel, or 1/4" plywood. Individual white sheets may be attached to AN orange reflectorized background to form the orange and white stripes. At the Contractor's option the reflective sheeting and backing may extend the full width of the barricade with an opaque film or paint applied to form the stripes.
3. All signs shall be of reflective sheeting on 5/8" thick plywood. The plywood shall conform to subsection 712.25, Standard Specifications, June 1968.
4. Pressure sensitive reflective sheeting will be an acceptable alternate to the reflective sheeting required by Standard Specifications.

NOTES - PORTABLE BARRICADES

1. Lumber sizes for portable barricades shall be 2" x 8" except posts which shall be 4" x 4" (nominal sizes).
2. The detour sign shall be an oversized M4-10 sign with a demountable "DETOUR" message which shall be made of screened reflective sheeting on 1/4" plywood, masonite, sheet steel or sheet aluminum.
3. Hazard markers shall be attached to the barricade with a bolt assembly of steel cadmium plated 5/16" bolt, lock washer and vandal resistant nuts.
4. When two W1-6 signs are required, R11-2, R11-3, or R11-4 signs shall be omitted.
5. Flashing lights housings shall be mounted to permit rotating in a vertical axis to allow for adjustment to face oncoming traffic.
6. Location of electric service and meter to be determined after the power source has been located.

NOTES-WING BARRICADES

1. Lumber sizes for wing barricades shall be 2" x 8" except posts which shall be 4" x 4" (nominal sizes).
2. Wing barricades will not be required unless specifically called for in the special provisions.
3. Location of signs and barricades will be determined by the Engineer.

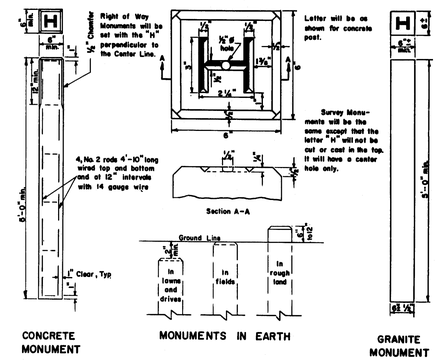


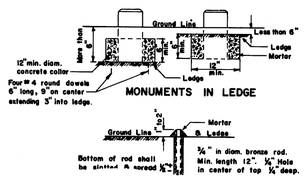

WING BARRICADES

C

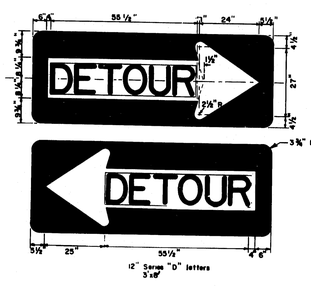
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 47 | 53 |

RIGHT OF WAY & SURVEY MONUMENTS

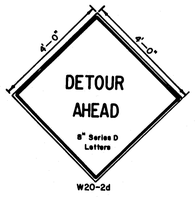



D

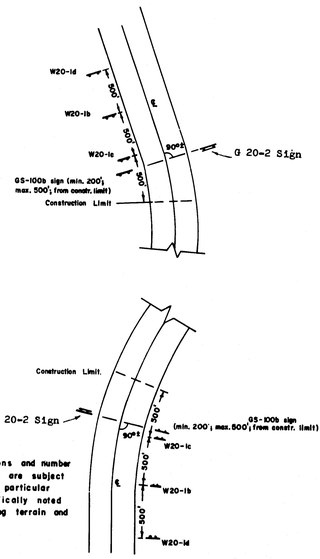



DETOUR SIGN
M 4-(L)



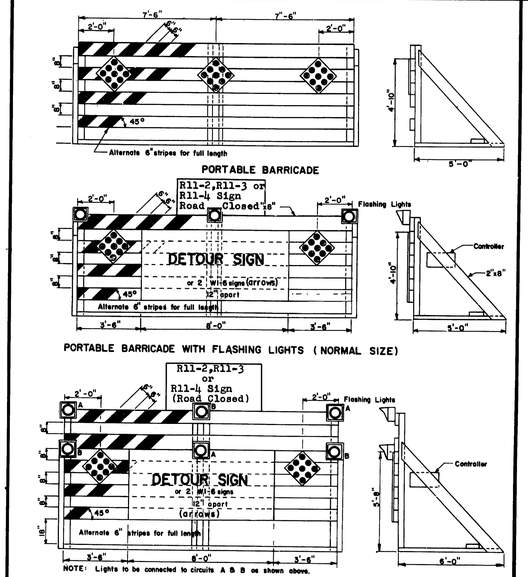

E

STANDARD SIGN LOCATIONS



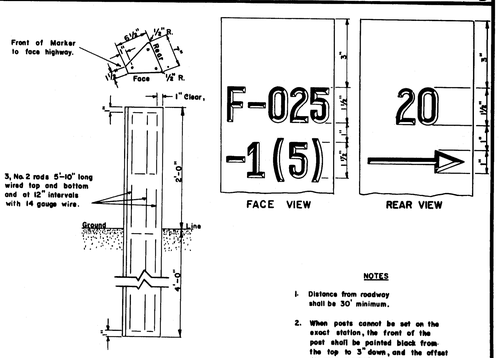

NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.

F




BARRICADES

G




NOTES

1. Distance from roadway shall be 30" minimum.
2. When posts cannot be set on the exact station, the front of the post shall be painted black from the top to 3" down, and the offset distance marked on rear with an arrow pointing in direction of beginning or end of project.
3. All markings to be 1/4" deep and 3/16" wide.

PROJECT MARKERS

H

| REVISION | |
|---|---|
| PLATE B | 12-21-70 |
| NOTES B,C,E,F,G | 12-15-71 |
| PLATE C | 10-12-72 |
| PLATES C,G | 3-25-76 |
| Plate B | 3-22-77 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

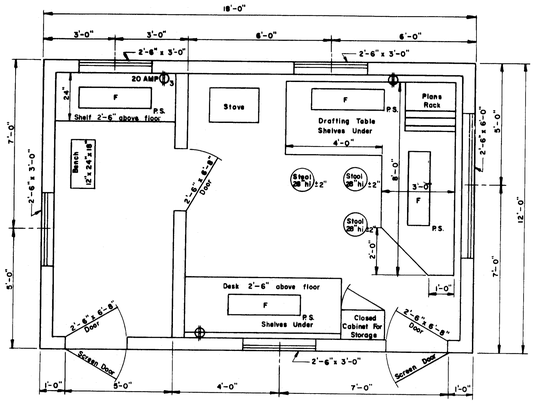
# BARRICADES
# WARNING SIGNS
# MONUMENTS
# PROJECT MARKERS

AUG. 1969

11

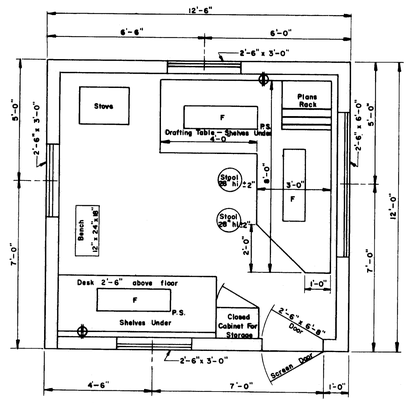
R93-480

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 43 | 53 |



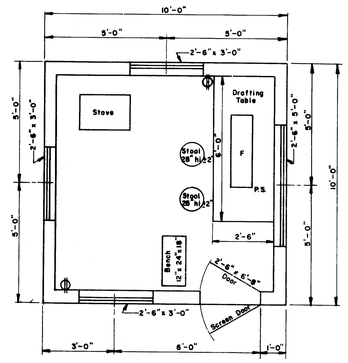

FLOOR PLAN
TYPE "A"

A




FLOOR PLAN
TYPE "B"

B

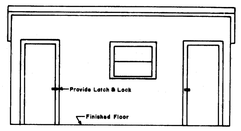



FLOOR PLAN
TYPE "C"

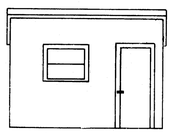
C

## GENERAL NOTES

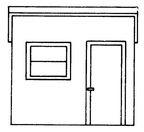
1. Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
2. Shelves under desk shall be constructed to received 11½" x 14" x 25" transfiles.
3. Windows shall be double hung.
4. Stovepipe shall not be in direct contact with combustible material ; the pipe shall be surrounded with at least 6" of fireproof material.
5. Continuous 110 volt 60 cycle electric service shall be supplied.
6. The engineer may rearrange the items shown on the plan views during construction of the field office.
7. FURNISHINGS TO BE SUPPLIED :
   - 2 Straight back chairs for types A and B
   - 1 Bench for types A, B & C
   - 3 Stool for type A
   - 2 Stools for types B & C
8. SYMBOLS :
   - F — Florescent lights ( 2 light , rapid start 48" strips and 40 watt bulbs.)
   - P.S. — Pull switch
   - Duplex wall outlet — 15 amp unless otherwise noted.
   - $\oplus_3$ — Triplex Wall Outlet
9. For the Type "A" Field Office one clean 55 gal. drum shall be supplied , installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furished with water at all times.



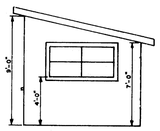

FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



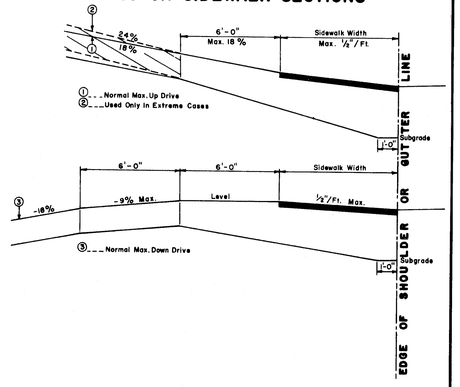
FRONT ELEVATION
TYPE "C"




SIDE ELEVATION
TYPES "A" "B" & "C"

F

## DRIVES ON SIDEWALK SECTIONS




**GENERAL NOTES**

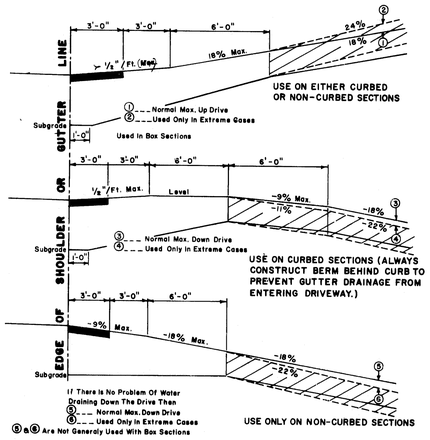
1. The sidewalk width shall be paved in all cases.
2. All residential or commercial drives 10% and over shall be paved.

**NOTES ON MAXIMUM DRIVEWAY PROFILES**

1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

D

## DRIVES ON NON-SIDEWALK SECTIONS




**GENERAL NOTES**

1. The first 3' shown as pavement shall be paved only when abutting a paved area.
2. All residential or commercial drives 10% and over shall be paved.

**NOTES ON MAXIMUM DRIVEWAY PROFILES**

1. These profiles are a guide for the majority of cases , but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.

E

| REVISIONS | |
|---|---|
| PLATE 'D' & 'E' | 3-16-73 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

# STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

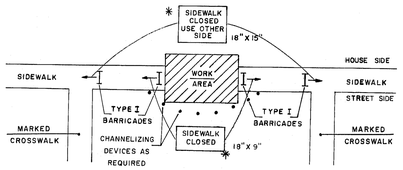
AUG. 1969

12

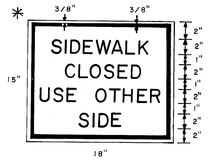
R93-481

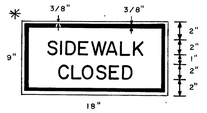
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | AA | 53 |

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



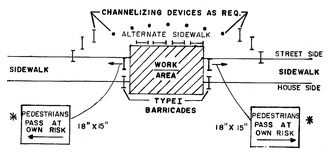

SIDEWALK CLOSURE
WITHOUT ALTERNATE SIDEWALK



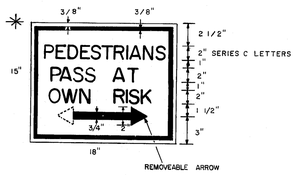




A

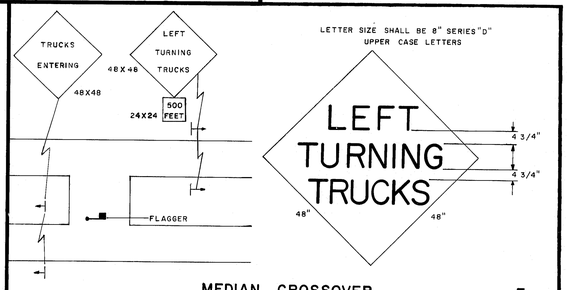
* NON-REFLECTORIZED WHITE BACK GROUND, BLACK TEXT AND BORDER-2" SERIES 'C' UPPER CASE LETTERS




SIDEWALK CLOSURE
WITH ALTERNATE SIDEWALK



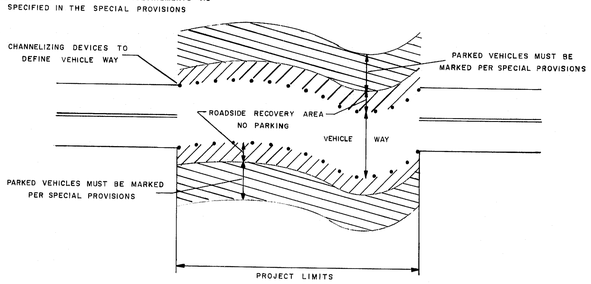

B




MEDIAN CROSSOVER

E

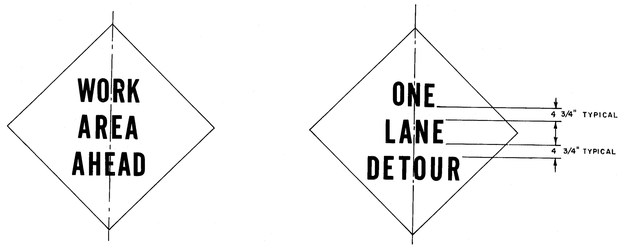
ALL DIMENSIONS AND OTHER REQUIREMENTS AS SPECIFIED IN THE SPECIAL PROVISIONS




ROADSIDE RECOVERY AREA

C

CONSTRUCTION WARNING SIGN DETAIL




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
   $L = (W \times S \times S) / 60$

   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:

   $D = (W \times S) / L$

   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.

8. The Contractor, when erecting steel, shall have two State Police officers and vehicles to stop traffic on I-95 in addition to the signs for the traffic control plan. The Contractor shall plan his work such that traffic on I-95 shall not be stopped for more than 10 minutes. Payment for the State Police officers and vehicles shall be considered incidental to the items in the contract.

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

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

R93-482

| REVISIONS | |
|---|---|
| | |

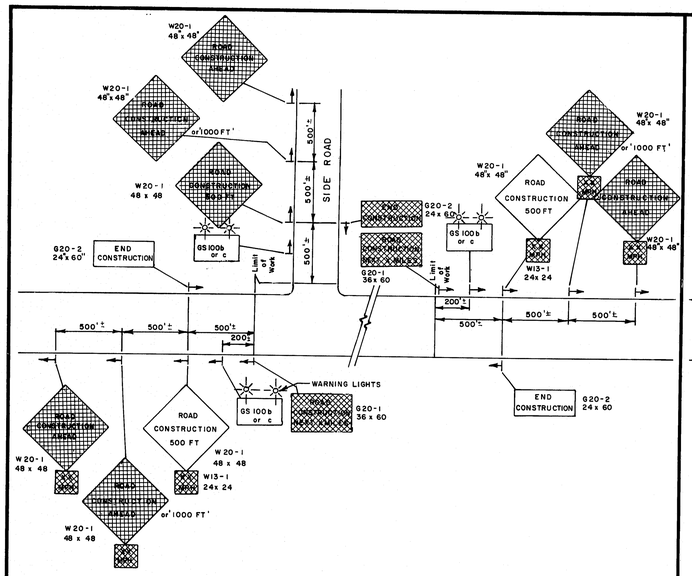
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES

SHEET 1 OF 3 AUGUSTA, MAINE

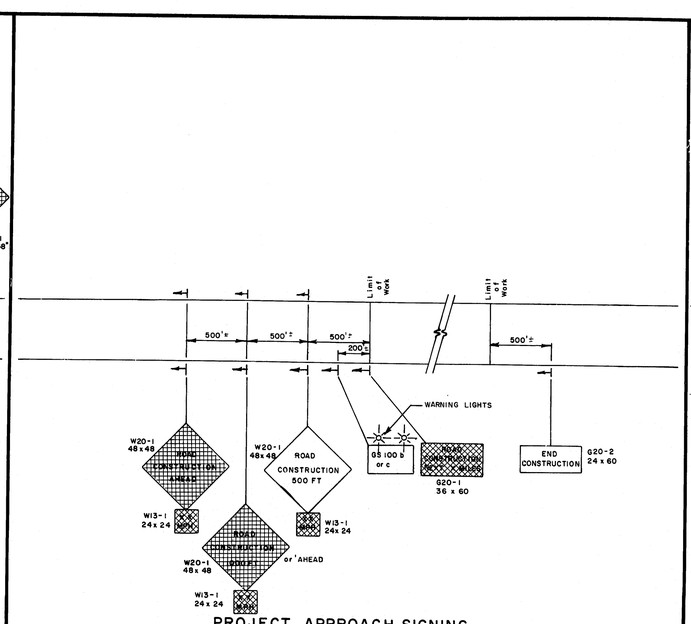
JANUARY 1980

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 45 | 93 |



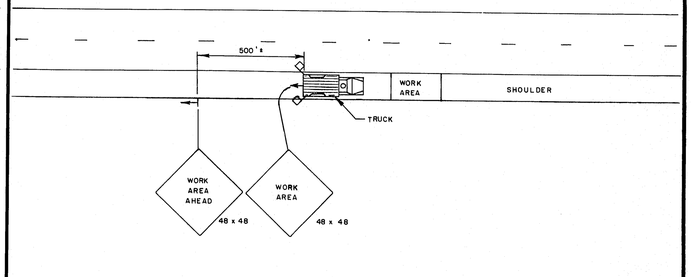

PROJECT APPROACH SIGNING
Two Way Traffic

A




PROJECT APPROACH SIGNING
Expressway

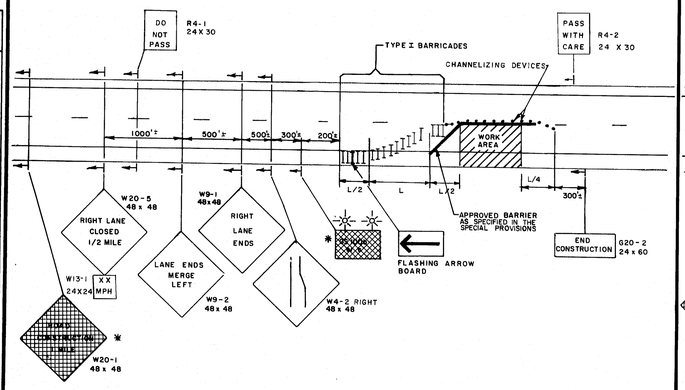
B




SHOULDER WORK - MOBILE

C

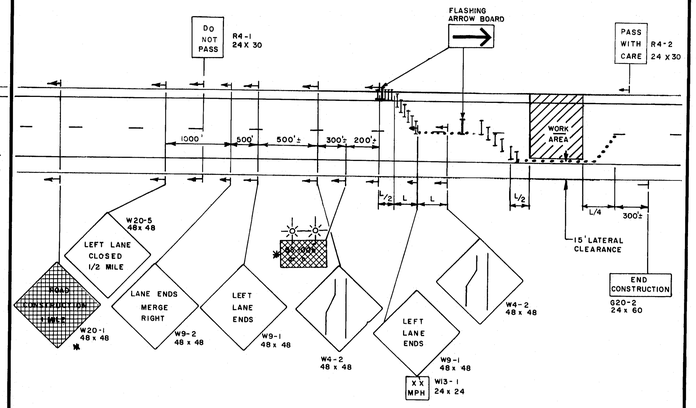
NOTE
* OMIT W20-1 AND GS-100 C OR B IF LANE CLOSURE SIGNING ARRAY IS WITHIN PROJECT LIMITS.
ALTER PAVEMENT MARKINGS AS REQUIRED. MAINTAIN 15 FT LATERAL CLEARANCE.
USE SIMILAR SIGNING FOR LEFT LANE CLOSURE.




EXPRESSWAY LANE CLOSURE

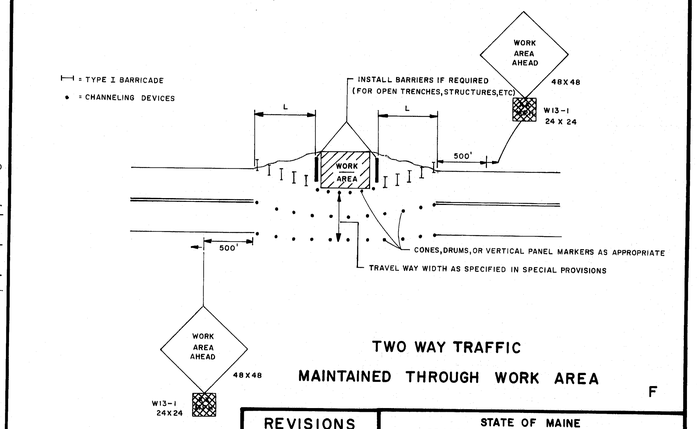
D

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.




TWO LANE CLOSURE - UTILIZING RIGHT SHOULDER

E




TWO WAY TRAFFIC
MAINTAINED THROUGH WORK AREA

F

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

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

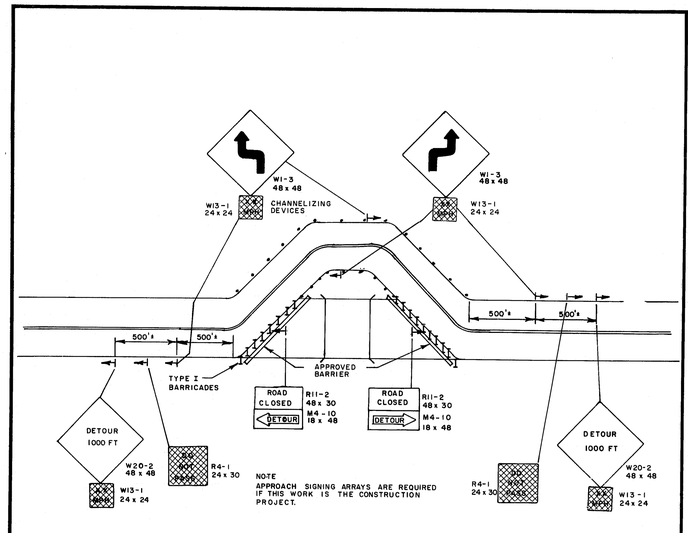
MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

R93-483

SHEET 2 OF 3 AUGUSTA, MAINE JULY, 1979

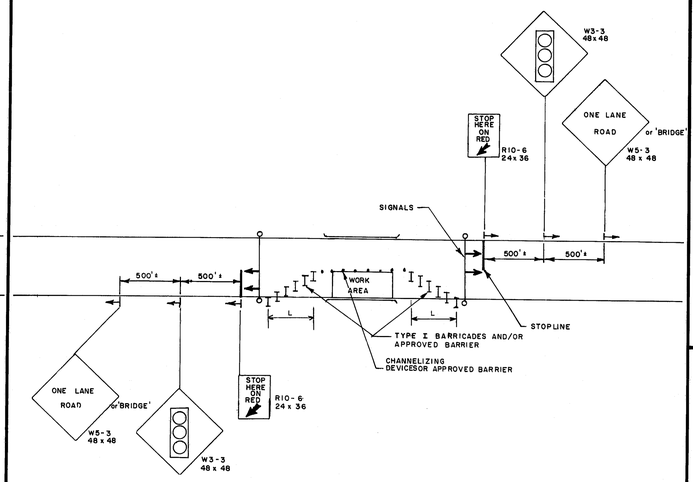
JANUARY 1969

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 46 | 53 |



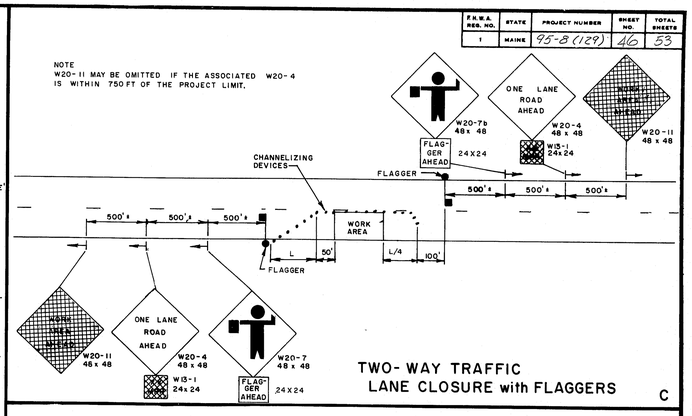

TWO WAY TWO LANE DETOUR

A



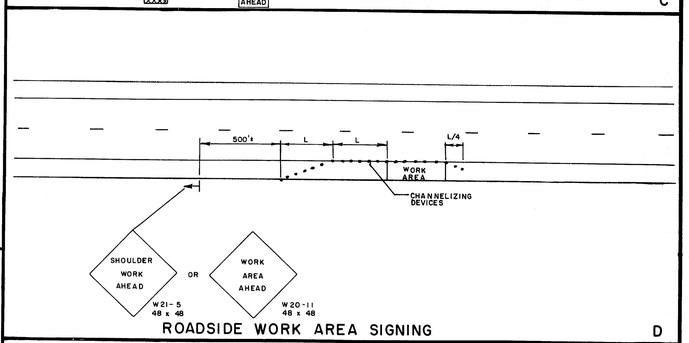

TWO WAY TRAFFIC
LANE CLOSURE
WITH TEMPORARY TRAFFIC SIGNALS

B



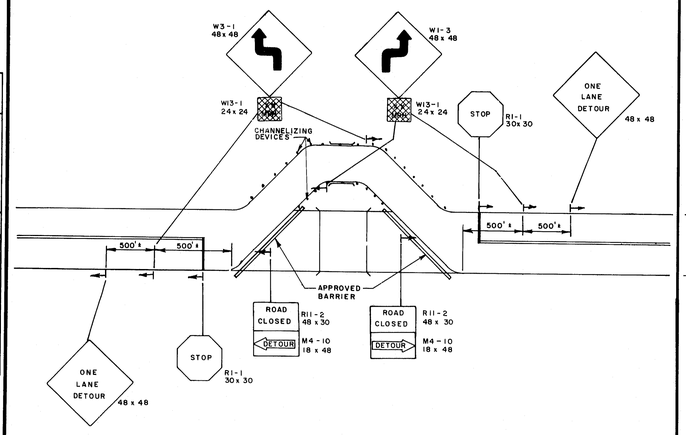

TWO- WAY TRAFFIC
LANE CLOSURE with FLAGGERS

C



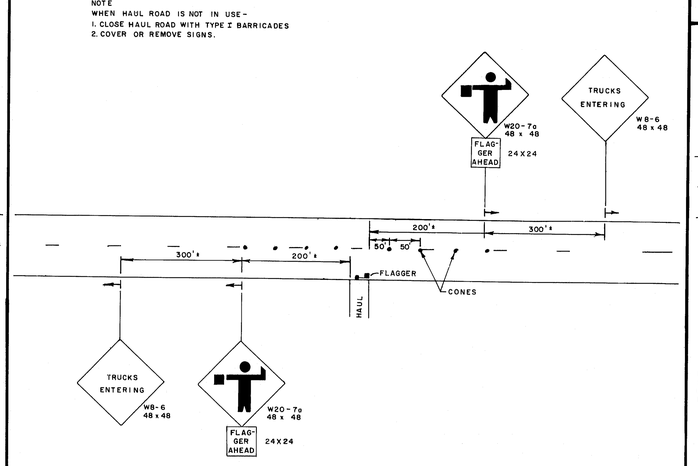

ROADSIDE WORK AREA SIGNING

D



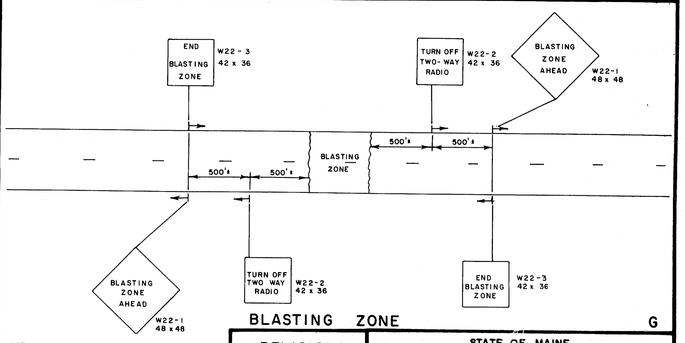

ONE WAY DETOUR

E




HAUL ROADS

F




BLASTING ZONE

G

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

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

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

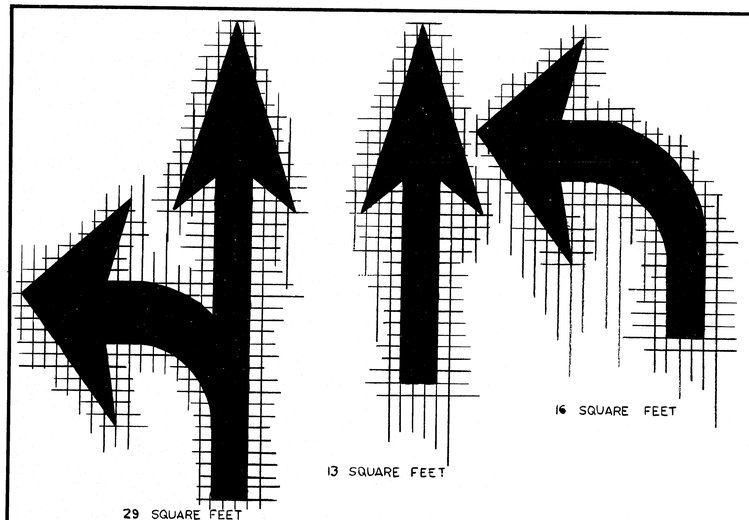
MAINTENANCE
OF
TRAFFIC
IN CONSTRUCTION ZONES

R93-484

SHEET 3 OF 3 AUGUSTA, MAINE JULY, 1979

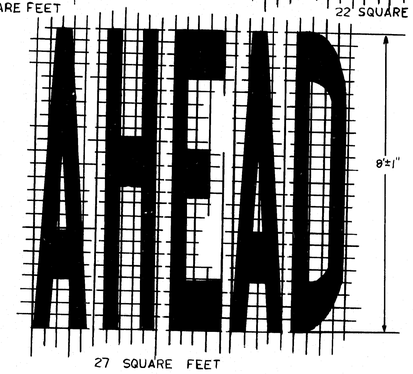
JANUARY 1968

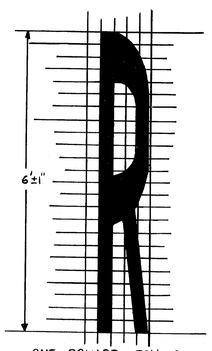
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 47 | 53 |










STROKE WIDTH AND LINE WIDTH VARIANCE SHALL BE ± 1/4 INCH FROM DIMENSIONS SHOWN.

DIMENSIONS SHOWN ARE PAY DIMENSIONS

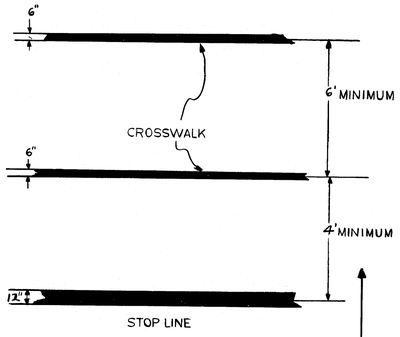
GRID IS MARKED IN FOUR INCH INTERVALS EXCEPT AS NOTED

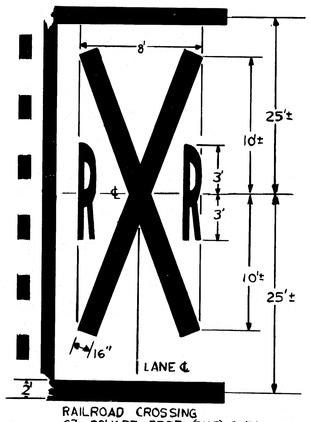
SYMBOLS AND LETTERS SHALL BE PROPORTIONED ACCORDING TO GRID AS SHOWN.

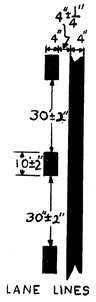
THE SPACE BETWEEN CHARACTERS SHALL BE ONE UNIT, BUT VISUAL SPACING MAY BE USED.

SPACING BETWEEN SYMBOL AND STOP LINE SHALL BE A MINIMUM OF 20FT OR AS DIRECTED BY ENGINEER.

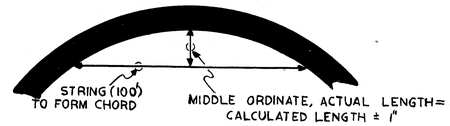
SPACING BETWEEN SYMBOL AND SYMBOL SHALL BE A MINIMUM OF 50 FT OR AS DIRECTED BY ENGINEER.

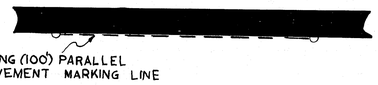



TOLERANCE FOR PAVEMENT MARKING LINES




DISTANCE FROM THE STRING TO THE EDGE OF THE PAVEMENT MARKING LINE SHALL NOT BE MORE THAN 1'.

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

| REVISIONS |
|---|
| DEC 79 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# STANDARD PAVEMENT MARKINGS

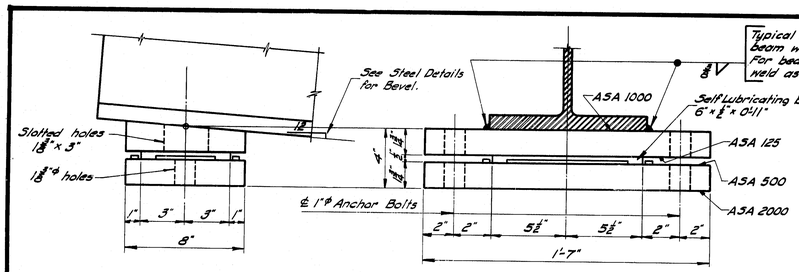
(PART 3 1978 MUTCD)

SHEET OF AUGUSTA, MAINE

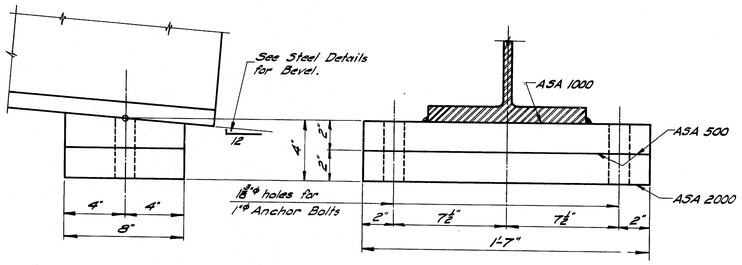
R93-485

JANUARY 1980

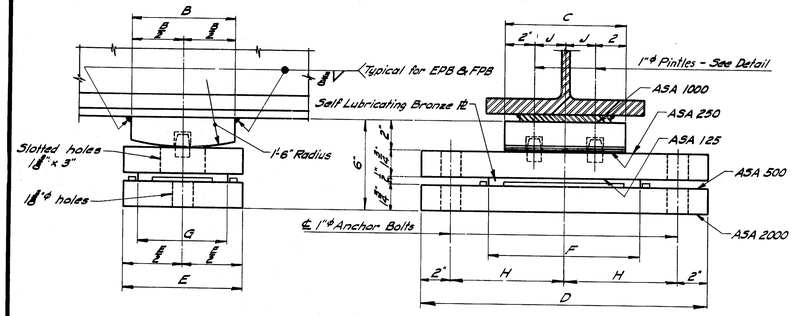
| B.P.R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| I | MAINE | 95-8(129) | 48 | 53 |



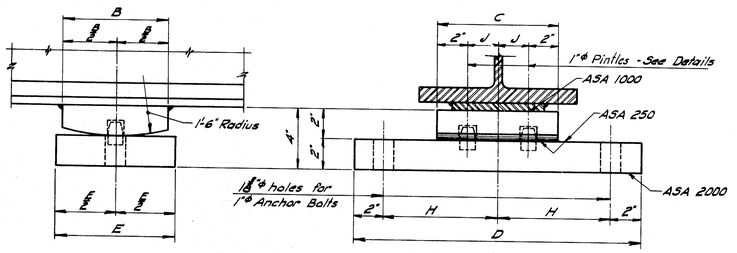

EXPANSION PEDESTAL - EPA



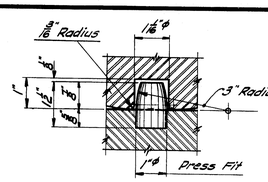

FIXED PEDESTAL - FPA



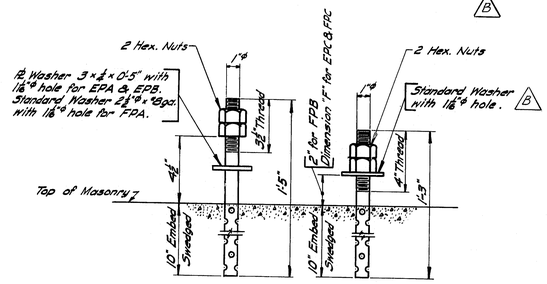

EXPANSION PEDESTAL - EPB



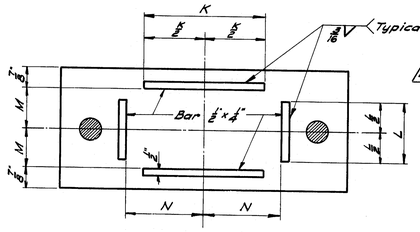

FIXED PEDESTAL - FPB



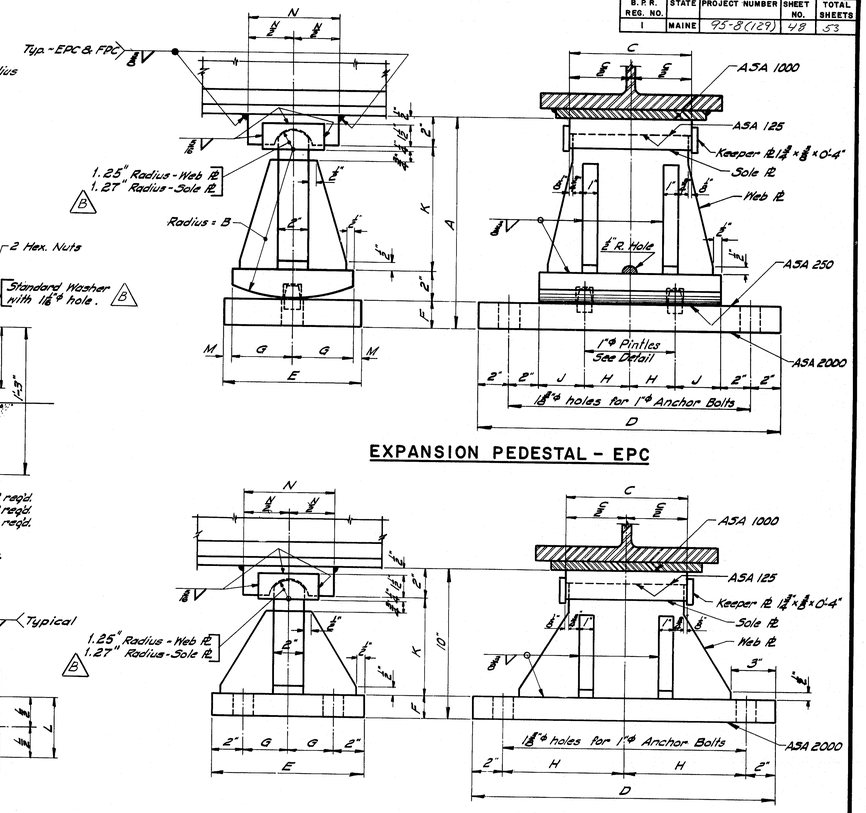

PINTLE DETAIL




ANCHOR BOLT DETAIL




MASONRY PLATE




EXPANSION PEDESTAL - EPC




FIXED PEDESTAL - FPC

| PEDESTALS — ALLOWABLE LOADS & DIMENSIONS | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pedestal | Load | A | B | C | D | E | F | G | H | J | K | L | M | N |
| EPA | 132 k | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FPA | 150 k | — | — | — | — | — | — | — | — | — | — | — | — | — |
| EPB-1 | 120 k | — | 6" | 6" | 1'-7" | 8" | 10" | 6" | 7½" | 2" | 8" | 4" | 3½" | 5⅛" |
| EPB-2 | 165 k | — | 7" | 10" | 1'-8" | 9" | 1'-0" | 7" | 8" | 3" | 10" | 5" | 3⅝" | 6⅛" |
| EPB-3 | 224 k | — | 8" | 1'-1" | 2'-0" | 10" | 1'-4" | 8" | 10" | 4½" | 1'-2" | 5" | 4⅛" | 6⅛" |
| FPB-1 | 120 k | — | 6" | 8" | 1'-7" | 8" | — | — | 7½" | 2" | — | — | — | — |
| FPB-2 | 165 k | — | 7" | 10" | 1'-8" | 9" | — | — | 8" | 3" | — | — | — | — |
| FPB-3 | 224 k | — | 8" | 1'-2" | 2'-0" | 10" | — | — | 10" | 5" | — | — | — | — |
| EPC-1 | 70 k | 9⅛" | 6" | 8" | 1'-8" | 8" | 1½" | 3½" | 5" | 3" | 4½" | — | 1" | 6" |
| EPC-2 | 100 k | 11⅛" | 8" | 8" | 1'-8" | 8" | 1½" | 3½" | 5" | 3" | 6½" | — | 1" | 6" |
| EPC-3 | 130 k | 1'-2" | 10" | 8" | 1'-8" | 9" | 1½" | 4" | 5" | 3" | 8½" | — | 1" | 7" |
| EPC-4 | 160 k | 1'-2" | 10" | 8" | 1'-10" | 9" | 1½" | 4" | 4" | 3" | 8½" | — | 1" | 7" |
| EPC-5 | 190 k | 1'-2½" | 10" | 9" | 2'-0" | 10" | 2" | 4½" | 5" | 3" | 8½" | — | 1" | 8" |
| EPC-6 | 220 k | 1'-4½" | 1'-0" | 10" | 2'-0" | 1'-0" | 2½" | 5" | 5" | 3" | 10½" | — | 1" | 8" |
| EPC-7 | 250 k | 1'-4½" | 1'-0" | 1'-0" | 2'-2" | 1'-0" | 2½" | 5" | 5" | 4" | 10½" | — | 1" | 8" |
| FPC-1 | 100 k | — | — | 8" | 1'-8" | 9" | 1½" | 2½" | 8" | — | 6½" | — | — | 6" |
| FPC-2 | 160 k | — | — | 8" | 1'-8" | 10" | 1½" | 3" | 8" | — | 6½" | — | — | 7" |
| FPC-3 | 190 k | — | — | 9" | 2'-0" | 10" | 1½" | 3" | 10" | — | 6½" | — | — | 8" |
| FPC-4 | 220 k | — | — | 10" | 2'-0" | 1'-0" | 1½" | 4" | 10" | — | 6½" | — | — | 8" |
| FPC-5 | 250 k | — | — | 1'-0" | 2'-0" | 1'-0" | 2" | 4" | 10" | — | 6" | — | — | 8" |

NOTE: At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than size of masonry plates and to exact elevations shown on the plans. If dressed areas are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 2" and min. slope of ¼ inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

**A DESIGN SPECIFICATIONS**

AASHTO, Standard Specifications for Highway Bridges 1973. Interims thru 1977

**A A.S.T.M. STEEL CLASSIFICATION**

(When structural steel is specified to be unpainted) All structural steel including anchor bolts shall be A588 unpainted.
(When structural steel is specified to be painted) All structural steel including anchor bolts shall be A36.

R93-486

| REVISIONS | DATE |
|---|---|
| B Delete Std. Washer size & change radius | 6-14-78 |
| A Change Specifications & Steel Classification | 3-1-77 |

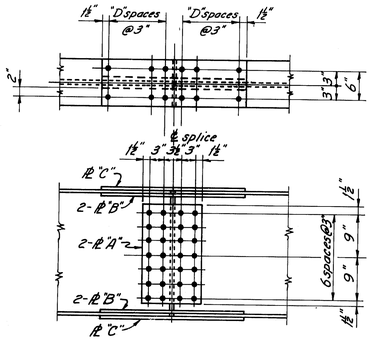
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# STANDARD DETAILS
( BD 101 - 74 )

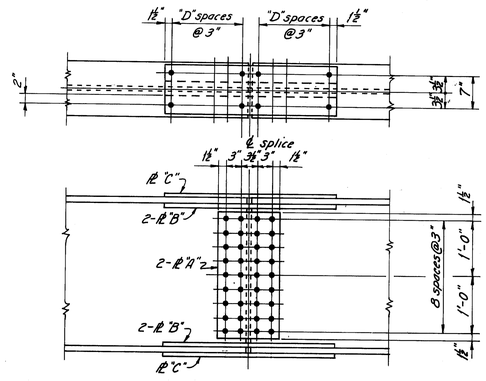
## BEARING PEDESTALS

SHEET OF AUGUSTA, ME. APRIL, 1974

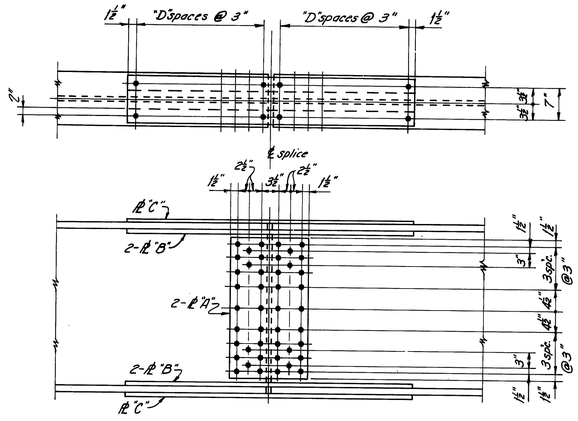
| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 49 | 53 |




**W27 x 84,94,102,114**



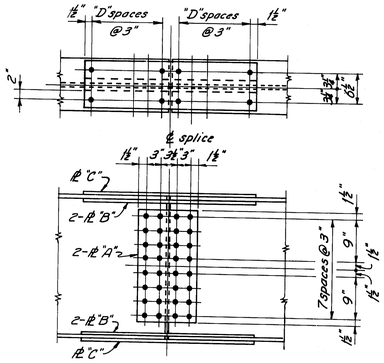

**W33 x 118, 130, 141, 152**



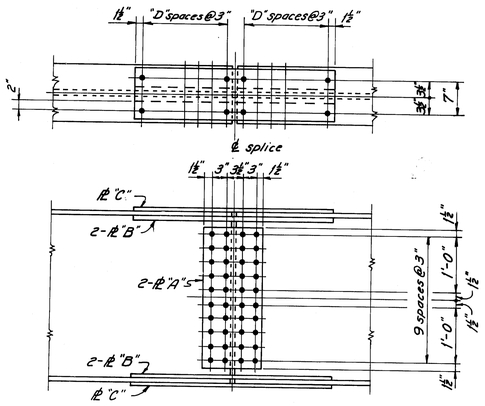

**W36 x 182, 194, 210**

## SPLICE PLATES AND FLANGE HOLES

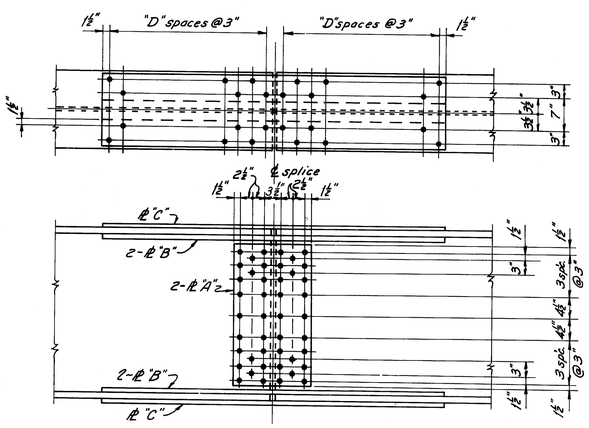
| BEAM | PLATE "A" | PLATE "B" | PLATE "C" | "D" |
|---|---|---|---|---|
| W 27 x 84 | 12½" x ½" | 4" x ½" | 10" x ½" | 3 |
| x 94 | 12½" x ½" | 4" x ½" | 10" x ½" | 3 |
| x 102 | 12½" x ½" | 4" x 7/16" | 10" x ½" | 3 |
| x 114 | 12½" x 7/16" | 4" x ½" | 10" x ½" | 4 |
| W30 x 99 | 12½" x ½" | 4" x ½" | 10" x ½" | 3 |
| x 108 | 12½" x ½" | 4" x 9/16" | 10" x ½" | 3 |
| x 116 | 12½" x ½" | 4" x ½" | 10" x ½" | 3 |
| x 124 | 12½" x ½" | 4" x 11/16" | 10" x ½" | 4 |
| x 132 | 12½" x 7/16" | 4" x 11/16" | 10" x ½" | 4 |
| W33 x 118 | 12½" x ½" | 4" x 9/16" | 11" x ½" | 3 |
| x 130 | 12½" x ½" | 4" x ½" | 11" x ½" | 4 |
| x 141 | 12½" x ½" | 4" x 11/16" | 11" x ½" | 4 |
| x 152 | 12½" x ½" | 4" x ½" | 11" x 9/16" | 5 |
| W36 x 135 | 12½" x ½" | 4" x 11/16" | 11" x ½" | 4 |
| x 150 | 12½" x ½" | 4" x 11/16" | 11" x ½" | 5 |
| x 160 | 12½" x ½" | 4" x ½" | 11" x 9/16" | 5 |
| x 170 | 12½" x ½" | 4" x 13/16" | 11" x 9/16" | 6 |
| x 182 | 16½" x 7/16" | 4" x 1" | 11" x 9/16" | 6 |
| x 194 | 16½" x 7/16" | 4" x 1 1/16" | 11" x 9/16" | 6 |
| x 210 | 16½" x 7/16" | 4" x 1 1/16" | 11" x 9/16" | 7 |
| x 230 | 16½" x 7/16" | 6" x 1" | 16" x 9/16" | 9 |
| x 245 | 16½" x 7/16" | 6" x 1" | 16" x 9/16" | 9 |
| x 260 | 16½" x 7/8" | 6" x 1 1/16" | 16" x ½" | 11 |
| x 280 | 16½" x ½" | 6" x 1 1/16" | 16" x 11/16" | 11 |
| x 300 | 16½" x 7/16" | 6" x 1¼" | 16" x 7/8" | 13 |




**W30 x 99, 108, 116, 124, 132**




**W36 x 135, 150, 160, 170**




**W36 x 230, 245, 260, 280, 300**

## GENERAL NOTES

1.) Splice connections shall be made with $\frac{7}{8}$"Ø ASTM A325 high tensile strength bolts. Holes shall be $\frac{15}{16}$"Ø.

2.) Web and flange filler plates shall be used as required when splicing beams of different sizes. Filler plates of $\frac{1}{16}$" or less in thickness are not required.

3.) If beams of different sizes are to be spliced, use splice details shown for the smaller of the beams being spliced unless otherwise directed by design details.

4.) For material specifications and details not shown, refer to design details.

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# STANDARD DETAILS
(BD 103-79)
## BEAM SPLICES

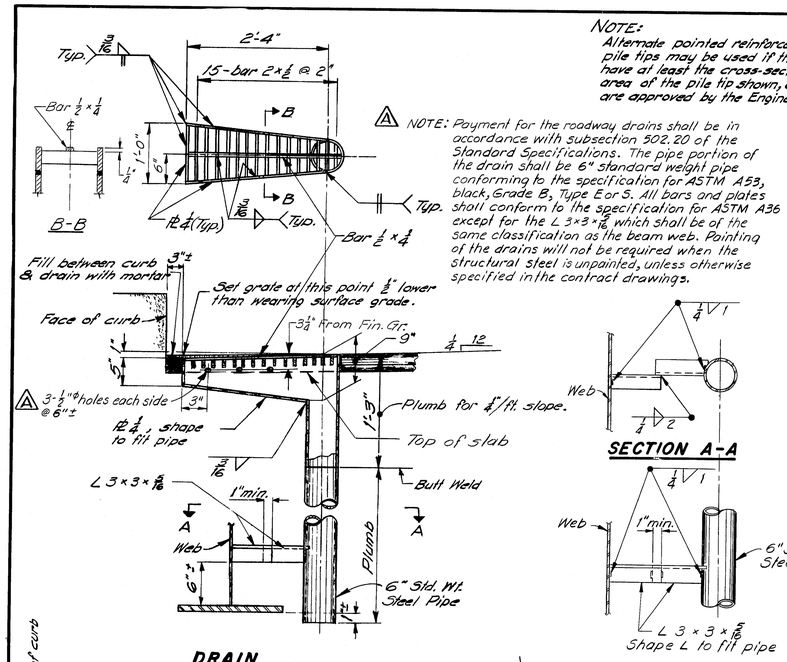
AUGUSTA, MAINE MAY 1979

R93-487

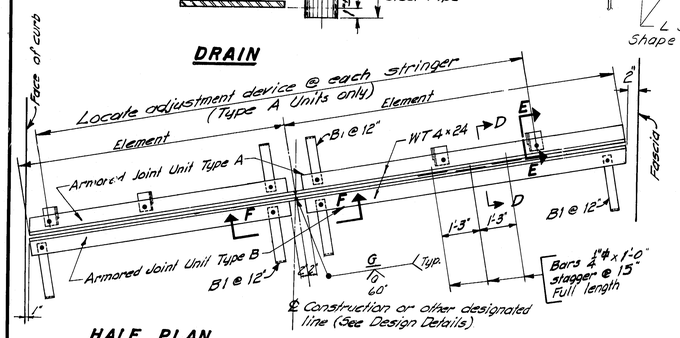
JANUARY 1968

BD-1 1968

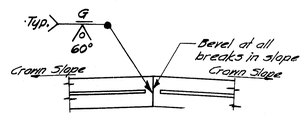
| B.R. DIV. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8(129) | 50 | 53 |




**DRAIN**




**HALF PLAN**
Curb to curb




**SECTION F-F**
Note: See design details for Constr. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

**HALF PLAN**
Fascia to fascia

**NOTE**

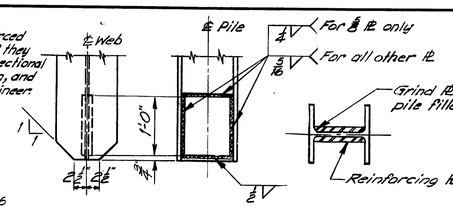
1. Type A Armored Joint Units are intended to be used for attachment to superstructures. Type B Armored Joint Units are intended to be used for attachment to abutments. At armored joints over piers, two (2) Type A Armored Joint Units shall be used.
2. When more elements than two (2) are required by the design details, the elements of both units shall be field welded together in the same manner as shown in Section F-F.
3. Armored Joints to be paid for as Structural Steel.
4. All structural steel shall be A36. When structural steel is specified to be unpainted, the armored joint shall receive three coats of shop paint, on exposed areas of flanges below seal retention bars.

**ARMORED JOINT**
An armored joint consists of two armored joint units. See note 1.

NOTE: Alternate pointed reinforced pile tips may be used if they have at least the cross-sectional area of the pile tip shown, and are approved by the Engineer.

NOTE: Payment for the roadway drains shall be in accordance with subsection 502.20 of the Standard Specifications. The pipe portion of the drain shall be 6" standard weight pipe conforming to the specification for ASTM A53, black, Grade B, Type E or S. All bars and plates shall conform to the specification for ASTM A36 except for the L 3×3×⅜ which shall be of the same classification as the beam web. Painting of the drains will not be required when the structural steel is unpainted, unless otherwise specified in the contract drawings.



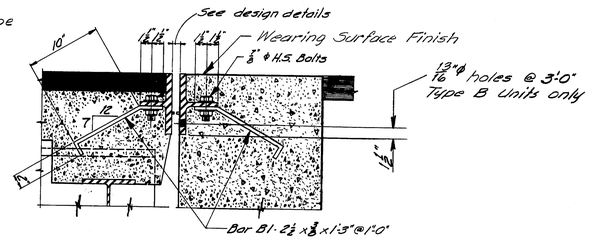




**POINTED REINFORCED PILE TIP**
NOTE: Plates may be shop or field welded

| STEEL HP BEARING PILES | |
|---|---|
| PILE SIZE | REINF. Rf. SIZE |
| HP 10 × 42 | 8¾ × ⅜ × 1'-0" |
| HP 10 × 57 | 8¾ × ⅜ × 1'-0" |
| HP 12 × 53 | 10⅝ × ⅜ × 1'-0" |
| HP 12 × 74 | 10¾ × ⅜ × 1'-0" |
| HP 14 × 73 | 12½ × ⅜ × 1'-0" |
| HP 14 × 89 | 12⅝ × 1 × 1'-0" |

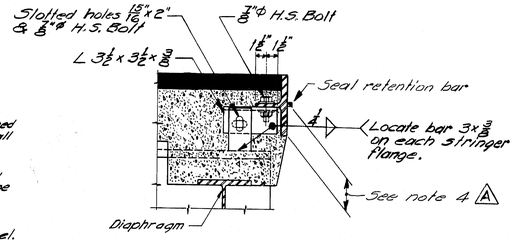



**POLYVINYLCHLORIDE WATERSTOP**

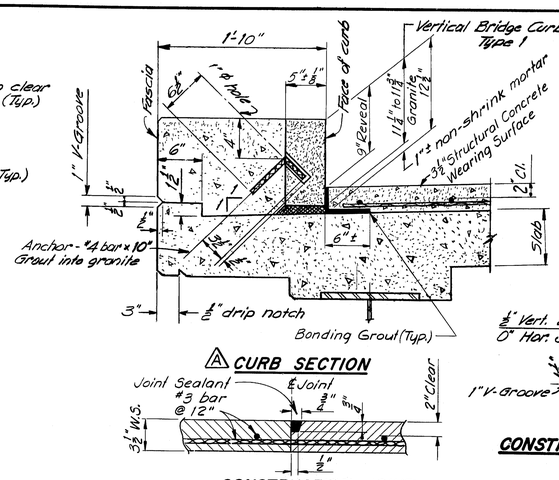



ARMORED JOINT UNIT TYPE A — ARMORED JOINT UNIT TYPE B

**SECTION D-D**



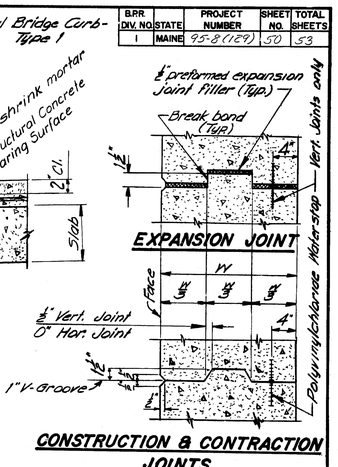

**SECTION E-E**
Showing Adjustment Device Armored Joint Unit Type A only. After Unit is in final position weld ⅜ bar to angle with ½ Fillet



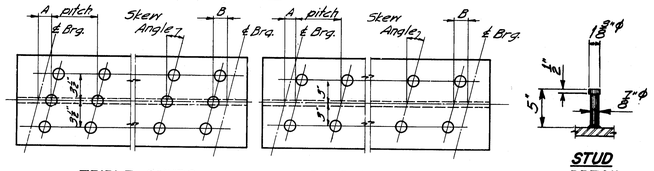

**⚠ CURB SECTION**




**CONSTRUCTION JOINT**




**CONSTRUCTION & CONTRACTION JOINTS**




**TRIPLE STUDS** — **DOUBLE STUDS** — **STUD DETAIL**

**NOTE**

1. Studs shall be granular or solid flux filled and automatically end welded to top flange in the shop or field.
2. See the design details for Dimensions "A" & "B", stud pitch and skew angle for studs.

**SHEAR CONNECTORS**

**NOTE** Use only those items called for on design details. In case of conflict between these Standard Details and design details, the requirements of the design details shall be followed.

| REVISIONS | DATE |
|---|---|
| Added holes and note to roadway drain. | |
| ⚠ Add Note 4 to Armored Joint notes. | 3-1-77 |
| Eliminate Hot Bit Pav't. | |
| Change curb and granite widths and added a concrete wearing surface | |

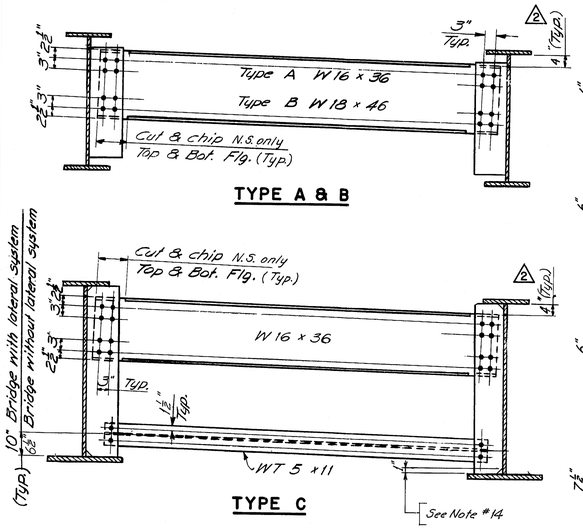
R93-488

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

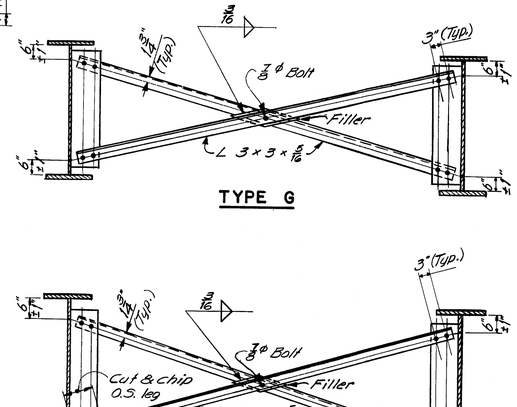
# STANDARD DETAILS
(BD 104-77)
## ARMORED JOINT, DRAIN
## SHEAR CONNECTORS
## MISC. STRUCTURAL DETAILS

SHEET OF AUGUSTA, ME. FEB. 1977

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 51 | 53 |



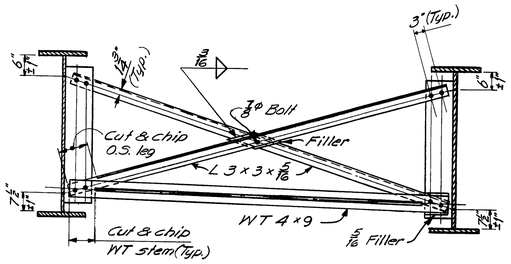

**TYPE A & B**



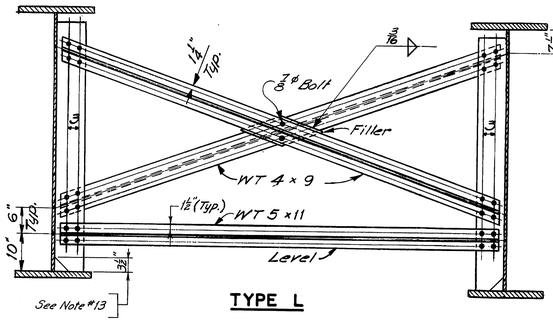

**TYPE G**



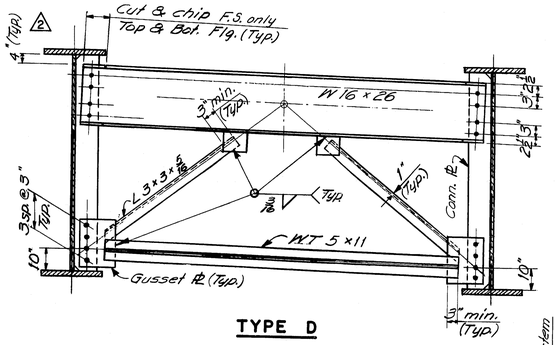

**TYPE C**



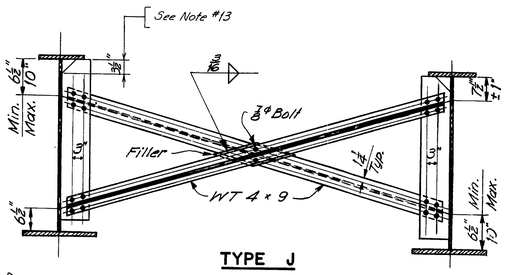

**TYPE H**



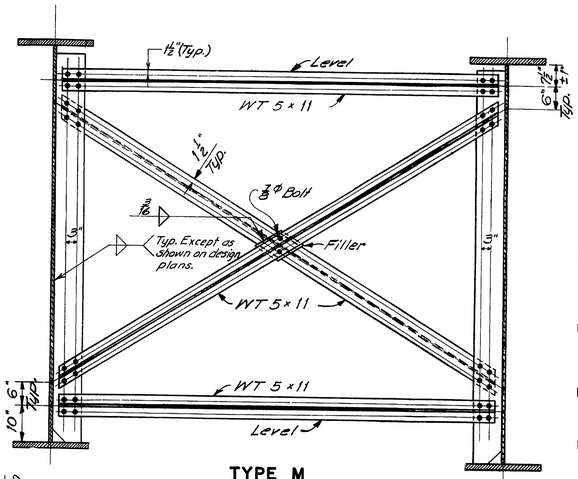

**TYPE L**



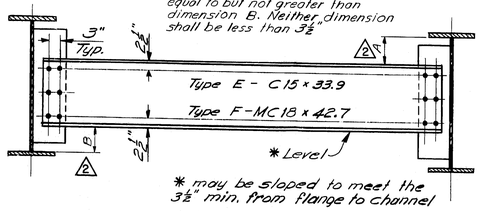

**TYPE D**




**TYPE J**

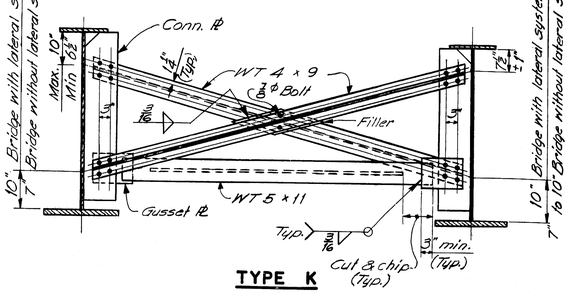



**TYPE M**




* may be sloped to meet the 3½" min. from flange to channel

**TYPE E & F**




**TYPE K**

## FABRICATION NOTES

1.) All bolts shall be $\frac{7}{8}$" Ø H.S. Bolts. Holes for bolts shall be $\frac{15}{16}$" Ø and edge-distances shall be $1\frac{1}{2}$" min. unless otherwise shown.

2.) Connection Plates and gusset plates shall have a minimum thickness of $\frac{3}{8}$" and shall have sufficient width to provide erection clearances. For bearing stiffeners or intermediate stiffeners and for bent connection plates the plate size will be given on the design details.

3.) Connection Plates shall be fastened to web plates by fillet welds as shown. All fillet welds shall be the minimum size as specified in A.A.S.H.T.O. Standard Specifications for Highway Bridges, Art. I. 7. 21 , unless otherwise shown on design plans. △2

4.) Connection Plates shall be $3\frac{1}{2}$" clear from flanges, except as indicated by notes 5 & 6 .

5.) Connection Plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression.

6.) Connection Plates shall extend to the bottom flange at points where lateral bracing is attached and on welded beams and girders in areas where the bottom flange is always in compression.

7.) When a connection plate is extended to a flange it shall fit within $\frac{1}{16}$" except if the design details show it is to be welded.

8.) Bearing Stiffeners at end bearings shall extend to both top and bottom flanges and shall be welded to both flanges. Weld at bottom flange shall be a full penetration weld. Weld at top flange shall be a fillet weld both sides ( see Note 3 ).

9.) Bearing Stiffeners at other than end bearings shall extend to both top and bottom flanges, shall be welded to the bottom flange with a full penetration weld and shall fit within $\frac{1}{16}$" at top flange.

10.) Intermediate Stiffeners shall extend to both top and bottom flanges, shall be welded to the compression flange with a fillet weld on both sides (see Note 3) and shall fit within $\frac{1}{16}$" at the tension flange.

11.) Use only those items called for on the design details. In case of conflict between these standard details and design details, the design details shall be followed.

12.) All dimensions shown as "__±1" are variable in order to allow a series of crossframes to have the same slopes and/or dimensions.

13.) All connection plates and stiffeners that are extended to a flange shall be clipped $3\frac{1}{2}$", except as indicated by note 14.

14.) Bearing stiffeners at end bearings shall be clipped 1" at top and bottom. Bearing stiffeners at all other bearings and intermediate stiffeners shall be clipped 1" at the compression flange.

15.) For unpainted applications all steel for diaphragms and crossframes shall be A.S.T.M.-A588. △1
For bridges specified to be painted the steel for diaphragms and connection plates shall be A.S.T.M.-A36, except other steel classifications may be used subject to the approval of the Engineer.

PLANS — DESIGN - DETAILED — CHECKED — REVISIONS — FIELD CHANGES — DATE — BY

R93-489

| | | | |
|---|---|---|---|
| △2 | CHANGED NOTE #3 & TYPE A,B,C,D,E & F | D.L.P. | 9-4-80 |
| △1 | ELIMINATED - A242 | G.R.W. | 5-24-79 |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

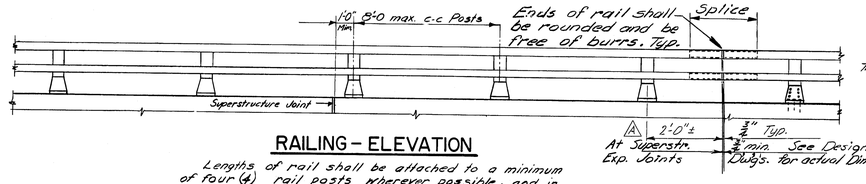
# STANDARD DETAILS
(BD 113 - 78)

## DIAPHRAGMS & CROSSFRAMES

SHEET OF AUGUSTA, MAINE June 1978

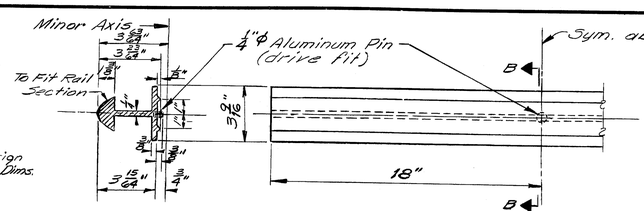
| F.H.W.A. REQ. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-B(129) | 52 | 53 |

## RAILING - ELEVATION




Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.

## SECTION B-B

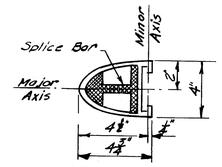



## SPLICE BAR

Alternate splice bars may be substituted if approved by the Engineer

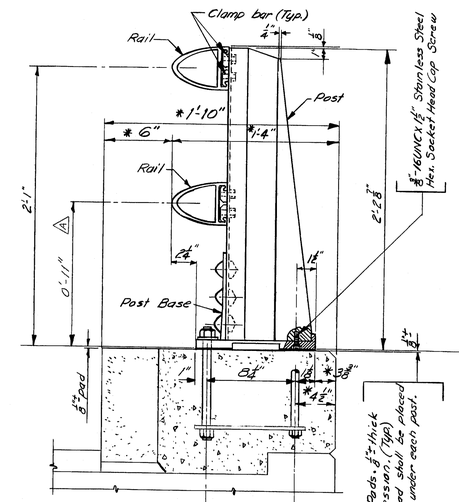
## DESIGN SPECIFICATIONS

⚠ AASHTO Standard Specifications for Highway Bridges 1977, and Interims 1978, '79, & '80.




## RAIL SECTION

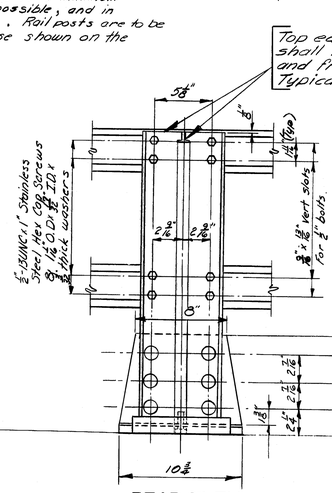
See "Rail Detail"



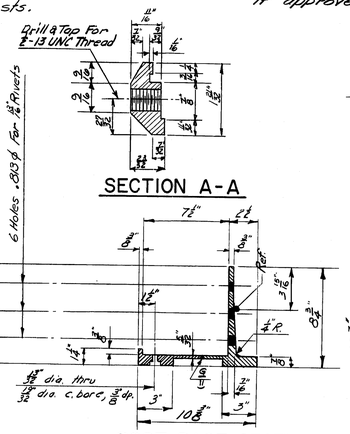

* Preferable minimum dimensions. For actual dimensions see Bridge Plan.

## BRIDGE RAILING

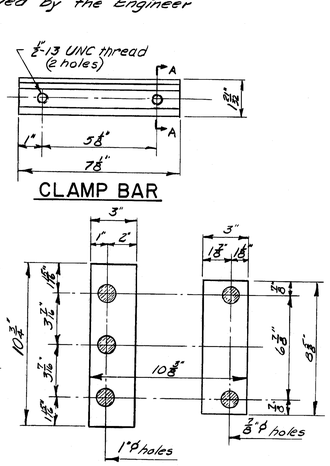
(Assembly)




## REAR ELEV.

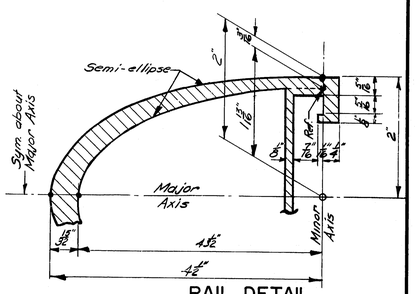



## POST BASE SECTION

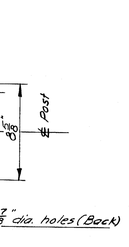



## CLAMP BAR

## PREFORMED PADS

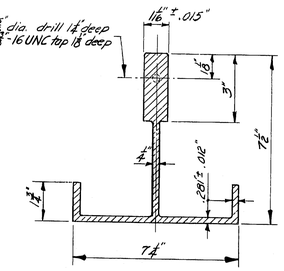



## RAIL DETAIL

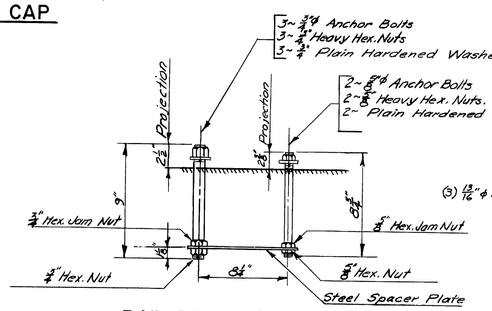



## POST BASE

(Bottom View)

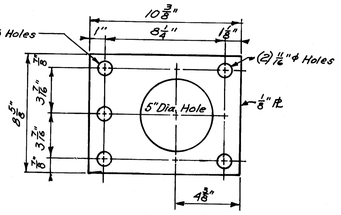



## POST SECTION



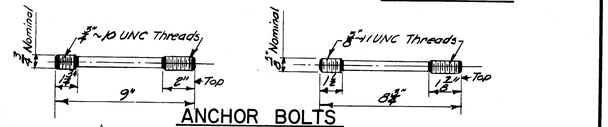

## RAIL POST ANCHORAGE

(Assembly)




## STEEL SPACER PLATE

(For Anchorage)




## ANCHOR BOLTS

⚠ If cut threads are used, body diameter shall be not less than nominal diameter. If rolled threads are used, body diameter shall be not less than pitch diameter of the threads.

| PLANS | BY | DATE |
|---|---|---|
| DESIGN - DETAILED | K. Leach | Jan. 1977 |
| CHECKED | K. Leach | |
| REVISIONS | W. Peterson | Jan. 1978 |
| FIELD CHANGES | | |

| | | |
|---|---|---|
| ⚠ | General Revisions | Feb. '81 |
| | REVISIONS | DATE |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

# STANDARD DETAILS
(BD 114-77)

## ALUMINUM BRIDGE RAILING
2 - BAR (SEMI-ELLIPSE)
TYPE "A"

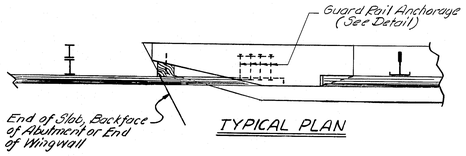
SHEET OF AUGUSTA, MAINE DEC. 1977

R93-490

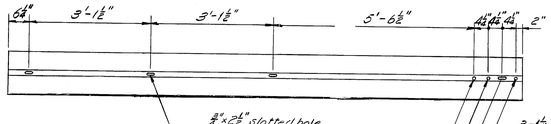
JANUARY 1968

853-1 2060

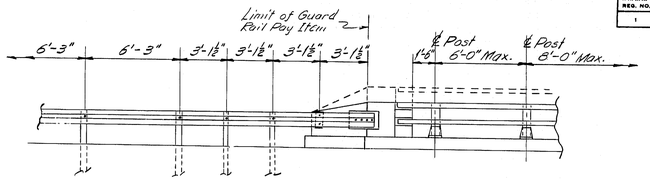
| F.H.W.A. REQ. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 95-8 (129) | 53 | 53 |



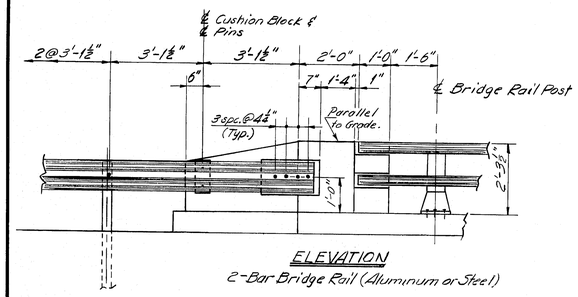

TYPICAL PLAN



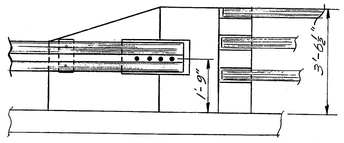

MODIFIED GUARD RAIL SECTION
See Note #5



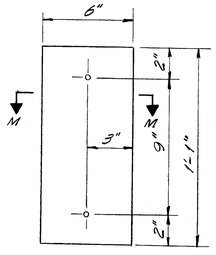

RAILING - ELEVATION



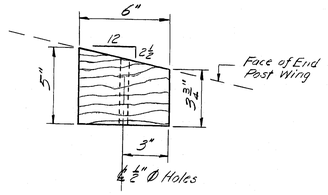

ELEVATION
2-Bar Bridge Rail (Aluminum or Steel)




ELEVATION
3-Bar Bridge Rail (Aluminum or Steel)



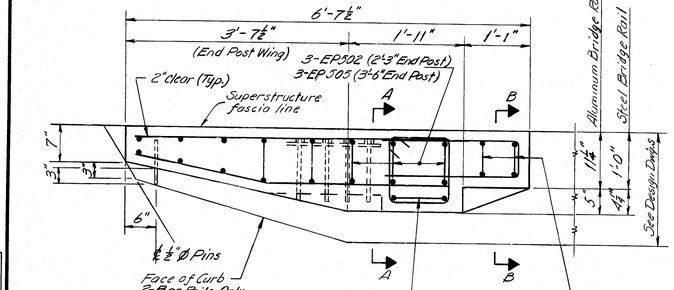

CUSHION BLOCK
(See Note #6)



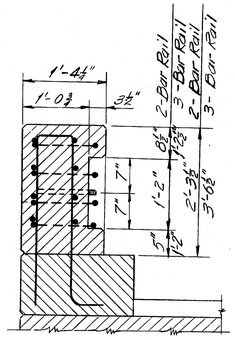

SECTION M-M

## NOTES

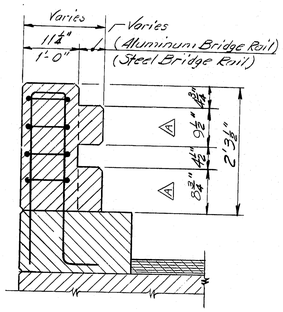
1.) For locations of the end posts on the structure see design drawings.
2.) At times an End Post Wing may be cantilevered for all or part of its length. For details see design drawings.
3.) If End Post Wing is cantilevered bars EP 401 to be omitted as needed in cantilevered section.
4.) Nuts for ⅞"Ø anchor bolts to be incidental to guard rail pay items. Nuts shall conform to A.S.T.M.-A563, Grade DH, galvanized in accordance with A.S.T.M. A153, or Grade C3, plain.
5.) Additional holes in the Modified Guard Rail Section shall be made by drilling, punching, or any other method that produces a neat, clean hole of the required size. Burning of holes will not be allowed.
6.) Cushion Block material shall be as specified in subsection 710.07, paragraph b & c and treated in accordance with the provisions of subsection 606.03(b) of the standard specifications. Payment to be incidental to Guard Rail pay item.
7.) After installation of guard rail is complete upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
8.) Guard Rail Anchorage to be incidental to the applicable concrete pay item.
9.) End Posts to be constructed normal to grade unless otherwise shown on the plans.
10.) When End Post Wing is cantilevered more than 2'-0" all number 5 bars shall be replaced with number 7 bars.



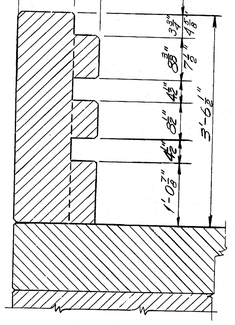

PLAN



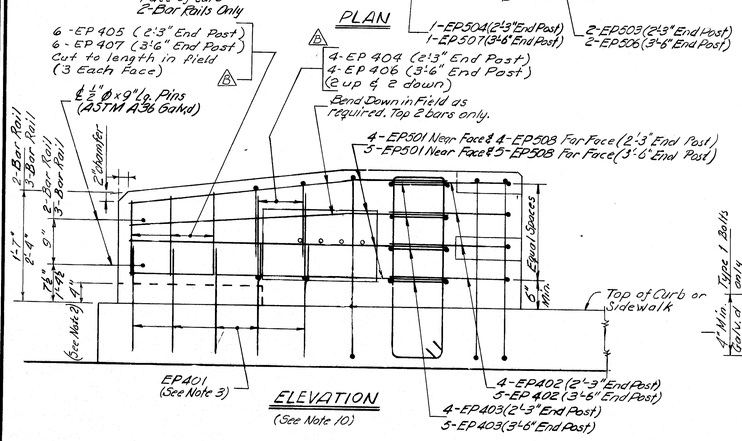

SECTION A-A



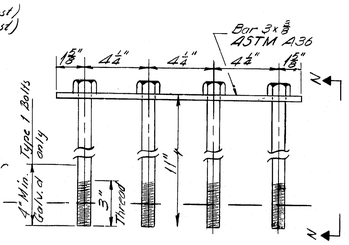

SECTION B-B
2-Bar Rail
(Aluminum or Steel)




SECTION B-B
3-Bar Rail
(Aluminum or Steel)




ELEVATION
(See Note 10)




DETAIL

VIEW N-N

GUARD RAIL ANCHORAGE

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| DESIGN DETAILED | A.E. | G.M.W. Dec.'78 |
| CHECKED | | A. Leeds Jan.'79 |
| REVISIONS | | |
| FIELD CHANGES | | |

PLANS

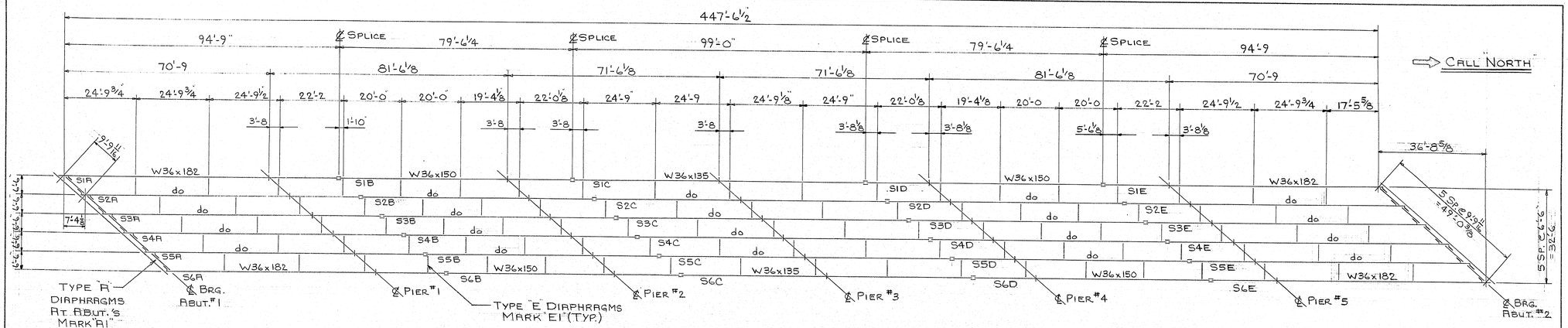
| | | |
|---|---|---|
| Ⓑ | Added New Rebar | Mar.'81 |
| Ⓐ | Changed Dimension | Jan.'81 |
| | REVISIONS | DATE |

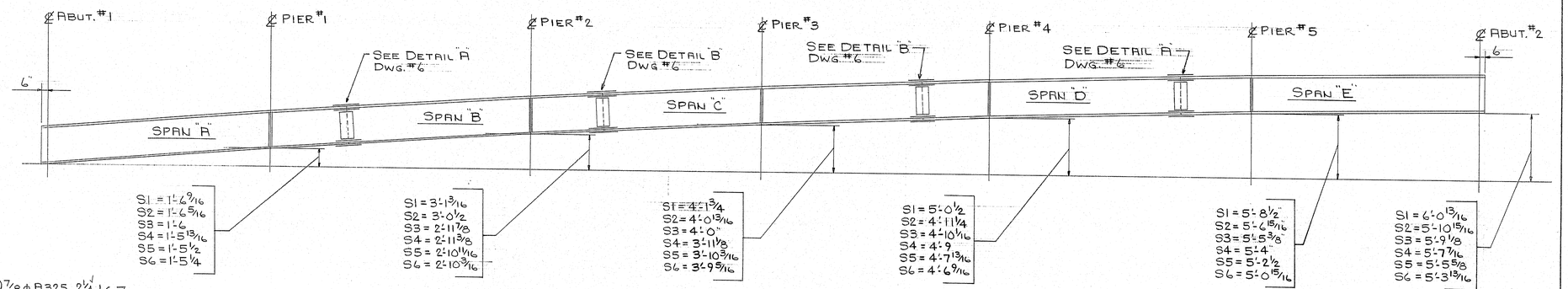
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

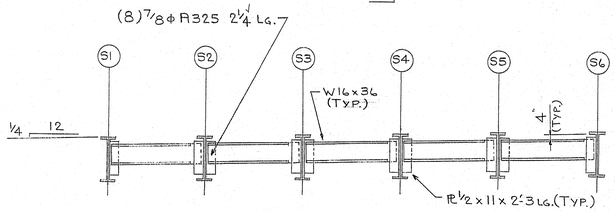
**STANDARD DETAILS**
(BD 120-79)
CONCRETE END POSTS

SHEET OF AUGUSTA, MAINE FEB. 1979

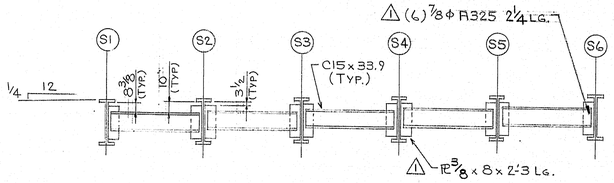
R93-491



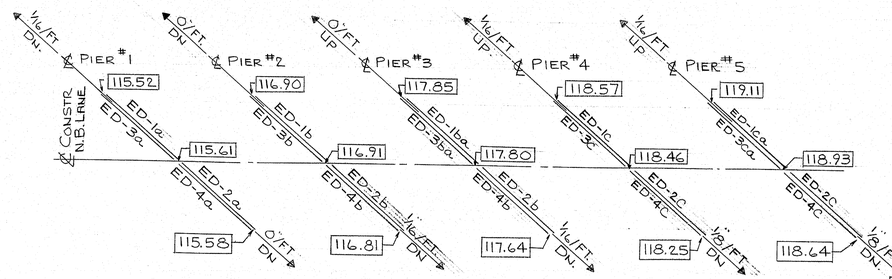




— DIAPHRAGMS AT ABUTMENTS —




— INTERMEDIATE DIAPHRAGMS —

— TYPICAL STRINGER ASSEMBLY —




PLAN OF NEW EXPANSION DEVICES AT EXISTING BRIDGE

☐ INDICATES GRADES TAKEN BY FIELD ENGINEER

NOTE

ERECT STEEL WITH PIECE MARK ON SAME END AS SHOWN ON PLAN.

PROJECT NO. IR 95-9 (129)

CUSTOMER ORDER NO.: VERBAL

REFERENCE DRAWINGS: 19 OF 53

HOLES: 15/16 φ

FIELD CONN: 7/8φ A325, TYPE 1 W/(1) WSH.

PAINT: SEE NOTE DWG #1

FINAL

| | | |
|---|---|---|
| APPR. | 10/7/82 | |
| APPR. | | |
| SHOP | 12/14/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | ET | 9/24/82 |
| CHECKED | RWR | 9/28/82 |
| ⚠1 REVISION | ET | 3/21/83 |
| REVISION | | |
| REVISION | | |

FRAMING PLAN

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

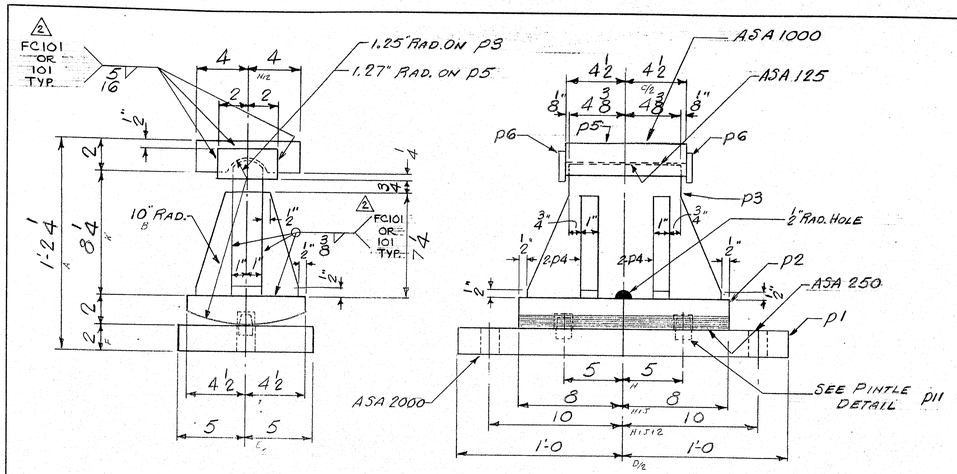
HOGAN ROAD BRIDGE
BANGOR MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

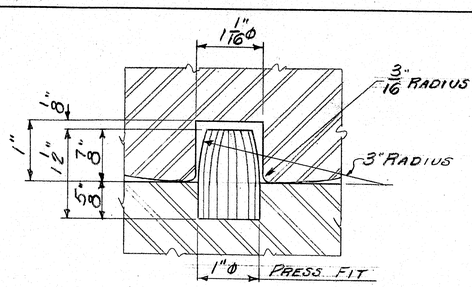
JOB NO. J-4 DWG. NO. E1

181-21

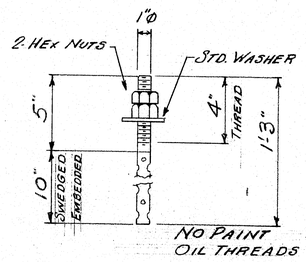
Boston Blue Print 7040



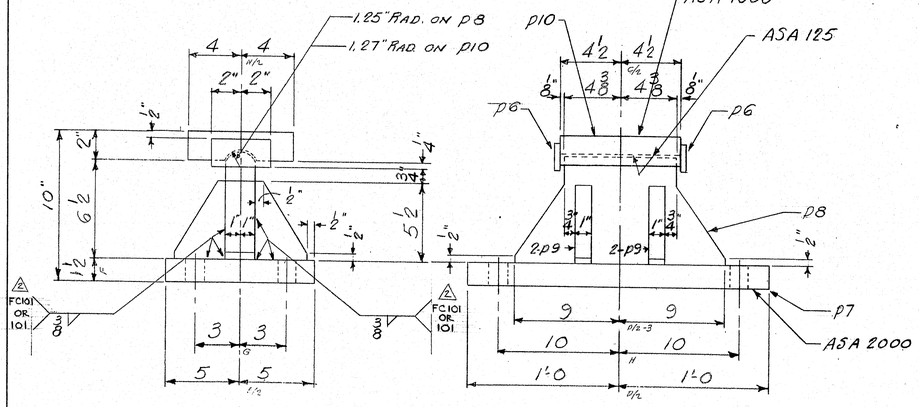

EPC 5 - 24 REQ'D



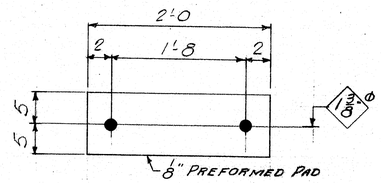

PINTLE DETAIL



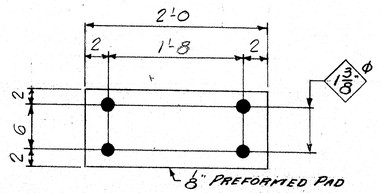

ANCHOR BOLTS - AB1
96 - REQ'D




FPC 3 - 6 REQ'D




FP1 - 24 REQ'D




FP2 - 6 REQ'D

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| EPC5 | 24 | | ASSEMBLY | | | |
| | 48 | D11 | BAR 1"Ø | 0 1½ | | |
| | 24 | P1 | PL 2x10 | 2 0 | | |
| | 24 | P2 | PL 2x 9 | 1 4 | | |
| | 24 | P3 | PL 2x 9¼ | 1 3 | | |
| | 96 | P4 | PL 1x 3 | 0 7¼ | | |
| | 24 | P5 | PL 2x 8 | 0 9 | | |
| | 48 | P6 | BAR 1¾x⅜ | 0 4 | | |
| FPC3 | 6 | | ASSEMBLY | | | |
| | 6 | P7 | PL 1½x10 | 2 0 | | |
| | 6 | P8 | PL 2x 7½ | 1 6 | | |
| | 24 | P9 | PL 1x 3½ | 0 5½ | | |
| | 6 | P10 | PL 2x 8 | 0 9 | | |
| | 12 | P6 | BAR 1¾x⅜ | 0 4 | | |
| AB1 | 96 | | BAR 1"Ø | 1 3 | | |
| | 192 | | 1" HEX NUT | — | | A325 TYPE 2 |
| | 192 | | 1" STD. WASHER | — | | |
| FP1 | 24 | | ⅛x10 | 2 0 | | ⅛" PREFORMED PAD P.O. No. |
| FP2 | 6 | | ⅛x10 | 2 0 | | |

BILL OF MATERIAL — JOB NO. J 4 — DWG. NO. 1

PROJECT NO. I.R. 95-9(129)

BLAST CLEAN SP 6 (COMMERCIAL BLAST)
STEEL ASTM A 36
COAT ASA 125 SURFACE WITH "NEVERSEEZE"
ITEM No 504.70

⚠1 PAINT NOTE
BASE LEAD SILICO CHROMATE (4 MILS WET MIN.)
PAINT 2 COATS ON P1 AND BEARING
SURFACES OF P2.

CUSTOMER ORDER NO.:
REFERENCE DRAWINGS:
HOLES: 1 3/8"Ø
FIELD CONN:
PAINT:

FINAL

| | | |
|---|---|---|
| APPR. | 7/19/82 | 11/16/82 |
| APPR. | 8/31/82 | |
| SHOP | 8/31/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | P.L.F. | 5-27-82 |
| CHECKED | E.E.T. | 6-7-82 |
| ⚠1 REVISION | E.T. | 9/28/82 |
| ⚠2 REVISION | E.T. | 11/5/82 |
| REVISION | | |

EXPANSION PEDESTAL EPC-5
FIXED PEDESTAL - FPC3

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

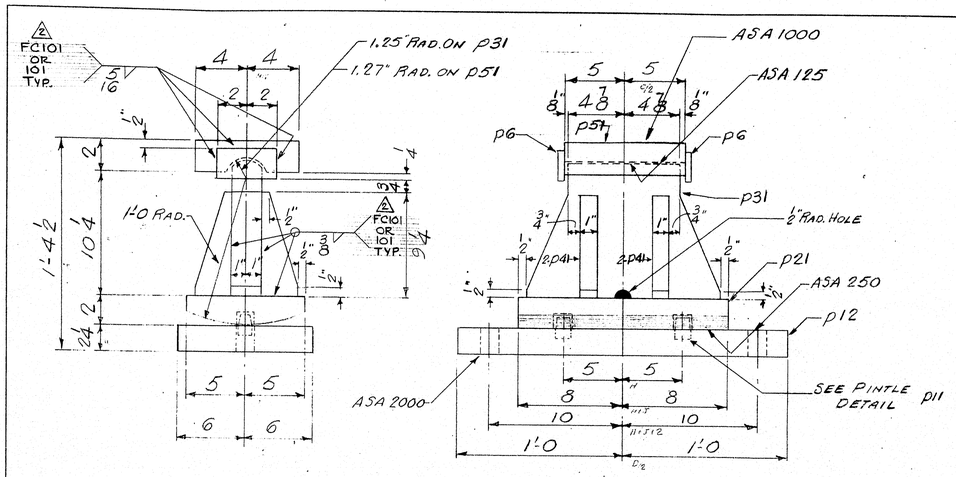
HOGAN ROAD BRIDGE
BANGOR, MAINE

CUSTOMER - REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

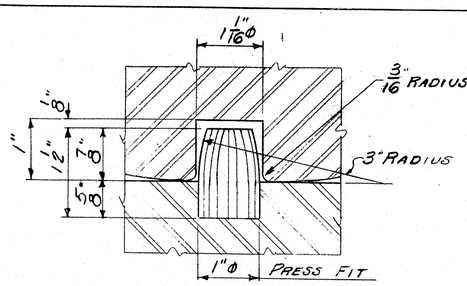
JOB NO. J 4 — DWG. NO. 1

181-22

Dawson Blue Print




EPC 6 - 12 REQ'D

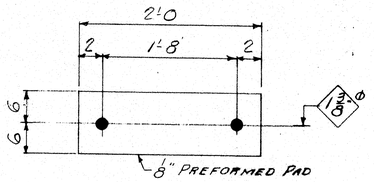



PINTLE DETAIL

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| EPC6 | 12 | | ASSEMBLY | | | |
| | 24 | P11 | BAR 1" Ø | 0 1½ | | |
| | 12 | P12 | PL 2¼ x 12 | 2 0 | | |
| | 12 | P21 | PL 2 x 10 | 1 4 | | |
| | 12 | P31 | PL 2 x 11¼ | 1 3 | | |
| | 48 | P41 | PL 1 x 3½ | 0 9¼ | | |
| | 12 | P51 | PL 2 x 8 | 0 10 | | |
| | 24 | P6 | BAR 1¾ x ⅜ | 0 4 | | |
| FP3 | 12 | | 8 x 12 | 2 0 | | ⅛" PREFORMED PAD P.O. No. |

PROJECT NO. IR-95-9(129)

BLAST CLEAN SP 6 (COMMERCIAL BLAST)
STEEL, ASTM A 36
COAT ASA 125 SURFACE WITH "NEVER SEEZE"
ITEM No 504.70




FP3 - 12 REQ'D

CUSTOMER ORDER NO.
REFERENCE DRAWINGS:
HOLES: 1 DRILL 3/16" Ø
FIELD CONN:
PAINT: BASIC LEAD SILICO CHROMATE - 4 MILS WET (MIN.)

EXPANSION PEDESTAL EPC-6

FINAL

| | | |
|---|---|---|
| APPR. | 7/19/82 | |
| APPR. | 11/16/82 | |
| SHOP | 8/31/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | PLE | 5-27-82 |
| CHECKED | ET | 6/7/82 |
| 2 REVISION | ET | 11/5/82 |
| REVISION | | |
| REVISION | | |

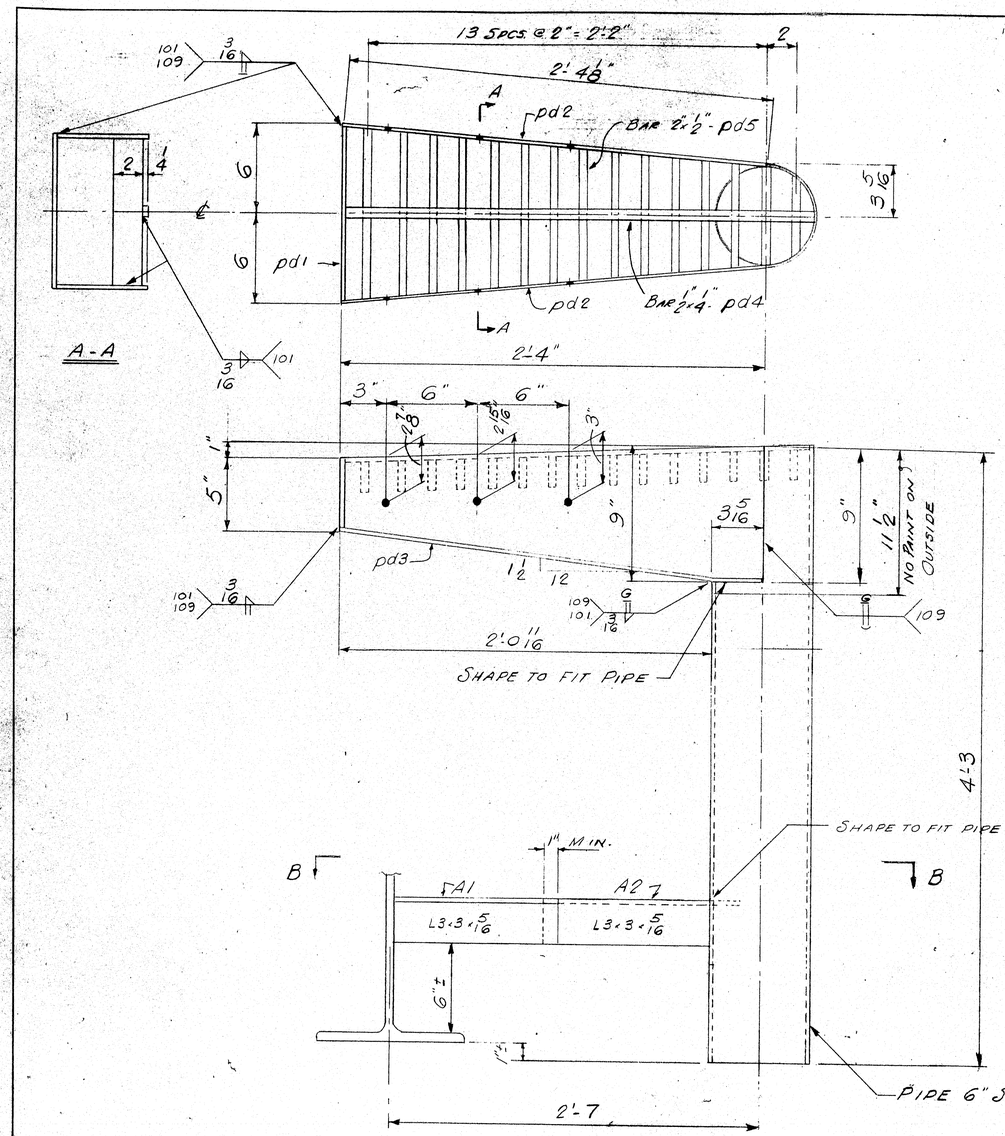
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

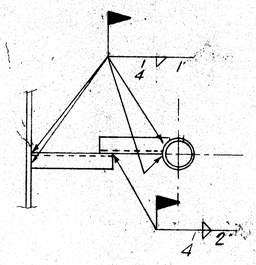
HOGAN ROAD BRIDGE
BANGOR, MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J 4 DWG. NO. 2

181-23




B-B

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| DR1 | 6 | | PIPE 6" STD | 4 | 3 | | ASTM A53 GRADE B |
| | 6 | pd1 | PL ¼ x 4¾ | 0 | 11½ | | |
| | 12 | pd2 | PL ¼ x 9 | 2 | 4½ | | |
| | 6 | pd3 | PL ¼ x 12 | 2 | 4½ | | BEND & FIT |
| | 6 | pd4 | BAR ½ x ¼ | 2 | 6¾ | | |
| | 6 | pd5 | BAR 2 x ½ | 12 | 0 | | CUT TO FIT |
| A1 | 6 | | L3x3x5/16 | 1 | 4 | | |
| A2 | 6 | | L3x3x5/16 | 1 | 4 | | |

BILL OF MATERIAL — JOB NO. J-4 DWG. NO. 3

ITEM NO. 502.20
PROJECT NO. IR-95-7 (129)
A36 STEEL EXCEPT AS NOTED
BLAST CLEAN - SP6 (COMMERCIAL BLAST)
CUSTOMER ORDER NO.:
REFERENCE DRAWINGS: BD. 104.77
HOLES: ½" Ø
FIELD CONN: WELD
PAINT: BASIC LEAD SILICO CHROMATE - 4 MILS WET (MIN.)

FINAL

| | | |
|---|---|---|
| APPR. | 7/19/82 | |
| APPR. | | |
| SHOP | 8/31/82 | |
| F. & O. | 9-15-83 | |
| DRAWN | P.L.F. | 5-28-82 |
| CHECKED | E.T. | 6/7/82 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

DRAINS - SOUTHBOUND SIDE

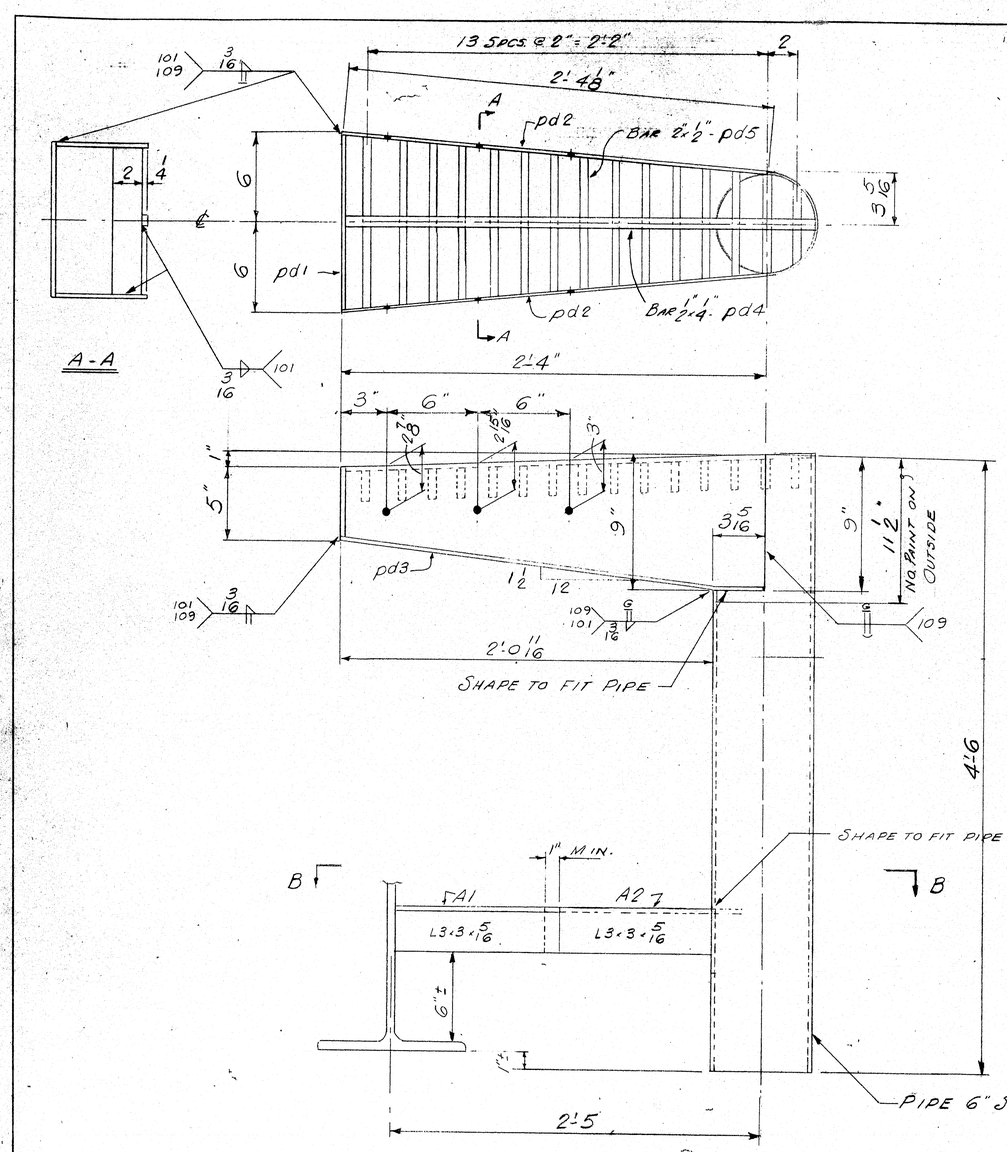
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR, MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 3

181-24




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| DR2 | 5 | | PIPE 6" STD | 4 | 6 | | ASTM A53 GRADE B |
| | 5 | pd1 | R 1/4 x 4 3/4 | 0 | 11½ | | |
| | 10 | pd2 | R 1/4 x 9 | 2 | 4⅓ | | |
| | 5 | pd3 | R 1/4 x 12 | 2 | 4⅛ | | BEND & FIT |
| | 5 | pd4 | BAR ½ x 1/4 | 2 | 6¾ | | |
| | 5 | pd5 | BAR 2 x ½ | 12 | 0 | | CUT TO FIT |
| A1 | 5 | | L3x3x5/16 | 1 | 4 | | |
| A2 | 5 | | L3x3x5/16 | 1 | 4 | | |

BILL OF MATERIAL JOB NO. J-4 DWG. NO. 4

ITEM NO. 502.44
PROJECT NO. IR-95-7 (129)
A36 STEEL EXCEPT AS NOTED
BLAST CLEAN - SP6 (COMMERCIAL BLAST)
CUSTOMER ORDER NO.:
REFERENCE DRAWINGS: BD-104.77
HOLES: 2" Φ
FIELD CONN: WELD
PAINT: BASIC LEAD SILICO CHROMATE 4 MILS WET (MIN.)

FINAL

| | | |
|---|---|---|
| APPR. | 7/19/82 | |
| APPR. | | |
| SHOP | 8/31/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | P.L.F. | 5-28-82 |
| CHECKED | E.E.T. | 6-7-82 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

DRAINS - NORTHBOUND SIDE

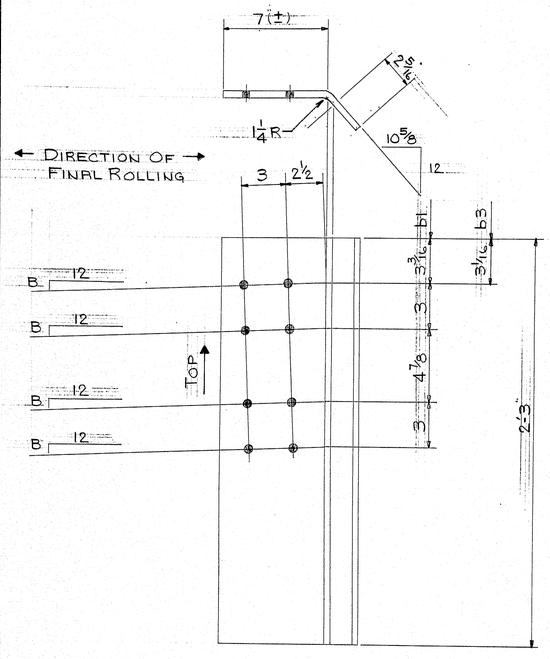
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR, MAINE

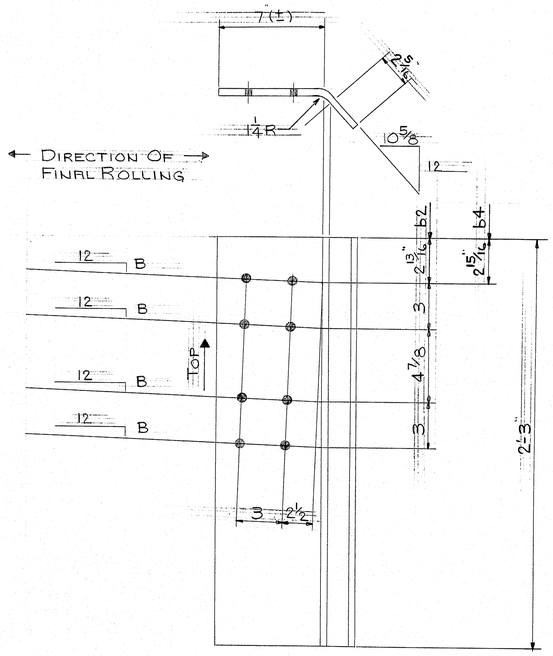
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 4

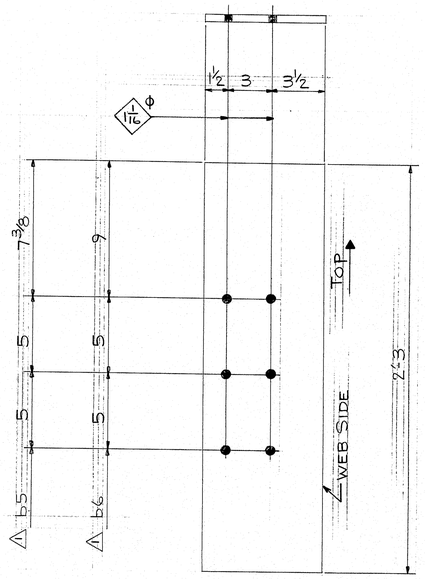
181-25




— b1 (DIM. "B" = 3/8") - 5 REQ'D —
— b3 (DIM. B = 3/16) - 5 REQ'D —




— b2 (DIM. B = 3/8) - 5 REQ'D —
— b4 DIM. B = 3/16 - 5 REQ'D —




— b5 ~ 95 REQ'D —
— b6 ~ 95 REQ'D —

PROJECT NO. IR-95-9 (129)
ITEM NO. 504.70 STRUCTURAL STEEL
LOCATION OF THESE R's SHOWN ON DWG. #7, 8, 9, 10 & 11.

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 Φ UNLESS NOTED
FIELD CONN: 7/8 A325, TYPE 1 W (1) WSH
PAINT: SEE NOTE ON DWG. #1

FINAL

| | | |
|---|---|---|
| APPR. | 10/7/82 | |
| APPR. | 11/16/82 | |
| SHOP | 12/14/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | ET | 9/24/82 |
| CHECKED | R.W.R | 9/28/82 |
| ⚠1 REVISION | ET | 11/5/82 |
| REVISION | | |
| REVISION | | |

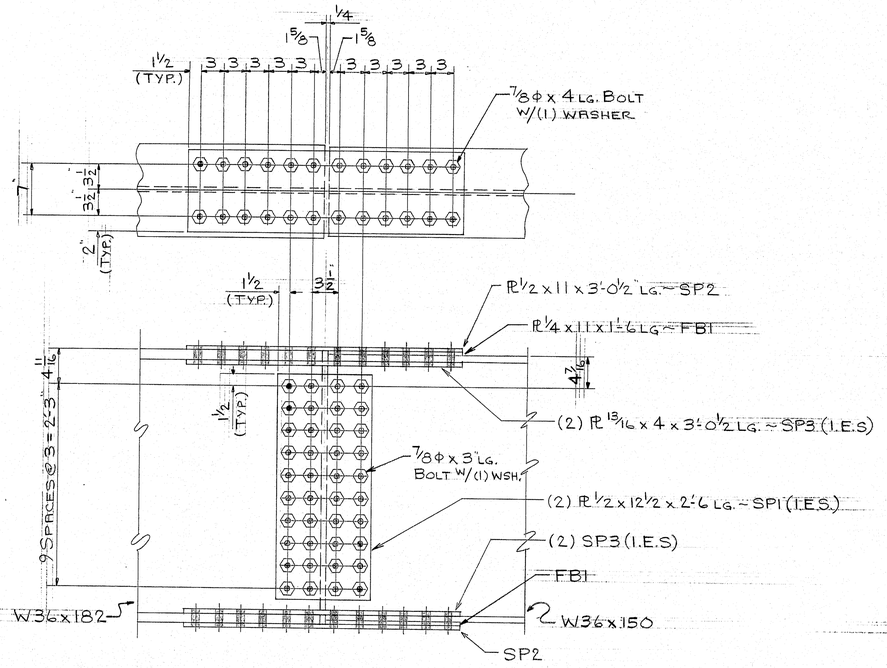
DIAPHRAGM PLATES

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER: REED & REED
ARCHITECT: MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 5

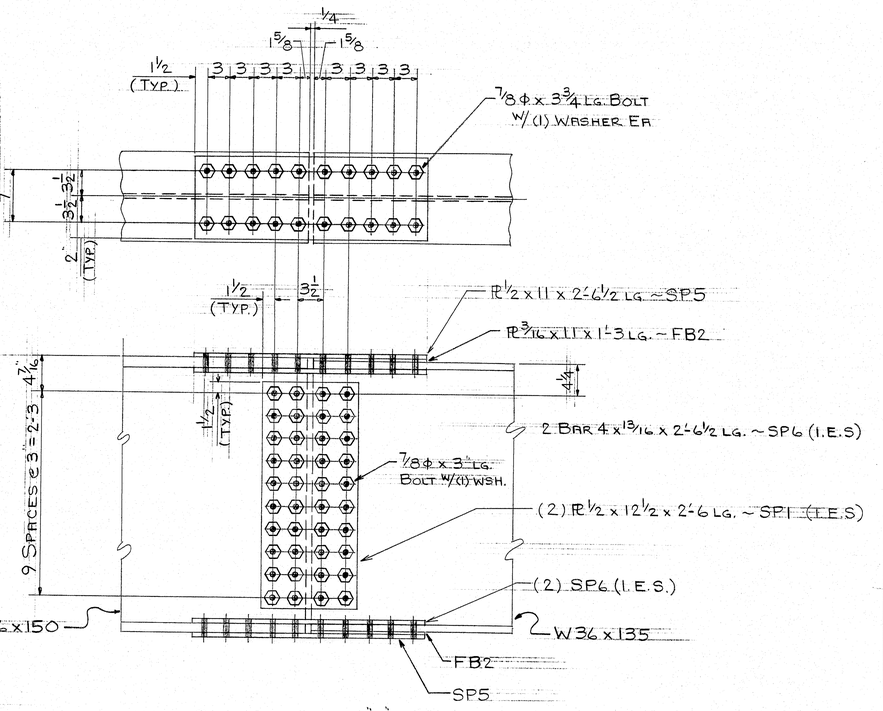
Boston Blue Print 7/82

181-26




— SPLICE DETAIL "A" —
(12 REQ'D)

NOTE
ALL BOLTS 7/8Φ A325, TYPE 1
WITH (1) WASHER EACH.




— SPLICE DETAIL "B" —
(12 REQ'D)

LOCATION OF THESE PL's SHOWN ON DWG #8 & 10

PROJECT NO. IR-95-9 (129)
ITEM NO. 504.70 STRUCTURAL STEEL

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16Φ
FIELD CONN: 7/8Φ A325, TYPE 1
PAINT: SEE NOTE ON DWG. #1

FINAL

| | | |
|---|---|---|
| APPR. | 10/7/82 | |
| APPR. | | |
| SHOP | 12/14/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | E.T. | 9/24/82 |
| CHECKED | R.W.R. | 9/28/82 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

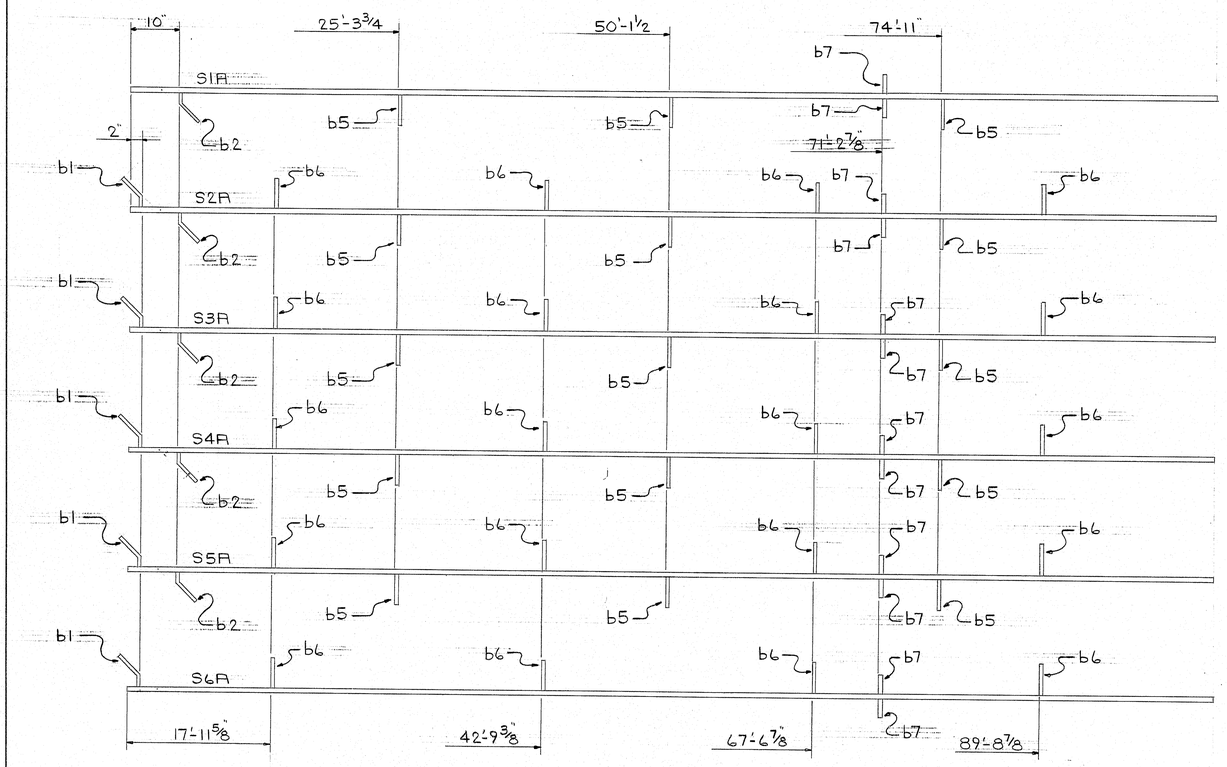
SPLICE PLATES

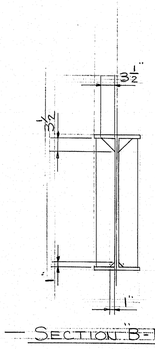
MEGQUIER & JONES CORP.
1166 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4
DWG. NO. 6

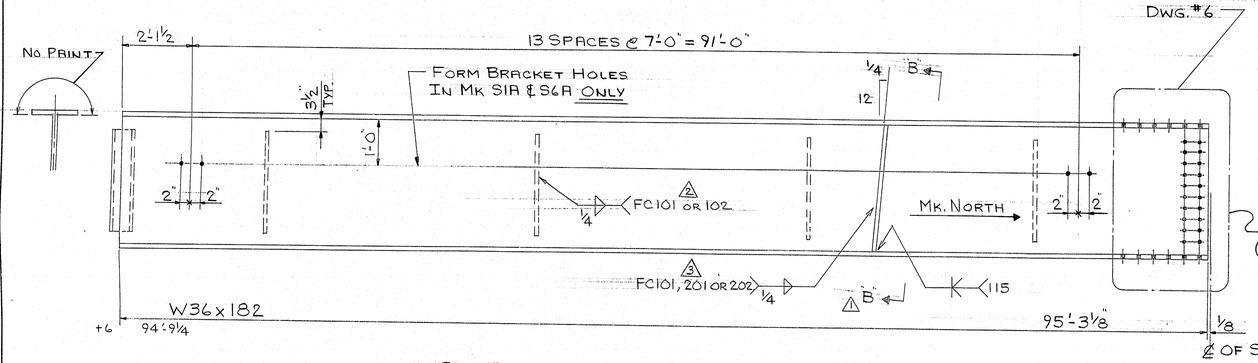
Boston Blue Print 7040

181-27




⚠ — SECTION B-B




SPLICE DETAIL "A" DWG. #6

DRILL SPLICE IN ASSEMBLY (SEE DWG. #E1 AND #6 FOR DETAILS) DRILL HOLES FROM SOLID.

— ONE REQ'D EACH — MARK S1A, S2A, S3A, S4A, S5A & S6A —

## SHOP NOTES

1.) PLACE NATURAL CAMBER UP.
2.) ALL DIMENSIONS ARE TAKEN AT BOTTOM OF BOTTOM FLANGE.
3.) SEE DWG. #5 FOR CONN. PL DETAILS.
4.) NO PAINT WITHIN 2" ALL HOLES.

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1A | 1 | | W36x182 | 95 | 3 1/8 | | |
| S2A | 1 | | do | 95 | 3 1/8 | | |
| S3A | 1 | | do | 95 | 3 1/8 | | CHARPY V-NOTCH |
| S4A | 1 | | do | 95 | 3 1/8 | | TEST |
| S5A | 1 | | do | 95 | 3 1/8 | | |
| S6A | 1 | | W36x182 | 95 | 3 1/8 | | |
| | 5 | b1 | PL 1/2 x 11 | 2 | 3 | | ROLL A36 |
| | 5 | b2 | PL 1/2 x 11 | 2 | 3 | | ROLL do |
| | 15 | b5 | BAR 8x 3/8 | 2 | 3 | | do |
| | 20 | b6 | BAR 8x 3/8 | 2 | 3 | | do |
| | 12 | b7 | BAR 5x 5/8 | 2 | 10 | | FIT A36 |

STEEL ~ A572 EXCEPT AS NOTED
PROJECT NO. IR 95-9 (129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 ℄
FIELD CONN.: 7/8 ℄ A325, TYPE 1
PAINT: SEE NOTE DWG. #1

FINAL

| | | |
|---|---|---|
| APPR. | 10/7/82 | 1-6-83 |
| APPR. | 11/16/82 | |
| SHOP | 12/14/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | ET | 9/24/82 |
| CHECKED | RWR | 9/28/82 |
| ⚠1 REVISION | ET | 11/5/82 |
| ⚠2 REVISION | ET | 1/6/83 |
| ⚠3 REVISION | ET | 1/7/83 |

STRINGERS SPAN "A" (6)

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

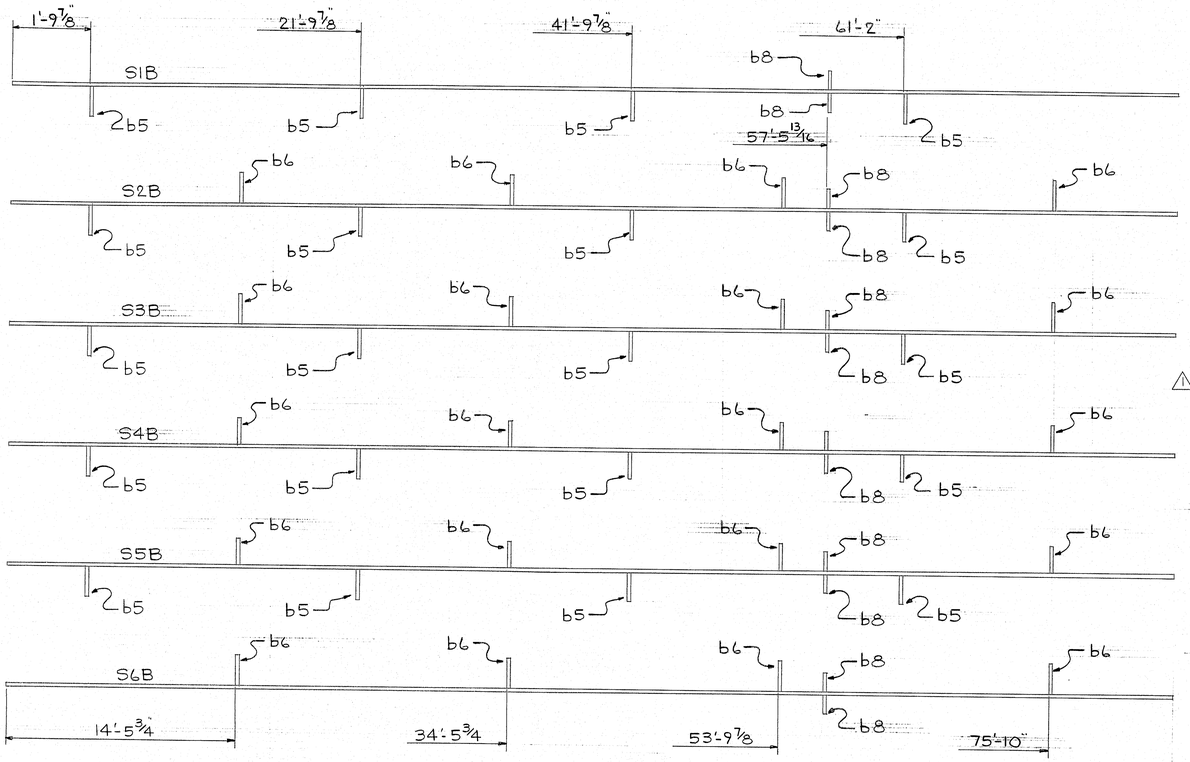
HOGAN ROAD BRIDGE
BANGOR MAINE

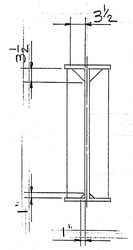
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 7

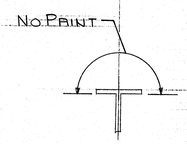
181-28

Boston Blue Print 7682




⚠ — SECTION "B-B" —

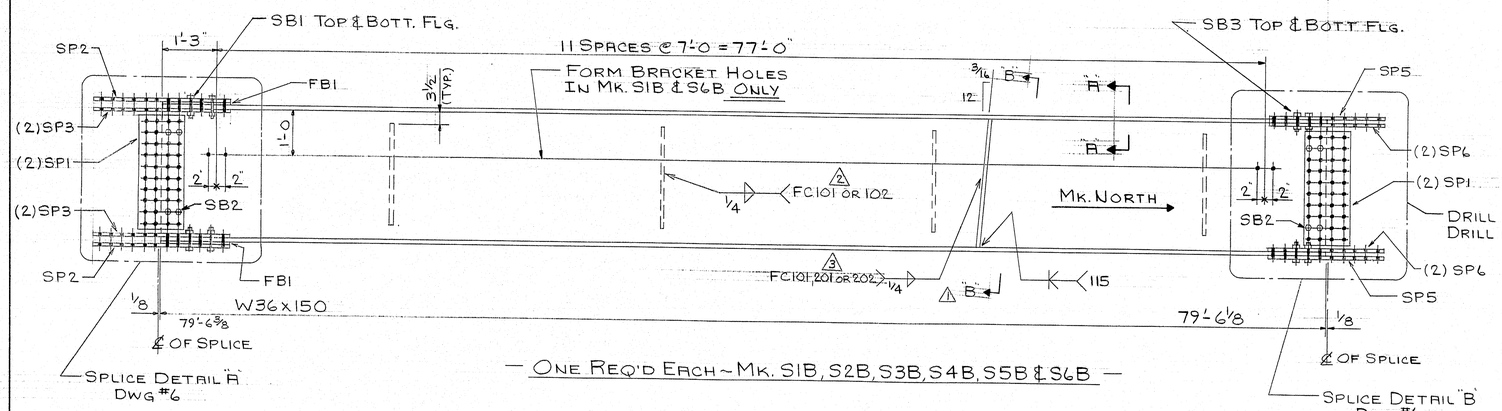



— SECTION "A-A" —

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| S1B | 1 | | W36x150 | 79 6 1/8 | | |
| S2B | 1 | | do | 79 6 1/8 | | |
| S3B | 1 | | do | 79 6 1/8 | | CHARPY V-NOTCH |
| S4B | 1 | | do | 79 6 1/8 | | TEST |
| S5B | 1 | | do | 79 6 1/8 | | |
| S6B | 1 | | W36x150 | 79 6 1/8 | | |
| | 20 | b5 | BAR 8x3/8 | 2 3 | | A36 |
| | 20 | b6 | BAR 8x3/8 | 2 3 | | A36 |
| | 12 | b8 | BAR 5x5/8 | 2 10 | | FIT A36 |
| | 24 | SP1 | R 1/2 x 12 1/2 | 2 6 | | |
| | 12 | SP2 | R 1/2 x 11 | 3 0 1/2 | | |
| | 24 | SP3 | R 13/16 x 4 | 3 0 1/2 | | |
| | | | | | | CHARPY V-NOTCH |
| | | | | | | TEST |
| | 12 | SP5 | R 1/2 x 11 | 2 6 1/2 | | |
| | 24 | SP6 | R 13/16 x 4 | 2 6 1/2 | | |
| | 12 | FB1 | R 1/4 x 11 | 1 6 | | A36 |
| | 48 | SB1 | 7/8 ϕ A325 | 0 4 | | TYPE 1 |
| | 48 | SB2 | do | 0 3 | | do |
| | 48 | SB3 | 7/8 ϕ A325 | 0 3 3/4 | | do |
| | 144 | SHOP | 7/8 ϕ HARD WSH. | ~ | | TYPE 1 |

## SHOP NOTES

1.) PLACE NATURAL CAMBER UP.
2.) ALL DIMENSIONS ARE TAKEN AT BOTTOM OF BOTTOM FLANGE.
3.) SEE DWG. #5 FOR CONN. R DETAILS.
4.) NO PAINT WITHIN 2" ALL HOLES.




— ONE REQ'D EACH ~ MK. S1B, S2B, S3B, S4B, S5B & S6B —

STEEL ~ A572 EXCEPT AS NOTED
PROJECT NO. IR 95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 ϕ
FIELD CONN: 7/8 ϕ A325, TYPE 1
PAINT: SEE NOTE ON DWG #1

**FINAL**

| | | | |
|---|---|---|---|
| APPR. | 10/7/82 | 1-6-83 | |
| APPR. | 11/16/82 | | |
| SHOP | 12/14/82 | | |
| F. & O. | 3-15-83 | | |
| DRAWN | ET | 9/25/82 | |
| CHECKED | RWR | 9/29/82 | |
| 1 REVISION | ET | 11/5/82 | |
| 2 REVISION | ET | 1/6/83 | |
| 3 REVISION | ET | 1/7/83 | |

STRINGERS SPAN "B" (6)

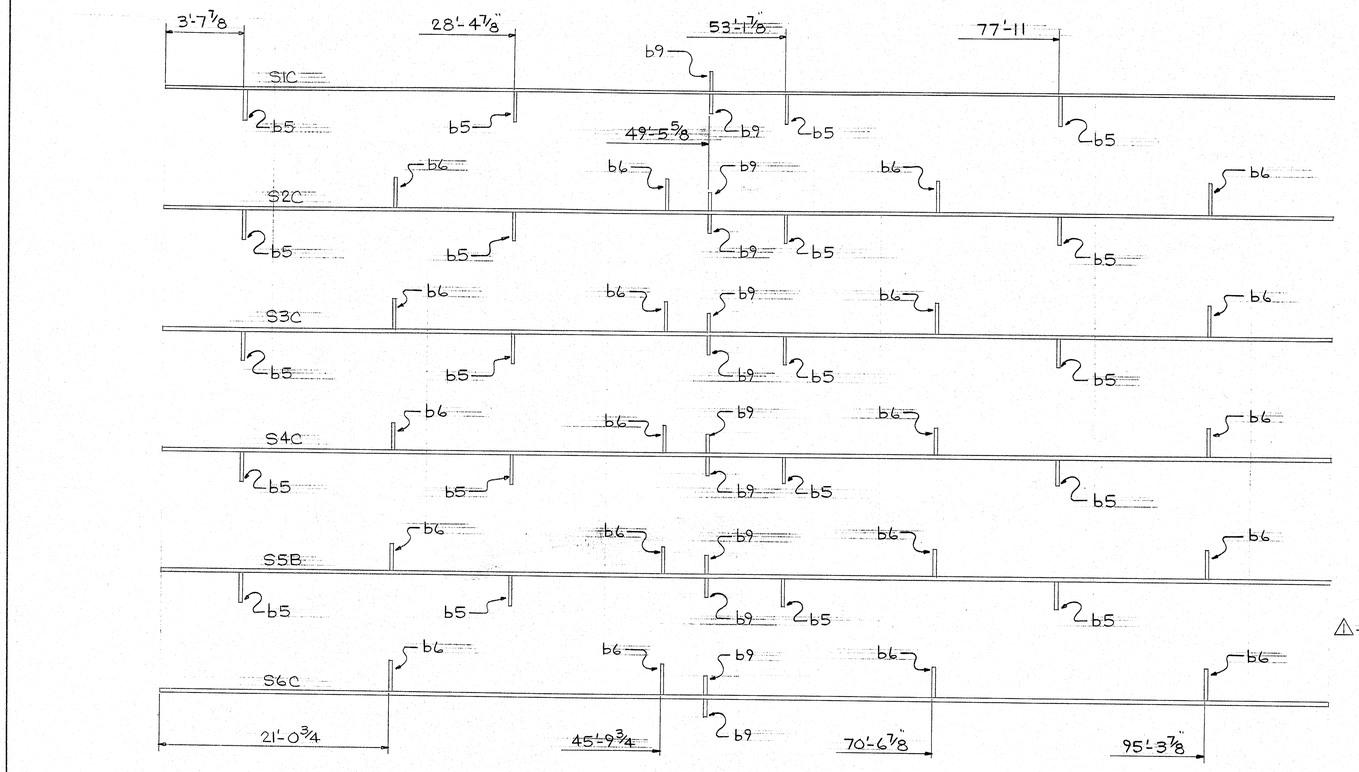
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

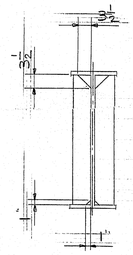
HOGAN ROAD BRIDGE
BANGOR MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 8

Boston Blue Print 7040

181-29



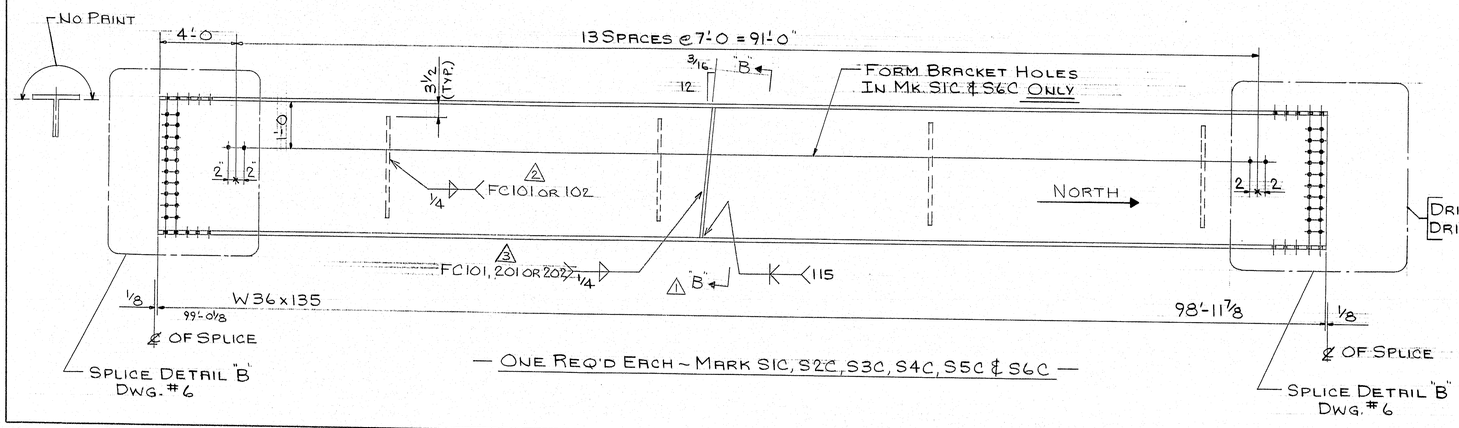

⚠ SECTION B-B

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| S1C | 1 | | W36x135 | 98 11 7/8 | | |
| S2C | 1 | | do | 98 11 7/8 | | |
| S3C | 1 | | do | 98 11 7/8 | | CHARPY V-NOTCH TEST |
| S4C | 1 | | do | 98 11 7/8 | | |
| S5C | 1 | | do | 98 11 7/8 | | |
| S6C | 1 | | W36x135 | 98 11 7/8 | | |
| | 20 | b5 | BAR 8x3/8 | 2 3 | | A36 |
| | 20 | b6 | BAR 8x3/8 | 2 3 | | A36 |
| | 12 | b9 | BAR 5x5/8 | 2 10 | FIT | A36 |
| FB2 | 24 | | PL 3/16x11 | 1 3 | | A36 |

BILL OF MATERIAL — JOB NO. J-4 DWG. NO. 9

SHOP NOTES

1.) PLACE NATURAL CAMBER UP.
2.) ALL DIMENSIONS ARE TAKEN AT BOTTOM OF BOTTOM FLANGE.
3.) SEE DWG. #5 FOR CONN. R. DETAILS
4.) NO PAINT WITHIN 2" OF ALL HOLES.




— ONE REQ'D EACH ~ MARK S1C, S2C, S3C, S4C, S5C & S6C —

STEEL ~ A572 EXCEPT AS NOTED.
PROJECT NO. IR-95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 ϕ
FIELD CONN: 7/8 A325, TYPE 1
PAINT: SEE NOTE ON DWG. #1

STRINGERS SPAN C (6)

FINAL

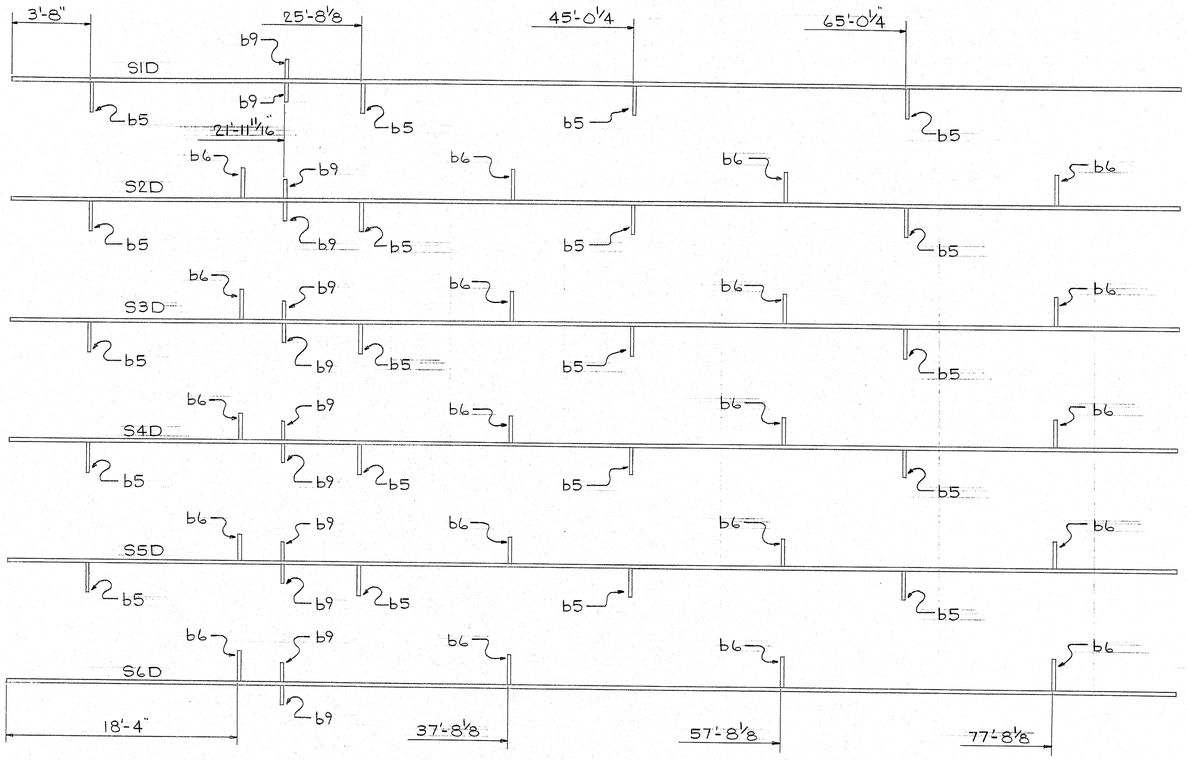
| | | |
|---|---|---|
| APPR. | 10/7/82 | 1-6-83 |
| APPR. | 11/16/82 | |
| SHOP | 12/14/82 | |
| F. & O. | 3-15-83 | |
| DRAWN | ET | 9/25/82 |
| CHECKED | R.W.R | 9/29/82 |
| 1 REVISION | ET | 11/5/82 |
| 2 REVISION | ET | 1/6/83 |
| 3 REVISION | ET | 1/7/83 |

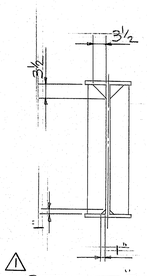
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 9

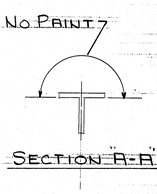
Boston Blue Print 7983

181-30




⚠ 3 — SECTION B-B —

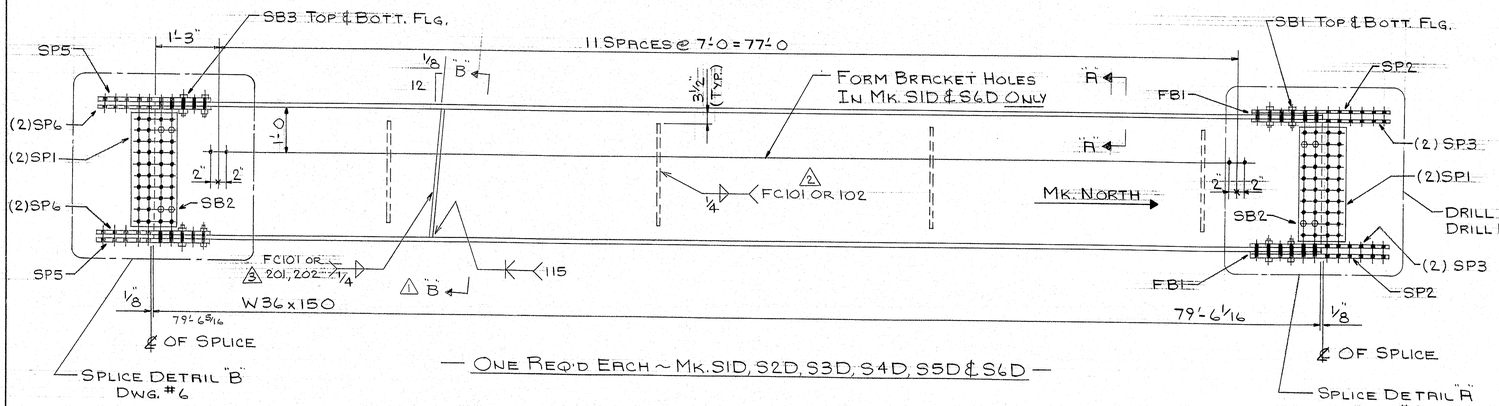



| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1D | 1 | | W36x150 | 79 | 6 1/16 | | |
| S2D | 1 | | do | 79 | 6 1/16 | | |
| S3D | 1 | | do | 79 | 6 1/16 | | CHARPY V-NOTCH |
| S4D | 1 | | do | 79 | 6 1/16 | | TEST |
| S5D | 1 | | do | 79 | 6 1/16 | | |
| S6D | 1 | | W36x150 | 79 | 6 1/16 | | |
| | 20 | b5 | BAR 8x 3/8 | 2 | 3 | | A36 |
| | 20 | b6 | BAR 8x 3/8 | 2 | 3 | | A36 |
| | 12 | b9 | BAR 5x 5/8 | 2 | 10 | | FIT A36 |
| | ~~24~~ | SP1 | R 1/2 x 12 1/2 | 2 | 6 | | |
| | 12 | SP2 | R 1/2 x 11 | 3 | 0 1/2 | | |
| | 24 | SP3 | R 13/16 x 4 | 3 | 0 1/2 | | |
| | | | | | | | CHARPY V-NOTCH |
| | | | | | | | TEST |
| | 12 | SP5 | R 1/2 x 11 | 2 | 6 1/2 | | |
| | 24 | SP6 | R 13/16 x 4 | 2 | 6 1/2 | | |
| | 12 | FB1 | R 1/4 x 11 | 1 | 6 | | A36 |
| | 48 | SB1 | 7/8 ϕ A325 | 0 | 4 | | TYPE 1 |
| | 48 | SB2 | do | 0 | 3 | | do |
| | 48 | SB3 | 7/8 ϕ A325 | 0 | 3 3/4 | | do |
| | 144 | SHOP | 7/8 ϕ HARD WSH | — | | | TYPE 1 |

SHOP NOTES

1.) PLACE NATURAL CAMBER UP.
2.) ALL DIMENSIONS ARE TAKEN AT BOTTOM OF BOTTOM FLANGE.
3.) SEE DWG. #5 FOR CONN. PLATE DETAILS.
4.) NO PAINT WITHIN 2" ALL HOLES.

STEEL ~ A572 EXCEPT AS NOTED.
PROJECT NO. IR 95-9(129)
ITEM NO. 504.70




— ONE REQ'D EACH ~ MK. S1D, S2D, S3D, S4D, S5D & S6D —

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 ϕ
FIELD CONN.: 7/8 ϕ A325, TYPE 1
PAINT: SEE NOTE ON DWG. #1

STRINGERS, SPAN D (6)

FINAL

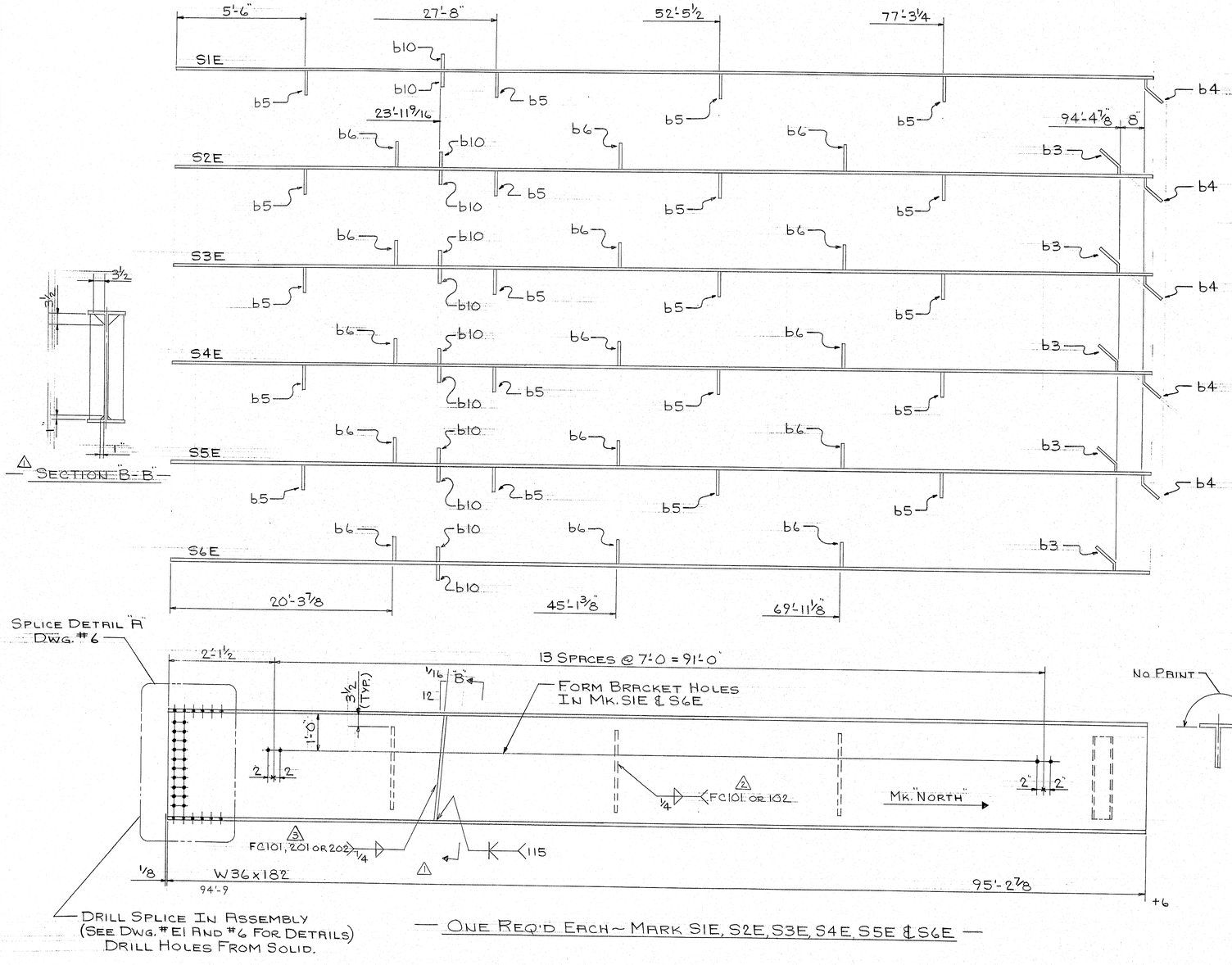
| | | | |
|---|---|---|---|
| APPR. | 10/7/82 | 1-6-83 | |
| APPR. | 11/16/82 | | |
| SHOP | 12/14/82 | | |
| F. & O. | 3-15-83 | | |
| DRAWN | ET | 9/27/82 | |
| CHECKED | RWR | 9/29/82 | |
| 1 REVISION | ET | 11/5/82 | |
| 2 REVISION | ET | 1/6/83 | |
| 3 REVISION | ET | 1/7/83 | |

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 10

Boston Blue Print 7/82

181-31




— ONE REQ'D EACH ~ MARK S1E, S2E, S3E, S4E, S5E & S6E —

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| S1E | 1 | | W36x182 | 95 | 2 7/8 | | |
| S2E | 1 | | do | 95 | 2 7/8 | | |
| S3E | 1 | | do | 95 | 2 7/8 | | CHARPY V-NOTCH TEST |
| S4E | 1 | | do | 95 | 2 7/8 | | |
| S5E | 1 | | do | 95 | 2 7/8 | | |
| S6E | 1 | | W36x182 | 95 | 2 7/8 | | |
| | 5 | b3 | PL ½ x 11 | 2 | 3 | | ROLL A36 |
| | 5 | b4 | PL ½ x 11 | 2 | 3 | | ROLL do |
| | 20 | b5 | BAR 8x 3/8 | 2 | 3 | | do |
| | 15 | b6 | BAR 8x 3/8 | 2 | 3 | | do |
| | 12 | b10 | BAR 5x 5/8 | 2 | 10 | | FIT A36 |

BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 11

SHOP NOTES

1.) PLACE NATURAL CAMBER UP.
2.) ALL DIMENSIONS ARE TAKEN AT BOTTOM OF BOTTOM FLANGE.
3.) SEE DWG #5 FOR CONN. PLATE DETAILS.
4.) NO PRINT WITHIN 2" OF ALL HOLES.

STEEL ~ A572 EXCEPT AS NOTED.
PROJECT NO. IR-95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16 ϕ
FIELD CONN: 7/8 ϕ A325, TYPE 1
PAINT: SEE NOTE ON DWG. #1

FINAL

| | | | |
|---|---|---|---|
| APPR. | 10/7/82 | 1-6-83 | |
| APPR. | 11/16/82 | | |
| SHOP | 12/14/82 | | |
| F. & O. | 3-15-83 | | |
| DRAWN | ET | 9/28/82 | |
| CHECKED | RWR | 9/29/82 | |
| 1 REVISION | ET | 11/5/82 | |
| 2 REVISION | ET | 1/6/83 | |
| 3 REVISION | ET | 1/7/83 | |

STRINGERS SPAN "E" (6)

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

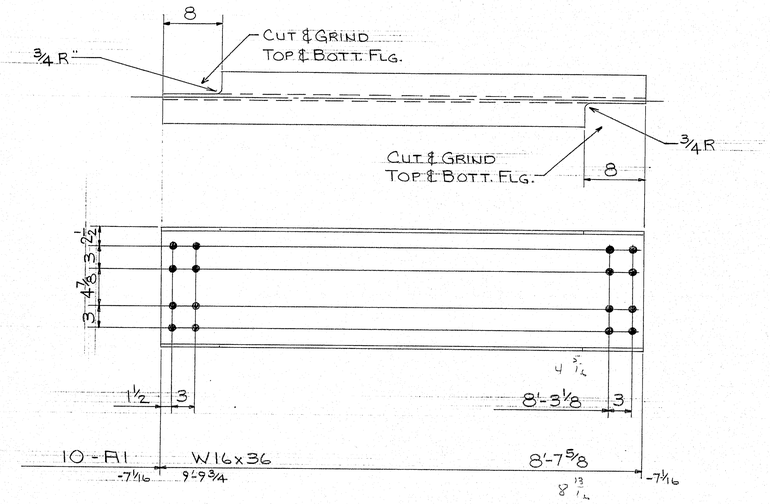
HOGAN ROAD BRIDGE
BANGOR MAINE

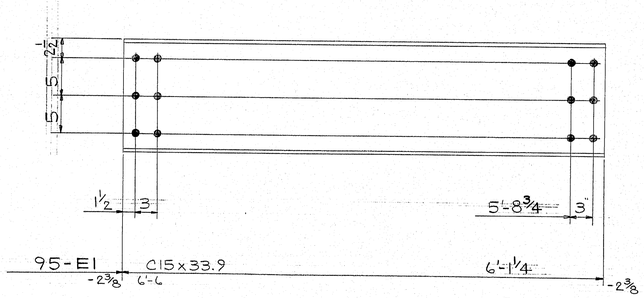
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 — DWG. NO. 11

Boston Blue Print 7043

181-32




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| A1 | 10 | | W16x36 | 8 7 5/16 | | |
| E1 | 95 | | C15x33.9 | 6 1/4 | | |
| 12A | 392 | | 7/8φ A325 | 0 4 | | TYPE 1 |
| 12B | 392 | | do | 0 3 3/4 | | do |
| 12C | 882 | | 7/8φ A325 | 0 3 | | do |
| 12D | 1666 | | 7/8φ HRD WSH. | ~ | | TYPE 1 |
| | | | BOLTS FOR FORM BRACKET HOLES | | | |
| 12E | 270 | | 5/8φ CARR BOLTS | 0 1 1/2 | | A307 |
| 12F | 270 | | 5/8φ STD WSH. | ~ | | |
| | | | BOLTS FOR DIAPHRAGMS | | | |
| 12G | 1326 | | 7/8φ A325 | 0 2 1/4 | | TYPE 1 |
| 12F | 1326 | | 7/8φ HRD WSH | ~ | | TYPE 1 |

BILL OF MATERIAL JOB NO. J-4 DWG. NO. 12

STEEL = A36
PROJECT NO. IR-95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16φ
FIELD CONN: 7/8φ A325, TYPE 1
PAINT: SEE NOTE ON DWG. #1

DIAPHRAGMS (105)
FIELD BOLTS (1666)

FINAL

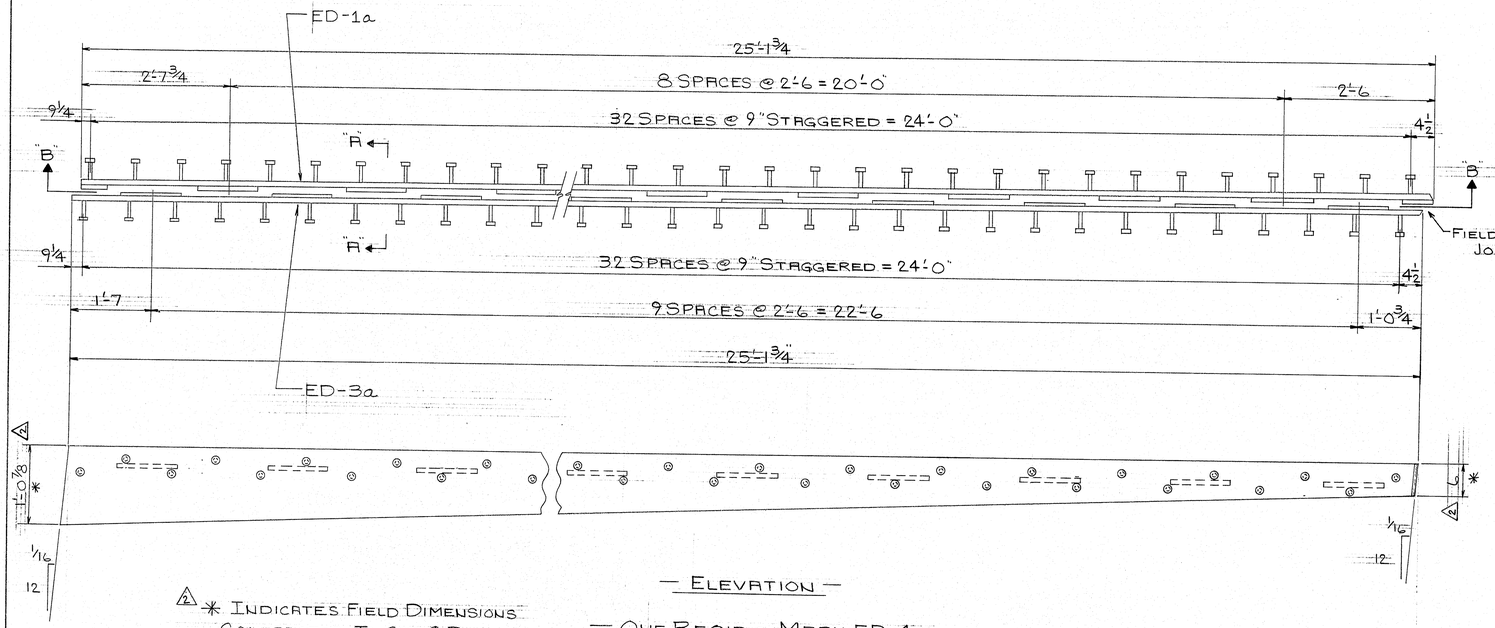
| | | | |
|---|---|---|---|
| APPR. | 10/7/82 | | |
| APPR. | | | |
| SHOP | 12/14/82 | | |
| F. & O. | 3-15-83 | | |
| DRAWN | ET | 9/30/82 | |
| CHECKED | R.W.R | 10/4/82 | |
| 1 REVISION | ET | 3/21/83 | |
| REVISION | | | |
| REVISION | | | |

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 12

Boston Blue Print 7682

181-33



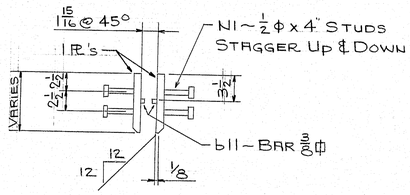

△2 * INDICATES FIELD DIMENSIONS CONTRACTOR TO CUT & BEVEL AS REQ'D IN THE FIELD.

— ELEVATION —

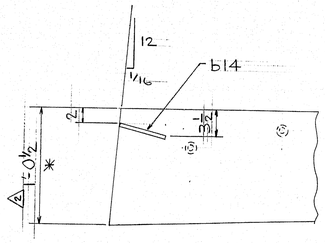
— ONE REQ'D ~ MARK ED-1a —

— ONE REQ'D ~ MARK ED-3a —

△2 — PIER #1 —

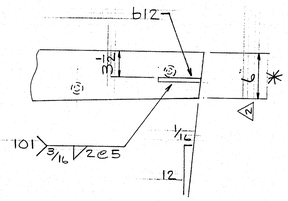



— SECTION "A-A" —




— SECTION "B-B" —

— FIELD WELD JOINT PREPARATION —




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 13 | | | | | | |
| △2 ED-1a | 1 | | PL 1 x 12 1/2 | 25 1 3/16 | | SHAPE |
| △2 ED-3a | 1 | | PL 1 x 12 1/2 | 25 1 3/16 | | SHAPE |
| | 19 | b11 | BAR 3/8 x 3/8 | 1 0 | | |
| | 1 | b12 | do | 0 6 | | |
| | 1 | b14 | BAR 3/8 x 3/8 | 0 7 3/4 | | |
| | 66 | N1 | 1/2 ϕ STUD | 0 4 | | |
| | | | ACMASEAL SEALS | | | |
| | | | AS MANUFACTURED BY ACME HIGHWAY PRODUCTS | | | |
| 13A | 5 | | J-300 SEALS | 52 0 | | P.O. # 2368 |
| 13B (CONTAINER) | 1 | | LUBRICANT ADHESIVE | | | P.O. # 2368 |

STEEL ~ A36
PROJECT NO. IR-95-9 (129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

FINAL

| | | |
|---|---|---|
| APPR. | 10/7/82 | |
| APPR. | 6/29/83 | |
| SHOP | [illegible] | |
| F. & O. | | |
| DRAWN | E.T. | 10/4/82 |
| CHECKED | R.W.R. | 10/5/82 |
| △1 REVISION | E.T. | 6/27/83 |
| △2 REVISION | E.T. | 12/21/83 |
| REVISION | | |

EXPANSION DEVICE @ PIERS
NORTHBOUND LANE

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

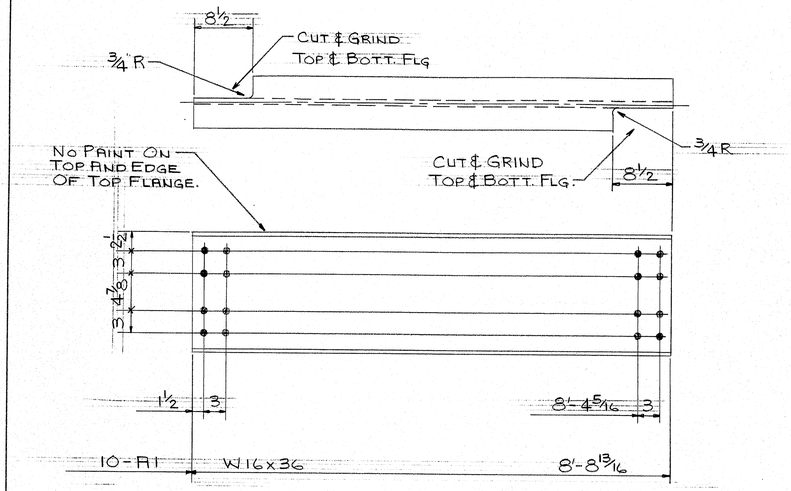
HOGAN ROAD BRIDGE
BANGOR MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 13

Boston Blue Print

181-34




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| R1 | 10 | | W16x36 | 8' 8 13/16 | | |

BILL OF MATERIAL JOB NO. J-4 DWG. NO. 14

STEEL - A36
PROJECT NO. IR-95-9(129)
ITEM No. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 19 OF 53
HOLES: 15/16ϕ
FIELD CONN.: 7/8ϕ A325, TYPE 1
PAINT: SEE NOTE ON DWG #1
REVISED END DIAPRAGMS (10)

FINAL

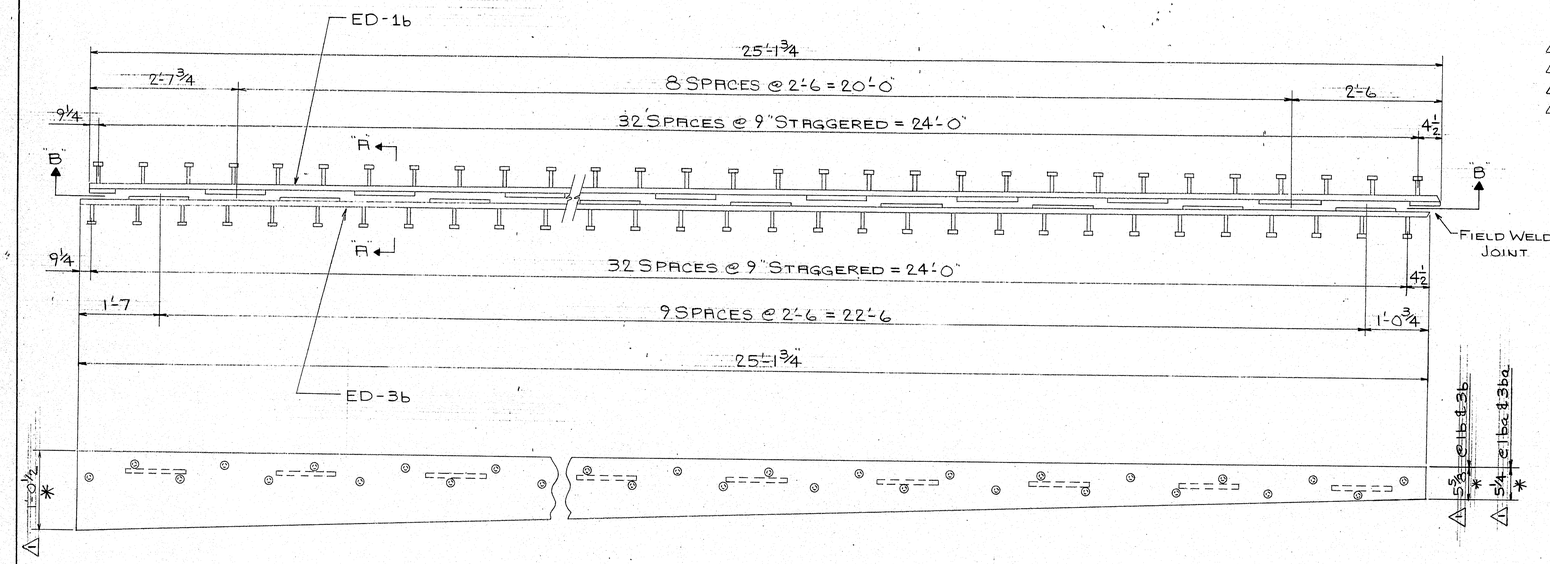
| | | |
|---|---|---|
| APPR. | | |
| APPR. | | |
| SHOP | 3/30/83 | |
| F. & O. | | |
| DRAWN | E.T. | 3/30/83 |
| CHECKED | | |
| REVISION | | |
| REVISION | | |
| REVISION | | |

**MEGQUIER & JONES CORP.**
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER: REED & REED
ARCHITECT: MAINE DEPT. OF TRANSPORTATION
JOB NO. J-4 DWG. NO. 14

Boston Blue Print 7/83

181-35




— ELEVATION —

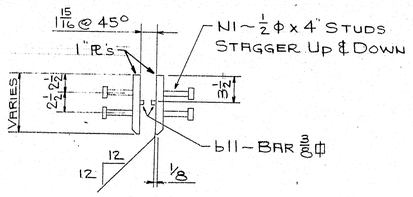
⚠ INDICATES FIELD DIMENSIONS CONTRACTOR TO CUT & BEVEL AS REQ'D IN THE FIELD.

— REQ'D ~ MARK ED-1b — — PIER #2 —

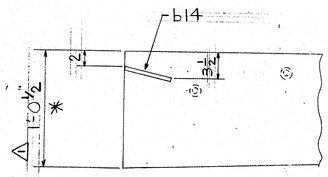
— REQ'D ~ MARK ED-3b —

— REQ'D ~ MARK ED-1ba —

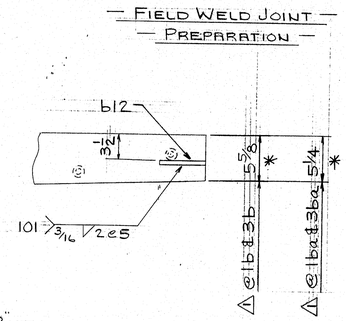
— REQ'D ~ MARK ED-3ba — — PIER #3 —




— SECTION "A-A" —




— SECTION "B-B" —



| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| ⚠ ED-1b | 1 | | PL 1" x 12 1/2 | 25 1 3/4 | | SHAPE |
| ⚠ ED-3b | 1 | | do | 25 1 3/4 | | SHAPE |
| ⚠ ED-1ba | 1 | | do | 25 1 3/4 | | SHAPE |
| ⚠ ED-3ba | 1 | | PL 1" x 12 1/2 | 25 1 3/4 | | SHAPE |
| | 38 | b11 | BAR 3/8 x 3/8 | 1 0 | | |
| | 2 | b12 | do | 0 6 | | |
| | 2 | b14 | BAR 3/8 x 3/8 | 0 7 3/4 | | |
| | 132 | N1 | 1/2 ϕ STUD | 0 4 | | |

STEEL ~ A36
PROJECT NO. IR-95-9 (129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

FINAL

| | | |
|---|---|---|
| APPR. | 6/29/83 | |
| APPR. | | |
| SHOP | JUL 5 1983 | |
| F. & O. | | |
| DRAWN | E.T. | 6/27/83 |
| CHECKED | E.T. | 6/28/83 |
| ⚠ REVISION | E.T. | 12/21/83 |
| REVISION | | |
| REVISION | | |

EXPANSION DEVICE @ PIERS NORTHBOUND LANE

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE

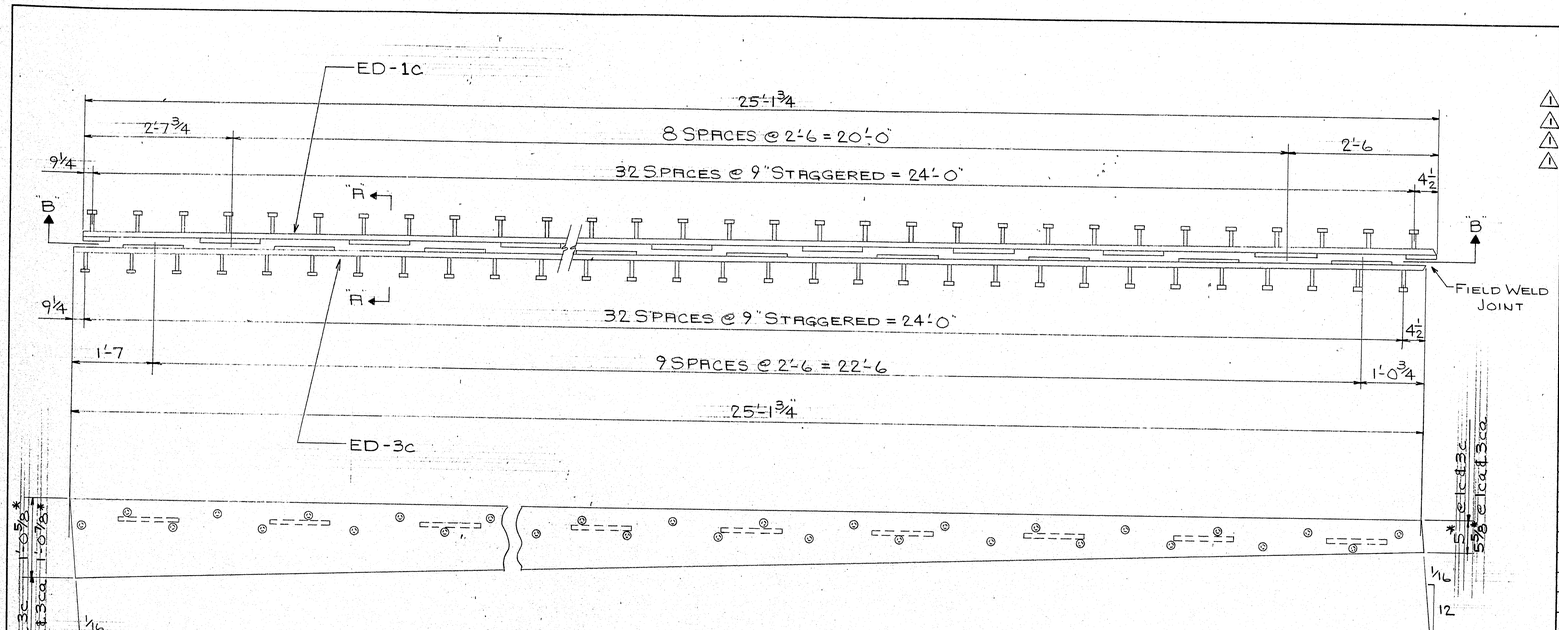
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 15

Boston Blue Print 7042

181-36

23




| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| ⚠ ED-1c | 1 | | R1 x 12 5/8 | 25 11 15/16 | | SHAPE |
| ⚠ ED-3c | 1 | | R1 x 12 5/8 | 25 11 15/16 | | SHAPE |
| ⚠ ED-1ca | 1 | | R1 x 12 7/8 | 25 11 15/16 | | SHAPE |
| ⚠ ED-3ca | 1 | | R1 x 12 7/8 | 25 11 15/16 | | SHAPE |
| | 38 | b11 | BAR 3/8 x 3/8 | 1 0 | | |
| | 2 | b12 | do | 0 6 | | |
| | 2 | b14 | BAR 3/8 x 3/8 | 0 7 3/4 | | |
| | 132 | N1 | 1/2 Φ STUD | 0 4 | | |

BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 16

STEEL ~ A36
PROJECT NO. IR-95-9 (129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

FINAL

| | | |
|---|---|---|
| APPR. | 6/29/83 | |
| APPR. | | |
| SHOP | | |
| F. & O. | | |
| DRAWN | ET | 6/27/83 |
| CHECKED | ET | 6/28/83 |
| ⚠ REVISION | ET | 12/21/83 |
| REVISION | | |
| REVISION | | |

EXPANSION DEVICE @ PIERS
NORTHBOUND LANE

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

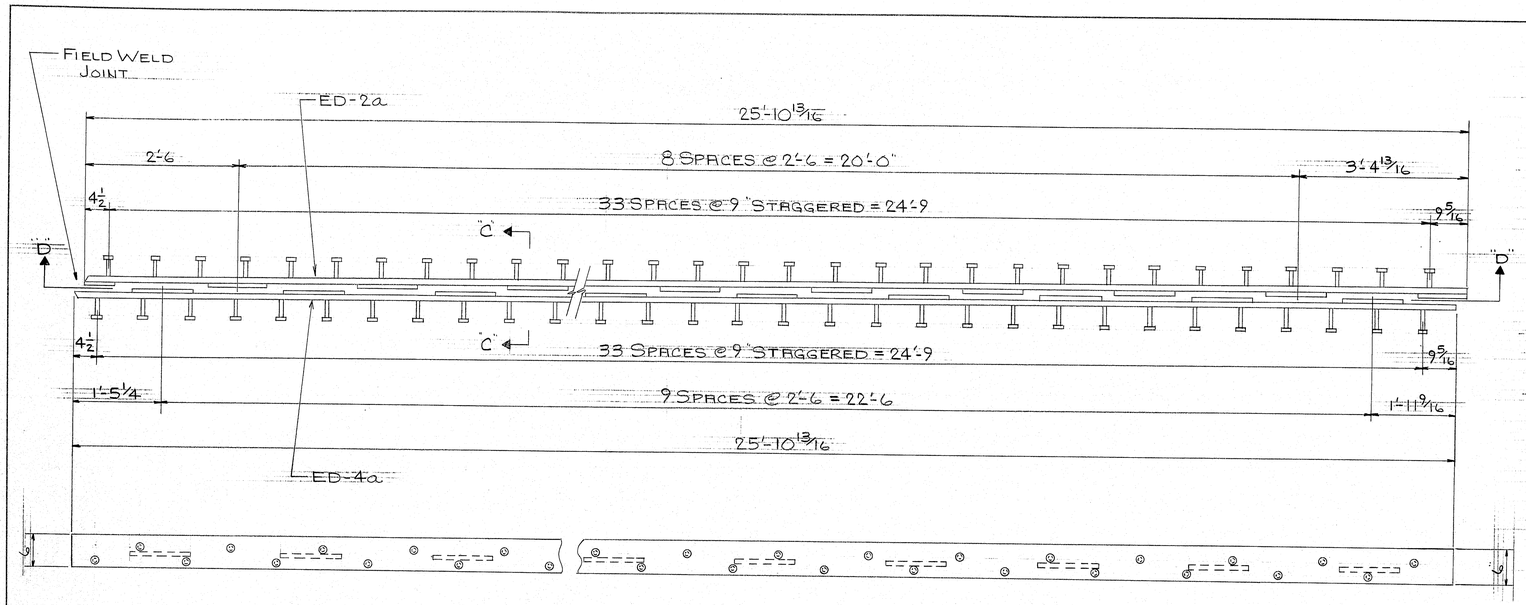
HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 16

181-37

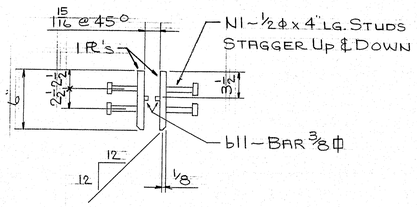


Boston Blue Print 760

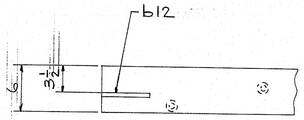


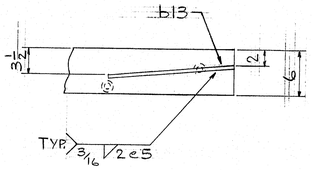

— ELEVATION —

— ONE REQ'D ~ MARK ED-2a —
— ONE REQ'D ~ MARK ED-4a —




— SECTION "C-C" —




— SECTION "D-D" —

FIELD WELD JOINT PREPARATION

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| ED-2a | 1 | | PL 1 x 6 | 25 10 13/16 | | |
| ED-4a | 1 | | PL 1 x 6 | 25 10 13/16 | | |
| | 19 | b11 | BAR 3/8 x 3/8 | 1 | 0 | |
| | 1 | b12 | do. | 0 | 6 | |
| | 1 | b13 | BAR 3/8 x 3/8 | 1 | 4 13/16 | |
| | 68 | N1 | 1/2φ STUD | 0 | 4 | |

BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 17

STEEL ~ A36
PROJECT No. IR-95-9(129)
ITEM No. 504.70

| | | |
|---|---|---|
| APPR. | 6/29/83 | |
| APPR. | | |
| SHOP | JUL 5 1983 | |
| F. & O. | | |
| DRAWN | ET | 6/28/83 |
| CHECKED | ET | 6/28/83 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

FINAL

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

EXPANSION DEVICE @ PIERS
NORTHBOUND LANE

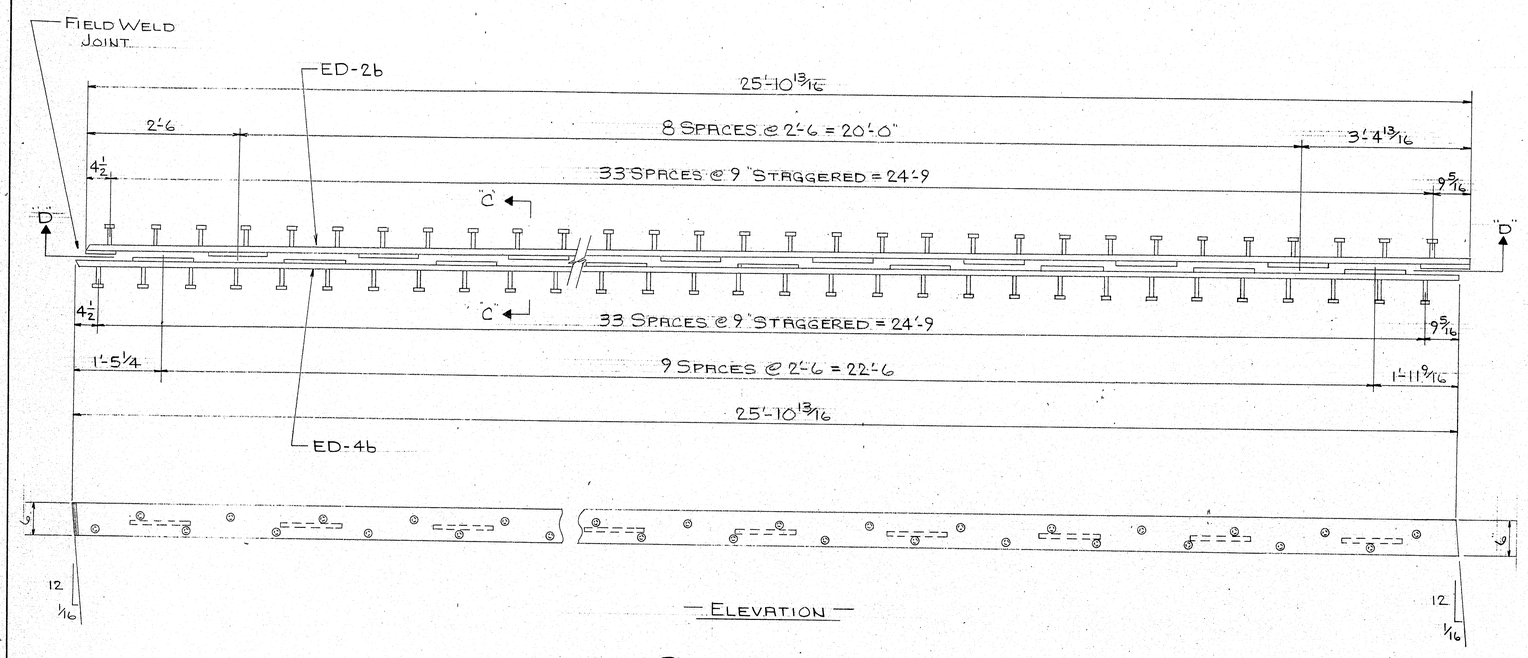
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 17

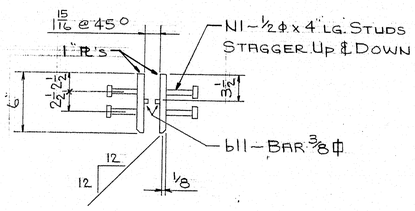
Boston Blue Print 7040

181-38

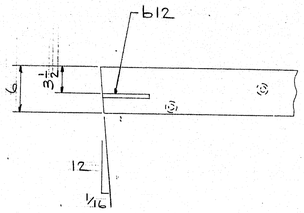


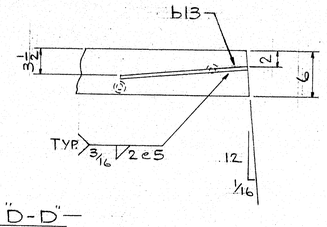

— ELEVATION —

— 2 REQ'D ~ MARK ED-2b —
— 2 REQ'D ~ MARK ED-4b —




— SECTION "C-C" —




— SECTION "D-D" —

FIELD WELD JOINT PREPARATION

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | | WT. | REMARKS |
|---|---|---|---|---|---|---|---|
| ED-2b | 2 | | PL 1 x 6 | 25 | 10 7/8 | | |
| ED-4b | 2 | | PL 1 x 6 | 25 | 10 7/8 | | |
| | 38 | b11 | BAR 3/8 x 3/8 | 1 | 0 | | |
| | 4 | b12 | do | 0 | 6 | | |
| | 4 | b13 | BAR 3/8 x 3/8 | 1 | 4 13/16 | | |
| | 136 | N1 | 1/2φ STUD | 0 | 4 | | |

BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 18

STEEL ~ A36
PROJECT NO. IR-95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

FINAL

| | | |
|---|---|---|
| APPR. | 6/29/83 | |
| APPR. | | |
| SHOP | JUL 5 1983 | |
| F. & O. | | |
| DRAWN | ET | 6/28/83 |
| CHECKED | ET | 6/28/83 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

EXPANSION DEVICE @ PIERS
NORTHBOUND LANE

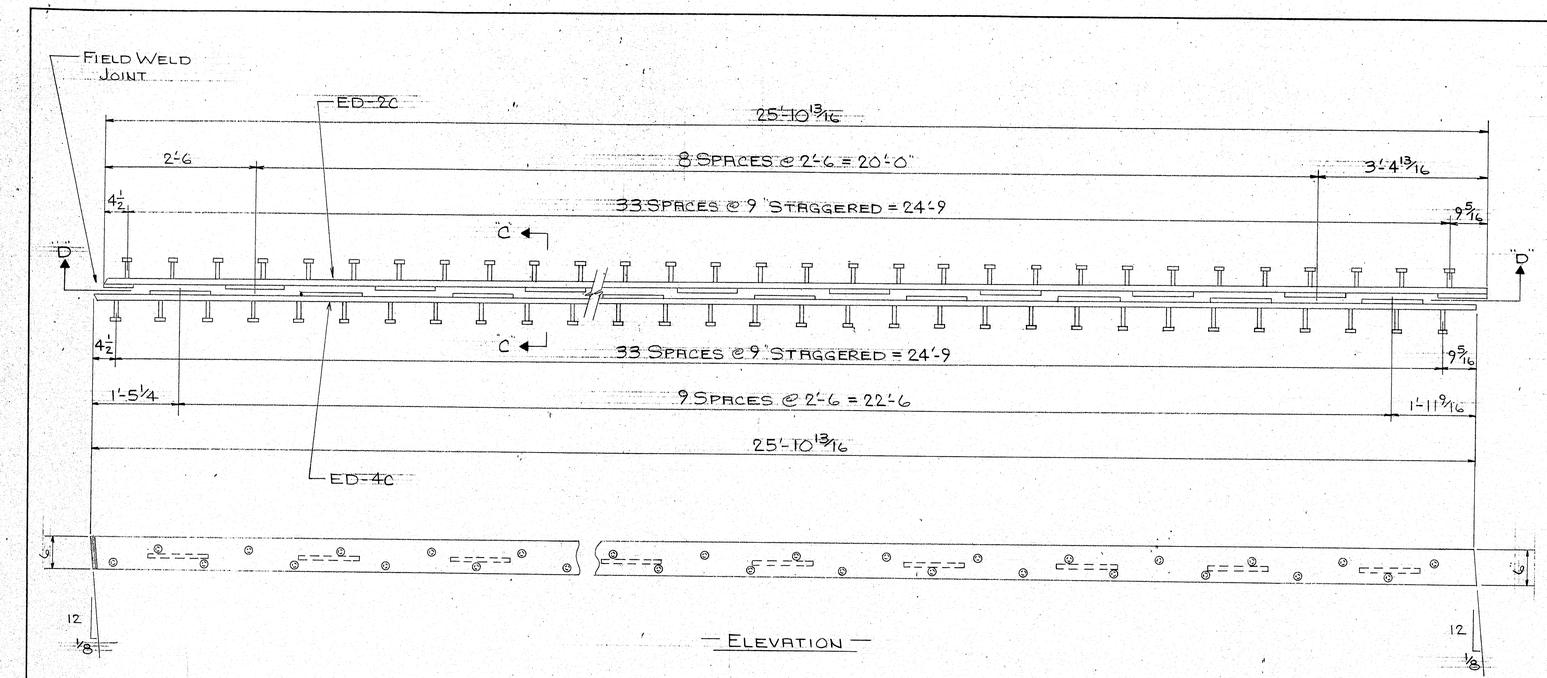
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HOGAN ROAD BRIDGE
BANGOR MAINE
CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 DWG. NO. 18

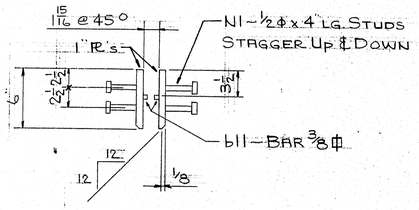
181-39

Boston Blue Print 7083

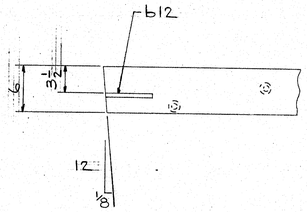


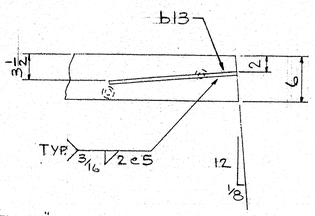

— ELEVATION —

2 REQ'D ~ MARK ED-2C
2 REQ'D ~ MARK ED-4C




— SECTION "C-C" —




— SECTION "D-D" —

FIELD WELD JOINT PREPARATION

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| ED-2C | 2 | | PL 1 x 6 | 25 10 3/8 | | |
| ED-4C | 2 | | PL 1 x 6 | 25 10 3/8 | | |
| | 38 | b11 | BAR 3/8 x 3/8 | 1 0 | | |
| | 4 | b12 | do | 0 6 | | |
| | 4 | b13 | BAR 3/8 x 3/8 | 1 4 13/16 | | |
| | 136 | N1 | 1/2φ STUD | 0 4 | | |

BILL OF MATERIAL — JOB NO. J-4 — DWG. NO. 19

STEEL ~ A36
PROJECT NO. IR-95-9(129)
ITEM NO. 504.70

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS: 8 OF 23
HOLES: NONE
FIELD CONN: FIELD WELD
PAINT: NONE

FINAL

| | | |
|---|---|---|
| APPR. | 6/29/83 | |
| APPR. | | |
| SHOP | OCT. 5 1983 | |
| F. & O. | | |
| DRAWN | ET | 6/28/83 |
| CHECKED | ET | 6/28/83 |
| REVISION | | |
| REVISION | | |
| REVISION | | |

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BANGOR, MAINE

CUSTOMER REED & REED
ARCHITECT MAINE DEPT. OF TRANSPORTATION

JOB NO. J-4 — DWG. NO. 19

Boston Blue Print 7640

181-40