

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



PLANS

JOSHUA CHAMBERLAIN BRIDGE
OVER
PENOBSCOT RIVER
BETWEEN THE CITIES OF
BANGOR and BREWER
PENOBSCOT COUNTY
PROJECT NO. BH-043-1(34)
PROJECT LENGTH 0.34 MILES

SPECIFICATION

DESIGN: AASHTO Standard Specifications for Highway
Bridges 1992 with interims 1993 thru 1995.

CONTRACT: State of Maine, Department of Transportation,
Standard Specifications Highways and Bridges,
Revisions of April 1995.

DESIGN LOADING

LIVE LOAD: HS25

STRESS CYCLES: (2,000,000)

MATERIALS

CONCRETE:.....Class A
REINFORCING STEEL:.....ASTM A615 Grade 60
STRUCTURAL STEEL:.....ASTM A36
STRUCTURAL STEEL:.....ASTM A325 TYPE 1

BASIC DESIGN STRESSES

CONCRETE:.....f'c=4,000psi
REINFORCING STEEL:.....fy=60,000psi
STRUCTURAL STEEL:.....fy=36,000psi
ASTM A325.....fv=25,000psi

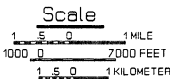
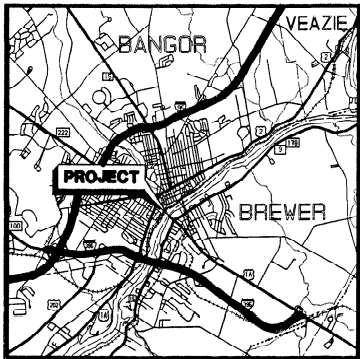
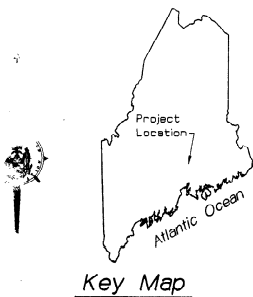
Traffic Data

AADT 1997.....20,050
AADT 2007.....28,070
DHV.....2807
Trucks (%).....3
D (%).....60
Velocity.....30 mph
18 kip eq P2.0.....264
18 kip eq P2.5.....260

NOTE:
All work contemplated under this contract to be governed
by and in conformity with the Standard Specifications
(Revision of April 1995) and supplementals thereto, as
modified on the plans and in the Special Provisions.

Plans of existing bridge are available for the Contractor's
reference at the Bridge Design Office in Augusta. These plans
are reproductions of original drawings as prepared for the
construction of the bridge and it is very unlikely that the
plans will show any construction field changes or any alterations
which may have been made to the bridge during its life span.
A bridge deck evaluation is also available.

A hydrologic report of the bridge site is available for the
Contractor's reference at the Bridge Design Office in Augusta.
The hydrologic report is based on the interpretation by the
Department of information obtained for the subject site and no
assurance is given that the information or the conclusions of the
report will be representative of actual conditions at the time of
construction.



Location Map

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
TITLE SHEET	1
ESTIMATED QUANTITIES	2
GENERAL PLAN AND ELEVATION	3
ABUTMENT (REMOVAL)	4
ABUTMENT (RECONSTRUCTED)	5
TRANSVERSE SECTIONS (REMOVAL)	6
TRANSVERSE SECTIONS (RECONSTRUCTED)	7
GENERAL DECK PLAN	8
DECK A REINFORCEMENT	9
DECK B DETAILS	10
DECK B REINFORCEMENT (1 OF 2)	11
DECK B REINFORCEMENT (2 OF 2)	12
DECK C, D & E DETAILS	13
DECK C REINFORCEMENT	14
DECK D REINFORCEMENT	15
DECK E REINFORCEMENT	16
DECK F DETAILS	17
DECK F REINFORCEMENT (1 OF 4)	18
DECK F REINFORCEMENT (2 OF 4)	19
DECK F REINFORCEMENT (3 OF 4)	20
DECK F REINFORCEMENT (4 OF 4)	21
PRECAST DECK PANELS	22
EXPANSION JOINT DETAILS	23
MISCELLANEOUS DETAILS	24
REBAR SCHEDULE (1)	25
REBAR SCHEDULE (2)	26
UNION ST. APPROACH AND RAMP "B" APPROACH	27
RAMP "B" PROFILES	28
FASCIA OFFSETS IN CURVE	29
BREWER APPROACH	30
BREWER APPROACH DETAILS	31
NAVIGATION LIGHTS	32
TRAFFIC SIGNAL PLANS - BREWER	33-36
RIGHT OF WAY MAPS	37-38
BRIDGE STANDARD DETAILS	39-42
HIGHWAY STANDARD DETAILS	43-48
TRAFFIC CONTROL PLANS	49

BRIDGE STANDARD DETAILS

BD 112-93	REV.	JULY 1993	DIAPHRAGMS AND CROSSFRAMES
BD 301-93	REV.	JULY 1993	EXPANSION DEVICE: COMPRESSION SEAL
BD 302-93	REV.	JULY 1993	EXPANSION DEVICE: GLAND SEAL
BD 521-93	REV.	DEC. 1994	SUPERSTRUCTURE DETAILS

HIGHWAY STANDARD DETAILS

HD-4	REV.	OCT. 1995	CURB
HD-10	REV.	MAY 1996	MAINTENANCE OF TRAFFIC
HD-11	REV.	MAY 1996	MAINTENANCE OF TRAFFIC
HD-12	REV.	MAY 1996	MAINTENANCE OF TRAFFIC
HD-13	REV.	OCT. 1993	PAVEMENT MARKINGS
HD-14	REV.	APRIL 1995	PEDESTRIAN RAMPS

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DESIGNER
ENGINEER
DATE
3/11/97

DATE
3/11/97

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION 1
APPROVED:
DIVISION ADMINISTRATOR
DATE

Prepared By: BETTIGOLE ANDREWS & CLARK, INC.

DATE

PROJECT DESIGN ENGINEER	DATE	3/97
	BY	KDM
PLANS	DESIGN-DETAILED	
	CHECKED	
	REVISIONS	
	FIELD CHANGES	

290C756-0100.30

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.10	REMOV. EXIST. SUPERSTRUCTURE (PROPERTY OF CONTRACTOR)	1	LS
202.17	REMOVING EXISTING STRUCTURAL CONCRETE	1	LS
202.203	PAVEMENT BUTT JOINTS	750	SY
403.10	HOT BITUMINOUS PAVEMENT, GRADING D	750	TON
403.101	HOT BIT. PAVEMENT, GRADING D (SIDEWALKS, DRIVES, SHIMS, ETC.)	35	TON
403.121	HOT BITUMINOUS PAVEMENT, GRADING E (SHIMMING)	140	TON
409.15	BITUMINOUS TACK COAT APPLIED	125	GAL
502.21	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	56	CY
502.26	STRUCT. CONC. ROADWAY AND SDWK. SLABS ON STEEL BRIDGES(1,325 CY)	1	LS
502.48	LOW PERMEABILITY CONCRETE	650	CY
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	4,200	LB
503.13	REINFORCING STEEL, PLACING	4,200	LB
504.70	STRUCTURAL STEEL, FABRICATED AND DELIVERED (11,000 LBS)	1	LS
504.71	STRUCTURAL STEEL ERECTION (11,000 LBS)	1	LS
505.08	SHEAR CONNECTORS (19,100 EACH)	1	LS
508.13	MEMBRANE WATERPROOFING (4,600 SY)	1	LS
514.06	CURING BOX FOR CONCRETE CYLINDERS	1	EACH
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (6,400 SY)	1	LS
518.21	REHABILITATION OF STRUCTURAL CONCRETE SUBSTRUCTURE	400	SF
520.21	EXPANSION DEVICE - GLAND SEAL	2	EACH
520.22	EXPANSION DEVICE - COMPRESSION SEAL	3	EACH
520.24	BRIDGE JOINT MODIFICATION	1	EACH
526.301	TEMP. CONCRETE BARRIER TYPE I	1	LS
604.11	CATCH BASIN TYPE C1	1	EACH
609.11	VERTICAL CURB TYPE 1	580	LF
609.234	TERMINAL CURB TYPE 1 (4 FOOT)	1	EACH
609.237	TERMINAL CURB TYPE 1 (7 FOOT)	1	EACH
626.11	PRECAST CONCRETE JUNCTION BOX	5	EACH
626.21	METALLIC CONDUIT	1,700	LF
627.71	4 INCH WHITE PAVEMENT MARKING LINE	4,230	LF
627.73	4 INCH YELLOW PAVEMENT MARKING LINE	3,500	LF
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	650	SF
634.16	HIGHWAY LIGHTING	1	LS
634.21	CONVENTIONAL LIGHT STANDARD	7	EACH
638.01	EMBEDDED WORK IN STRUCTURE, BRIDGE LIGHTING	1	LS
638.01	EMBEDDED WORK IN STRUCTURE, UNDERBRIDGE LIGHTING	1	LS
638.01	EMBEDDED WORK IN STRUCTURE, COMMUNICATIONS CONDUIT	1	LS
638.02	NAVIGATION LIGHTS	1	LS
639.18	FIELD OFFICE TYPE A	1	EACH
639.22	TESTING FACILITIES BITUMINOUS MIXES	1	LS
643.80	TRAFFIC SIGNAL AT: INTERSECTION EASTERN AVE. & STATE STREET	1	LS
643.80	TRAFFIC SIGNAL AT: INTERSECTION WASHINGTON & STATE STREET	1	LS
652.312	TYPE III BARRICADE	5	EACH
652.33	DRUM	25	EACH
652.34	CONE	25	EACH
652.35	CONSTRUCTION SIGNS	1,500	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
656.50	BALED HAY, IN PLACE	25	EACH
656.51	SANDBAG, IN PLACE	25	EACH
656.631	15 INCH TEMPORARY SILT FENCE	200	LF
659.10	MOBILIZATION	1	LS
660.21	ON-THE-JOB TRAINING	2,000	MH

* UNDETERMINED LOCATION

Notes:

- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- For easements, construction limits and Right-Of-Way lines, refer to Right-Of-Way map.
- During construction, the road will be closed to traffic for a period specified in the Special Provisions.
- Pavement removal from approaches shall be paid for under item 202.203 Pavement Butt Joints.
- Concrete removal at approaches shall be paid for under item 202.17, Removing Existing Structural Concrete.
- Item 202.10, Remove Existing Superstructure - Property of Contractor, shall include:
 - Removal of existing deck slab & curbs.
 - Removal of existing expansion joints, bridge drains, down spouts and manhole covers.
 - Removal of electrical conduits for underbridge lighting and pull boxes in and under the deck slab.
 - Removal of anchor bolts for the rail posts at span 1.
- Item 638.01, Embedded Work In Superstructures shall include new electrical conduits, underbridge lighting and new pull boxes.
- At the Contractor's option, precast deck panels may be used in lieu of the full depth Cast-In-Place concrete deck slab. No additional payment will be made for the precast panels as all expenses incurred with the use of this option will be included in the Cast In Place pay items.
- Dimensions and elevations shown on these contract plans have been obtained from as built plans of the existing structure and limited field investigation and may not accurately reflect actual field conditions. Accordingly, the Contractor will be responsible for making field measurements of all the existing structure components impacted by the new work to assure consistency with the proposed modifications. Any discrepancies in dimensions, character or extent of the existing facilities shall be brought to the Engineer before advancing the work. Shop drawings required for various items of the work shall indicate the actual field measurements and shall be so noted.
- Rail post anchor bolts in span #1, U-Bolt anchors in span #2 thru #16 and rail post anchors at the approaches shall be replaced in kind or as shown the plans in conformance with the requirement of ASTM A307 Grade C. These anchors will not be paid for directly but will be considered incidental to the related Structural Concrete Pay item.
- Extreme care shall be taken not to damage the telephone conduits below the upstream sidewalk. (See special provision 105 and 107, Utilities). Should damage occur, the Contractor shall cooperate with the utility, as necessary, to provide access across the bridge.
- Surface deterioration on piers #4 and #11 and other locations, as determined by the Engineer, shall be repaired as specified in Special Provision Section 518.
- The existing navigation lights shall remain in service until the new navigation lights have been installed. The Contractor shall inform the Harbor Masters of Bangor and Brewer concerning in river work, including deck removal that may impact navigation. The Contractor shall schedule work such that navigation shall be maintained at all times.
- Traffic signals at the intersections of Washington and Eastern Avenues with State Street in Brewer, shall be installed before the bridge is closed to traffic.
- At Sta. 2+41.77 Left, remove an existing stair and construct a Concrete Barrier widening the edge of sidewalk. Removal shall be included for payment under item 202.17 Removal Of Existing Structural Concrete. Construction of the Concrete Barrier Wall shall be done as directed by the Engineer and Payment shall be made under the appropriate concrete and reinforcing steel pay items. All reinforcing will be #5 bars placed at a maximum 12" spacing and with a minimum embedment into existing concrete of 12". Drilling and anchoring will be incidental to item 502.13.
- All structural concrete in the superstructure will be paid for under the item 502.26 and 502.48 as appropriate. All structural concrete in the abutments and approach walls will be paid for under item 502.21.
- The Coast Guard Marine Safety Office (207)780-3251 shall be notified at least 5 working days in advance of any work done in and over water.

** NON-BID ITEM

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BH-043-1(34)	2	

- Superstructure concrete placed in sidewalks, curb and curbline barrier, light bases and within the blockouts each side of all bridge joints shall be Class LP (low permeability) concrete. (pay item 502.48).
- Anchor bolts for the new light standards shall be stainless steel with a minimum yield strenght of 50 ksi.
- Sheets 33 thru 36 are in metric units.
- A plan to prevent materials from falling in the river shall be submitted to the Engineer fo approval. If the method proves unsatisfactory, as determined by the Engineer, operations over the water will be suspended until an acceptable method, approved by the engineer is in place.

Scope Of Work

The bridge and approach roadways and sidewalks will be closed to traffic during construction.

Approaches:

- Shim approach roadway pavement
- Remove existing approach sidewalks and replace with new pavement.
- Remove and reset existing railings (Brewer approach only).
- Remove existing curbs and install new granite curbs and new concrete curbline barriers.
- Remove and reconstruct concrete sidewalk slabs (Brewer approach only). Install intersection lights in Brewer.

Bridge:

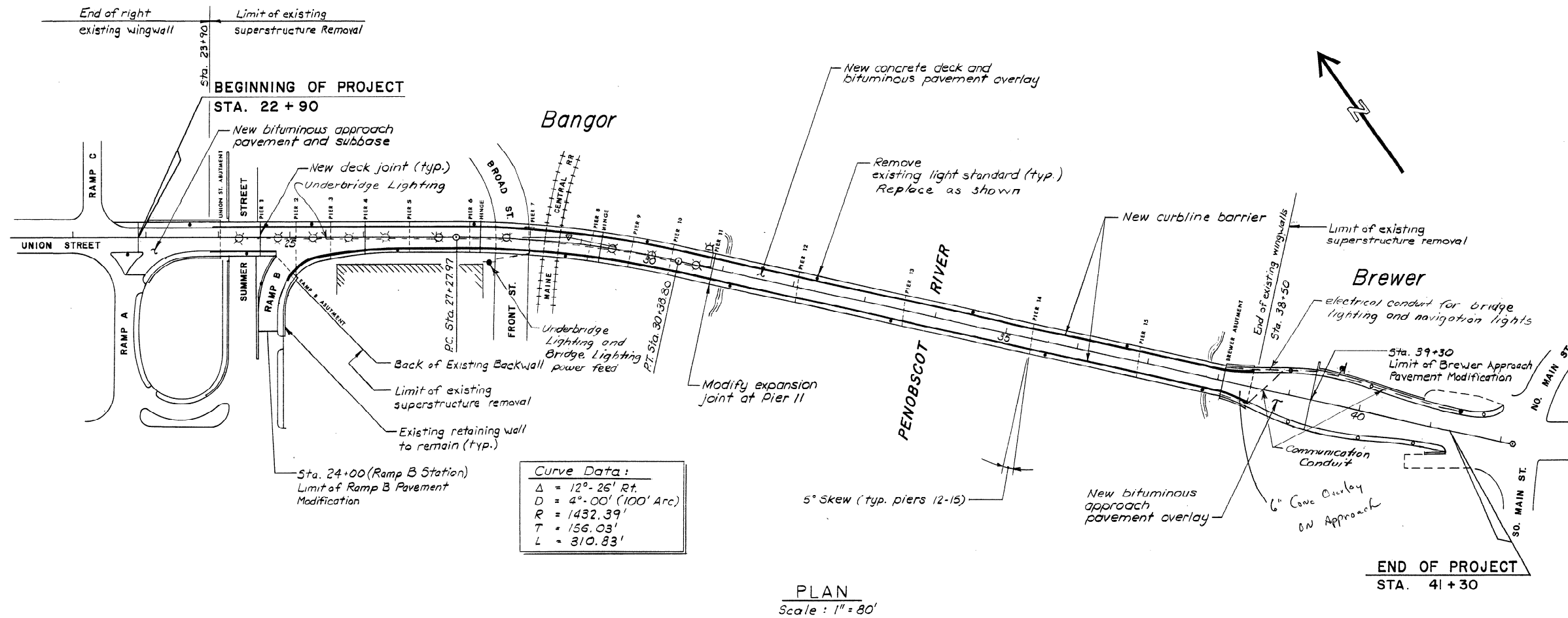
- Remove and reconstruct top portion of abutment backwalls.
- Remove existing bridge deck including: sidewalks, curbs, utility conduits, light standards, bridge drains and expansion devices.
- Install stud shear connectors.
- Remove and replace rail post anchor bolts at span 1 and U-bolt bridge rail anchors spans 2 thru 16. Install steel plow barrier. Repair existing damaged railing.
- Install new bridge drains & new utility conduit.
- Place new bridge deck, sidewalks, curbline barrier and bituminous pavement.
- Install new light standards.
- Install new expansion joint devices
- Repair damaged concrete on piers.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

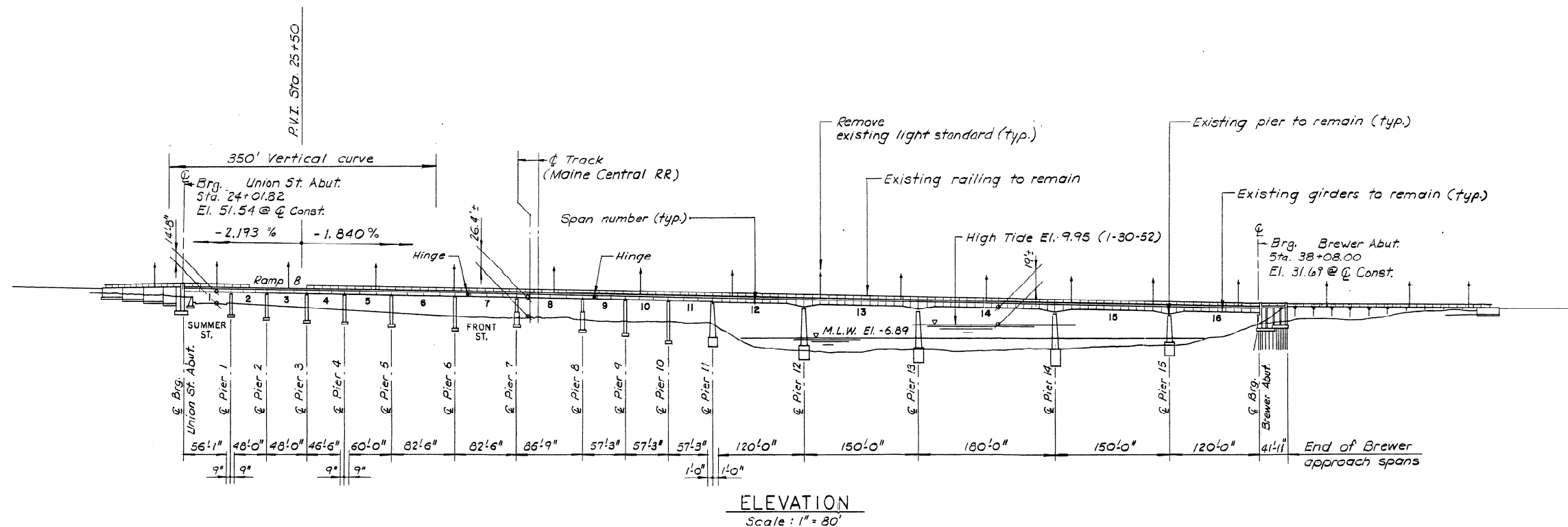
JOSHUA L. CHAMBERLAIN BRIDGE
OVER
PENOBSCOT RIVER
BETWEEN THE TOWNS OF
BANGOR and BREWER
PENOBSCOT COUNTY

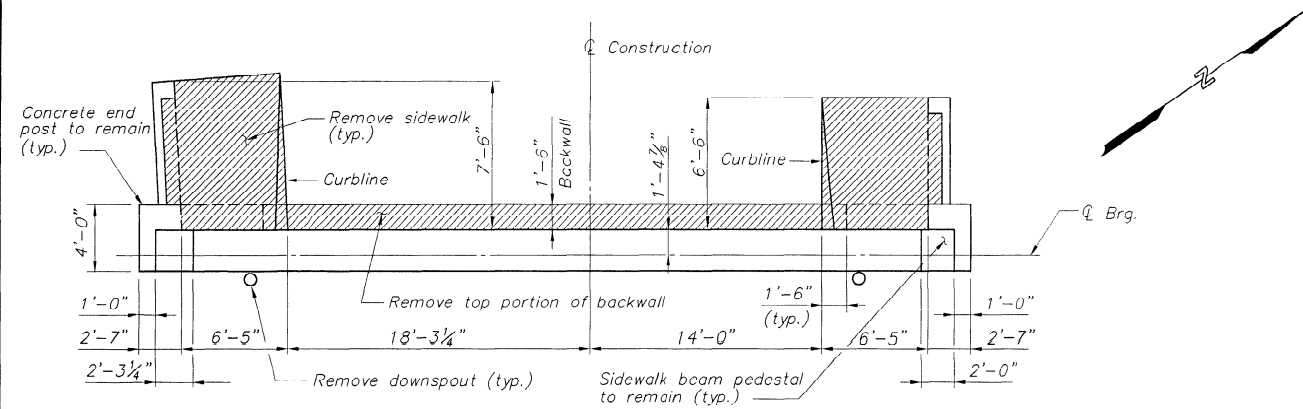
ESTIMATE

SHEET OF AUGUSTA, MAINE

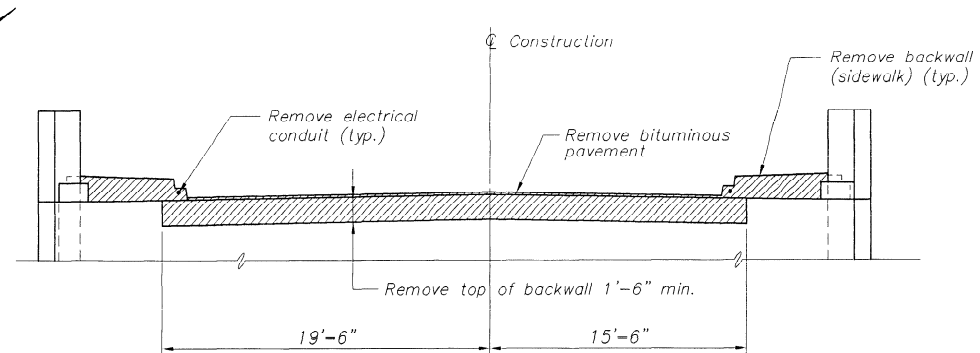


For Under bridge lighting details
See Sheets 27 and 32



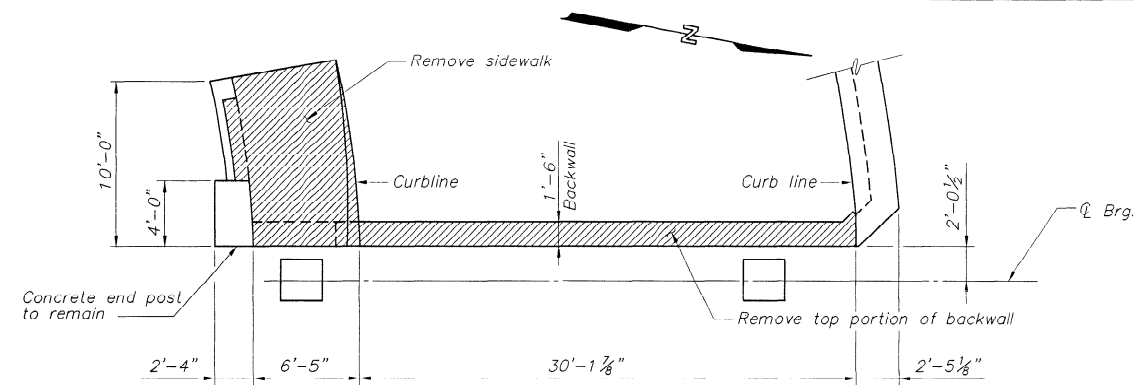


PLAN

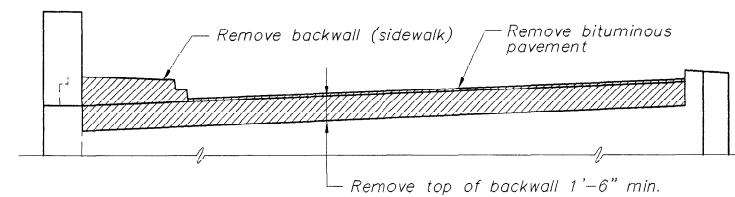


ELEVATION

UNION STREET ABUTMENT (BANGOR)

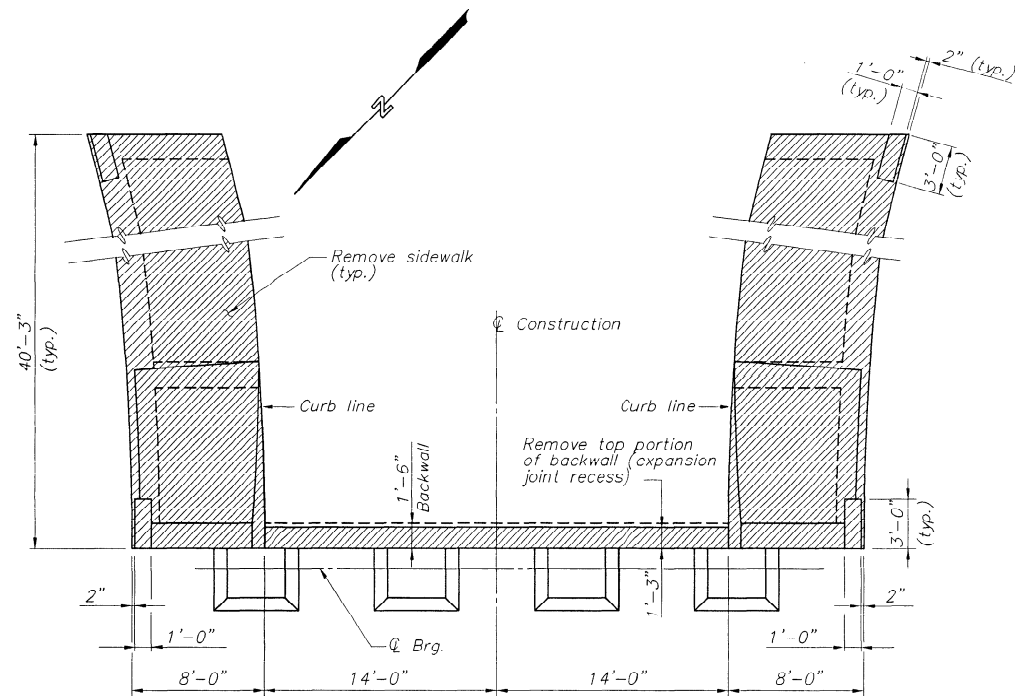


PLAN

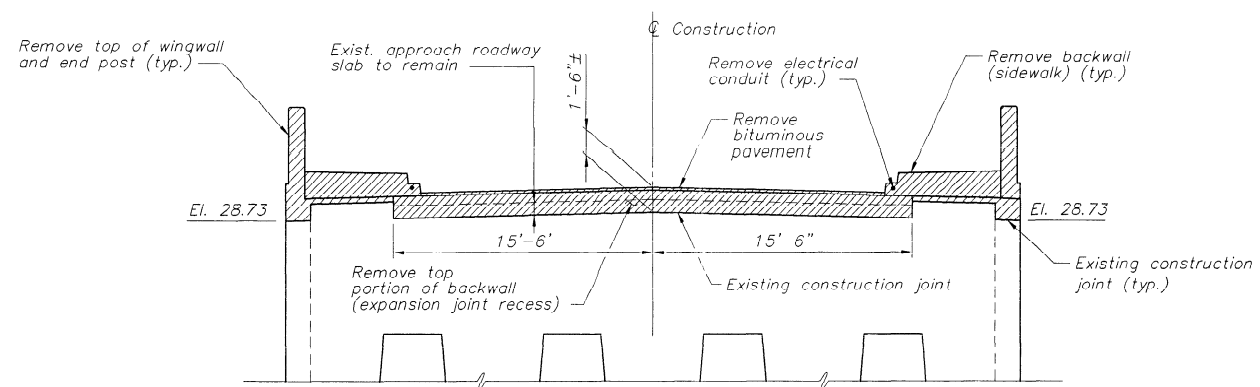


ELEVATION

RAMP B ABUTMENT (BANGOR)



PLAN



ELEVATION

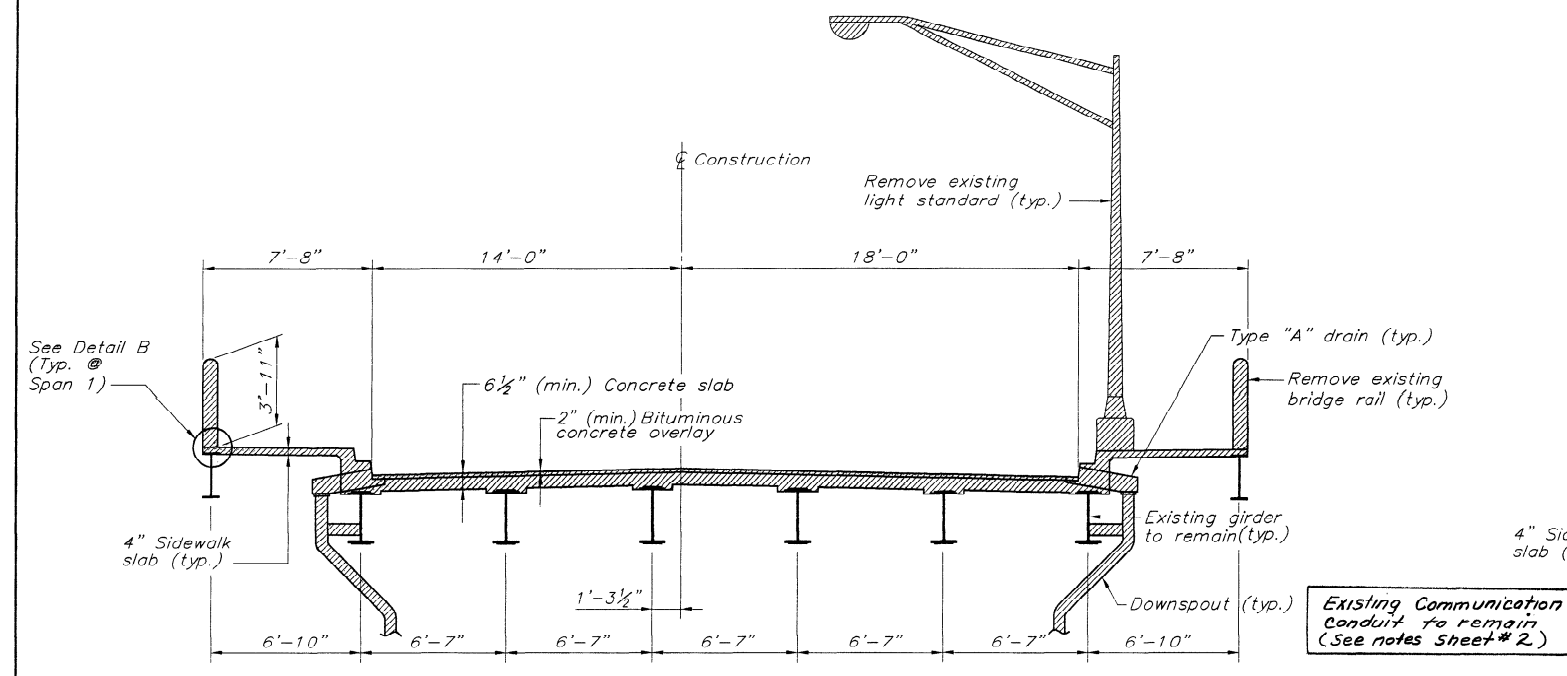
BREWER ABUTMENT

NOTES:

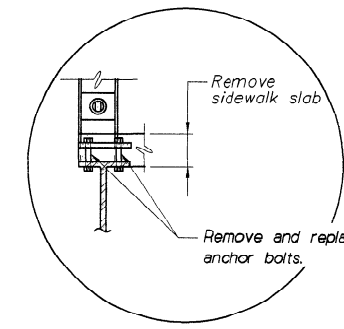
1. Denotes limit of removal.
2. Removal of existing backwall shall be paid under Removing Existing Structural Concrete (Item 202.17).
3. Structural excavation and backfill shall be INCIDENTAL TO Structural Concrete Abutments and Retaining Walls (Item 502.21).

As Built
1998
g

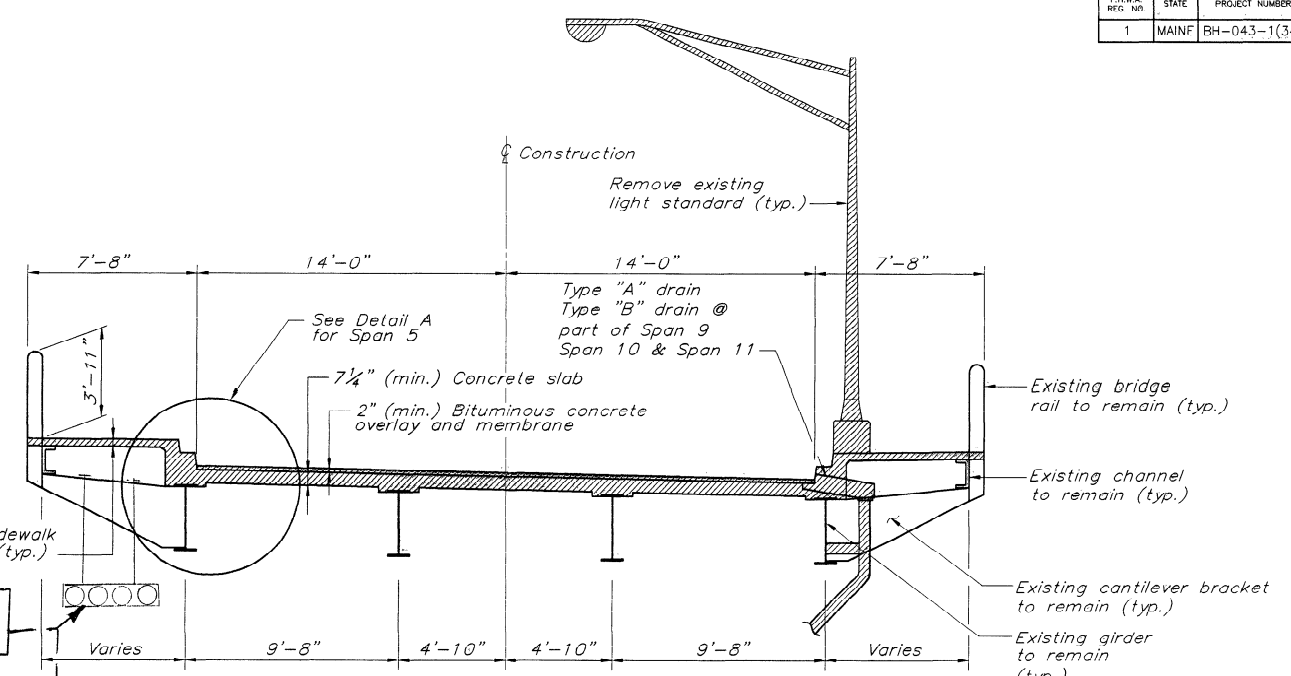
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
ABUTMENT (REMOVAL)



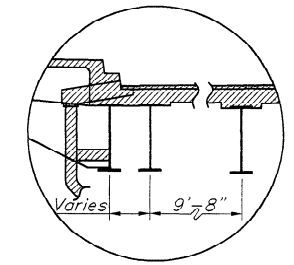
SPAN 1



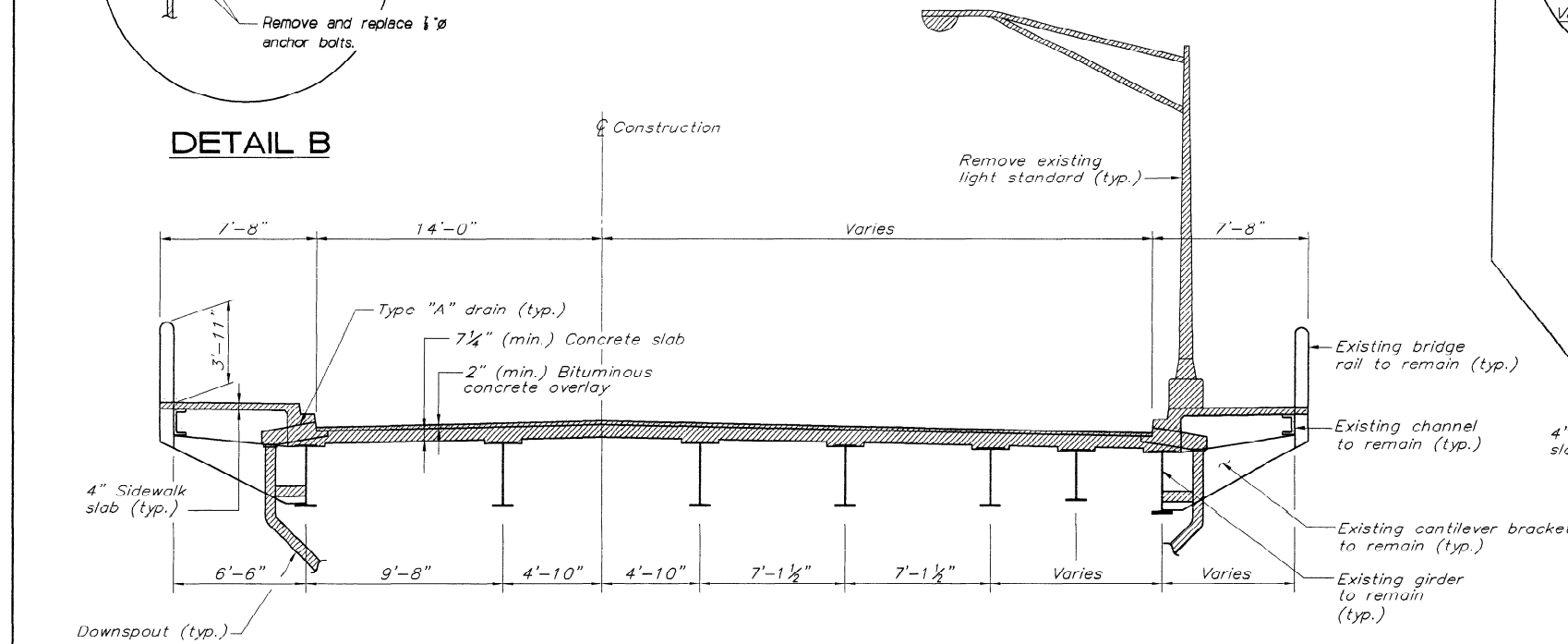
DETAIL B



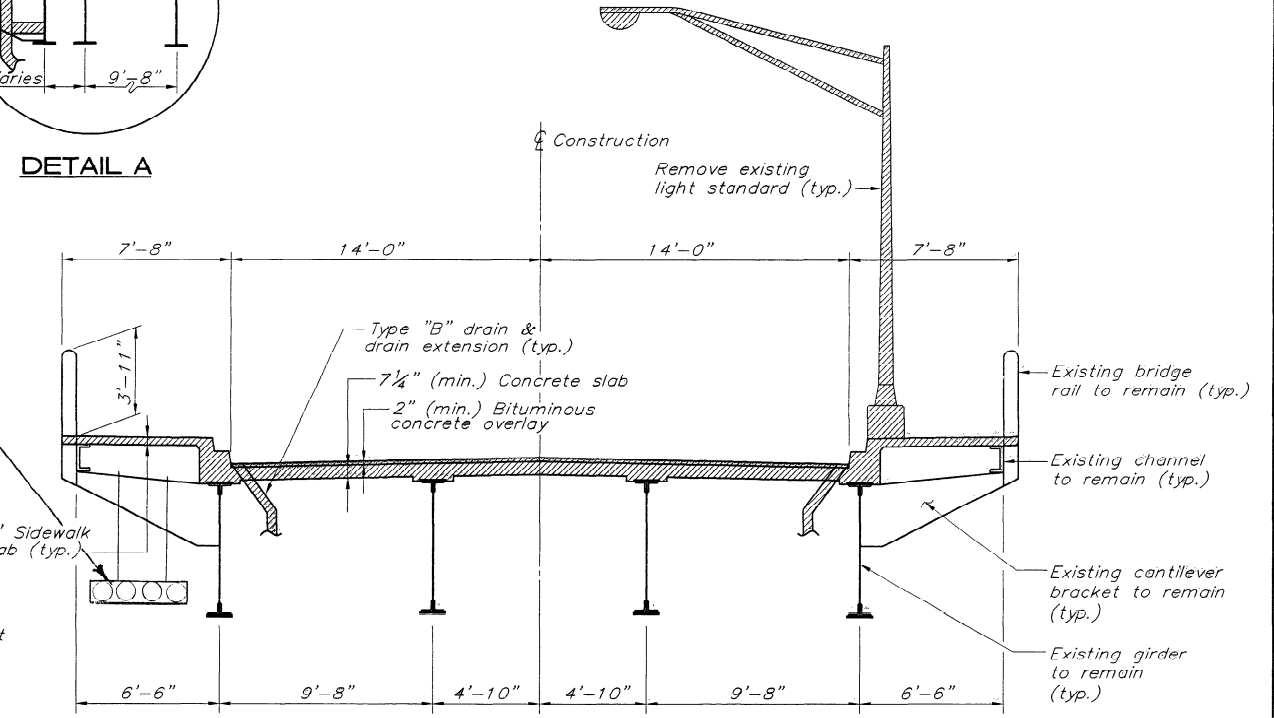
SPANS 5-11



DETAIL A



SPANS 2-4

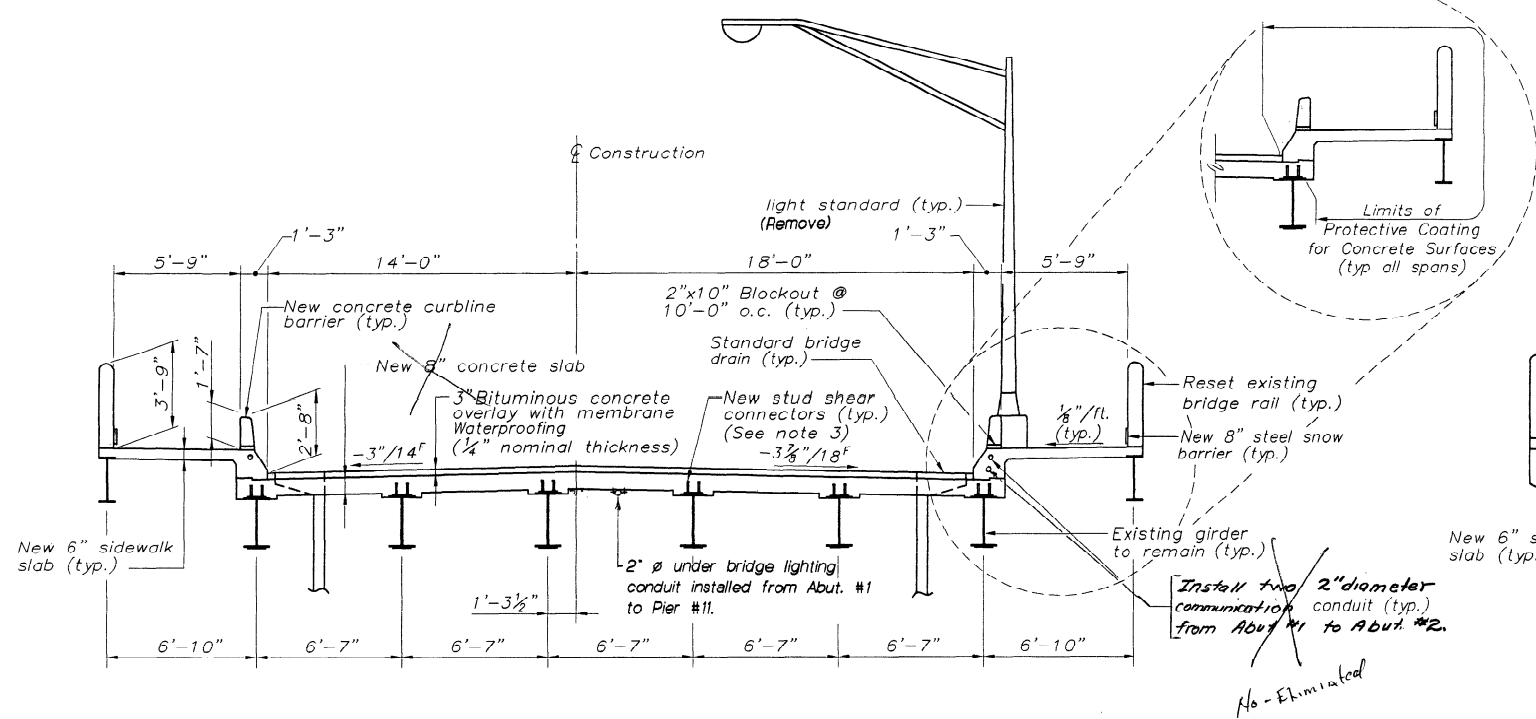


SPANS 12-16

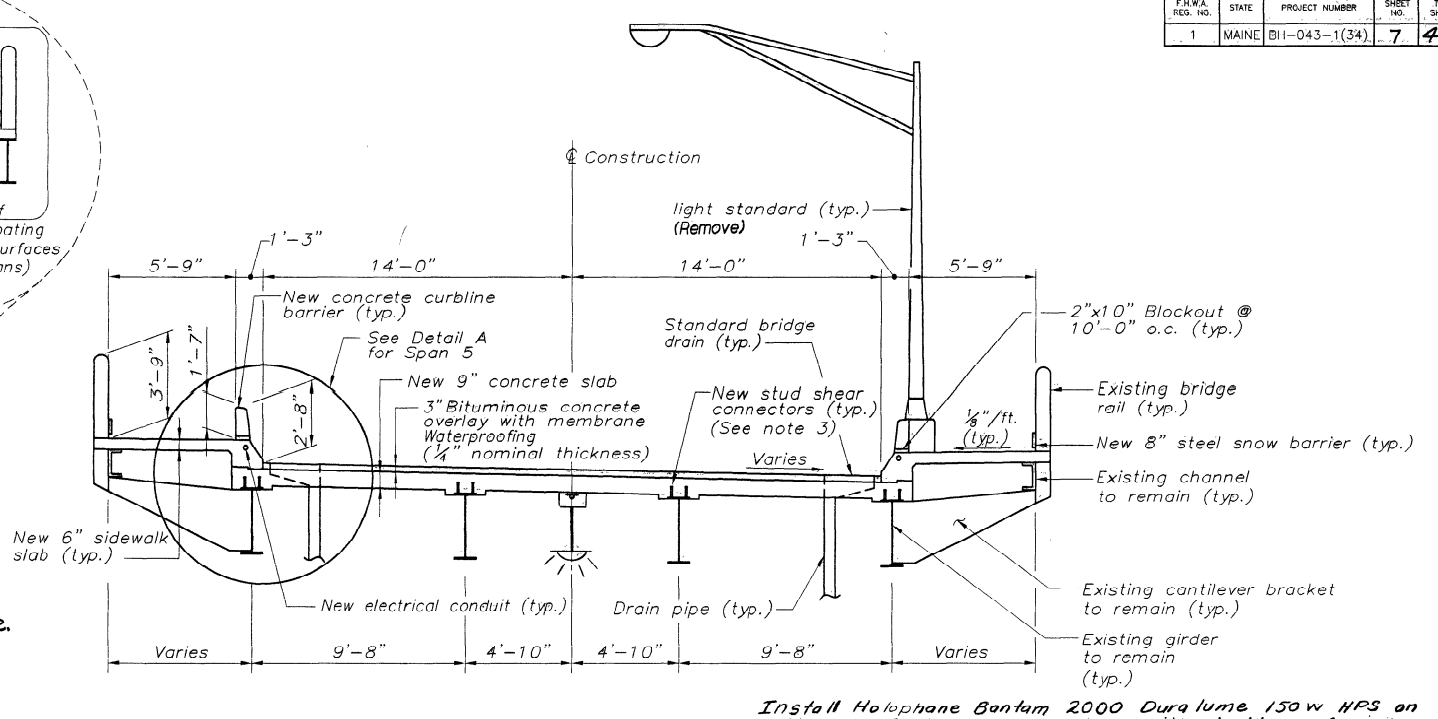
Denotes limits of removal

Denotes limits of removal

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
TRANSVERSE SECTIONS (REMOVAL)

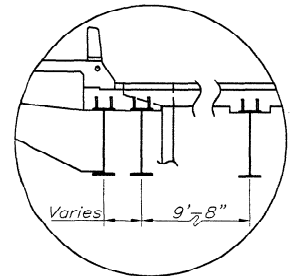


SPAN 1

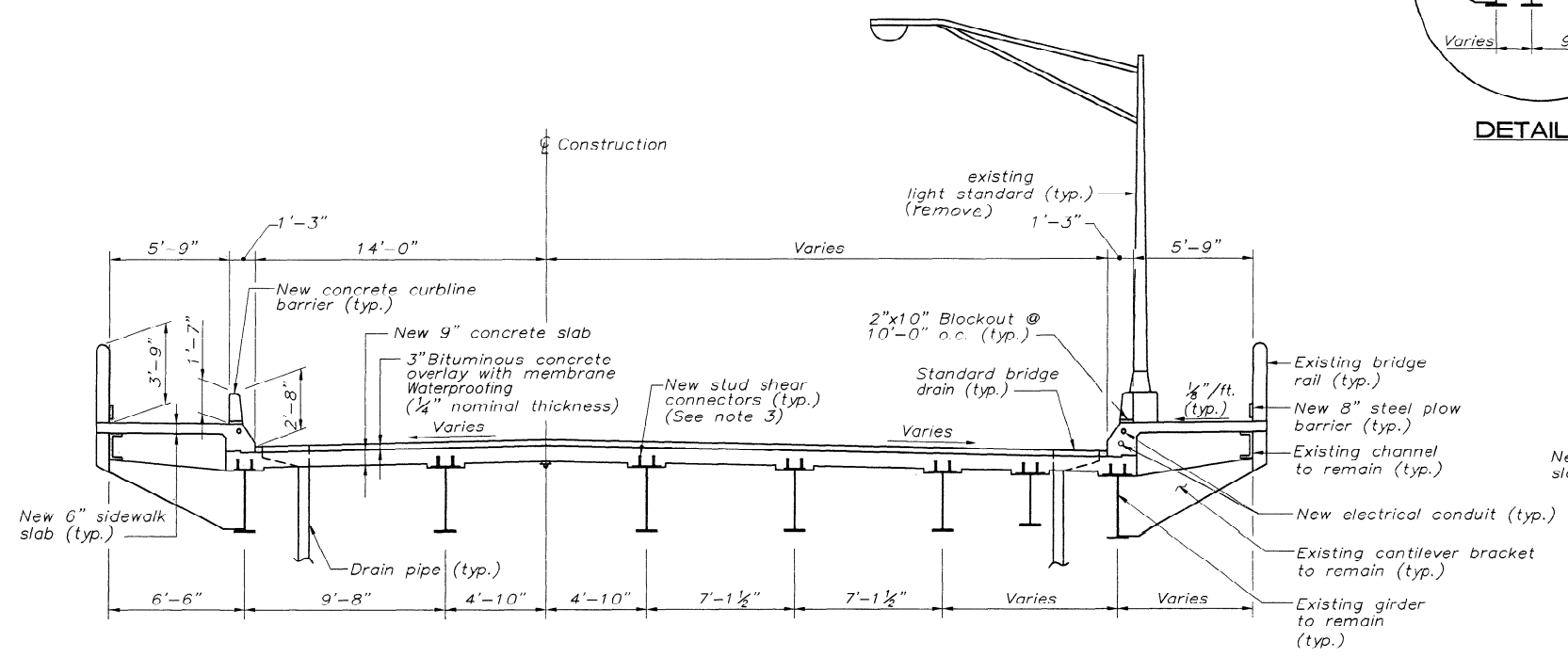


SPANS 5-11

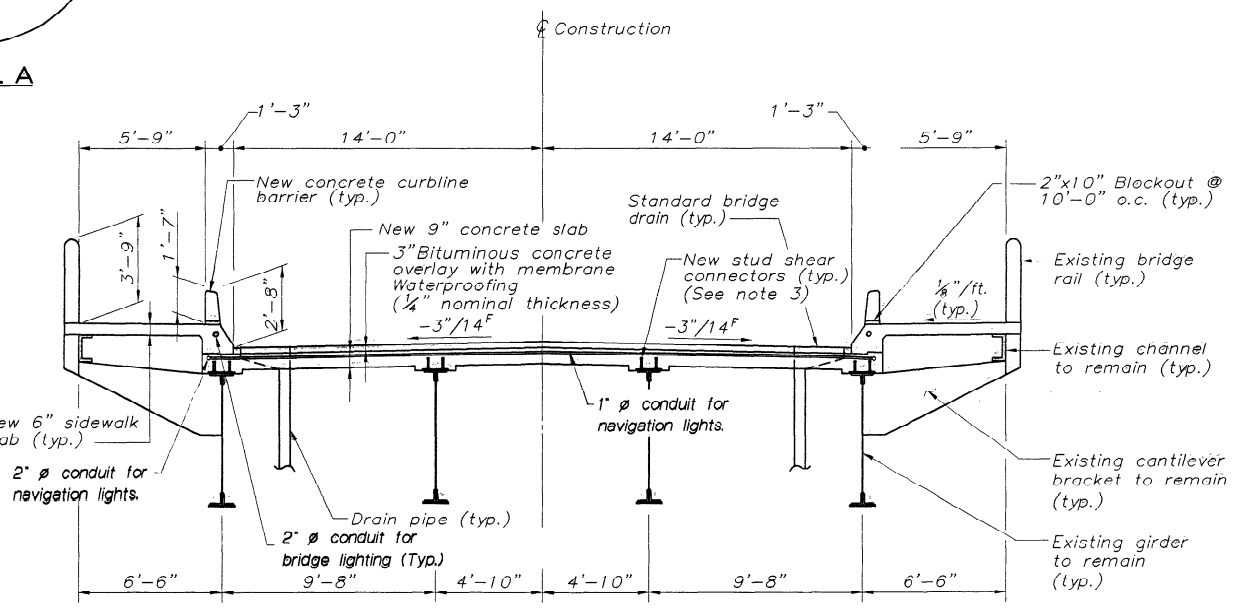
Install Helophane Bantam 2000 Duralume 150W HPS on flexible festoon mount flush with bottom of girder. Locate at centerline of spans #1 thru #7 and #9 thru #11. In span #8 locate approx. 30 feet from pier #8 (total 11 required)



DETAIL A



SPANS 2-4



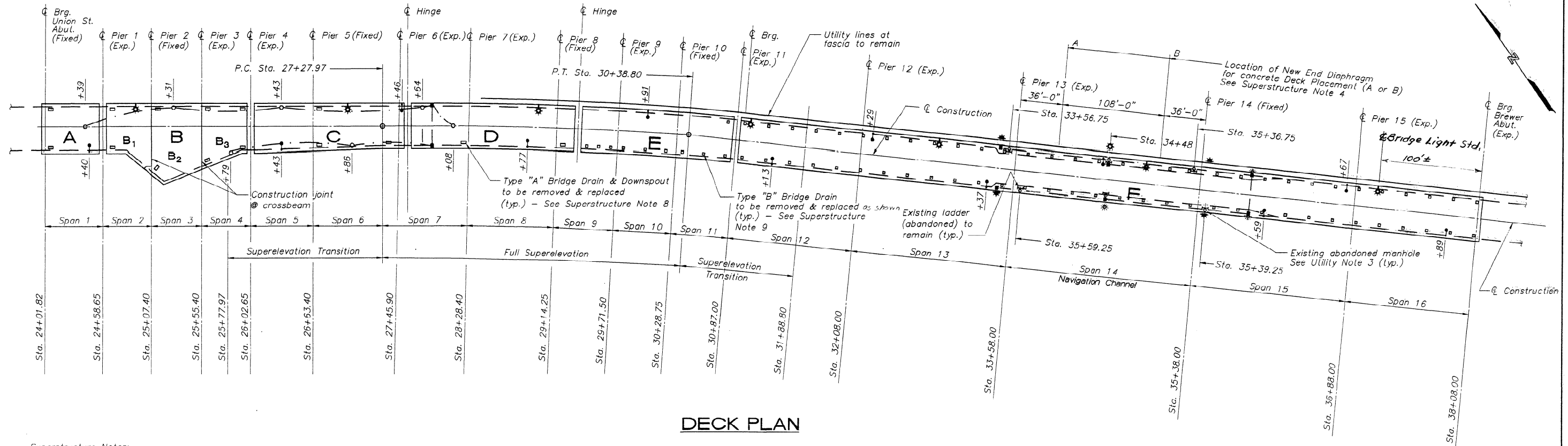
SPANS 12-16

NOTES:

1. Bridge Rail Details - See Sheet 24 of 31, Miscellaneous Details.
2. Installation of new electrical conduit and parkway cable shall be paid under Embedded Work in Structures. (Item 638.01)
3. New stud shear connector lengths:
7" for all interior beams
6" for all exterior beams

4. New 8" steel snow barrier will be installed on the existing rail from Abut. #1 to Pier #11.
5. Install light poles along left (upstream) curbline barrier.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River	
BANGOR/BREWER Penobscot County	
TRANSVERSE SECTIONS (RECONSTRUCTED)	



DECK PLAN

Superstructure Notes:

- Reinforcing steel shall have a minimum cover of 2" unless otherwise indicated.
- Adjust reinforcing steel to fit around the drains in a manner approved by the Engineer. Do not cut transverse reinforcing bars.
- The superstructure slab concrete for Decks A, B, C, D & E shall be placed continuously and shall be kept plastic one complete span behind the span being placed.
- The concrete placement for Deck F: Unless the superstructure slab concrete is placed in one continuous operation, the initial placement shall start at the Brewer Abutment or Pier 11 and continue through the completion of a positive moment section in Span 14. Successive placements shall proceed from the end of previous placement and complete the Deck F concrete placement. New End Diaphragm shall be erected to support slab end at Span 14. See Standard Detail Sheet BD-112 for Type A2 Diaphragms. No additional payment will be made for Type A2 diaphragms as they will be considered incidental to the Structural Concrete Pay Items.
- ~~DELETED~~

- Payment for Reinforcing Steel Fabricated, Delivered and Placed, for the cast-in-place Structural Concrete roadway and sidewalk slab shall be considered incidental to item 502.26.
- New bridge light standards shall be located in the left (curbline) barrier at 200' ± spacings; exact locations will be as approved by the Engineer. (Total 7 required on bridge.)

5 Bangor River
2 Brewer River

Utility Notes:

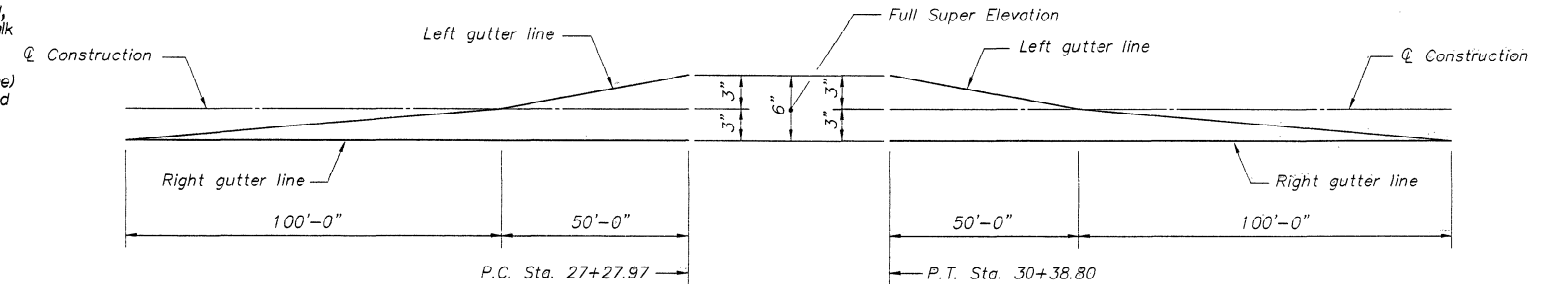
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- ~~DELETED~~

- Four existing manhole covers to be removed and not reinstalled.

Legend:

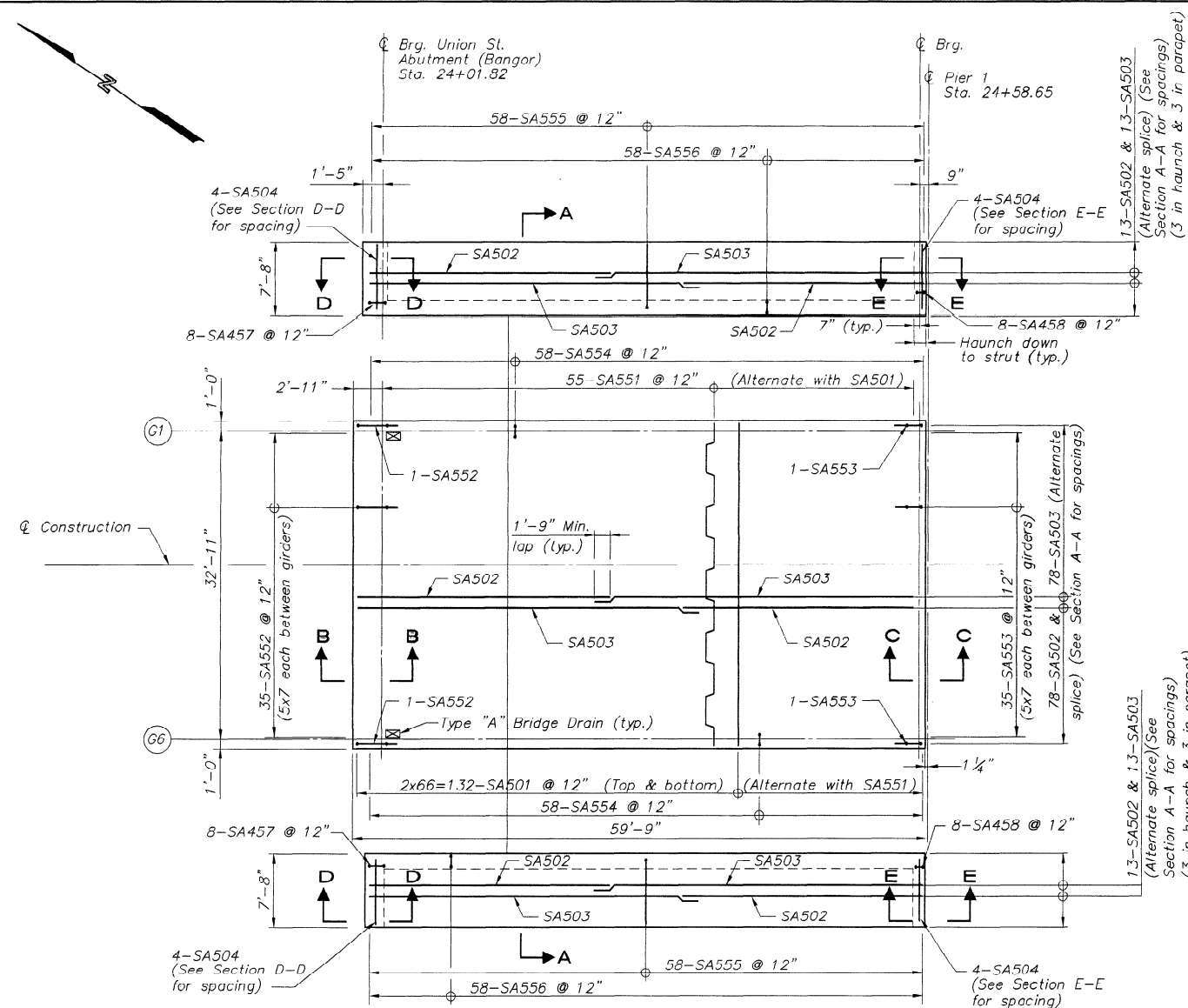
- Light Pole : Remove
- Pull Box : Remove & install new as directed
- 2" Conduit : Remove Existing Conduit
- Lights Under Structure to Remain
- * 360° Green Nav. Light (Mounted on Fascia Girder) to Remain
- * 180° Red Nav. Light (Mounted on Top of Pier) to Remain
- Parkway Cable : Remove
- * Light Pole : New (upstream curb only)



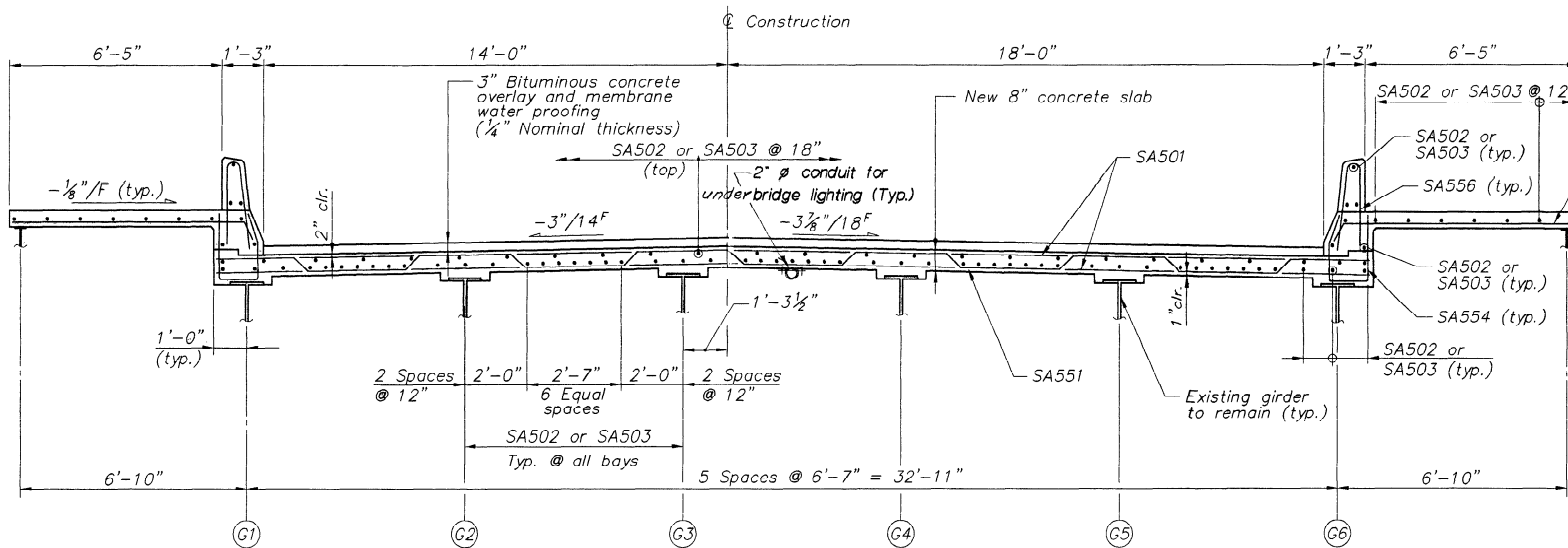
SUPERELEVATION TRANSITION

- Precast concrete deck panel may be utilized in lieu of the full depth cast-in-place deck slab. The precast deck panels shall conform to the Special Provision 502-Structural Concrete Precast Deck panels. The total slab thickness (T) shall be 9" (except 8" at Span 1). The contractor shall submit shop drawings for the option and they shall be approved by the Engineer. See Sheet No. 22 Alternative Deck Details.
- Stud Shear Connector Placement - Shear connector spacings shown on the Deck Detail Sheets may require modification for the existing girders with riveted cover plates. Use the layout shown as the maximum spacings.
- All Type "A" bridge drains and downspouts shall be removed and replaced with new. See Deck Reinforcement Plan for the location.
- All Type "B" bridge drains and drain extensions shall be removed and replaced with new. See Deck Reinforcement Plan for new location.
- Protective Coating for concrete surfaces shall be applied to all spans as shown in detail on Span 1 cross section, sheet 7 and on exposed concrete at deck joints.

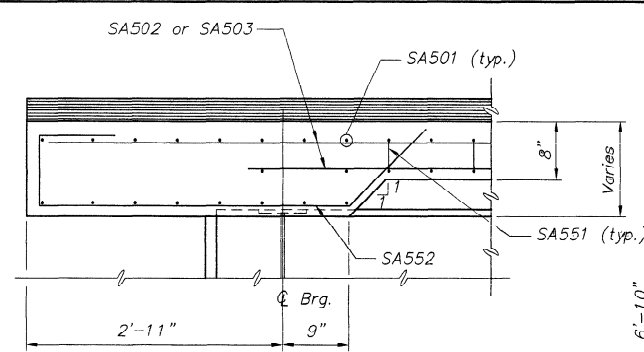
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
GENERAL DECK PLAN



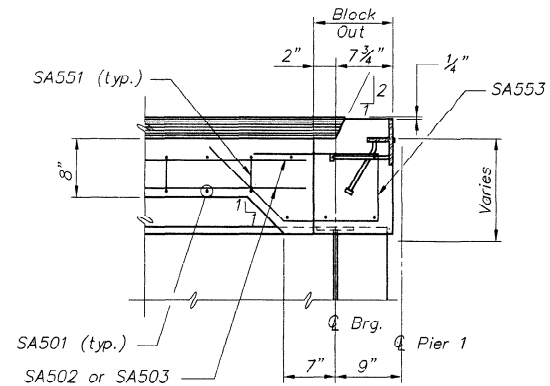
DECK PLAN



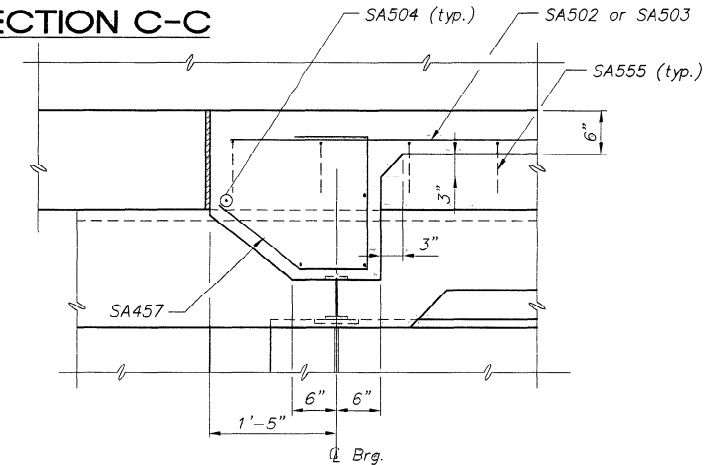
SECTION A-A



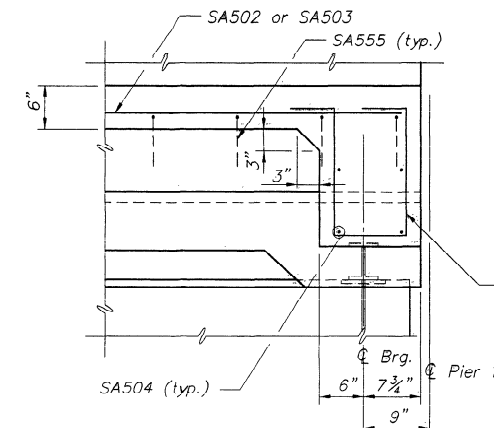
SECTION B-B



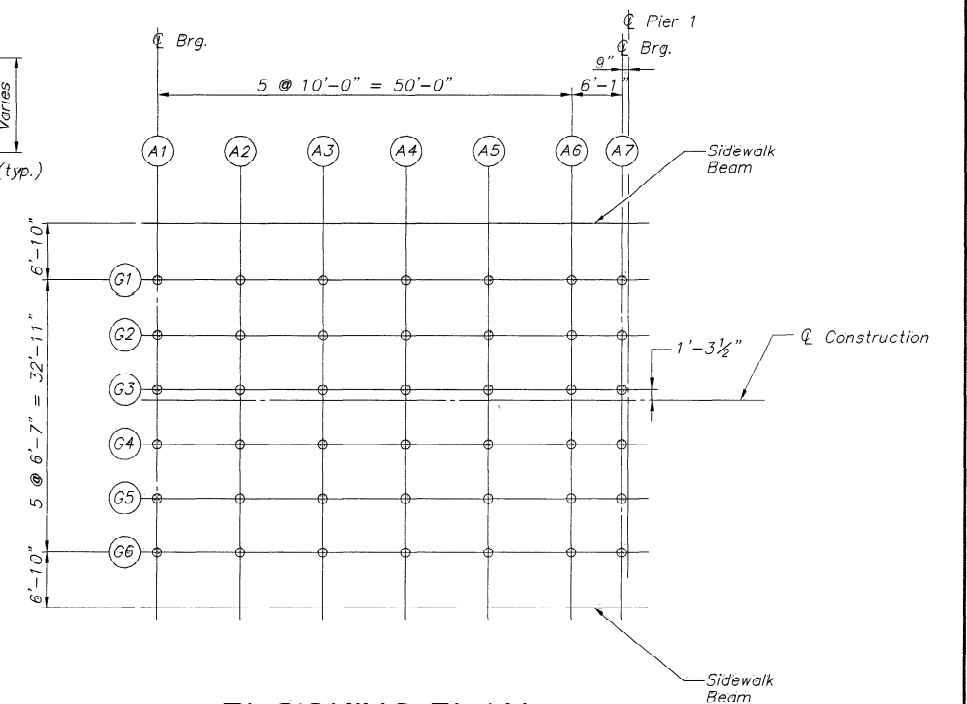
SECTION C-C



SECTION D-D

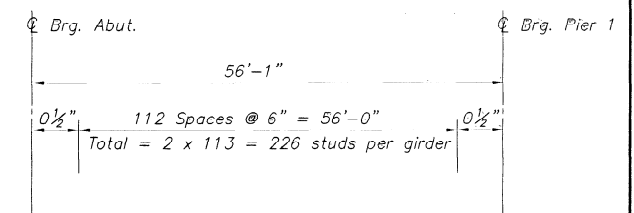


SECTION E-E



BLOCKING PLAN

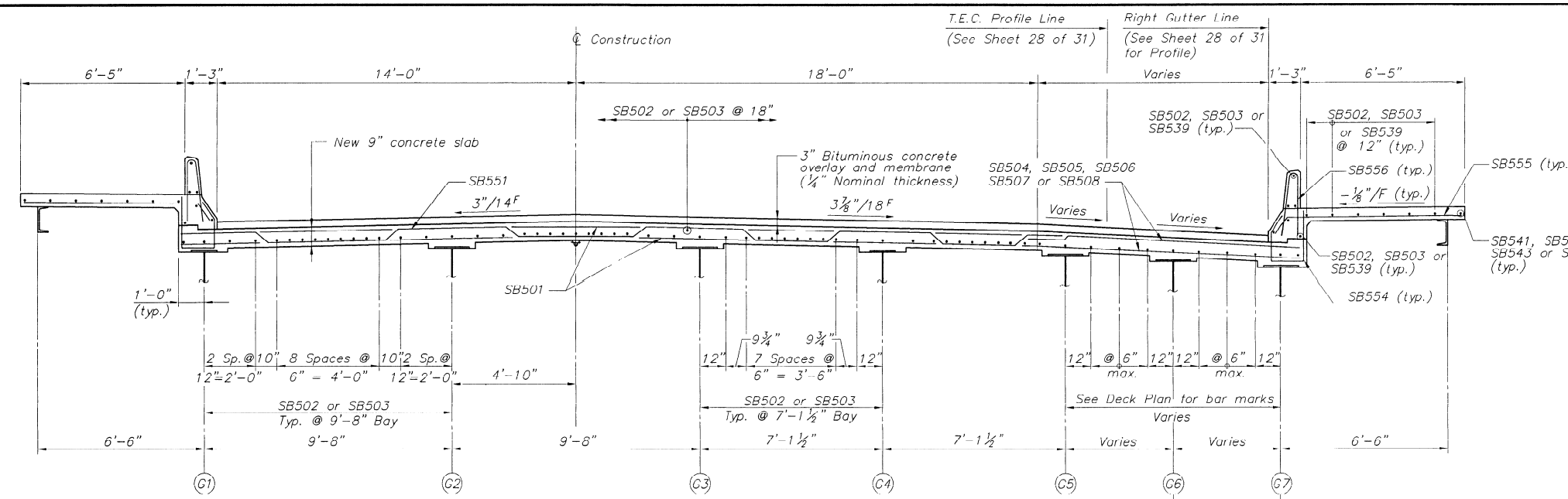
BOTTOM OF SLAB ELEVATIONS							
Point Girder	A1	A2	A3	A4	A5	A6	A7
G1	50.37	50.59	50.78	50.95	51.08	51.19	51.24
G2	50.48	50.70	50.89	51.06	51.19	51.30	51.35
G3	50.60	50.82	51.01	51.18	51.31	51.42	51.47
G4	50.53	50.75	50.94	51.11	51.24	51.35	51.40
G5	50.41	50.63	50.82	50.99	51.12	51.23	51.28
G6	50.30	50.52	50.71	50.88	51.01	51.12	51.17



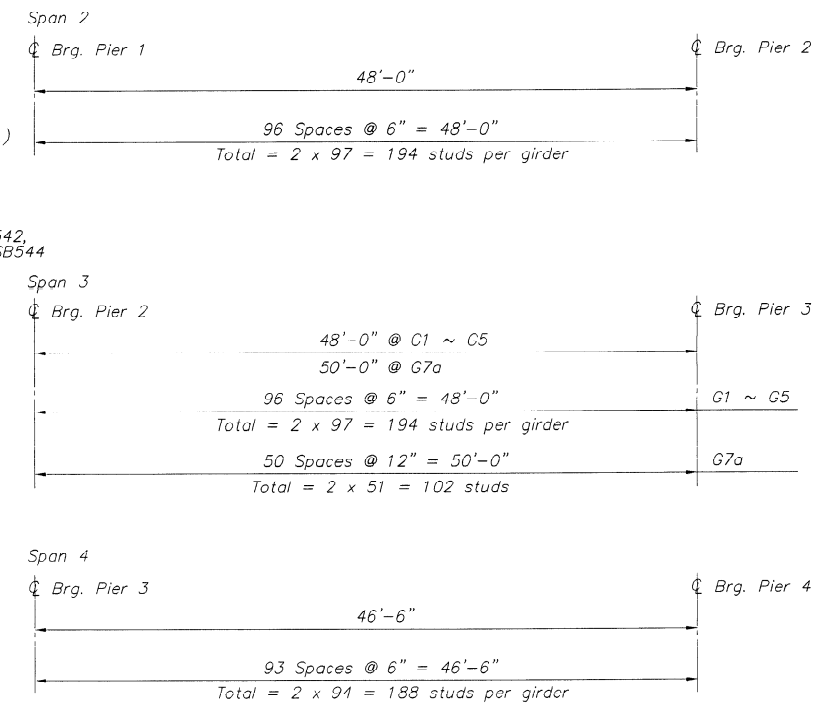
SHEAR CONNECTOR LAYOUT

Used
Pre cast used
JS

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
DECK A REINFORCEMENT



SECTION A-A



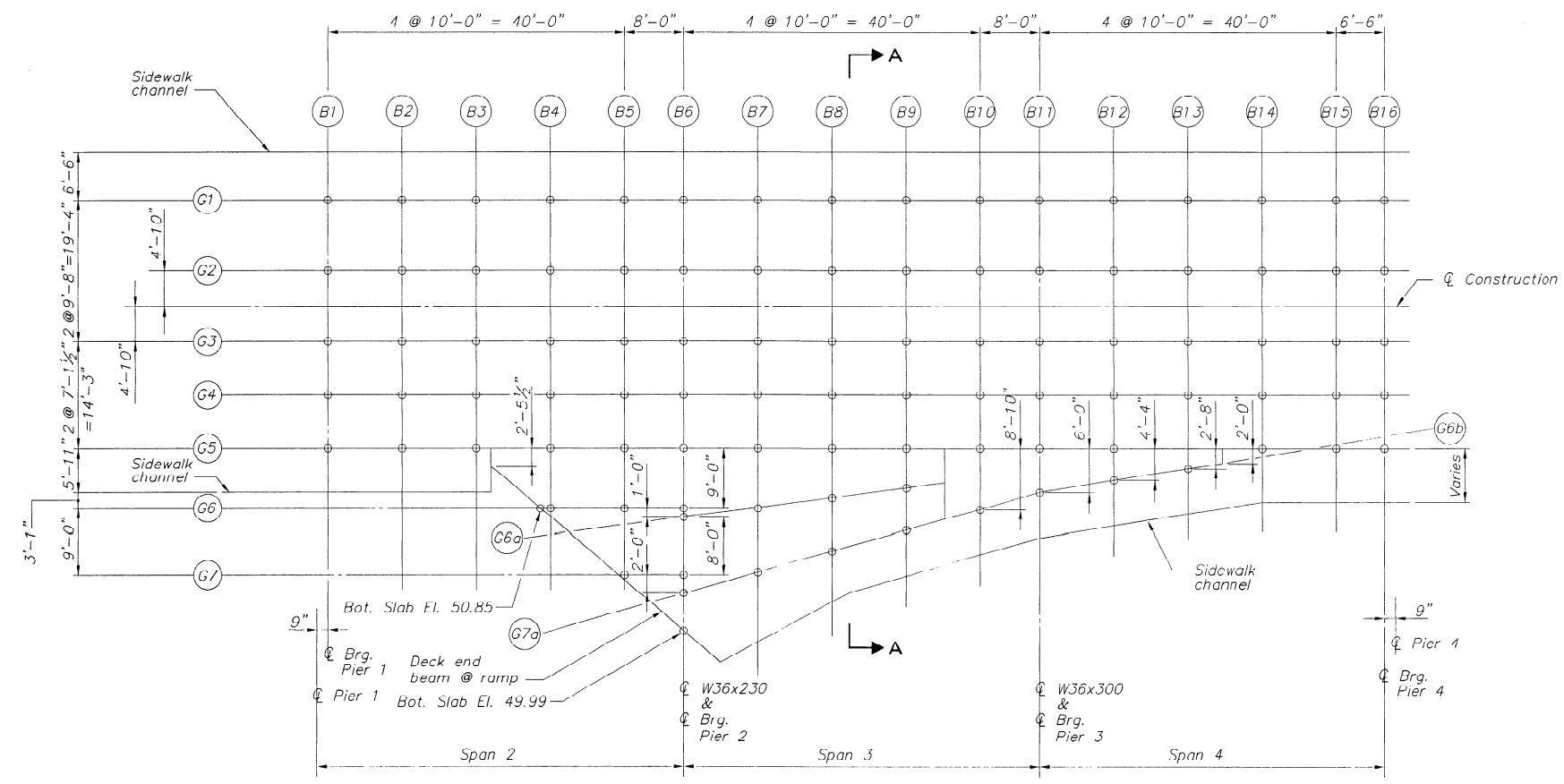
NOTE: No stud shear connectors required for cross beams and stringers at G6, G6a, G6b and G7.

SHEAR CONNECTOR LAYOUT

BOTTOM OF SLAB ELEVATIONS

BOTTOM OF SLAB ELEVATIONS																
<div>Point</div> <div>Girder</div>	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
G1	51.18	51.32	51.43	51.53	51.60	51.63	51.72	51.77	51.82	51.83	51.81	51.84	51.84	51.85	51.83	51.81
G2	51.34	51.49	51.60	51.70	51.77	51.80	51.90	51.95	51.98	52.00	52.00	52.01	52.02	52.01	51.98	51.93
G3	51.34	51.49	51.60	51.70	51.77	51.80	51.90	51.95	51.99	52.01	52.00	52.02	52.02	52.01	51.96	51.91
G4	51.22	51.37	51.48	51.58	51.64	51.68	51.77	51.82	51.86	51.89	51.87	51.89	51.89	51.88	51.83	51.79
G5	51.09	51.23	51.35	51.44	51.51	51.54	51.63	51.68	51.72	51.74	51.73	51.75	51.76	51.74	51.70	51.66
G6				50.86	50.95	51.04										
G6a						50.97	51.19	51.39	51.55							
G6b												51.63	51.68			
G7					50.39	50.49										
G7a						50.33	50.70	51.04	51.31	51.48	51.56					

Sta. 25+77.97
Begin Superelevation Transition



BLOCKING PLAN

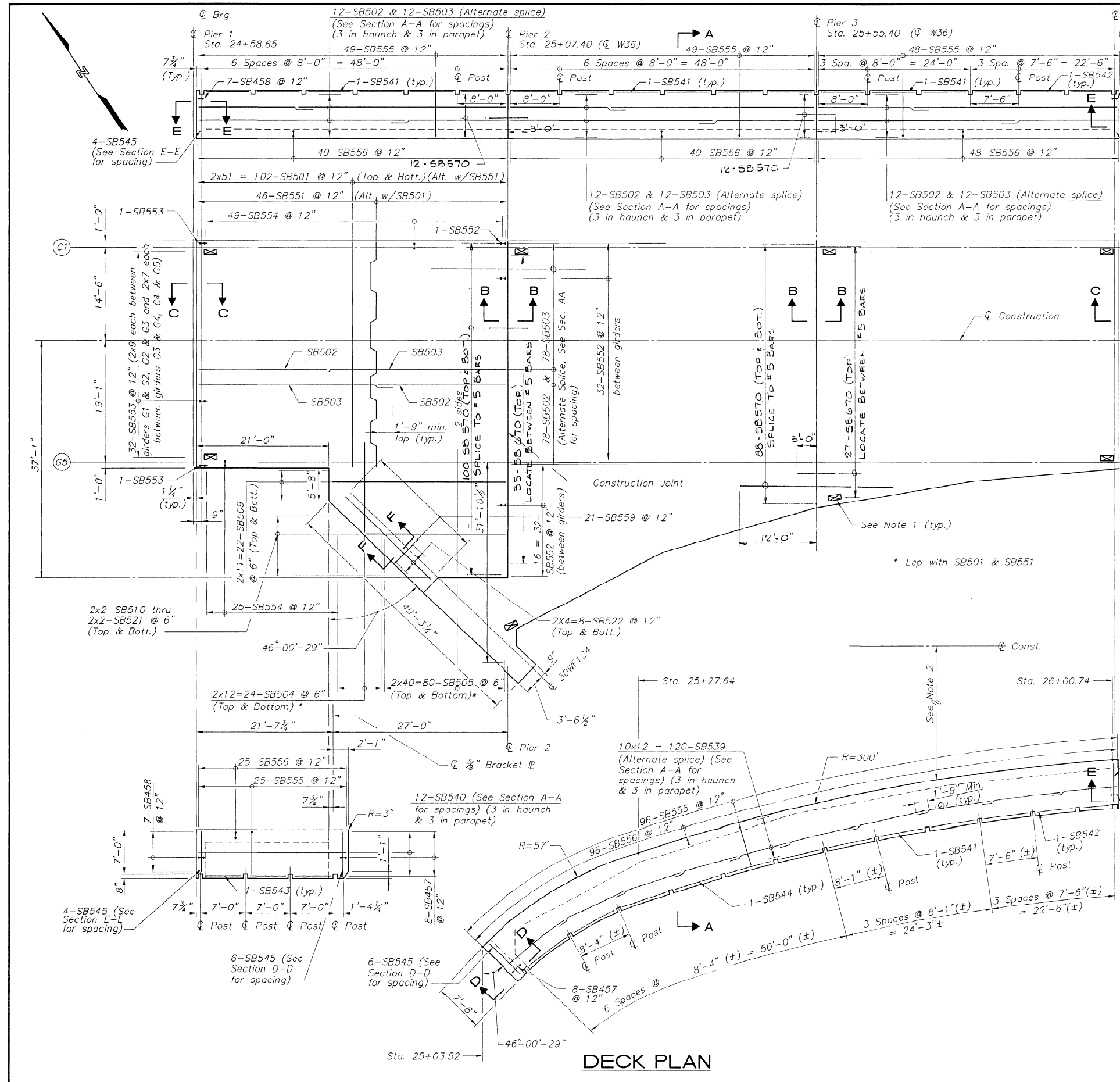
Void
Precast Used

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

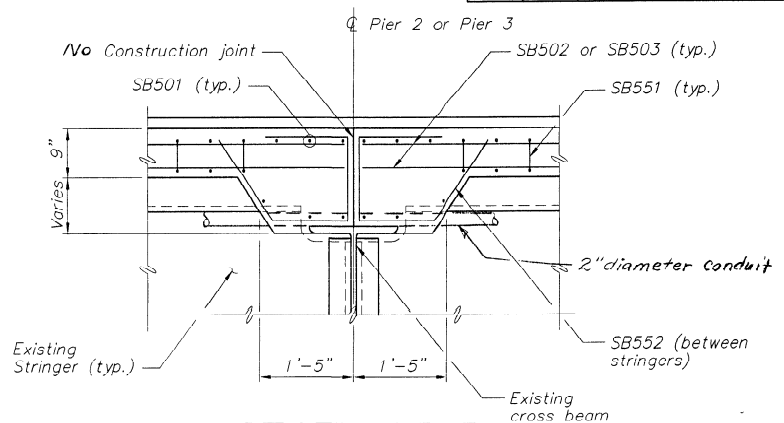
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

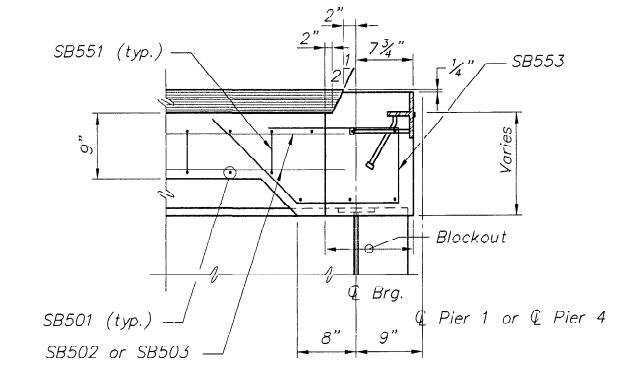
DECK B DETAILS



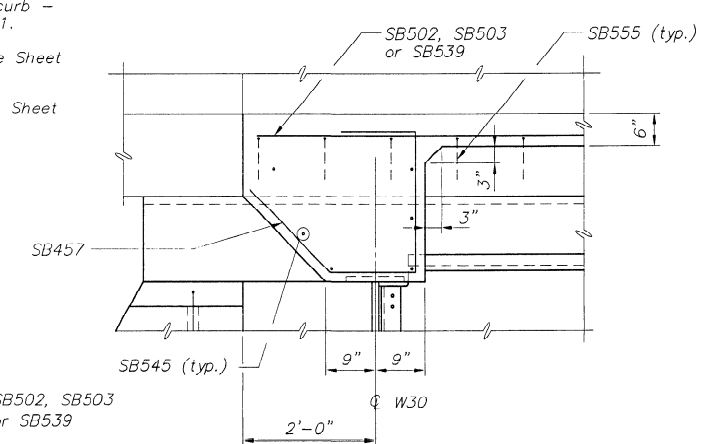
DECK PLAN



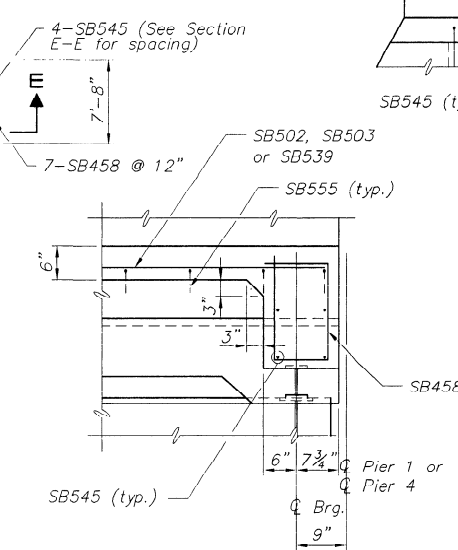
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

- Notes:
1. denotes Type "A" Bridge Drain
 2. Offset to face of curb - see Sheet 12 of 31.
 3. Section A-A - see Sheet 10 of 31.
 4. Section F-F - see Sheet 12 of 31.

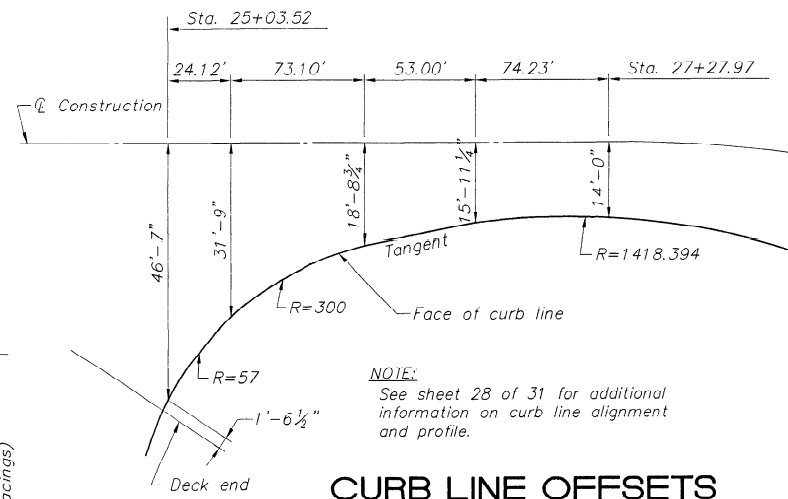
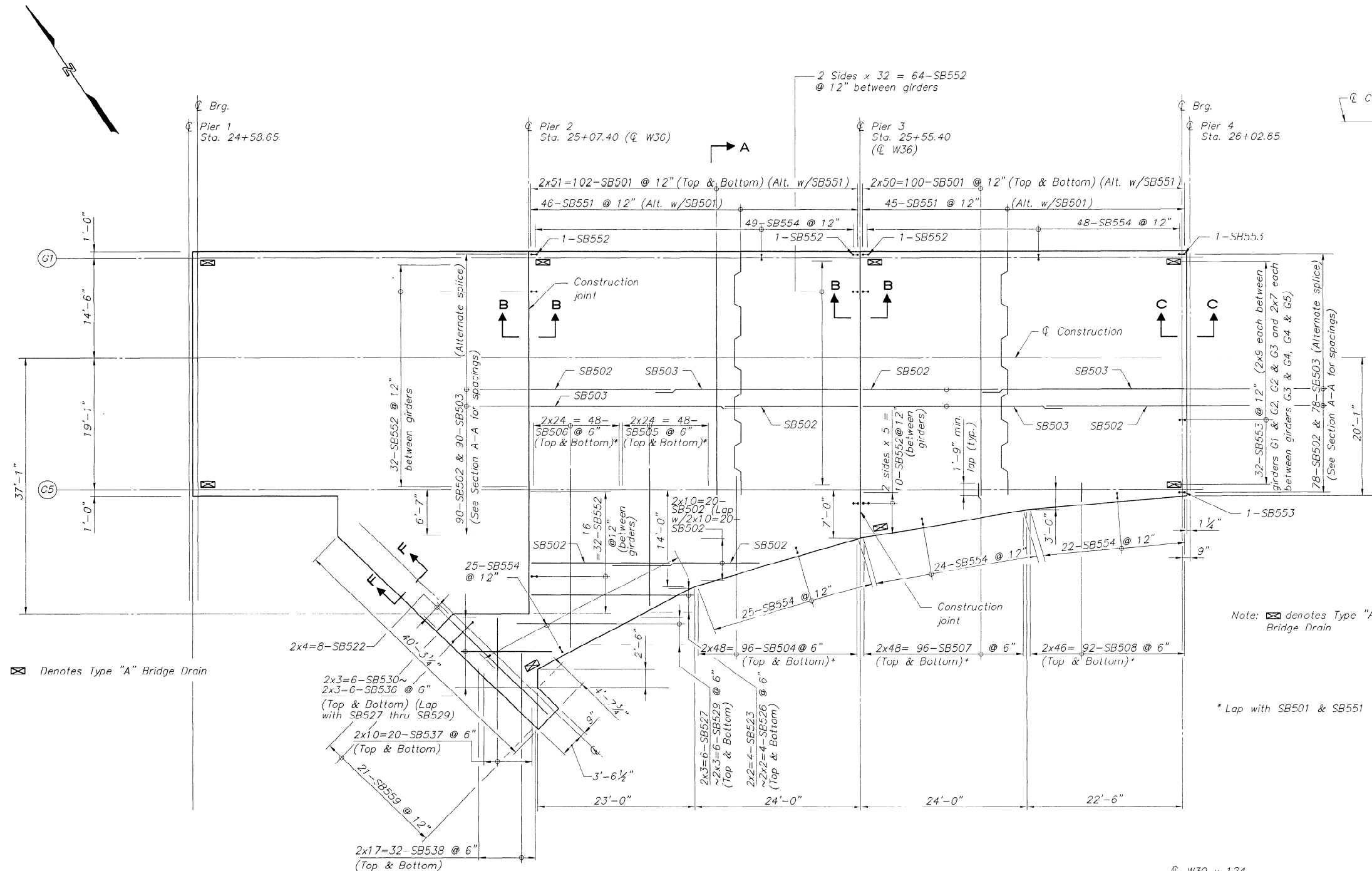
VOID REINAST USED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

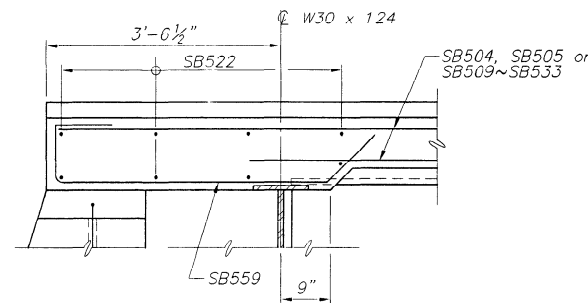
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

DECK B REINFORCEMENT
(1 OF 2)



STATION	OFFSET	STATION	OFFSET
25+03.52	46'-7"	25+75	21'-2 1/4"
25+04	46'-1"	25+78	20'-9 1/4"
25+05	45'-1 1/4"	25+81	20'-5"
25+06	44'-2"	25+84	20'-0 3/4"
25+07	43'-3 3/4"	25+87	19'-9"
25+08	42'-5"	25+90	19'-5 1/4"
25+09	41'-7 1/4"	25+93	19'-2 3/4"
25+10	40'-10"	25+96	19'-0"
25+11	40'-1"	25+99	18'-9 3/4"
25+12	39'-4 1/2"	26+00.74	18'-8 3/4"
25+13	38'-8 1/4"	26+12	18'-1 1/2"
25+14	38'-0 1/2"	26+24	17'-6"
25+15	37'-5 1/4"	26+36	16'-10 1/2"
25+16	36'-10"	26+48	16'-2"
25+17	36'-3 1/4"	26+53.74	15'-11 1/4"
25+18	35'-8 3/4"	26+66	15'-10"
25+19	35'-2 3/4"	26+79	15'-8 1/4"
25+20	34'-8 3/4"	26+92	15'-6 1/2"
25+21	34'-3 3/4"	26+105	15'-4 3/4"
25+22	33'-10"	26+118	15'-3 1/4"
25+23	33'-5"	26+131	15'-1 3/4"
25+24	33'-0 1/4"	26+144	15'-0 1/4"
25+25	32'-7 3/4"	26+157	14'-11"
25+26	32'-3 1/2"	26+170	14'-9 3/4"
25+27.64	31'-9"	26+183	14'-8 1/2"
25+30	31'-0 1/2"	26+196	14'-7 1/2"
25+33	30'-1 1/4"	26+209	14'-6 1/2"
25+36	29'-3 1/2"	26+222	14'-5 1/2"
25+39	28'-5 3/4"	26+235	14'-4 1/2"
25+42	27'-8 1/4"	26+248	14'-3 3/4"
25+45	26'-11 1/4"	27+01	14'-3"
25+48	26'-2 3/4"	27+04	14'-2 1/2"
25+51	25'-6 1/2"	27+07	14'-1 3/4"
25+54	24'-10 1/2"	27+10	14"-1 1/4"
25+57	24'-3"	27+13	14'-1"
25+60	23'-8"	27+16	14'-0 1/2"
25+63	23'-1 1/4"	27+19	14'-0 1/4"
25+66	22'-7"	27+22	14'-0 1/4"
25+69	22'-1"	27+25	14'-0"
25+72	21'-7 1/2"	27+27.97	14'-0"



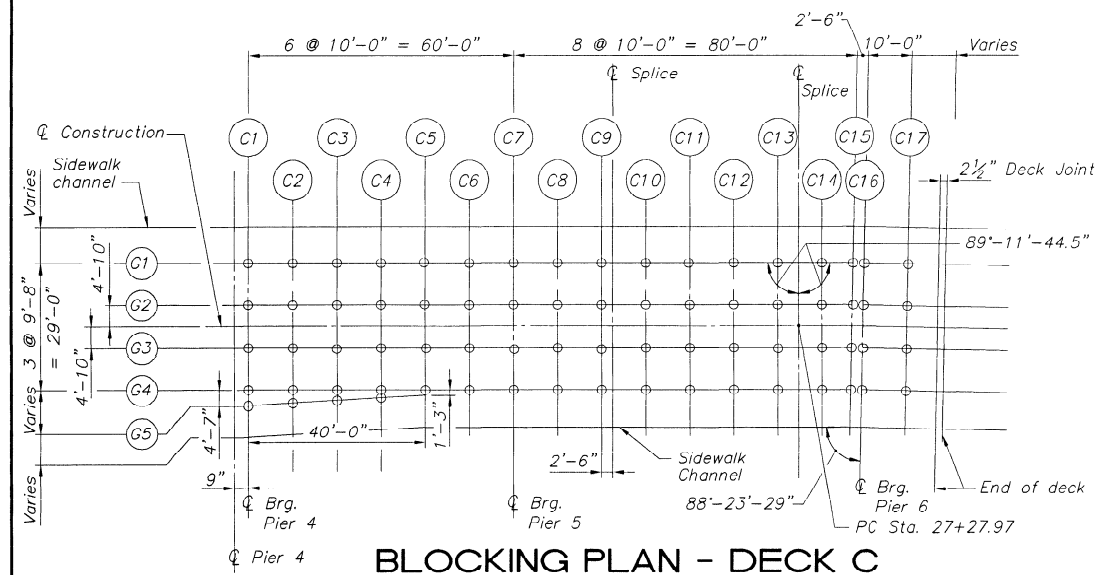
Not
Present Used

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

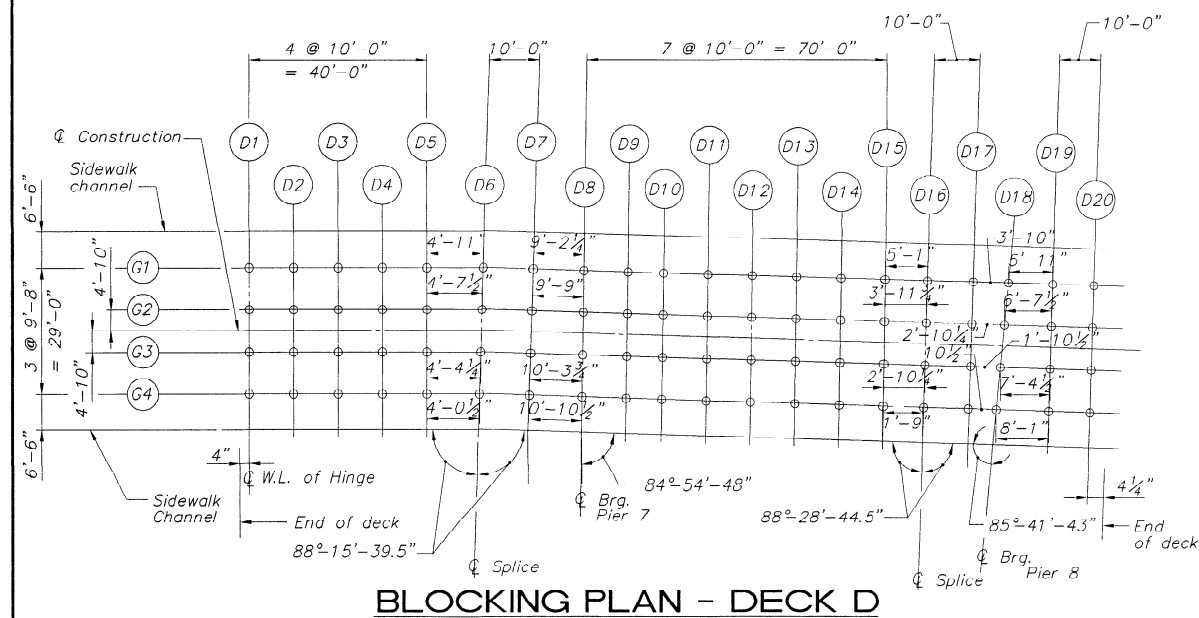
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

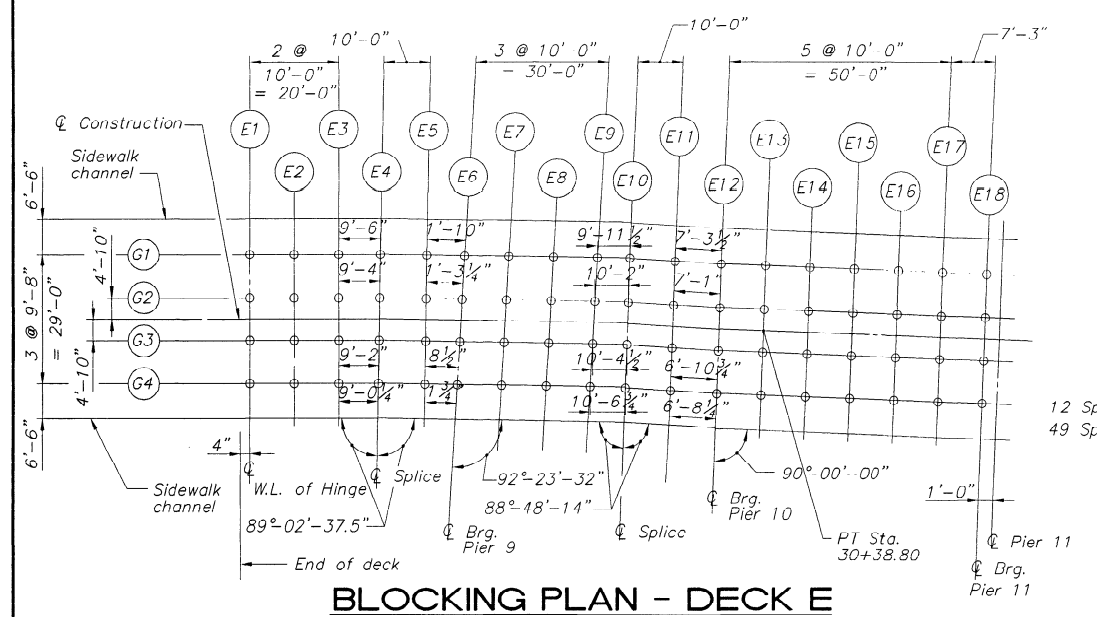
DECK B REINFORCEMENT
(2 OF 2)



BLOCKING PLAN - DECK C



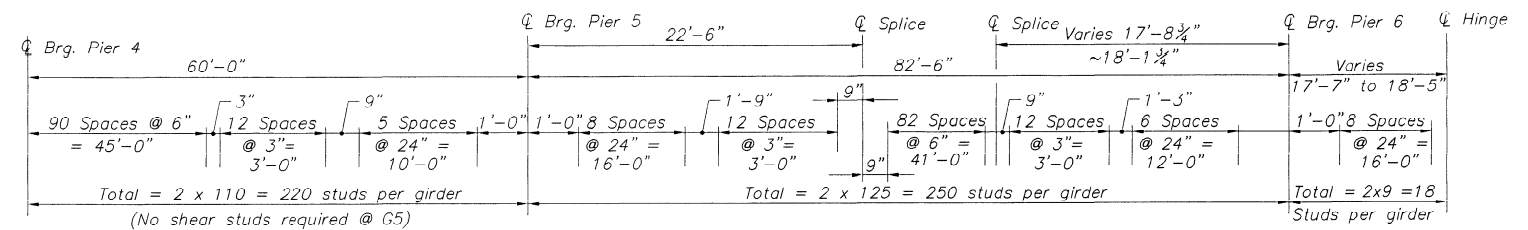
BLOCKING PLAN - DECK D



BLOCKING PLAN - DECK E

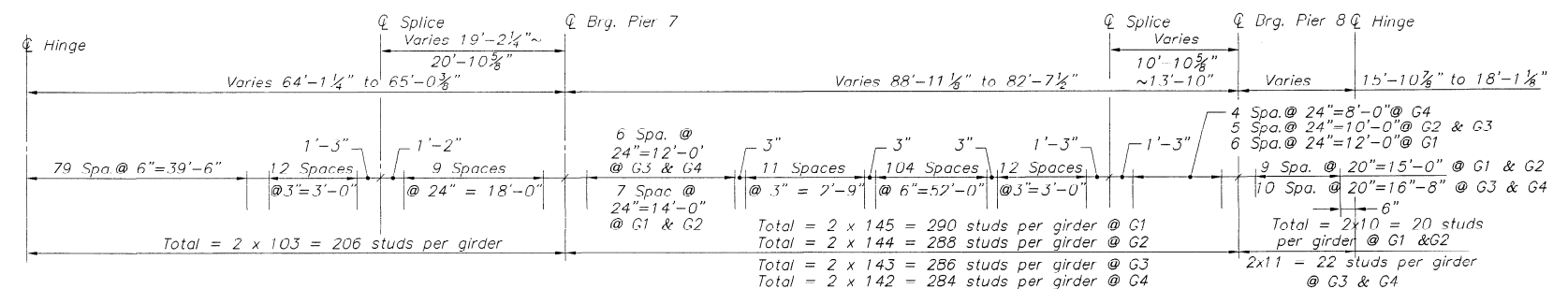
BOTTOM OF SLAB ELEVATIONS - DECK C																	
Point Girder	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17
G1	51.80	51.81	51.77	51.72	51.66	51.57	51.48	51.41	51.34	51.27	51.18	51.06	50.91	50.72	50.52	50.47	50.29
G2	51.93	51.92	51.87	51.80	51.72	51.61	51.51	51.42	51.33	51.22	51.10	50.95	50.77	50.56	50.36	50.31	50.12
G3	51.90	51.89	51.83	51.76	51.66	51.55	51.43	51.34	51.24	51.11	50.97	50.80	50.60	50.39	50.19	50.13	49.95
G4	51.73	51.71	51.65	51.57	51.48	51.37	51.26	51.17	51.06	50.93	50.80	50.62	50.43	50.21	50.01	49.96	49.78
G5	51.65	51.64	51.59	51.54													

Sta. 27+27.97
End Superelevation Transition
Begin Full Superelevation



SHEAR CONNECTOR LAYOUT

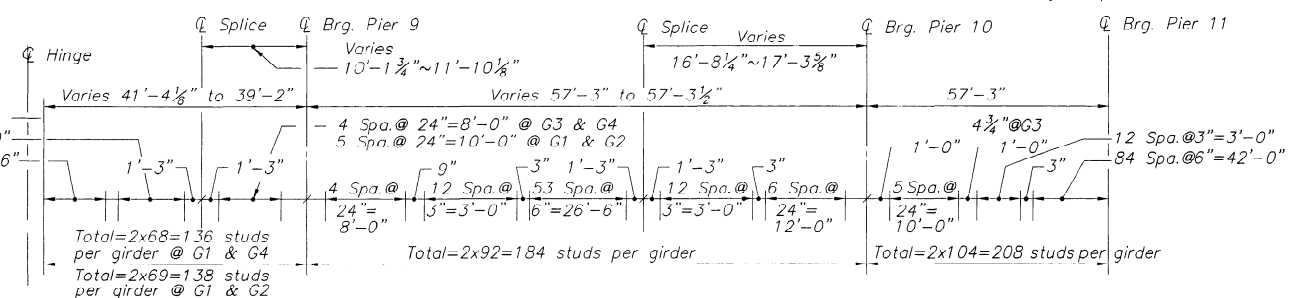
BOTTOM OF SLAB ELEVATIONS - DECK D																					
<div>Point</div> <div>Girder</div>	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	
G1	50.22	50.05	49.88	49.69	49.50	49.40	49.20	49.03	48.85	48.70	48.53	48.36	48.18	47.98	47.78	47.67	47.47	47.39	47.27	47.09	
G2	50.01	49.85	49.68	49.49	49.30	49.20	49.01	48.83	48.66	48.51	48.36	48.18	48.00	47.80	47.59	47.51	47.28	47.23	47.09	46.89	
G3	49.81	49.65	49.47	49.29	49.09	49.00	48.81	48.61	48.45	48.29	48.14	47.97	47.79	47.60	47.37	47.31	47.10	47.05	46.91	46.71	
G4	49.61	49.44	49.27	49.08	48.89	48.80	48.60	48.40	48.23	48.07	47.91	47.73	47.55	47.36	47.15	47.11	46.91	46.88	46.72	46.54	



SHEAR CONNECTOR LAYOUT

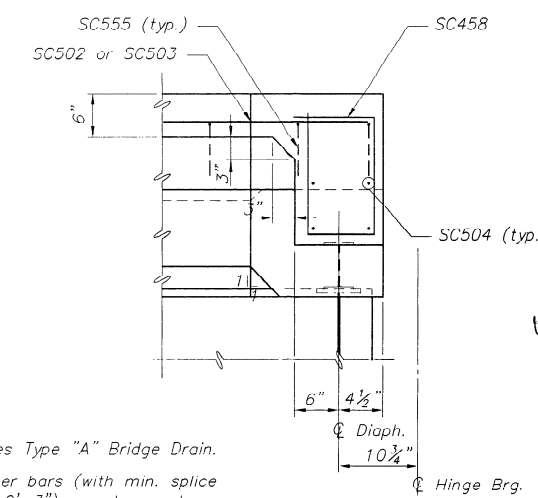
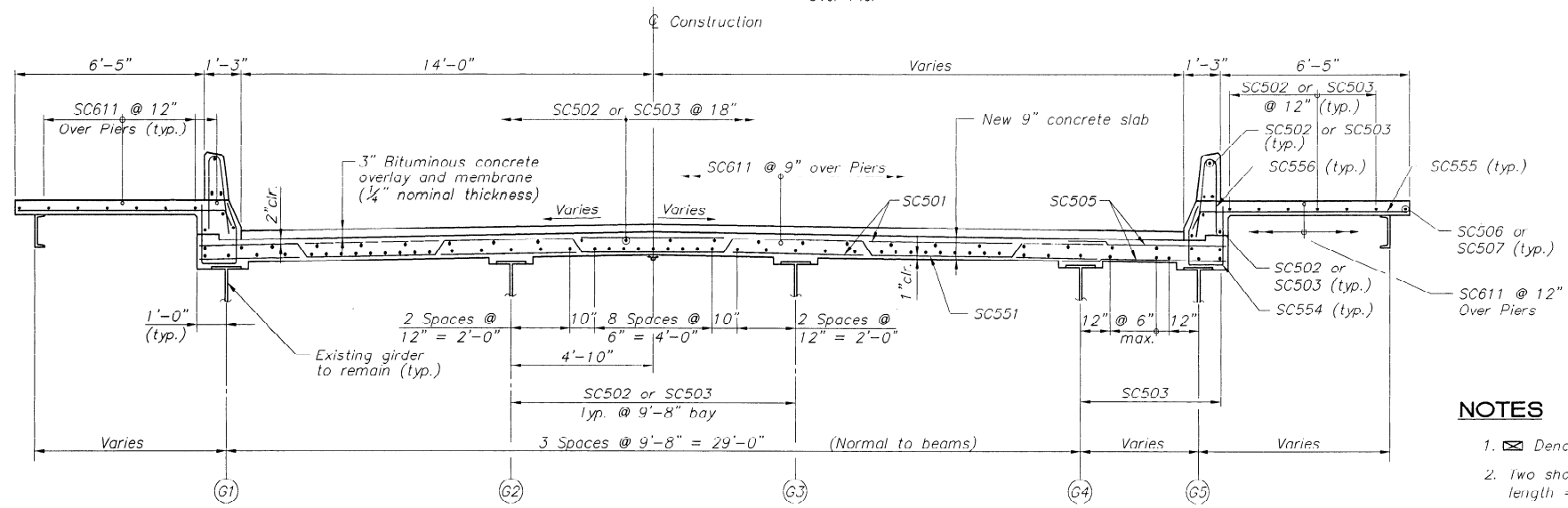
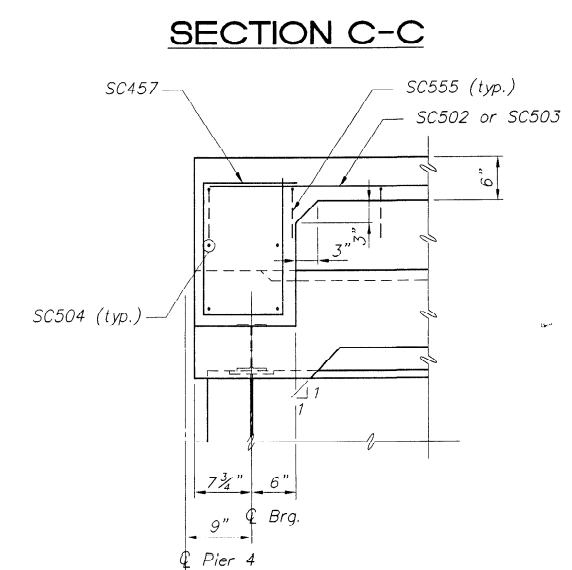
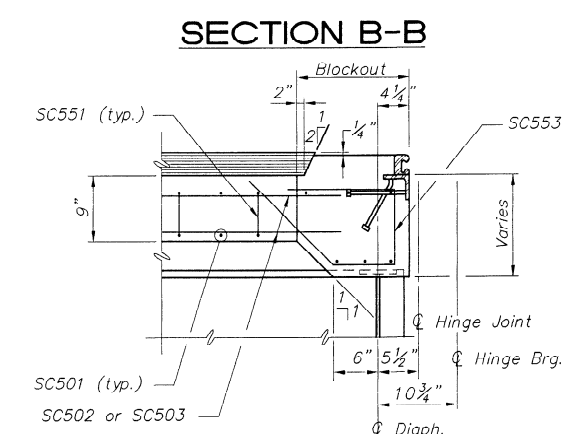
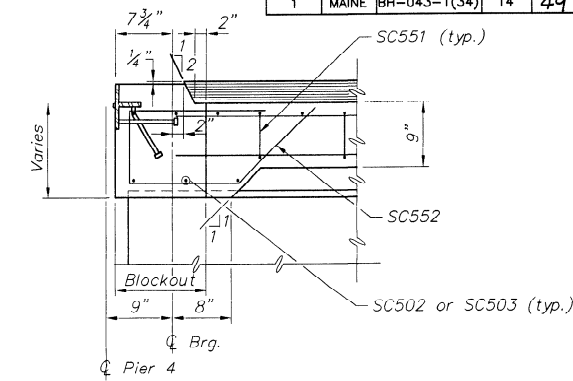
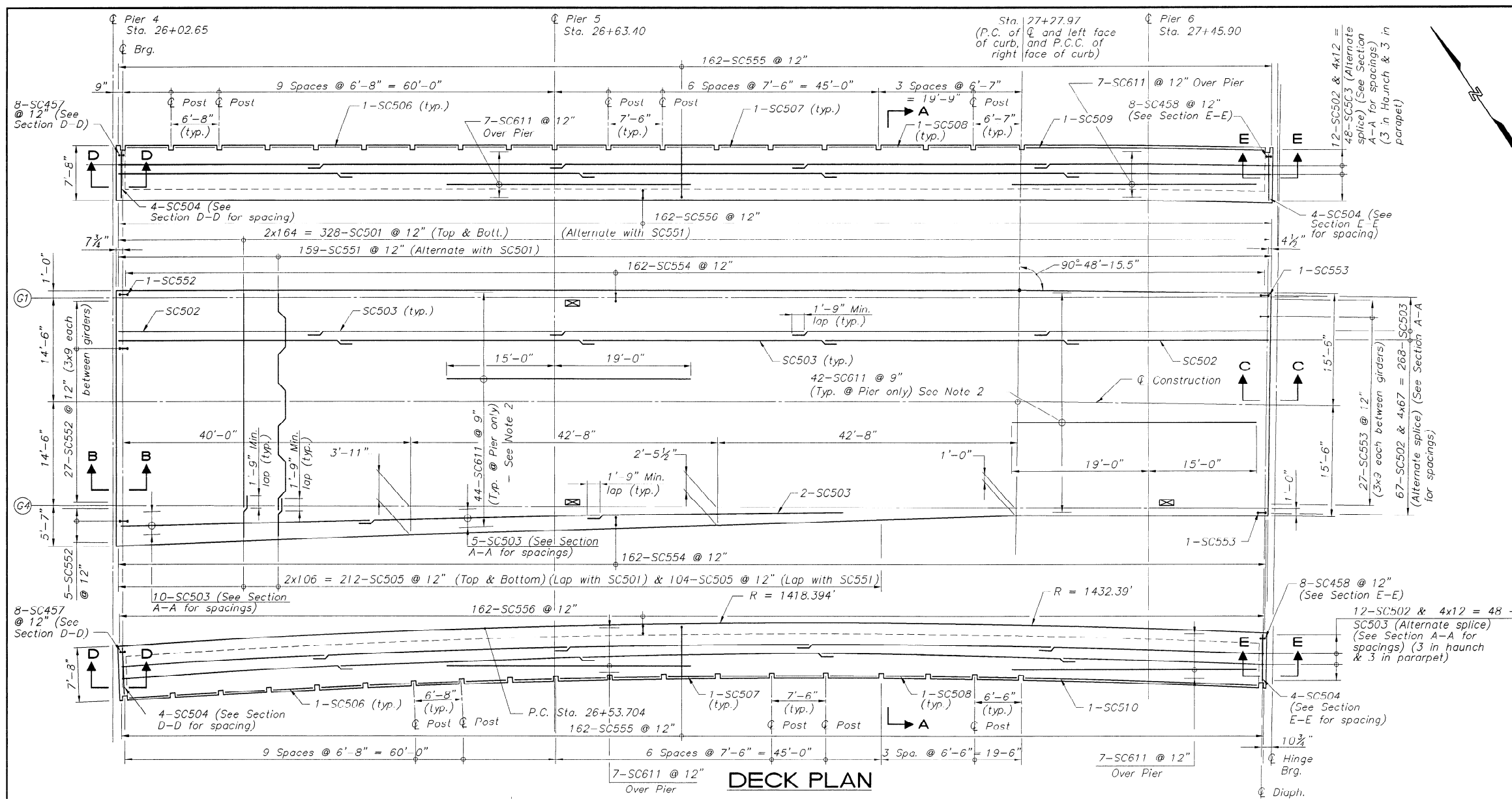
BOTTOM OF SLAB ELEVATIONS - DECK E																	
Point Girder	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17
G1	47.07	46.90	46.73	46.54	46.36	46.32	46.15	45.98	45.79	45.60	45.40	45.27	45.11	44.88	44.67	44.42	43.98
G2	46.88	46.72	46.54	46.37	46.19	46.16	45.99	45.82	45.63	45.43	45.24	45.11	44.94	44.76	44.57	44.36	43.97
G3	46.70	46.52	46.36	46.18	46.00	45.98	45.81	45.64	45.45	45.26	45.06	44.93	44.77	44.60	44.43	44.24	43.88
G4	46.52	46.35	46.18	46.00	45.82	45.81	45.64	45.47	45.28	45.08	44.88	44.76	44.60	44.42	44.26	44.06	43.86

Sta. 30+38.80 End Full Superelevation
Begin Superelevation Transition




SHEAR CONNECTOR LAYOUT

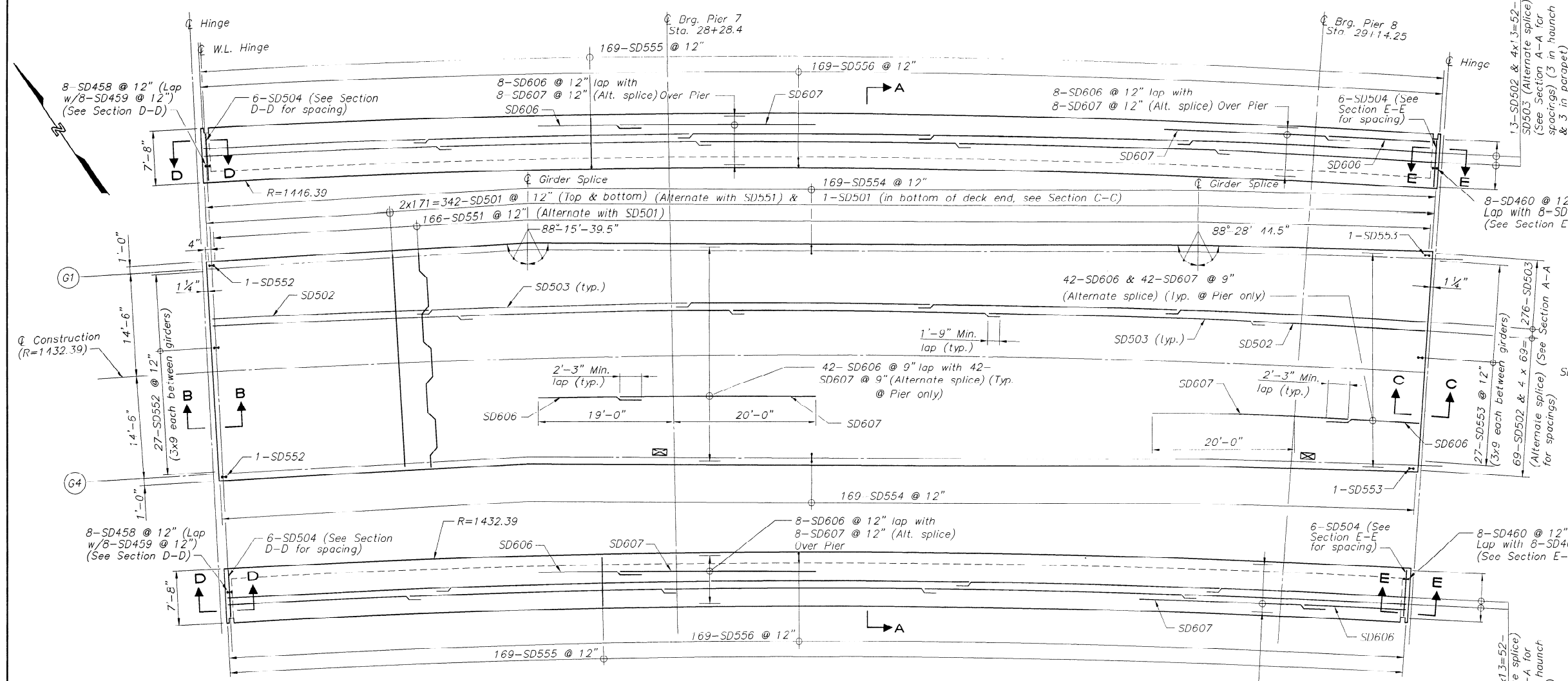
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BH-043-1(34)	14	49



- NOTES

1.  Denotes Type "A" Bridge Drain.
2. Two shorter bars (with min. splice length = 2'-3") may be used.

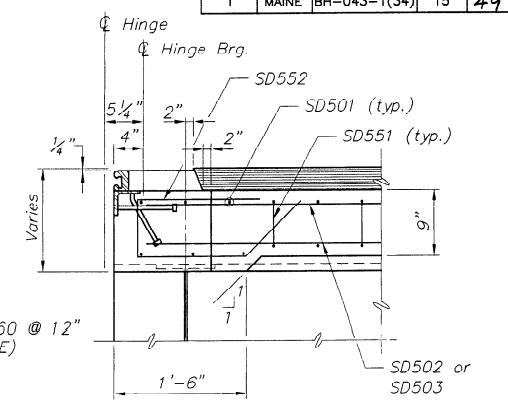
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
DECK C REINFORCEMENT



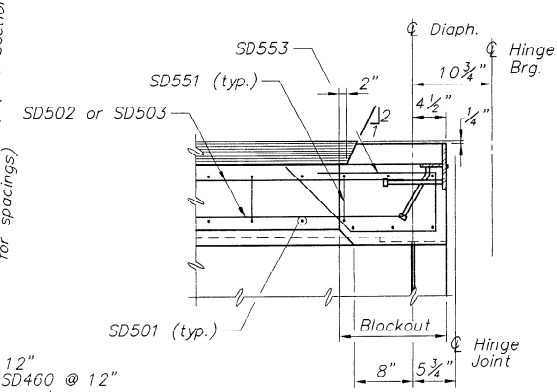
DECK PLAN

NOTE

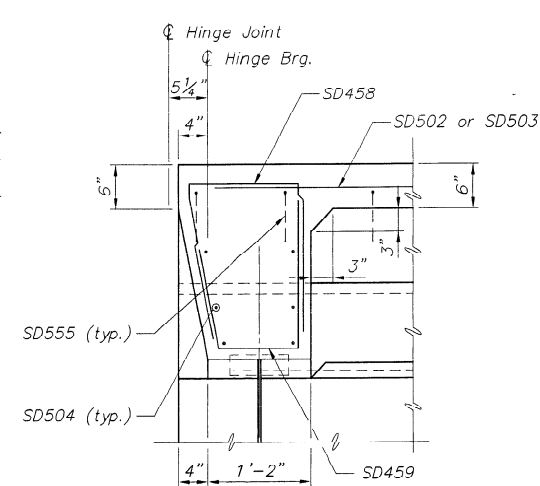
⊠ Denotes Type "A" Bridge Drain (replace with new)



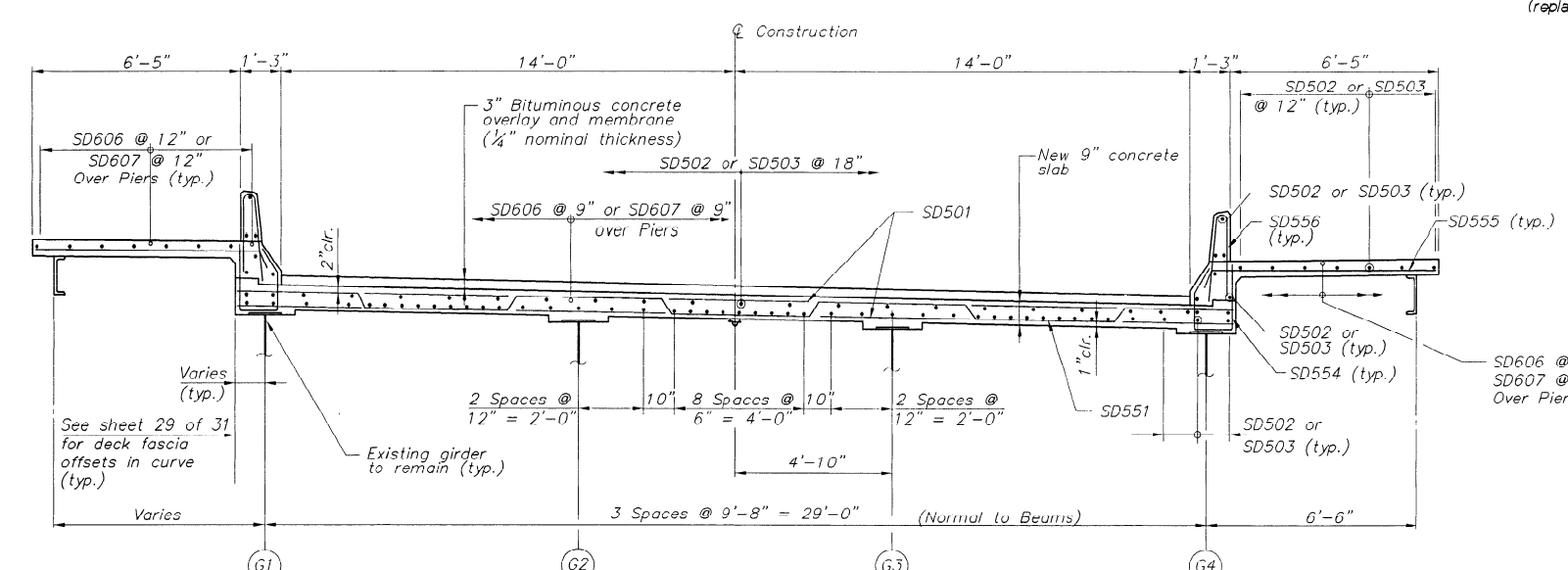
SECTION B-B



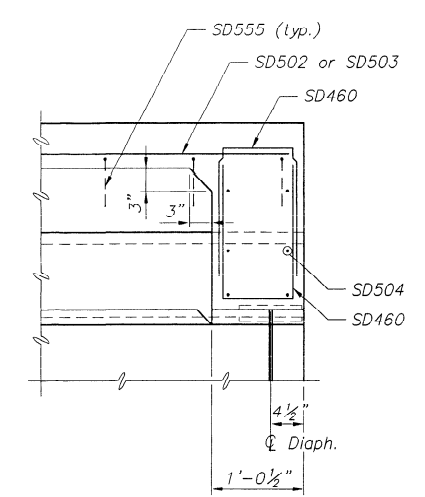
SECTION C-C



SECTION D-D

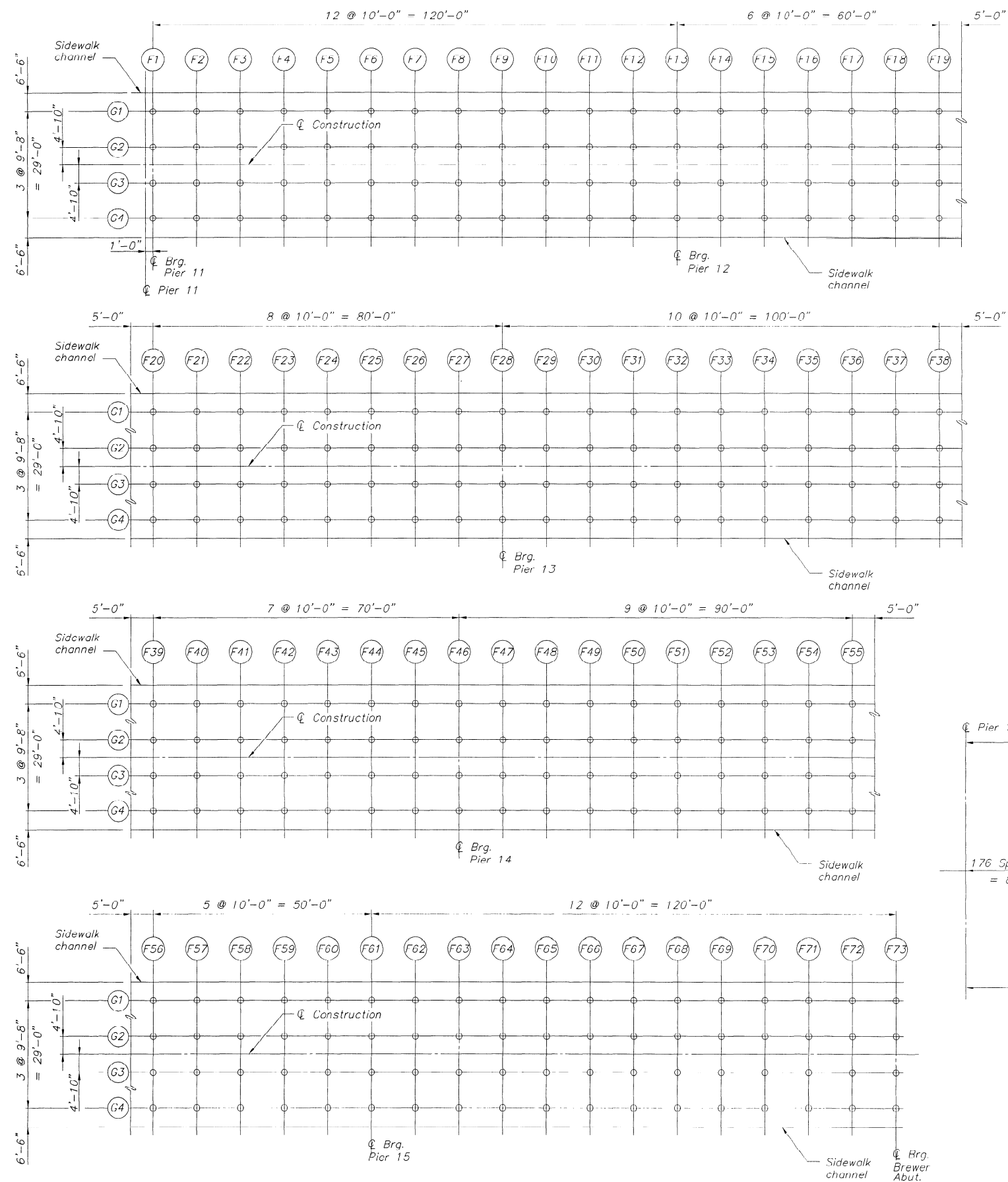


SECTION A-A



SECTION E-E

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River
BANGOR/BREWER
Penobscot County
DECK D REINFORCEMENT



BLOCKING PLAN

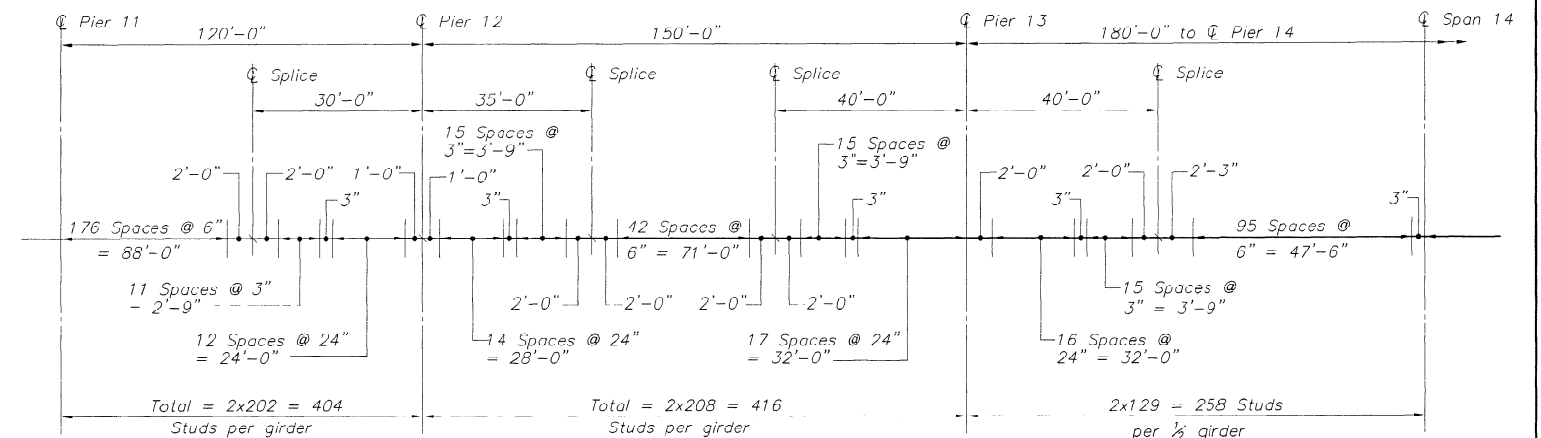
BOTTOM OF SLAB ELEVATIONS																				
Point Girder	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	
G1	43.93	43.76	43.57	43.38	43.18	42.98	42.77	42.55	42.33	42.09	41.87	41.67	41.47	41.29	41.10	40.93	40.75	40.59	40.42	
G2	43.93	43.77	43.60	43.43	43.24	43.06	42.87	42.66	42.45	42.24	42.03	41.83	41.63	41.45	41.27	41.10	40.91	40.75	40.58	
G3	43.84	43.69	43.53	43.37	43.19	43.02	42.83	42.63	42.44	42.23	42.03	41.83	41.63	41.45	41.27	41.10	40.91	40.75	40.58	
G4	43.68	43.53	43.37	43.21	43.03	42.85	42.67	42.47	42.27	42.06	41.86	41.67	41.47	41.29	41.10	40.93	40.75	40.59	40.42	

Sta. 31+88.80 end
superelevation transition

BOTTOM OF SLAB ELEVATIONS																				
Point Girder	F20	F21	F22	F23	F24	F25	F26	F27	F28	F29	F30	F31	F32	F33	F34	F35	F36	F37	F38	
G1 & G4	40.23	40.04	39.86	39.65	39.46	39.25	39.07	38.89	38.71	38.55	38.38	38.23	38.08	37.93	37.77	37.60	37.44	37.26	37.07	
G2 & G3	40.39	40.21	40.02	39.82	39.62	39.42	39.23	39.05	38.87	38.71	38.54	38.39	38.25	38.09	37.94	37.77	37.60	37.43	37.23	

BOTTOM OF SLAB ELEVATIONS																	
Point Girder	F39	F40	F41	F42	F43	F44	F45	F46	F47	F48	F49	F50	F51	F52	F53	F54	F55
G1 & G4	36.87	36.66	36.46	36.24	36.02	35.81	35.60	35.40	35.21	35.02	34.84	34.67	34.50	34.34	34.15	33.98	33.79
G2 & G3	37.04	36.83	36.62	36.41	36.18	35.97	35.76	35.56	35.37	35.18	35.01	34.83	34.67	34.50	34.32	34.14	33.95

BOTTOM OF SLAB ELEVATIONS																		
Point Girder	F56	F57	F58	F59	F60	F61	F62	F63	F64	F65	F66	F67	F68	F69	F70	F71	F72	F73
G1 & G4	33.60	33.41	33.20	33.01	32.82	32.65	32.47	32.29	32.13	31.96	31.80	31.63	31.44	31.26	31.06	30.86	30.65	30.43
G2 & G3	33.76	33.57	33.37	33.18	32.98	32.81	32.63	32.46	32.30	32.13	31.96	31.79	31.61	31.42	31.22	31.02	30.81	30.59



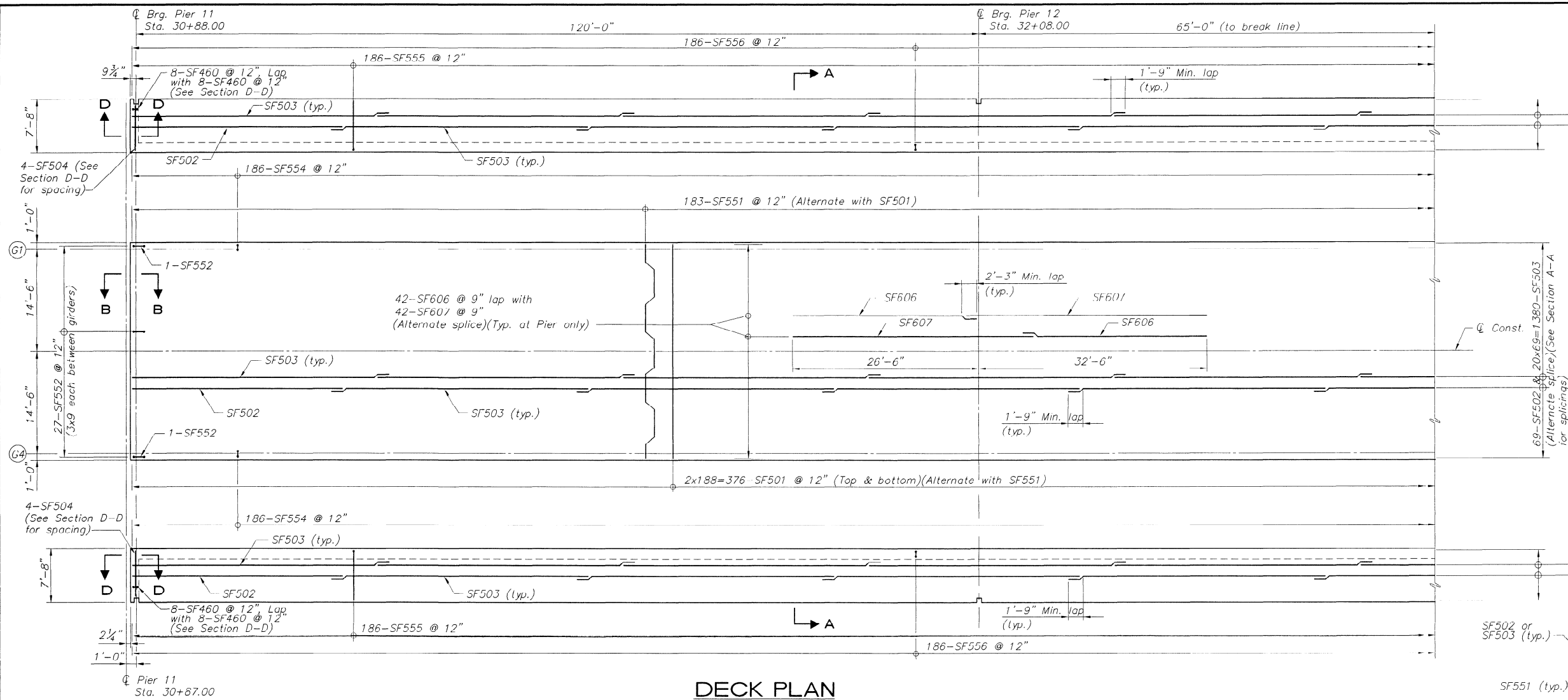
SHEAR CONNECTOR LAYOUT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

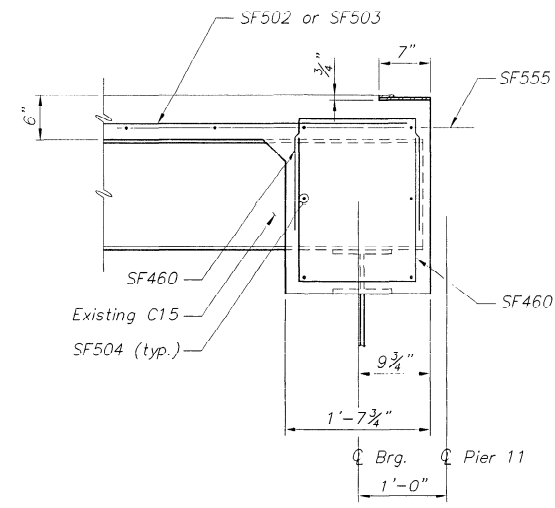
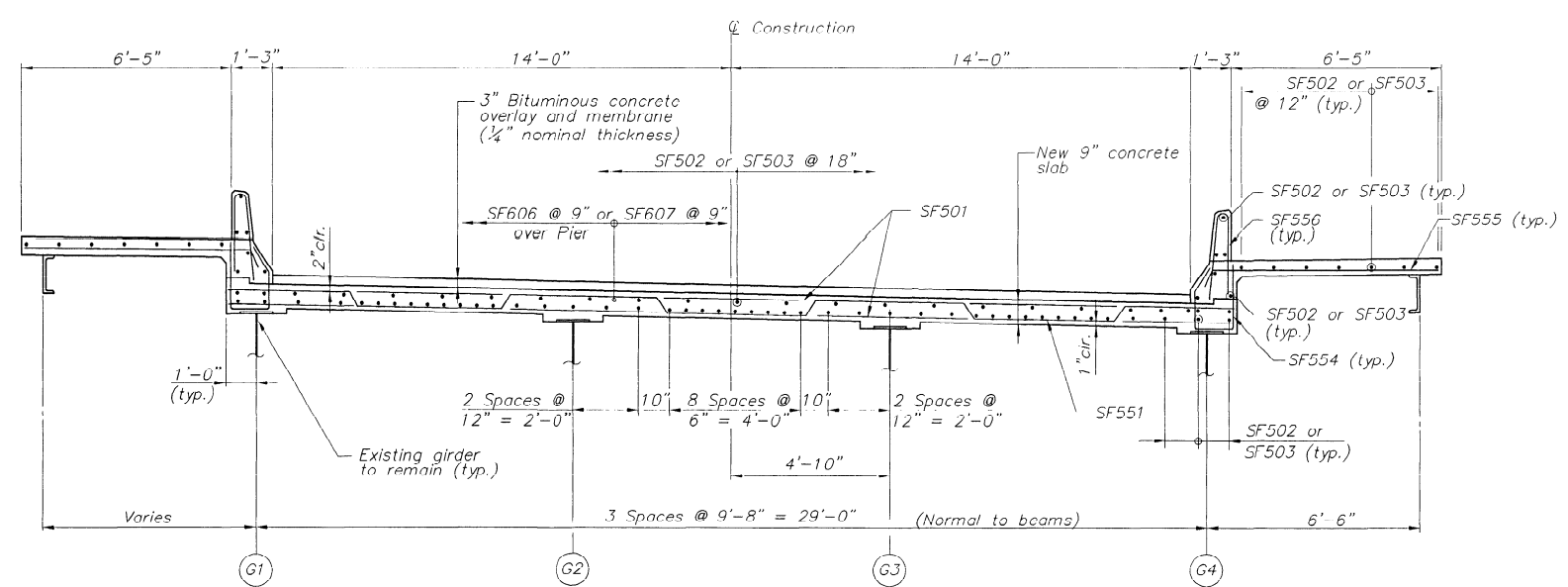
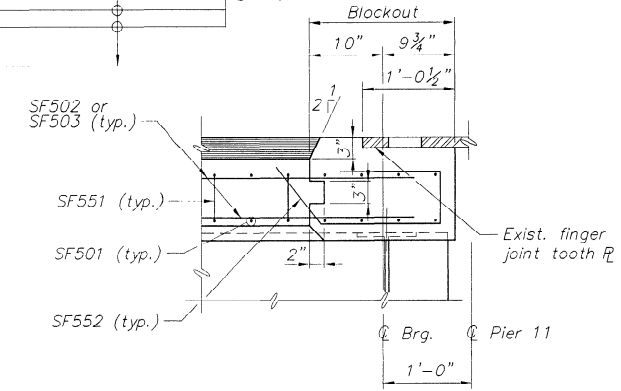
DECK F DETAILS



13-SF502 & 20x13=260-SF503
(Alternate splice/See Section A-A
for splicing)(3 in haunch &
3 in parapet)

69-SF502 & 20x69=1380-SF503
(Alternate splice/See Section A-A
for splicing)

13-SF502 & 20x13=260-SF503
(Alternate splice/See Section A-A
for splicing)(3 in haunch &
3 in parapet)

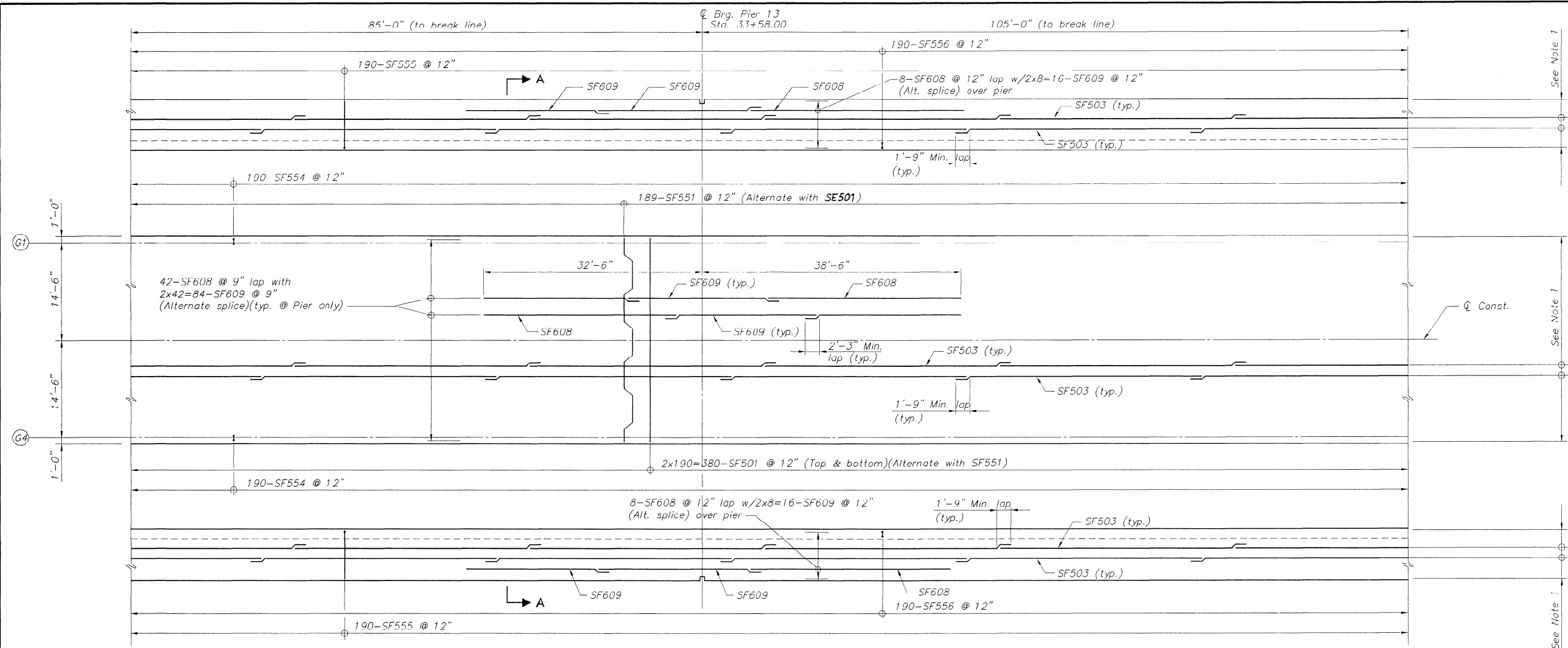


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

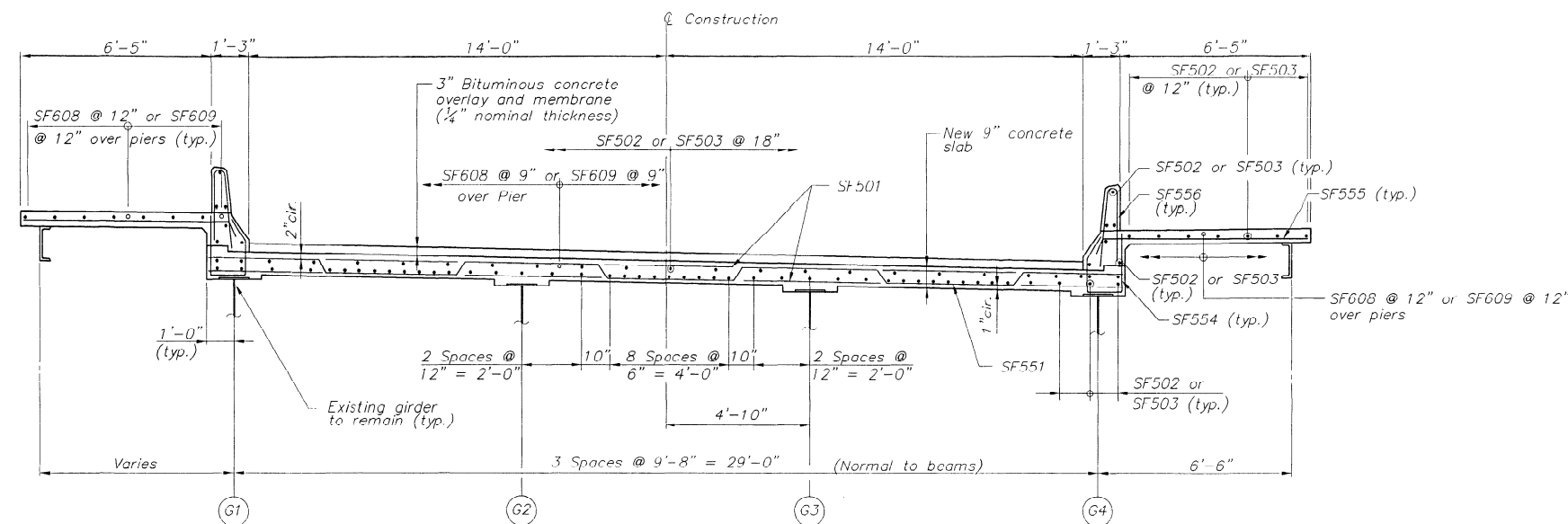
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

DECK F REINFORCEMENT
(1 OF 4)



DECK PLAN

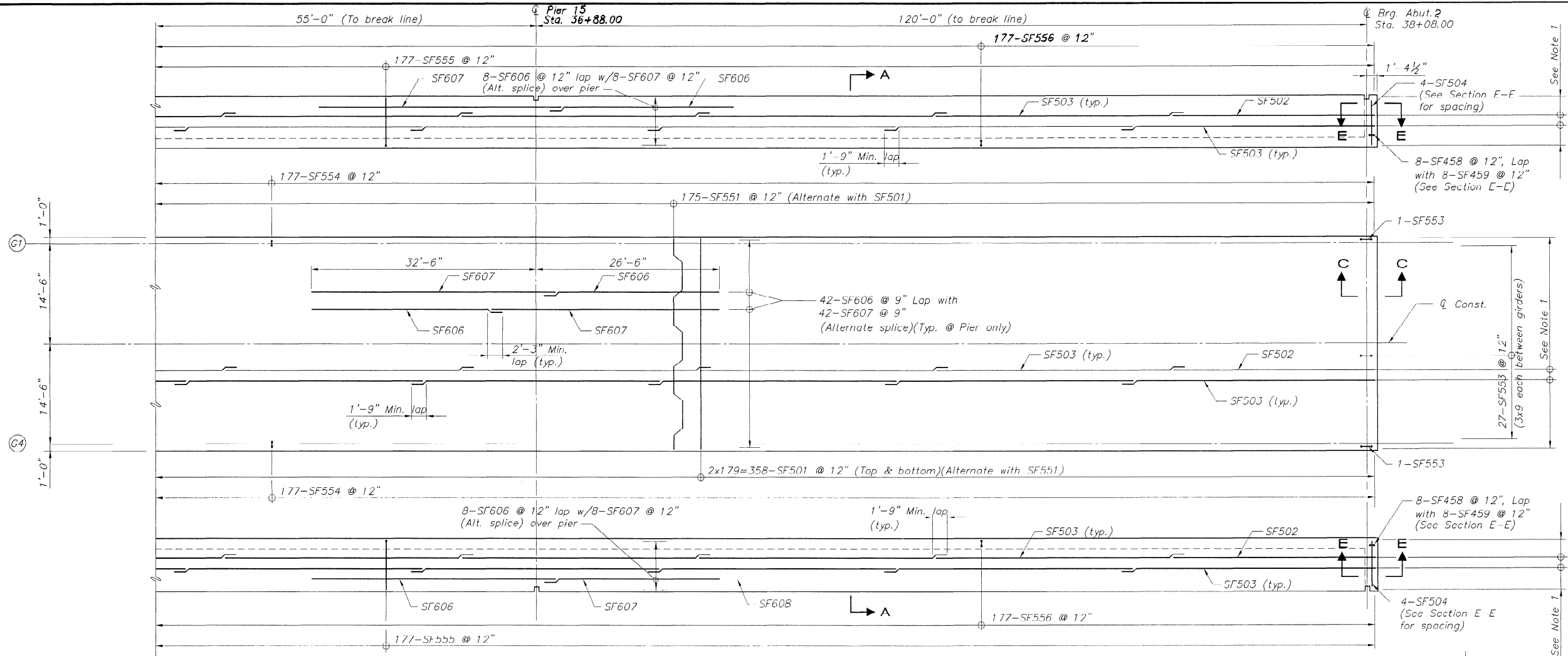


SECTION A-A

NOTE:

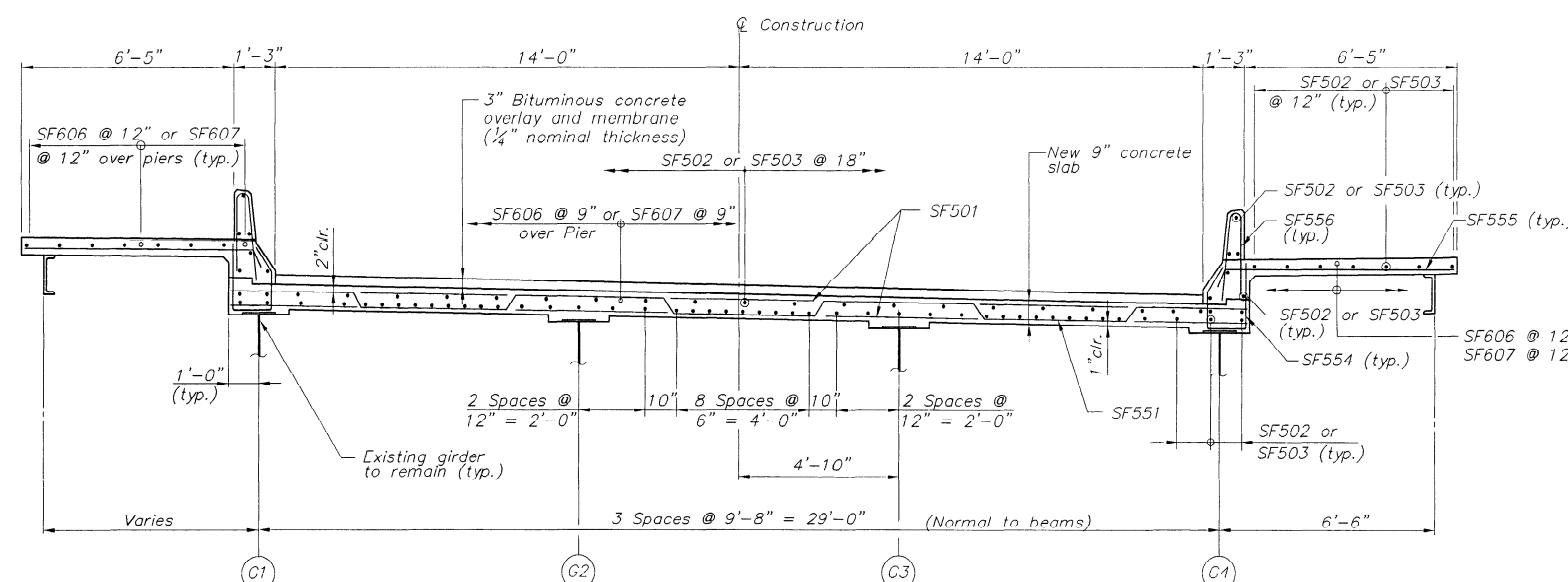
1. See Deck F Reinforcement Sheet (1 of 4) for total number of longitudinal bars.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
DECK F REINFORCEMENT (2 OF 4)

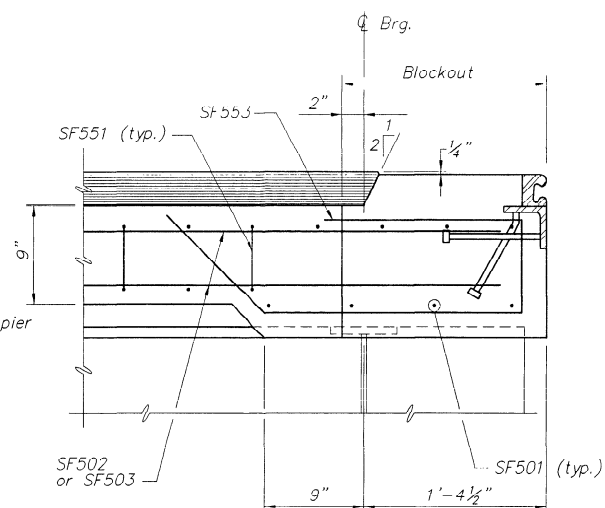


DECK PLAN

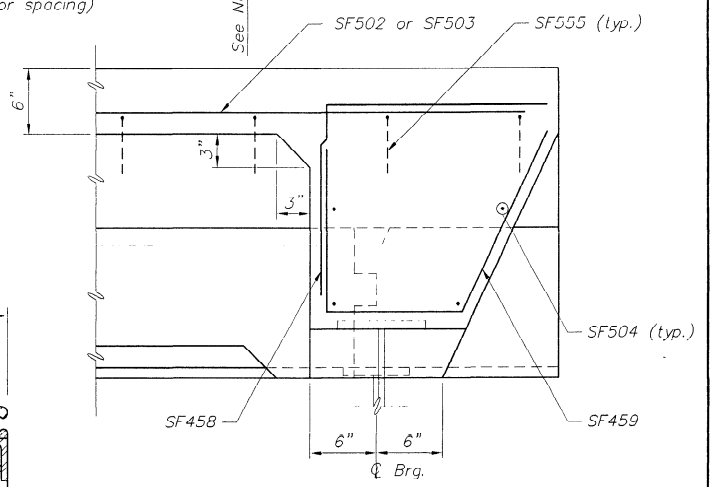
NOTE:
1. See Deck F Reinforcement Sheet (1 of 4) for total number of longitudinal bars.



SECTION A-A

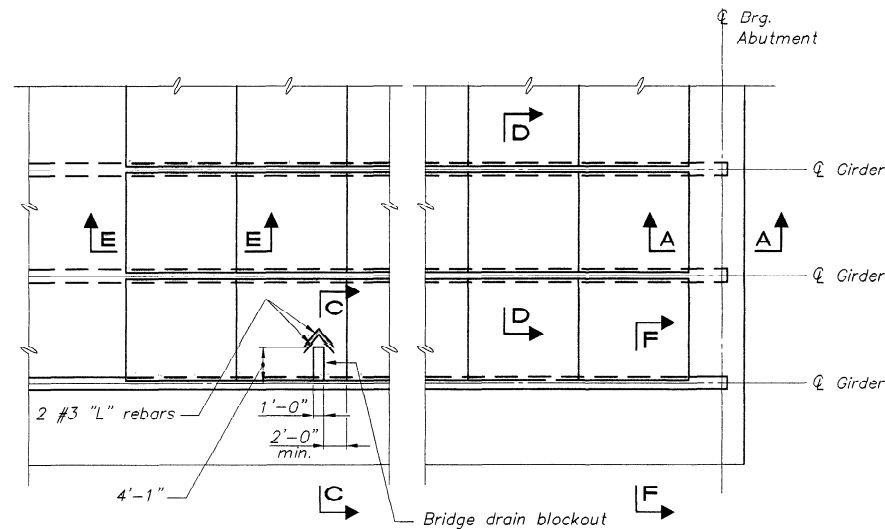


SECTION C-C

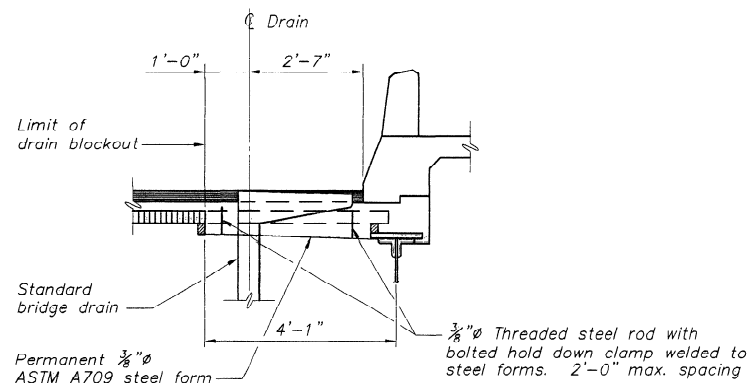


SECTION E-E

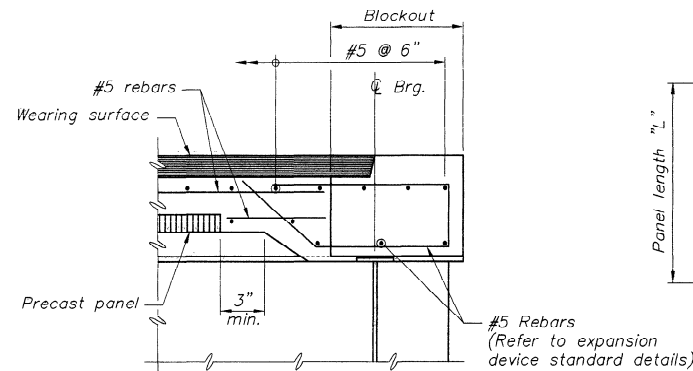
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River
BANGOR/BREWER
Penobscot County
DECK F REINFORCEMENT
(4 OF 4)



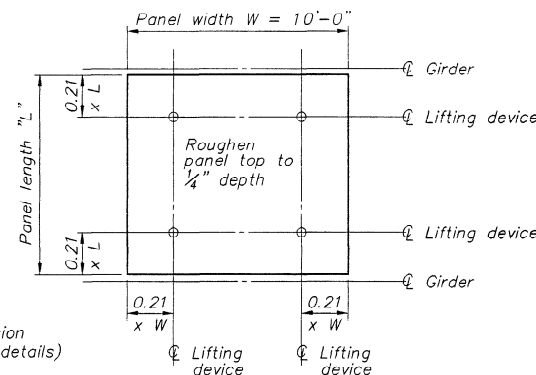
PARTIAL PLAN



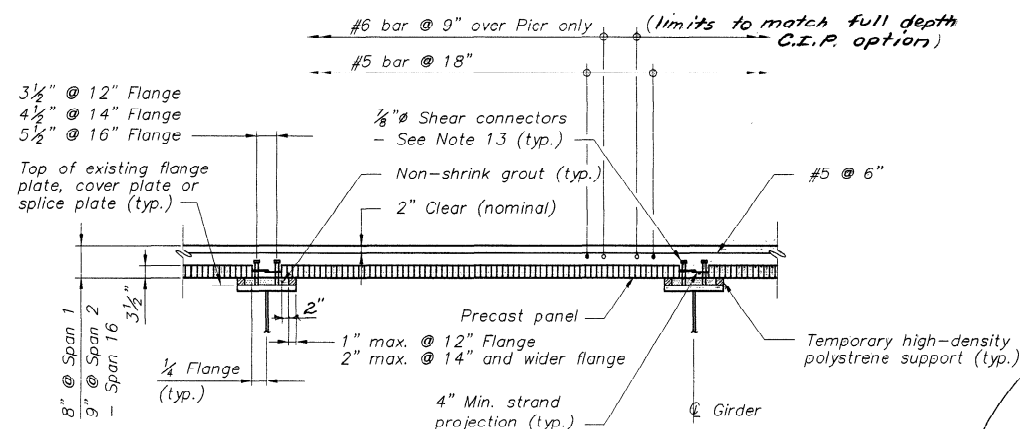
SECTION C-C



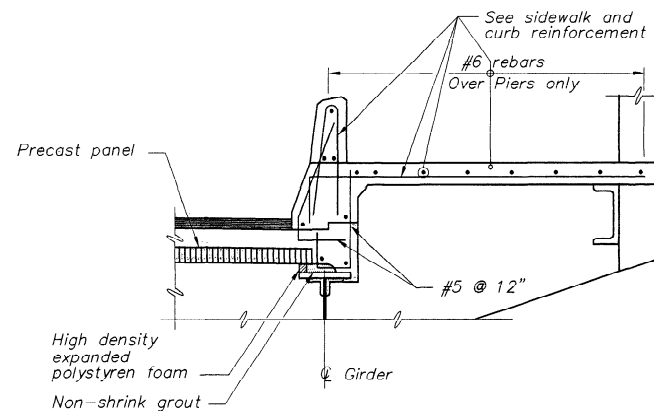
SECTION A-A



PANEL PLAN



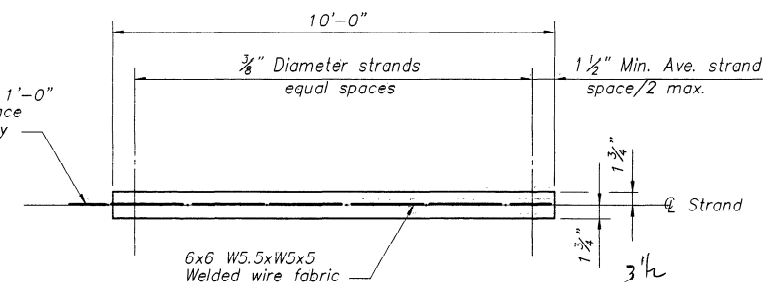
SECTION D-D



SECTION F-F

MATERIALS				
Deck Slab	Cast-In-Place Slab	Precast panel		
Span	Main Reinf.	Strength	# of strands	Strength
Span 1	#5 @ 6"	Steel : fy = 60,000 PSI	22 - 3/8" strand per 10' of width	Prestressing Steel : fs = 270,000 PSI Es = 28,000,000 PSI
Span 2 Span 16	#5 @ 6"	Concrete : fc = 4,000 PSI	27 - 3/8" strand per 10' of width	Concrete : fc = 5,000 PSI

Extend welded wire fabric 1'-0" minimum into cast-in-place concrete at abutment only



SECTION E-E
(Typical panel)

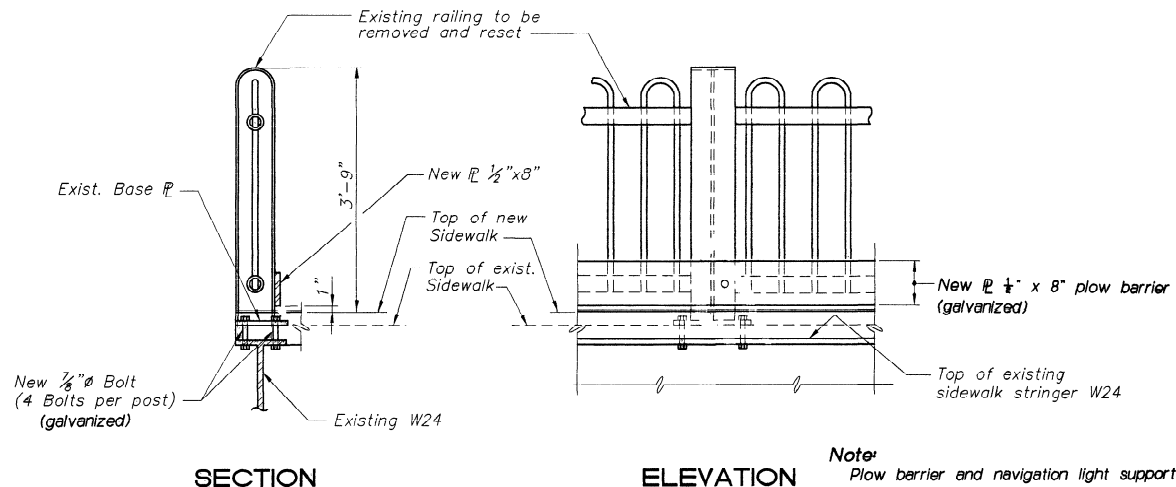
NOTES

- CONCRETE FOR PANELS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI AND A MINIMUM RELEASE STRENGTH OF 4000 PSI.
- PRESTRESSING STRANDS SHALL BE 3/8" DIAMETER 270 k SEVEN WIRE LOW RELAXATION STRANDS THAT CONFORM TO THE REQUIREMENTS OF ASTM A416 WITH AN INITIAL TENSION OF 17.2 KIPS PER STRAND.
- WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A497. NO. 3 BARS AT 6" O.C. EACH WAY MAY BE SUBSTITUTED FOR WELDED WIRE FABRIC.
- GROUT TO BE USED FOR SUPPORT UNDER THE DECK PANELS SHALL HAVE AN APPROVED HIGH RANGE WATER REDUCING ADDITIVE.
- HIGH DENSITY EXPANDED POLYSTYRENE FOAM SHALL BE CUT IN THE FIELD TO THE REQUIRED HEIGHT.
- WHEN FLANGE THICKNESSES DIFFER OR FLANGE COVER PLATES ARE USED, THE TEMPORARY BLOCKING THICKNESS SHALL VARY. PRECAST PANELS SHALL ALIGN VERTICALLY WITHIN 1/4".
- PANEL WIDTHS OF LESS THAN 10'-0" MAY BE USED. PROVIDE STRANDS IN THE RATIO OF THE SMALLER PANEL WIDTH TO 10'-0", TIMES THE NUMBER OF STRANDS GIVEN IN THE TABLE ROUNDED UP TO THE NEXT EVEN NUMBER OF STRANDS. THE MINIMUM PANEL WIDTH IS 3'-0".
- FOR STRUCTURES WITH CURVED OR ANGLED SPLICES, REFER TO THE DESIGN DRAWINGS FOR DETAILS.
- THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS SHOWING THE EXACT LAYOUT OF PANEL TYPES AND SIZES.
- JOINTS AT EXPANSION PIERS SHALL BE TREATED THE SAME AS ABUTMENT JOINT DETAILS OF PANEL TYPES AND SIZES.
- IF THERE IS A CONFLICT BETWEEN THE STANDARD DETAIL AND THE DESIGN DRAWINGS THE REQUIREMENTS OF THE DESIGN DRAWINGS SHALL BE FOLLOWED.
- THE TRANSVERSE SHEAR CONNECTOR SPACING SHALL BE AS SHOWN IN THE DESIGN DRAWINGS IN LIEU OF THE STANDARD 6" SPACING.
- 7" LONG SHEAR CONNECTORS ARE REQUIRED (6" LONG SHEAR STUD FOR EXTERIOR BEAMS) FOR USE WITH PRECAST DECK PANELS. THE ADDITIONAL COST OF 7" SHEAR CONNECTORS USED IN LIEU OF THE 6" OR 7" CONNECTORS FOR THE CAST-IN-PLACE CONCRETE SLAB SHALL BE CONSIDERED INCIDENTAL TO THE PRECAST DECK PANELS.
- All inserts in precast panels shall be stainless steel.

3" Pissy back shear connectors used Sec F because of deep blocking

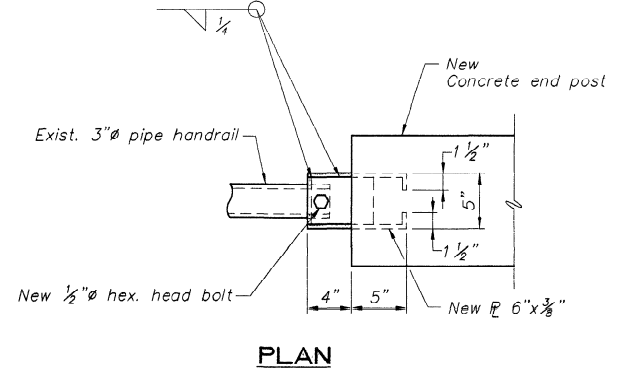
As Built
1998

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
PRECAST DECK PANELS



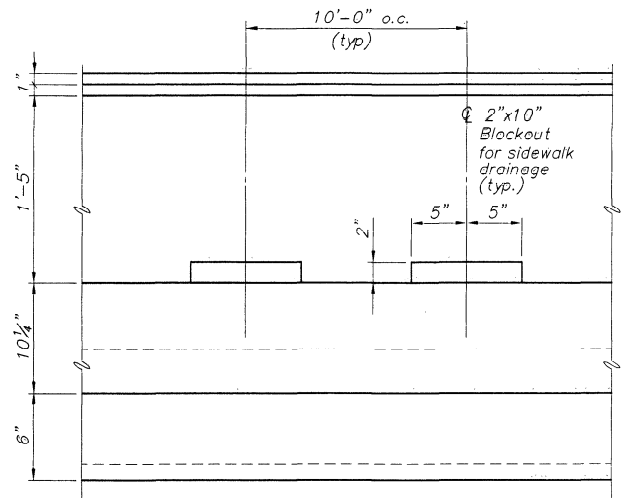
RAIL POST DETAILS - SPAN 1

Note:
Plow barrier and navigation light support bracket, including anchorage, bolts field drilling and all incidentals will be paid for under Items 504.70 and 504.71.

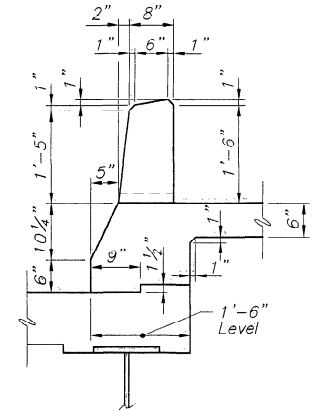


**HANDRAIL TO END POST DETAIL
BREWSTER ABUTMENT**

Note: Rail to be located in the field



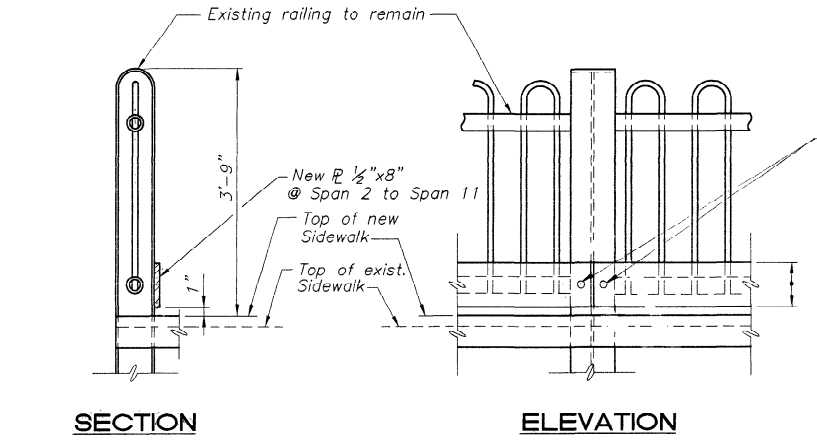
ELEVATION



SECTION

CURBLINE BARRIER DETAILS

A, B, H
1998

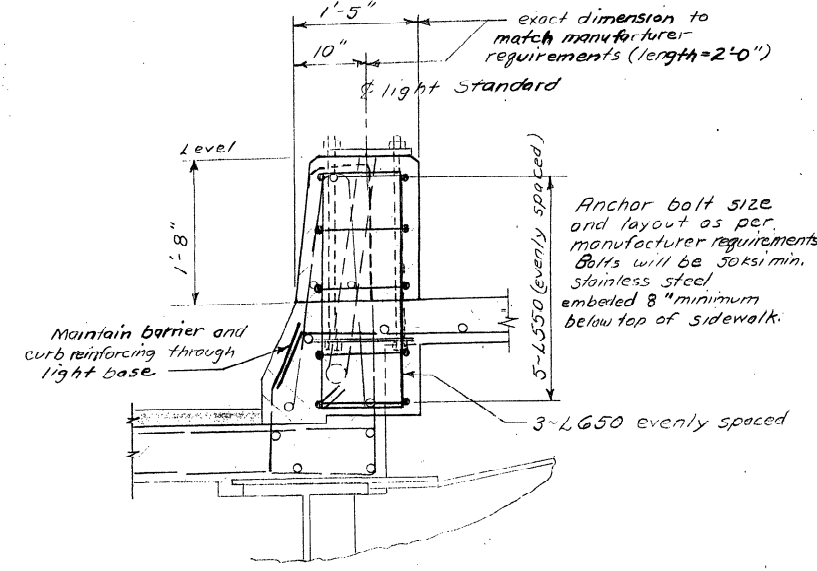


RAIL POST DETAILS - SPANS 2-16

Scale: 3/4 inch = 1 foot 0 inch

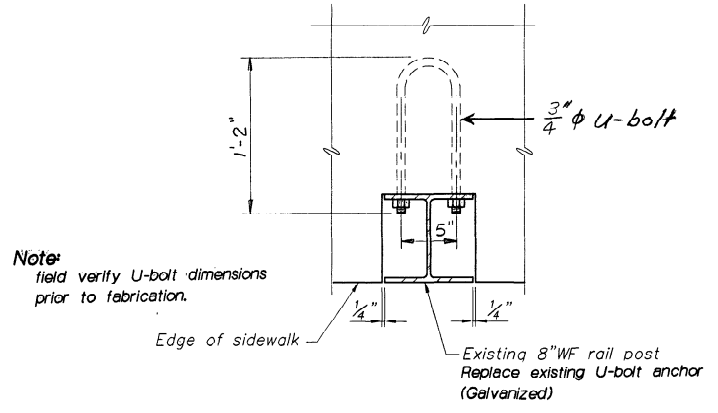
Note:
One 1/2 inch A307 round head ribbed neck bolt with nut and washer each post and at each end of the plow barrier plate. Each plate shall be attached to 4 posts min. The bolt holes shall be sized to provide the appropriate interference fit.

New 1/2 inch x 8 inch @ Span 2 to Span 11



TYPICAL LIGHT STANDARD BASE

40' Steel light standard - along left curbline
Detail drawn looking back on station



RAIL POST BLOCKOUT - SPANS 2-16

Note:
field verify U-bolt dimensions prior to fabrication.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWSTER Penobscot County
MISCELLANEOUS DETAILS

REINFORCING STEEL SCHEDULE

STRAIGHT BARS												BENT BARS														
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
APPROACHES				DECK B				DECK C				APPROACHES & ABUTMENTS														
AP500	22	6'- 0'	SIDEWALK	SB501	304	35'- 3'	DECK SLAB	SC501	328	30'- 8'	DECK SLAB	AP550	14	3'- 1'	L	0'-10'	2'- 3'									SIDEWALK OVER BACKWALL
AP501	7	7'- 0'	"	SB502	322	20'- 0'	DECK SLAB,SDWLK & PARAPET	SC502	91	28'- 0'	DECK SLAB,SDWLK & PARAPET	AP551	68	2'- 9'	SJ	0'- 0'	1'- 5'	0'- 4.00'	1'- 0'	0'- 0'				0'- 7.50'		PARAPET
AP502	7	6'- 0'	"	SB503	282	30'- 0'	" " "	SC503	381	34'-11'	" " "	AP552	68	5'- 2'	PR	2'- 4'	0'- 6'	2'- 4.00'						0'- 8'	0'- 2'	"
AP503	7	9'- 6'	"	SB504	120	15'- 0'	DECK SLAB	SC504	16	7'- 4'	SDWLK HAUNCH AT DECK END	AP553	2	5'- 2'	PR	2'- 4'	0'- 6'	2'- 4.00'						0'- 8'	0'- 2'	"
AP505	8	6'- 3'	PARAPET	SB505	128	19'- 7'	"	SC505	316	6'- 2'	DECK SLAB	AP554	2	4'- 4'	PR	1'-11'	0'- 6'	1'-11.00'						0'- 8'	0'- 2'	"
AP506	4	11'- 1'	"	SB506	48	26'- 7'	"	SC506	18	5'- 8'	SIDEWALK	AP555	2	3'- 6'	PR	1'- 6'	0'- 6'	1'- 6.00'						0'- 8'	0'- 2'	"
AP507	60	16'- 9'	SIDEWALK RAMP & PARAPET	SB507	96	8'- 7'	"	SC507	12	6'- 6'	"	AP556	2	2'- 8'	PR	1'- 1'	0'- 6'	1'- 1.00'						0'- 8'	0'- 2'	"
AP508	28	11'- 3'	" "	SB508	92	4'- 7'	"	SC508	6	5'- 6'	"	AP557	2	1'-10'	PR	0'- 8'	0'- 6'	0'- 8.00'						0'- 8'	0'- 2'	"
				SB509	20	27'- 0'	"	SC509	1	35'- 1'	"	AP558	1	1'- 0'	PR	0'- 3'	0'- 6'	0'- 3.00'						0'- 8'	0'- 2'	"
				SB510	4	26'- 0'	"	SC510	1	34'- 8'	"	AP559	2	6'- 1'	V				1'- 4'	4'- 9'			2'- 0.00'			"
SA501	132	34'- 7'	DECK SLAB	SB511	4	25'- 0'	"	SC611	114	34'- 0'	DECK SLAB&SDWLK OVER PIER	AP560	1	4'-10'	PR	2'- 2'	0'- 6'	2'- 2.00'						0'- 8'	0'- 2'	"
SA502	104	28'- 0'	DECK SLAB,SDWLK & PARAPET	SB512	4	24'- 0'	"					AP561	1	4'- 6'	PR	2'- 0'	0'- 6'	2'- 0.00'						0'- 8'	0'- 2'	"
SA503	104	33'- 9'	" " " "	SB513	4	23'- 0'	"	DECK D				AP562	1	4'- 2'	PR	1'-10'	0'- 6'	1'-10.00'						0'- 8'	0'- 2'	"
SA504	16	7'- 4'	SDWLK HAUNCH AT DECK ENDS	SB514	4	22'- 0'	"	SD501	343	30'- 8'	DECK SLAB	AP563	1	3'-10'	PR	1'- 8'	0'- 6'	1'- 8.00'						0'- 8'	0'- 2'	"
				SB515	4	21'- 0'	"	SD502	95	30'- 3'	DECK SLAB,SDWLK & PARAPET	AP564	1	3'- 6'	PR	1'- 6'	0'- 6'	1'- 6.00'						0'- 8'	0'- 2'	"
				SB516	4	20'- 0'	"	SD503	380	36'- 3'	" " "	AP565	1	3'- 2'	PR	1'- 4'	0'- 6'	1'- 4.00'						0'- 8'	0'- 2'	"
				SB517	4	19'- 0'	"	SD504	24	7'- 4'	SDWLK HAUNCH AT DECK END	AP566	1	2'-10'	PR	1'- 2'	0'- 6'	1'- 2.00'						0'- 8'	0'- 2'	"
				SB518	4	18'- 0'	"	SD606	116	16'- 3'	DECK SLAB&SDWLK OVER PIER	AP567	1	2'- 6'	PR	1'- 0'	0'- 6'	1'- 0.00'						0'- 8'	0'- 2'	"
				SB519	4	17'- 0'	"	SD607	116	25'- 0'	"	AP568	1	2'- 2'	PR	0'-10'	0'- 6'	0'-10.00'						0'- 8'	0'- 2'	"
				SB520	4	16'- 0'	"					AP569	1	1'-10'	PR	0'- 8'	0'- 6'	0'- 8.00'						0'- 8'	0'- 2'	"
				SB521	4	15'- 0'	"	DECK E				AP570	1	9'- 7'	V				1'- 4'	8'- 3'			2'- 3.00'			"
				SB522	16	20'- 0'	"	SE501	316	30'- 8'	DECK SLAB	AP571	82	2'-10'	SJ	0'-10'	1'- 2'	0'-10.00'	0'- 0'	0'- 0'			1'- 0.00'			"
				SB523	4	16'- 6'	"	SE502	95	28'- 0'	DECK SLAB,SDWLK & PARAPET	AP572	82	3'- 4'	SJ	0'-10'	2'- 0'	0'- 6.00'	0'- 0'	0'- 0'			1'- 5.00'			TOP OF RETAINING WALL
				SB524	4	18'- 6'	"	SE503	380	33'-10'	" " "	AP573	16	10'-10'	PR	4'-11'	1'- 0'	4'-11.00'						0'- 8'	0'- 2'	END POST, BREWER ABUTMENT
				SB525	4	20'- 6'	"	SE504	18	7'- 4'	SDWLK HAUNCH AT DECK END	AP574	2	4'- 8'	PR	2'- 1'	0'- 6'	2'- 1.00'						0'- 8'	0'- 2'	PARAPET
				SB526	4	22'- 6'	"	SF606	116	28'- 0'	DECK SLAB&SDWLK OVER PIER	AP575	2	4'- 4'	PR	1'-11'	0'- 6'	1'-11.00'						0'- 8'	0'- 2'	"
				SB527	6	9'- 0'	"					AP576	2	4'- 0'	PR	1'- 9'	0'- 6'	1'- 9.00'						0'- 8'	0'- 2'	"
				SB528	6	13'- 0'	"	DECK F				AP577	2	3'- 8'	PR	1'- 7'	0'- 6'	1'- 7.00'						0'- 8'	0'- 2'	"
				SB529	6	17'- 0'	"	SF501	1454	30'- 8'	DECK SLAB	AP578	2	3'- 4'	PR	1'- 5'	0'- 6'	1'- 5.00'						0'- 8'	0'- 2'	"
				SB530	6	5'- 0'	"	SF502	95	30'- 0'	DECK SLAB,SDWLK & PARAPET	AP579	2	3'- 0'	PR	1'- 3'	0'- 6'	1'- 3.00'						0'- 8'	0'- 2'	"
				SB531	6	6'- 9'	"	SF503	1900	36'- 4'	" " "	AP580	2	2'- 8'	PR	1'- 1'	0'- 6'	1'- 1.00'						0'- 8'	0'- 2'	"
				SB532	6	8'- 6'	"	SF504	16	7'- 4'	SDWLK HAUNCH AT DECK END	AP581	2	2'- 4'	PR	0'-11'	0'- 6'	0'-11.00'						0'- 8'	0'- 2'	"
				SB533	6	9'- 3'	"	SF606	116	26'- 6'	DECK SLAB&SDWLK OVER PIER	AP582	82	8'- 4'	L	1'- 4'	7'- 0'									SIDEWALK
				SB534	6	11'- 0'	"	SF607	116	34'- 9'	"	AP589	2	11'- 4'	V				1'- 6'	9'-10'			1'- 6.00'			PARAPET
				SB535	6	12'- 9'	"	SF608	116	28'- 0'	"	AP590	36	2'- 4'	L	0'-10'	1'- 6'									"
				SB536	6	14'- 6'	"	SF609	232	23'- 9'	"	AP591	33	1'-10'	C	0'- 7'	1'- 3'					0'- 0'				"
				SB537	20	8'- 9'	"					AP492	16	7'- 2'	HB	0'- 5'	2'- 6'	0'- 8.00'	2'- 6'	0'- 8'		0'- 5'				END POST, BREWER ABUTMENT
				SB538	32	9'- 9'	"																			
				SB539	120	11'- 6'	SIDEWALK & PARAPET					DECK A														
				SB540	12	23'- 4'	" "					SA551	55	36'- 3'	B		2'- 3'	0'- 7.00'	2'-11'	2'-10'	2'- 3'		0'- 5.00'	34'- 1'		DECK SLAB
				SB541	18	7'- 0'	SIDEWALK					SA552	37	5'-10'	SJ	0'- 0'	0'-10'	3'- 5.00'	0'- 7'	1'- 0'			0'- 7.00'			DECK END
				SB542	6	6'- 6'	"					SA553	37	4'- 0'	SJ	0'- 0'	0'-10'	1'- 1.00'	0'- 7'	1'- 6'			0'- 7.00'			"
				SB543	3	6'- 0'	"					SA554	116	5'- 1'	SJ	0'- 0'	0'-11'	1'- 2.00'	1'- 2'	1'-10'			0'- 4.00'			SIDEWALK HAUNCH
				SB544	6	7'- 4'	"					SA555	116	7'-10'	V				7'- 0'	0'-10'			0'- 9.00'			SIDEWALK
				SB545	28	7'- 4'	SDWLK HAUNCH AT DECK END					SA556	116	5'- 0'	PR	2'- 4'	0'- 6'	2'- 2.00'						0'- 8'	0'- 2'	PARAPET
				SB570	212	6'- 0"						SA457	16	3'- 2'	SJ	0'- 0'	0'- 9'	0'- 9.00'	1'- 0'	0'- 8'			0'- 6.50'			SIDEWALK END HAUNCH
				SB670	62	24'- 0"						SA458	16	4'- 0'	S	0'- 5'	1'- 0'	0'-10.00'	1'- 0'				0'- 5'			"
												MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River
BANGOR/BREWER
Penobscot County
REBAR SCHEDULE (1)

1085JC98 / 1-1
SHEET 25 OF
AUGUSTA, MAINE

TYPE-BENDING DIAGRAMS

All dimensions are out to out of reinforcing bar. Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318.

Reinforcing Bar : ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of the reinforcing bar.
Mark (A502) bar size - #5
Mark (P1001) bar size - #10
Mark (S603) bar size - #6

2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

REVISIONS

DATE

9-26-83
5-12-83

Δ New Bent Bar Type SJ

Δ Revised ACI Standard

9-26-83
5-12-83

REINFORCING STEEL SCHEDULE

BENT BARS													BENT BARS																
MARK	NO.	LENGTH	TYPE	B	C	D1 & D2	D3 & D4	E1	E2	E3	F	H	O	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
DECK B													DECK D																
SB551	137	36'-7"	B	3'-0"	0'-8.5"	4'-4.00"	3'-3"	4'-3"	3'-8"	3'-0"	2'-5.00"	0'-6"	35'-4"	DECK SLAB	SD551	166	31'-11"	B		3'-0"	0'-8.50"	4'-4"	4'-4"	3'-0"		0'-6.00"	30'-8"		DECK SLAB
															SD552	29	4'-1"	SJ	0'-0"	0'-10"	1'-2.00"	0'-7"	1'-6"			0'-7.00"			DECK END
				A	B	C	D	E	F	G	H	O	R		SD553	29	3'-9"	SJ	0'-0"	0'-10"	0'-10.00"	0'-7"	1'-6"			0'-7.00"			
SB552	174	3'-7"	SJ	0'-0"	0'-7"	1'-1.00"	0'-10"	1'-1"			0'-10.00"			DECK END	SD554	338	5'-1"	SJ	0'-0"	0'-11"	1'-2.00"	1'-2"	1'-10"			0'-4.00"			SIDEWALK HAUNCH
SB553	68	3'-11"	SJ	0'-0"	0'-7"	1'-0.00"	0'-10"	1'-6"			0'-10.00"				SD555	338	7'-9"	V				7'-0"	0'-9"			0'-6.00"			SIDEWALK
SB554	267	5'-1"	SJ	0'-0"	0'-11"	1'-2.00"	1'-2"	1'-10"			0'-4.00"			SIDEWALK HAUNCH	SD556	338	5'-0"	PR	2'-4"	0'-6"	2'-2.00"						0'-8"	0'-2"	PARAPET
SB555	267	7'-9"	V				7'-0"	0'-9"			0'-6.00"			SIDEWALK	SD458	16	4'-10"	SJ	0'-0"	1'-9"	0'-3.00"	1'-2"	1'-8"			0'-4.00"			DECK END AT SIDEWALK
SB556	267	5'-0"	PR	2'-4"	0'-6"	2'-2.00"						0'-8"	0'-2"	PARAPET	SD459	16	3'-8"	SJ	0'-0"	1'-3"	0'-0.00"	0'-10"	1'-7"			0'-4.00"			
SB457	16	6'-5"	SJ	0'-0"	2'-4"	1'-3.00"	1'-10"	1'-0"			1'-10.00"			DECK END AT SIDEWALK	SD460	32	3'-8"	S	0'-0"	1'-6"	0'-8.00"	1'-6"				0'-0"			
SB458	28	4'-7"	SR	0'-0"	1'-5"	0'-10.00"	1'-4"	1'-0"				0'-7"			DECK E														
SB559	42	6'-3"	SJ	0'-0"	0'-10"	4'-0.00"	0'-7"	1'-0"							SE551	151	31'-11"	B		3'-0"	0'-8.50"	4'-4"	4'-4"	3'-0"		0'-6.00"	30'-8"		DECK SLAB
DECK C														SE552	29	4'-1"	SJ	0'-0"	0'-10"	1'-2.00"	0'-7"	1'-6"				0'-7.00"			DECK END
SC551	159	31'-8"	B		3'-0"	0'-8.50"	4'-4"	4'-4"	2'-9"		0'-6.00"	30'-5"		DECK SLAB	SE553	29	4'-2"	SJ	0'-0"	0'-10"	1'-3.00"	0'-7"	1'-6"			0'-7.00"			
SC552	33	4'-1"	SJ	0'-0"	0'-11"	1'-0.00"	0'-8"	1'-6"			0'-8.00"			DECK END	SE554	310	5'-1"	SJ	0'-0"	0'-11"	1'-2.00"	1'-2"	1'-10"			0'-4.00"			SIDEWALK HAUNCH
SC553	29	3'-7"	SJ	0'-0"	0'-10"	0'-8.00"	0'-7"	1'-6"			0'-7.00"				SE555	310	7'-9"	V				7'-0"	0'-9"			0'-6.00"			SIDEWALK
SC554	324	5'-1"	SJ	0'-0"	0'-11"	1'-2.00"	1'-2"	1'-10"			0'-4.00"			SIDEWALK HAUNCH	SE556	310	5'-0"	PR	2'-4"	0'-6"	2'-2.00"						0'-8"	0'-2"	PARAPET
SC555	324	7'-9"	V				7'-0"	0'-9"			0'-6.00"			SIDEWALK	SE458	16	4'-7"	SJ	0'-0"	1'-9"	0'-0.00"	1'-2"	1'-8"			0'-4.00"			DECK END AT SIDEWALK
SC556	324	5'-0"	PR	2'-4"	0'-6"	2'-2.00"						0'-8"	0'-2"	PARAPET	SE459	16	3'-8"	SJ	0'-0"	1'-3"	0'-0.00"	0'-10"	1'-7"			0'-4.00"			
SC457	16	4'-4"	SB	0'-0"	1'-3"	0'-10.00"	1'-3"	1'-0"						DECK END AT SIDEWALK	SE460	32	3'-10"	S	0'-0"	1'-3"	1'-4.00"	1'-3"				0'-0"			
SC458	16	3'-10"	SB	0'-0"	1'-3"	0'-7.00"	1'-3"	0'-9"							DECK F														
															SF551	716	31'-11"	B		3'-0"	0'-8.50"	4'-4"	4'-4"	3'-0"		0'-6.00"	30'-8"		DECK SLAB
															SF552	29	3'-11"	SJ	0'-0"	0'-10"	1'-3.00"	0'-7"	1'-3"			0'-7.00"			DECK END
															SF553	29	4'-9"	SJ	0'-0"	0'-10"	1'-10.00"	0'-7"	1'-6"			0'-7.00"			
															SF554	1446	5'-1"	SJ	0'-0"	0'-11"	1'-2.00"	1'-2"	1'-10"			0'-4.00"			SIDEWALK HAUNCH
															SF555	1446	7'-9"	V				7'-0"	0'-9"			0'-6.00"			SIDEWALK
															SF556	1446	5'-0"	PR	2'-4"	0'-6"	2'-2.00"						0'-8"	0'-2"	PARAPET
															SF458	16	2'-10"	L	1'-6"	1'-4"									DECK END AT SIDEWALK
															SF459	16	3'-8"	SJ	0'-0"	1'-5"	1'-0.00"	1'-3"	0'-0"			1'-3.00"			
															SF460	32	4'-4"	SL	0'-0"	1'-6"	1'-4.00"	1'-6"			0'-0"				
															L650	21	7'-7"	H	0'-6"	0'-9 ¹ / ₂ "	2'-6"	0'-9 ¹ / ₂ "	2'-6"		0'-6"			Light Std. Base	
															L550	35	6'-2"	H	0'-6"	0'-11"	1'-8"	0'-11"	1'-8"		0'-6"				Light Std. Base
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

1MAINEBH-043-1(34)2649

TYPE-BENDING DIAGRAMS

All dimensions are out to out of reinforcing bar. Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318.

Reinforcing Bar : ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of the reinforcing bar.

Mark (A502) bar size - #5
Mark (P1001) bar size - #10
Mark (S603) bar size - #6

2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

New Bent Bar Type SJ

Revised ACI Standard

9-26-83
5-12-83

REVISIONS

DATE

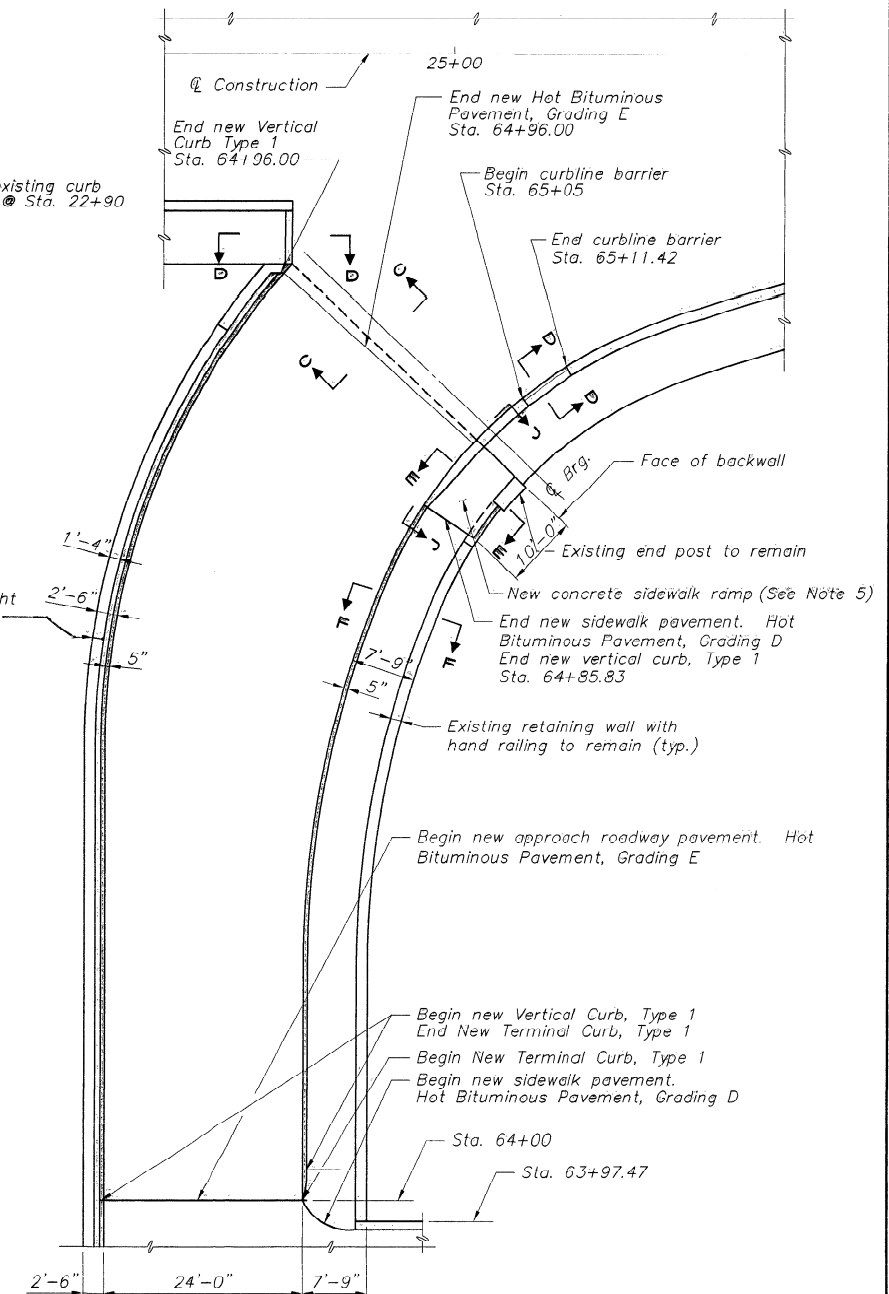
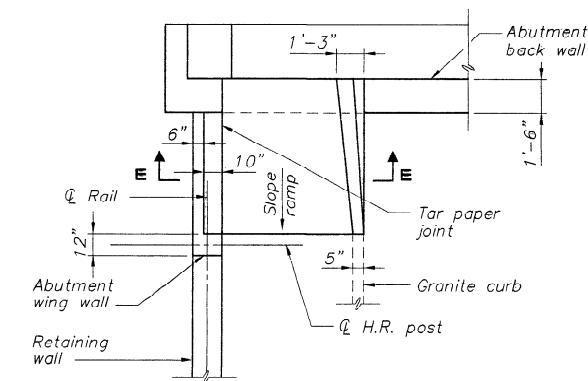
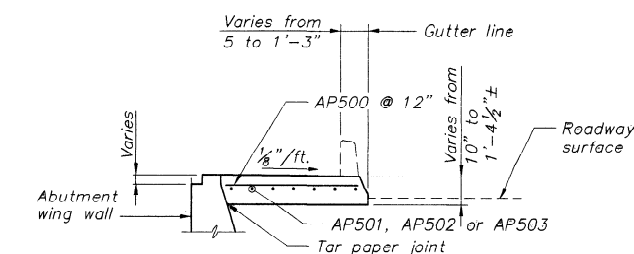
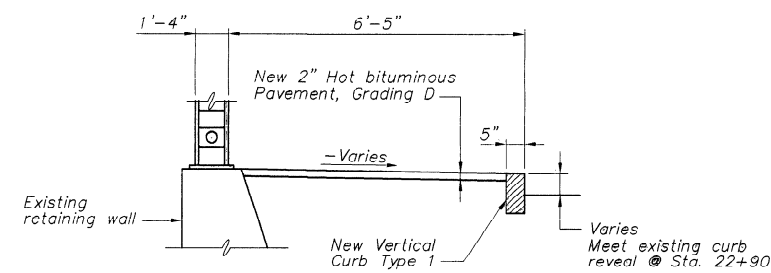
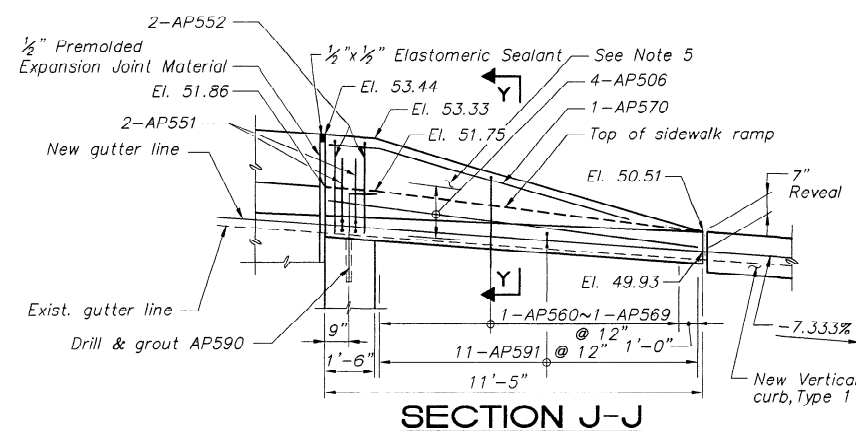
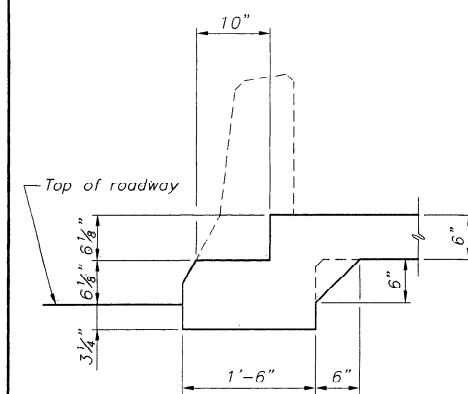
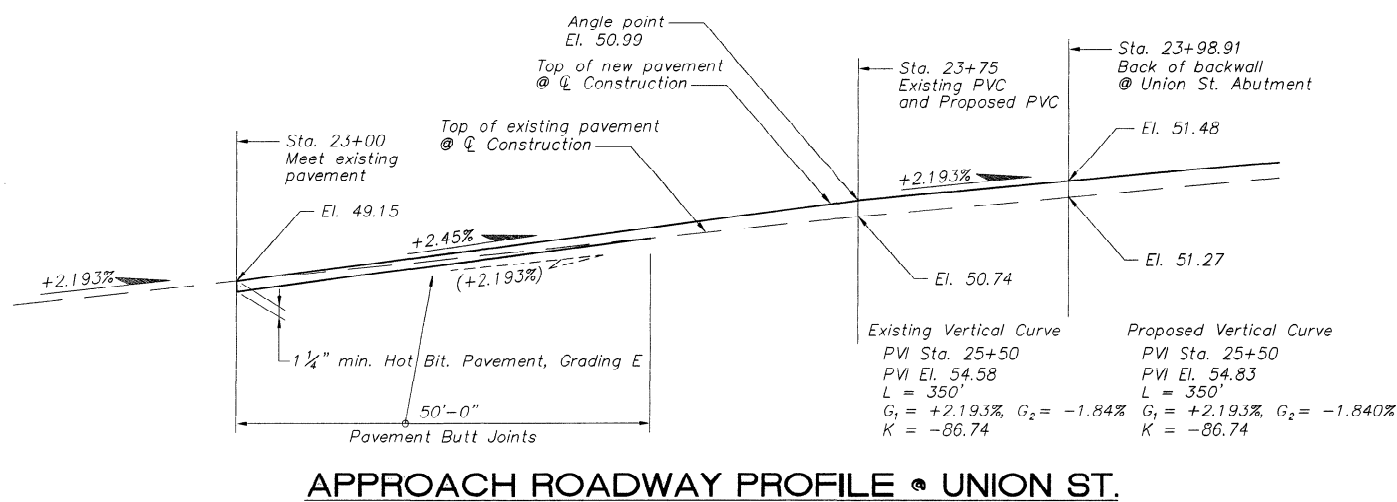
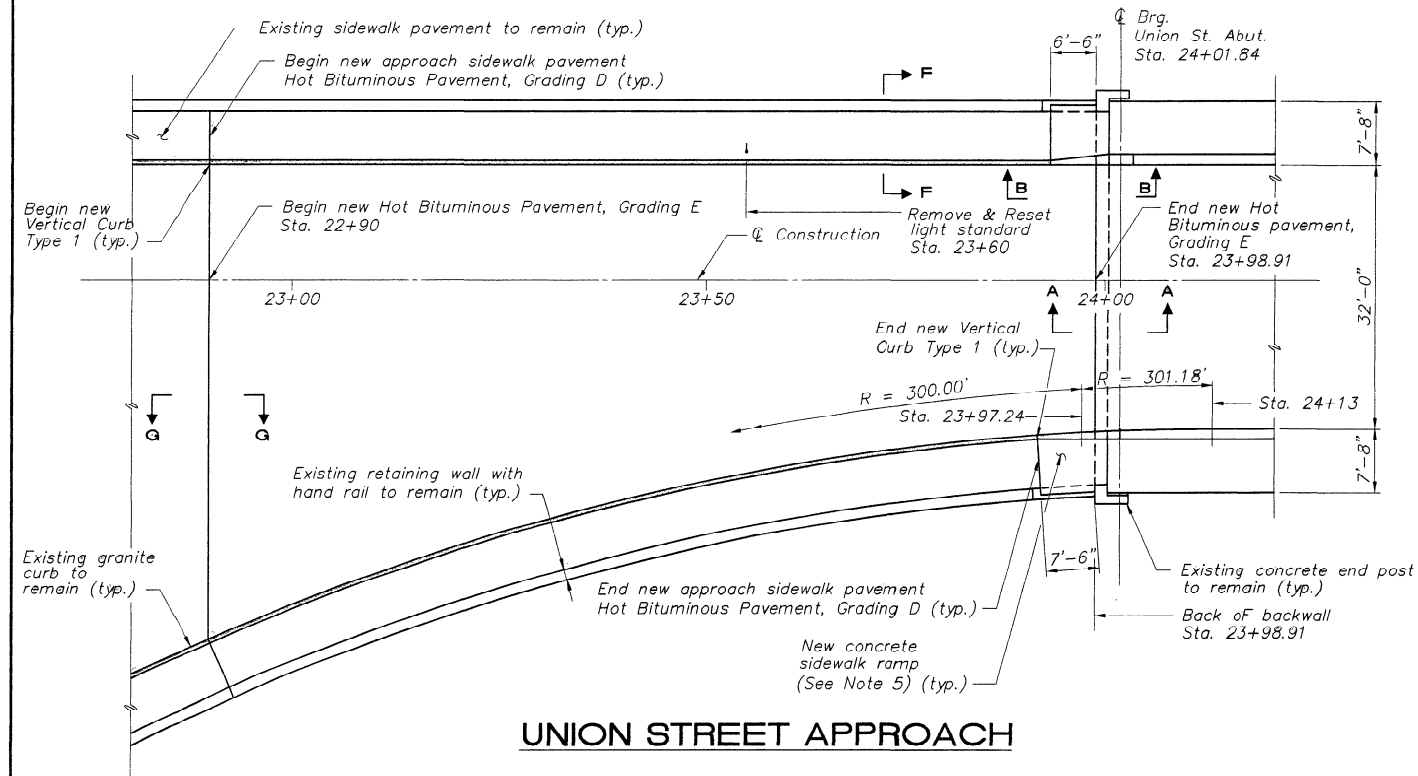
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

JOSHUA L. CHAMBERLAIN BRIDGE
U.S. Route 1A over the Penobscot River

BANGOR/BREWER
Penobscot County

REBAR SCHEDULE (2)

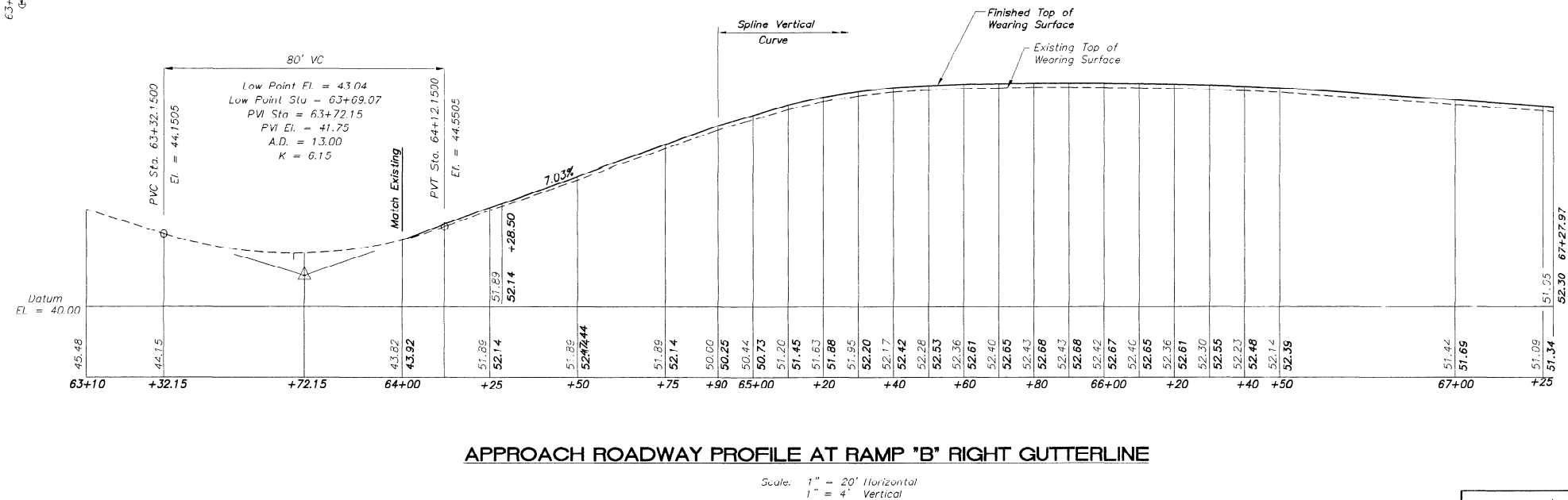
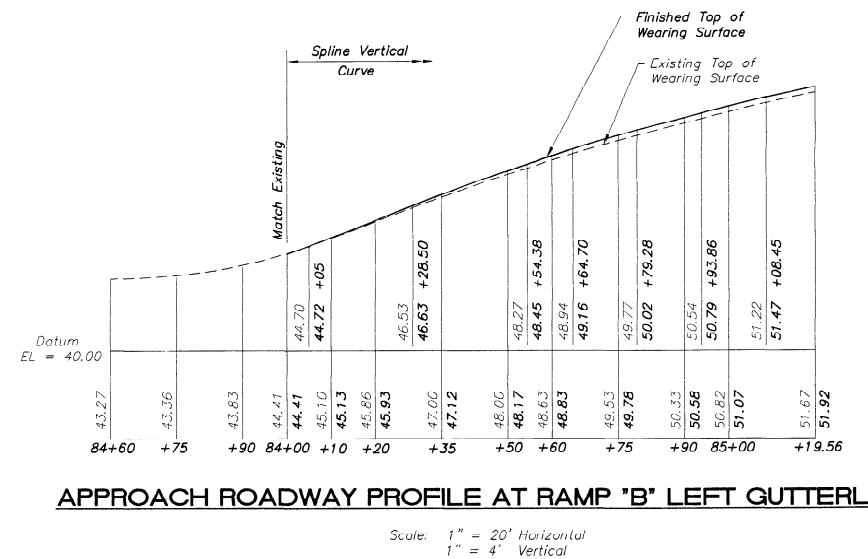
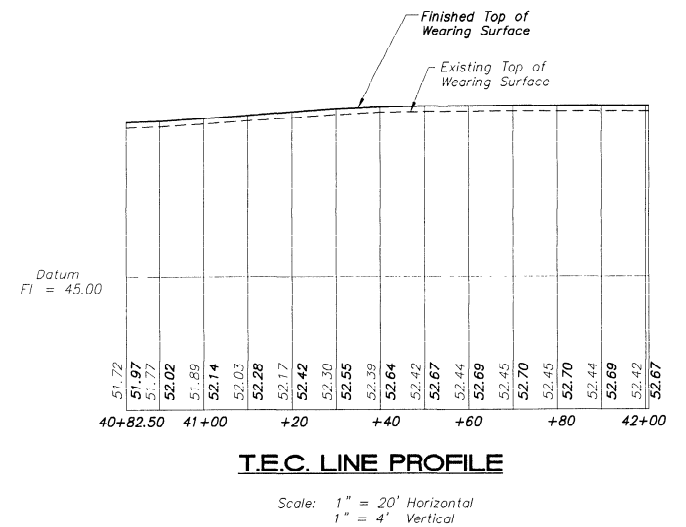
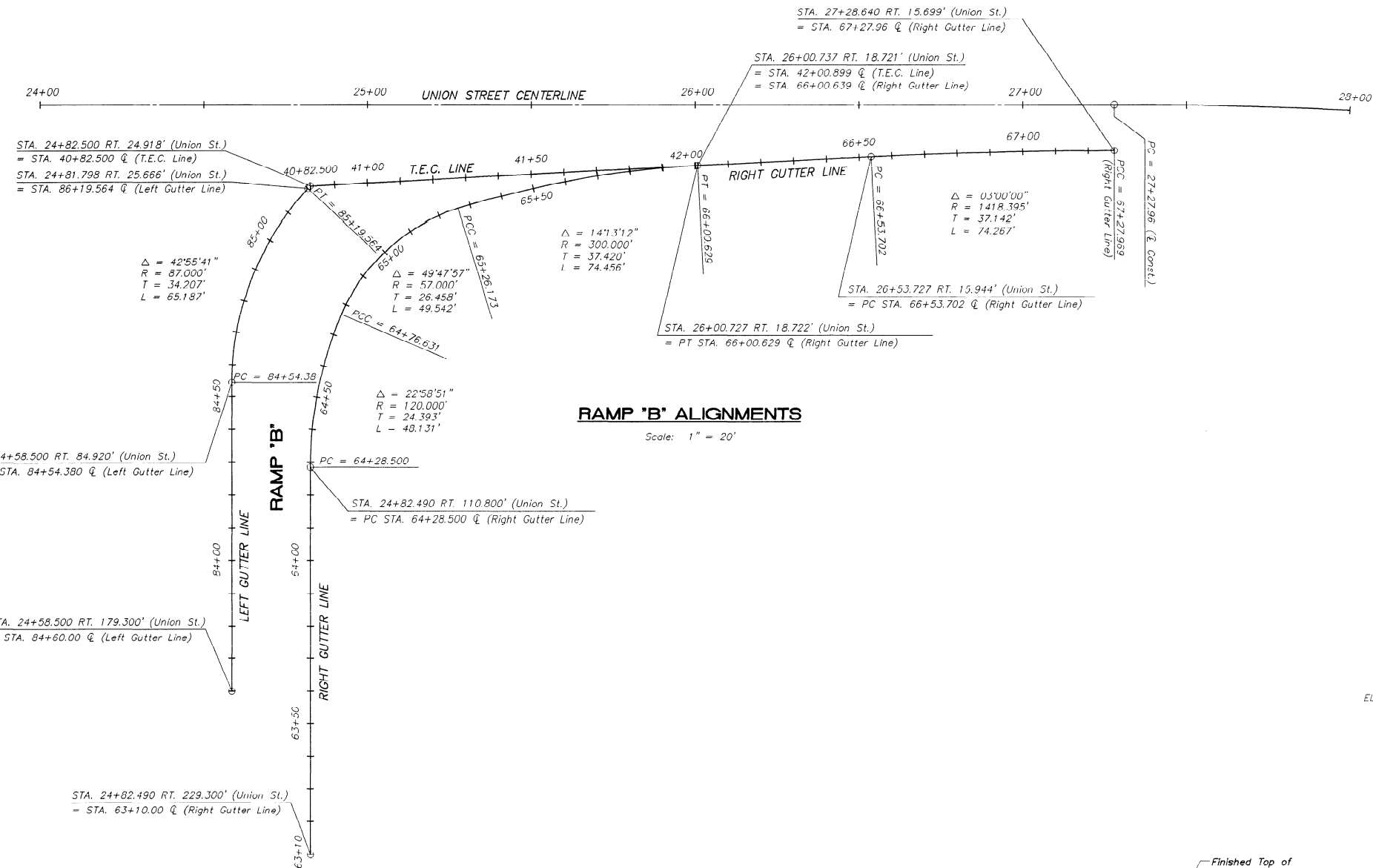
1085JC94 / 1-1SHEET 26 OFAUGUSTA, MAINE

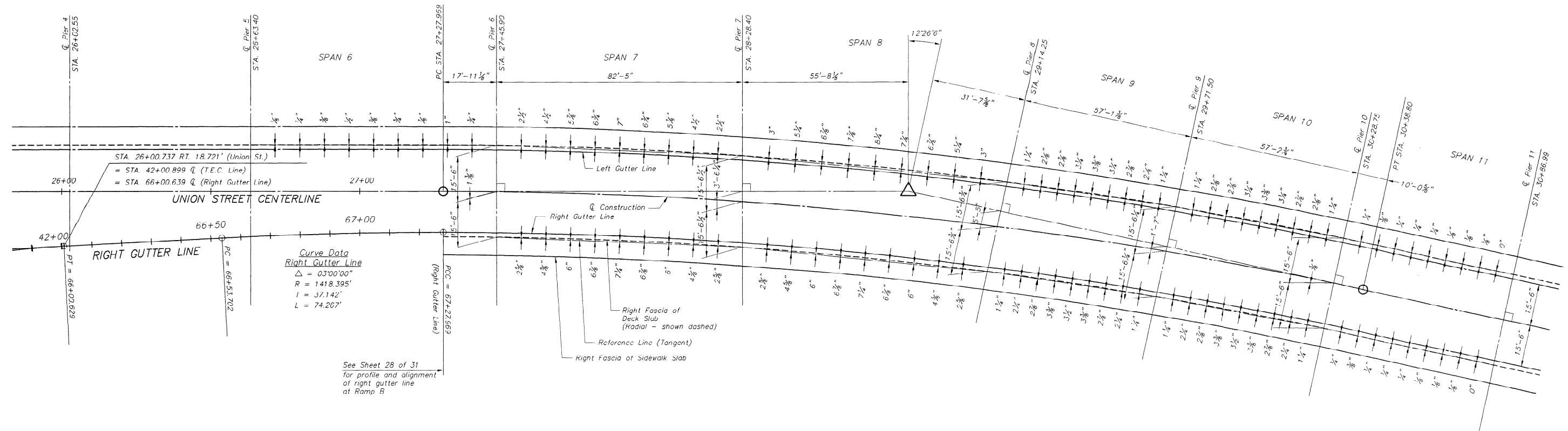


- ## NOTES

As Built 1998
B

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
UNION STREET APPROACH AND RAMP 'B' APPROACH

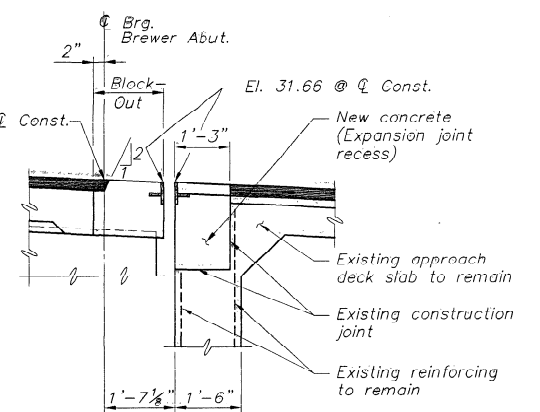
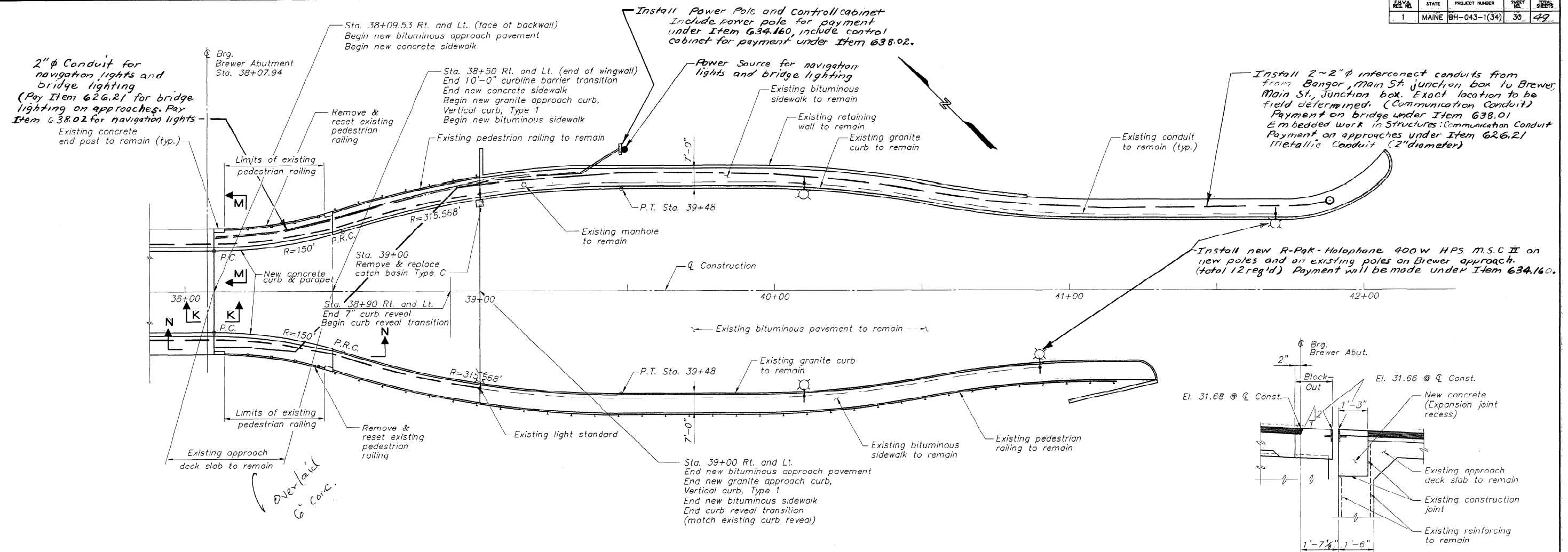




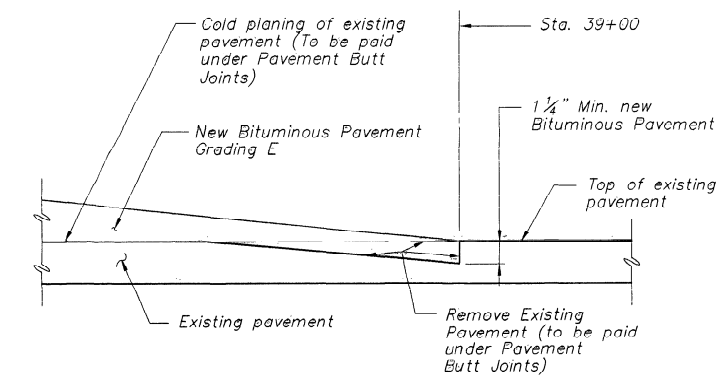
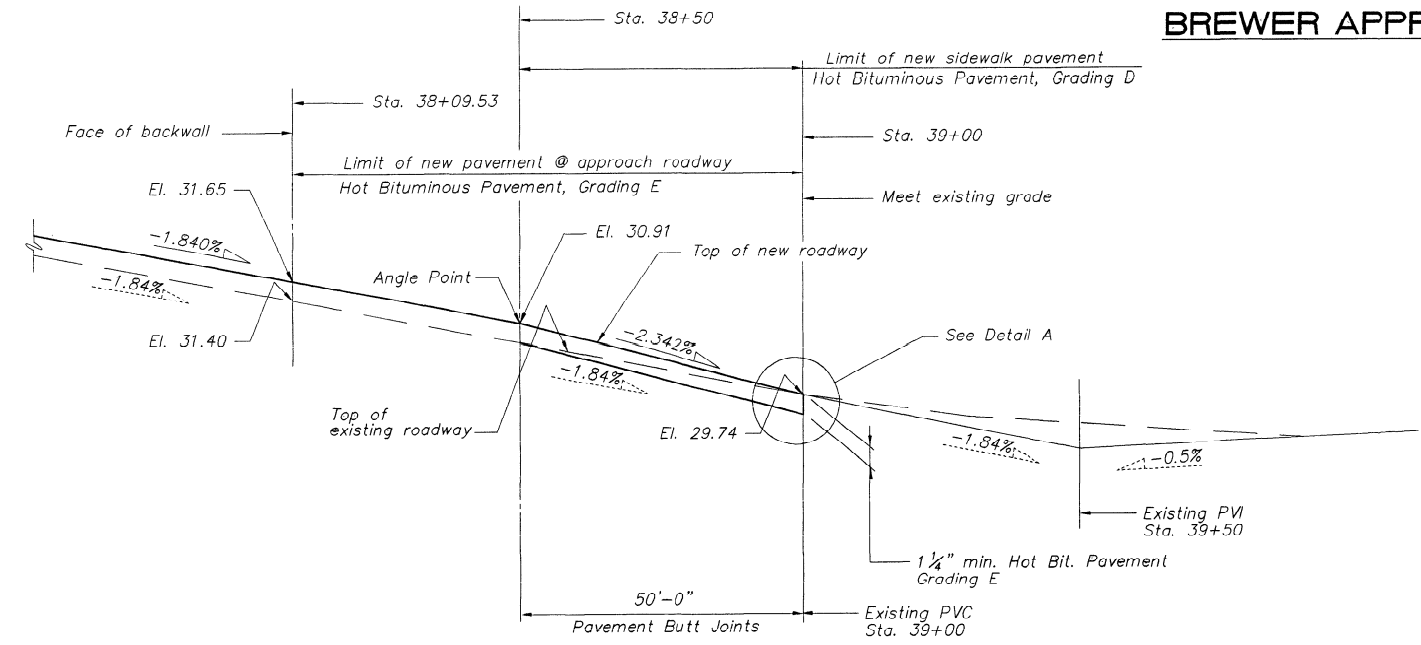
DECK FASCIA OFFSETS IN CURVE

Scale: $\frac{1}{8}'' = 1'-0''$

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
FASCIA OFFSETS IN CURVE



BREWER APPROACH



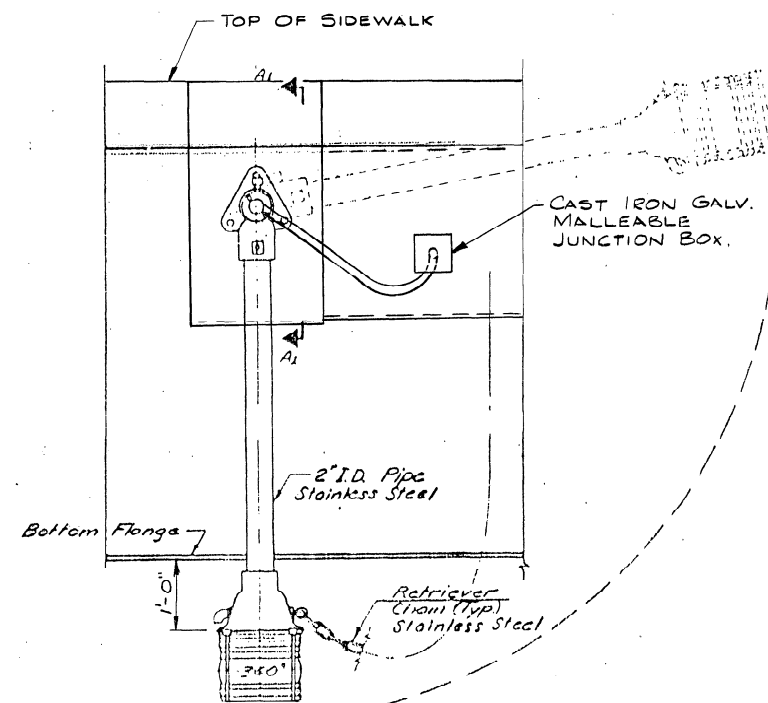
NOTE:
1. Section M-M & Section N-N
- See Sheet 31

As Built
1998

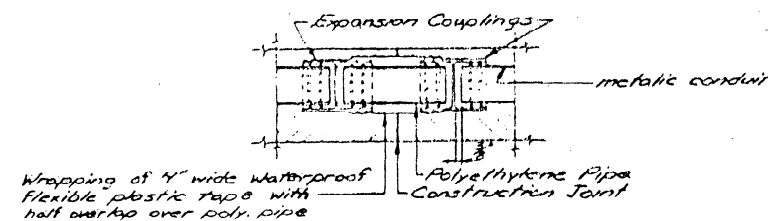
APPROACH ROADWAY PROFILE • Q CONSTRUCTION

DETAIL A

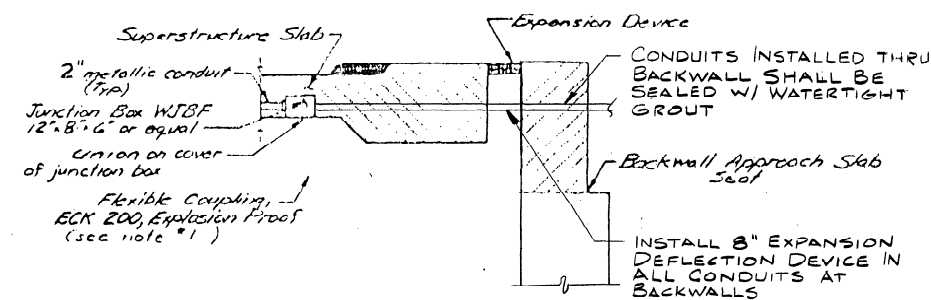
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE U.S. Route 1A over the Penobscot River
BANGOR/BREWER Penobscot County
BREWER APPROACH



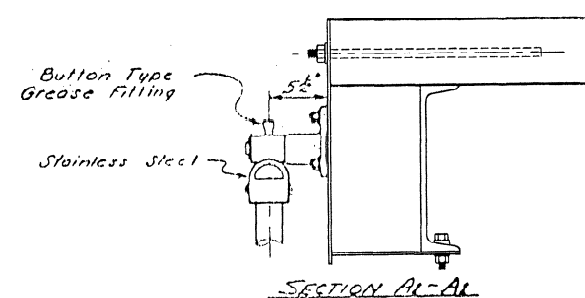
NAVIGATION LIGHT DETAIL
(Required 4 Red @ 180° & 2 Green @ 360°)



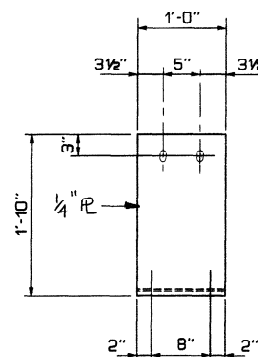
Expansion Device for Non-Metallic conduit
At Construction Joints



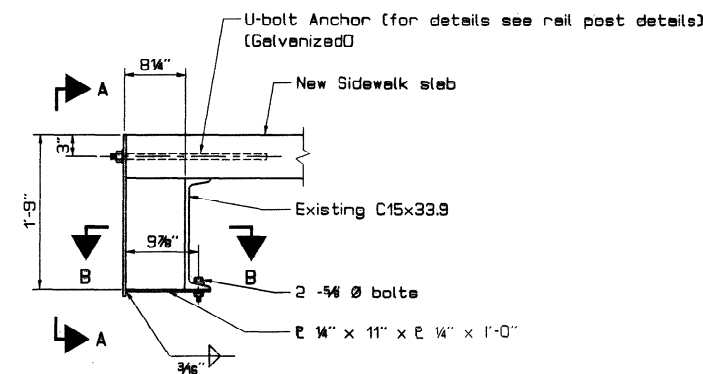
Conduit System At Abutments



NOTE
1. Navigation lighting conduit shall be derived separately and metered from the Brewer end

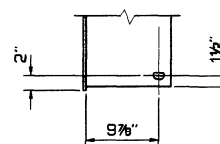


View A-A

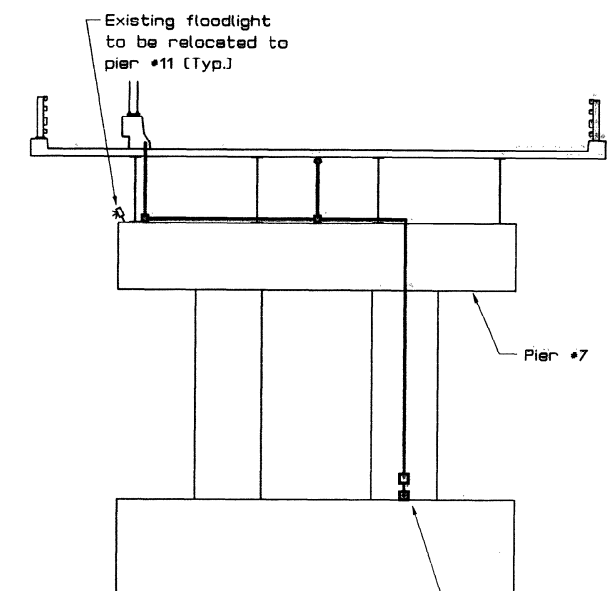


Note:
Field verify channel size and location before fabrication.

Navigation Light Support Bracket



Section B-B



Install 2" galv. steel conduit from wood pole on Front St. to pier #7 to a meter and street light control cabinet. Conduit to extend up to underbridge lighting and street lighting on bridge deck on the Bangor side.

NOTES:

1. Use non-metallic conduit at all finger joints. Use rigid conduit everywhere else.
2. Identify all conduits where exposed at origin. ReNavigation lights, Bridge lights.
3. Revise existing poles on Brewer approach. Rewire to electrical service for new bridge lighting and install new luminaires (400w RPAK Holophane or equal).
4. Use #2 THWP copper conductors to all lighting, 4 conductors required.
5. The existing floodlight to be removed from Bridge lighting and will be re-installed at pier #11. The light will remain in service during construction. Relocating the light, including temporary feed, will be included for payment under Item 638.01 Embedded Work In Structures/Underbridge Lighting

PROJECT NUMBER	DATE
DESIGN-DETAILED	3/97
CHECKED	KWA
REVISIONS	
FIELD CHANGES	

PLANS

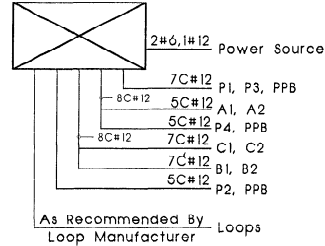
290CT96-0100.30

NAVIGATION LIGHTING

GENERAL NOTES:

- The Contractor shall meet all requirements of the utility companies when installing equipment on their poles. The Contractor shall be responsible for contacting the utility companies to determine their requirements.
- The Electrical Contractor shall make the necessary connections for a #6 AWG bonding wire to an existing utility's vertical ground wire. If this vertical ground wire does not exist the contractor shall leave enough bonding wire to reach the system neutral. The local utility should be notified when the bonding wire is ready to be connected. The utility will make that connection.
- The locations of all equipment shown are approximate. Final locations shall be determined in the field by the Resident Engineer.
- If a steel cabinet is used it shall be 14 guage steel.
- The new controller shall be a N.E.M.A. standard solid state menu-driven unit capable of providing the phasing shown. It shall have an internal time clock/calendar for flash and max II operations. The controller shall also be capable of volume density operation on all phases and shall have a programmable lead/lag function.
- Any signal equipment removed is the property of the State of Maine and shall be returned to the State as directed by the Engineer.
- The cost of pole risers shall be incidental to the cost of Item No. 643.80.
- The cost of lane use and signal ahead signs shall be incidental to Item No. 643.80.

FIELD WIRING DIAGRAM

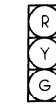


METRIC

- All dimensions are in millimeters unless otherwise noted.
- All elevations and stations are in meters.

F.I.L.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	RH-043(34)	33	49

INDICATIONS



All
Indications



Peds

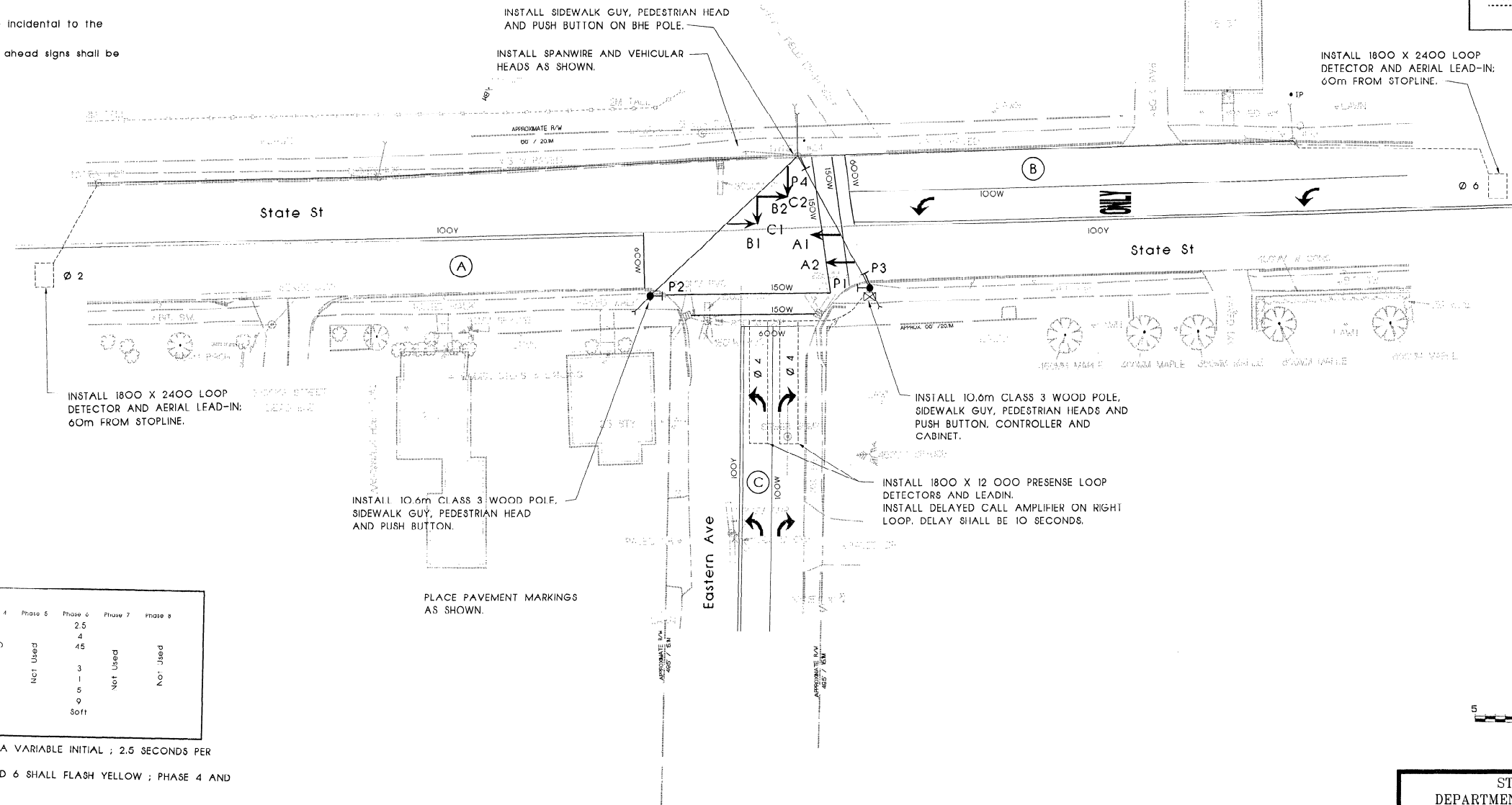
ALL INDICATIONS SHALL BE 300mm.
ALL INDICATIONS SHALL HAVE LED LENSES.

KEY TO PAVEMENT MARKINGS

100 Y	100 mm DOUBLE YELLOW CENTER LINE
100 W	100 mm WHITE LANE LINE
150 W	150 mm WHITE CROSS WALK LINE
600 W	600 mm WHITE STOP LINE
	WHITE LEFT OR RIGHT ARROW
	WHITE THRU ARROW
	WHITE "ONLY" MESSAGE

LEGEND

	controller with cabinet
	wood pole
	guy wire
	vehicular head
	ped head
	loop detector conduit

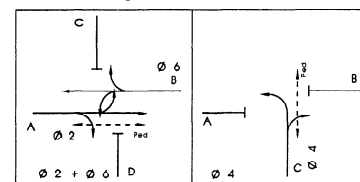


SIGNAL TIMING

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green		2.5		3		2.5		
Extension		4		3		4		
Max I		45		30		45		
Max II								
Veh. Clear		3		3		3		
Red Clear	Not Used	1	Not Used	1	Not Used	1	Not Used	Not Used
Walk		5		5		5		
Red Clear		9		7		9		
Recall		Soft				Soft		

NOTE - PHASE 2 AND 6 SHALL HAVE A VARIABLE INITIAL ; 2.5 SECONDS PER ACTUATION, 20 SECONDS MAXIMUM.
DURING FLASH OPERATION PHASE 2 AND 6 SHALL FLASH YELLOW ; PHASE 4 AND 8 SHALL FLASH RED.

Phase Diagram



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Traffic Signals
State St and Eastern Ave
BREWER

SHEET OF AUGUSTA, MAINE PIN 0047.00

BANGOR - BREWER

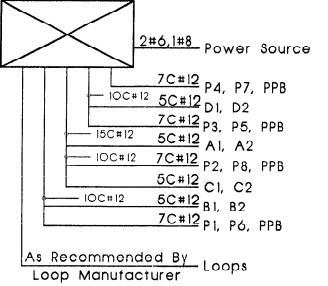
PROJECT DESIGN ENGINEER	DATE
BY	2-97
RL	
DESIGN-DETAILED	
CHECKED	
REVISED	
FIELD CHANGES	

14NOV96-0100.30

GENERAL NOTES:

- The Contractor shall meet all requirements of the utility companies when installing equipment on their poles. The Contractor shall be responsible for contacting the utility companies to determine their requirements.
- The Electrical Contractor shall make the necessary connections for a #6 AWG bonding wire to an existing utility's vertical ground wire. If this vertical ground wire does not exist the contractor shall leave enough bonding wire to reach the system neutral. The local utility should be notified when the bonding wire is ready to be connected. The utility will make that connection.
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- The cost of pole risers shall be incidental to the cost of Item No. 643.80.
- The cost of lane use and signal ahead signs shall be incidental to Item No. 643.80.

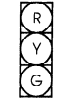
FIELD WIRING DIAGRAM



METRIC

- All dimensions are in millimeters unless otherwise noted.
- All elevations and stations are in meters.

INDICATIONS



All Indications



Peds

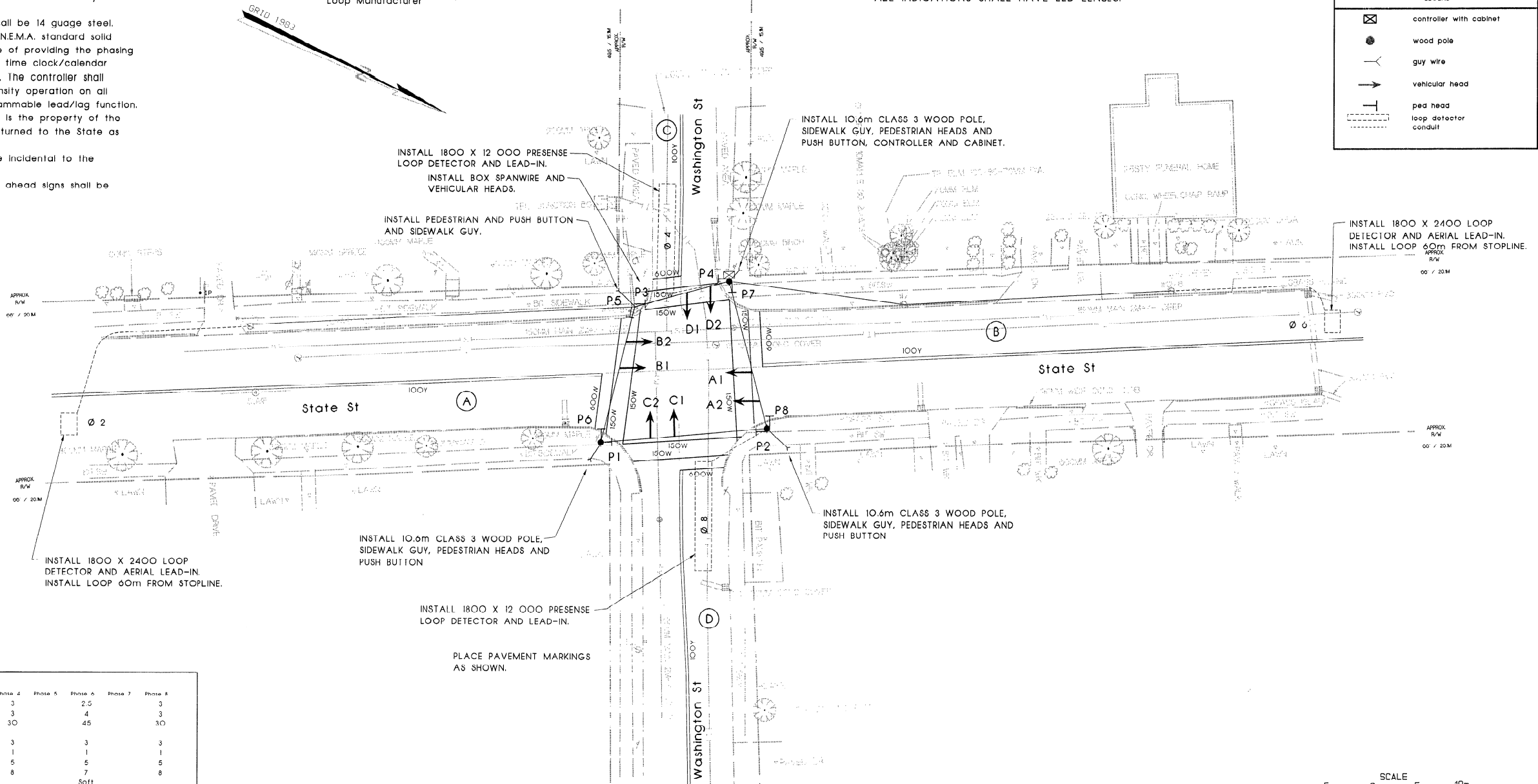
ALL INDICATIONS SHALL BE 300mm.
ALL INDICATIONS SHALL HAVE LED LENSES.

KEY TO PAVEMENT MARKINGS

100 V	100 mm DOUBLE YELLOW CENTER LINE
100 W	100 mm WHITE LANE LINE
150 W	150 mm WHITE CROSS WALK LINE
600 W	600 mm WHITE STOP LINE
WHITE LEFT OR RIGHT ARROW	
WHITE THRU ARROW	
WHITE "ONLY" MESSAGE	

LEGEND

	controller with cabinet
	wood pole
	guy wire
	vehicular head
	ped head
	loop detector conduit

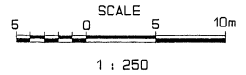
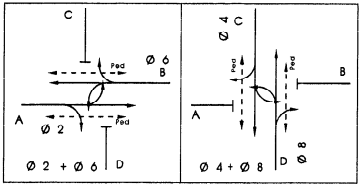


SIGNAL TIMING

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Min Green	2.5	3	3	3	2.5	3	3	3
Extension	4	3	4	3	4	3	4	3
Max I	45	30	45	30	45	30	45	30
Max II								
Veh Clear	3	3	3	3	3	3	3	3
Red Clear	1	1	1	1	1	1	1	1
Walk	5	5	5	5	5	5	5	5
Ped Clear	7	8	7	8	7	8	7	8
Recall	Soft		Soft		Soft		Soft	

NOTE - PHASE 2 AND 6 SHALL HAVE A VARIABLE INITIAL ; 2.5 SECONDS PER ACTUATION. 20 SECONDS MAXIMUM.
DURING FLASH OPERATION PHASE 2 AND 6 SHALL FLASH YELLOW ; PHASE 4 AND 8 SHALL FLASH RED.

Phase Diagram

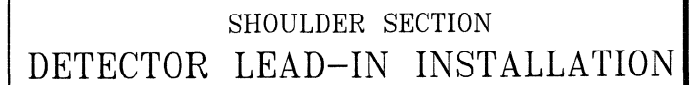


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Traffic Signals
State St and Washington St
BREWER

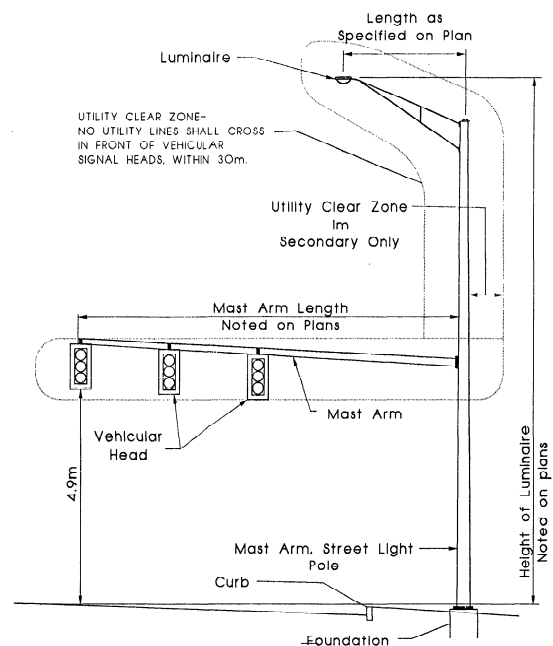
PROJECT DESIGNER	DATE
BY	2-97
RL	
DESIGN-DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

14NOV96-0100.30

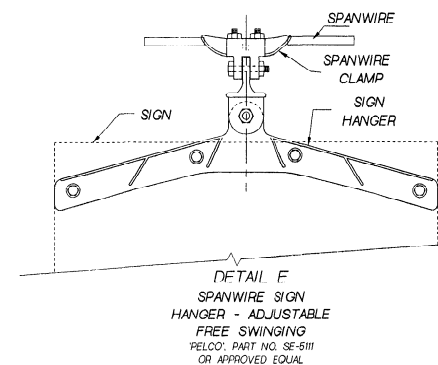
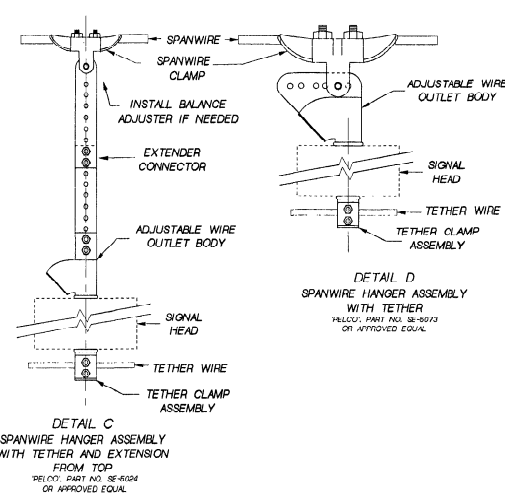


GENERAL NOTES

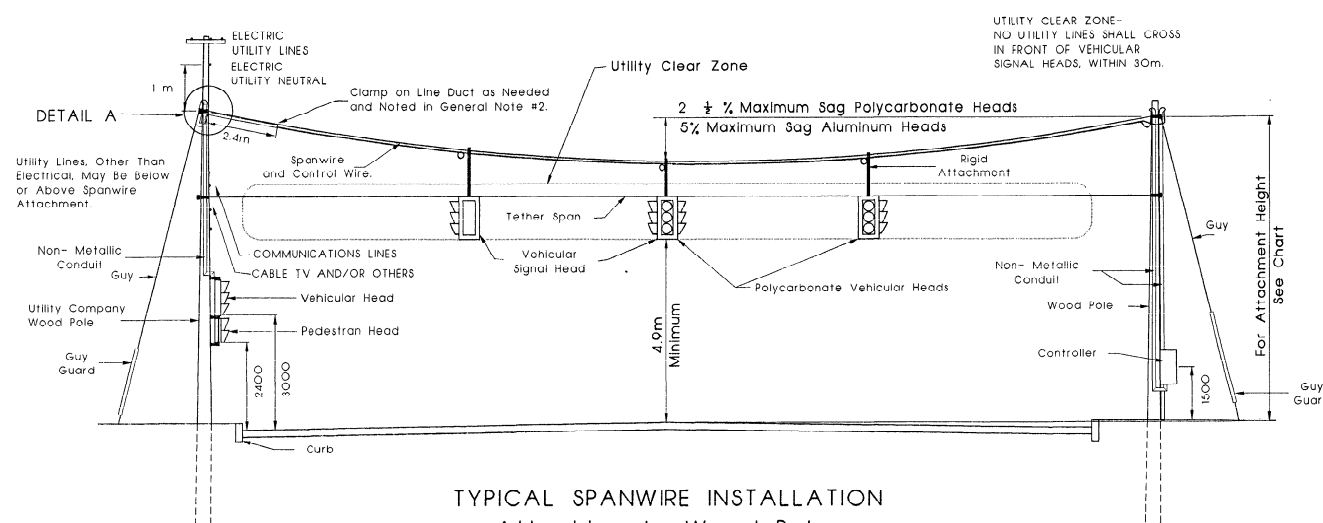
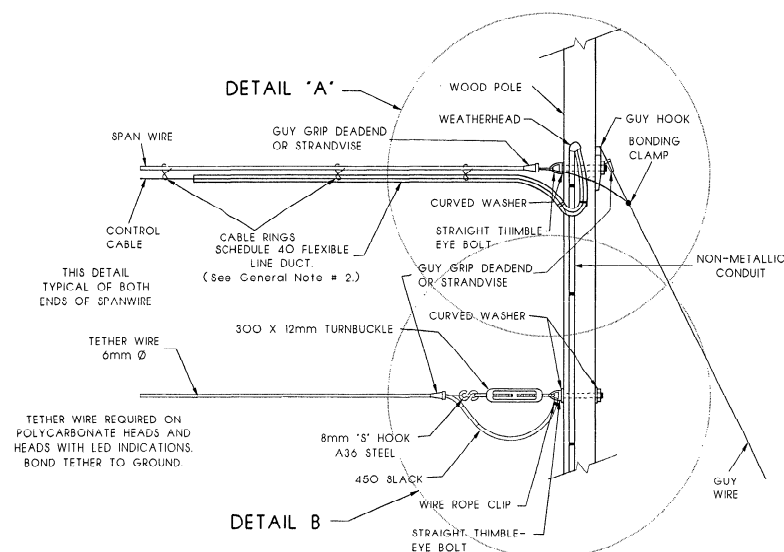
1. HEIGHT OF SPANWIRE ATTACHMENT IS SHOWN ON CHART AT RIGHT. WHEN ATTACHING TO UTILITY CO. OWNED POLES THE CONTRACTOR SHALL CHECK WITH RESPECTIVE UTILITY COMPANIES TO DETERMINE IF ALL ADJUSTMENTS HAVE BEEN MADE.
2. WHEN UTILITY POLE CLEARANCES CANNOT BE MET, THE SIGNAL SPANWIRE SHALL BE PROTECTED BY FLEXIBLE SCHEDULE 40 LINE DUCT.
3. THE UTILITY COMPANIES SHALL BE RESPONSIBLE FOR AVOIDING THE TRAFFIC SIGNAL CLEAR ZONE AS SHOWN BELOW. AT THE PRE-CONSTRUCTION UTILITY MEETING CONFLICTS, IF ANY, WILL BE RESOLVED.
4. CONDUITS INSTALLED ON UTILITY COMPANY OWNED POLES WILL BE INSTALLED BY THE RESPECTIVE UTILITY. THE CONDUIT WILL BE PROVIDED BY THE SIGNAL CONTRACTOR.
5. UTILITIES WILL BE NO LOWER THAN 5.8m AT MID SPAN.
6. THE LOCATION OF ALL SIGNAL EQUIPMENT AND RELATED ITEMS SHALL BE IN CONFORMITY WITH 'AMERICANS WITH DISABILITIES ACT' (ADA) ACCESSIBILITY STANDARDS. USE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT BE OBSTRUCTED.



TYPICAL MAST ARM, STREET LIGHT
INSTALLATION



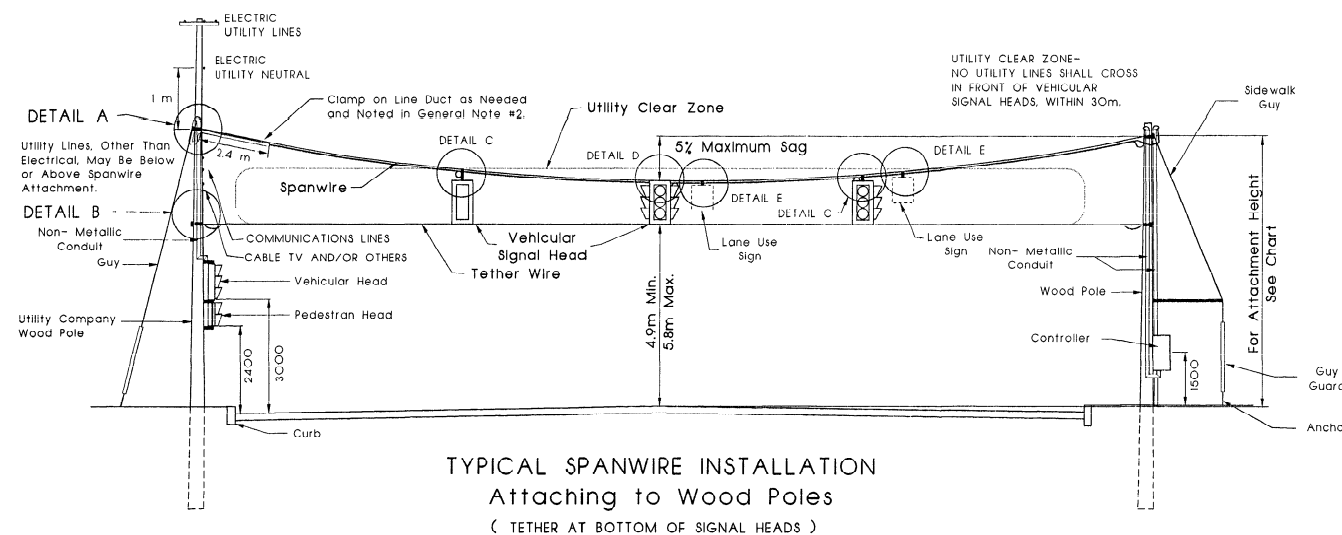
HORIZONTAL SPAN WIDTH	HEIGHT OF SPANWIRE ATTACHMENT- $5\frac{1}{2}$ sag Aluminum Heads	HEIGHT OF TOP ATTACHMENT- $2\frac{1}{2}$ $\frac{1}{4}$ sag Polycarbonate Heads
Up to 11.6m	6.70m	7.11m
12.2m	6.86m	7.16m
13.7m	6.93m	
15.2m	7.01m	7.24m
16.8m	7.08m	
18.3m	7.17m	7.31m
19.8m	7.24m	
21.3m	7.31m	7.39m
22.9m	7.39m	
24.4m	7.47m	7.46m
26.0m	7.54m	
27.4m	7.62m	7.54m
29.0m	7.69m	
30.5m	7.77m	7.62m
32.0m	7.84m	
33.5m	7.92m	7.69m
35.0m	8.00m	
36.5m	8.07m	7.77m
38.0m	8.15m	
39.6m	8.23m	7.85m
41.0m	8.31m	
42.7m	8.38m	7.92m
44.2m	8.45m	
45.7m	8.53m	8.00m
47.2m	8.61m	
48.7m	8.68m	8.08m
50.0m	8.86m	



TYPICAL SPANWIRE INSTALLATION

Attaching to Wood Poles

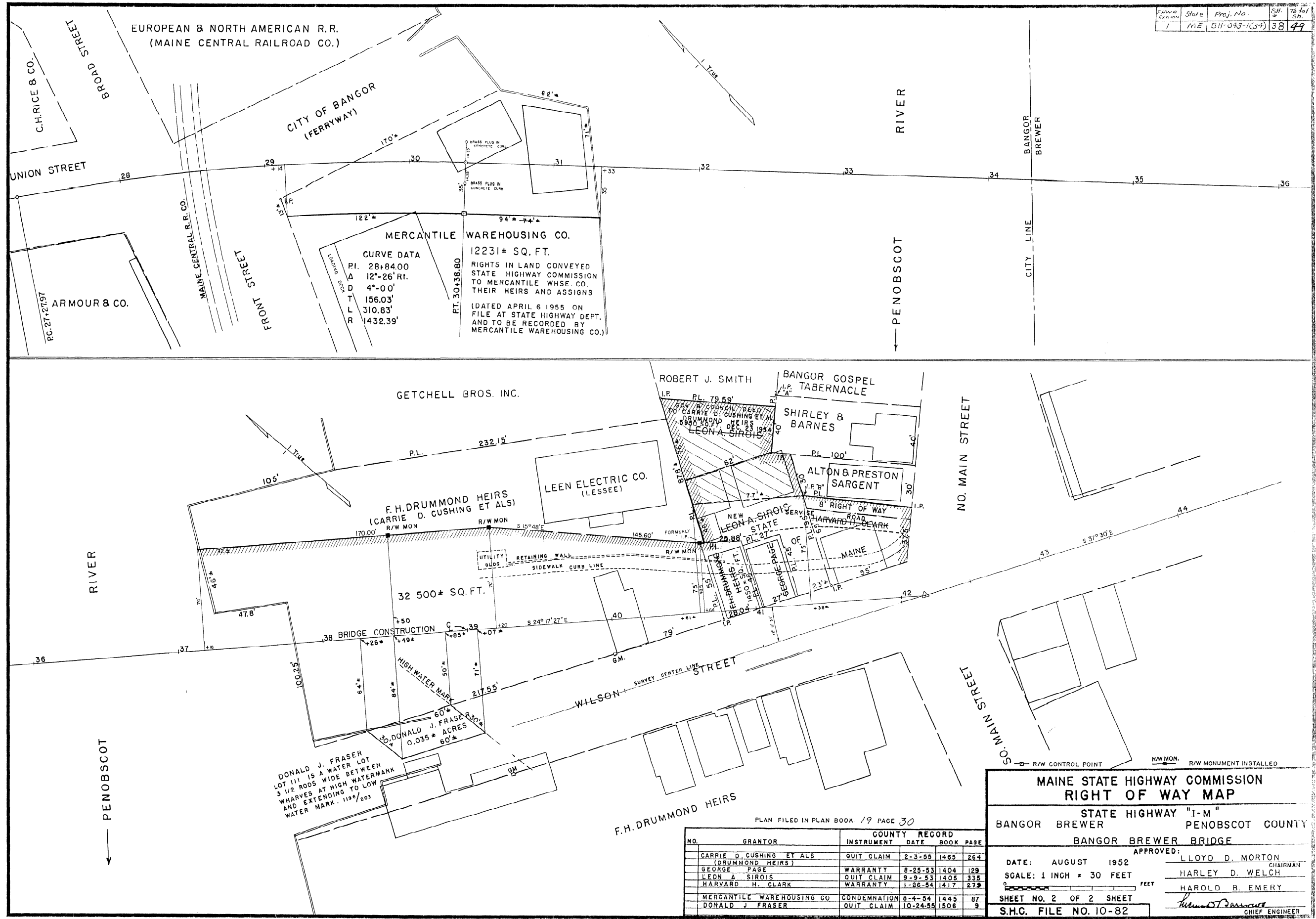
(TETHER AT TOP OF SIGNAL HEADS)



TYPICAL SPANWIRE INSTALLATION

Attaching to Wood Poles
(TETHER AT BOTTOM OF SIGNAL HEADS)

[illegible]



NO.	GRANTOR	COUNTY	RECORD	INSTRUMENT	DATE	BOOK	PAGE
	CARRIE D. CUSHING ET ALS		QUIT CLAIM	2-3-55	1465	264	
	GEORGE PAGE		WARRANTY	8-25-53	1404	129	
	LEON A. SIROIS		QUIT CLAIM	9-9-53	1405	335	
	HARVARD H. CLARK		WARRANTY	1-26-54	1417	272	
	MERCANTILE WAREHOUSING CO.		CONDEMNATION	8-4-54	1445	87	
	DONALD J. FRASER		QUIT CLAIM	10-24-55	1506	9	

MAINE STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP
 STATE HIGHWAY "I-M"
 BANGOR BREWER PENOBSCOT COUNTY
 BANGOR BREWER BRIDGE

APPROVED: **LLOYD D. MORTON** CHAIRMAN
HARLEY D. WELCH
HAROLD B. EMERY
CHIEF ENGINEER

DATE: AUGUST 1952
 SCALE: 1 INCH = 30 FEET
 SHEET NO. 2 OF 2 SHEET
 S.H.C. FILE NO. 10-82

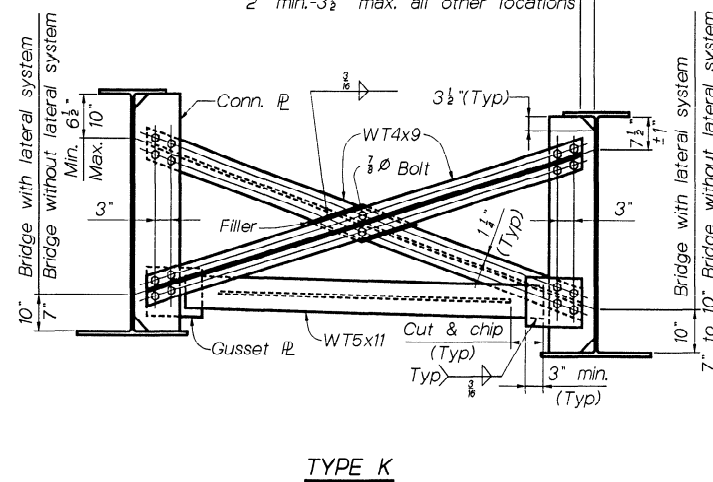
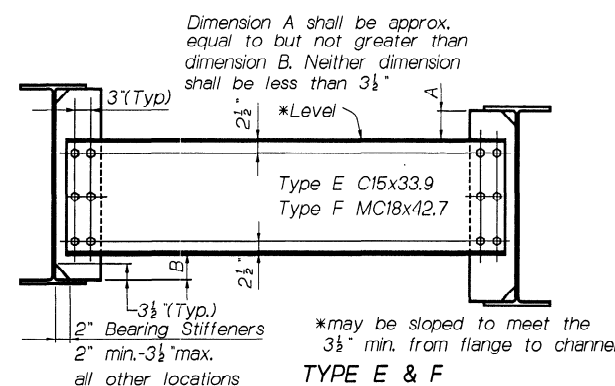
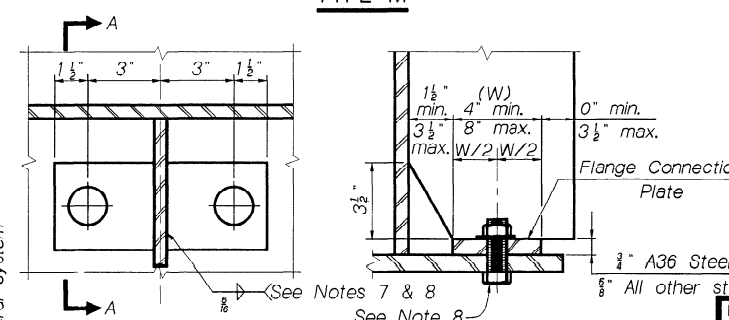
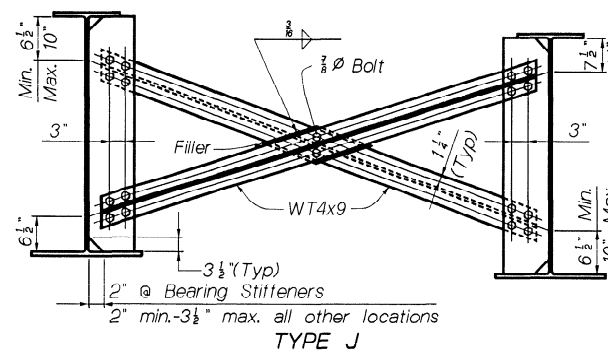
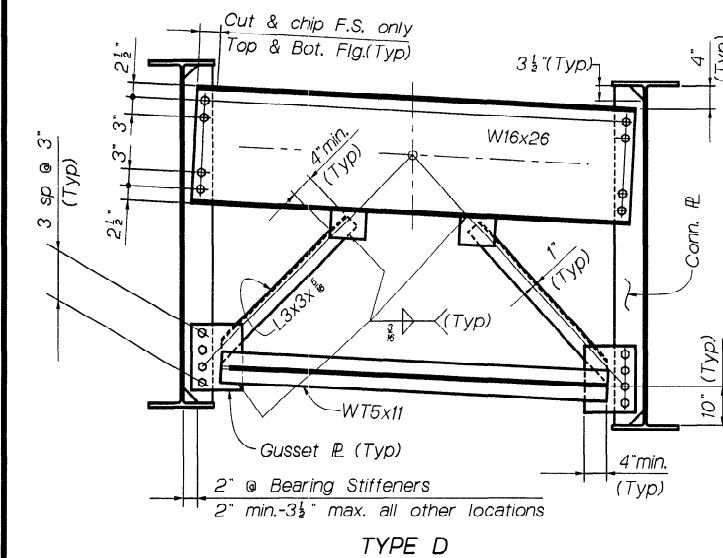
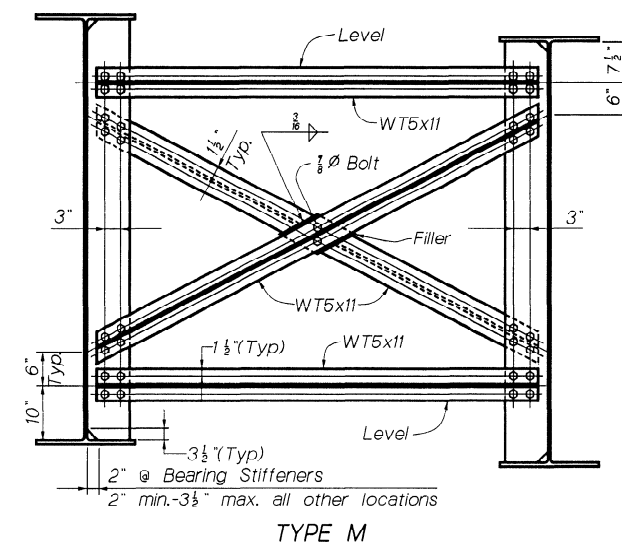
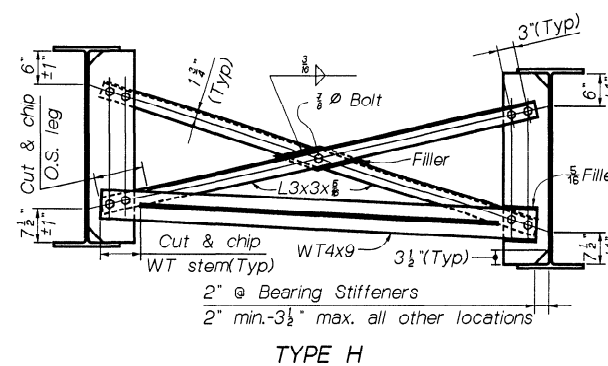
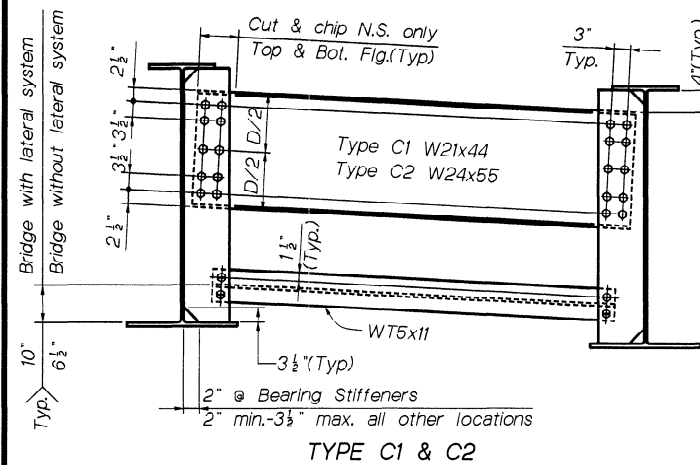
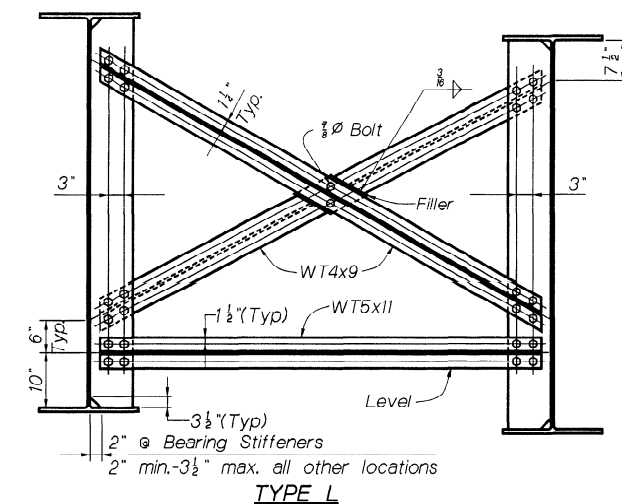
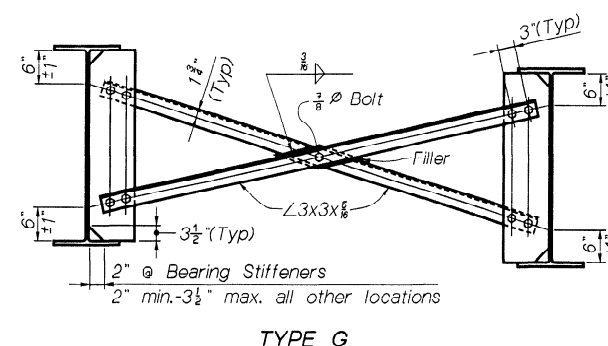
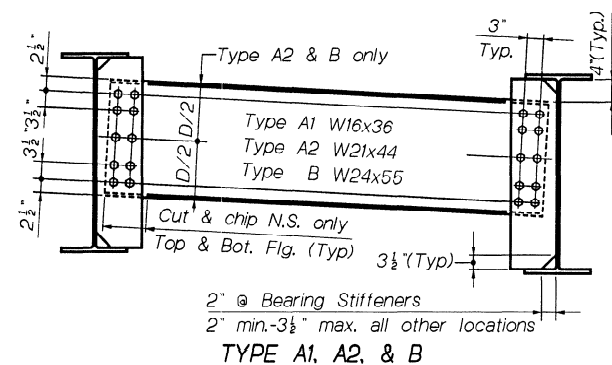
FABRICATION NOTES

- 1.....All bolts shall be $\frac{7}{8}$ " dia. H.S. Bolts. Hole sizes for bolts shall conform to Section 504.23 of the Standard Specifications, 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 clearance. Connection plates shall have a minimum width of 7". For all stiffeners and bent connection plates, the plate thickness will be given on the design drawings.
- 3.....Depending on the skew angle, stiffeners and connection plates shall be welded to the web plates with either fillet welds or a single bevel groove weld. Fillet welds shall be the minimum size specified by the AWS Structural Welding Code D15, table 2.2 unless otherwise shown on the design drawings. Fit-up shall meet the requirements of AWS D15, Art. 3.3, Assembly.
- 4.....All stiffeners and connection plates shall extend to both the top and bottom flanges and shall be welded to the flanges with a fillet weld on both sides of the plate, except as indicated by note 5 and/or 6. Fillet weld size shall be as specified under note 3.
- 5.....Connection plates and stiffeners used as connection plates shall be connected to flanges in tension and stress reversal areas with the "Tension-Flange Connection" detail. All other stiffeners shall fit within $\frac{1}{8}$ " (tight fit) at flanges in tension and stress reversal areas and shall not be welded.
- 6.....Bearing stiffeners shall be machined to have full bearing, and shall have a fillet weld on each side.
- 7.....All fillet welds which connect stiffeners or connection plates to either a flange or web plate, shall be started and stopped approximately $\frac{1}{2}$ inch from the ends or edges of the plate.
- 8.....Bolt tension-flange connection plate to flange before welding stiffener or diaphragm connection plate to it.
- 9.....All dimensions shown as " ± 1 " are variable in order to allow a series of crossframes to have the same slopes and/or dimensions.
- 10.....For unpainted applications all steel for diaphragms and crossframes shall be A.S.T.M.-A588. 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.
- 11.....Use only those items called for on the design drawings.

NOTE: Use only those items called for on the design drawings.

GENERAL NOTE:
In case of conflict between these Standard Details and the Design Drawings, the requirements of the Design Drawings shall be followed.

REVISIONS		APPROVED		STATE OF MAINE DEPARTMENT OF TRANSPORTATION
Description		MeDOT	FWHA	
Original Plan		JULY, 1993		<p>STANDARD DETAILS</p> <p>BD 112 - 93</p> <p>DIAPHRAGMS & CROSSFRAMES</p>



PLAN SECTION A-A

TENSION-FLANGE CONNECTION

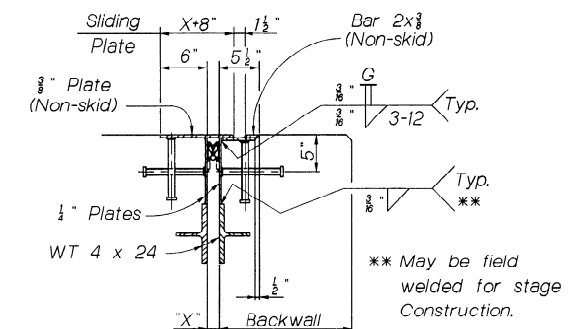
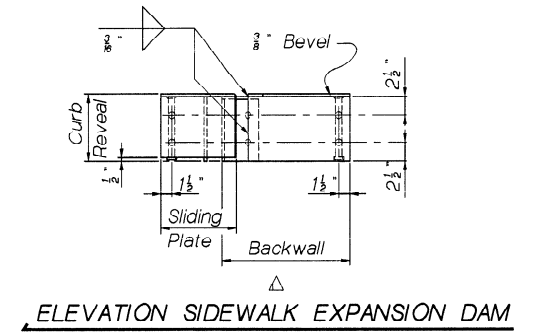
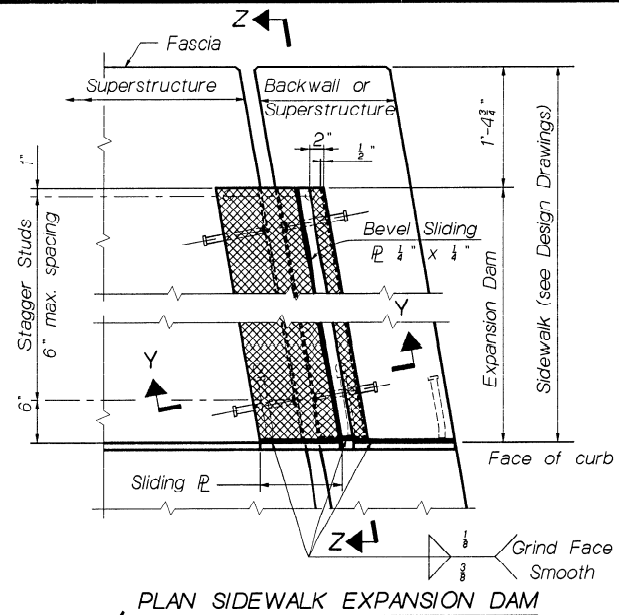
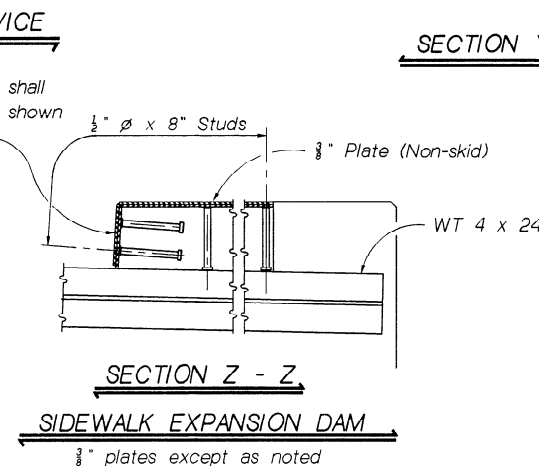
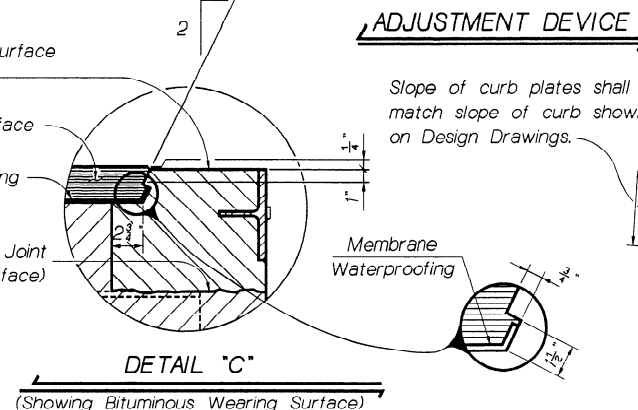
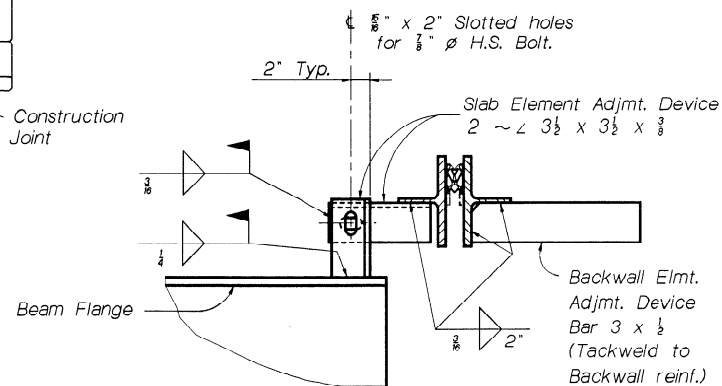
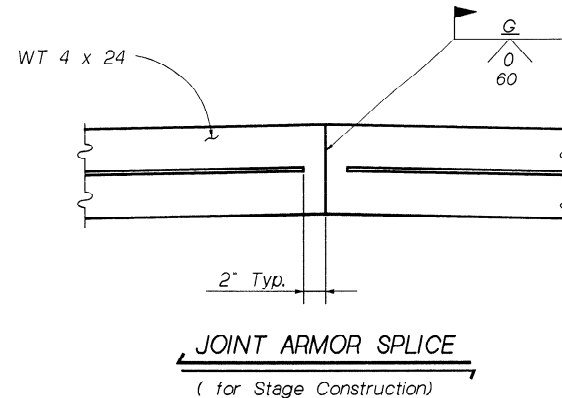
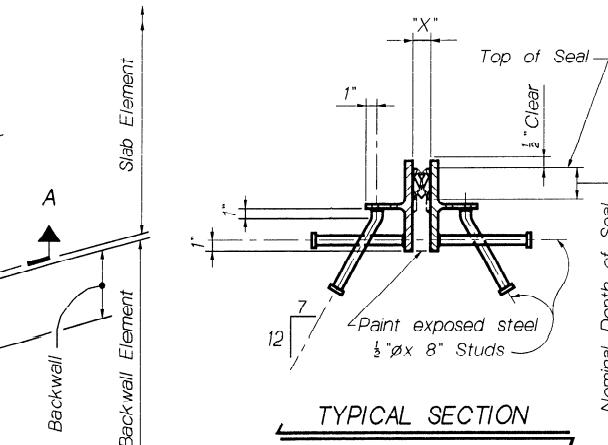
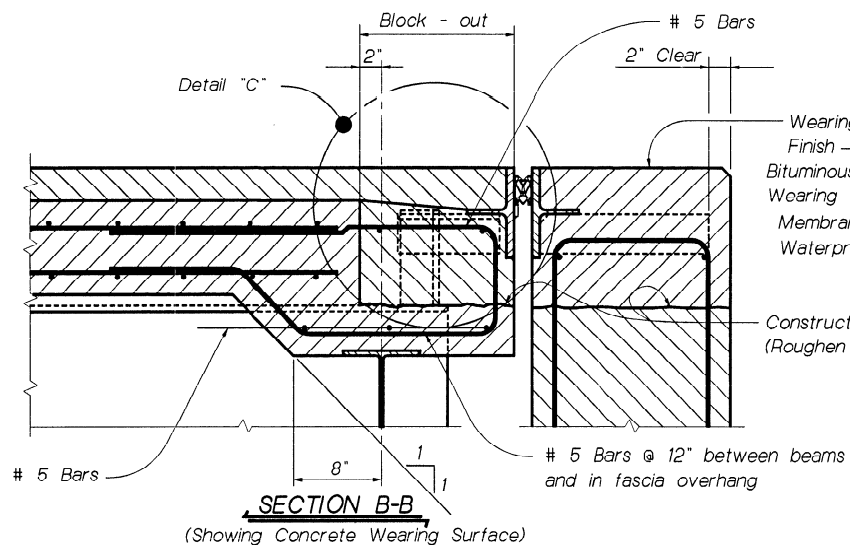
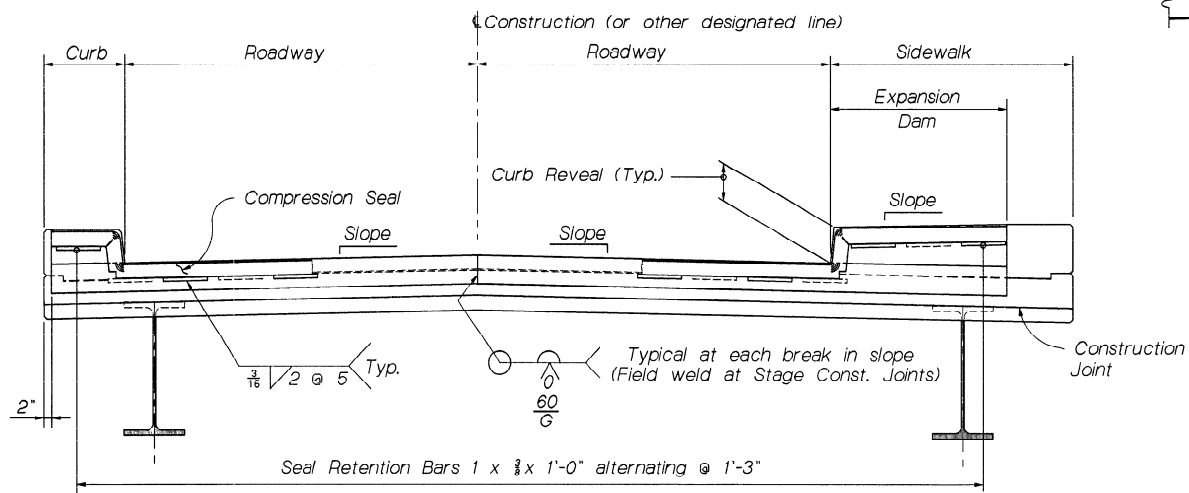
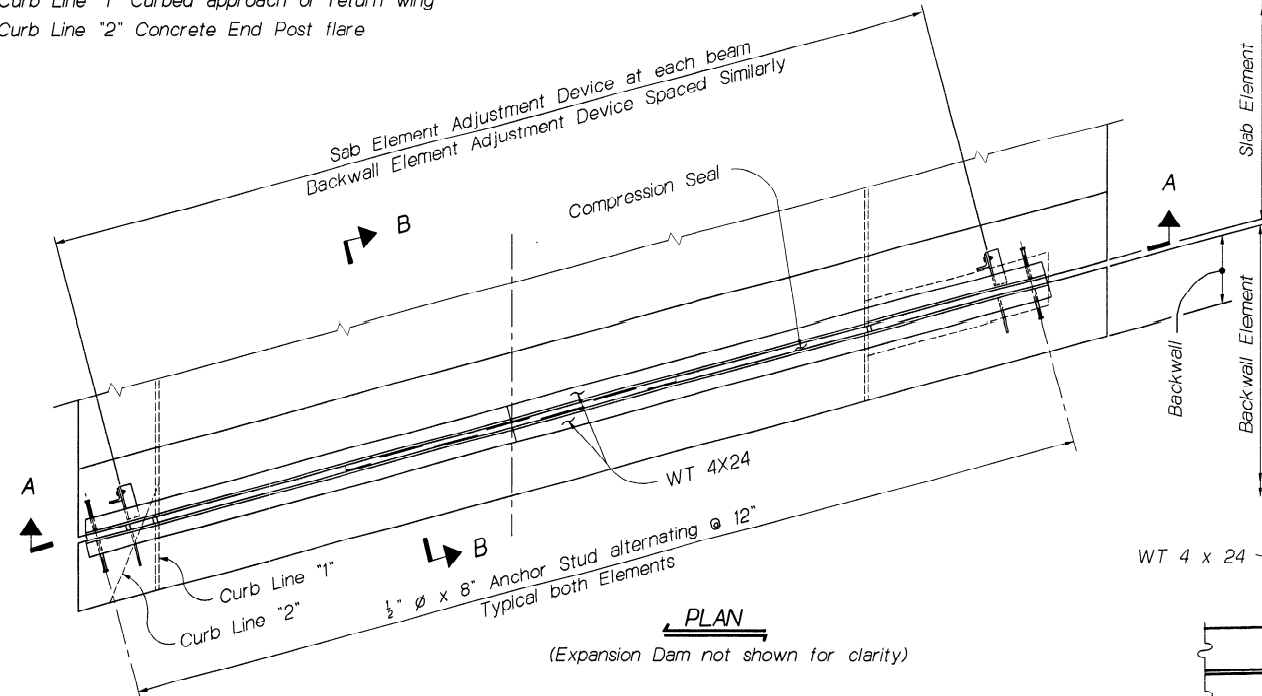
PROJECT DESIGN ENGINEER	DATE
DESIGN-DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

NOTES

- Each "Expansion Device" consists of one pair of matching Slab and Backwall Elements and Expansion Dams as required. At expansion joints over piers, two Slab Elements shall be used.
- Refer to Design Drawings for all dimensions, slopes, skew, and other information necessary to fabricate and install each individual "Expansion Device".
- "Expansion Devices" shall be installed normal to grade.
- Dimension "X" at 45°F shall be determined as follows:
 $(0.85 \times \text{nom. seal width}) - \frac{1}{2} \text{MR} *$
 Dimension "X" and the make and type of seal to be provided shall be shown on the Shop Detail Drawings.
- Final adjustment for temperature shall be made in the field according to the "Compression Seal Adjustment Chart" shown on the Design Drawings. Adjustment shall be measured parallel to the centerline of construction.
- Welding to reinforcing steel will be allowed in the top of the abutment backwall above the construction joint.
- The slab and backwall concrete shall be in place before the "Expansion Device" is fixed in position. No allowance for movement due to dead load deflection is necessary.
- The concrete in the slab block-out may be placed with the curb / sidewalk concrete. An approved epoxy bonding agent shall be applied to all vertical surfaces of the block-out before making the final concrete placement.

* MR (Movement Rating) of seal shall be as determined by MDOT for the make and type of seal provided.

Curb Line "1" Curbed approach or return wing
Curb Line "2" Concrete End Post flare



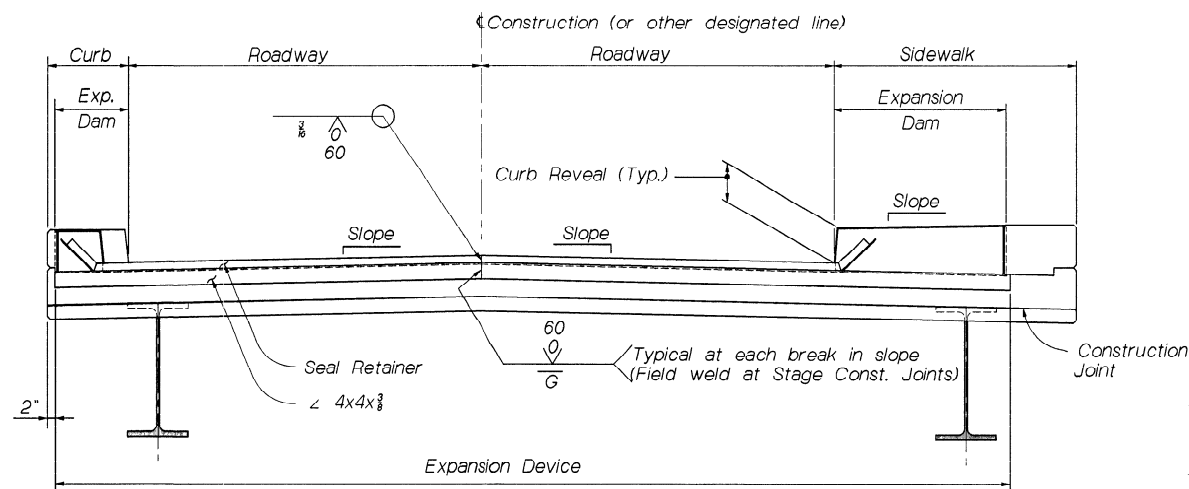
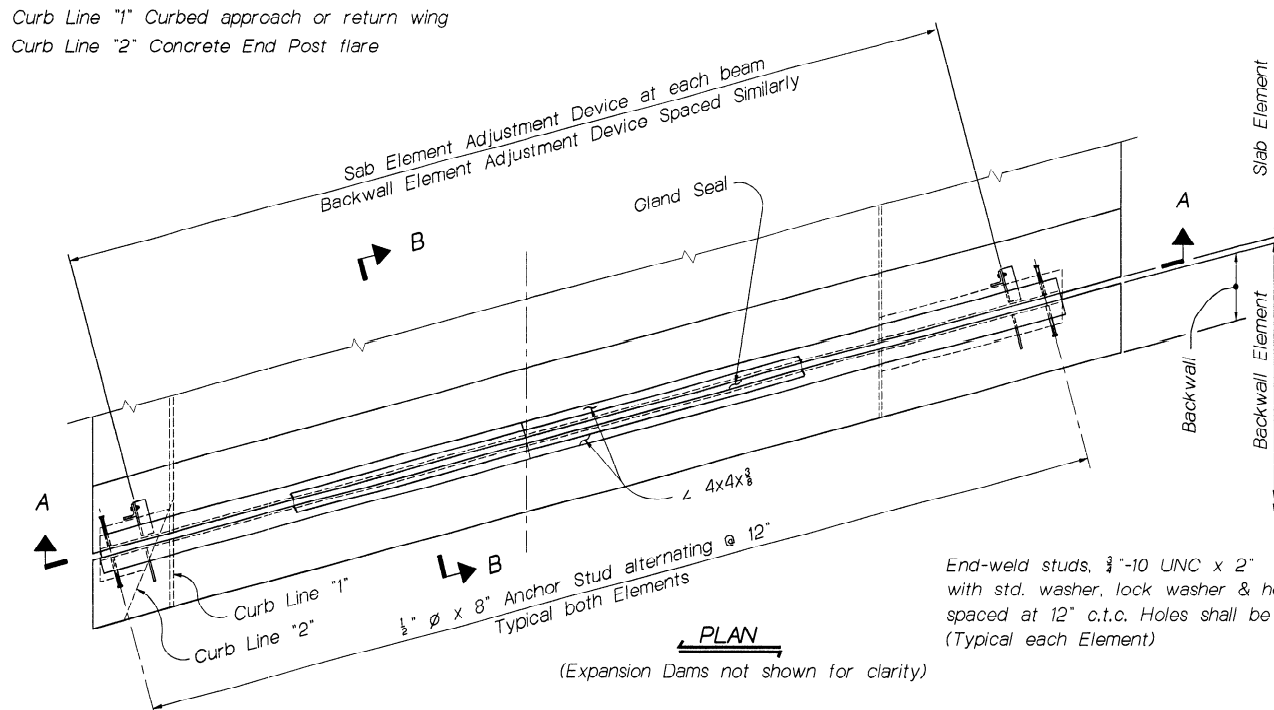
GENERAL NOTE:
In case of conflict between these Standard Details and the Design Drawings, the requirements of the Design Drawings shall be followed.

REVISIONS		APPROVED		STATE OF MAINE	
Description		MoDOT	FHWA	DEPARTMENT OF TRANSPORTATION	
Original Plan		JULY, 1993		STANDARD DETAILS BD 301 - 93	
				EXPANSION DEVICE COMPRESSION SEAL	
				SHEET OF AUGUSTA, MAINE July 1993	

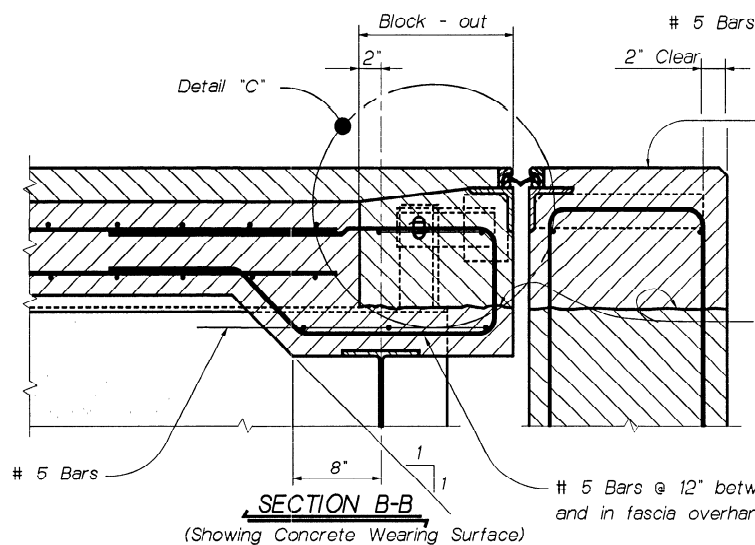
PROJECT DESIGN ENGINEER	DATE
BY BUS	7/93
DESIGN-DETAILED	
CHECKED	
REVISIONS	
FIELD CHANGES	

230CT96-010030
BD301

Curb Line "1" Curbed approach or return wing
Curb Line "2" Concrete End Post flare

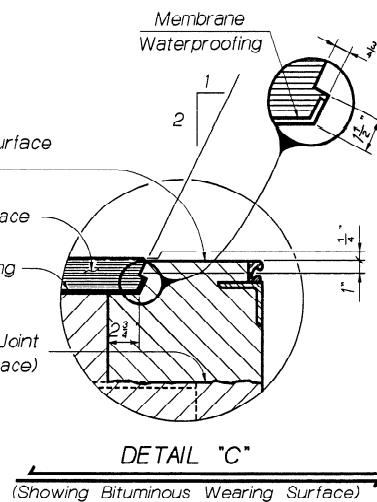


SECTION A - A



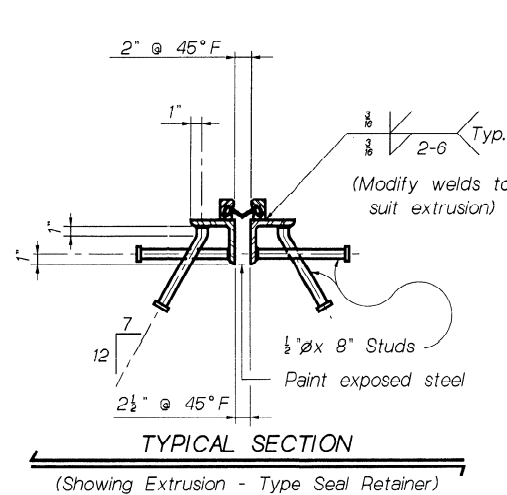
SECTION B-B

(Showing Concrete Wearing Surface)



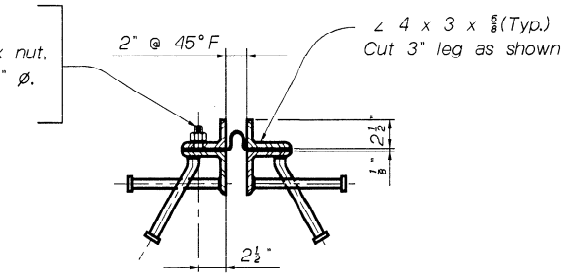
DETAIL "C"

(Showing Bituminous Wearing Surface)



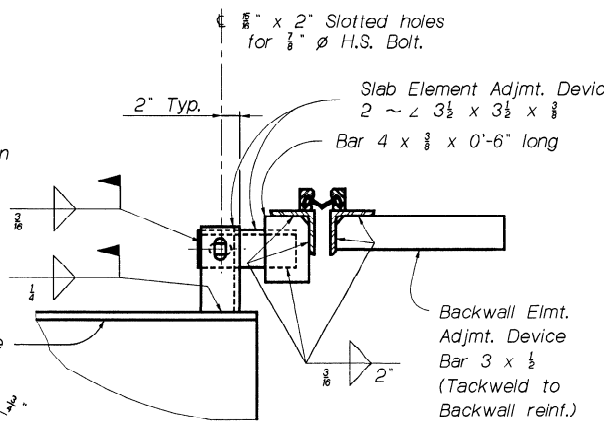
TYPICAL SECTION

(Showing Extrusion - Type Seal Retainer)

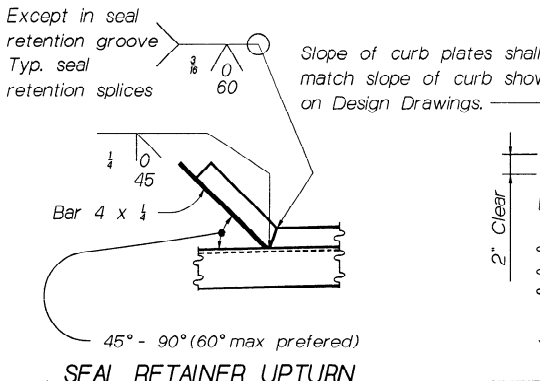


OPTIONAL SECTION

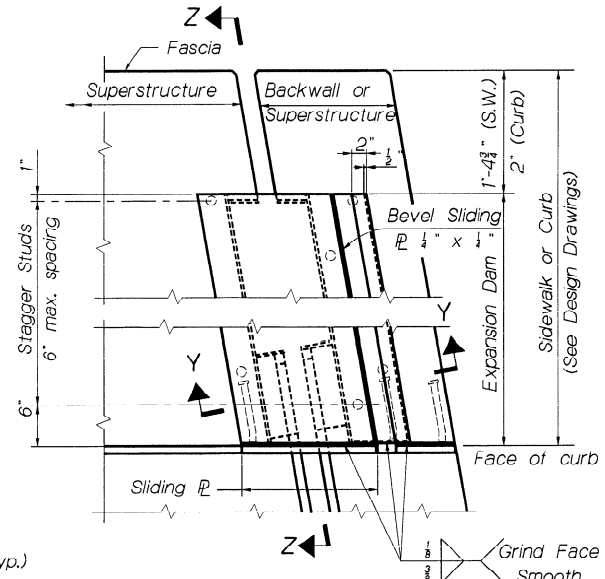
(Showing Angle - Type Seal Retainer)



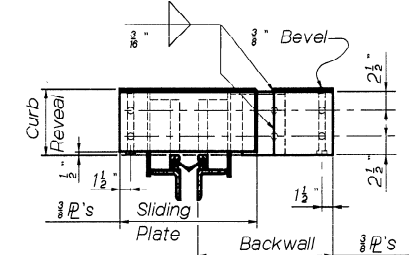
ADJUSTMENT DEVICE



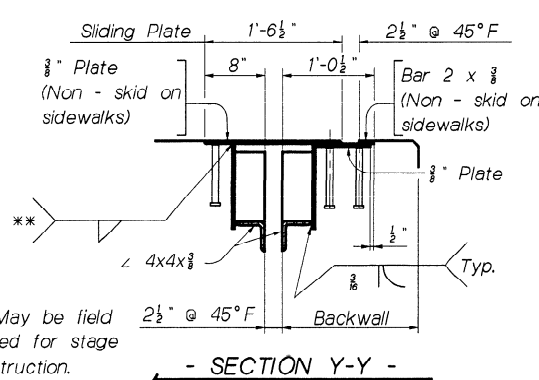
SEAL RETAINER UPTURN



PLAN SIDEWALK EXPANSION DAM

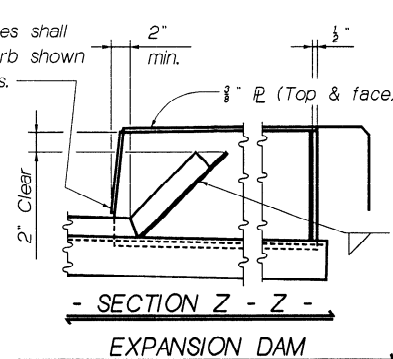


ELEVATION SIDEWALK EXPANSION DAM



SECTION Y-Y

** May be field welded for stage construction.



SECTION Z-Z

EXPANSION DAM

NOTES

1. Each "Expansion Device" consists of one pair of matching Slab and Backwall Elements and Expansion Dams as required. At expansion joints over piers, two Slab Elements shall be used.
2. Refer to Design Drawings for all dimensions, slopes, skew, and other information necessary to fabricate and install each individual "Expansion Device".
3. "Expansion Devices" shall be installed normal to grade.
4. "Expansion Device" shall be set to an opening of two inches in the fabrication shop. The opening shall be adjusted in the field to reflect the temperature of the structure at the time of installation.

Correction per 10°F = $\frac{0.0125 \text{ in} \times L \text{ (exp.)}}{15}$

where L(exp.) at abutments is the distance in feet to the nearest fixed bearing and where L(exp.) at piers is the distance in feet between the fixed bearings at either side of the expansion joint.

5. Welding to reinforcing steel will be allowed in the top of the abutment backwall above the construction joint.

6. The slab and backwall concrete shall be in place before the "Expansion Device" is fixed in position. No allowance for movement due to dead load deflection is necessary.

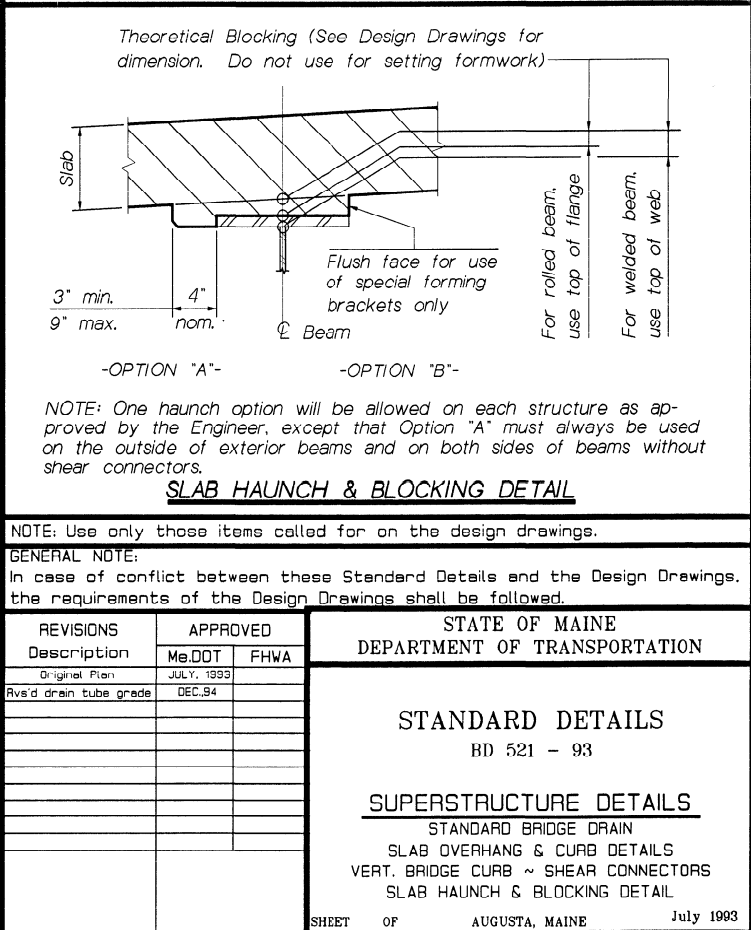
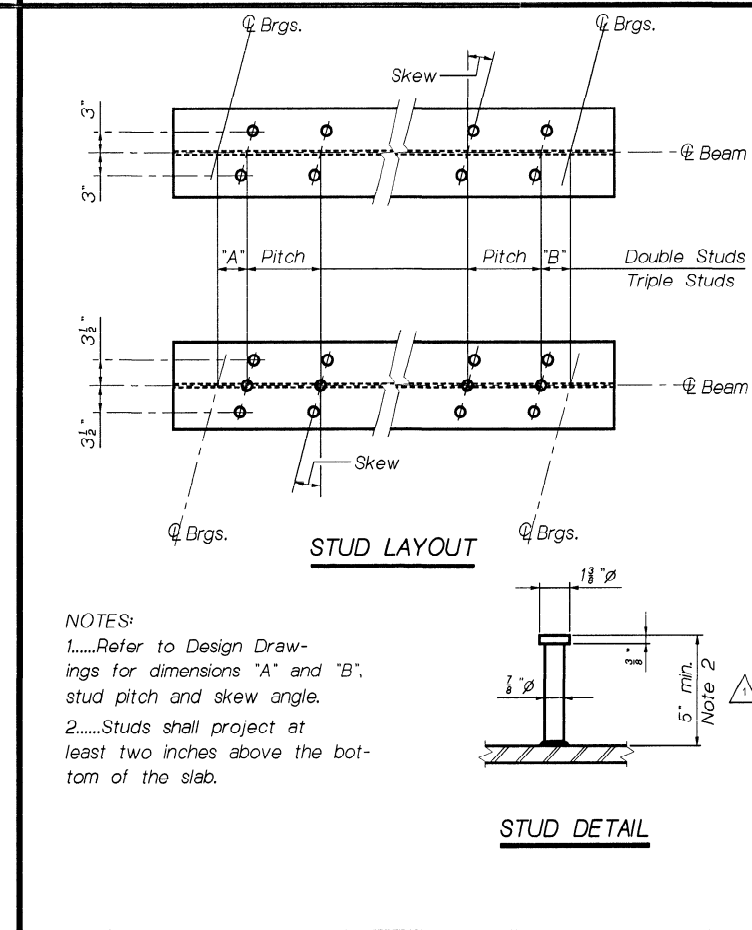
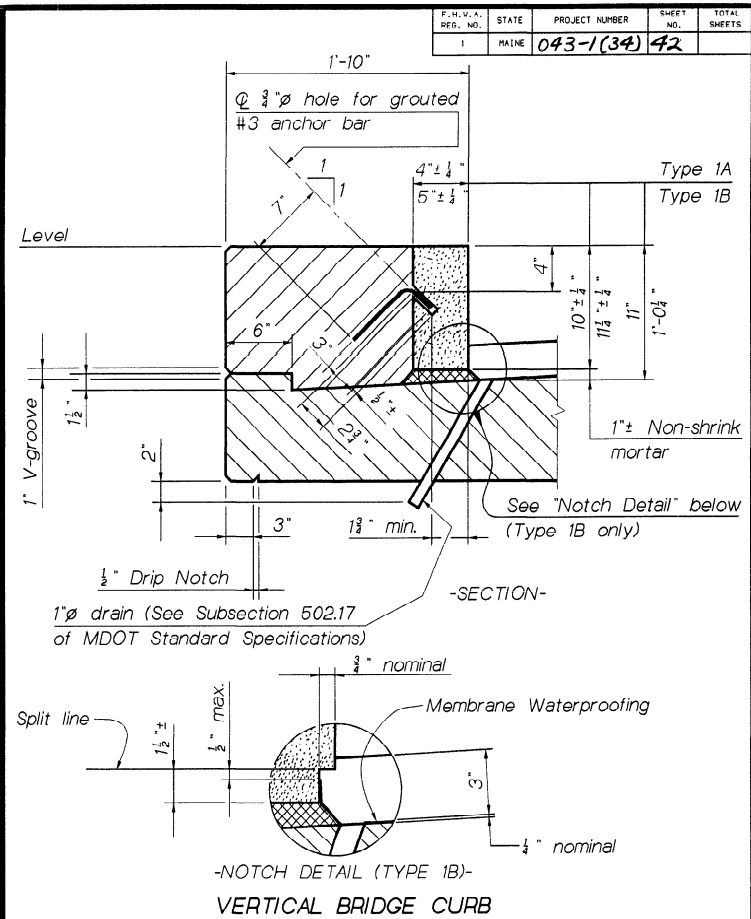
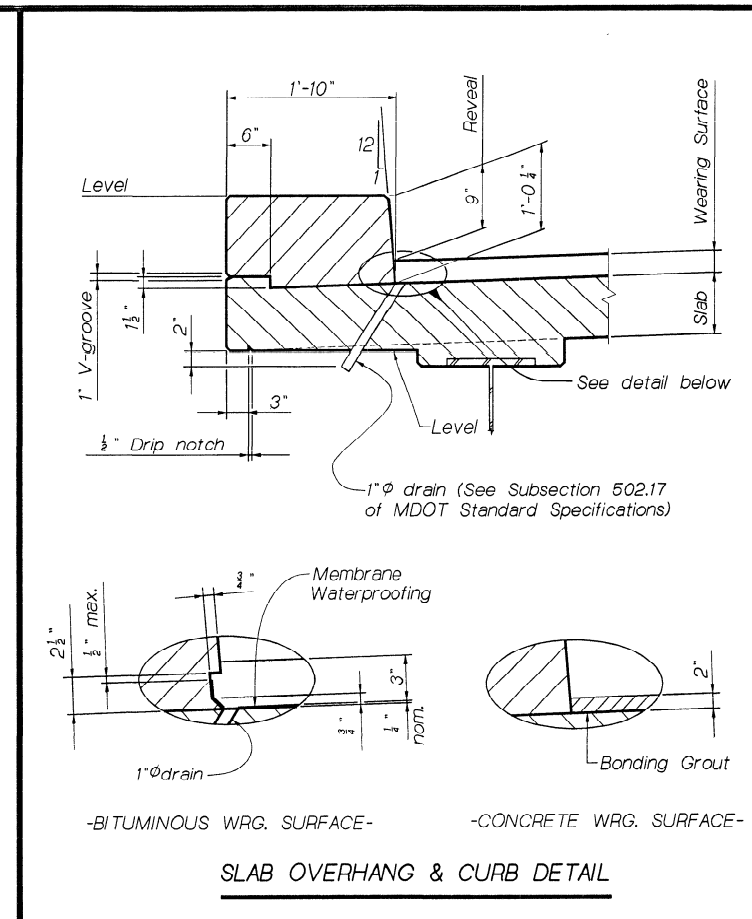
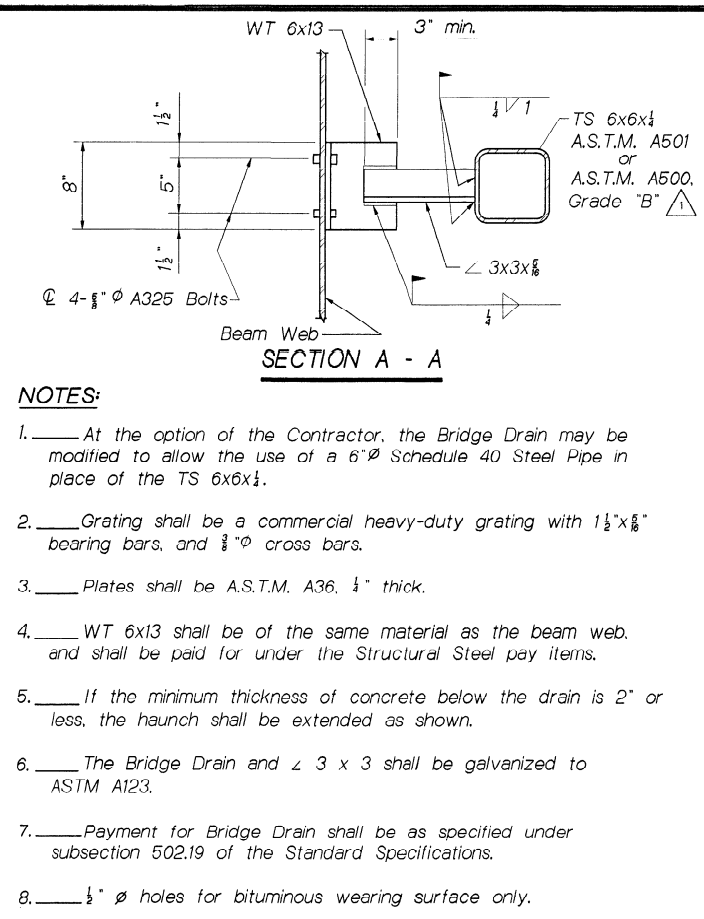
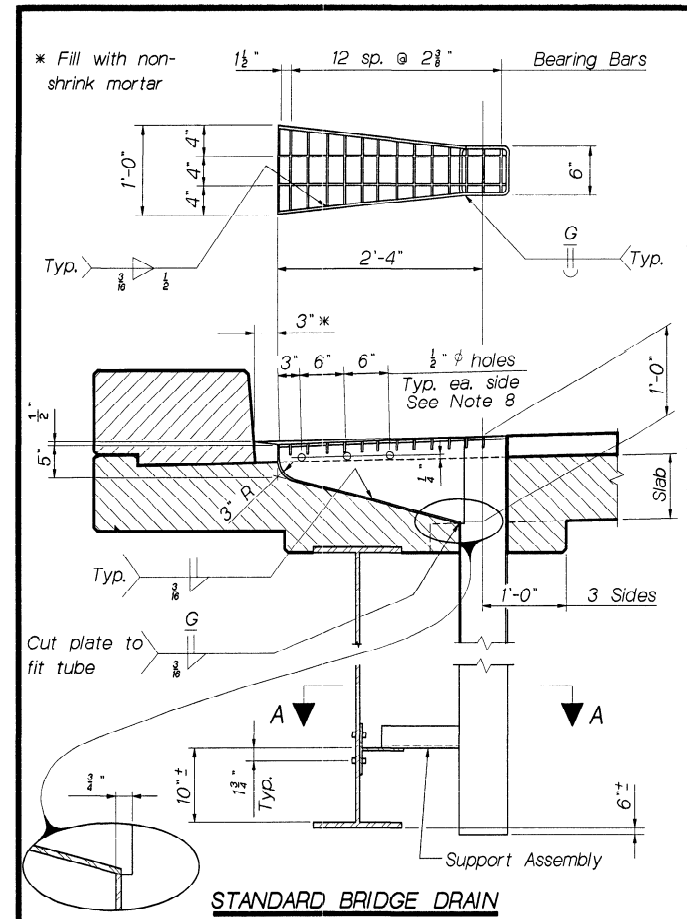
7. The concrete in the slab block-out may be placed with the curb / sidewalk concrete. An approved epoxy bonding agent shall be applied to all vertical surfaces of the block-out before making the final concrete placement.

GENERAL NOTE:			STATE OF MAINE	
In case of conflict between these Standard Details and the Design Drawings, the requirements of the Design Drawings shall be followed.			DEPARTMENT OF TRANSPORTATION	
REVISIONS		APPROVED		STANDARD DETAILS
Description		MeDOT	FHWA	
Original Plan		JULY, 1993		BD 302 - 93
				EXPANSION DEVICE
				GLAND SEAL

PROJECT DESIGN ENGINEER	DATE
BY	7/53
DESIGN-DETAILED	BDS
CHECKED	KJ
REVISIONS	
FIELD CHANGES	

290CT96-010030
BD302

F.H.D.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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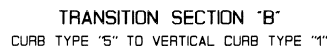


PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-CHECKED		
CHECKED		
REVISIONS		
FIELD CHANGES		
PLANS		
290CT195-01C030		
BD521		

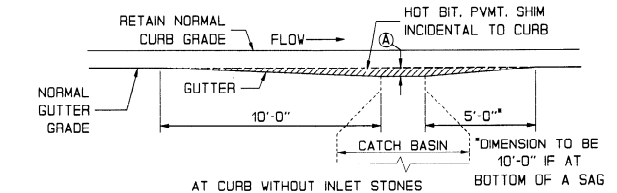
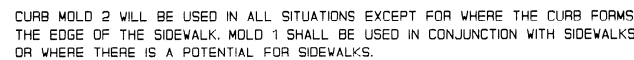
CURB TYPES 1 & 5 ON CURVES				
T _P E	RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
1 & 2	0' TO 60' INCL.	4' MIN.	CIRCULAR	ARC TO FIT CURVE
	OVER 60' TO 160'	4' TO 6'	STRAIGHT	STRAIGHT PIECES
5	0' TO 8' INCL.	2' MIN.	CIRCULAR	TO FIT CURVE
	OVER 8' TO 30' INCL.	12" MIN. CHORD	CIRCULAR	STR. PIECES, RADIAL ENDS
	OVER 30' & UNDER 160'	2' TO 3'	STRAIGHT	STRAIGHT PIECES
	160' AND OVER	3' TO 6'	STRAIGHT	STRAIGHT PIECES



SPEC. 609 TERMINAL CURB SECTION CU00



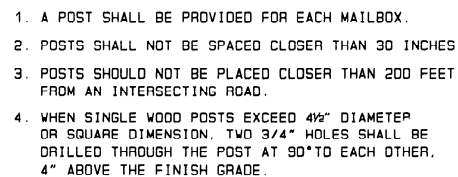
SPEC. 609 CORR TRANSITION CU002



SPEC. 609 AT CATCH BASIN CU004



SPEC. 203 MS00



SPEC. 606 MAILBOX POSTS MS003

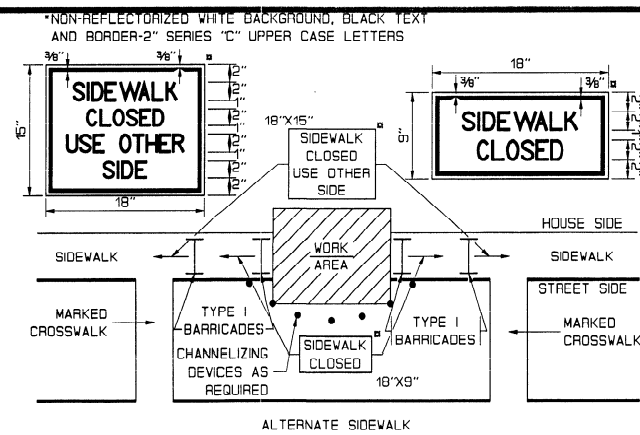


MULTIPLE MAILBOX SUPPORT MS004

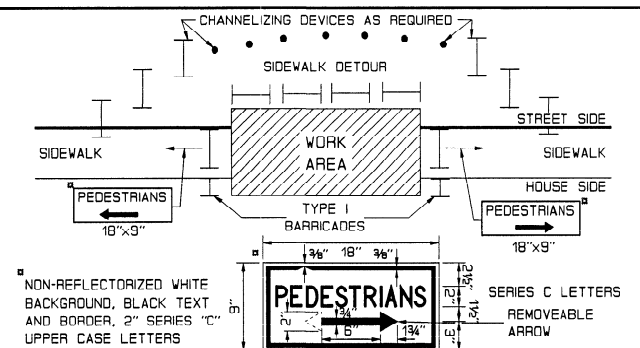


APPROVED	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
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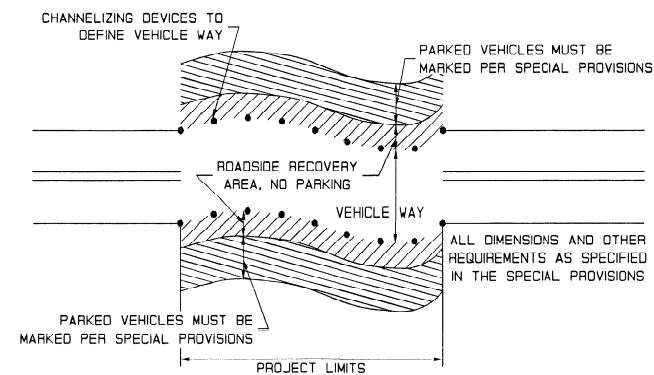
SHEET OF AUGUSTA, MAINE HD-4



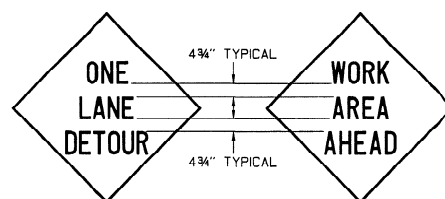
SIDEWALK CLOSURE WITH ALTERNATE SIDEWALK



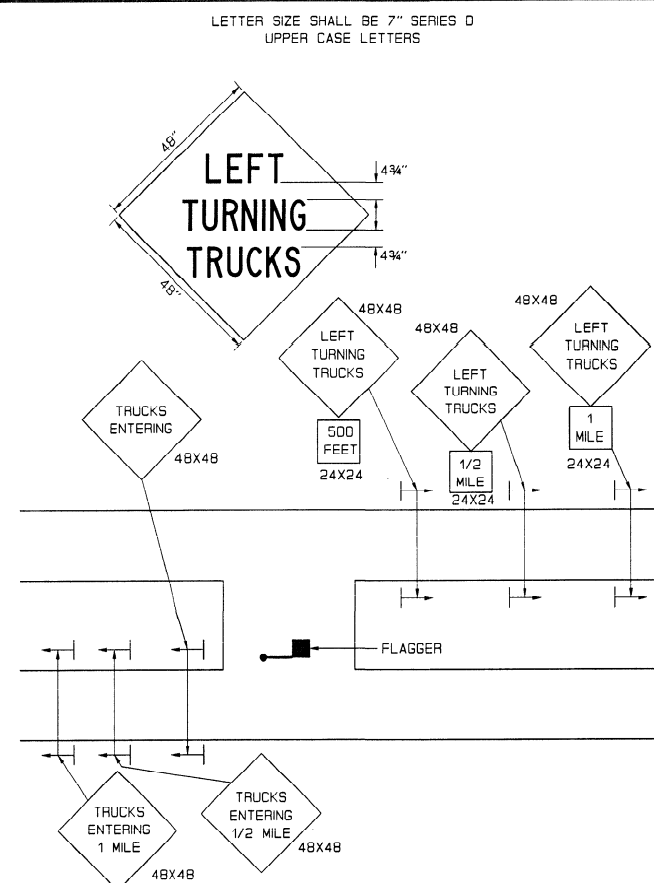
SIDEWALK CLOSURE WITHOUT ALTERNATE SIDEWALK



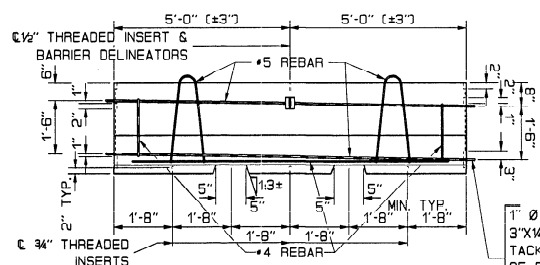
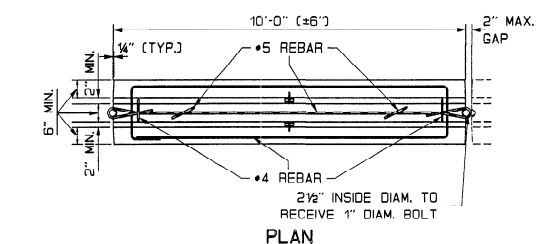
ROADSIDE RECOVERY AREA



NOTE:
1. LETTER SIZE SHALL BE 7" SERIES D.
2. BORDER DIMENSIONS AND LEGEND DESIGN SHALL CONFORM TO "STANDARD HIGHWAY SIGNS".

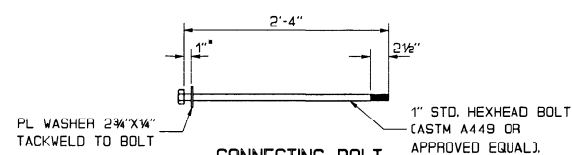
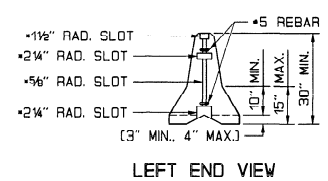
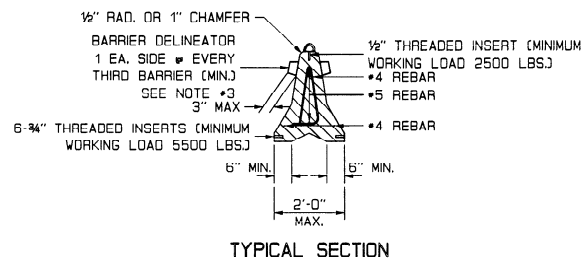


MEDIAN CROSSOVER



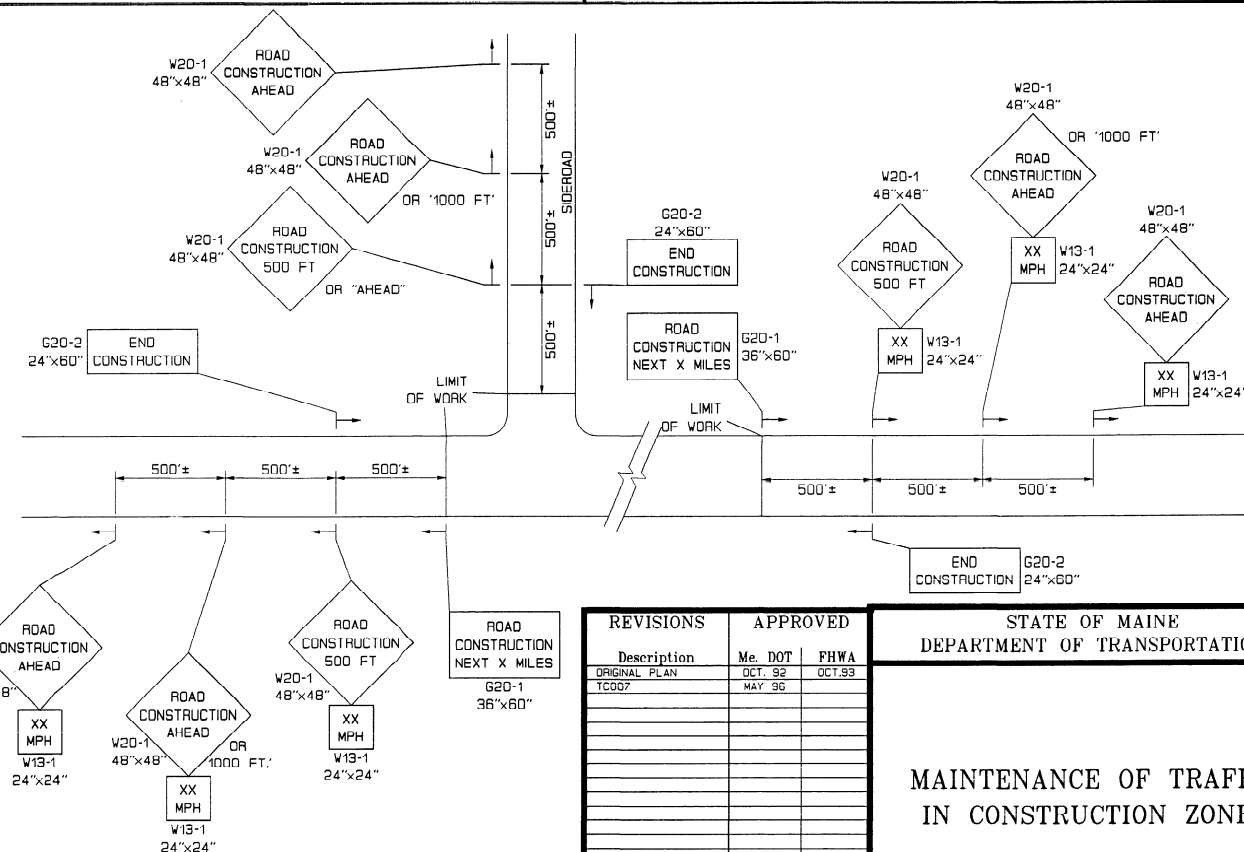
NOTES:

- NOTES:
1. SUBJECT TO APPROVAL BY THE ENGINEER, END CONNECTIONS OTHER THAN THE ONE DETAILED MAY BE USED, PROVIDED THEY ARE OF EQUIVALENT OR GREATER STRENGTH. ALL END CONNECTIONS SUBMITTED FOR APPROVAL SHALL INCORPORATE A CONNECTING PIN OR OTHER LOCKING DEVICE THAT IS POSITIVELY SECURED AGAINST ACCIDENTALLY BEING DISLOGGED UNDER IMPACT.
 2. THE REINFORCING STEEL SHOWN IS THE MINIMUM REQUIRED. LIFTING ARRANGEMENT SIZE AND LOCATIONS OF HOLD-DOWN INSERTS ARE ADVISORY ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE LIFTING POINTS AND HOLD-DOWN ARRANGEMENTS.
 3. BARRIER DELINEATORS SHALL BE BI-DIRECTIONAL WITH A MINIMUM EFFECTIVE REFLECTIVE AREA OF 8.0 SQUARE INCHES AS APPROVED BY THE ENGINEER. THE REFLECTOR SHALL PREFERABLY BE OF METHYL METHACRYLATE, AND THE HOUSING OF ACRYLONITRILE BUTADIENE STYRENE. AS AN ALTERNATIVE REFLECTORS MAY BE MOUNTED ON THE TOP OF THE BARRIER.



* THE SLOTS MAY BE 2 1/4" RADIUS FULL HEIGHT WITH THE 1" SPACE ON THE CONNECTING BOLT INCREASED TO 4"

TEMPORARY CONCRETE BARRIER-TYPE I



PROJECT APPROACH SIGNING
TWO WAY TRAFFIC

GENERAL NOTES FOR SIGNING

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 M.P.H.
$$L = W \times S \times S / 60$$

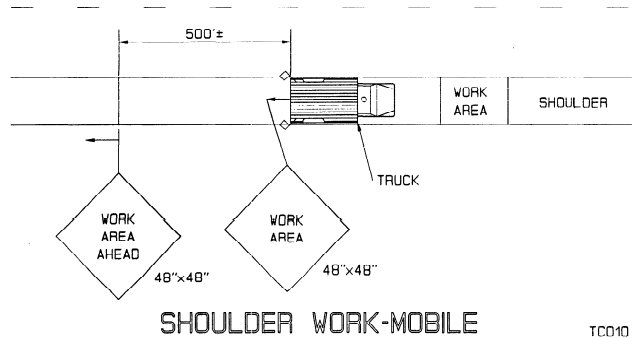
IF S IS EQUAL TO OR GREATER THAN 45 M.P.H.
$$L = W \times S$$

WHERE:
L-LENGTH OF TAPER IN FEET
S-POSTED SPEED IN M.P.H.
W-WIDTH OF ROADWAY TO BE CLOSED IN FEET

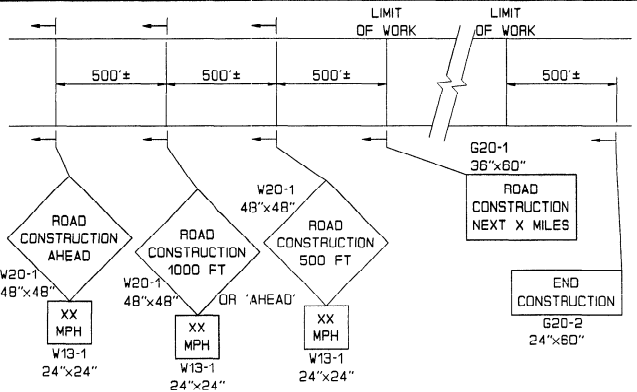
TAPER LENGTHS SHALL BE ROUNDED TO THE NEAREST FIVE FEET. IT MAY BE REQUIRED TO EXTEND LANE CLOSURE TAPERS TO PROVIDE A SMOOTH TRANSITION WHERE GEOMETRIC ALIGNMENT REDUCES SIGHT ALIGNMENT.
6. THE MAXIMUM LONGITUDINAL SPACING OF CHANNELIZING DEVICES SHALL CONFORM TO THE FOLLOWING:
 - A. 50 FEET THROUGH WORK AREAS
 - B. A DISTANCE IN TAPERS EQUAL TO THE NUMERICAL VALUE OF THE OPERATION SPEED, I.E., 45 M.P.H.: 45 FEET.
 - C. A DISTANCE IN TEMPORARY CHANNELIZATION EQUAL TO TWICE THE NUMERICAL VALUE OF THE OPERATION SPEED, I.E. 50 M.P.H. = 100 FT.
7. ALL SIGNS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS", FHWA, 1979, AND REVISIONS THERETO.

[illegible]

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES	
SHEET OF	AUGUSTA, MAINE

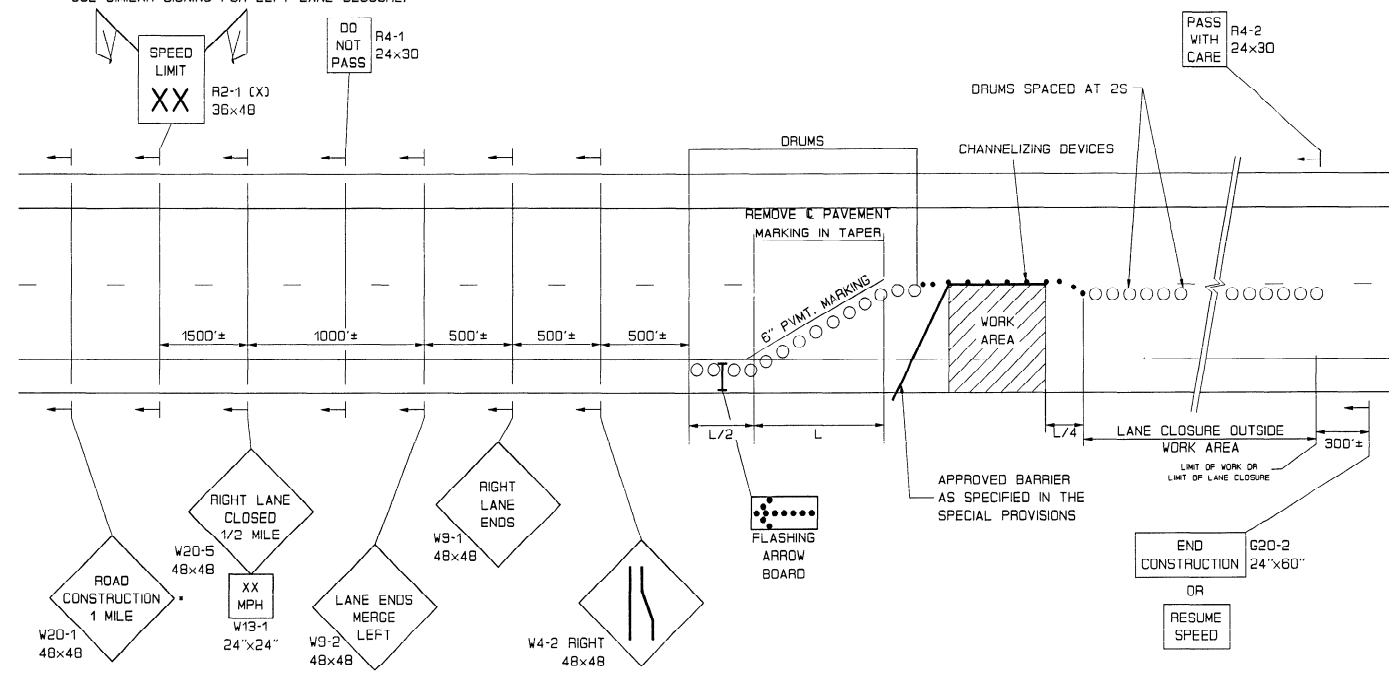


SHOULDER WORK-MOBILE TC010

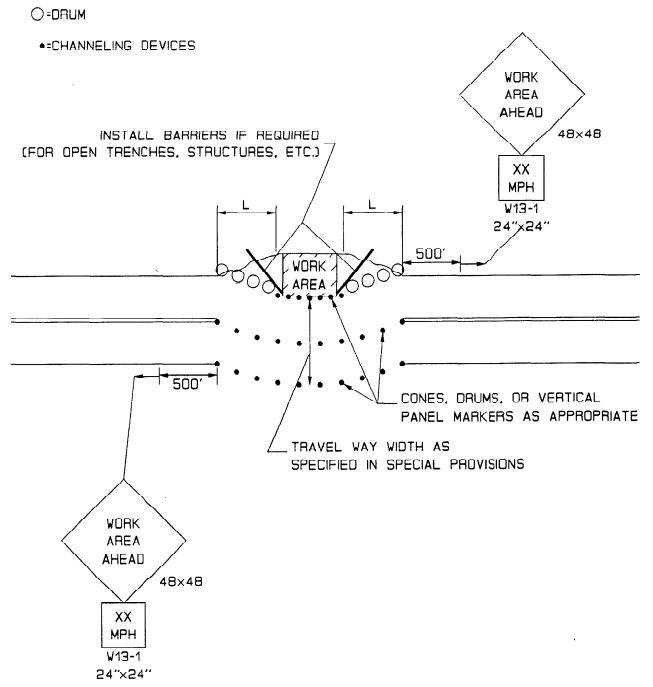


PROJECT APPROACH SIGNING EXPRESSWAY TC009

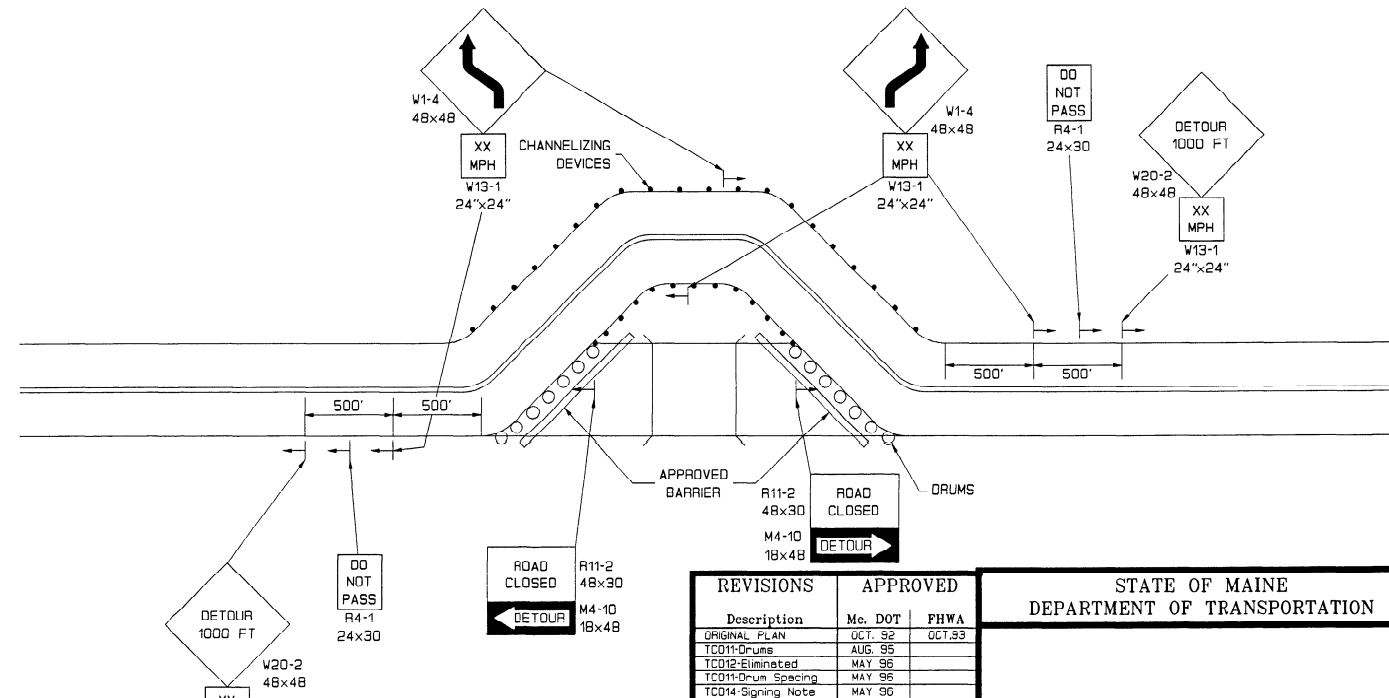
NOTE
• OMIT W20-1 IF LANE CLOSURE SIGNING ARRAY IS WITHIN PROJECT LIMITS.
ALTER PAVEMENT MARKINGS AS REQUIRED.
MAINTAIN 15 FT. LATERAL CLEARANCE.
USE SIMILAR SIGNING FOR LEFT LANE CLOSURE.



EXPRESSWAY LANE CLOSURE TC011



TWO WAY TRAFFIC MAINTAINED THROUGH WORK AREA TC013



TWO WAY TWO LANE DETOUR TC014

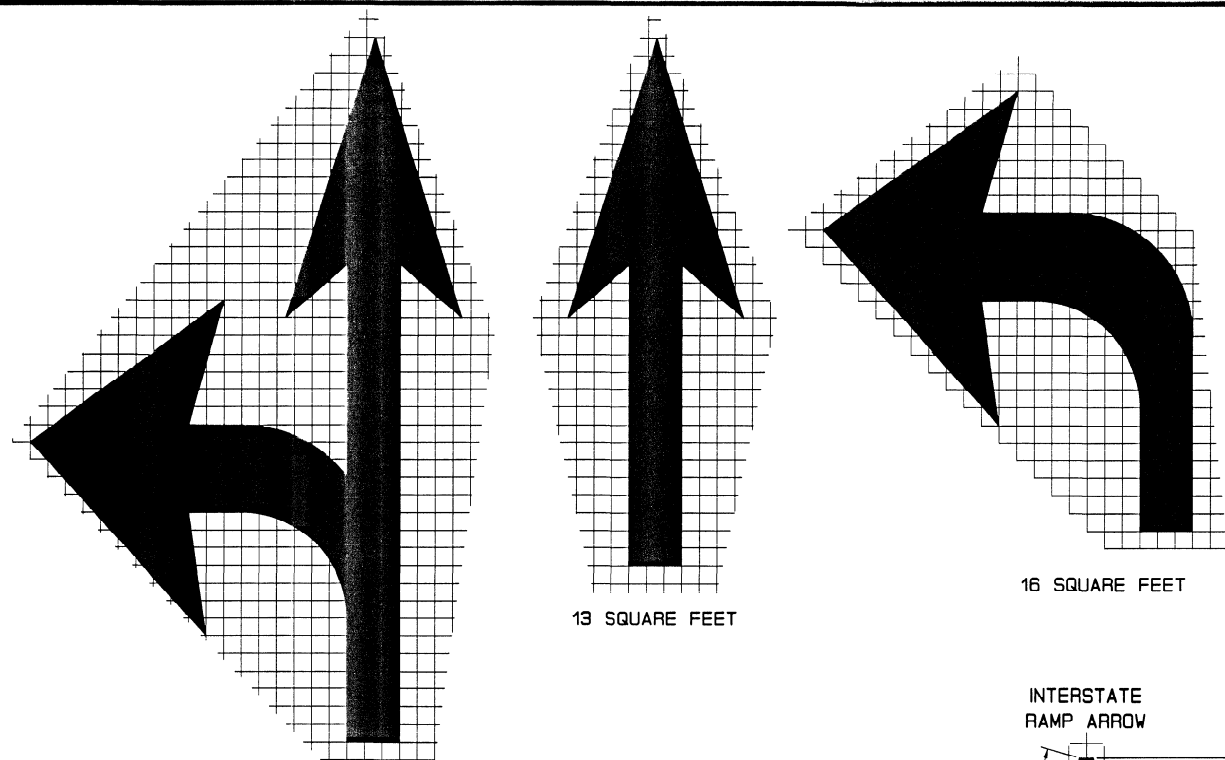
REVISIONS	APPROVED
Description	Mo. DOT FHW
ORIGINAL PLAN	OCT. 92
TC011-Drums	AUG. 95
TC012-Eliminated	MAY. 96
TC011-Drum Spacing	MAY. 96
TC014-Signing Note	MAY. 96

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES

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

PLANS

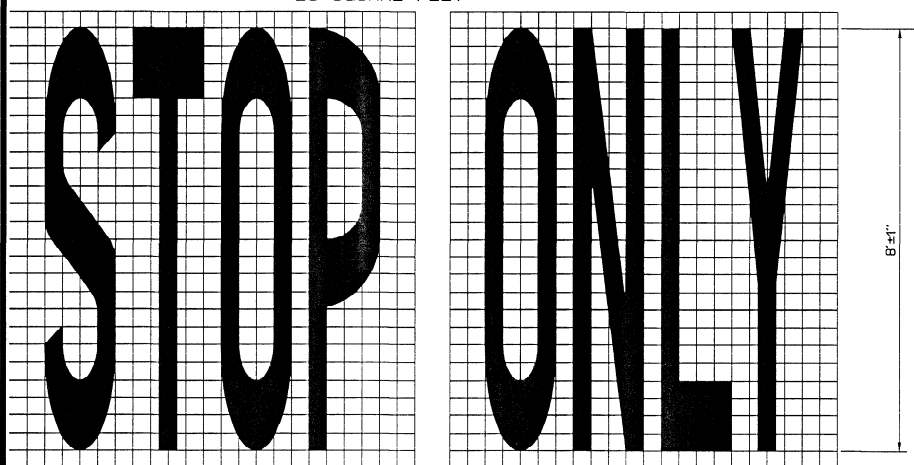
29OCT96-0-00030



13 SQUARE FEET

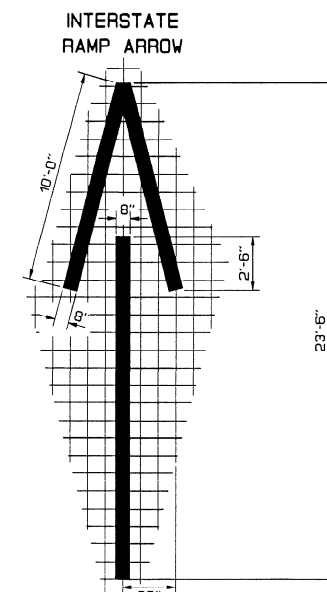
16 SQUARE FEET

29 SQUARE FEET

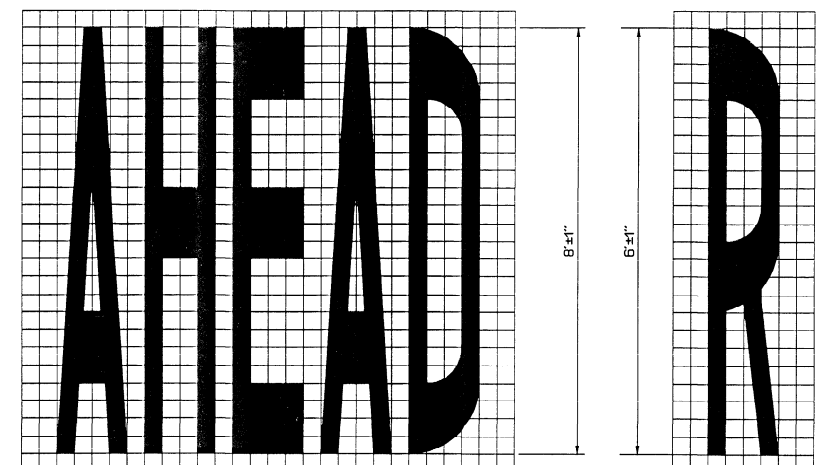


22 SQUARE FEE

22 SQUARE FEET

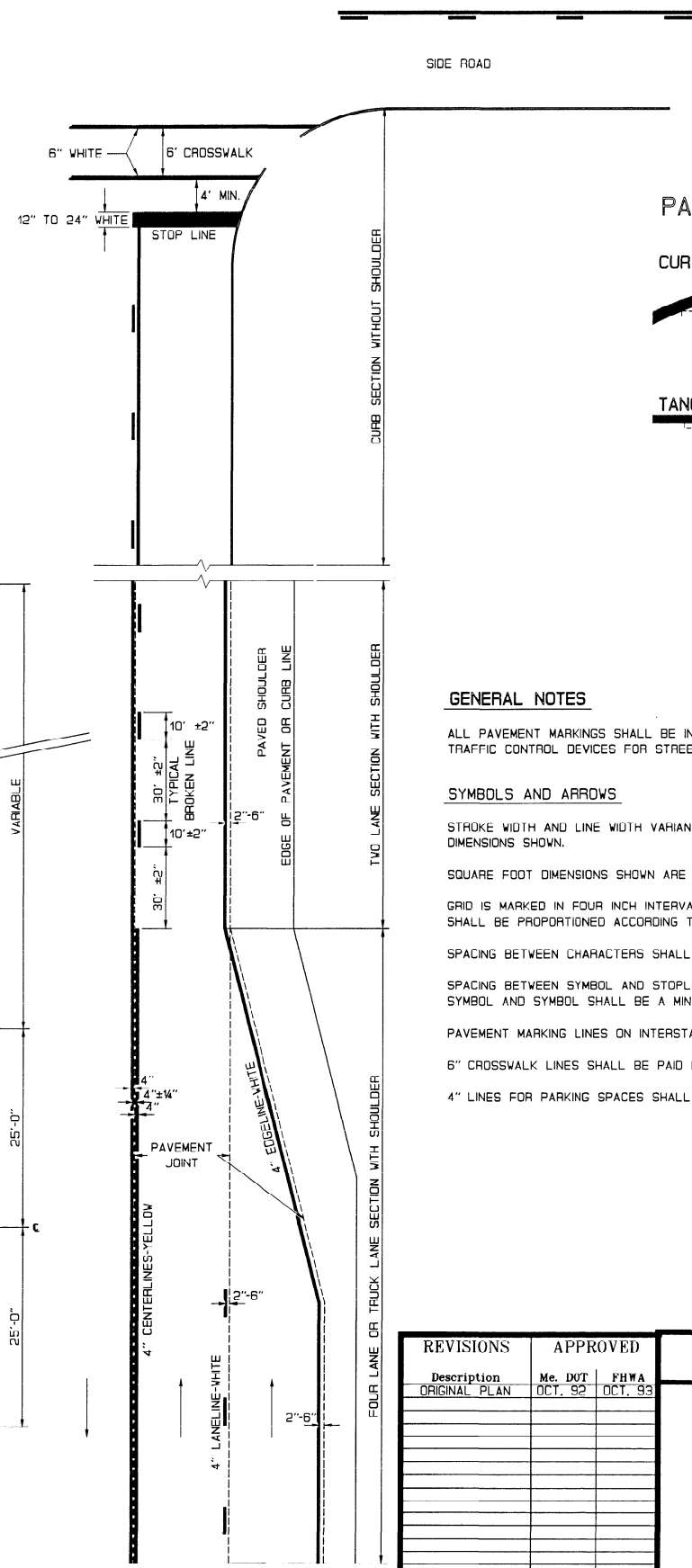
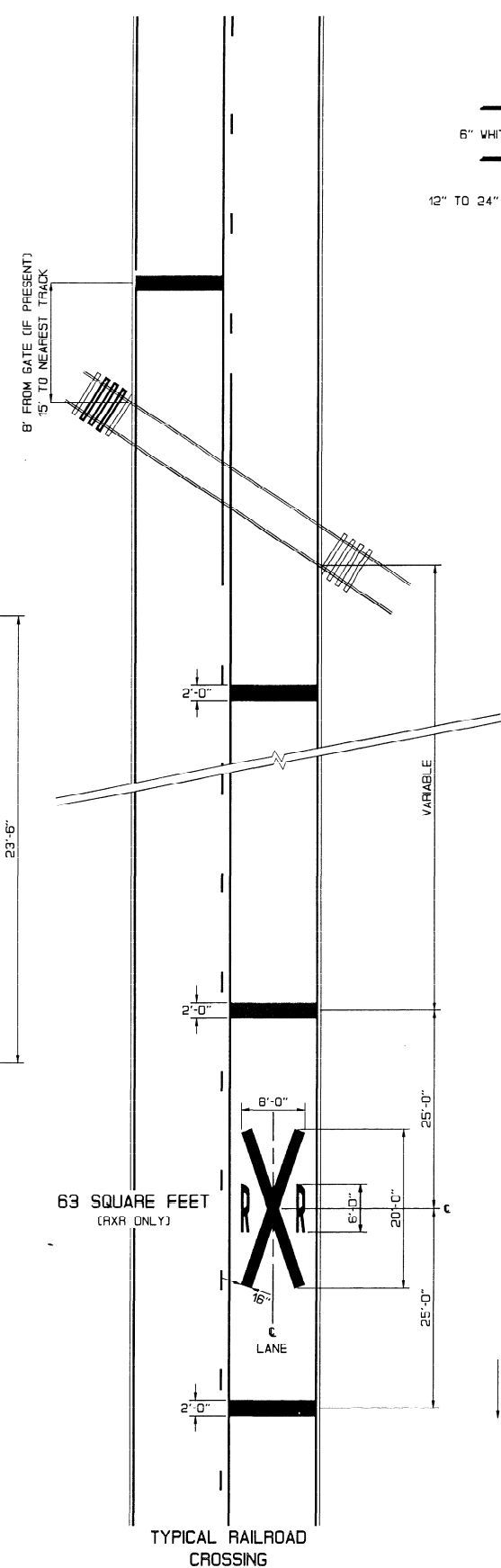


ONE SQUARE=10 INCHES
25 SQUARE FEET

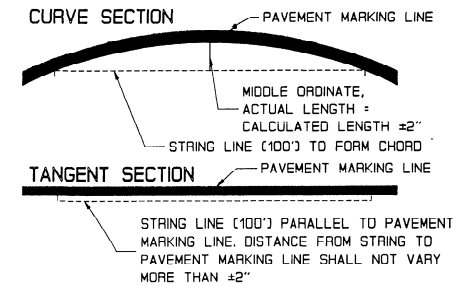


27 SQUARE FEET

ONE SQUARE=3 INCHES



TOLERANCE FOR PAVEMENT MARKING LINES



GENERAL NOTES

ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", U. S. DOT, FHWA, 1988.

SYMBOLS AND ARROWS

STROKE WIDTH AND LINE WIDTH VARIANCE SHALL BE NO MORE THAN $\pm 1/4"$ FROM
DIMENSIONS SHOWN.

SQUARE FOOT DIMENSIONS SHOWN ARE PAY DIMENSIONS, PAID BY ITEM NO. 627.65

GRID IS MARKED IN FOUR INCH INTERVALLS EXCEPT AS NOTED. SYMPOLS AND LETTERS SHALL BE PROPORTIONED ACCORDING TO GRID AS SHOWN.

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

SPACING BETWEEN SYMBOL AND STOPLINE SHALL BE A MINIMUM OF 20'. SPACING BETWEEN
SYMBOL AND SYMBOL SHALL BE A MINIMUM OF 50' OR AS DIRECTED BY THE ENGINEER.

PAVEMENT MARKING LINES ON INTERSTATE HIGHWAYS SHALL BE 6" IN WIDTH.

6" CROSSWALK LINES SHALL BE PAID FOR BY ITEM 627.65

6 CROSSWALK LINES SHALL BE PAID FOR BY ITEM 627.65.

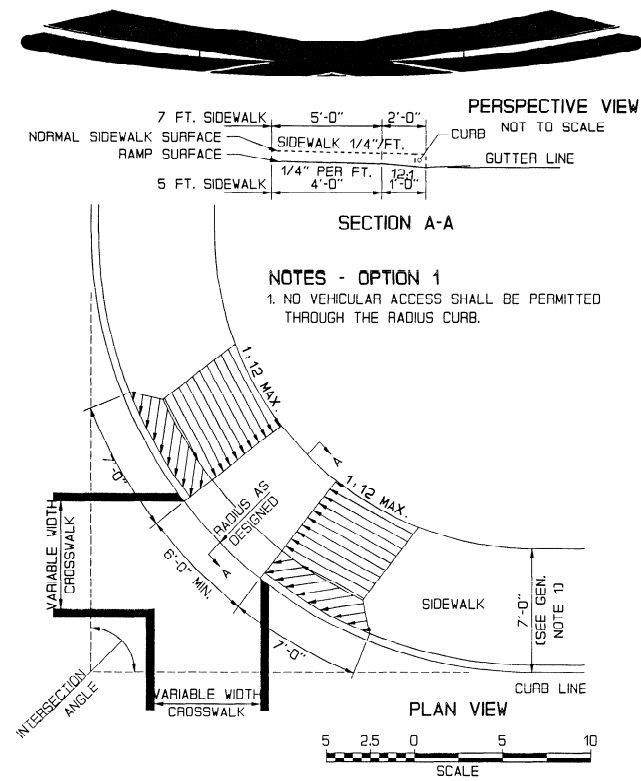
[illegible]

GENERAL NOTES

1. WHEN THE SIDEWALK IS LESS THAN 5'-0" IN WIDTH, A MINIMUM PAD 5'-0"x5'-0" SLOPING NO MORE THAN 1/4" PER FOOT SHALL BE PROVIDED WHENEVER A CHANGE IN DIRECTION MUST BE MADE.
2. THERE SHALL BE A MINIMUM OF 12" AGGREGATE SUBBASE COURSE GRAVEL UNDER THE 2" PAVEMENT ON PEDESTRIAN RAMPS.
3. CURB OPENINGS FOR PEDESTRIAN RAMPS SHALL BE 6" MINIMUM.

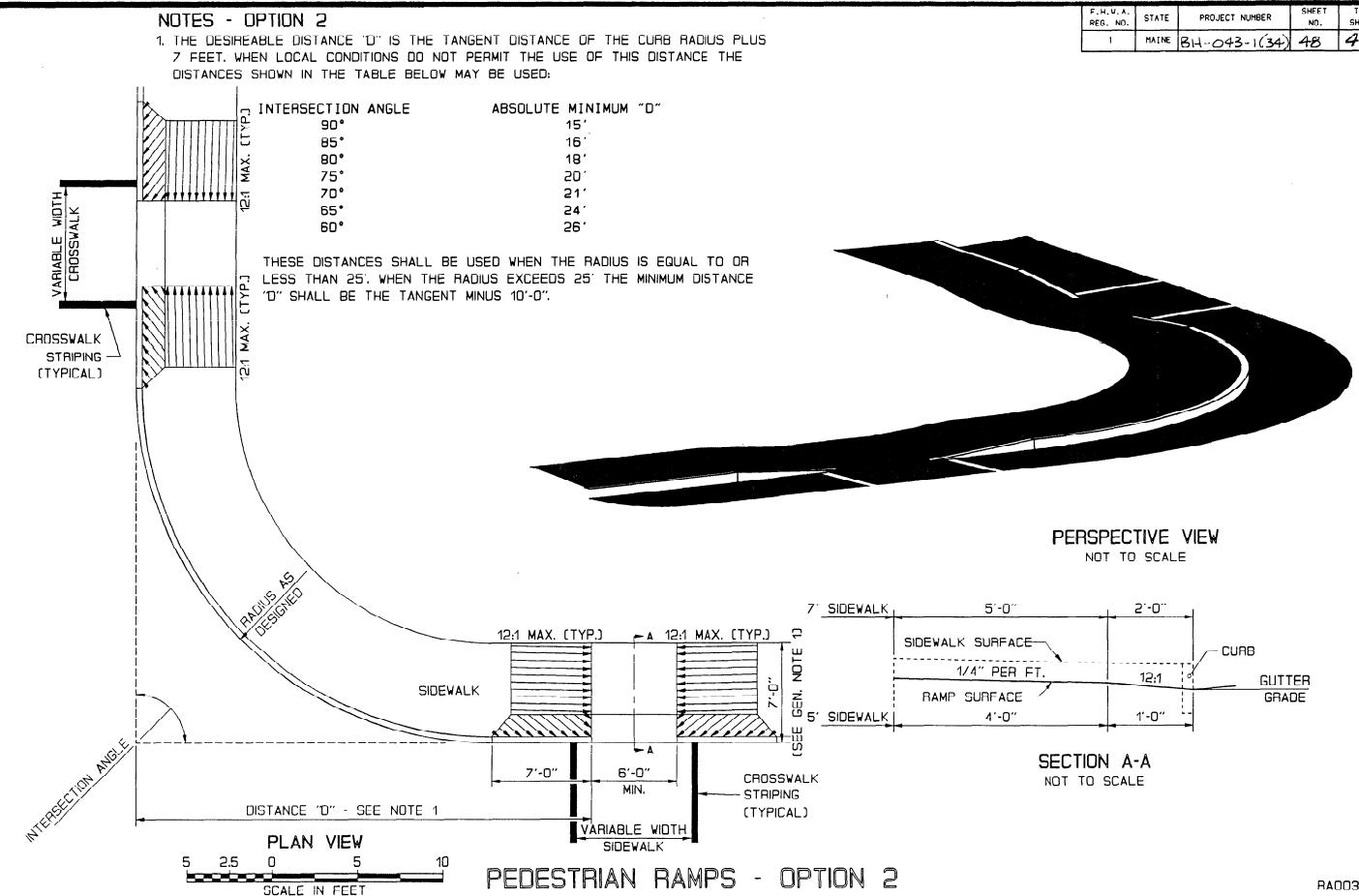
PEDESTRIAN RAMP NOTES

RA001



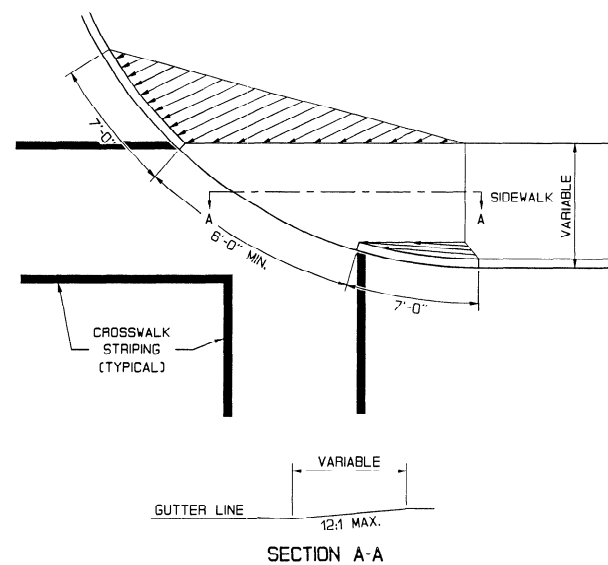
PEDESTRIAN RAMP - OPTION 1

RA002



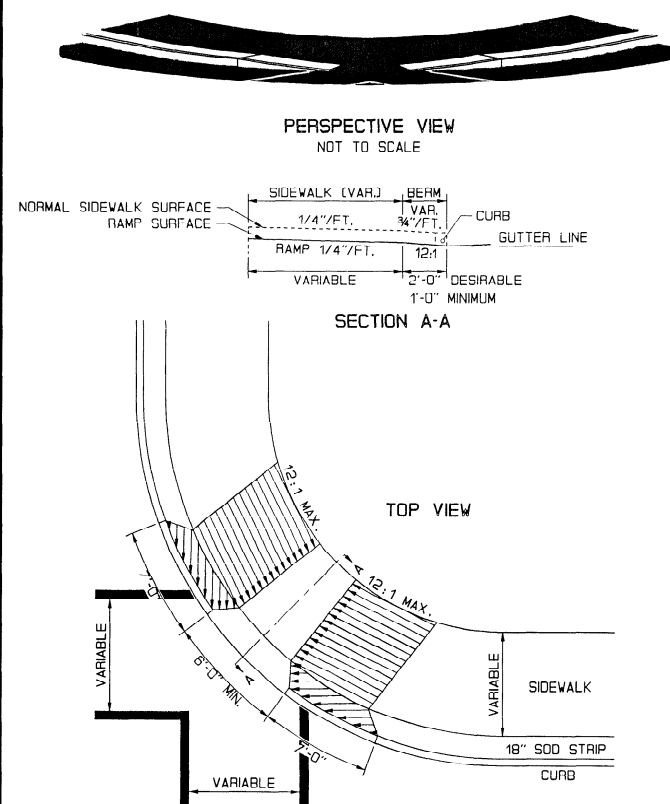
PEDESTRIAN RAMPS - OPTION 2

RA003



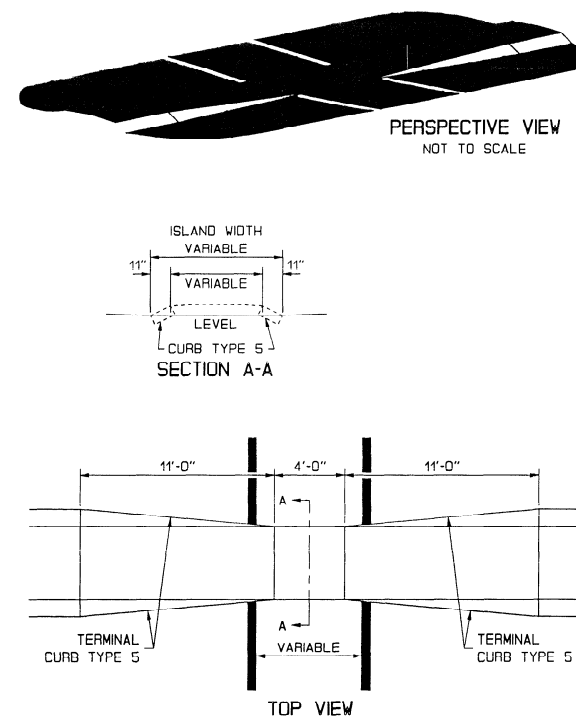
PEDESTRIAN RAMPS - OPTION 3

RA004



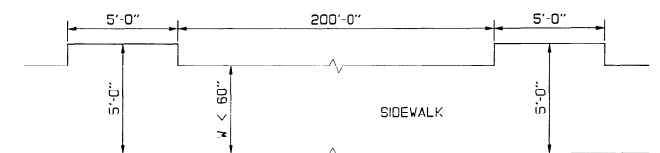
PEDESTRIAN RAMP WITH BERM

RA005



PEDESTRIAN RAMP
ISLAND - CURB TYPE 5

RA006



RA007

REVISIONS	APPROVED
Description	Me. DOT FHWA
ORIGINAL PLAN	OCT. 92 OCT. 93
RA001 - CHANGED MIN. PAD DIMENSION	APR. 93 OCT. 93
RA002 - REV. NOTE ADDED SLOPES	APR. 93 OCT. 93
RA003 - ADD. SLOPES	APR. 93 OCT. 93
RA004 - ADD. LABELS	APR. 93 OCT. 93
RA005 - ADD. SLOPES	APR. 93 OCT. 93
RA007 - ORIG. PLAN	APR. 93 OCT. 93
RA002	APR. 95
RA005	APR. 95
RA006	APR. 95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
PEDESTRIAN RAMPS

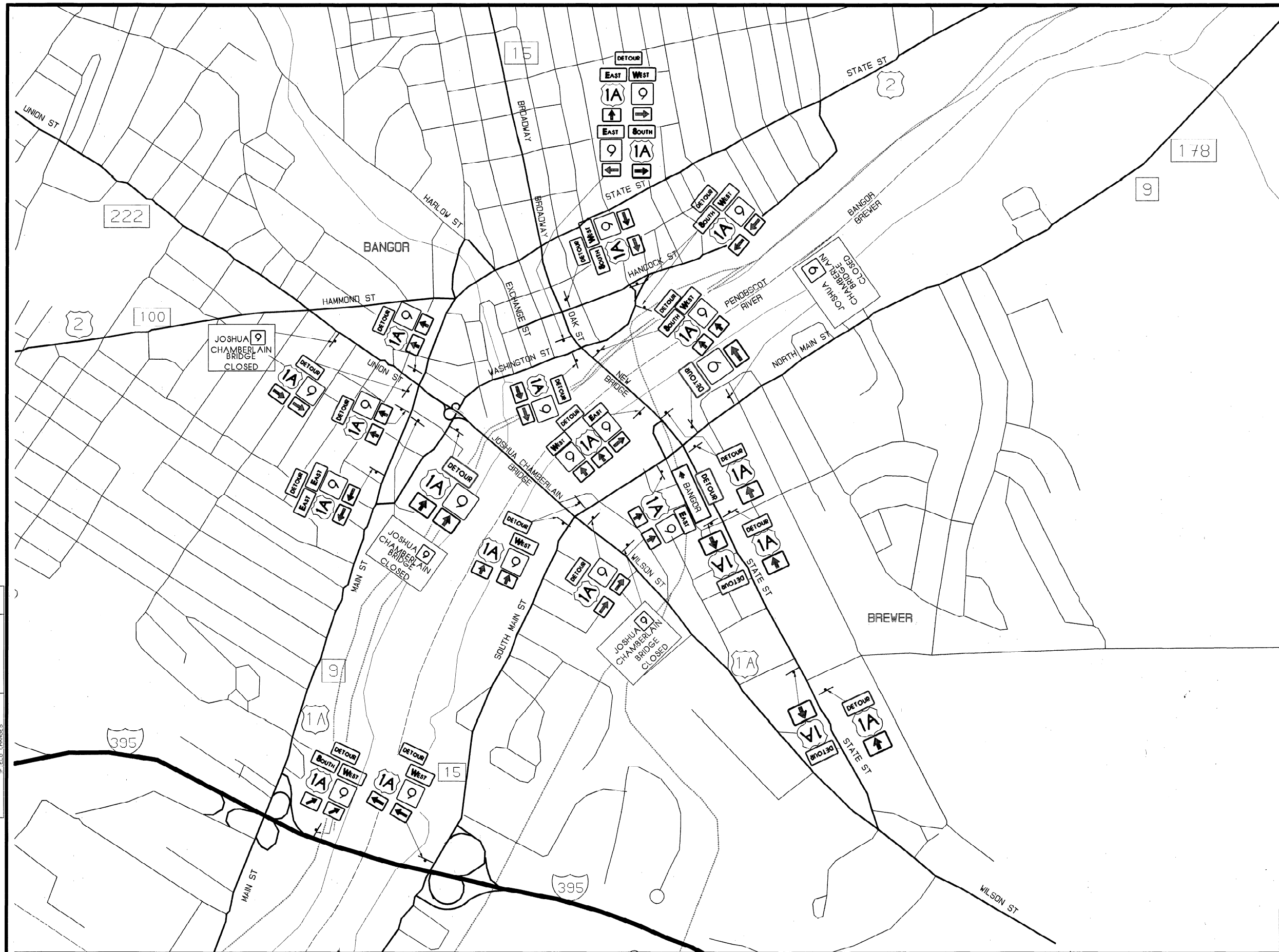
SHEET OF AUGUSTA, MAINE

HD-14

PROJECT DESIGN ENGINEER	DATE
CHECKED	BY
REVISIONS	
FIELD CHANGES	

PLANS

280CT96-01.00.30



PROJECT DESIGN ENGINEER	DATE
DESIGN DETAILER	
CHECKED	
REVISIONS	
FIELD CHANGES	

PLANS

2900195-010030

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
JOSHUA L. CHAMBERLAIN BRIDGE OVER PENOBSCOT RIVER BETWEEN THE TOWNS OF BANGOR and BREWER PENOBSCOT COUNTY
DETOUR SIGNING
SHEET OF AUGUSTA, MAINE