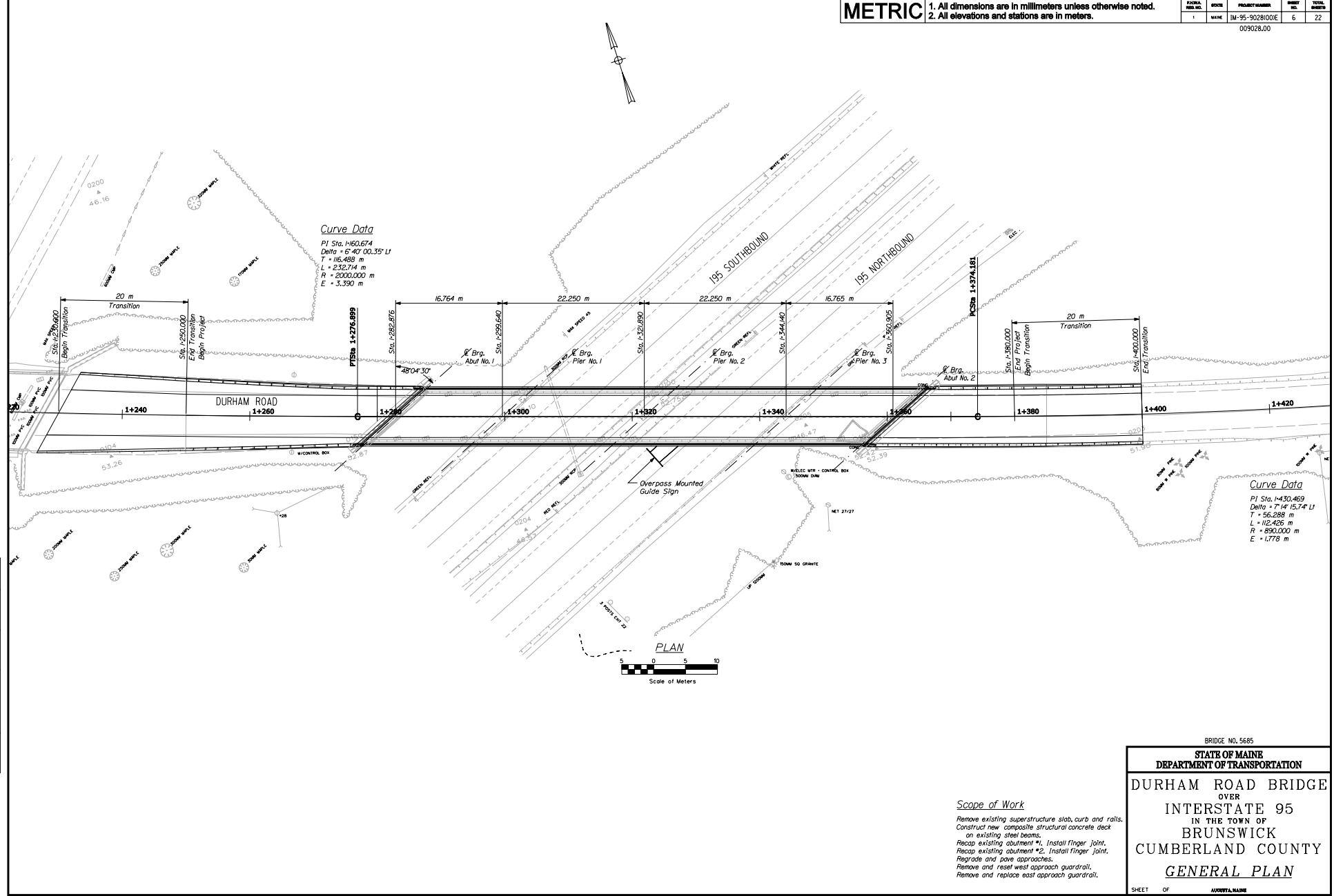


Filename: ...\\001\bridge\msta\006...BDPlan1.dgn Division: BRIDGE User: jim.wentworth Date: 1/21/2009

PROJECT DESIGN ENGINEER	DATE
DESIGN DETAIL	BY
CHECKED	C. RIFT
FIELD CHANGES	
PLANS	

METRIC		1. All dimensions are in millimeters unless otherwise noted. 2. All elevations and stations are in meters.	
SHEET NO.	6	TOTAL SHEETS	22
PROJECT NUMBER	IM-95-9028(00)E		
DATE	009028.00		



Scope of Work
 Remove existing superstructure slab, curb and rails.
 Construct new composite structural concrete deck on existing steel beams.
 Recap existing abutment #1. Install finger joint.
 Recap existing abutment #2. Install finger joint.
 Regrade and pave approaches.
 Remove and reset west approach guardrail.
 Remove and replace east approach guardrail.

BRIDGE NO. 5685

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DURHAM ROAD BRIDGE
 OVER
INTERSTATE 95
 IN THE TOWN OF
BRUNSWICK
 CUMBERLAND COUNTY

GENERAL PLAN

SHEET OF AUSTIN, MAINE

Date: 1/21/2009

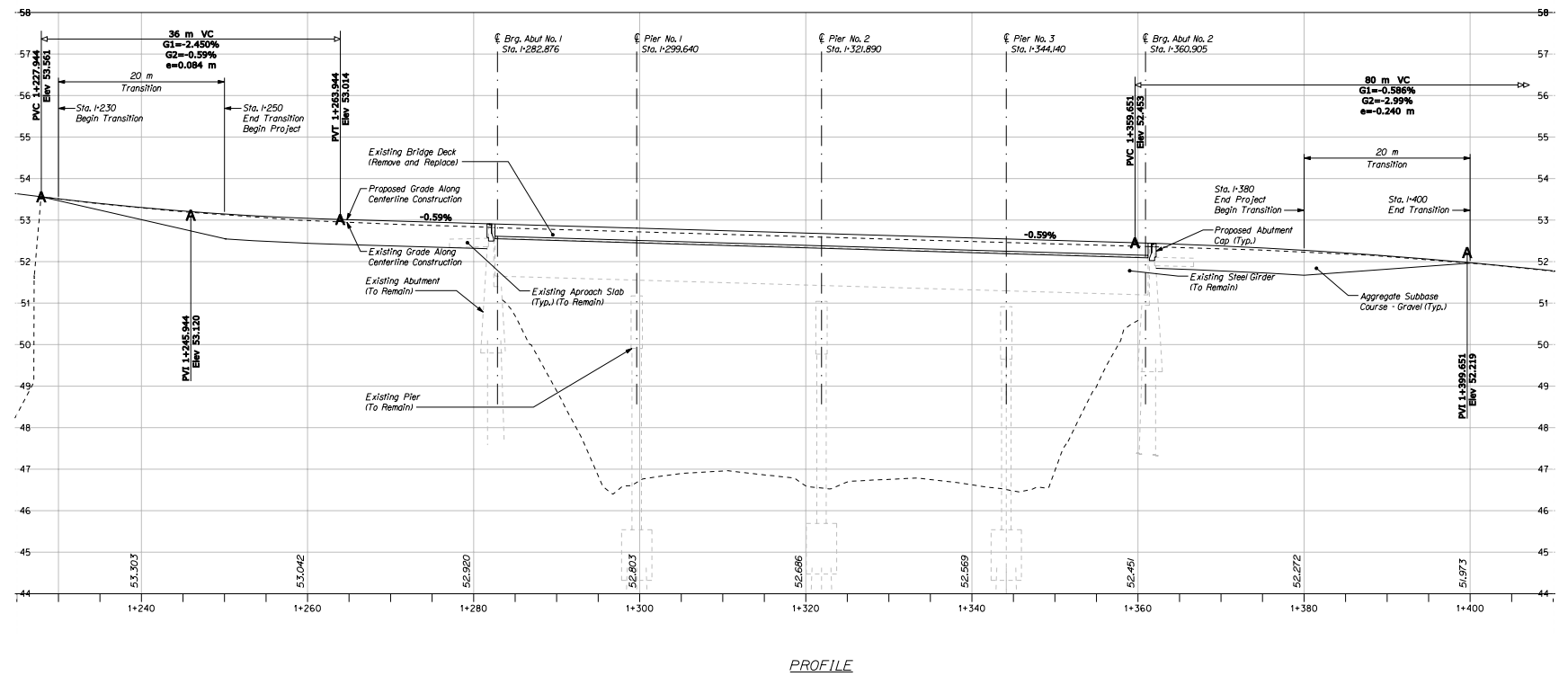
User: jim.wentworth

Division: BRIDGE

Filename: ...\\001\bridge\msta007_Profile.dgn

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN RETAINED	C. RUFF	
CHECKED		
FIELD CHANGES		
PLANS		

METRIC	1. All dimensions are in millimeters unless otherwise noted.		SHEET NO. 7	TOTAL SHEETS 22
	2. All elevations and stations are in meters.			
			009028.00	



PROFILE

BRIDGE NO. 5685

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DURHAM ROAD BRIDGE
OVER
INTERSTATE 95
IN THE TOWN OF
BRUNSWICK
CUMBERLAND COUNTY

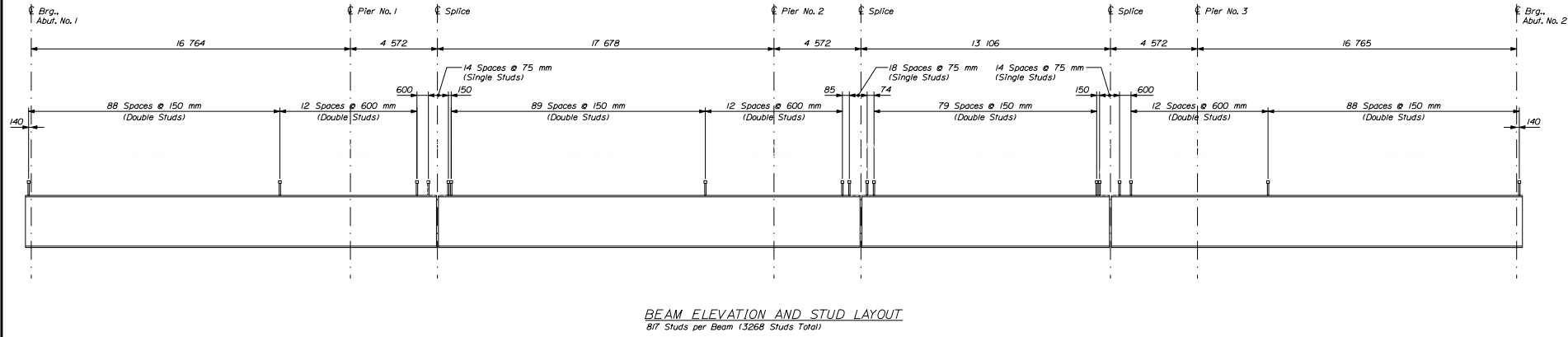
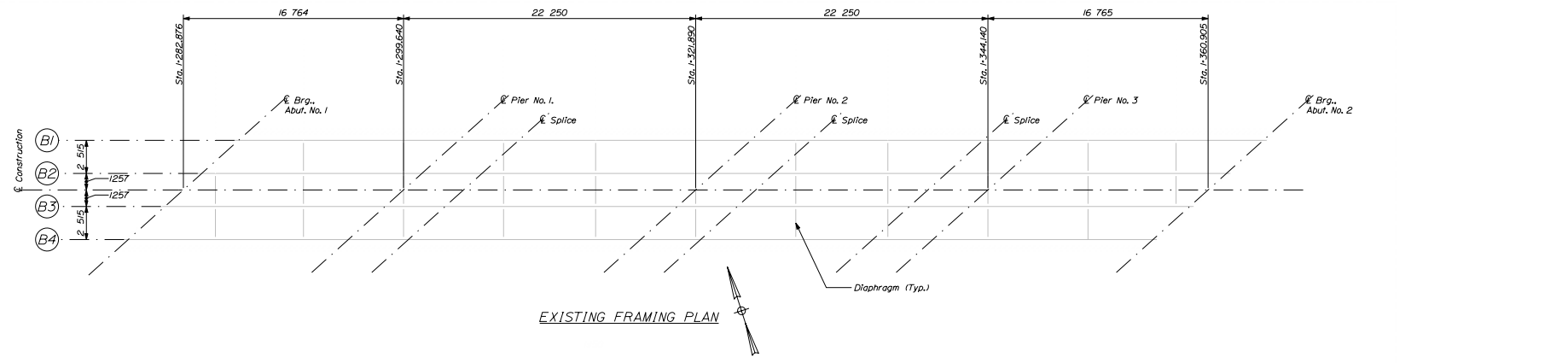
PROFILE

SHEET OF AUSTRIA, MAINE

Filename: ...\\001\bridge\msta\017...Framing.dgn
 Division: BRIDGE
 Username: jmw.wentworth
 Date: 1/21/2009

PROJECT DESIGN ENGINEER	DATE
DESIGN REVIEWED	BY
CHECKED	C. RIFT
FIELD CHANGES	
PLANS	

METRIC		1. All dimensions are in millimeters unless otherwise noted.		2. All elevations and stations are in meters.	
SIGNAL	SPICE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	
1		IM-95-9028(00)E	17	22	
009028.00					



BRIDGE NO. 5685

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DURHAM ROAD BRIDGE
 OVER
INTERSTATE 95
 IN THE TOWN OF
BRUNSWICK
 CUMBERLAND COUNTY
STRUCTURAL STEEL

SHEET OF **AUGUSTA, MAINE**

Date: 1/21/2009

Username: j_m.wentworth

Division: BRIDGE

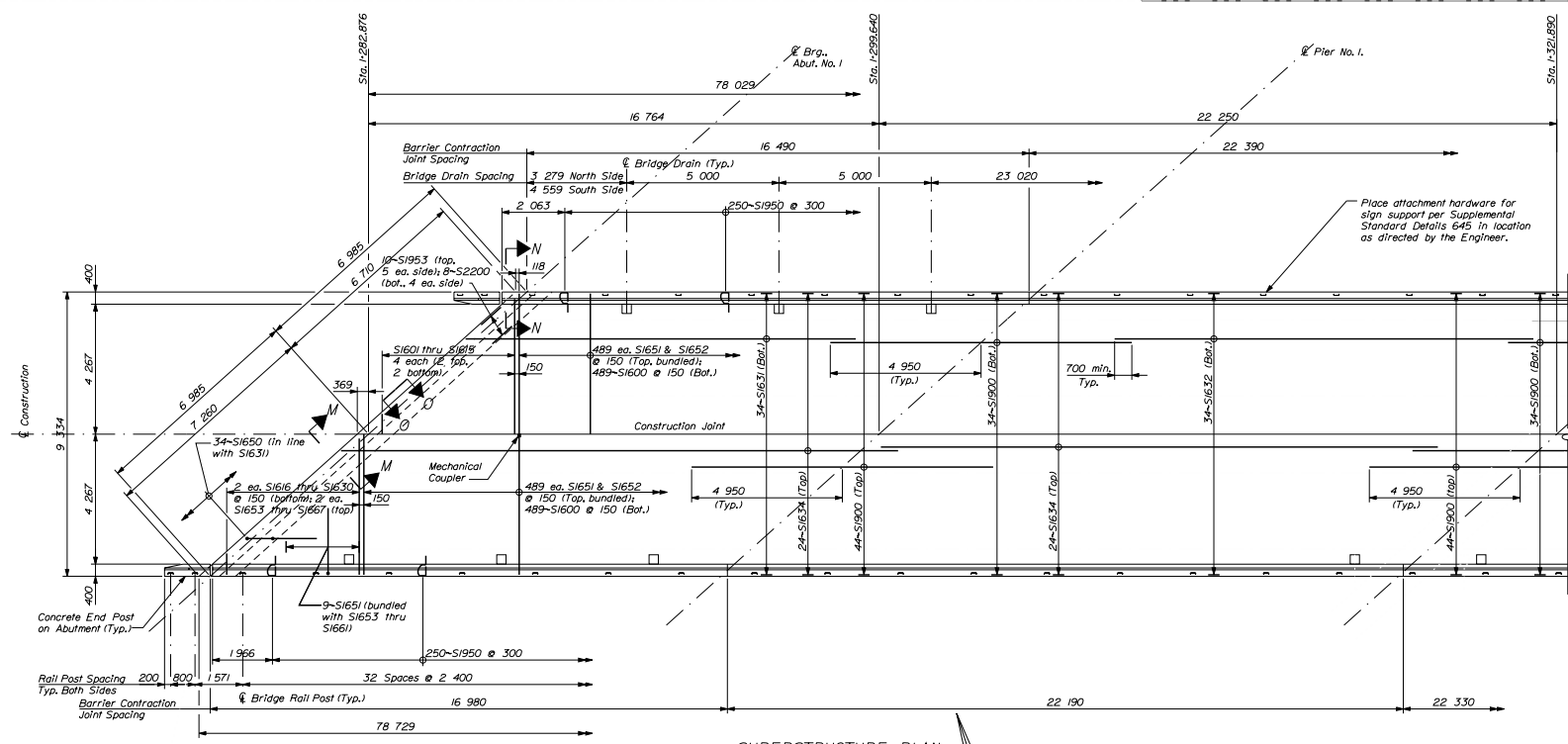
Filename: ...\\001\bridge\msta\018...Sup.dgn

PROJECT DESIGN ENGINEER	DATE
DESIGNER/IN CHARGE	BY
CHECKED	C. RIFT
APPROVED	
FIELD CHANGES	
PLANS	

METRIC 1. All dimensions are in millimeters unless otherwise noted.
 2. All elevations and stations are in meters.

FISCAL YEAR	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IM-95-9028(00)E	18	22

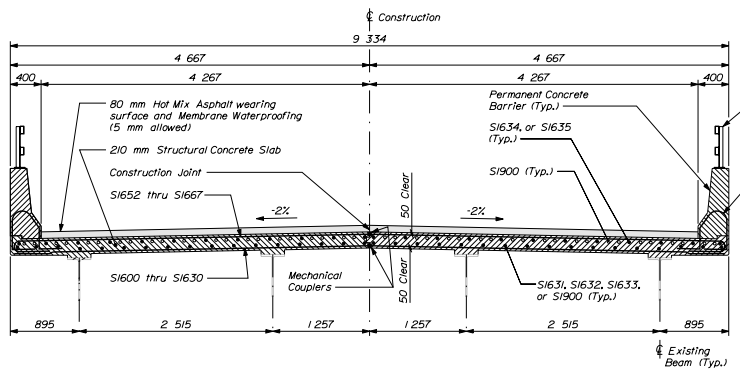
009028.00



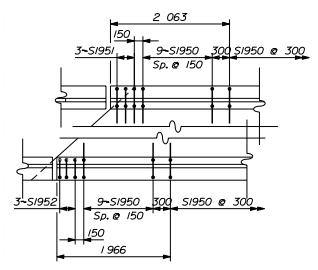
SUPERSTRUCTURE PLAN
 Note: Expansion Device not shown for clarity.

SUPERSTRUCTURE NOTES

1. Form a 30 mm V-groove on the fascias at the horizontal joint between the curb and slab.
2. Reinforcing steel shall have a minimum cover of 50 mm unless otherwise noted.
3. The superstructure slab concrete shall be placed in one continuous operation and the concrete shall be kept plastic one complete span behind the span being placed.
4. The formwork and its supports, over the full width of the structural slab, shall remain in place until a minimum of 48 hours has elapsed after placement of the final section of the slab, after which removal of formwork for sections meeting the requirements for form removal of Section 502, Structural Concrete, of the Standard Specifications, may proceed.
5. All concrete barrier reinforcing steel shall be epoxy-coated.



TRANSVERSE SECTION



BARRIER END PLAN ABUTMENT #1
 Abutment #2 Similar
 Note: Bars S1950 through S1952 shall be epoxy coated.

BRIDGE NO. 5685

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

DURHAM ROAD BRIDGE
 OVER
INTERSTATE 95
 IN THE TOWN OF
BRUNSWICK
 CUMBERLAND COUNTY

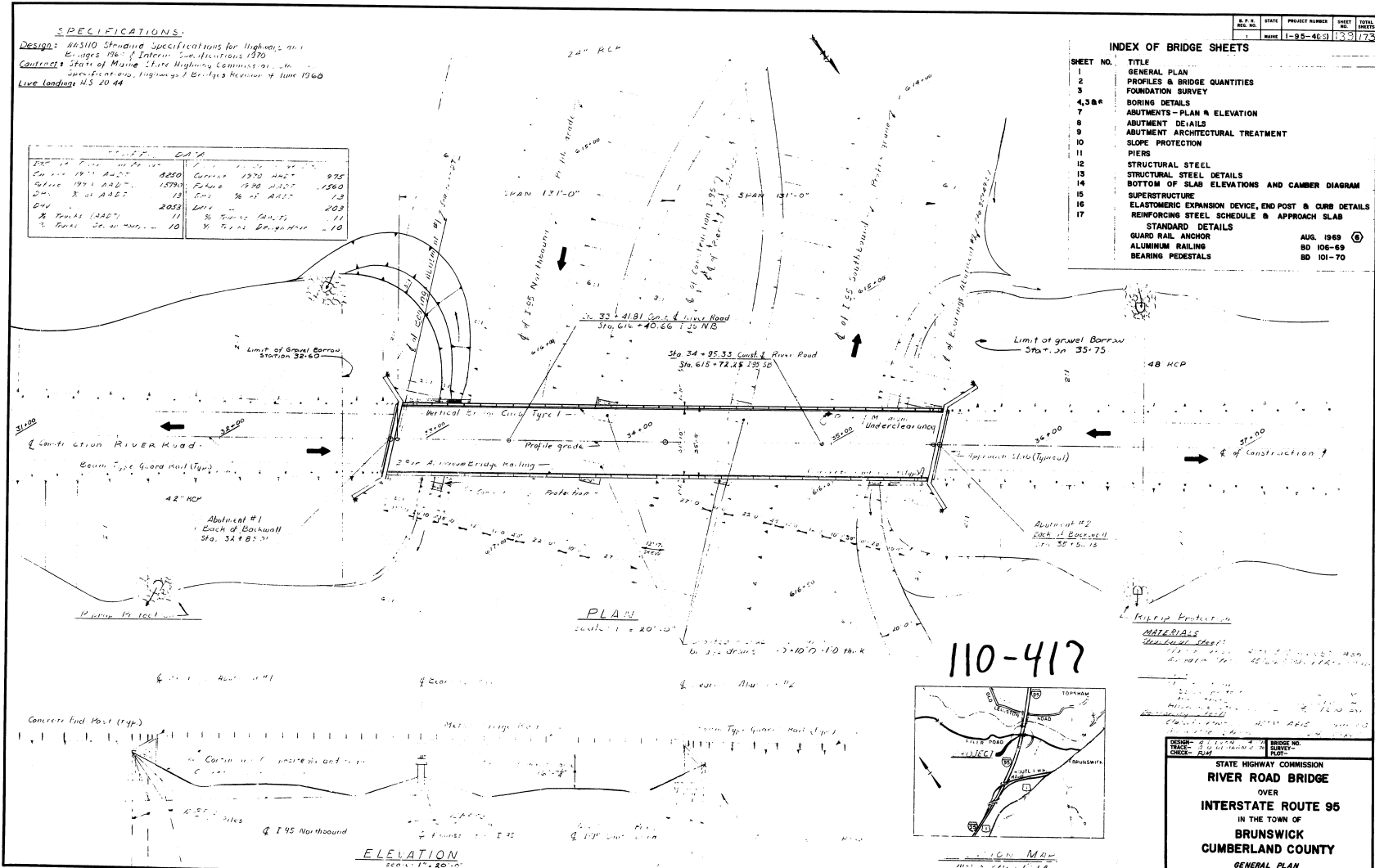
SUPERSTRUCTURE

SHEET OF **ADVENTA HARRIS**

SPECIFICATIONS.

Design: AASHTO Standard Specifications for Highway Bridges, 1961 Edition, Sections 1370 through 1375
 Contract: State of Maine State Highway Commission, etc.
 Specification: Highway Bridges, Revision of June 1960
 Live Load: HS 20-44

DATE	BY	REVISION
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970

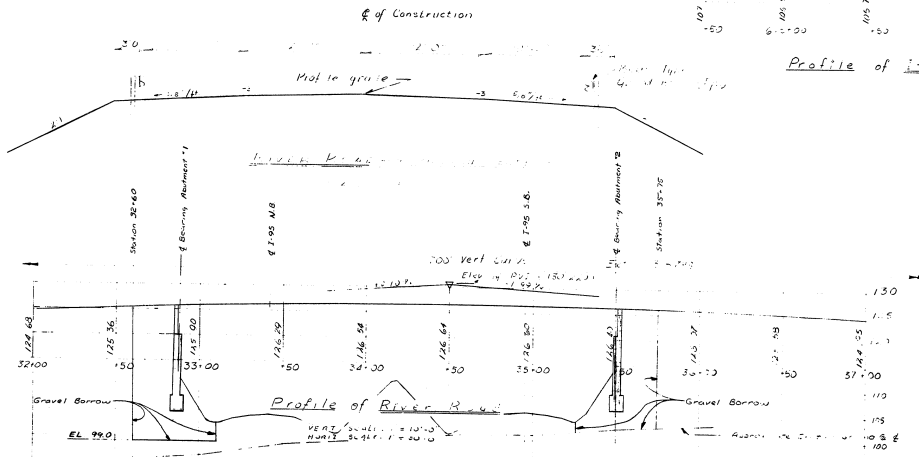
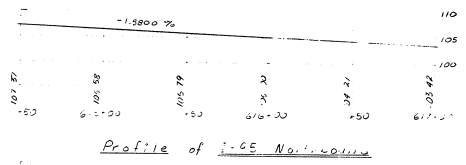
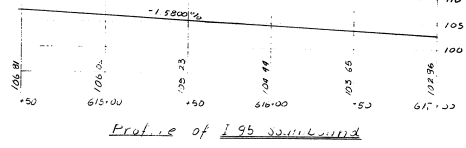
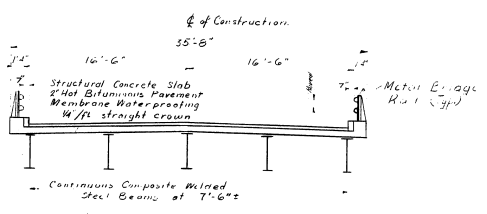
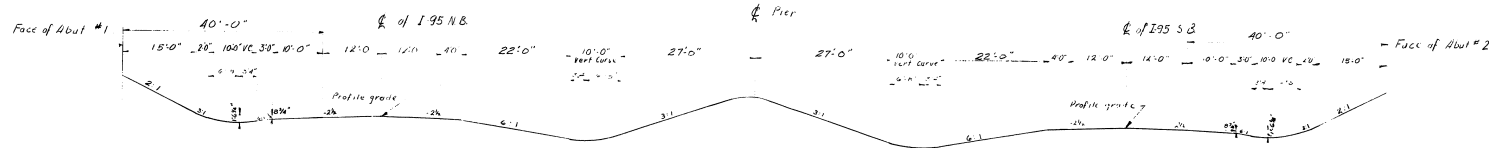


SHEET NO.	TITLE
1	GENERAL PLAN
2	PROFILES & BRIDGE QUANTITIES
3	FOUNDATION SURVEY
4, 5, 6, 7	BORING DETAILS
7	ABUTMENTS - PLAN & ELEVATION
8	ABUTMENT DETAILS
9	ABUTMENT ARCHITECTURAL TREATMENT
10	SLOPE PROTECTION
11	PIERS
12	STRUCTURAL STEEL
13	STRUCTURAL STEEL DETAILS
14	BOTTOM OF SLAB ELEVATIONS AND CAMBER DIAGRAM
15	SUPERSTRUCTURE
16	ELASTOMERIC EXPANSION DEVICE, END POST & CURB DETAILS
16	REINFORCING STEEL SCHEDULE & APPROACH SLAB
17	STANDARD DETAILS
	GUARD RAIL ANCHOR
	ALUMINUM RAILING
	BEARING PEDESTALS

110-417

STATE HIGHWAY COMMISSION
RIVER ROAD BRIDGE
 OVER
INTERSTATE ROUTE 95
 IN THE TOWN OF
BRUNSWICK
CUMBERLAND COUNTY
 GENERAL PLAN
 SHEET 1 OF 17 AUGUSTA, MAINE, JUNE, 1970

ELEVATION
 scale 1" = 20'-0"



ESTIMATED BRIDGE QUANTITIES			
Item	Description	Unit	Quantity
403.08	Hot Bituminous Pavement Grading C	Ton	100
403.14	Asphalt Cement Hot Bituminous Surf Pavement	Ton	7
501.818	Steel H-Beam Piles 53 lbs per foot	Lin. ft	2,408
502.21	Structural Concrete, Abutments and Retaining Walls	Cu. Yd.	350
502.23	Structural Concrete, Piers	Cu. Yd.	58
502.26	Structural Concrete, Roadway and Sidewalk Slabs on Steel Bridges	Cu. Yd.	1
502.31	Structural Concrete, Approach Slabs	Cu. Yd.	1
503.12	Reinforcing Steel, Fabricated and DB, Joints	Lb.	92,870
503.12	Reinforcing Steel, Milling	Lb.	92,870
504.70	Structural Steel, Fabricated and Delivered	Cu. Yd.	1
504.71	Structural Steel, Erection	Cu. Yd.	1
505.08	Shear Connectors	Cu. Yd.	1
506.04	Field Painting, Structural Steel	Cu. Yd.	1
507.08	Bridge Railings	Lin. ft	510
508.13	Membrane Waterproofing	Sq. Yd.	93
518.06	French Drains	Cu. Yd.	170
518.09	Slope Protection - Portland cement concrete	Sq. Yd.	314
519.08	Curing Box for Concrete Cylinders	Each	7
519.20	Protective Coating for Concrete Surfaces	Sq. Yd.	220
520.07	Elastomeric Expansion Device Type 1	Lin. ft	68
604.13	Vertical Bridge Curb - Type 1	Lin. ft	530

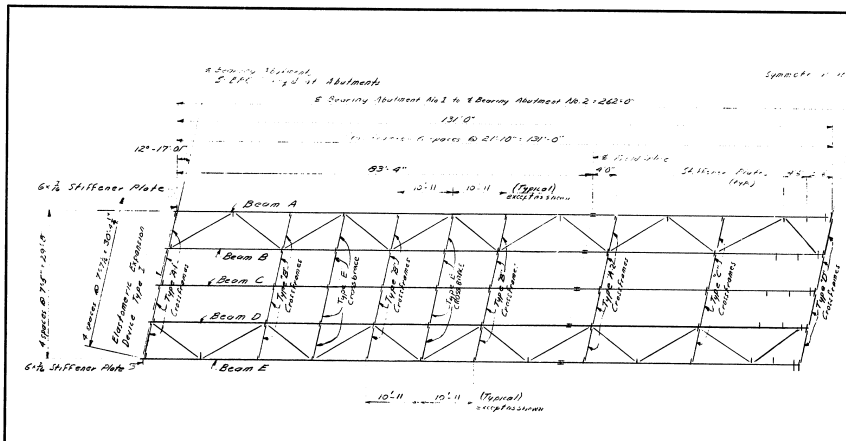
ESTIMATED QUANTITIES FOR LANDSCAPE ITEMS:
 275 Cu. Yd. Concrete, Roadway and Sidewalk
 51 lbs. Structural Steel, Piles
 Structural Concrete, Approach Slabs
 Structural Steel
 Shear Connectors

290 CY
 23 CY
 326,000 lbs
 2,120 lbs

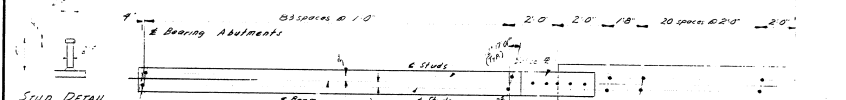
110-418

STATE HIGHWAY COMMISSION
 RIVER ROAD BRIDGE
 OVER
 INTERSTATE ROUTE 95
 IN THE TOWN OF
 BRUNSWICK
 CUMBERLAND COUNTY
 PROFILES AND BRIDGE QUANTITIES
 SHEET 8 OF 17 AUGUSTA, MAINE JUNE 1970
 BRUNSWICK I-95-4(25)

PLANS	DESIGN-DETAILED	REV.	DATE
	RECORDED	2/10/70	2/10/70
	FIELD CHANGE		



FRAMING PLAN
All dimensions are horizontal for
slope of beams see bottom of slab
Elevation No. 14

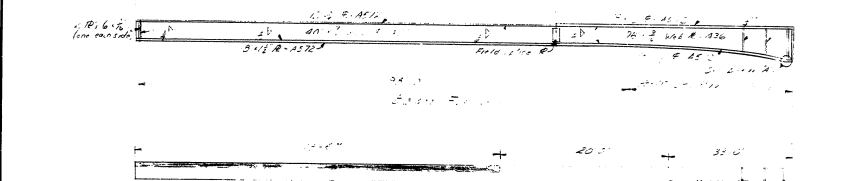


STUD DETAIL

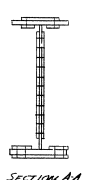
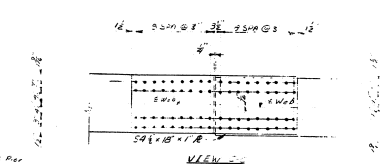
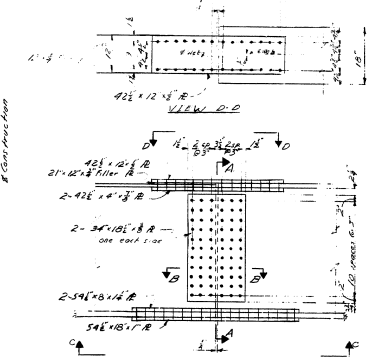
NOTE: Studs shall be granular or solid flat filled and automatically and welded to the flange in the shop or in the field.



SHEAR CONNECTOR

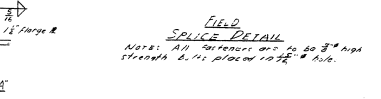


SLAB DETAIL



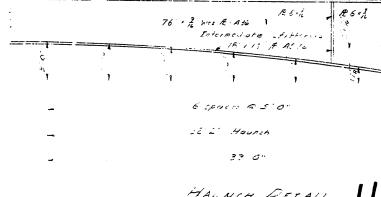
NOTES:

1. All reinforcement shall be placed in accordance with the provisions of the ACI 318 Building Code Requirements for Reinforced Concrete and Commentary thereon. The design of the reinforcement shall be in accordance with the provisions of the ACI 318 Building Code Requirements for Reinforced Concrete and Commentary thereon. The design of the reinforcement shall be in accordance with the provisions of the ACI 318 Building Code Requirements for Reinforced Concrete and Commentary thereon.



FIELD SPICE DETAIL

NOTE: All reinforcement shall be 30 #4 high strength deformed steel bars.



HAUNCH DETAIL

STIFFENER NOTES:

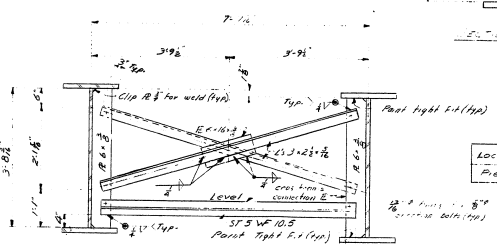
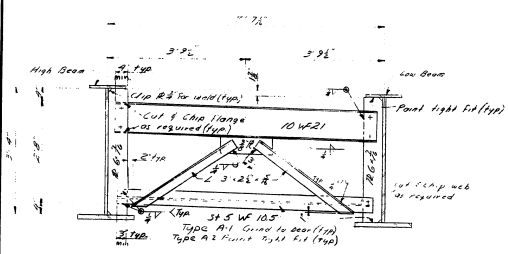
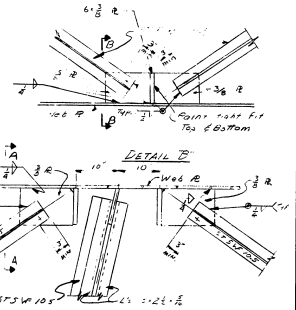
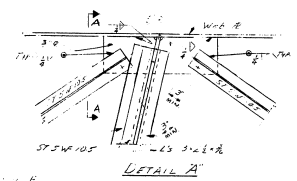
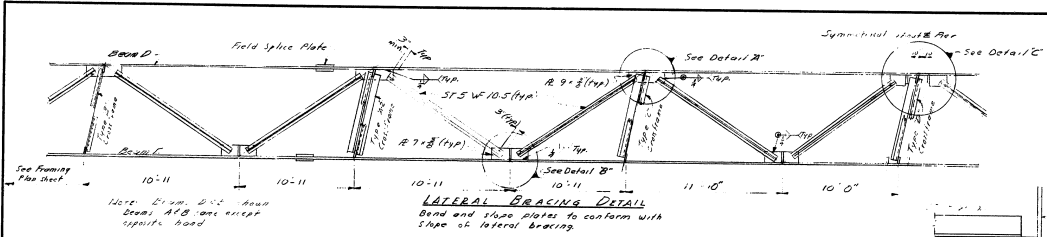
The intermediate stiffeners shall be welded to the web with a 5" fillet weld and to the bottom flange with a 1/2" fillet weld. The top flange shall have a 1/2" fillet weld. The bearing stiffeners shall be welded to the web with a 5" fillet weld and to the bottom flange with a 1/2" fillet weld. The bearing stiffeners shall have a 1/2" fillet weld to the top flange.

DESIGN DETAIL	DATE
CHECKED	DATE
FIELD CHANGES	DATE

STATE HIGHWAY COMMISSION
RIVER ROAD BRIDGE
 OVER
INTERSTATE ROUTE 95
 IN THE TOWN OF
BRUNSWICK
CUMBERLAND COUNTY
 STRUCTURAL STEEL

110-428

DATE	STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
1-95-469	ME	115	173	

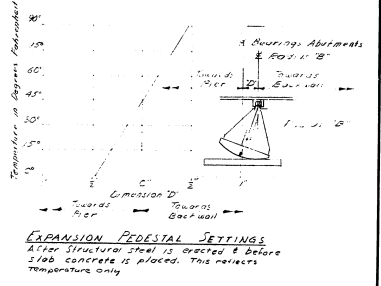
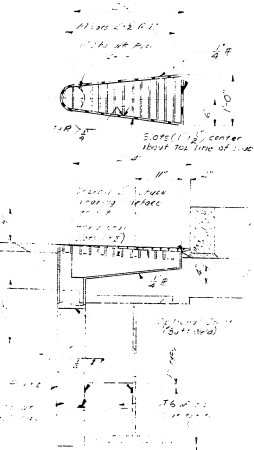
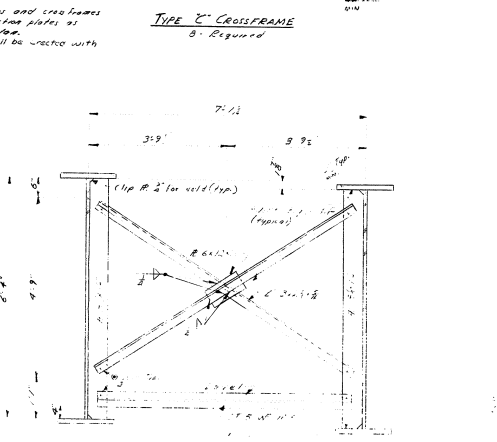
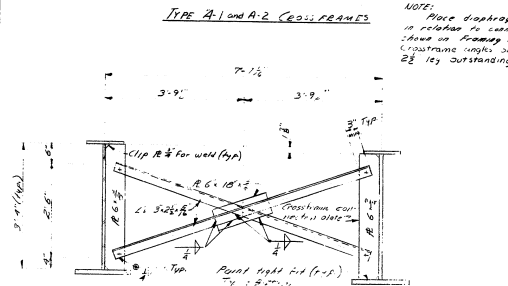


SECTION A-A

Point weld on the top side of the connecting plates, where necessary to facilitate the making of field connections.

Location	Mod. A	B	C	D	E	F	G	H	J	K	L	M	N
Per	FACT Mod.	-	14	21.5	10	2	4	14	-	5	-	-	5

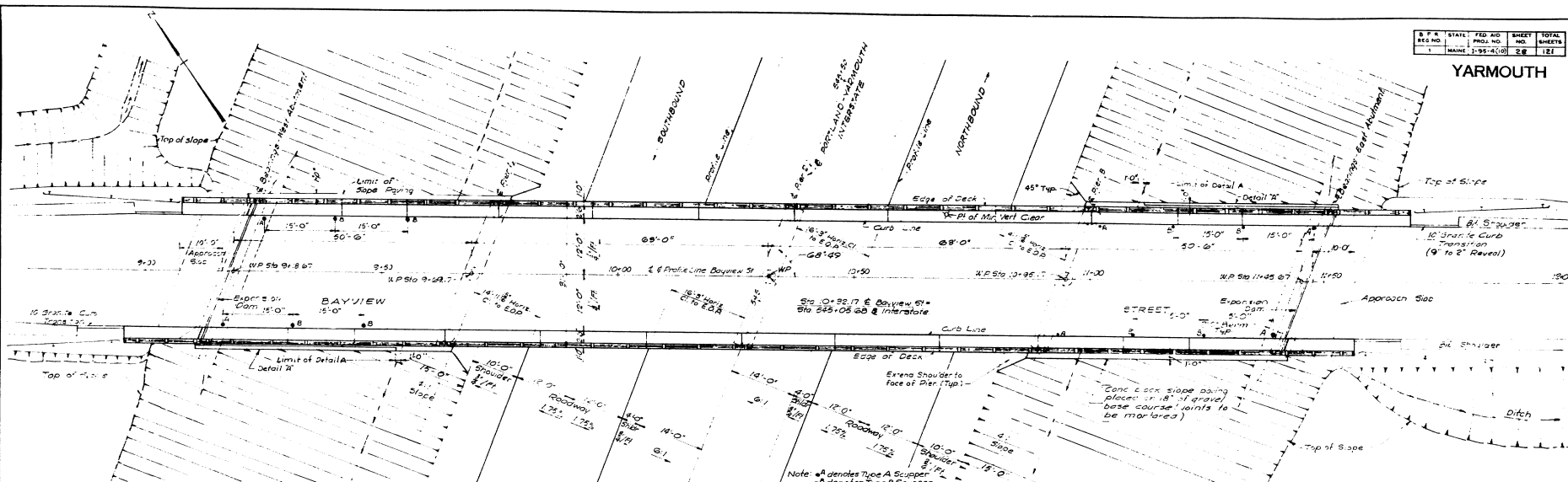
DIMENSIONS FOR EPCC MOD. BEARING PEDESTALS
See Standard Detail sheet (SD 101-70)



PLANS	DESIGN DETAIL	SCALE	DATE
	REVISIONS	BY	DATE
	FILE CHANGES		

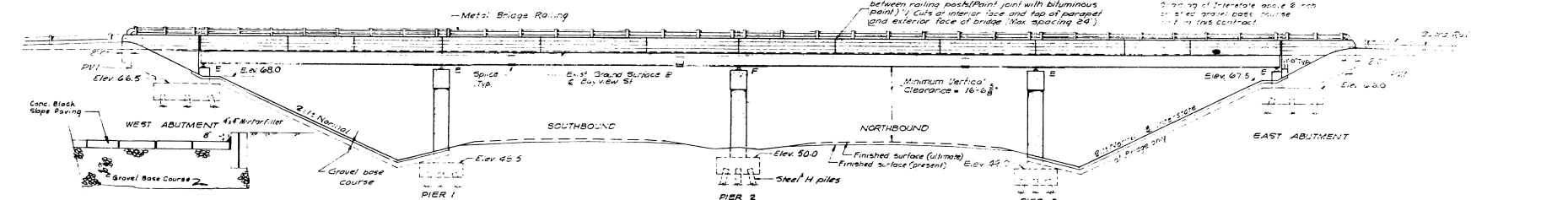
110-429

STATE HIGHWAY COMMISSION
RIVER ROAD BRIDGE
OVER
INTERSTATE ROUTE 95
IN THE TOWN OF
BRUNSWICK
CUMBERLAND COUNTY
STRUCTURAL STEEL DETAILS
SHEET 13 OF 17 AUGUSTA, MAINE SEPT. 1970



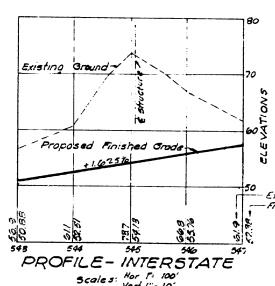
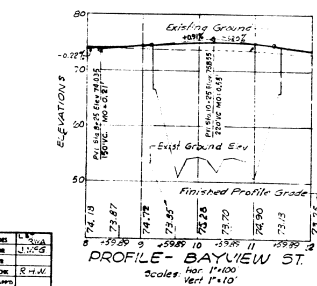
ALIGNMENT NOTES
 1) Abutment and Piers are parallel to Interstate
 2) Wingwalls and Stringers are parallel to Bayview St

PLAN
 Scale: 1"=40'



DETAIL A
 Scale: 1/2"=10'

ELEVATION
 Scale: 1"=40'



GENERAL NOTES

- SPECIFICATIONS:**
 AASHO 1953
 Maine State Highway Commission Standard Specifications and Special Provisions
- LIVE LOAD:**
 H20-44
- FOUNDATIONS:**
 Steel H piles driven to firm end bearing
 Design Capacity of piles - 35 Tons
- ALLOWABLE STRESSES:**
 Structural Steel - 18,000 p.s.i.
 Reinforcing Steel - 18,000 p.s.i.
 Concrete - 1,500 p.s.i.
- CONCRETE:**
 Class "A" Footings, Piers, Abutments, Approach Slabs and Deck
- ELEVATIONS:**
 Based on Elev. 0.00 at Mean Sea Level

ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
200-16	Structural Earth Excavation, Riprap and Ret. Walls	CY	350
200-19	Structural Earth Excavation, Piers	CY	320
300-7	Gravel Base Course in Slabs - Measurement	CY	222
307-6	Reinforced Portland Cement Concrete Approach Slabs	CY	53
204-38	Bituminous Concrete Surface Course, Type A	Ton	80
701-29	Portland Cement Concrete, Abutments and Ret. Walls	CY	218
701-37	Portland Cement Concrete, Substructure Columns, End Bases, Benches, Collision Walls, Girders, Sluts, Etc.	CY	190
701-40	Portland Cement Concrete, Roadway and Sidewalk Slabs on Steel Bridges	CY	255
701-41	Portland Cement	BB	595
701-51	Crack Repair, Scissors	LB	18
702-103	Structural Steel, Fabricated and Delivered	LB	123,000
702-34	Structural Steel, Erection	LB	123,000
702-85	Structural Steel, Field Painting	LB	123,000
705-18	Reinforcing Steel, Delivered	LB	86,000
705-16	Reinforcing Steel, Piling	LB	26,000
708-16	Steel H-beam Piles - 42 lbs. per ft.	LB	6,177
807-9	Membrane Waterproofing	SF	670
810-4	Waterproofing Joints	LF	30
804-6	French Drains	CY	55
806-7	Aluminum Roll, Delivered and Erected	SF	233
808-6	Slope Paving for Bridges	SF	420

STATE HIGHWAY COMMISSION
 AUGUSTA, MAINE

PORTLAND YARMOUTH INTERSTATE

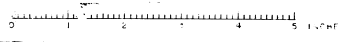
BAYVIEW STREET OVER INTERSTATE

GENERAL PLAN AND ELEVATION

SHEET NO. 28 OF 121 SCALE: AS NOTED

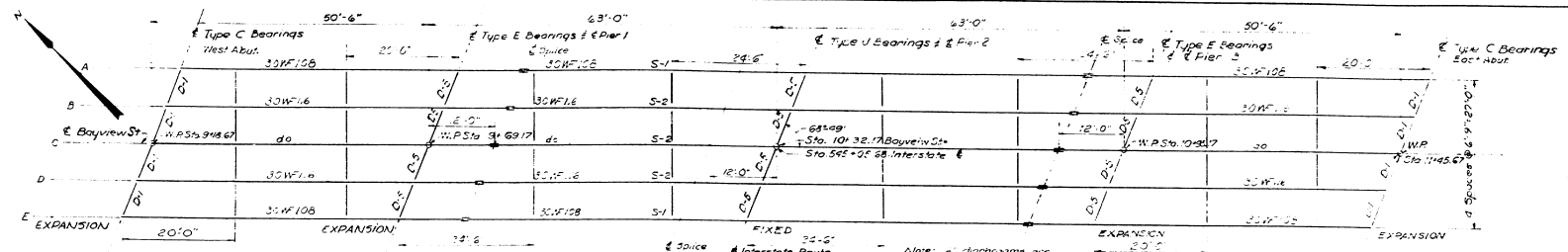
FAY, SPOFFORD & THORNDIKE, INC.
 ENGINEERS BOSTON, MASS. 04-14
 55

M-1778

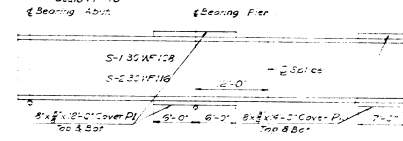


YARMOUTH

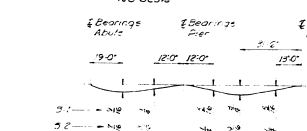
Note: Where no dimensions are given, the framing shall conform to A.S.T.M. A-373. All other structural steel shall conform to A.S.T.M. A-373 unless specified otherwise.



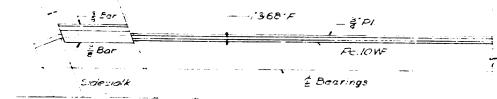
FRAMING PLAN
Scale: 1"=10'



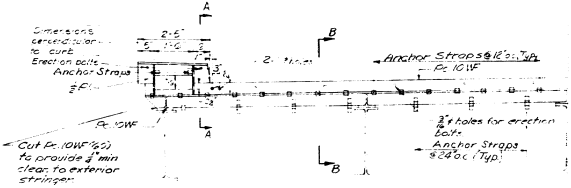
STRINGER ELEVATION
No Scale



DEAD LOAD DEFLECTION DIAGRAM
No Scale



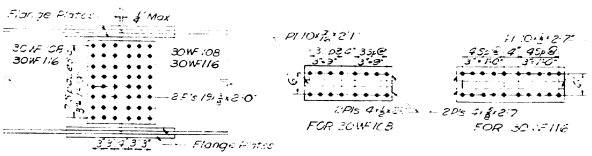
PLAN
Scale: 3/4"=1'-0"



ELEVATION
Scale: 3/4"=1'-0"

FRAMING NOTES

- 1. All stringers and bearing details shall conform to A.S.T.M. A-373.
- 2. All dimensions shown in framing plan are center-to-center.
- 3. Stringers shall be fabricated in accordance with the details shown in this plan and shall be erected with natural bow up, unless otherwise specified, to follow road profile to be obtained with similar adjustment of splices.



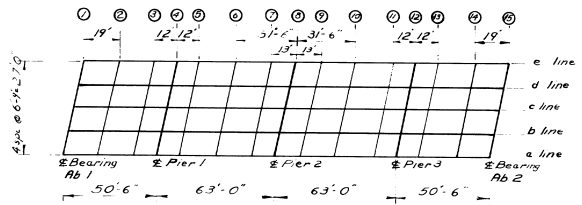
ELEVATION FLANGE PLATES

Note: All splices to be made with 3/4" rivets or high strength bolts in 1/8" sholes.

STRINGER SPLICE DETAILS

(For 30WF108 to 30WF108)
(For 30WF116 to 30WF116)
Scale: 3/4"=1'-0"

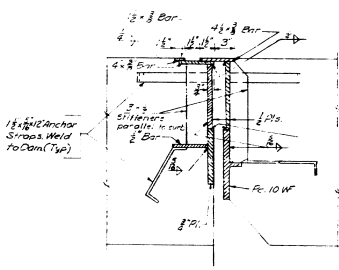
BLOCKING PLAN



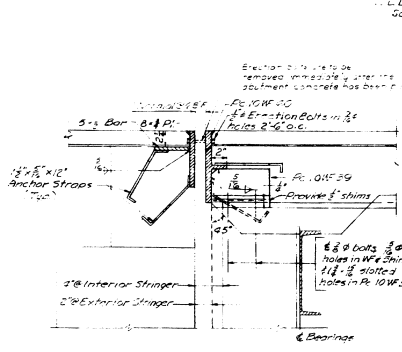
BLOCKING TABLE *

Point	Line a	Line b	Line c	Line d	Line e
① @ Bearing Ab1	73.79	73.95	74.12	74.30	74.48
②	73.99	74.17	74.30	74.48	74.67
③	74.09	74.24	74.40	74.57	74.75
④ @ Pier 1	74.13	74.28	74.47	74.60	74.77
⑤	74.20	74.35	74.50	74.66	74.83
⑥	74.27	74.42	74.56	74.72	74.90
⑦	74.26	74.39	74.53	74.69	74.85
⑧ @ Pier 2	74.22	74.36	74.49	74.64	74.80
⑨	74.22	74.37	74.48	74.63	74.78
⑩	74.19	74.40	74.42	74.67	74.93
⑪	74.04	74.16	74.28	74.42	74.56
⑫ @ Pier 3	73.93	74.05	74.17	74.30	74.44
⑬	73.85	73.96	74.08	74.21	74.35
⑭	73.68	73.78	73.90	74.03	74.17
⑮ @ Bearing Ab2	73.42	73.53	73.64	73.76	73.89

* Bottom of slab elevations. Added: 9/14/61



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

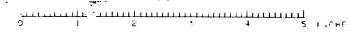


SECTION B-B
Scale: 1 1/2"=1'-0"

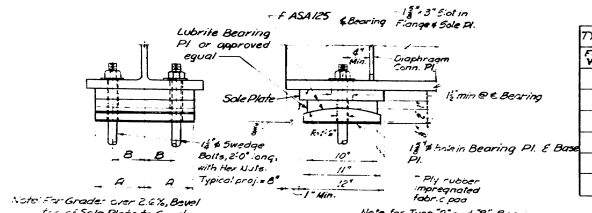
EXPANSION DAM DETAILS

STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
PORTLAND-YARMOUTH INTERSTATE	
BAYVIEW STREET OVER INTERSTATE	
FRAMING PLAN AND DETAILS	
SHEET NO. 3 OF 161	SCALE AS NOTED
FAY, SPROFFER & ASSOCIATES, INC. ENGINEERS	0m-11 56

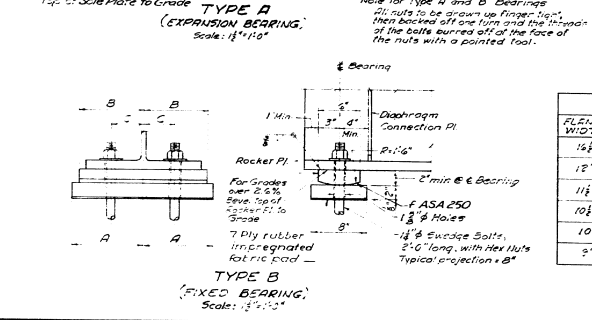
M-1761



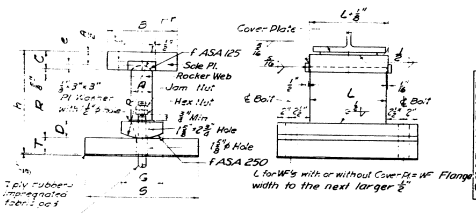
YARMOUTH



TYPE A (EXPANSION)		
FLANGE WIDTH	A	B
16 1/2"	7"	4 1/2"
12"	5"	2 1/2"
11 1/2"	5"	2 1/2"
10 1/2"	4 1/2"	2 1/2"
10"	4 1/2"	2 1/2"
9"	4"	2 1/2"



TYPE B (FIXED)			
FLANGE WIDTH	A	B	C
16 1/2"	10"	9"	4 1/2"
12"	8"	7"	2 1/2"
11 1/2"	8"	7"	2 1/2"
10 1/2"	7"	6"	2 1/2"
10"	7"	6"	2 1/2"
9"	7"	6"	2 1/2"



BEARING TYPE	DIMENSIONS									
	A	B	C	D	e	G	h	R*	S	T
C	2 1/2"	8 1/2"	2"	2 1/2"	8"	6"	10 1/2"	6"	12"	1 1/2"
D	2 1/2"	9 1/2"	2"	2 1/2"	8"	6"	11 1/2"	7"	14"	1 1/2"
E	3"	10"	2 1/2"	2 1/2"	1"	6"	12 1/2"	8"	14"	2"
F	3"	10"	2 1/2"	2 1/2"	1"	6"	12 1/2"	9"	16"	2 1/2"
G	3 1/2"	10"	3"	2 1/2"	1 1/2"	7"	16 1/2"	10"	16"	2 1/2"
H	3 1/2"	10"	3"	2 1/2"	1 1/2"	7"	17 1/2"	11"	18"	2 1/2"

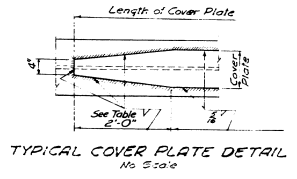
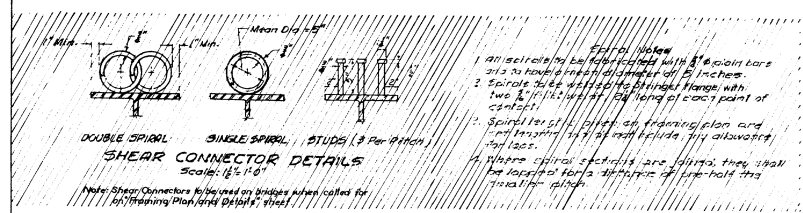
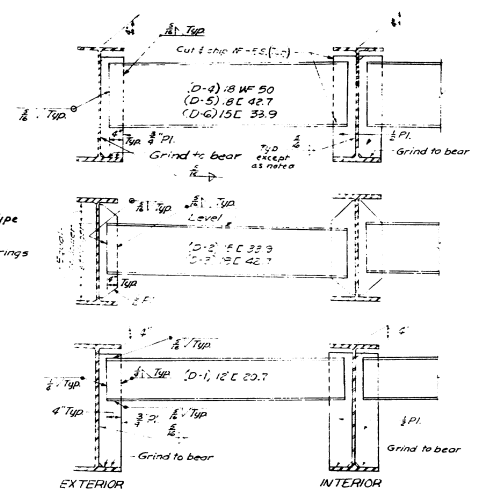
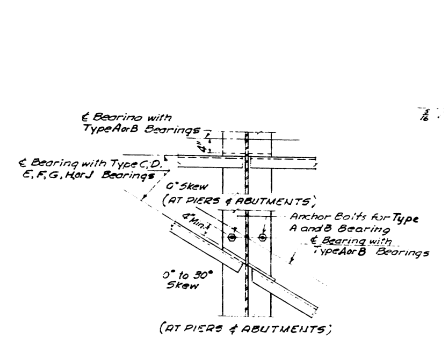
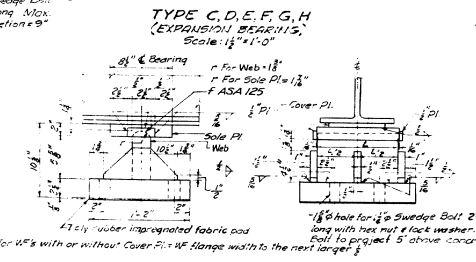


PLATE	FILLET WELD
3/8" to 1/2"	3/16"
5/8" to 1"	1/8"
1 1/8" to 1 1/2"	5/16"

STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

PORTLAND YARMOUTH INTERSTATE

BAYVIEW STREET OVER INTERSTATE

STANDARD FRAMING DETAILS

SHEET NO. OF SCALE: AS NOTED

DR.	DWIGGS
IN.	RB
CHK.	R.K.
APP'D.	

M-1783

