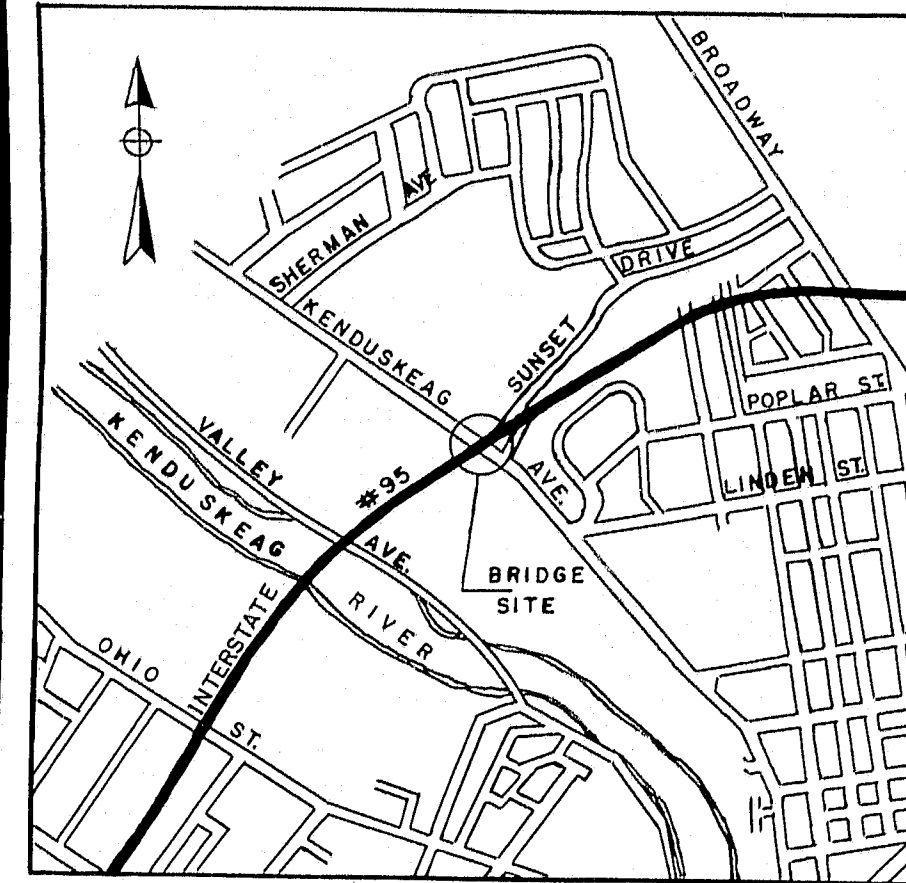
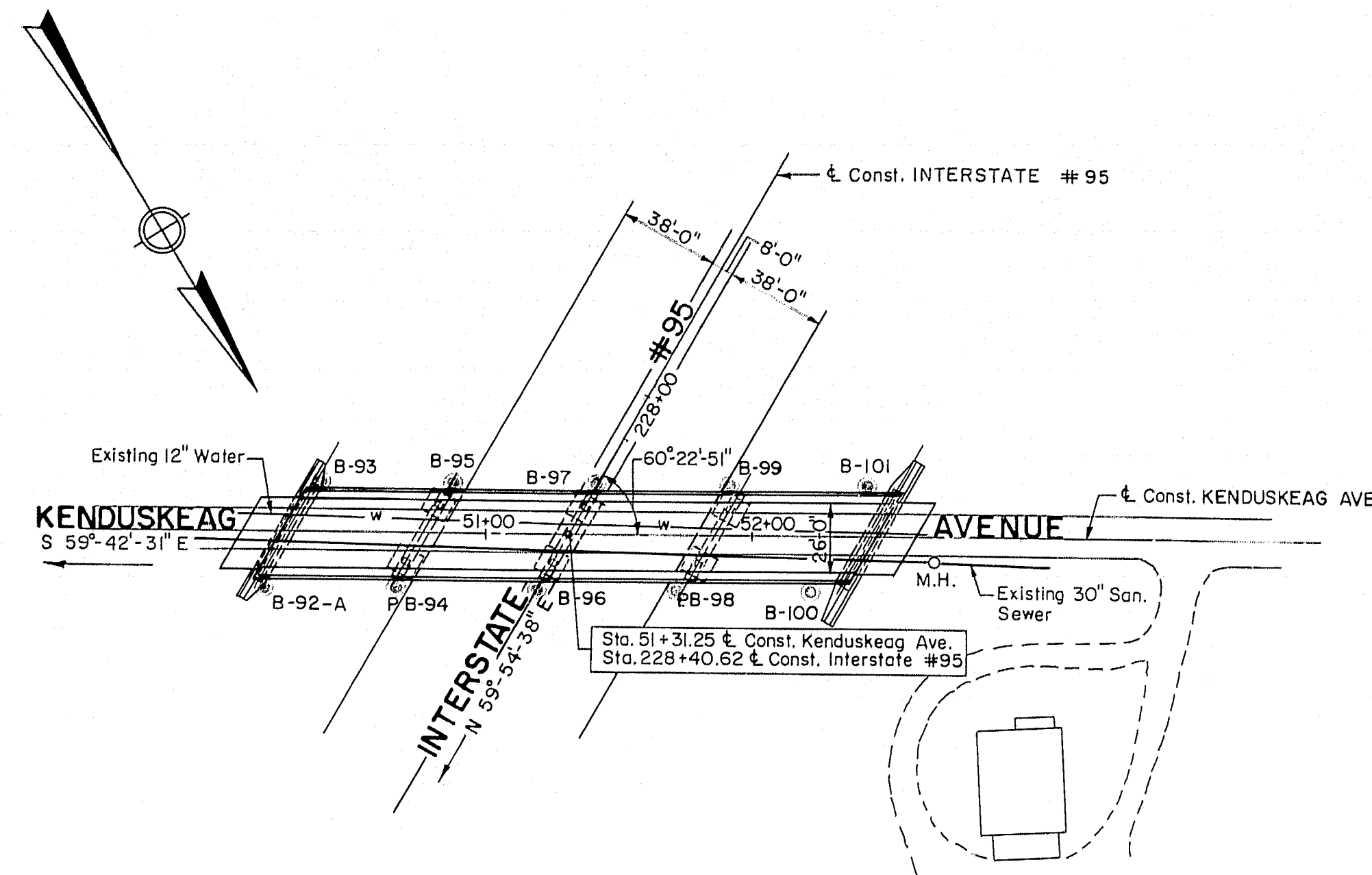
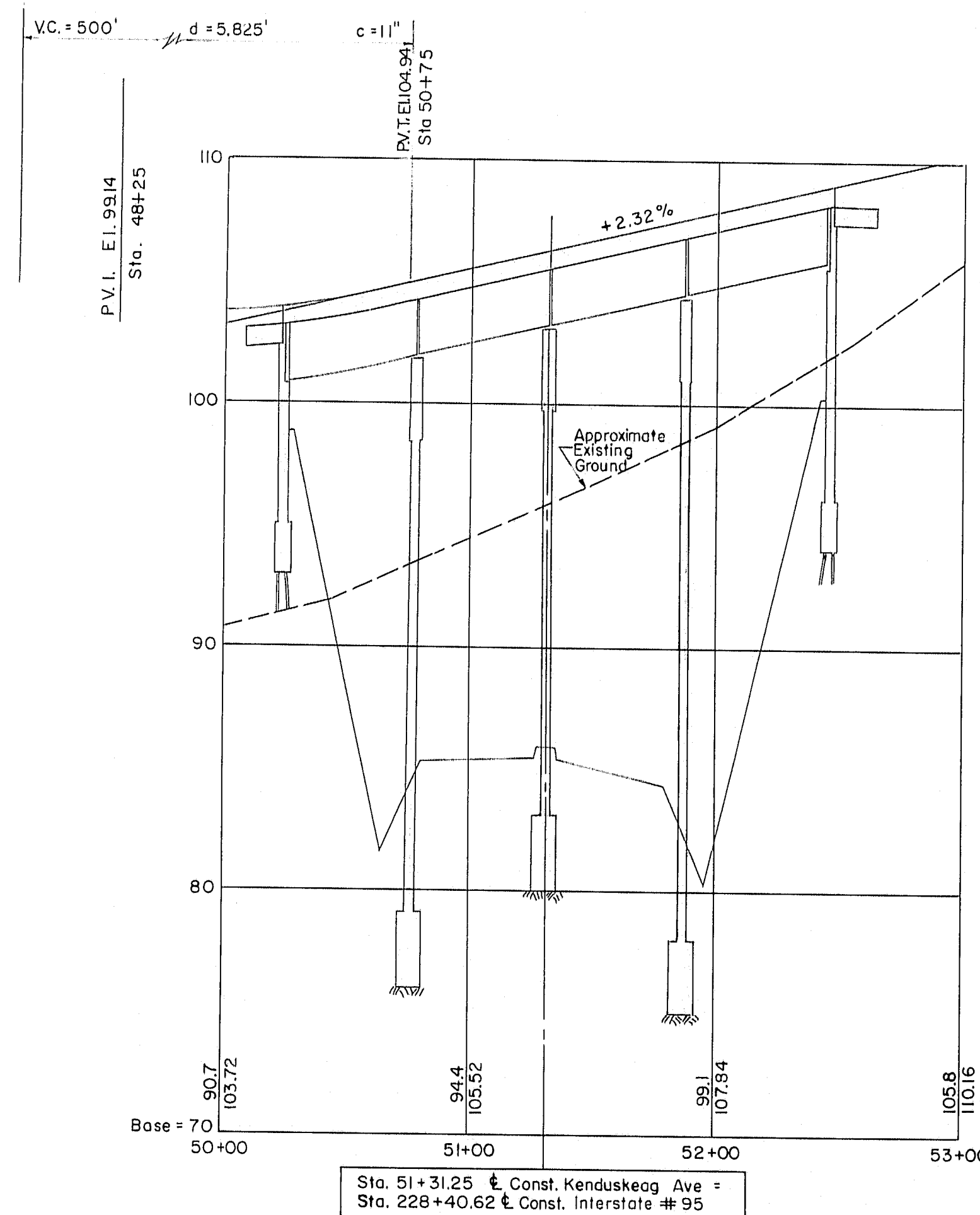




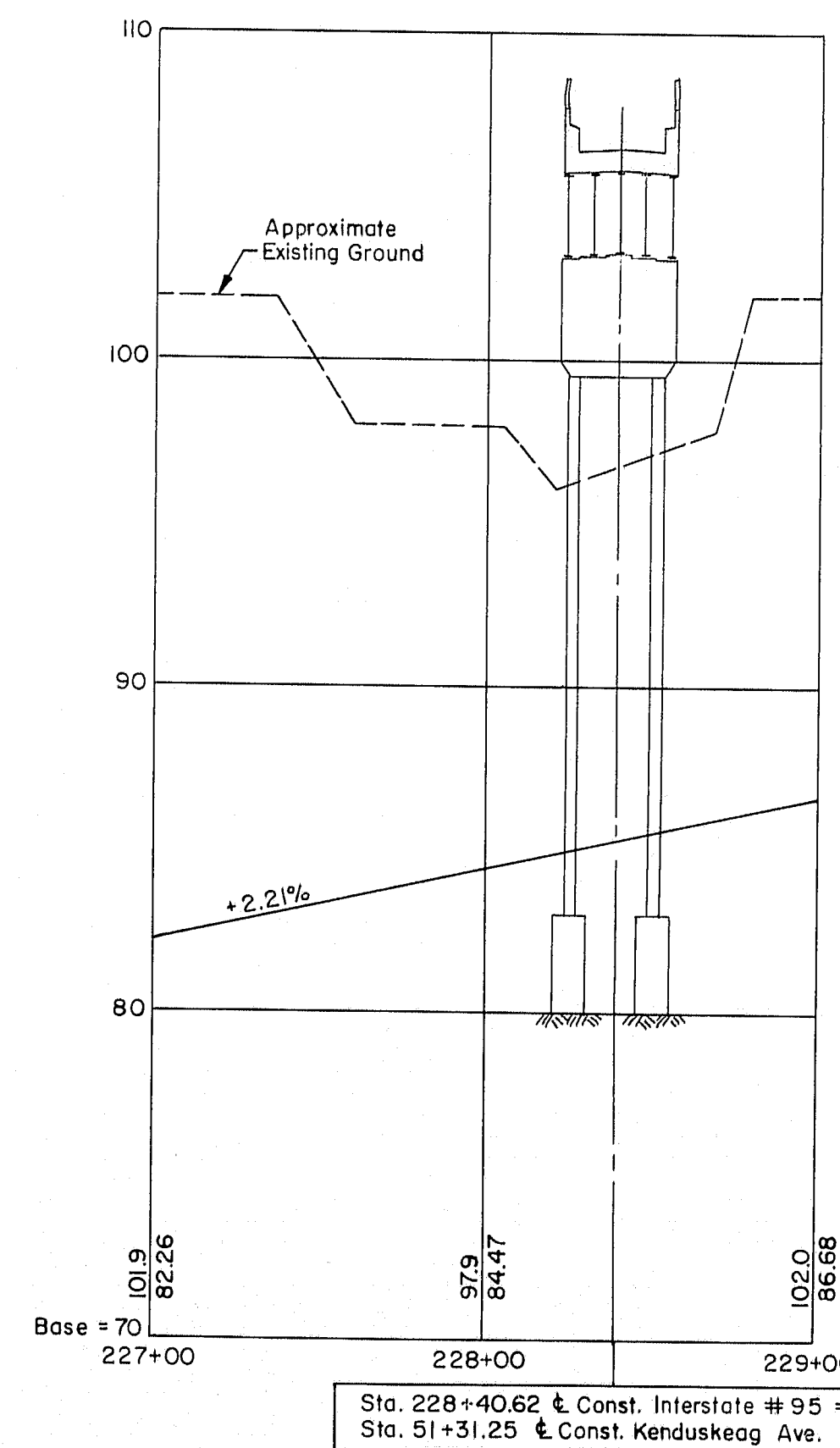
LOCATION MAP
No Scale



KEY PLAN
Scale: 1" = 50'-0"



PROFILE ALONG KENDUSKEAG AVE.
Scale: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"



PROFILE ALONG INTERSTATE #95
Scale: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"

GENERAL NOTES

FOUNDATIONS:

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

DESIGN:

In accordance with the Specifications of the American Association of State Highway Officials for H20-44 loading (1953 Edition), with adopted tentative revisions.

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

CONSTRUCTION:

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

REINFORCEMENT:

All bars shall have deformations conforming to A.S.T.M. Designation A 305. Unless otherwise shown on plans, reinforcing bars shall be lapped 20 diameters to make a splice, except that main reinforcing bars near the top of slabs and beams having more than 12 inches of concrete under the bars shall be lapped 35 diameters to make a splice.

STRUCTURAL STEEL:

Whenever cover plates and/or shear connectors are welded to beams, beams and plates shall be structural weldable steel A.S.T.M. designation A-373.

BENCH MARK:

BM S-19 Vertical hinge spike in roof of 17' Elm, 0.6 mile South of S-18 on Broadway, 0.1 mile West of intersection of Poplar St. and Kenduskeag Ave., 280' East of target on Kenduskeag Ave.
Elevation = 101.05 U.S.G.S. Datum

ESTIMATED QUANTITIES (NOT GUARANTEED)

STRUCTURAL EARTH EXCAVATION, ABUTMENTS AND RETAINING WALLS	190	CU. YDS.
STRUCTURAL EARTH EXCAVATION, PIERS	110	CU. YDS.
STRUCTURAL ROCK EXCAVATION, PIERS	120	CU. YDS.
GRAVEL BASE COURSE - IN PLACE MEASUREMENT	300	CU. YDS.
BITUMINOUS CONCRETE SURFACE COURSE TYPE "A"	80	TONS
MEMBRANE WATERPROOFING (3 PLY)	660	SQ. YDS.
PORTLAND CEMENT CONCRETE, ABUTMENTS AND RETAINING WALLS	140	CU. YDS.
PORTLAND CEMENT CONCRETE, PIERS	140	CU. YDS.
PORTLAND CEMENT CONCRETE, ROADWAY AND SIDEWALK SLABS	300	CU. YDS.
ON STEEL BRIDGES	870	BBL.
PORTLAND CEMENT	207,800	LBS.
BRIDGE DRAINAGE	207,800	LBS.
STRUCTURAL STEEL, FABRICATED AND DELIVERED	101,700	LBS.
STRUCTURAL STEEL, ERECTION	101,700	LBS.
REINFORCING STEEL, DELIVERED	101,700	LBS.
REINFORCING STEEL, PLACING	101,700	LBS.
SHEAR CONNECTORS, DELIVERED AND PLACED	610	LIN. FT.
STEEL H-BEAM PILES 42 LBS./FOOT	90	CU. YDS.
FRENCH DRAINS	460	LIN. FT.
ALUMINUM RAILING	600	SQ. YDS.
SLOPE PAVING FOR BRIDGES		

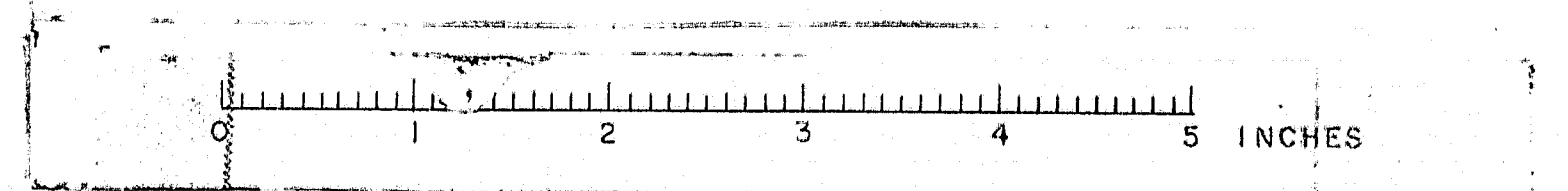
FINAL AS BUILT PLANS

DESIGN	CHECK	H.P.	BRIDGE NO.
DRAWN	E.K.	R.E.M.	APPROVED W.A.H.-C.J.M.
STATE HIGHWAY COMMISSION			
INTERSTATE #95			
UNDER			
KENDUSKEAG AVE.			
IN THE CITY OF			
BANGOR			
PENOBSCOT COUNTY			
KEY PLAN AND PROFILES			

APPROVED BY *[Signature]* DATE 7/29/58
THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

SHEET 1 OF 8 AUGUSTA, MAINE

M-1186



BANGOR INTERSTATE

B-101

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
102.63	Gravelly fill	6			
102.63	Brown silty clay	15			
98.63	Brown silty clay	15			
96.63	Mottled silty clay	15			
94.63	Gray silty clay with brown sand layers	15			
88.13	Brown gravelly sandy silt or silty sand	15			
81.63	Rock	15			
79.30	Rock	15			

* Penetration 2"
+ Penetration 2"

Bottom of Proposed Westerly Abutment Footing

B-100

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
102.65	Brown sandy silt topsoil	14			
98.65	Brown silty clay	14			
95.65	Gray silty clay	14			
91.15	Gray gravelly silty sand	14			
83.90	Phyllite	14			
78.90	Phyllite	14			

* Penetration 10"
+ Penetration 2"
++ Penetration 9"

B-99

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
99.31	Mixed brown silty clay and gravel fill	15			
97.31	Brown clayey silt or silty clay	15			
85.98	Gray silty clay	15			
83.98	Brown gravelly sandy silt or silty sand	15			
77.56	Rock-leached & weathered phyllite boulder	15			
74.48	Reddish sand possibly weathered ledge	15			

* Penetration 6"
+ Penetration 11"
++ Penetration 9"

Bottom of Proposed Pier C Footing

B-97

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
97.00	Gravel fill mixed with brown silty clay	30			
94.00	Brown silty clay	30			
87.50	Gray silty clay with sand layers	30			
83.50	Gray silty gravelly sand	30			
81.42	Phyllite	30			
76.42	Rock	30			

* Penetration 6"
+ Penetration 7"
++ Penetration 6"

Base = 80

B-96

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
94.98	Organic silty sand topsoil	10			
90.98	Brown silty clay or clayey silt	10			
88.23	Gray silty clay with sand layers	10			
85.98	Brown silty clay or clayey silt	10			
85.48	Dark brown silty clay	10			
83.15	Brown silty gravelly sand	10			
78.15	Phyllite with calcite intrusions	10			

* Penetration 6"
+ Penetration 10"

Bottom of Proposed Pier B Footing

B-95

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
93.58	Gravel fill mixed with brown silty clay	100			
91.58	Brown silty clay or clayey silt	100			
88.58	Brown silty clay or clayey silt	100			
80.75	Brown silty gravelly sand	100			
75.75	Phyllite bedded 60° with calcite intrusions	100			

Bottom of Proposed Pier A Footing

B-93

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
89.7	Gravel fill mixed with brown silty sand	30			
88.7	Brown silty clay or clayey silt	30			
78.7	Brown silty fine sand	30			
77.9	Brown silty sandy gravel	30			
74.5	Phyllite, weathered on top. Calcite intrusions bedded steeply as in a fold	30			
69.5	Phyllite	30			

* Penetration 8"
+ Penetration 2"

Bottom of Proposed Easterly Abutment Footing

B-92 A

Elevations	Description of Materials	Casing Blows per Foot	Spoon Blows per Foot	Percent Recovery	Vane Shear Strength (Tons per Sq. Ft.)
92.50	Fill for Kenduskeag Ave. mostly granular	4			
88.7	Mixed original topsoil and gravel	17			
80.7	Brown silty clay	17			
78.2	Brown silty fine sand and silty clay in layers	17			
73.7	Brown gravelly silty sand	17			
69.5	Rock weathered Phyllite with weathered calcite intrusions	17			
63.9	Rock	17			

* Penetration 3"

NOTES:

- Location of borings and punchings are shown on Key Plan thus (B-92-A), punchings are shown on Key Plan thus (PB-94).
- Borings and punchings are taken for the purpose of design and show condition at boring and punching points only, but do not necessarily show nature of materials to be encountered during construction.
- The Contractor is to form his own opinion of the character of the materials, and to make his own interpretation of borings and punchings.
- The Engineer does not warrant the findings as being accurate or complete.
- Figures in boring columns indicate blows per foot on 2 1/2" casing or 1" spoon produced by a 308# hammer with a fall of 16" and 14" respectively.
- Figures in punching columns indicate blows on "A" rods produced by a 308# hammer with a fall of 14".
- Borings and punchings were taken by the Maine State Highway Commission during the months of May and June 1957.

BORING LOG

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

Elev	Depth in Feet	No. of Blows
PB-94		
91.79	0-1	3
90	1-2	13
	2-3	53
	3-4	53
	4-5	53
	5-6	45
	6-7	49
	7-8	33
	8-9	27
	9-10	20
	10-11	21
	11-12	32
	12-12'-1"	17
	Refusal	
PB-98		
99.05	0-1	2
	1-2	3
	2-3	13
	3-4	53
	4-5	53
	5-6	53
	6-7	53
	7-8	53
	8-9	53
	9-10	53
	10-11	53
	11-12	53
	12-13	53
	13-14	53
	14-15	53
	15-16	53
	16-17	53
	17-18	53
	18-19	53
	19-20	53
	20-21	53
	21-22	53
	22-23	53
	23-23'-2"	40
	Refusal	

PUNCHING LOG

Not to Scale

FINAL AS BUILT PLANS

THE CLARKSON ENGINEERING CO., INC.

DESIGN CHECK Y.E. & H.P. BRIDGE NO. SURVEY
DRAWN V.C.S. APPROVED W.A.H.-CUM. PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95

UNDER

KENDUSKEAG AVE.

IN THE CITY OF

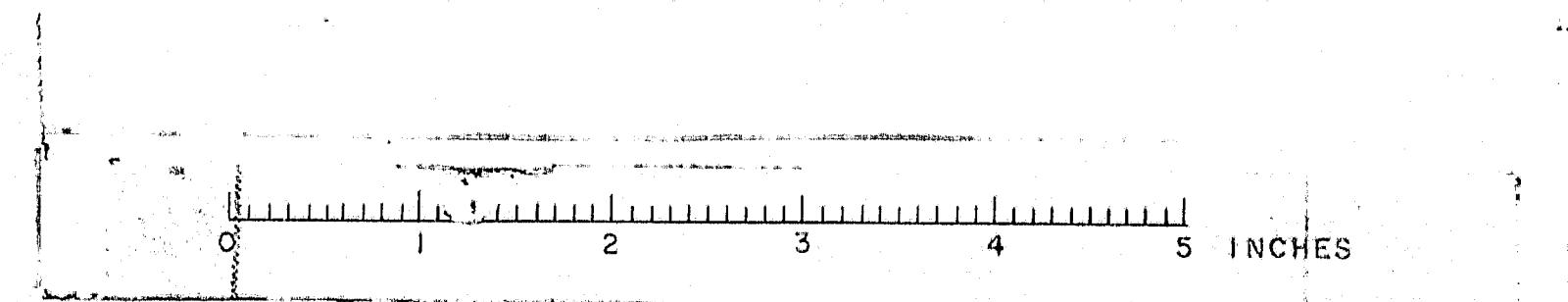
BANGOR

PENOBSCOT COUNTY

BORING DATA

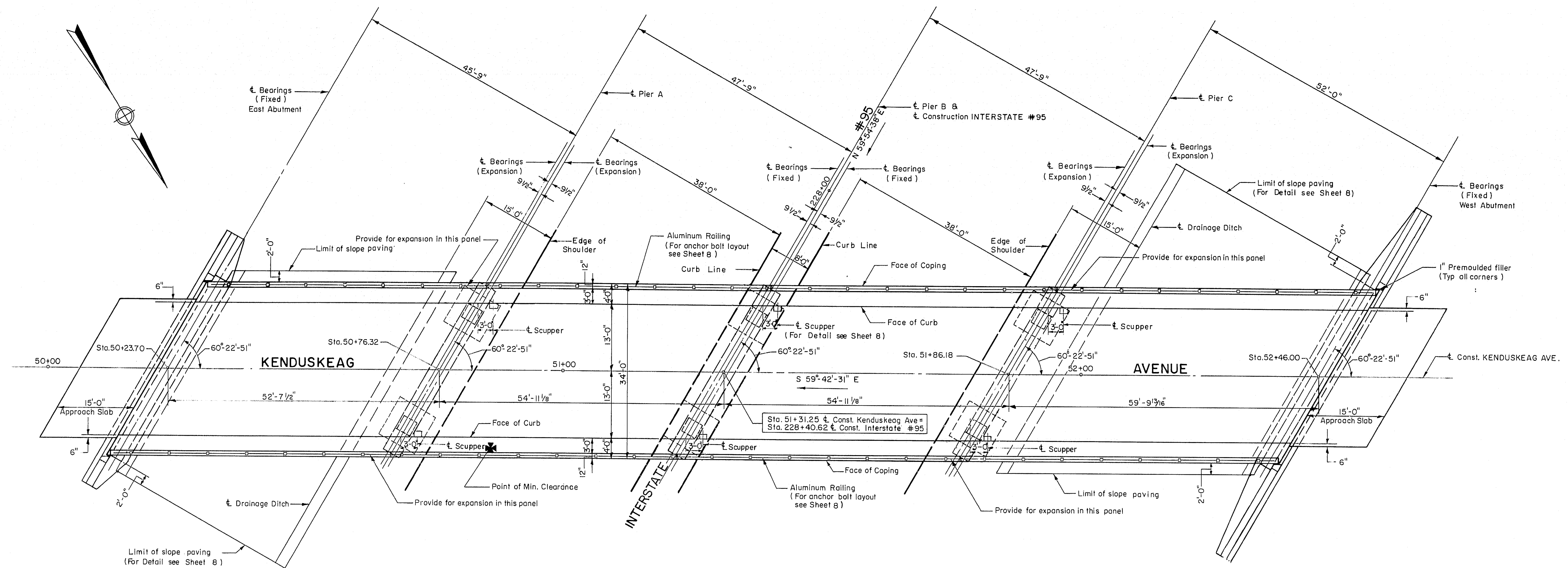
SHEET 2 OF 8 SHEETS

M-1187



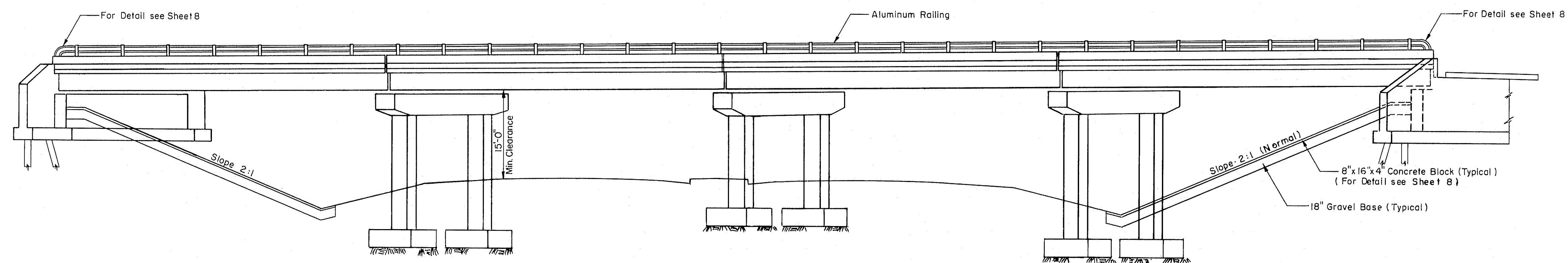
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEET
1	MAINE	I-95-8(7)177	66	127

BANGOR INTERSTATE



GENERAL PLAN

Scale: $\frac{1}{32}'' = 1'-0''$



GENERAL ELEVATION

Scale: $\frac{1}{32}'' = 1'-0''$

FINAL AS BUILT PLANS

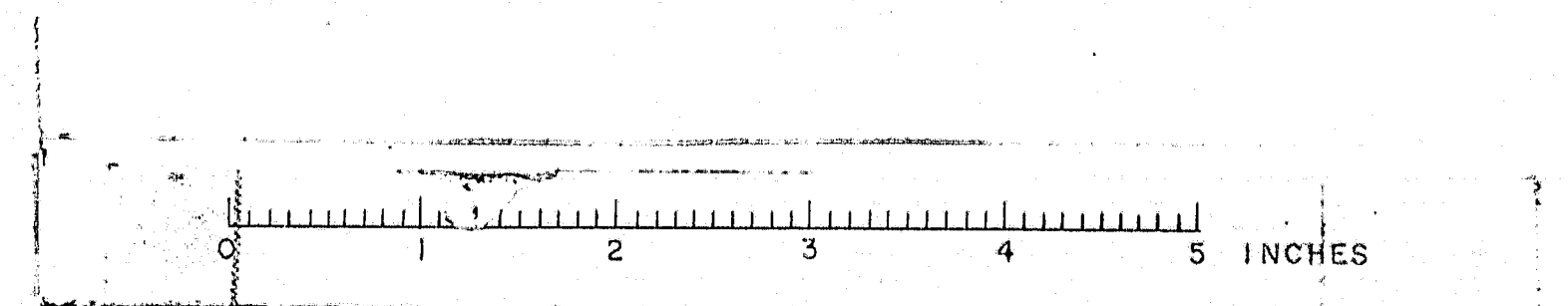
THE CLARKSON ENGINEERING CO., INC.

DESIGN R.F.	CHECK Y.E. & H.P.	BRIDGE NO.
DRAWN E.K.	APPROVED C.J.M.	SURVEY PLOT

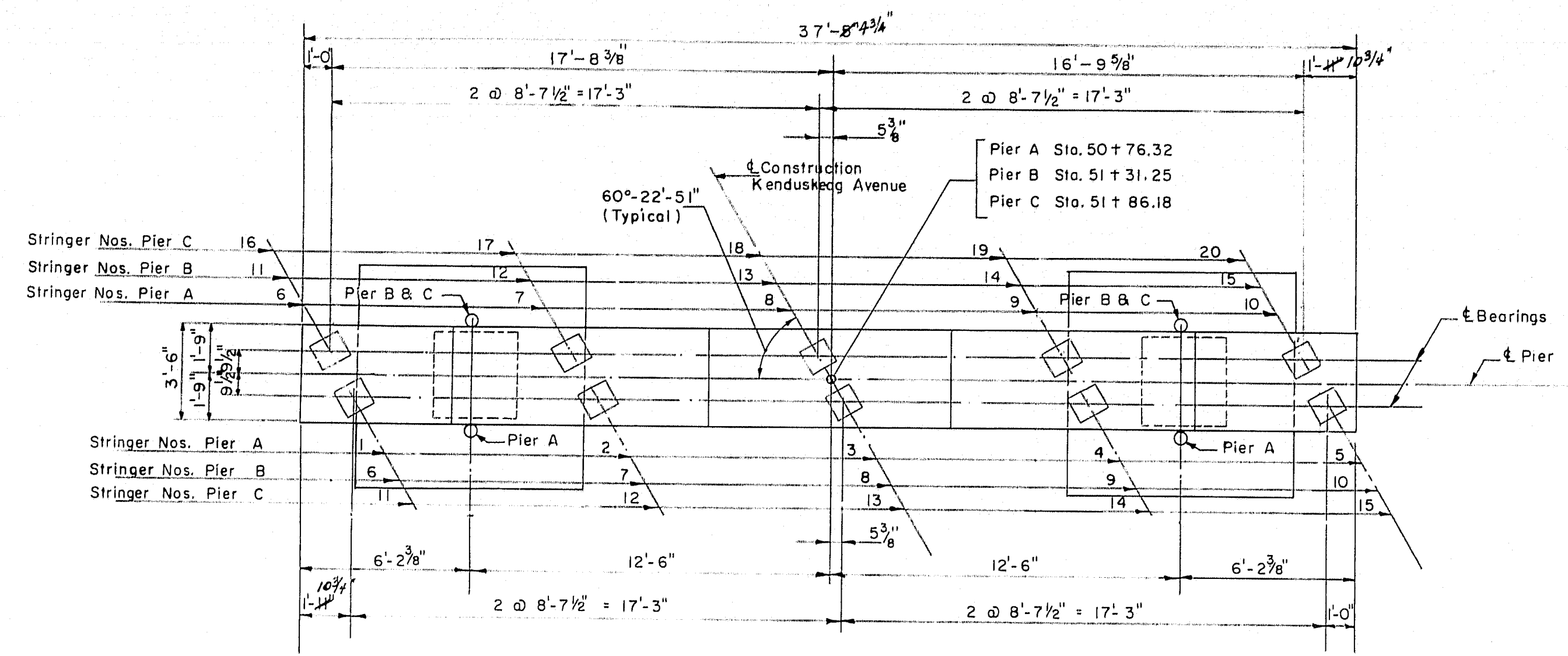
STATE HIGHWAY COMMISSION
INTERSTATE #95
 UNDER
KENDUSKEAG AVE.
 IN THE CITY OF
BANGOR
PENOBSCOT COUNTY
GENERAL PLAN & ELEVATION

SHEET 3 OF 8 AUGUSTA, MAINE

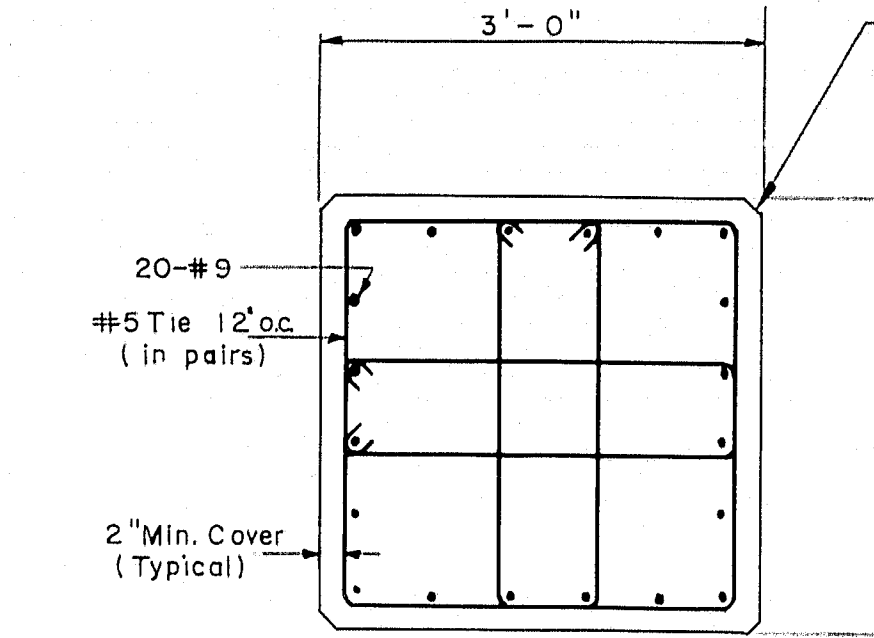
M-1188



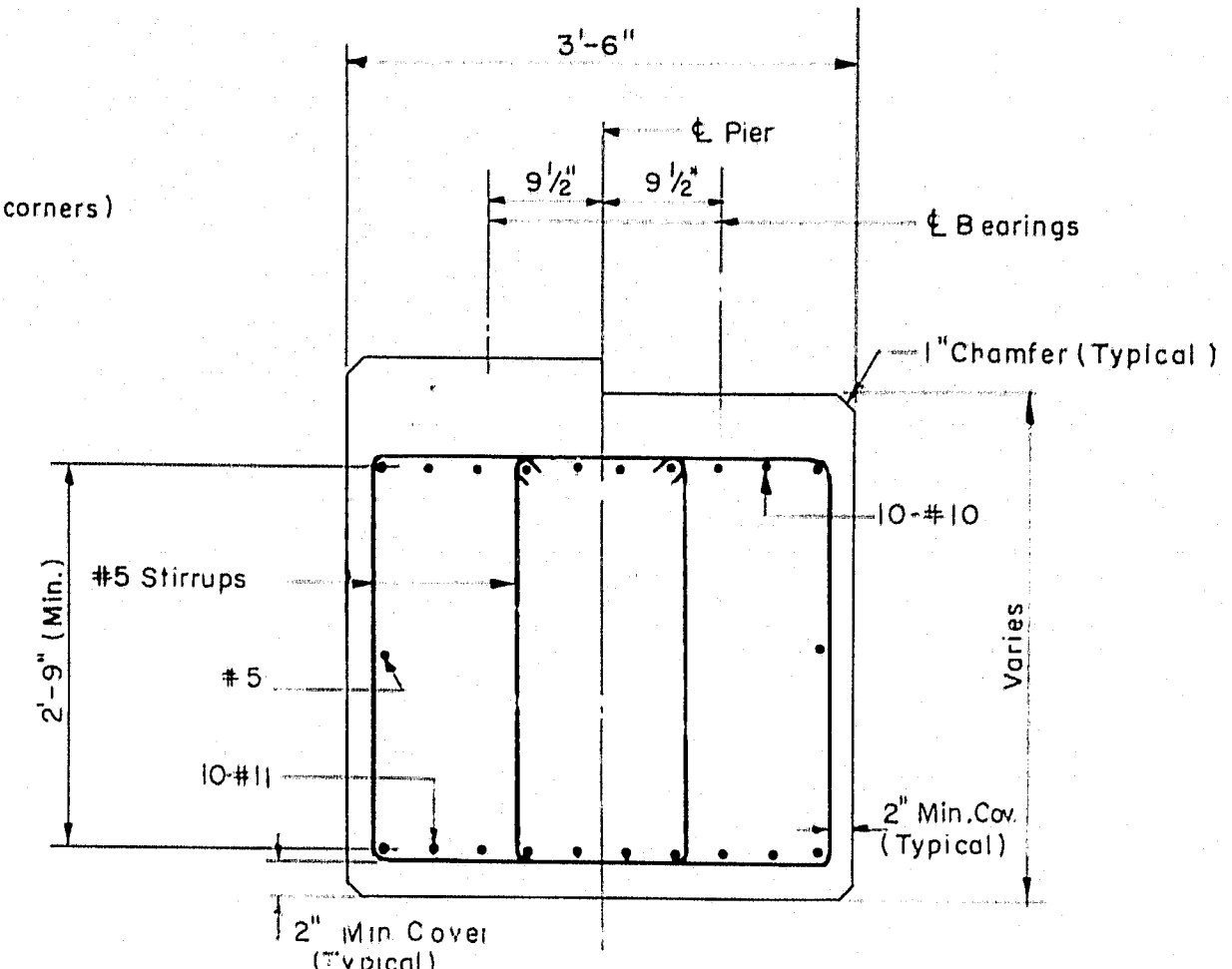
BANGOR INTERSTATE



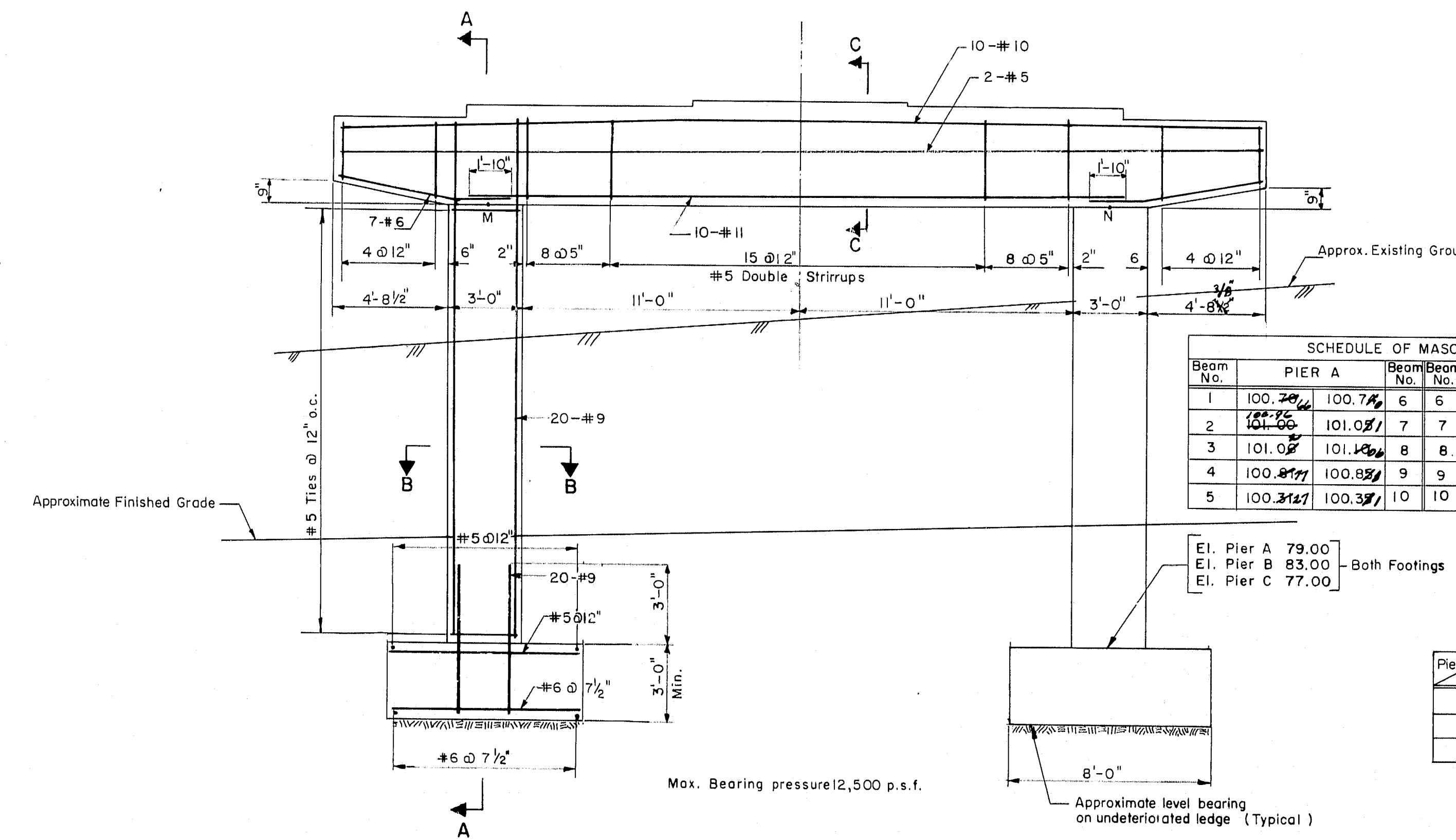
**PLAN PIER A
PLAN PIERS B & C (SIMILAR)**
Scale: $\frac{1}{4}'' = 1'-0''$



SECTION B-B
Scale: $\frac{3}{4}'' = 1'-0''$



SECTION C-C
Scale: $\frac{3}{4}'' = 1'-0''$

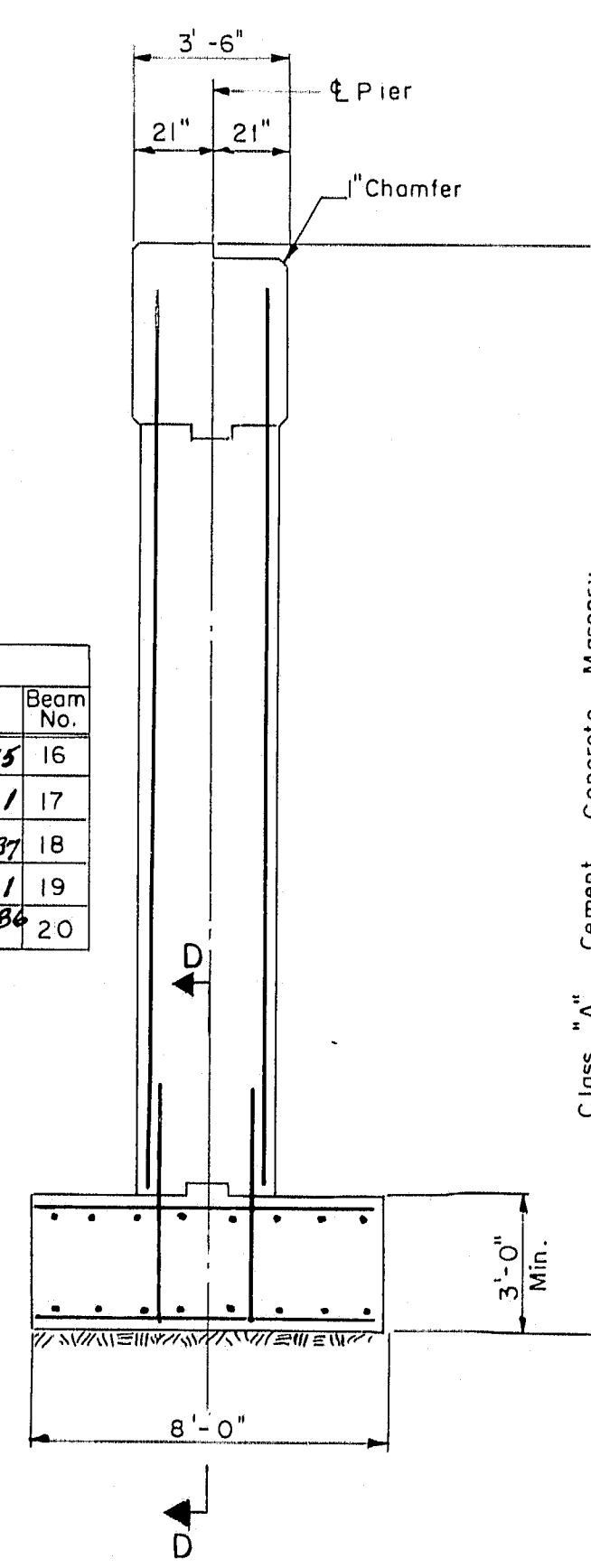


**ELEVATION PIER A
ELEVATION PIERS B & C (SIMILAR)**
Scale: $\frac{1}{4}'' = 1'-0''$

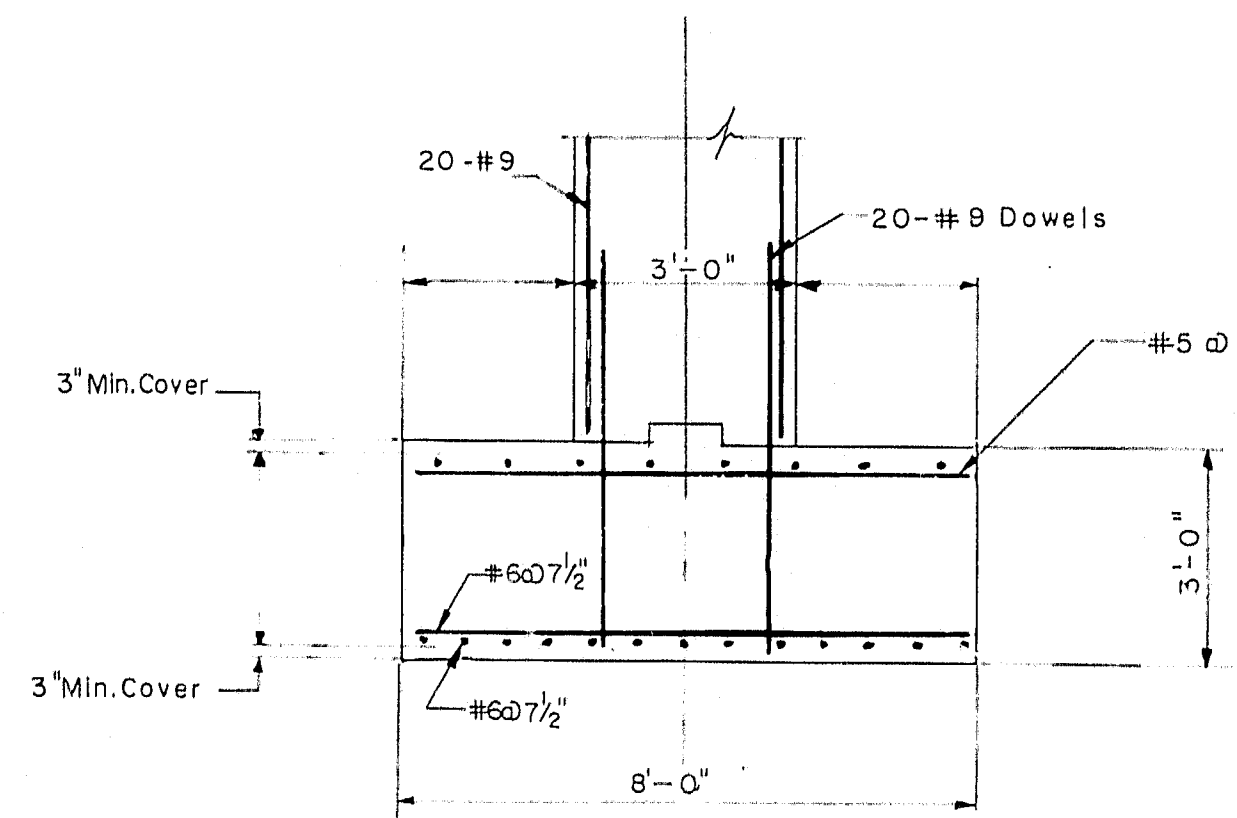
SCHEDULE OF MASONRY SHELF ELEVATIONS											
Beam No.	PIER A	Beam No.	PIER B	Beam No.	PIER C	Beam No.					
1	100.20	6	101.98	11	103.28	16					
2	101.66	7	102.28	12	103.58	17					
3	101.08	8	102.38	13	103.68	18					
4	100.88	9	102.18	14	103.38	19					
5	100.38	10	101.58	15	102.88	20					

E1. Pier A 79.00
E1. Pier B 83.00
E1. Pier C 77.00

Pier	Col.	M	N
A		97.70	97.30
B		98.50	98.50
C		100.28	99.80



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



SECTION D-D
Scale: $\frac{3}{8}'' = 1'-0''$

FINAL AS BUILT PLANS

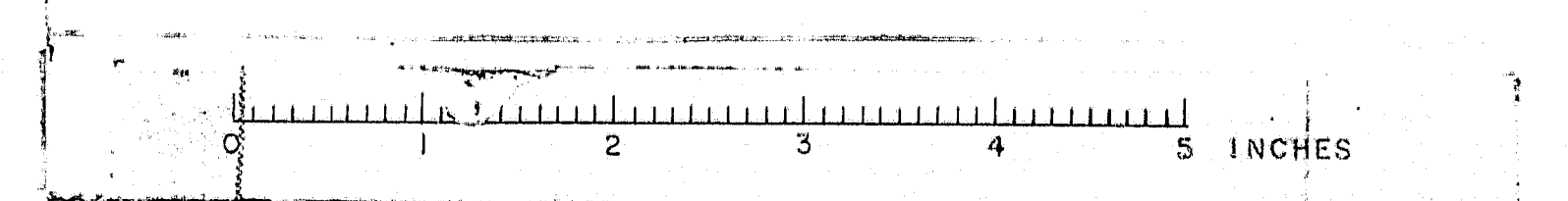
THE CLARKSON ENGINEERING CO., INC.

DESIGN R.F. CHECK Y.E. & H.P. BRIDGE NO.
DRAWN D.A.T. APPROVED W.A.H. SURVEY
C.J.W. PLOT

STATE HIGHWAY COMMISSION
INTERSTATE #95
UNDER
KENDUSKEAG AVE.
IN THE CITY OF
BANGOR
PENOBSCOT COUNTY
PIERS

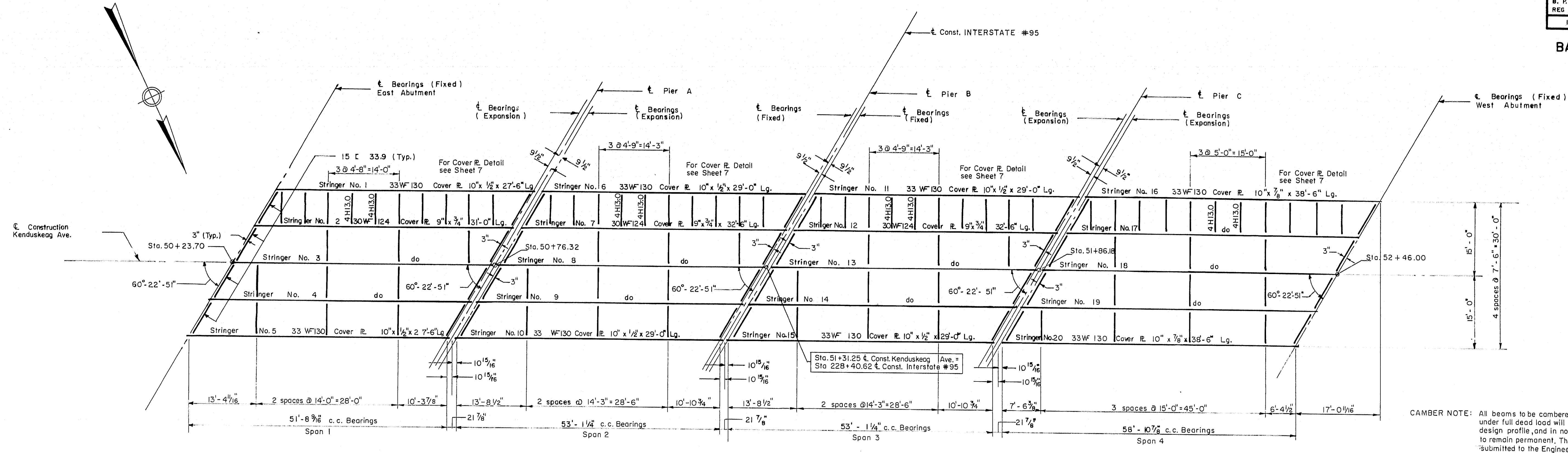
SHEET 5 OF 8 AUGUSTA, MAINE

M-1190



B. R. R.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-8(7)177	69	127

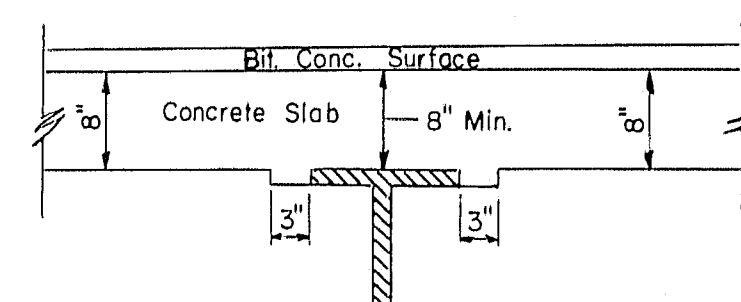
BANGOR INTERSTATE



FRAMING PLAN

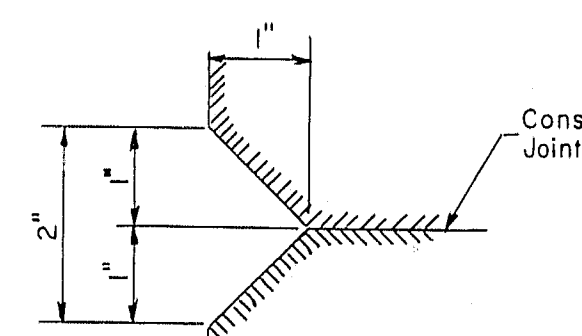
Scale: $\frac{3}{32}$ " = 1'-0"

Note: All intermediate diaphragms to be 18 C 42.7
All end diaphragms to be 15 C 33.9



DETAIL OF HAUNCH

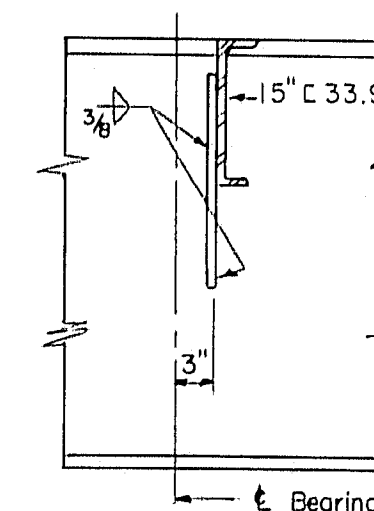
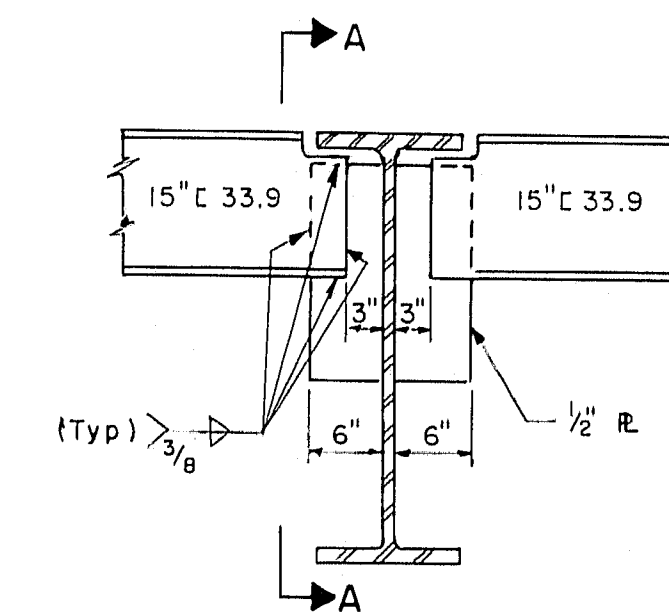
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DETAIL A

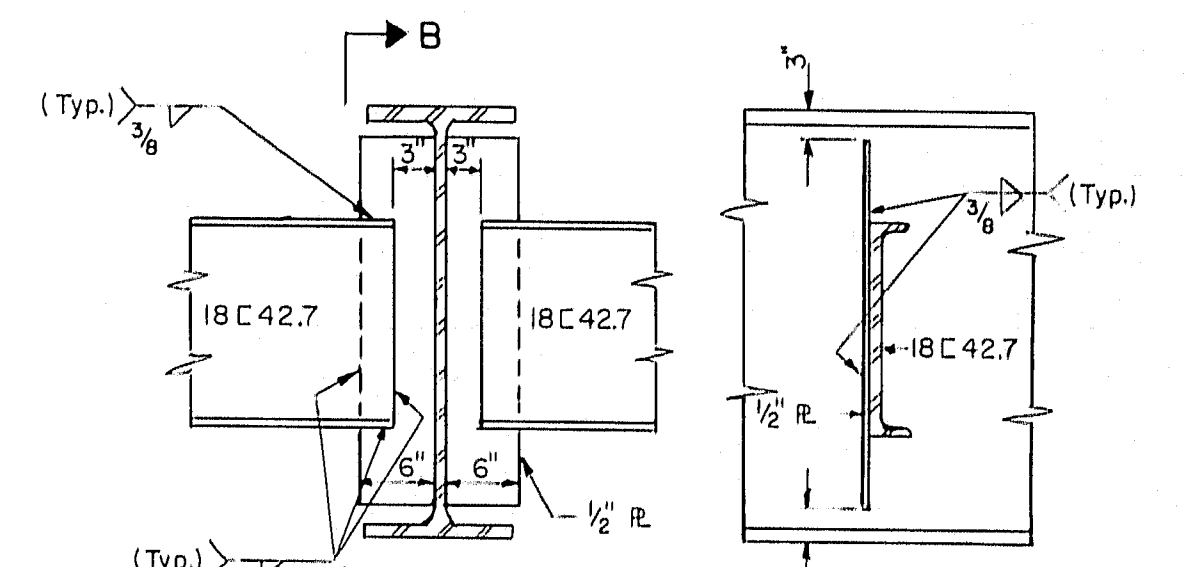
Not to Scale

Note: Sidewalks and Parapets to have transverse construction joints 20' on center. Joints are not to be located under railing posts. Contact surfaces of joints to be painted with bituminous material. Exposed surfaces are to be chamfered 1". Reinforcing steel to be carried thru joints.



SECTION A-A

Scale: $\frac{3}{4}$ " = 1'-0"



SECTION B-B

Scale: $\frac{3}{4}$ " = 1'-0"

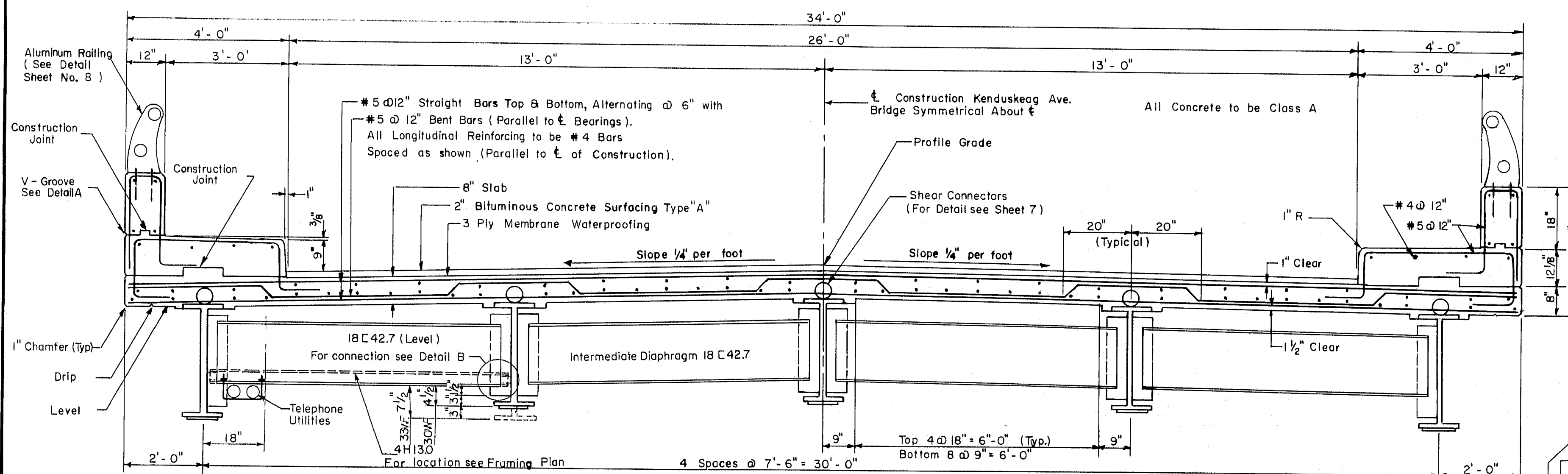
WELDED END DIAPHRAGM CONNECTION

Scale: $\frac{3}{4}$ " = 1'-0"

NOTE: Welds to be shop or field welded

WELDED DIAPHRAGM CONNECTION

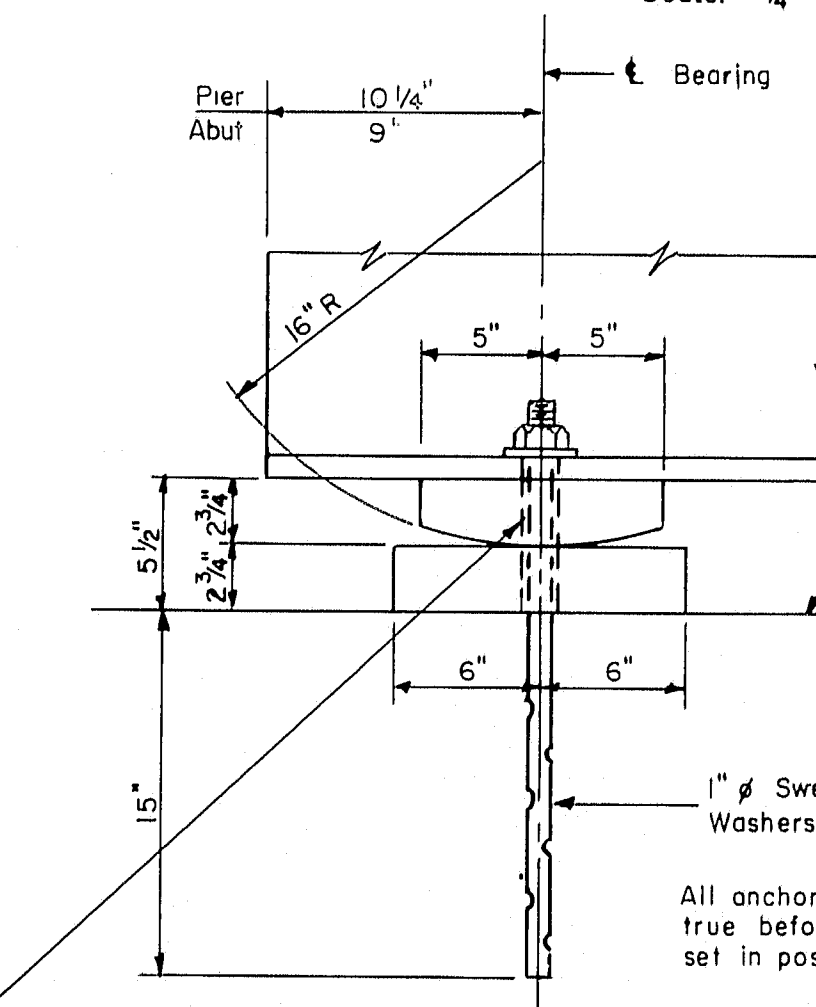
Scale: $\frac{3}{4}$ " = 1'-0"



TYPICAL CROSS SECTION

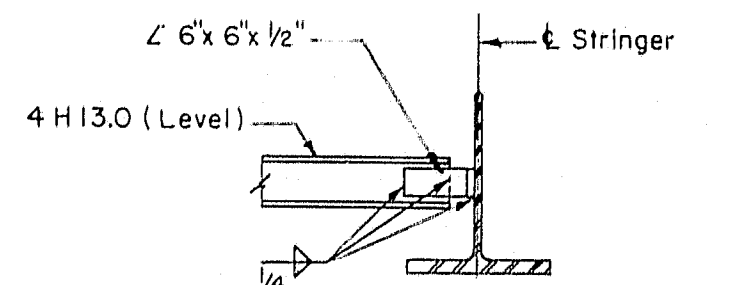
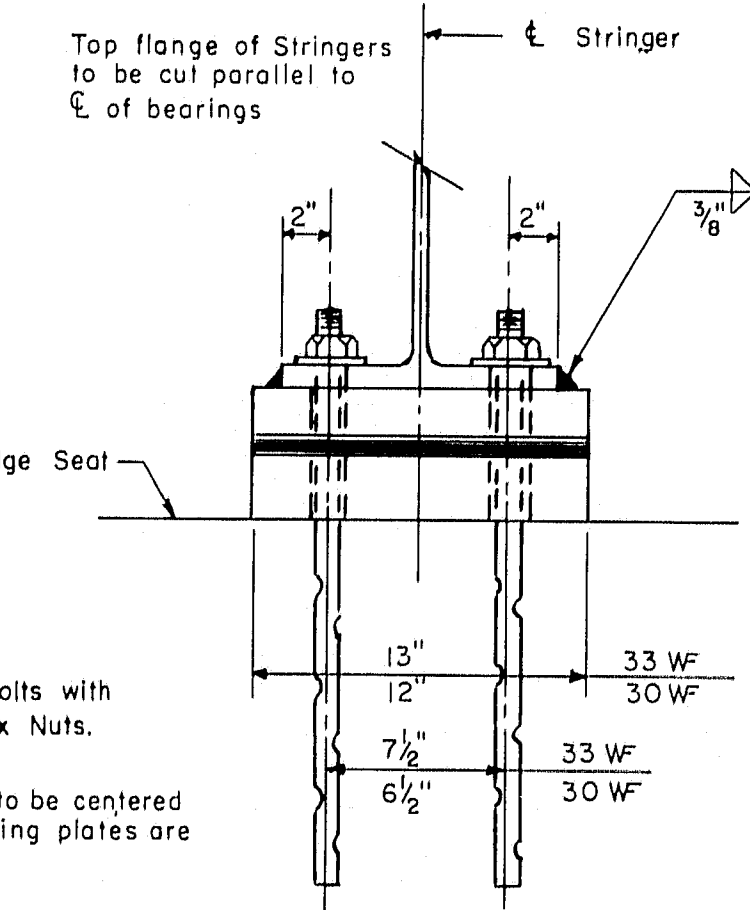
Scale: $\frac{1}{2}$ " = 1'-0"

Note: 1. Utilities & fastenings to be placed & furnished by others.
2. All bolt holes for utilities to be field drilled by others.



FIXED AND EXPANSION BEARING DETAILS

Scale: $1\frac{1}{2}$ " = 1'-0"



DETAIL B

Scale: $\frac{3}{4}$ " = 1'-0"

FINAL AS BUILT PLANS

THE CLARKSON ENGINEERING CO., INC.

DESIGN	R. F.	CHECK	Y. E. & H. P.	BRIDGE NO.
DRAWN	R. E. M.	APPROVED	C. J. M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95

UNDER

KENDUSKEAG AVE.

IN THE CITY OF

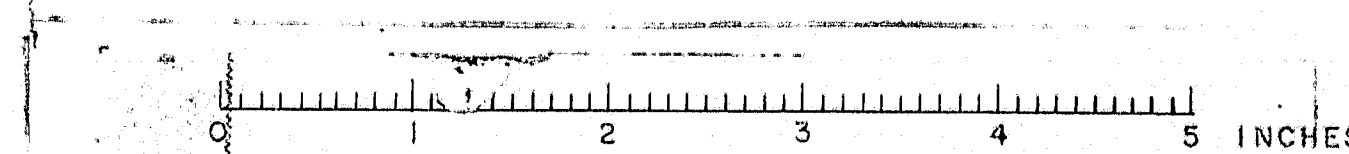
BANGOR

PENOBSCOT COUNTY

FRAMING PLAN & DETAILS

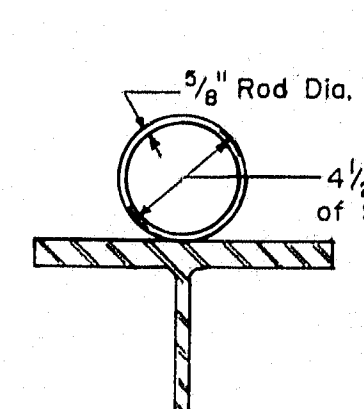
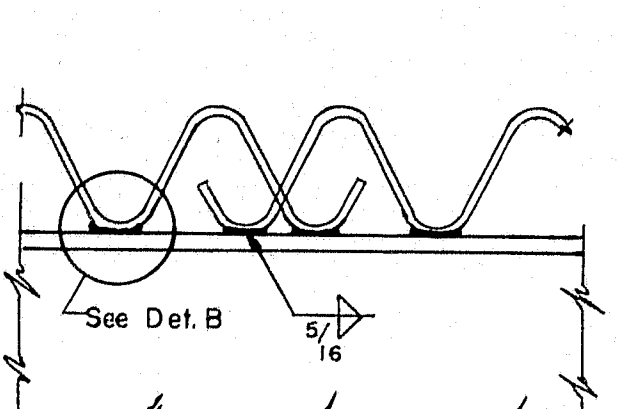
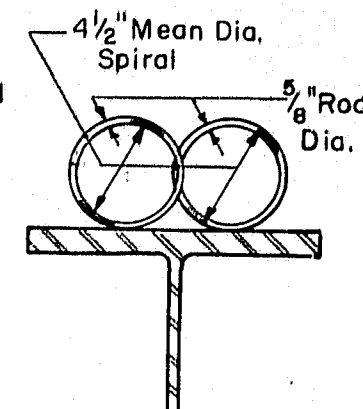
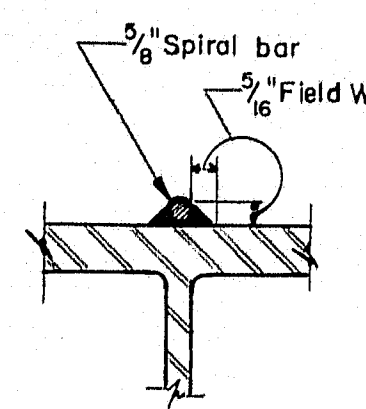
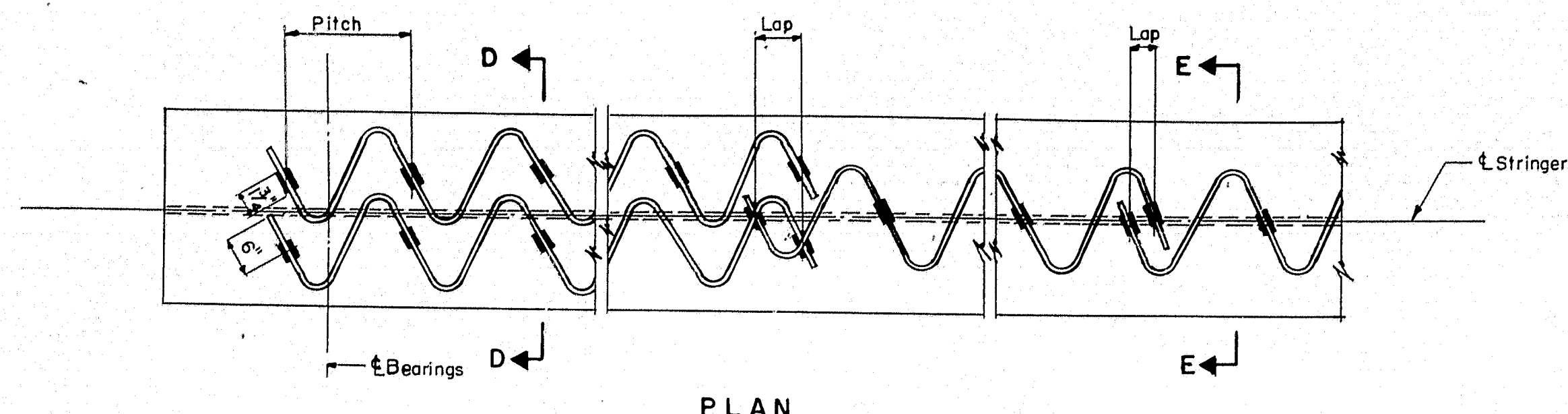
SHEET 6 OF 8 AUGUSTA, MAINE

M-1191

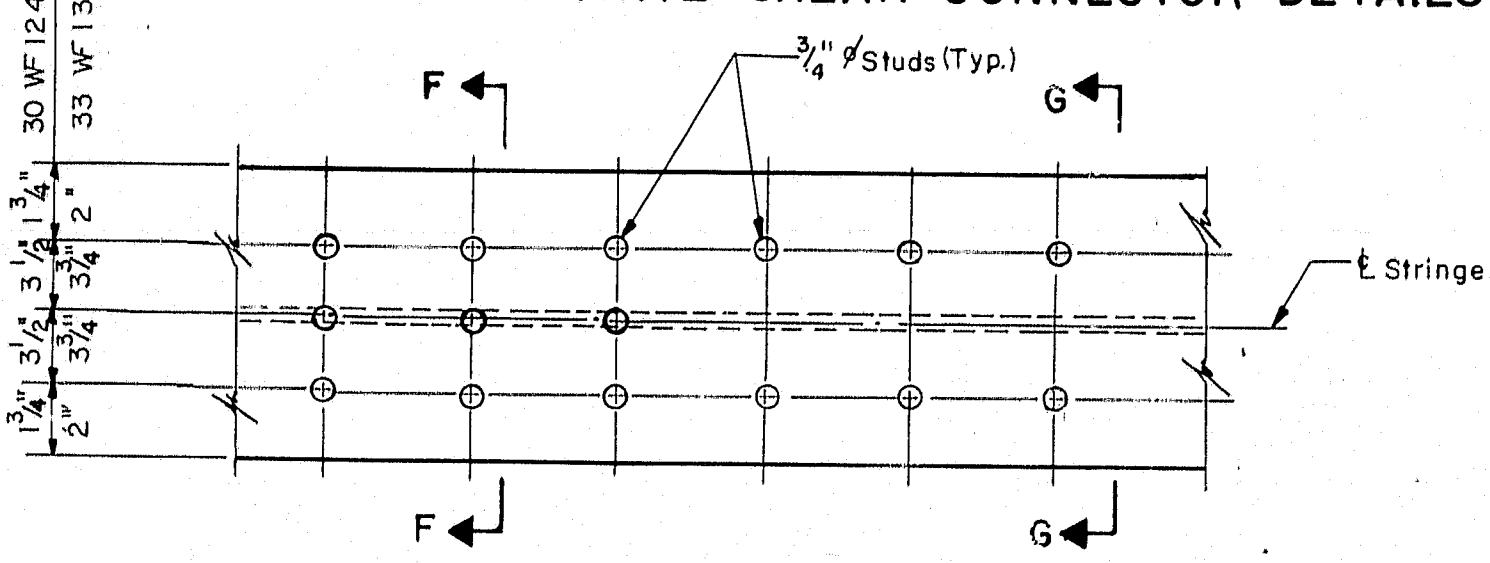


B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-B(7)177	70	127

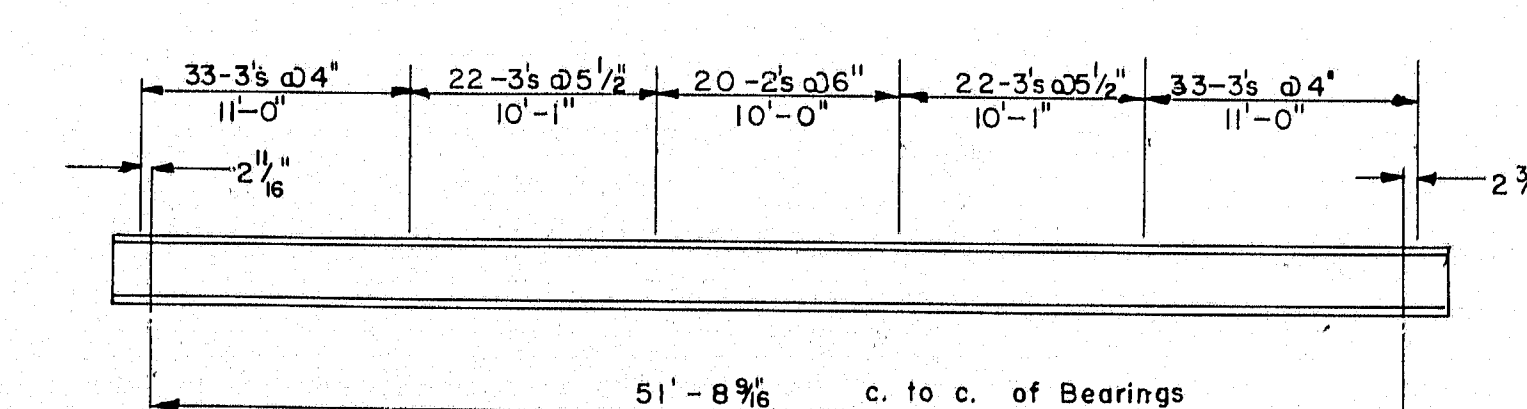
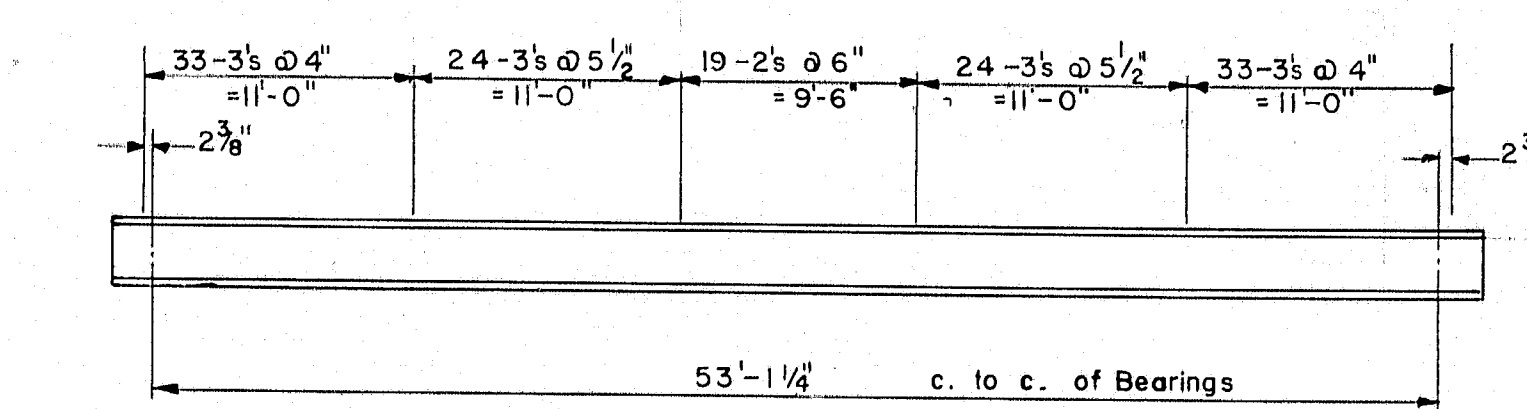
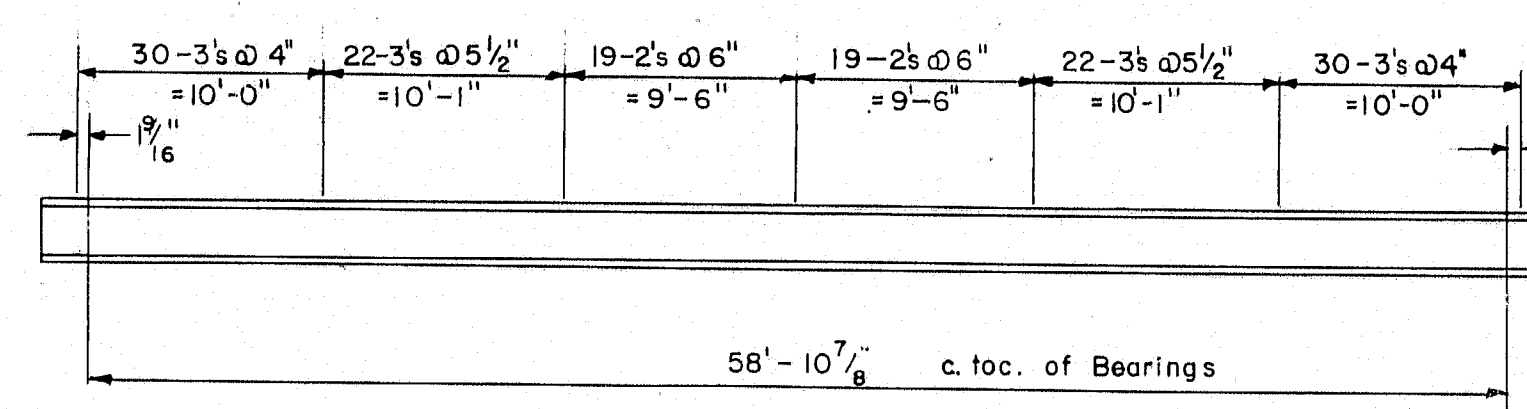
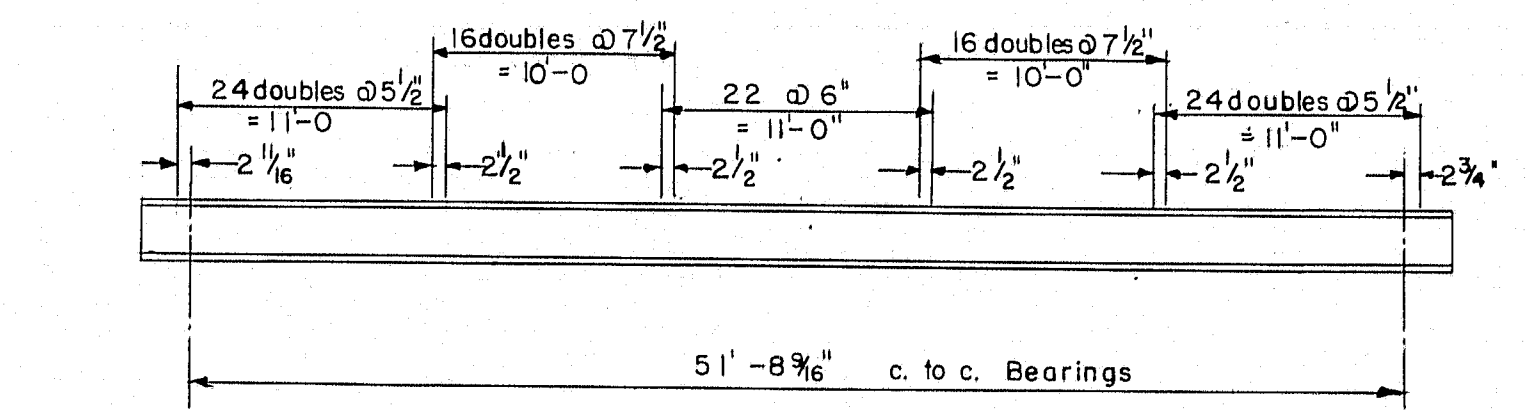
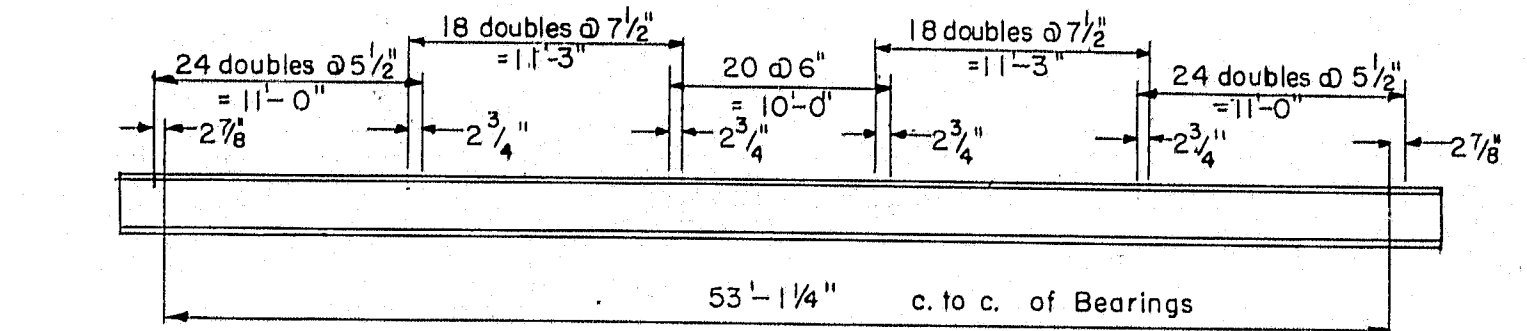
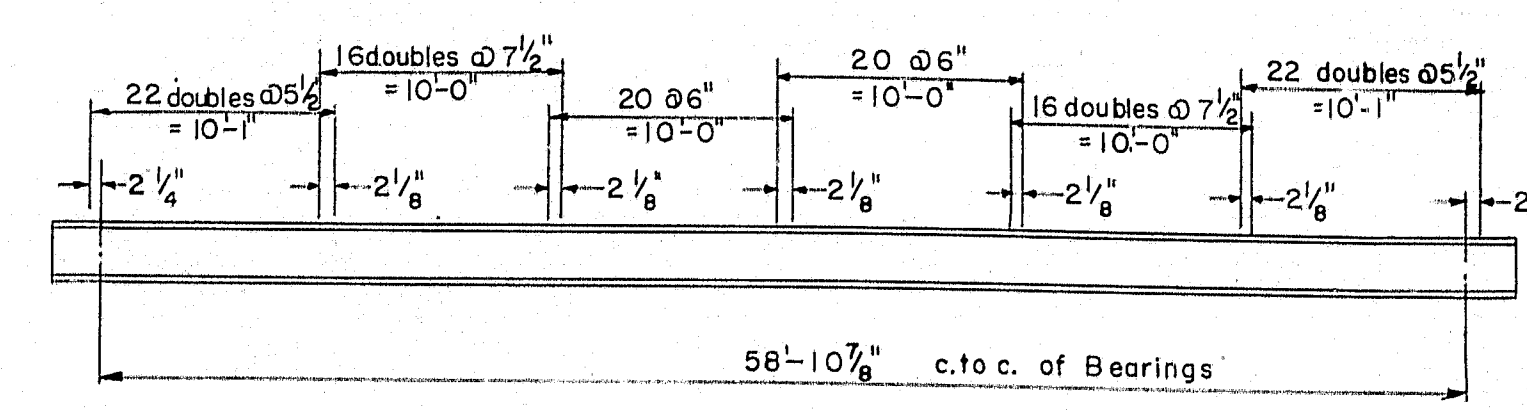
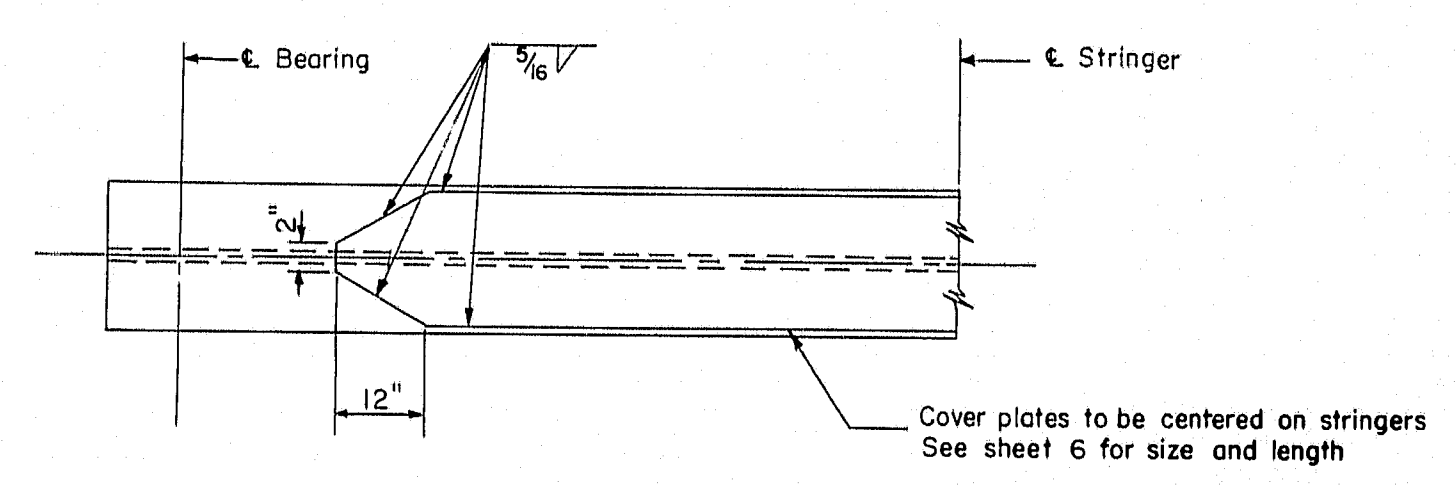
BANGOR INTERSTATE



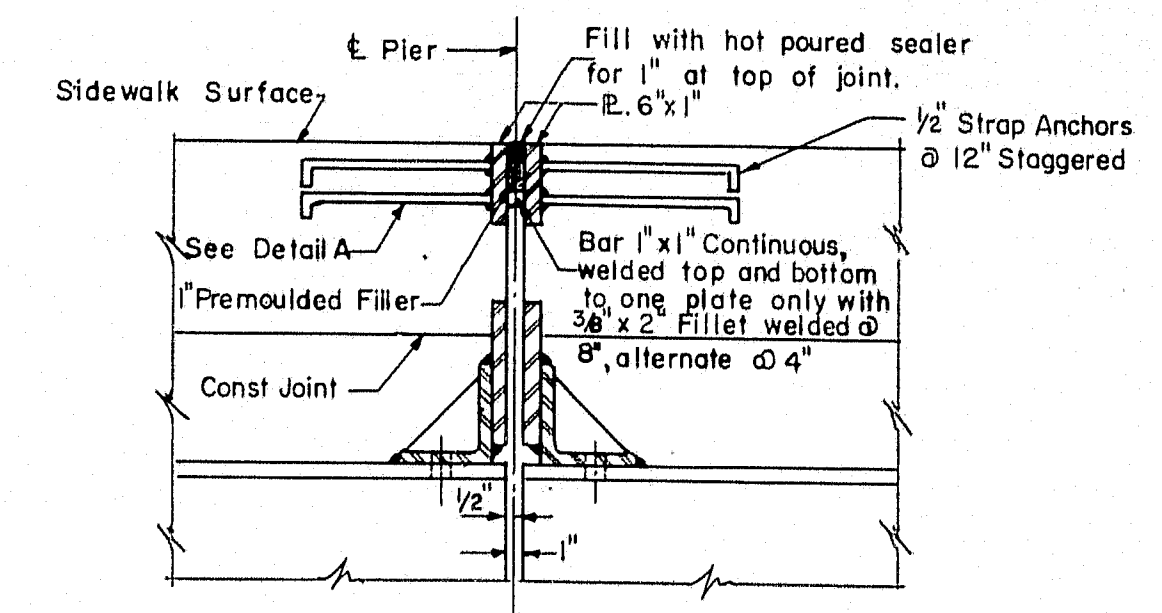
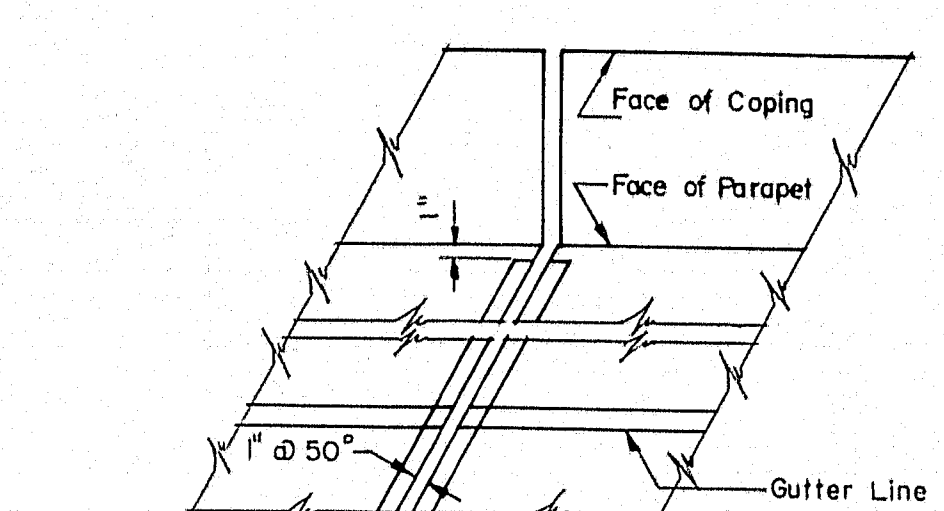
SPIRAL SHEAR CONNECTOR DETAILS



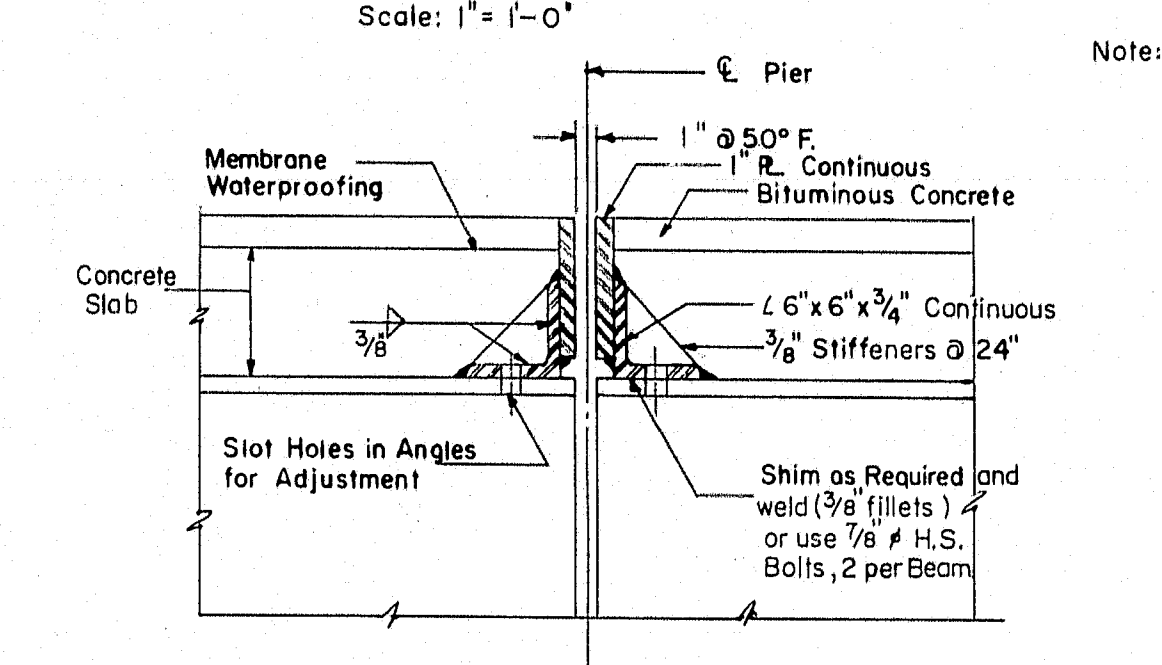
STUD SHEAR CONNECTOR DETAILS



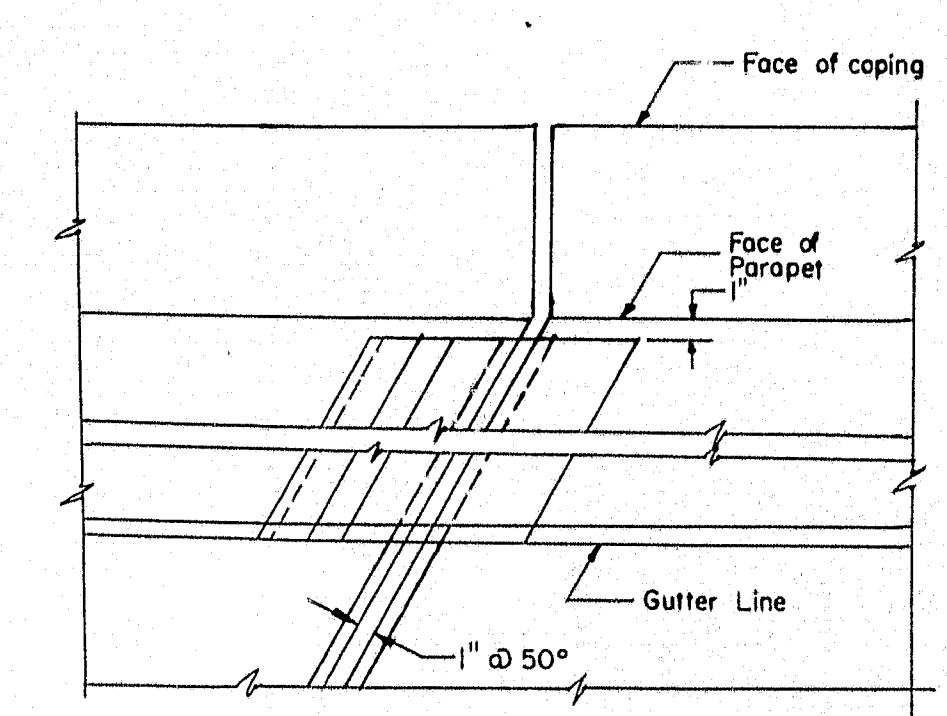
STUD SHEAR CONNECTOR LAYOUT



SIDEWALK FIXED JOINT

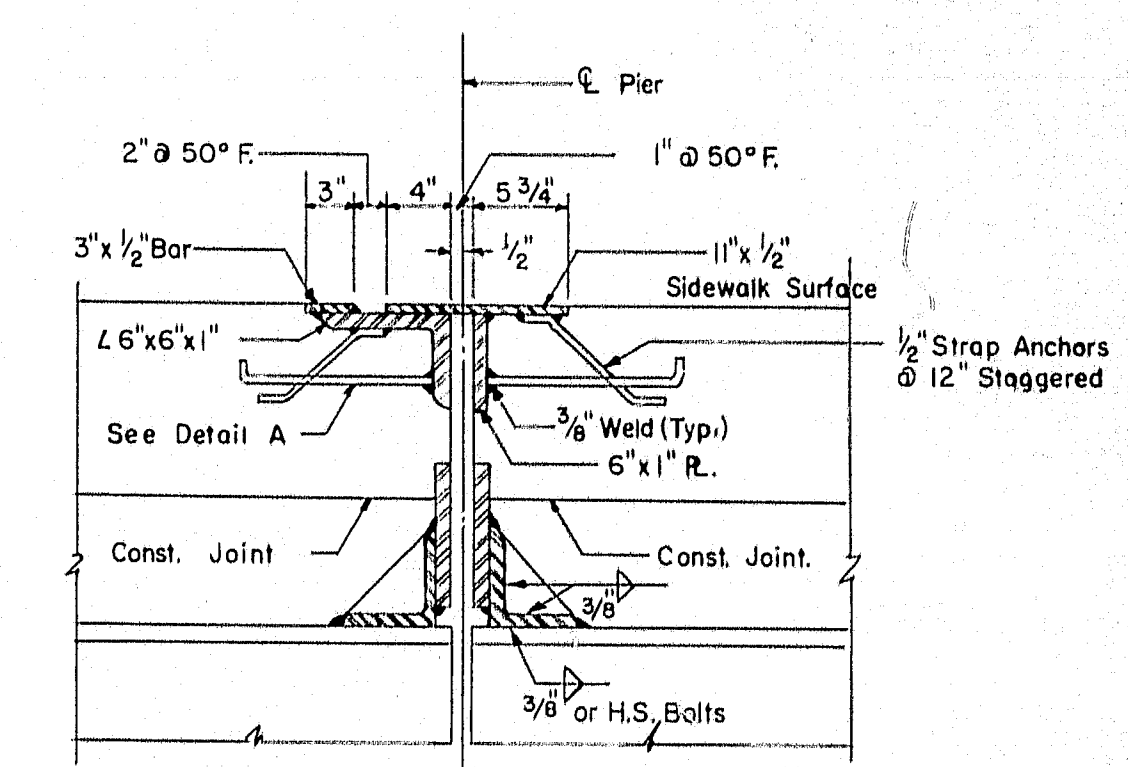


ROADWAY FIXED AND EXPANSION JOINTS



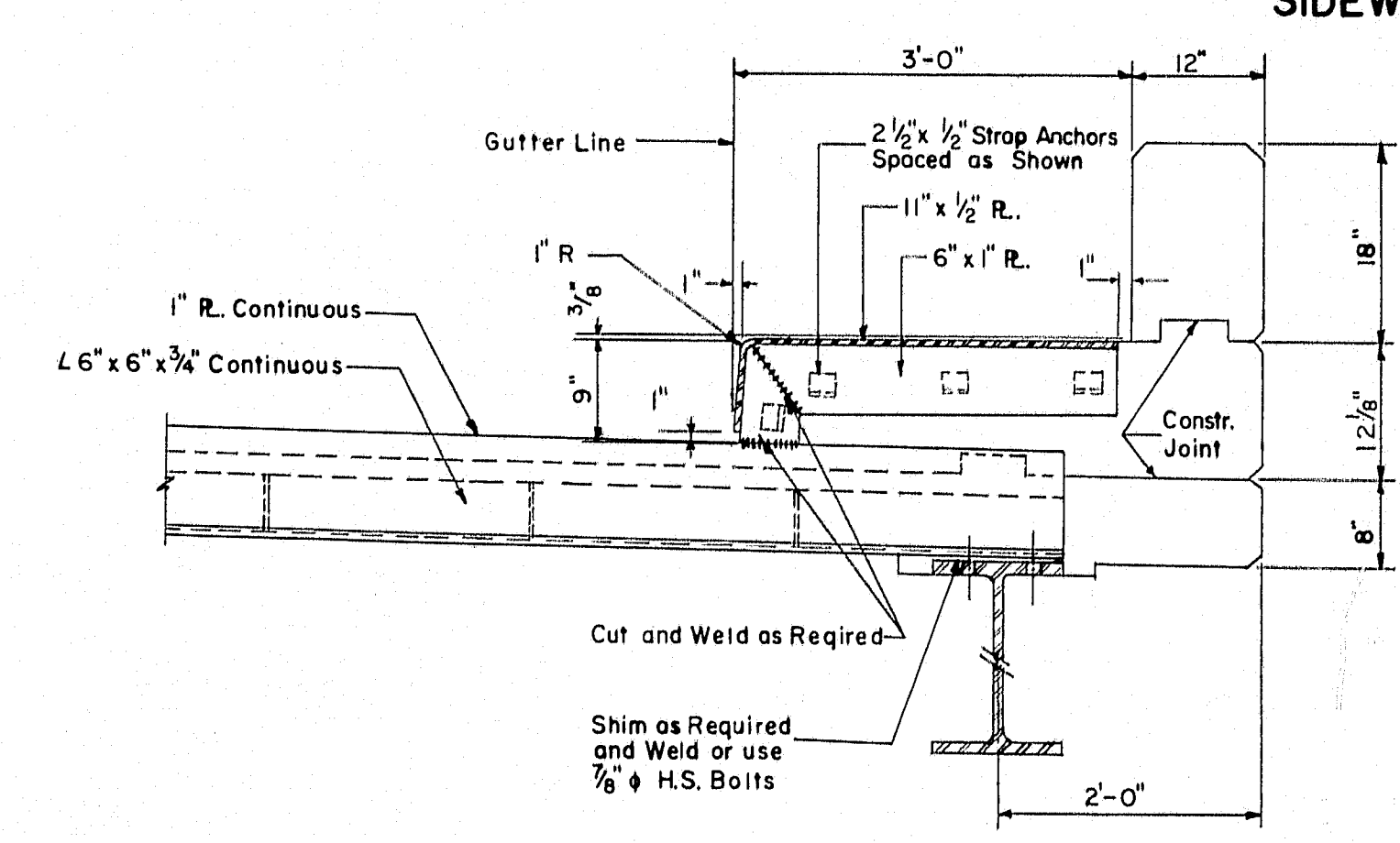
PLAN OF EXPANSION JOINT

Note: All welds to be 3/8" fillets



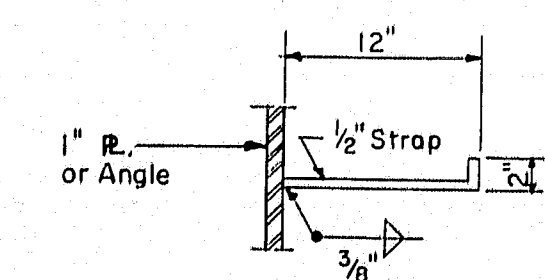
SIDEWALK EXPANSION JOINT

Note: Similar Joint to be Carried Down Face of Curb to Within 1" of Roadway Surface.



SIDEWALK EXPANSION JOINT DETAIL

Note: Fixed detail similar except as shown in section.



DETAIL A

FINAL AS BUILT PLANS

THE CLARKESON ENGINEERING CO., INC.			
DESIGN	R.F.	CHECK	Y.E.B.H.P.
DRAWN	F.P.D.	APPROVED	W.A.H.
	D.A.T.		C.J.M.
STATE HIGHWAY COMMISSION			
INTERSTATE #95			
UNDER			
KENDUSKEAG AVE.			
IN THE CITY OF			
BANGOR			
PENOBSCOT COUNTY			
SUPERSTRUCTURE DETAILS			

SHEET 7 OF 8 AUGUSTA, MAINE

M-1192

