

STATE OF MAINE STATE HIGHWAY COMMISSION

PLANS

WATERVILLE

KENNEBEC COUNTY

MAINE FEDERAL AID INTERSTATE #95

PROJECT NO. I-95-6(24)124

TOTAL LENGTH 0.095 MILES

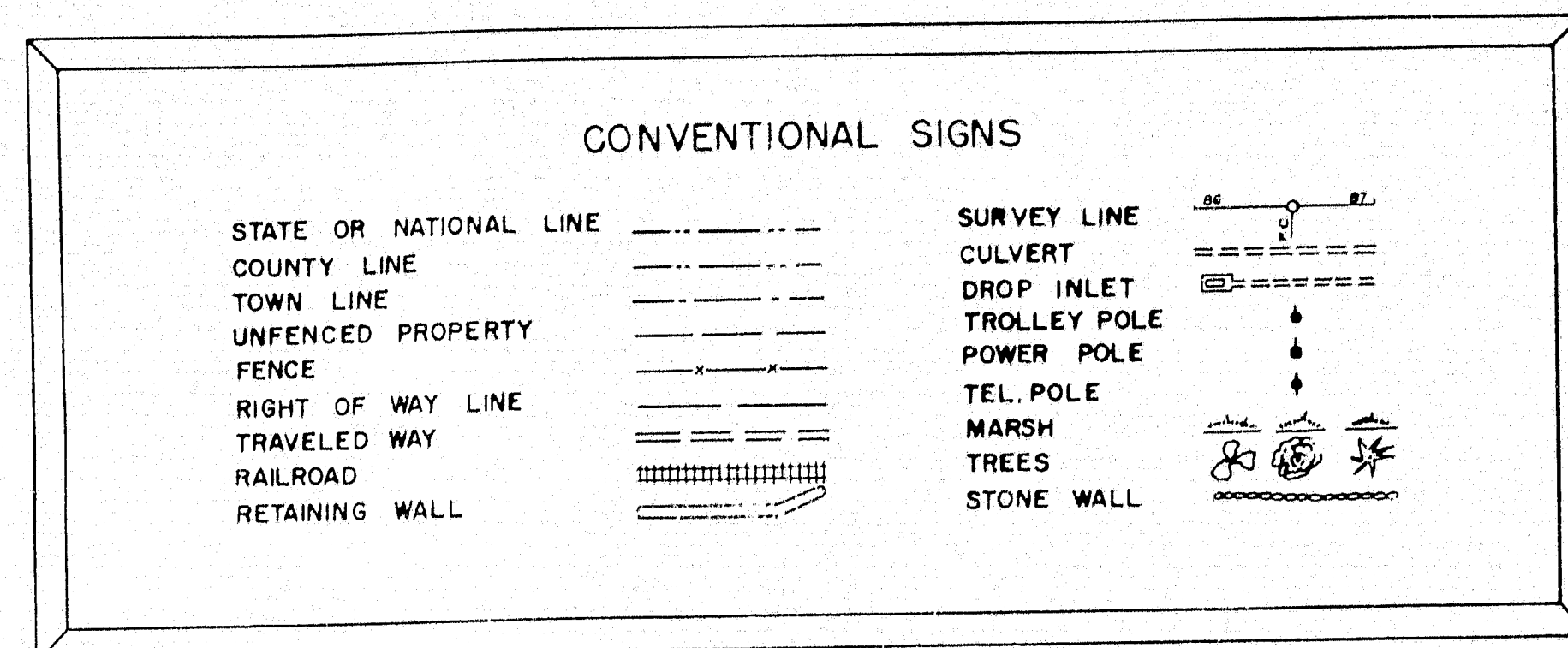
SCALES { PLAN 1 IN. = 50 FT.
PROFILE { HOR. 1 IN. = 50 FT.
VER. 1 IN. = 5 FT.
CROSS SECTIONS 1 IN. = 10 FT.

INTERSTATE #95 BRIDGE OVER MAIN STREET

INDEX OF SHEETS

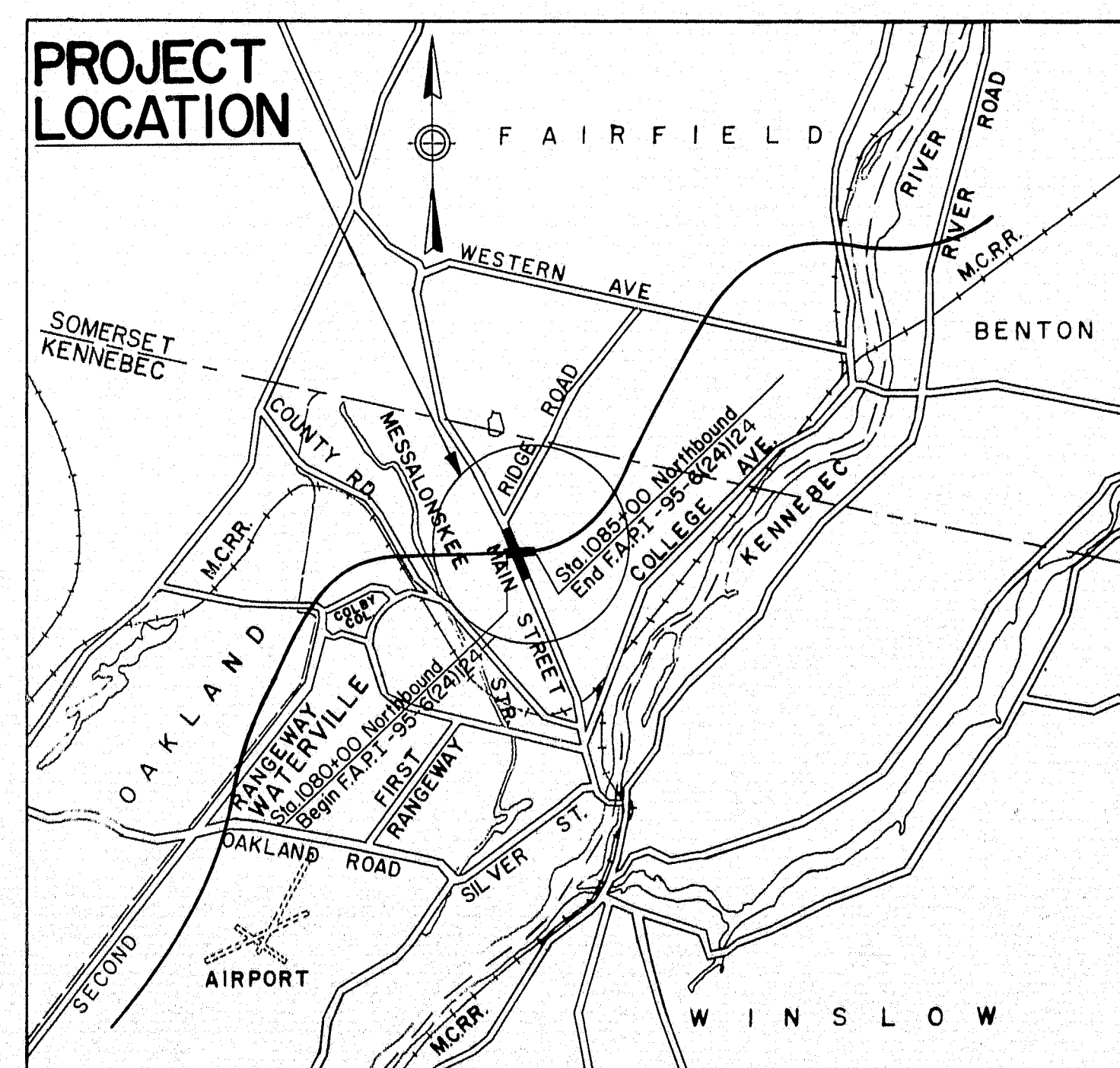
SHEET NO.

1	Title Sheet
2-4	Typical Sections
5	Quantities
6-10	Standard Details
11-12	Special Details
13	Subsurface Data
14	General Plan and Profile—Main Street
15	Profile—Sta. 1075+00 to Sta. 1089+00
16	Profile—Ramps "E", "F", "G" & "H"
17	Grading, Pavement & Curb Tie Plan—Main St. Interchange
18-24	Cross Sections
25-34	Bridge Plans



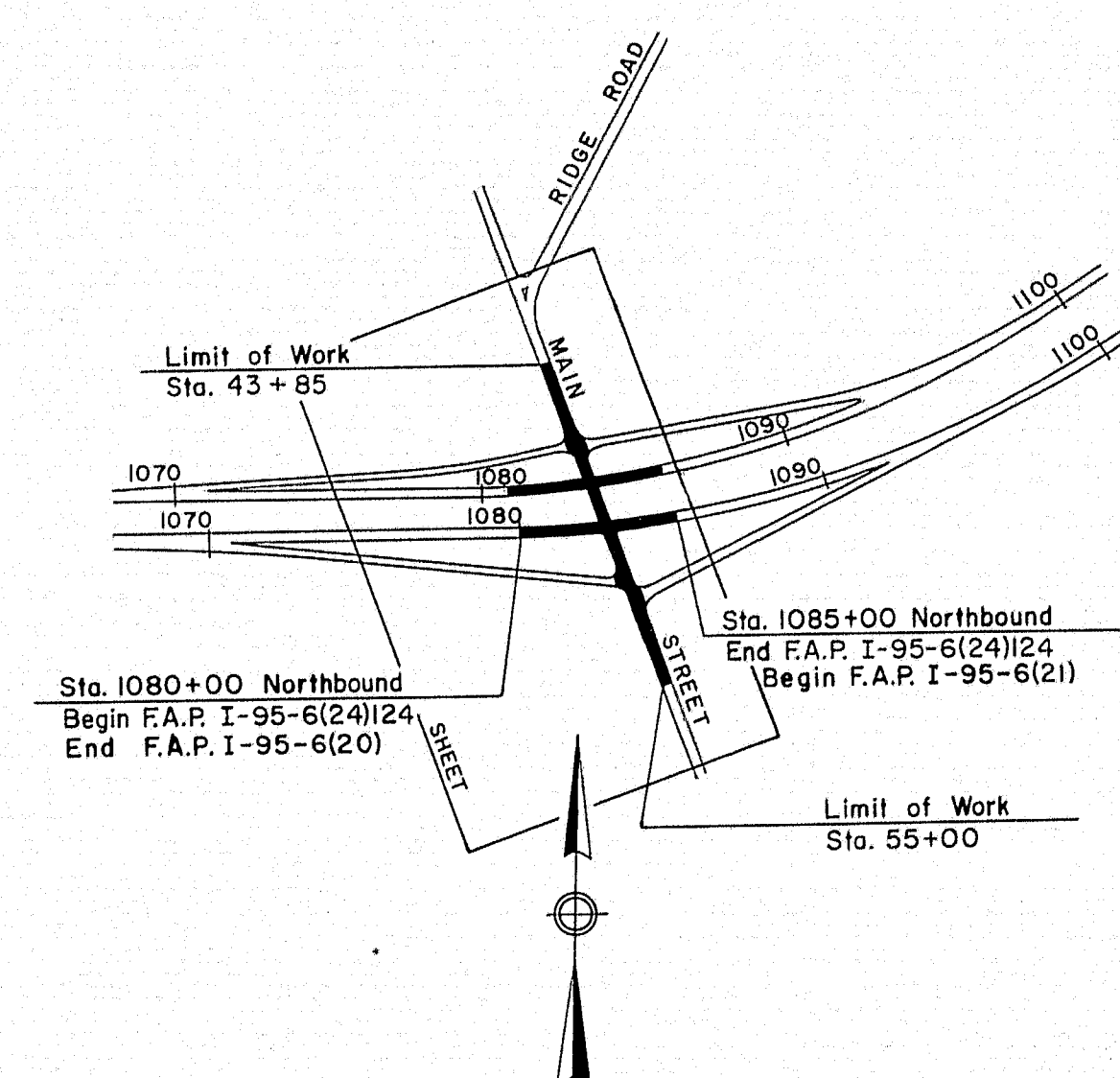
Interstate #95 and Main Street Interchange Ramps shall be Constructed to Top of Lower Course Crushed Gravel Base only, within the Limits Indicated on the Plans. Construction of Main Street is to include Pavement. Construction of Main Street Bridge is included in this Contract

All work contemplated under this Contract to be Governed by and in conformity with the Standard Specifications, Highways and Bridges, Revision Of Jan. 1956, except as modified on these Plans And by the Special Provisions.



A PORTION OF KENNEBEC AND SOMERSET COUNTIES

APPROX. SCALE 1 IN. = 1 MILE



LAYOUT PLAN

SCALE: 1" = 600'

INTERSTATE #95

A.D.T.(1960)	= 4790
A.D.T.(1980)	= 7620
D.H.V.(1980)	= 1143
D.(1980)	= 65 %
T.(1980)	= 15 %
V.(M.P.H.)	= 60

MAIN STREET

A.D.T.(1960)	= 6250
A.D.T.(1980)	= 7940
D.H.V.(1980)	= 1190
D.(1980)	= 65 %
T.(1980)	= 15 %
V.(M.P.H.)	= 45

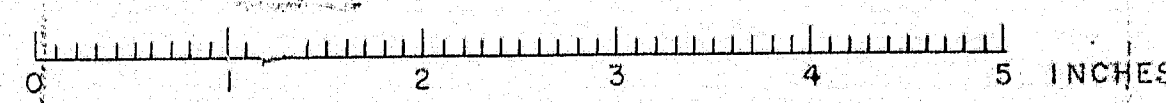
APPROVED:
MAINE STATE HIGHWAY COMMISSION

David H. Sturges
CHAIRMAN
Robert L. Williams
CHIEF ENGINEER

CONSULTING ENGINEERS
THE CLARKESON ENGINEERING COMPANY, INC.
BOSTON MASS.
John Clarkson
CONSULTING ENGINEER
9/20/58
DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1
APPROVED:
DIVISION ENGINEER
DATE

75-126



GENERAL NOTES

FOUNDATION:

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

DESIGN:

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

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

CONSTRUCTION:

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

REINFORCEMENT:

All bars shall have deformations conforming to A.S.T.M. Designation A305. Unless otherwise shown on plans, reinforcing bars shall be lapped 20 diameters to make a splice except that main reinforcing bars near the top of slabs and beams having more than 12" of concrete under the bars shall be lapped 36 diameters to make a splice.

STRUCTURAL STEEL:

Wherever cover plate and/or shear connectors are welded to beams, beams and plates shall be weldable structural steel A.S.T.M. Designation A373.

BENCH MARK:

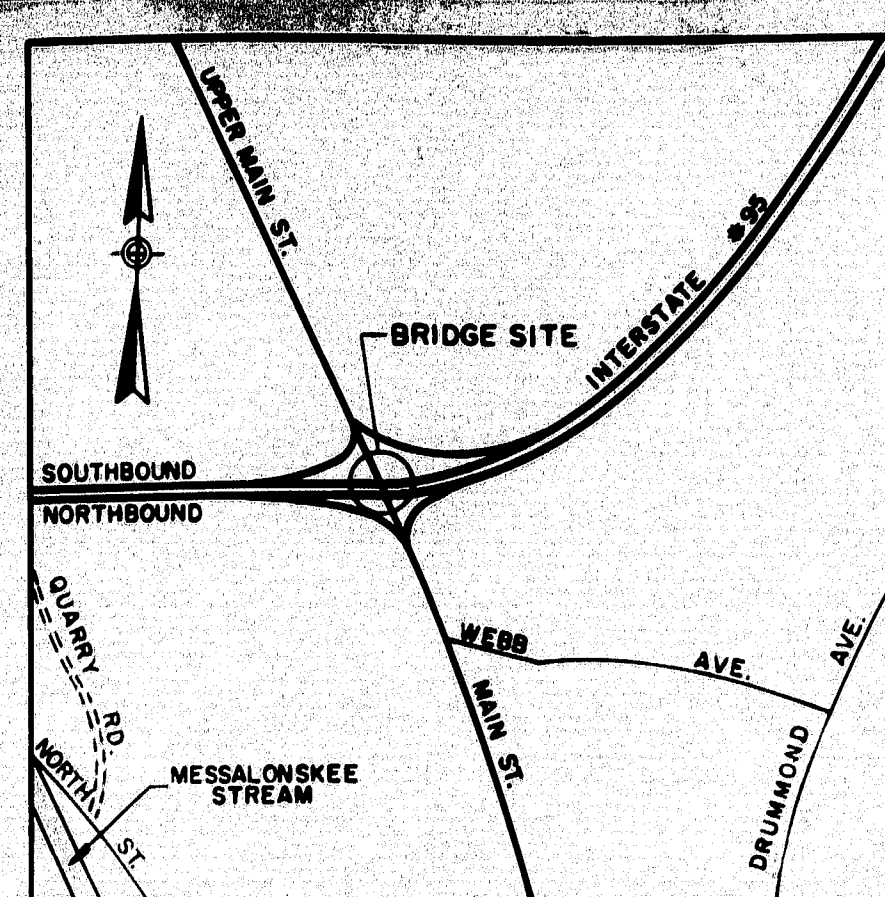
BM-53 R.R. Spike in pole N.E.T. & T. # 57 Sta. 1082 + 95(N.B.) Interstate # 95
130' R.I.
Elevation 201.35 U.S.G.S. Datum

ESTIMATED QUANTITIES

(NOT GUARANTEED)

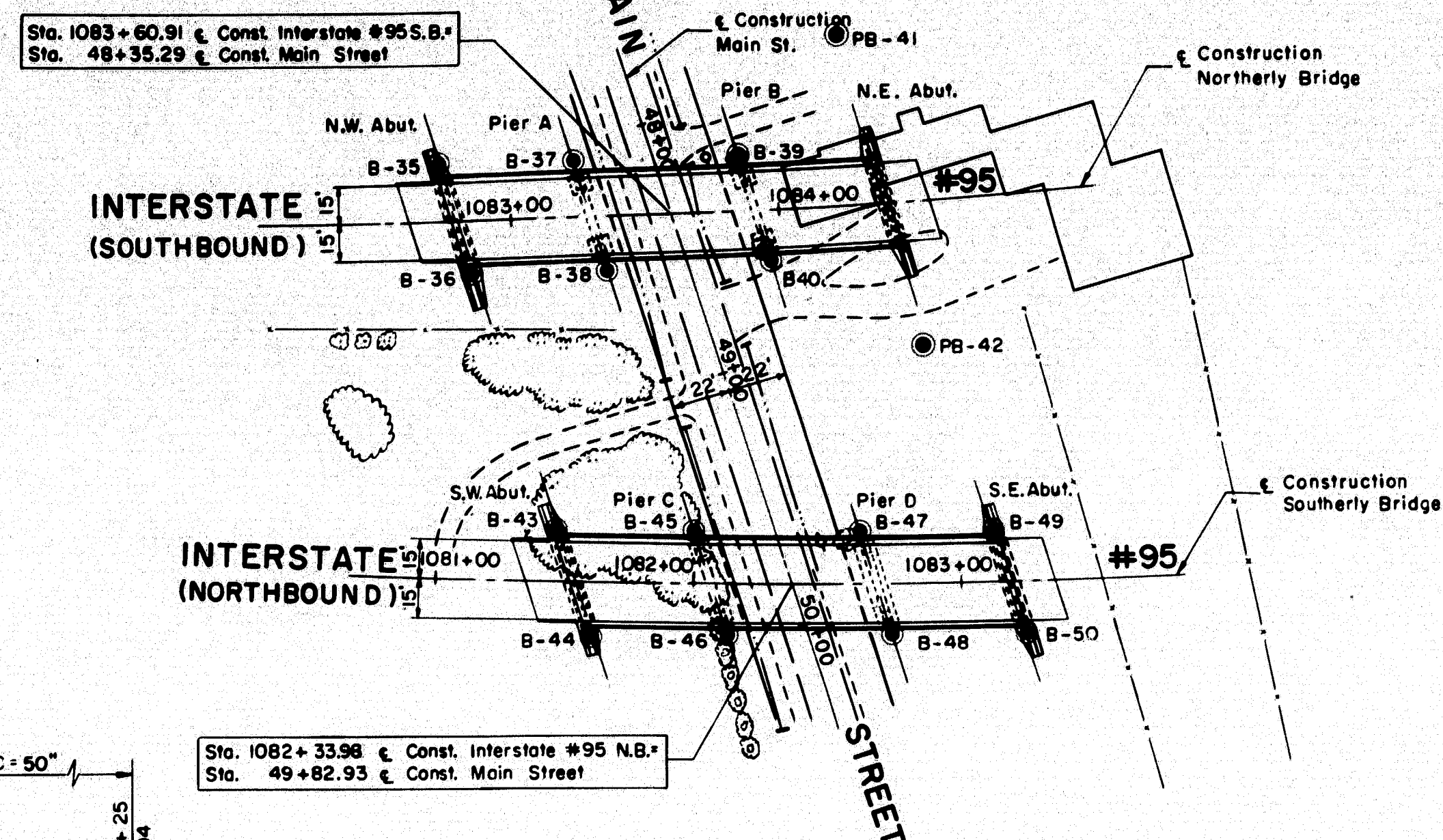
Not in this Contract

STRUCTURAL EARTH EXCAVATION, PIERS	310	CU. YDS.	379
STRUCTURAL ROCK EXCAVATION, PIERS	50	CU. YDS.	70
GRAVEL BASE COURSE - IN PLACE MEASUREMENT	440	CU. YDS.	90
BITUMINOUS CONCRETE SURFACE COURSE, TYPE "A"	130	TONS	90
MEMBRANE WATERPROOFING (3 PLY)	1,100	SQ. YDS.	90
RETAINING WALLS	330	CU. YDS.	328.23
PORTLAND CEMENT CONCRETE, ABUTMENTS AND	200	CU. YDS.	213.70
PORTLAND CEMENT CONCRETE, ROADWAY AND	430	CU. YDS.	441.30
SIDEWALK SLABS ON STEEL BRIDGES	1,440	BBLs	140
PORTLAND CEMENT	1,440	BBLs	140
BRIDGE DRAINAGE	1	LUMP SUM	1
STRUCTURAL STEEL, FABRICATED AND DELIVERED	358,700	LBS.	80,122
STRUCTURAL STEEL ERECTION	358,700	LBS.	80,122
REINFORCING STEEL DELIVERED	135,400	LBS.	14,000
REINFORCING STEEL PLACING	135,400	LBS.	14,000
SHEAR CONNECTORS DELIVERED AND PLACED	1,390	LIN. FT.	1,390
STEEL H-BEAM PILES - 42 LBS. PER FOOT	1,390	LIN. FT.	1,390
FRENCH DRAINS	160	CU. YDS.	160
ALUMINUM RAILING	660	LIN. FT.	660
SLOPE PAVING FOR BRIDGES	890	SQ. YDS.	890



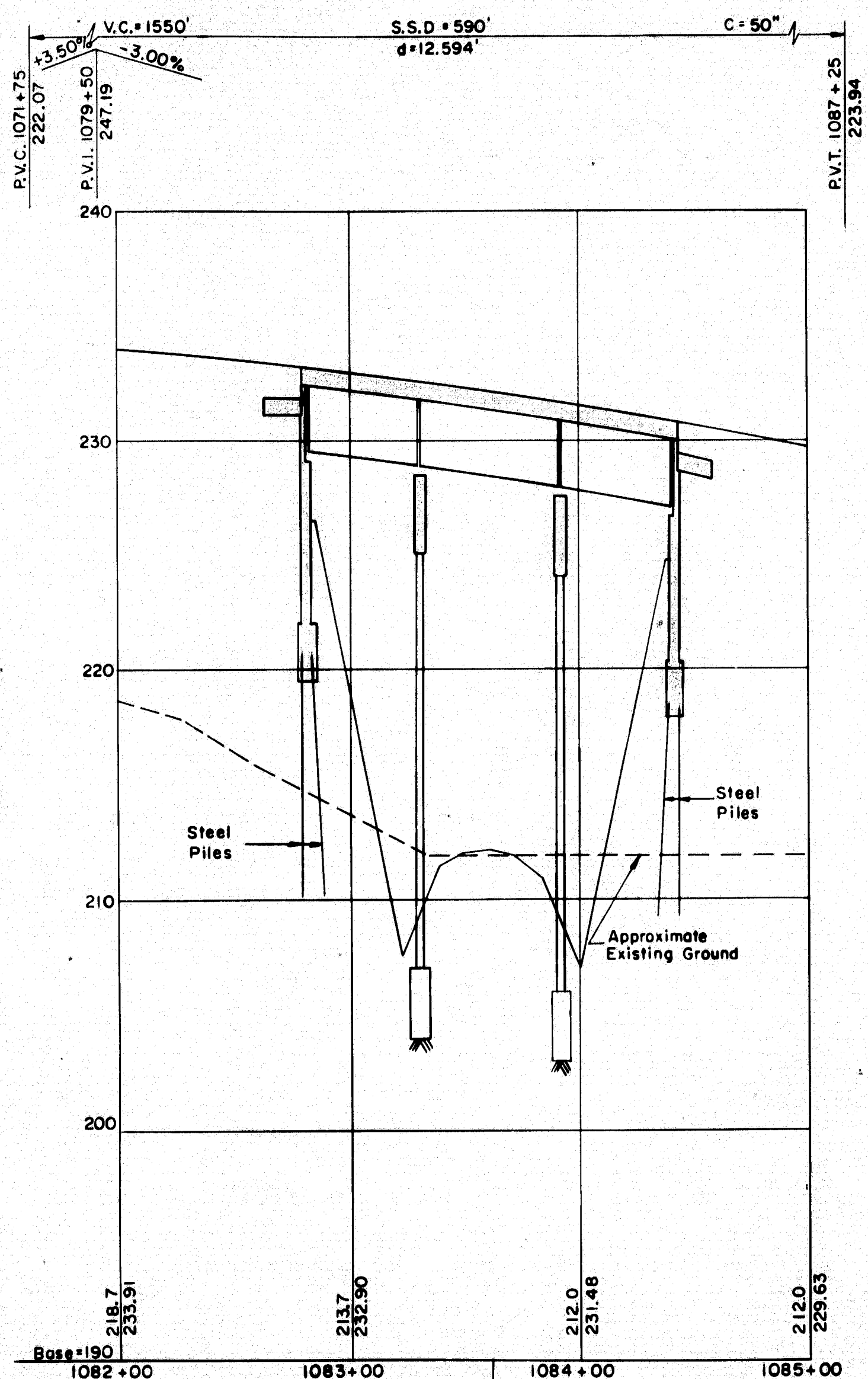
LOCATION MAP

Not to Scale



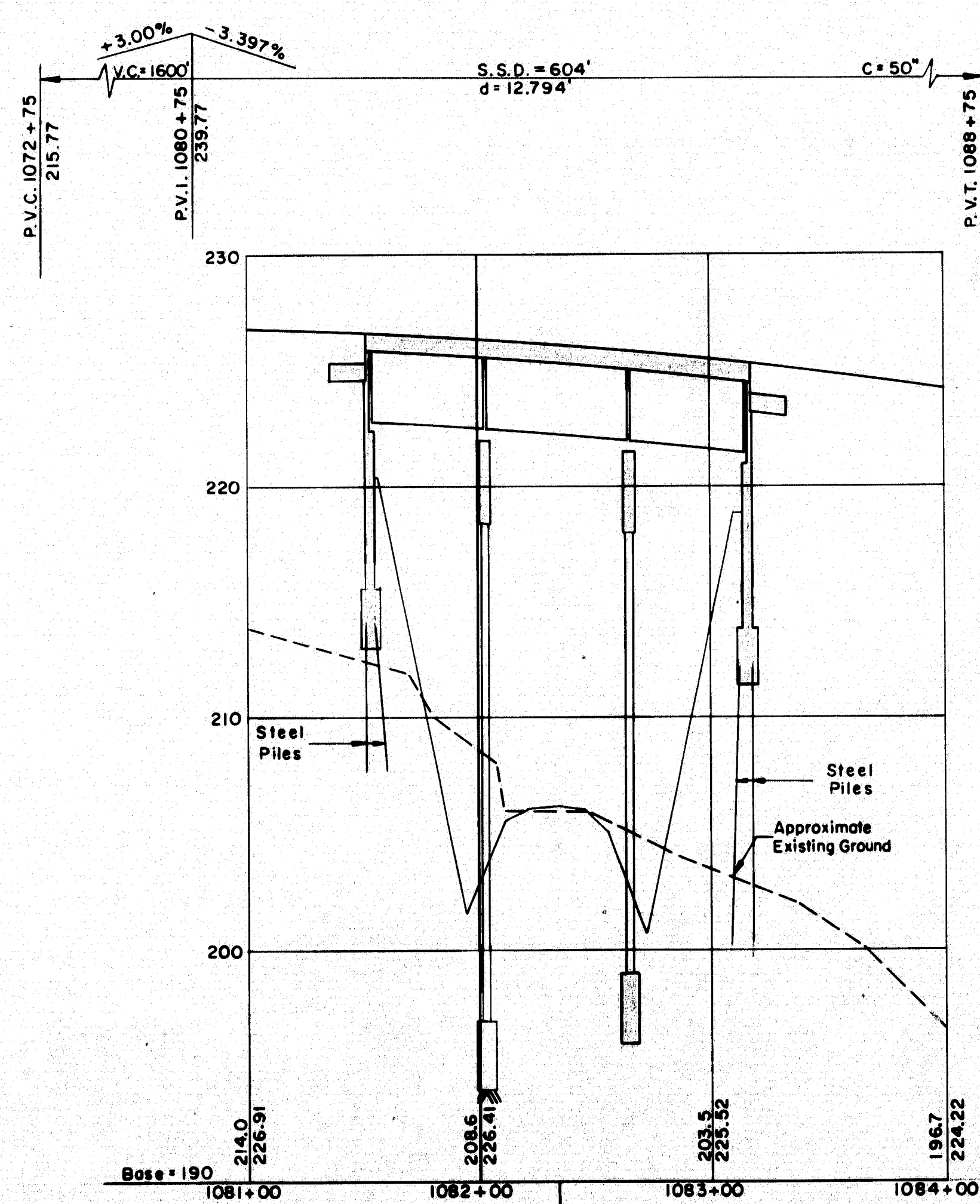
KEY PLAN

Scale: 1" = 50'-0"



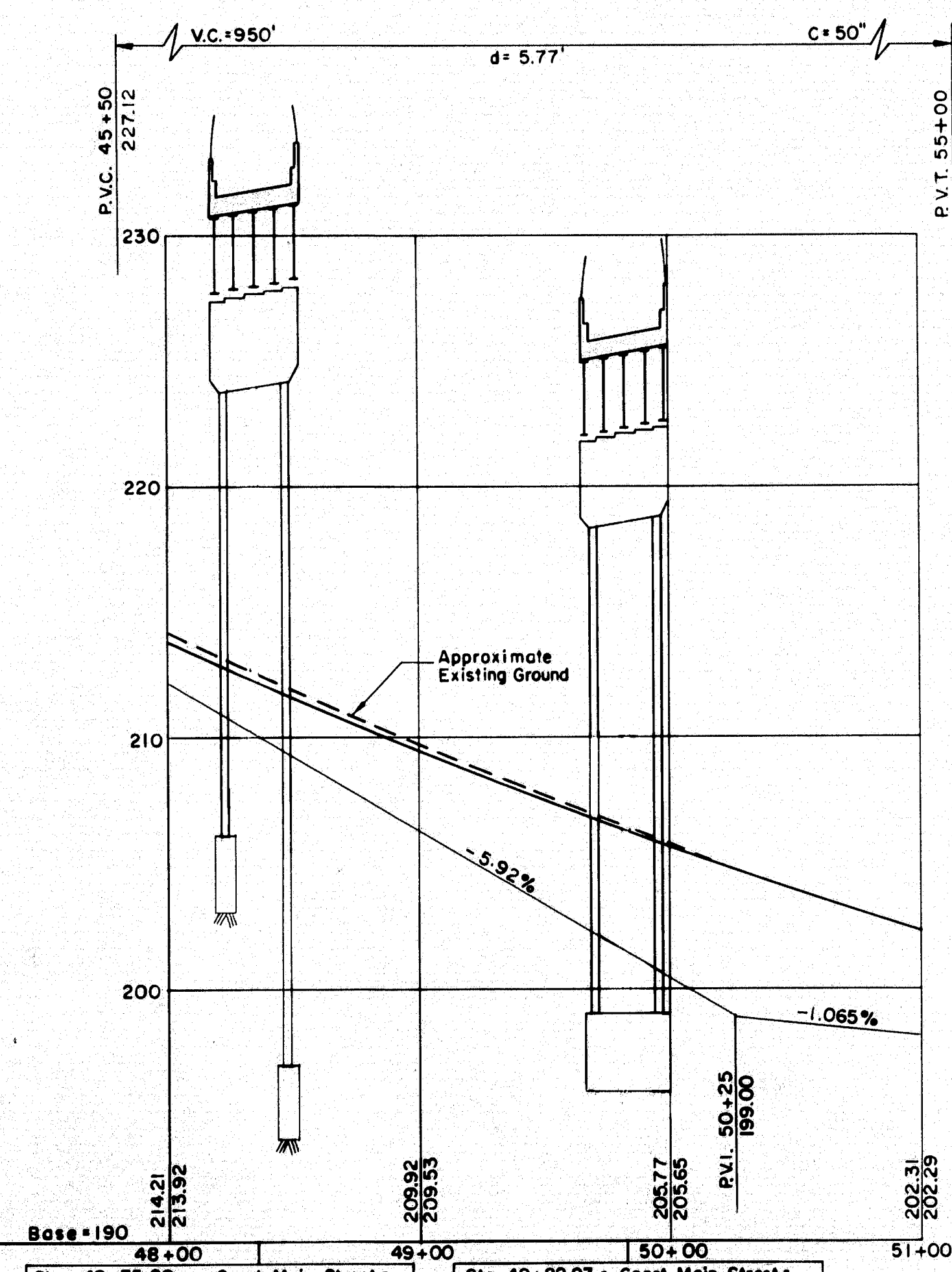
PROFILE ALONG INTERSTATE #95 (NORTHERLY BRIDGE)

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



PROFILE ALONG INTERSTATE #95 (SOUTHERLY BRIDGE)

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



PROFILE ALONG MAIN STREET

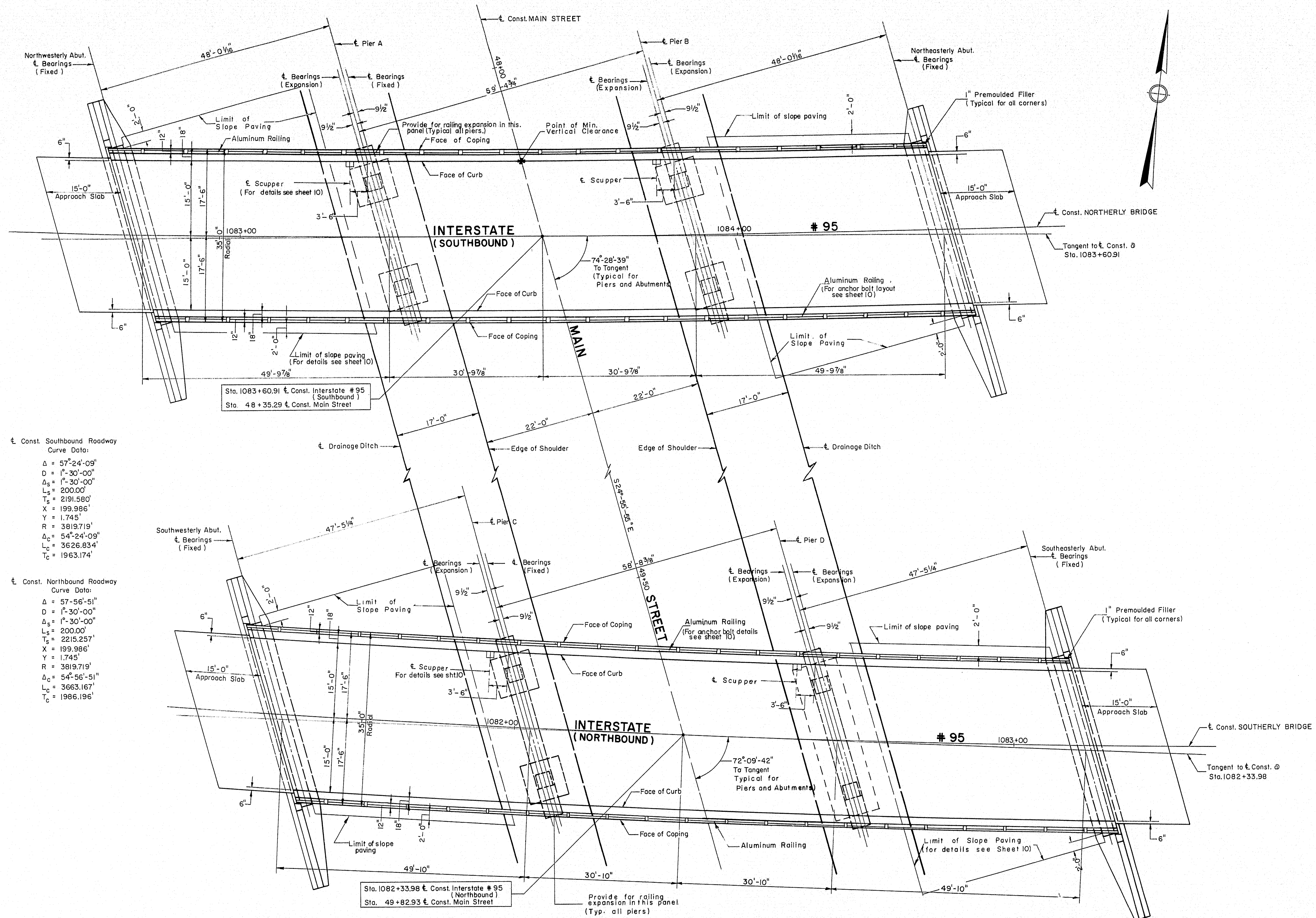
Scale: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"

APPROVED BY *Wm. A. Henderson* DATE 10-14-58
THE CLARKSON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

DESIGN	CHECK D.S.	BRIDGE NO.
DRAWN D.A.T.	APPROVED W.A.H.-C.J.M.	BRIDGE NO.
STATE HIGHWAY COMMISSION		
INTERSTATE #95		
OVER		
MAIN STREET		
IN THE CITY OF		
WATERVILLE		
KENNEBEC COUNTY		
KEY PLAN & PROFILES		
SHEET 1 OF 10 AUGUSTA, MAINE		

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(24)	27	34

WATERVILLE INTERSTATE



Const. Southbound Roadway

Curve Data:
 $\Delta = 57^{\circ}24'09''$
 $D = 1^{\circ}30'00''$
 $\Delta_s = 1^{\circ}30'00''$
 $L_s = 200.00'$
 $T_s = 2191.580'$
 $X = 199.986'$
 $Y = 1.745'$
 $R = 3819.719'$
 $\Delta_c = 54^{\circ}24'09''$
 $L_c = 3626.834'$
 $T_c = 1963.174'$

Const. Northbound Roadway

Curve Data:
 $\Delta = 57^{\circ}56'51''$
 $D = 1^{\circ}30'00''$
 $\Delta_s = 1^{\circ}30'00''$
 $L_s = 200.00'$
 $T_s = 2215.257'$
 $X = 199.986'$
 $Y = 1.745'$
 $R = 3819.719'$
 $\Delta_c = 54^{\circ}56'51''$
 $L_c = 3663.167'$
 $T_c = 1986.196'$

GENERAL PLAN

Scale: 1" = 10'-0"

THE CLARKSON ENGINEERING CO., INC.

DESIGN DS. - H.L. CHECK D.S. BRIDGE NO. SURVEY
DRAWN E.K. APPROVED WAH-CJM PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MAIN STREET

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

GENERAL PLAN

SHEET 3 OF 10 AUGUSTA, MAINE

75-161

Beam No.	ℓ Brg. *	1/4 Point	1/2 Point	3/4 Point	ℓ Brg.
1	231.75	231.63	231.48	231.31	231.12
2	232.02	231.90	231.76	231.59	231.39
3	232.30	232.18	232.03	231.86	231.66
4	232.57	232.45	232.30	232.13	231.93
5	232.84	232.72	232.57	232.40	232.20
6	231.10	230.94	230.74	230.50	230.23
7	231.37	231.22	231.02	230.78	230.49
8	231.64	231.49	231.29	231.06	230.76
9	231.91	231.76	231.56	231.31	231.02
10	232.18	232.01	231.81	231.57	231.29
11	230.20	230.03	229.84	229.63	229.40
12	230.47	230.30	230.11	229.90	229.66
13	230.73	230.57	230.38	230.16	229.92
14	230.99	230.83	230.64	230.42	230.18
15	231.26	231.09	230.90	230.68	230.45
16	225.29	225.24	225.17	225.08	224.97
17	225.57	225.53	225.46	225.37	225.25
18	225.86	225.81	225.75	225.65	225.53
19	226.15	226.10	226.03	225.93	225.82
20	226.43	226.38	226.31	226.21	226.10
21	224.96	224.89	224.79	224.65	224.47
22	225.24	225.18	225.08	224.94	224.75
23	225.52	225.46	225.36	225.21	225.02
24	225.80	225.74	225.64	225.49	225.30
25	226.08	226.01	225.91	225.76	225.57
26	224.45	224.36	224.26	224.12	223.97
27	225.01	224.94	224.83	224.70	224.51
28	225.28	225.19	225.08	224.95	224.79
29	225.56	225.46	225.34	225.20	225.04

* Low station end of beam.

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

NOTES:

- All intermediate diaphragms to be 18" x 42.7"; for detail see sheet 9.
- All end diaphragms to be 15" x 33.9"; for details see sheet 9.
- For Cover Plate and Shear Connector details see sheet 9.
- All beams to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile, and in no case with less camber than is likely to remain permanent. The proposed camber diagram shall be submitted to the engineer for approval.
- Parapets and safety walks to have transverse construction joints 20'± on centers. Joints are not to be located under railing post. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered 1/2". Reinforcing steel to be carried thru joints.
- All deck slab concrete in each span shall be placed in one continuous operation.
- 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing are not in this contract.

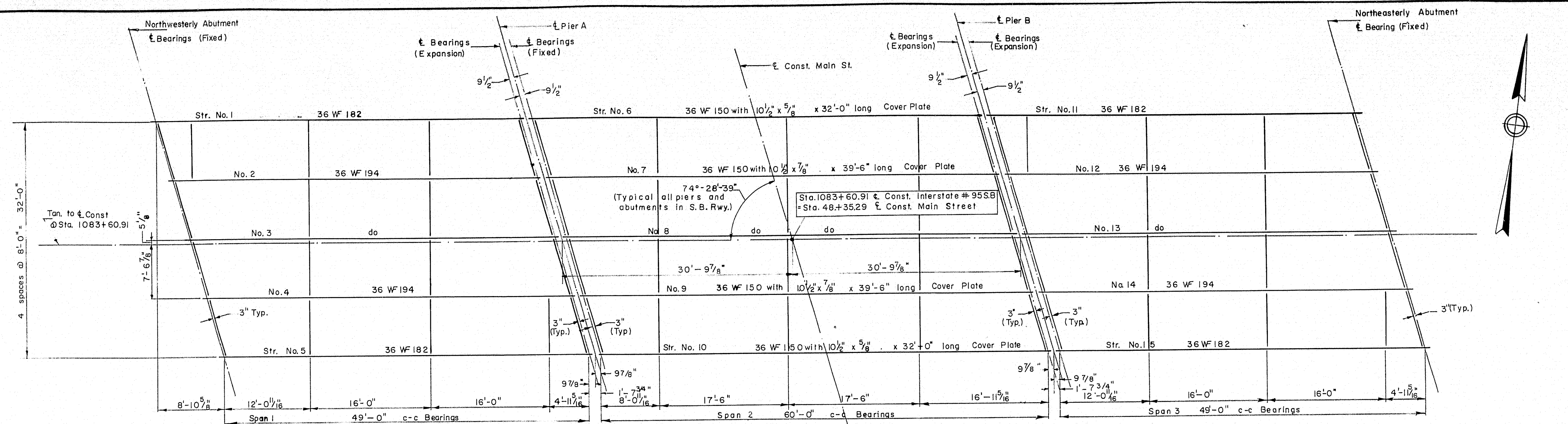
THE CLARKSON ENGINEERING CO., INC.

DESIGN G.B.-H.L. CHECK G.B. BRIDGE NO. SURVEY PLOT
DRAWN D.A.T. APPROVED WAH.-CJM

STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MAIN STREET
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
FRAMING PLAN & CROSS SECTION

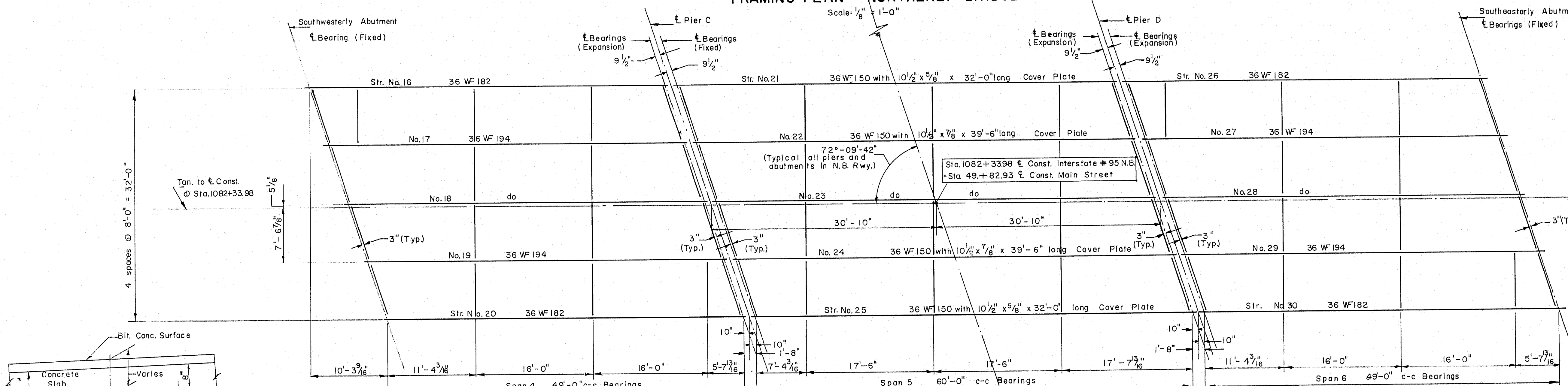
SHEET 8 OF 10 AUGUSTA, MAINE

75-166



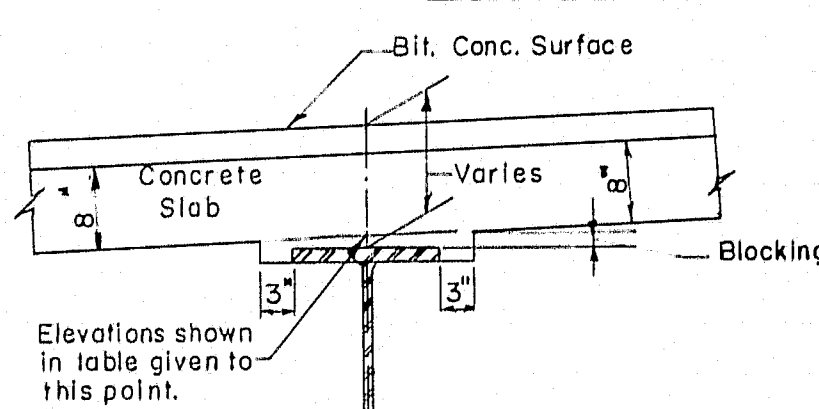
FRAMING PLAN NORTHERLY BRIDGE

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



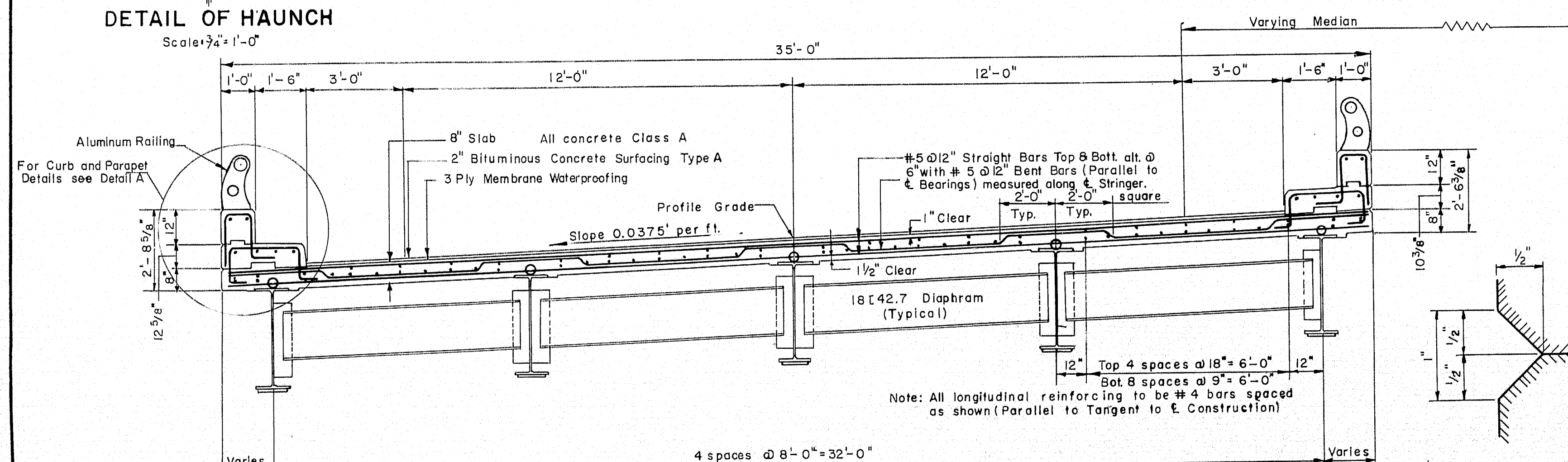
FRAMING PLAN SOUTHERLY BRIDGE

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



DETAIL OF HAUNCH

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

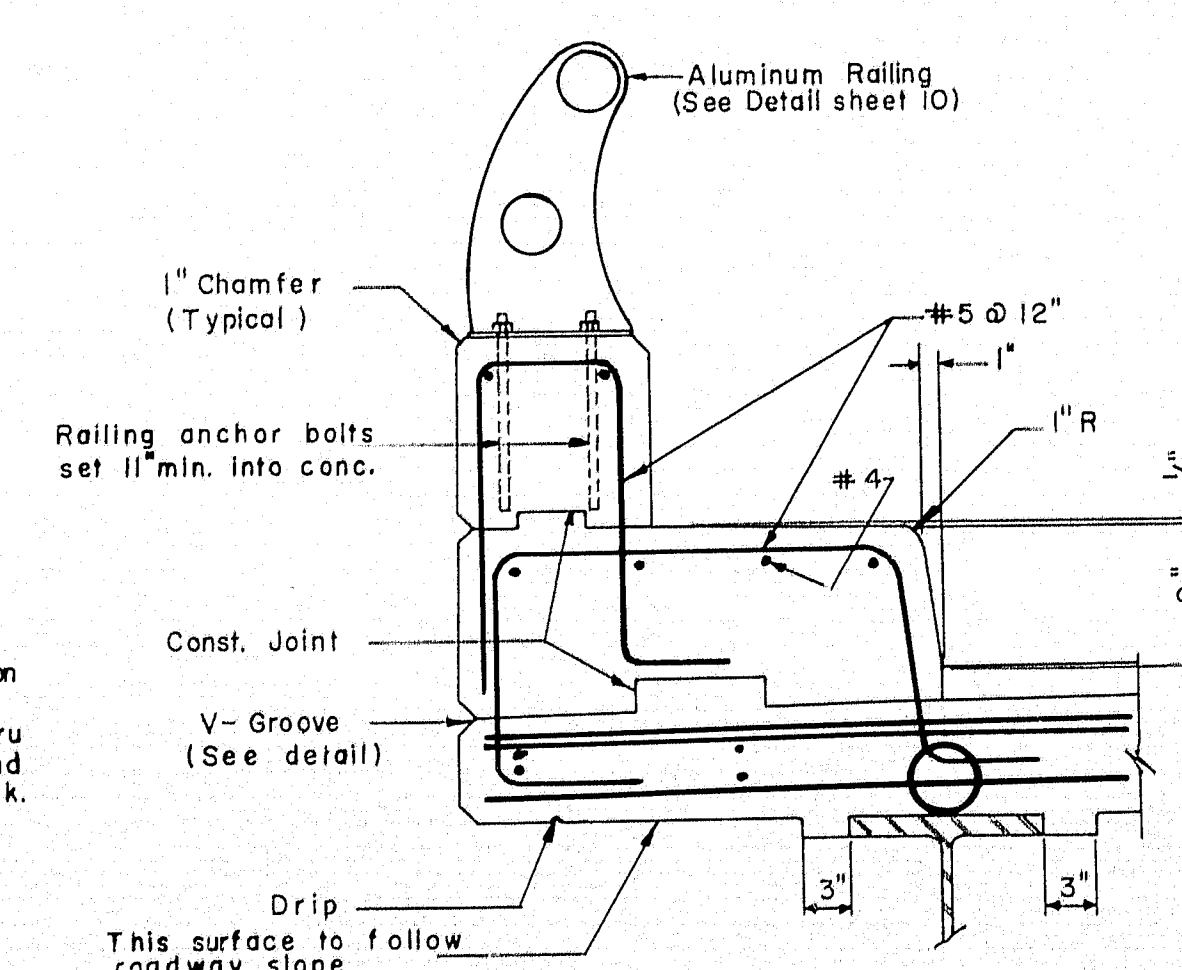


TYPICAL CROSS SECTION

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

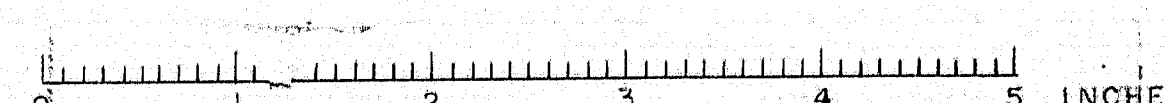
V - GROOVE DETAIL

Not to Scale



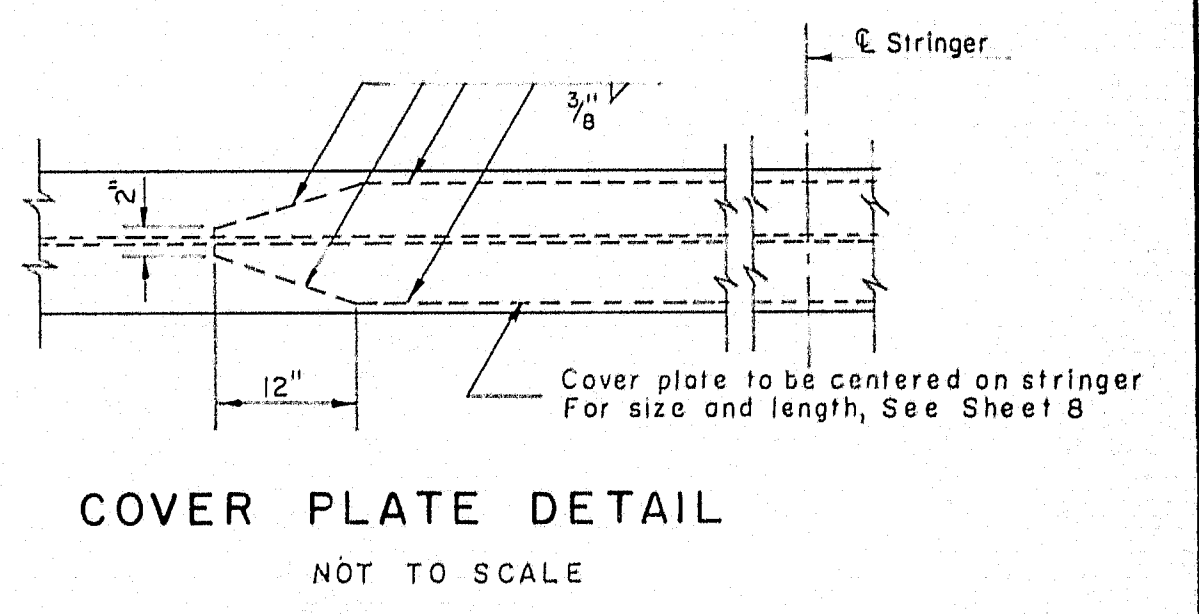
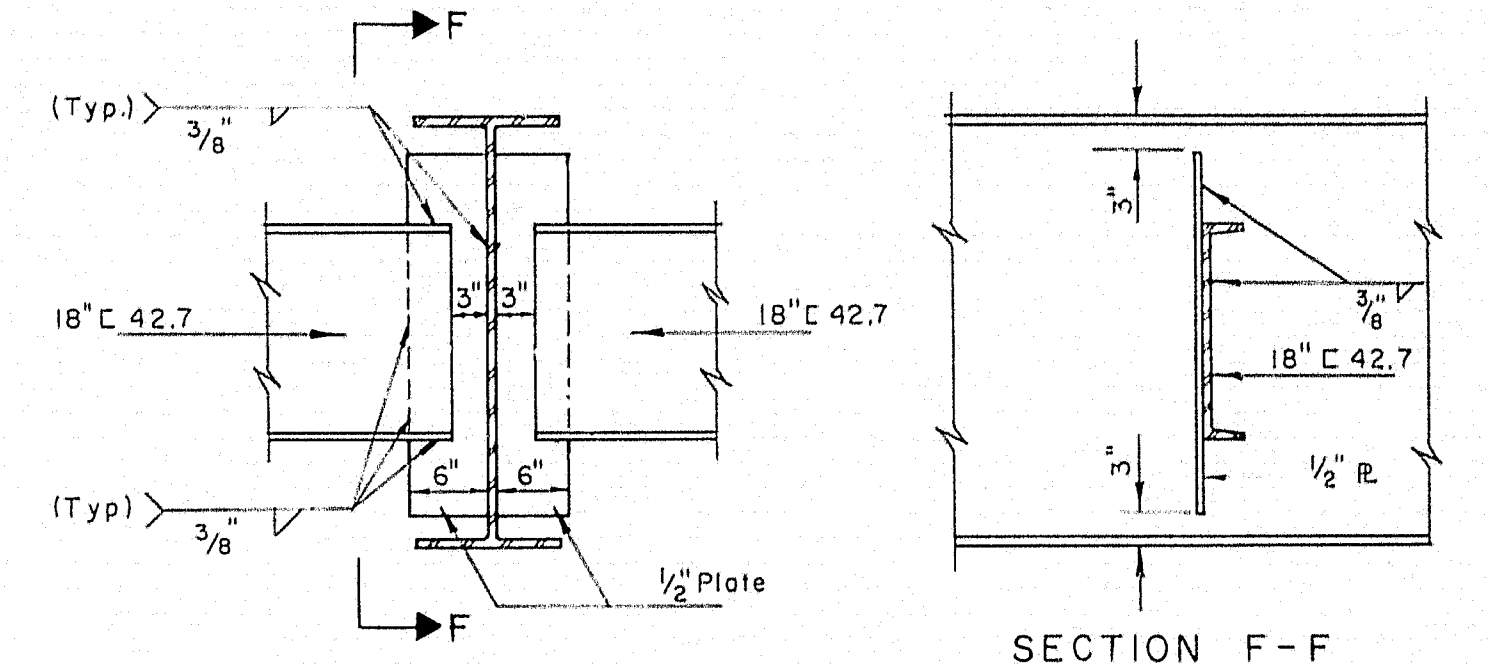
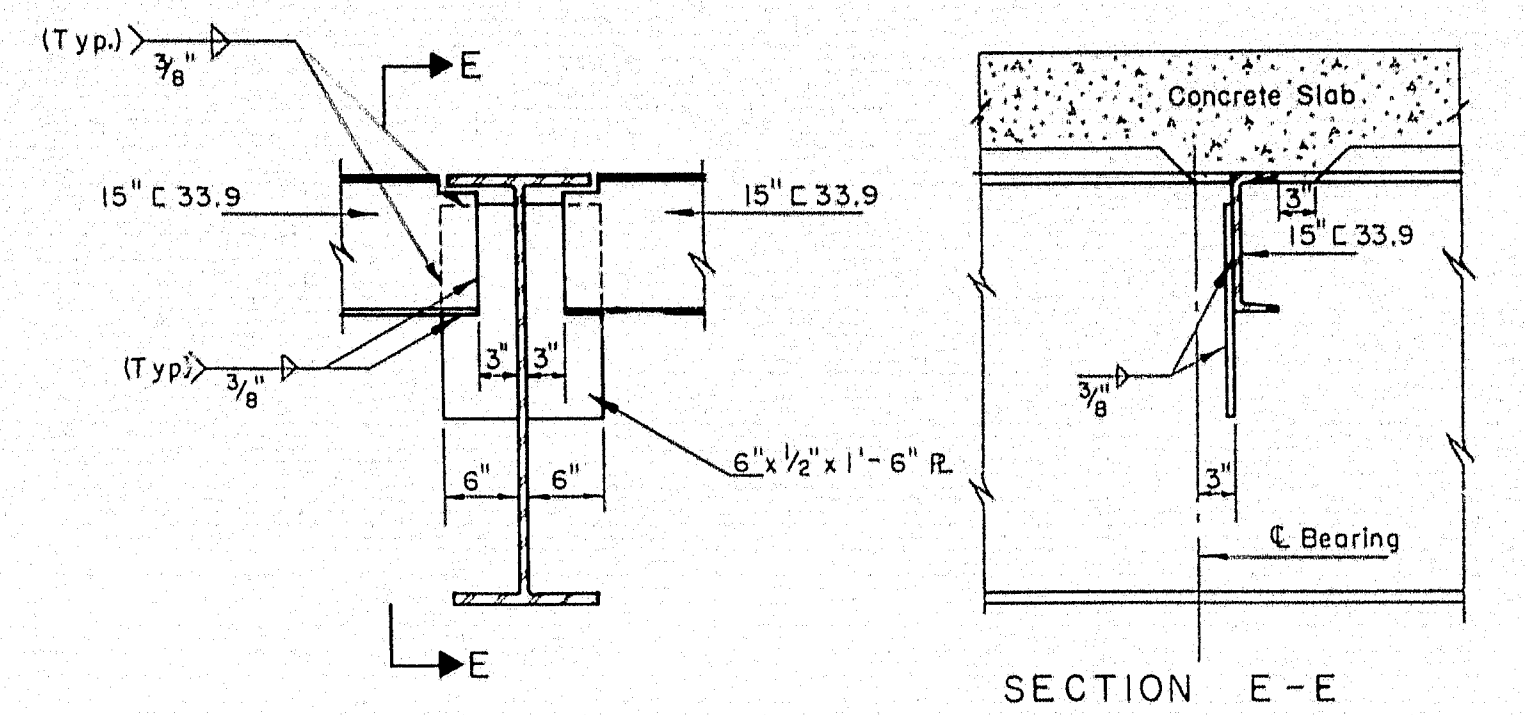
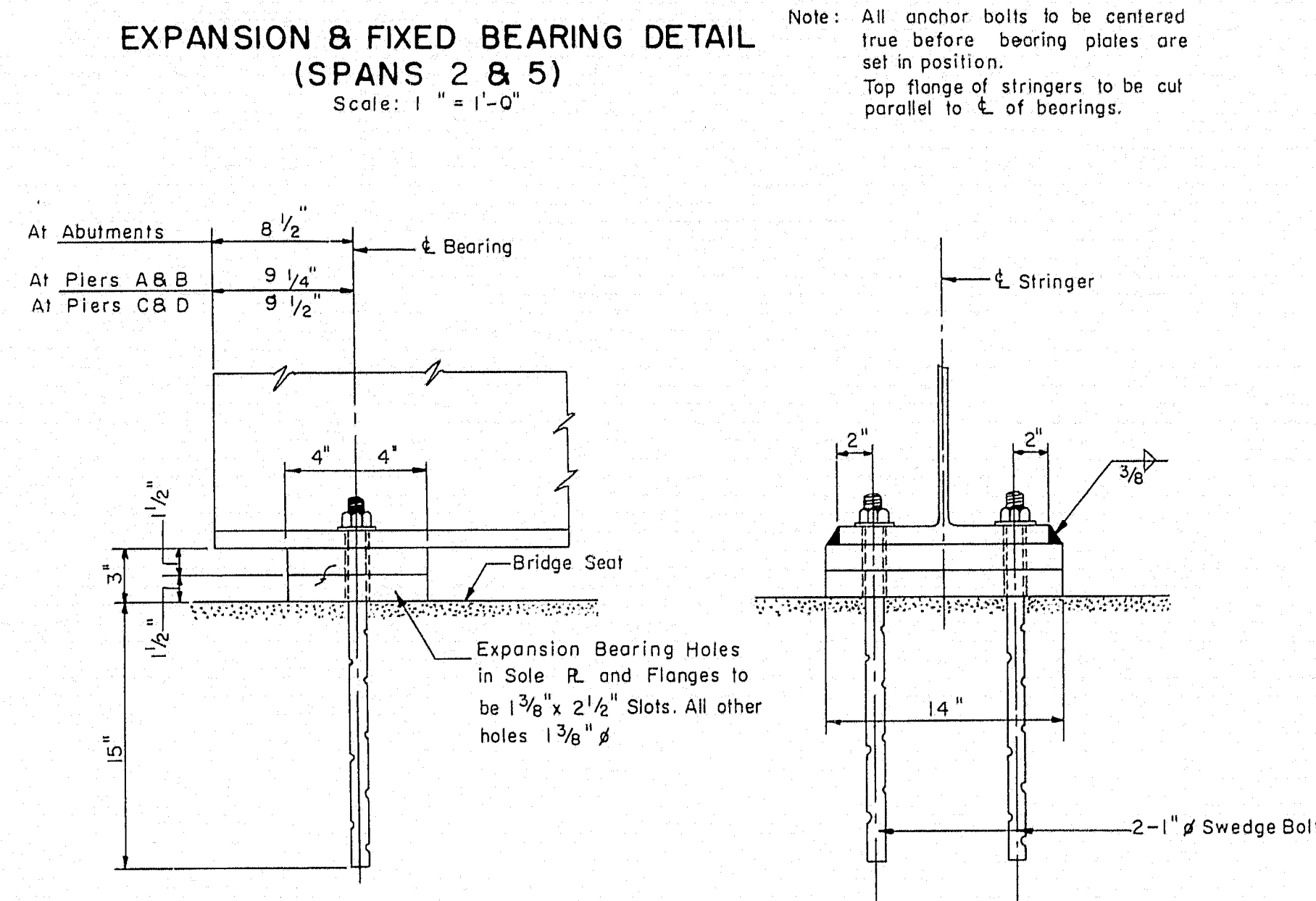
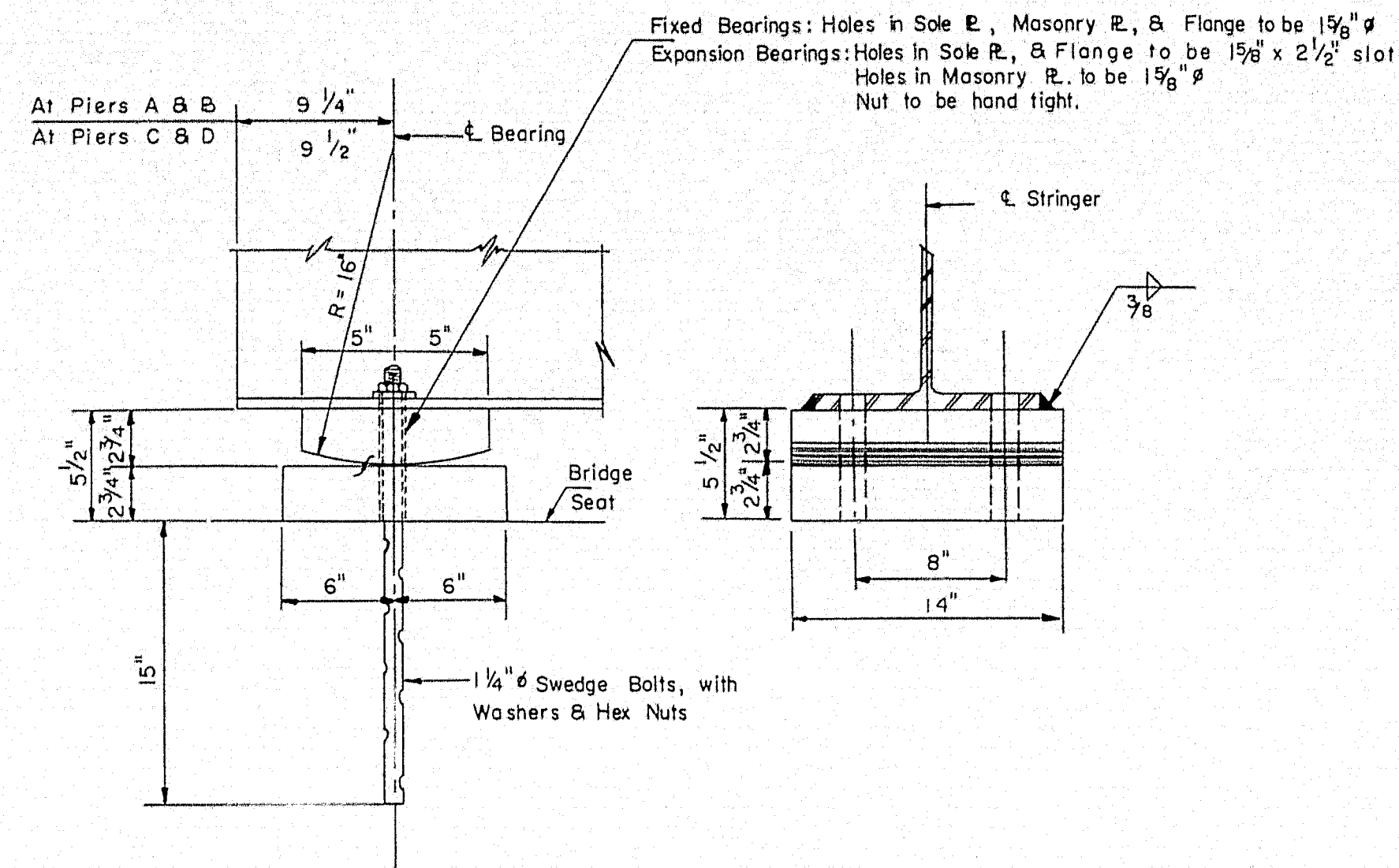
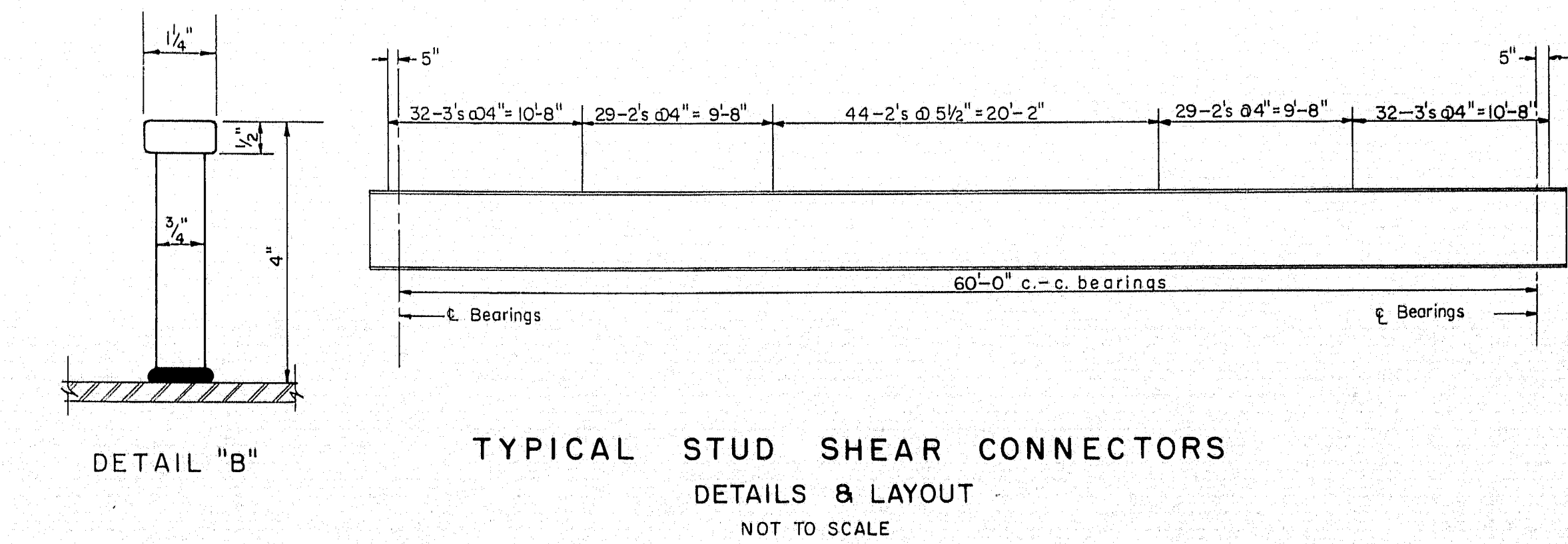
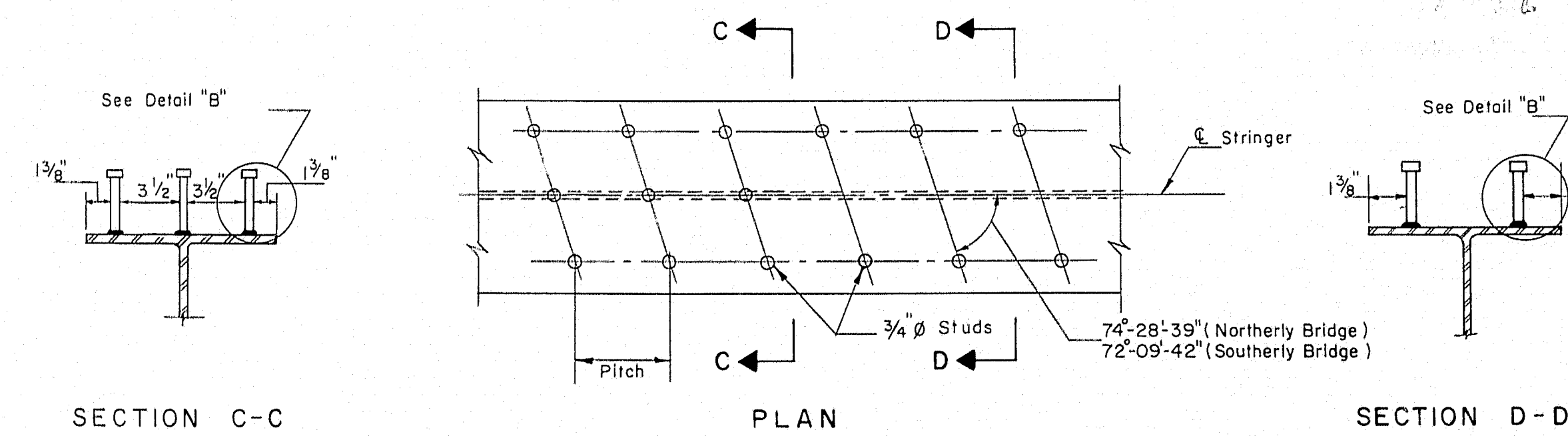
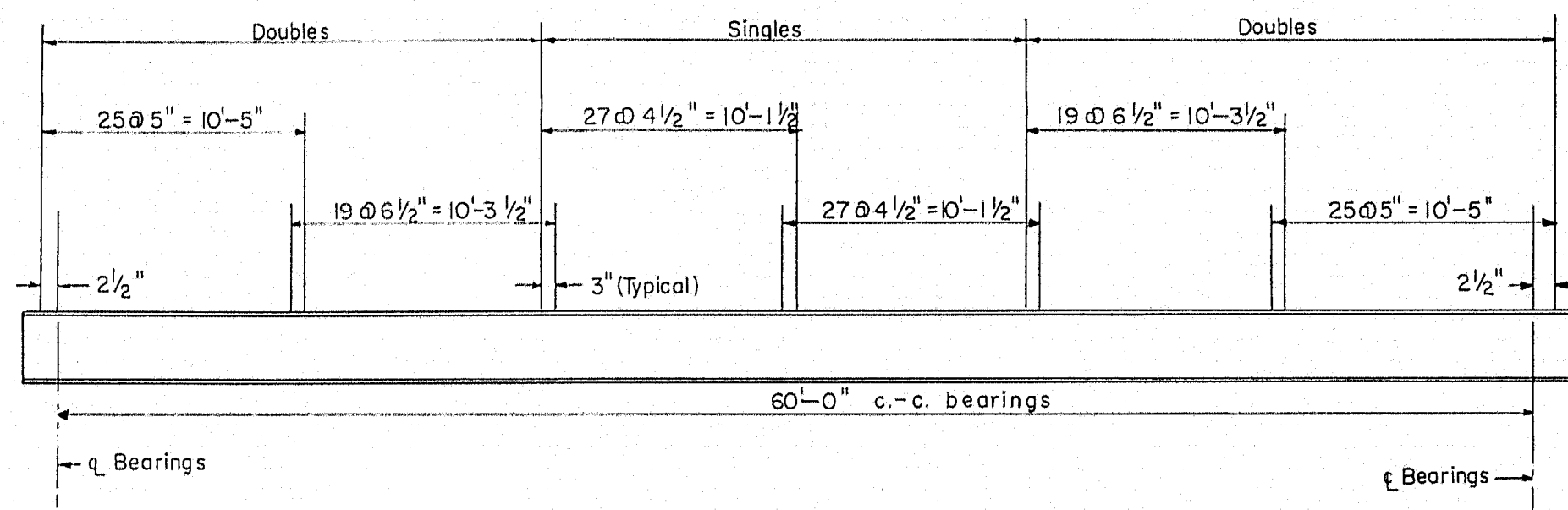
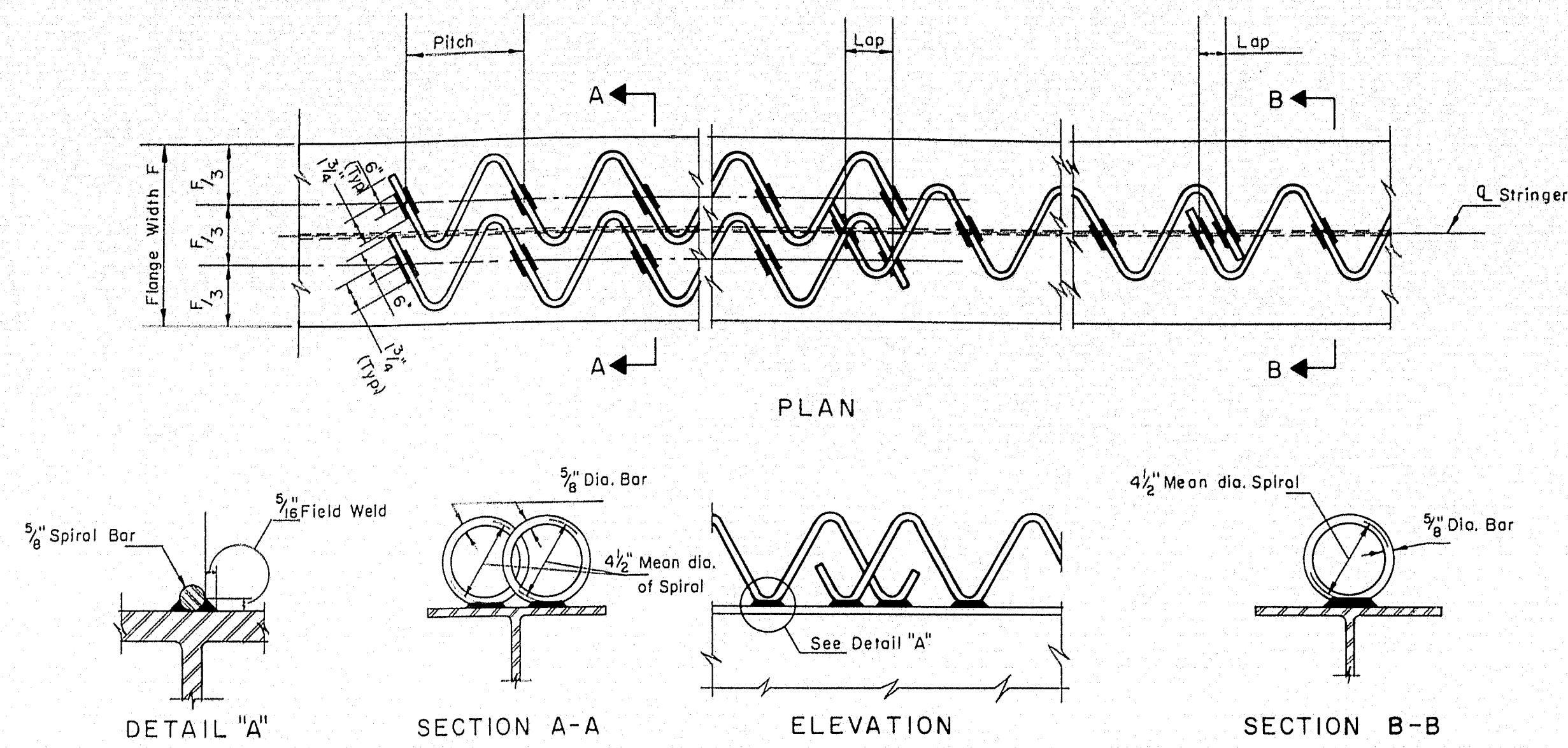
DETAIL A

Scale: 1" = 1'-0"



B.P.R.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-6(24)	33	34

WATERVILLE INTERSTATE



THE CLARKESON ENGINEERING CO., INC.			
DESIGN G.B.-H.L.		CHECK G.B.	BRIDGE NO.
DRAWN D.E.S.		APPROVED W.A.H.-C.M.	SURVEY PLOT
STATE HIGHWAY COMMISSION			
INTERSTATE #95			
OVER			
MAIN STREET			
IN THE CITY OF			
WATERVILLE			
KENNEBEC COUNTY			
SUPERSTRUCTURE DETAILS			
SHEET 9 OF 10 AUGUSTA, MAINE			