

DAY 1 (2004) 01/01/04 000416.DWG 1/01/04 000416

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



PLANS

WATERVILLE/WINSLOW

KENNEBEC COUNTY

DONALD V. CARTER BRIDGE

PROJECT NO. DPB-0009(002)

PROJECT LENGTH = 0.38 MILES

A BRIDGE PROJECT

VOLUME 1 - STEEL ALTERNATE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	0009(002)	1	103

WATERVILLE/WINSLOW
PIN 000566.40

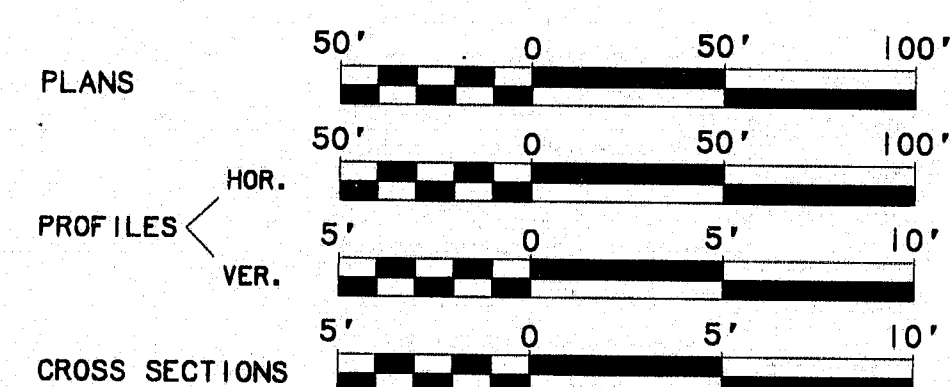
INDEX OF SHEETS

SEE SHEET NO. 2 FOR INDEX

CONVENTIONAL SIGNS

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

SCALES

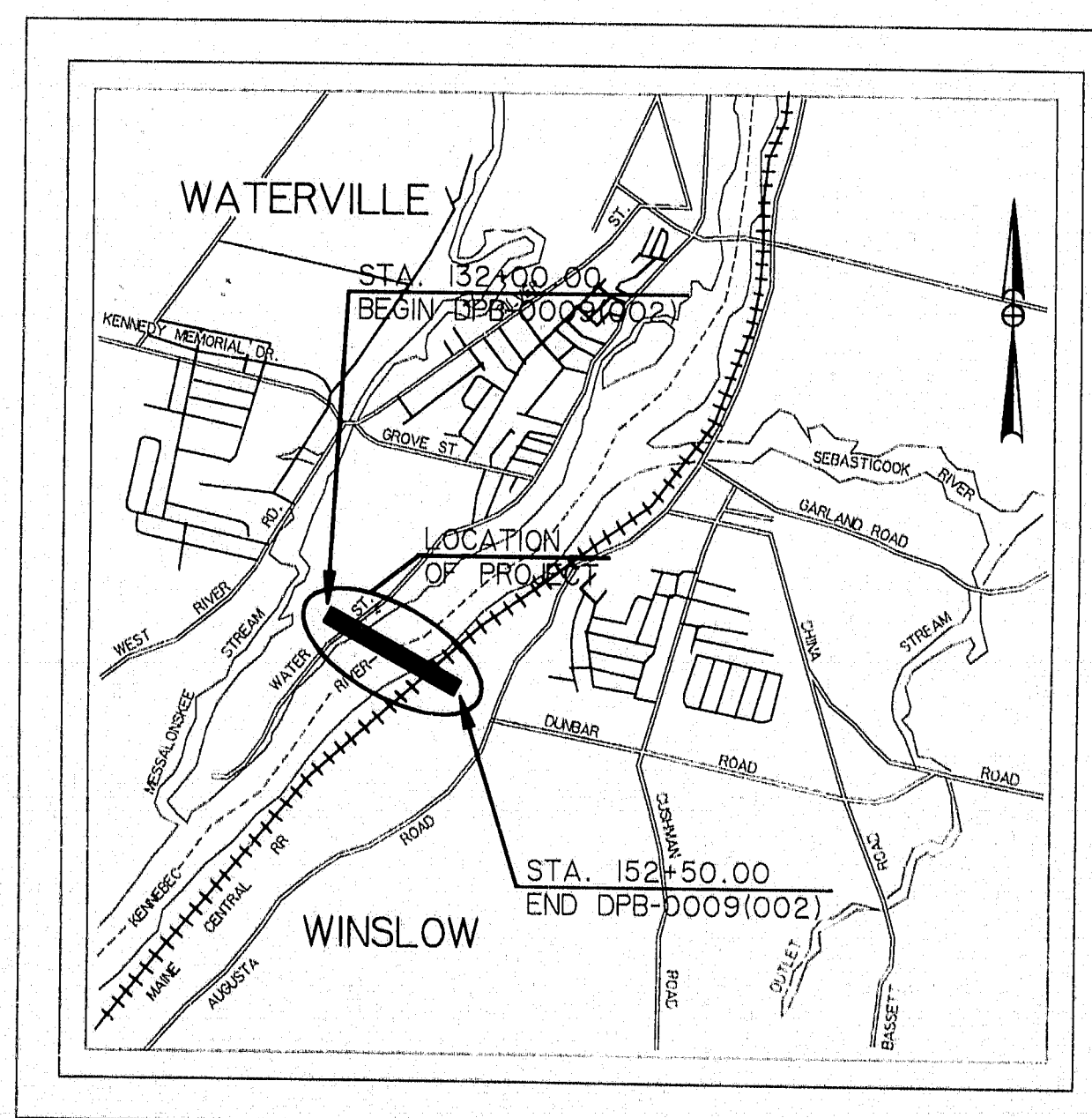


CONTRACT DESCRIPTION

VOLUME 1 - STEEL ALTERNATE
VOLUME 2 - CONCRETE ALTERNATE

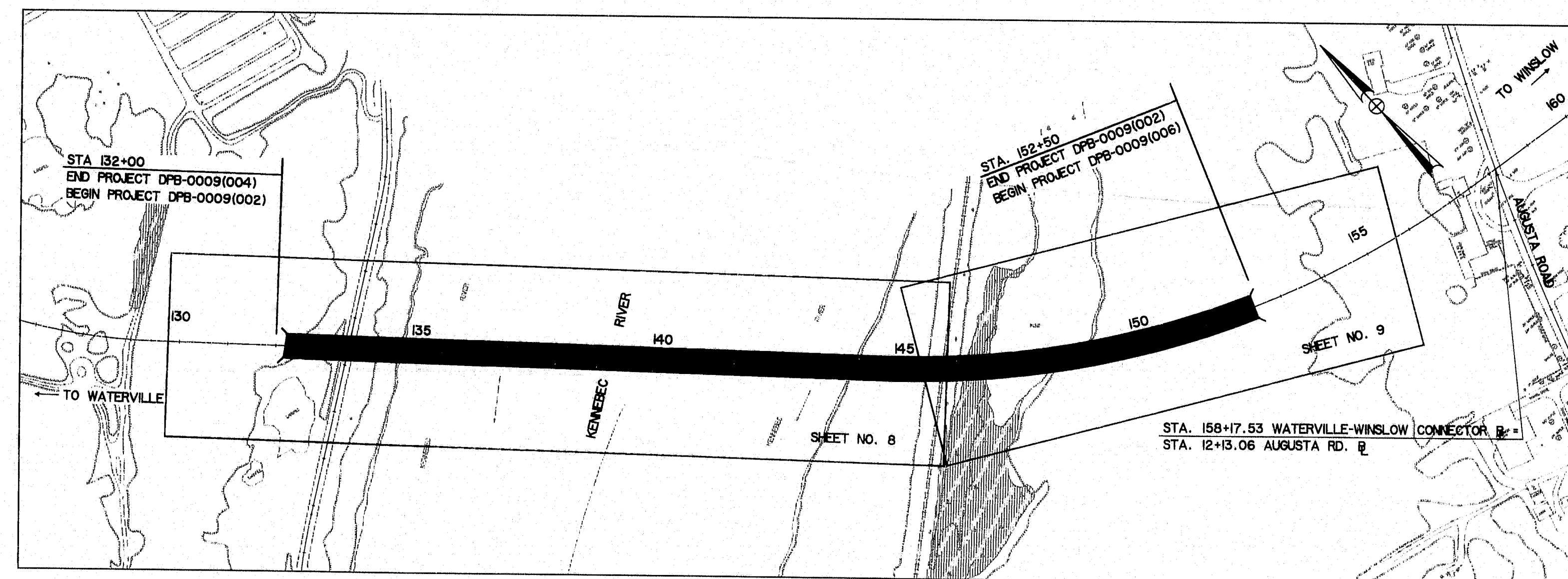
NOTE:

IT IS THE INTENT TO AWARD ONLY VOLUME 1
OR ONLY VOLUME 2



A PORTION OF KENNEBEC COUNTY

0 2500 5000
SCALE IN FEET



LAYOUT PLAN

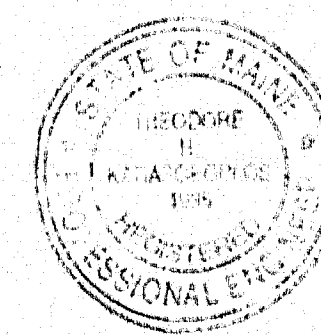
200 0 200 400
GRAPHIC SCALE 1"=200'

DONALD V. CARTER BRIDGE TRAFFIC DATA

A.A.D.T. (1994) 12550
A.A.D.T. (2014) 15110
D.H.V. 1511
T. (2D.H.V.) 3
D. (2D.H.V.) 55
V. 50 MPH
P.S.D. (X) N/A
18 KIPS P(2.5) 122

NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT TO BE GOVERNED
BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS
(REVISION OF OCTOBER 1990) AND SUPPLEMENTALS THERETO, EXCEPT
AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.



APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

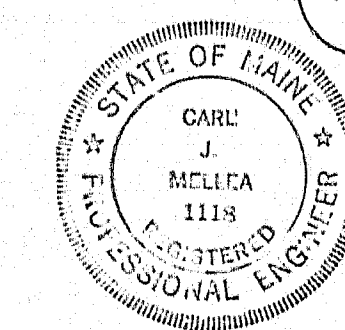
COMMISSIONER
CHIEF ENGINEER

Prepared by:

HNTB ARCHITECTS ENGINEERS PLANNERS

ENGINEER'S SIGNATURE

2/20/95
DATE



115-187

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION

APPROVED:

DIVISION ADMINISTRATOR

DATE

WATERVILLE-WINSLOW

CONTRACT SHEET NO.	BRIDGE SHEET NO.	DESCRIPTION
1.	-----	TITLE SHEET
2.	-----	INDEX OF SHEETS
3.	-----	ESTIMATED QUANTITIES AND GENERAL NOTES
4.	-----	HIGHWAY PROFILE
5.-7.	-----	HIGHWAY CROSS SECTIONS
8.-9.	B1 - B2	PLAN AND ELEVATION
10.	B3	GENERAL NOTES
11.	B4	BORING PLAN
12.-26.	B5 - B19	BORING LOGS
27.	B19A	FOUNDATION SURVEY (NORTH SOIL PROFILE)
28.	B19B	FOUNDATION SURVEY (SOUTH SOIL PROFILE)
29.	B20 - B22	FOUNDATION PLAN
30.	B23	COFFERDAM DETAILS
31.	B24	ABUTMENT 1 (CONCRETE)
32.	B25	ABUTMENT 1 (RE-STEEL)
33.	B26	ABUTMENT 2 (CONCRETE)
34.	B27	ABUTMENT 2 (RE-STEEL)
35.	B28	ABUTMENT DETAILS
36.	B29	WINGWALL DETAILS
37.	B30	PIER 1 DETAILS
38.	B31	PIER 1 RE-STEEL
39.	B32	PIER 2 DETAILS
40.	B33	PIER 2 RE-STEEL
41.	B34	PIER 3 DETAILS
42.	B35	PIER 3 RE-STEEL
43.	B36	PIER 4 DETAILS
44.	B37	PIER 4 RE-STEEL
45.	B38	PIER 5 DETAILS
46.	B39	PIER 5 RE-STEEL
47.	B40	PIER 6 DETAILS
48.	B41	PIER 6 RE-STEEL
49.	B42	PIER 7 DETAILS
50.	B43	PIER 7 RE-STEEL
51.	B44	PIER 8 DETAILS
52.	B45	PIER 8 RE-STEEL
53.	B46	PIER 9 DETAILS
54.	B47	PIER 9 RE-STEEL
55.	B48	PIER 10 DETAILS
56.	B49	PIER 10 RE-STEEL
57.	B50	PIER CAP DETAILS
58.-65.	B51 - B56	FRAMING PLAN
66.	B57	CROSSFRAME DETAILS
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69.-70.	B60 - B61	CAMBER DIAGRAM
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73.	B64	GIRDER SPLICE DETAILS
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77.-79.	B68 - B70	BLOCKING ELEVATIONS
80.-84.	B71 - B75	DECK PLAN
85.	B76	DECK SECTIONS
86.	B77	BARRIER DETAILS
87.-88.	B78 - B79	EXPANSION JOINT DETAILS
89.-95.	B80 - B86	REINFORCING STEEL SCHEDULE

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BRIDGE STANDARDS	
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97. -----	BD 304-93 ----- EXPANSION DEVICE: FINGER JOINT
98. -----	BD 501-93 ----- SUBSTRUCTURE DETAILS
99. -----	BD 521-93 ----- SUPERSTRUCTURE DETAILS

HIGHWAY STANDARDS

HIGHWAY STANDARDS	
100.-----	HD-7 ----- EROSION CONTROL FOR DITCHES AND SLOPES
101.-----	HD-10 ----- MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES
102.-----	HD-11 ----- MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES
103.-----	HD-12 ----- MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES

REVISED IN
AG BUILD

AS BUILT
Cmn 12/18/96

115-188

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

INDEX OF SHEETS

HNTE

ARCHITECTS ENGINEERS PLANNERS

SHEET OF AUGUSTA, MAINE

					BY	DATE
					DESIGNED:	
					DRAWN:	
					CHECKED:	
NO.	REVISION	BY	DATE	IN CHARGE OF		

GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE THE MAINE CENTRAL RAILROAD, KENNEBEC SANITARY TREATMENT DISTRICT, AND THE TOWN OF WINSLOW.
2. LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED HIGHWAY EMBANKMENT SLOPE AREA. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE ENGINEER.
3. UNLESS OTHERWISE NOTED, SEEDING METHOD NO. 3 SHALL BE UTILIZED ON ALL HIGHWAY EMBANKMENT SLOPES.
4. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEMS 629.05, HAND LABOR; 631.12, ALL PURPOSE EXCAVATOR; AND 631.172, TRUCK (LARGE).
5. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS.
6. FOR THE TEMPORARY CONSTRUCTION/RIVER ACCESS REQUIREMENTS REFER TO THE PERMIT. PAYMENT FOR THE CONSTRUCTION/RIVER ACCESS WILL BE INCIDENTAL TO THE CONTRACT.
7. CLEARING HAS BEEN ESTIMATED FOR THE AREA WITHIN THE LIMITS OF WORK AS OUTLINED BELOW:

STA. 130+75 TO STA 134+60
STA. 148+00 TO STA. 151+90

THE CLEARING SHALL BE 10' BEYOND AND PARALLEL TO THE CONSTRUCTION
SLOPE LINE AND/OR BRIDGE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER

AS Built
Cm 12/18/96

115-189

STEEL ALTERNATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

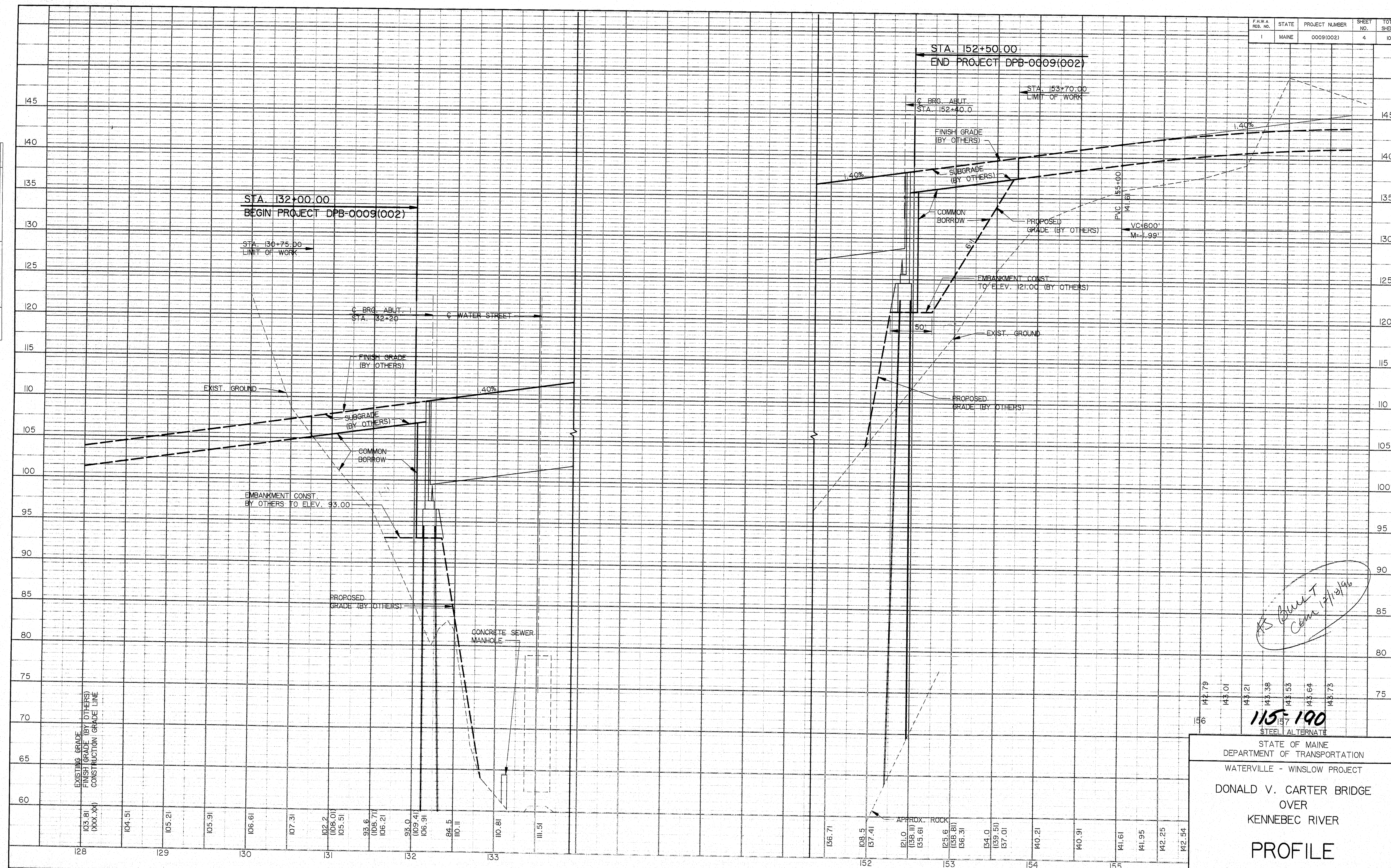
ESTIMATED QUANTITIES
AND
GENERAL NOTES

SHEET OF AUGUSTA, MAINE

					BY	DATE
					DESIGNED: RJD	2/95
					DRAWN: SV	2/95
					CHECKED: RJD	2/95
NO.	REVISION	BY	DATE	IN CHARGE OF C.M.		



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	4	10



KS Bunt
Cane 12/13/96

STEEL TUBES

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

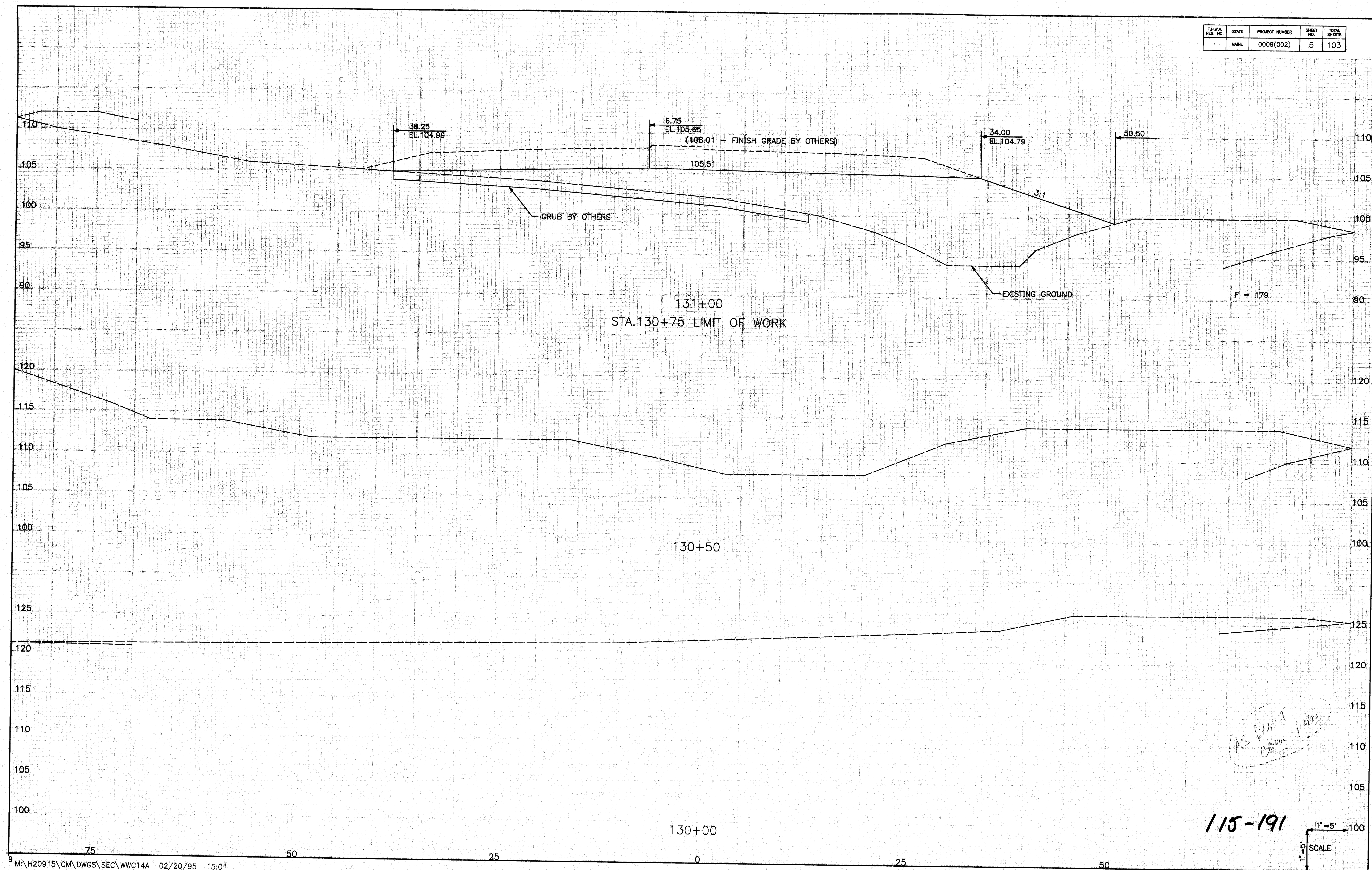
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PROFILE

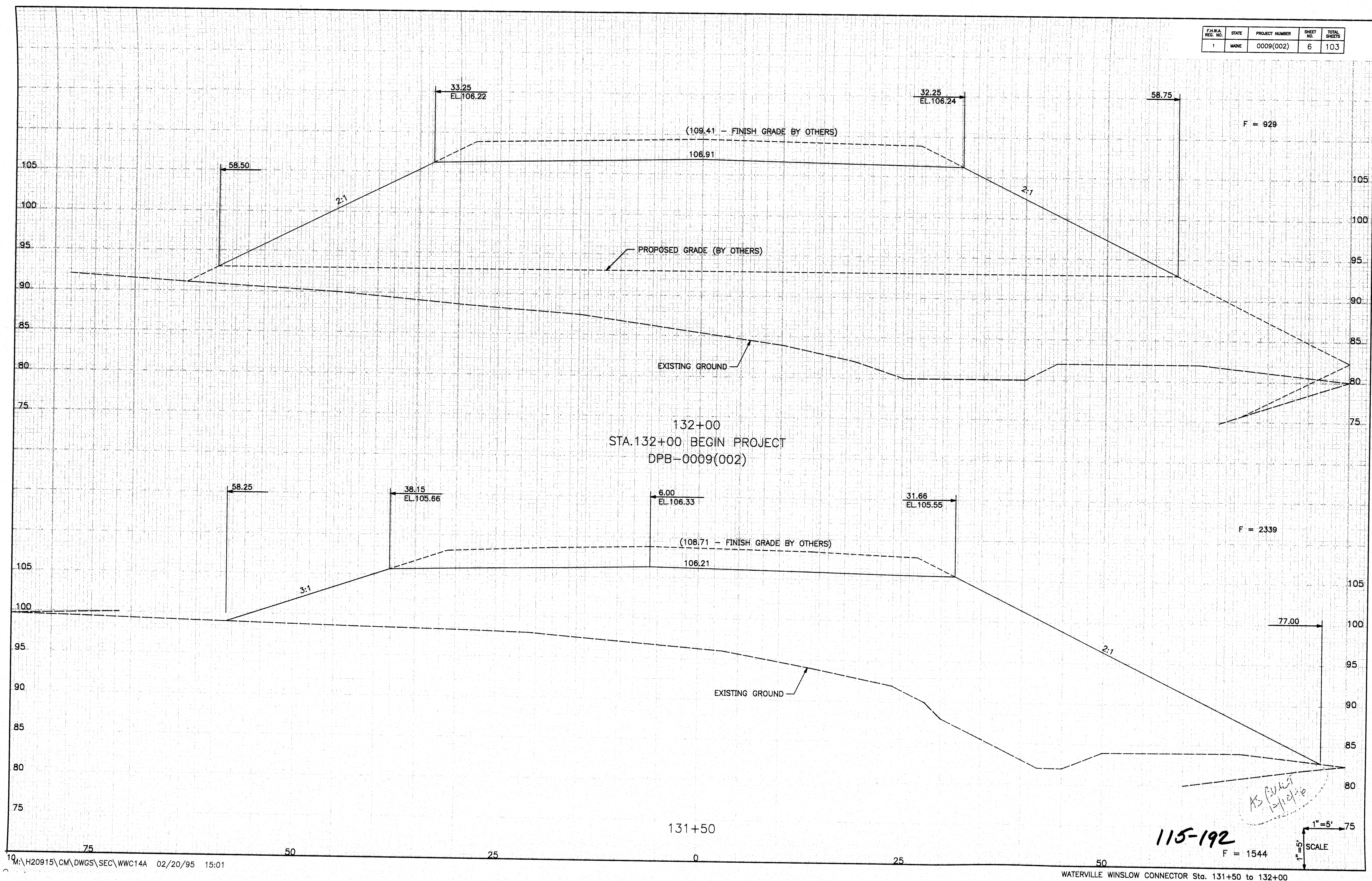
AUGUSTA, MAINE

WATERVILLE-WINSLOW

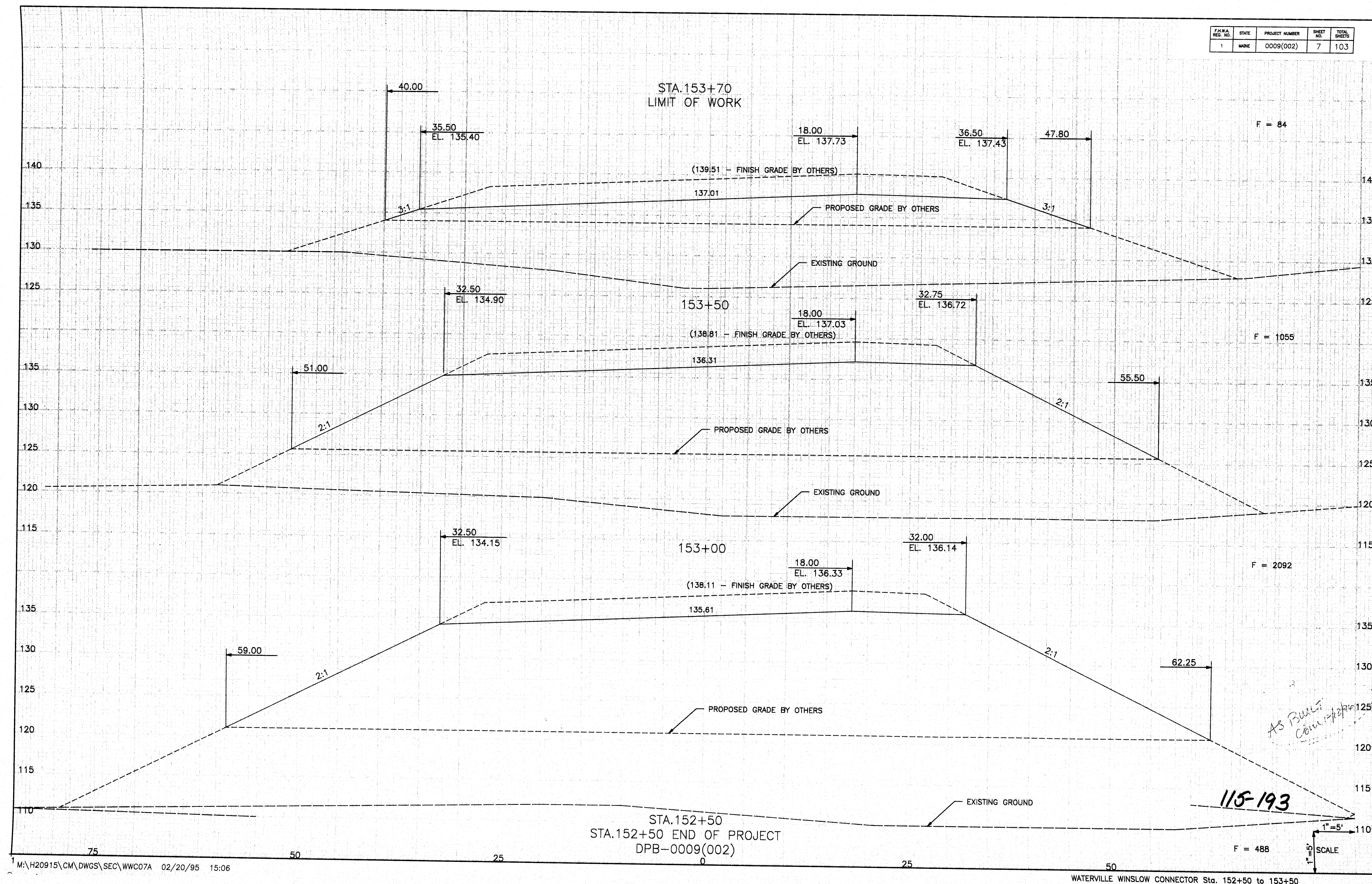
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1	MAINE	0009(002)	5	103



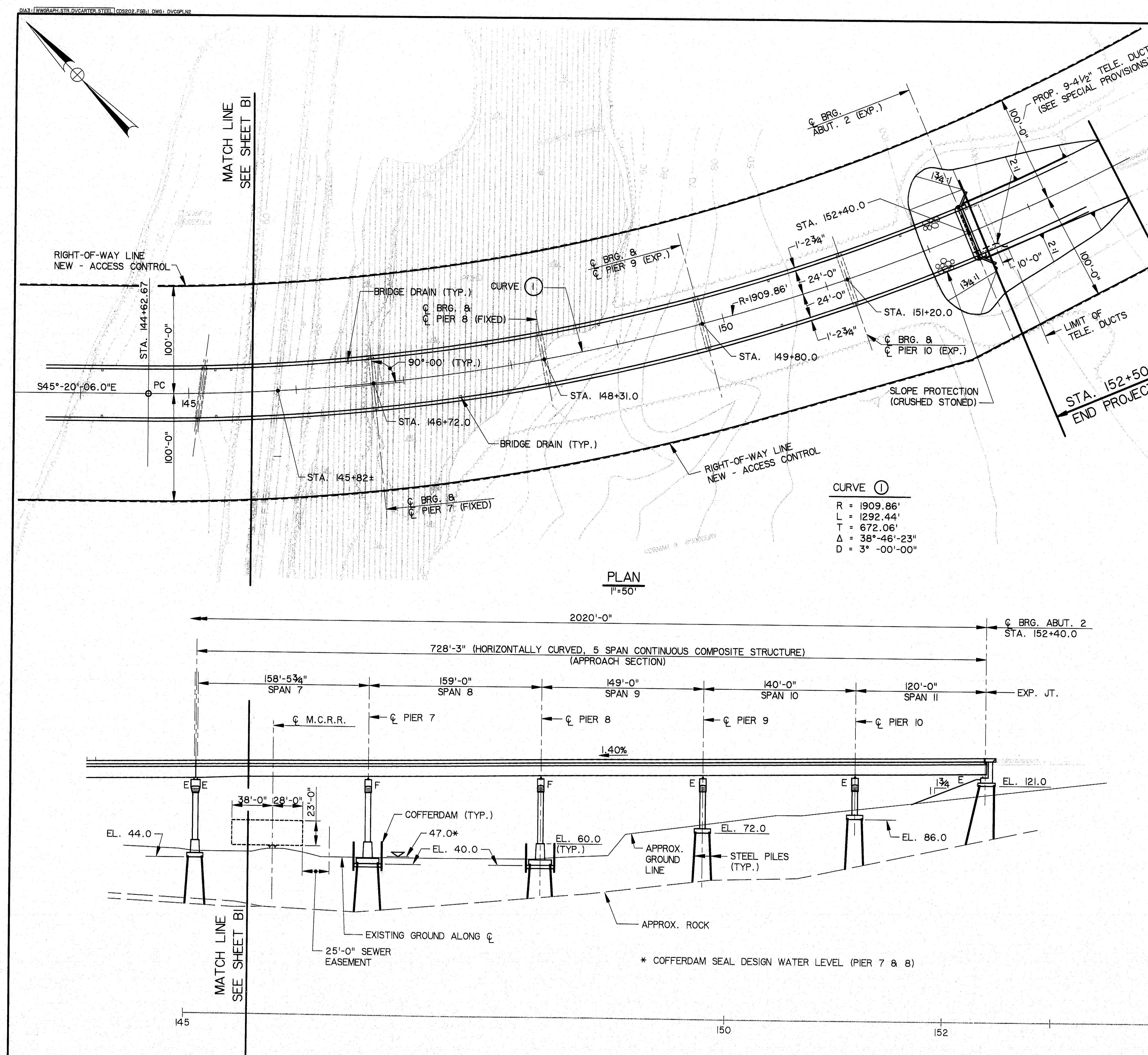
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1	MAINE	0009(002)	6	103



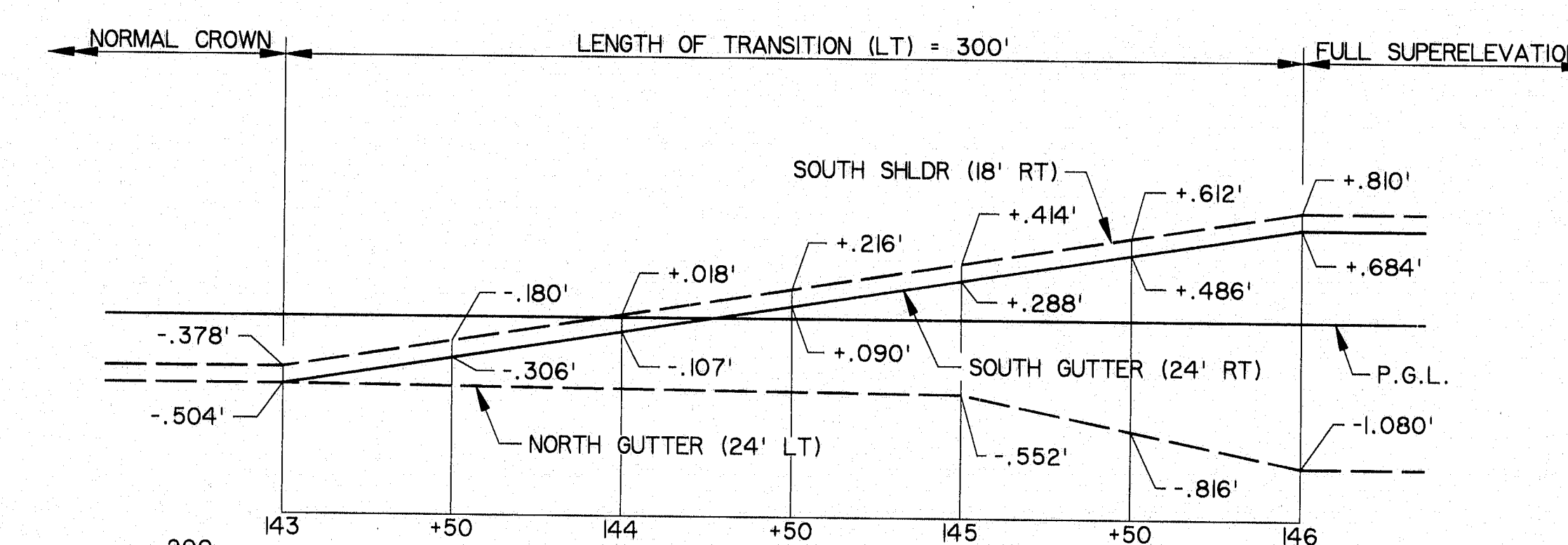
F.A.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	7	103



F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	9	103



BRIDGE DRAIN		
STATION	24' LEFT	24' RIGHT
132+30		
132+45		
132+75		
135+05		
137+50		
139+90		
142+20		
144+20		
145+25		
145+40		
146+50		
147+50		
147+80		
148+87		
150+50		
151+80		



AS BUILT
CEN
10/18/96

115-195
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PLAN AND ELEVATION - II

SHEET B2 OF B86 AUGUSTA, MAINE

HNTB
ARCHITECTS ENGINEERS PLANNERS

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	9/94	
		DRAWN: RJT	9/94	
		CHECKED: DWR	9/94	
		BY DATE		

GENERAL NOTES

F.R.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	10	103

SUPERSTRUCTURE

SPECIFICATIONS

DESIGN: LOAD FACTOR DESIGN
AASHTO STANDARD SPECIFICATIONS FOR
HIGHWAY BRIDGES, 15TH EDITION, 1992.
AASHTO GUIDE SPECIFICATIONS FOR
HORIZONTALLY CURVED HIGHWAY BRIDGES
EDITION 1993, AND INTERIM SPECIFICATIONS.

CONTRACT: STATE OF MAINE, DEPARTMENT OF
TRANSPORTATION STANDARD SPECIFICATIONS,
HIGHWAYS AND BRIDGES, REVISION OF
OCTOBER 1990.

DESIGN LOADING

LIVE LOAD: HS25, ALTERNATE MILITARY LOADING
FATIGUE 500,000/100,000 CYCLES

MATERIALS

CONCRETE: DECK SLAB - CLASS A
BARRIERS - CLASS A WITH SILICA FUME ADDITIVE

REINFORCING STEEL: ASTM DESIGNATION A615, GRADE 60.

STRUCTURAL STEEL: ALL STRUCTURAL STEEL SHALL BE ASTM DESIGNATION
A709, GRADE 50W.

HIGH STRENGTH BOLTS: ASTM DESIGNATION A325, TYPE 3.

BASIC DESIGN STRESSES

CONCRETE: DECK SLAB $f'_c = 4,000$ PSI
BARRIERS $f'_c = 4,000$ PSI

REINFORCING STEEL: $f_y = 60,000$ PSI

STRUCTURAL STEEL: $f_y = 50,000$ PSI

TRAFFIC DATA

AADT 1990 = 12,558
AADT 2010 = 14,089
DHV 2010 = 1452
T(%) (DH) = 2%
DD (DH) = 56/44%
V = 50 MPH

SUBSTRUCTURE

SPECIFICATIONS

DESIGN: LOAD FACTOR DESIGN
AASHTO STANDARD SPECIFICATIONS FOR
HIGHWAY BRIDGES, 15TH EDITION, 1992.
AND INTERIM SPECIFICATIONS.

CONTRACT: STATE OF MAINE, DEPARTMENT OF
TRANSPORTATION STANDARD SPECIFICATIONS,
HIGHWAYS AND BRIDGES, REVISION OF
OCTOBER 1990.

DESIGN LOADING

LIVE LOAD: HS25, ALTERNATE MILITARY LOADING

EARTHQUAKE LOAD: ACCORDING TO AASHTO FOR ACCELERATION
COEFFICIENT A = 0.10 AND CATEGORY B

MATERIALS

CONCRETE: ABUTMENTS, APPROACH SLABS - CLASS B
PIERS (CAP, SHAFT AND FOOTING) - CLASS A
PIER SEALS - CLASS S
ALL OTHER CONCRETE SHALL BE CLASS A.

REINFORCING STEEL: ASTM DESIGNATION A615, GRADE 60.

STRUCTURAL STEEL: FOUNDATION PILING SHALL CONFORM
TO THE REQUIREMENTS OF AASHTO
M270, GRADE 50. (ASTM A709, GRADE 50)

POT BEARING: ALL STRUCTURAL STEEL SHALL BE
ASTM DESIGNATION A709, GRADE 50.
SEE SUPPLEMENTAL SPECIFICATIONS.

BASIC DESIGN STRESSES

CONCRETE: ABUTMENTS/APPROACH SLABS $f'_c = 3,000$ PSI
PIERS $f'_c = 4,000$ PSI
PIER SEALS $f'_c = 3,500$ PSI

REINFORCING STEEL: $f_y = 60,000$ PSI

DATUM

BASED ON 1929 N.G.V.D

HYDROLOGIC DATA

HYDROLOGIC PARAMETERS: DRAINAGE AREA = 5.182 SQUARE MILES
ORDINARY HIGH WATER (O.H.W.) = 33,000 CFS
DESIGN DISCHARGE (Q50) = 149,420 CFS
CHECK DISCHARGE (Q100) = 168,300 CFS
FLOOD OF RECORD (1987) = 212,770 CFS @ ELEV. 64.2

HYDRAULIC PARAMETERS: HEADWATER EL. @ Q50 56.3'
HEADWATER EL. @ Q100 58.9'
DISCHARGE VELOCITY @ Q50 4.8 FPS*
DISCHARGE VELOCITY @ Q100 5.0 FPS
ORDINARY HIGH WATER O.H.W. 36.2'
VERTICAL CLEARANCE @ Q50 43.0'±
* OVERBANK VELOCITIES (0.3 FPS TO 0.9 FPS)

A HYDROLOGIC REPORT OF THE BRIDGE SITE IS
AVAILABLE FOR THE CONTRACTOR'S REFERENCE AT
THE BRIDGE DESIGN OFFICE IN AUGUSTA.
THE HYDRAULIC REPORT IS BASED ON THE
INTERPRETATION BY THE DEPARTMENT OF INFORMATION
OBTAINED FOR THE SUBJECT SITE AND NO
ASSURANCE IS GIVEN THAT THE INFORMATION OF THE
CONCLUSIONS OF THE REPORT WILL BE REPRESENTATIVE
OF ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION.

FOUNDATIONS

ABUTMENTS: HP14x73 PILES SHALL BE DRIVEN TO ULTIMATE CAPACITY
OF 203 TONS. DESIGN LOAD = 80 TONS AND 10 TONS FOR
DRAG DOWN FORCES WITH F.S. = 2.25.

PIERS: SPREAD FOOTING ON ROCK - 10.0 TON/SF ALLOWABLE BEARING
PRESSURE WITH COEFFICIENT OF FRICTION = 0.55.
HP14x73 PILES SHALL BE DRIVEN TO ULTIMATE CAPACITY
OF 270 TONS. DESIGN LOAD = 120 TONS AND ALLOWABLE
TENSION OF 12 TONS WITH F.S. = 2.25.

CONSTRUCTION CONTROL: WAVE EQUATION ANALYSIS AND
PILE DYNAMIC TEST (MEASUREMENT AND ANALYSIS) IS REQUIRED
FOR THE ABUTMENT AND PIER PILES INSTALLATION.

POINTED REINFORCED PILE TIPS SHALL BE USED FOR ALL
FOUNDATION PILES. PILE LENGTHS SHOWN ON FOUNDATION
PLAN ARE FOR ESTIMATING PURPOSES ONLY.

CONSTRUCTION

FOOTING ELEVATIONS AND SUBSTRUCTURE DETAILS ARE
SUBJECT TO CHANGE DEPENDING UPON FOUNDATION
MATERIAL ENCOUNTERED. REINFORCING STEEL FOR THE
FOOTINGS, COLUMNS AND ABUTMENTS SHALL NOT BE
FABRICATED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN
MODIFIED AS REQUIRED.

CONCRETE COVER SHALL BE MEASURED FROM THE FACE OF THE
CONCRETE TO THE FACE OF THE REINFORCING STEEL. MINIMUM
CONCRETE COVERS ARE SHOWN ON THE REINFORCING
DETAILS SHEETS.

MAINTENANCE

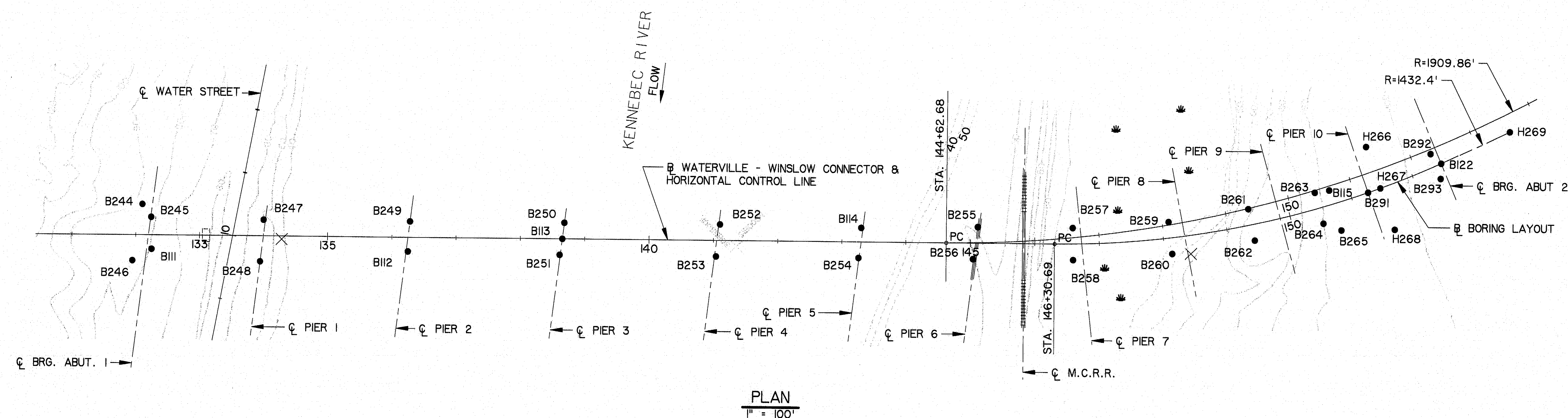
POT BEARINGS: TO ACCOMMODATE REMOVAL, REPLACEMENT OR MAINTENANCE
OF THE POT BEARINGS, TEMPORARY JACK POSITIONS ARE
INDICATED ON THE DRAWINGS.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: SM	9/94		
		DRAWN: RJT	9/94		
		CHECKED: DWR	9/94		

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B3 OF B86 AUGUSTA, MAINE

F.H.K.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	0009 (002)	II	103



BORING LOCATIONS *		
BORING	STATION	OFFSET
B244	132+10	48' LT
B245	132+24	28' LT
B111	132+25	22' RT
B246	131+95	40' RT
B247	134+00	25' LT
B248	133+95	40' RT
B249	136+28	25' LT
B112	136+25	22' RT
B250	138+68	25' LT
B113	138+65	CENTER LINE
B251	138+61	25' RT
B252	141+10	25' LT
B253	141+04	25' RT
B114	143+30	22' LT
B254	143+26	25' RT
B255	145+11	25' LT
B256	145+04	25' RT
B257	146+59	25' LT
B258	146+59	25' RT
B259	148+11	25' LT
B260	148+11	25' RT
B261	149+39	25' LT
B262	149+39	25' RT
B263	150+47	25' LT
B264	150+47	25' RT
B115	150+70	22' LT
B265	150+70	43' RT
B291	151+20	CENTER LINE
H266	151+50	65' LT
H267	151+50	CENTER LINE
H268	151+50	65' RT
B292	152+42	27' LT
B293	152+45	27' RT
B122	152+50	CENTER LINE
H269	153+50	CENTER LINE

* LOCATED FROM BORING LAYOUT

LEGEND

1. ∇ - GROUND WATER LEVEL

2. SAMPLE IDENTIFICATION:

O	OPEN END ROD
T	THIN WALL TUBE
U	UNDISTURBED SAMPLE
S	SPLIT SPOON
C	ROCK CORE

3. DRILLING DESCRIPTION AND PROCEDURE:

ITEM	CASING	DRIVE SAMPLE	CORE BARREL
TYPE	NW	SS	NX
INSIDE DIA. (IN.)	3.0	1 3/8	2 3/8
HAMMER WEIGHT (LB.)	300	140	-
HAMMER FALL (IN.)	24	30	-

GENERAL NOTES

- THE SUBSURFACE EXPLORATIONS SHOWN HEREON WERE MADE BETWEEN JULY, 1990 AND JANUARY, 1992 FOR THE MAINE DEPARTMENT OF TRANSPORTATION.
- SOIL AND ROCK (WHERE ENCOUNTERED) CLASSIFICATION, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION OF AVAILABLE SUBSURFACE INFORMATION AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING SAMPLE LOCATIONS.
- OBSERVED WATER LEVELS AND/OR WATER CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.
- SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREON. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTENDED FOR DESIGN AND ESTIMATING PURPOSES ONLY. PRESENTATION OF THE INFORMATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME DATA AVAILABLE TO THE DEPARTMENT. THE SUBSURFACE INFORMATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS, INDEPENDENT ANALYSIS OR JUDGEMENT OF THE CONTRACTOR.

NOTES

- MEAN SEA LEVEL DATUM (NGVD 1929) IS USED THROUGHOUT.
- ALL BORINGS TAKEN BY MAINE TEST BORING, INC. UNDER SUPERVISION OF HALEY & ALDRICH, INC., SCARBOROUGH, MAINE.

AS BUILT
Crew 12/18/96

115-197

STEEL ALTERNATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BORING PLAN

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B4 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

B-246
Ground Elev. 78.5

TEST BORING REPORT									
DEPTH (FT)	CASING BLDG PER FT.	SAMPLER BLDG PER 6 IN.	SAMPLE NUMBER (FT)	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			1	5.1	78.5	Frost			
5			2	10.1	73.5	Medium stiff dark brown fine sandy silt, trace roots			
10			3	15.1	68.5	Very stiff gray brown mottled fine sandy silt, little clay			
15			4	20.1	63.5	Very stiff brown mottled silty clay with plant debris			
20			5	25.1	58.5	FWS, 15.0-15.7 ft., (2 in. x 3 in.); Su = 2800 pcf			
25			6	30.1	53.5	FWS, 15.7-16.4 ft., (2 in. x 3 in.); Su = 3140 pcf			
30			7	35.1	48.5	Very stiff brown gray mottled silty clay			
35			8	40.1	43.5	FWS, 20.0-20.7 ft.; Su = 1080 pcf			
40			9	45.1	38.5	FWS, 20.7-21.4 ft.; Su = 1260 pcf			
45			10	50.1	33.5	Stiff dark gray silty clay with black streaks (organics)			
50			11	55.1	28.5	FWS, 25.0-25.7 ft.; Su = 930 pcf			
55			12	60.1	23.5	FWS, 25.7-26.4 ft.; Su = 1110 pcf			
60			13	65.1	18.5	Stiff dark gray silty clay with black streaks (organics)			
65			14	70.1	13.5	Stiff brown silty clay from 30.0-30.5 ft. Gray silty clay from 30.5-31.5 ft.			
70			15	75.1	8.5	MARINE DEPOSIT			
75			16	80.1	3.5	Medium dense brown silty fine sand (laminated) with gray brown mottled silty clay (1/2"-1" layers)			
80			17	85.1	-1.5	Dense brown medium to fine sand, trace silt			
85			18	90.1	-6.5	Dense brown medium to fine sand, trace silt			
90			19	95.1	-11.5	Dense brown medium to fine sand, trace silt			
95			20	100.1	-16.5	Medium dense brown medium to fine sand, trace silt			
100			21	105.1	-21.5	Dense gray silty medium to fine sand, little coarse sand, trace gravel			
105			22	110.1	-26.5	Very dense gray silty medium to fine sand, little coarse sand, little gravel			
110			23	115.1	-31.5	Top of bedrock at 63.1 ft. Seat NW casing at 63.1 ft. Begin NW rock core at 63.1 ft. (See Core Boring Report)			

					BY	DATE
				DESIGNED:	SM	7/93
				DRAWN:	RJT	7/93
				CHECKED:		
NO.	REVISION	BY	DATE	IN CHARGE OF		

B-246 (CONT)

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE (MM/YY)	RECOVERY/ROD IN. %	WEATH- ERING	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS				
0				78.5	63.1 ft. of Overburden (See Test Boring Report)				
63.1	08.1	60/50	100/85	15.4	Hard, fresh, slightly weathered, gray sphenitic slate. Joints dipping at low to moderate angles, close to moderate, partly open, planar, smooth, slight staining on some joints surfaces.				
68.1				10.4	Bottom of Exploration at 68.1 ft.				

B-III (CONT)

TEST BORING REPORT									
DEPTH (FT)	CASING BLDG PER FT.	SAMPLER BLDG PER 6 IN.	SAMPLE NUMBER (FT)	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			1	5.1	80.0	Medium dense gray fine sand, little silt			
5			2	10.1	75.0	Dense gray fine sand, little coarse to medium sand, trace fine gravel			
10			3	15.1	70.0	NOTE: Approximately 50% water loss at 87.0 ft.			
15			4	20.1	65.0	Casing returned at 87.0 ft. Encountered boulder and cobble from 67.0-69.1 ft.			
20			5	25.1	60.0	Possible gravel from 66.4-67.0 ft. and 69.1-69.6 ft.			
25			6	30.1	55.0	GLACIAL TILL			
30			7	35.1	50.0	Seat NW casing at 69.6 ft. Begin NW rock core at 67.0 ft. (See Core Boring Report)			

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE (MM/YY)	RECOVERY/ROD IN. %	WEATH- ERING	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS				
0				80.0	80.6 ft. of Overburden (See Test Boring Report)				
65				28.5	NOTE: TOTAL WATER LOSS AT 87.0 FT.				
70				23.5	NOTE: NW rock cored from 67.0-72.0 ft.; Recovered 21 in. of hard, fresh, sandstone/secondary rock immediately overlying 4 in. of hard, fresh, coarse to fine grained granite. Drill action indicates boulder and cobble respectively. Rapid core advance from 69.6-69.9 ft. Top of bedrock at 69.6 ft.				
75				19.0	Moderately hard, fresh, gray, sphenitic slate; extremely thin bedding and foliation dipping at high angles; joints are very close to close, open, smooth, planar and dipping parallel to bedding; joint surfaces are generally fresh, occasionally slightly oxidized; frequent extremely thin calcite veins dipping parallel to bedding; occasionally folded, clay seam present at 71.8 ft.; tight, smooth, undulating vertical joint at 74.6 ft.; joints are moderately close from 72.0-75.0 ft.; open, smooth, planar, horizontal joints at 71.8 ft., 71.9 ft., and 72.0 ft.; occasional pyrite crystals				
				75.0	Bottom of Exploration at 75.0 ft.				

B-III
Ground Elev. 94.9

TEST BORING REPORT									
DEPTH (FT)	CASING BLDG PER FT.	SAMPLER BLDG PER 6 IN.	SAMPLE NUMBER (FT)	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			1	5.1	94.9	NOTE: Test boring location was originally laid out on the slope of a fill pile consisting of bituminous asphalt fill. An access ramp was made and the area around the proposed borehole location was graded prior to set up. Two attempts to auger and drive through the fill were unsuccessful. The third attempt was conducted 5.0 ft. west and 1.2 ft. higher in elevation relative to the original stated location.			
5			2	10.1	89.9	Very dense brown-black silty coarse to fine sand, little fine gravel, asphalt, concrete fragments			
10			3	15.1	84.9	-FILL-			
15			4	20.1	79.9	Very dense black-brown silty coarse to fine sand, some fine gravel, little asphalt			
20			5	25.1	74.9	-FILL-			
25			6	30.1	69.9	Stiff to very stiff mottled brown-gray clayey silt, trace plant stems			
30			7	35.1	64.9	NOTE: Blue counts irregular			
35			8	40.1	59.9	-MARINE DEPOSIT-			
40			9	45.1	54.9	Stiff mottled brown-gray laminated silty clay, trace fine sand in occasional partings and indistinct zones			
45			10	50.1	49.9	Pushed tube in MARINE CLAY			
50			11	55.1	44.9	2 in. x 7 in. Vane Shear Test: 27.0-27.5 ft.; 115 ft. lbs.			
55			12	60.1	39.9	No remolded strength taken			
60			13	65.1	34.9	27.5-28.14 ft.; 94/33 ft. lbs.			
65			14	70.1	29.9	Su = 3800 pcf			
70			15	75.1	24.9	-MARINE DEPOSIT-			
75			16	80.1	19.9	Pushed tube in MARINE CLAY			
80			17	85.1	14.9	2 in. x 7 in. Vane Shear Test: 37.0-37.5 ft.; 35/9 ft. lbs.			
85			18	90.1	9.9	37.5-38.14 ft.; 46/16 ft. lbs.			
90			19	95.1	4.9	Su = 1500 pcf			
95			20	100.1	-0.1	-MARINE DEPOSIT-			
100			21	105.1	-5.1	GLACIOFLUVIAL DEPOSIT			
105			22	110.1	-10.1	Dense brown fine sand			
110			23	115.1	-15.1	NOTE: SAND slightly darker brown below 45.5 ft.			
115			24	120.1	-20.1	Dense brown fine sand, trace silt			
120			25	125.1	-25.1	Medium dense brown fine sand, little silt, trace medium sand			
125			26	130.1	-30.1	GLACIOFLUVIAL DEPOSIT			

HNTB
HOWARD NEEDLES TAMMEN & BERGENDT

115-198
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
BORING LOGS
SHEET B5 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEET
1	MAINE	0009 (002)	13	103

B-245
Ground Elev. 80.8

TEST BORING REPORT

DEPTH (FT)	CASING ELEV. PER FT.	SAMPLER ELEV. PER FT.	SAMPLE ELEV. PER FT.	SAMPLE ELEV. PER FT.	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
0	80.8	80.8	80.8	80.8	80.8	Loose dark brown silty coarse to fine SAND, with roots and gravel.
5	79.8	79.8	79.8	79.8	79.8	Medium dense dark brown silty coarse to fine SAND -FILL-
10	78.8	78.8	78.8	78.8	78.8	Dense gray-brown silty fine SAND, with roots
15	77.8	77.8	77.8	77.8	77.8	Very stiff gray-brown silty CLAY (too stiff to press tube) -MARINE DEPOSIT-
20	76.8	76.8	76.8	76.8	76.8	Very stiff brown silty CLAY, little fine SAND (too stiff to press tube) FWP, 20.0-20.6 ft.; Su > 5,500 psf
25	75.8	75.8	75.8	75.8	75.8	Medium dense brown fine SAND, trace silt Change to 3 in. I.D. casing at 25.0 ft.
30	74.8	74.8	74.8	74.8	74.8	Medium dense brown medium to fine SAND, trace silt
35	73.8	73.8	73.8	73.8	73.8	Dense brown medium to fine SAND, trace silt -GLACIOFLUVIAL DEPOSIT-
40	72.8	72.8	72.8	72.8	72.8	Very dense brown medium to fine SAND, trace silt, trace coarse sand
45	71.8	71.8	71.8	71.8	71.8	Dense brown medium to fine SAND, trace silt
50	70.8	70.8	70.8	70.8	70.8	Dense brown medium to fine SAND, trace silt
55	69.8	69.8	69.8	69.8	69.8	Dense gray medium to fine SAND, trace silt
60	68.8	68.8	68.8	68.8	68.8	Dense gray medium to fine SAND, trace silt, trace fine gravel -GLACIAL TILL-
65	67.8	67.8	67.8	67.8	67.8	Very dense gray coarse to fine GRAVEL

BY DATE
DESIGNED: SM 7/93
DRAWN: RJT 7/93
CHECKED: IN CHARGE OF

B-245 (CONT)

CORE BORING REPORT

DEPTH (FT)	DRILLING DATE TIME	RECOVERY/NO. IN. X	WEATHERING ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
66.4	06/03/93	22/25	16.3	66.4 ft. of Overburden (See Test Boring Report) Begin KX rock core at 66.4 ft.
66.5	06/03/93	100/100	16.3	C1: Moderately hard, gray aphanitic to fine grained -SCHIST-. Primary joint set is close, tight to slightly open, slightly to moderately weathered, planar and smooth, dipping at high angles. C2: Same lithology as C1, primary joint set same as C1. Secondary joint set is close, open, stepped and smooth to undulating and occasionally rough, dipping at low to horizontal angles, calcite stringers noted. C3: Moderately hard, gray aphanitic to fine grained -SCHIST-. Primary joint set is fresh, tight to slightly open, close, planar and smooth, to less frequently stepped and smooth, dipping at high angles. Frequent calcite stringers.
75.7	06/03/93	100/100	5.1	Bottom of Exploration at 75.7 ft.

H-267
Ground Elev. 95.9

TEST BORING REPORT

DEPTH (FT)	CASING ELEV. PER FT.	SAMPLER ELEV. PER FT.	SAMPLE ELEV. PER FT.	SAMPLE ELEV. PER FT.	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
0	95.9	95.9	95.9	95.9	95.9	Dark brown loamy SILT, with frozen leaves FOREST MAT. Very loose brown SILTY FINE SAND, trace coarse sand, with rootlets -TOPSOIL-
5	94.9	94.9	94.9	94.9	94.9	Medium dense brown silty fine SAND, trace medium sand -ALLUVIAL-
10	93.9	93.9	93.9	93.9	93.9	Very stiff mottled olive brown clayey SILT
15	92.9	92.9	92.9	92.9	92.9	FWP, 15.0 to 15.6 ft., Su = 1110 psf Stiff gray silty CLAY -MARINE DEPOSIT-
20	91.9	91.9	91.9	91.9	91.9	Stiff gray silty CLAY
25	90.9	90.9	90.9	90.9	90.9	FWP, 25.0 to 25.6 ft., Su = 700 psf Medium stiff gray silty CLAY
30	89.9	89.9	89.9	89.9	89.9	Medium stiff gray silty CLAY -MARINE DEPOSIT-
35	88.9	88.9	88.9	88.9	88.9	NOTE: Advanced roller bit through probable boulder from 34.0 to 35.0 ft. Very dense brown silty fine SAND, little coarse sand, little gravel (well bonded in situ) -GLACIAL TILL- NOTE: Encountered boulder at 38.0 ft. while advancing roller bit. Washed ahead of casing to 40.0 ft. Very dense brown silty fine SAND, little gravel -GLACIAL TILL- Bottom of Exploration at 40.2 ft. No refusal
40	87.9	87.9	87.9	87.9	87.9	

115-199

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
BORING LOGS
SHEET B6 OF B86 AUGUSTA, MAINE

115-109

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
BORING LOGS
SHEET B6 OF B86 AUGUSTA, MAINE

B-244 (CONT)

B-247
Ground Elev. 55.5

CORE BORING REPORT

CORE BORING REPORT									
DEPTH (FEET)	DRILLING LOG H.W./F.T.	LOG H.W./F.T.	DEPTH (FEET)	RECOVERY/ IN.	% C	WEATH- ERING	ELEV./ DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS	
65									<p>08.7 ft. of Overburden (See Test Boring Report)</p> <p>Advanced roller bit to 68.8 ft.</p> <p>Begin NX rock core at 68.8 ft.</p>
70	6	C1	24.8 75.3	24/24	100/103	FR. TO SL.	18.7 68.8		<p>C1: Moderately hard, gray argillaceous to fine grained siltstone. Primary joint set is fresh to slightly weathered, tight to slightly open, close, planar and smooth to less frequent undulating and smooth, dipping at high angles approximately 70 degrees. Secondary joint set is fresh, tight, moderately close, stepped and rough, dipping at low to horizontal angles. Frequent quartz and calcite mineralization noted.</p>
75	6	C2	25.3 76.3	26/12	100/55	FR. TO SL.			<p>C2: Same lithology as C1, silty coating on joint faces noted. Secondary joint set is fresh to slightly weathered, close, tight, planar and smooth, to undulating and smooth, dipping at low to horizontal angles. From 75.2 to 75.7 ft. zone of extremely weathered and fractured core with clay infilings.</p>
75	5	C3	26.3 79.3	24/4	100/17	SL. TO MOD.	9.2 79.3		<p>C3: Same as C2, but more severely weathered and fractured run. Moderately weathered joints. Silty coating noted on discontinuity surfaces.</p> <p>Bottom of Exploration at 79.3 ft.</p>

B-247 (CONT)

TEST BORING REPORT					VISUAL DESCRIPTION AND REMARKS	
DEPTH (FT)	CASING ALONG PER FT	SAMPLER FLOW PER 6 IN RECUIN.	SAMPLE NUMBER & DEPTH (FT)	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	
0			6 5 4	51 5"	0.5 2.0	NOTE: Frozen ground from 0-0.5 ft. Loose brown silty fine SAND, some gravel -FILL-
5	14	7	52 10"	5.0 6.5	50.5 5.0	Medium dense brown fine sandy SILT in seams and partings -ALLUVIAL DEPOSIT-
10	8	9	55 6"	10.0 11.5		Medium dense gray brown coarse to fine SAND, trace silt in frequent partings
15	16	10			42.5 13.0	
20	16	1	54	15.5 17.0		FV#8, 15.5-16.2 ft.; 26/8 ft. lbs.; Su = 960 psf Medium stiff gray laminated silty CLAY -MARINE DEPOSIT-
25	16	1	55 18"	20.0 21.5		Medium stiff gray laminated silty CLAY
30	25	1	56 18"	25.0 26.5		FV#8, 25.0-25.7 ft.; 30/9 ft. lbs.; Su = 1110 psf stiff gray laminated silty CLAY, trace fine sand in occasional seams -MARINE DEPOSIT-
35	25	1	57 5"	30.0 31.5		Medium stiff gray laminated silty CLAY NOTE: Possibly layer of sand below 30.9 ft.
40	34	10	58 7"	35.0 36.5		Medium dense gray silty fine SAND, occasional seam of silt
45	32	9	59 8"	40.0 41.5		Medium dense gray silty fine SAND -GLACIOFLUVIAL DEPOSIT-
50	37	17	61 10"	45.0 46.5		Medium dense gray silty fine SAND
55	48	30	61 9"	50.0 51.5		Very dense gray medium to fine SAND, little silt in occasional seams
100/2					1.3 54.2	Bedrock encountered at 54.2 ft. Start MW casing at 54.2 ft. Begin MW rock core at 54.2 ft. (See Core Boring Report)

AS BUILT
Cem 12/10/14

115-200

OVER
KENNEBEC RIVER

SHEET B7 OF B86 AUGUSTA, MAINE

HNTB

B-244 (CONT)

B-240

CORE BORING REPORT

CORE BORING REPORT							B ₂ -24-a
DEPTH (FT)	DRILLING IN./FT.	RUN IN./FT.	DEPTH (FT)	RECOVERY/ROD IN.	% WASH- ING	ELEV./ DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
64							
65							68.7 ft. of Overburden (See Test Boring Report) Advanced Roller 811 to 68.8 ft. Begin NX rock core at 68.8 ft.
70	6		C1 68.8 73.3	54/34 100/63	NL TO SL.	18.7 68.6	C1: Moderately hard, gray micritic to fine grained MSHIST. Primary joint set is fresh to slightly weathered, tight to slightly open, close, planar and smooth to less than slightly undulating and smooth, dipping at high angles approximately 70 degrees. Secondary joint set is fresh, tight, moderately close, stepped and rough, dipping at low to horizontal angles. Frequent quartz and calcite mineralization noted.
75	6		C2 73.3 76.3	36/12 100/33	NL TO SL.		C2: Same lithology as C1. Silty coating on joint faces noted. Secondary joint set is fresh to slightly weathered, close, tight, planar and smooth, to undulating and smooth, dipping at low to horizontal angles. From 75.2 to 75.7 ft. zone of extremely weathered and fractured core with clay fillings.
	5		C3 76.3 78.3	24/4 100/17	SL TO MOO.		C3: Same as C2, but more severely weathered and fractured rock. Moderately weathered joints. Silty coating noted on discontinuity surfaces. SECTION OF ENGINEERING AT 76.3 FT.

B-247 (CONT)

B-247
Ground Elev. 55.5

DEPTH (FT)	CASING FLOW PER FT	SAMPLER BLWD PER 6 IN	SAMPLE NUMBER, A REC. (IN.)	SAMPLE DEPTH (FT)	ELEV./ DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
5			6 2 4	5' 5" 5"	0.5 2.0	NOTE: From ground from 0-0.5 ft. Loose brown silty fine SAND, some gravel "fill".
14			7 9	32 18"	5.0 6.5	Medium dense brown fine sandy SILT in seams and partings *ALLUVIAL DEPOSIT*
28						
41						
50			9 10 18	33 34"	10.0 11.5	Medium dense gray brown coarse to fine SAND, trace silt in frequent partings
23						
16						
14						
15			16 14 1	54 54"	15.5 17.0	PWT, 15.5-16.2 ft.; 26/8 ft. lbs.; Su = 960 Medium stiff gray laminated silty CLAY *MARINE DEPOSIT*
12						
20			14 1 2 1	55 19"	20.0 21.5	Medium stiff gray laminated silty CLAY
16						
15						
10						
25			1 36 3	56 18"	25.0 26.5	PWT, 25.0-25.7 ft.; 30/9 ft. lbs.; Su = 1110 med stiff gray laminated silty CLAY, trace fine sand in occasional seams *MARINE DEPOSIT*
27						
23						
25						
30			1 20 3	57 5"	30.0 31.5	Medium stiff gray laminated silty CLAY NOTE: Possibly layer of sand below 30.9 ft.
23						
22						
36						
35			10 8	58 7"	35.0 36.5	Medium dense gray silty fine SAND, occasional seam of silt
35						
34						
28						
40			7 9	59 8"	40.0 41.5	Medium dense gray silty fine SAND *GLACIOFLUVIAL DEPOSIT*
31						
25						
33						
15						
42						
41						
45			9 10	610 10"	45.0 46.5	Medium dense gray silty fine SAND
32						
39						
28						
29			17 18 50	611 9"	50.0 51.5	Very dense gray medium to fine SAND, little silt in occasional seams
37						
48						
76						
138						
100/2					1.3 54.2	Bedrock encountered at 54.2 ft. Start NW casing at 54.2 ft. Begin KK rock core at 54.2 ft. (See Core Boring Report)

AS BUILT
Cem 12/10/46

115-200

DONALD V. CARTER BRIDGE
OVER

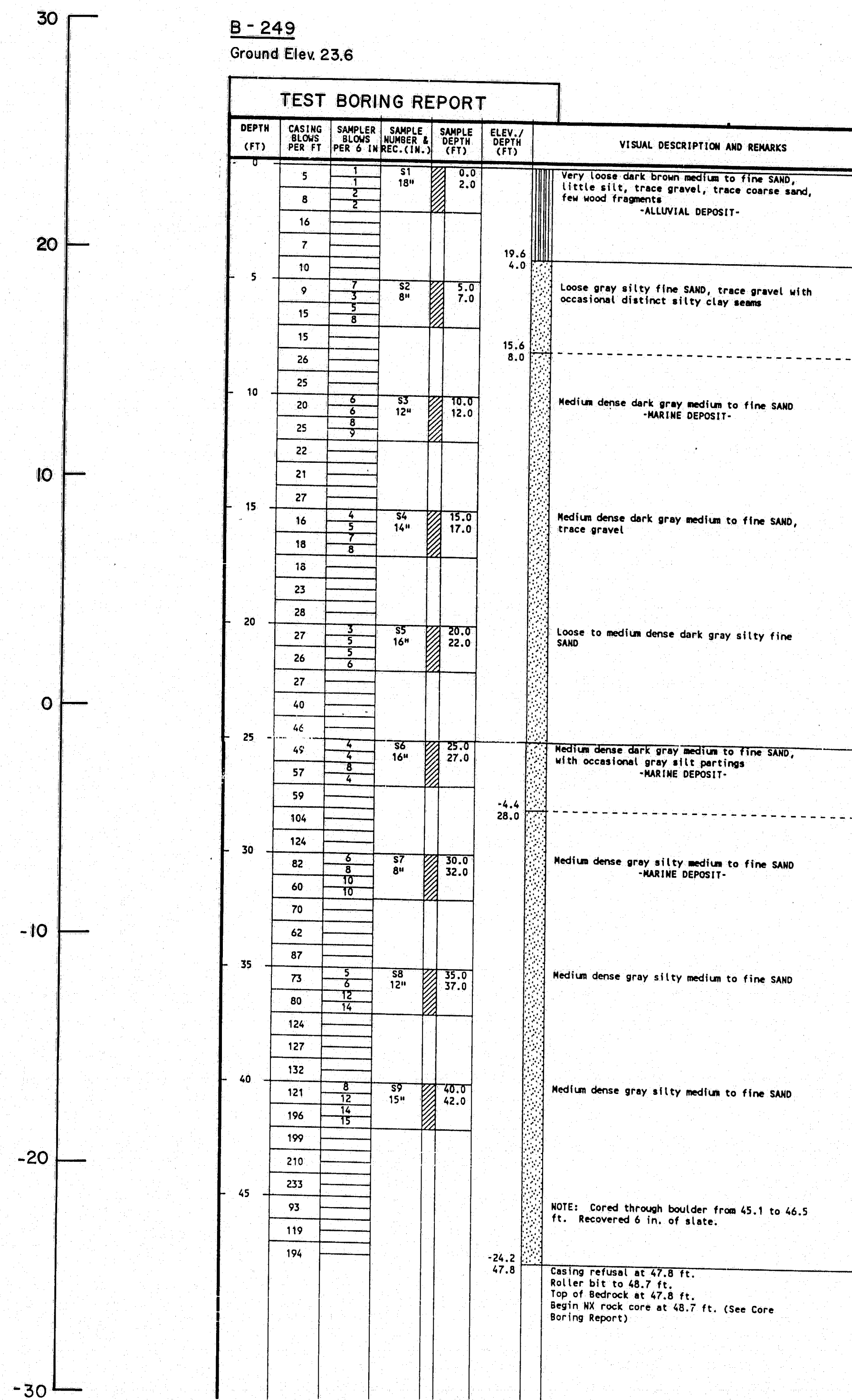
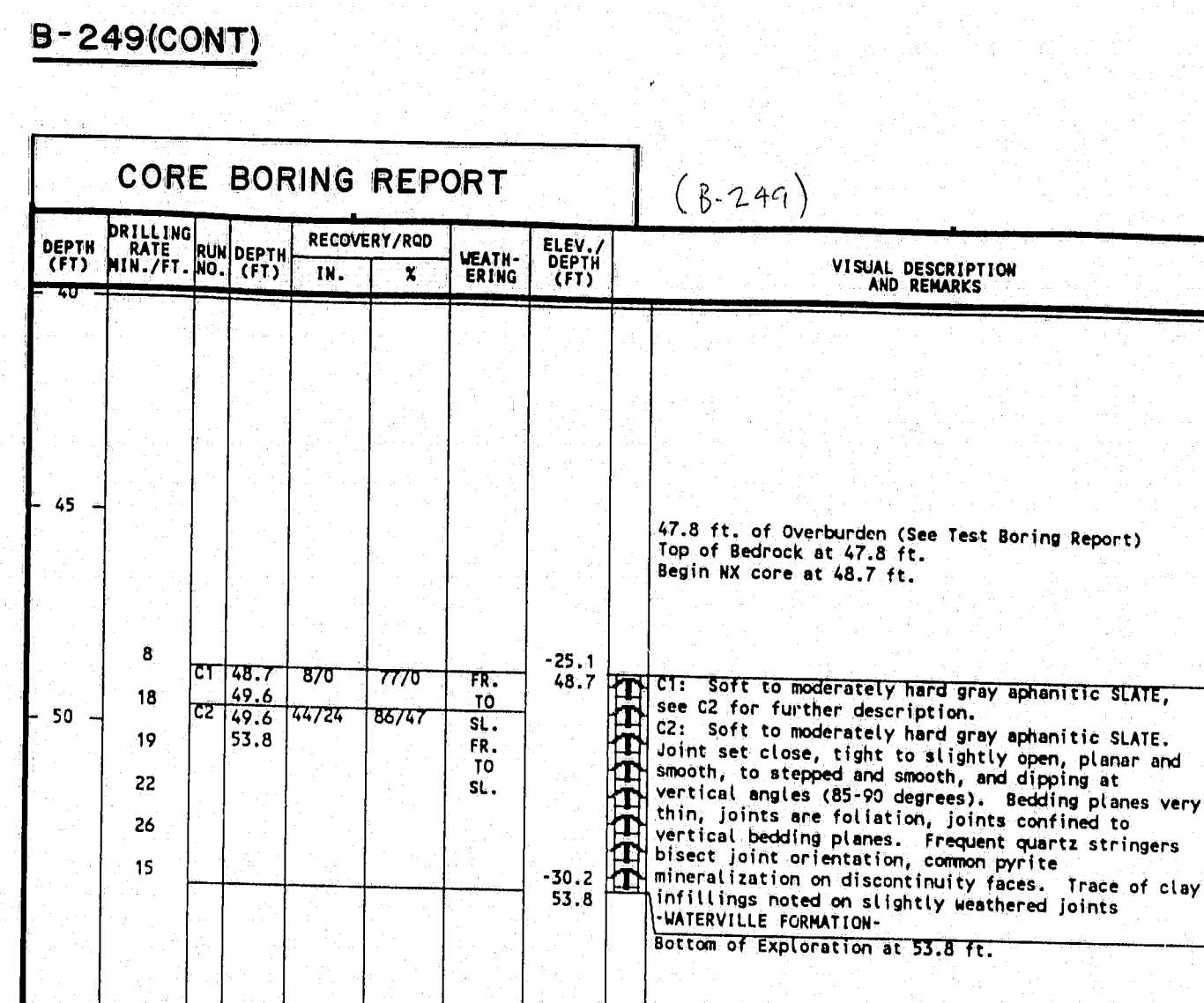
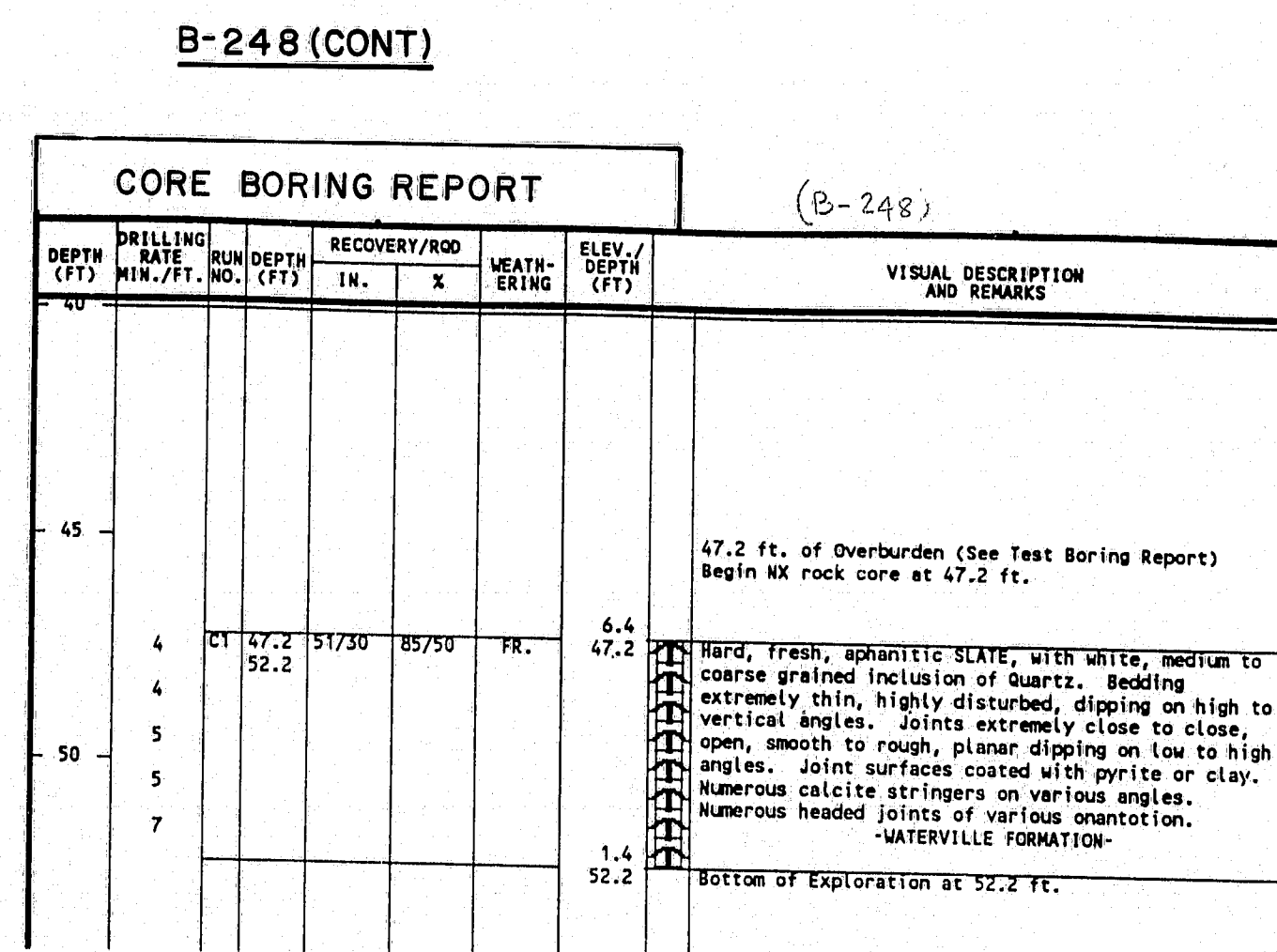
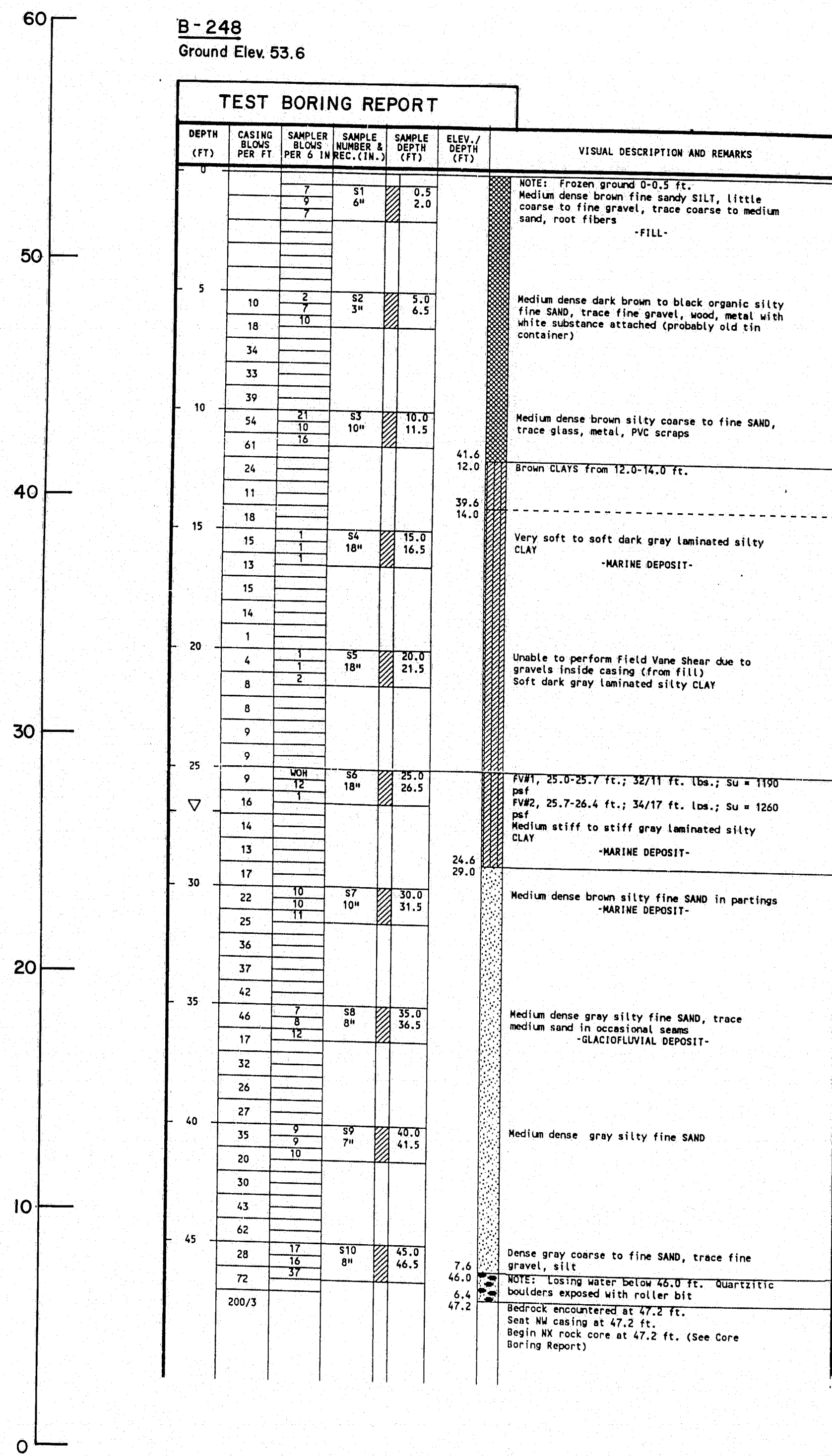
KENNEBEC RIVER

BORING LOGS

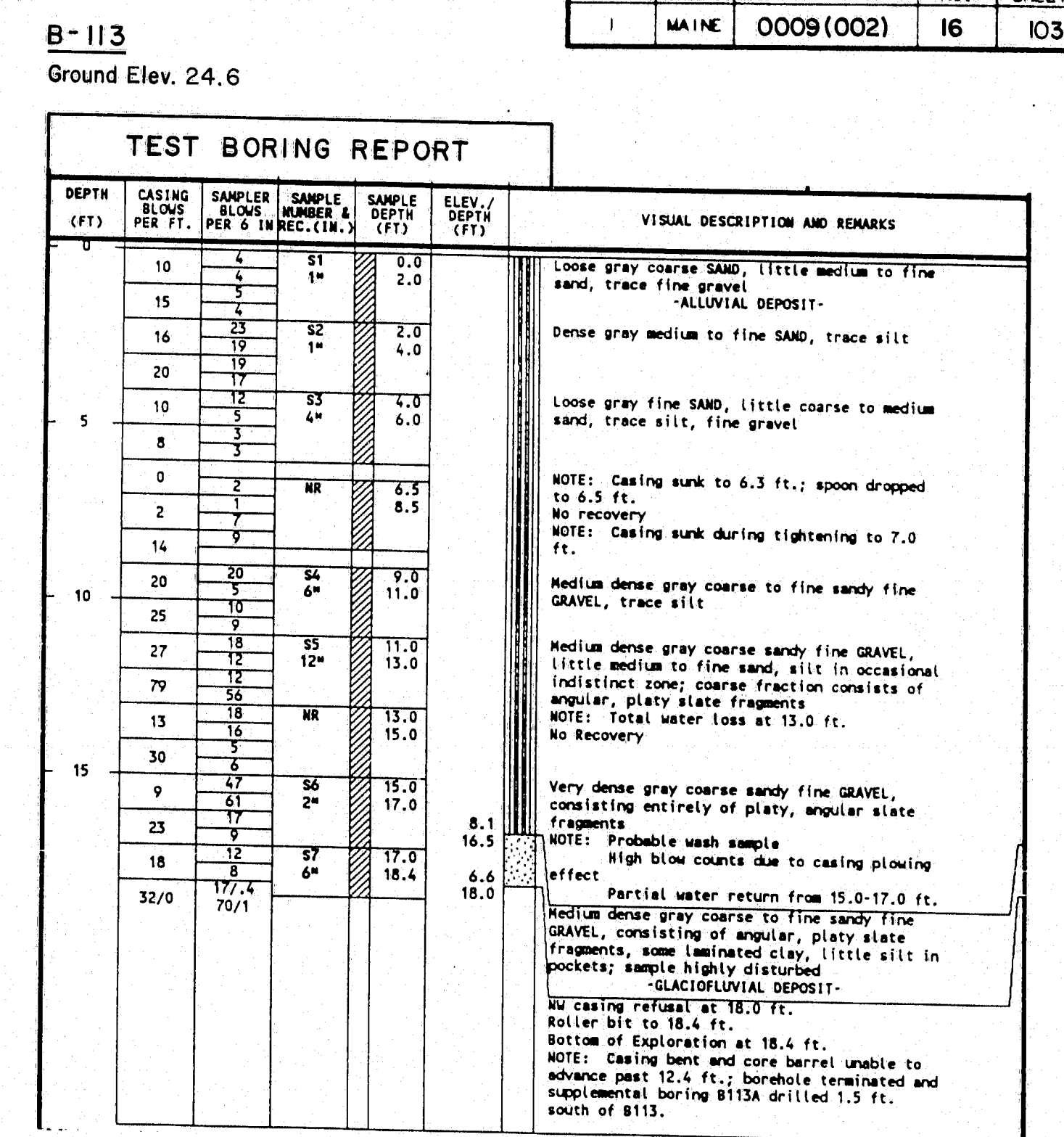
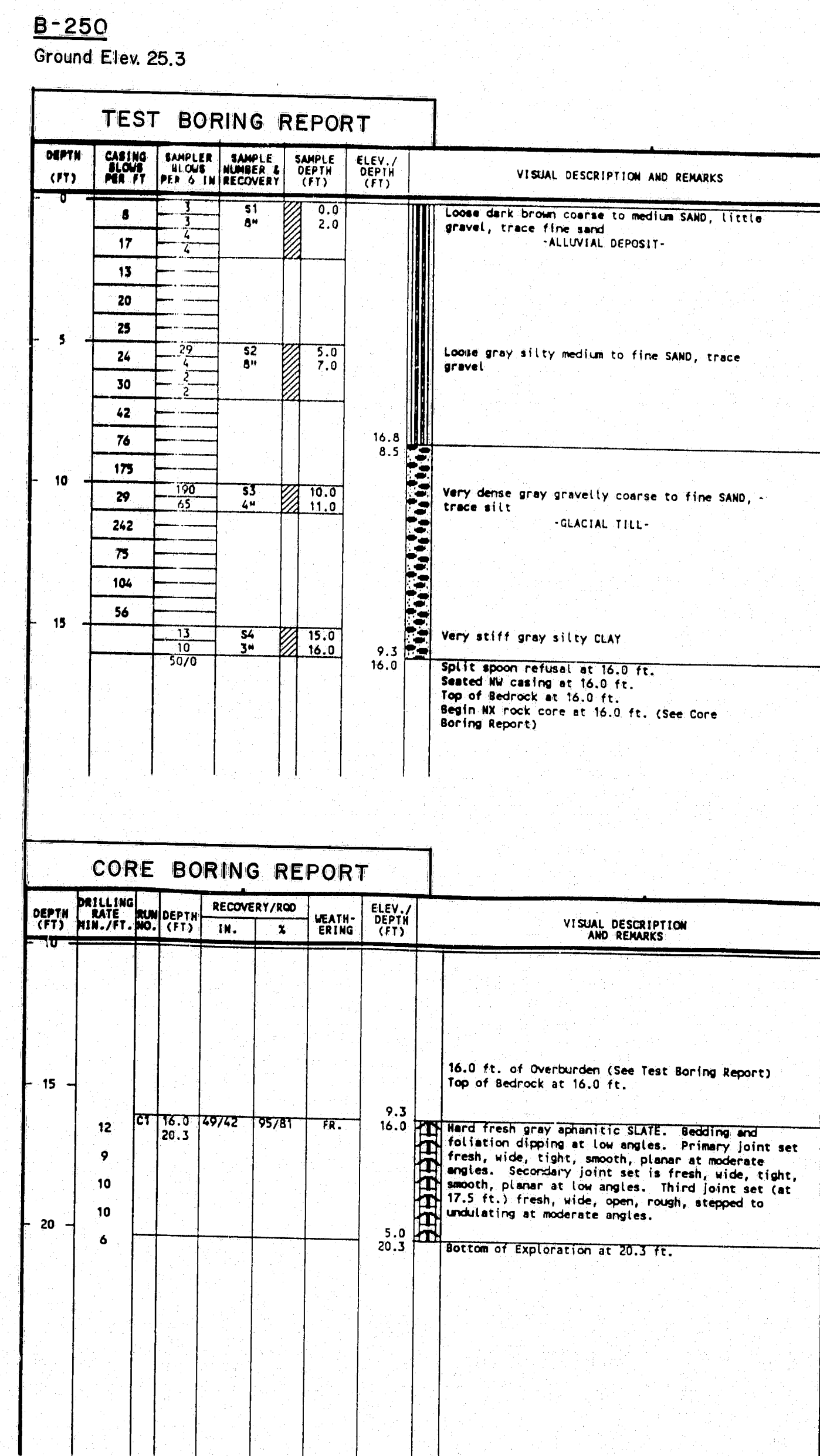
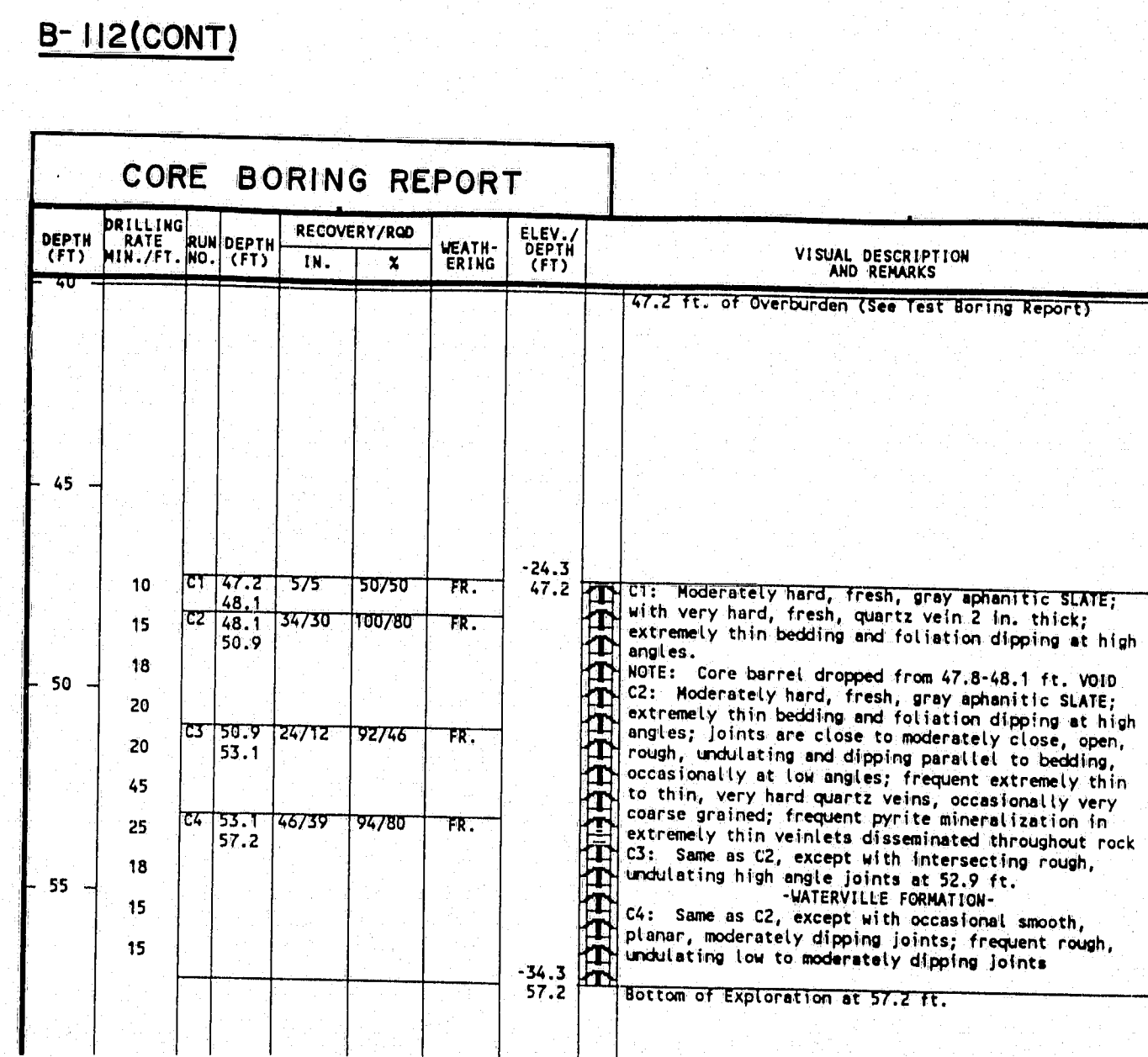
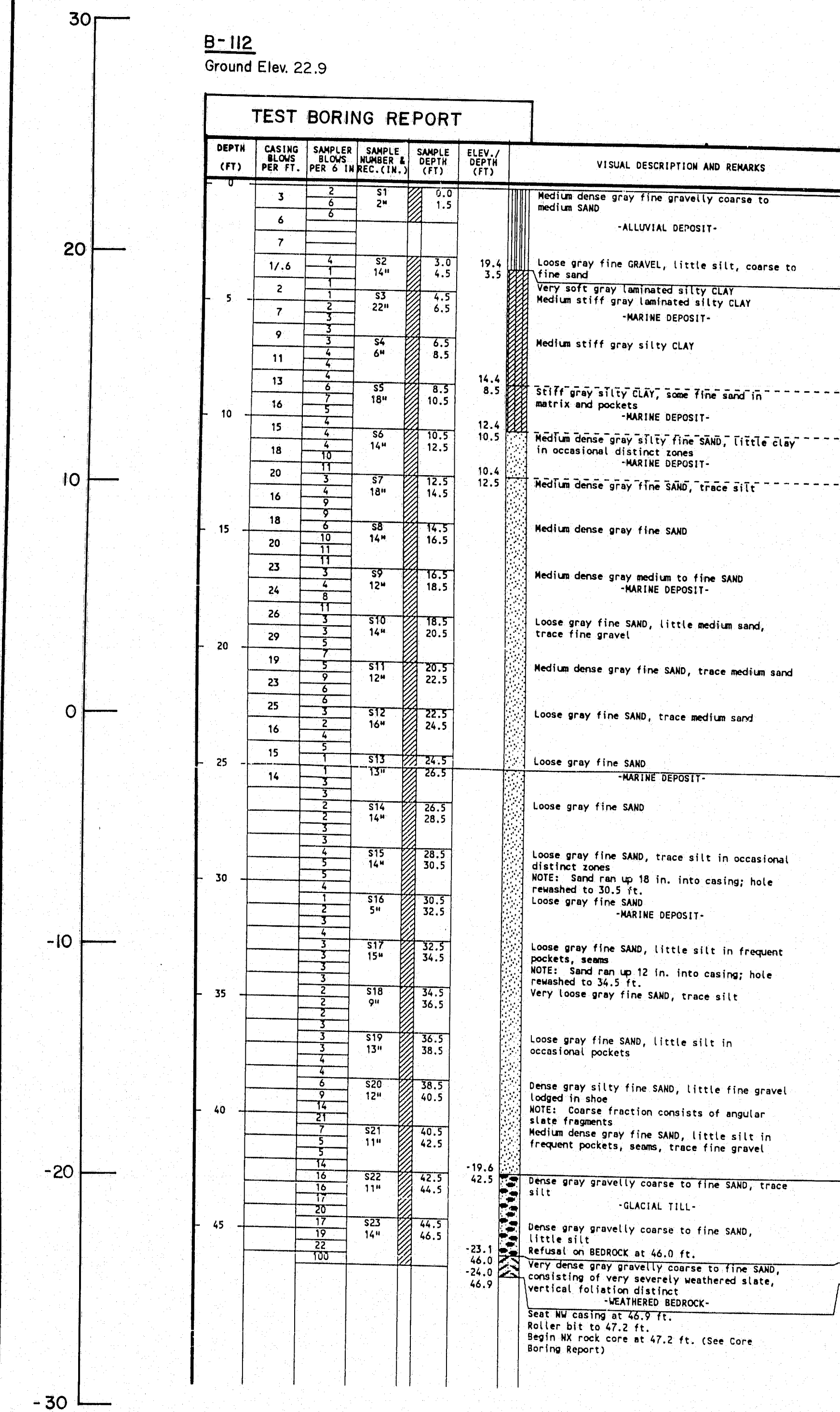
SHEET B.7 OF B86 AUGUSTA, MAINE

					BY	DATE
				DESIGNED:	SM	7/93
				DRAWN:	RJT	7/93
				CHECKED:		
NO.	REVISION	BY	DATE	IN CHARGE OF		

F.H.W.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	15	103



MAINE DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
DESIGN DIVISION
DESIGNER: SM
DRAWN: RJT
CHECKED: RJT
IN CHARGE OF: RJT



30
20
10
0
-10
-20

B-251
Ground Elev. 23.1

TEST BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	CASING BLDG. PER FT.	SAMPLER BLDG. PER FT.	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)		
0							Medium dense gray gravelly coarse to fine sand, trace silt - ALLUVIAL DEPOSIT -
17	6	51	4"	0.0	2.0		
23	6	51	4"	2.0	2.0		
20	11						
19							
22	7	52	4"	5.0	7.0		Medium dense gray gravelly coarse to fine sand
5	4	52	4"	7.0	7.0		
7	5						
44							
43							
20	26	53	6"	9.0	11.0		Medium dense gray gravelly coarse to fine sand, little silt
31	12						
48	18						
43							
32							
90	189	54	5"	16.0	15.5		Very dense gray sandy fine GRAVEL - GLACIAL TILL -
77							
58							
46							
89							
50/4	74	55	4"	19.0	3.6		Very dense gray gravelly silt
	55/0			19.5	19.5		Drove MW casing to 19.6 ft. Roller bit to 19.8 ft. Top of Bedrock at 19.6 ft. Begin MW rock core at 19.8 ft. (See Core Boring Report)

CORE BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	DRILLING RATE MIN./FT.	RECOVERY/ROD IN. X	WEATH- ERING	ELEV. / DEPTH (FT)			
10							
15							
20							
10	19.8	60/53	100/88	FR.	3.3	19.8	19.6 ft. of Overburden (See Test Boring Report) Top of Bedrock at 19.6 ft. Begin MW rock core at 19.8 ft.
11	24.8						Hard fresh gray aphanitic SLATE. Bedding and foliation dipping at high angles. Primary joint set is fresh, wide, tight, smooth planar dipping at vertical angle from 20.0 to 20.4 ft. Secondary joint set is fresh, very close, smooth, undulating at low angles. Third joint set is fresh, wide, tight, rough, undulating at moderate angles. Thin quartz veins present throughout core.
12							
11							
9							
							Bottom of Exploration at 24.8 ft.

B-252
Ground Elev. 25.7

TEST BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	CASING BLDG. PER FT.	SAMPLER BLDG. PER FT.	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)		
0							Medium dense gray gravelly coarse to fine sand, little silt - ALLUVIAL DEPOSIT -
22	5	51	8"	0.0	2.0		
54	12						
87							
105							
84							
35		52		5.0			Dense gray coarse to fine sandy GRAVEL, little silt - GLACIAL TILL -
20		52	8"	7.0			
28							
14							
50/3		53	3"	10.0	14.9		Very dense gray GRAVEL, little sand
		54		10.8			Drove MW casing to 11.0 ft. Top of Bedrock at 11.0 ft. Begin MW rock core at 11.0 ft. (See Core Boring Report)

CORE BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	DRILLING RATE MIN./FT.	RECOVERY/ROD IN. X	WEATH- ERING	ELEV. / DEPTH (FT)			
0							
5							
10							
10	11.0	58/37	56/62	FR.	16.7	11.0	11.0 ft. of Overburden (See Test Boring Report) Top of Bedrock at 11.0 ft. Begin MW rock core at 11.0 ft.
15							
							Hard fresh gray aphanitic SLATE. Bedding and foliation very thin, dipping at high angles. Primary joint set is fresh, close to wide, tight, smooth, planar at moderate angles. Secondary joint set is fresh, close to wide, open, rough, stepped to undulating at horizontal angles. Third joint set is fresh, wide, tight, smooth, planar at horizontal angles. Quartz veins present throughout core.
							Bottom of Exploration at 16.0 ft.

B-253
Ground Elev. 25.8

TEST BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	CASING BLDG. PER FT.	SAMPLER BLDG. PER FT.	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)		
0							Dense brown gray sandy GRAVEL, trace silt - ALLUVIAL DEPOSIT -
7	9	51	4"	0.0	2.0		
23	11						
24							
36							
35							
28	14	52	5"	5.0			Very dense gray gravelly coarse to fine sand, little silt - GLACIAL TILL -
4	35/0	52	4"	6.0	19.8		Drove MW casing to 6.0 ft. Top of Bedrock at 6.0 ft. Begin MW rock core at 6.0 ft. (See Core Boring Report)

CORE BORING REPORT							VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	DRILLING RATE MIN./FT.	RECOVERY/ROD IN. X	WEATH- ERING	ELEV. / DEPTH (FT)			
0							
5							
11	6.4	61/49	100/60	FR.	19.8	6.0	6.0 ft. of Overburden (See Test Boring Report) Top of Bedrock at 6.0 ft.
8	11.5						C1: Gray fractured SLATE with clay seam C2: Hard fresh gray aphanitic SLATE. Bedding and foliation dipping at high angles. Primary joint set is fresh, wide, tight, rough, planar. Secondary joint set is fresh, close, open, rough, planar at low angles. Quartz inclusions from 6.4 to 7.8 ft. Quartz veins present throughout core.
10							
8	11.5	63/46	100/75	FR.			C3: Same as C2 except 13.7 to 14.1 ft. moderately weathered zone with calcite veins. NOTE: Frequent calcite stringers on high to vertical angles.
11	16.7						
12							
13							
14							
15							
							Bottom of Exploration at 16.7 ft.

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	7/93	
		DRAWN: RJT	7/93	
		CHECKED:		

HNTB
HOWARD NEEDLES TAMMEN & BERGENDT

115-203
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
BORING LOGS
SHEET BIO OF B86 AUGUSTA, MAINE

B-114
Ground Elev. 20.1

TEST BORING REPORT					
DEPTH (FT)	CASING BLANK PER FT	SAMPLER BLANK PER FT	SAMPLE DEPTH (FT)	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS
0	5	2	31	20.0	Loose gray coarse to fine SAND, little fine gravel
1	1	1	16"	19.5	-ALLUVIAL DEPOSIT-
2	1	1	16"	19.0	Soft gray silty CLAY
3	1	1	24"	18.5	-MARINE DEPOSIT-
4	1	1	16"	18.0	NOTE: Casing sinks to 2.5 ft. during washing. Soft gray silty CLAY, occasional fine sand partings
5	1	1	16"	17.5	NOTE: Sampler overdriven. Soft gray silty CLAY, trace fine gravel
6	1	1	16"	17.0	Very loose gray silty FINE SAND, some clay in frequent pockets
7	1	1	16"	16.5	-MARINE DEPOSIT-
8	1	1	16"	16.0	Loose gray silty FINE SAND, little clay in occasional pockets
9	1	1	16"	15.5	Medium dense to dense gray silty coarse to fine SAND, some fine gravel, little clay in indistinct zones within matrix.
10	1	1	16"	15.0	NOTE: Sample consists largely of angular platy slate fragments
11	1	1	16"	14.5	-GLACIAL TILL-
12	1	1	16"	14.0	Medium dense gray coarse SAND, and fine GRAVEL, some silt, little medium to fine sand
13	1	1	16"	13.5	NOTE: Sample consists largely of angular platy slate fragments
14	1	1	16"	13.0	-GLACIAL TILL-
15	1	1	16"	12.5	Top of Bedrock at 13.3 ft.
16	1	1	16"	12.0	-WEATHERED BEDROCK-
17	1	1	16"	11.5	Roller bit to 13.3 ft.
18	1	1	16"	11.0	Set W casing at 13.5 ft.
19	1	1	16"	10.5	Begin W rock core at 13.5 ft. (See Core Boring Report)

CORE BORING REPORT					
DEPTH (FT)	DATE	RECOVERY/ROD IN.	WEATH. ERING	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS
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DESIGNED:	SM	7/93
DRAWN:	RJT	7/93
CHECKED:		
IN CHARGE OF:		

B-254
Ground Elev. 18.1

TEST BORING REPORT						
DEPTH (FT)	CASING ELOWS (FEET)	SAMPLER ELOWS (FEET)	SAMPLE NUMBER & IN RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
0	8	1	51	0.0	17.1	Medium dense brown coarse to fine SAND, little silt, fine gravel
1	12	10"		2.0	17.0	-FLUVIAL DEPOSIT-
2	1					Very loose gray silty fine SAND in partings
3	1					-FLUVIAL DEPOSIT-
4	1					Medium dense gray silty coarse to fine SAND, some gravel
5	26					NOTE: 7.0-10.0 ft. Interbedded layers of light gray silty fine SAND, dark gray sand and gravelly sand, mostly of slate origin.
6	24	8	22	5.0		
7	19	10"	5"	7.0		
8	35	8				
9	21					
10	11				8.1 / 10.0	Set W casing at 10.0 ft. Top of Bedrock at 10.0 ft. Begin W rock core at 10.0 ft. (See Core Boring Report)

F.A.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	19	103

B-256
Ground Elev. 49.8

TEST BORING REPORT									
DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			1	4"	1.5	Very loose dark brown silty fine sand			
5	5	2	2	8"	5.0	Loose brown silty fine sand			
10	12	5	3	9"	10.0	Medium dense brown silty fine sand			
15	10	2	4	6"	15.0	Very dense red-brown sandy coarse to fine gravel			
20	12	5	5	4"	20.0	Medium dense gray coarse to fine gravel, little coarse sand			
25	13	1	6	18"	25.0	Medium stiff gray silty clay (gravel in bottom of boring, washed ahead of casing to remove)			
30	40	12	7	5"	30.2	Attempted tube, too stiff, could not advance			
35	115	24	8	7"	35.7	Very dense gray clayey coarse to fine gravel			
40	122	28	9	10"	40.3	Bedrock encountered at 38.3 ft. Seat W casing at 38.3 ft. Begin NX rock core at 38.3 ft. (See Core Boring Report)			
45	155	34	10	10"	45.3	Bottom of Exploration at 45.3 ft.			

CORE BORING REPORT

DEPTH (FT)	DRILLING RATE (FT/HR)	RECOVERY/NO.	WEATH. %	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS	
0					38.3 ft. of Overburden (See Test Boring Report) Begin NX rock core at 38.3 ft.	
5	38.3	24/0	100/0	SL	C1: Moderately hard, gray siltstone to fine grained slate. Very thin bedding. Primary joint set is close, open, slightly weathered, undulating and smooth, dipping at high angles.	
10	42.8	30/17	100/57	FR TO SL	C2: Same lithology as C1. Same primary joint set. Secondary joint set is close, tight to slightly open, fresh, undulating and smooth to stepped and smooth, dipping at low to horizontal angles. Sound core begins at 41.3 ft. Calcite stringers abundant.	
15	44.9	25/13	100/52	FR TO SL	C3: Same as C2, calcite and quartz mineralization noted.	
20	44.9	47/27	100/66	FR	C4: Same as C3.	
25	48.3				Bottom of Exploration at 48.3 ft.	

B-257
Ground Elev. 46.4

TEST BORING REPORT									
DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			1	4"	1.5	Very loose brown fine sand, with roots - TOPSOIL -			
5	14	2	2	10"	5.0	Loose gray-brown sandy silt, trace medium sand			
10	14	2	3	14"	10.0	Very loose gray fine sand, trace silt, with organics			
15	73	37	4	3"	15.0	Dense gray sandy coarse to fine gravel			
20	11	1	5	14"	20.0	FWS1, 20.0-20.6 ft.; Su = 1340 psf			
25	10	1	6	18"	25.0	FWS2, 25.0-25.6 ft.; Su = 820 psf			
30	17	1	7	18"	30.0	FWS3, 30.0-30.6 ft.; Su = 930 psf			
35	19	2	8	18"	35.0	FWS4, 35.0-35.6 ft.; Su = 1480 psf			
40	53	12	9	8"	40.0	Dense gray clayey fine gravel, little coarse to fine sand			
45	52	17	10	5"	45.0	Medium dense gray clayey fine gravel, little coarse to fine sand			
50	48	21	11	7"	50.0	Medium dense gray clayey fine gravel, little coarse to fine sand			
55	7	1	12	10"	55.0	Bedrock encountered at 53.6 ft. Seat W casing at 53.6 ft. Begin NX rock core at 53.6 ft. (See Core Boring Report)			

B-257(CONT)

CORE BORING REPORT						
DEPTH (FT)	DRILLING RATE (IN./FT.)	RECOVERY/NO. (FT)	WEATH. %	ELEV./DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS	
0						53.6 ft. of Overburden (see Test Boring Report) Seat W casing at 53.6 ft. Advanced roller bit to 53.6 ft. Begin NX rock core at 53.6 ft.
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CERM 11/1/96

115-205

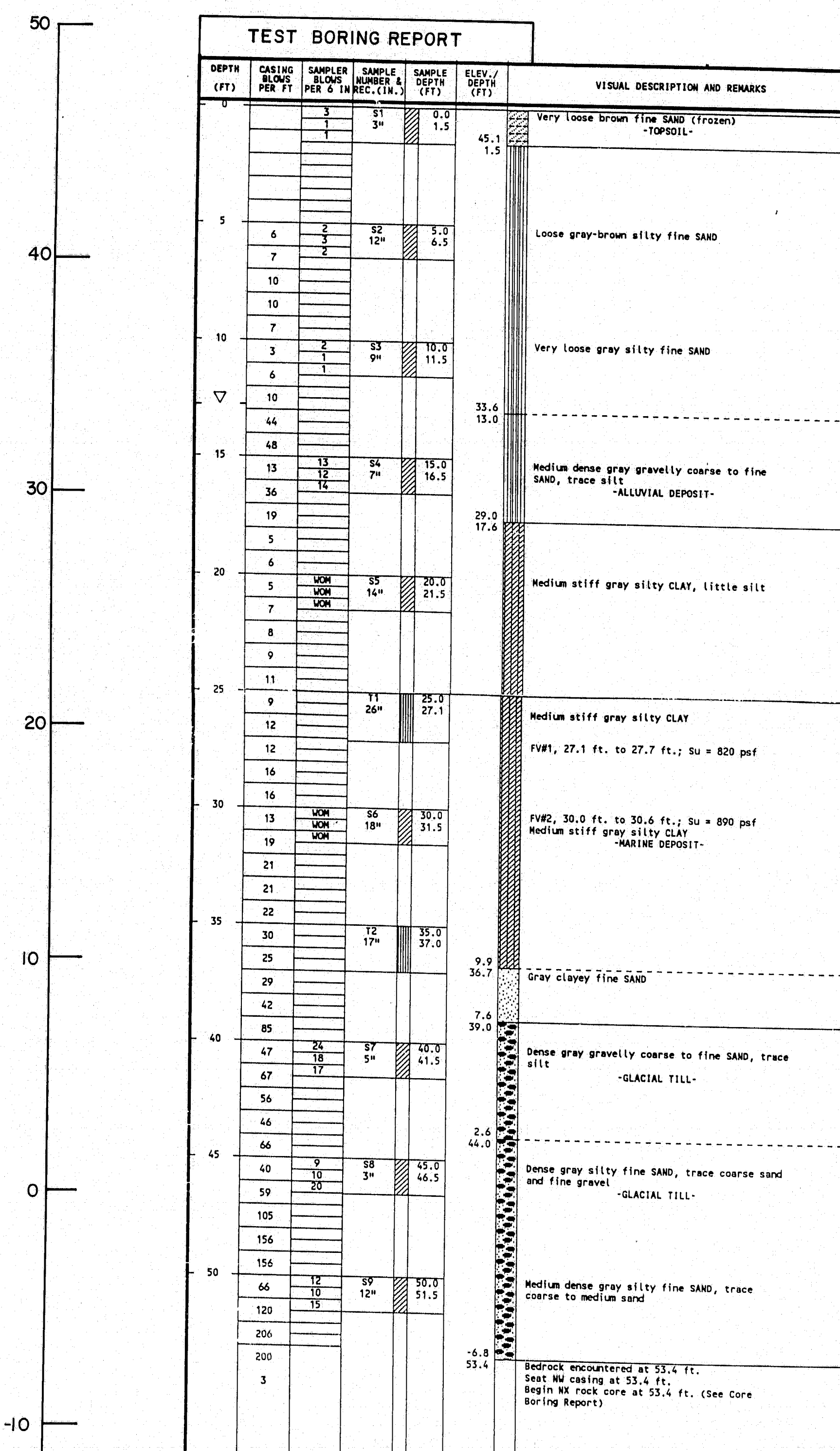
STATE OF MAINE DEPARTMENT OF TRANSPORTATION WATERVILLE - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER BORING LOGS SHEET B12 OF B86 AUGUSTA, MAINE



DESIGNED: SM	DATE: 7/93
DRAWN: RJT	DATE: 7/93
CHECKED:	
NO. REVISION	BY DATE IN CHARGE OF

DATE: 7/23/93 BY: RJT

B-258
Ground Elev. 46.6

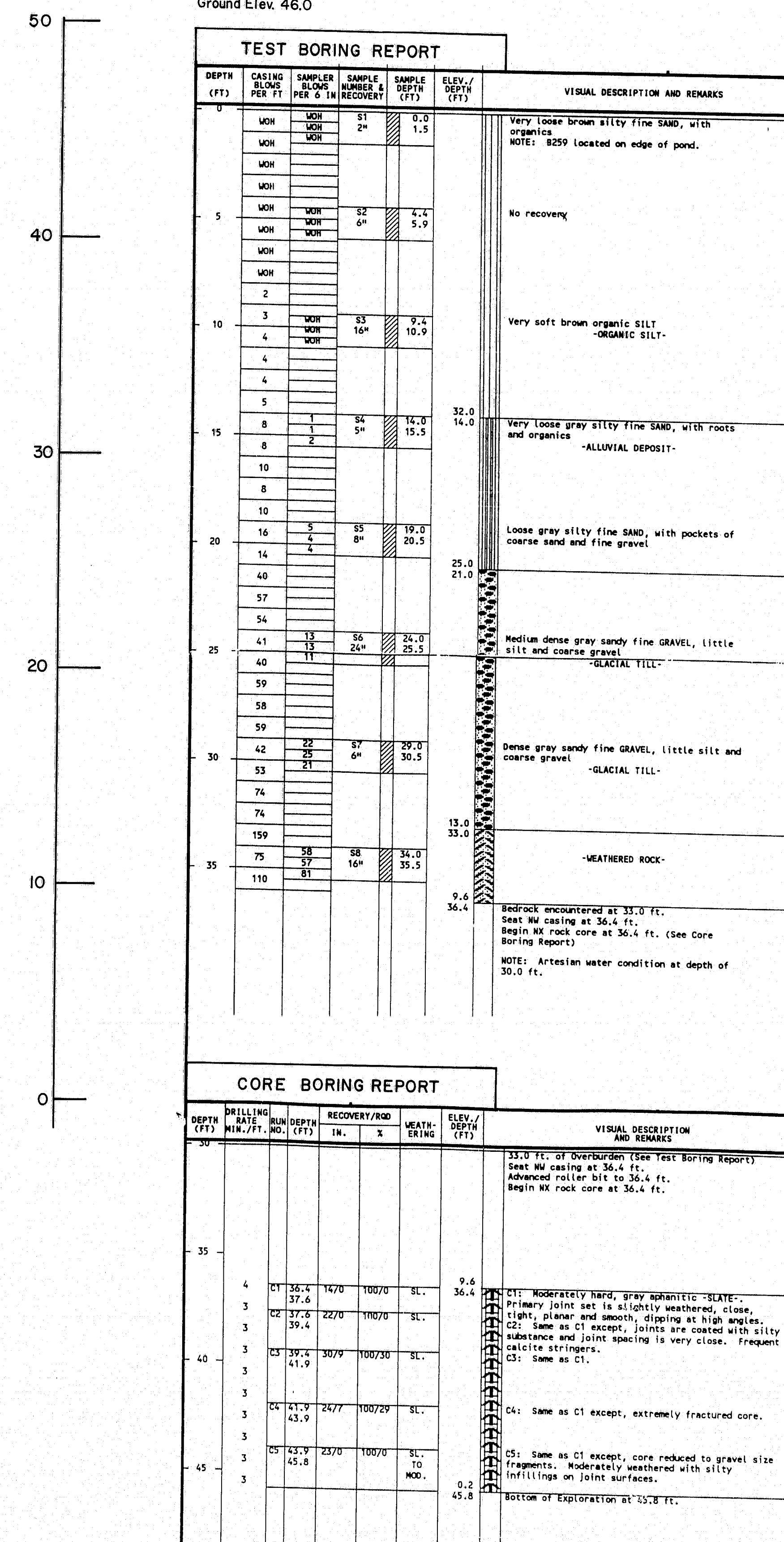


NO.	REVISION	BY	DATE
		DESIGNED: SM	7/93
		DRAWN: RJT	7/93
		CHECKED:	
		IN CHARGE OF	

B-258(CONT)

DEPTH (FT)	DRILLING RATE (FT/HR)	RECOVERY/ROD (IN.)	WEATHERING (X)	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS
30				33.4	33.4 ft. of Overburden (See Test Boring Report) Begin MK rock core at 33.4 ft.
55				33.4	C1: Moderately hard, gray sphenitic SLATE. Joints are very close, open, moderately weathered, planar and smooth, to stepped and smooth, and dipping at steep angles. Silty coating noted on joint surfaces. C2: Same as C1.
60				33.4	C3: Same as C1.
65				33.4	C4: Moderately hard, gray sphenitic SLATE. Bedding is very thin, and steeply inclined with occasional calcite stringers. Joints are very close, open, moderately weathered, planar and smooth, and dipping at steep angles. Calcite and quartz mineralization present. Bottom of Exploration at 65.4 ft.

B-259
Ground Elev. 46.0



DEPTH (FT)	DRILLING RATE (FT/HR)	RECOVERY/ROD (IN.)	WEATHERING (X)	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS
30				33.4	33.4 ft. of Overburden (See Test Boring Report) Set MK casing at 36.4 ft. Advanced roller bit to 36.4 ft. Begin MK rock core at 36.4 ft.
35				33.4	C1: Moderately hard, gray sphenitic SLATE. Primary joint set is slightly weathered, close, tight, planar and smooth, dipping at high angles. Same as C1 except, joints are coated with silty calcite stringers. C2: Same as C1.
40				33.4	C3: Same as C1.
45				33.4	C4: Same as C1 except, extremely fractured core. C5: Same as C1 except, core reduced to gravel size fragments. Moderately weathered with silty inclusions on joint surfaces. Bottom of Exploration at 45.8 ft.

115-206
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
BORING LOGS
SHEET B13 OF B86 AUGUSTA, MAINE

HNTB
HOWARD NEEDLES TAMMEN & BERGENDOFF

B-260
Ground Elev. 48.0

TEST BORING REPORT									
DEPTH (FT)	CASING BLDG PER FT	SAMPLER BLDG PER 6 IN REC. (IN.)	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			S1	0.0	47.0	No recovery - frozen soil at ground surface - TOPSOIL			
5			S2	5.0	42.0	Soft brown sandy SILT - ALLUVIAL DEPOSIT			
10			S3	10.0	37.0	Very soft brown sandy SILT, with organics			
15			S4	15.0	32.0	Very soft brown sandy SILT, with organics			
20			S5	20.0	27.0	FWB, 20.0 ft. to 20.4 ft.; Su = 740 pcf Medium stiff gray silty CLAY			
25			S6	25.0	22.0	Very loose gray clayey fine SAND			
30			S7	30.0	17.0	Medium dense gray-brown clayey fine SAND, little coarse sand and fine gravel			
35			S8	35.0	12.0	Artesian pressure at 35.0 ft. Weathered rock with clayey fine SAND - GLACIAL TILL			
40			S9	40.0	7.0	Top of bedrock at 37.8 ft. Brown M. casing to 37.8 ft. Advanced roller bit to 37.8 ft. Begin M. rock core at 37.8 ft. (See Core Boring Report)			

CORE BORING REPORT

DEPTH (FT)	DRILLING DATE	RECOVERY/ROD IN. %	WEATH- ERING	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS	
37.8				37.8	37.8 ft. of Overburden (See Test Boring Report) Begin M. rock core at 37.8 ft.	
40.0				40.0	C1: Moderately hard gray aphanitic SLATE. Bedding planes are very thin and steeply inclined. Joints are very close to close, open, moderately to slightly weathered, and dipping at steep angles. Silty coatings are noted on discontinuity surfaces. C2: Same as C1. C3: Same as C1.	
42.0				42.0	C4: Same as C1.	
44.0				44.0	C5: Same as C1.	
46.0				46.0	C6: Same as C1.	
48.0				48.0	C7: Moderately hard, gray aphanitic SLATE. Joints are close to very close, open, slightly weathered, planar and smooth, steeply dipping, pyrite mineralization common, occasional calcite and quartz mineralization.	
48.0				48.0	WATERVILLE FORMATION - Bottom of Exploration at 48.0 ft.	

NO.	REVISION	BY	DATE
		DESIGNED: SM	7/93
		DRAWN: RJT	7/93
		CHECKED:	
		IN CHARGE OF	

B-261
Ground Elev. 72.1

TEST BORING REPORT									
DEPTH (FT)	CASING BLDG PER FT	SAMPLER BLDG PER 6 IN REC. (IN.)	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			S1	0.0	72.1	Brown fibrous organics with medium to fine sand			
5			S2	5.0	67.1	Dense olive brown silty CLAY with blocky structure			
10			S3	10.0	62.1	Dense olive brown silty CLAY with blocky structure and mottling			
15			S4	15.0	57.1	Very stiff gray silty CLAY, trace fine sand			
20			S5	20.0	52.1	FWB, 20.2 to 20.8 ft.; Su = 1670 pcf Stiff gray silty CLAY with high plasticity			
25			S6	25.0	47.1	FWB, 25.0 to 25.6 ft.; Su = 1400 pcf FWB, 25.6 to 26.2 ft.; Su = 1860 pcf Stiff gray silty CLAY - MARINE CLAY			
30			S7	30.0	42.1	FWB, 30.0 to 30.6 ft.; Su = 1670 pcf FWB, 30.6 to 31.2 ft.; Su = 1860 pcf Stiff to very stiff gray silty CLAY - MARINE CLAY			
35			S8	35.0	37.1	FWB, 35.0 to 35.6 ft.; Su = 1860 pcf Stiff to very stiff gray silty CLAY to gray silty fine SAND, little clay			
40			S9	40.0	32.1	Very dense sandy GRAVEL (slate) -GLACIAL TILL - Washed ahead of casing from 40.0 to 45.0 ft.			
45			S10	45.0	27.1	Top of bedrock at 45.0 ft. Advanced roller bit to 45.0 ft. Begin M. rock core at 45.0 ft. (See Core Boring Report)			

B-261(CONT)

CORE BORING REPORT						
DEPTH (FT)	DRILLING DATE	RECOVERY/ROD IN. %	WEATH- ERING	ELEV. DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS	
45.9					45.9 ft. of Overburden (See Test Boring Report) Begin MX rock core at 45.9 ft.	
45.9						
9	11	35.9 37/0	100/0	FR.	45.9	C1: Hard slightly weathered gray aphanitic SLATE. Joints are very close, open, smooth, planar, dipping at vertical and high angles. Joint surfaces are slightly coated with silty. Quartz veins throughout core. Entire run is extremely fractured.
26		49.1				
26						
13	11	49.1 51.6	25/0	100/0	FR.	C2: Same as C1. NOTE: No water return at 51.3 ft.
50						
16	11	51.6 53.8	32/0	100/0	FR.	C3: Same as C1, except joints are dipping at high angles.
12						
11					53.8	Bottom of Exploration at 53.8 ft.

F.H.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	21	103

115-207

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

HNTB
HOWARD NEEDLES TAMMEN & BERGENDT

BORING LOGS

SHEET B14 OF B86 AUGUSTA, MAINE

F.A.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	22	103

B-262
Ground Elev. 79.1

TEST BORING REPORT									
DEPTH (FT)	CASING BLOW PER FT	SAMPLER BLOW PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			S1 8"	0.0	79.1	Loose dark brown loamy silt, trace fine sand, with wood and organic matter.			
			S2 14"	1.5	78.6	TOPSOIL - Very loose to loose orange brown silty fine sand, trace coarse to medium sand, few rootlets.			
5	10	9	S3 14"	5.0	74.1	Medium dense dark brown coarse to fine sand, trace fine gravel.			
10	18	5		6.5	73.6	ALLUVIAL DEPOSIT - Very stiff mottled olive brown clayey silt.			
15	37	7	S4 14"	10.0	71.1	Very stiff mottled olive brown clayey silt.			
20	48	12		11.5	70.6	PWT, 15.0-15.25 ft.; Su = 2080 per (2 in. x 3 in.)			
25	55			15.0		Very stiff brown gray silty clay.			
30	57			16.5		PWT, 20.0-20.6 ft.; Su = 1860 per			
35	45	1		20.0		Stiff gray silty clay.			
40	54	3		21.5		PWT, 25.0-25.6 ft.; Su = 1800 per			
45	56			23.0		Stiff gray silty clay, with frequent black oxidized spots.			
50	61			24.5		PWT, 30.0-30.6 ft.; Su = 1450 per			
55	62			30.0		Stiff gray silty clay, with frequent black oxidized spots.			
60	63			31.5		MARINE DEPOSIT - PWT, 35.0-35.6 ft.; Su = 1450 per			
65	64			36.5		Stiff gray silty clay.			
70	66			37.5		PWT, 40.0-40.6 ft.; Su = 1370 per			
75	67			40.0		Stiff gray silty clay.			
80	68			41.5		Medium stiff gray silty clay, little fine sand.			
85	69			43.0		Very dense gray silty fine sand, little coarse sand, little fine gravel.			
90	70			44.5		GLACIAL TILL - Very dense black gravel, sample consists of platy slate fragments.			
95	71			46.5		UNWEATHERED BEDROCK - Encountered bedrock at 55.2 ft.			
100	72			50.0		See NW casing at 56.0 ft. Advanced roller bit to 56.0 ft. Begin RI rock core at 56.0 ft. (See Core Boring Report)			

B-262(CONT)

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.
55	6/1/93	23/29	100/100	SL	56.0	C1: Hard, dark gray argillite slate. Primary joint set moderately to steeply dipping, close, tight to slightly open, undulating to planar and smooth, with frequent calcite and quartz veins.			
60	6/1/93	27/34	100/100	SL	61.8	C2: Same as C1.			
65					61.8	Bottom of Exploration at 61.8 ft.			

B-263(CONT)

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.	RECOVERY/NO.
55	6/1/93	23/29	100/100	SL	56.0	C1: Moderately hard, gray argillite slate. Primary joints are very close to close, slightly weathered, tight to slightly open, planar and smooth and dipping at steep angles, parallel to bedding.			
60	6/1/93	27/34	100/100	SL	61.8	C2: Same as C1, except joints are close, tight, planar and smooth.			
65	6/1/93	27/34	100/100	SL	65.5	C3: Same lithology as C1. Joints are fresh to slightly weathered, close, tight to slightly open, steeply dipping, planar to stepped and smooth. Pyrite, quartz mineralization present. Some oxidation noted.			
70					65.5	Bottom of Exploration at 65.5 ft.			

B-263
Ground Elev. 89.6

TEST BORING REPORT									
DEPTH (FT)	CASING BLOW PER FT	SAMPLER BLOW PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS			
0			S1 1"	0.0	89.6	Frozen dark brown loamy silt, leaves.			
5	12	9	S2 12"	5.0	84.6	TOPSOIL - Dark brown loamy silt.			
10	48	17		6.5		Medium dense brown fine sand, little silt, trace coarse to medium sand.			
15	37	7		10.0		Medium dense brown medium to fine sand, trace gravel, coarse sand, trace silt.			
20	48	12		11.5		Soft gray silty clay.			
25	55			15.0		PWT, 17.0-17.6 ft.; Su = 470 per			
30	57			17.0		Soft gray silty clay.			
35	54			19.0		Soft gray silty clay.			
40	56			20.0		Soft gray silty clay.			
45	57			21.5		MARINE DEPOSIT - Medium stiff gray silty clay.			
50	58			23.0		PWT, 27.0-27.6 ft.; Su = 580 per			
55	59			25.0		Medium stiff gray silty clay.			
60	60			27.0		PWT, 37.0-37.6 ft.; Su = 930 per			
65	61			29.0		Medium stiff gray silty clay.			
70	62			30.0		Medium stiff gray silty clay.			
75	63			32.0		Medium stiff gray silty clay.			
80	64			33.0		Medium stiff gray silty clay.			
85	65			35.0		Medium stiff gray silty clay.			
90	66			37.0		PWT, 37.0-37.6 ft.; Su = 930 per			
95	67			39.0		Medium stiff gray silty clay.			
100	68			41.5		Medium stiff gray silty clay.			
105	69			42.0		Medium stiff gray silty clay.			
110	70			43.5		Medium stiff gray silty clay.			
115	71			44.5		Medium stiff gray silty clay.			
120	72			46.5		NOTE: 3 in. NW casing telescoped from 45.0 to 60.0 ft.			
125	73			47.0		Gray silty clay in top of tube.			
130	74			48.5		Silty fine sand in bottom of tube.			
135	75			49.5		Some gray silty fine sand, little coarse sand, little gravel.			
140	76			50.0		GLACIAL TILL - Medium dense gray silty fine sand, little coarse sand, little gravel.			
145	77			50.5		Medium dense to dense gray silty fine sand, little coarse sand, little gravel.			
150	78			51.5		GLACIAL TILL - Top of bedrock at 59.0 ft.			
155	79			59.0		Bore casing to 60.0 ft.			

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	7/93	
		DRAWN: RUT	7/93	
		CHECKED:		

HNTB
HOWARD NEEDLES TAMMEN & BERGENDT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BORING LOGS

SHEET B15 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	23	103

B-115
Ground Elev. 89.7

TEST BORING REPORT									
DEPTH (FT)	CASING ELEV. PER FT.	SAMPLER ELEV. PER FT.	SAMPLE ELEV. PER FT.	SAMPLE ELEV. PER FT.	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS			
0					89.7	Topsoil, organics Very loose brown silty fine sand, trace medium sand, organics -ALLUVIAL DEPOSIT-			
5					84.7	Medium dense brown silty medium to fine sand, little silt, trace coarse sand			
10					80.7	Dense brown medium to fine sand, little coarse sand, trace silt -ALLUVIAL DEPOSIT-			
15					76.0	Brown mottled silty clay 2 in. x 7 in. Vane Shear Test 37.0-37.57 ft.: 21.6 ft. lb. 37.57-38.14 ft.: 19.6 ft. lb.; Su = 700 pcf Medium stiff gray silty clay			
20					71.3	Gray silty clay -MARINE DEPOSIT-			
25					66.6	Tubes were pushed hydraulically. -MARINE DEPOSIT- 2 in. x 7 in. Vane Shear Test 37.0-37.57 ft.: 14.6 ft. lb. 37.57-38.14 ft.: 15.6 ft. lb. Su = 400 pcf Medium stiff gray silty clay Tubes were pushed hydraulically			
30					61.9	Gray silty clay			
35					57.2	2 in. x 7 in. Vane Shear Test 37.0-37.57 ft.: 42.16 ft. lb. 37.57-38.14 ft.: 46.16 ft. lb. Tubes were pushed hydraulically Medium stiff to stiff gray silty clay			
40					52.5	Gray silty clay			
45					47.8	Tube refusal at 45.6 ft. Very stiff silty clay, some fine gravel, little coarse to fine sand -GLACIAL TILL-			
50					43.1	NOTE: Cored through boulder from 50.0 to 54.9 ft.			
55					38.4	Dense gray silty medium sand, some fine sand, little coarse sand NOTE: Running sands may have affected blow counts -GLACIAL TILL-			
60					33.7	No casing refusal at 57.1 ft. Begin rock core at 57.1 ft. (See Core Boring Report)			

B-115 (CONT)

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE	RECOVERY/NO. (FT)	IN.	X	WEATH. ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS			
0					32.6	50.0 ft. of Overburden (See Test Boring Report) Top of bedrock at 57.1 ft.			
6	6/1	37.1	25/	96/29	57.1	C1: Mottled, slightly weathered, gray schistose slate; extremely thin bedding and foliation, dipping at high angles; joints slightly weathered, open, close, smooth, undulating, parallel to bedding; extremely thin to thin, hard white quartz veins present throughout and from pyrite; fractured zone at 59.4 ft. C2: Same as C1, except joints are moderately weathered, open, very close, rough, stepped with silt seams C3: Same as C1, except joints from 62.1 to 63.5 ft. are close, smooth, planar C4: Same as C1. C5: Same as C1. C6: Same as C1, except joints are smooth, planar and undulating			
7	6/4	38.3	34/12	100/33	57.1				
6		39.1	14/0	83/0	57.1				
6		40.5			57.1				
6		42.3			57.1				
7		43.3	26/7	100/26	57.1				
7		45.7			57.1				
7	7/4/3	46.0	24/1	83/0	57.1				
6		46.0	34/21	97/57	57.1				
8		46.1			57.1				
7		46.1			57.1				
5/1					20.6	Bottom of Exploration at 57.1 ft.			

B-264 (CONT)

CORE BORING REPORT									
DEPTH (FT)	DRILLING DATE	RECOVERY/NO. (FT)	IN.	X	WEATH. ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS			
0					30.0	50.0 ft. of Overburden (See Test Boring Report) Begin rock core at 58.0 ft.			
6	6/1	38.0	39/25	100/64	58.0	C1: Gray moderately hard schistose slate. Primary joint set slightly weathered, tight to slightly open, planar and smooth, dipping at high angles at 85 degrees. Frequent quartz and calcite stringers.			
6		41.2			58.0				
4		41.2	26/9	100/34	58.0	C2: Same as C1, moderately fractured with moderate weathering and discontinuities are filled with silty coating. Loss of drilling fluid on C2.			
3		43.4			58.0				
3		43.4	23/4	100/17	58.0	C3: Same as C1, moderately fractured core run. Loss of drilling fluid noted.			
5		45.3	20/5	100/25	58.0	C4: Same as C1, except extremely fractured zone from 46.2 to 46.9 ft. Loss of drilling fluid noted.			
4		46.9	13/8	100/62	58.0	C5: Same as C1, except joints are at high angles and stepped, tight and fresh. -WATERVILLE FORMATION-			
4		48.0			58.0	Bottom of Exploration at 48.0 ft.			

B-264
Ground Elev. 88.8

TEST BORING REPORT									
DEPTH (FT)	CASING ELEV. PER FT.	SAMPLER ELEV. PER FT.	SAMPLE ELEV. PER FT.	SAMPLE ELEV. PER FT.	ELEV. (FT)	VISUAL DESCRIPTION AND REMARKS			
0					88.8	Stiff black loamy silt, with organics and frozen ground -TOPSOIL-			
5					83.8	Loose orange brown silty fine sand, trace medium sand, trace coarse sand, few rootlets -ALLUVIAL DEPOSIT-			
10					78.8	Dense dark brown medium to fine sand, trace coarse sand -ALLUVIAL DEPOSIT-			
15					73.8	Loose brown medium sand, trace coarse sand, trace fine sand			
20					68.8	Soft gray silty clay -MARINE DEPOSIT-			
25					63.8	FVW, 20.0-20.6 ft.; Su = 480 pcf Soft gray silty clay			
30					58.8	FVW, 20.0-20.6 ft.; Su = 480 pcf Soft gray silty clay			
35					53.8	FVW, 30.0-30.6 ft.; Su = 590 pcf Soft to medium stiff gray silty clay with rounded 1 in. gravel fragments at 31.2 ft. -MARINE DEPOSIT-			
40					48.8	FVW, 35.0-35.6 ft.; Su = 930 pcf Medium stiff gray silty clay, with occasional black oxidized specks			
45					43.8	FVW, 40.0-40.6 ft.; Su = 1410 pcf Stiff gray silty clay, with occasional black specks			
50					38.8	FVW, 45.0-45.6 ft.; Su = 1860 pcf Stiff gray silty clay, little fine sand			
55					33.8	Dense gray silty fine sand, little coarse to medium sand, little fine gravel, well bonded matrix -GLACIAL TILL-			
60					28.8	Medium dense black GRAVEL, sample consists of silt			
65					23.8	Bedrock encountered at 58.0 ft. Sent NW casing at 58.0 ft. Begin rock core at 58.0 ft. (See Core Boring Report)			

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	7/93	
		DRAWN: RJT	7/93	
		CHECKED:		

HNTB
HOWARD NEEDLES TAMMEN & BERGENOFF

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BORING LOGS
SHEET B16 OF B86 AUGUSTA, MAINE

F.H.R.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	24	103

B-265
Ground Elev. 88.0

TEST BORING REPORT						VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	CASING BLANK PER FT.	SAMPLER BLANK PER 6 IN.	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. / TOP (FT)	
0			1	0.0	88.0	Soft to medium stiff dark brown loamy silt, little fine sand, trace medium sand with roots, wood fragments. Frozen soils 0-0.5 ft. - TOPSOIL.
5			2	5.0	86.5	Medium dense brown medium to fine sand, little silt. - ALLUVIAL DEPOSIT.
10			3	10.0	85.0	Medium dense brown medium sand, little fine sand, trace coarse sand and silt.
15			4	15.0	83.5	Soft to medium stiff gray silty clay. - MARINE DEPOSIT.
20			5	20.0	82.0	FWB, 20.0-20.6 ft.; Su = 500 psf. Soft to medium stiff gray silty clay.
25			6	25.0	80.5	Soft to medium stiff gray silty clay.
30			7	30.0	79.0	FWB, 30.0-30.6 ft.; Su = 740 psf. Medium stiff gray silty clay with occasional black oxidized specks. - MARINE DEPOSIT.
35			8	35.0	77.5	Medium stiff gray silty clay, with occasional black oxidized specks.
40			9	40.0	76.0	FWB, 40.0-40.6 ft.; Su = 1300 psf. Stiff gray silty clay.
45			10	45.0	74.5	Brown gray silty fine sand, little coarse sand and fine gravel. - GLACIAL TILL.
50			11	50.0	73.0	Brown casing to refusal at 48.0 ft. Advanced roller bit to 49.0 ft. with increased resistance. Cored boulder from 49.0 to 52.0 ft.
55			12	55.0	71.5	Very dense gray silty fine sand, little coarse sand and gravel. - GLACIAL TILL.
60			13	60.0	70.0	Encountered bedrock at 58.8 ft. Set no casing at 58.8 ft.

B-265(CONT)

CORE BORING REPORT						VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	DRILLING DATE	RECOVERY/ROD IN. X	REMARKS	ELEV. / TOP (FT)	DEPTH (FT)	
58.8	10/0	100/0	10	58.8	58.8	58.8 ft. of Overburden (See Test Boring Report) Begin RE rock core at 58.8 ft.
60.0	10/0	100/0	10	60.0	60.0	FWB, 60.0-60.6 ft.; Su = 1300 psf. Stiff gray silty clay.
62.5	10/0	100/0	10	62.5	62.5	FWB, 62.5-63.1 ft.; Su = 1300 psf. Stiff gray silty clay.

H-266
Ground Elev. 93.9

TEST BORING REPORT						VISUAL DESCRIPTION AND REMARKS
DEPTH (FT)	CASING BLANK PER FT.	SAMPLER BLANK PER 6 IN.	SAMPLE NUMBER	SAMPLE DEPTH (FT)	ELEV. / TOP (FT)	
0			1	0.0	93.9	Dark brown loamy silt, frozen. FOREST MAT/TOPSOIL.
5			2	5.0	92.9	Medium dense brown mottled silty fine sand, trace medium sand. - ALLUVIAL DEPOSIT.
10			3	10.0	91.9	Medium dense brown mottled medium to fine sand, little silt.
15			4	15.0	90.9	Very stiff olive brown mottled clayey silt.
20			5	20.0	89.9	FWB, 15.0 to 15.6 ft.; Su = 1410 psf. Stiff gray silty clay. - MARINE DEPOSIT.
25			6	25.0	88.9	Stiff gray silty clay, with black specks.
30			7	30.0	87.9	FWB, 25.0 to 25.6 ft.; Su = 1200 psf. Medium stiff gray silty clay, with black specks.
35			8	35.0	86.9	Gray silty clay, little fine sand. - MARINE DEPOSIT.
40			9	40.0	85.9	Medium dense brown mottled silty fine sand. - ALLUVIAL DEPOSIT.
45			10	45.0	84.9	Probable cobbles and boulders at 33.0 ft. Casing refusal at 33.0 ft. Holed ahead of casing to 35.0 ft.
50			11	50.0	83.9	Very dense gray brown silty fine sand, little coarse to medium sand, little gravel. - GLACIAL TILL.
55			12	55.0	82.9	Very dense gray brown silty fine sand, little coarse to medium sand, little gravel. - GLACIAL TILL.
60			13	60.0	81.9	Bottom of Exploration at 37.5 ft. No refusal.

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	7/93	
		DRAWN: RJT	7/93	
		CHECKED:		

HNTB
HOWARD NEEDLES TAMMEN & BERGENOFF

STATE OF MAINE DEPARTMENT OF TRANSPORTATION WATERVILLE - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER BORING LOGS SHEET B17 OF B86 AUGUSTA, MAINE

Ground Elev. 95.0

					BY	DATE
				DESIGNED:	SM	6/94
				DRAWN:	RJT	6/94
				CHECKED:	DWR	6/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		

Ground Elev. 93.2

TEST BORING REPORT						
DEPTH (FT)	CASING BLUES PER FT.	SAMPLER BLOG PER 6 IN.	SAMPLE NUMBER REC. (IN.)	SAMPLE DEPTH (FT)	ELEV. / DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
1			81	0.0	95.0	Dark brown loamy SILT, with organics
			10"	2.0	93.0	-SPRINT W/
			1		91.2	Very soft light brown sandy SILT, "little" silt
					2.0	fine sand with rootlets -TOPSOIL-
5			52	5.0		Medium stiff to medium dense laminated brown-gray silty SILT and silty fine SAND, trace medium sand Sample wet at 6.3 ft.
			16	6		
			25	11		
			28			
			22			
10			53	10.0	85.2	Medium dense brown medium SAND, trace silt,
			15	10"	10.0	trace fine gravel
			13		81.4	-ALLUVIAL DEPOSIT-
			23		11.8	At 11.8 ft. Olive brown clayey SILT -MARINE DEPOSIT-
			19			
15			71	15.0		Gray silty CLAY
			12	24"	17.9	
			13			
			12			FWS, 17.0 to 17.6 ft., Su = 590 pcf
			12			FWS, 17.6 to 18.2 ft., Su = 500 pcf
			12			Medium stiff gray silty CLAY with black streaks
20			35	20.0		Medium stiff gray silty CLAY, with black streaks
			11	24"	22.0	
			13			
			13			
			13			
25			15	25.0		Gray silty CLAY
			13			
			13			
			15			FWS, 27.0 to 27.6 ft., Su = 760 pcf
			15			FWS, 27.6 to 30.2 ft., Su = 800 pcf
			15			Medium stiff gray silty CLAY
30			87	30.0		Gray silty CLAY
			10	24"	32.0	-MARINE DEPOSIT-
			18			
			18			
			20			
35			58	35.0		Gray silty CLAY with black concretions
			18			
			23			
			3			
			99		56.5	Olive brown sandy SILT, trace fine sand
					36.7	
					56.0	Washed ahead from 39.5 to 40.0 ft. through probable cobbles.
40			39	40.0		Very dense olive brown silty fine SAND, little coarse sand, little fine gravel, well banded silt
			100	100"/4	50.0	-SPECIAL TILL-
			90			Split upon refusal at 40.4 ft.
			92			Brown M casing to 40.5 ft.
			74			Begin M rock core at 40.5 ft.
			200"/4			Cored boulders, cobbles and glacial till from 40.5 to 44.2 ft.
45						Bore casing to 44.4 ft.
						Begin M rock core at 44.4 ft.
						Cored 4.0 ft. from 44.4 to 48.4 ft. Recovered cobbles and boulders.
						Casing and drive shoe bent from driving to 44.5 ft.
						Removed M driving casing and spun M casing to 50.0 ft.
50			139	50.0		Very dense grayish brown silty medium to fine SAND, little gravel
			58			
			74			
					41.1	Spun casing to 52.1 ft.
					52.1	Refusal on top of bedrock at 52.1 ft.
						Advanced roller bit to 53.0 ft.
						Begin M rock core at 53.0 ft. (See Test Boring Report)

	DRIILLING DATE	BLW INCH./FT.	DEPTH FATHOMS	RECOVERY/RND		WEATH- ERING	ELEVATION DEPTH (FEET)	VISUAL DESCRIPTION AND REMARKS
WT			RND	INC.	"			
- 50								32-1 ft. of Overburden (See Test Boring Report) Spun MV casing to 52.1 ft. Advanced roller bit to 53.0 ft. Begin MK rock core at 53.0 ft.
- 55			CT	53.0 57.7	95/0 95/0	NOD.	40.2 53.0	SOFT TO MODERATELY HARD BLACK GRANITIC PHYLITE. Joints are moderately weathered, very close, open and dipping steeply. Core is highly fractured.
							35.5 57.7	Bottom of Exploration at 57.7 ft.

Ground Elev. 124.1

DEPTH (FT)	CASING DOWN PER #1	SAMPLER DOWN PER # 2	SAMPLE HARNESS PER 3	SAMPLE DEPTH RECOVERY	SAMPLE DEPTH (FT)	ELEV./ DEPTH (FT)	VISUAL DESCRIPTION AND REMARKS
0							
8	7	8		51	0.0		Loose brown fine SAND, little silt, trace medium sand, with rootlets and organics -TOPSOIL-
9	8	9		15"	1.5		
6	3	1				122.6	
3						1.5	
42							
5							Advanced roller bit through probable cobbles and gravel at approximately 4.5 ft. Advanced roller bit to 5.4 ft. washed beyond probable cobbles Very stiff olive brown mottled silt, trace clay -MARINE DEPOSIT-
58						118.7	
27	10	52		5.4	5.4		
5	12	12"		6.9			
5	16						
63							Very stiff olive brown silty CLAY (Pushed cobble ahead of sampler - hence high blow counts)
69							
75							
46	21	33		10.0			
40	22	18"		11.5			
60	20						Loose brown silty fine SAND, with occasional olive clay partings }
78							
83							
71						110.1	
39						14.0	
15							Loose brown silty fine SAND, with occasional olive clay partings }
43	3	54		15.5			
45	5	16"		17.0			
133							
100	6					105.5	
						18.6	-WEATHERED BEDROCK-
20							
	50/1	NR		20-1	20-1	104.0	
							Advanced casing to 18.6 ft. Advanced roller bit to 20.0 ft. Split spoon refusal at 20.1 ft. Bottom of Exploration at 20.1 ft.

AS BUILT
CEN 12/2/76

115-211

HNTB
ARCHITECTS ENGINEERS PLANNERS

BORING LOGS

SHEET **B18** OF **B86** AUGUSTA, MAINE

Ground Elev. 111.3

DEPTH (FT)	CASING BLWD PER FT.	SAMPLER BLDGS PER 6 IN.	SAMPLE NUMBER & REC.(IN.)	SAMPLE DEPTH (FT)	ELEV./ TOTAL (FT)	DESCRIPTION AND REMARKS
0						Begin MW driven casing at 5.0 ft.
5					105.6 5.7	-ALLUVIAL DEPOSIT- Medium dense brown medium SAND Stiff olive brown clayey SILT
10						Mottled olive brown silty CLAY
15						FWH, 12.0 to 12.2 ft., Su = 1860 pcf Very stiff mottled olive gray silty CLAY
20					91.6 19.7	Medium stiff to stiff olive gray silty CLAY, well bonded initially -MARINE DEPOSIT- Very dense grayish brown silty medium to fine SAND, little coarse sand, little fine gravel -GLACIAL TILL- Washed ahead of casing open hole in Glacial till from 20.0 ft.
25						Very dense grayish brown silty medium to fine SAND, little coarse sand, little gravel Advanced roller bit to 29.0 ft. Spun MW casing to 29.5 ft. Cored Boulder from 29.0 to 31.0 ft.
30						Very dense grayish brown silty medium to fine SAND, little gravel -GLACIAL TILL- Cored boulder from 34.0 to 37.0 ft. Recovered 2.5 ft. of mixed gravel, boulders and cobbles.
35						Very dense gray silty medium to fine SAND, little coarse sand, little fine gravel with cobbles and boulders
40					71.3 40.1	No recovery SPHC spoon refusal at 40.1 ft. Spun casing to refusal at 40.1 ft. Advanced roller bit to 40.1 ft. Probable Top of Bedrock at 40.1 ft. Begin MW rock core at 40.1 ft. (See Core Logging Report)

DEPTH (FT)	DRILLING MIS./FT.	RUM DEPTH (FT)	RECOVERY/ROD		WEATH- ERING	ELEV./ DEPTH (FT)	VIRAL DESCRIPTION AND REMARKS	
			IN.	%				
30							40.1 FT. of Overburden (See Test Boring Report) Advanced piston bit to 40.1 ft. Begin MX rock core at 40.1 ft.	
35								
40	8	CT	100.1	60/38	100/64	SL. TO FR.	71.2 40.1	Moderately hard to hard, gray aphanitic SCHIST. Joints are close, tight, fresh to slightly weathered, planar and smooth to less frequently stepped and smooth and dipping at moderate to steep angles. Quartz and pyrite mineralization noted.
	10						1	
	7							
45	8						66.2 45.1	Bottom of Exploration at 45.1 ft.

NO.	REVISION	BY	DATE	CHECKED: DWR 8/94
				IN CHARGE OF CJM

Ground Elev. 108.8

DEPTH (FT)	CASING ELEV. PER FT.	SAMPLE BLOGS PER 6 IN	SAMPLE NUMBER REC.(IN.)	SAMPLE VOLUME (CFT)	ELEV. ODP/ CPT
0			1	0.8	106.6
			51	2.0	
			1		
			2		
			3		
			4		
			5		
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			98		
			99		
			100		

VISUAL DESCRIPTION AND REMARKS

 FOREST MAT
 Very loose brown sandy SILT, WITH plant fibers, rootlets
 -TOPSOIL-

 Very stiff brown mottled clayey SILT with fine sand laminations
 Spun MW casing from 5.0 to Bottom of Exploration
 -MARINE DEPOSIT-

 Mottled olive gray silty CLAY

 FWWL, 12.0 to 12.2 ft., Su = 3380 pcf
 FWD, 12.2 to 12.4 ft., Su = 3140 pcf
 Very stiff gray brown silty CLAY (mottled)

 Gray silty CLAY to 20.5 ft.
 Medium dense gray brown silty Fine SAND

 Gravel in wash, color change to gray at 22.5 ft.
 -GLACIAL TILL-

 Very dense brown gray silty coarse fine SAND, little gravel

 Split spoon refusal at 29.5 ft.
 Advanced roller bit to 30.0 ft. with resistance.
 Core Bailer from 30.0 to 32.0 ft.
 Recovered 5 in.
 Dense gray brown silty medium to fine SAND, little gravel

 Many boulders and cobbles encountered while spinning casing to 30.5 ft.
 Spun MW casing to 39.3 ft.
 Refusal at 39.3 ft.
 Advanced roller bit to 39.3 ft.
 Top of bedrock at 39.5 ft.
 Begin MW rock core at 39.3 ft. (See Core Logging Report)

DEPTH (FT)	MILLING DATE	DIR./FT.	NO.	RECOVERY/ROD		WEATH- ERING	ELEV./ DEPTH (FT)	VIRTUAL DESCRIPTION AND REMARKS
				IN.	%			
34								38.3 ft. of Overburden (Last Test Boring Report) Advanced casing and roller bit to 39.3 ft. Begin MK rock core at 39.3 ft.
35								
40							69.3 39.3	Moderately hard dark grey sphenitic schist. Joints are very close, open, moderately to severely weathered and dipping steeply, planar and smooth. Rock core is reduced to gravel sized fragments and some rock disintegration was noted.
8			39.3	15/0	100/0	NOD.		
10			40.6					
12			42.5	30/0	100/0	NOD. TO SEV.		
16			43.1					
10			43.1	14	100	NOD.	64.3 44.3	
			44.3					Bottom of Exploration at 44.3 ft.

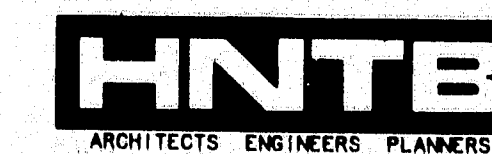
Ground Elev. 108.4

DEPTH (FT)	CASTING ELEV. PER FT.	SAMPLER ELOG PER 6 IN	SAMPLE REMARKS REC. (IN.)	SAMPLE DEPTH (FT)	ELEV./ DEPTH (FT)	GENERAL DESCRIPTION AND REMARKS
9		1	51	0.0		0.0-0.2 ft. Organic topsoil, roots and plant fibers
		2	7"	1.5		Very loose brown fine sandy SILT, little plant waste, roots, organic
		2			106.4	-TOPSOIL-
					2.0	-MARINE DEPOSIT-
5		9	52	5.0		Very stiff brown-gray clayey SILT, little sand, indistinct laminations
		10	18"	6.5	102.9	Very stiff brown mottled silty CLAY, laminated
		25			5.5	-MARINE DEPOSIT-
		38				
		39				
10		28	33	10.0		Very stiff brown mottled silty CLAY, laminated
		30	18"	11.5		
		39				
		40				
15		31	54	15.0		NOTE: Attempt tube sample from 15.0-17.0 ft. - not successful
		22	12"	17.0		45 sample taken from recovery inside tube
		19			90.9	Pertite brown-gray clay SILT, trace fine gravel
		19			17.5	-MARINE DEPOSIT-
20		18				
		27	11	20.0		Brown-gray silty CLAY in tube sample
		22	24"	22.0		
		22	100/0			
100.6					85.8	2 in. x 7 in. Vane shear tests:
					22.6	32.2-22.37 ft. 44/0 ft. lbs.
						22.57-22.6 ft. vane refusal
						su = 1700 psf
						Bottom of exploration at 22.6 ft.
						Casting Refusal at 22.6 ft.
						101% spoon refusal at 22.6 ft.
						*tube sample pushed hydraulically

115-212

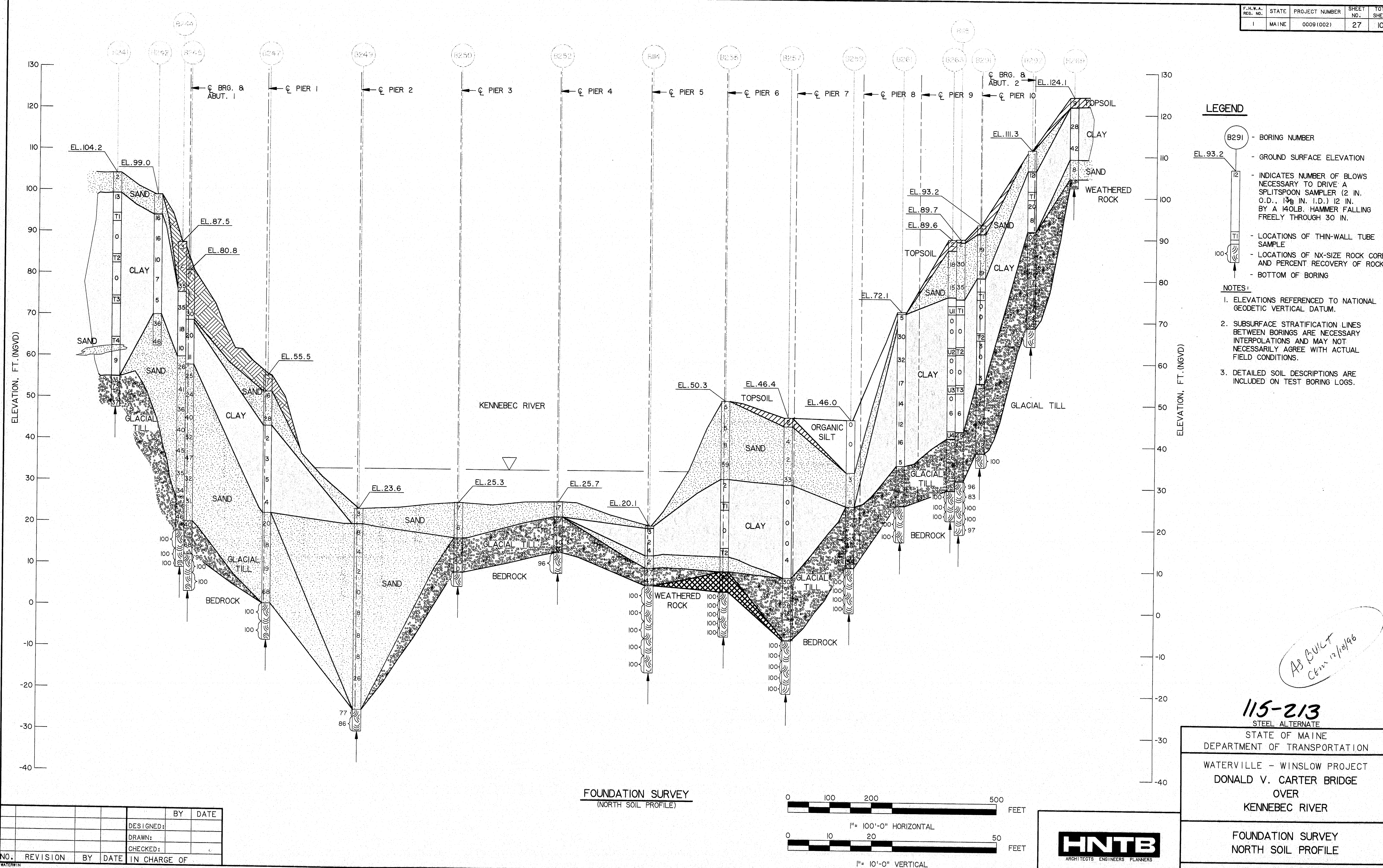
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

SHEET **B19** OF **B86** AUGUSTA, MAINE

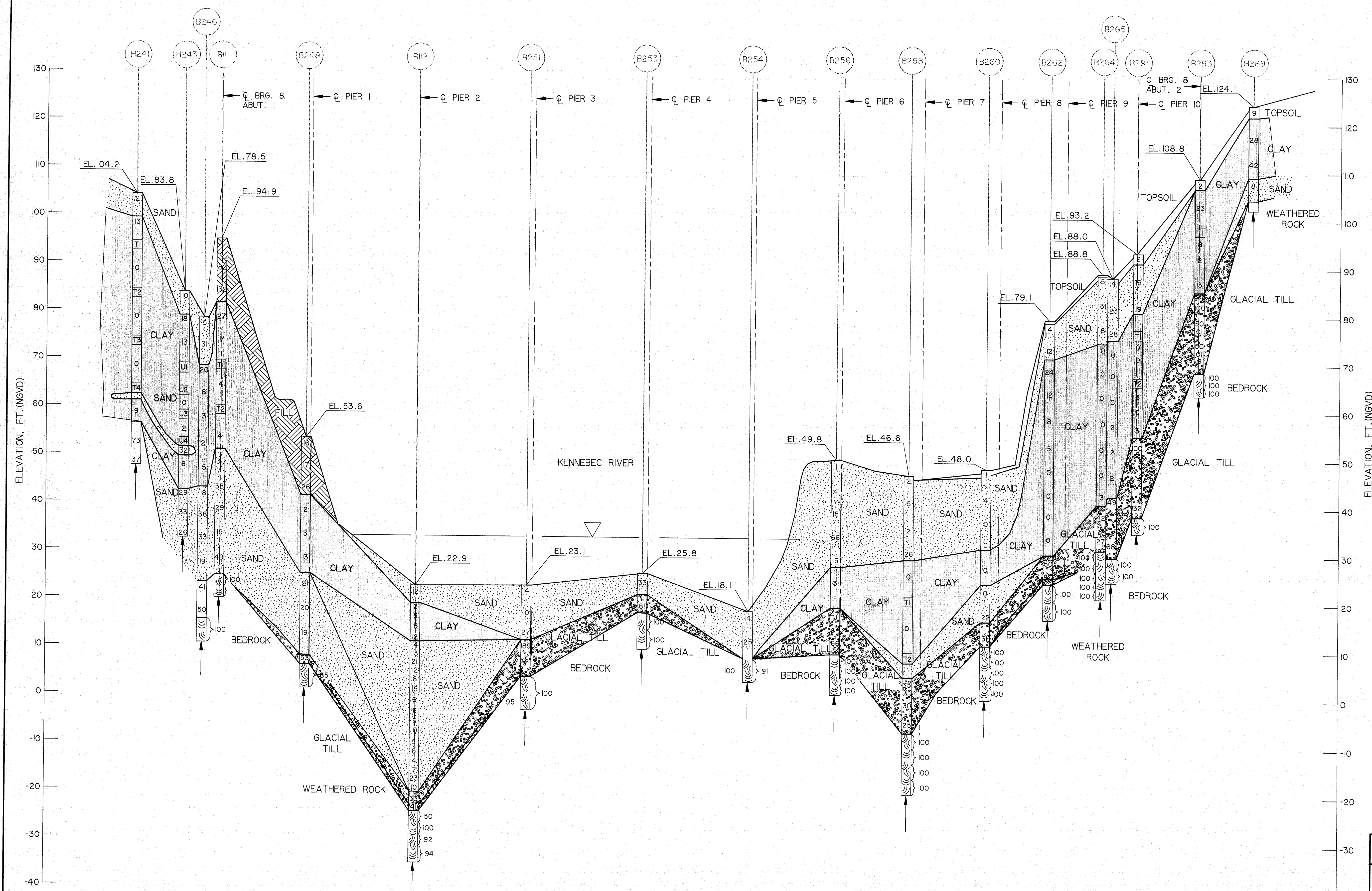


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F.H.R.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	27	103



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	28	103



NOTE:

FOR LEGEND, SEE SHEET B19A

AS BUILT
C.E. 12/8/96

115-214

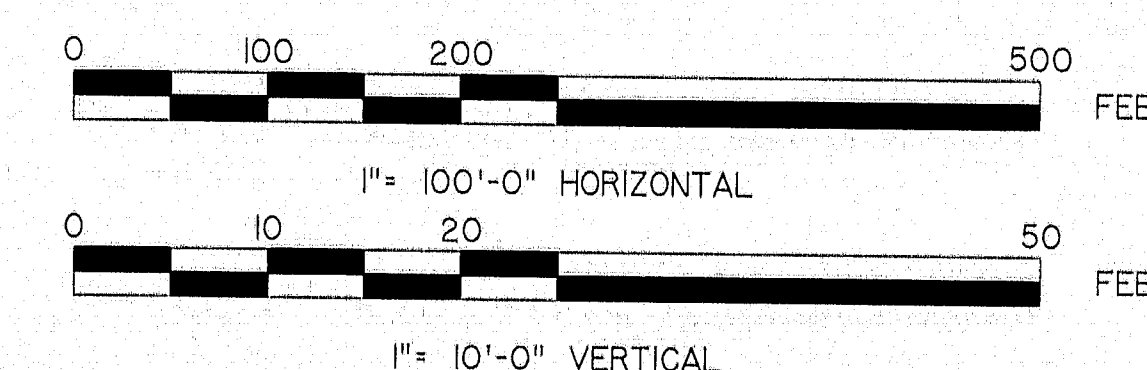
STEEL ALTERNATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

FOUNDATION SURVEY
SOUTH SOIL PROFILE

SHEET B199 OF B86 AUGUSTA, MAINE

FOUNDATION SURVEY
(SOUTH SOIL PROFILE)



HNTB
ARCHITECTS ENGINEERS PLANNERS

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED:		
		DRAWN:		
		CHECKED:		

DIA3: W\GRAPH.STR,C\VCARTER,STEEL CD5220.FOR DIA: CD522

1. PILES MARKED THIS → SHALL BE BATTER IN THE DIRECTION OF THE ARROW:
 - o ABUTMENTS: 3 INCH PER FOOT
 - o PIERS: 2 INCH PER FOOT
2. ESTIMATE OF PILES REQUIRED:

ABUTMENT 1	22-HPI4x73	@ 75'	= 1716'
PIER 1	28-HPI4x73	@ 45'	= 1260'
PIER 2	32-HPI4x73	@ 42'	= 1344'
PIER 6	24-HPI4x73	@ 40'	= 960'
PIER 7	28-HPI4x73	@ 46'	= 1288'
PIER 8	28-HPI4x73	@ 34'	= 952'
PIER 9	20-HPI4x73	@ 48'	= 960'
PIER 10	20-HPI4x73	@ 47'	= 940'
ABUTMENT 2	22-HPI4x73	@ 55'	= 1210'
3. 13HPX73 BEARING PILES MAY BE SUBSTITUTED FOR 14HPX73 BEARING PILES AT THE OPTION OF THE CONTRACTOR. IN EITHER CASE PAYMENT WILL BE MADE UNDER ITEM 501.216 FOR THE PILES.
4. ● - INDICATES 2 1/8" (NX) CONCRETE SEAL CORE.
5. CONCRETE SEAL CORE LOCATIONS MAY BE ADJUSTED IN FIELD BY THE ENGINEER.

STEEL ALTERNATIVE

WATERVILLE - WINSLOW PROJECT

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

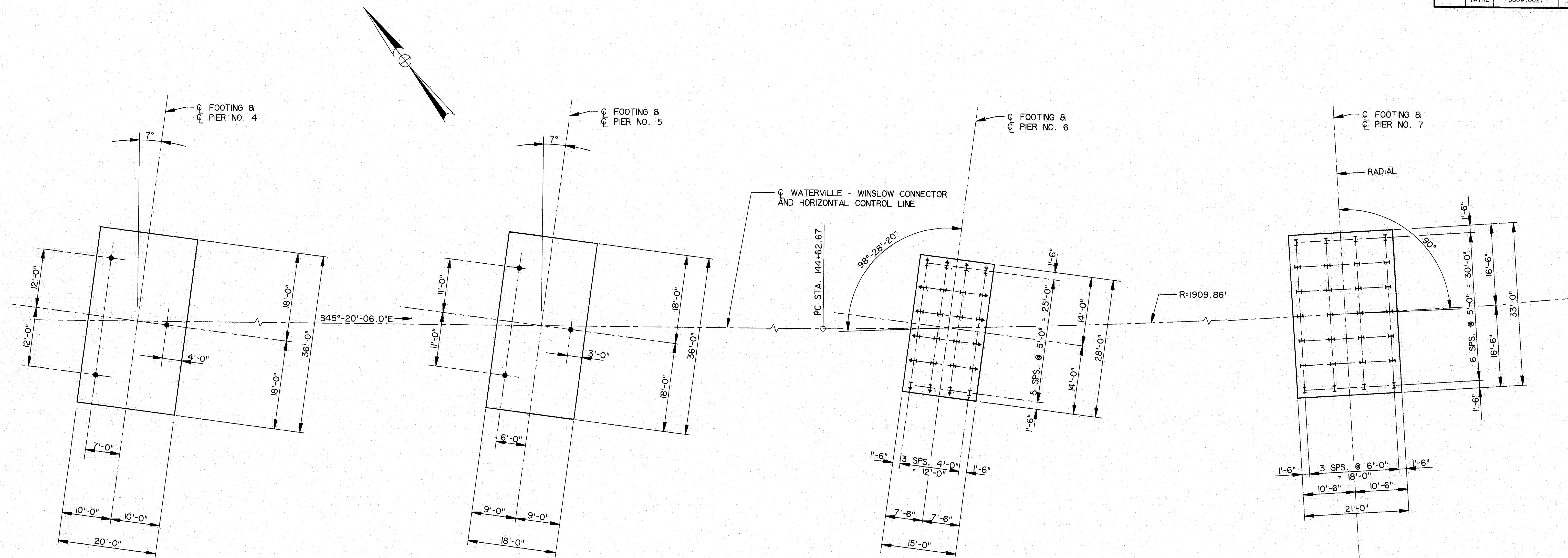
FOUNDATION PLAN - I

SHEET B20 OF **B86** AUGUSTA, MAINE

					BY	DATE
				DESIGNED:	DWR	9/94
				DRAWN:	RJT	9/94
				CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

NO.	REVISION	BY	DATE	CHECKED:	SM	97/94
				IN CHARGE OF	CJM	

F.H.W.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	30	103



FOUNDATION PLAN

NOTES

1. FOR PILE NOTES SEE SHEETS B3 AND B20.
2. ● - INDICATES 2 1/8" (NX) CONCRETE SEAL CORE.

AS BUILT
Comm 12/14/96

115-216

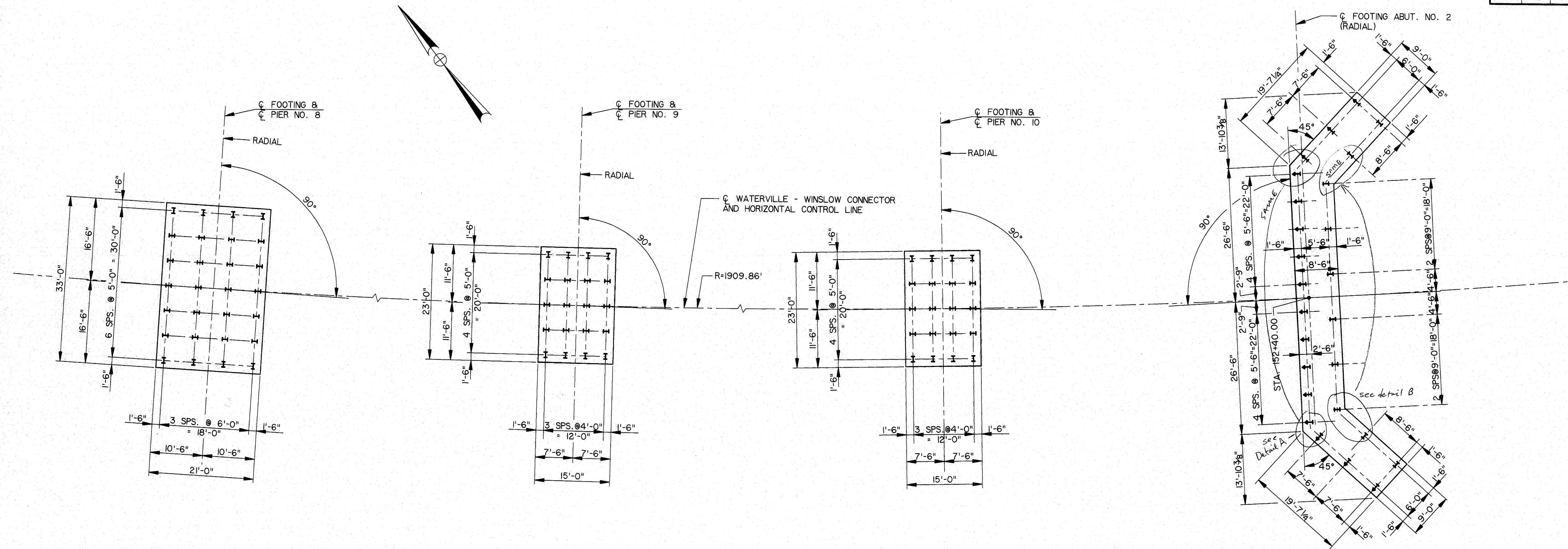
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

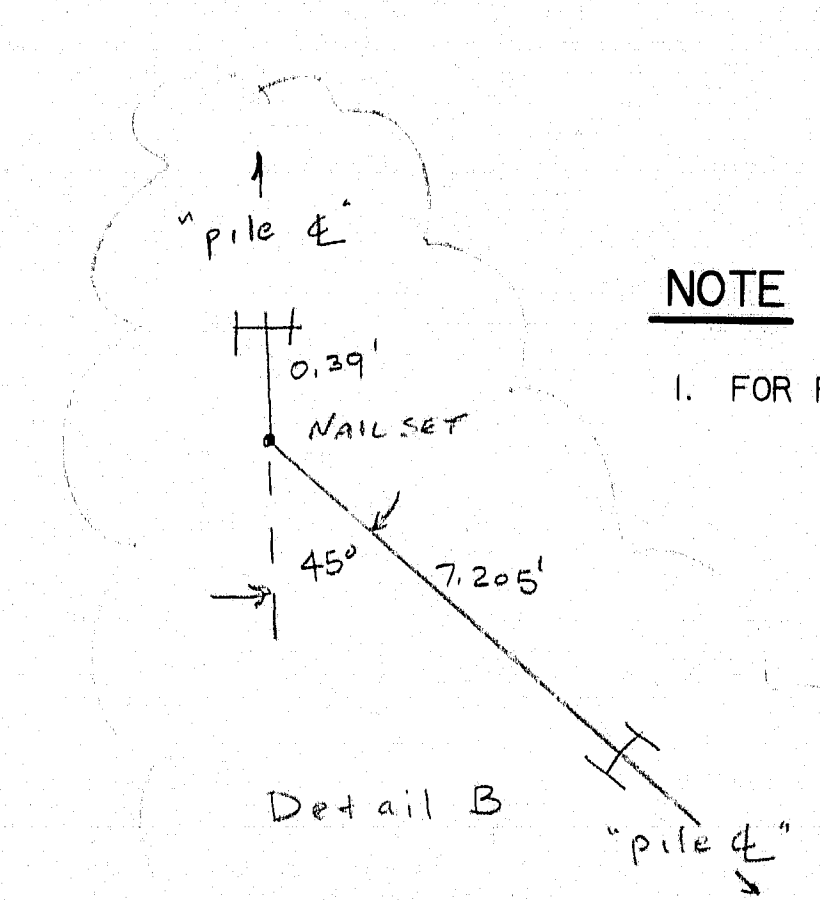
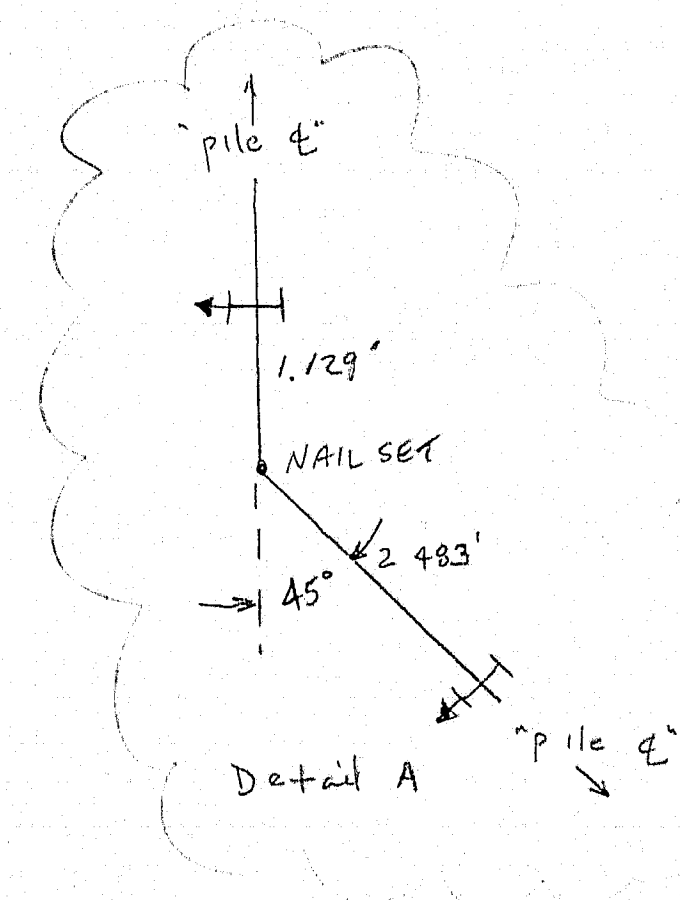
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
FOUNDATION PLAN - II
SHEET B21 OF B86 AUGUSTA, MAINE

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F.H.W.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	00091002	31	103



FOUNDATION PLAN
1" = 10'-0"



NOTE

1. FOR PILE NOTES SEE SHEETS B3 AND B20.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

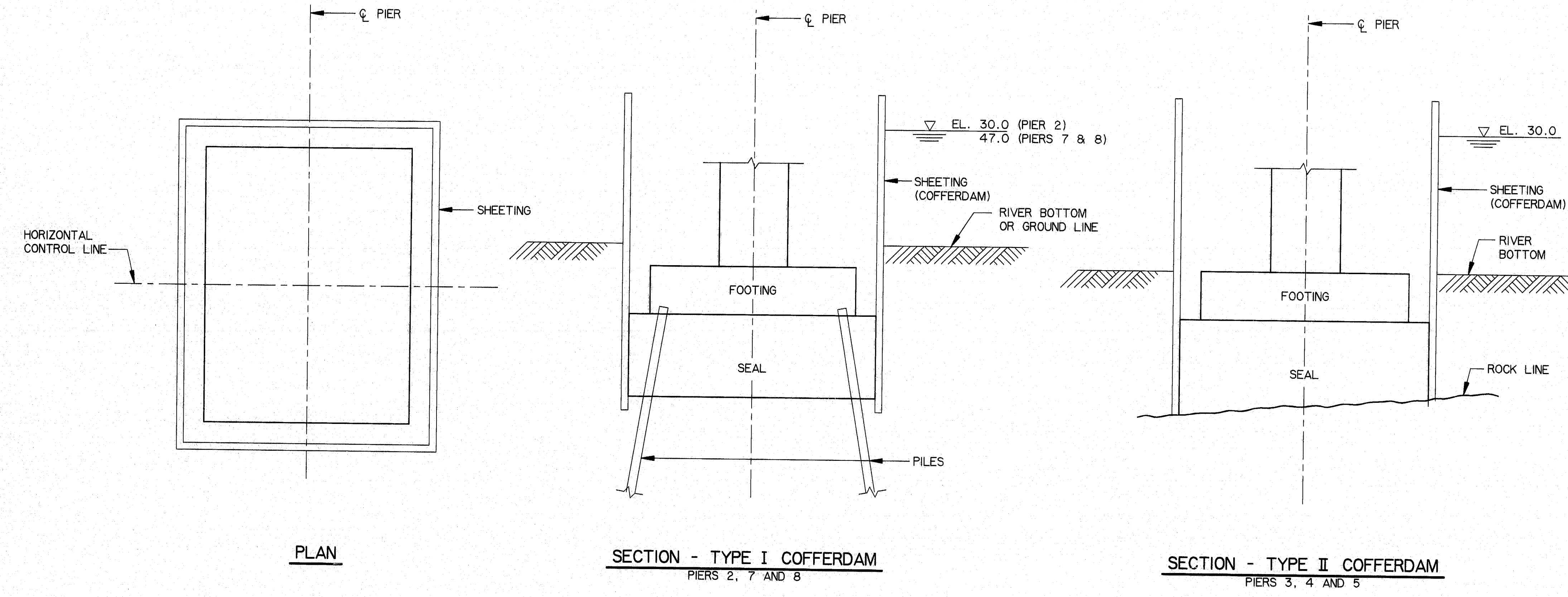
HNTB
ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
FOUNDATION PLAN - III
SHEET B22 OF B86 AUGUSTA, MAINE

REV
115-217

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FED. H.A. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	32	103



SCHEMATIC COFFERDAMS

COFFERDAM NOTES:

1. IN THE EVENT THAT THE WATER RISES OUTSIDE THE COFFERDAM ABOVE THE ELEVATION 30.0 (EL. 47.0 AT PIERS 7 & 8), THE COFFERDAM SHALL BE FLOODED, AS DIRECTED BY THE ENGINEER.
 2. THE CONTRACTOR SHALL CONSIDER THE POSSIBILITY THAT THE BOTTOM OF EXCAVATION MAY BE LOWERED BY A MAXIMUM OF TWO FEET IN HIS SHEETING DESIGN.
 3. SKETCHES SHOWN ON THIS SHEET INDICATE THE TYPE OF COFFERDAMS WHICH WILL BE REQUIRED FOR THE CONSTRUCTION OF THE PIERS.
 4. FOR CONCRETE SEAL DIMENSIONS SEE FOUNDATION PLAN.
 5. SEALS FOUNDED ON ROCK SHALL BE CORED FULL DEPTH, AT THREE LOCATIONS AS INDICATED ON FOUNDATION PLANS. THE CORES SHALL BE INSPECTED BY THE ENGINEER FOR VOIDS OR OTHER DEFECTS. THE CONTRACTOR SHALL CORRECT ANY AND ALL DEFECTS. METHOD(S) FOR CORRECTING DEFECTS SHALL BE APPROVED BY THE ENGINEER. FOR EACH CORE THAT REVEALS VOIDS OR OTHER DEFECTS TWO ADDITIONAL CORES SHALL BE TAKEN. ONE ADDITIONAL CORE SHALL BE MADE IN APPROXIMATELY THE SAME LOCATION AS THE ORIGINAL CORE. THE OTHER ADDITIONAL CORE SHALL BE LOCATED BY THE ENGINEER. ALL COST OF CORING SHALL BE INCLUDED IN LUMP SUM PRICE BID FOR COFFERDAMS.
 6. PAY ITEMS:
 - 511.071 - COFFERDAM, PIER 2
 - 511.072 - COFFERDAM, PIER 3
 - 511.073 - COFFERDAM, PIER 4
 - 511.074 - COFFERDAM, PIER 5
 - 511.075 - COFFERDAM, PIER 7
 - 511.076 - COFFERDAM, PIER 8
- SHALL BE FULL COMPENSATION FOR PLACEMENT AND REMOVAL OF CONSTRUCTION MATERIALS, EXCAVATION OF MATERIALS WITHIN THE COFFERDAMS, AND ALL LABOR AND EQUIPMENT TO DO THE NECESSARY WORK.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	



115-218

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

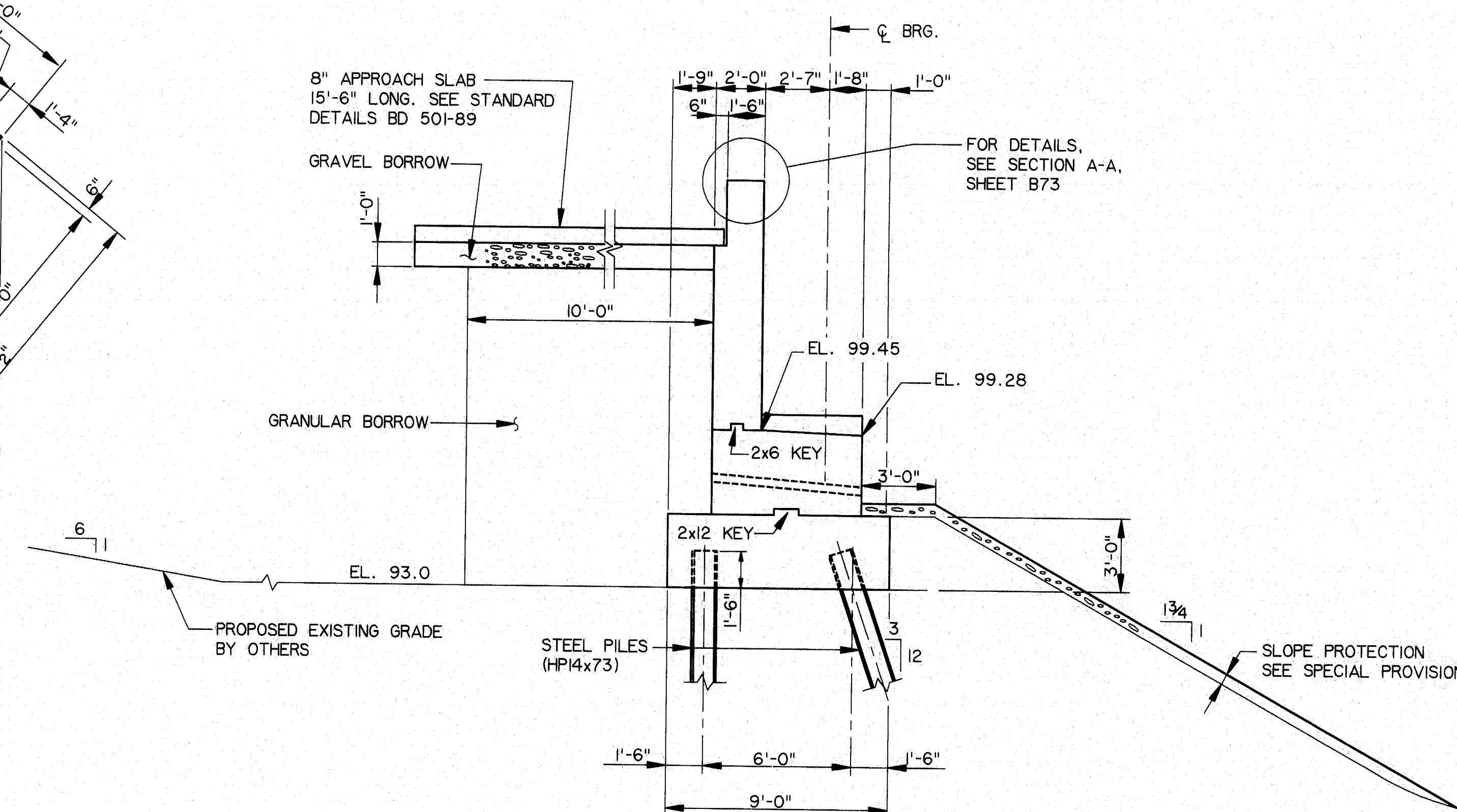
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER
OVER
KENNEBEC RIVER

COFFERDAM DETAILS

SHEET B23 OF B86 AUGUSTA, MAINE

AS BUILT
6/20/96

DIA3: WWWGRAPH.STR.DVCARTER STEEL CDS206.FGB: DWG: CDS206



SECTION A-A



1. REINFORCING STEEL SHALL HAVE 2 INCHES COVER UNLESS OTHERWISE INDICATED.
2. COVER EXPANSION JOINTS ON THE BACK WITH TWO LAYERS OF HEAVY ROOFING FELT, SEE STD. DETAILS BD 501-89.
3. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO THE FOLLOWING AREAS:
CONCRETE BARRIERS.
TOP OF ABUTMENT BACKWALLS AND ONE (1) FOOT BELOW TOP OF BACKWALLS ON THE BACK SIDE.
PAYMENT FOR PROTECTIVE COATING FOR CONCRETE SURFACES WILL BE INCIDENTAL TO THE CONCRETE ITEMS.
4. PLACE 4 INCH DIAMETER DRAINS IN BREASTWALL AND WINGWALLS AT 20 FEET MAXIMUM SPACING.
EXACT LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
5. MAXIMUM PILE LOAD = 77 TONS
6. BLOCKOUT FOR TELEPHONE DUCTS TO BE FILLED WITH BRICK MASONRY.

115-219

ABUTMENT 1 (CONCRETE)

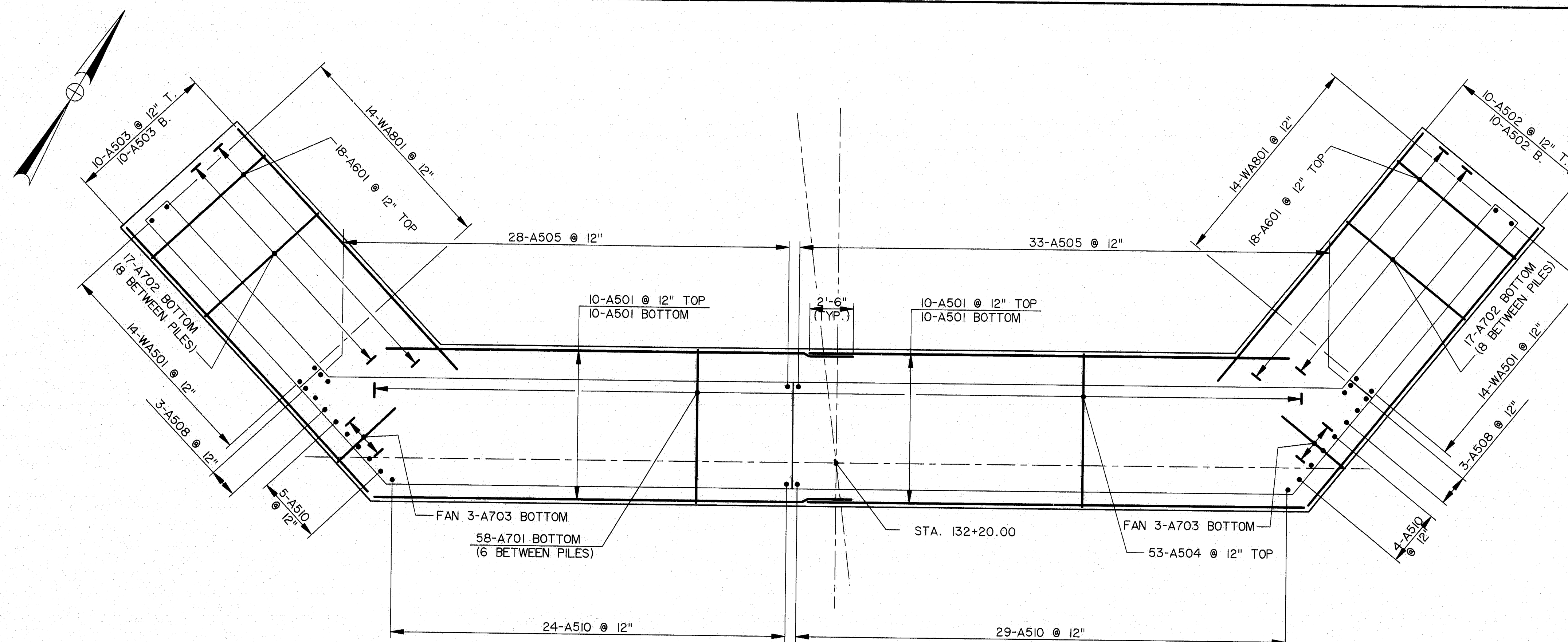
SHEET B24 OF B86 AUGUSTA, MAINE

					BY	DATE
					DESIGNED: SM	9/94
					DRAWN: RJT	9/94
					CHECKED: DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CUM		

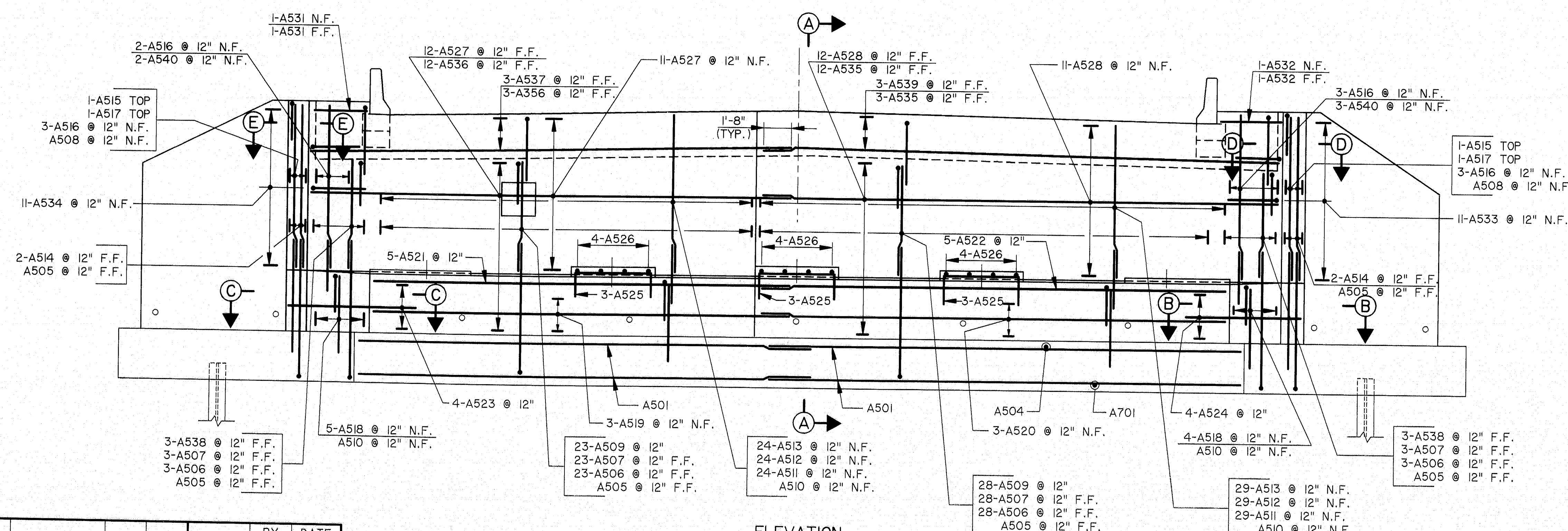


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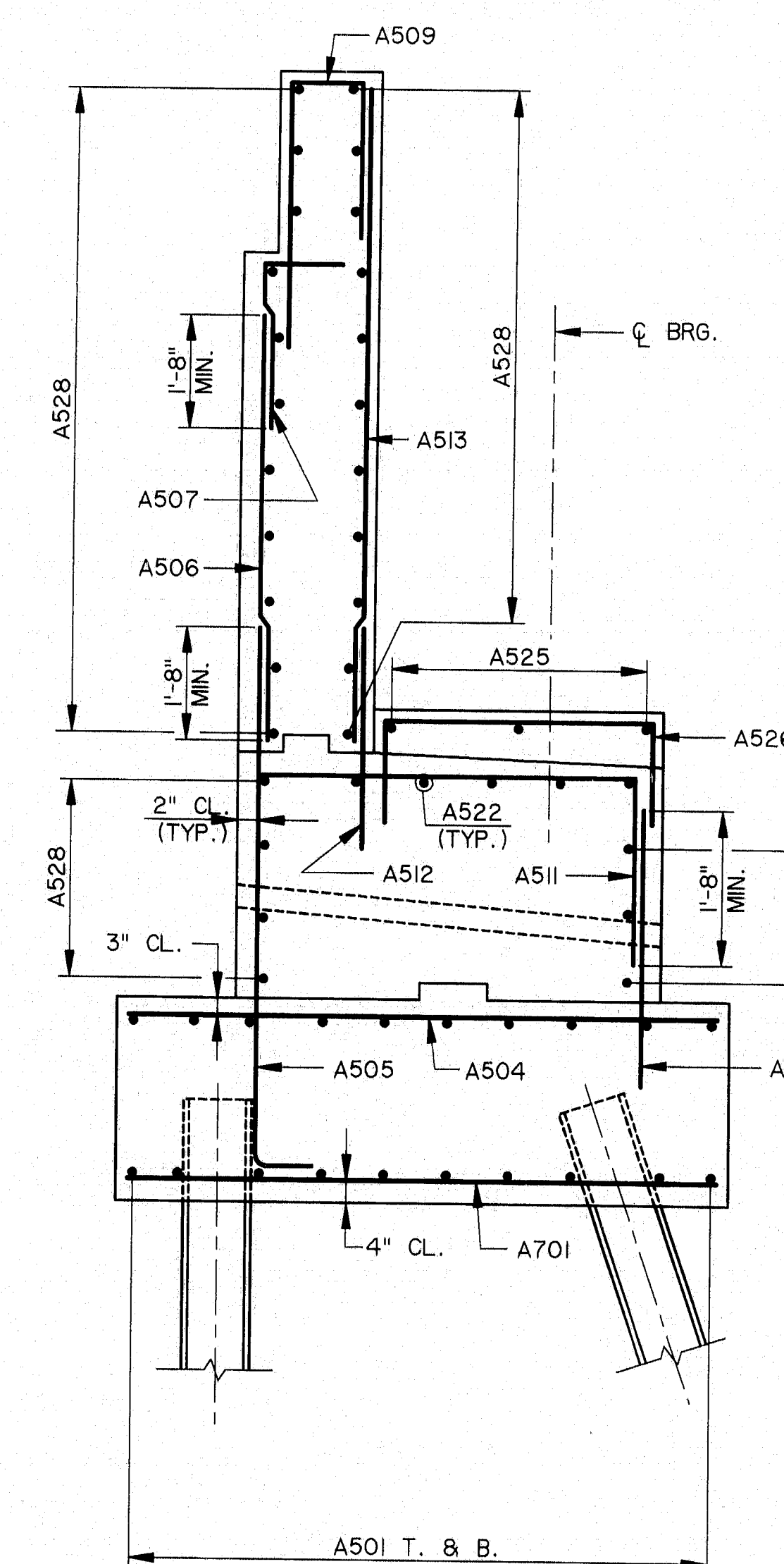
F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	34	103



PLAN - ABUTMENT NO. 1



ELEVATION



SECTION A-A

NOTES

- FOR END BARRIER BRACKET REINFORCEMENT, SEE SHEET B79.
- FOR SECTIONS B-B, C-C, D-D, E-E, SEE SHEET B28.

AS BUILT
CJM
12/1/96
115-220

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: AD	9/94	
		DRAWN: LS	9/94	
		CHECKED: RJR	9/94	
		IN CHARGE OF: CJM		

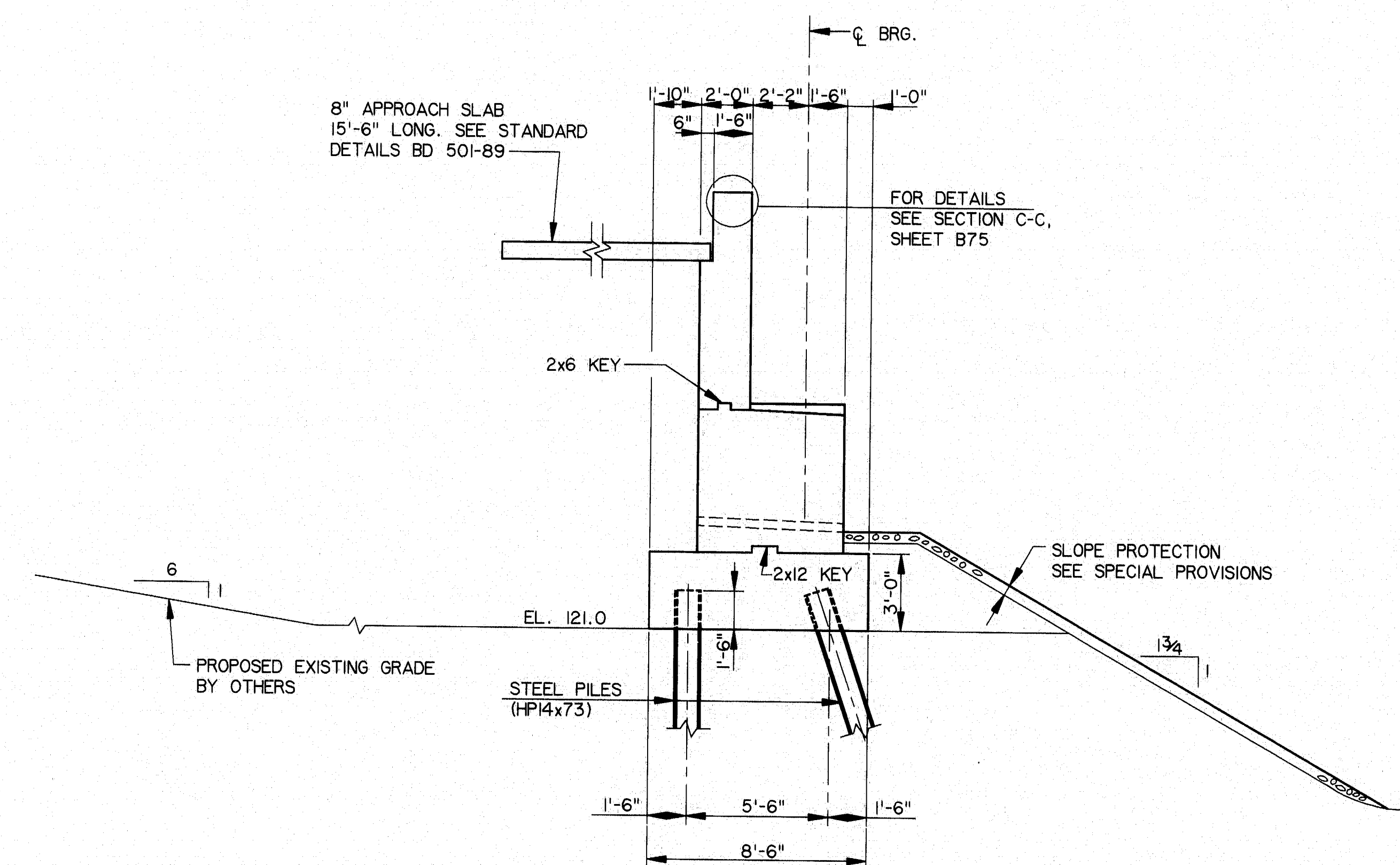
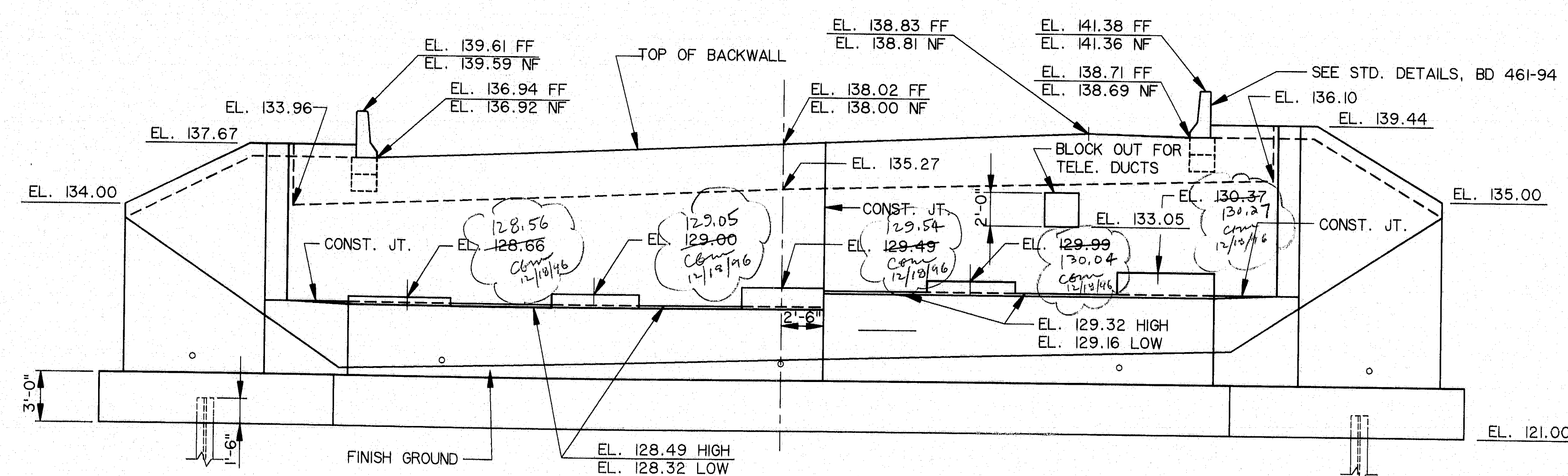
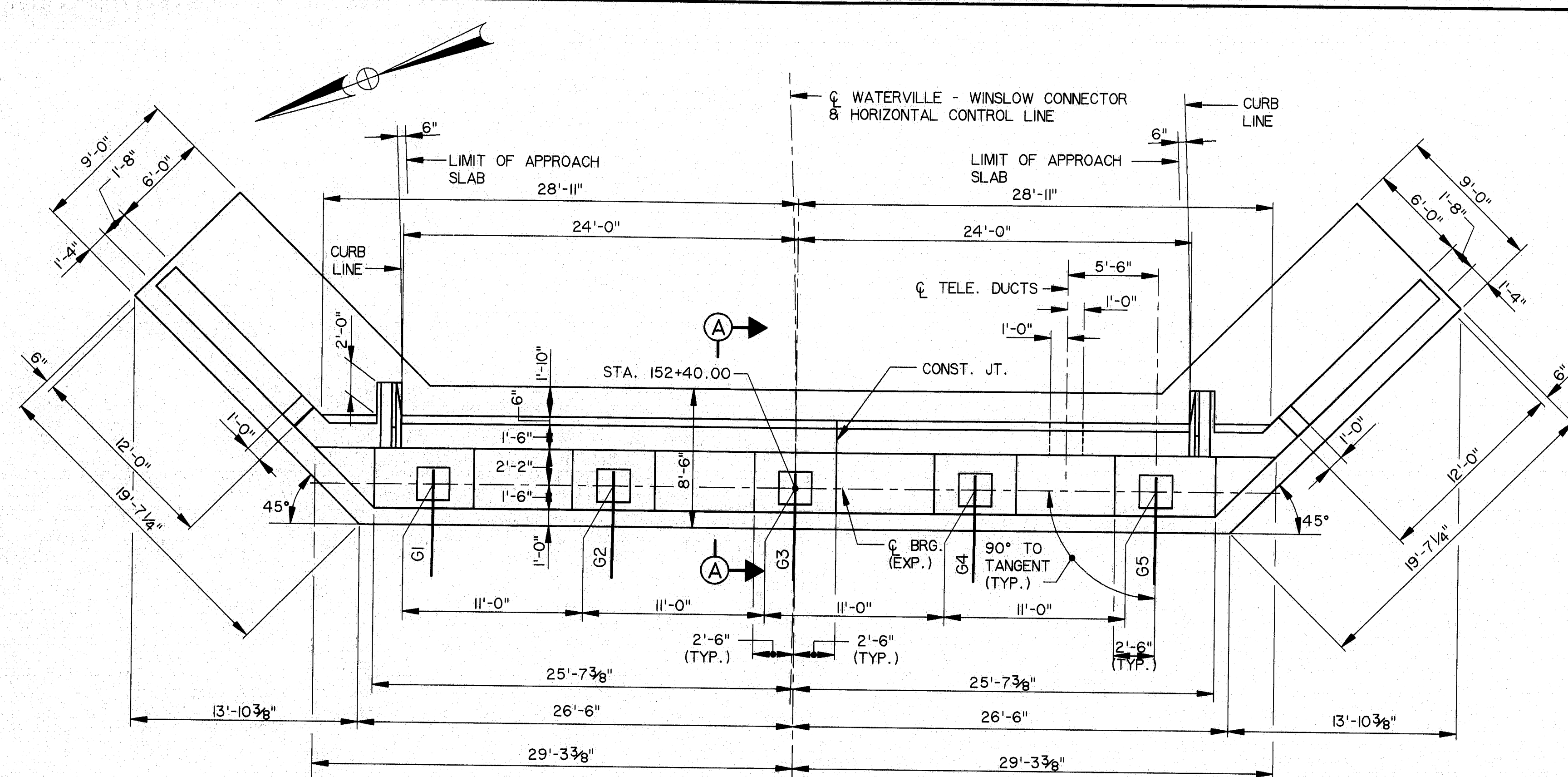
HNTB
ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

ABUTMENT I (RE-STEEL)

SHEET B25 OF B86 AUGUSTA, MAINE

					BY	DATE
				DESIGNED:	SM	9/94
				DRAWN:	RJT	9/94
				CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	



SECTION A-A
(FOR ADDITIONAL DETAILS, SEE ABUTMENT 1)

NOTES

1. MAXIMUM PILE LOAD = 68 TONS
2. FOR ADDITIONAL NOTES SEE ABUTMENT 1.

115-221

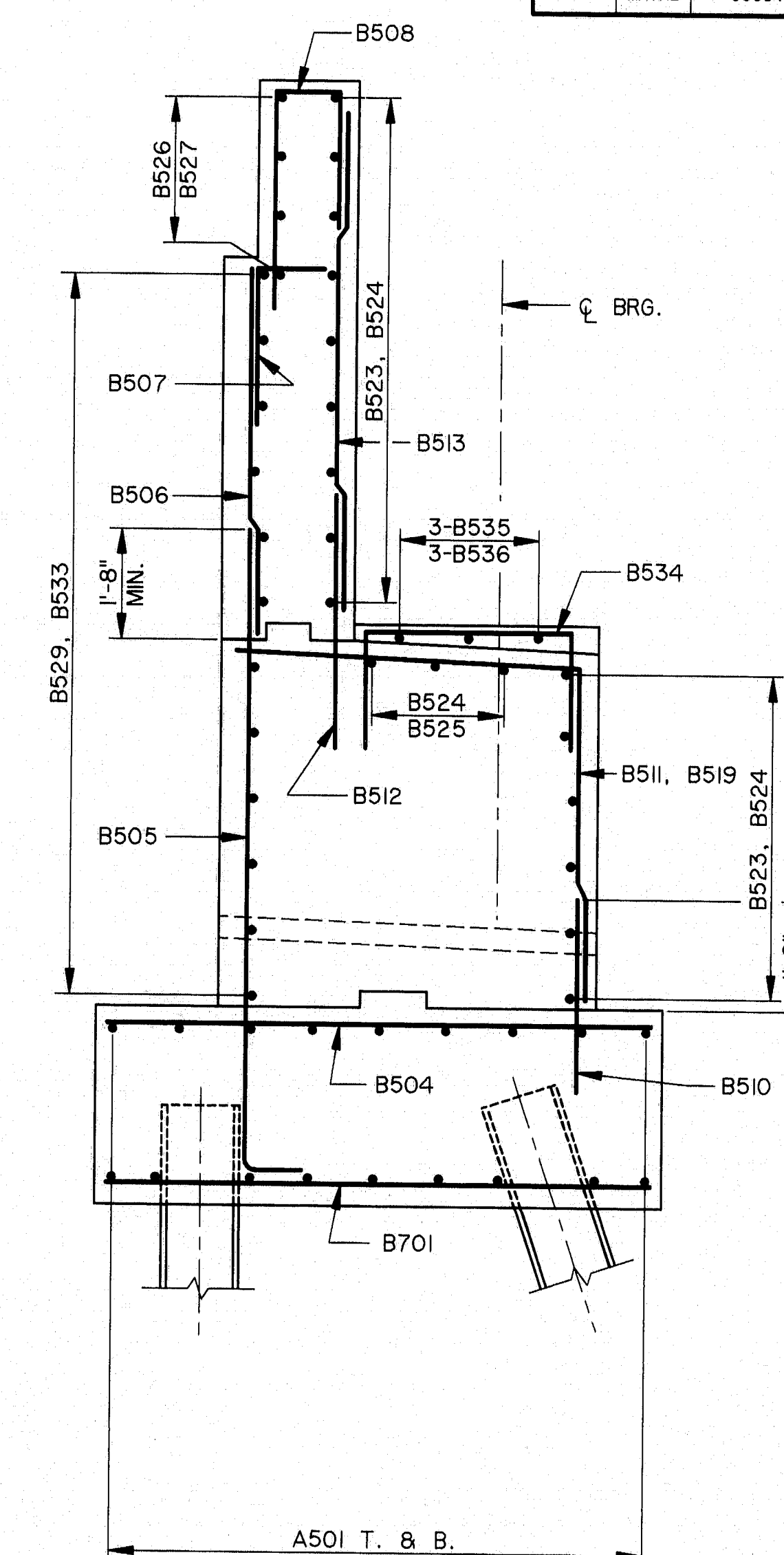
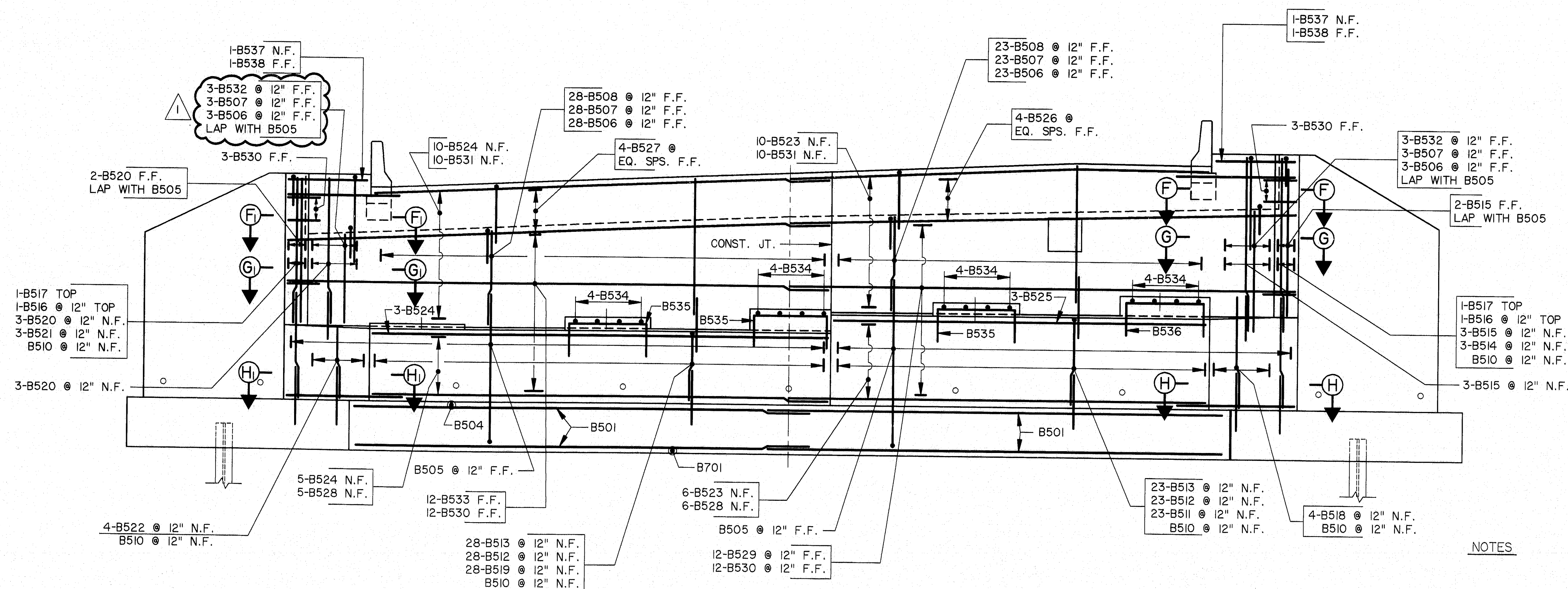
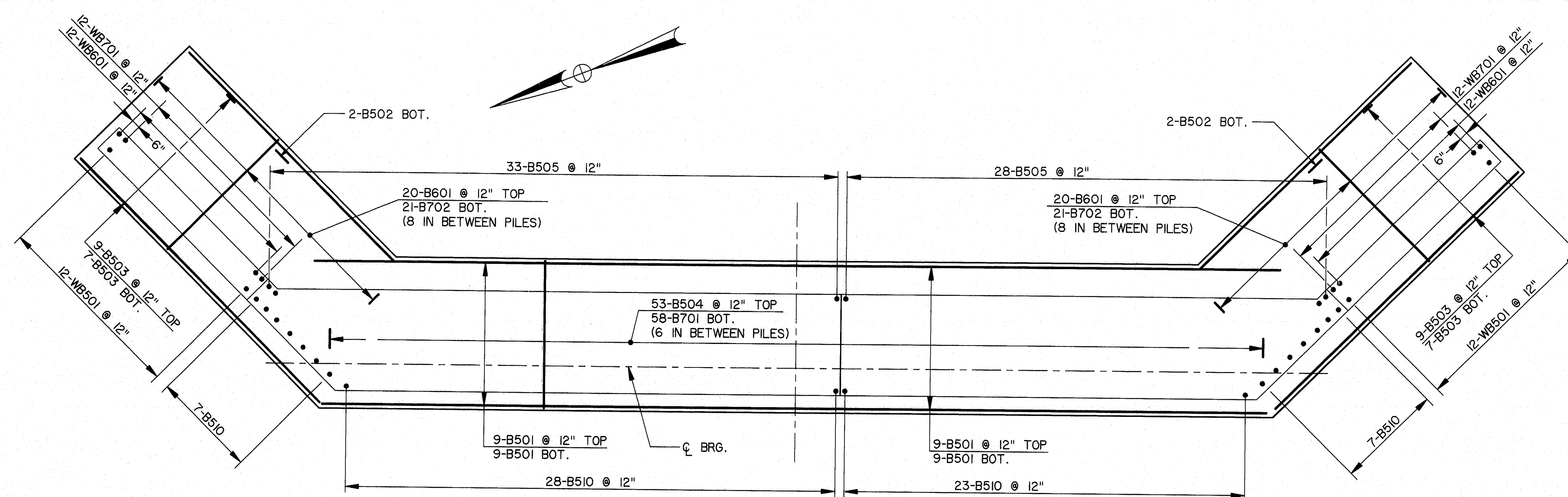
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERTVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

ABUTMENT 2 (CONCRETE)


SHEET B26 OF B86 AUGUSTA, MAINE





NOTES

1. FOR END POST BRACKET REINFORCEMENT,
SEE SHEET B79.
2. FOR SECTIONS F-F, G-G, H-H, $F_1 - F_1$, $G_1 - G_1$,
 $H_1 - H_1$, SEE SHEET B28.

					BY	DATE
				DESIGNED:	RJR	9/94
				DRAWN:	LS	9/94
	BARS	DWR	9/95	CHECKED:	JFW	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF		CJM

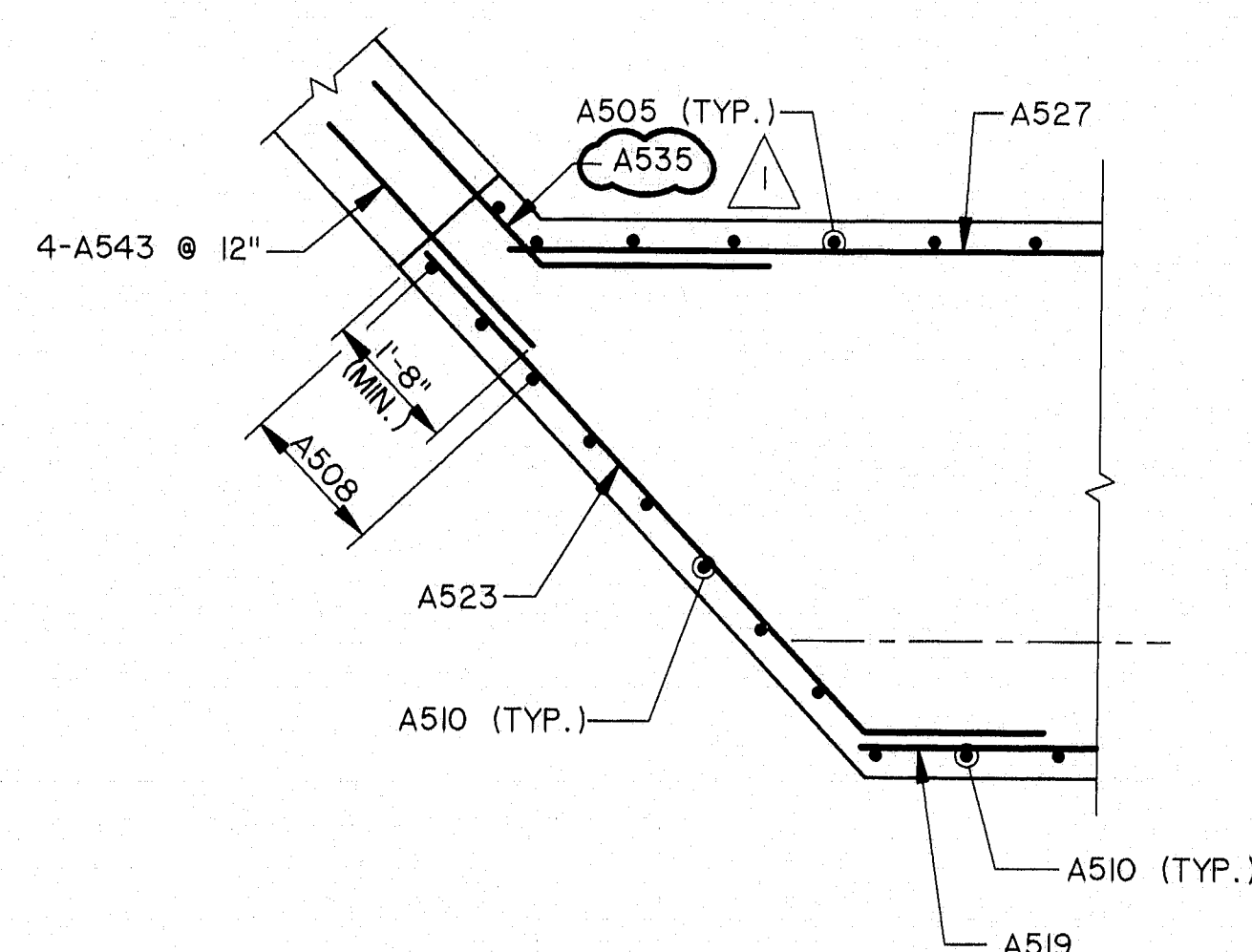
HNTB

<i>115-222</i>	
STEEL ALTERATIVE	
STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
WATERVILLE - WINSLOW PROJECT	
DONALD V. CARTER BRIDGE	
OVER	
KENNEBEC RIVER	
ABUTMENT 2 (RE-STEEL)	
SHEET B27 OF B86	AUGUSTA, MAINE

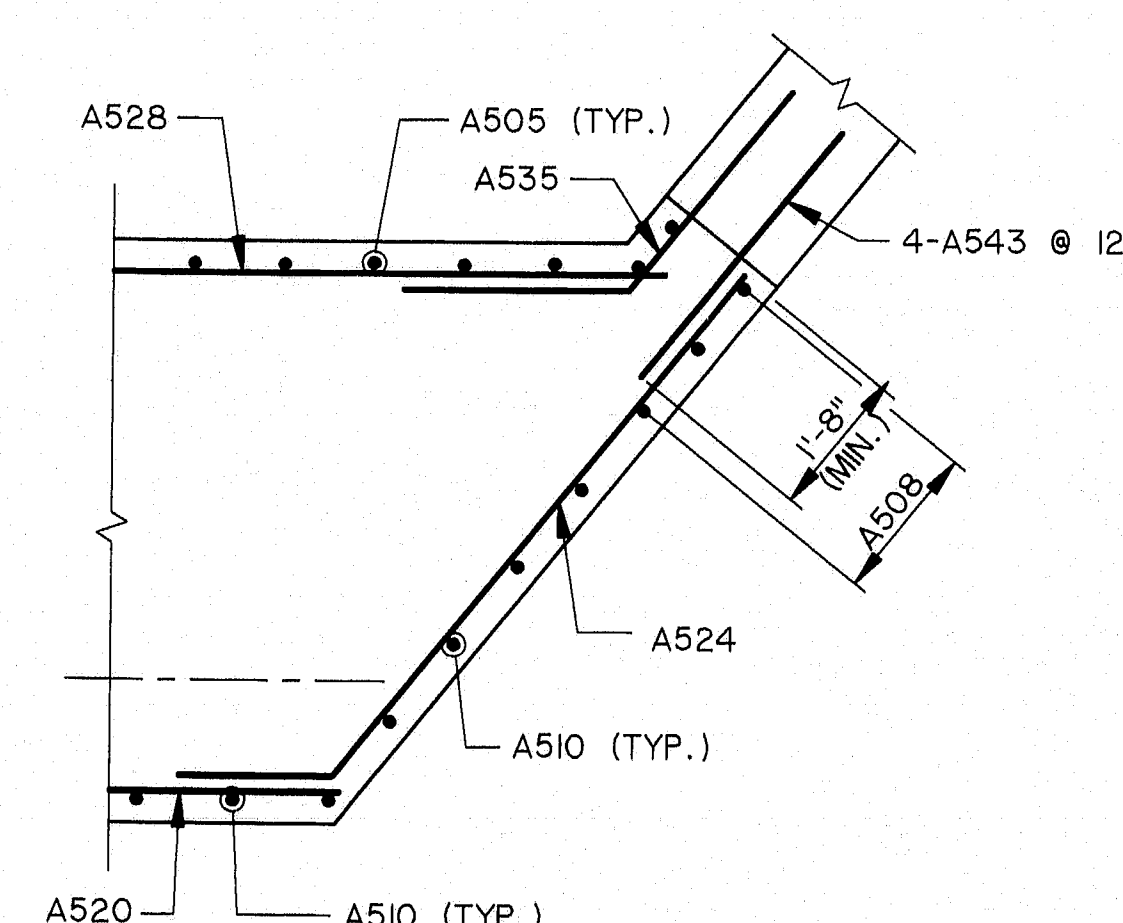
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOT SHEET
1	MAINE	0009(002)	36	10

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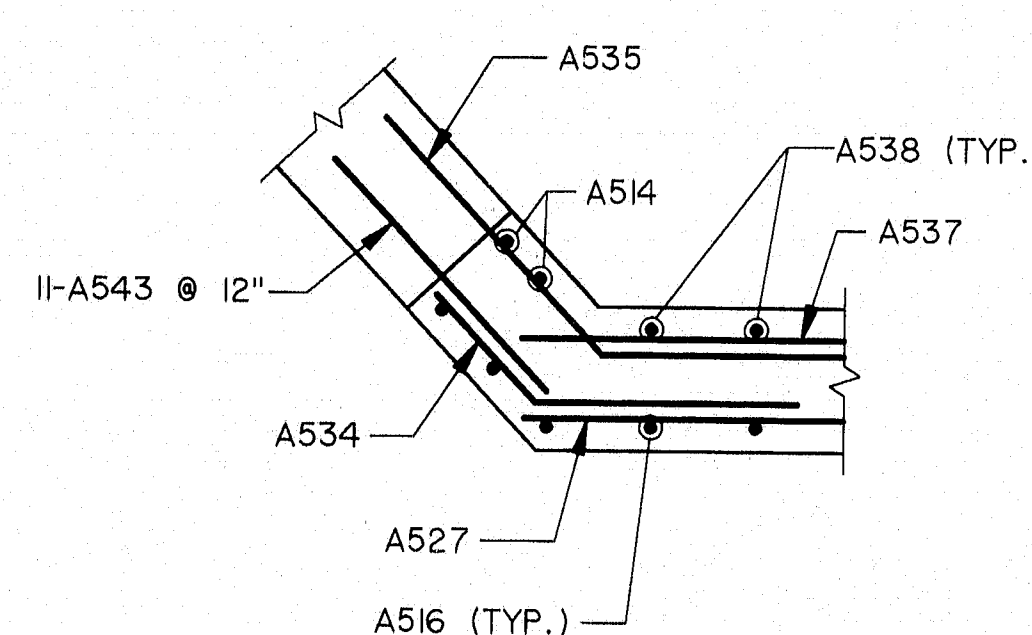
F.B.I.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	00091002	37	103



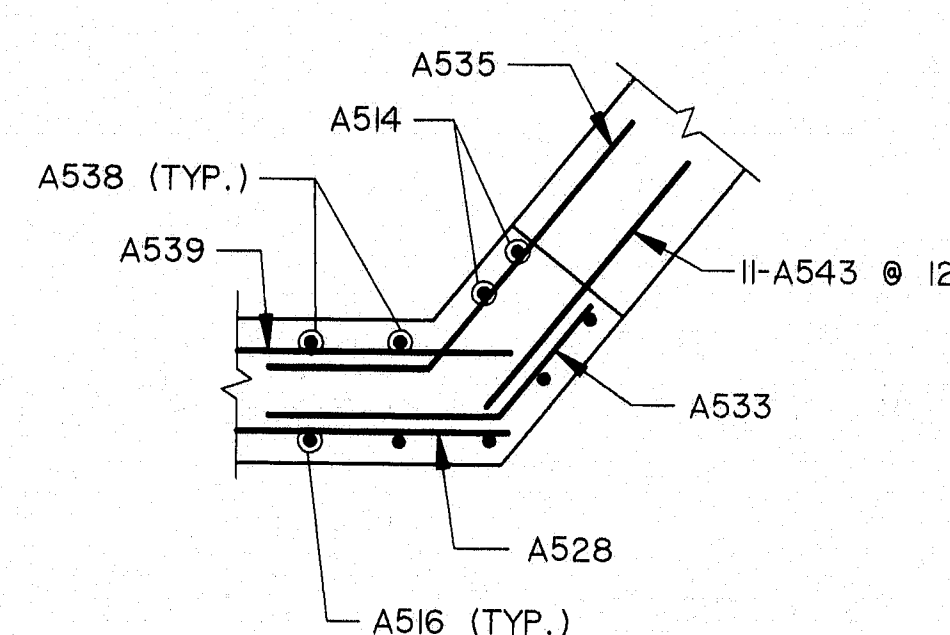
SECTION C-C



SECTION B-B

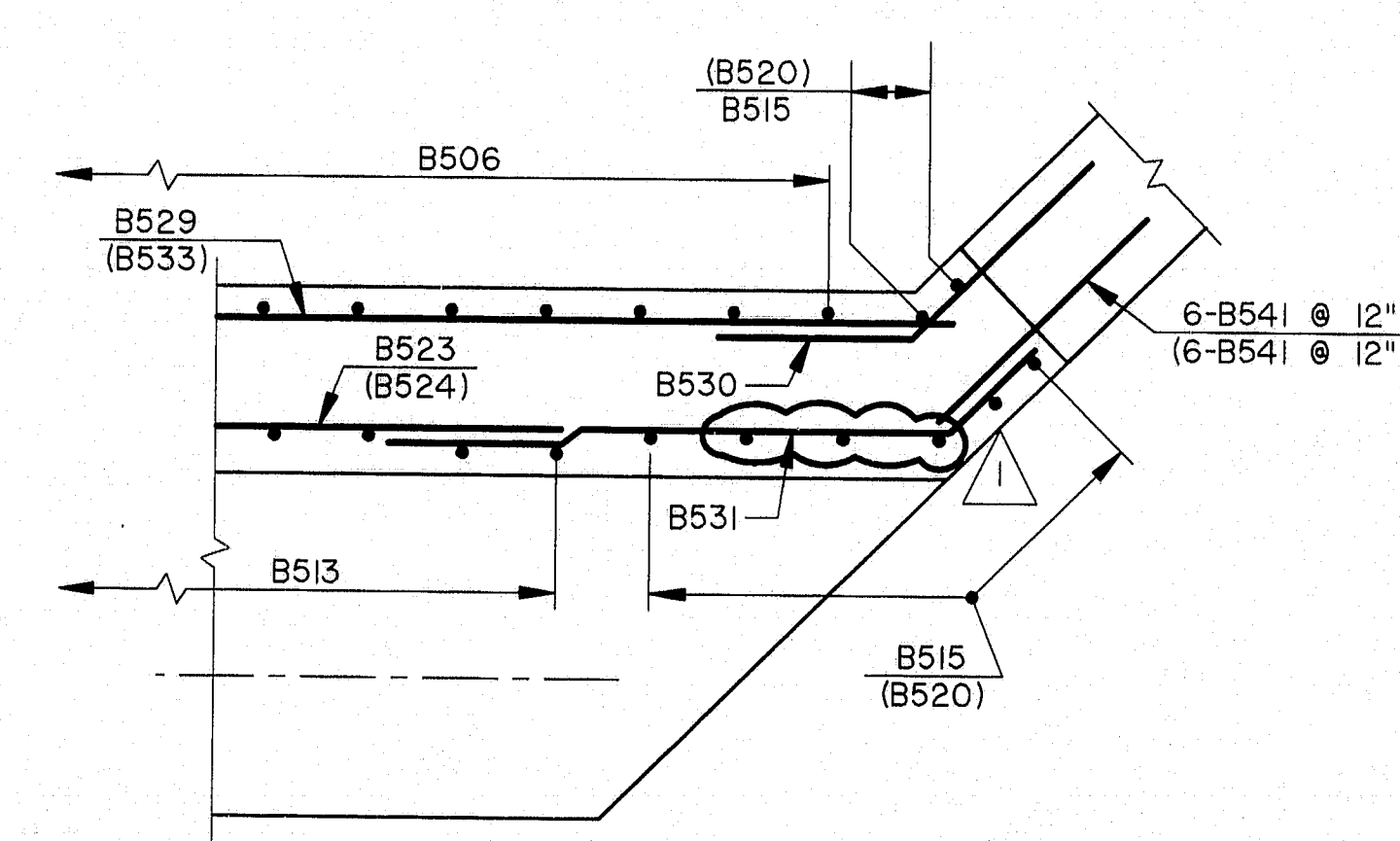


SECTION E-E

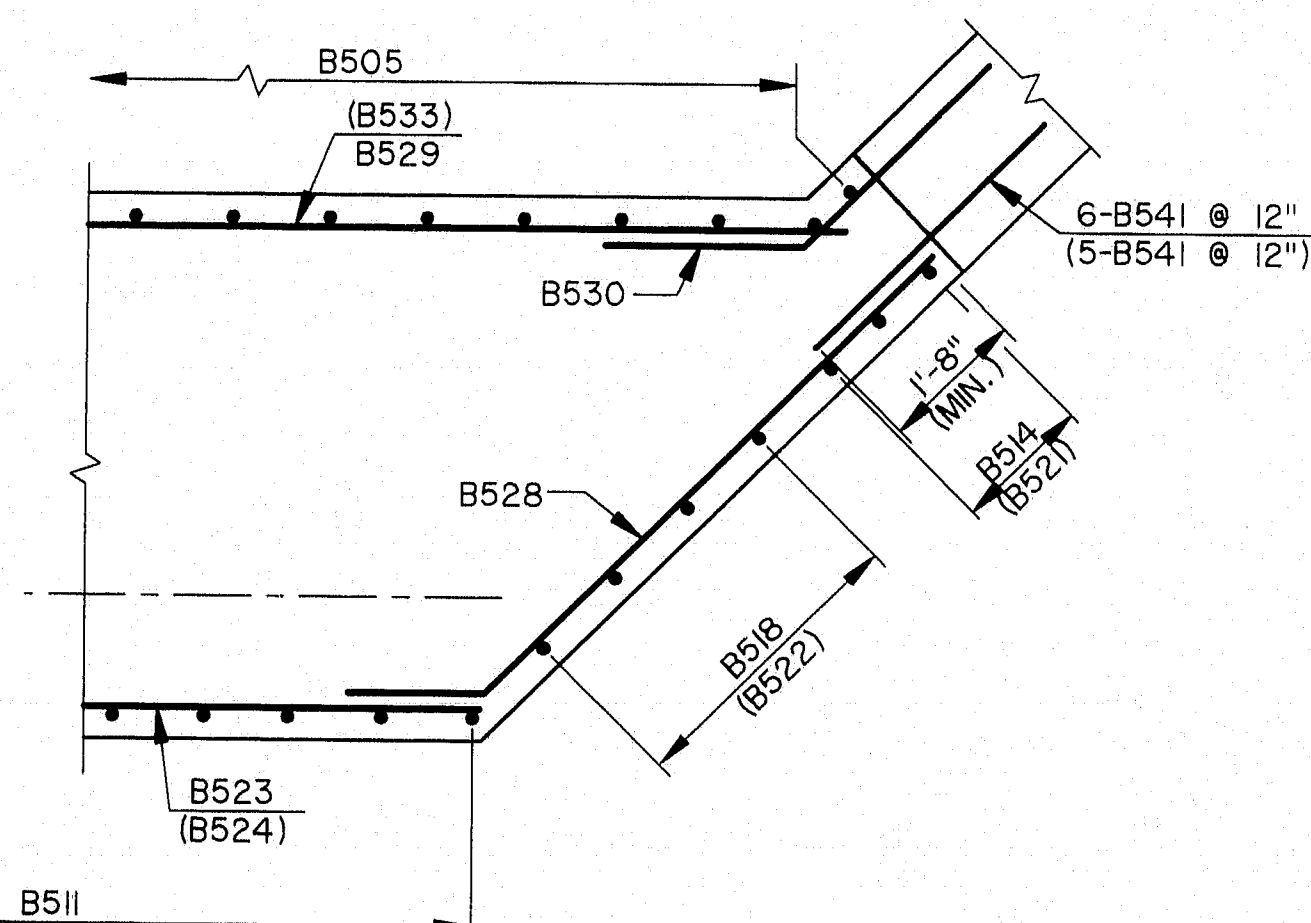


SECTION D-D

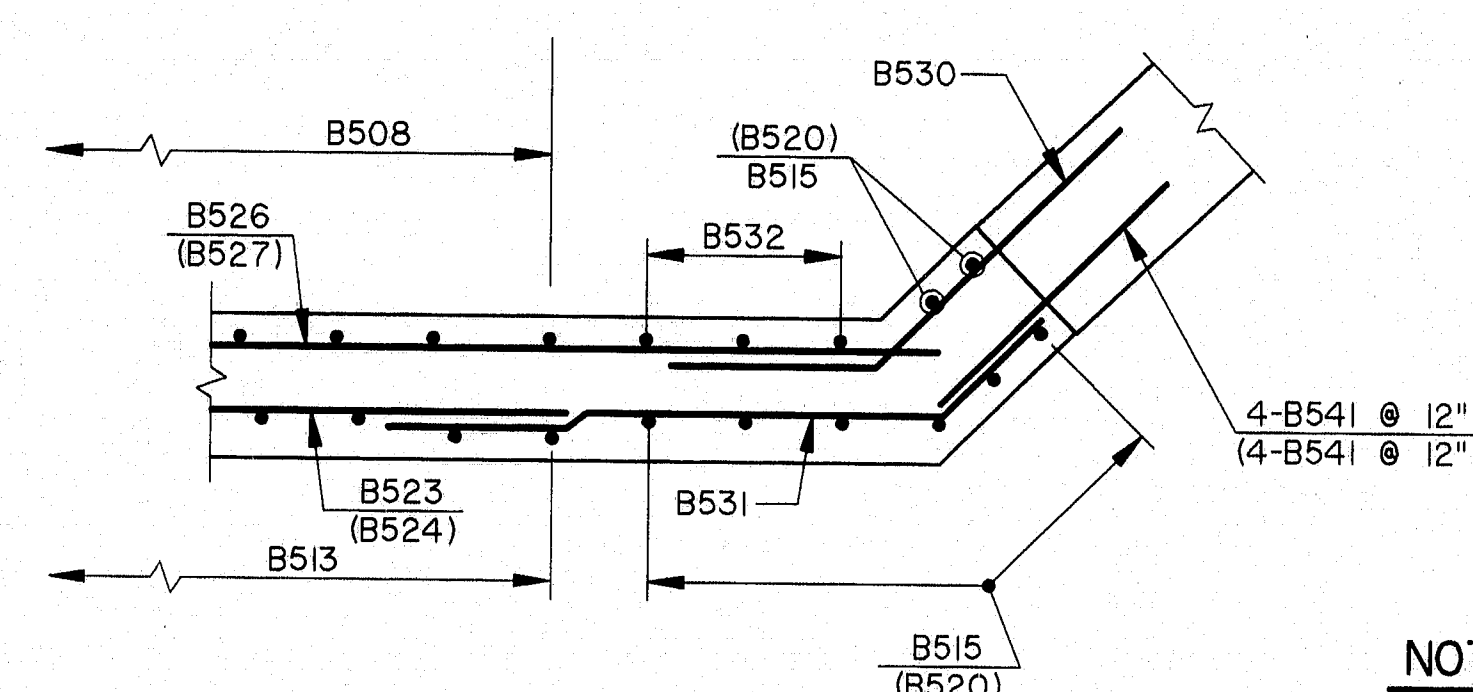
PLAN - ABUTMENT NO. 1



SECTION G-G
SECTION G₁ - G₁ OPP. HAND



SECTION H-H
SECTION H₁ - H₁ OPP. HAND



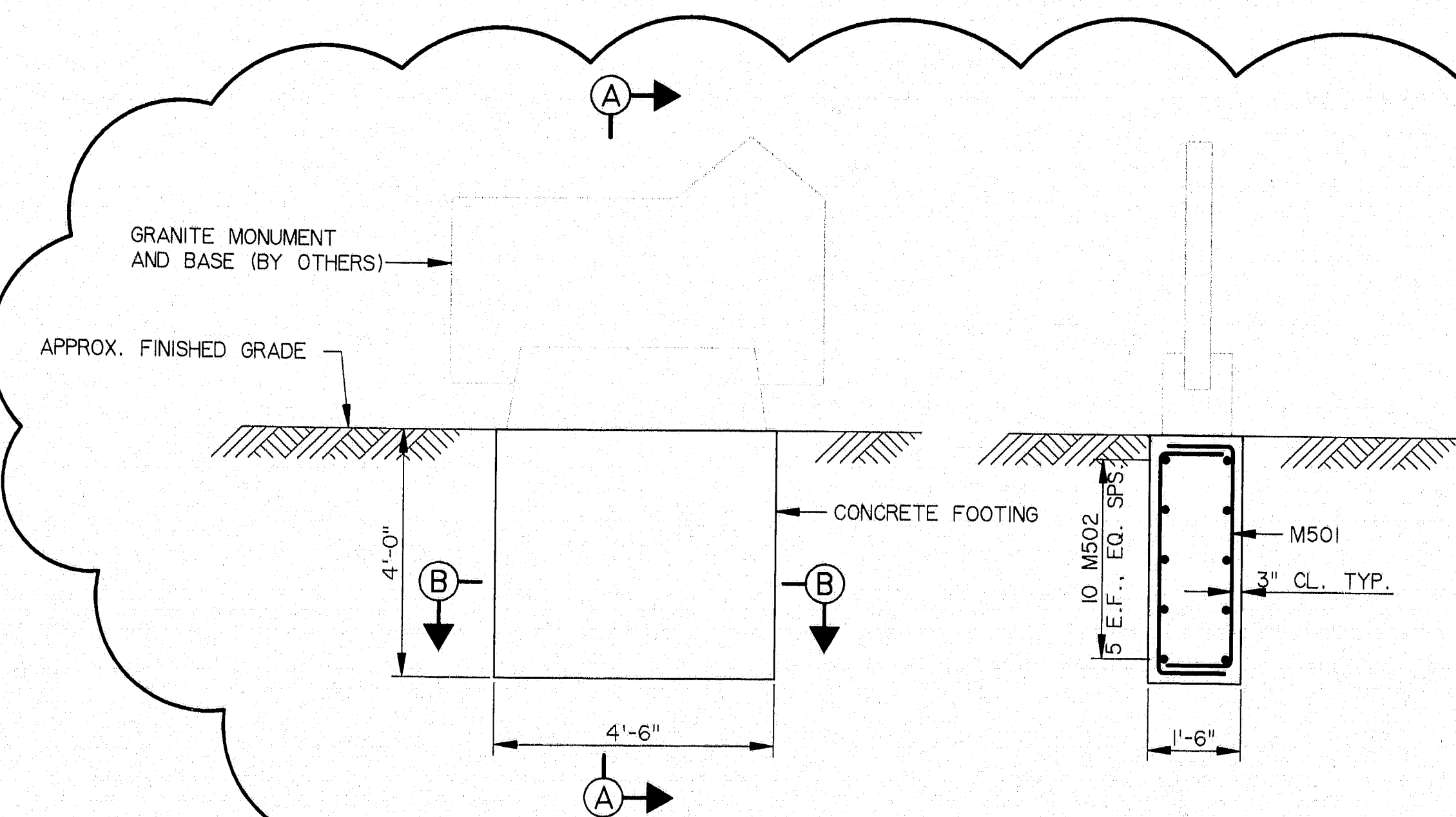
SECTION F-F
SECTION F₁ - F₁ OPP. HAND

NOTE
REBAR MARK NUMBERS SHOWN IN BRACKETS
APPLY TO OPPOSITE HAND SECTIONS.

PLAN - ABUTMENT NO. 2

REINFORCING SCHEDULE - MEMORIAL						
MARK	SIZE	NO.	LENGTH	TYPE	A	B
M501	5	10	5'-6"	101	3'-6"	1'-0"
M502	5	10	6'-0"	101	4'-0"	1'-0"

- NOTES:
1. MONUMENT FOOTING SHALL BE FIELD LOCATED BY THE ENGINEER.
 2. UNSUITABLE MATERIALS AT THE BOTTOM OF FOOTING SHALL BE EXCAVATED AND REPLACED WITH 1' MIN. OF GRAVEL BORROW AS DIRECTED BY THE ENGINEER.
 3. SEE SHEET B80 FOR BENT BAR DETAIL.
 4. GRANITE MONUMENT AND CONNECTION TO FOOTING BY OTHERS.



ELEVATION
N.T.S.

SECTION A-A
N.T.S.

SECTION B-B
N.T.S.

DONALD V. CARTER MEMORIAL

NO.	REVISION	BY	DATE	IN CHARGE	OF
1	MEMORIAL	DWR	9/95	CHECKED: RJR	9/94
2	REVISION	BY	DATE	IN CHARGE	OF

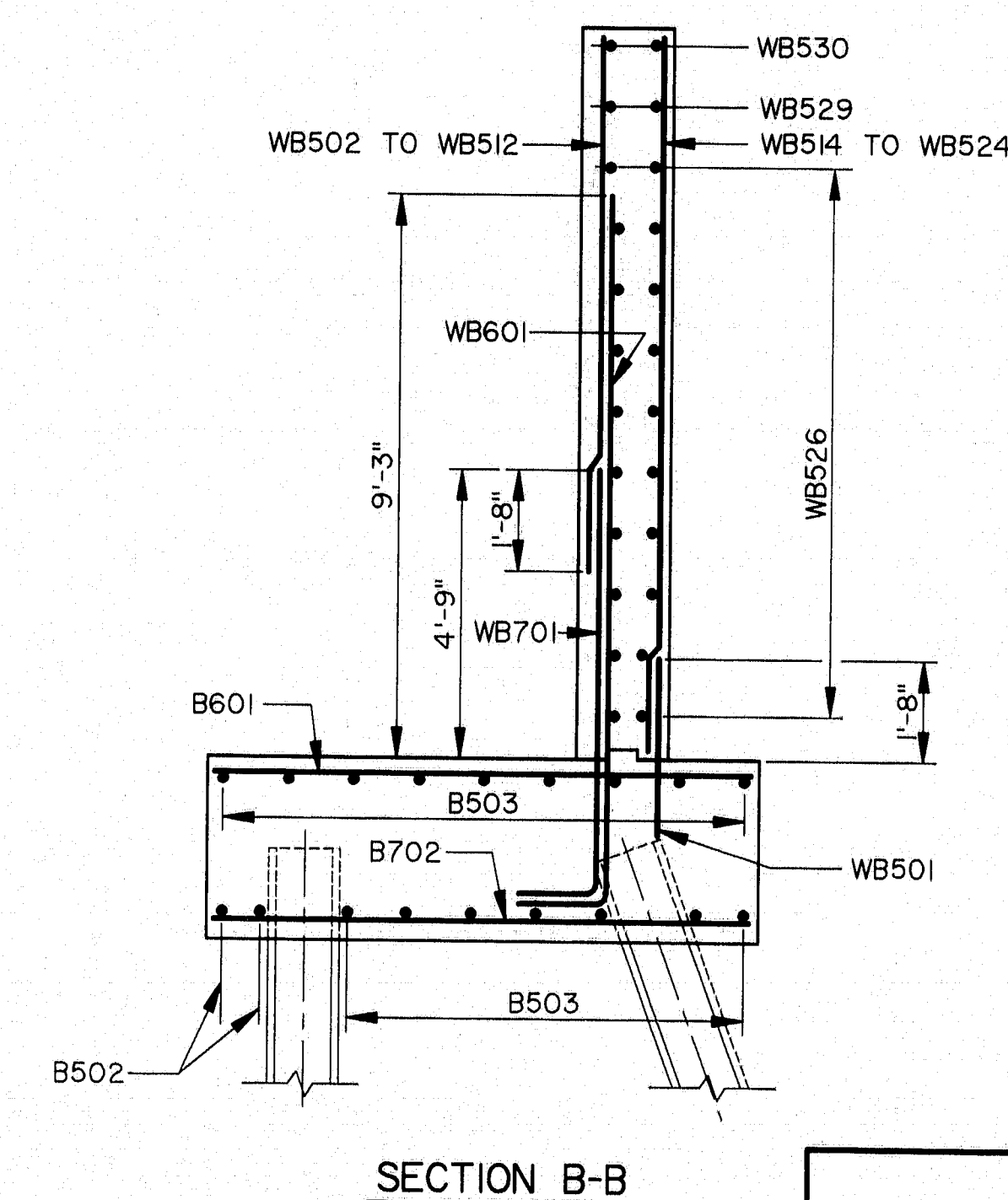
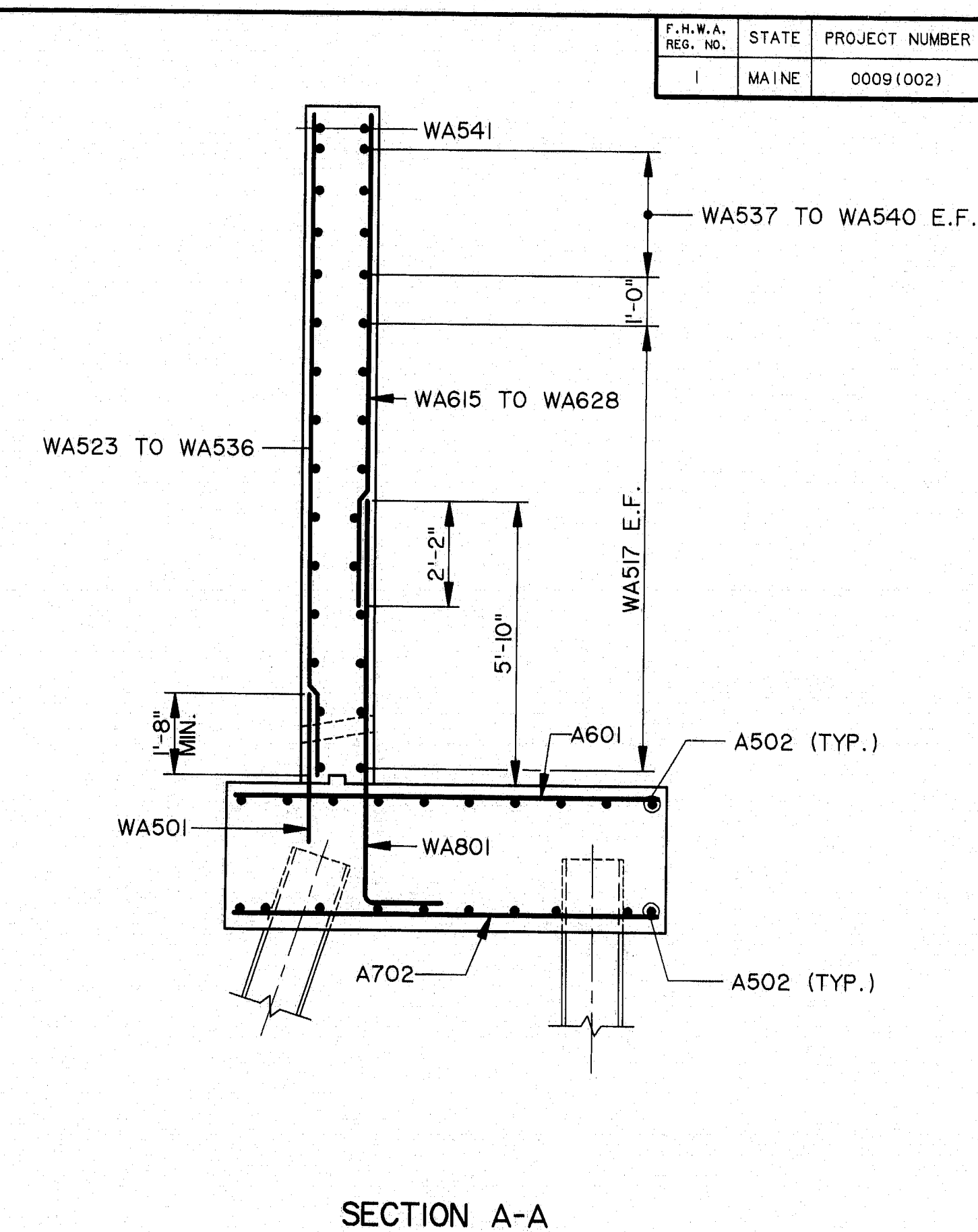
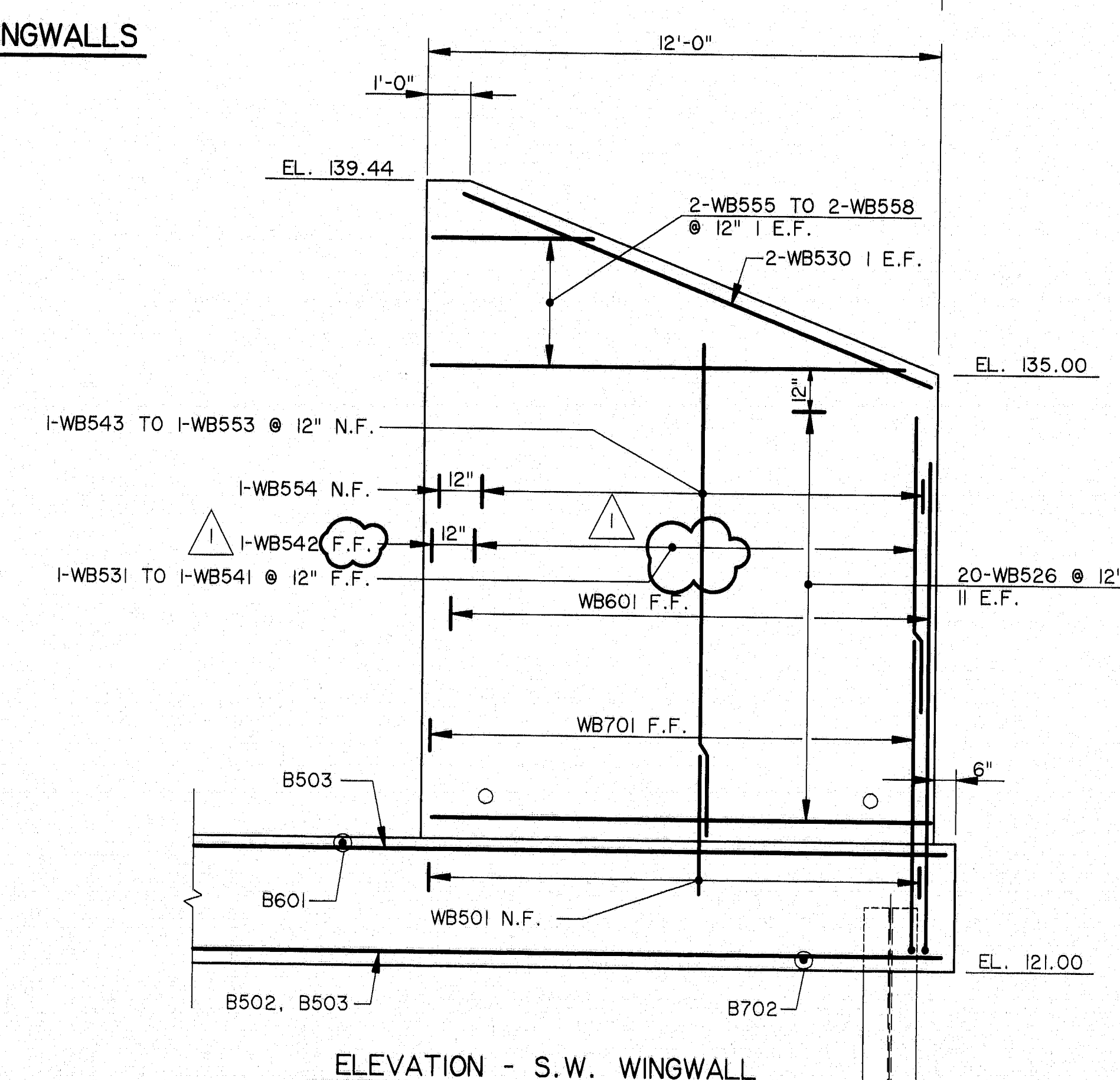
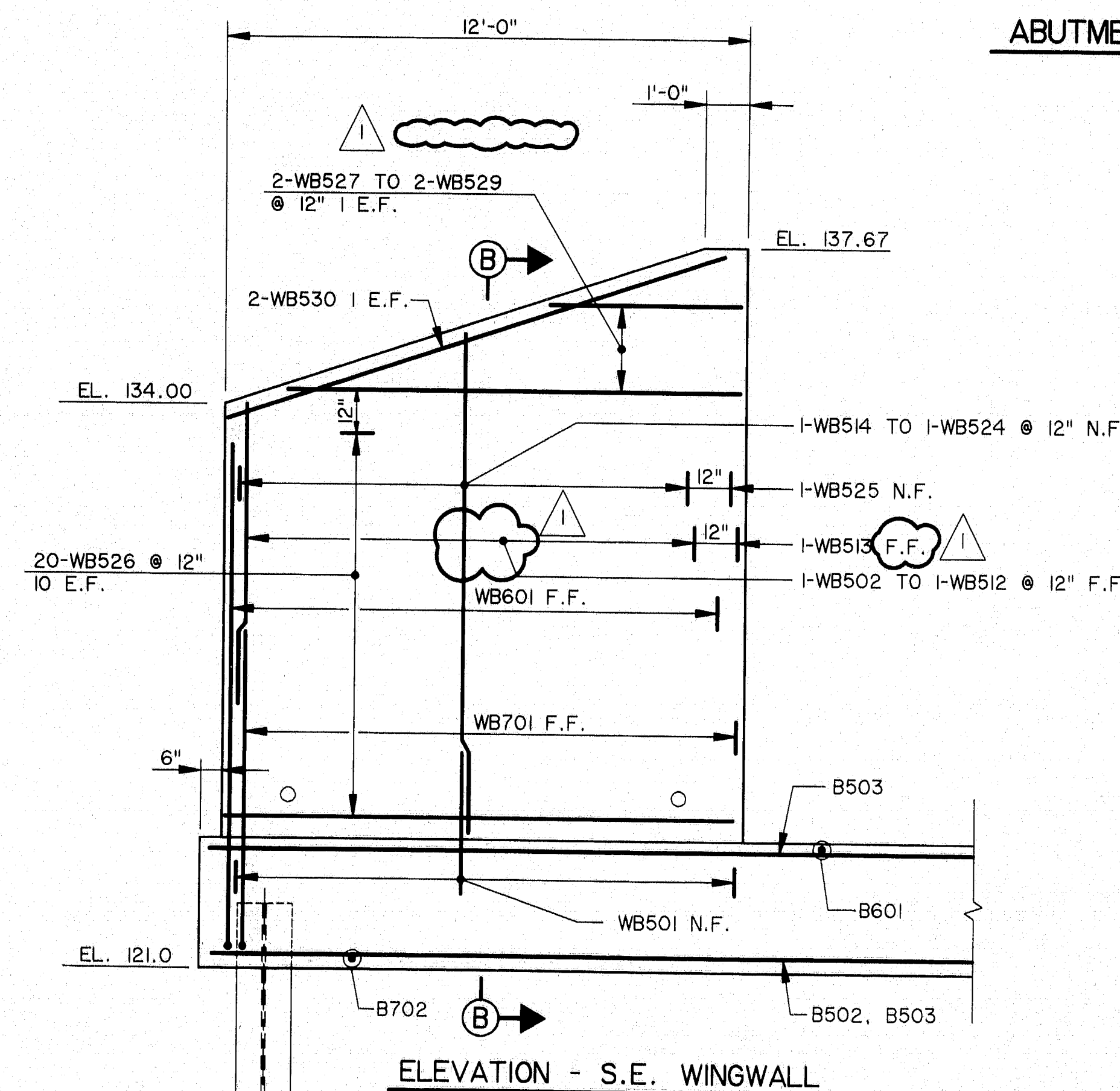
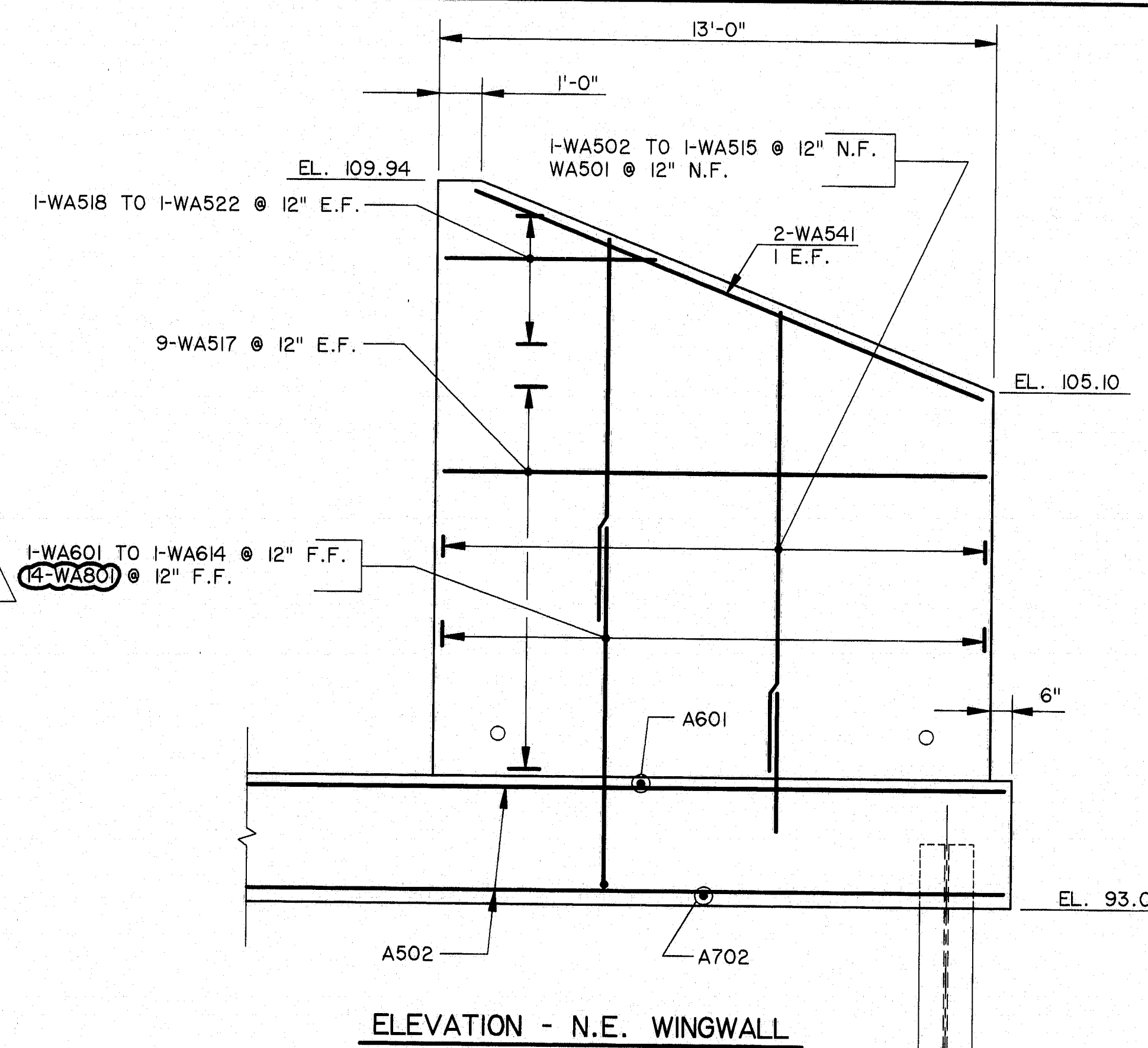
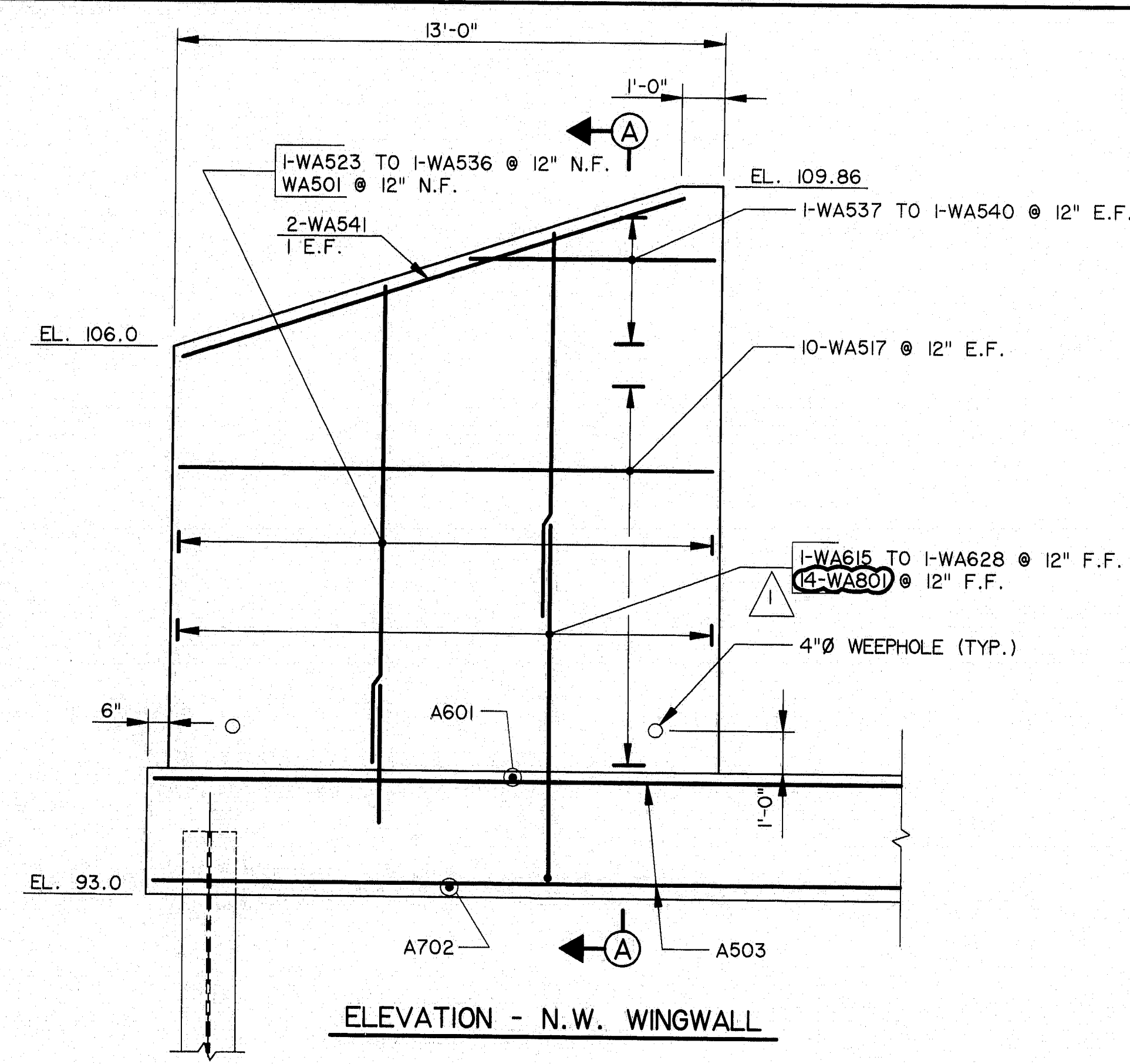
HNTB
ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
ABUTMENT DETAILS
SHEET B28 OF B86 AUGUSTA, MAINE

AS BUILT
com 12/14/96

115-223

DIA3 (WINGWALL STR. DETAIL) STEEL (22508.F06) (DWG) (22508)



NOTES
1. FOR ADDITIONAL DETAILS, SEE SHEETS B24 & B26.

HNTB
ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

WINGWALL DETAILS

SHEET B29 OF B86 AUGUSTA, MAINE

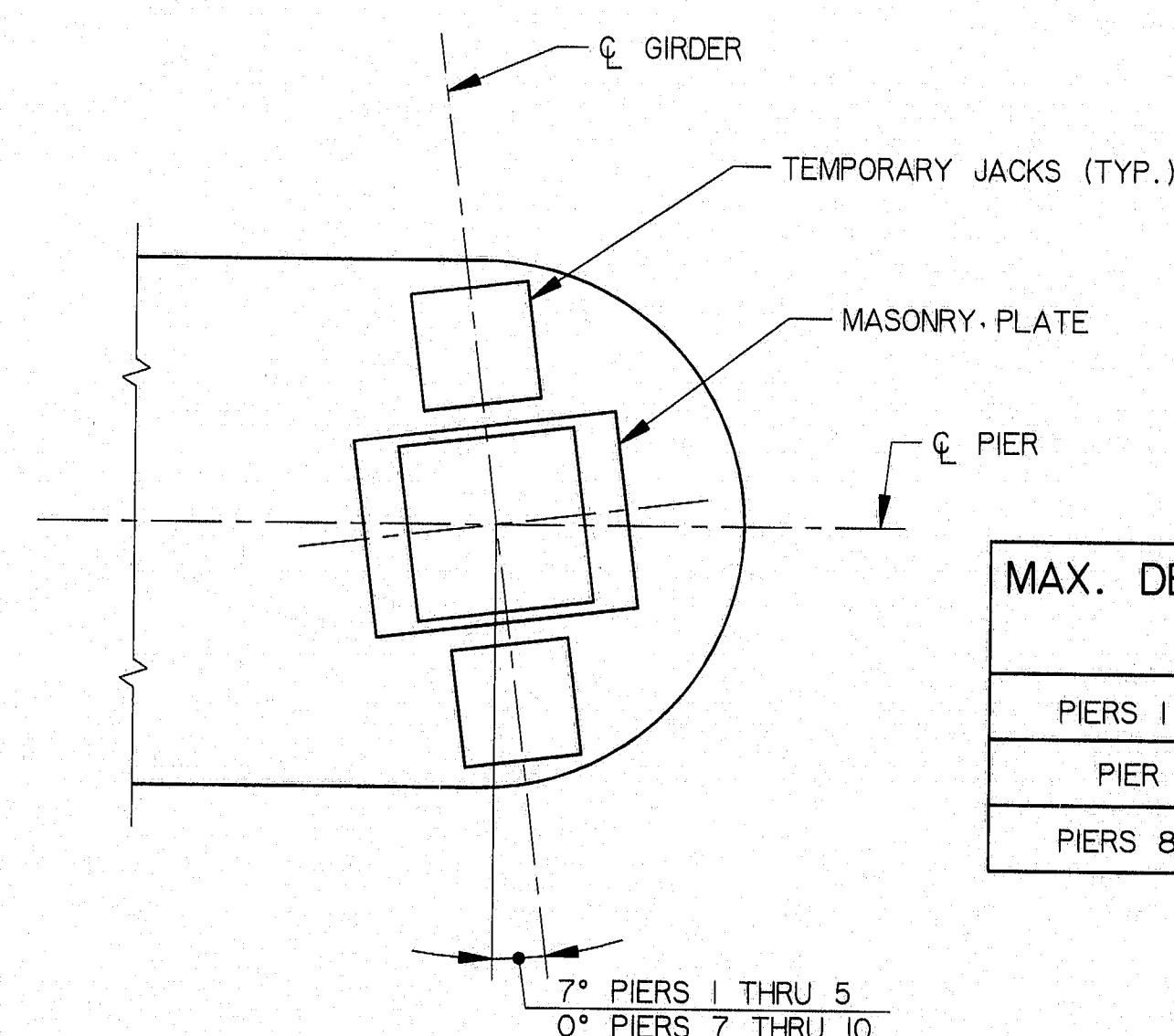
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	AD	9/94	
		DRAWN:	LS	9/94	
		CHECKED:	RJR	9/94	
		DATE	9/95		

ABUTMENT NO. 2 - WINGWALLS

ABUTMENT NO. 1 - WINGWALLS

*AS BUILT
from 11/14/96*

115-224



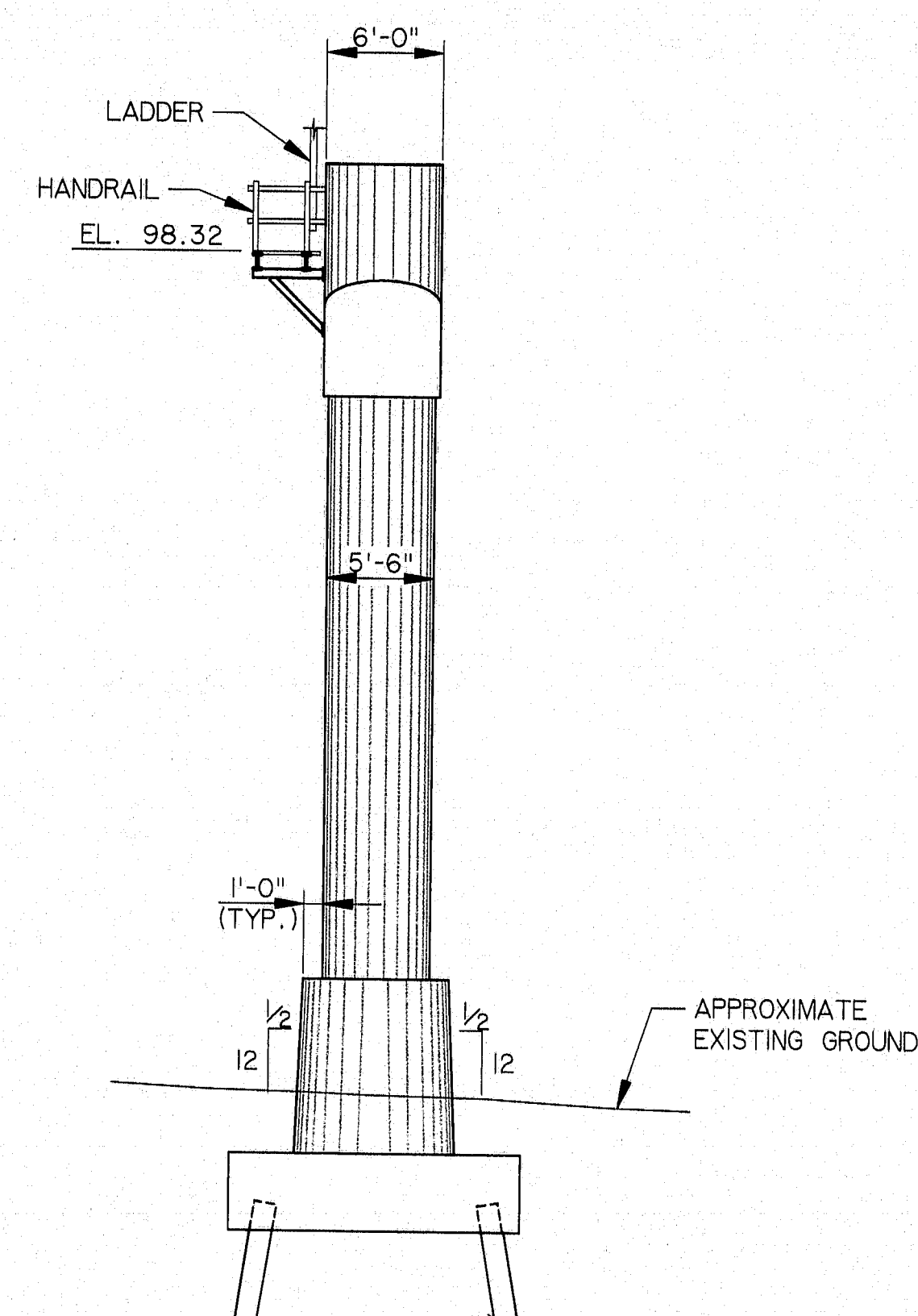
DETAIL A

TYP. PIERS 1 THRU 5 AND 7 THRU 10

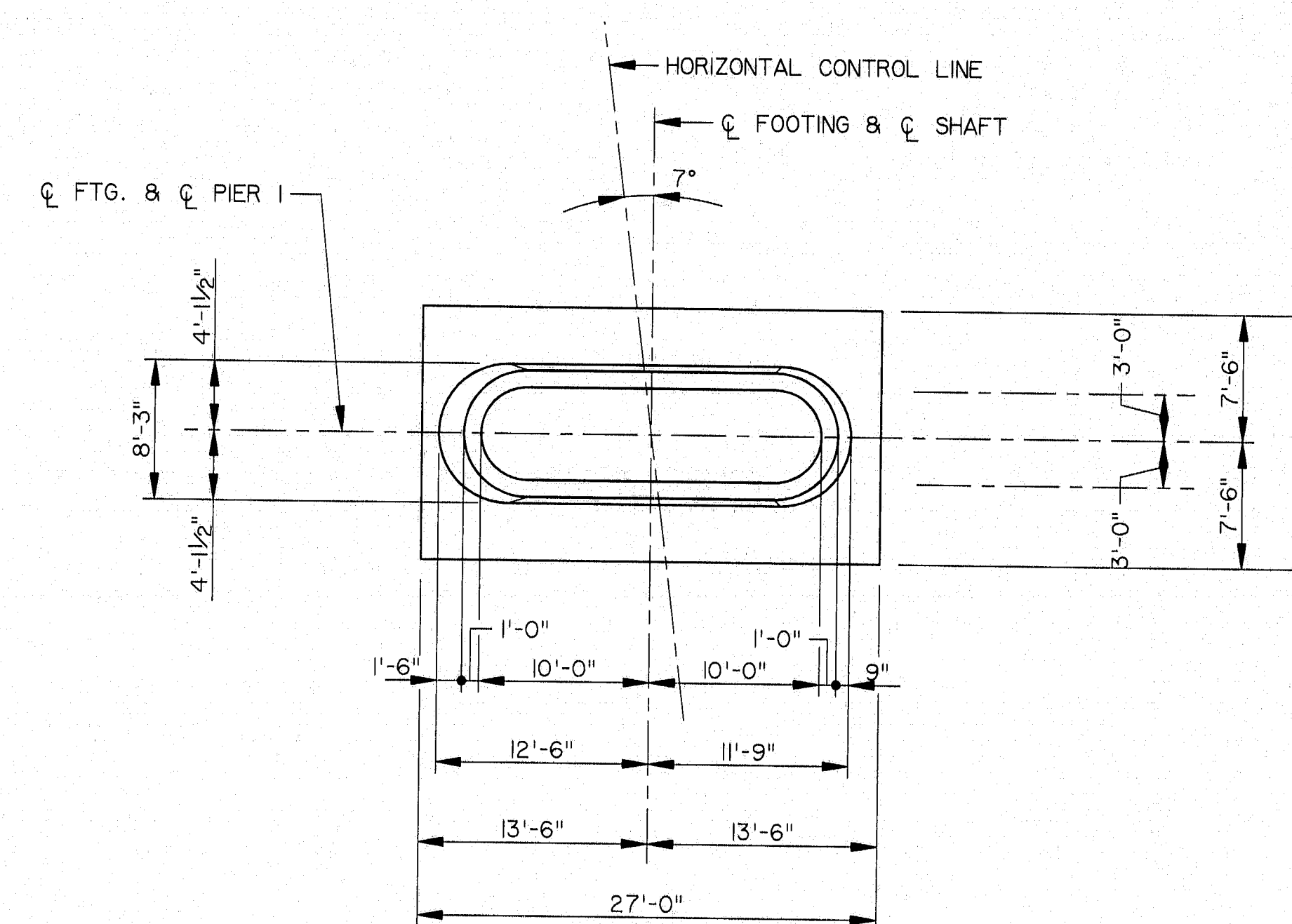
MAX. DEAD LOAD REACTION PER GIRDER	
PIERS 1 - 5	627 K
PIER 7	432 K
PIERS 8 -10	341 K

1. REINFORCING STEEL SHALL HAVE 3 INCHES MINIMUM COVER UNLESS OTHERWISE INDICATED.
2. THE METHOD OF PLACING DOWELS IN THE CONCRETE SEAL SHALL BE APPROVED BY THE ENGINEER.
3. MAXIMUM CALCULATED PILE LOAD = 113 TONS (GROUP: IV).
4. SEAL CONCRETE DIMENSIONS ARE PREDICATED ON THE USE OF STANDARD SHEET PILE PDA27 OR EQUIVALENT STEEL SHEET PILING, USING APPROPRIATE STANDARD ROLLED CORNERS. PAY DIMENSIONS FOR SEAL CONCRETE SHALL BE TO THE NEAT LINES SHOWN PLUS 5" ALL AROUND.
5. FOR CATWALK DETAILS, SEE SHEETS B65-B67.
6. FOR BEARING DEVICE DETAILS, SEE SHEETS B62-B63.
7. BEARING PAD ELEVATIONS MAY VARY, SEE SHEET B62, NOTE 2.

1. BUOYANCY - WATER LEVEL ASSUMED AT ELEVATION 56.3 (Q50).
2. STREAM FLOW - VELOCITY = 4.8 FEET PER SECOND AT PIERS 1 THRU 5 AND 0.9 F.P.S. AT PIERS 6 THRU 8. FLOW DIRECTION IS AT 0° SKEW TO LONGITUDINAL CENTERLINE OF PIERS 1 THRU 6, 13.30° AT PIER 7 AND 18.1° AT PIER 8.
3. WIND - 40 PSF.
4. ICE - THICKNESS 24 INCHES, PRESSURE 100 PSI AT ELEVATION 56.3
30 PERCENT OF NOSE FORCE APPLIED TRANSVERSE TO PIER.



SIDE ELEVATION



SECTION A-A

115-225

STEEL ALTERNATIVE

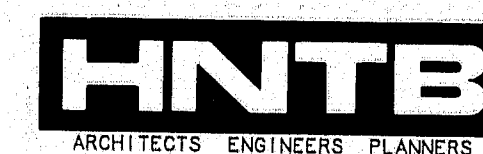
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER

KENNEBEC RIVER

PIER 1 DETAILS

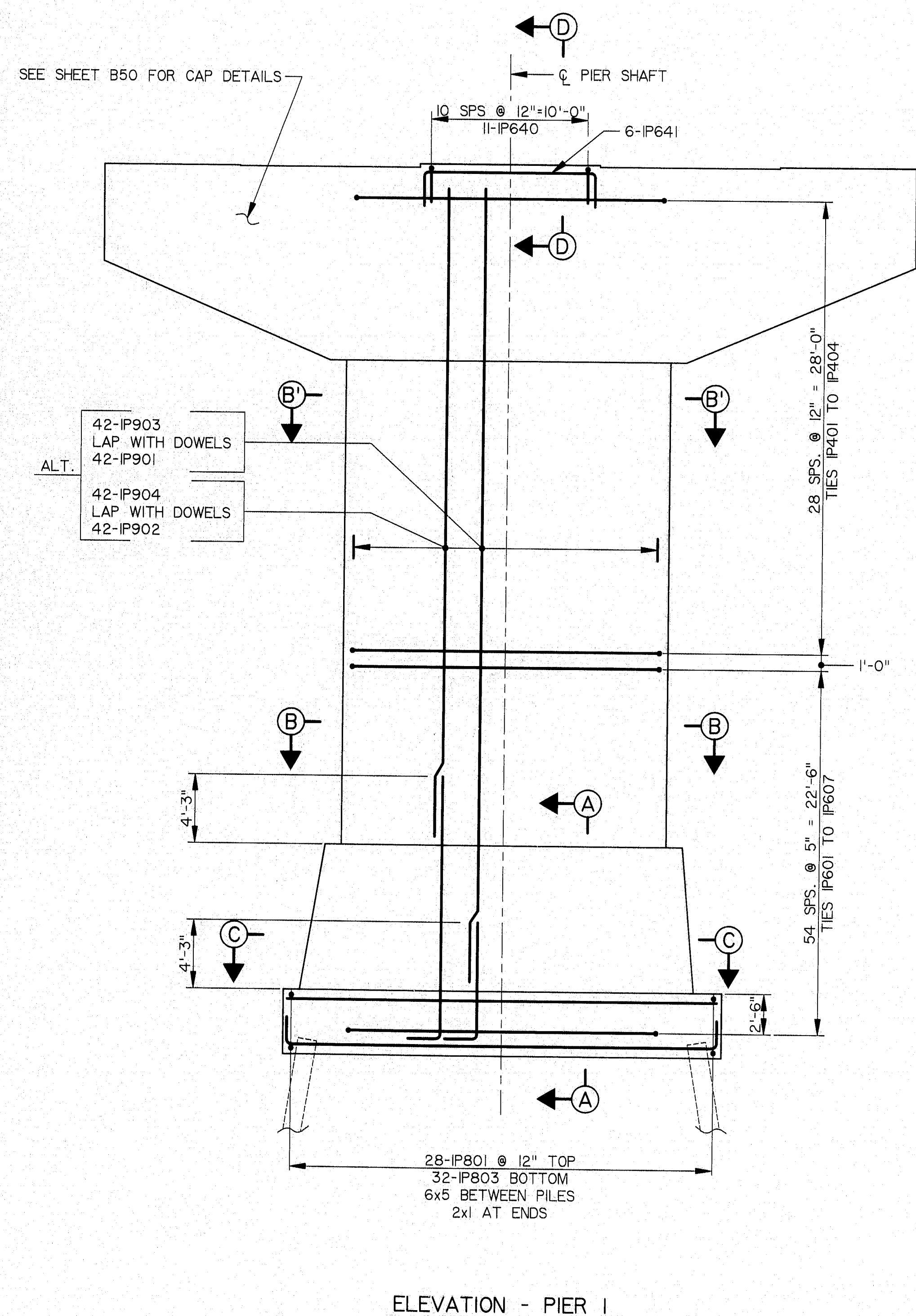


SHEET B30 OF B86 AUGUSTA, MAINE

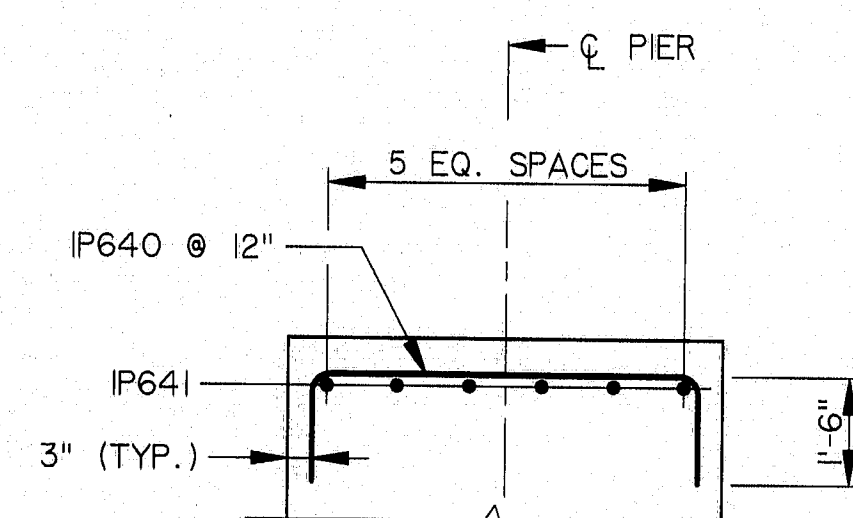
				BY	DATE
				DESIGNED: SM	9/94
				DRAWN: RJT	9/94
				CHECKED: DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM

045 / WINDHAM STN. OVERCAST STEEL (00000.F01) DWG. 100000

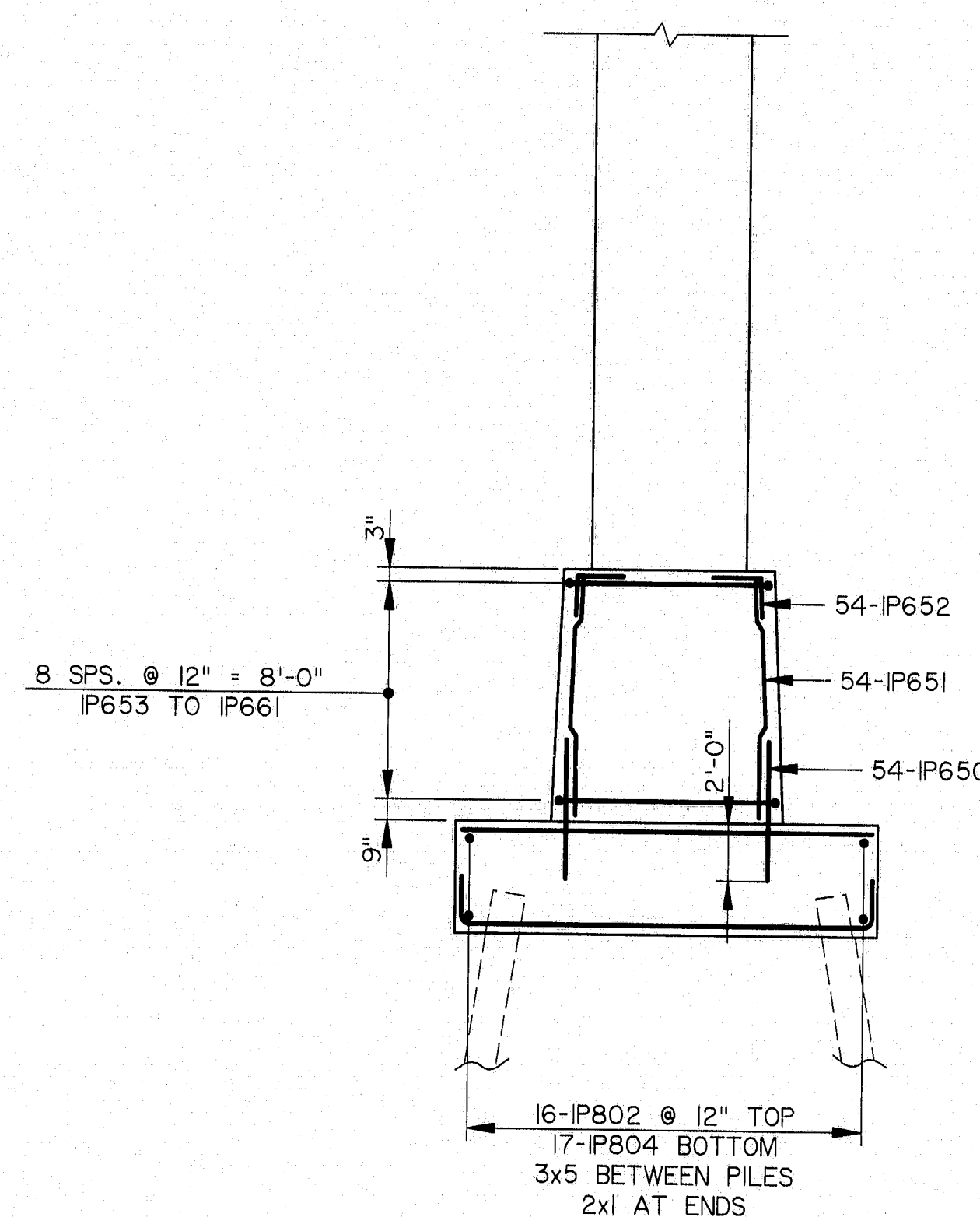
F.H.W.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	00091002	40	103



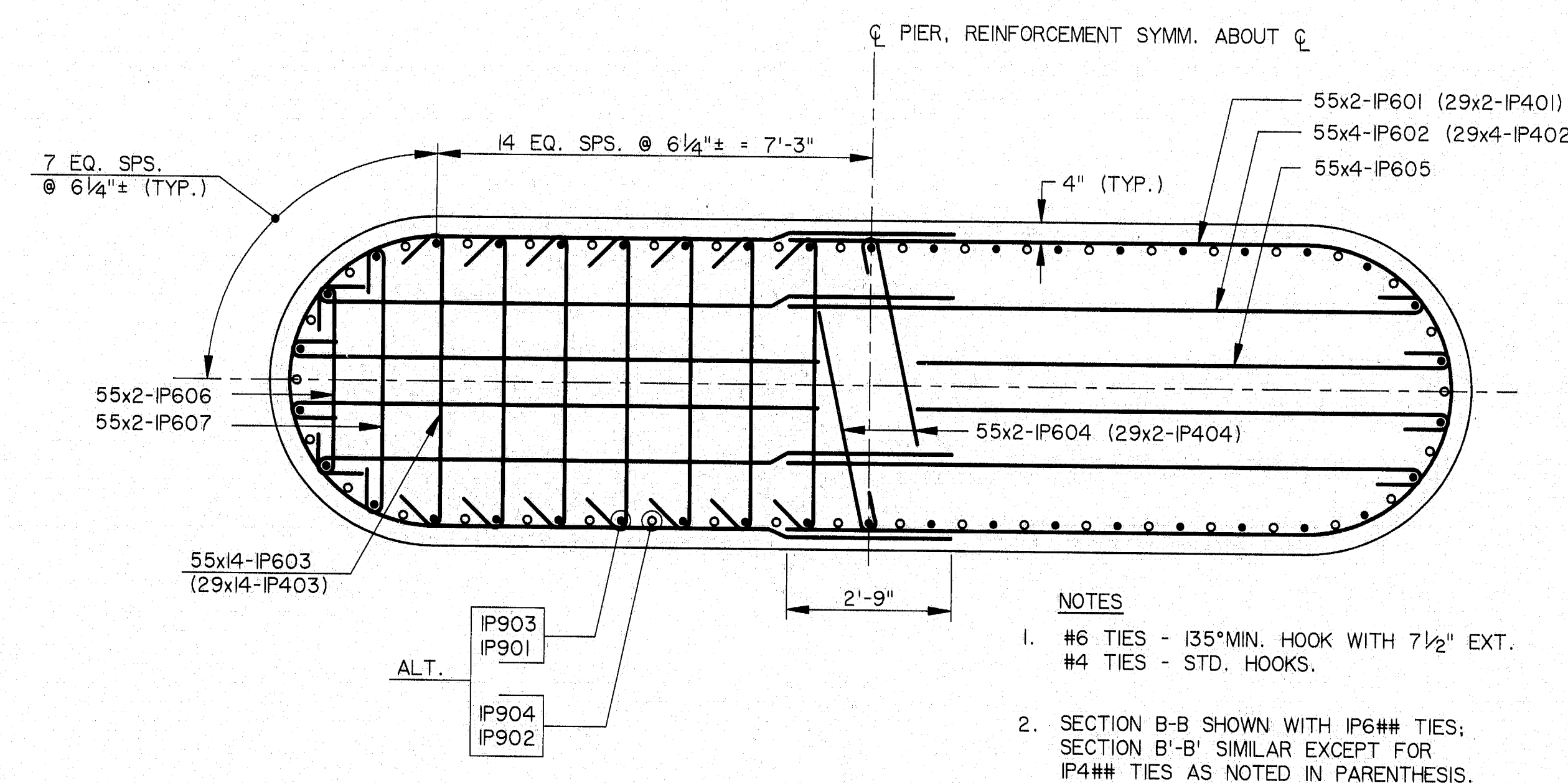
ELEVATION - PIER I



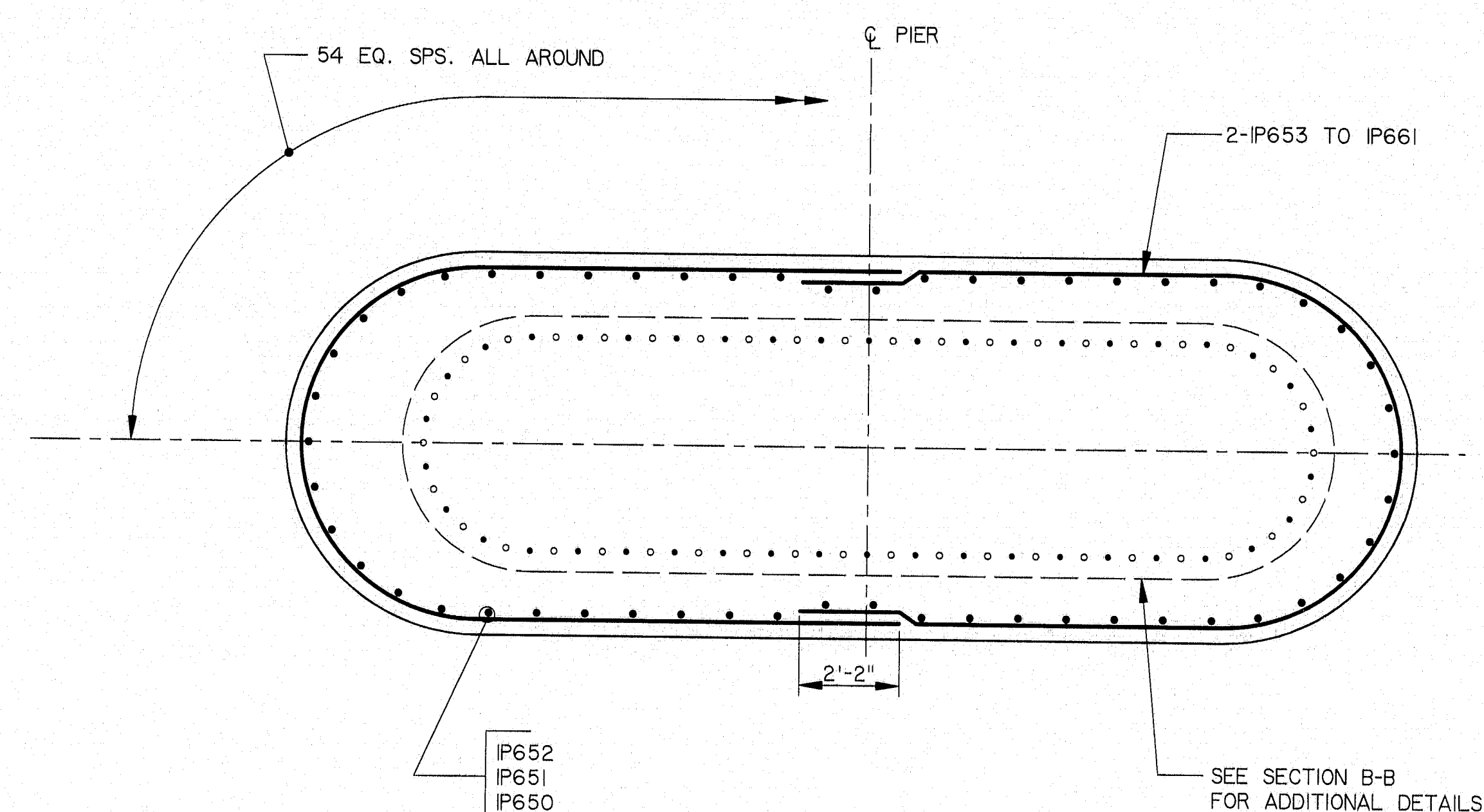
SECTION D-D



SECTION A-A



SECTION B-B (SECTION B'-B')



SECTION C-C

115-226

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

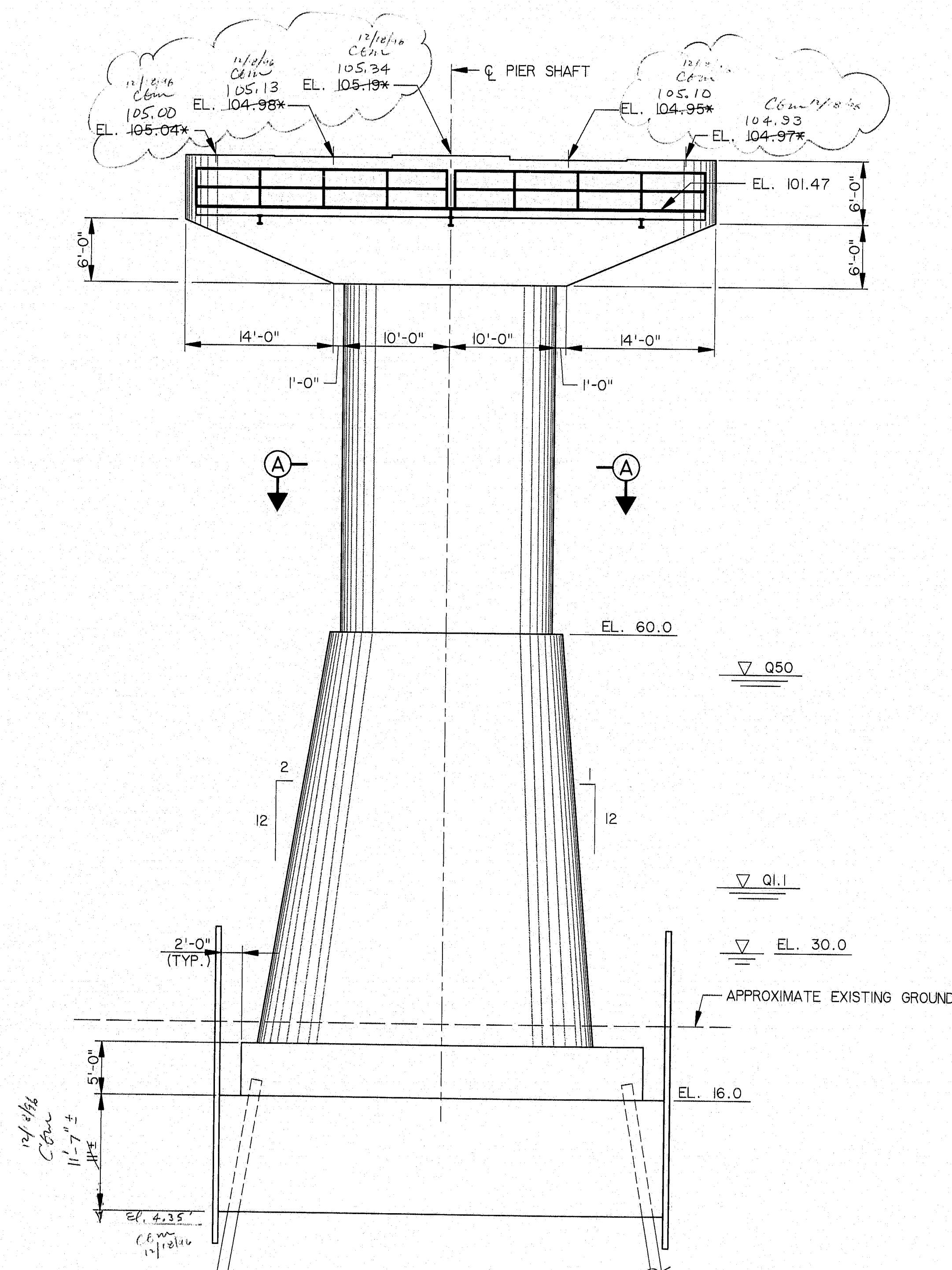
PIER I RE-STEEL

SHEET B31 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

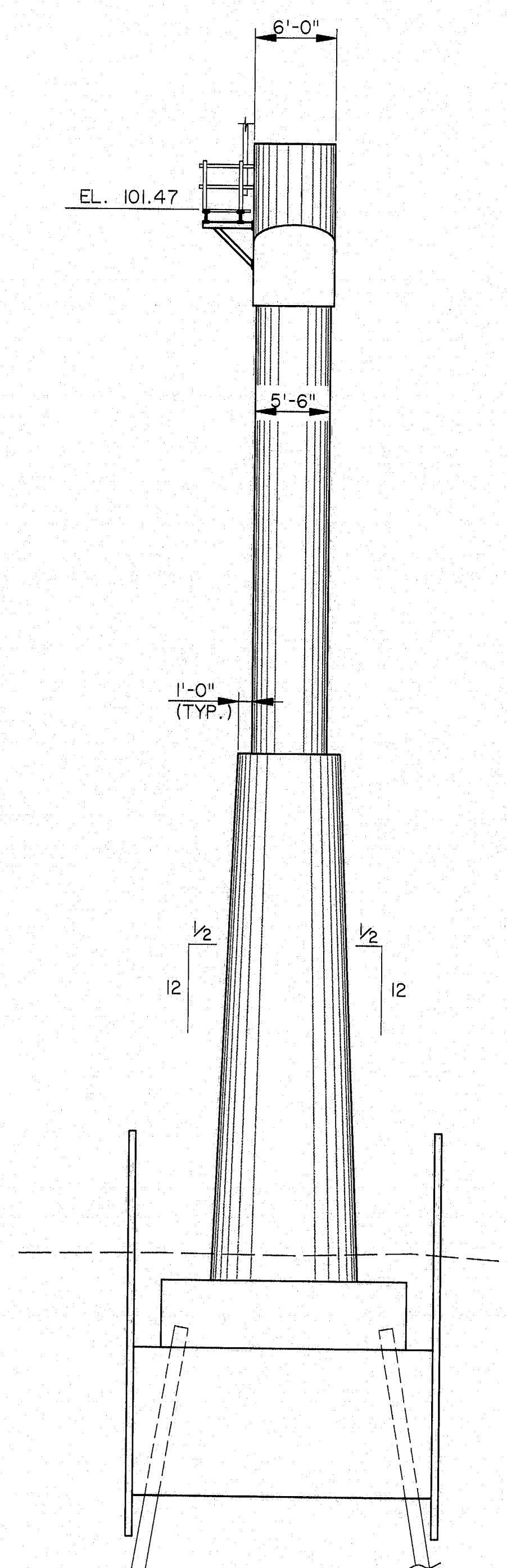
HNTB
ARCHITECTS ENGINEERS PLANNERS

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	41	103

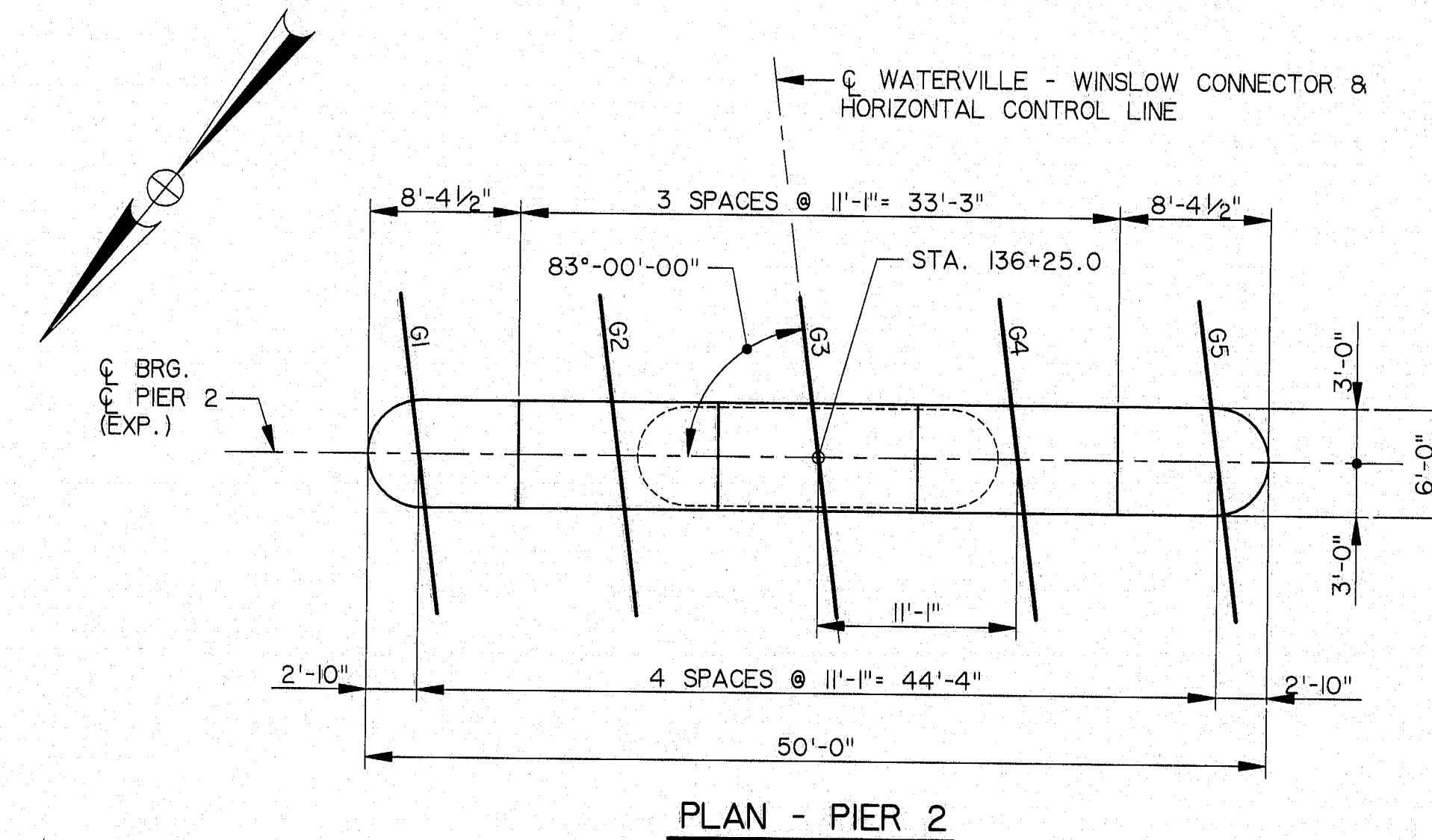


ELEVATION - PIER 2
LOOKING UPSTATION

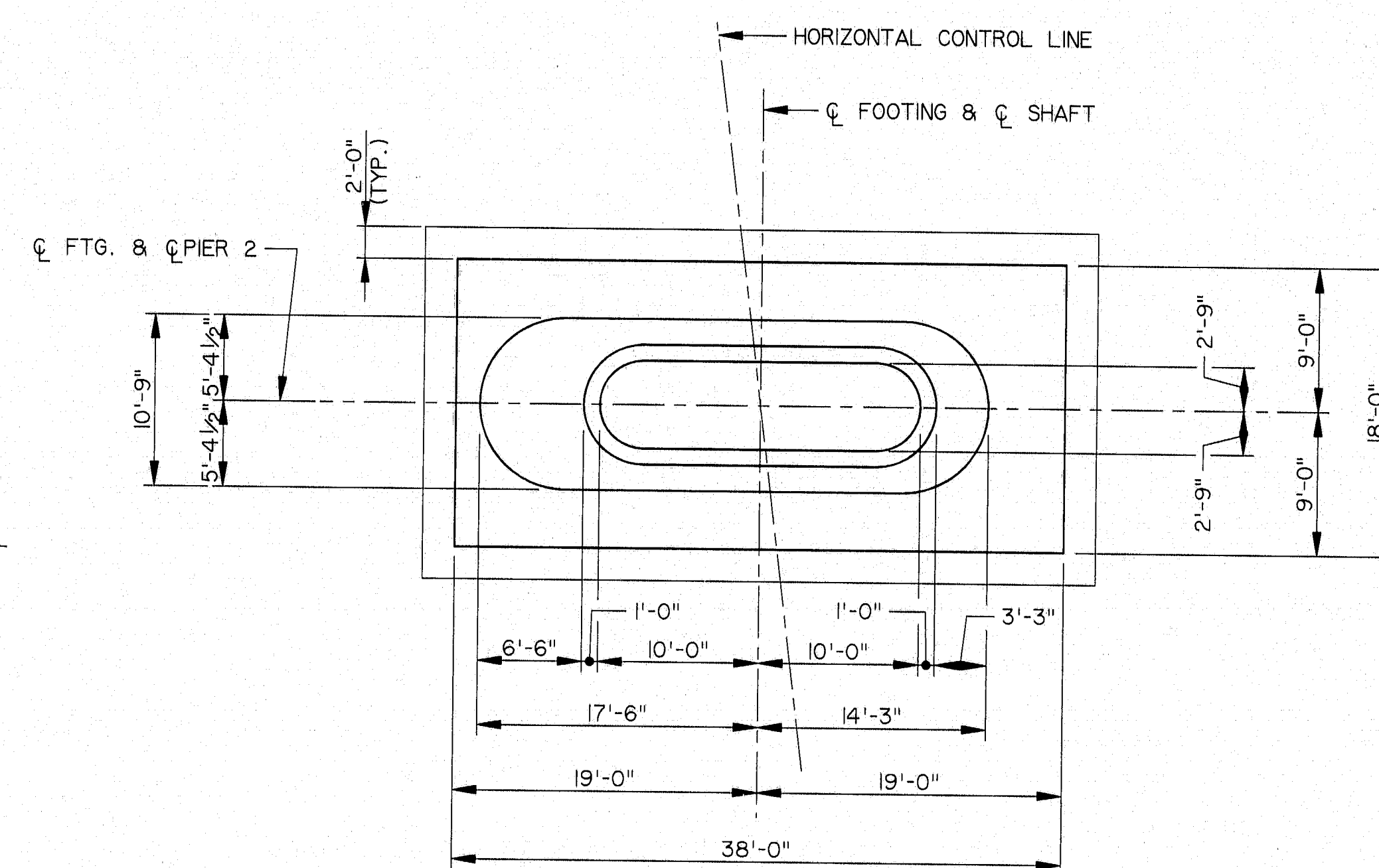
* SEE NOTE 7, SHEET B30.



SIDE ELEVATION



PLAN - PIER 2



SECTION A-A

NOTES:

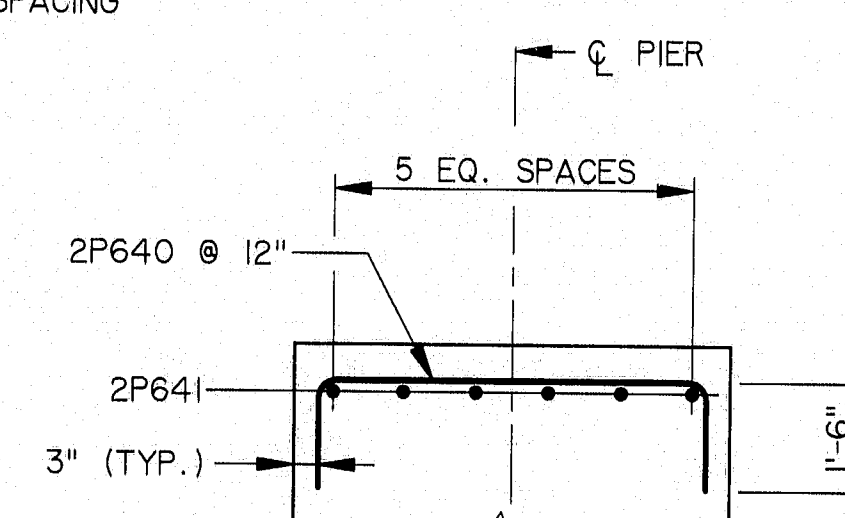
1. MAXIMUM CALCULATED PILE LOAD = 119 TONS (GROUP: IV)
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	9/94	
		DRAWN: RJT	9/94	
		CHECKED: DWR	9/94	
				CJM

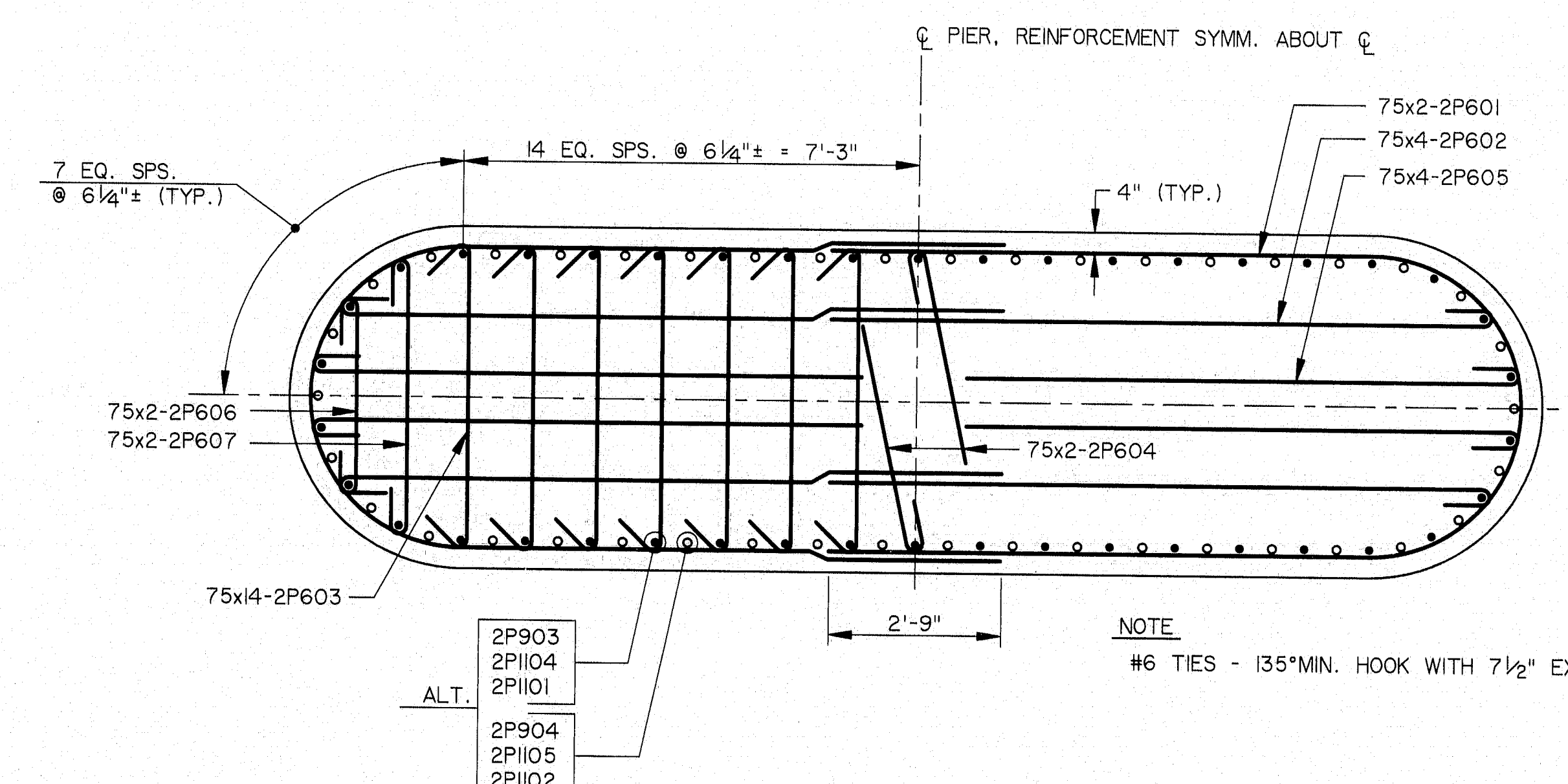


115-227

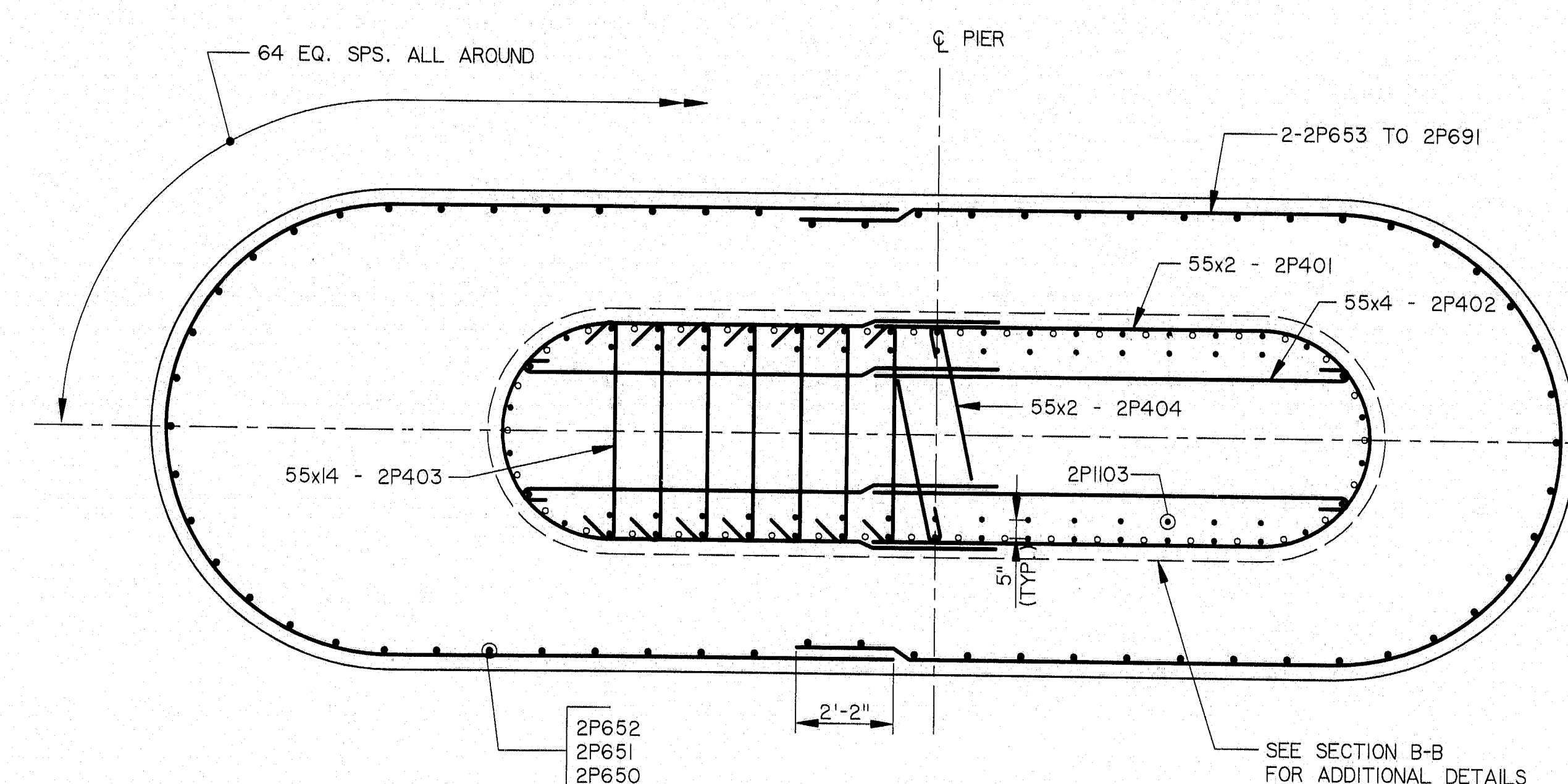
STEEL ALTERNATIVE
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
WATerville - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
PIER 2 DETAILS
SHEET B32 OF B86 AUGUSTA, MAINE



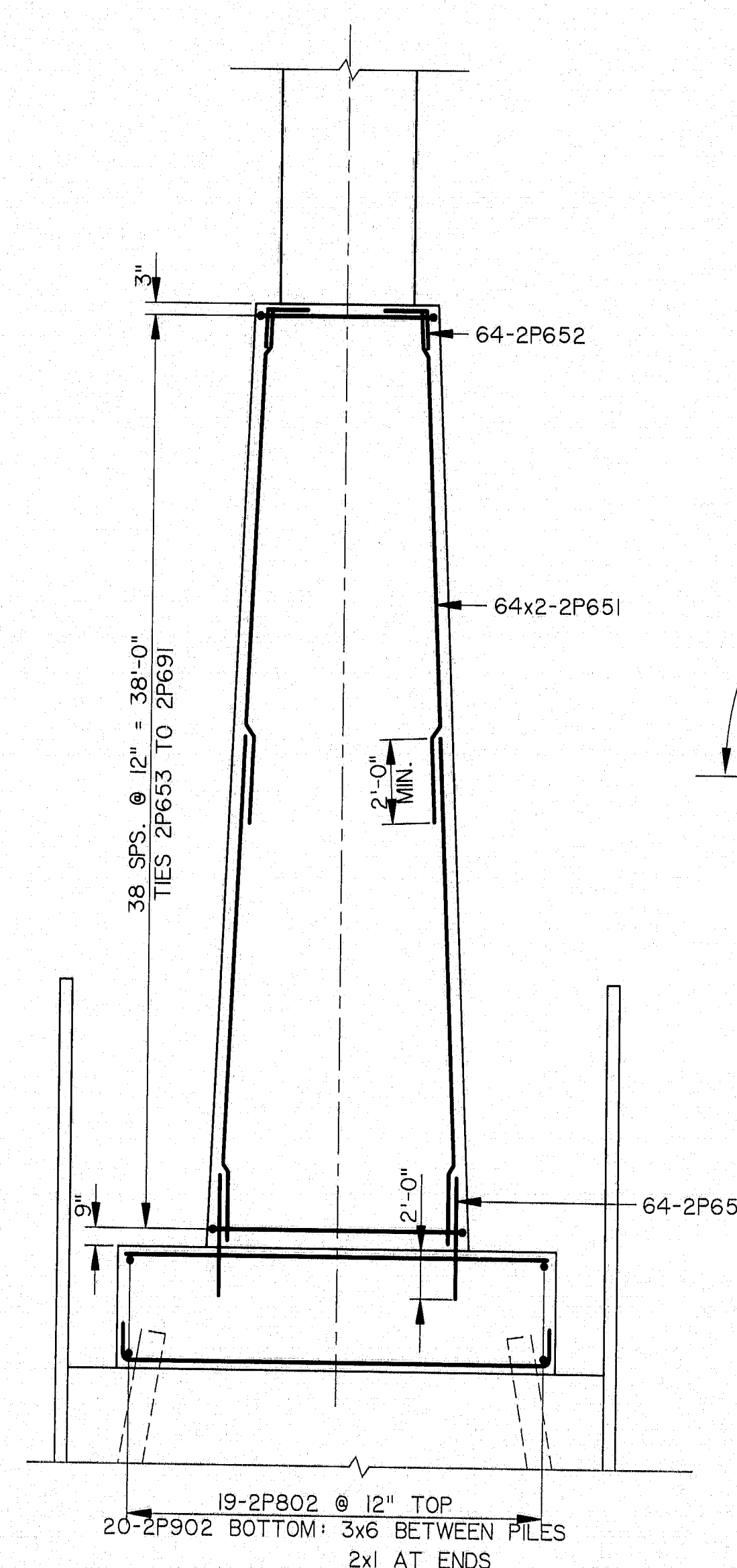
SECTION D-D



SECTION B-B



SECTION C-C



SECTION A-A

					BY	DATE
				DESIGNED:	DWR	9/94
				DRAWN:	LS	9/94
				CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CUM		

ELEVATION - PIER 2

115-228

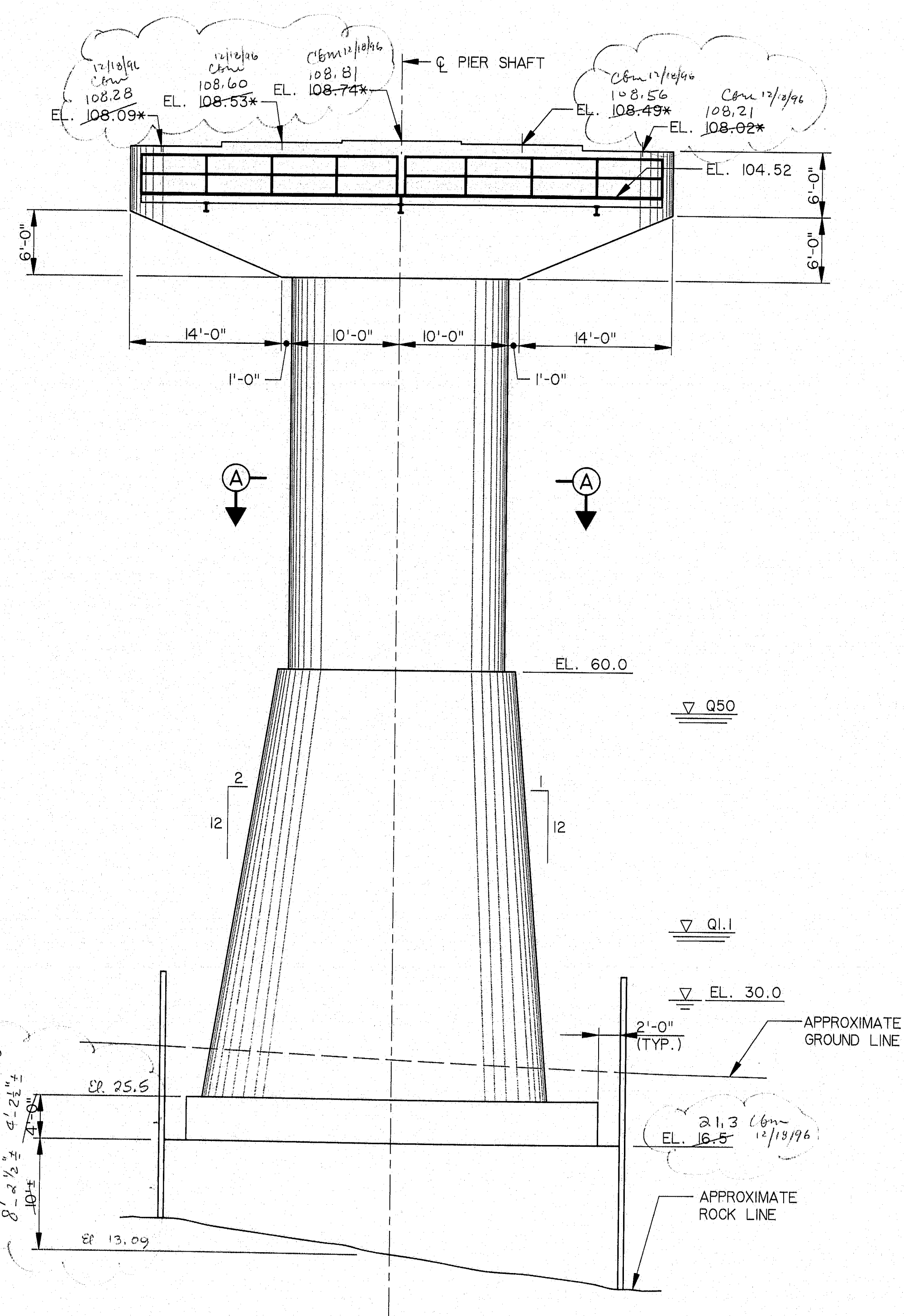
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PIER 2 RE-STEEL

SHEET B33 OF B86 AUGUSTA, MAINE

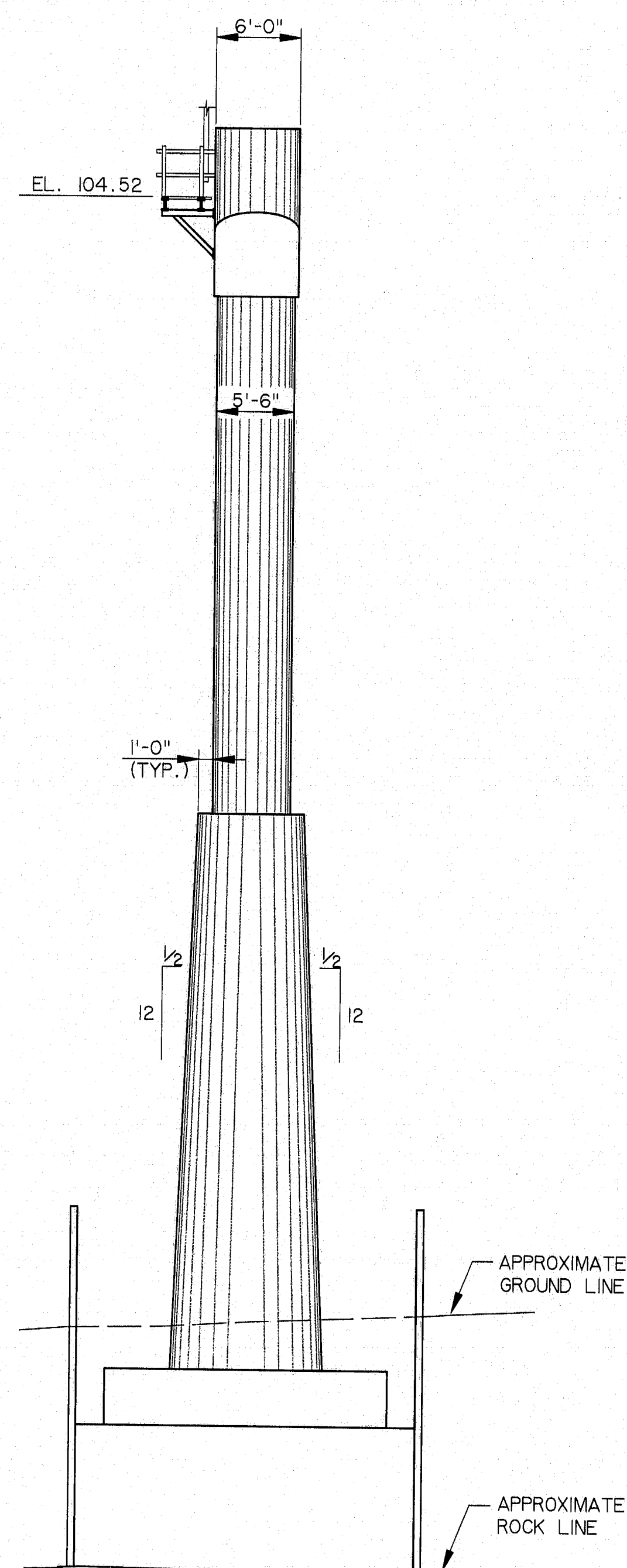


115-229-229

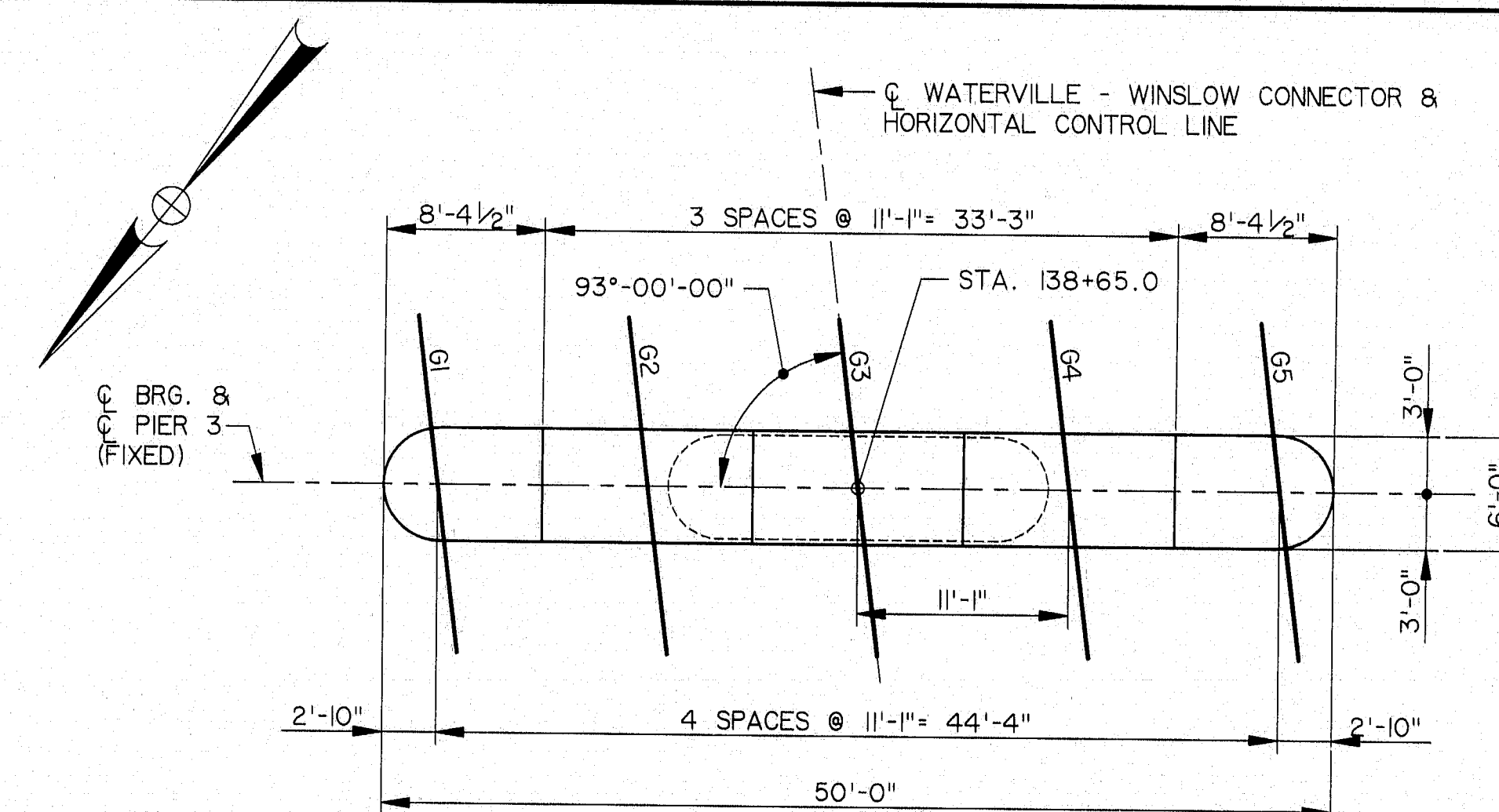


ELEVATION
(LOOKING UPSTATION)

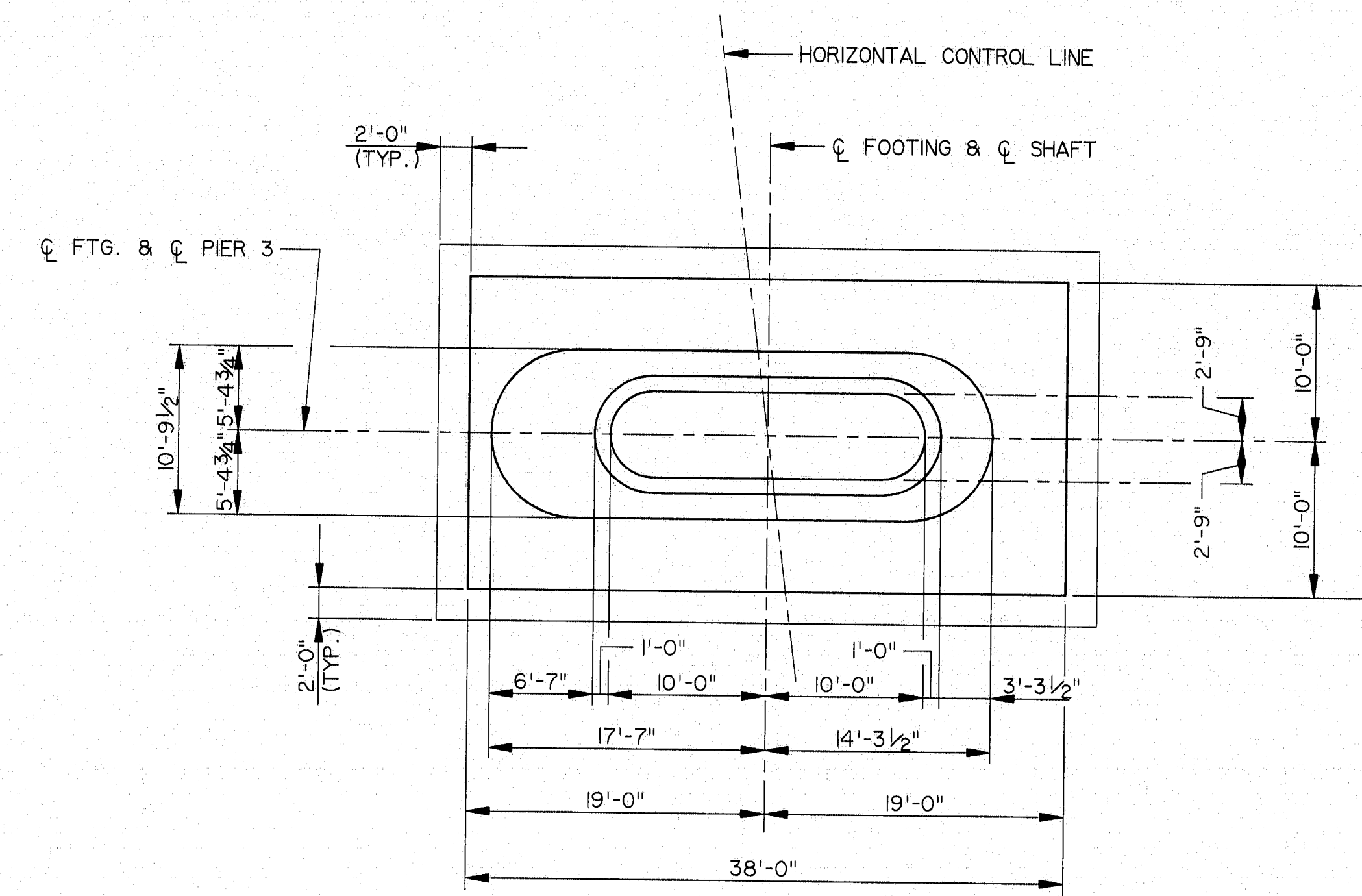
* SEE NOTE 7, SHEET B30.



SIDE ELEVATION



PLAN - PIER 3



SECTION A-A

NOTES:

1. MAXIMUM CALCULATED FOOTING PRESSURE = 14.9 T.S.F. (GROUP: SEISMIC)*
- * ULTIMATE CAPACITY OF FOUNDATION SUPPORTING ROCK IS USED IN CONJUNCTION WITH SEISMIC LOADING.
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	8/94	
		DRAWN:	RJT	8/94	
		CHECKED:	DWR	8/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-229
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
PIER 3 DETAILS
SHEET B34 OF B86 AUGUSTA, MAINE

SEE SHEET B50 FOR CAP DETAILS

10 SPS @ 12"=10'-0"

11-3P640

6-3P642

10 SPS @ 12"=10'-0"

11-3P640

6-3P641

10 SPS @ 12"=10'-0"

11-3P640

6-3P642

TIE LIMITS AND SPACING

25 SPS @ 12" = 25'-0"

TIES 3P401 TO 3P404

1'-0"

74 SPS @ 5" = 30'-10"

TIES 3P601 TO 3P607

1'-0"

1'-0"

4'-3"

4'-3"

1'-0"

6'-6"

6'-6"

1'-0"

6'-6"

1'-0"

3'-4" (TYP.)

54-3P1101 DOWELS 2'-0" O.C. ALL AROUND

39-3P801 @ 12" TOP

51-3P1001 @ 9" BOTTOM

SECTION A-A

SECTION D-D

5 EQ. SPACES

3P640 @ 12"

3P641

3" (TYP.)

1'-0"

SECTION B-B

7 EQ. SPS. @ 6 1/4"± (TYP.)

14 EQ. SPS. @ 6 1/4"± = 7'-3"

4" (TYP.)

75x2-3P606

75x2-3P607

75x2-3P604

75x4-3P603

3P901

3P1105

3P1103

3P902

3P1106

3P1104

NOTE

#6 TIES - 135" MIN. HOOK WITH 7 1/2" EXT.

SECTION C-C

64 EQ. SPS. ALL AROUND

2-3P653 TO 3P691

58x2 - 3P401

58x4 - 3P402

58x2 - 3P404

58x4 - 3P403

3P652

3P651

3P650

3P1107

SEE SECTION B-B FOR ADDITIONAL DETAILS

115-230

STEEL ALTERNATIVE

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

WATVERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

PIER 3 RE-STEEL

SHEET B35 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: DWR	9/94		
		DRAWN: LS	9/94		
		CHECKED: SM	9/94		

BY DATE

DESIGNED: DWR 9/94

DRAWN: LS 9/94

CHECKED: SM 9/94

IN CHARGE OF CJM

ELEVATION - PIER 3

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

115-230

STEEL ALTERNATIVE

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

WATVERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

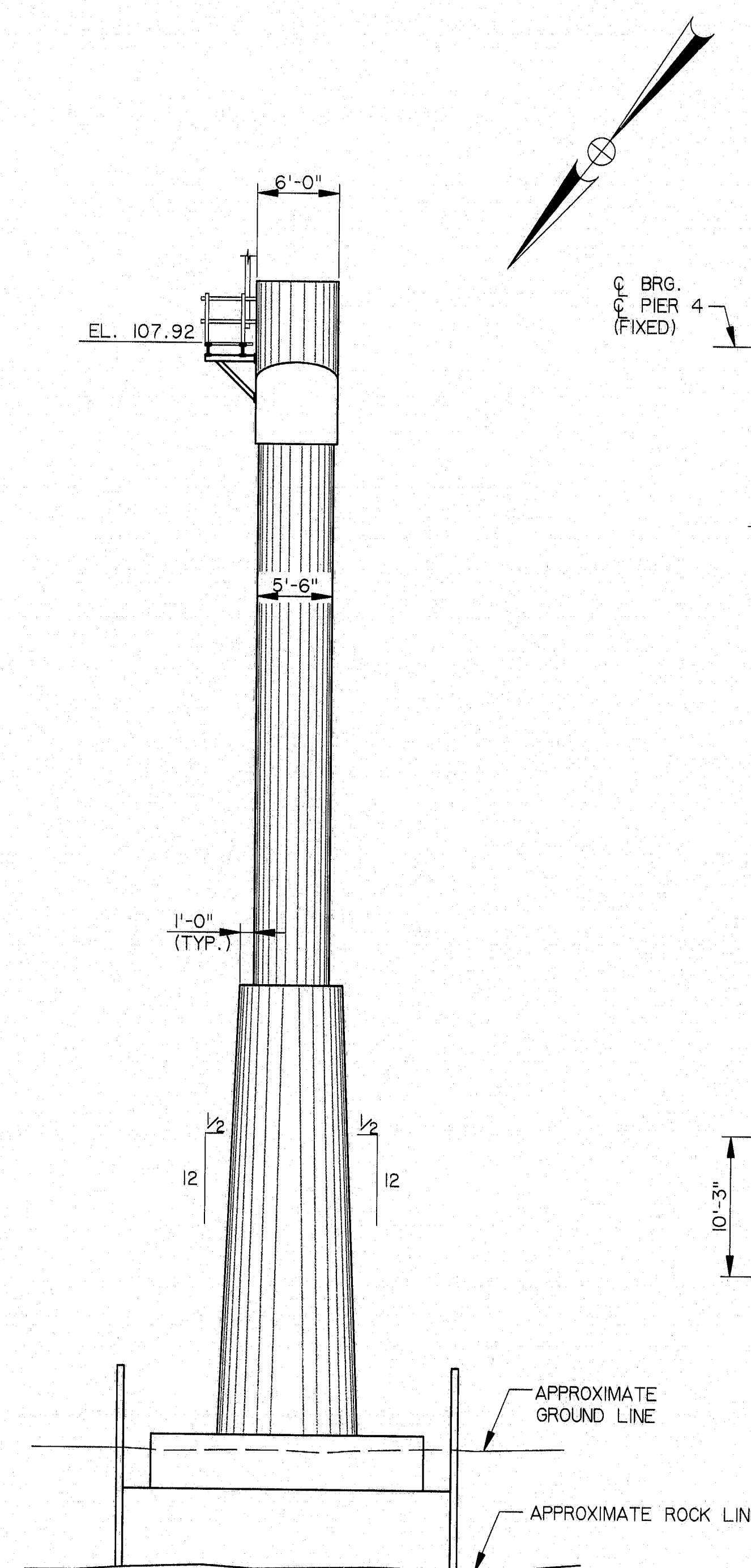
PIER 3 RE-STEEL

SHEET B35 OF B86 AUGUSTA, MAINE

HNTB

ARCHITECTS ENGINEERS PLANNERS

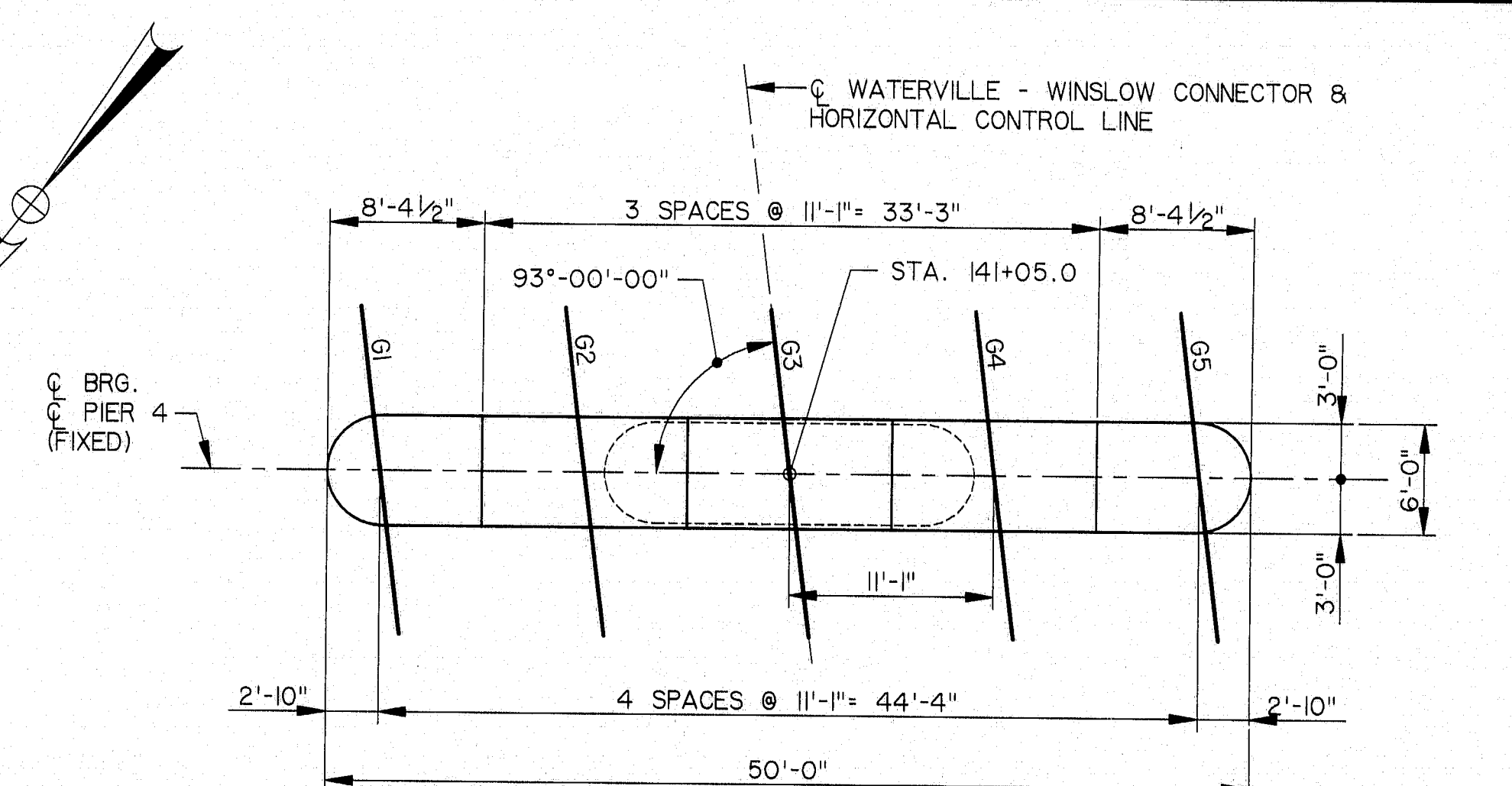
					BY	DATE
					DESIGNED: SM	9/94
					DRAWN: RJT	9/94
					CHECKED: DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		



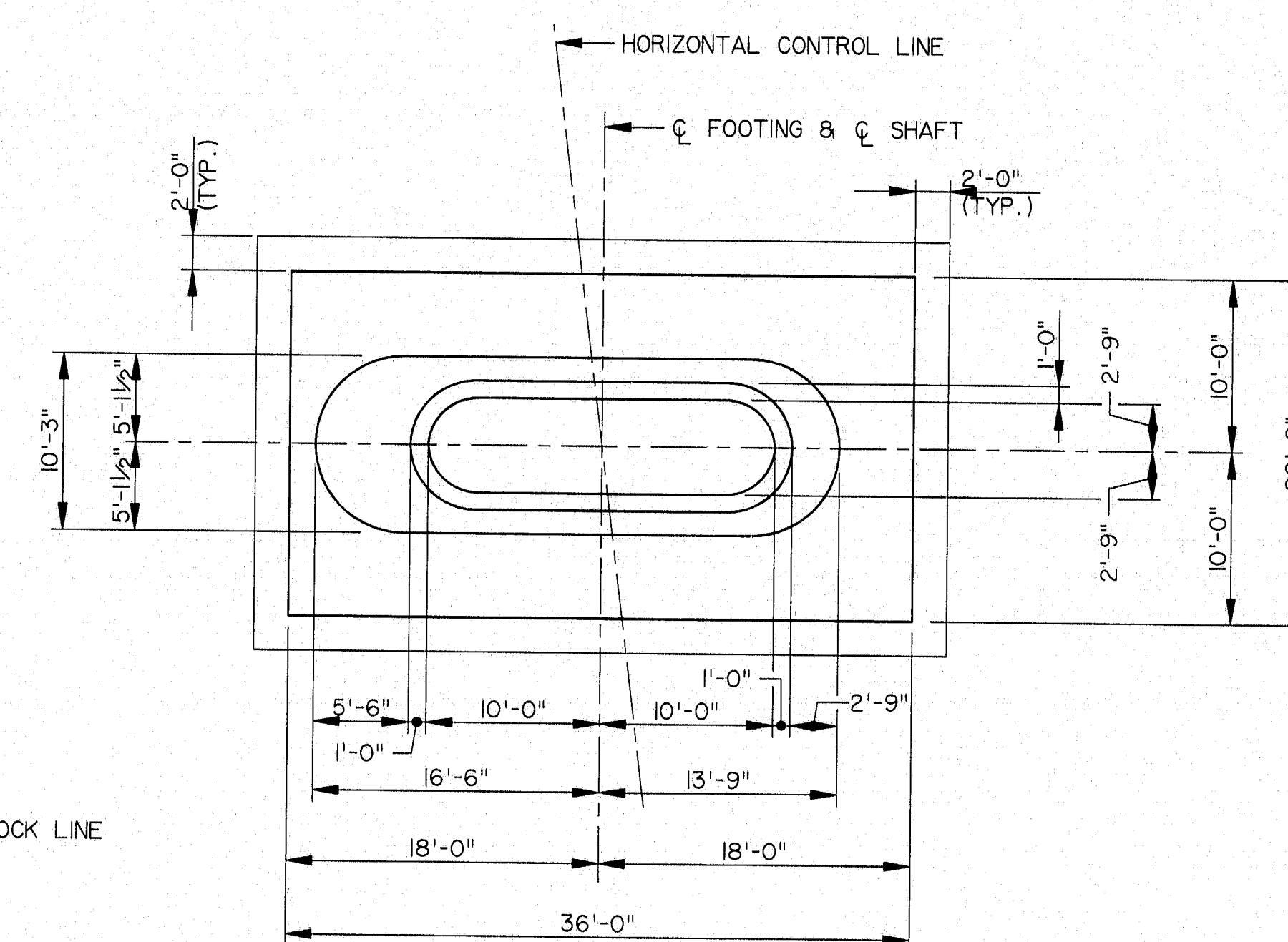
SIDE ELEVATION

NOTES:

1. MAXIMUM CALCULATED FOOTING PRESSURE = 16.3 T.S.F. (GROUP: SEISMIC);
ULTIMATE CAPACITY OF FOUNDATION SUPPORTING ROCK IS
USED IN CONJUNCTION WITH SEISMIC LOADING.
2. SEE SHEET B30 FOR ADDITIONAL NOTES.



PLAN



SECTION A-A

115-231
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PIER 4 DETAILS

SHEET B36 OF B86 AUGUSTA, MAINE

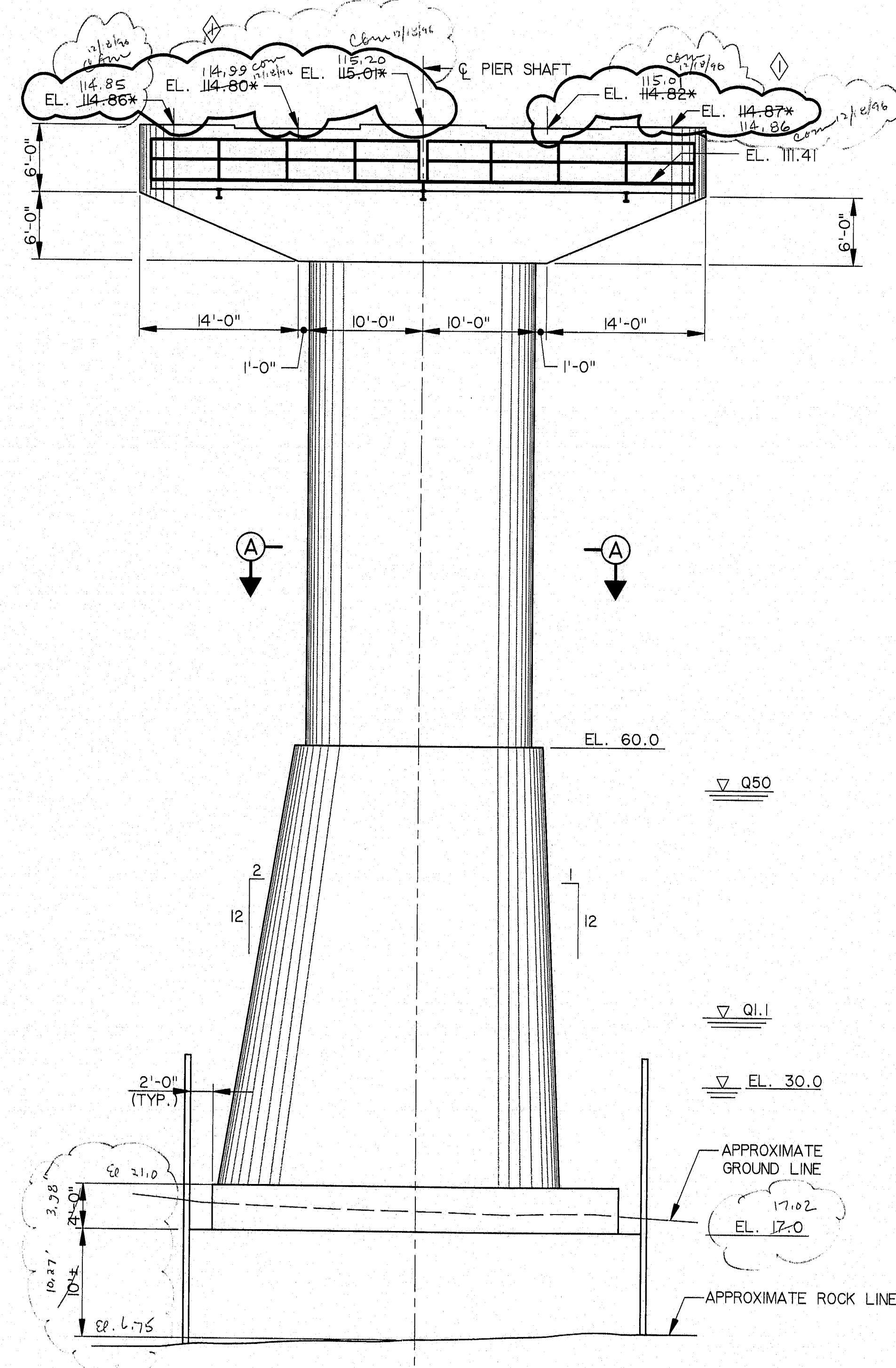


DIA3: WNGRAPH.STR.DVCARTER.STR.DWG: CDS263.FGB: DWG: CDS263



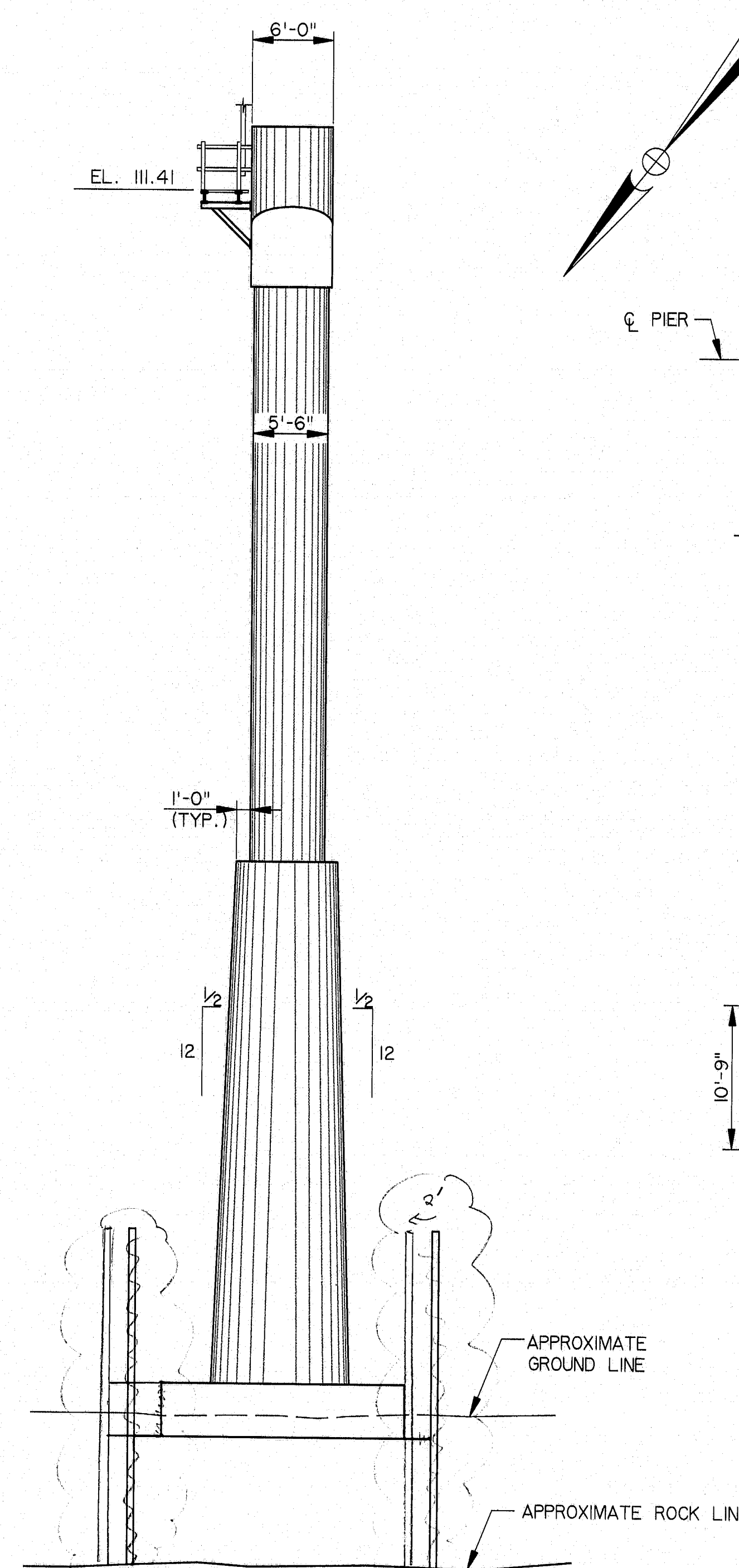
115-232
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
PIER 4 RE-STEEL
SHEET B37 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	47	103

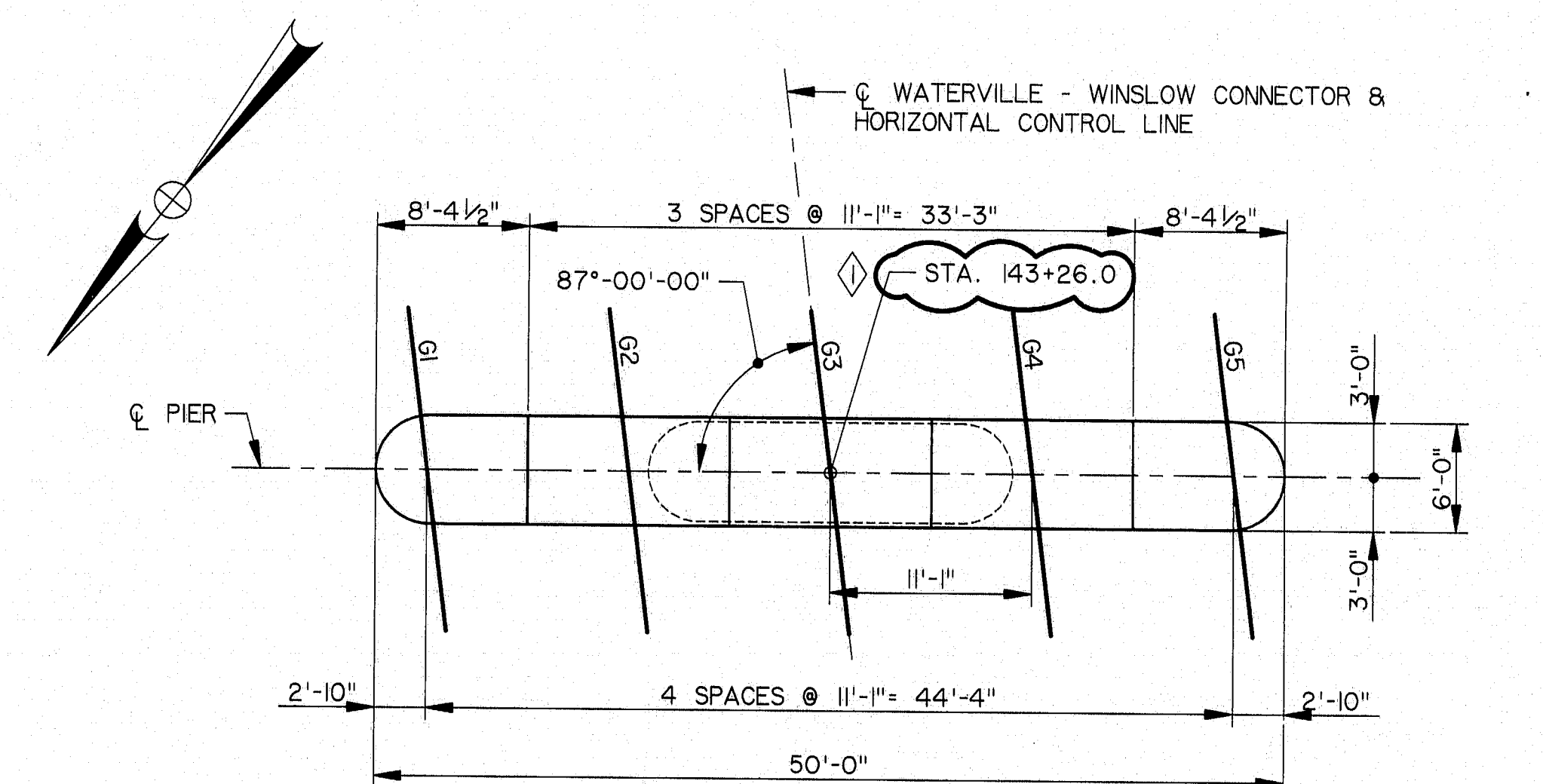


ELEVATION
(LOOKING UPSTATION)

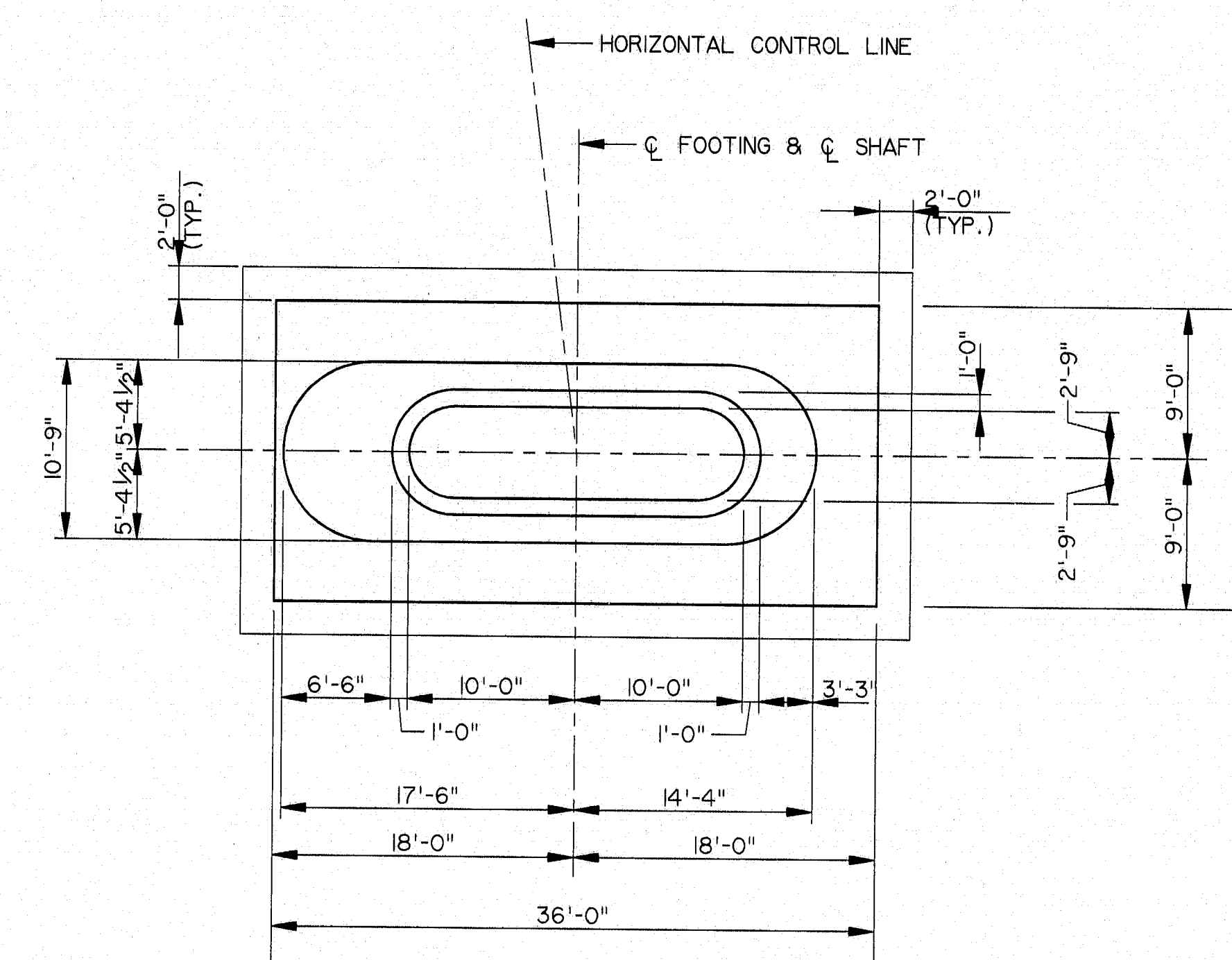
* SEE NOTE 7, SHEET B30.



SIDE ELEVATION



PLAN - PIER 5



SECTION A-A

NOTES:

1. MAXIMUM CALCULATED FOOTING PRESSURE = 8.9 T.S.F. (GROUP: SEISMIC).
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

NO.	REVISION	BY	DATE	IN CHARGE OF
1	PIER EL. & STA.	JFW	10/98	CJM
2	DESIGNED:	SM	9/94	
3	DRAWN:	RJT	9/94	
4	CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-233

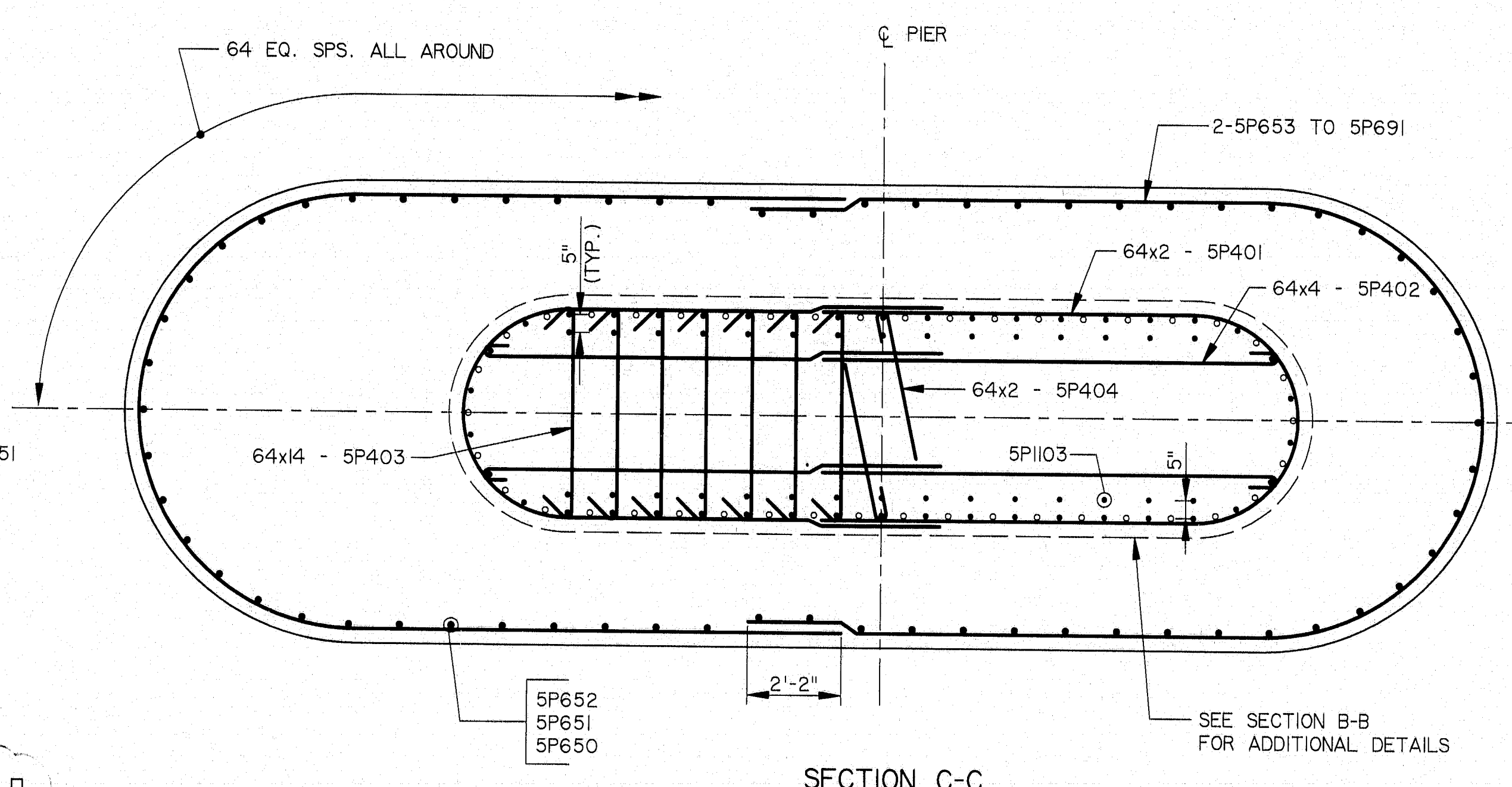
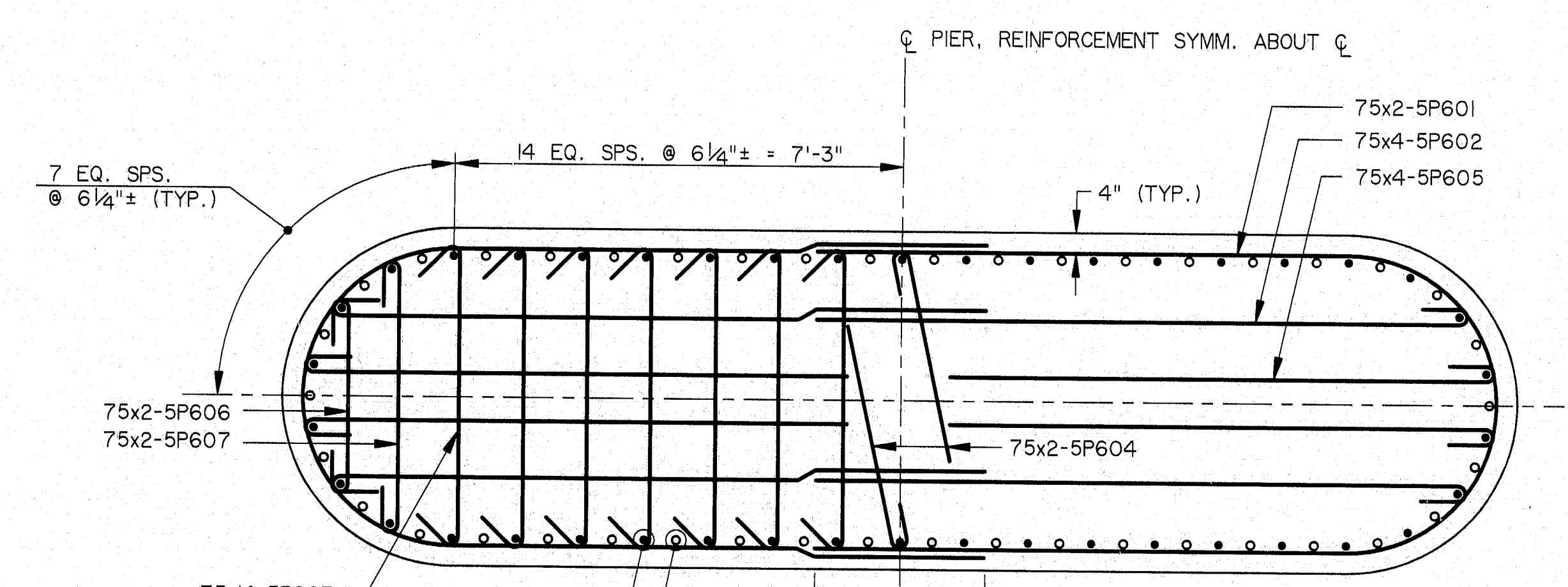
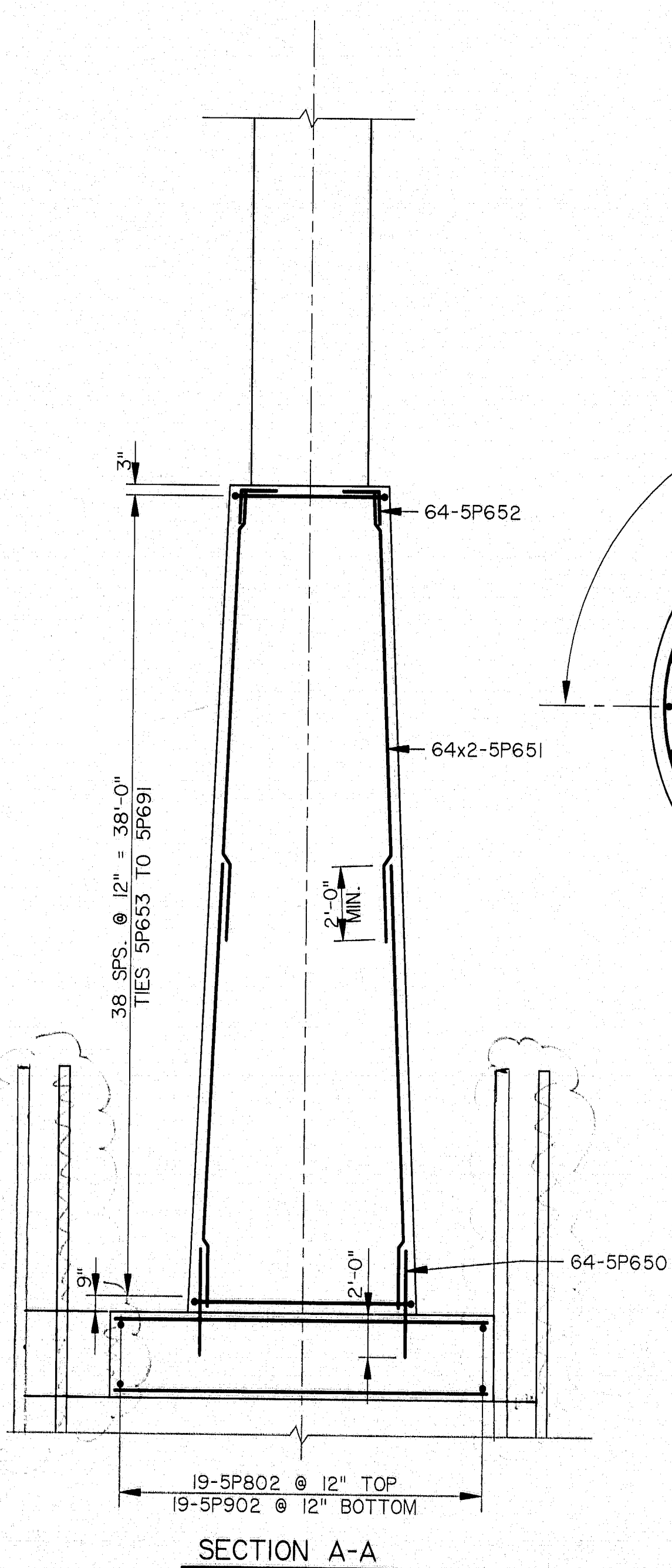
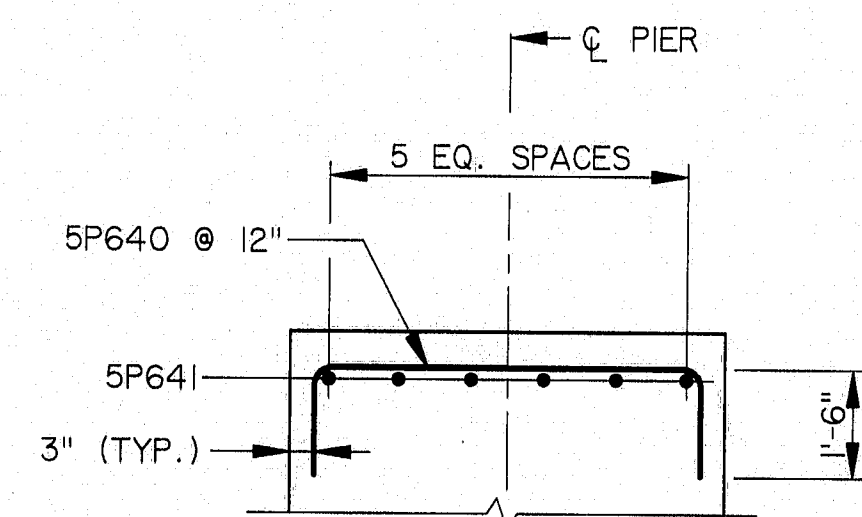
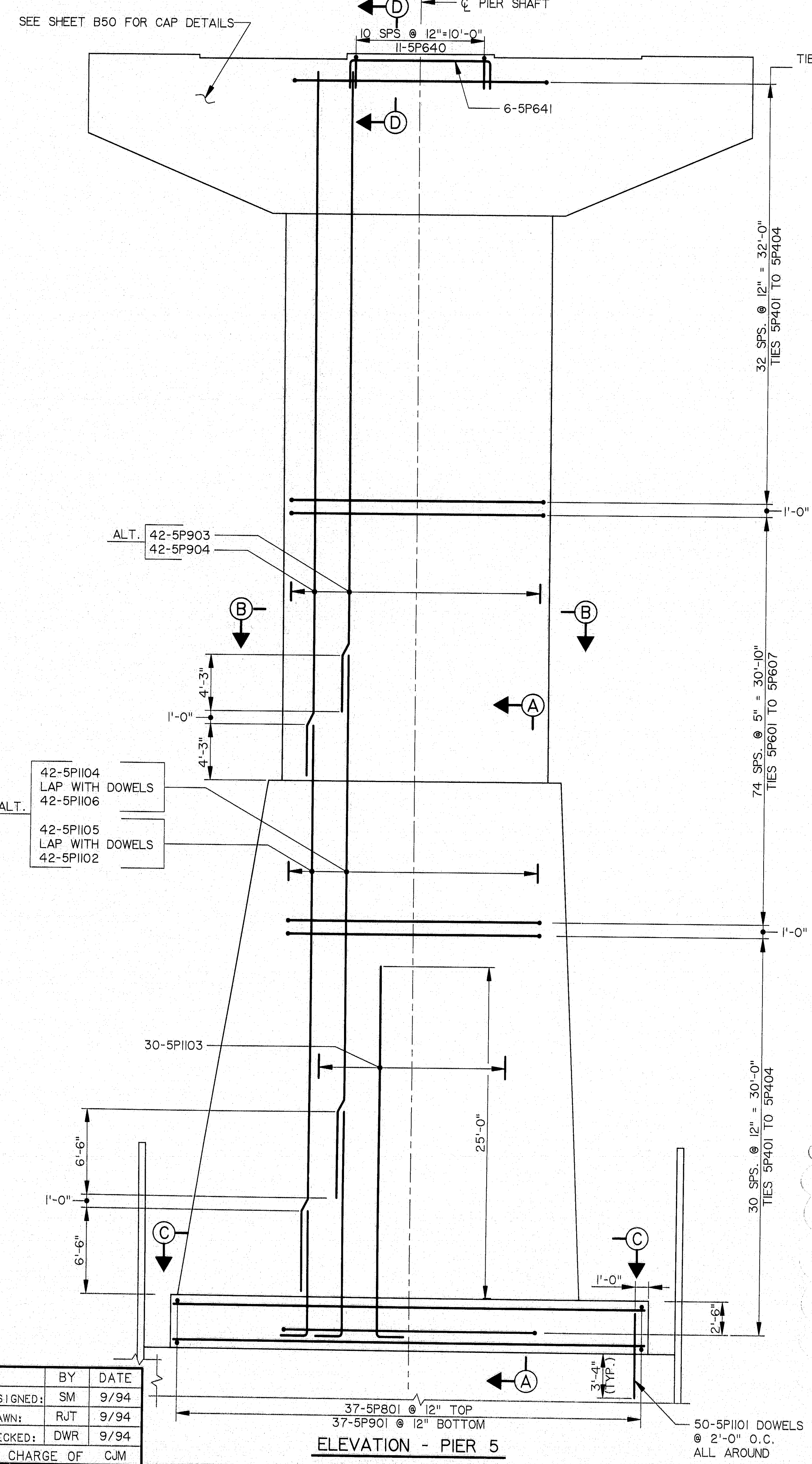
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PIER 5 DETAILS

SHEET B38 OF B86 AUGUSTA, MAINE

RAY: (F:\PROJECTS\B39\B39.DWG) 10/26/94 CSM/ DWT/ CSM/

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	48	103



NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	



115-234

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

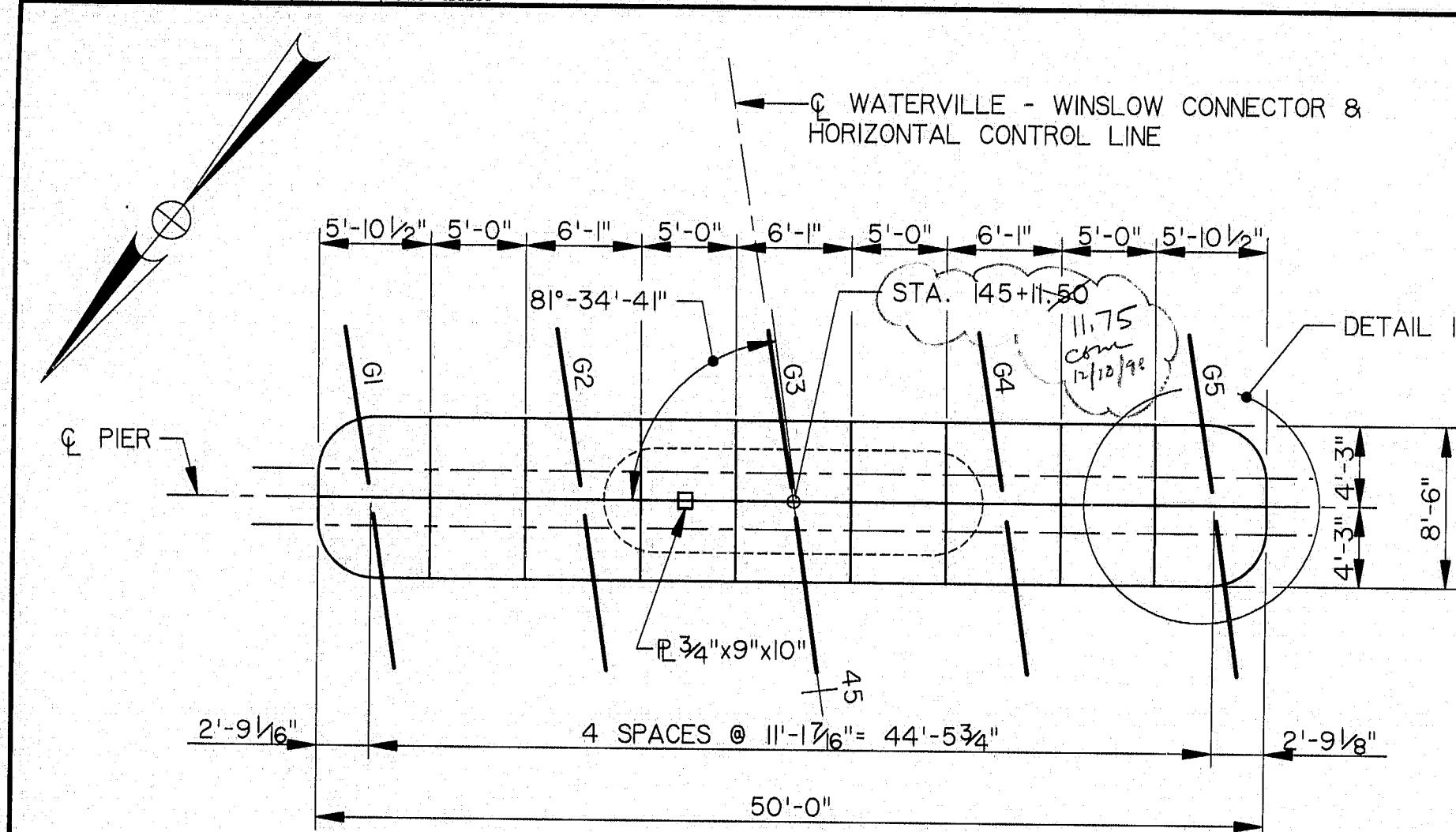
WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

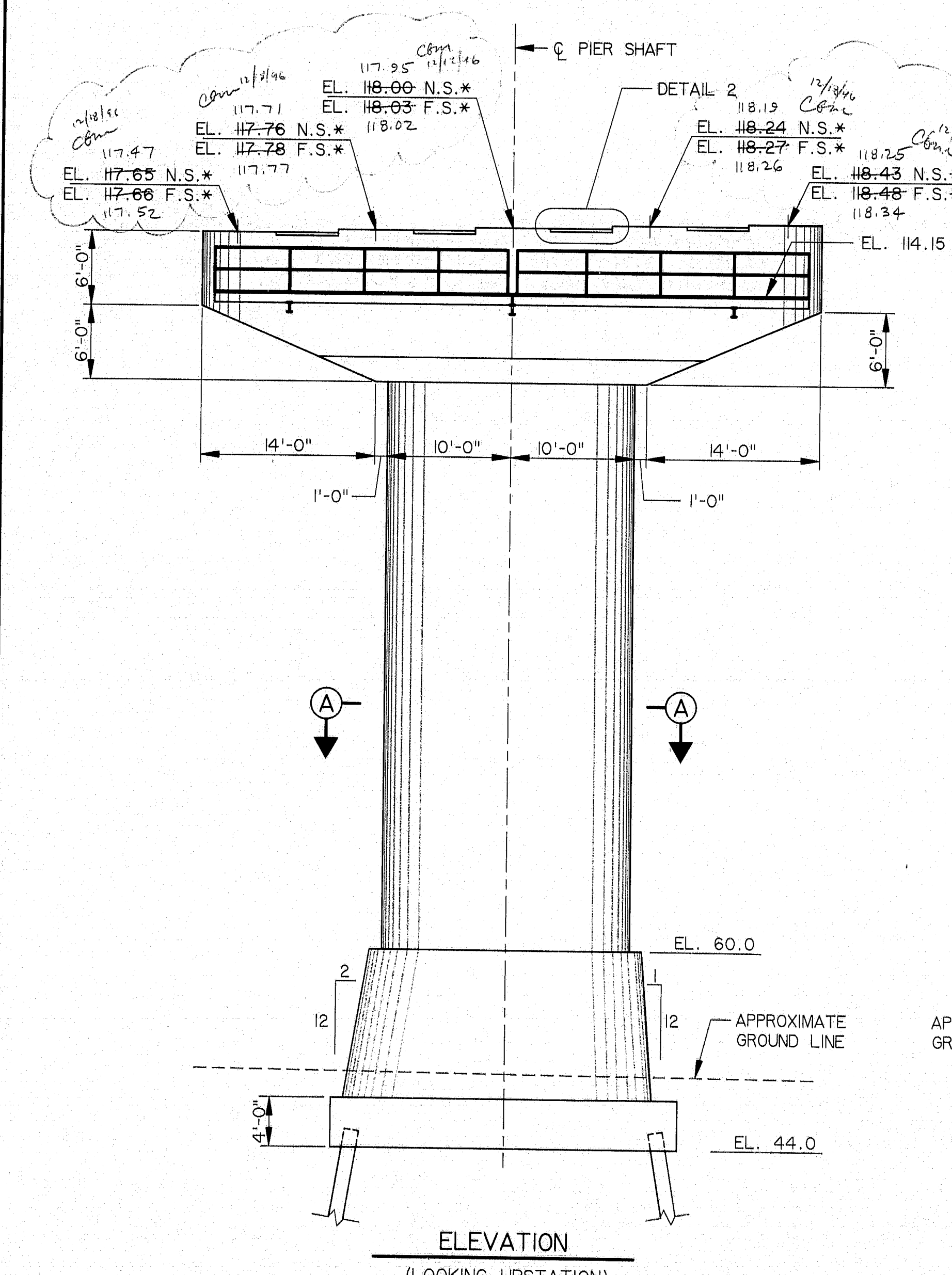
PIER 5 RE-STEEL

SHEET B39 OF B86 AUGUSTA, MAINE

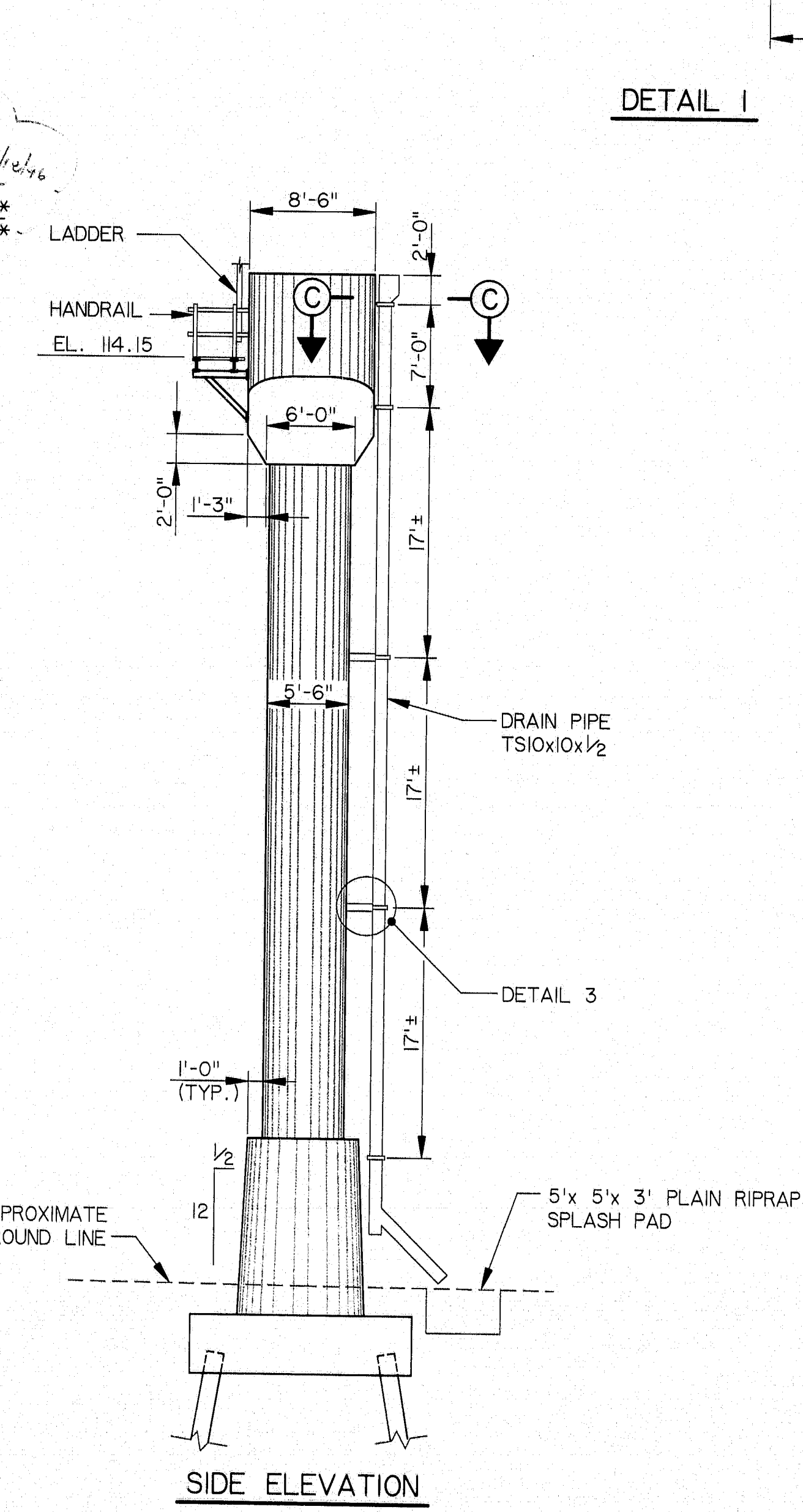
PLAN - PIER 6



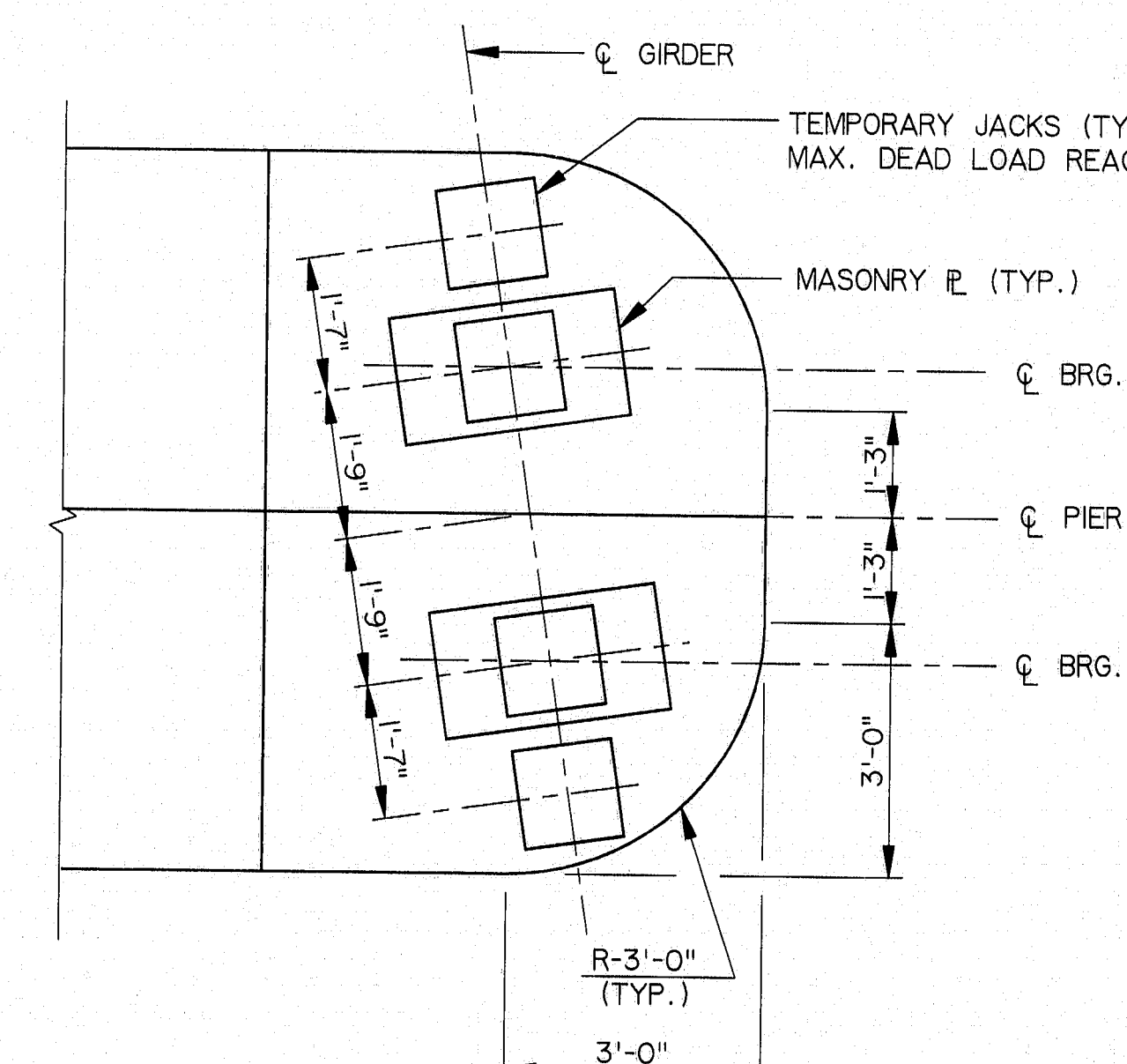
PLAN - PIER 6



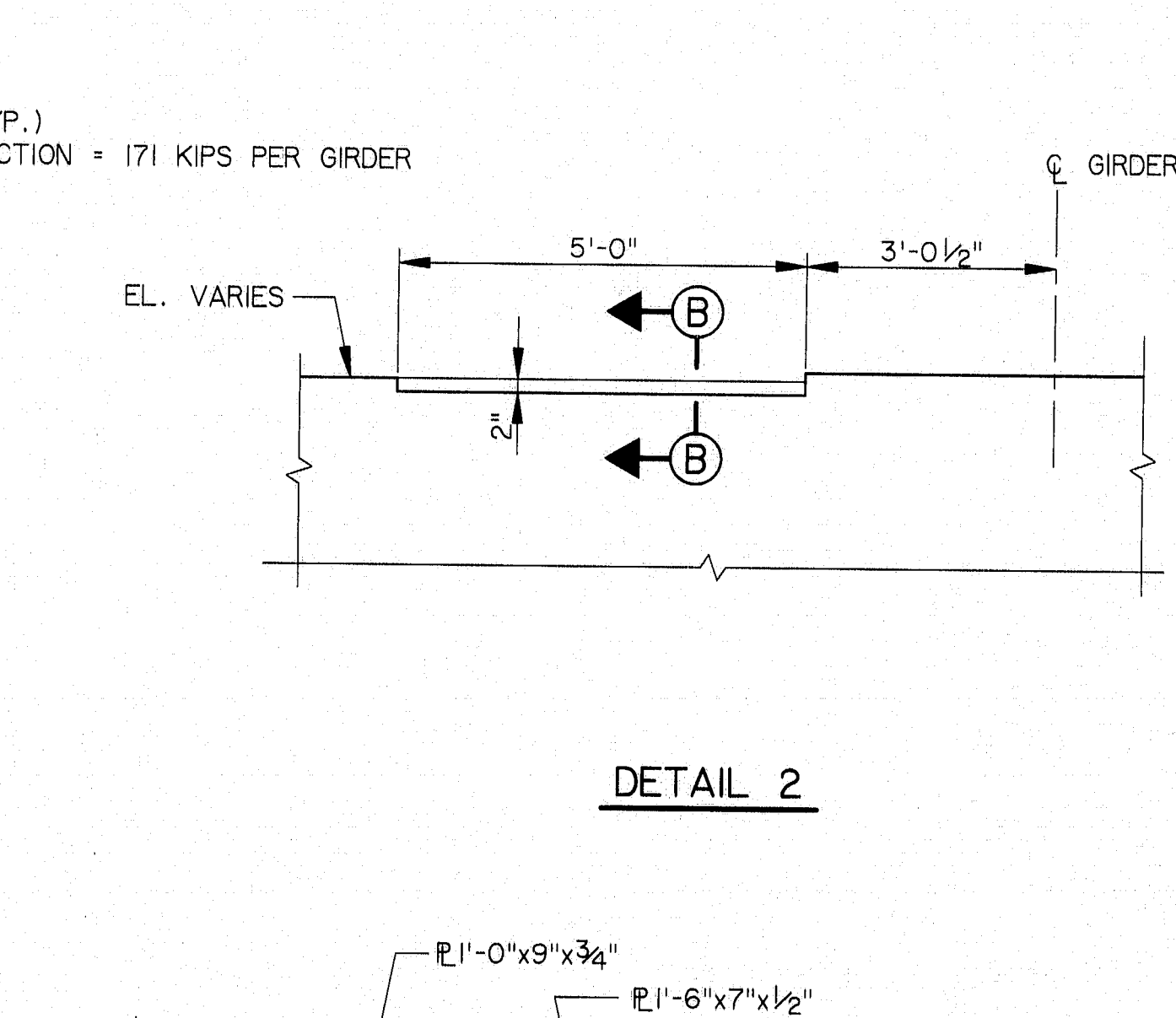
ELEVATION
(LOOKING UPSTATION)



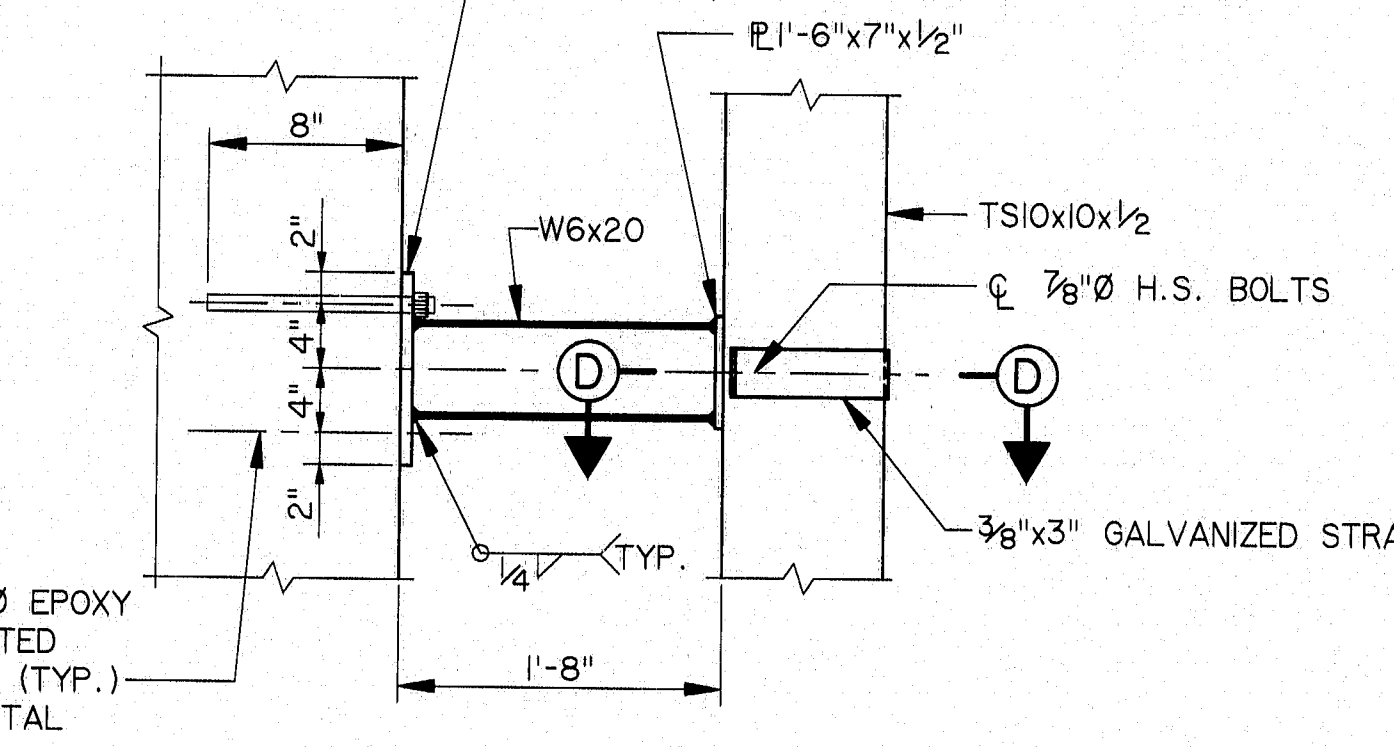
SIDE ELEVATION



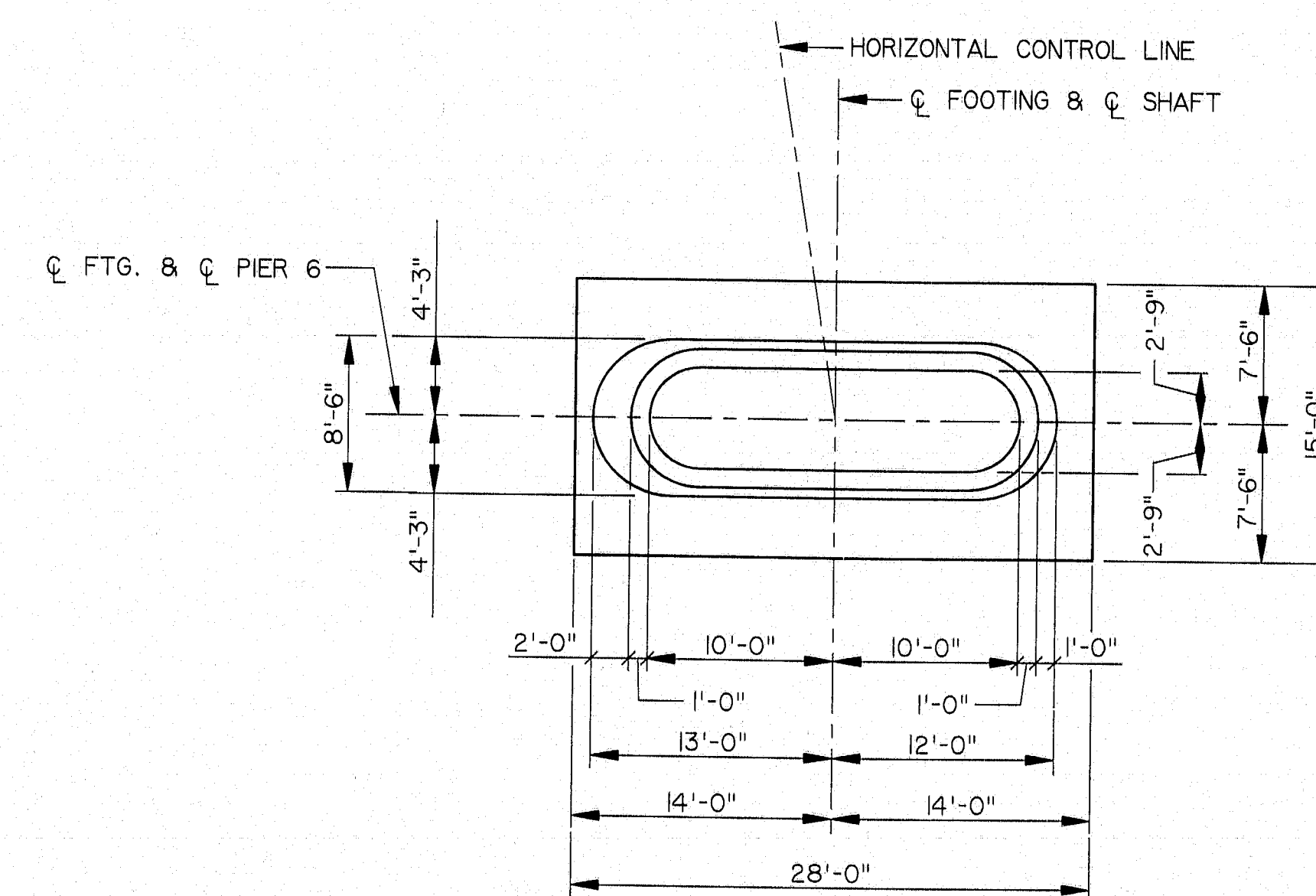
DETAIL 1



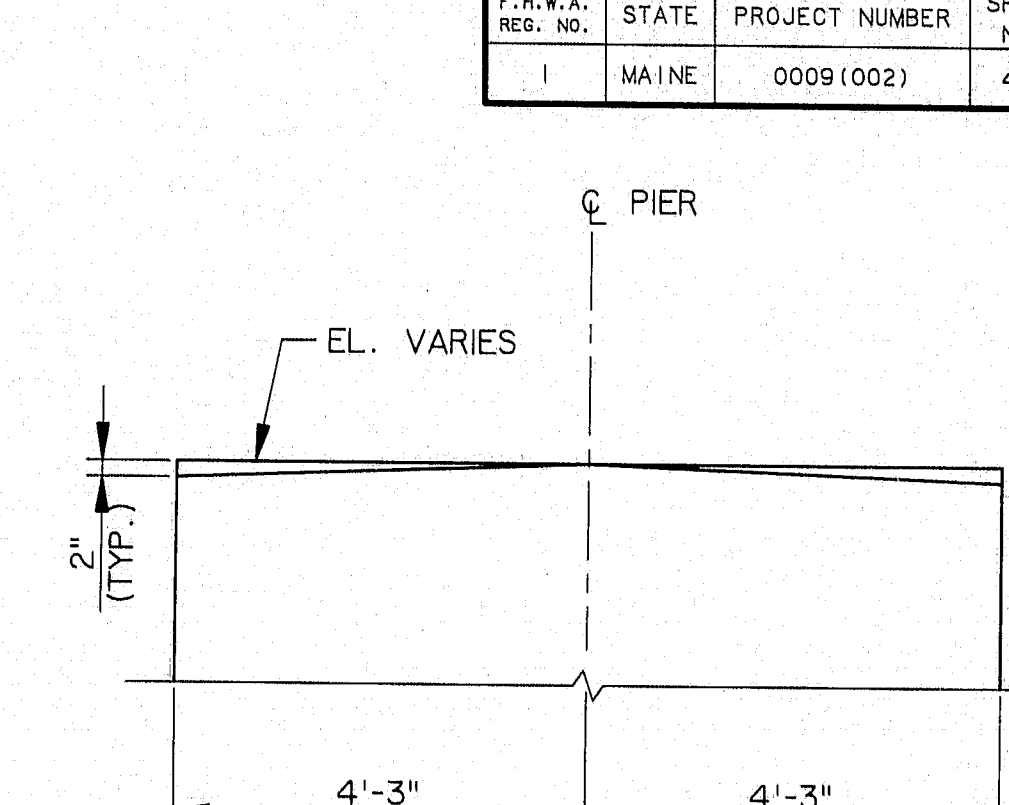
DETAIL 2



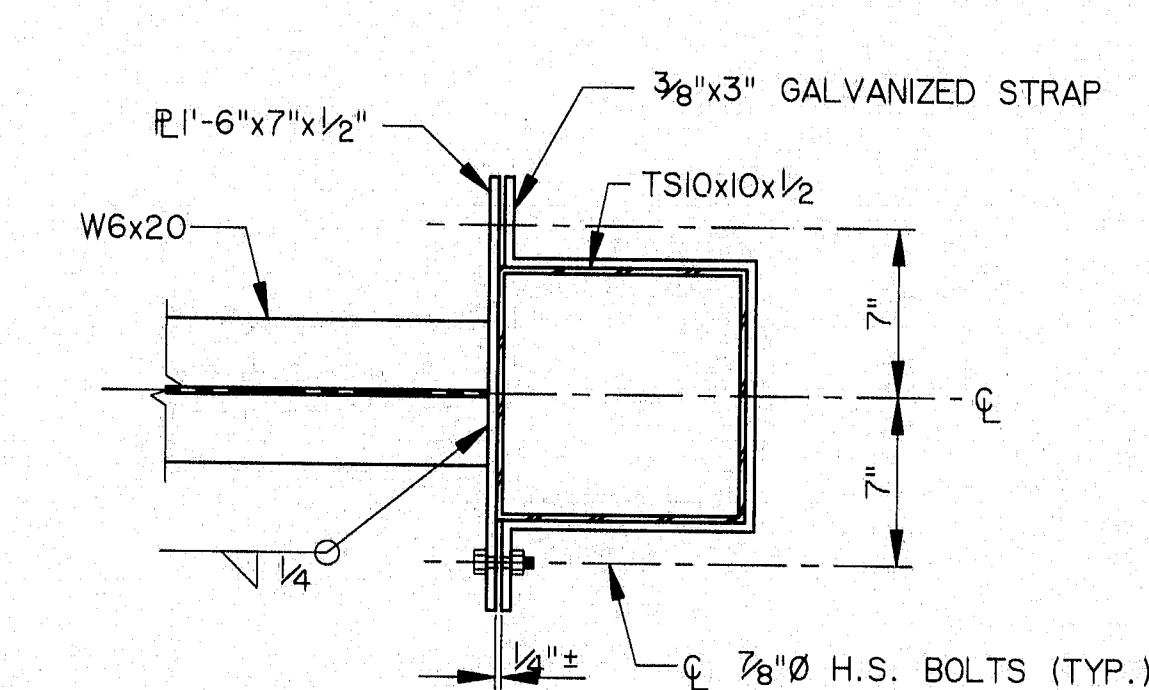
DETAIL 3



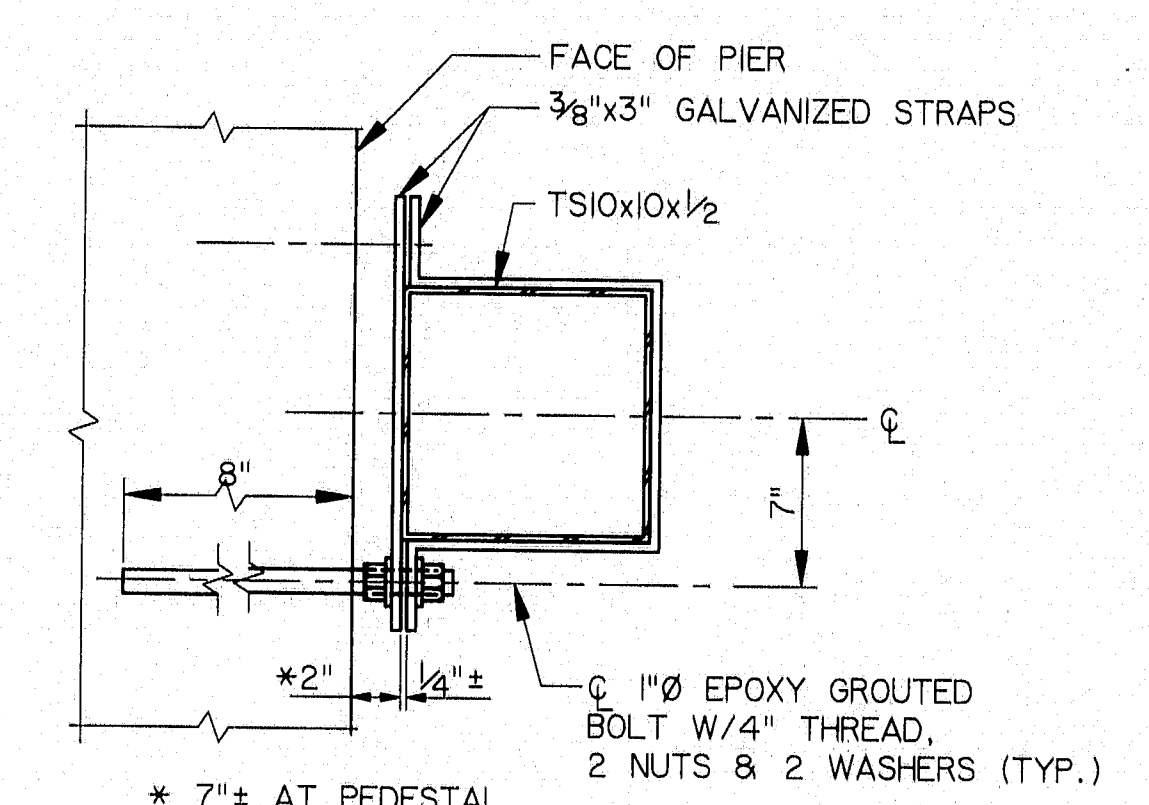
SECTION A-A



SECTION B-B



SECTION D-D



SECTION C-C

115-235

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

PIER 6 DETAILS

SHEET B40 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

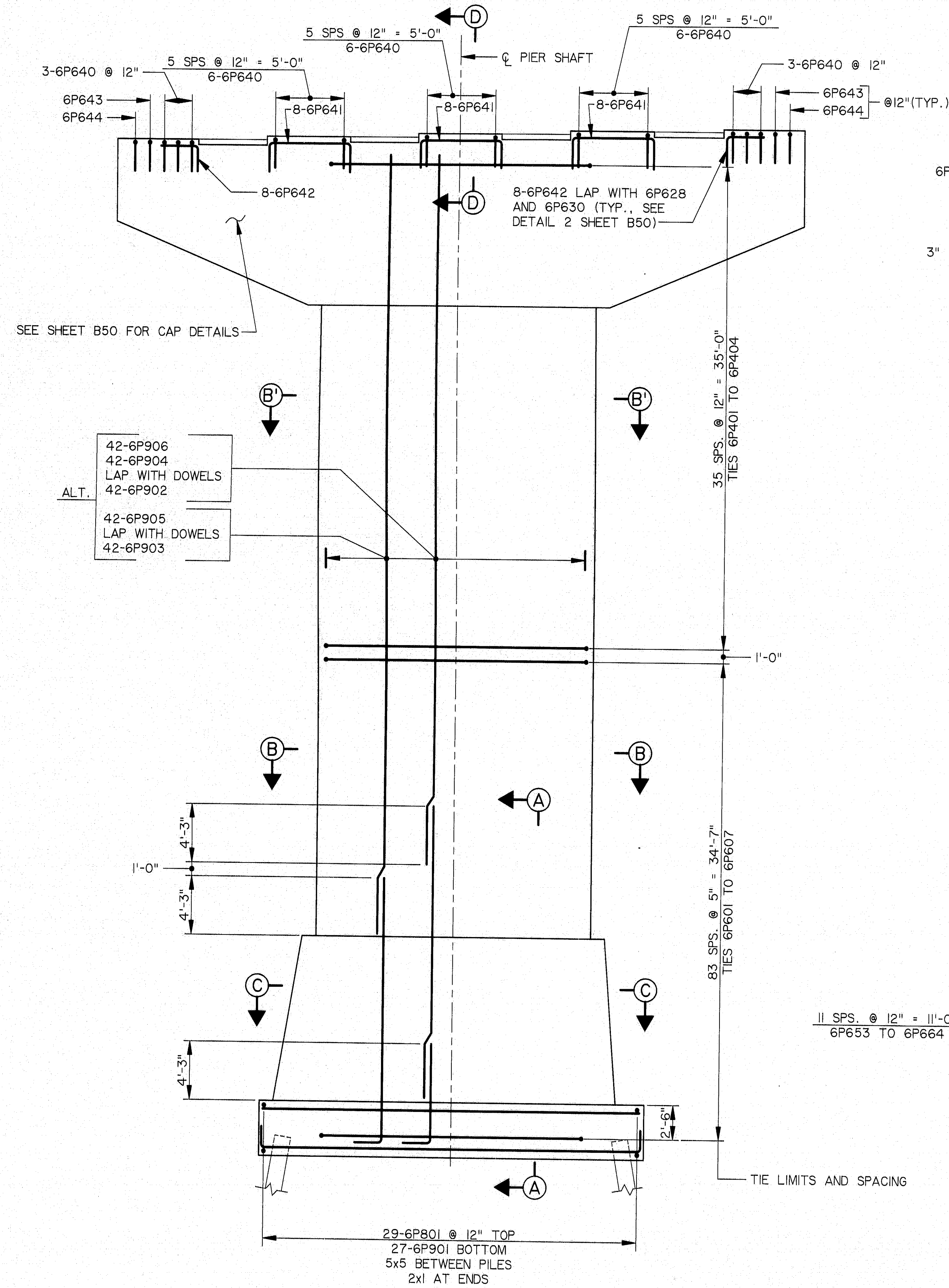
* SEE NOTE 7, SHEET B30.

NOTES:

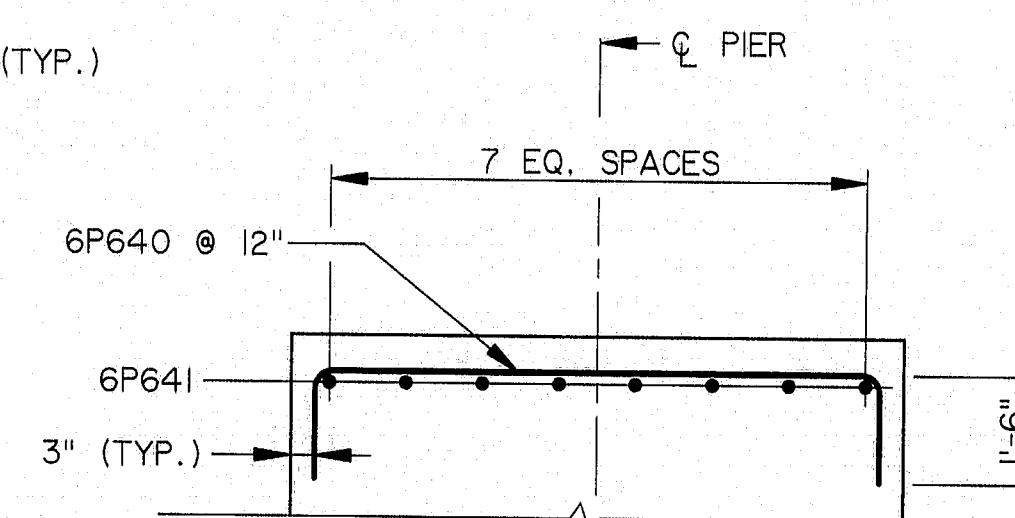
1. MAXIMUM CALCULATED PILE LOAD = 111 TONS (GROUP: 1).
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

HNTB
ARCHITECTS ENGINEERS PLANNERS

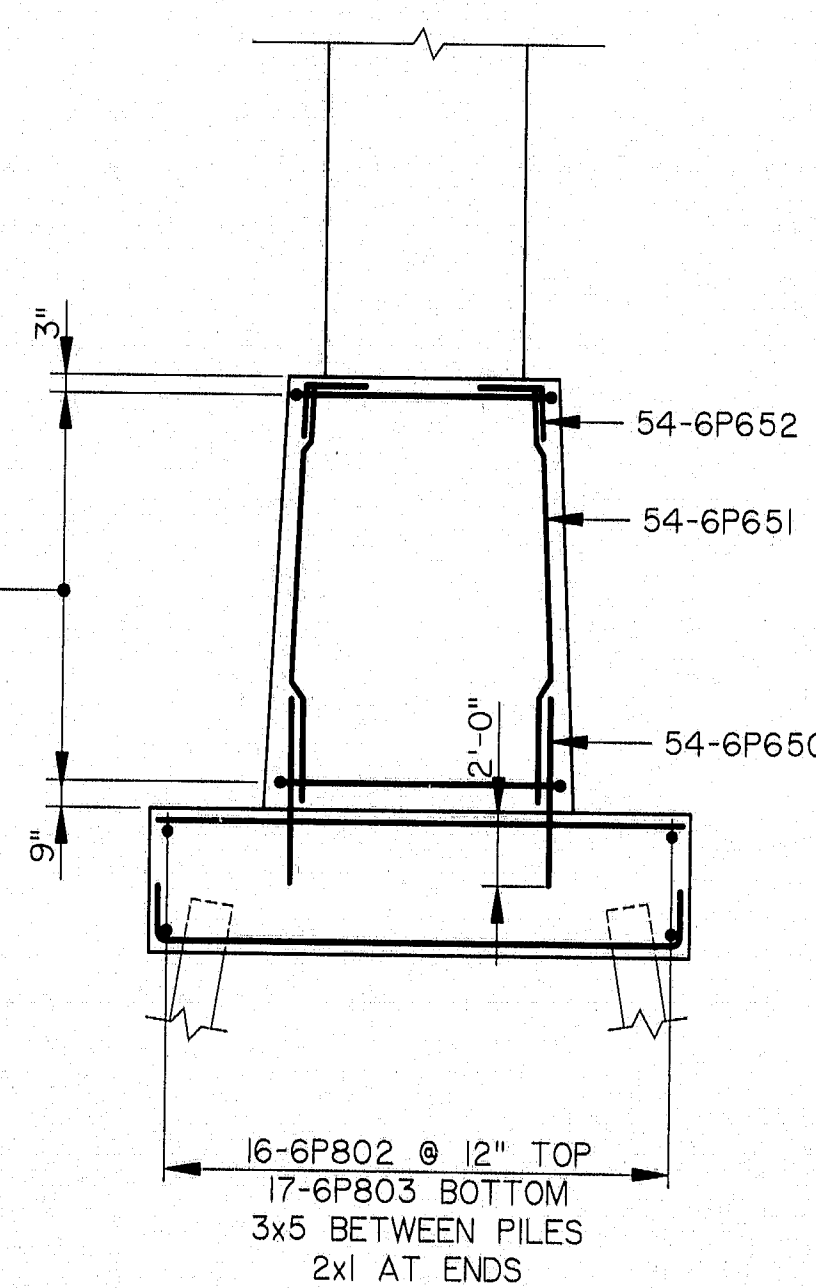
0131 (WSP) 314 (PIER) STEEL COSSAS (P6) (REV. COSSAS)



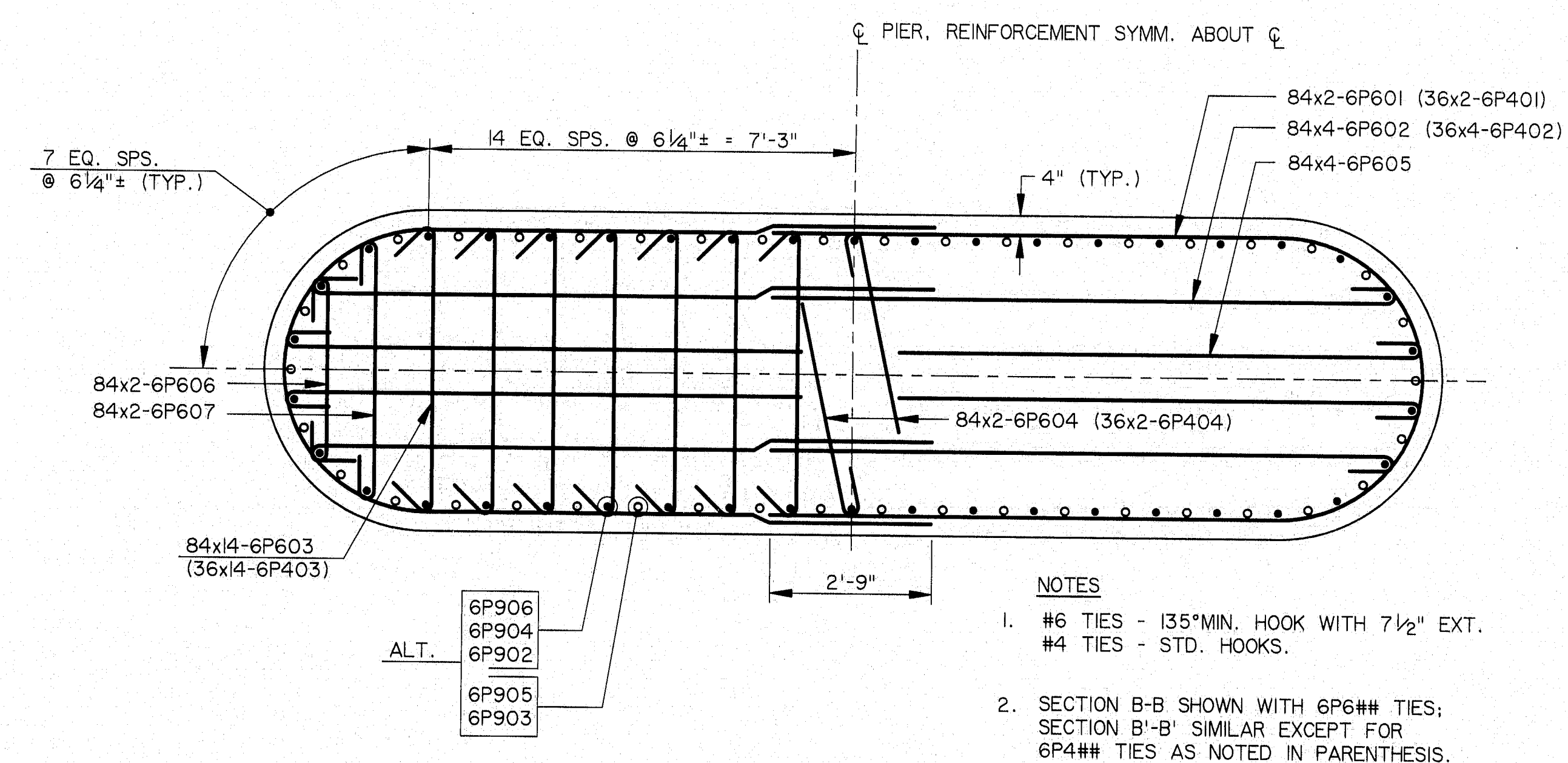
ELEVATION - PIER 6



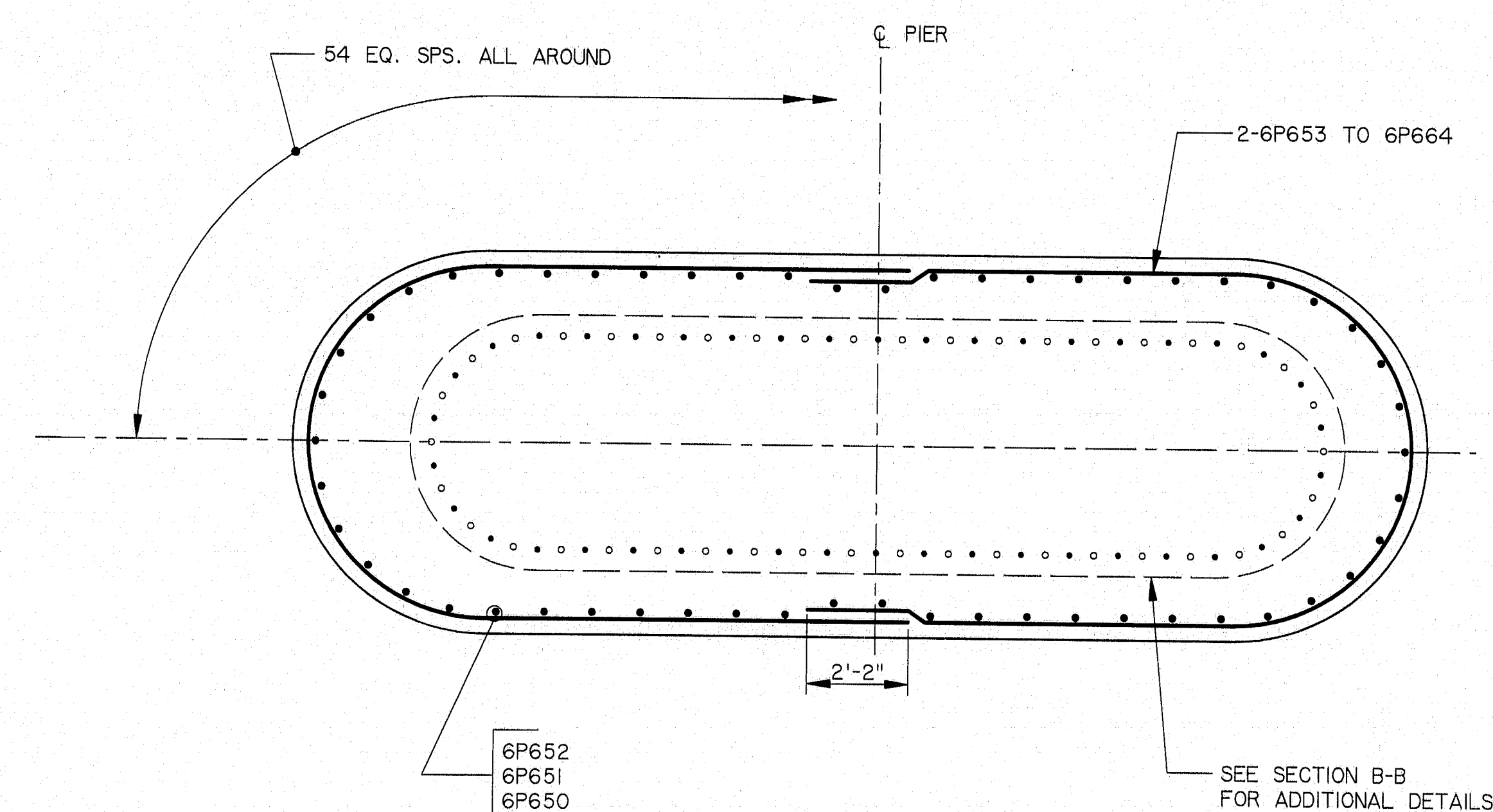
SECTION D-D



SECTION A-A



SECTION B-B (SECTION B'-B')



SECTION C-C

115-236

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

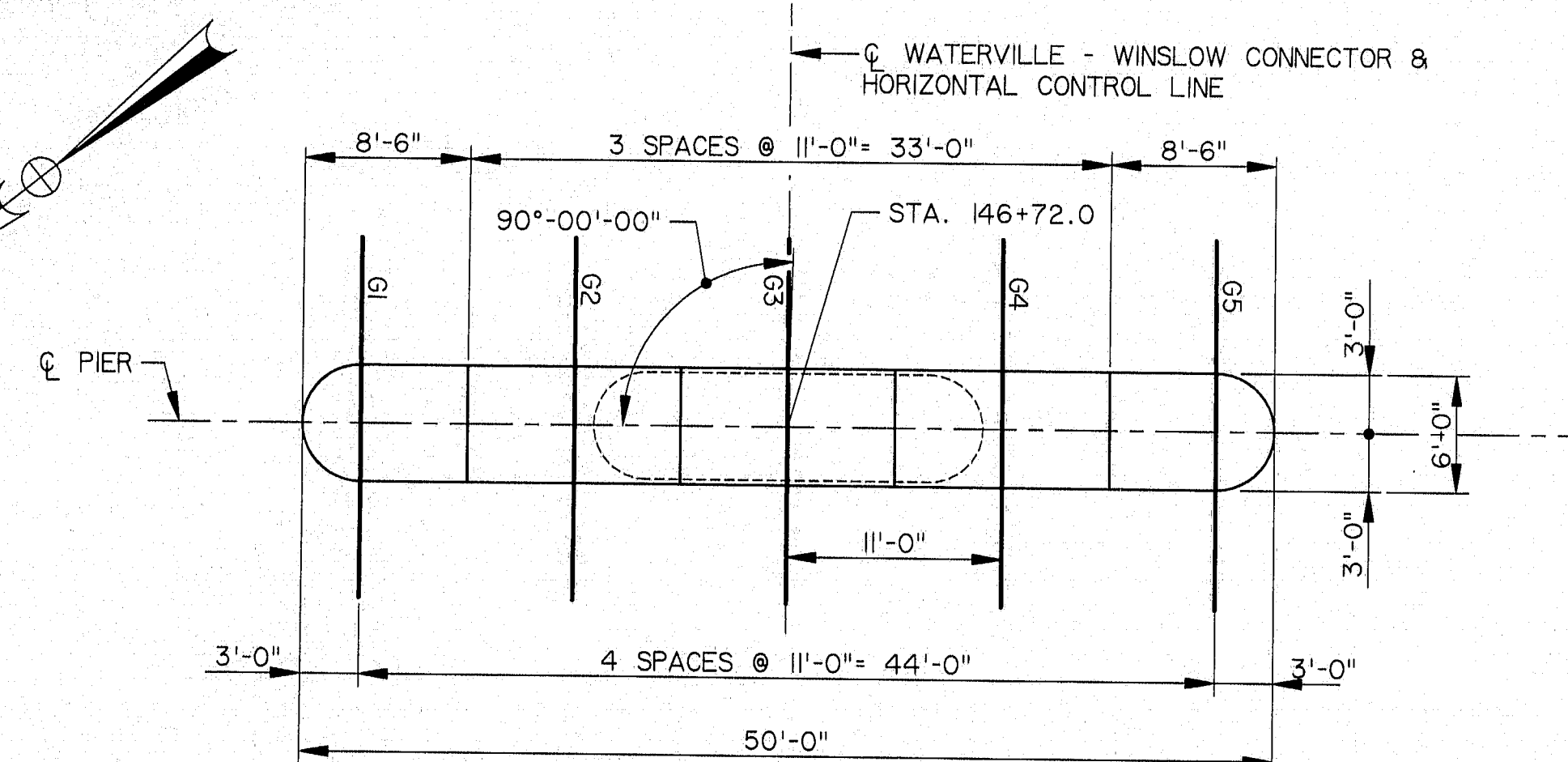
PIER 6 RE-STEEL

SHEET B41 OF B86 AUGUSTA, MAINE

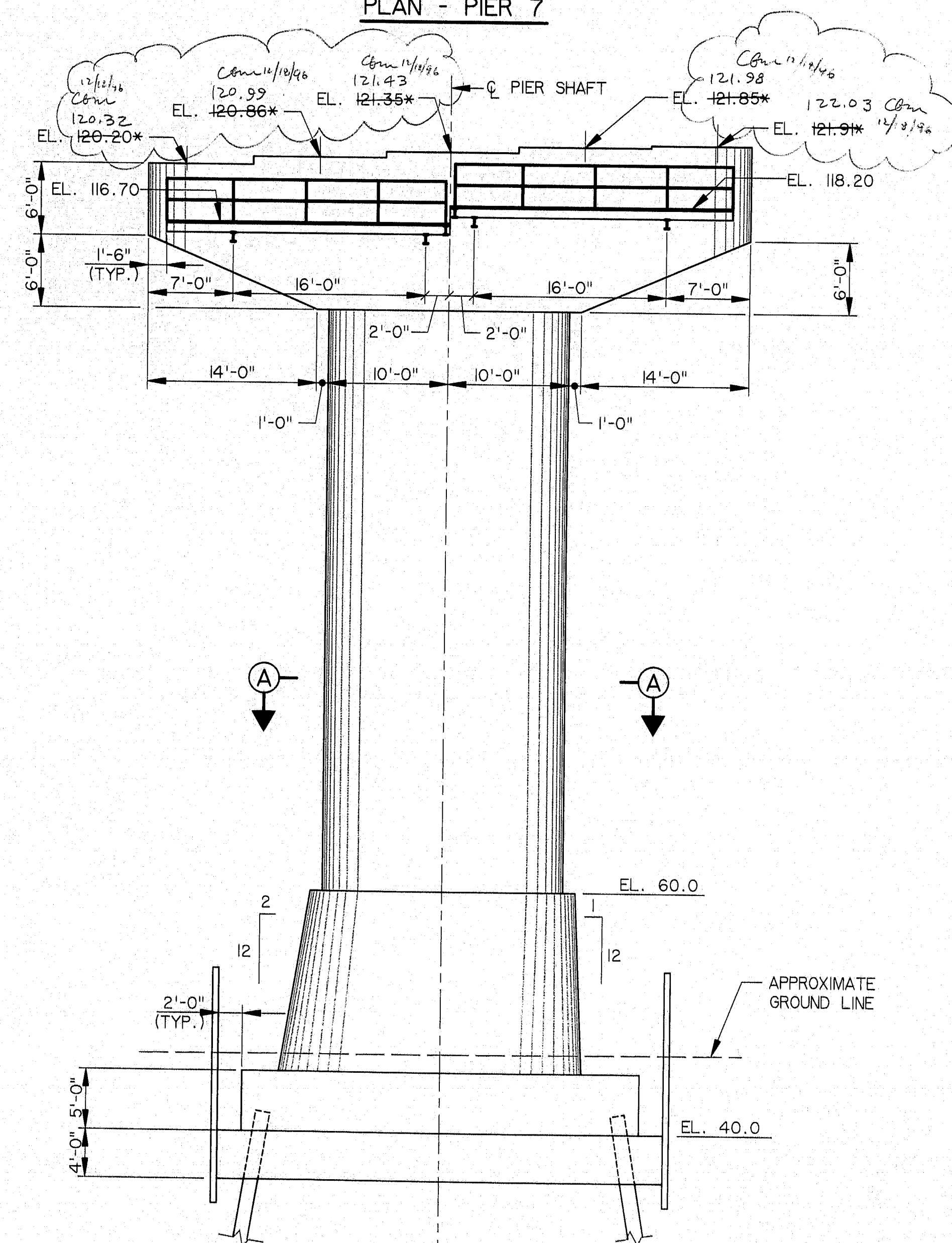
HNTB
ARCHITECTS ENGINEERS PLANNERS

NO.	REVISION	BY	DATE
		DESIGNED: SM	9/94
		DRAWN: RJT	9/94
		CHECKED: DWR	9/94
		IN CHARGE OF: CJM	

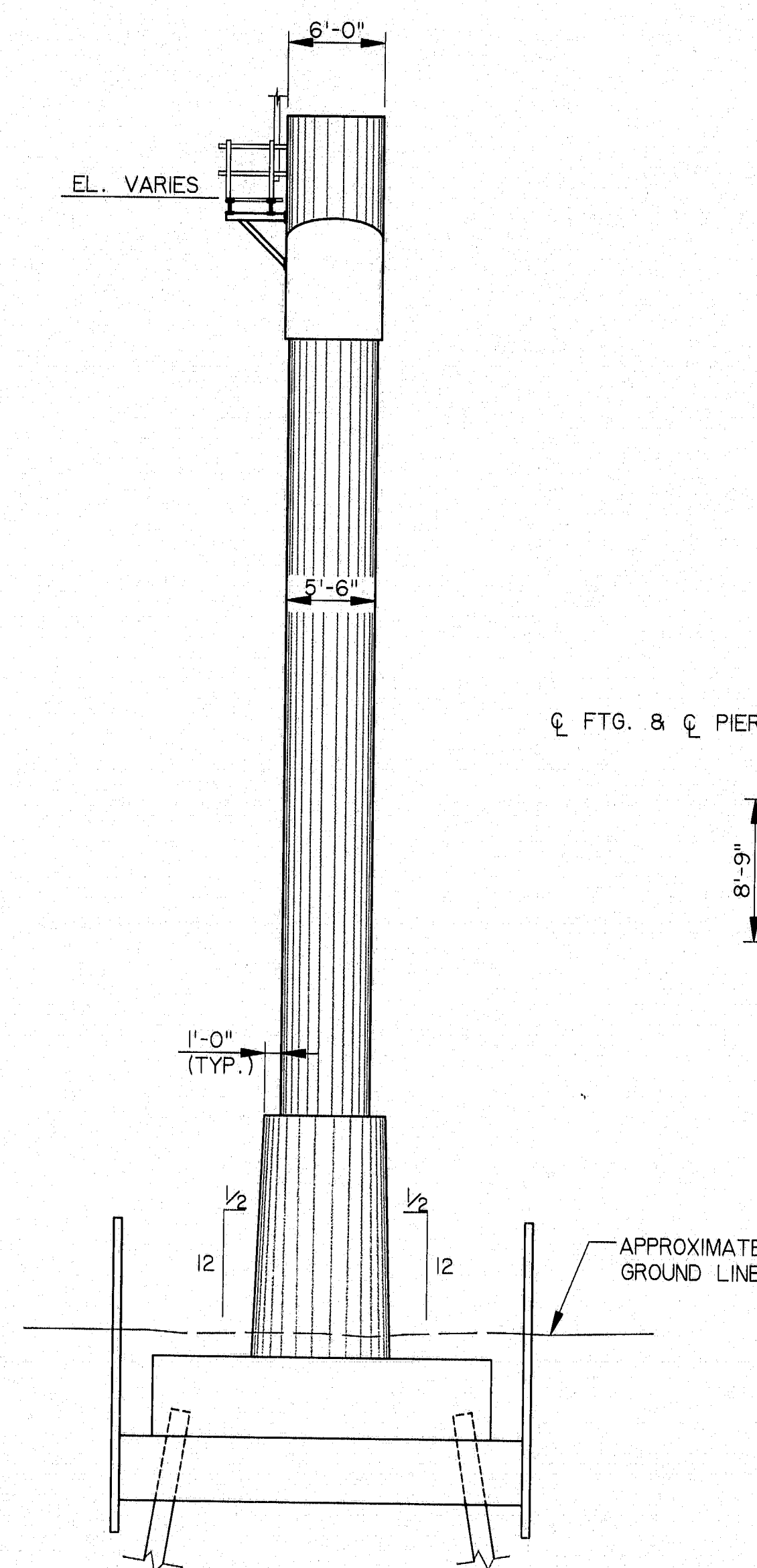
PLAN - PIER 7



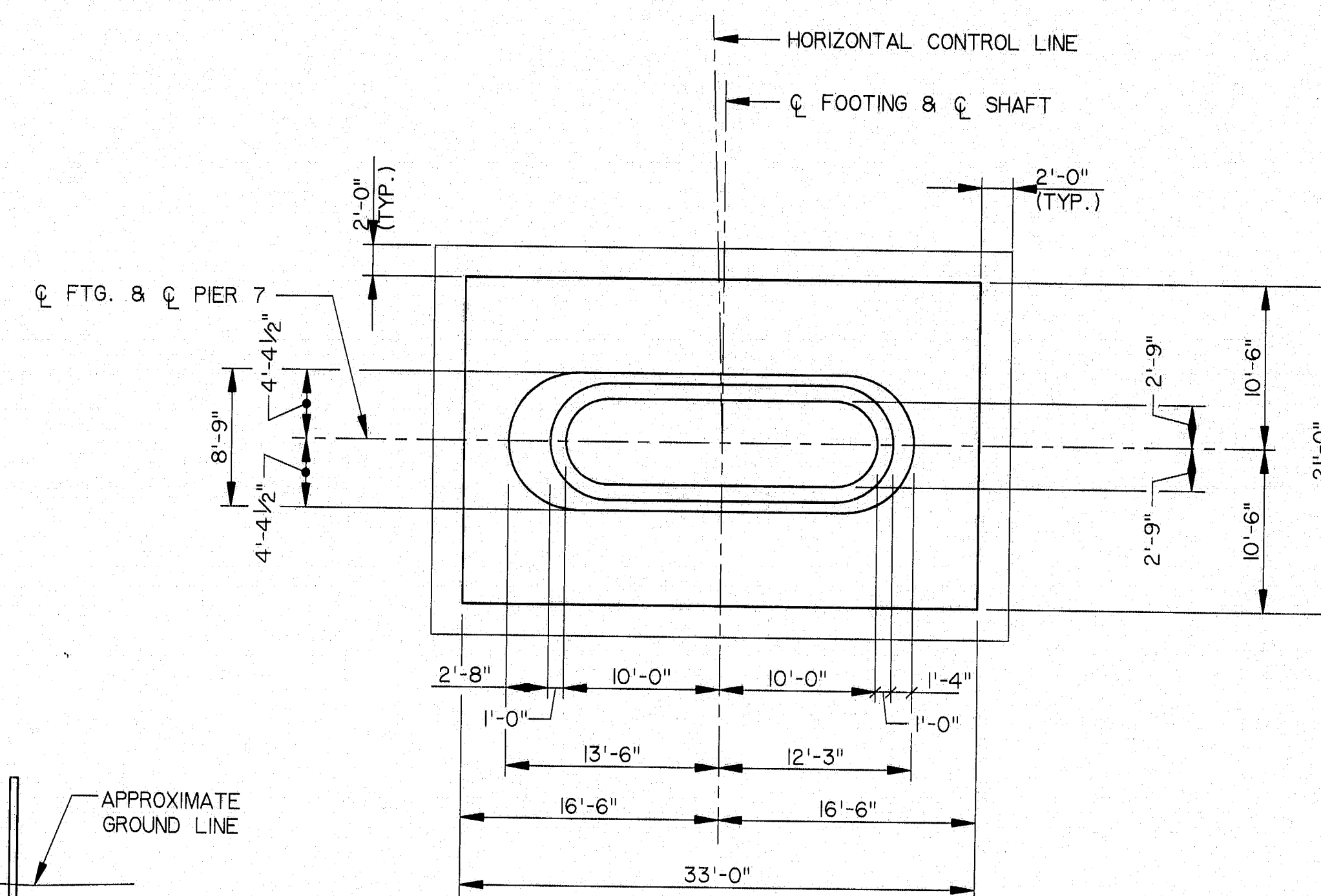
PLAN - PIER 7



ELEVATION
(LOOKING UPSTATION)



SIDE ELEVATION



SECTION A-A

NOTES:

1. MAXIMUM CALCULATED PILE LOAD = 164 TONS (GROUP SEISMIC)*.
* ULTIMATE CAPACITY OF PILE USED IN CONJUNCTION WITH SEISMIC LOADS.
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

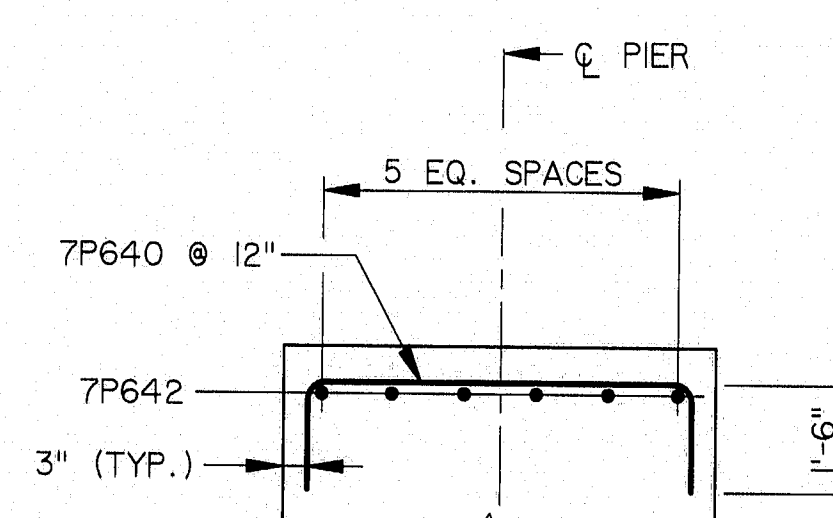
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	51	103

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

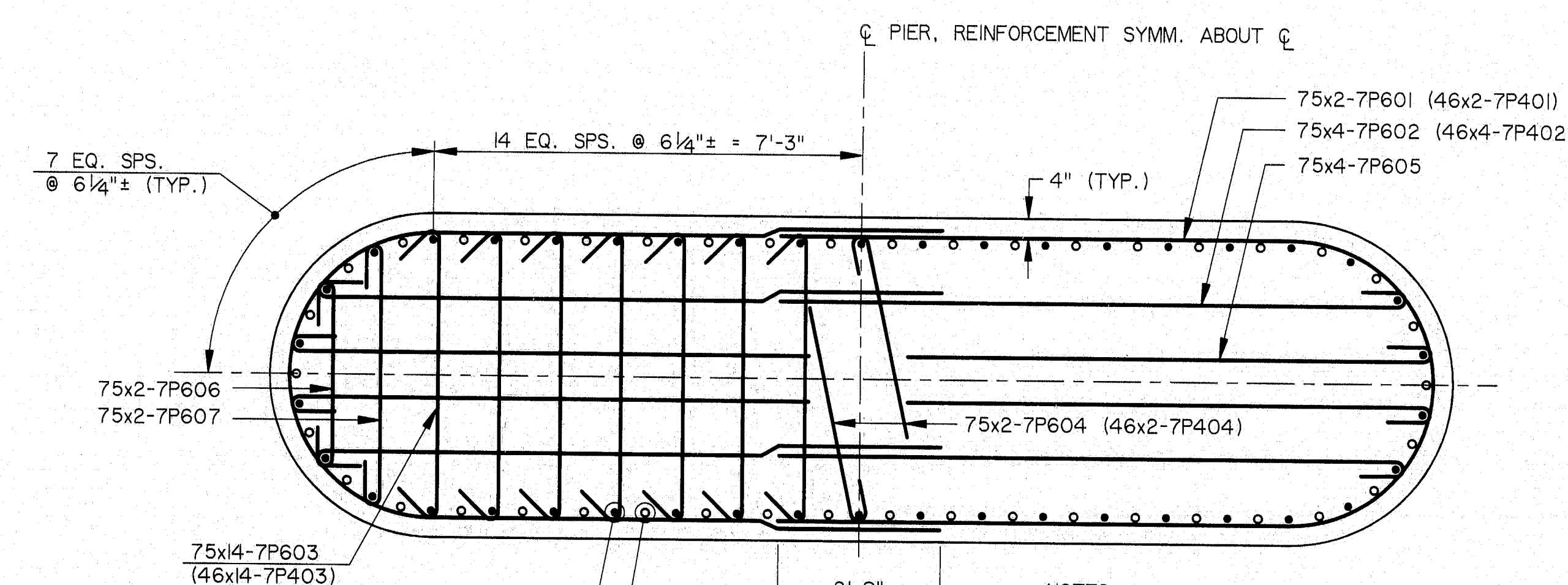
* SEE NOTE 7, SHEET B30.

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-237
STEEL ALTERNATIVE
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
PIER 7 DETAILS
SHEET B42 OF B86 AUGUSTA, MAINE

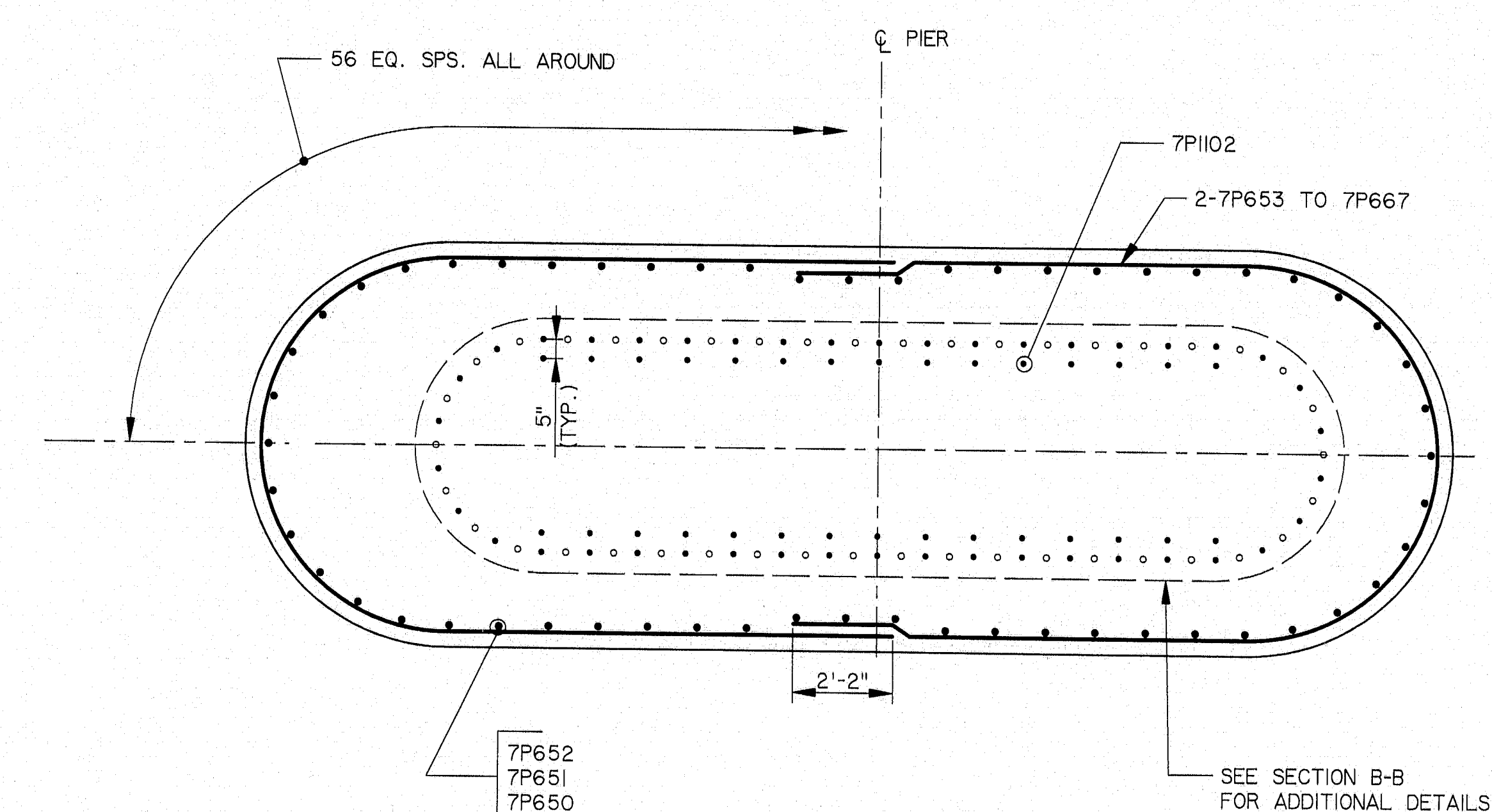


SECTION D-D

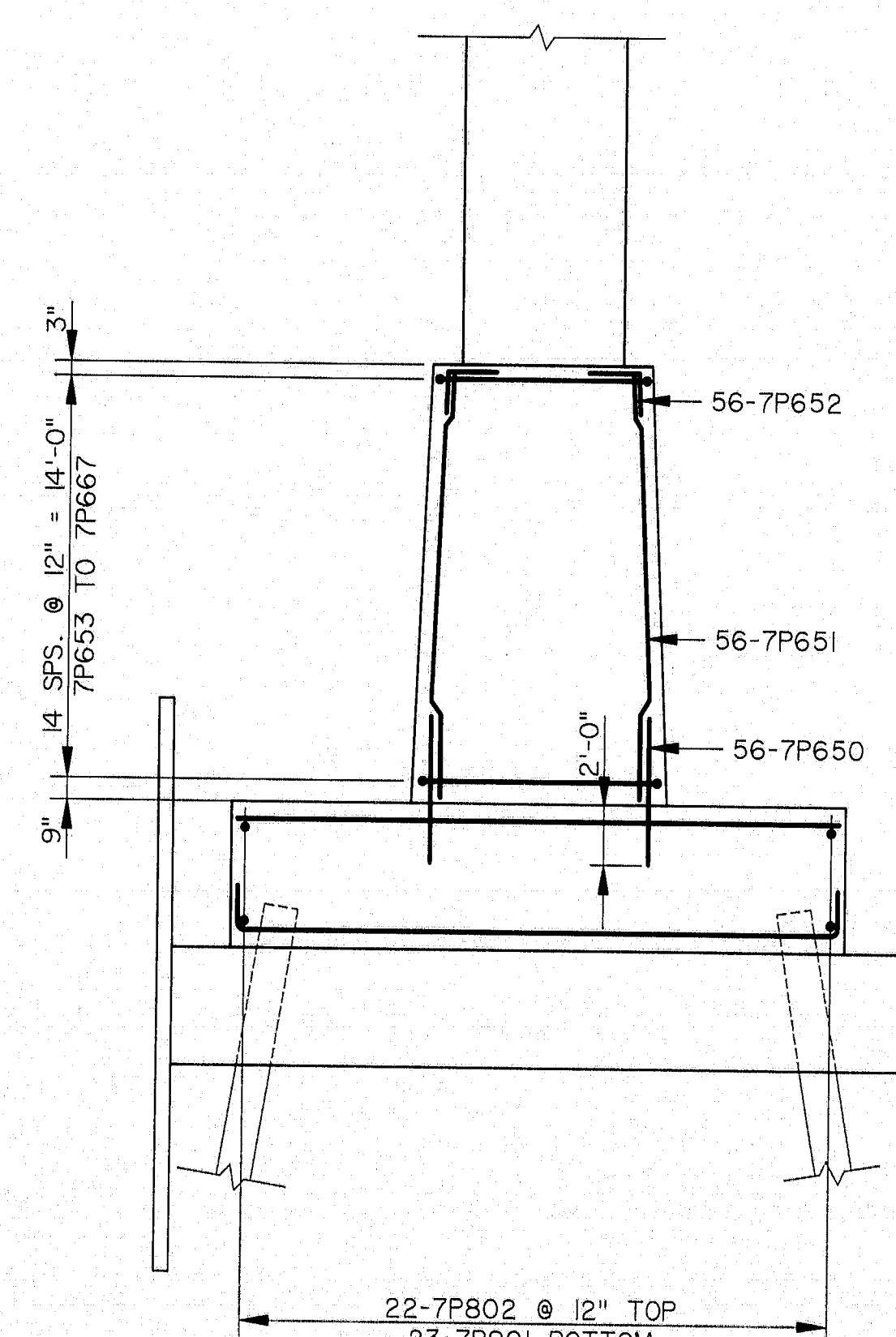


- NOTES
1. #6 TIES - 135°MIN. HOOK WITH 7½" EXT.
#4 TIES - STD. HOOKS.
 2. SECTION B-B SHOWN WITH 7P6## TIES;
SECTION B'-B' SIMILAR EXCEPT FOR
7P4## TIES AS NOTED IN PARENTHESIS.

SECTION B-B (SECTION B'-B')



SECTION C-C



SECTION A-A

				BY	DATE
				DESIGNED:	SM 9/94
				DRAWN:	RJT 9/94
				CHECKED:	DWR 9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	C/M

ELEVATION - PIER 7

115-238

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER

KENNEBEC RIVER

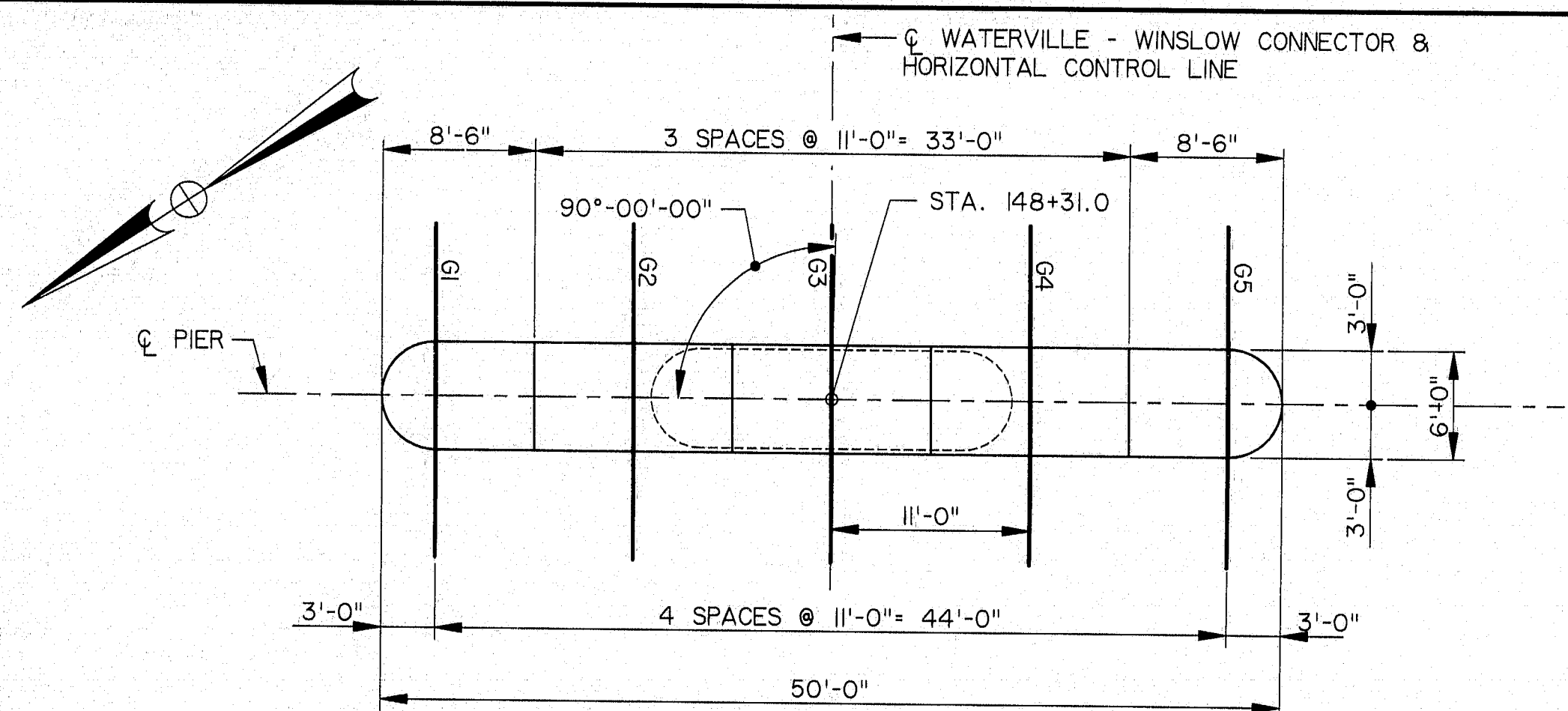
PIER 7 RE-STEEL

SHEET B43 OF B86 AUGUSTA, MAINE

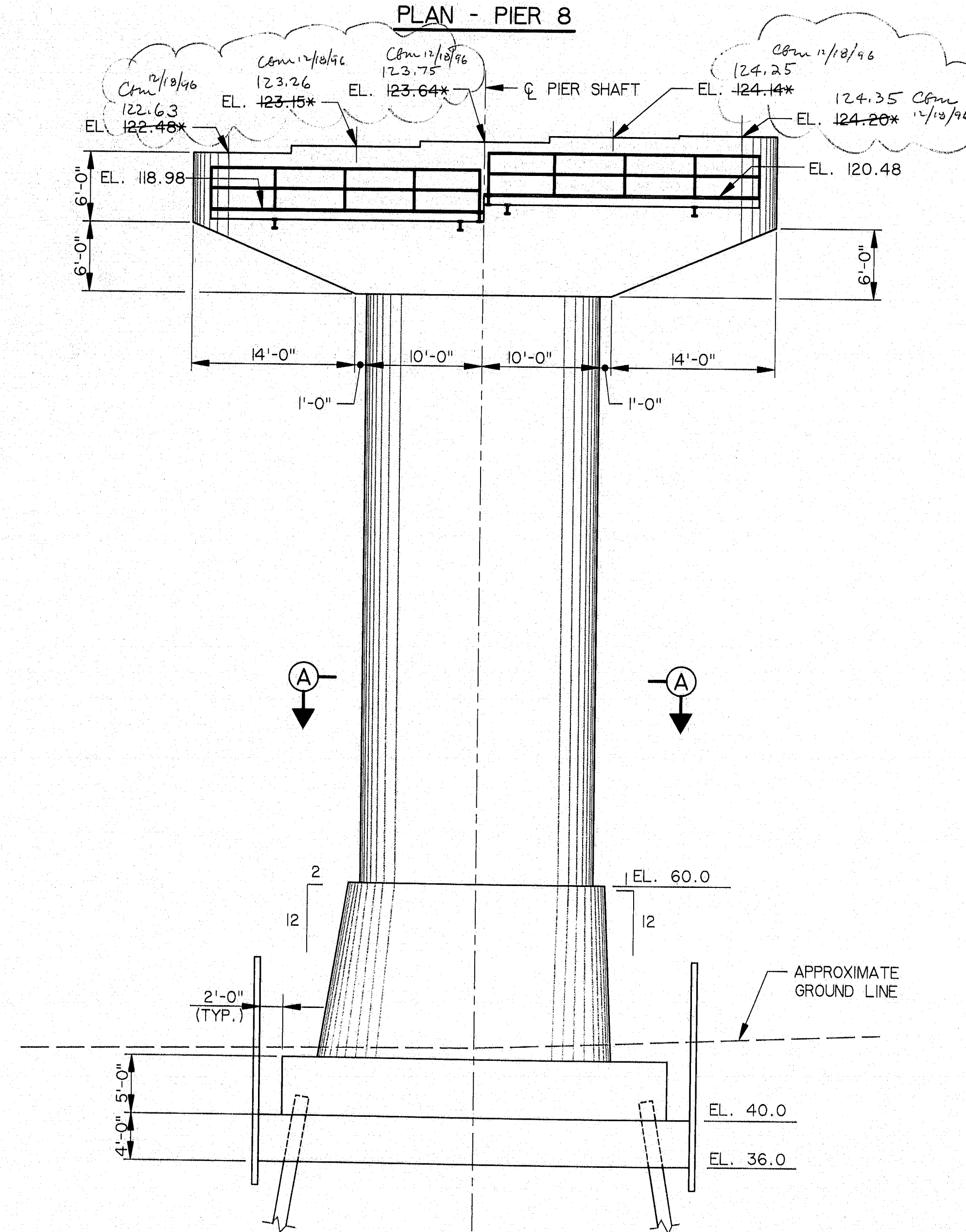


DATA: WATVILLE - WINSLOW CONNECTOR & HORIZONTAL CONTROL LINE

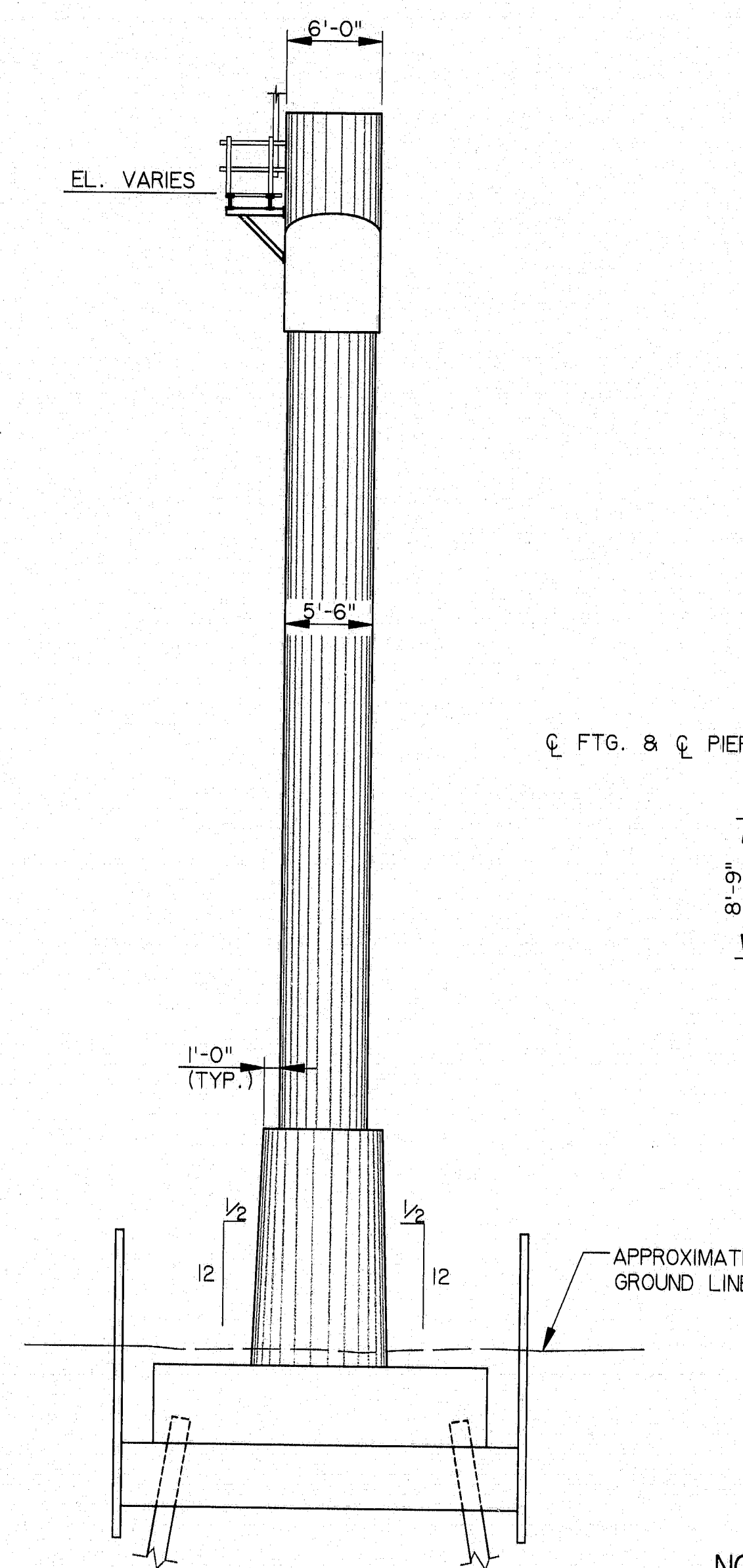
F. H. & A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	53	103



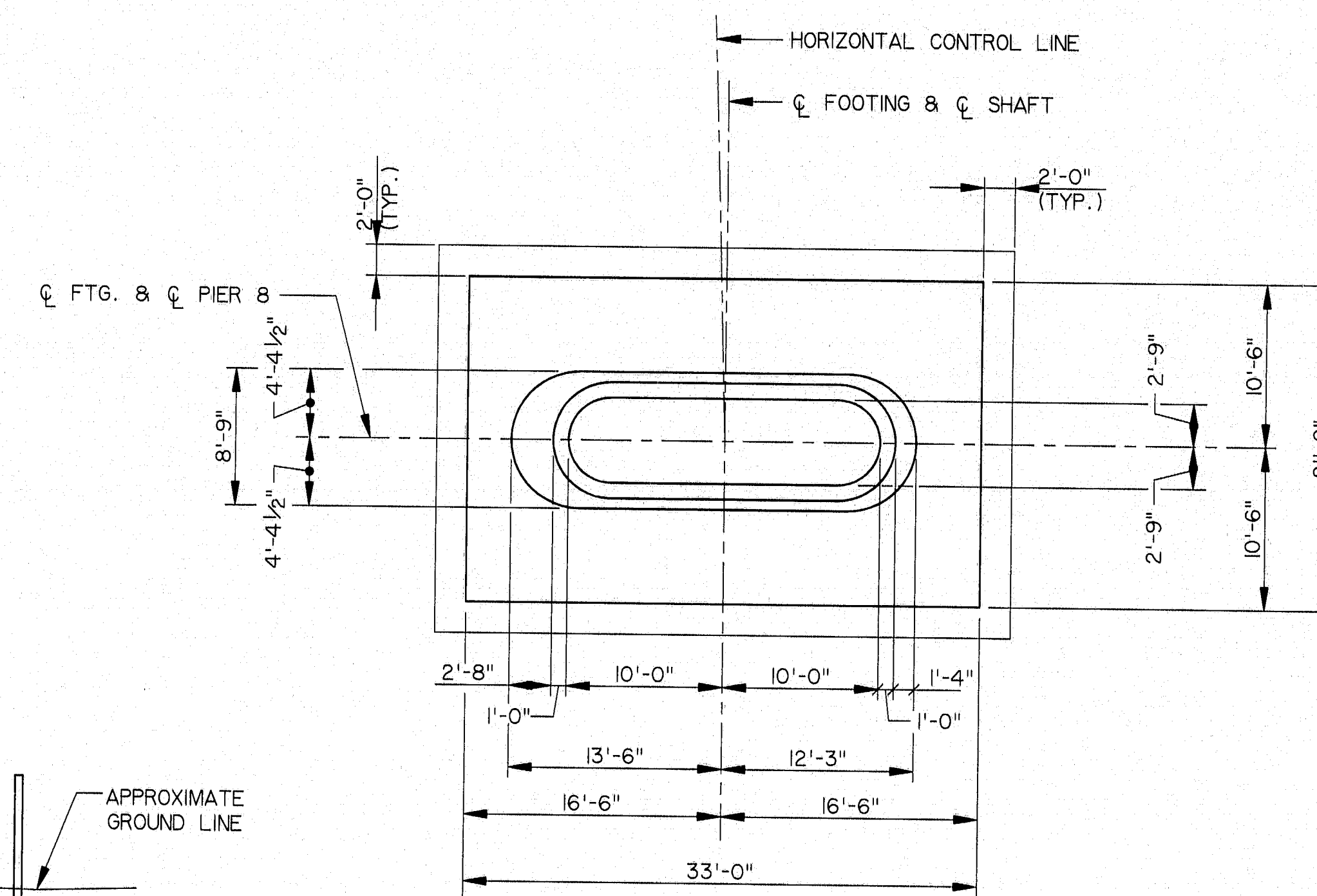
PLAN - PIER 8



ELEVATION
(LOOKING UPSTATION)



SIDE ELEVATION



SECTION A-A

NOTES:

- MAXIMUM CALCULATED PILE LOAD = 157 TONS (GROUP SEISMIC)*
* ULTIMATE CAPACITY OF PILE IS USED IN CONJUNCTION WITH SEISMIC LOADS.
- SEE SHEET B30 FOR ADDITIONAL NOTES.

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-239

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER

KENNEBEC RIVER

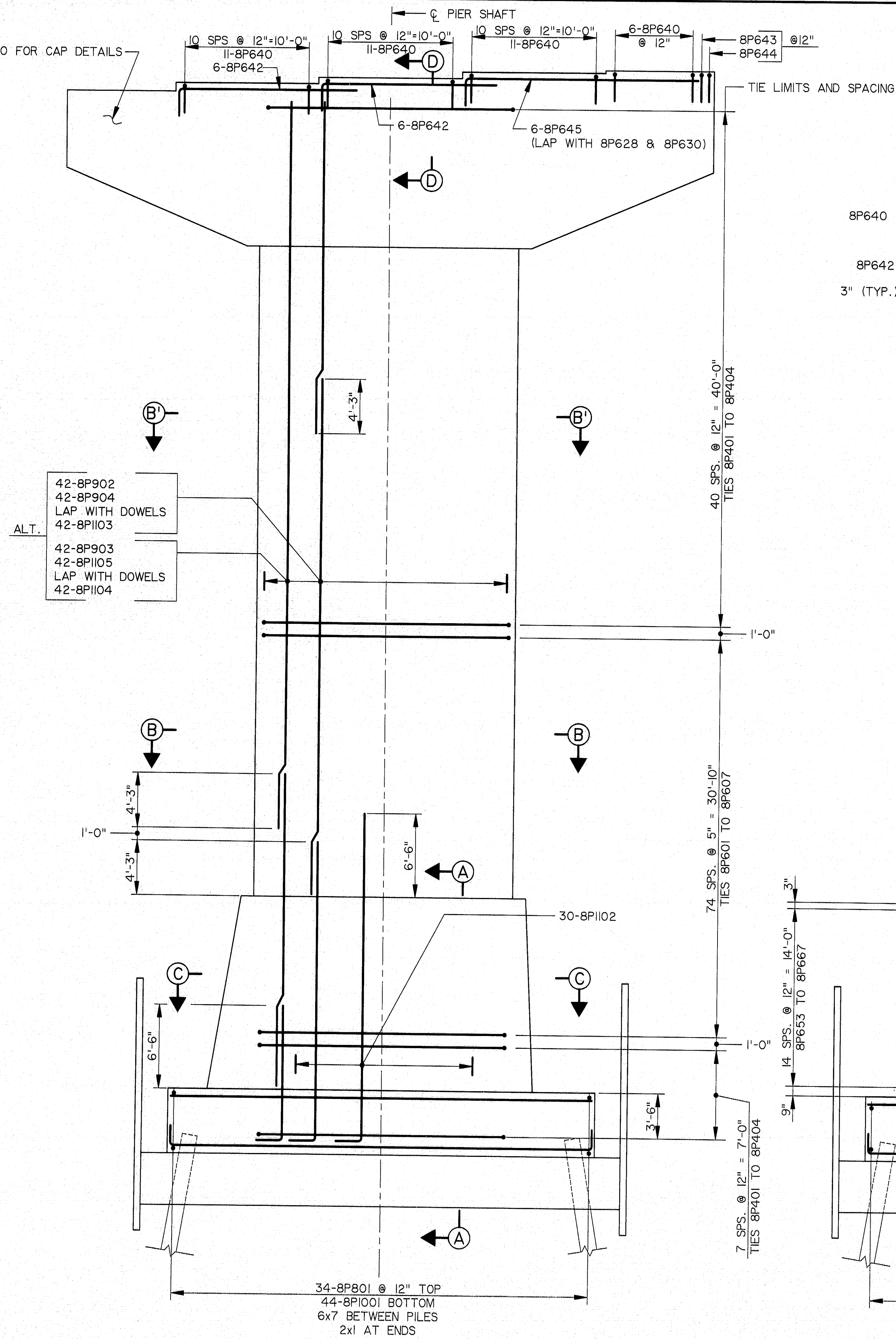
PIER 8 DETAILS

SHEET B44 OF B86 AUGUSTA, MAINE

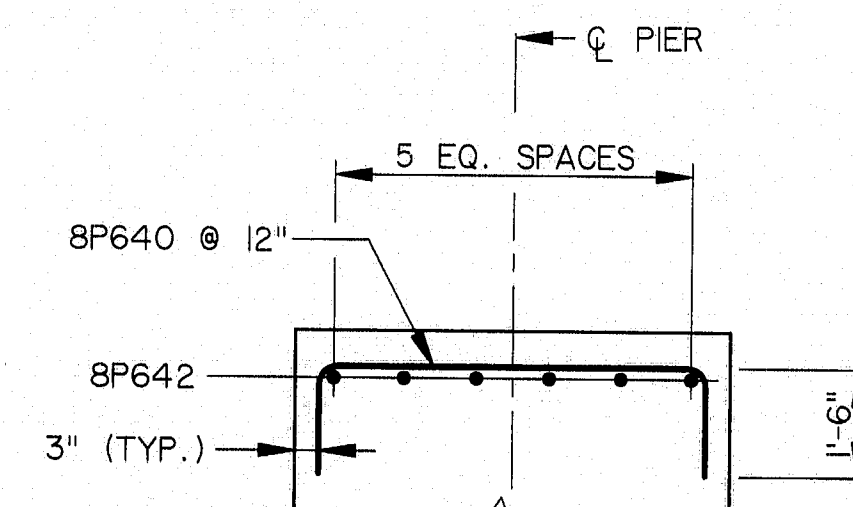
NO.	REVISION	BY	DATE
		DESIGNED: SM	9/94
		DRAWN: RJT	9/94
		CHECKED: DWR	9/94
		IN CHARGE OF CUM	

* SEE NOTE 7, SHEET B30.

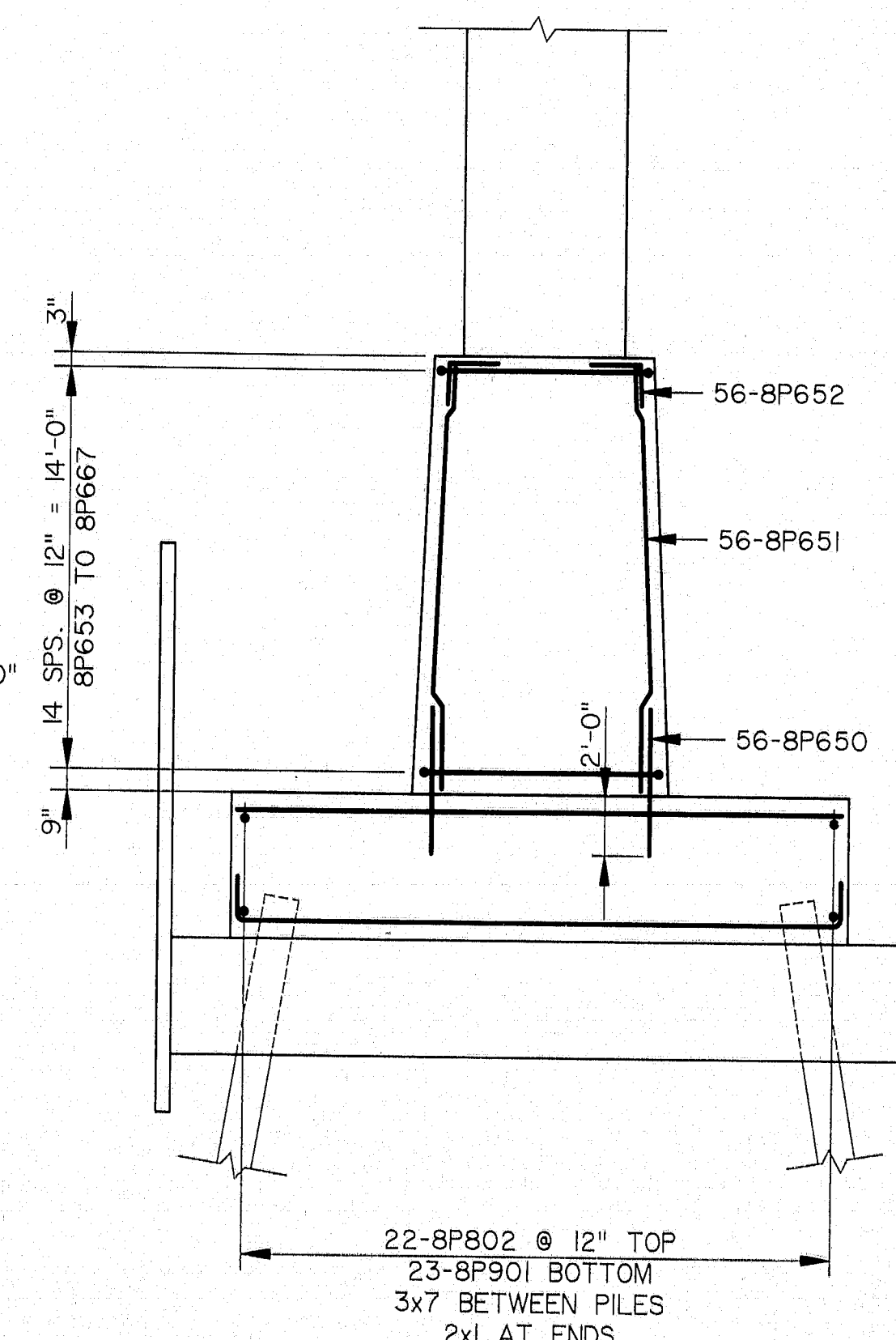
SEE SHEET B50 FOR CAP DETAILS



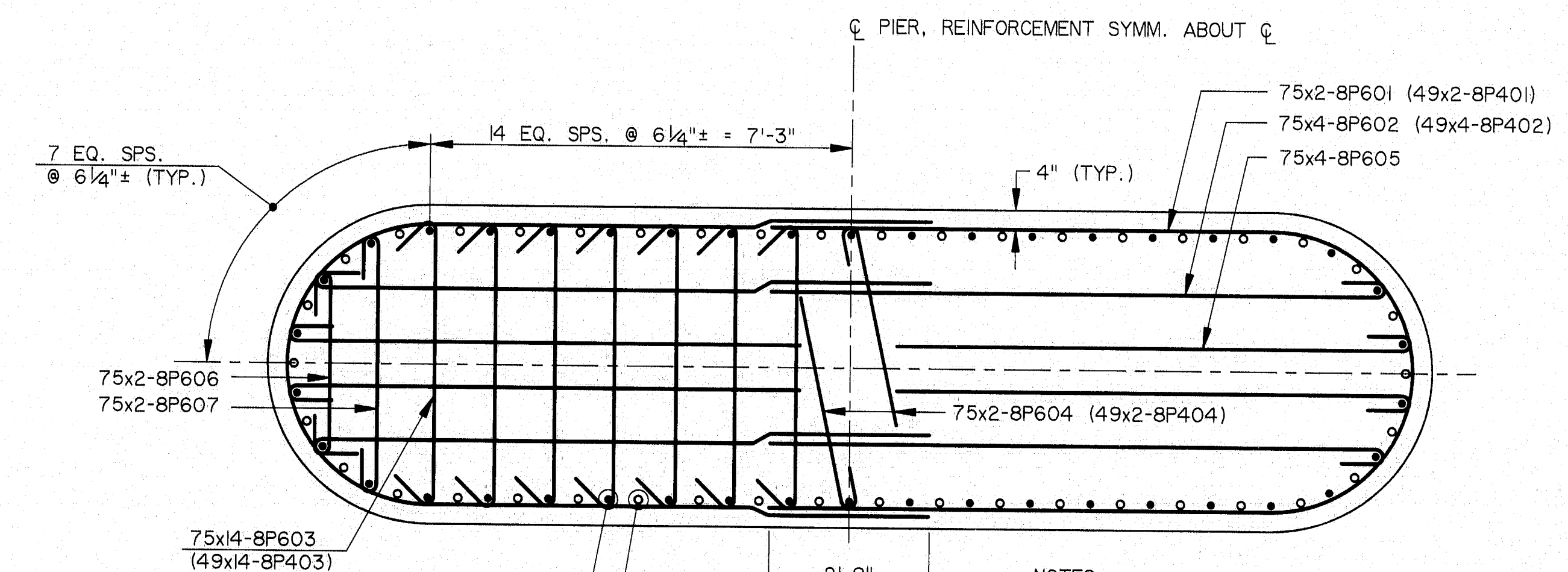
ELEVATION - PIER 8



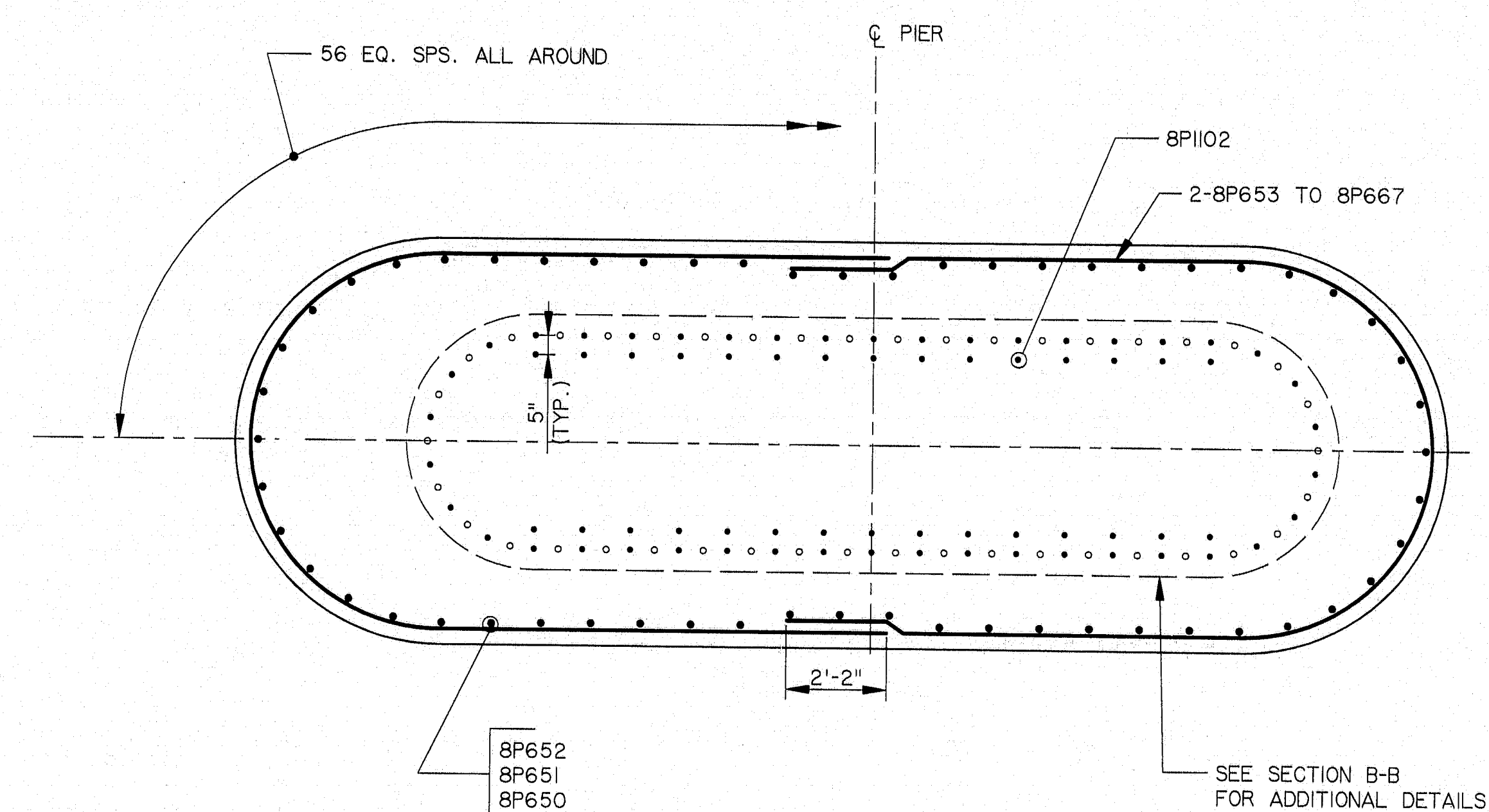
SECTION D-D



SECTION A-A



SECTION B-B (SECTION B'-B')



SECTION C-C

- NOTES
- #6 TIES - 135° MIN. HOOK WITH 7 1/2" EXT. #4 TIES - STD. HOOKS.
 - SECTION B-B SHOWN WITH 8P6## TIES; SECTION B'-B' SIMILAR EXCEPT FOR 8P4## TIES AS NOTED IN PARENTHESIS.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-240
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATKINSVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
PIER 8 RE-STEEL
SHEET B45 OF B86 AUGUSTA, MAINE

DIA3: BOWGRAPH STR DIACTING STRF CD3258 508: DIA3: CD3258

SIDE ELEVATION
1/8" = 1'-0"



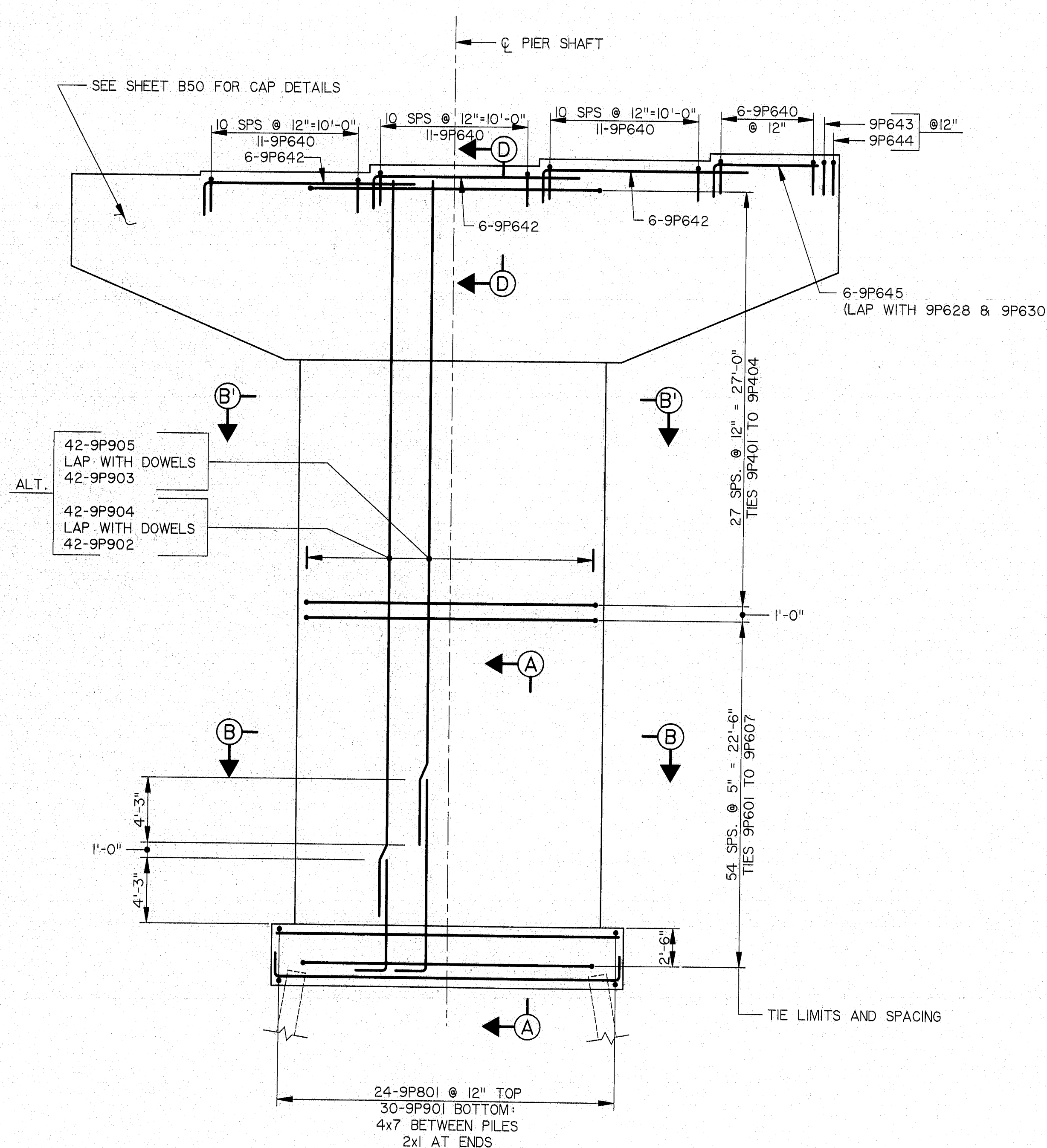
					BY	DATE
				DESIGNED:	SM	9/94
				DRAWN:	RJT	9/94
				CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		

HINTE

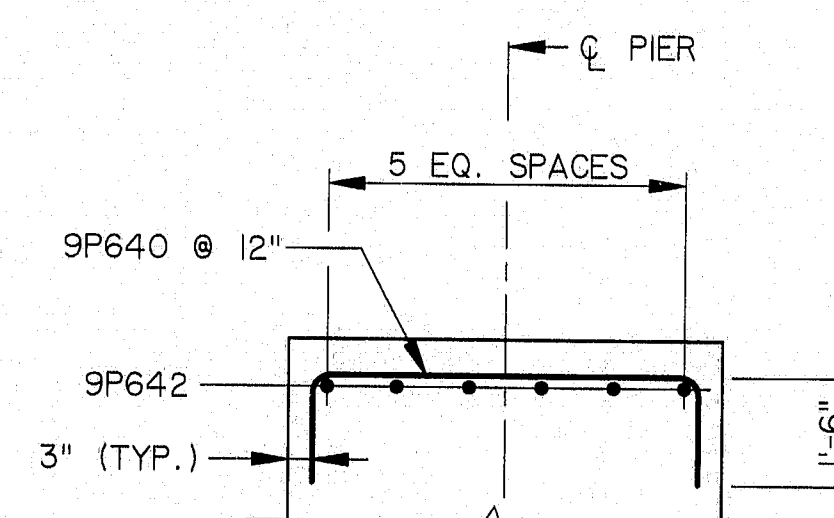
ARCHITECTS ENGINEERS PLANNERS

SHEET B46 OF B86 AUGUSTA, MAINE

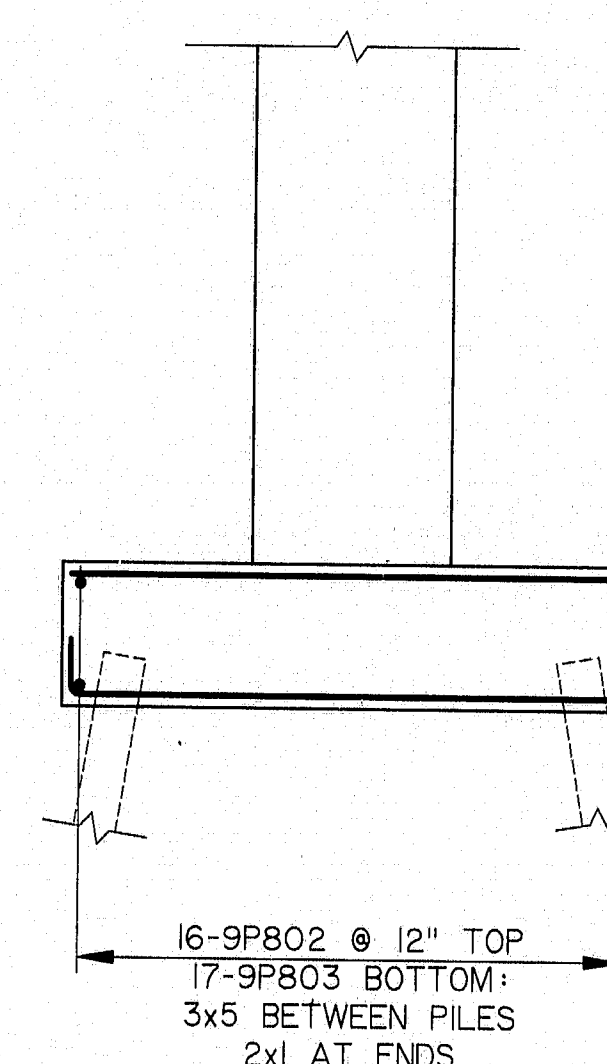
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	56	103



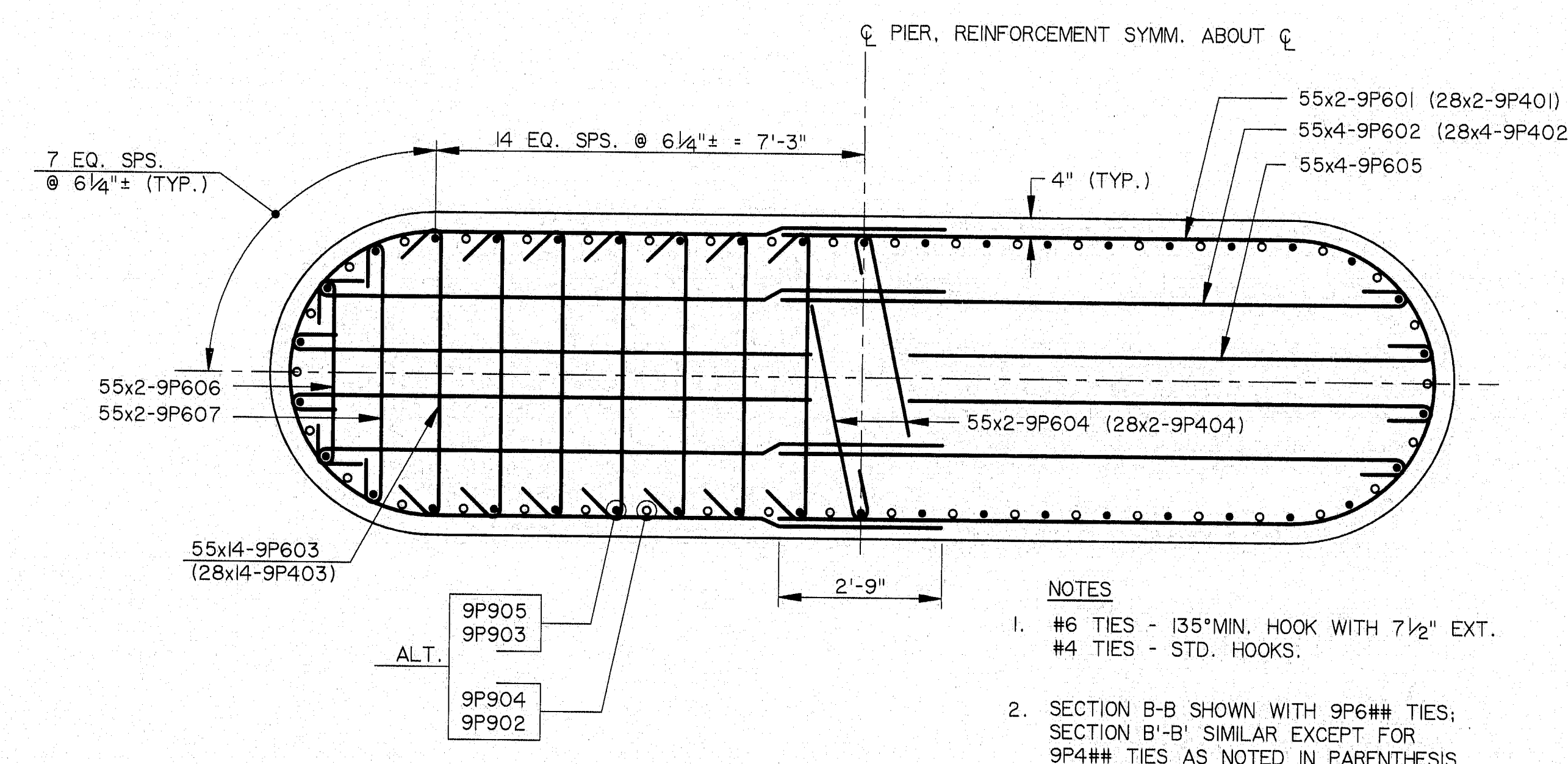
ELEVATION - PIER 9



SECTION D-D



SECTION A-A



SECTION B-B (SECTION B'-B')

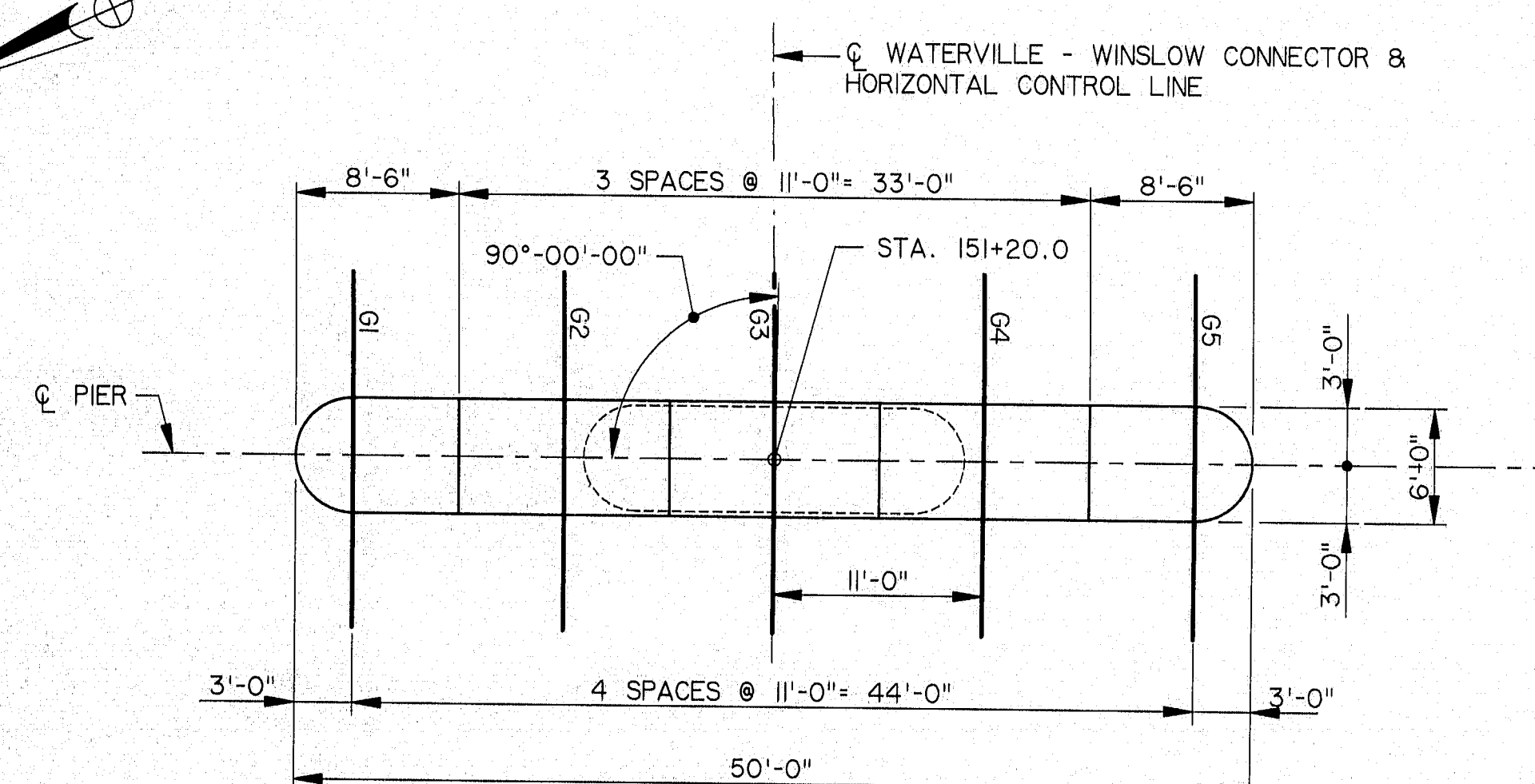
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

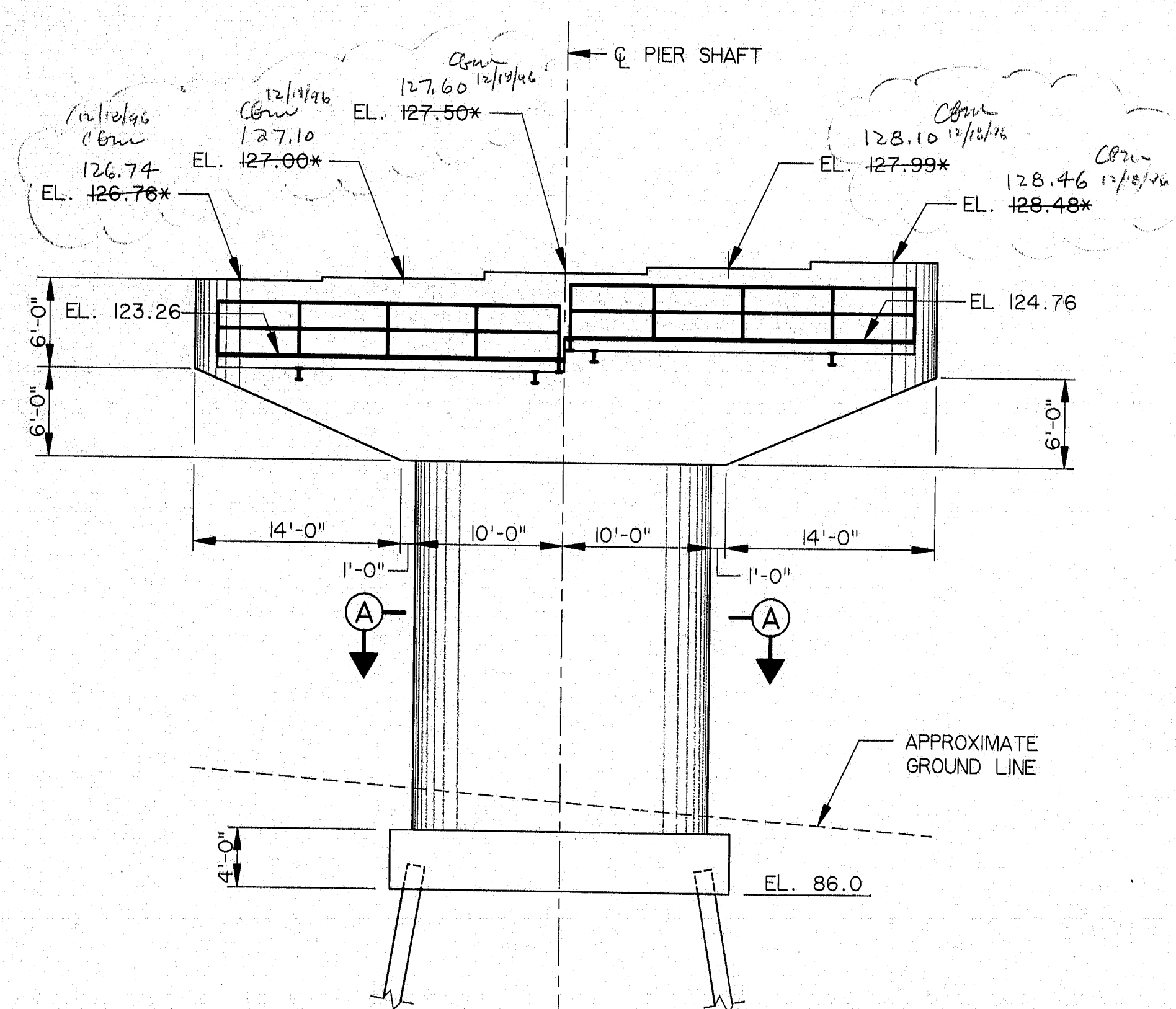
115-242
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
PIER 9 RE-STEEL
SHEET B47 OF B86 AUGUSTA, MAINE

*As Built
from 12/1/16*

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	57	103

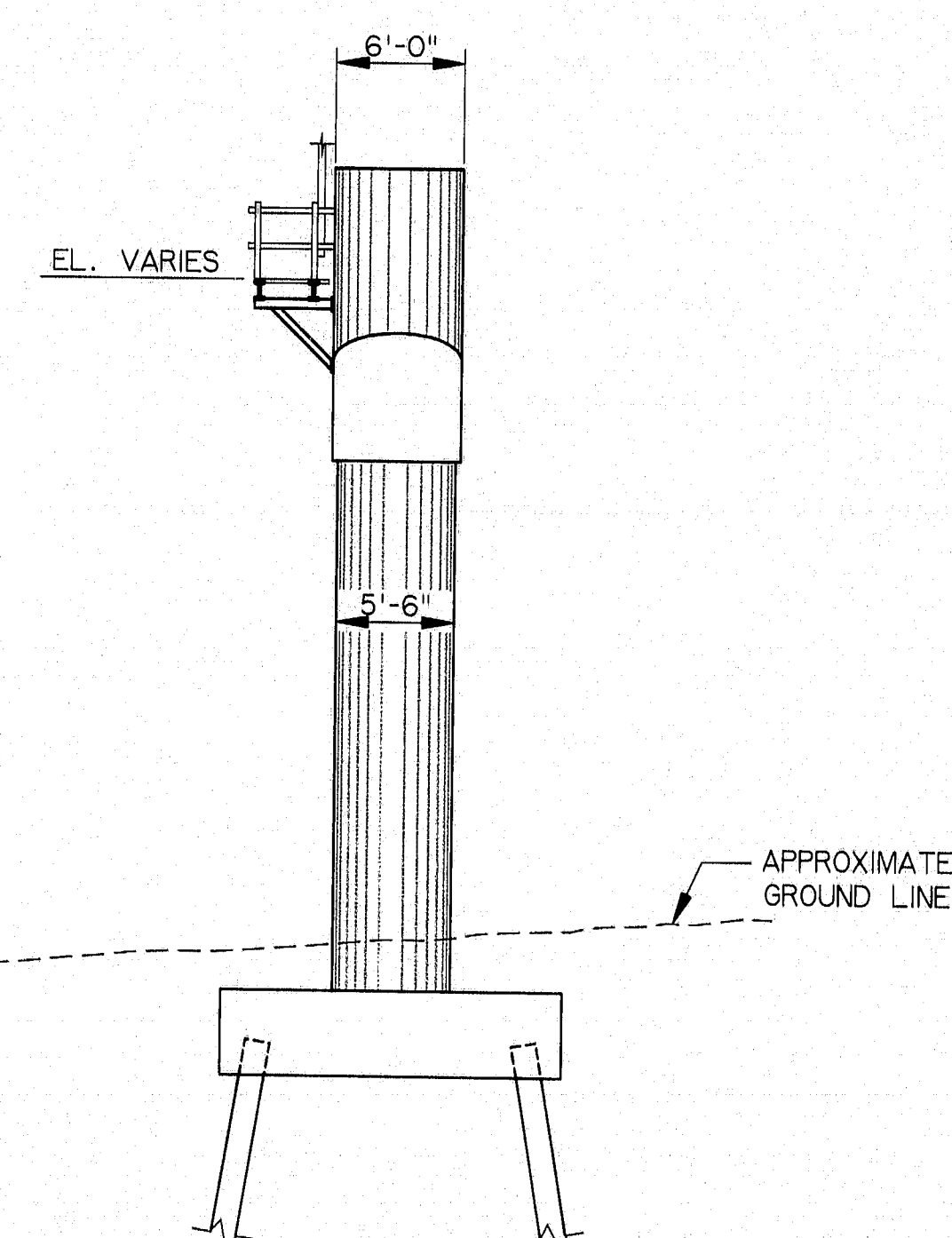


PLAN - PIER 10

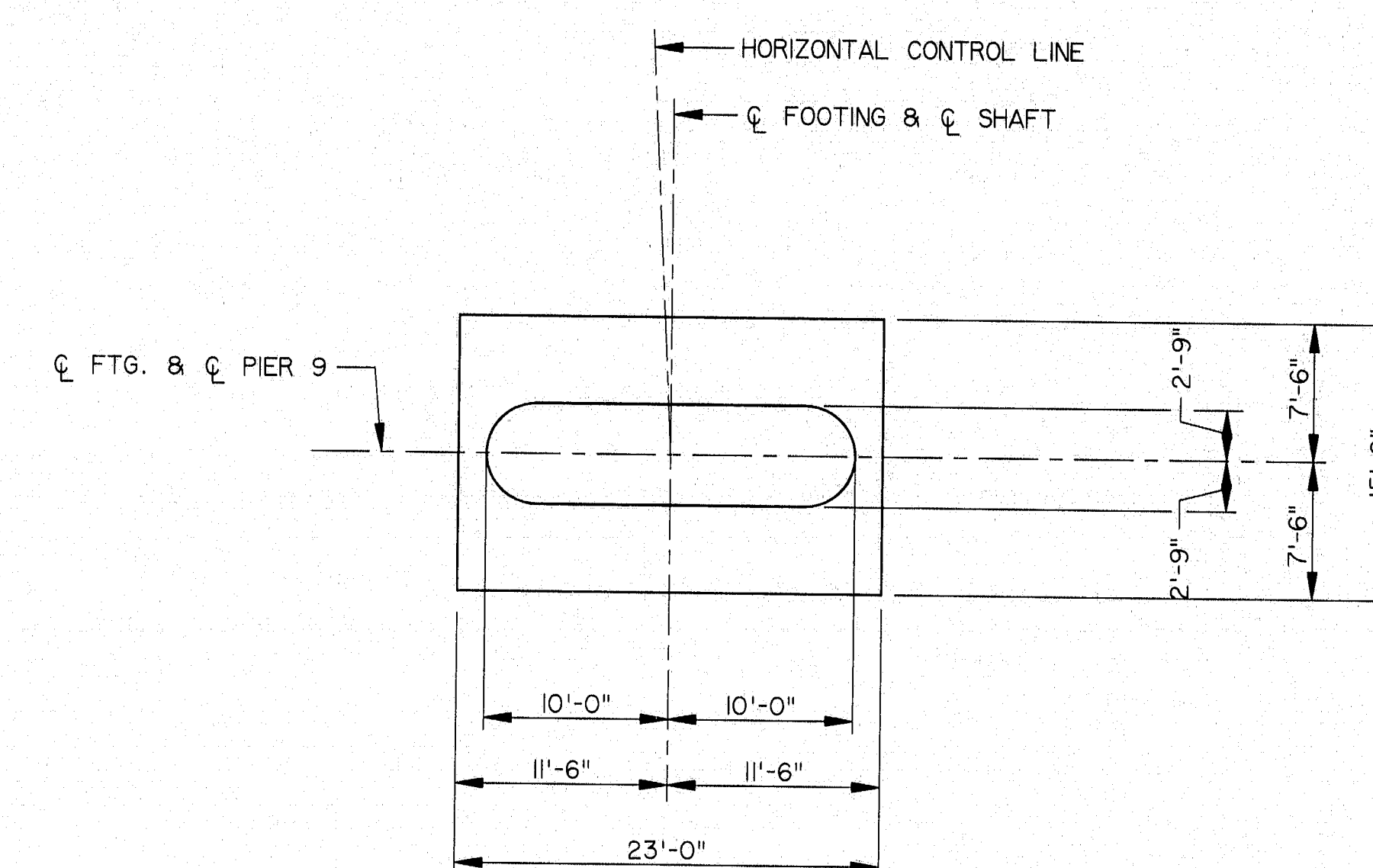


ELEVATION
(LOOKING UPSTATION)

* SEE NOTE 7, SHEET B30.



SIDE ELEVATION



SECTION A-A

NOTES:

1. MAXIMUM CALCULATED PILE LOAD = 107 TONS (GROUP: I).
2. SEE SHEET B30 FOR ADDITIONAL NOTES.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-243

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

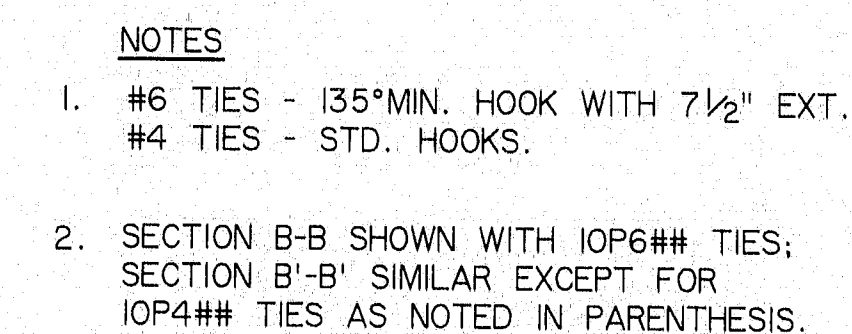
WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER

KENNEBEC RIVER

PIER 10 DETAILS

SHEET B48 OF B86 AUGUSTA, MAINE

DIA3: WWWGRAPH.STR.DVCARTER.STR CD5259.FGB: DWG: CD5259

SECTION A-A

AS BUILT
CORN
12/13/96

115-244

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE
OVER

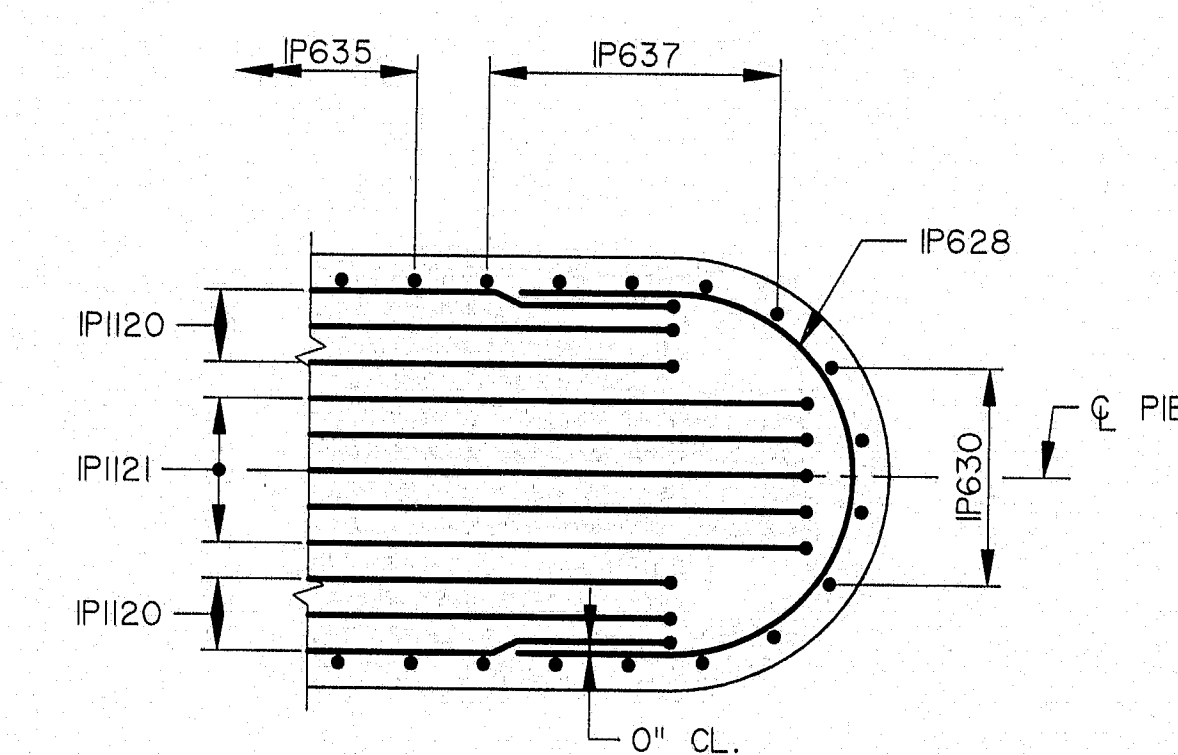
KENNEBEC RIVER

PIER 10 RE-STEEL

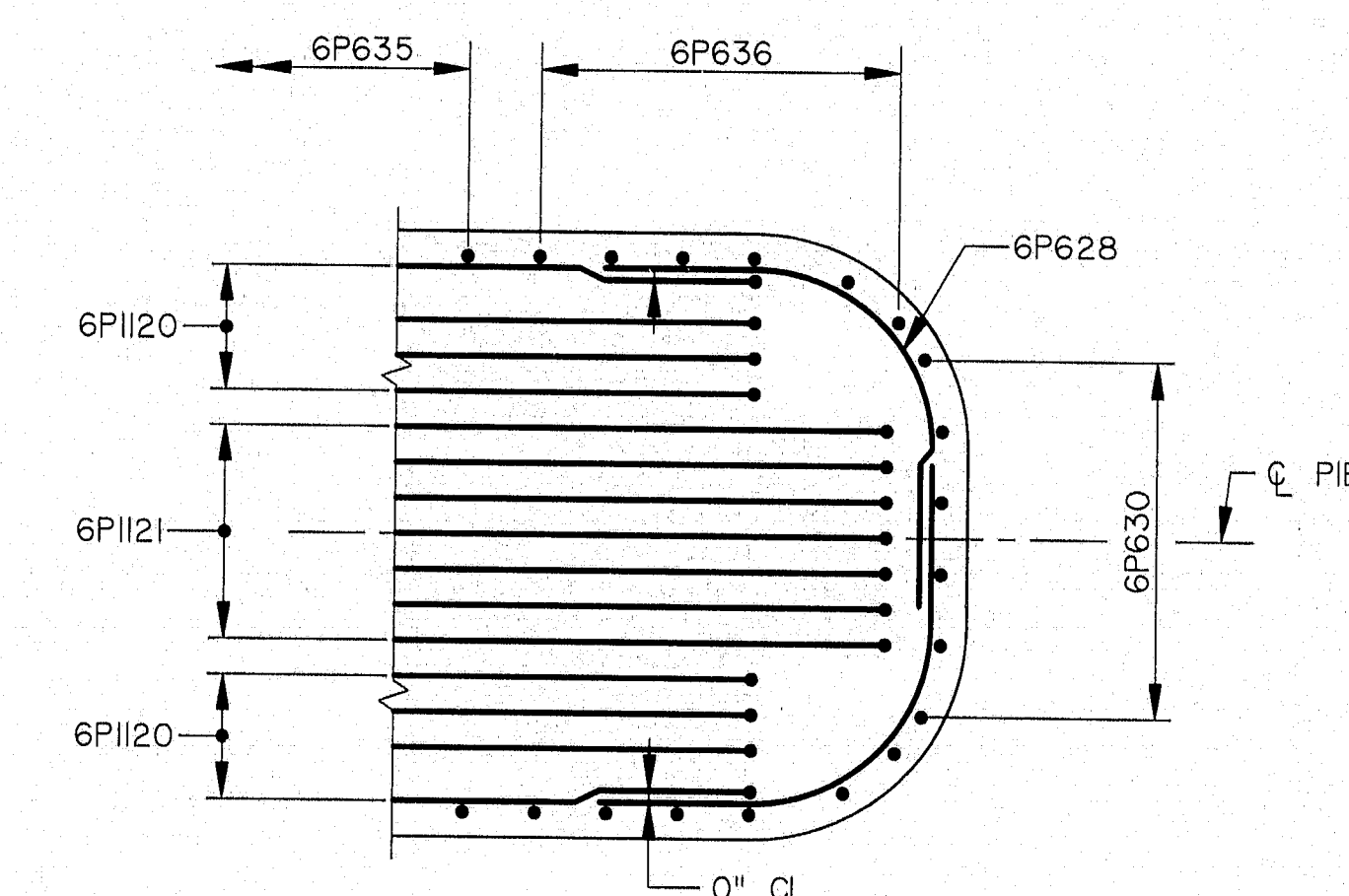
SHEET B49 OF B86 AUGUSTA, MAINE



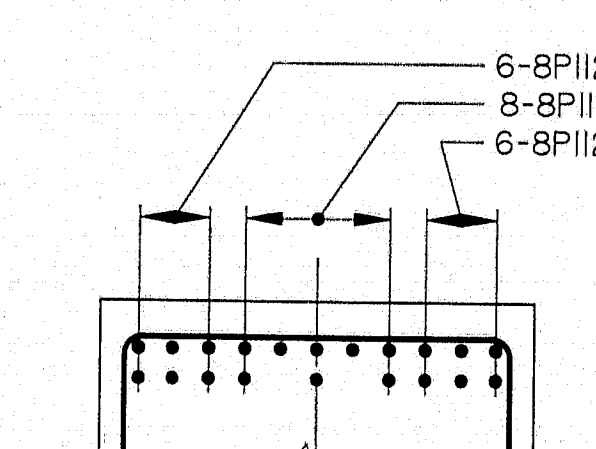
DIA3: WWSRAPH STR CMCARTER STEE CD6270 EGR-I DWG: CD6270



SECTION C-C



SECTION F-F



PIERS 8, 9 & 10

DETAIL 4

HNTB

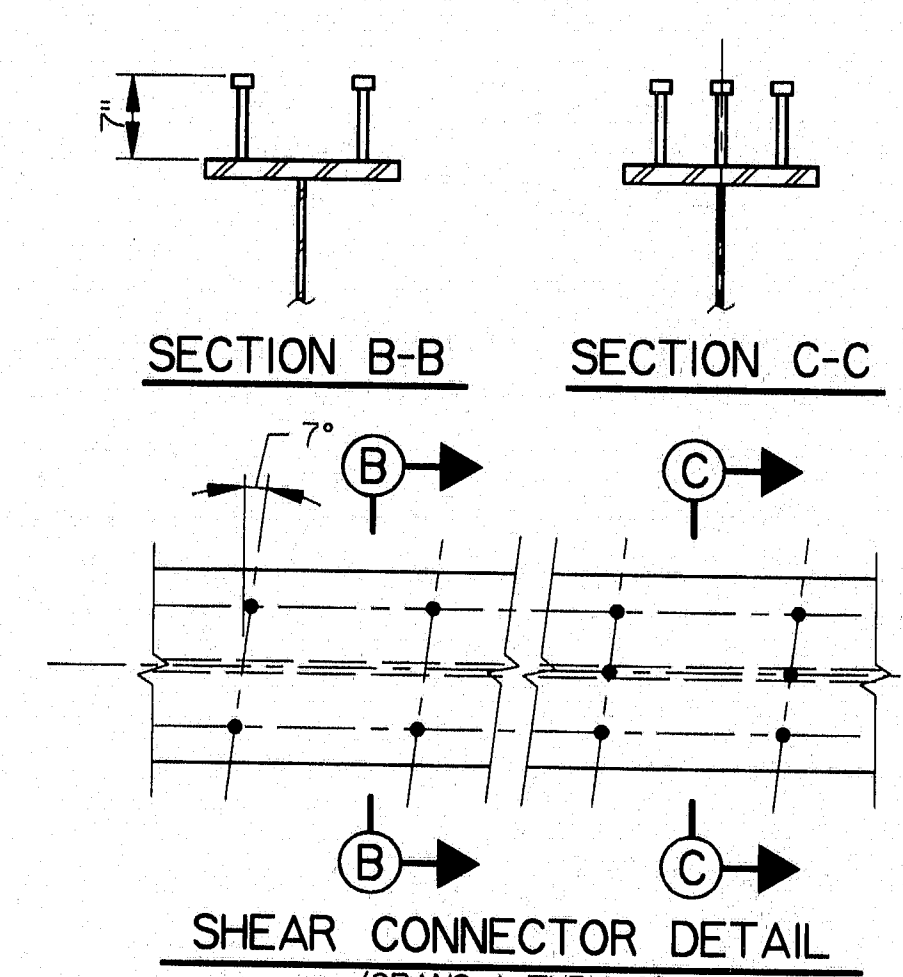
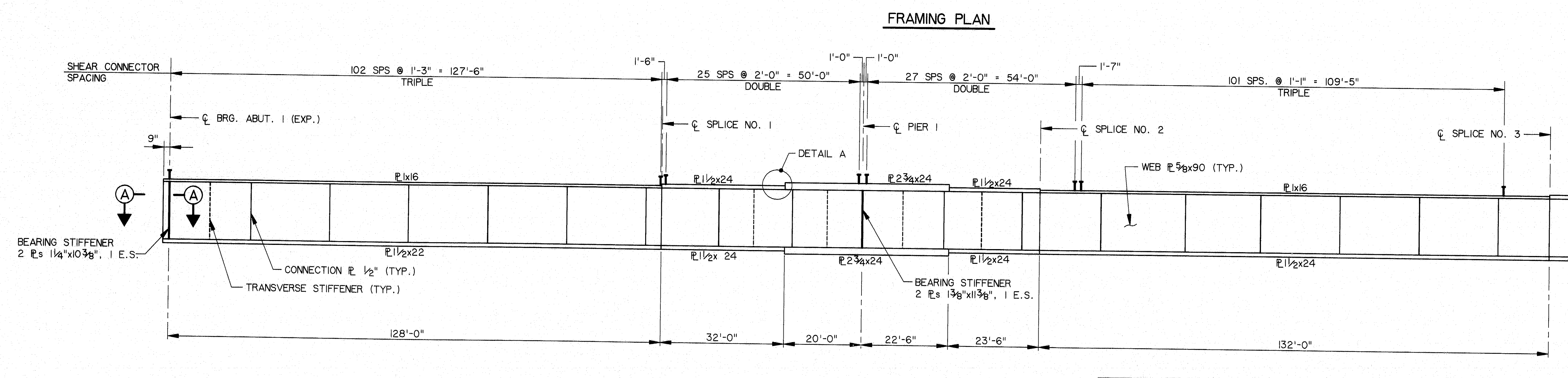
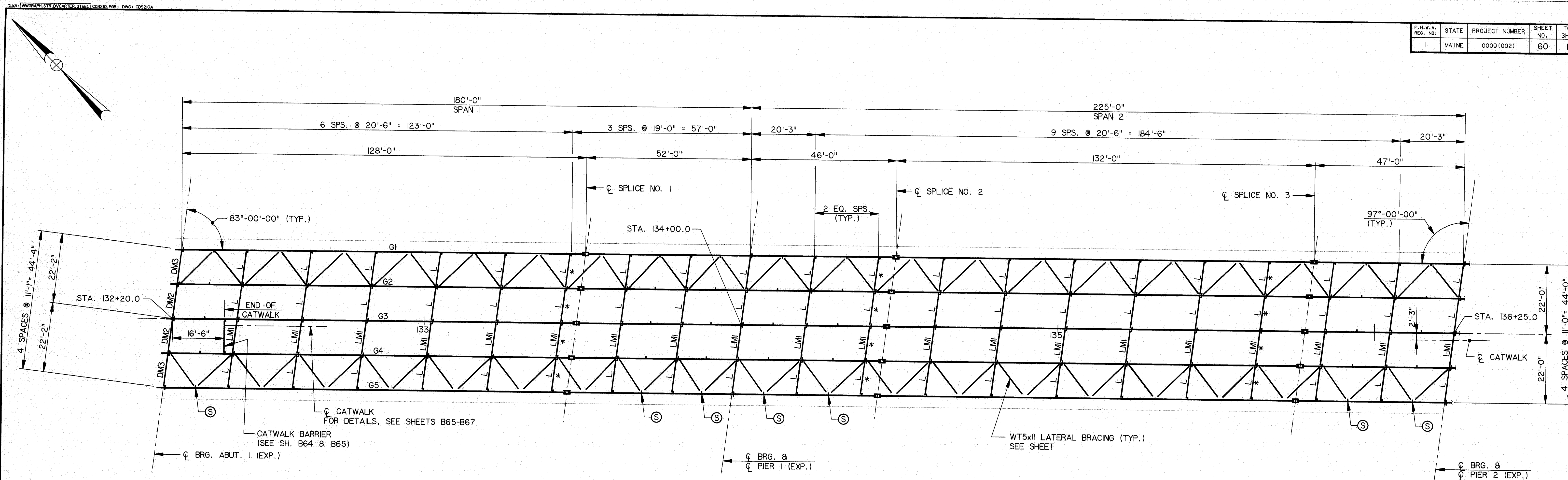
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

PIER CAP DETAILS

SHEET B50 OF B86 AUGUSTA, MAINE

F.H.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	60	103



TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2"x6"

- NOTES
1. FLANGE TO WEB FILLET WELDS FOR ALL FLANGE THICKNESSES SHALL BE 5/16" WELDS. FOR CONNECTION AND STIFFENER PLATE WELDING SEE SHEET B52.
 2. THE NOTCH TOUGHNESS REQUIREMENTS OF SECTION 713.01 OF STANDARD SPECIFICATIONS SHALL APPLY TO THE WEB AND FLANGES OF THE MAIN GIRDER AND TO THE FIELD SPLYCE PLATES.
 3. ALL DIMENSIONS ARE HORIZONTAL.
 4. FOR STRUCTURAL STEEL NOTES, SEE SHEET B52.
 5. * - SEE NOTE 7, SHEET B52.

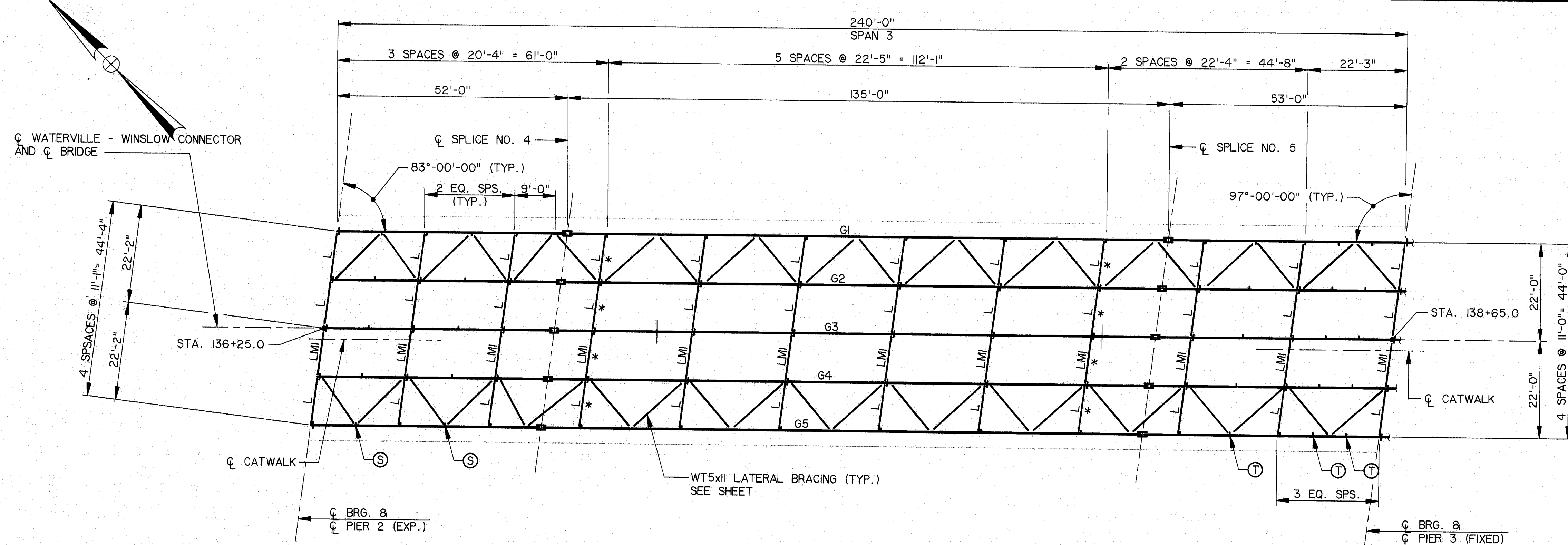


NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: SM	9/94		
		DRAWN: RJT	9/94		
		CHECKED: DWR	9/94		

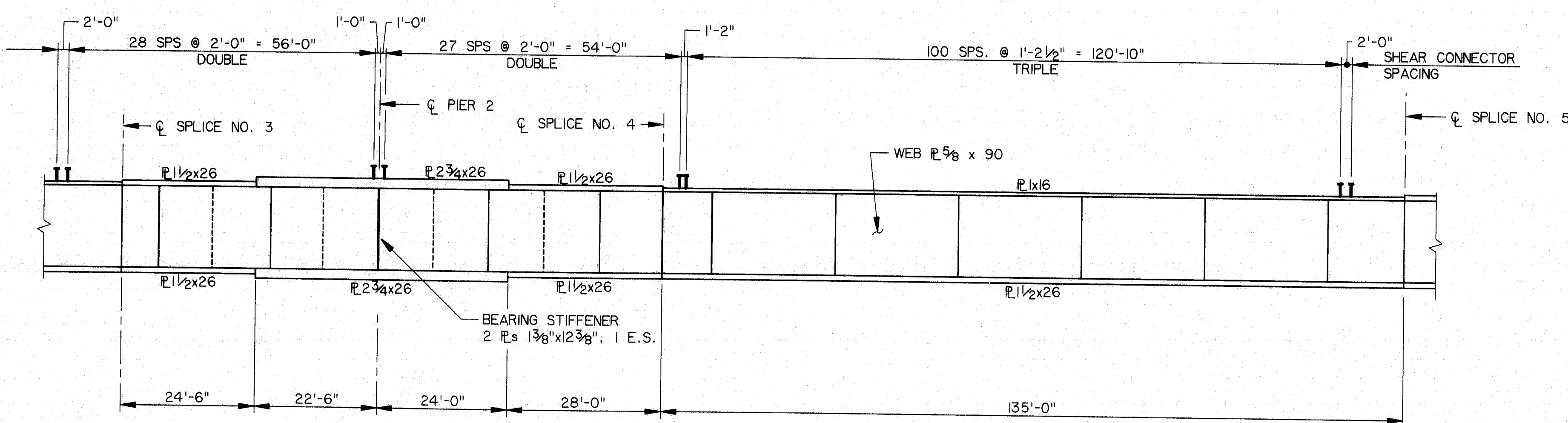
115-246
 STEEL ALTERNATIVE
 STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 WATERVILLE - WINSLOW PROJECT
 DONALD V. CARTER BRIDGE
 OVER
 KENNEBEC RIVER
 FRAMING PLAN I
 SHEET B51 OF B86 AUGUSTA, MAINE

0431 WATVILLE BRIDGE CENTER LINE (2000) P. 1 (REV. 000000)

F.H.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	61	103

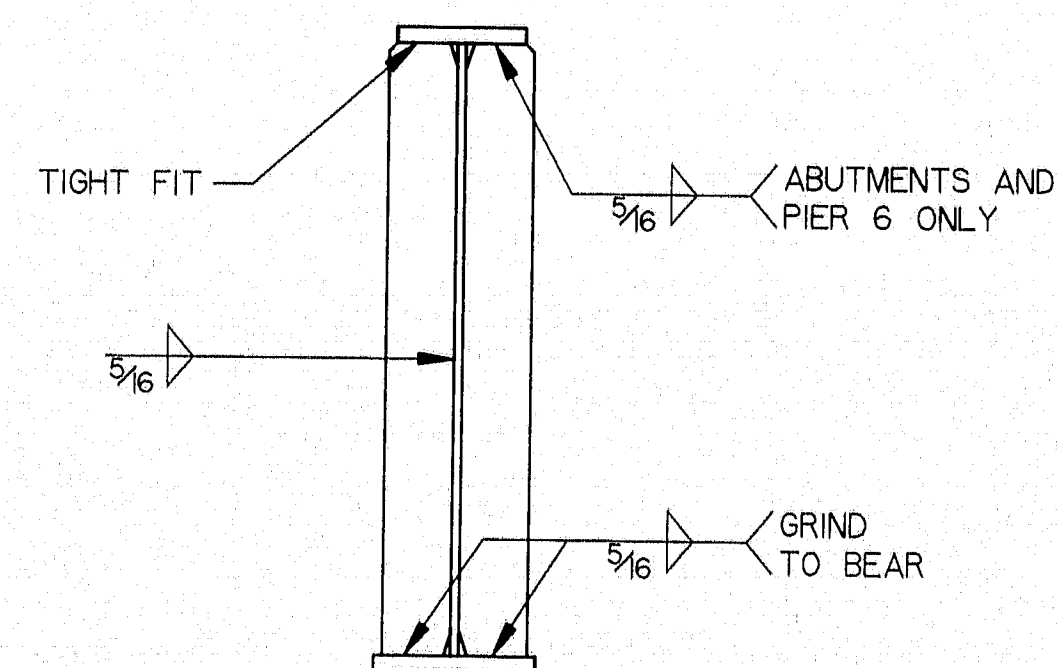


FRAMING PLAN



GIRDER ELEVATION

TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2" x 6"
T	1/2" x 7"



BEARING STIFFENER
PIERS 1 TO 10
AND ABUTMENTS

STIFFENER / CONNECTION PLATE

STRUCTURAL STEEL NOTES

- CAMBER ORDINATES, AS SHOWN ON SHEETS B60 & B61, ARE COMPUTED TO COMPENSATE FOR ALL DEAD LOAD DEFLECTIONS.
- NO TRANSVERSE BUTT-WELD SPLICES WILL BE ALLOWED IN THE FLANGE PLATES OR WEB PLATES WITHIN 10 FEET OR 10 PERCENT OF THE SPAN LENGTH (WHICHEVER IS GREATER) FROM THE POINTS OF MAXIMUM NEGATIVE MOMENT OR MAXIMUM POSITIVE MOMENT. BUTT-WELD SPLICES IN FLANGES SHALL BE NOT BE LESS THAN THREE FEET FROM TRANSVERSE BUTT-WELDS IN THE WEB PLATES AND NO TRANSVERSE WEB OR FLANGE BUTT-WELDS SHALL BE LOCATED WITHIN THREE FEET OF OTHER TRANSVERSE WELDS (E.G. CONNECTION PLATES TO WEB WELDS) ON EITHER FLANGE OR WEB. NO TRANSVERSE BUTT-WELD SPLICES WILL BE ALLOWED IN AREAS OF STRESS REVERSAL.
- SECTIONS OF FLANGE PLATES OR WEB PLATES BETWEEN TRANSVERSE SHOP SPLICES OR BETWEEN A TRANSVERSE SHOP SPLICE AND A FIELD SPLICE SHALL BE NOT LESS THAN 15 FEET IN LENGTH UNLESS OTHERWISE SHOWN ON THE PLANS.
- BEARING STIFFENERS SHALL BE PLUMB AFTER ERECTION AND DEAD LOADING OF THE STRUCTURE. INTERMEDIATE WEB STIFFENERS MAY BE EITHER PLUMB OR NORMAL TO THE TOP FLANGE.
- CROSS-FRAME CONNECTION PLATES MAY BE EITHER PLUMB OR NORMAL TO THE TOP FLANGE.
- THE BEARING SETTING CHART INDICATES THE REQUIRED FINAL POSITION OF THE BEARINGS. IT IS ANTICIPATED THAT THE BEARINGS AT ABUTMENT 1, PIER 6 AND ABUTMENT 2 WILL MOVE AWAY FROM THE FIXED BEARINGS DUE TO THE PLACEMENT OF THE SUPERSTRUCTURE CONCRETE AS FOLLOWS:

MOVEMENT Δ L

ABUTMENT 1	5/8"
PIER 6 (WEST)	5/8"
PIER 6 (EAST)	7/8"
ABUTMENT 2	7/16"

NO SEPARATE PAYMENT WILL BE MADE FOR RESETTING BEARINGS TO THE FINAL POSITION IF AN ADJUSTMENT IS REQUIRED.

- AT LOCATIONS MARKED WITH AN ASTERISK (*) THE DESIGNATED DIAPHRAGMS SHALL BE CHANGED TO A TYPE D DIAPHRAGM AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S DECK PLACEMENT SEQUENCE. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY DIAPHRAGMS SO SUBSTITUTED, AND ANY ADDITIONAL COSTS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT ITEMS.
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A709, GRADE 50W (UNPAINTED). ALL BOLTS SHALL CONFORM TO ASTM A325 - TYPE 3.
- BEARING STIFFENERS NOT USED AS A CROSSFRAME CONNECTION PLATE SHALL BE KEPT NORMAL OR RADIAL TO GIRDER CENTERLINE. SEE SECTION A-A, SHEET B51.
- GIRDERS IN SPANS 7 THRU 10 SHALL BE HORIZONTALLY CURVED TO RADII SHOWN. SEE NOTE A, SHEET B54.
- TRANSVERSE STIFFENERS SHALL BE KEPT NORMAL OR RADIAL TO GIRDER CENTERLINE.

115-247

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

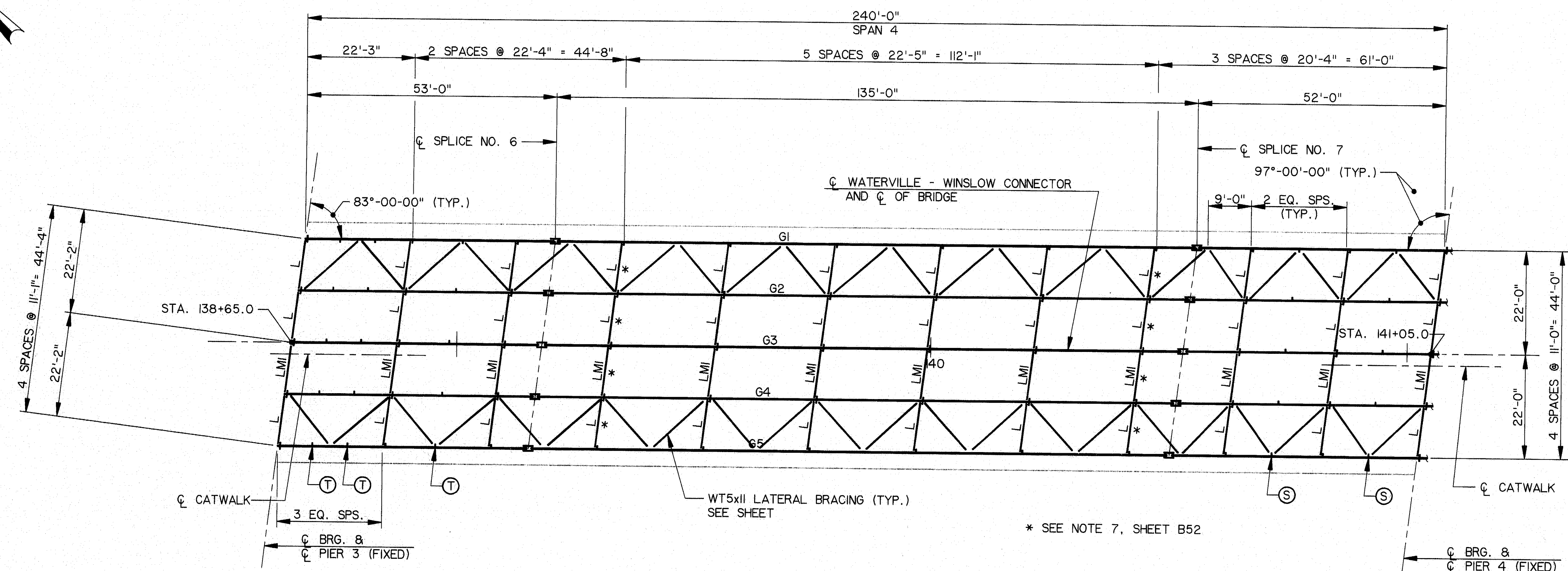
FRAMING PLAN II

SHEET B52 OF B86 AUGUSTA, MAINE

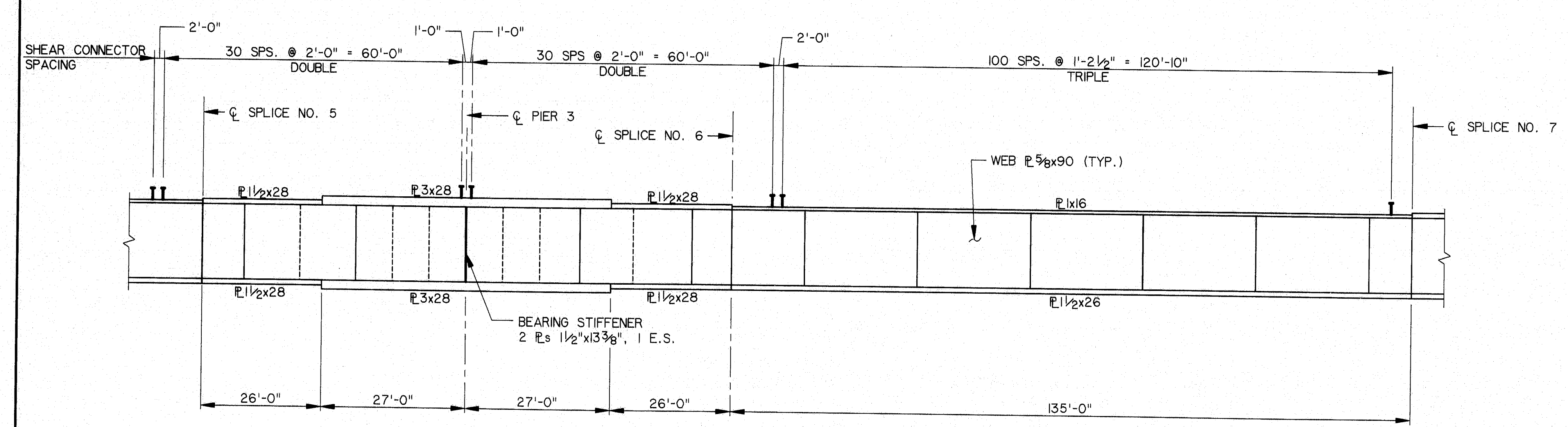
HNTB
ARCHITECTS ENGINEERS PLANNERS

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: SM	9/94		
		DRAWN: RJT	9/94		
		CHECKED: JFW	9/94		

F.N.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	62	103

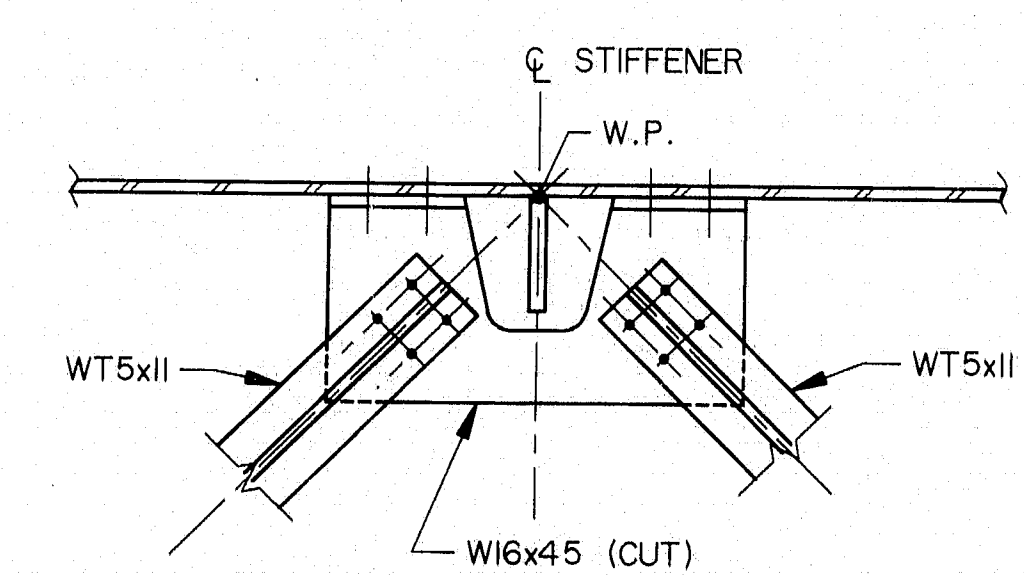


FRAMING PLAN

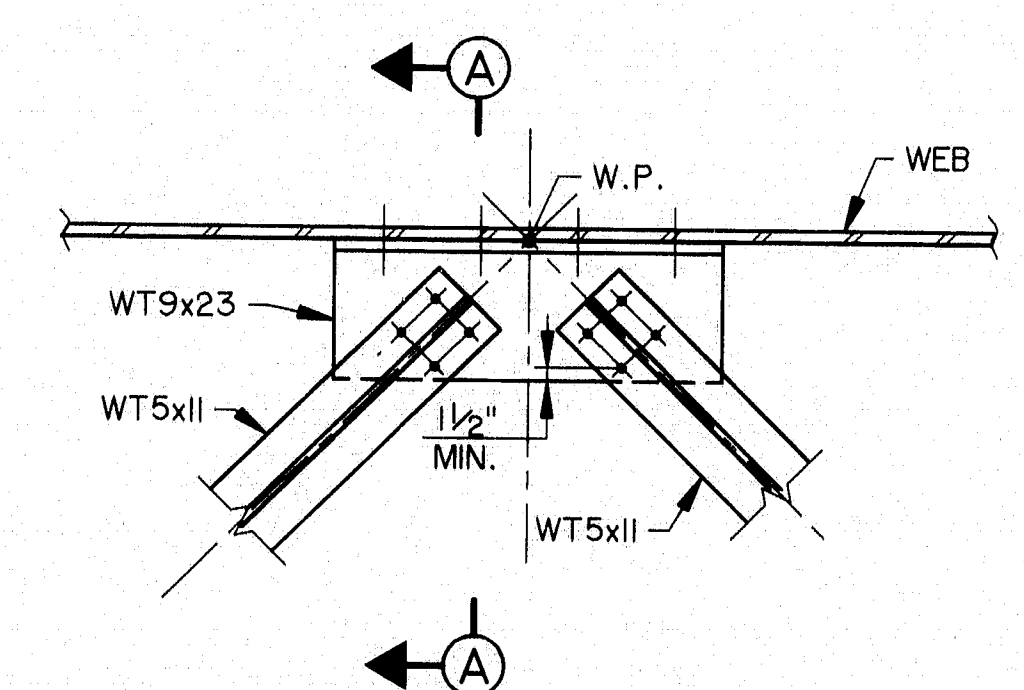


GIRDER ELEVATION

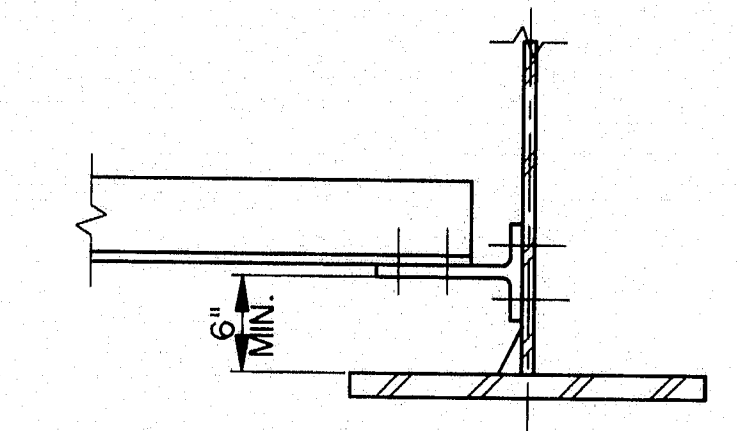
TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2" x 6"
T	1/2" x 7"



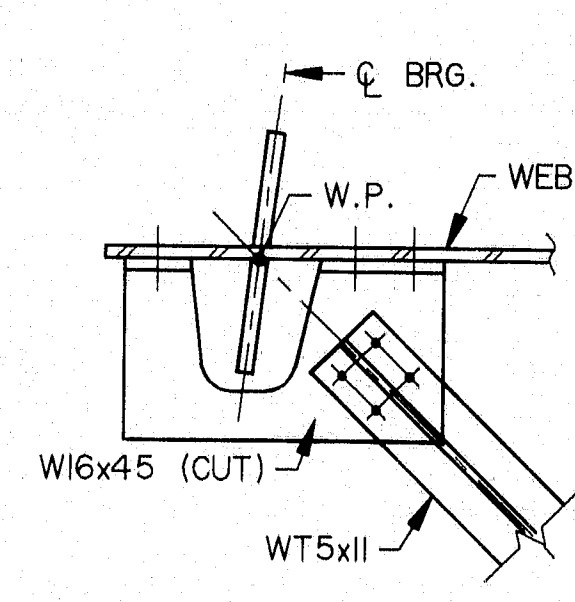
AT TRANSVERSE STIFFENER



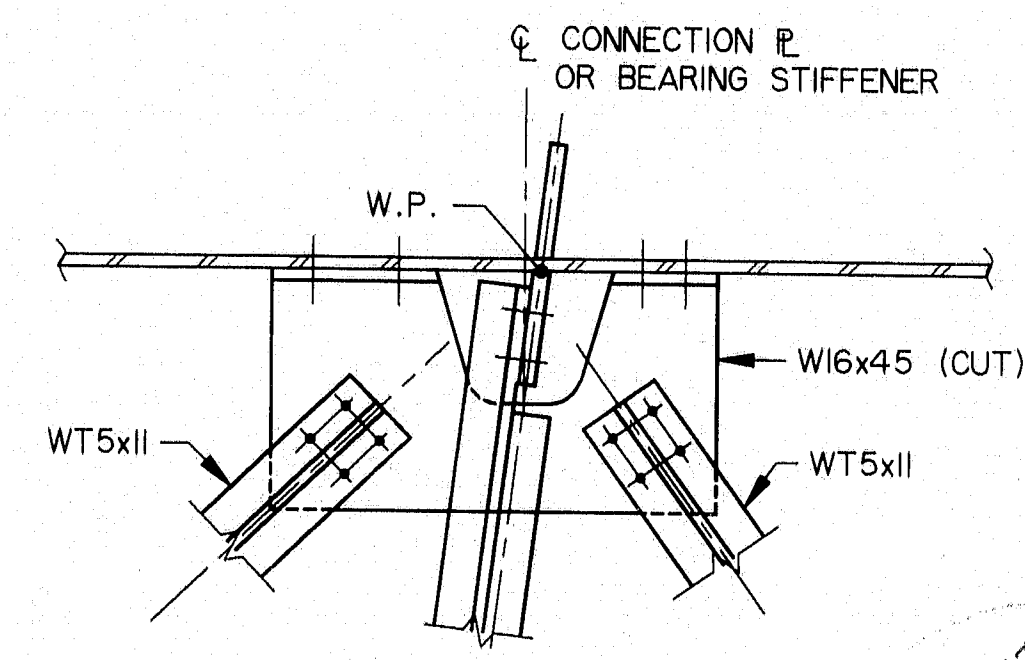
AT INTERMEDIATE POINT



SECTION A-A



AT ABUTMENT



AT CONNECTION PLATE
OR BEARING STIFFENER

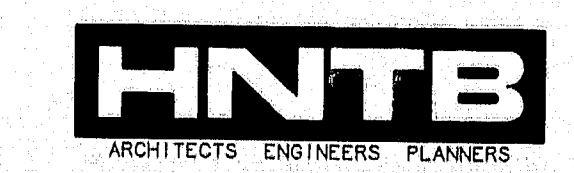
LATERAL BRACING DETAILS
SPANS 1 THRU 6

115-248
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

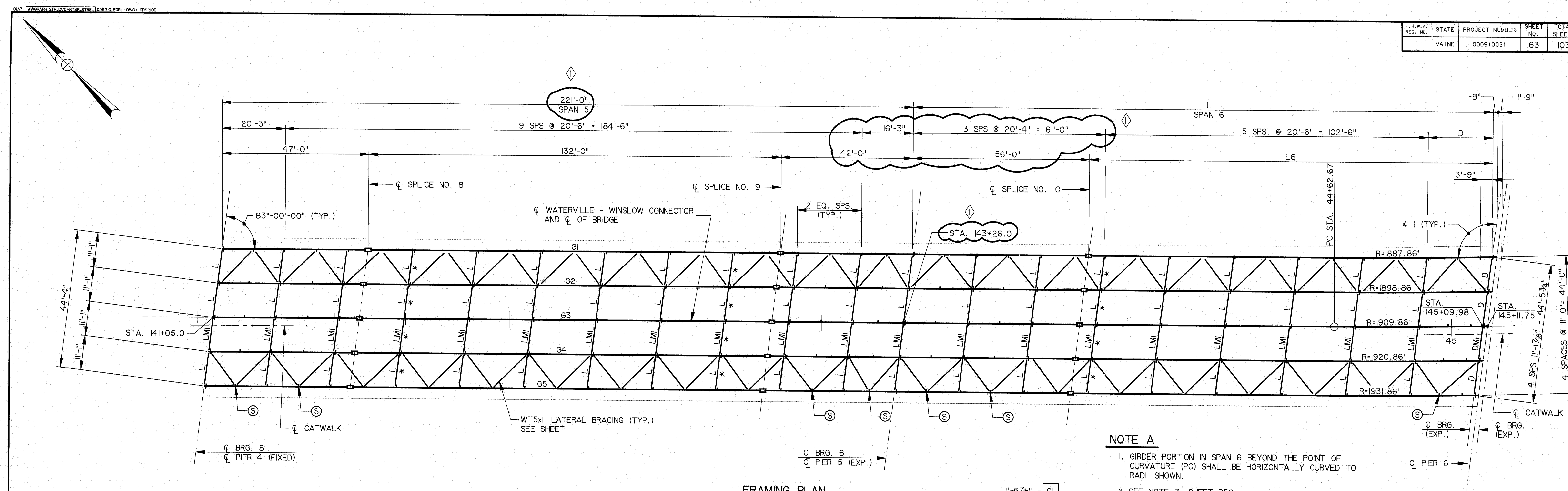
FRAMING PLAN III

SHEET B53 OF B86 AUGUSTA, MAINE



NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	9/94	
		DRAWN: RJT	9/94	
		CHECKED: DWR	9/94	
				CJM

F.I.R.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	000910021	63	103

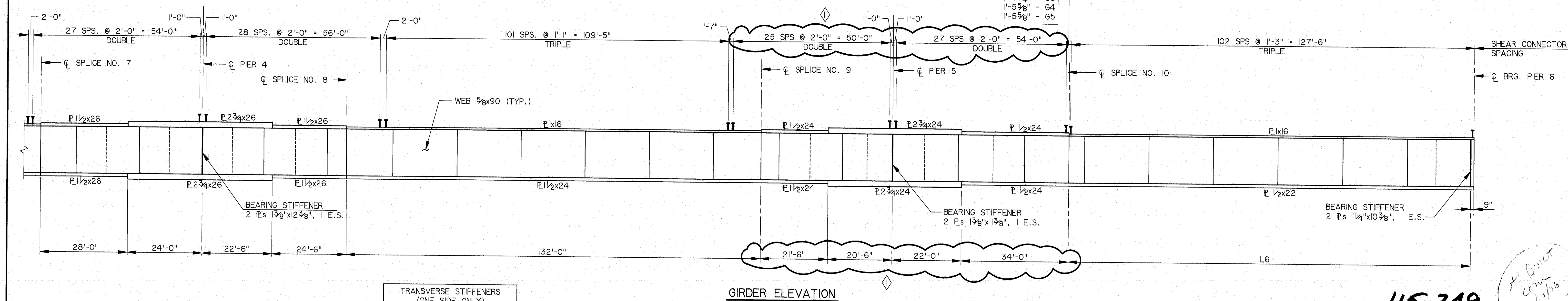


NOTE A

1. GIRDER PORTION IN SPAN 6 BEYOND THE POINT OF CURVATURE (PC) SHALL BE HORIZONTALLY CURVED TO RADII SHOWN.

* SEE NOTE 7, SHEET B52.

FRAMING PLAN



TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2"x6"

GIRDER ELEVATION

GIRDER - SPAN 6				
GIRDER	TANGENT + CURVE	L6	D	4 I
G1	133'-11 1/2" + 50'-0 1/4" = 183'-11 5/8"	127'-11 7/8"	20'-5 7/8"	98°-31'-05"
G2	135'-3 5/16" + 48'-8" = 183'-11 5/16"	127'-11 7/8"	20'-5 7/8"	98°-28'-06"
G3	136'-8" + 47'-3 3/8" = 183'-11 5/8"	127'-11 3/4"	20'-5 3/4"	98°-25'-09.1"
G4	138'-0 1/4" + 45'-11 1/8" = 183'-11 1/4"	127'-11 3/8"	20'-5 5/8"	98°-22'-14.3"
G5	139'-4 3/8" + 44'-7 1/8" = 183'-11 1/8"	127'-11 5/8"	20'-5 5/8"	98°-19'-21.5"

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-249

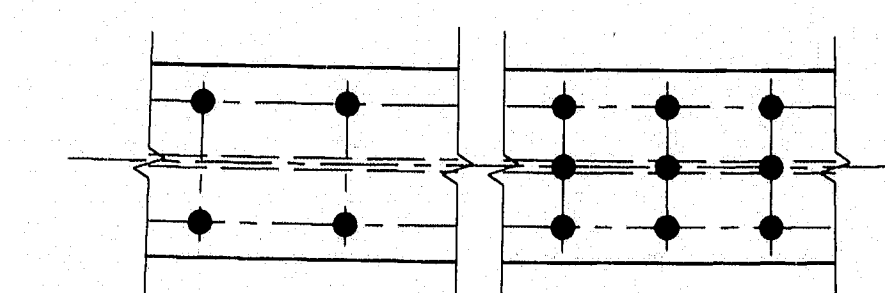
STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

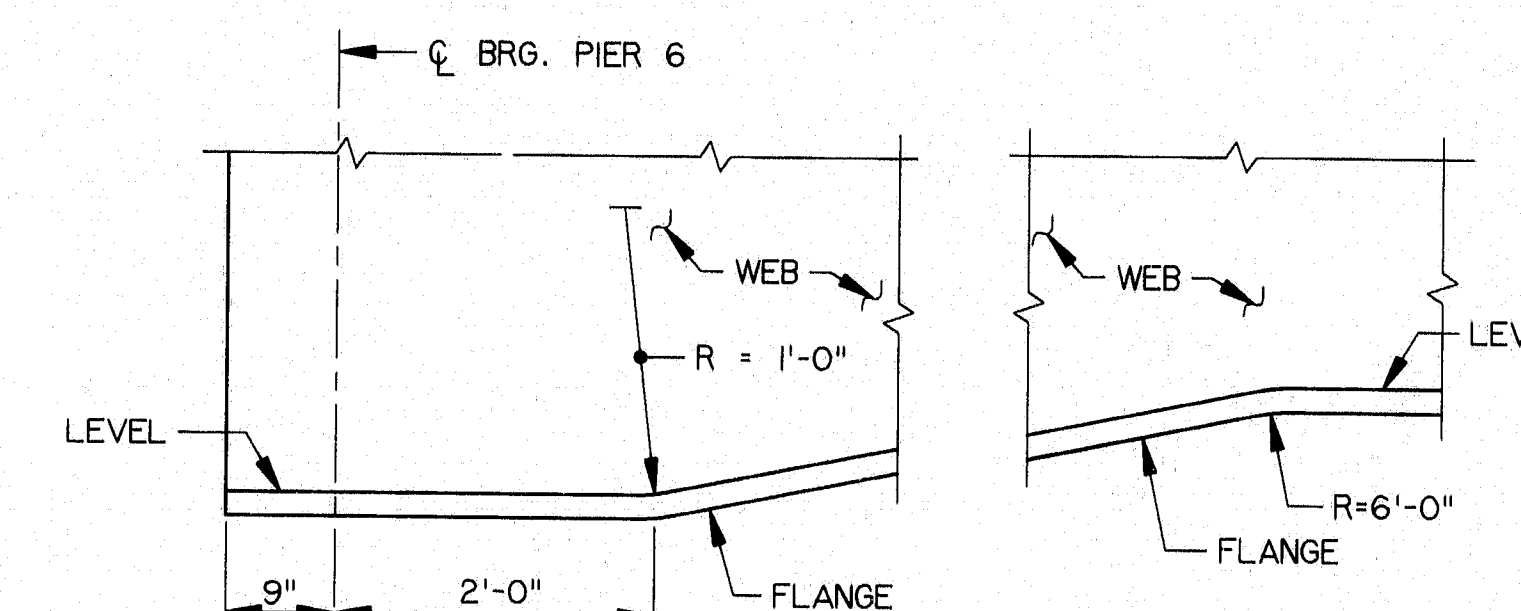
FRAMING PLAN IV

SHEET B54 OF B86 AUGUSTA, MAINE



SHEAR CONNECTOR DETAIL
(SPANS 7-II)

GIRDER	R	Δ
G1	1887.86'	81°-22'-28"
G2	1898.86'	81°-25'-29"
G3	1909.86'	81°-28'-28"
G4	1920.86'	81°-31'-25"
G5	1931.86'	81°-34'-20"



DETAIL B
NO SCALE

DETAIL C
NO SCALE

GIRDER	DIMENSION				
	L ₁	L ₂	L ₃	L ₄	L ₅
G1	107'-4 1/8"	93'-2 1/8"	83'-3 3/8"	74'-4 1/8"	86'-7 1/8"
G2	109'-11 1/8"	94'-0 5/8"	84'-11 1/8"	75'-2 1/4"	87'-3 3/8"
G3	112'-5 3/4"	95'-0"	85'-0"	76'-0"	88'-0"
G4	115'-0 1/2"	95'-11 1/8"	85'-10 5/8"	76'-9 3/4"	88'-8 1/8"
G5	117'-7 3/4"	96'-9 5/8"	86'-8 5/8"	77'-7 5/8"	89'-4 1/8"

GIRDER	SPAN				
	7	8	9	10	11
G1	153'-4 $\frac{1}{2}$ "	157'-2 $\frac{1}{4}$ "	147'-3 $\frac{3}{8}$ "	138'-4 $\frac{1}{2}$ "	118'-7 $\frac{1}{2}$ "
G2	155'-1 $\frac{1}{2}$ "	158'-0 $\frac{5}{8}$ "	148'-1 $\frac{1}{8}$ "	139'-2 $\frac{1}{4}$ "	119'-3 $\frac{3}{4}$ "
G3	158'-5 $\frac{3}{4}$ "	159'-0"	149'-0"	140'-0"	120'-0"
G4	161'-0 $\frac{1}{2}$ "	159'-1 $\frac{1}{4}$ "	149'-10 $\frac{5}{8}$ "	140'-9 $\frac{3}{4}$ "	120'-8 $\frac{1}{2}$ "
G5	163'-7 $\frac{3}{4}$ "	160'-9 $\frac{5}{8}$ "	150'-8 $\frac{5}{8}$ "	141'-7 $\frac{5}{8}$ "	122'-9 $\frac{1}{2}$ "

115-250

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

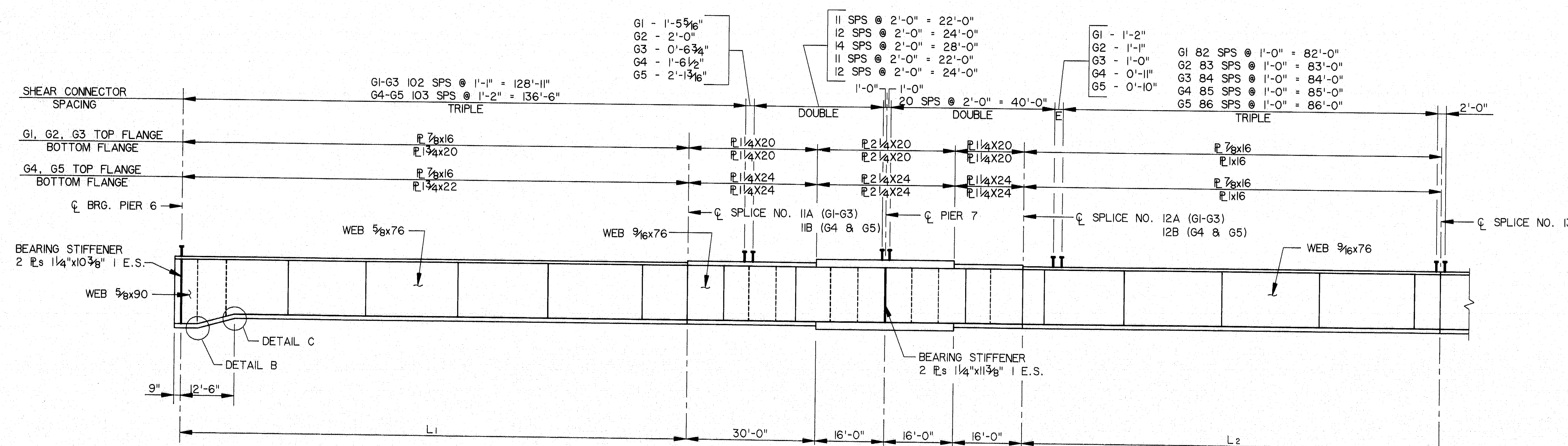
FRAMING PLAN V

SHEET B55 OF B86 AUGUSTA, MAINE

FRAMING PLAN

NOTES

1. FOR STRUCTURAL STEEL NOTES, SEE SHEET B52
2. * SEE NOTE 7, SHEET B52.



GIRDER ELEVATION

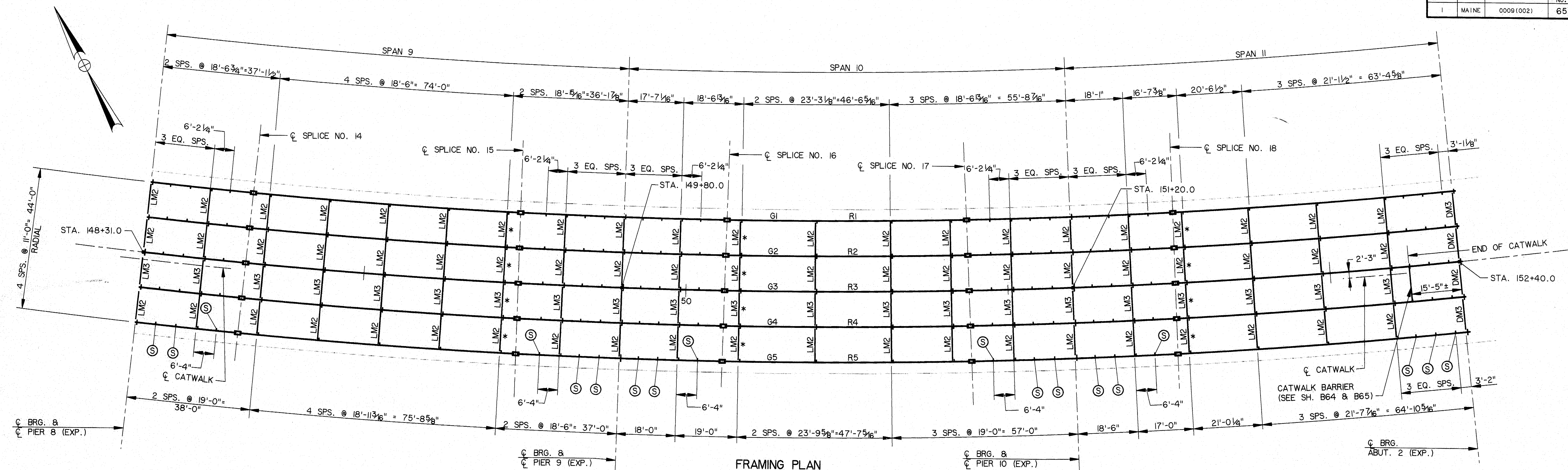
TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2"x6"

					BY	DATE
				DESIGNED:	SM	9/94
				DRAWN:	RJT	9/94
				CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		

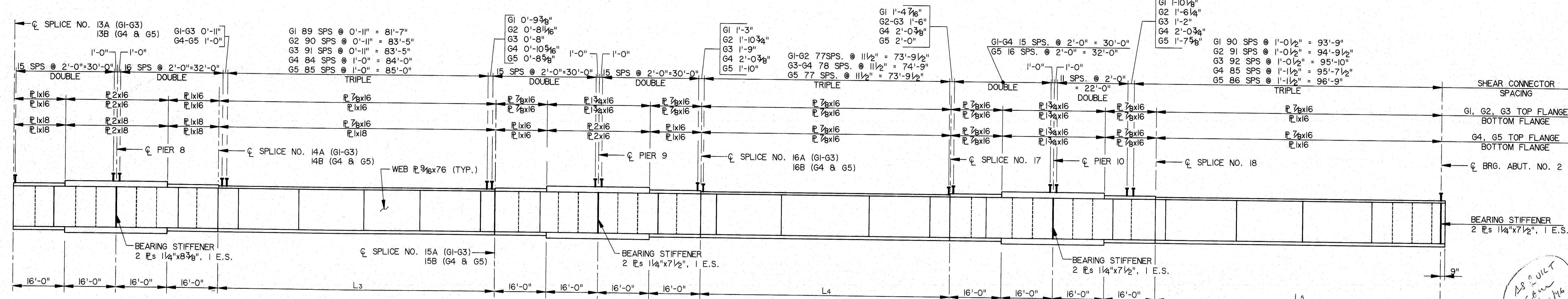


MAINE HIGHWAY DEPARTMENT, CROSSING PERMIT, CROSSING

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	0009(1002)	65	103



FRAMING PLAN



GIRDER ELEVATION

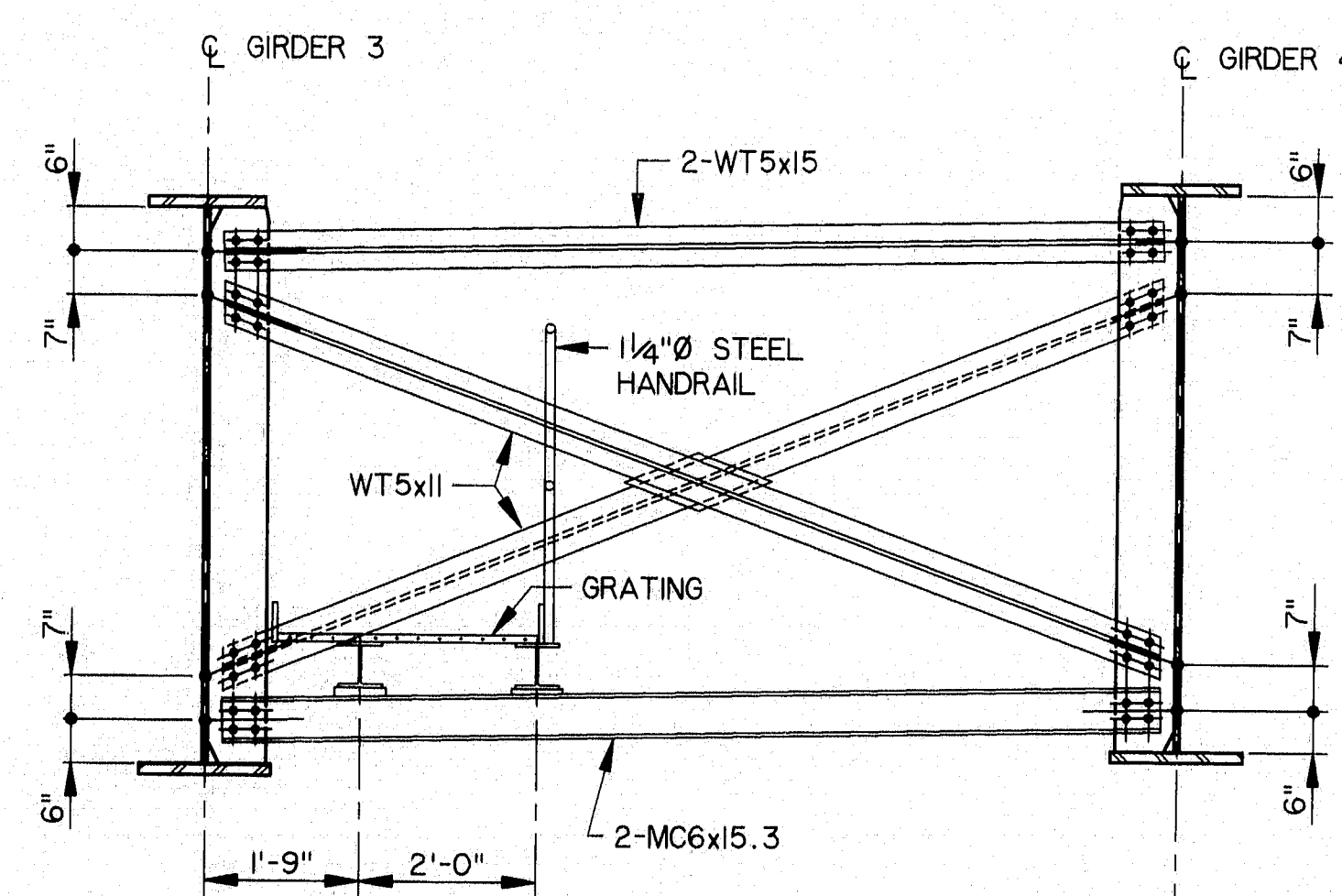
TRANSVERSE STIFFENERS (ONE SIDE ONLY)	
TYPE	SIZE
S	1/2x6

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

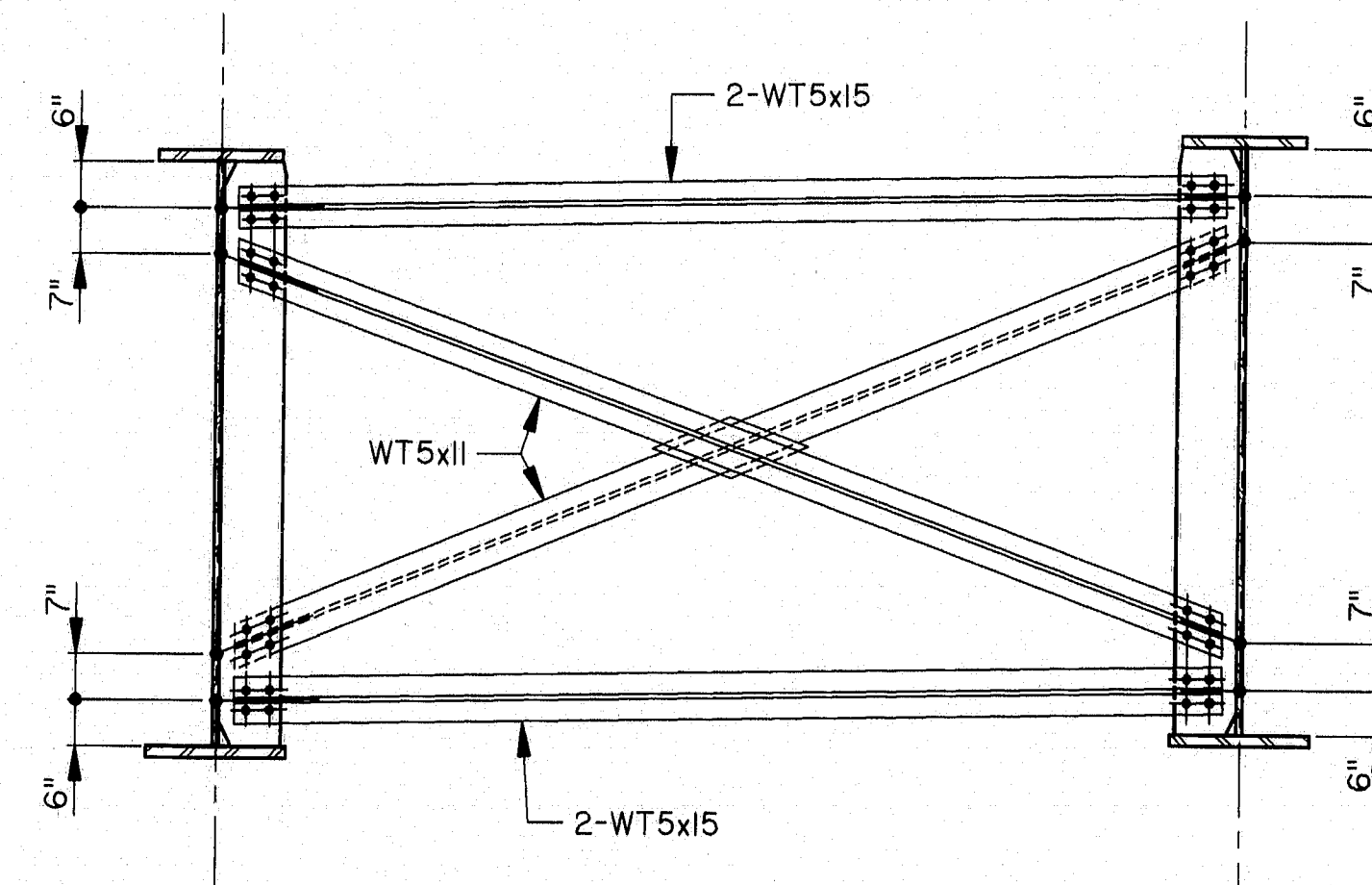
HNTB
ARCHITECTS ENGINEERS PLANNERS

115-251 STEEL ALTERNATIVE
STATE OF MAINE DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER
FRAMING PLAN VI
SHEET B56 OF B86 AUGUSTA, MAINE

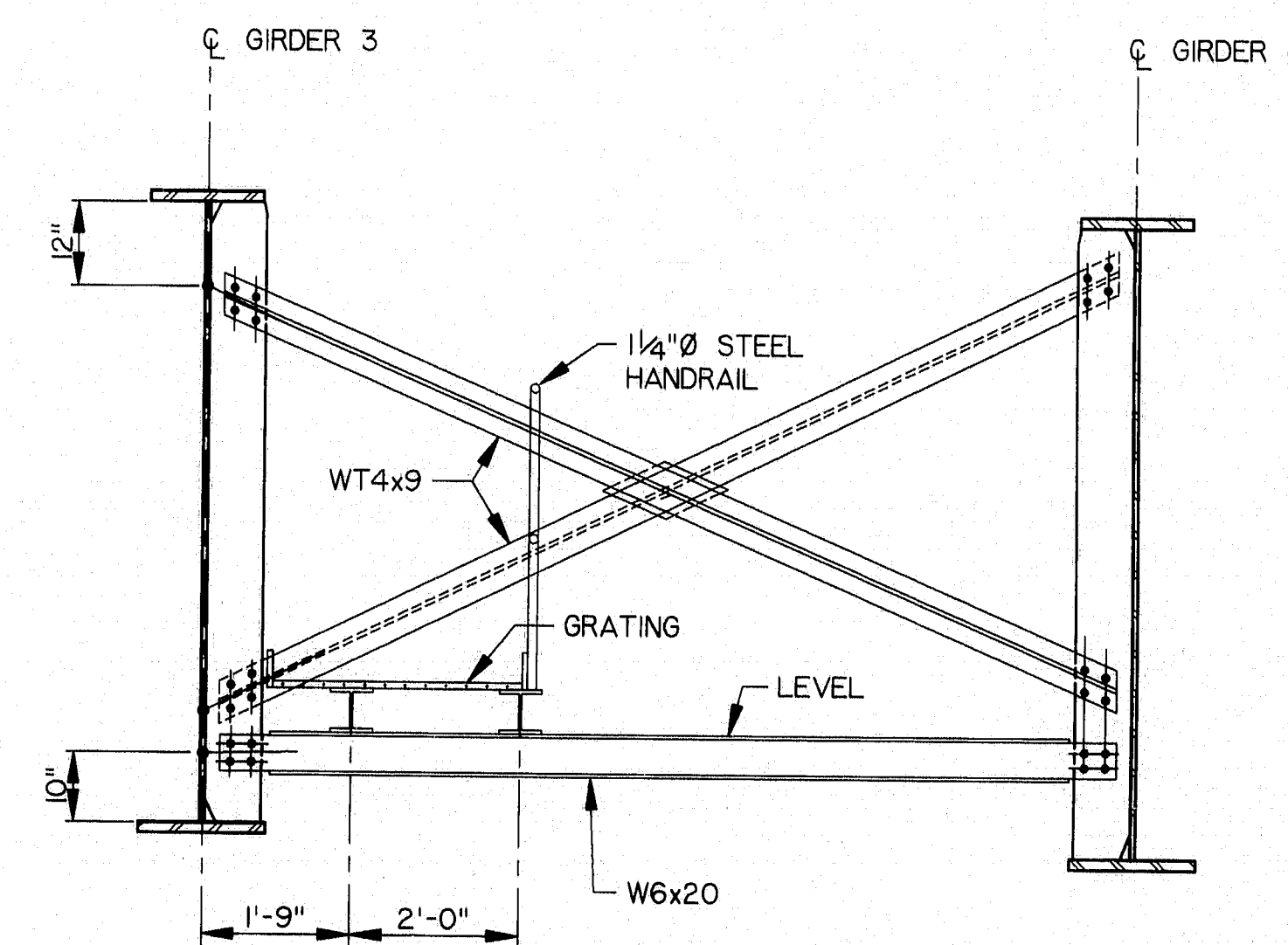
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	66	103



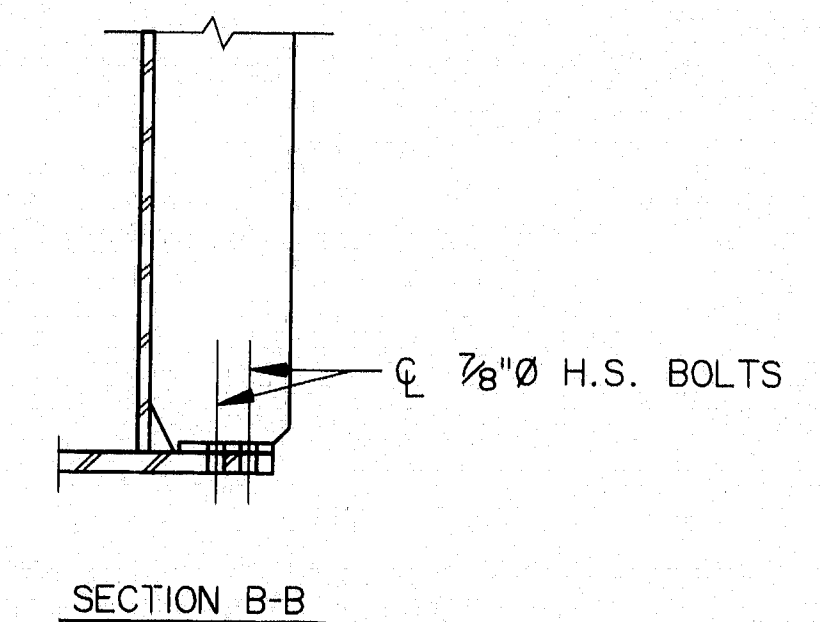
CROSSFRAME - TYPE LM3
(SPANS 7-11)



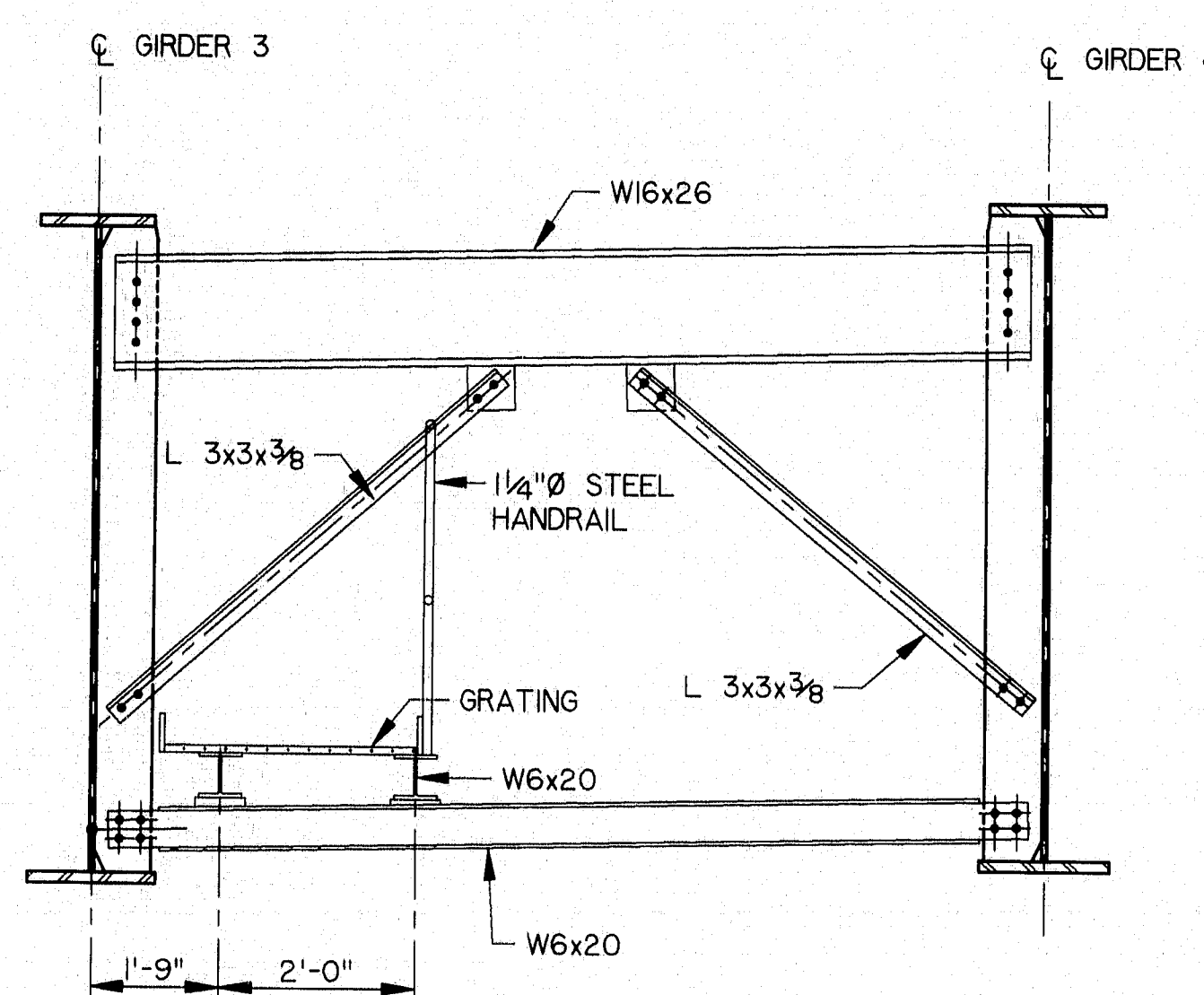
CROSSFRAME - TYPE LM2
(SPANS 7-11)



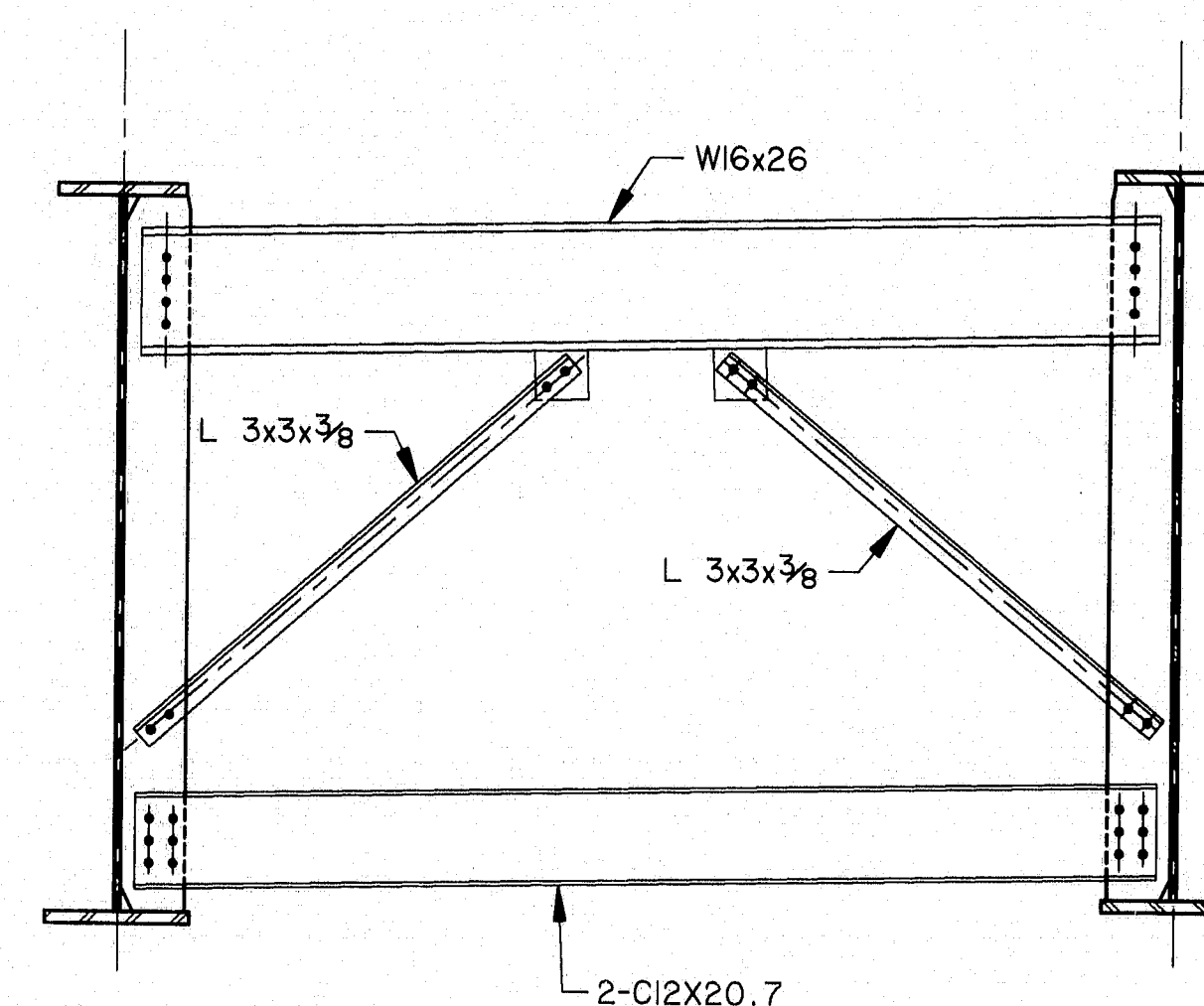
CROSSFRAME - TYPE LM1
(TYPE L, MODIFIED)



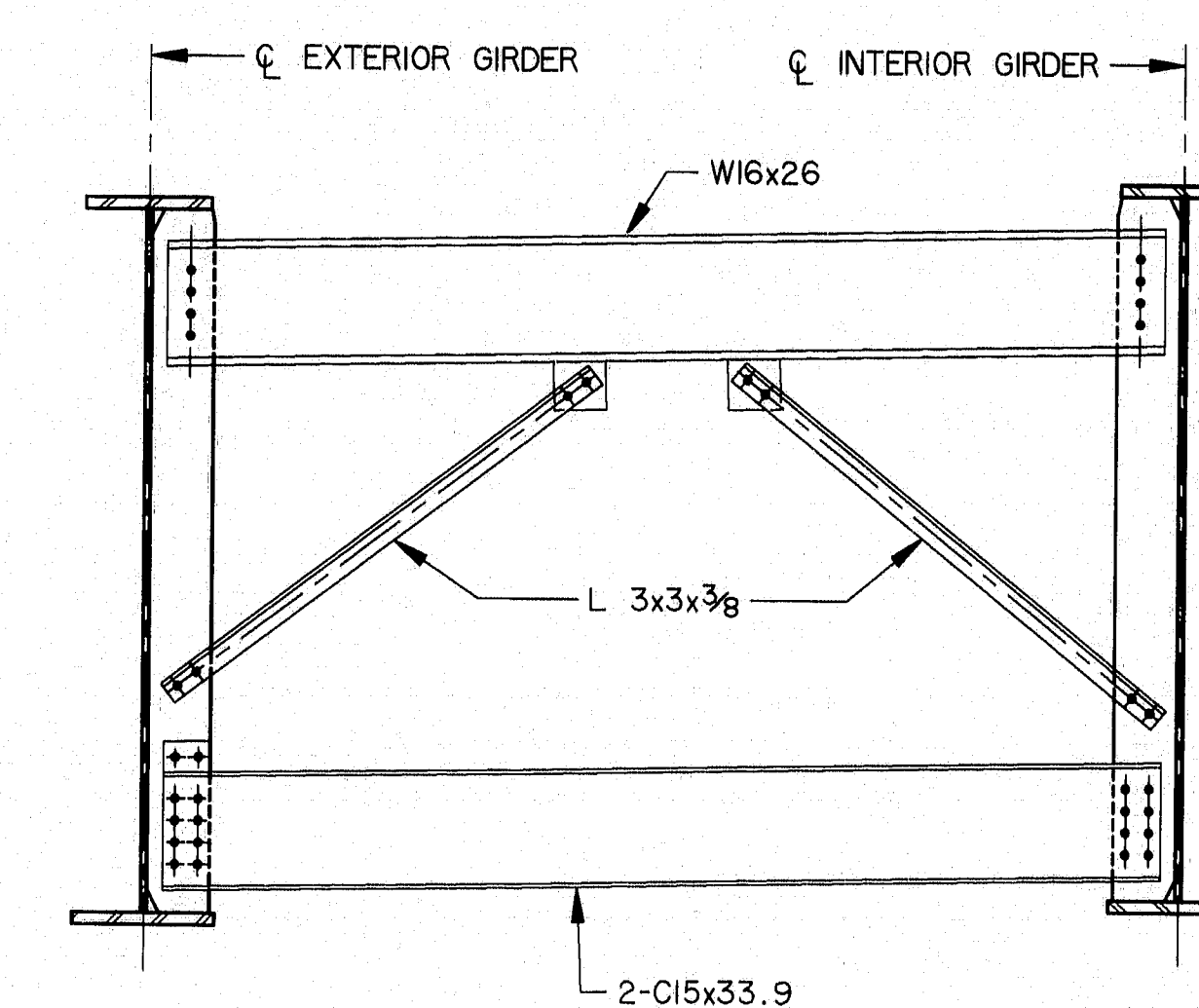
SECTION B-B



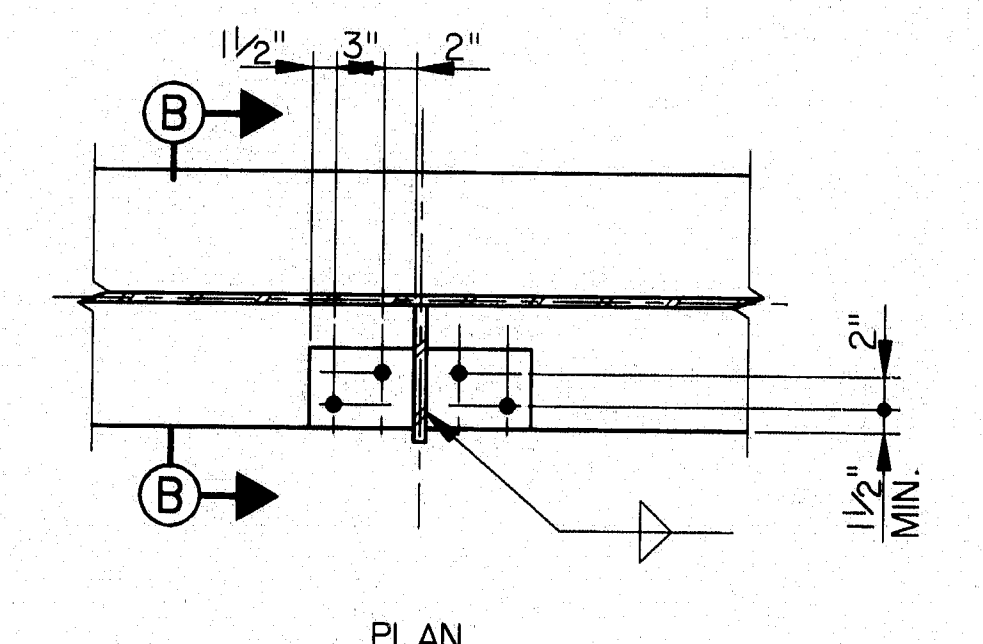
CROSSFRAME - TYPE DM1
(TYPE D, MODIFIED AT PIER 6)



CROSSFRAME - TYPE DM2
(TYPE D, MODIFIED AT ABUTMENTS)



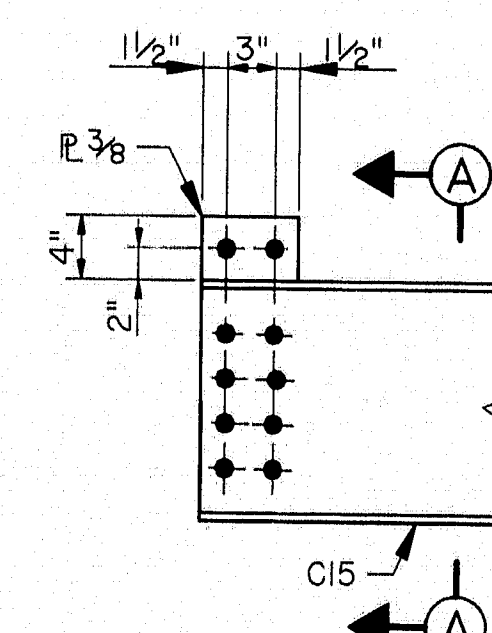
CROSSFRAME - TYPE DM3
(TYPE D, MODIFIED AT ABUTMENTS)



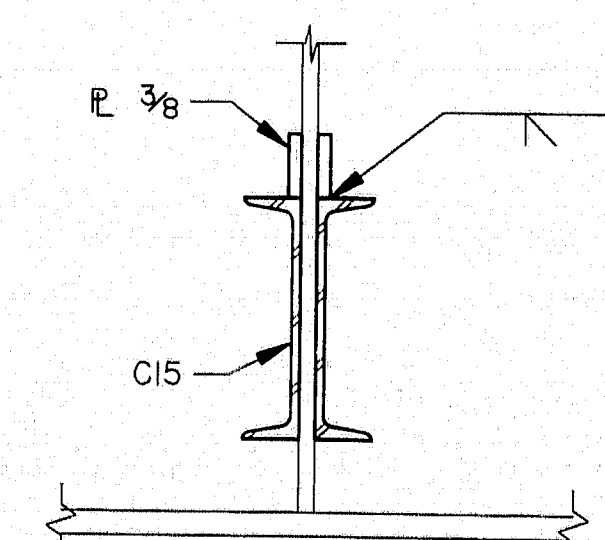
TENSION - FLANGE CONNECTION
(AT CROSSFRAMES)

NOTES

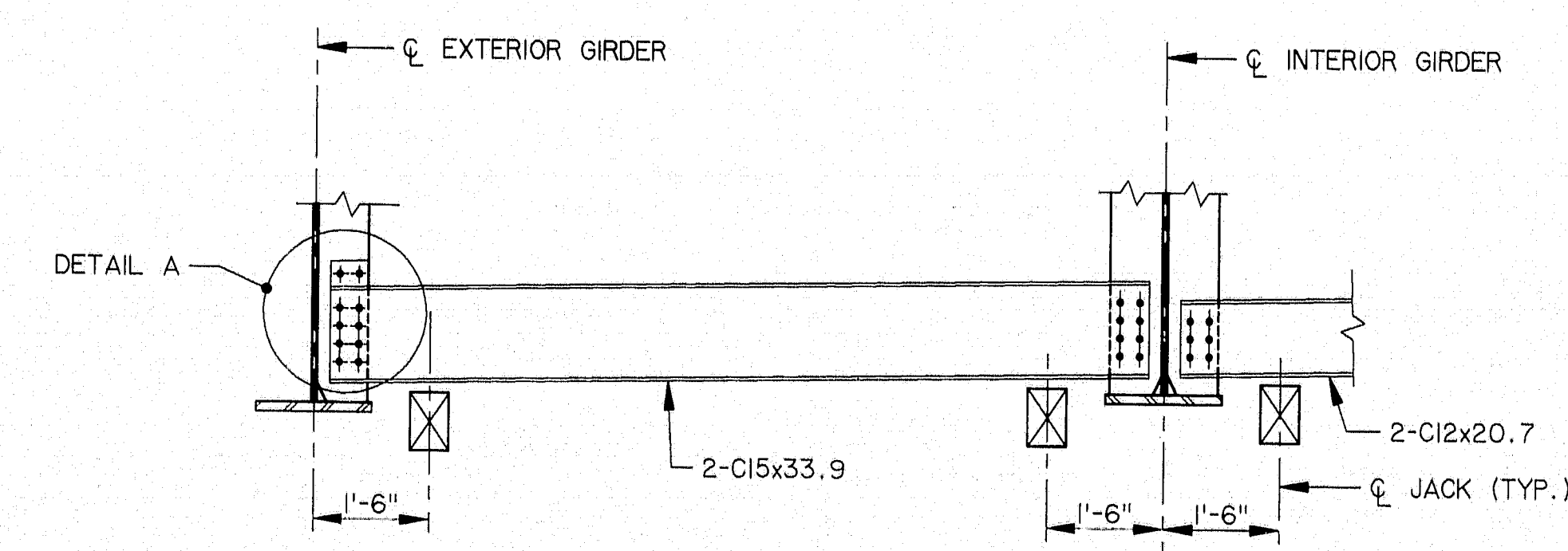
1. USE TENSION FLANGE CONNECTION, SHOWN ON THIS DRAWING FOR ALL CROSSFRAME CONNECTION PLATES IN SPANS 6-11, AND FOR ALL CONNECTION/STIFFENER PLATES WITH LATERAL BRACING.
2. FOR ADDITIONAL DETAILS REFER TO BRIDGE STANDARD DETAILS, BD 112-93.



DETAIL A



SECTION A-A



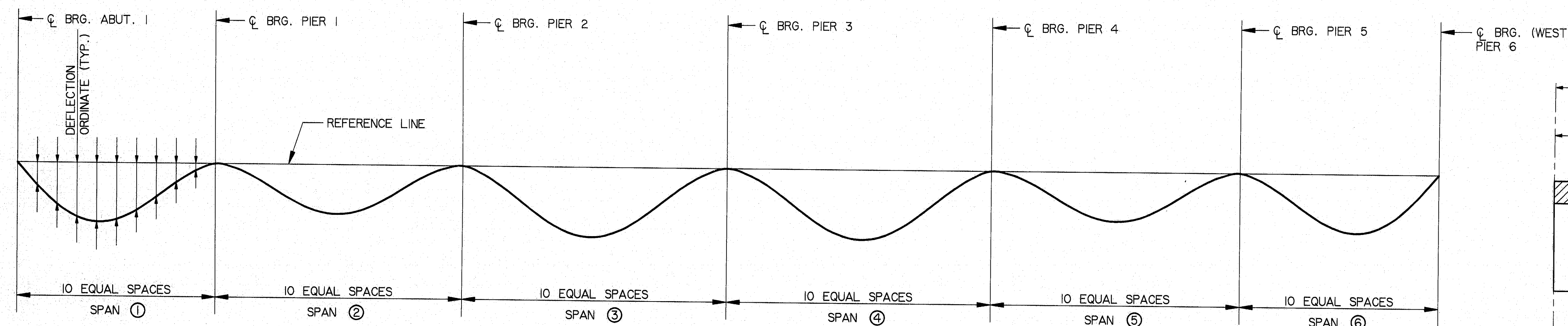
BEARING MAINTENANCE DETAIL (LIFTING)
(AT ABUTMENTS ONLY)

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: SM	9/94		
		DRAWN: RJT	9/94		
		CHECKED: DWR	9/94		

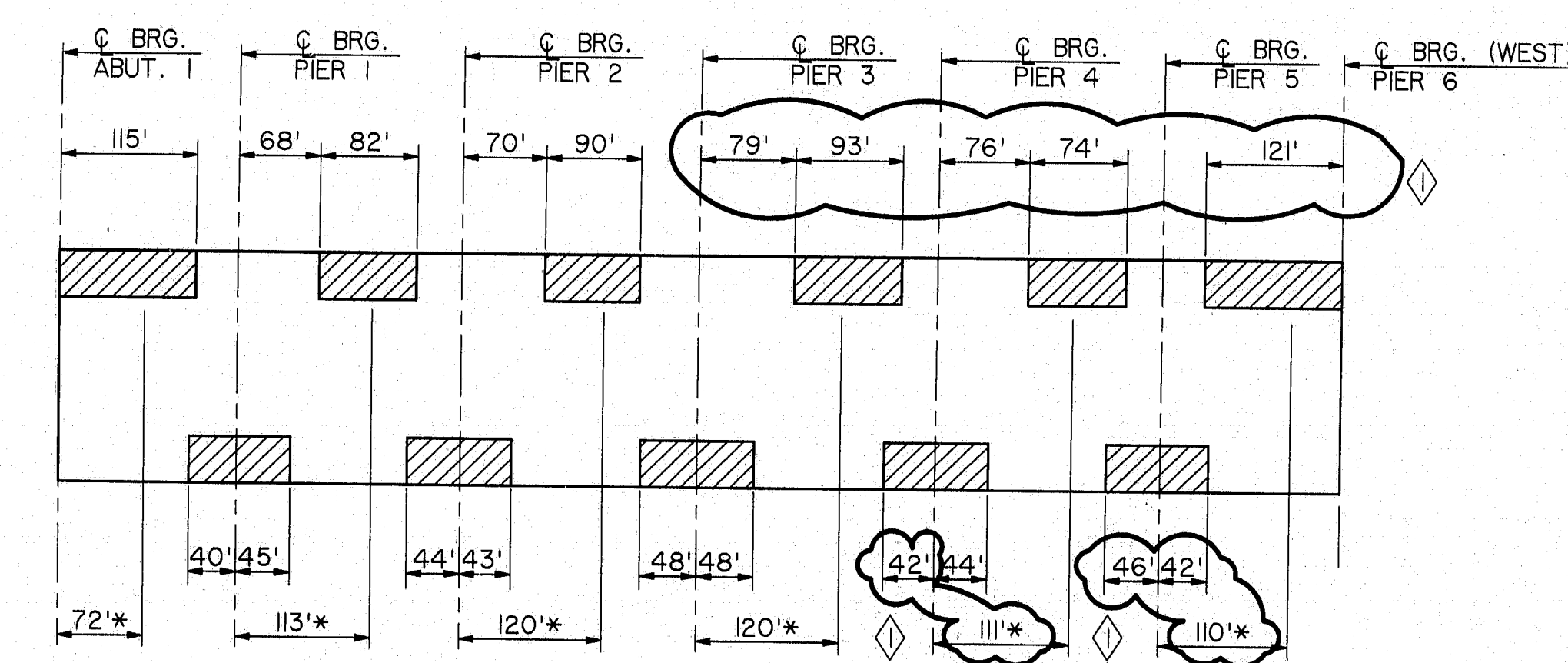


115-252
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER
CROSSFRAME DETAILS
SHEET B57 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	67	103



DEAD LOAD DEFLECTION DIAGRAM
NO SCALE



GIRDER STRESS DIAGRAM
NO SCALE

AREAS OF GIRDER WHICH WILL ALWAYS BE IN COMPRESSION
ALL OTHER AREAS WILL BE IN TENSION OR HAVE STRESS REVERSALS
* - POINTS OF MAXIMUM POSITIVE MOMENT

DEAD LOAD DEFLECTION (Inches)																			
SPAN 1										SPAN 3									
GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
GL. G5	ABUT. 1									PIER 2									
STEEL	0	3/8	1/2	5/8	7/8	1	1 1/8	1 1/4	1 1/2	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4
OTHERS	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
TOTAL	0	1/2	3/4	1 1/4	1 3/4	1 5/8	1 7/8	2 1/8	2 1/4	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4

DEAD LOAD DEFLECTION (Inches)																			
SPAN 4										SPAN 6									
GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
GL. G5	PIER 3									PIER 5									
STEEL	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4
OTHERS	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
TOTAL	0	1/2	3/4	1 1/4	1 3/4	1 5/8	1 7/8	2 1/8	2 1/4	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4

DEAD LOAD DEFLECTION (Inches)																			
SPAN 1										SPAN 3									
GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
GL. G5	ABUT. 1									PIER 2									
STEEL	0	3/8	1/2	5/8	7/8	1	1 1/8	1 1/4	1 1/2	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4
OTHERS	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
TOTAL	0	1/2	3/4	1 1/4	1 3/4	1 5/8	1 7/8	2 1/8	2 1/4	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4

DEAD LOAD DEFLECTION (Inches)																			
SPAN 4										SPAN 6									
GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	GIRDERS	C. BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
GL. G5	PIER 3									PIER 5									
STEEL	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4
OTHERS	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	0	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
TOTAL	0	1/2	3/4	1 1/4	1 3/4	1 5/8	1 7/8	2 1/8	2 1/4	0	1/8	1/4	3/8	1/2	5/8	3/4	1	1 1/8	1 1/4

DEFLECTION NOTE

STEEL INDICATES DEFLECTION CAUSED BY THE WEIGHT OF THE STEEL FRAMING
OTHERS INDICATE DEFLECTION CAUSED BY THE WEIGHT OF THE DECK SLAB,
BARRIER, AND WEARING SURFACE.

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	JFW	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	



115-253

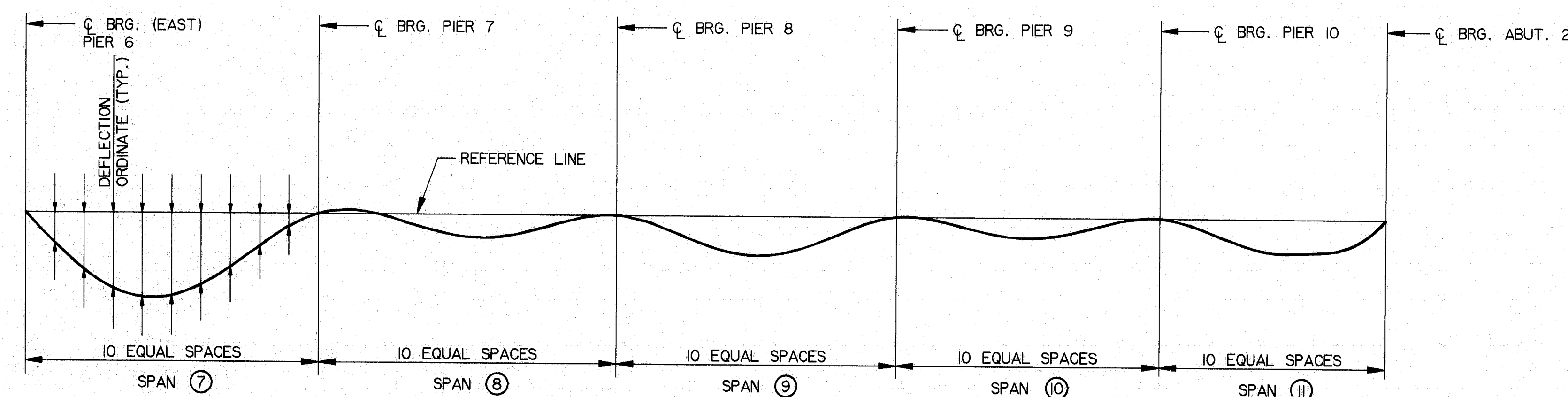
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DEFLECTION DIAGRAM - I

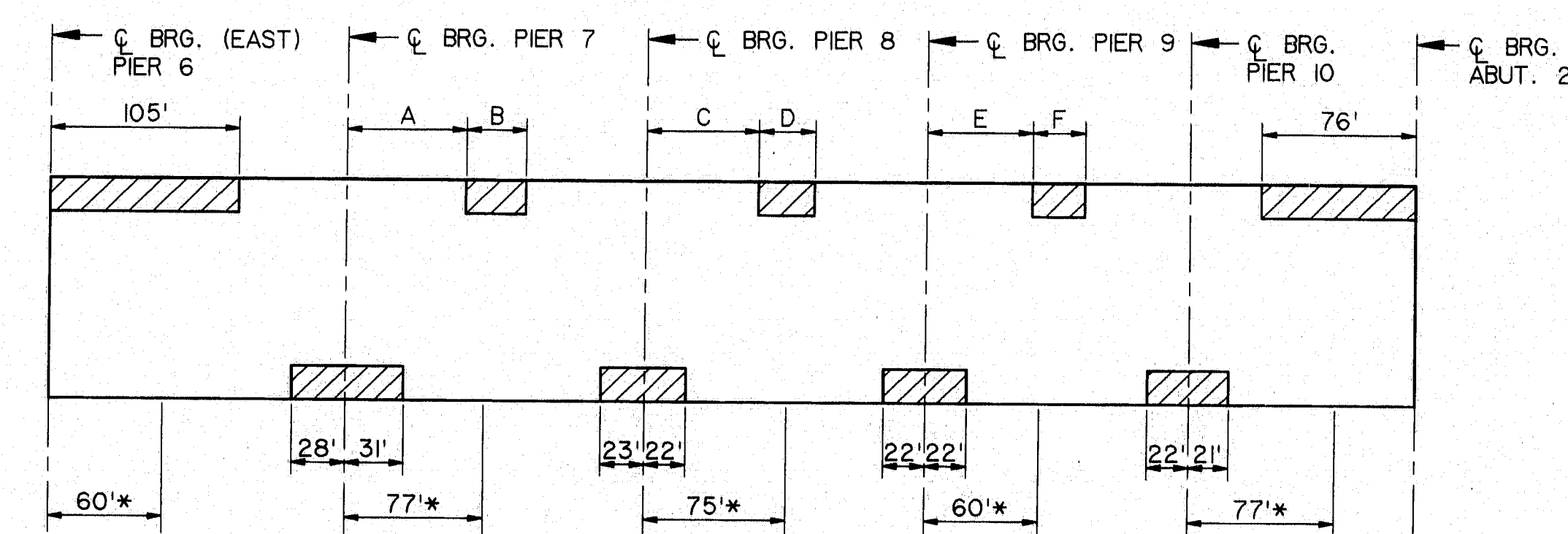
SHEET B58 OF B86 AUGUSTA, MAINE

D:\S\1\W\001\STA\POC\103\103.DWG (000000) DWG 103.DWG

F.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	68	103



DEAD LOAD DEFLECTION DIAGRAM
NO SCALE



GIRDER STRESS DIAGRAM
NO SCALE

- AREAS OF GIRDER WHICH WILL ALWAYS BE IN COMPRESSION
ALL OTHER AREAS WILL BE IN TENSION OR HAVE STRESS REVERSALS
- POINTS OF MAXIMUM POSITIVE MOMENT

DEAD LOAD DEFLECTION (Inches)																																
GIRDER		SPAN 7									SPAN 8									SPAN 9												
		C BRG. PIER 6W	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C BRG. PIER 7	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C BRG. PIER 8	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
G1	STEEL	0	5/16	9/16	3/4	5/8	13/16	1 1/16	1 1/2	5/8	1 1/8	0	-1/16	-1/16	0	1/16	1/8	1/8	1/8	1/8	0	0	1/16	1/8	1/8	5/16	5/16	5/16	1/4	1/8	1/16	
	OTHERS	0	1/16	2 1/16	2 5/16	3 1/16	3 1/16	2 1/16	1 5/16	1 3/16	7/16	0	-1/16	3/16	5/8	1	1 3/16	1 1/8	7/8	1/2	1/8	0	3/16	5/8	1 1/8	1 1/2	1 3/16	1 1/2	1 3/16	1 1/8	1/4	
	TOTAL	0	1 1/16	2 1/16	3 3/16	3 5/16	3 5/16	3 3/16	2 7/16	1 1/2	9/16	0	-1/16	1/8	5/8	1 1/16	1 5/16	1 1/8	7/8	1/2	1/8	0	3/16	5/8	1 1/8	1 1/2	1 3/16	1 1/2	1 3/16	1 1/8	1/4	
G2	STEEL	0	5/16	9/16	3/4	5/8	13/16	1 1/16	1 1/2	5/8	1 1/8	0	-1/16	-1/16	0	1/16	1/8	1/8	1/8	1/8	0	0	1/16	1/8	1/8	5/16	5/16	5/16	1/4	1/8	1/16	
	OTHERS	0	1 5/16	2 7/16	3 3/16	3 3/16	3 1/2	3	2 1/4	1 3/8	1 1/2	0	-1/8	1/8	1/2	5/16	1 1/8	1 1/8	7/8	1/2	1/8	0	1/4	1 1/16	1 1/4	1 5/8	1 3/4	1 5/8	1 1/4	3/4	1/4	
	TOTAL	0	1 5/8	3 1/16	4	4 1/2	4 3/8	3 5/8	2 7/8	1 3/4	1 1/6	0	-3/16	0	7/16	5/16	1 3/16	1 3/16	5/8	7/16	1/8	0	5/16	1 3/16	1 1/2	1 5/16	2 1/16	1 5/16	1 1/2	7/8	5/16	
G3	STEEL	0	3/8	1 1/16	5/16	1	1	7/8	1 1/16	7/8	3/16	0	-1/8	-1/8	-1/16	-1/16	0	1/16	0	0	0	0	0	1/16	3/16	1/2	1 5/16	2 1/16	1 5/16	1 1/2	7/8	5/16
	OTHERS	0	1 7/16	2 1/16	3 1/2	3 5/16	3 7/8	3 3/8	2 1/2	1 1/2	5/8	0	-3/16	0	7/16	5/16	1 1/16	1 1/16	5/8	7/16	1/8	0	1/4	3/4	1 5/16	1 1/4	1 5/16	1 1/4	1 5/16	1 3/8	5/16	
	TOTAL	0	1 5/16	3 3/16	4 7/16	4 7/8	4 1/4	3 3/16	1 5/8	1 3/4	1 1/6	0	-5/16	-1/8	3/8	3/4	1 1/16	1 1/16	5/8	7/16	1/8	0	5/16	1 3/16	1 1/2	1 5/16	2 1/16	1 5/16	1 1/2	7/8	5/16	
G4	STEEL	0	7/16	3/4	1	1 1/8	1 1/8	1	3/4	1/2	3/16	0	-1/8	-3/16	-1/8	-1/16	-1/16	0	0	0	0	0	0	1/16	3/16	5/16	1 3/16	2	2 3/16	2	1 3/16	1/2
	OTHERS	0	1 9/16	2 7/16	3 1/16	4 1/4	4 3/16	3 5/8	2 1/4	1 5/8	5/8	0	-1/4	-1/8	5/16	1 1/16	5/16	5/16	3/4	3/8	1/16	0	1/4	3/4	1 5/16	1 3/4	1 7/8	1 3/4	1 3/8	1 3/8	5/16	
	TOTAL	0	2	3 5/16	4 1/16	5 3/16	5 5/16	4 5/8	3 3/8	2 1/4	1 1/6	0	-3/8	-5/16	3/8	5/8	7/8	5/16	3/4	3/8	1/16	0	5/16	1 5/16	1 5/8	2 1/8	2 1/8	2 1/8	1 5/8	1	3/8	
G5	STEEL	0	7/16	5/16	1 1/8	1 1/4	1 1/4	1 1/8	7/8	9/16	1/4	0	-1/8	-3/16	-3/16	-1/8	-1/16	-1/16	-1/16	-1/16	0	1/16	3/16	5/16	3/8	7/16	3/8	5/16	3/8	1/4	1/16	
	OTHERS	0	1 5/8	3 1/16	4 1/16	4 3/16	4 1/2	3 5/16	2 5/16	1 5/16	3/4	0	-5/16	-1/4	1/8	1/2	3/4	3/16	5/8	5/16	0	0	5/16	1 3/16	1 3/8	1 3/4	1 3/4	1 3/4	1 3/8	1 3/8	5/16	
	TOTAL	0	2 1/16	3 7/16	5 3/16	5 5/16	5 3/4	5 1/16	3 5/16	2 3/8	1	0	-7/16	-7/16	-1/16	3/8	1 1/16	3/4	9/16	1/4	-1/16	0	3/8	1	1 1/16	2 1/8	2 5/16	2 1/8	1 1/16	1	3/8	

STRESS DIAGRAM DIMENSIONS (FT)										
GIRDER	A	B	C	D	E	F				
G1	67	36	50	50	55	33				
G2	67	38	48	55	52	38				
G3	71	33	49	54	54	36				
G4	76	26	51	51	56	32				
G5	-	-	54	46	66	20				

DEAD LOAD DEFLECTION (Inches)																															
GIRDER	SPAN 10										SPAN 11																				
	C BRG. PIER 9	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C BRG. PIER 10	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	C BRG. PIER 11	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
G1	STEEL	0	0	1/16	1/16	1/8	1/8	1/8	1/8	1/8	0	0	1/16	1/16	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	1/16	1/16	3/16	1/4	1/4	1/4	1/4	1/4	0
	OTHERS	0	1/16	5/16	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1	9/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	0
	TOTAL	0	1/16	3/8	1 1/16	5/8	1	5/8	1 1/8	3/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	1 1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
G2	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/8	1/8	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	1/4	0
	OTHERS	0	1/16	5/16	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1	9/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	0
	TOTAL	0	1/16	5/16	1 1/16	1	1 1/8	1	1 1/8	3/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	1 1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
G3	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/8	1/8	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	1/4	0
	OTHERS	0	1/16	5/16	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1	9/16	0	3/16	1/2	7/8	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	0
	TOTAL	0	1/16	5/16	1 1/16	1	1 1/8	1	1 1/8	3/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	1 1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
G4	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/8	1/8	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	1/4	0
	OTHERS	0	0	1/4	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1	9/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
	TOTAL	0	0	1/4	1 1/16	1	1 1/8	1	1 1/8	3/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	1 1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
G5	STEEL	0	0	0	1/16	1/8	1/8	1/8	1/8	1/8	0	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	1/16	1/8	3/16	1/4	1/4	1/4	1/4	1/4	0
	OTHERS	0	0	1/4	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1	9/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0
	TOTAL	0	0	1/4	5/16	5/8	5/8	5/8	5/8	5/8	1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	1 1/16	0	1/4	5/16	1 1/16	1 5/16	1 5/16	1 5/16	1 5/16	1 3/16	0

DEFLECTION NOTE:

SEE SHEET B58 FOR DEFLECTION NOTES.

115-254

AS BUILT
Carter
10/1/94

NO.	REVISION	BY	DATE	IN CHARGE OF	DATE
		DESIGNED:	JFW	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

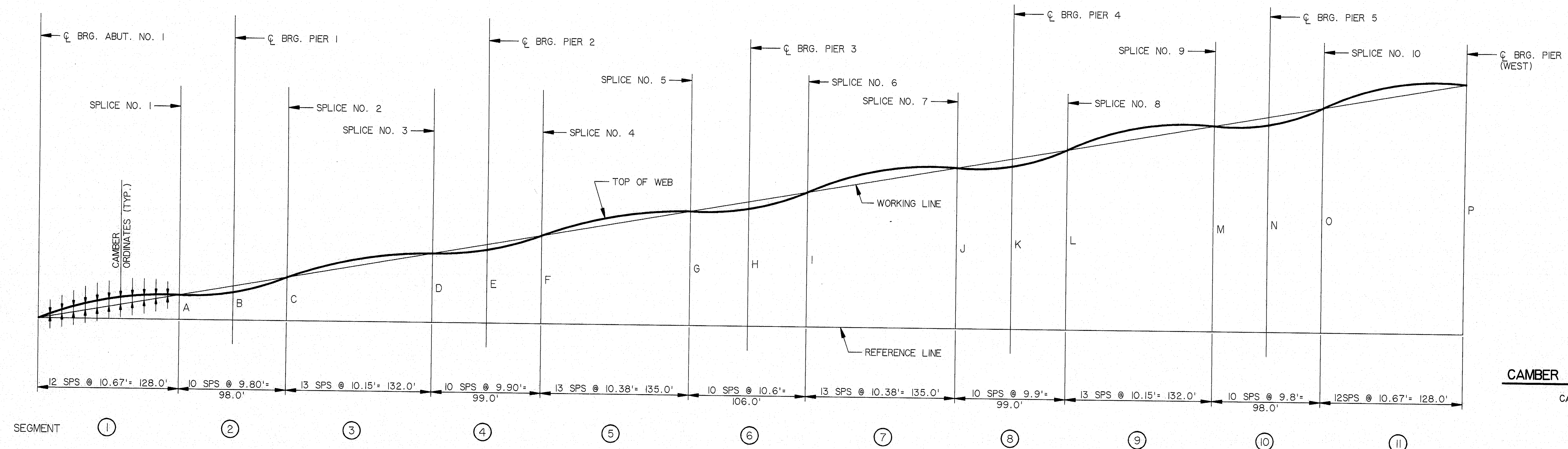
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ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DEFLECTION DIAGRAM - II

SHEET B59 OF B86 AUGUSTA, MAINE

F.S. No.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	69	103



CAMBER NOTES

- CAMBER ORDINATES SHOWN INCLUDES:
- TOTAL DEAD LOAD DEFLECTION
 - RESIDUAL CAMBER (1/16th INCH PER 10 FEET)

NOTES

1. CAMBER ORDINATES - INCHES
CAMBER LOCATION - FEET
2. NEGATIVE CAMBER INDICATES THAT TOP OF WEB IS BELOW THE WORKING LINE.

CAMBER ORDINATES																																					
SEGMENT 1														SEGMENT 2														SEGMENT 3									
GIRDER	C BRG. ABUT. 1	10.67	21.33	32.00	42.67	53.33	64.00	74.67	85.33	96.00	106.67	117.33	C SPLICE 1	9.80	19.60	29.40	39.20	49.00	58.80	68.60	78.40	88.20	C SPLICE 2	10.15	20.31	30.46	40.62	50.77	60.92	70.08	81.23	91.38	101.54	111.69	121.85	C SPLICE 3	
G1 & G5	0	5/16"	13/16"	2 1/2"	3"	3 3/8"	3 1/2"	3 3/8"	3"	2 1/2"	1 5/16"	5/16"	0	-5/8"	-1 1/16"	-1 5/16"	-1 5/16"	-2 3/8"	-2 1/16"	-1 1/16"	-1 3/8"	-5/8"	0	5/8"	1 3/16"	1 1/16"	2 3/16"	2 3/8"	2 1/2"	2 1/2"	2 3/8"	2 3/16"	1 1/16"	1 3/16"	5/8"	0	
G2-G4	0	5/16"	1 5/16"	2 3/4"	3 1/4"	3 3/4"	3 13/16"	3 3/4"	3 3/8"	2 3/4"	1 5/16"	5/16"	0	-5/8"	-1 3/16"	-1 1/16"	-2 1/16"	-2 1/4"	-2 3/16"	-1 5/16"	-1 3/8"	-3/4"	0	5/8"	1 5/16"	1 3/16"	2 1/4"	2 5/8"	2 3/4"	2 3/8"	2 1/4"	1 5/16"	1 3/16"	5/8"	0		
SEGMENT 4														SEGMENT 5														SEGMENT 6									
GIRDER	C SPLICE 3	9.90	19.80	29.70	39.60	49.50	59.40	69.30	79.20	89.10	C SPLICE 4	10.38	20.77	31.15	41.54	51.92	62.31	72.69	83.08	93.46	103.85	114.23	124.62	C SPLICE 5	10.60	21.20	31.80	42.40	53.00	63.60	74.20	84.80	95.40	C SPLICE 6			
G1 & G5	0	-3/4"	-1 3/16"	-1 1/16"	-2 3/16"	-2 1/4"	-2 1/16"	-1 1/16"	-1 1/16"	-5/8"	0	5/16"	1 5/16"	2 3/16"	2 5/8"	3"	3 1/4"	3 1/8"	3"	2 5/8"	2 1/4"	1 7/16"	3/4"	0	-3/4"	-1 5/16"	-1 1/16"	-2 3/8"	-2 1/2"	-2 3/8"	-1 5/16"	-1 7/16"	-3/4"	0			
G2-G4	0	-3/4"	-1 5/16"	-1 3/16"	-2 1/4"	-2 3/8"	-2 3/16"	-1 1/16"	-1 3/16"	-5/8"	0	5/16"	1 1/16"	2 3/8"	2 7/8"	3 1/4"	3 1/2"	3 1/2"	3 1/4"	2 3/4"	2 1/4"	1 5/16"	1 3/16"	0	-1 3/16"	-1 7/16"	-2 1/16"	--2 3/8"	--2 1/2"	--2 3/4"	--2 1/2"	-1 3/16"	-1 3/16"	0			
SEGMENT 7														SEGMENT 8														SEGMENT 9									
GIRDER	C SPLICE 6	10.38	20.77	31.15	41.54	51.92	62.31	72.69	83.08	93.46	103.85	114.23	124.62	C SPLICE 7	9.9	19.80	29.70	39.60	49.50	59.40	69.30	79.20	89.10	C SPLICE 8	10.15	20.31	30.46	40.62	50.77	62.92	70.08	81.23	91.38	101.54	111.69	121.85	C SPLICE 9
G1 & G5	0	3/4"	1 7/16"	2 1/16"	2 5/8"	3"	3 1/8"	3 1/4"	3"	2 5/8"	2 3/16"	1 5/16"	1 3/8"	0	-5/8"	-1 1/16"	-1 1/16"	-2 1/16"	-2 1/4"	-2 3/16"	-1 1/16"	-1 3/8"	-3/4"	0	5/8"	1 3/16"	1 1/16"	2 3/16"	2 3/8"	2 1/2"	2 1/2"	2 3/8"	2 3/16"	1 1/16"	1 3/16"	5/8"	0
G2-G4	0	5/16"	1 5/16"	2 1/4"	2 3/4"	3 1/4"	3 1/2"	3 1/2"	3 1/4"	2 7/8"	2 3/8"	1 1/16"	1 3/8"	0	-5/8"	-1 3/16"	-1 1/16"	-2 3/16"	-2 3/8"	-2 1/4"	-1 5/16"	-1 5/16"	-3/4"	0	5/8"	1 3/16"	1 1/16"	2 3/16"	2 5/8"	2 3/4"	2 3/8"	2 1/4"	1 5/16"	1 3/16"	5/8"	0	
SEGMENT 10														SEGMENT 11														SEGMENT 12									
GIRDER	C SPLICE 9	9.80	19.60	29.40	39.20	49.00	58.80	68.60	78.40	88.20	C SPLICE 10	10.67	21.33	32.00	42.67	53.33	64.00	74.67	85.33	96.00	106.67	117.33	C BRG. PIER 6														
G1 & G5	0	-5/8"	-1 3/16"	-1 1/16"	-2 1/16"	-2 3/16"	-1 5/16"	68.60	-1 1/16"	-5/8"	0	5/16"	1 3/16"	2 1/2"	3"	3 3/8"	3 1/2"	3 3/8"	3"	2 1/2"	1 5/16"	5/16"	0														
G2-G4	0	-3/4"	-1 5/16"	-1 3/16"	-2 3/16"	-2 1/4"	-2 1/16"	-1 1/16"	-1 3/16"	-5/8"	0	5/16"	1 5/16"	2 3/4"	3 3/8"	3 3/16"	3 3/4"	3 1/4"	2 3/4"	1 5/16"	5/16"	0															

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	JFW	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

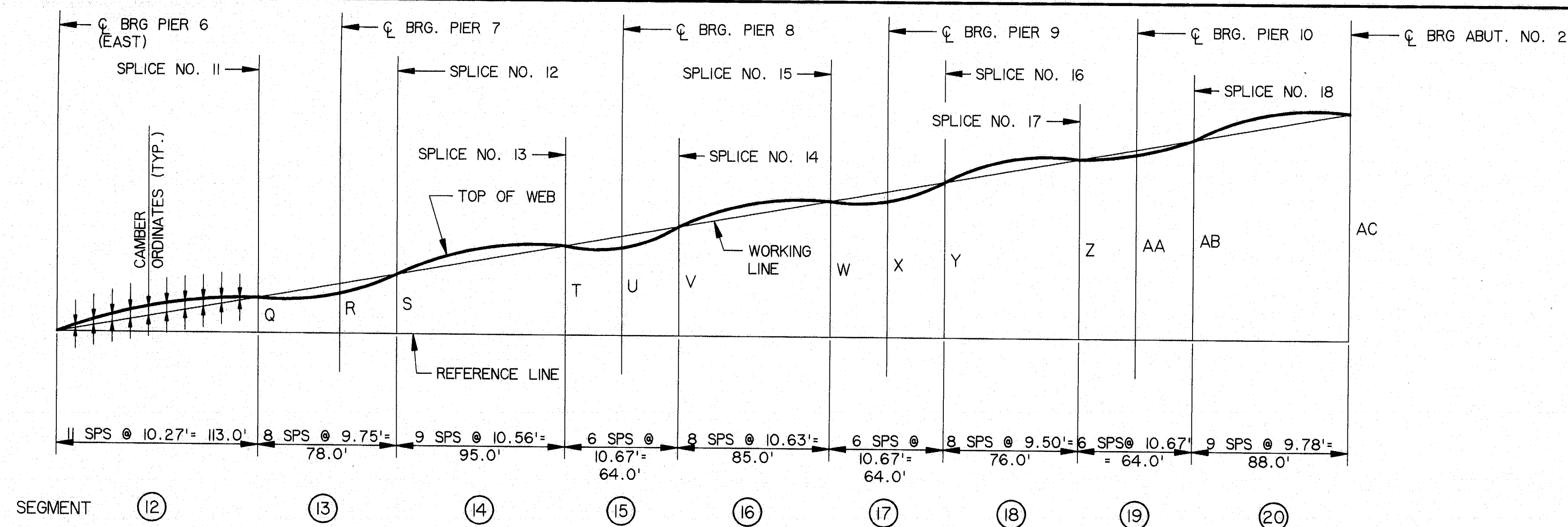
115-255

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CAMBER DIAGRAM - I

SHEET B60 OF B86 AUGUSTA, MAINE

043 (REVISIONS TO DRAWING) (LARGE) (B6) (DW) (000000)



CAMBER DIAGRAM
NO SCALE

GIRDER	SEGMENT 12	SEGMENT 13	SEGMENT 14
G1	9.81 18.61 29.42 39.23 49.04 58.84 68.65 78.46 88.27 98.07 0 1/16 2 1/16 2 3/16 2 5/16 2 7/16 2 9/16 2 11/16 3 1/16 3 3/16	9.75 19.50 29.25 39.00 48.75 58.50 68.25 78.00 87.75 97.50 0 -1/2 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16	10.35 20.70 31.06 41.41 51.76 62.11 72.47 82.82 93.17 103.52 0 5/16 5/8 7/8 1 5/16 3/4 1/2 1/4 0
G2	10.04 20.08 30.12 40.16 50.20 60.24 70.28 80.32 90.36 100.40 0 5/16 1 1/16 2 5/16 2 3/4 2 5/16 2 7/8 2 5/8 2 3/16 1 9/16	9.75 19.50 29.25 39.00 48.75 58.50 68.25 78.00 87.75 97.50 0 -1/2 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16	10.45 20.91 31.36 41.81 52.27 62.72 73.17 83.63 94.08 104.53 0 5/16 5/8 7/8 1 5/16 3/4 1/2 1/4 0
G3	10.27 20.55 30.82 41.09 51.36 61.64 71.91 82.18 92.45 102.73 0 5/16 1 1/16 2 1/16 2 5/16 3 1/4 3 1/4 3 1/16 2 9/16 1 7/8	9.75 19.50 29.25 39.00 48.75 58.50 68.25 78.00 87.75 97.50 0 -3/8 -3/4 -1 -1 3/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16	10.56 21.11 31.67 42.22 52.78 63.33 73.89 84.44 95.00 105.56 0 1/4 1/2 1 1/16 7/8 1 5/16 7/8 5/8 5/16 0
G4	10.51 21.01 31.52 42.02 52.53 63.03 73.54 84.04 94.55 105.05 0 1 1 1/8 2 1/16 3 1/4 3 9/16 3 5/8 3 3/8 2 5/8 2 1/16	9.75 19.50 29.25 39.00 48.75 58.50 68.25 78.00 87.75 97.50 0 -3/8 -3/4 -1 -1 3/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16	10.66 21.32 31.97 42.63 53.29 63.95 74.60 85.26 95.92 106.58 0 3/16 7/16 5/8 1 5/16 7/8 1 1/16 5/8 5/16 0
G5	10.74 21.48 31.98 42.49 52.99 63.50 74.00 84.51 95.01 105.52 0 1 1/16 2 2 7/8 3 1/2 3 5/16 3 7/8 3 5/8 3 1/16 2 1/4	9.75 19.50 29.25 39.00 48.75 58.50 68.25 78.00 87.75 97.50 0 -3/8 -3/4 -1 -1 3/16 -1 1/16 -1 1/16 -1 1/16 -1 1/16	10.75 21.50 32.25 43.00 53.75 64.50 75.25 86.00 96.75 107.50 0 1/8 3/8 5/8 7/8 1 5/16 3/4 5/16 5/16 0

GIRDER	SEGMENT 15	SEGMENT 16	SEGMENT 17
G1	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 3/8 3/4 5/16 1 1/16	10.41 20.82 31.23 41.64 52.05 62.46 72.87 83.28 93.69 104.10 0 3/8 3/4 5/16 1 1/16 1 5/16 3/4 3/8 0 -5/16 -9/16 -1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 3/8 3/4 5/16 1 1/16
G2	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16	10.52 21.04 31.55 42.07 52.59 63.11 73.62 84.13 94.64 105.15 0 7/16 5/16 1 1/16 1 5/16 3/4 7/16 0 -3/8 -5/8 -1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16
G3	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16	10.63 21.25 31.88 42.50 53.13 63.75 74.38 85.00 95.63 106.25 0 7/16 5/16 1 1/16 1 5/16 3/4 7/16 0 -3/8 -5/8 -1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16
G4	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16	10.73 21.47 32.20 43.03 53.66 64.40 75.13 85.86 96.59 107.32 0 7/16 5/16 1 1/16 1 5/16 3/4 7/16 0 -3/8 -5/8 -1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16
G5	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16	10.83 21.66 32.49 43.32 54.15 64.98 75.81 86.64 97.47 108.30 0 7/16 5/16 1 1/16 1 5/16 3/4 7/16 0 -3/8 -5/8 -1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16 1 5/16

GIRDER	SEGMENT 18	SEGMENT 19	SEGMENT 20
G1	9.37 18.75 28.12 37.50 46.87 56.24 65.62 75.00 84.37 93.75 0 1/4 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16	9.62 19.25 28.87 38.50 48.12 57.75 67.37 77.00 86.63 96.25 0 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16 1 1/16
G2	9.40 18.80 28.20 37.60 46.99 56.39 65.79 75.19 84.59 93.99 0 1/4 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -5/16 -9/16 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16	9.70 19.40 29.10 38.80 48.51 58.21 67.91 77.61 87.31 97.01 0 1/2 7/8 1 1/8 1 5/8 1 3/4 1 1/2 1 1/4 1 1/4
G3	9.50 19.00 28.50 38.00 47.50 57.00 66.50 76.00 85.50 95.00 0 1/4 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16	9.78 19.56 29.33 39.11 48.89 58.67 68.44 78.22 88.00 97.78 0 1/2 5/8 1 1/4 1 3/8 1 1/2 1 1/4 1 1/4 1 1/4
G4	9.60 19.20 28.80 38.41 48.01 57.61 67.21 76.81 86.41 96.01 0 1/4 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16	9.85 19.71 29.56 39.42 49.27 59.13 68.98 78.84 88.69 98.54 0 1/2 1 1 1 1 1 1 1 1 1
G5	9.69 19.39 29.08 38.77 48.46 58.16 67.85 77.54 87.23 96.92 0 1/4 7/16 5/8 3/4 7/16 1 1/16 1 5/16 1 3/16 1 1/16	10.67 21.33 32.00 42.67 53.33 64.00 74.67 85.33 96.00 106.67 0 -3/8 -5/8 -1 1/16 -1 3/16 -1 5/16 0 7/16 5/16 1 1/16	9.92 19.85 29.77 39.70 49.62 59.55 69.47 79.40 89.32 99.24 0 1/2 1 1 1 1 1 1 1 1 1

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	9/94	
		DRAWN: RJT	9/94	
		CHECKED: DWR	9/94	

WEB PLATE LAYOUT
(DIMENSIONS IN FEET)

GIRDER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
G2, G3, G4	2.04	2.52	3.31	5.15	5.67	6.66	8.51	9.03	10.00	11.92	12.39	13.19	15.04	15.54	16.51	18.06
G1 - G5	2.02	2.52	3.30	5.15	5.67	6.64	8.50	9.03	9.98	11.90	12.39	13.18	15.04	15.54	16.49	18.06

WEB PLATE LAYOUT
(DIMENSIONS IN FEET)

GIRDER	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
G1	1.79	2.23	2.68	4.05	4.45	4.97	6.17	6.54	7.02	8.09	8.50	9.02	10.18
G2	1.81	2.23	2.67	4.04	4.45	4.98	6.17	6.54	7.02	8.09	8.50	9.03	10.18
G3	1.84	2.23	2.66	4.04	4.45	4.98	6.18	6.54	7.02	8.09	8.50	9.03	10.18
G4	1.85	2.23	2.65	4.03	4.45	4.99	6.18	6.54	7.01	8.09	8.50	9.03	10.18
G5	1.87	2.23	2.64	4.02	4.45	4.99	6.18	6.54	7.01	8.08	8.50	9.04	10.18

CAMBER NOTES

CAMBER ORDINATES SHOWN INCLUDES:

- TOTAL DEAD LOAD DEFLECTION
- RESIDUAL CAMBER (1/16th INCH PER 10 FEET)

NOTES

1. CAMBER ORDINATES - INCHES
CAMBER LOCATION - FEET
2. NEGATIVE CAMBER INDICATES THAT TOP OF WEB IS BELOW THE WORKING LINE.

115-256

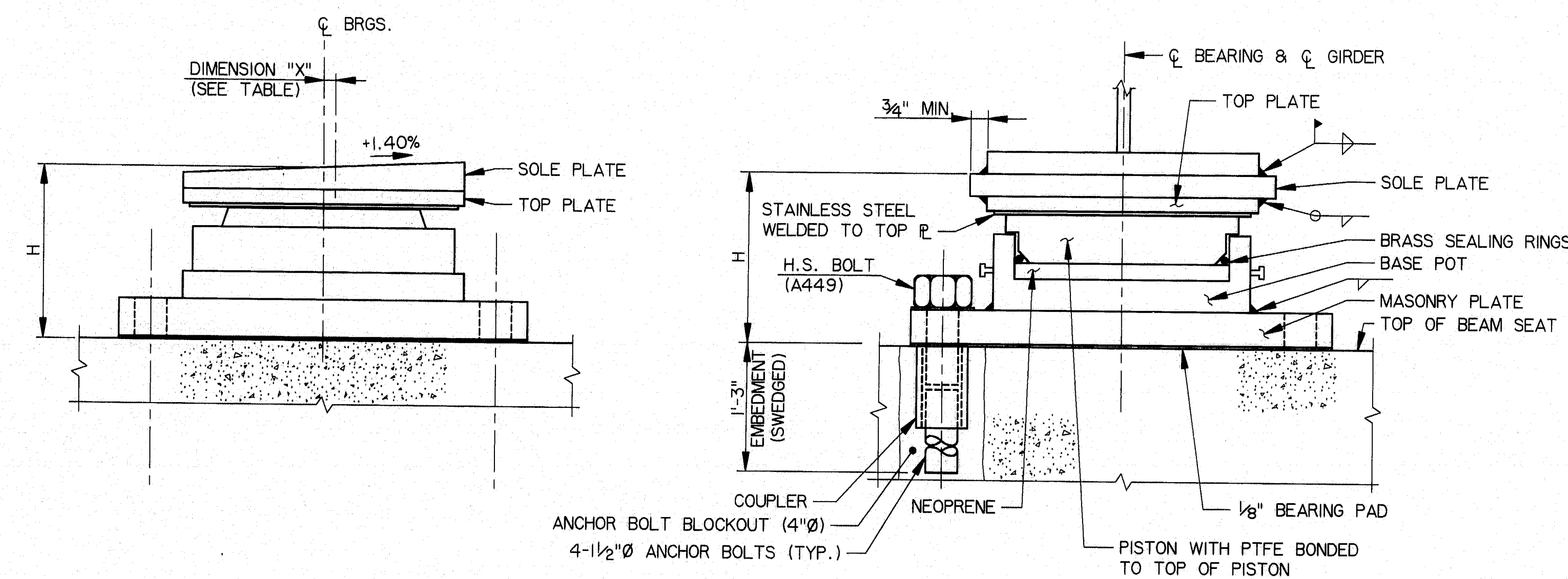
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATerville - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CAMBER DIAGRAM-II

SHEET B61 OF B86 AUGUSTA, MAINE

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ARCHITECTS ENGINEERS PLANNERS

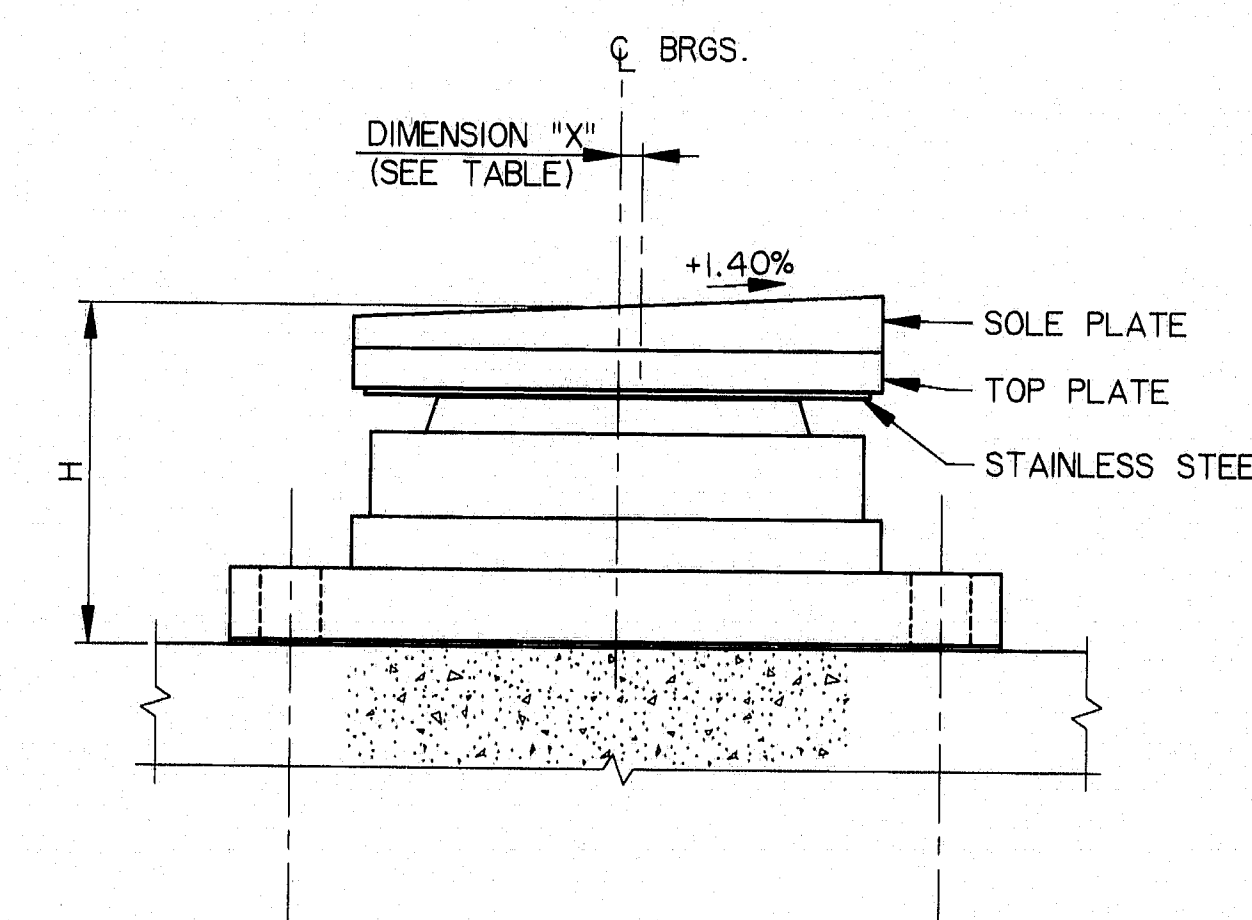
F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(1002)	71	103



ELEVATION

SECTION

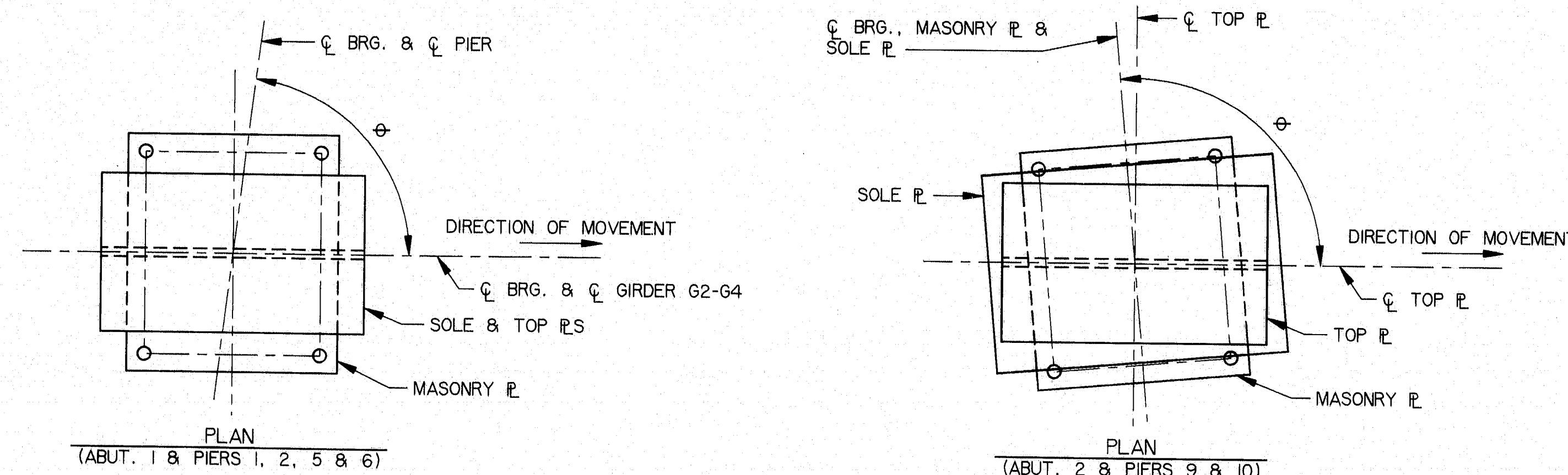
NON GUIDED POT BEARING



ELEVATION

SECTION

GUIDED POT BEARING



GUIDED - LONGITUDINAL EXPANSION

BEARING DEVICE NOTES

- FOR DESIGN, MATERIAL, FABRICATION, GENERAL CONSTRUCTION REQUIREMENTS, REFER TO THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. ENTIRE BEARING ASSEMBLY EXCEPT FOR THE PTFE AND STAINLESS STEEL PLATE SHALL BE ZINC METALLIZED OR GALVANIZED.
- DIMENSION "H" SHOWN IS AN ESTIMATE USED TO COMPUTE BRIDGE SEAT ELEVATIONS. DIMENSIONS AND SIZES OF PLATES NOT SHOWN ARE DEPENDENT UPON DESIGN LOADS, BEARING TYPE, CAPACITY AND THE MANUFACTURER. THE SHOP DRAWINGS, PREPARED BY THE MANUFACTURER SHALL PROVIDE ALL PERTINENT BEARING INFORMATION. THE FINAL BEAM SEAT ELEVATIONS WILL BE DETERMINED AFTER APPROVAL OF THE SHOP DRAWINGS.
- MASONRY BASE PLATE SHALL BE PLACED ON 1/8 INCH PREFORMED FABRIC PAD, SEE SPECIFICATIONS.
- ANCHOR BOLT SPACING SHALL BE COORDINATED WITH THE BEARING MANUFACTURER.
- ANCHOR BOLTS SHALL BE GALVANIZED AASHTO DESIGNATION M270 (ASTM 709 GRADE 36).
- BEARING INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH SPECIAL PROVISIONS OF THE SPECIFICATIONS AND THE MANUFACTURER RECOMMENDATIONS.
- PTFE INDICATES POLYTETRAFLUOROETHYLENE.
- THE WELD (BETWEEN SOLE PLATE AND FLANGE) AND GALVANIZED AREAS DAMAGED IN THE WELDING PROCESS, SHALL BE PAINTED WITH ZINC RICH PAINT.
- DESIGN TEMPERATURE RANGE SHALL BE 150°F (75°F RISE AND FALL).

EXPANSION BEARINGS																		
ABUT./PIER	NON-GUIDED				GUIDED					TOTAL LONGITUDINAL MOVEMENT -30°F TO 120°F	BEARING SETTING CORRECTIONS (Inches)							
	GIRDER	* DESIGN LOADS (KIPS)		H (IN)	GIRDER	* DESIGN LOADS (KIPS)		ϕ	H (IN)		DIMENSION "X"							
		VERTICAL	HORIZONTAL			VERTICAL	HORIZONTAL				0°F	15°F	30°F	45°F	60°F	75°F	90°F	100°F
ABUT. 1	1 & 5	280.6	0.0	6 1/2	2 - 4	280.6	7.4	83°	8 1/4	8 5/16	2 1/16 →	1 13/16 →	7/8 →	0	→ 3/8	→ 1 13/16	→ 2 1/16	→ 3 1/8
PIER 1	1 & 5	838.0	0.0	8 3/4	2 - 4	838.0	43.8	83°	12	6 7/8	2 1/16 →	1 3/8 →	1 1/16 →	0	→ 1 1/16	→ 1 3/8	→ 2 1/16	→ 2 1/2
PIER 2	1 & 5	864.5	0.0	8 3/4	2 - 4	864.5	89.2	83°	12	4 3/8	1 1/4 →	1 3/16 →	7/16 →	0	→ 3/16	→ 1 3/16	→ 1 1/4	→ 1 9/8
PIER 3	-	-	-	-	1 & 5	918.1	66.5	-	12 1/4	-	-	-	-	-	-	-	-	-
PIER 4	-	-	-	-	1 & 5	864.5	65.7	-	12	-	-	-	-	-	-	-	-	-
PIER 5	1 & 5	838.0	0.0	8 3/4	2 - 4	838.0	78.7	83°	12	4 1/8	1 3/16 →	1 3/16 →	3/8 →	0	→ 3/8	→ 1 3/16	→ 1 3/8	→ 1 1/2
PIER 6 (W)	1 & 5	280.6	0.0	6 1/2	2 - 4	280.6	36.9	81°-58'-42.9"	8 1/4	6 1/8	1 3/16 →	1 1/4 →	5/8 →	0	→ 5/8	→ 1 1/4	→ 1 3/8	→ 2 1/8
PIER 6 (E)	1 & 5	239.1	0.0	6 1/2	2 - 4	286.3	15.8	79°-00'-16.6"	8 1/4	2 3/8	7/8 →	9/16 →	5/16 →	0	→ 5/16	→ 9/16	→ 7/8	→ 1 1/8
PIER 7	-	-	-	-	1 & 5	596.7	38.1	-	10 1/2	-	-	-	-	-	-	-	-	-
PIER 8	-	-	-	-	1 & 5	483.9	34.1	-	10	-	-	-	-	-	-	-	-	-
PIER 9	1 & 5	491.4	0.0	7 1/2	2 - 4	520.7	77.5	92°-14'-06.0"	10 1/2	2 3/8	1 3/16 →	9/16 →	1/4 →	0	→ 1/4	→ 9/16	→ 1 3/16	→ 1 1/2
PIER 10	1 & 5	487.0	0.0	7 1/2	2 - 4	502.6	47.8	94°-20'-06.0"	10 1/2	4 5/16	1 3/16 →	7/8 →	7/16 →	0	→ 7/16	→ 1 3/8	→ 1 5/8	→ 1 5/4
ABUT. 2	1 & 5	198.6	0.0	6	2 - 4	198.6	23.5	96°-08'-06.0"	8	5 1/16	1 3/4 →	1 1/8 →	9/16 →	0	→ 9/16	→ 1 1/8	→ 1 3/4	→ 2 1/4

* SERVICE LOADS

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: SM	9/94		
		DRAWN: RJT	9/94		
		CHECKED: DWR	9/94		

WEST (DOWN STATION) EAST (UP STATION)

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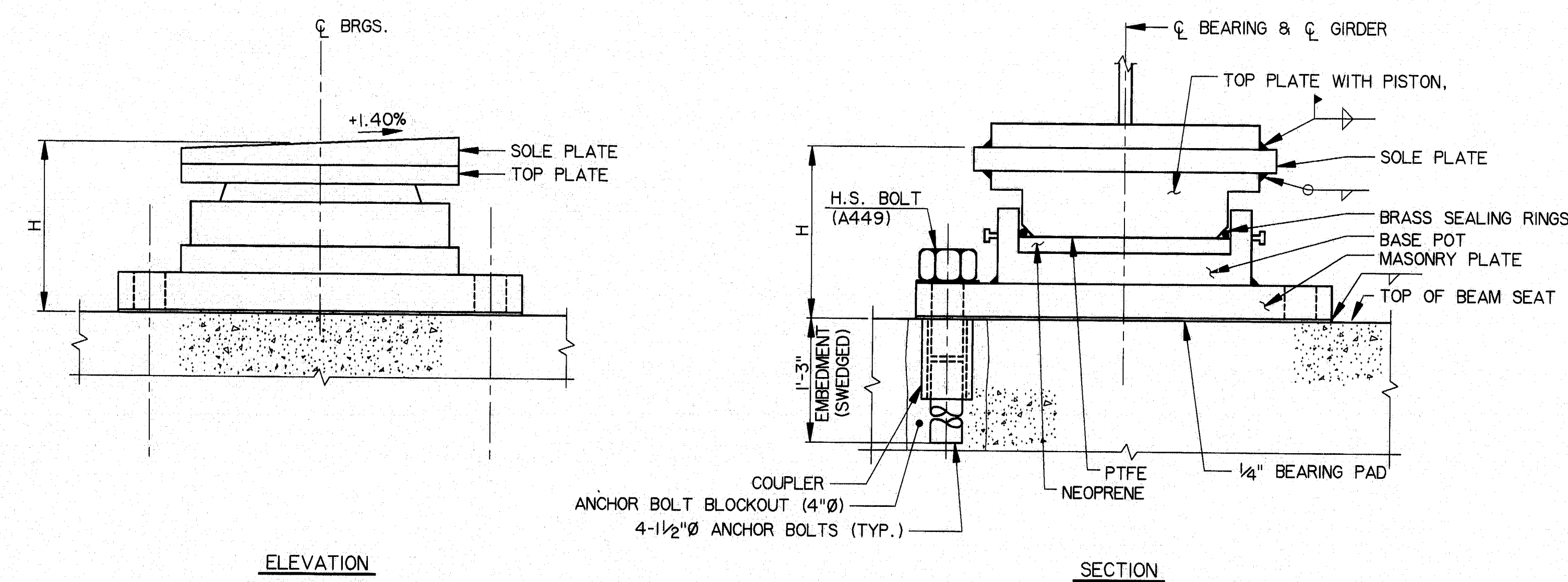
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BEARING DEVICES - I

SHEET B62 OF B86 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	72	103



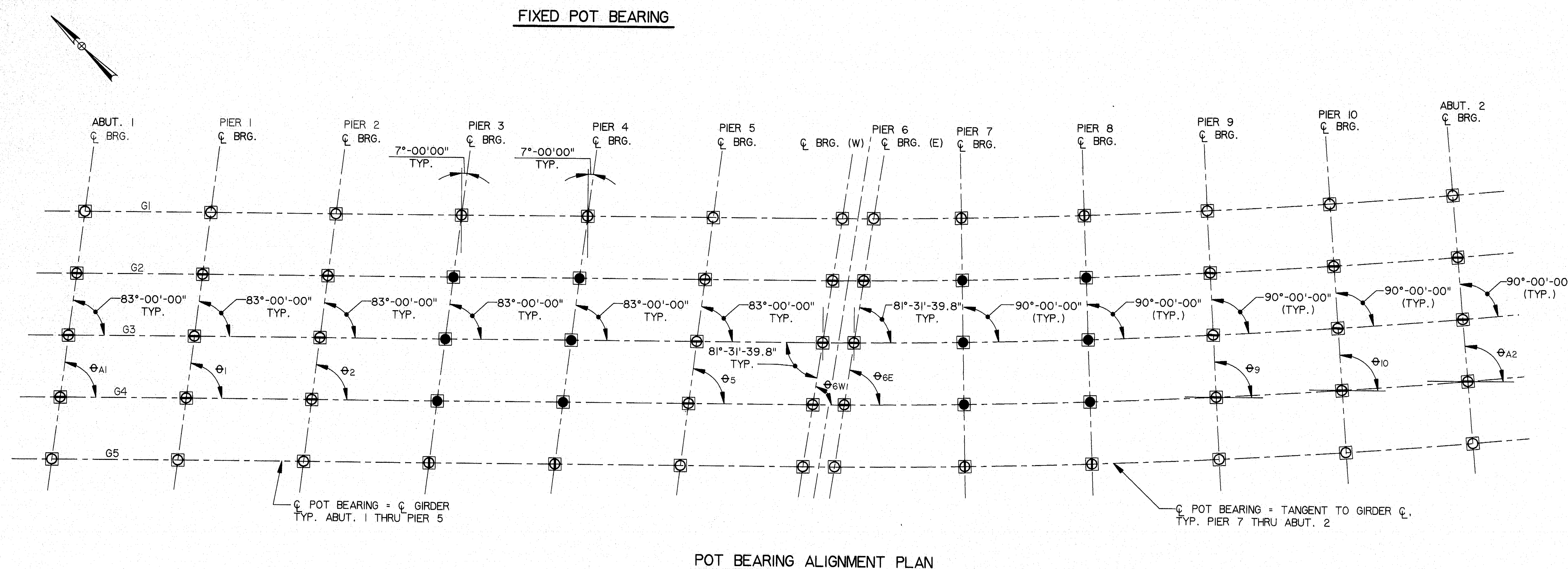
FIXED BEARING				
PIER	GIRDER	DESIGN LOADS PER GIRDER IN KIPS (SERVICE LOAD)		H (IN)
		VERTICAL	HORIZONTAL	
3	2 - 4	918.1	135.9	9 1/2
4	2 - 4	864.5	154.1	9 1/2
7	2 - 4	653.3	54.8	8 1/2
8	2 - 4	542.4	48.1	8

FIXED BEARING NOTE

SOLE PLATE OF THE BEARING, PIER 4 AND PIER 7 SHOULD BE WELDED TO THE GIRDER AT APPROXIMATELY 45°F.

NOTE

ANCHOR BOLTS SHALL CONFORM TO ASTM A449



POT BEARING ALIGNMENT PLAN

LEGEND

- - FIXED
- - GUIDED LONGITUDINAL EXPANSION
- - GUIDED TRANSVERSE EXPANSION
- - NON - GUIDED EXPANSION
- ⊕ - TOP P. SETTING ANGLE (GUIDED LONGITUDINAL ONLY)

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	SM	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	DWR	9/94	

HNTB
ARCHITECTS ENGINEERS PLANNERS

115-258

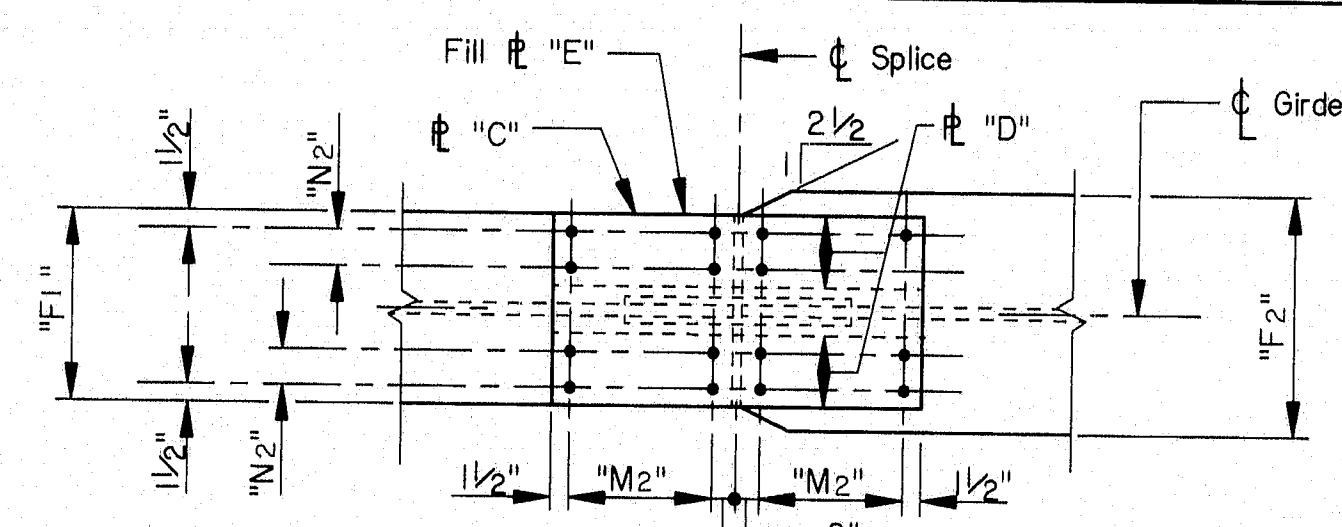
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BEARING DEVICES - II

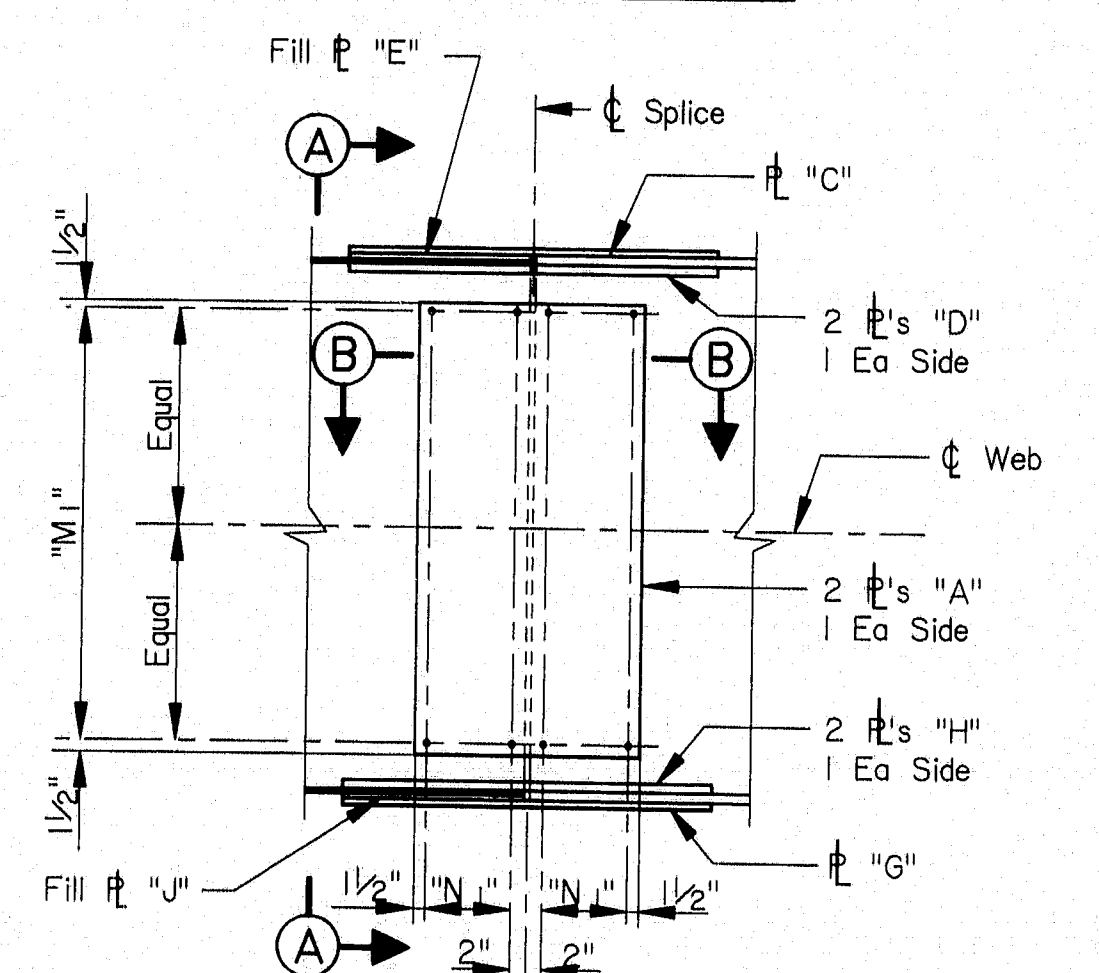
SHEET B63 OF B66 AUGUSTA, MAINE

SPICE NUMBER	WEB SPLICE			TOP FLANGE SPLICE							BOTTOM FLANGE SPLICE						
	SPLICE PLATE	BOLT SPACING		SPLICE PLATES			BOLT SPACING		FLANGE WIDTH		SPLICE PLATES			BOLT SPACING		FLANGE WIDTH	
	"A"	"M" 1"	"N" 1"	"C"	"D"	"E"(FILL R)	"M" 2"	"N" 2"	"F" 1"	"F" 2"	"G"	"H"	"J"(FILL P)L	"M" 3"	"N" 3"	"K" 1"	"K" 2"
1 A 10	1/2 x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	1/2 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	1 x 22 x 2'-1"	1 1/4 x 10 x 2'-1"	-	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	22"	24"
2 B 9	1/2 x 19 x 7'-0"	24 SPS. @ 3 3/8" = 6'-9"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 2'-1"	3/4 x 7 x 2'-1"	1/2 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	5/8 x 24 x 2'-1"	1 1/4 x 11 x 2'-1"	-	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	24"	24"
3 B 8	1/2 x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	1/2 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	26"	5/8 x 24 x 2'-1"	7/8 x 11 x 2'-7"	-	4 SPS. @ 3" = 1'-0"	2 SPS. @ 3" = 6"	24"	26"
4 B 7	1/2 x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	1/2 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	26"	3/4 x 26 x 1'-7"	3/4 x 12 x 1'-7"	-	2 SPS. @ 3" = 6"	3 SPS. @ 3" = 9"	26"	26"
5 B 6	1/2 x 19 x 7'-0"	27 SPS. @ 3" = 6'-9"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	1/2 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	28"	7/8 x 26 x 2'-1"	1 x 12 x 2'-1"	-	3 SPS. @ 3" = 9"	3 SPS. @ 3" = 9"	26"	28"
11A	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	1/2 x 16 x 1'-7"	1/2 x 7 x 1'-7"	3/8 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	20"	5/8 x 20 x 2'-1"	5/8 x 9 x 2'-1"	1/2 x 20 x 1'-0 3/8"	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	20"	20"
11B	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	1/2 x 16 x 1'-7"	1/2 x 7 x 1'-7"	3/8 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	24"	5/8 x 22 x 2'-7"	5/8 x 10 x 2'-7"	1/2 x 20 x 1'-3 3/8"	4 SPS. @ 3" = 1'-0"	2 SPS. @ 3" = 6"	20"	24"
12A	1/2 x 19 x 5'-9 1/2"	22 SPS. @ 3" = 5'-6"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	3/8 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	20"	1/2 x 16 x 2'-1"	5/8 x 7 x 2'-1"	1/4 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	2 SPS. @ 3" = 6"	20"	20"
12B	1/2 x 19 x 5'-9 1/2"	22 SPS. @ 3" = 5'-6"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	3/8 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	24"	1/2 x 16 x 2'-1"	5/8 x 7 x 2'-1"	1/4 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	20"
13A & 14A	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	1/2 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	24"
13B	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	1/2 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	18"	5/8 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	16"
14B	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	1/2 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	18"	5/8 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	18"
15A & 18	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	16"	5/8 x 16 x 2'-1"	5/8 x 7 x 2'-1"	1/4 x 16 x 1'-0 3/8"	3 SPS. @ 3" = 9"	3"	16"	16"
15B	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	-	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	1 1/4 x 7 x 2'-1"	-	3 SPS. @ 3" = 9"	3"	16"	18"
16A & 17	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	5/8 x 16 x 1'-7"	5/8 x 7 x 1'-7"	-	2 SPS. @ 3" = 6"	3"	16"	16"	5/8 x 16 x 2'-1"	1 1/4 x 7 x 1'-7"	-	2 SPS. @ 3" = 6"	3"	16"	18"
16B	1/2 x 19 x 5'-9 1/2"	19 SPS. @ 3 1/2" = 5'-6 1/2"	2 SPS. @ 3" = 6"	1 1/4 x 16 x 1'-7"	1 1/4 x 7 x 1'-7"	1/8 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"	1 1/4 x 16 x 1'-7"	1 1/4 x 7 x 1'-7"	1/8 x 16 x 9 3/8"	2 SPS. @ 3" = 6"	3"	16"	16"

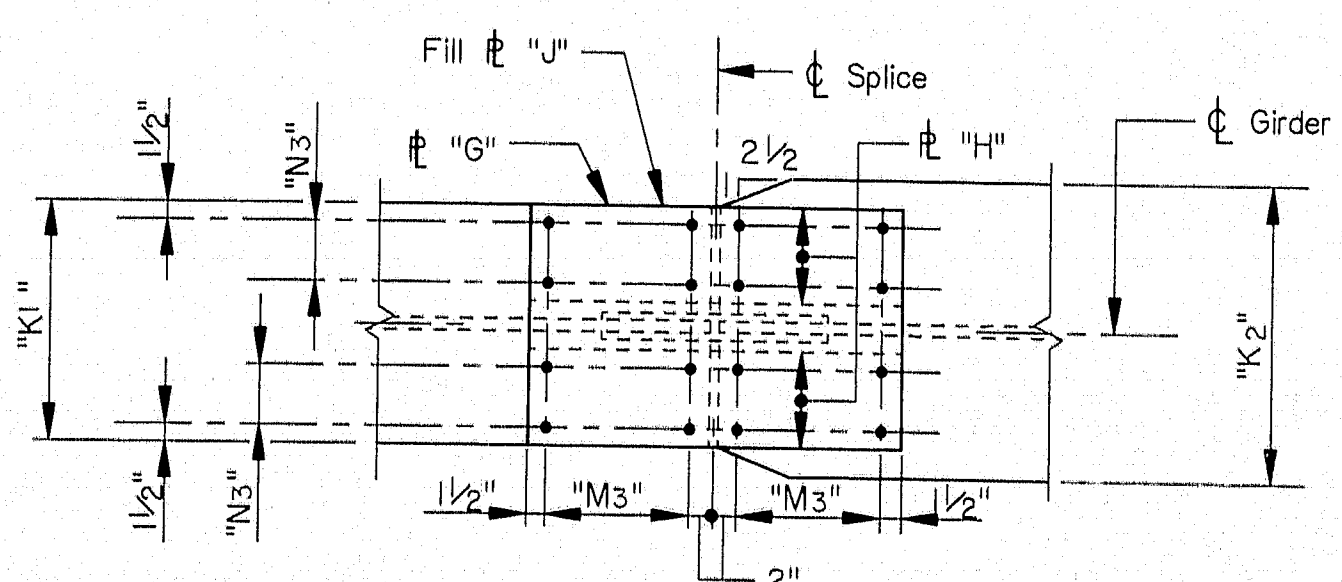
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	73	103



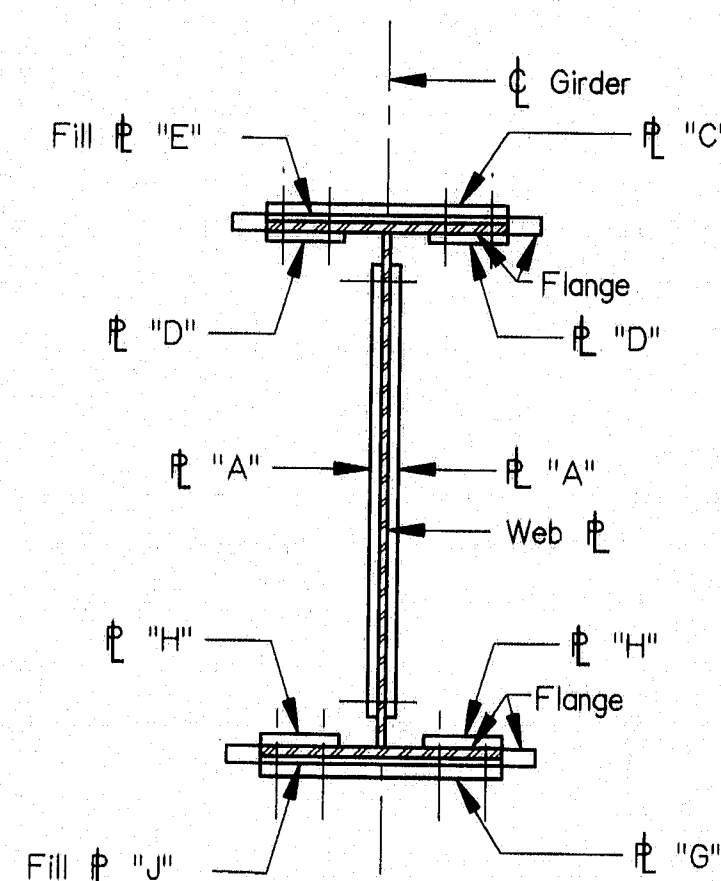
PLAN - TOP FLANGE



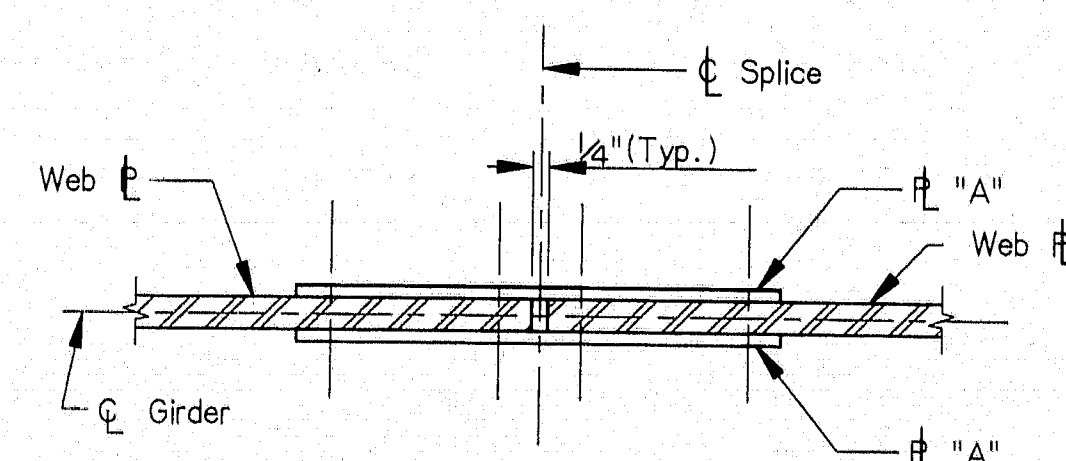
ELEVATION



PLAN - BOTTOM FLANGE



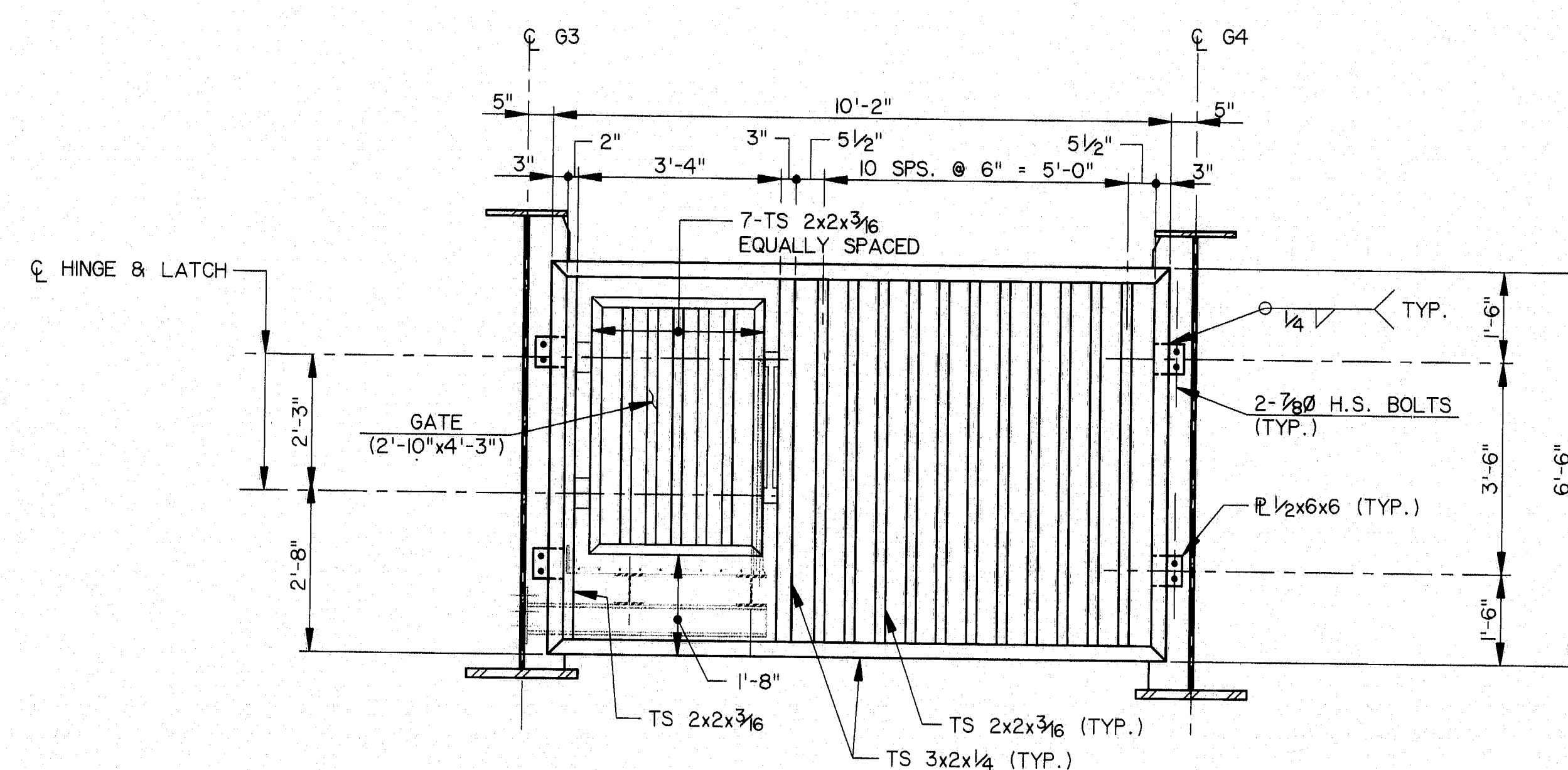
SECTION A-A



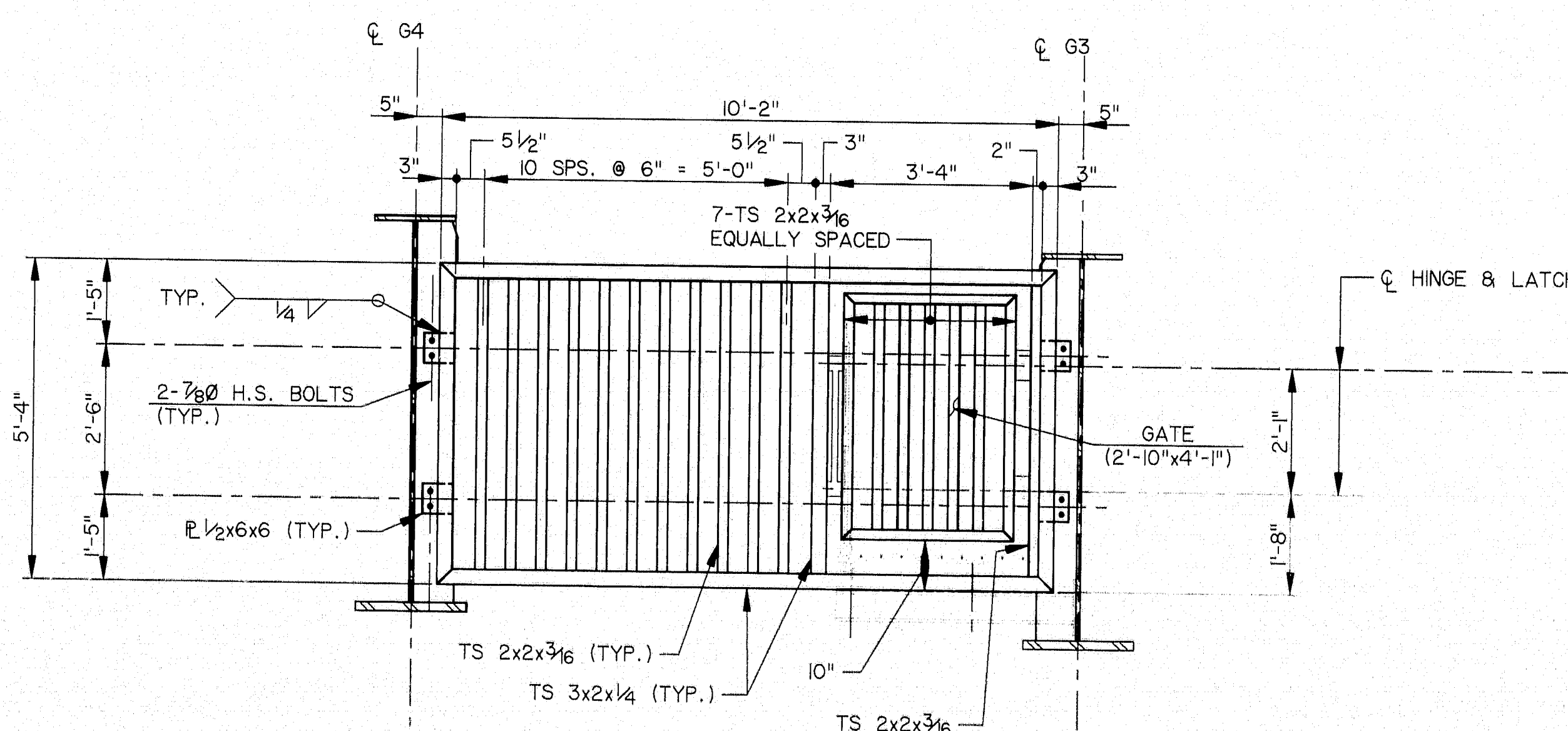
SECTION B-B

- ## NOTES

1. ALL FIELD CONNECTIONS ARE TO BE MADE WITH $\frac{7}{8}$ "Ø HIGH STRENGTH BOLTS (FRICTION), ASTM A325 TYPE 3.
2. ALL HOLES FOR $\frac{7}{8}$ "Ø BOLTS TO BE $\frac{5}{16}$ "Ø.
3. NUTS TO BE ON INSIDE FACE OF WEB SPLICE AT FASCIA GIRDERS.
4. NUTS TO BE UP ON ALL FLANGE SPLICES.



BARRIER AT WEST END



BARRIER AT EAST END

CATWALK BARRIER - DETAILS

$\frac{1}{2}'' = 1'-0''$

- ### CATWALK BARRIER NOTES

1. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM DESIGNATION A501.
2. THE CATWALK BARRIER SHALL BE SHOP WELDED AND HOT DIPPED GALVANIZED
3. THE HINGES SHALL BE BOLT-ON, HEAVY DUTY, INDUSTRIAL TYPE, WITH A MINIMUM 90° SWING AND MUST CLEAR CATWALK RAILING WHEN OPEN.
4. THE LATCHES SHALL BE BOLT-ON, DOUBLE LATCHING, HEAVY DUTY, INDUSTRIAL TYPE. MUST BE LOCKABLE WITH PADLOCK AND WHEN LATCHED THE GATE SHALL BE VIRTUALLY VIBRATION FREE.
5. PAYMENT FOR CATWALK BARRIER (MATERIAL, FABRICATION AND INSTALLATION) SHALL BE INCLUDED IN THE STRUCTURAL STEEL ITEMS.

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STEEL ALTERNATIVE

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WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

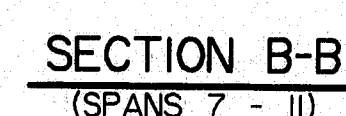
GIRDER SPLICE DETAILS

SHEET B64 OF B86 AUGUSTA, MAINE



DIA3: WWGRAPH.STR.DVCARTER STEEL CDS278.F08.DWG: CDS278

SHEET B65 OF B86 AUGUSTA, MAINE

[illegible]

SECTION C-C

NOTE

- I. FOR SECTION D-D, SEE DETAIL A, SHEET R65.

HAND - HOLD BAR NOTES

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709, GRADE 50W.
2. HANDHOLD BARS SHALL BE PLACED ON BOTH SIDES OF INTERIOR GIRDERS AND SHALL BE PLACED ON THE INSIDE OF EXTERIOR GIRDERS. HANDHOLD BARS WILL NOT BE REQUIRED IN THE BAY WHERE THE CATWALK IS LOCATED AT GIRDER 3 ONLY GIRDER 4 IN THAT BAY SHOULD HAVE A HANDHOLD BAR.
3. STIFFENERS AND CONNECTION PLATES AT TERMINATION AND SPLICE LOCATION SHALL BE 1/2" THICK, MINIMUM. ANGLE SUPPORTS SHALL BE USED AT INTERMEDIATE LOCATIONS ON ALL CORNERS. CORNERS PLATES SHALL BE ADDED AT TERMINATION AND SPLICE POINTS WHEN STIFFENERS OR CONNECTION PLATES ARE NOT CALLED FOR ON THE PLANS.
4. NUTS SHALL CONFORM TO ASTM A563, HEAVY HEX GRADE C3-DH3.

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WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

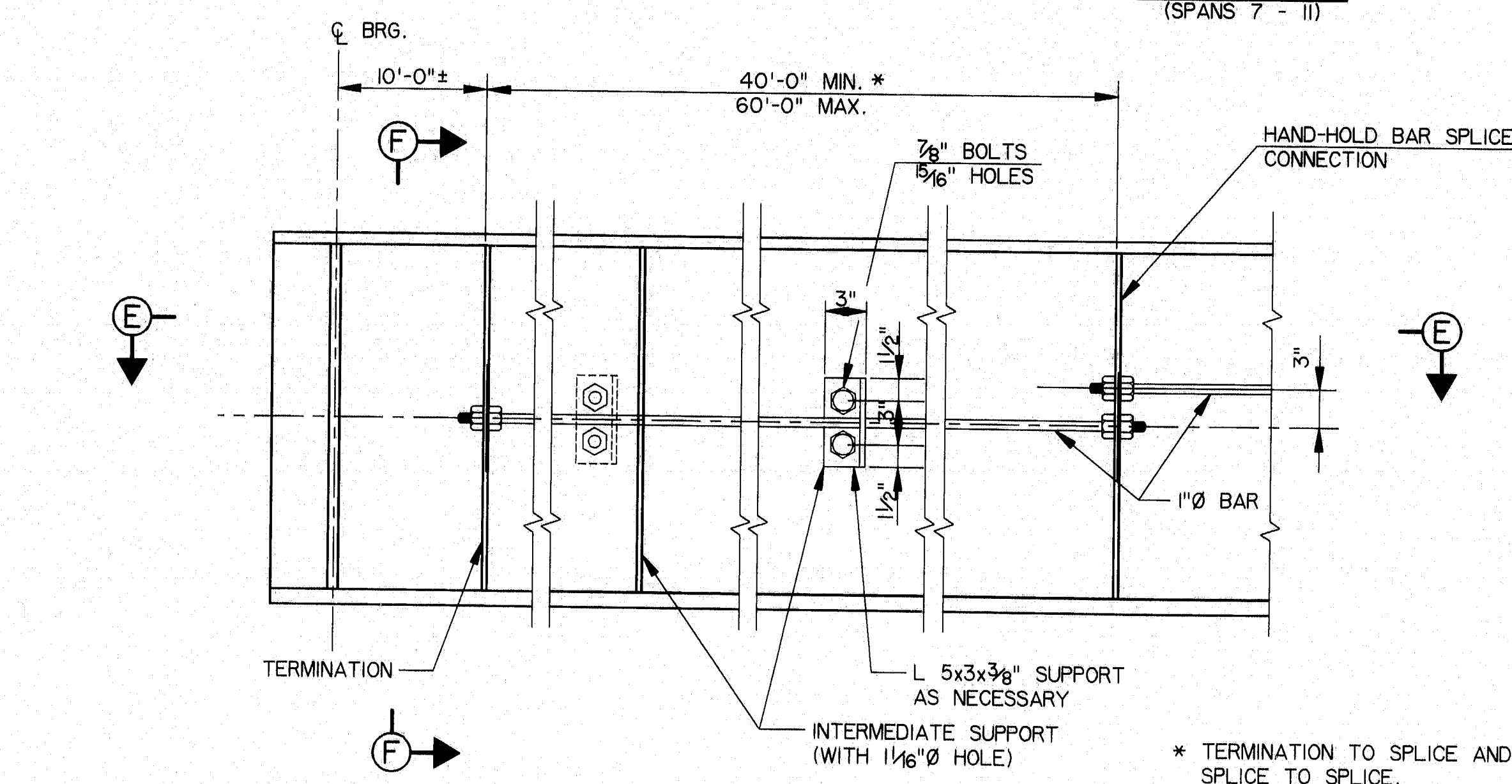
OVER

KENNEBEC RIVER

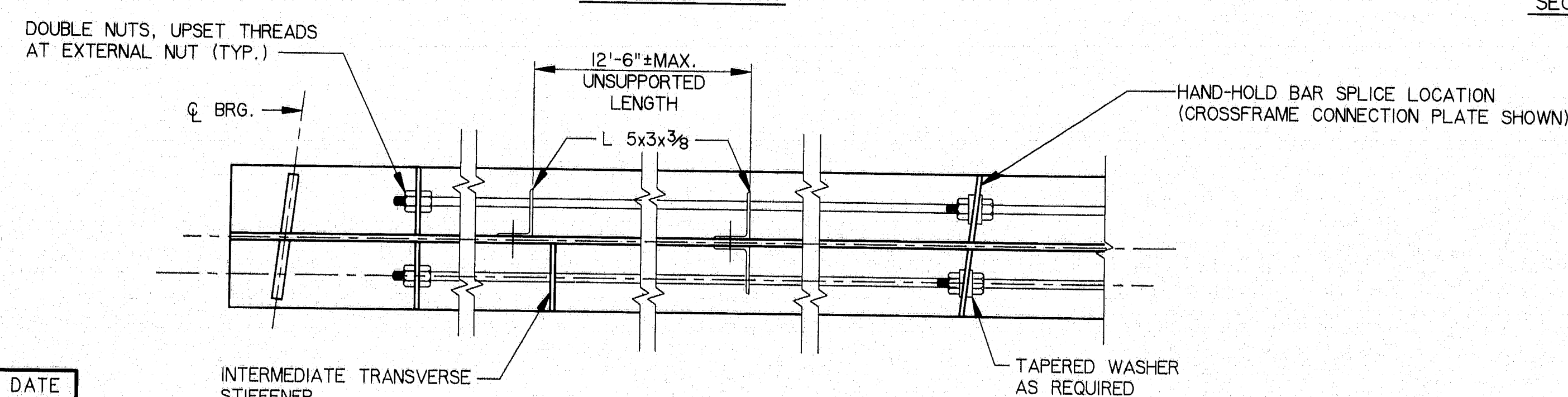
CATWALK DETAILS

SHEET B66 OF B86 AUGUSTA, MAINE

					BY	DATE
				DESIGNED:	SM	7/94
				DRAWN:	RJT	7/94
				CHECKED:	DWR	7/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		

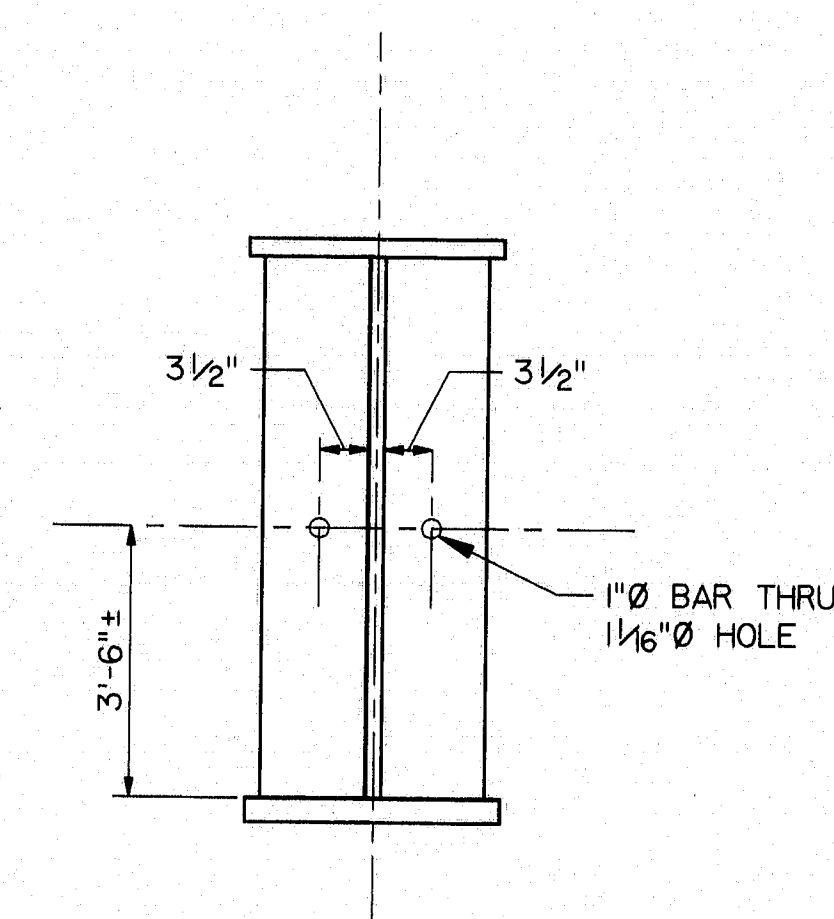


GIRDER ELEVATION



SECTION E-E

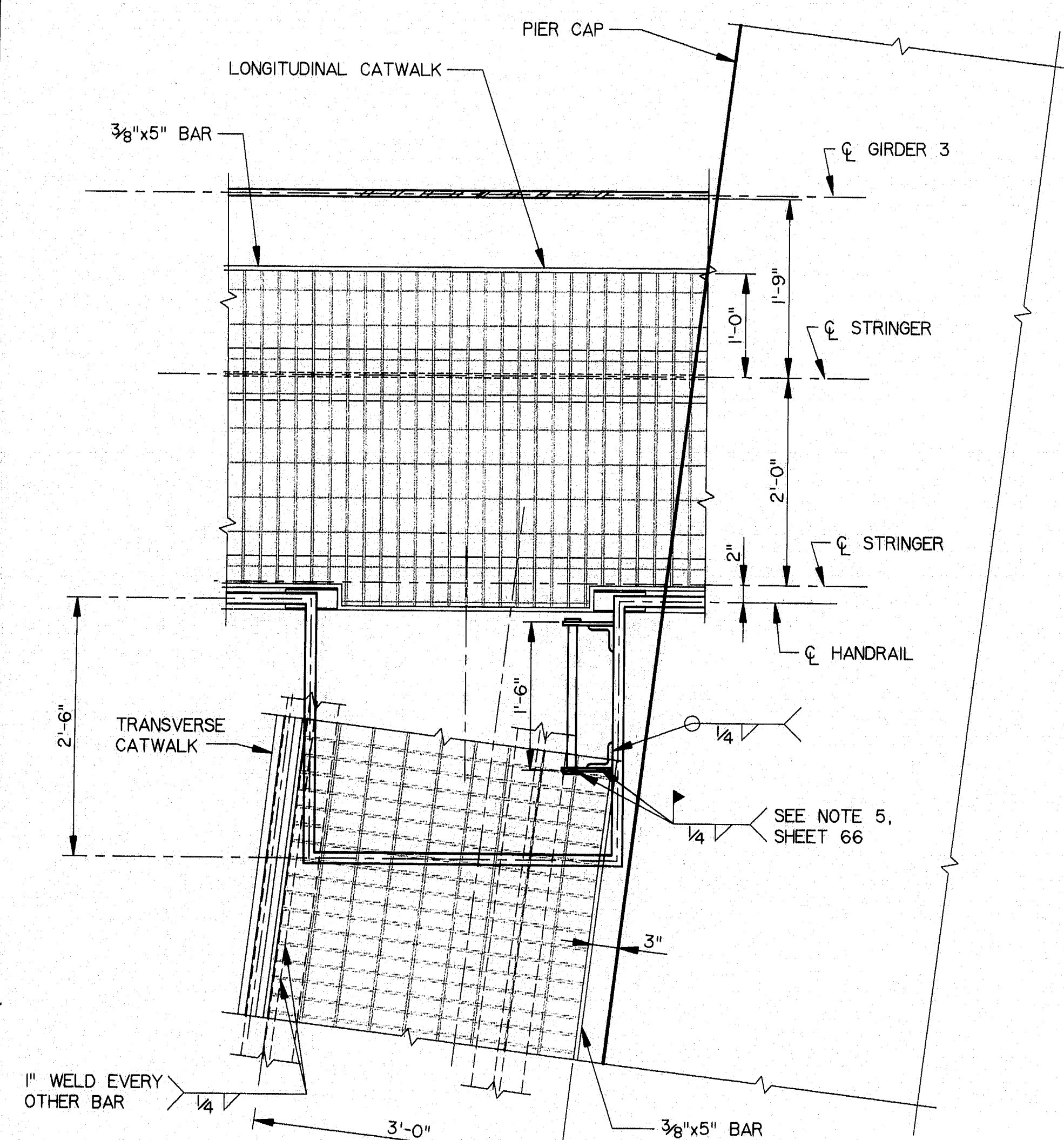
HAND - HOLD BAR DETAILS



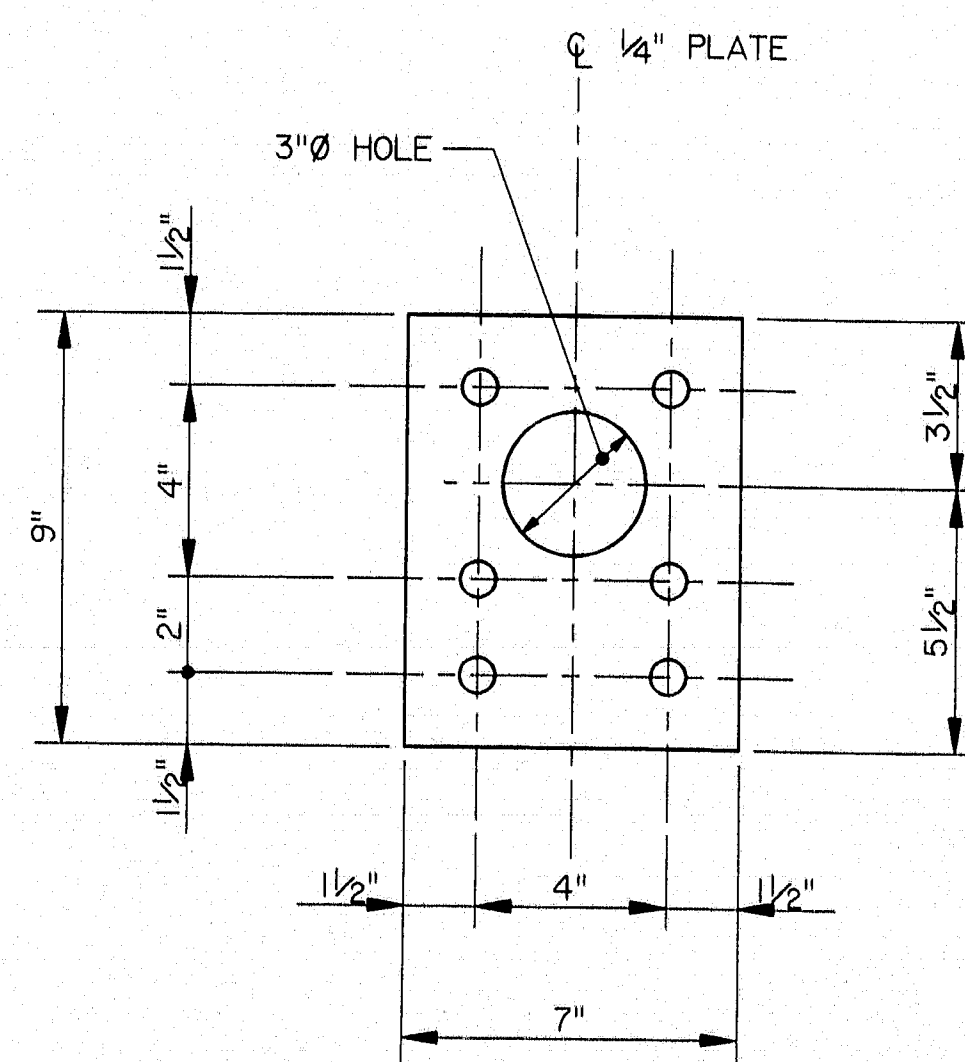
SECTION F-F

WATERVILLE STEEL BRIDGE, STEEL, COASTAL PIER, CDS, 00000

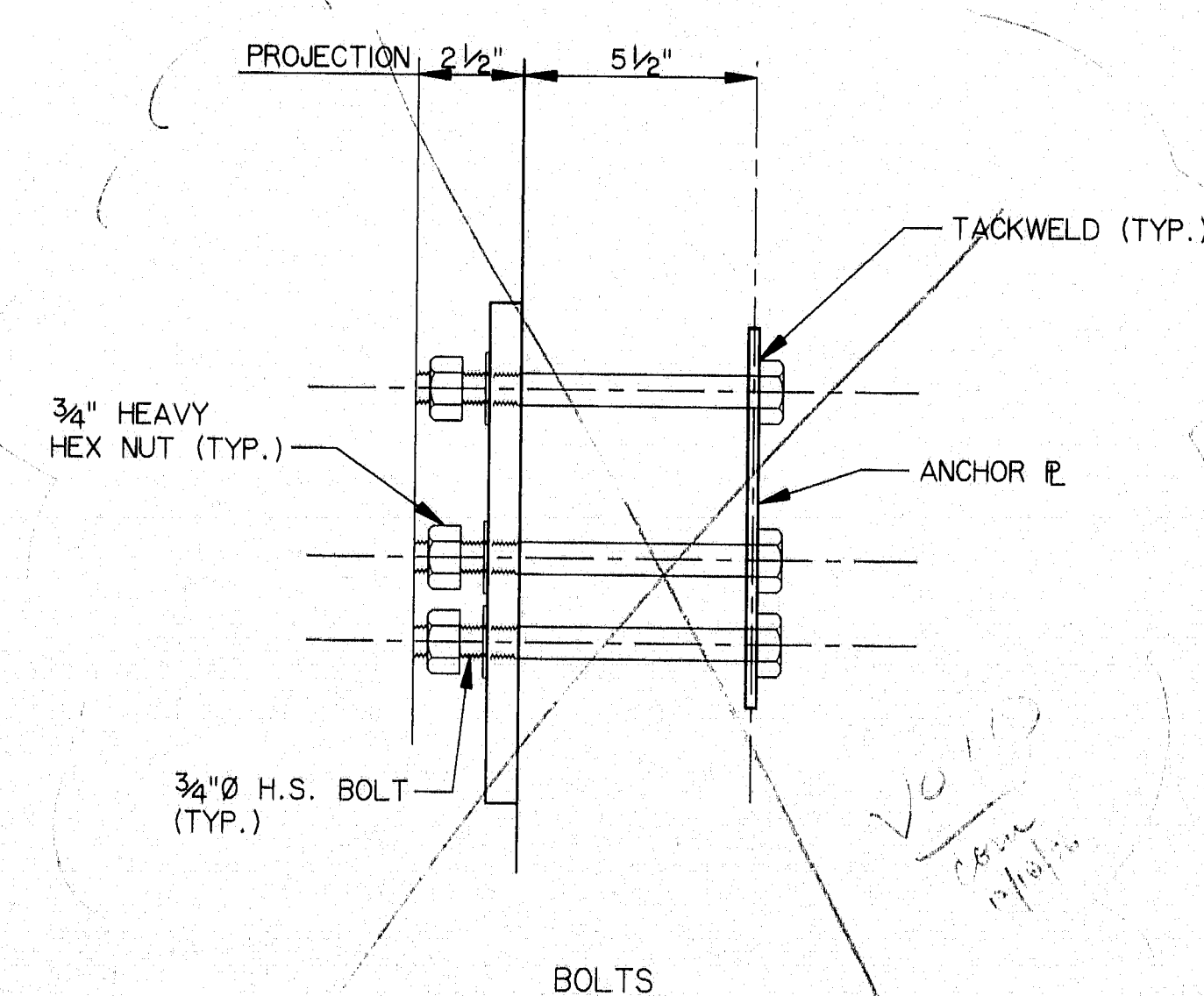
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	76	103



PLAN AT PIER LADDER

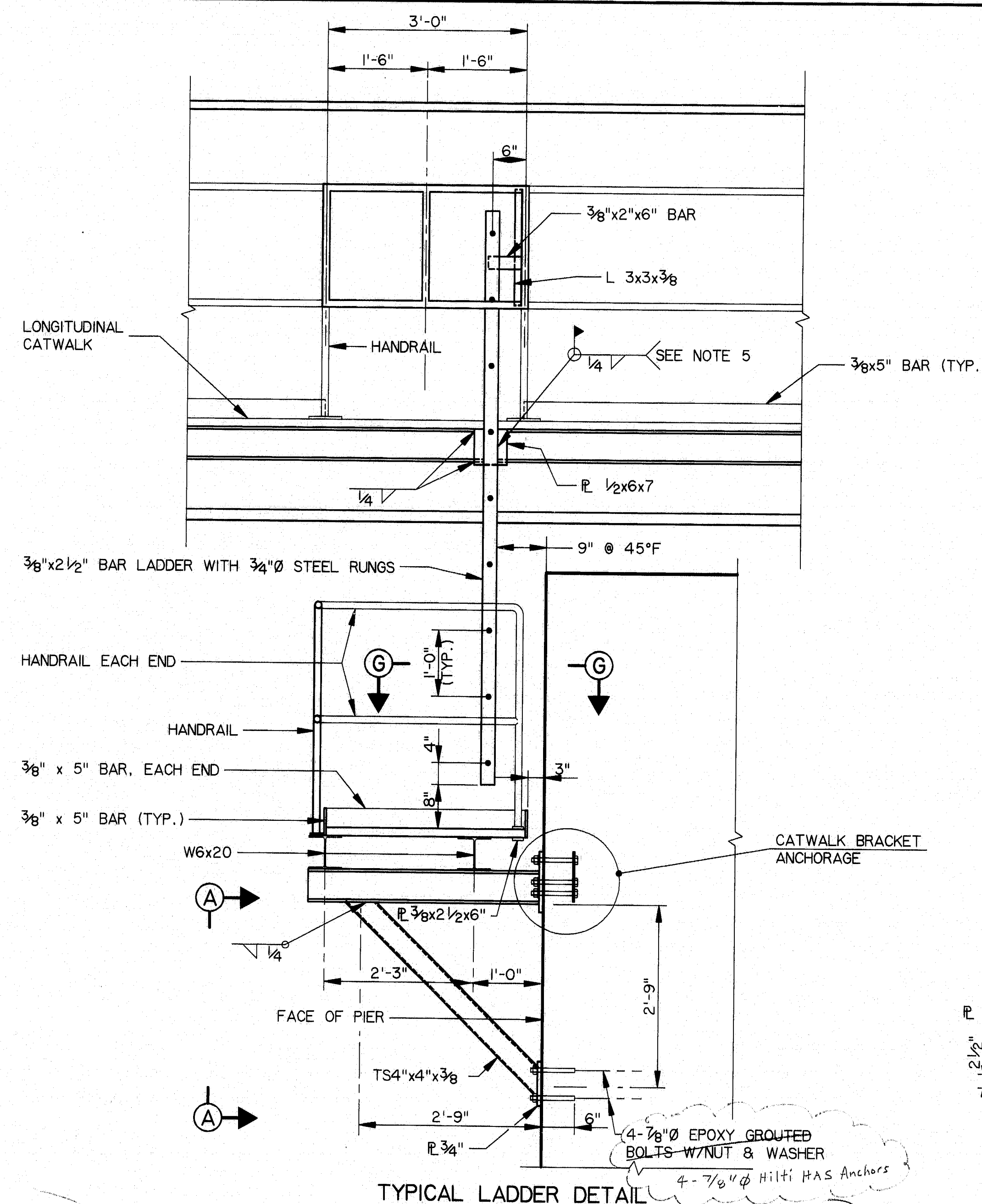


ANCHOR PLATE

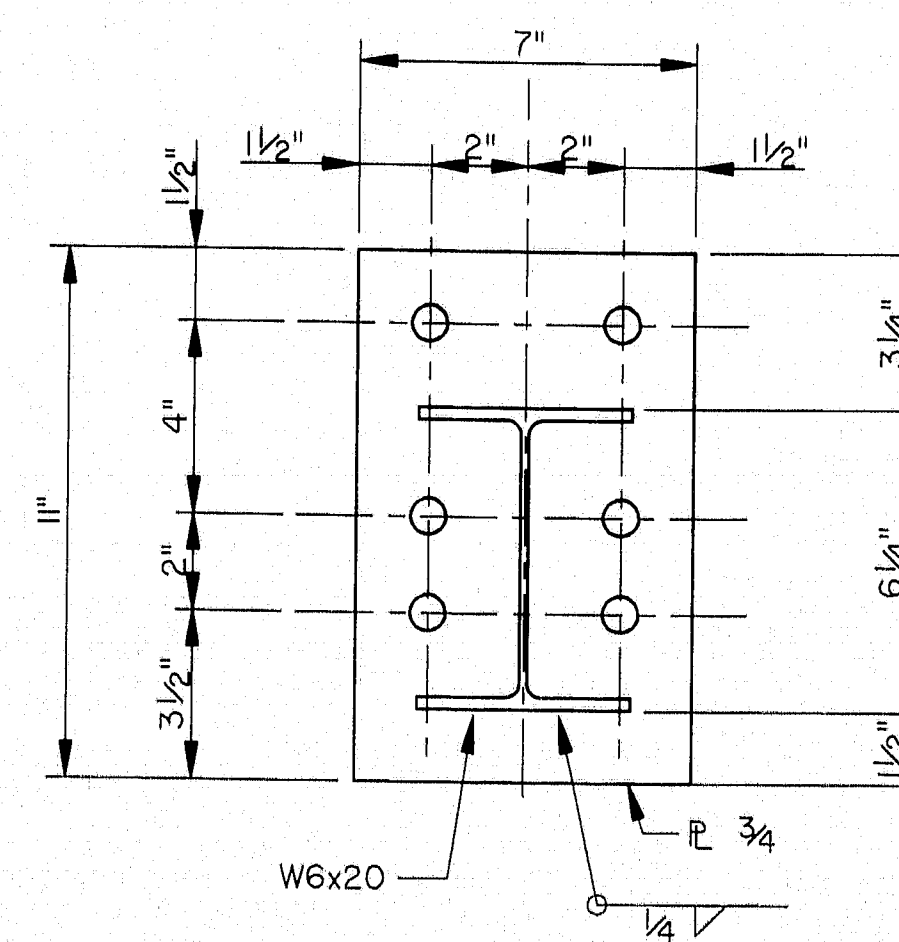


BOLTS

CATWALK BRACKET ANCHORAGE
(AT PIERS)

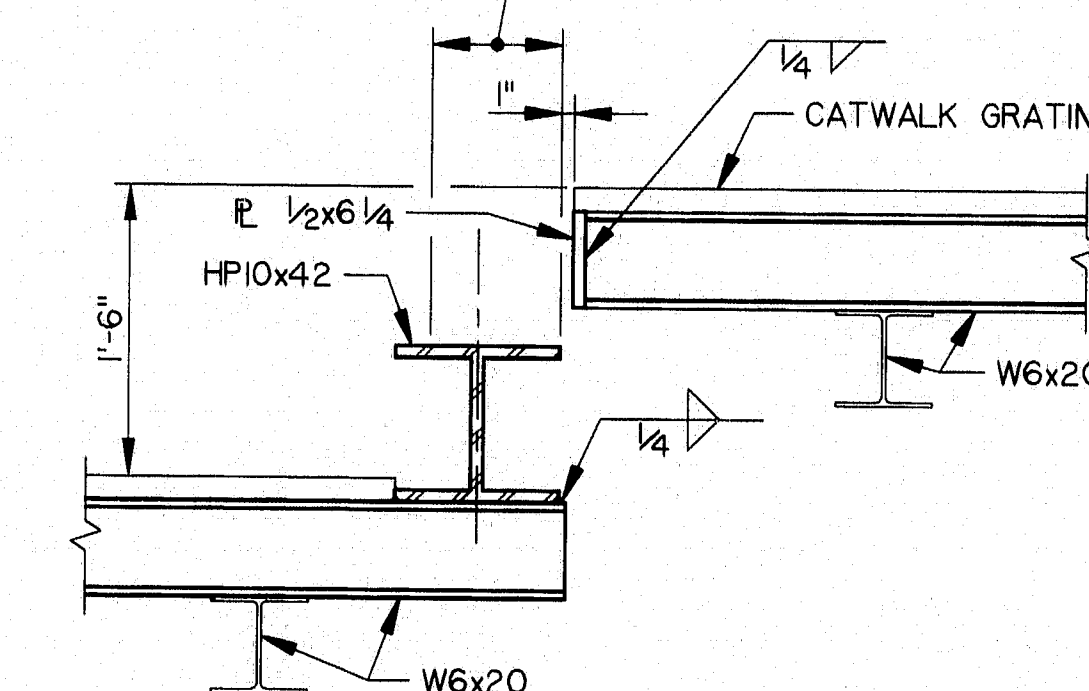


TYPICAL LADDER DETAIL

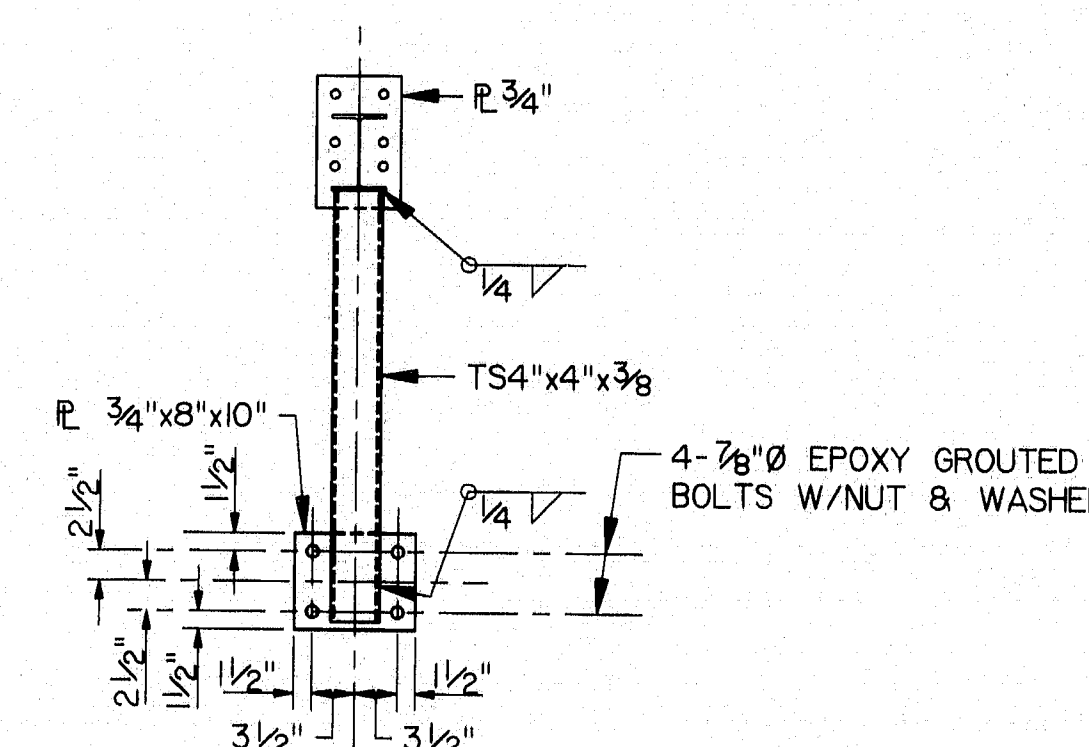


BRACKET BASE PLATE

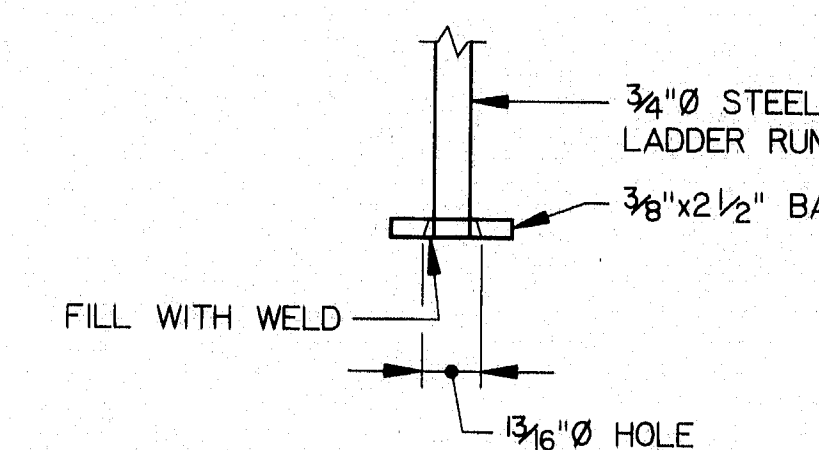
INSTALL 8" WIDE NON-SLIP ABRASIVE
COATED FABRIC TO TOP OF STEPS.
THE FABRIC SHALL BE APPROVED BY
THE ENGINEER.



STEP DETAIL AT PIERS 7 THRU 10



VIEW A-A



SECTION G-G

NOTE

1. FOR TRANSVERSE WALK ADDITIONAL DETAILS,
SEE PIER DETAILS.
2. Hilti AVA Adhesive Anchor System
with the HAS 34-95g (3/4" x 9-5/8" rod)
anchors shall be used for the catwalk
Bracket Anchorage.

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STEEL ALTERNATIVE

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DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

CATWALK DETAILS

HNTB
ARCHITECTS ENGINEERS PLANNERS

SHEET B67 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: SM	8/94	
		DRAWN: RJT	8/94	
		CHECKED: DWR	8/94	
				CJM

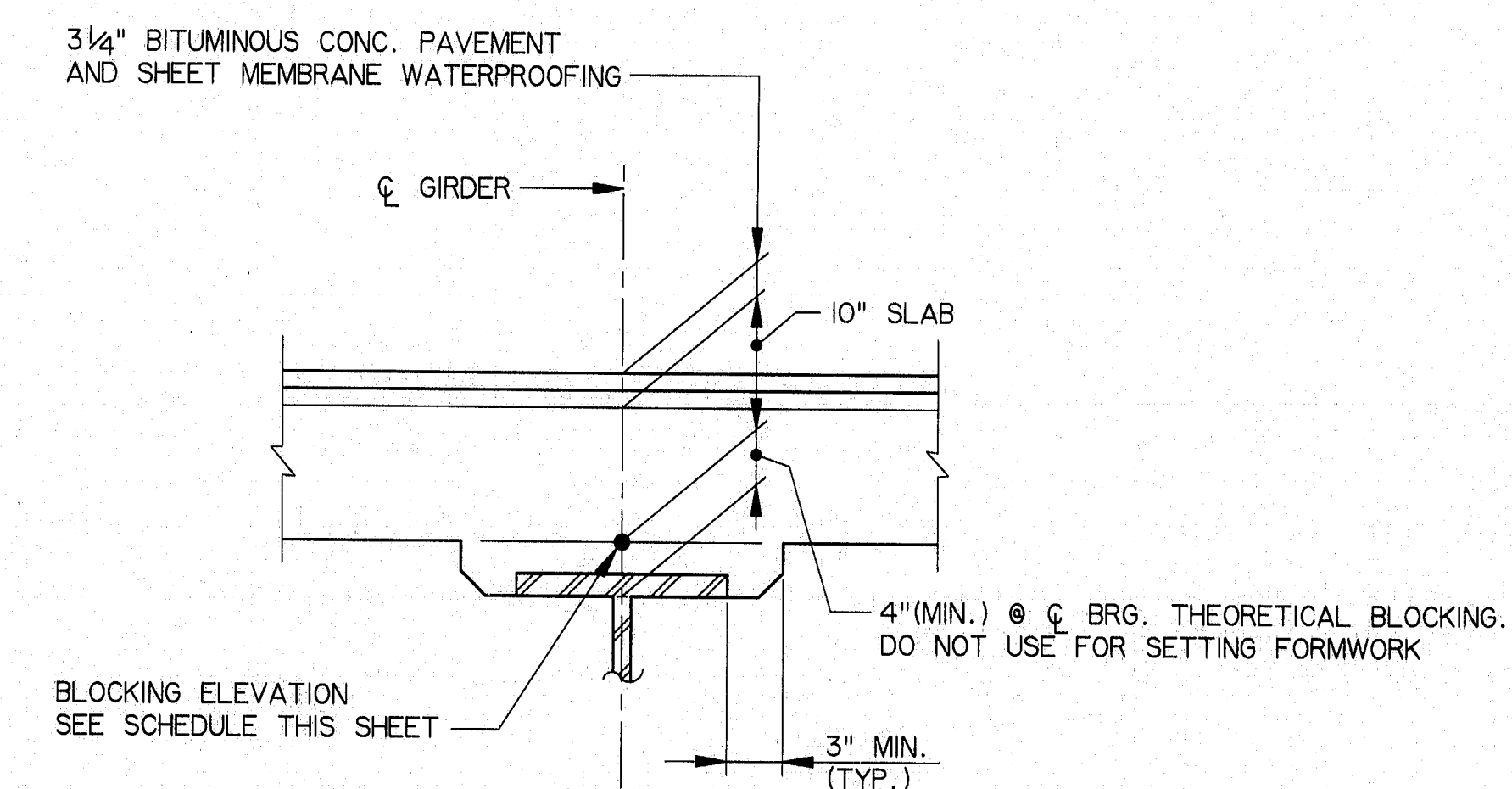
115-263 (STANDARD) (SHEET) (0000) (0000) (0000)

F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	77	103

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
¢ BRG. ABUT. 1	108.17
10	108.37
20	108.57
30	108.76
40	108.95
50	109.12
60	109.29
70	109.44
80	109.57
90	109.70
100	109.82
110	109.93
120	110.03
130	110.13
140	110.23
150	110.33
160	110.44
170	110.56
¢ BRG. PIER 1	110.69
10	110.83
20	110.98
30	111.14
40	111.31
50	111.48
60	111.66
70	111.83
80	112.00
90	112.16
100	112.32
110	112.46
120	112.60
130	112.73
140	112.85
150	112.96
160	113.07
170	113.17
180	113.28
190	113.39
200	113.50
210	113.63
220	113.77
¢ BRG. PIER 2	113.84
10	113.99
20	114.15
30	114.32
40	114.50
50	114.69
60	114.87
70	115.05
80	115.23
90	115.40
100	115.57
110	115.72
120	115.86
130	115.99
140	116.11
150	116.22
160	116.33
170	116.43
180	116.52
190	116.62
200	116.72
210	116.82
220	116.94
230	117.06

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 3	117.20
10	117.34
20	117.50
30	117.66
40	117.84
50	118.02
60	118.20
70	118.39
80	118.57
90	118.74
100	118.91
110	119.07
120	119.22
130	119.36
140	119.49
150	119.60
160	119.71
170	119.81
180	119.91
190	120.01
200	120.10
210	120.20
220	120.31
230	120.43
¢ BRG. PIER 4	120.56
10	120.70
20	120.84
30	120.99
40	121.15
50	121.32
60	121.49
70	121.66
80	121.83
90	121.99
100	122.14
110	122.29
120	122.42
130	122.55
140	122.67
150	122.79
160	122.90
170	123.01
180	123.12
190	123.23
200	123.36
210	123.50
220	123.64
¢ BRG. PIER 5	123.65
10	123.81
20	123.98
30	124.15
40	124.34
50	124.53
60	124.71
70	124.90
80	125.07
90	125.24
100	125.40
110	125.54
120	125.67
130	125.79
140	125.89
150	125.98
160	126.06
170	126.13
180	126.14
¢ BRG. PIER 6-W	126.15

GIRDER 1	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 6-E	126.18
10	126.34
20	126.48
30	126.62
40	126.76
50	126.87
60	126.98
70	127.07
80	127.15
90	127.26
100	127.36
110	127.46
120	127.57
130	127.66
140	127.77
150	127.88
¢ BRG. PIER 7	127.92
10	128.06
20	128.20
30	128.36
40	128.52
50	128.69
60	128.85
70	129.01
80	129.16
90	129.30
100	129.43
110	129.55
120	129.68
130	129.80
140	129.92
150	130.05
¢ BRG. PIER 8	130.15
10	130.30
20	130.46
30	130.63
40	130.80
50	130.96
60	131.12
70	131.28
80	131.42
90	131.55
100	131.67
110	131.79
120	131.90
130	132.02
140	132.14
¢ BRG. PIER 9	132.24
10	132.38
20	132.53
30	132.69
40	132.85
50	133.01
60	133.16
70	133.30
80	133.44
90	133.57
100	133.70
110	133.82
120	133.95
130	134.08
¢ BRG. PIER 10	134.20
10	134.35
20	134.51
30	134.68
40	134.84
50	135.01
60	135.16
70	135.31
80	135.44
90	135.57
100	135.68
110	135.79
¢ BRG. ABUT. 2	135.88



BLOCKING DETAIL
NO SCALE

ROADWAY SLAB NOTES

1. AFTER THE GIRDERS ARE ERECTED, BUT BEFORE FORMS ARE BUILT, ELEVATIONS ON THE TOP FLANGE OF GIRDERS ARE TO BE OBTAINED AT THE POINTS INDICATED IN THE TABLE. THE DIFFERENCE OF THESE ELEVATIONS AND THOSE SHOWN IN THE TABLE GIVES THE ACTUAL DISTANCE FROM THE TOP OF GIRDER TO THE BOTTOM OF THE SLAB.
2. ELEVATIONS SHOWN ARE FINISHED BOTTOM OF SLAB ELEVATIONS BASED ON PROFILE GRADES ADJUSTED FOR DEAD LOAD DEFLECTION LESS THE DEFLECTION DUE TO STEEL WEIGHT. FOR LOCATION OF POINTS SEE BLOCKING DETAIL THIS SHEET.

NO.	REVISION	BY	DATE	IN CHARGE OF
		DESIGNED: JFW	9/94	
		DRAWN: RJT	9/94	
		CHECKED: SM	9/94	
				CJM

HNTB
ARCHITECTS ENGINEERS PLANNERS

BLOCKING ELEVATIONS - I

SHEET B68 OF B86 AUGUSTA, MAINE

AS BUILT
CONV
12/1/96
115-263

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

GIRDER 2	
DISTANCE	BLOCKING ELEVATION
¢ BRG. ABUT. 1	108.38
10	108.59
20	108.79
30	108.99
40	109.19
50	109.36
60	109.53
70	109.68
80	109.82
90	109.94
100	110.06
110	110.16
120	110.26
130	110.35
140	110.45
150	110.55
160	110.65
170	110.77
¢ BRG. PIER	110.90
10	111.04
20	111.19
30	111.35
40	111.53
50	111.70
60	111.88
70	112.06
80	112.23
90	112.39
100	112.55
110	112.70
120	112.83
130	112.96
140	113.07
150	113.18
160	113.29
170	113.39
180	113.49
190	113.60
200	113.72
210	113.84
220	113.98
¢ BRG. PIER 2	114.05
10	114.20
20	114.37
30	114.54
40	114.72
50	114.91
60	115.10
70	115.29
80	115.47
90	115.65
100	115.81
110	115.96
120	116.11
130	116.24
140	116.36
150	116.46
160	116.56
170	116.66
180	116.75
190	116.84
200	116.94
210	117.04
220	117.15
230	117.27

GIRDER 2	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 3	117.41
10	117.55
20	117.71
30	117.88
40	118.05
50	118.24
60	118.43
70	118.62
80	118.80
90	118.98
100	119.16
110	119.32
120	119.47
130	119.60
140	119.73
150	119.85
160	119.95
170	120.05
180	120.14
190	120.23
200	120.32
210	120.42
220	120.53
230	120.64
¢ BRG. PIER 4	120.77
10	120.91
20	121.05
30	121.20
40	121.37
50	121.54
60	121.71
70	121.88
80	122.05
90	122.21
100	122.36
110	122.51
120	122.65
130	122.77
140	122.89
150	123.00
160	123.11
170	123.22
180	123.33
190	123.45
200	123.57
210	123.71
220	123.85
¢ BRG. PIER 5	123.86
10	124.02
20	124.19
30	124.37
40	124.56
50	124.75
60	124.94
70	125.13
80	125.31
90	125.48
100	125.64
110	125.78
120	125.91
130	126.02
140	126.12
150	126.21
160	126.29
170	126.35
180	126.39
¢ BRG. PIER 6-W	126.40

GIRDER 2			
	DISTANCE	BLOCKING ELEVATION	
C BRG. PIER 6-E		126.44	
	10	126.63	
	20	126.81	
	30	126.98	
	40	127.14	
	50	127.29	
	60	127.43	
	70	127.54	
	80	127.65	
	90	127.75	
	100	127.86	
	110	127.96	
	120	128.05	
	130	128.14	
	140	128.24	
C BRG. PIER 7	150	128.35	
		128.42	
	10	128.55	
	20	128.69	
	30	128.85	
	40	129.01	
	50	129.17	
	60	129.33	
	70	129.49	
	80	129.64	
	90	129.78	
	100	129.92	
	110	130.04	
	120	130.16	
	130	130.28	
C BRG. PIER 8	140	130.40	
	150	130.53	
		130.64	
	10	130.80	
	20	130.96	
	30	131.13	
	40	131.30	
	50	131.46	
	60	131.62	
	70	131.77	
	80	131.92	
	90	132.05	
	100	132.17	
	110	132.28	
	120	132.39	
C BRG. PIER 9	130	132.51	
	140	132.63	
		132.73	
	10	132.87	
	20	133.02	
	30	133.18	
	40	133.34	
	50	133.50	
	60	133.65	
	70	133.80	
	80	133.93	
	90	134.06	
	100	134.19	
	110	134.31	
	120	134.43	
C BRG. PIER 10	130	134.56	
		134.69	
	10	134.85	
	20	135.01	
	30	135.18	
	40	135.34	
	50	135.51	
	60	135.66	
	70	135.81	
	80	135.94	
	90	136.05	
	100	136.18	
	110	136.28	
	C BRG. ABUT. 2		136.37
			136.46

GIRDER 3		
DISTANCE		BLOCKING ELEVATION
¢ BRG. ABUT. 1		108.59
	10	108.80
	20	109.00
	30	109.20
	40	109.40
	50	109.57
	60	109.74
	70	109.89
	80	110.03
	90	110.15
	100	110.27
	110	110.37
	120	110.47
	130	110.56
	140	110.66
	150	110.76
	160	110.86
	170	110.98
¢ BRG. PIER 1		111.11
	10	111.25
	20	111.40
	30	111.56
	40	111.74
	50	111.91
	60	112.09
	70	112.27
	80	112.44
	90	112.60
	100	112.76
	110	112.91
	120	113.04
	130	113.17
	140	113.29
	150	113.39
	160	113.50
	170	113.60
	180	113.70
	190	113.81
	200	113.93
	210	114.05
	220	114.19
¢ BRG. PIER 2		114.26
	10	114.41
	20	114.58
	30	114.75
	40	114.93
	50	115.12
	60	115.31
	70	115.50
	80	115.68
	90	115.86
	100	116.02
	110	116.17
	120	116.32
	130	116.45
	140	116.57
	150	116.67
	160	116.77
	170	116.87
	180	116.96
	190	117.05
	200	117.15
	210	117.25
	220	117.36
	230	117.48

GIRDER 3	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 3	117.62
10	117.76
20	117.92
30	118.09
40	118.27
50	118.45
60	118.64
70	118.83
80	119.01
90	119.19
100	119.37
110	119.53
120	119.68
130	119.81
140	119.94
150	120.06
160	120.16
170	120.26
180	120.35
190	120.44
200	120.53
210	120.63
220	120.74
230	120.85
¢ BRG. PIER 4	120.98
10	121.12
20	121.26
30	121.41
40	121.58
50	121.75
60	121.92
70	122.09
80	122.26
90	122.42
100	122.57
110	122.72
120	122.86
130	122.98
140	123.10
150	123.21
160	123.32
170	123.43
180	123.54
190	123.66
200	123.78
210	123.92
220	124.06
¢ BRG. PIER 5	124.07
10	124.23
20	124.40
30	124.58
40	124.77
50	124.96
60	124.15
70	124.34
80	124.52
90	125.69
100	125.85
110	125.99
120	126.12
130	126.23
140	126.33
150	126.42
160	126.49
170	126.56
180	126.62
¢ BRG. PIER 6-W	126.65

[illegible]

GIRDER 3		
DISTANCE		BLOCKING ELEVATION
¢ BRG. PIER	10	135.19
	10	135.34
	20	135.50
	30	135.67
	40	135.84
	50	136.00
	60	136.16
	70	136.30
	80	136.44
	90	136.56
	100	136.67
	110	136.77
¢ BRG. ABUT.	2	136.87

NOTE
SEE SHEET B68 FOR NOTES

115-264

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BLOCKING ELEVATIONS - II

SHEET B69 OF B86 AUGUSTA, MAINE

					BY	DATE
				DESIGNED:	JFW	9/94
				DRAWN:	RJT	9/94
◆	ELEV. REVISIONS	JFW	10/95	CHECKED:	SM	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		



DIA3: WWDGRAPH.STR.DVCARTER,STEEL COS293.F08:1 DWG: COS293

GIRDER 4	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 3	117.37
10	117.51
20	117.67
30	117.84
40	118.02
50	118.20
60	118.39
70	118.58
80	118.77
90	118.95
100	119.12
110	119.28
120	119.43
130	119.57
140	119.69
150	119.81
160	119.91
170	120.01
180	120.10
190	120.19
200	120.29
210	120.38
220	120.49
230	120.60
¢ BRG. PIER 4	120.73
10	120.87
20	121.01
30	121.17
40	121.33
50	121.50
60	121.67
70	121.84
80	122.01
90	122.17
100	122.32
110	122.47
120	122.61
130	122.73
140	122.85
150	122.97
160	123.08
170	123.18
180	123.29
190	123.41
200	123.54
210	123.70
220	123.86
¢ BRG. PIER 5	123.88
10	124.07
20	124.26
30	124.46
40	124.67
50	124.89
60	125.10
70	125.31
80	125.51
90	125.71
100	125.89
110	126.06
120	126.21
130	126.34
140	126.47
150	126.57
160	126.67
170	126.76
180	126.85
¢ BRG. PIER 6-W	126.88

GIRDER 5		
DISTANCE		BLOCKING ELEVATION
Ç BRG. ABUT. I		108.09
	10	108.29
	20	108.49
	30	108.69
	40	108.87
	50	109.05
	60	109.21
	70	109.36
	80	109.50
	90	109.62
	100	109.74
	110	109.85
	120	109.95
	130	110.05
	140	110.15
	150	110.25
	160	110.36
	170	110.48
Ç BRG. PIER I		110.61
	10	110.75
	20	110.90
	30	111.07
	40	111.23
	50	111.41
	60	111.58
	70	111.75
	80	111.92
	90	112.09
	100	112.24
	110	112.39
	120	112.52
	130	112.65
	140	112.77
	150	112.88
	160	112.99
	170	113.10
	180	113.20
	190	113.31
	200	113.43
	210	113.55
	220	113.69
Ç BRG. PIER 2		113.76
	10	113.91
	20	114.08
	30	114.25
	40	114.43
	50	114.61
	60	114.79
	70	114.98
	80	115.16
	90	115.33
	100	115.49
	110	115.64
	120	115.78
	130	115.91
	140	116.03
	150	116.15
	160	116.25
	170	116.35
	180	116.45
	190	116.54
	200	116.64
	210	116.75
	220	116.86
	230	116.99

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
¢ BRG. PIER 3	117.12
10	117.27
20	117.42
30	117.59
40	117.76
50	117.94
60	118.13
70	118.31
80	118.49
90	118.67
100	118.83
110	118.99
120	119.14
130	119.28
140	119.41
150	119.53
160	119.64
170	119.74
180	119.83
190	119.93
200	120.03
210	120.13
220	120.24
230	120.35
¢ BRG. PIER 4	120.48
10	120.62
20	120.76
30	120.92
40	121.08
50	121.25
60	121.42
70	121.59
80	121.75
90	121.91
100	122.07
110	122.21
120	122.35
130	122.48
140	122.60
150	122.71
160	122.82
170	122.93
180	123.04
190	123.16
200	123.30
210	123.47
220	123.64
¢ BRG. PIER 5	123.66
10	123.86
20	124.07
30	124.28
40	124.50
50	124.73
60	124.96
70	125.18
80	125.39
90	125.60
100	125.79
110	125.97
120	126.14
130	126.29
140	126.43
150	126.56
160	126.68
170	126.78
180	126.89
¢ BRG. PIER 6-W	126.93

GIRDER 5		
DISTANCE		BLOCKING ELEVATION
¢ BRG. PIER 6-E		127.00
	10	127.26
	20	127.52
	30	127.77
	40	128.02
	50	128.24
	60	128.34
	70	128.52
	80	128.69
	90	128.97
	100	129.08
	110	129.17
	120	129.25
	130	129.34
	140	129.42
	150	129.51
	160	129.61
¢ BRG. PIER 7		129.64
	10	129.76
	20	129.89
	30	130.04
	40	130.19
	50	130.35
	60	130.50
	70	130.66
	80	130.81
	90	130.96
	100	131.09
	110	131.22
	120	131.34
	130	131.46
	140	131.59
	150	131.72
	160	131.86
¢ BRG. PIER 8		131.87
	10	132.02
	20	132.18
	30	132.35
	40	132.52
	50	132.69
	60	132.84
	70	132.99
	80	133.13
	90	133.26
	100	133.38
	110	133.49
	120	133.60
	130	133.71
	140	133.82
	150	133.95
¢ BRG. PIER 9		133.96
	10	134.09
	20	134.24
	30	134.39
	40	134.55
	50	134.70
	60	134.86
	70	135.00
	80	135.13
	90	135.26
	100	135.38
	110	135.50
	120	135.63
	130	135.75
	140	135.89

GIRDER 5	
DISTANCE	BLOCKING ELEVATION
C BRG. PIER 10	135.92
10	136.07
20	136.23
30	136.40
40	136.57
50	136.73
60	136.89
70	137.03
80	137.16
90	137.28
100	137.39
110	137.49
120	137.58
C BRG. ABUT. 2	137.60

SEE SHEET B68 FOR NOTES

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Cm
12/3/96

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BLOCKING ELEVATIONS - III

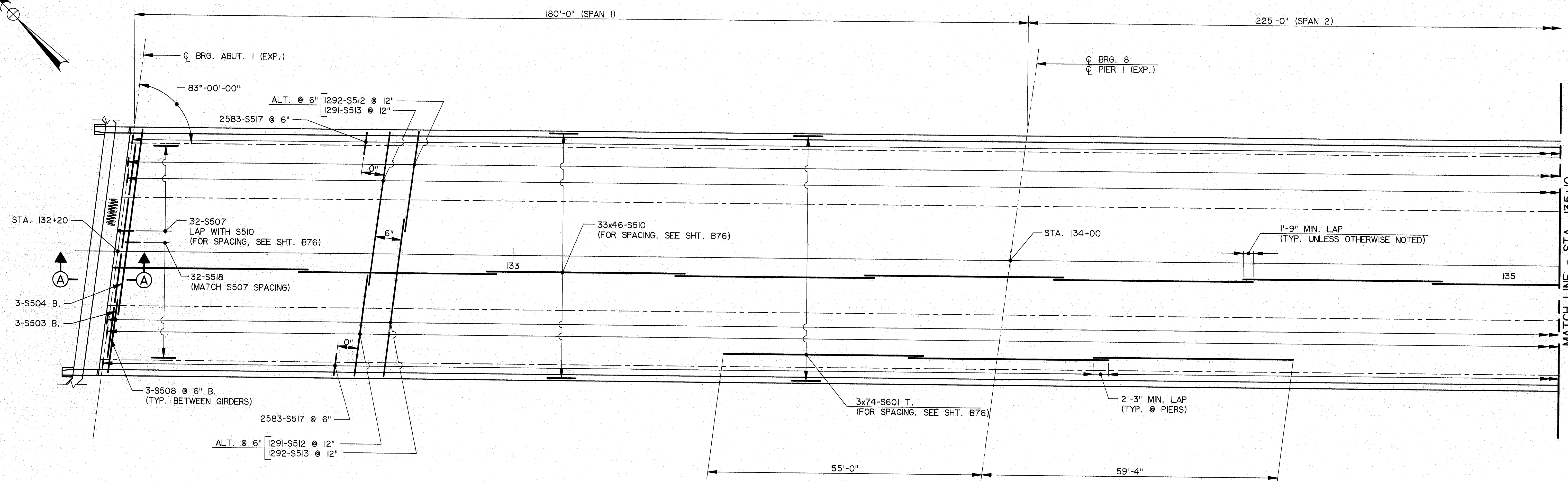
SHEET B70 OF B86 AUGUSTA, MAINE

				DESIGNED:	JFW	9/94
				DRAWN:	RJT	9/94
◆	ELEV. REVISIONS	JFW	10/95	CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CUM		

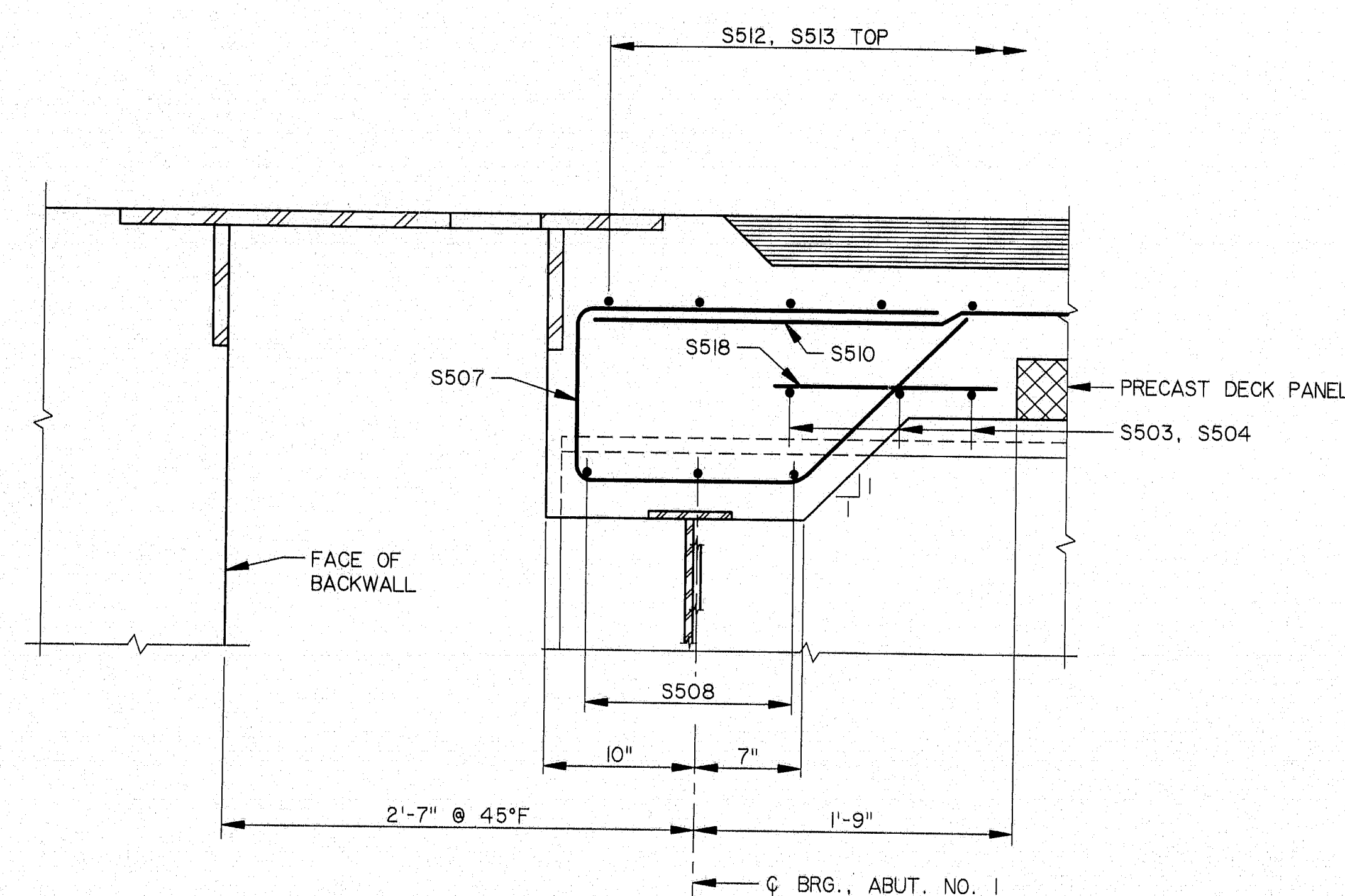


CHS / STANDARD STEEL (00530) / PWS / 002304

F.H.W.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	80	103



PLAN



SECTION A-A

SUPERSTRUCTURE NOTES

1. FORM A 1" V-GROOVE ON THE FASCIAS AT THE HORIZONTAL JOINT BETWEEN THE BARRIER AND SLAB.
2. REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" UNLESS OTHERWISE INDICATED.
3. ADJUST REINFORCING STEEL TO FIT AROUND THE DRAINS IN A MANNER APPROVED BY THE ENGINEER. DO NOT CUT TRANSVERSE REINFORCING BARS.
4. THE SUPERSTRUCTURE SLAB CONCRETE SHALL BE PLACED IN SUCCESSIVE PLACEMENTS STARTING AT ABUTMENT 1 OR PIER 6 FOR THE RIVER SECTION AND AT PIER 6 OR ABUTMENT 2 FOR THE APPROACH SECTION. THE INITIAL PLACEMENT SHALL START AT A SIMPLY SUPPORTED END OF THE DECK SLAB AND SHALL TERMINATE AT THE COMPLETION OF A POSITIVE MOMENT SECTION. SUCCESSIVE PLACEMENTS SHALL PROCEED FROM THE END OF THE PREVIOUS PLACEMENT, TERMINATE AT THE COMPLETION OF A POSITIVE MOMENT SECTION, AND INCLUDE TWO OR MORE SPANS. THE PLACEMENT SEQUENCE OF THE SUPERSTRUCTURE SLAB CONCRETE SHALL BE APPROVED BY THE ENGINEER. CONCRETE IN PLACEMENT SHALL BE KEPT PLASTIC ONE COMPLETE SPAN BEHIND THE SPAN BEING PLACED. A MINIMUM OF FIVE DAYS SHALL ELAPSE BETWEEN SUCCESSIVE PARTIAL PLACEMENTS.
5. PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO THE FOLLOWING AREAS:
CONCRETE BARRIERS
FASCIA DOWN TO THE DRIP NOTCH. (SEE NOTE 3, SHEET B24)
6. REFER TO STANDARD DETAILS BD522-93, PRECAST DECK PANEL. END DECK PANEL UNITS ADJACENT TO THE EXPANSION JOINTS AT THE ABUTMENTS AND PIER 6 SHALL CONFORM TO THE GEOMETRY AS SHOWN IN SECTIONS A-A, B-B AND C-C. PANEL UNIT GEOMETRY IN SPANS 7 THROUGH 11 AND A PORTION OF SPAN 6 SHALL CONFORM TO THE CURVED GIRDER GEOMETRY. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS OF PRECAST DECK PANEL LAYOUT, GEOMETRY AND DETAILS.

ENTIRE SHEET
REVISED ON 3/96

115-266
12/14/96

115-266

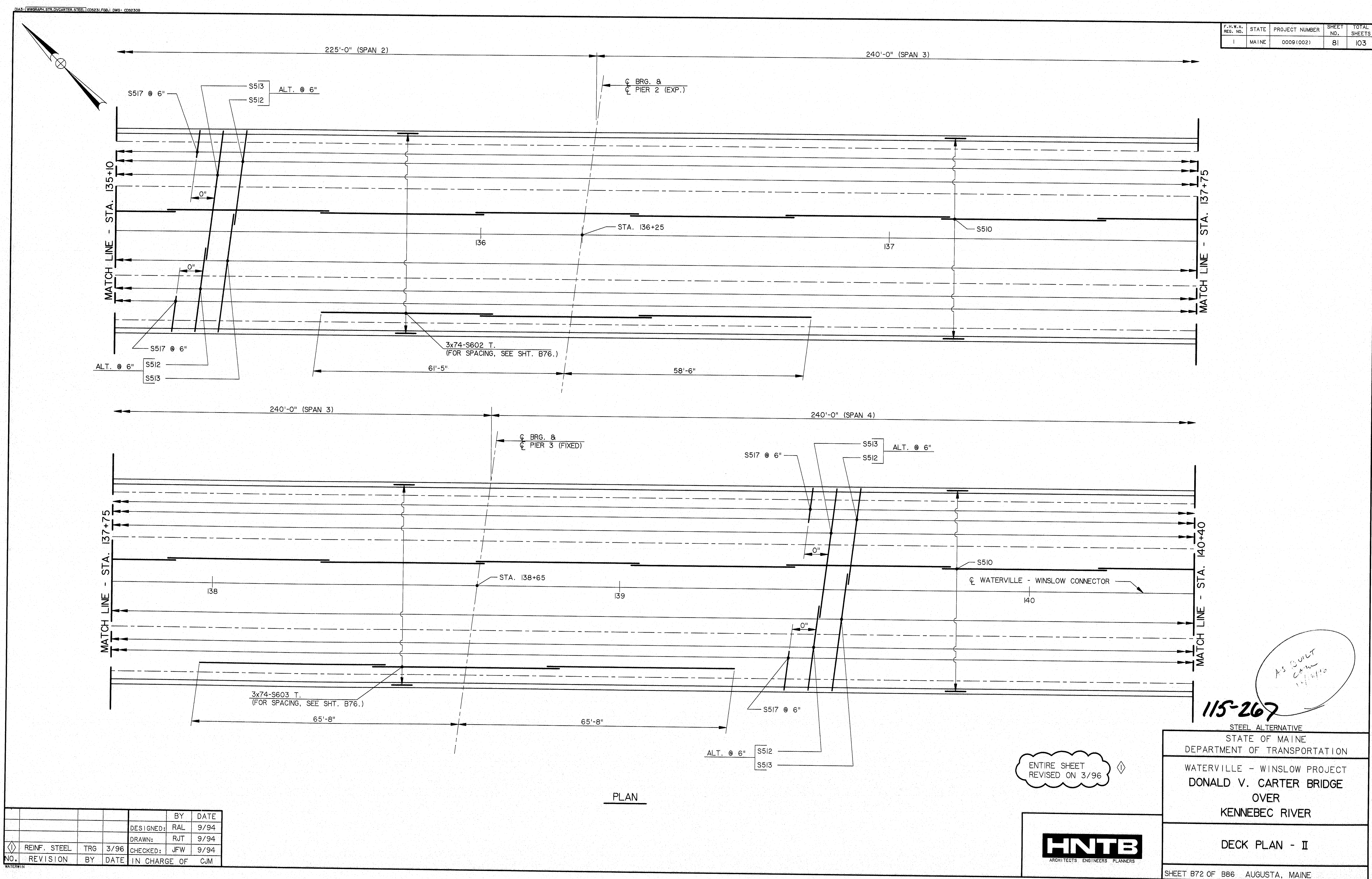
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK PLAN I

HNTB
ARCHITECTS ENGINEERS PLANNERS

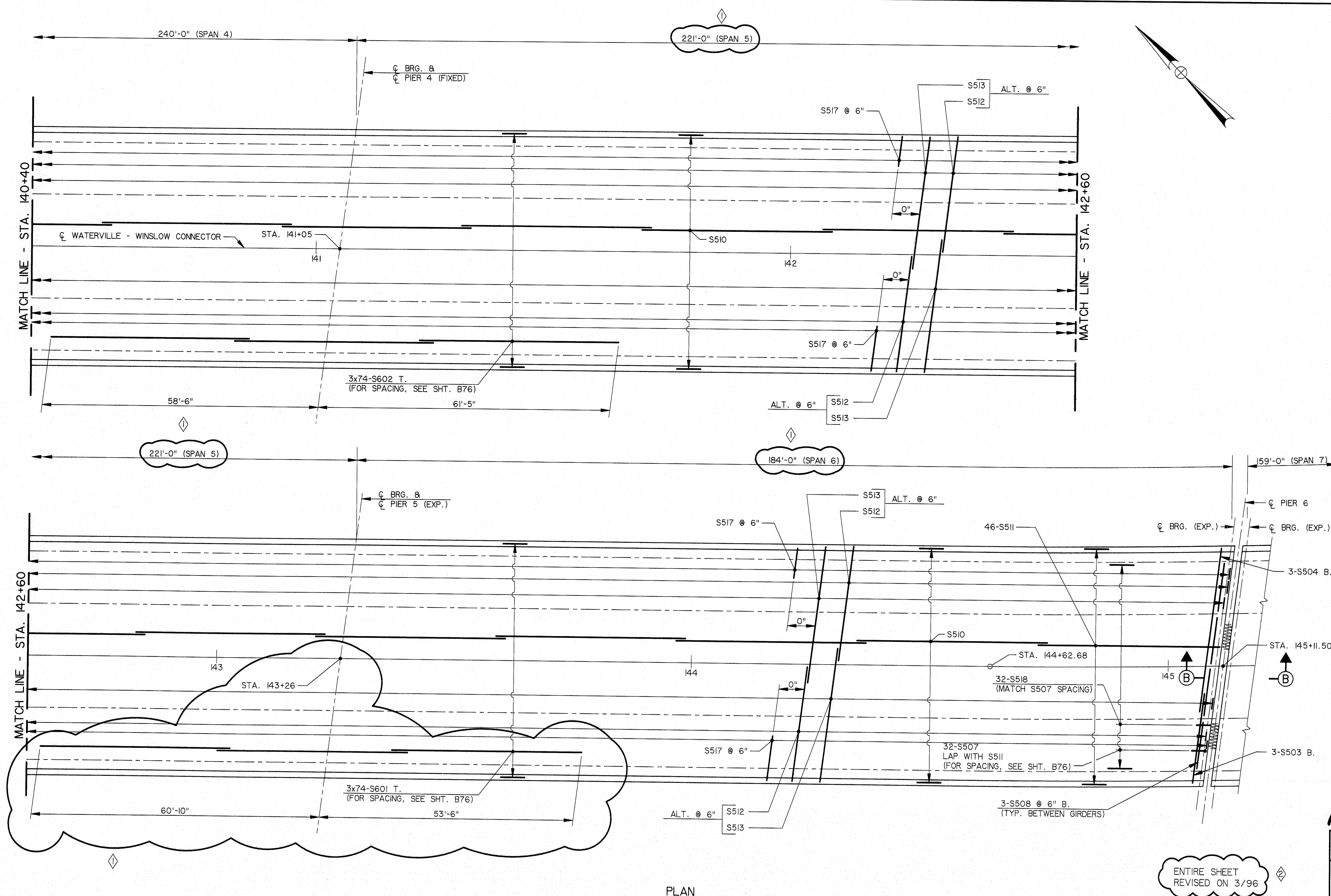
SHEET B71 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE OF
DESIGNED:	RAL	9/94		
DRAWN:	RJT	9/94		
CHECKED:	JFW	9/94		
IN CHARGE OF	CJM			



PLAN (SPAN 4) (SPAN 5) (SPAN 6) (SPAN 7)

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	82	103



PLAN

NOTE
1. SEE SHEET B74 FOR SECTION B-B.

115-268

ENTIRE SHEET
REVISED ON 3/96

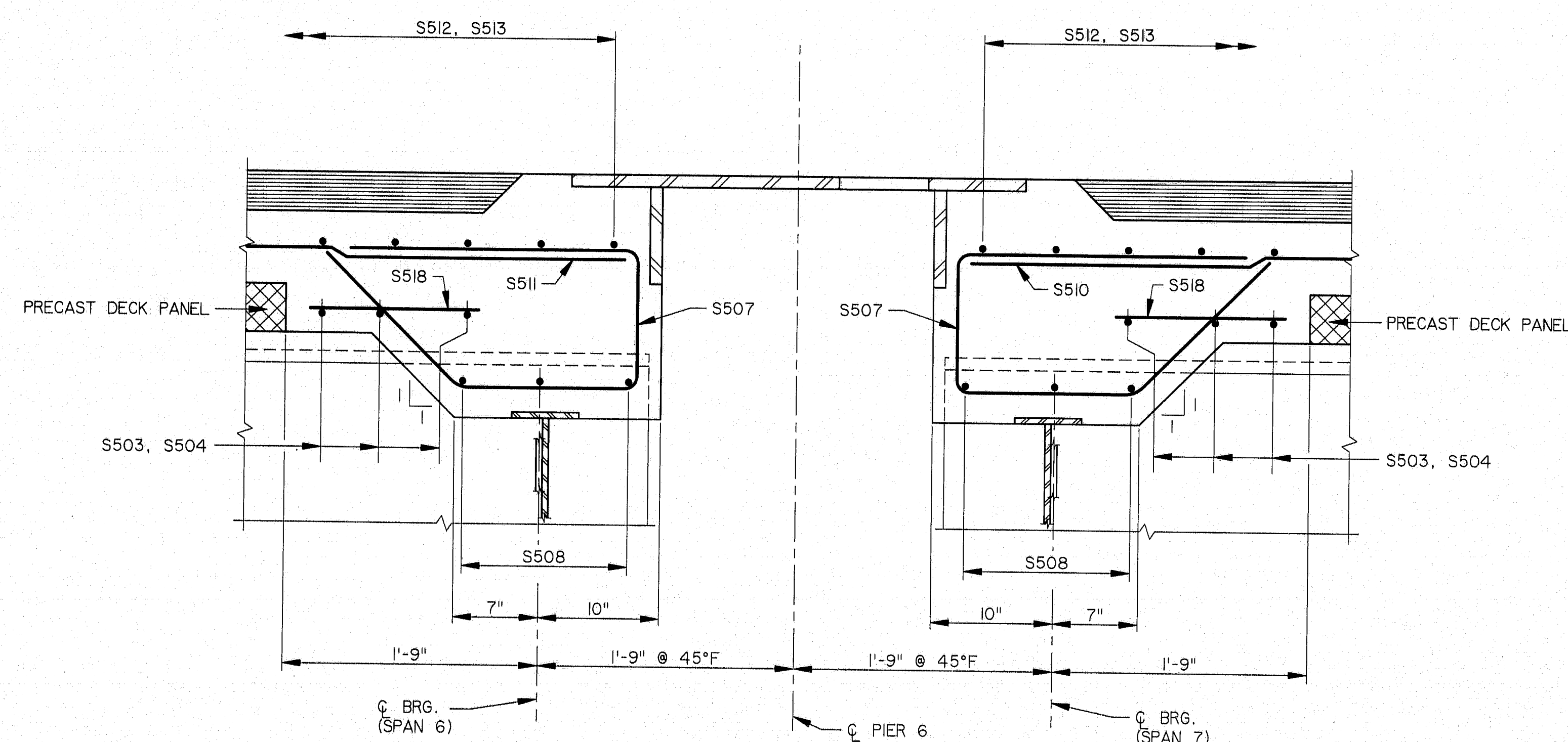
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
1	REINF. STEEL	TRG	3/96	DESIGNED: RAL	9/94
2	PIER LOCATION	JFW	9/95	DRAWN: RUT	9/94
3				CHECKED: JFW	9/94

HNTB
ARCHITECTS ENGINEERS PLANNERS

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK PLAN - III

SHEET B73 OF B86 AUGUSTA, MAINE

DIA3: WWGRAPH STR.DWCARTER STEE CD0230 EGB. DIA2: CD0230

ENTIRE SHEET
REVISED ON 3/96

As Built
C600
12/3/1

115-269

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

OVER

KENNEBEC RIVER

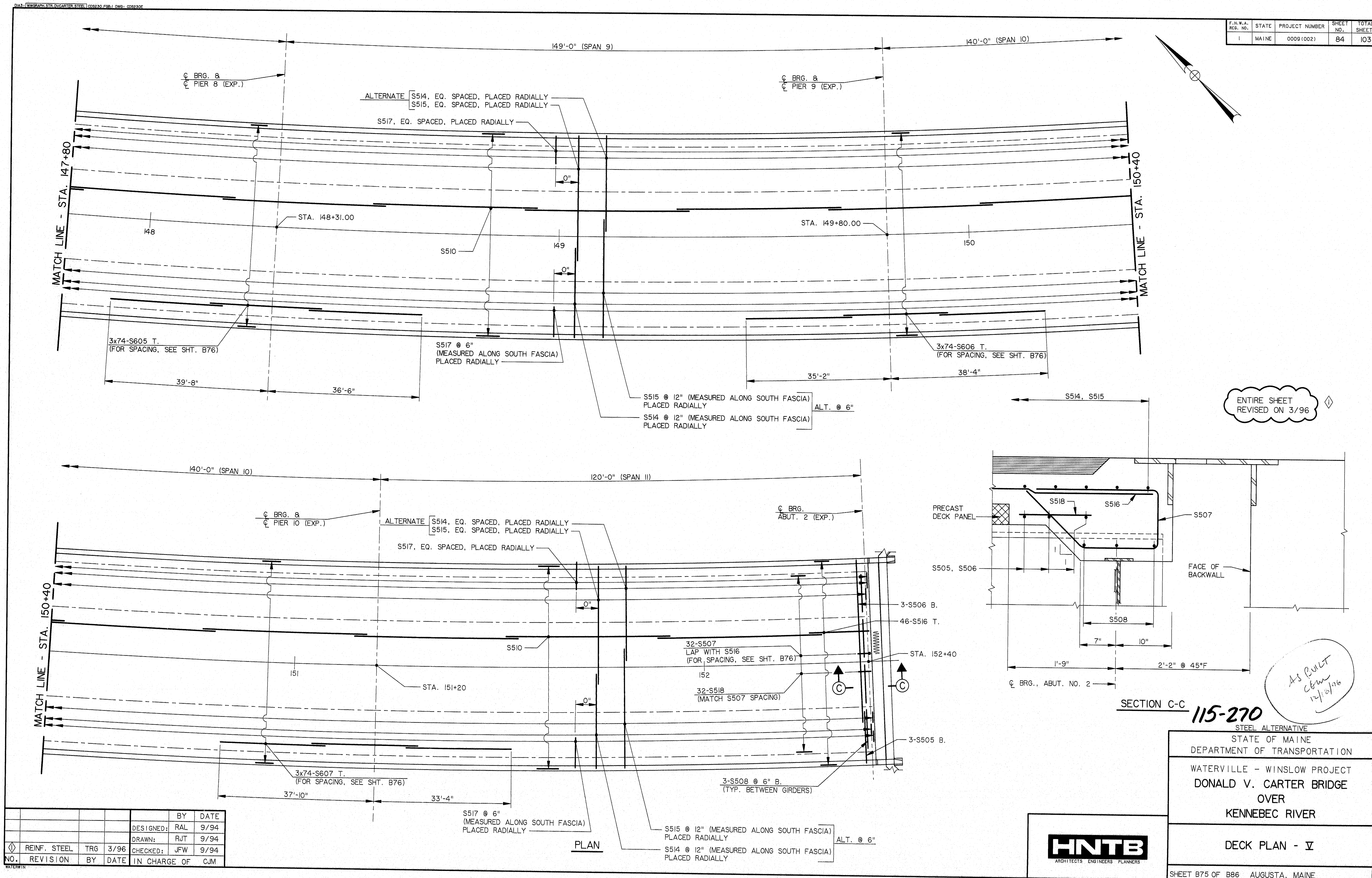
DECK PLAN - IV



SHEET B74 OF B86 AUGUSTA, MAINE

				DESIGNED:	RAL	9/94
				DRAWN:	RJT	9/94
◆	REINF. STEEL	TRG	3/96	CHECKED:	JFW	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF CJM		

				BY	DATE
				DESIGNED:	RAL 9/94
				DRAWN:	RJT 9/94
◆	REINF. STEEL	TRG	3/96	CHECKED:	JFW 9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM



ENTIRE SHEET
REVISED ON 3/96

AS BUILT
C/W
12/12/96

SECTION C-C 115-270

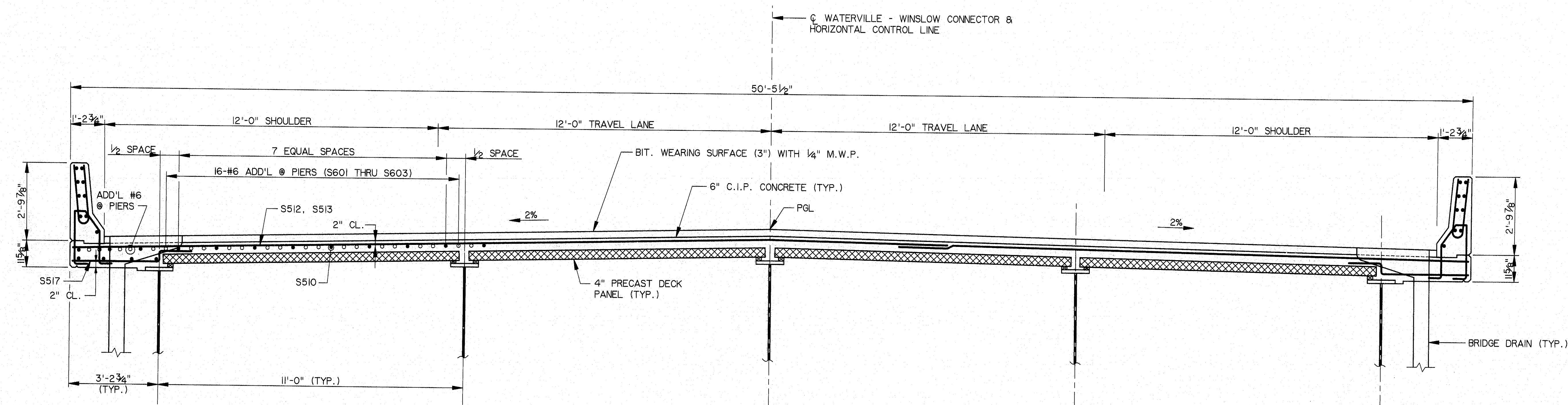
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERTVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK PLAN - V

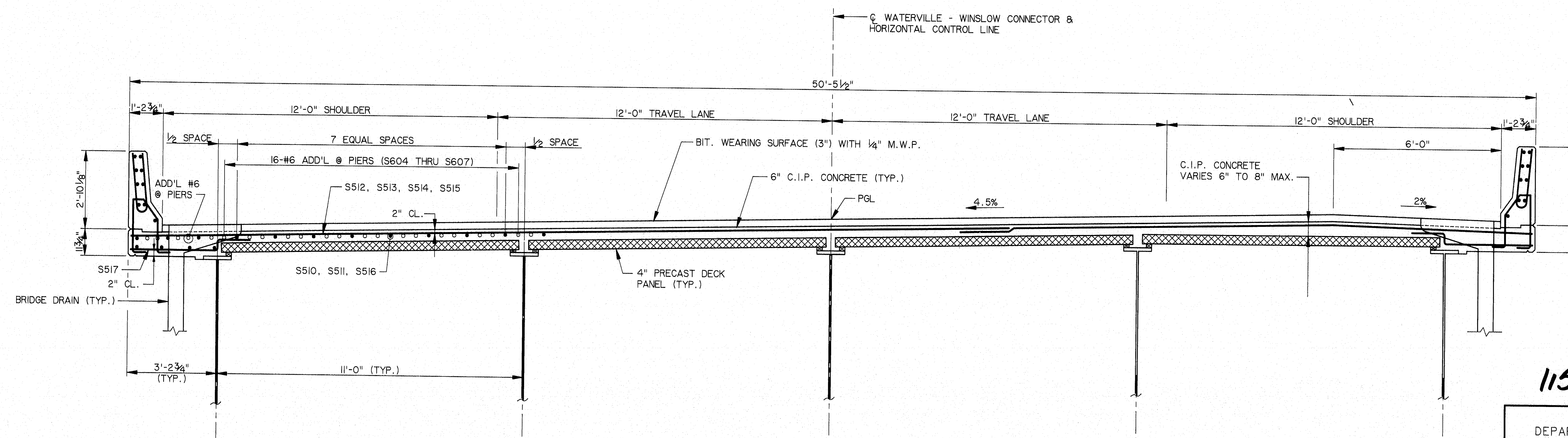
SHEET B75 OF B86 AUGUSTA, MAINE



F.H.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	85	103



TYPICAL SECTION - CROWNED ROADWAY



TYPICAL SECTION - SUPERELEVATION

AS BUILT
CONSTRUCTION

ENTIRE SHEET
REVISED ON 3/96

115-271

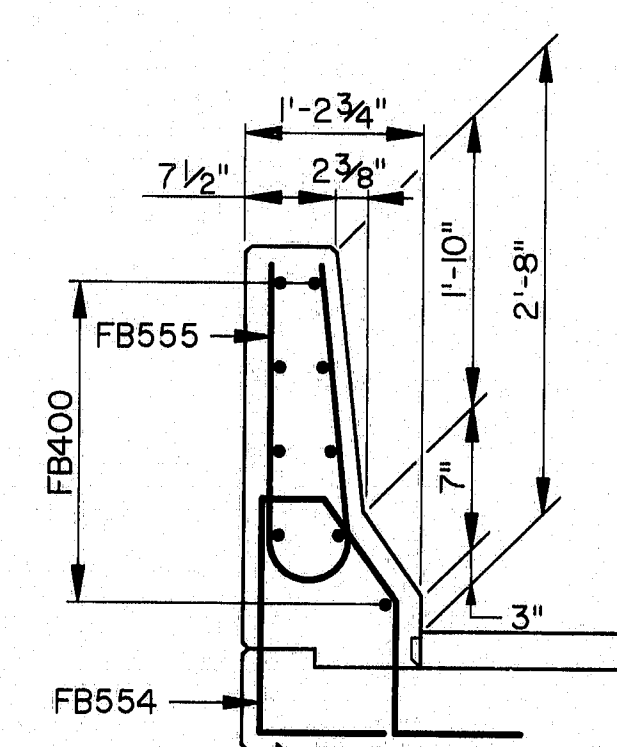
STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

DECK SECTIONS

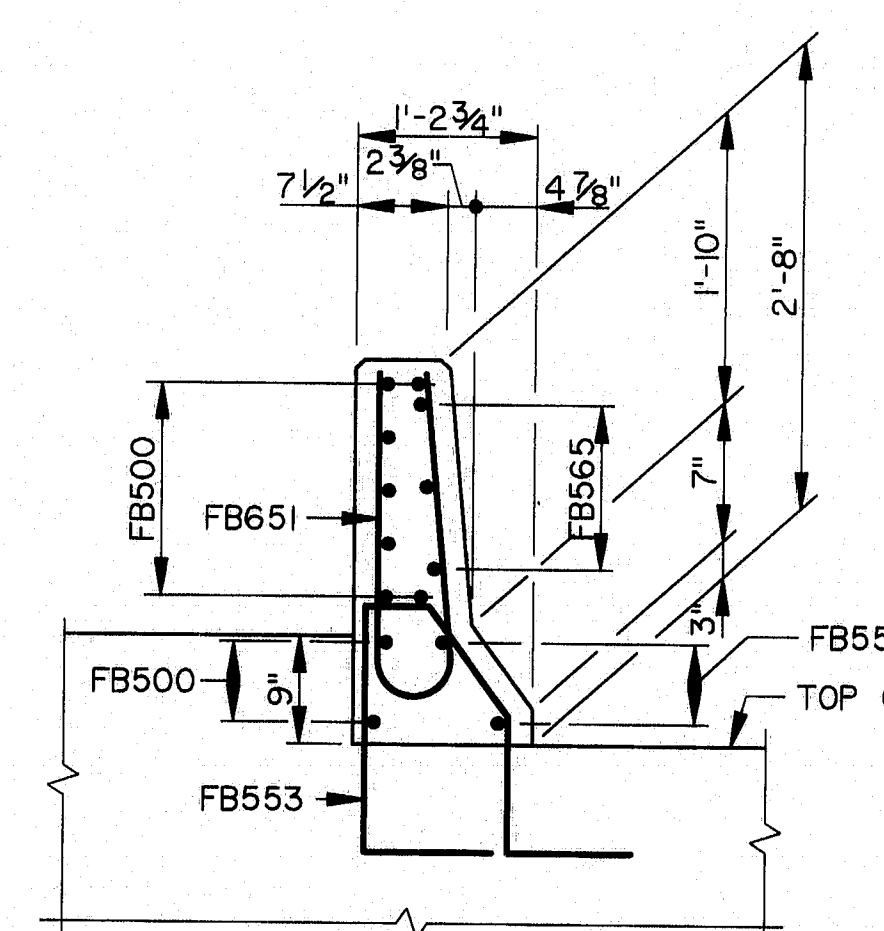
SHEET B76 OF B86 AUGUSTA, MAINE

HNTB
ARCHITECTS ENGINEERS PLANNERS

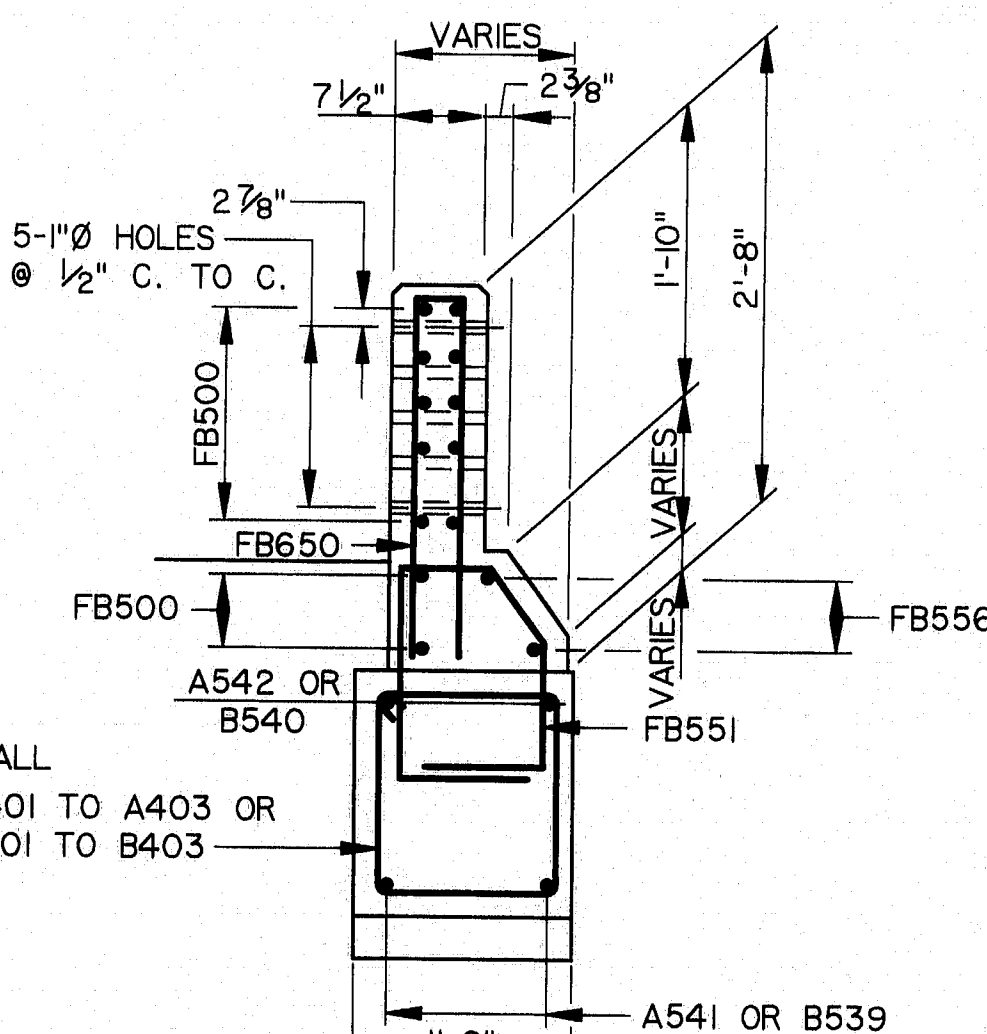
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED:	RAL	9/94	
		DRAWN:	RJT	9/94	
		CHECKED:	JFW	9/94	
		IN CHARGE OF	CJM		



SECTION A-A

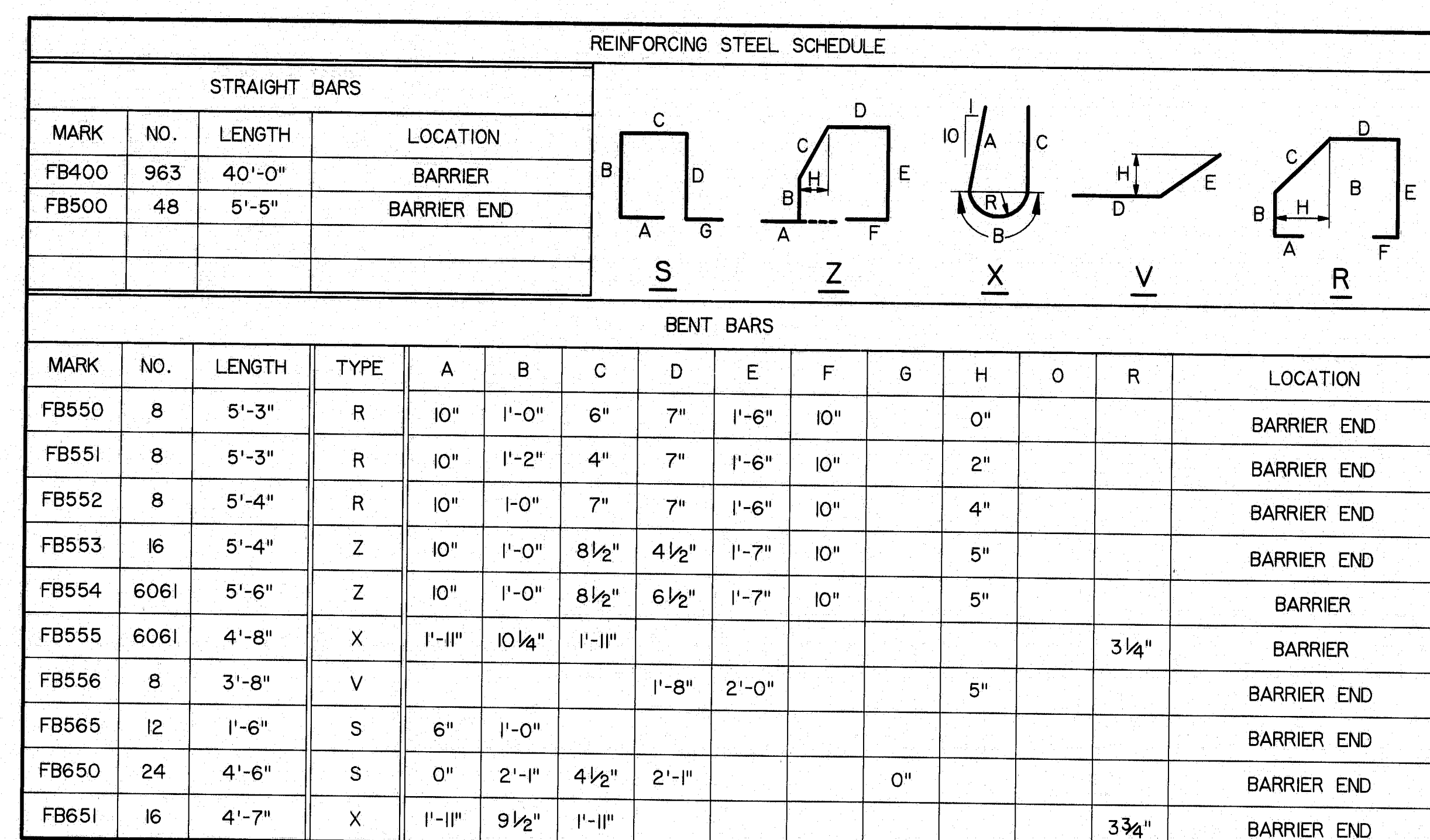


SECTION B-B

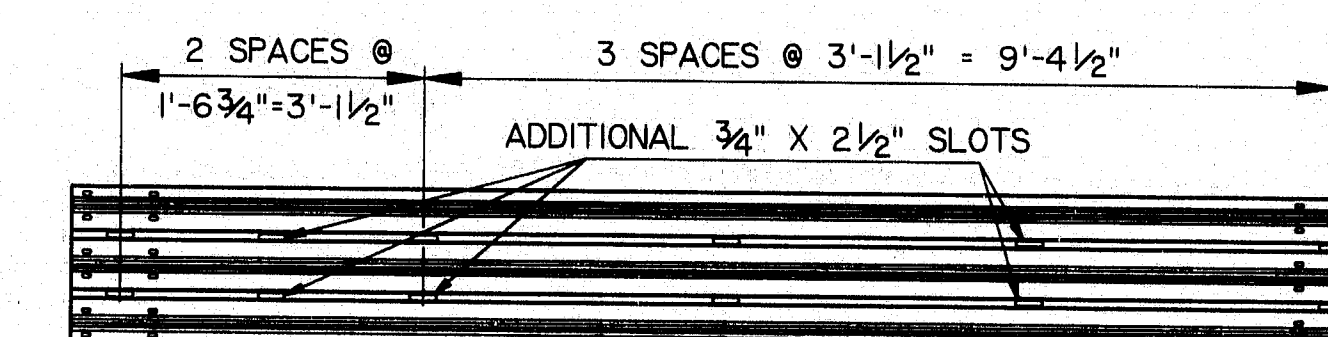


SECTION C-C

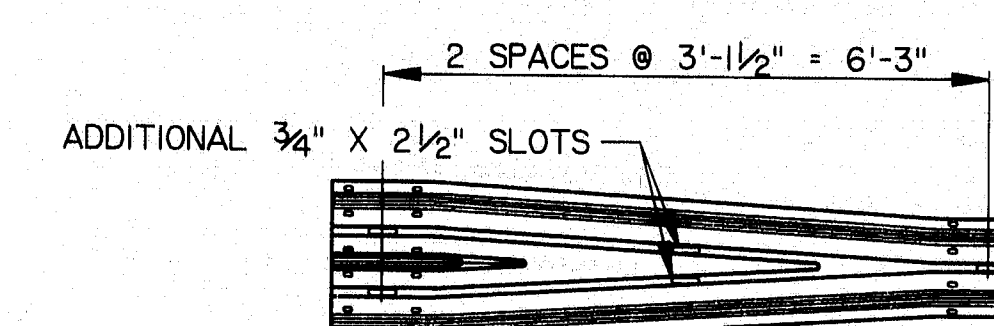
- 1.) REINFORCING STEEL SHALL HAVE $1\frac{1}{2}$ " MINIMUM CONCRETE COVER.
- 2.) AFTER INSTALLATION IS COMPLETE, UPSET THE THREAD ON THE ANCHOR BOLTS IN THREE PLACES AROUND EACH BOLT, AT THE JUNCTION OF THE NUT AND THE EXPOSED THREAD, WITH A CENTER PUNCH OR SIMILAR TOOL.
- 3.) ADDITIONAL HOLES IN THE MODIFIED THRIE BEAM PANELS MAY BE MADE BY DRILLING, PUNCHING OR ANY OTHER METHOD THAT PRODUCES A NEAT, CLEAN HOLE OF THE REQUIRED SIZE. BURNING OF HOLES WILL NOT BE ALLOWED.
- 4.) STANDARD BARRIER HARDWARE HAS BEEN USED TO DEVELOP THIS GUARD-RAIL TRANSITION. DESIGNATIONS PROVIDED IN PARENTHESIS RELATE TO STANDARD ELEMENTS DETAILED IN " A GUIDE TO STANDARDIZED BARRIER RAIL HARDWARE. " 1979. AASHTO-AGC-ARTBA JOINT COOPERATE COMMITTEE.
- 5.) 1"Ø HOLES IN CONCRETE WILL BE FORMED BY A METHOD APPROVED BY THE ENGINEER.
- 6.) MINIMUM SPLICE LENGTH FOR #4 BARS SHALL BE 1'-8"."



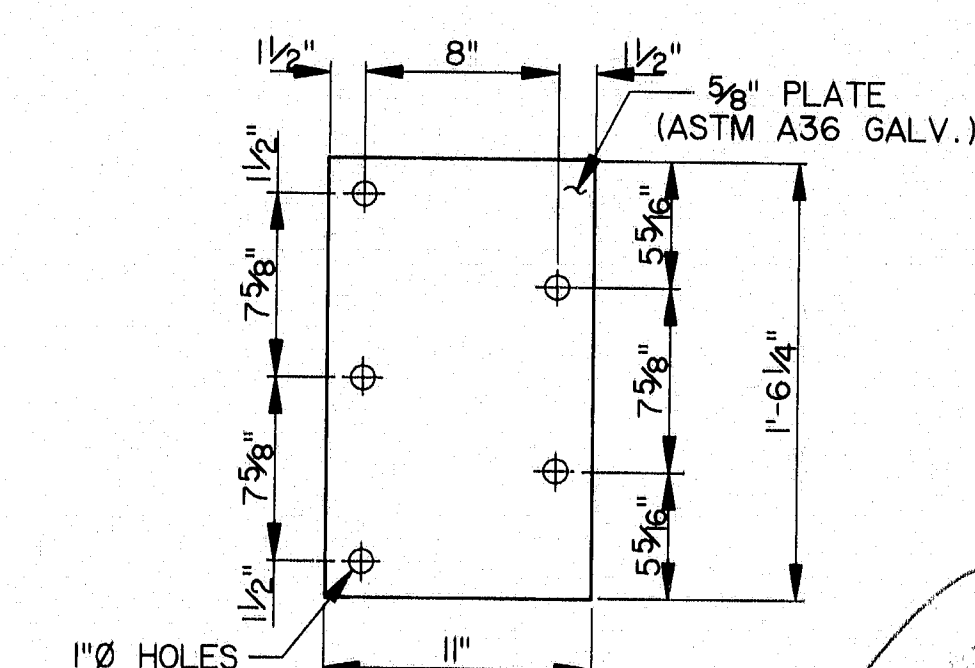
ELEVATION



MODIFIED THRIE BEAM PANEL



MODIFIED THRIE BEAM TRANSITION



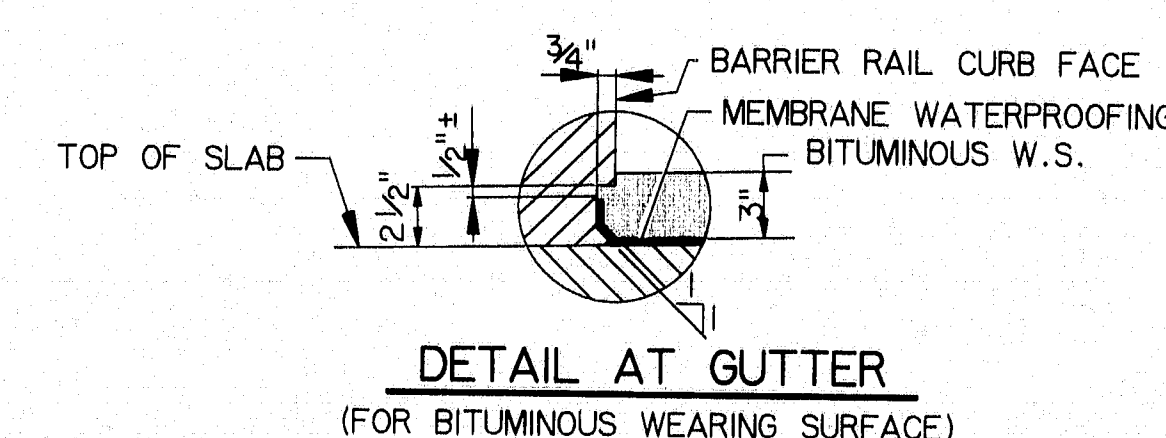
BEARING PLATE

115-272

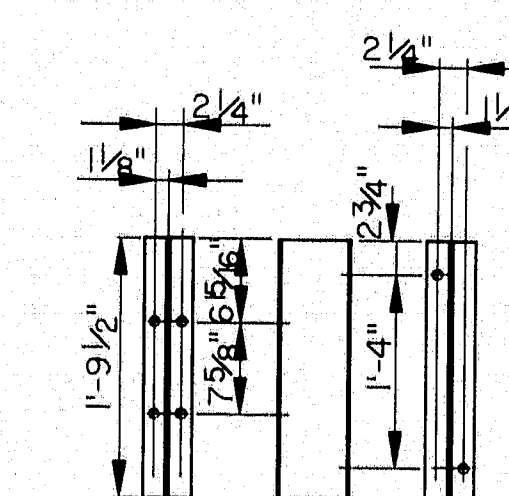
115 212
STEELE ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

BARRIER DETAILS

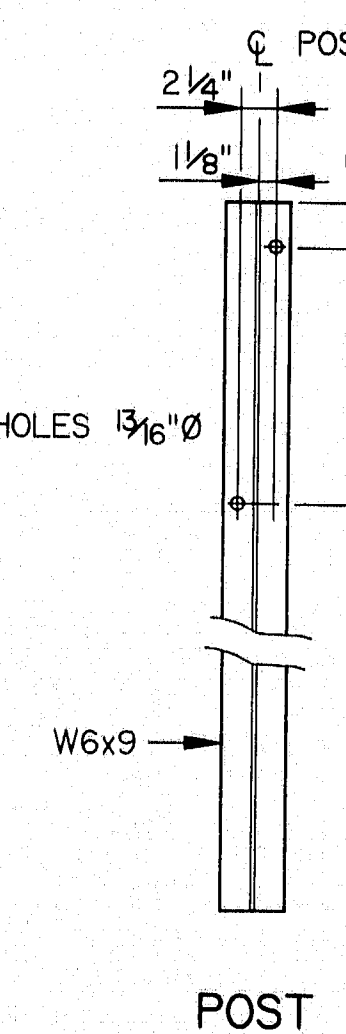
SHEET B77 OF B86 AUGUSTA, MAINE



DETAIL AT GUTTER
(FOR BITUMINOUS WEARING SURFACE)



BRACKET

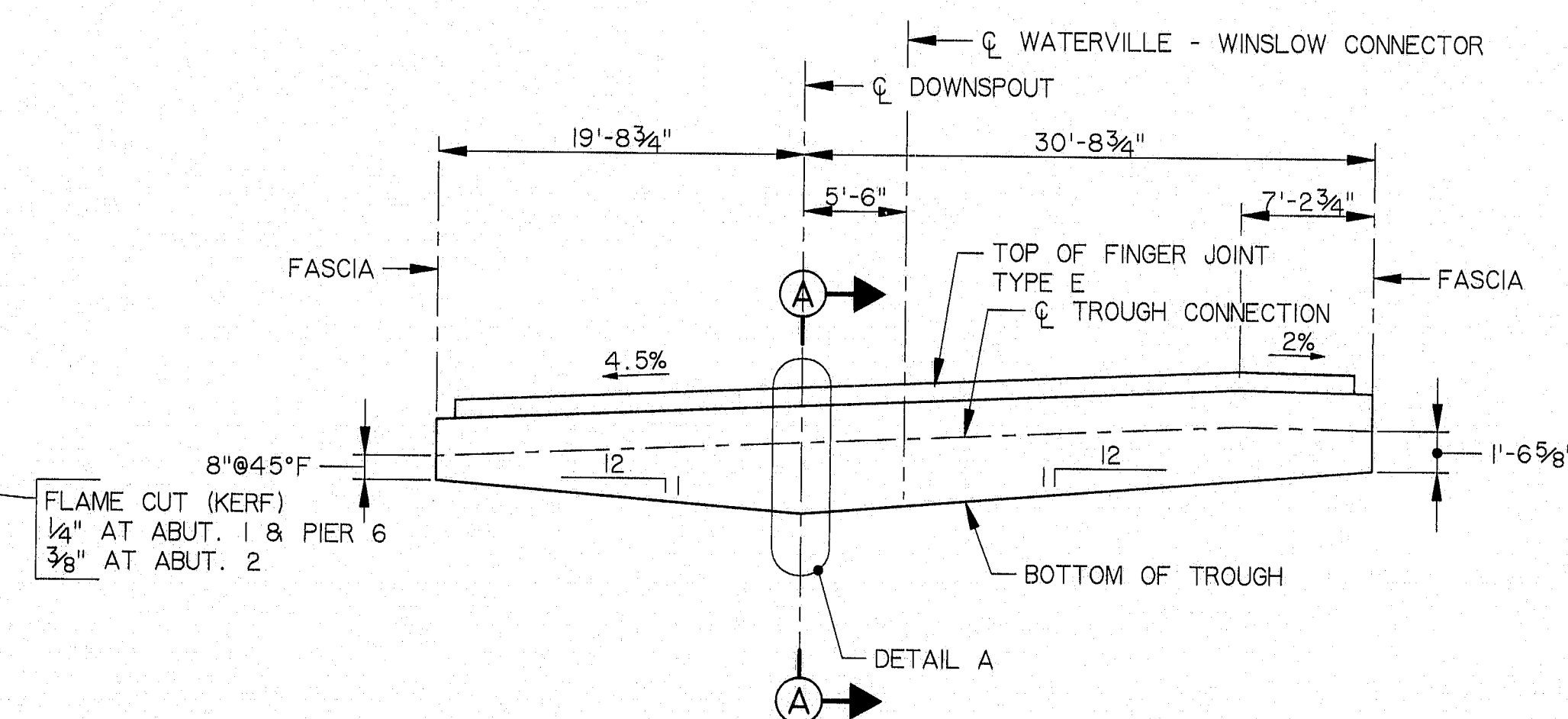


POST

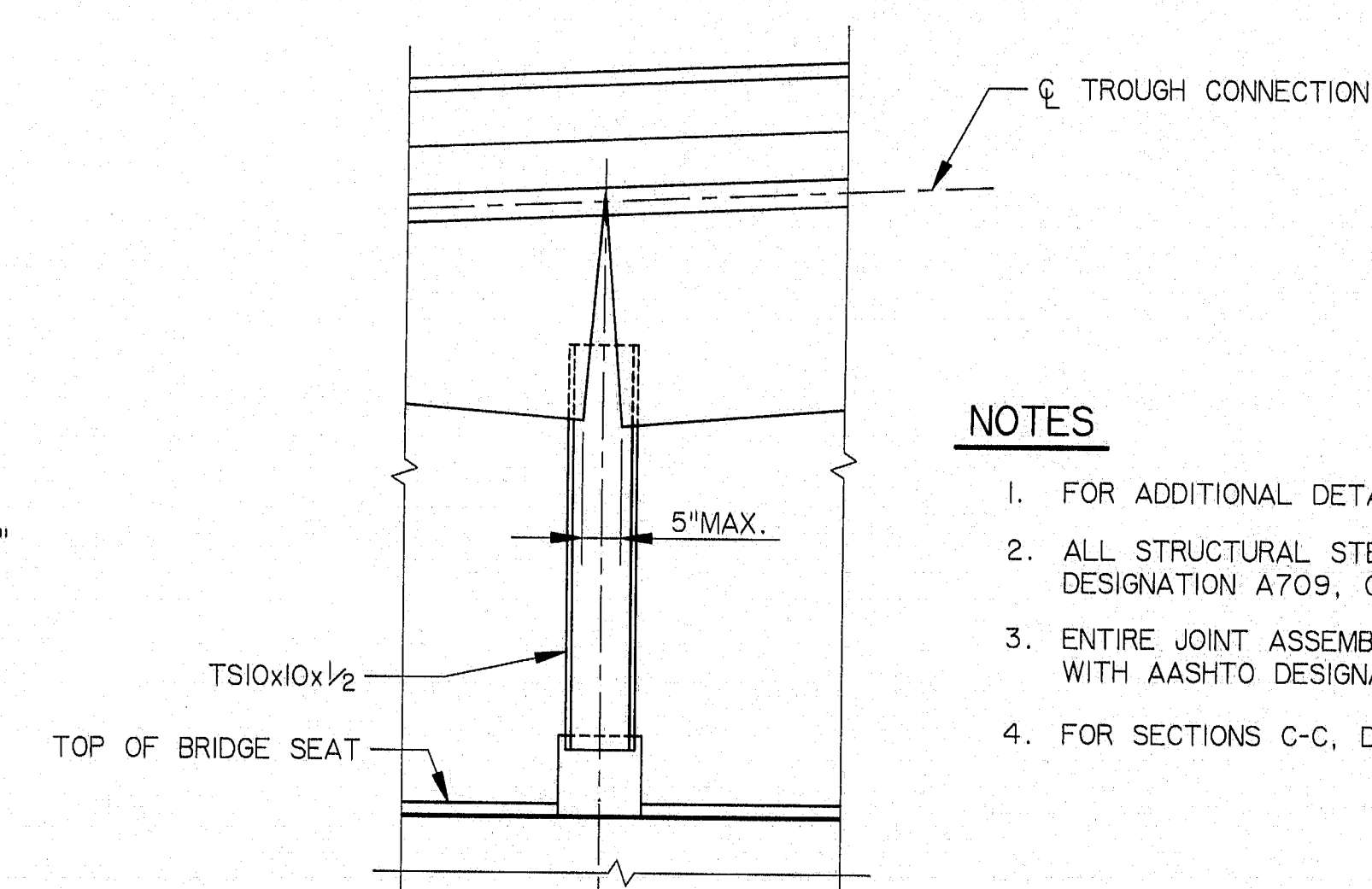
HNTE

ARCHITECTS ENGINEERS PLANNERS

					BY	DATE
				DESIGNED:	DWR	10/94
				DRAWN:	RJT	10/94
				CHECKED:	JFW	10/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	



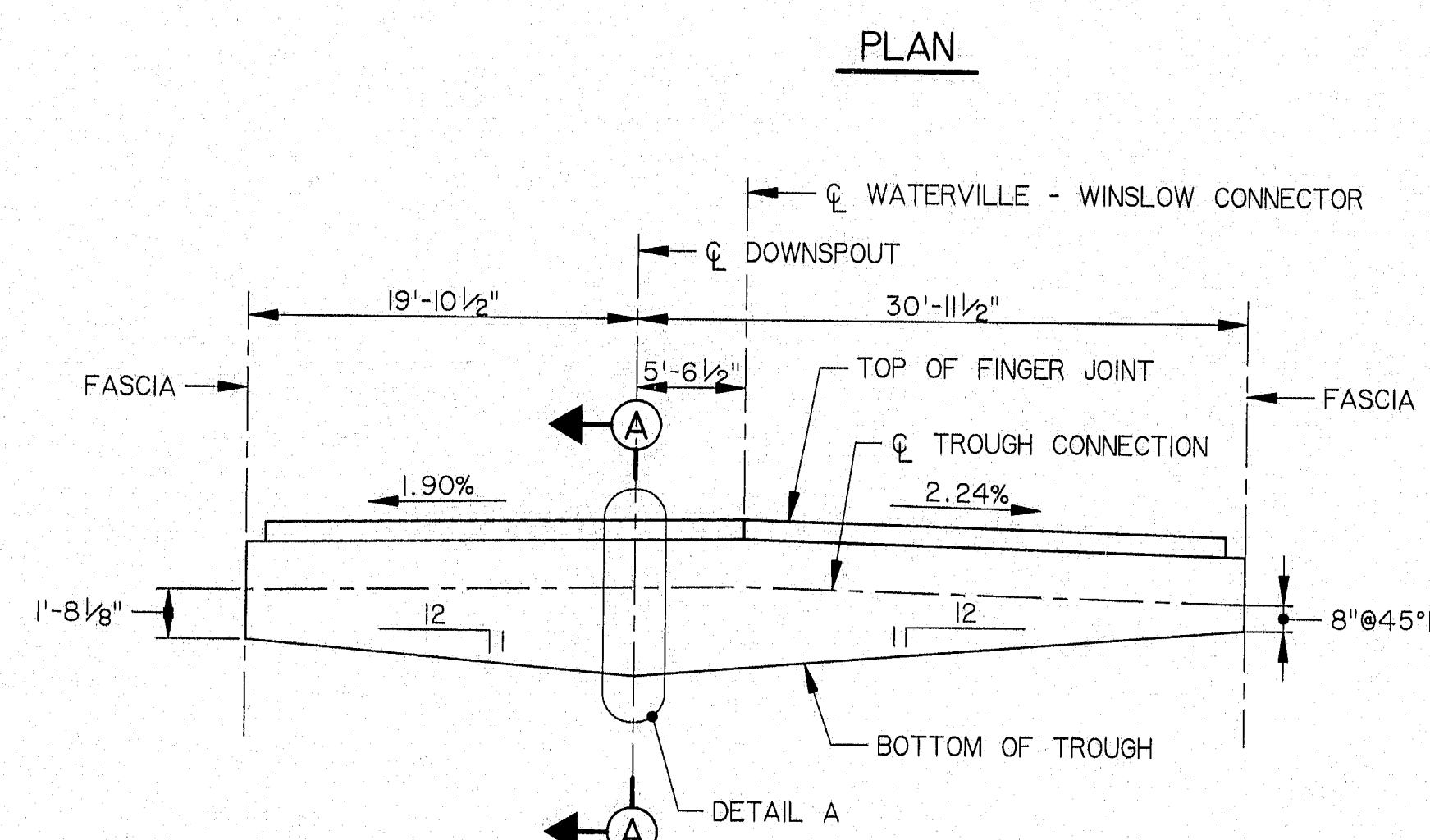
ABUTMENT 2 - JOINT LAYOUT
(LOOKING UPSTATION)



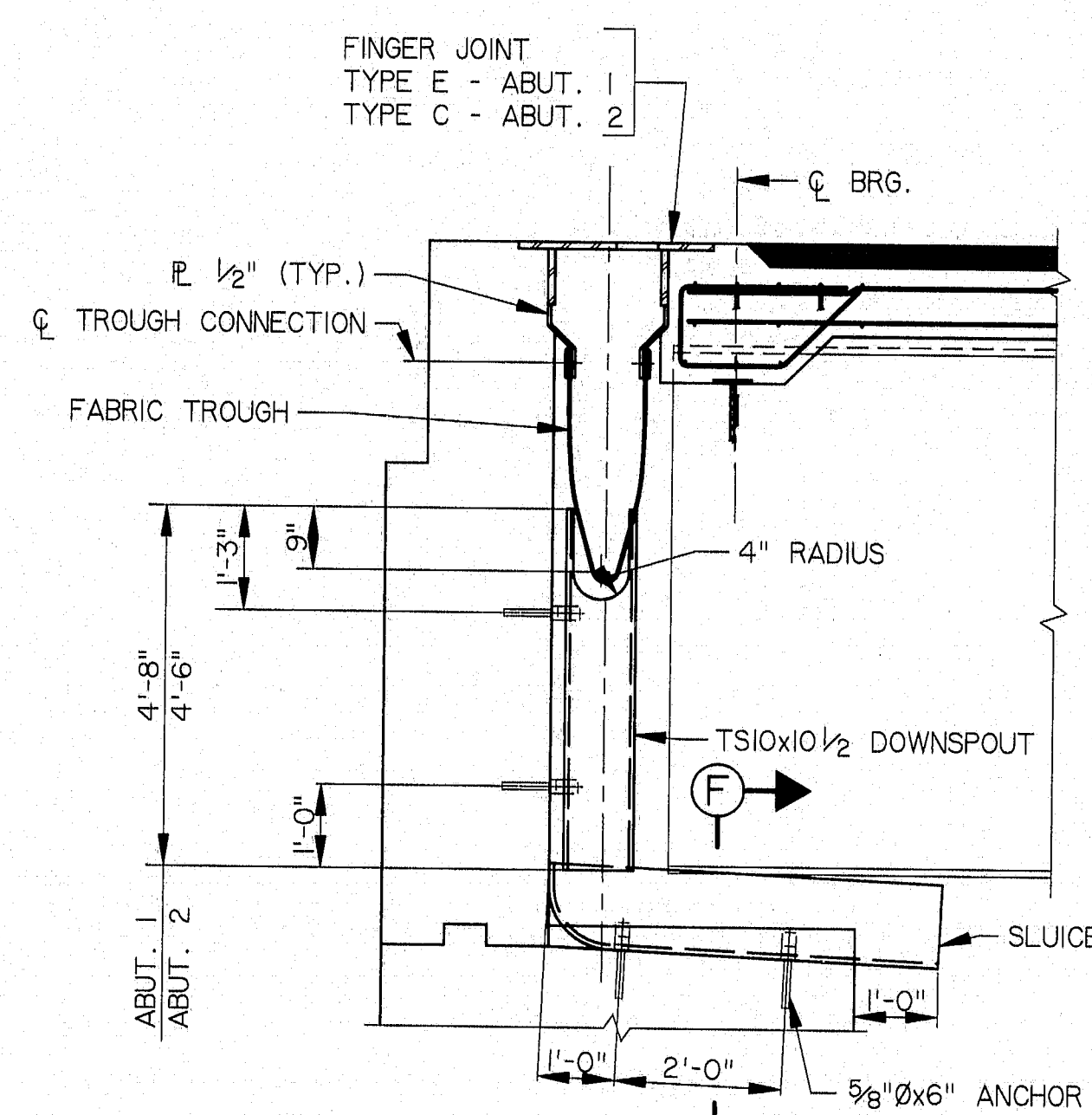
DETAIL A

NOTES

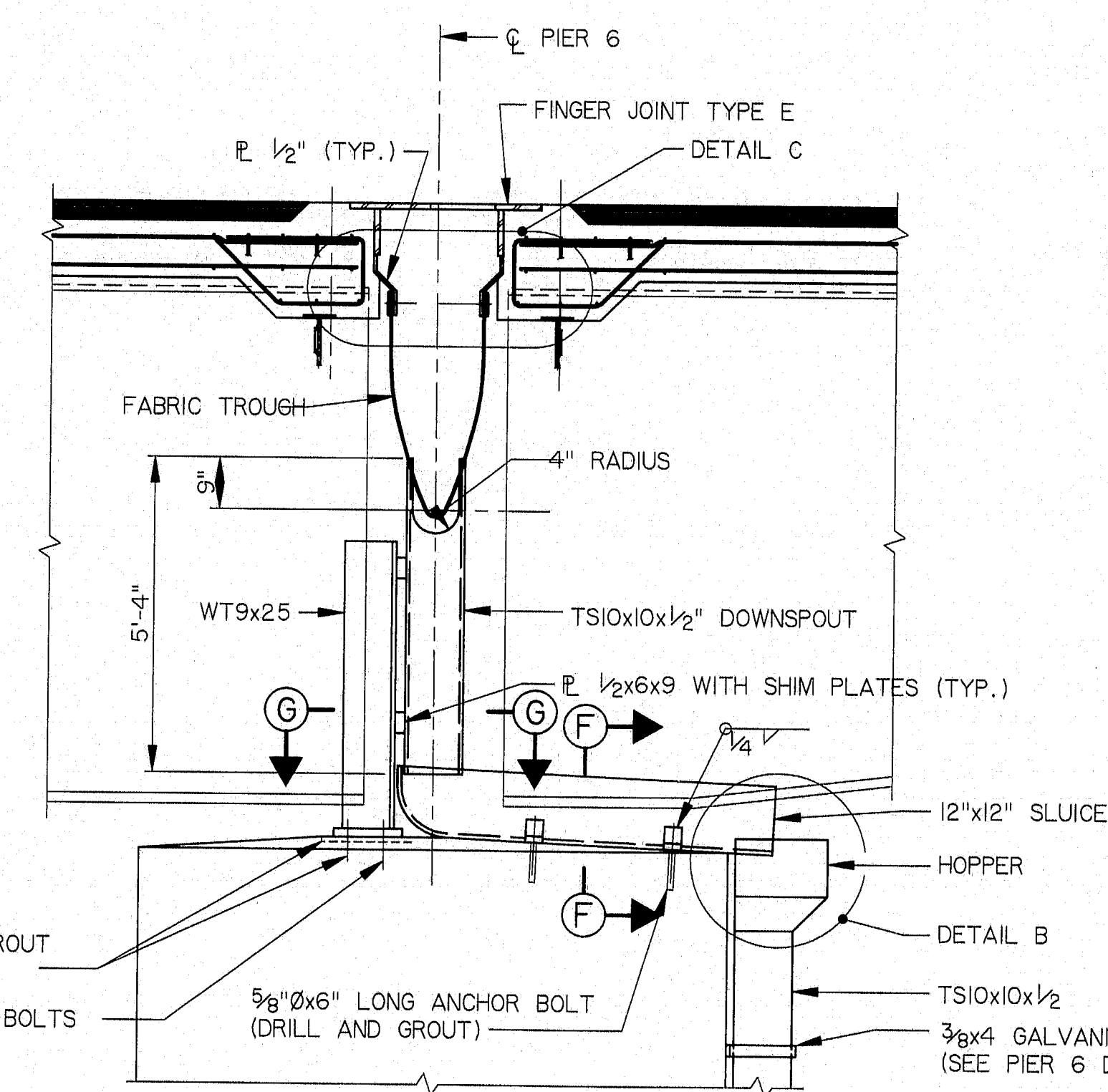
1. FOR ADDITIONAL DETAILS SEE STANDARD DETAILS BD 304-93.
2. ALL STRUCTURAL STEEL FOR BARRIER JOINT SHALL BE ASTM DESIGNATION A709, GRADE 36.
3. ENTIRE JOINT ASSEMBLY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M11-91.
4. FOR SECTIONS C-C, D-D & E-E SEE SHEET B79.



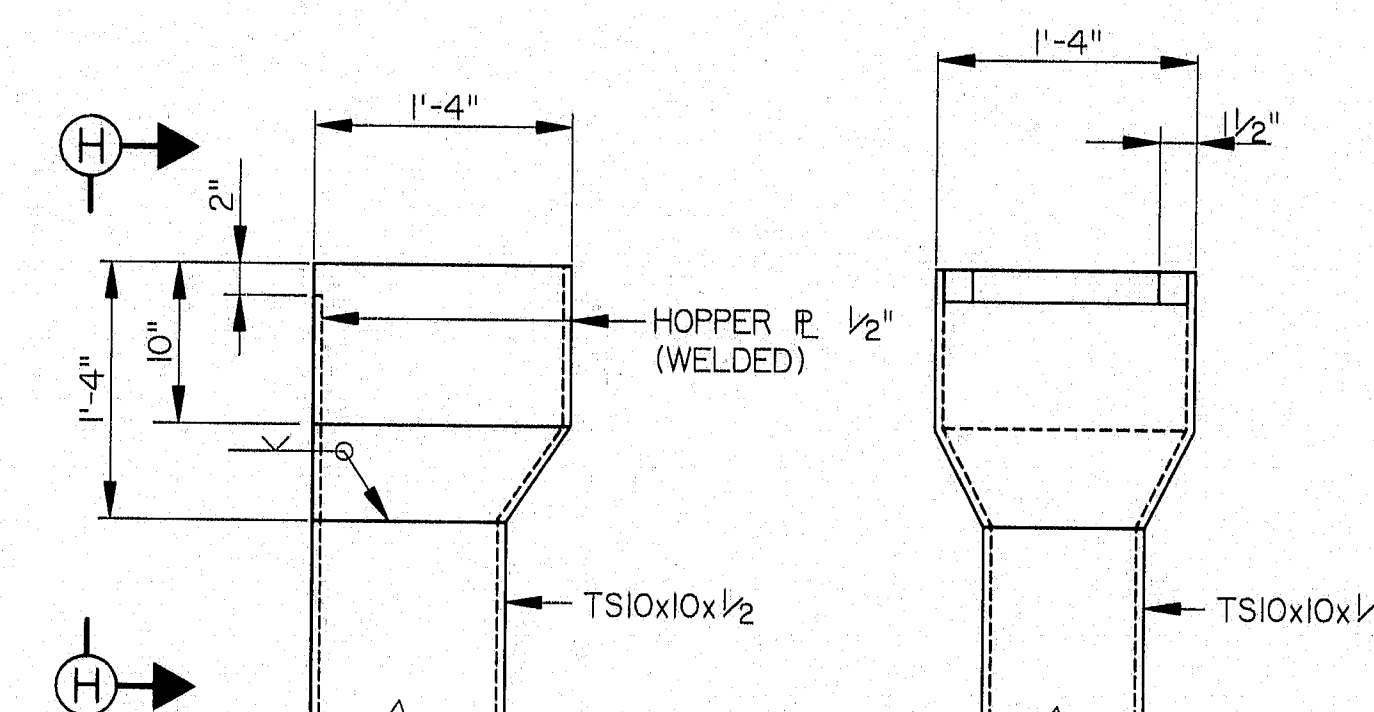
ABUTMENT I JOINT LAYOUT
(LOOKING UPSTATION)



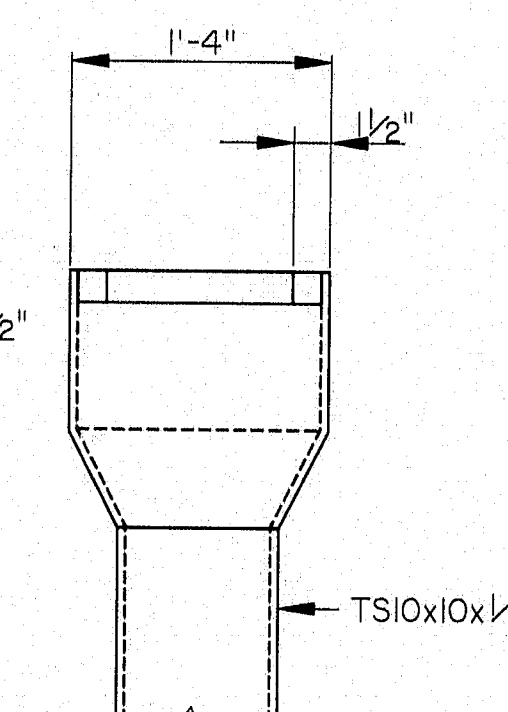
SECTION A-A



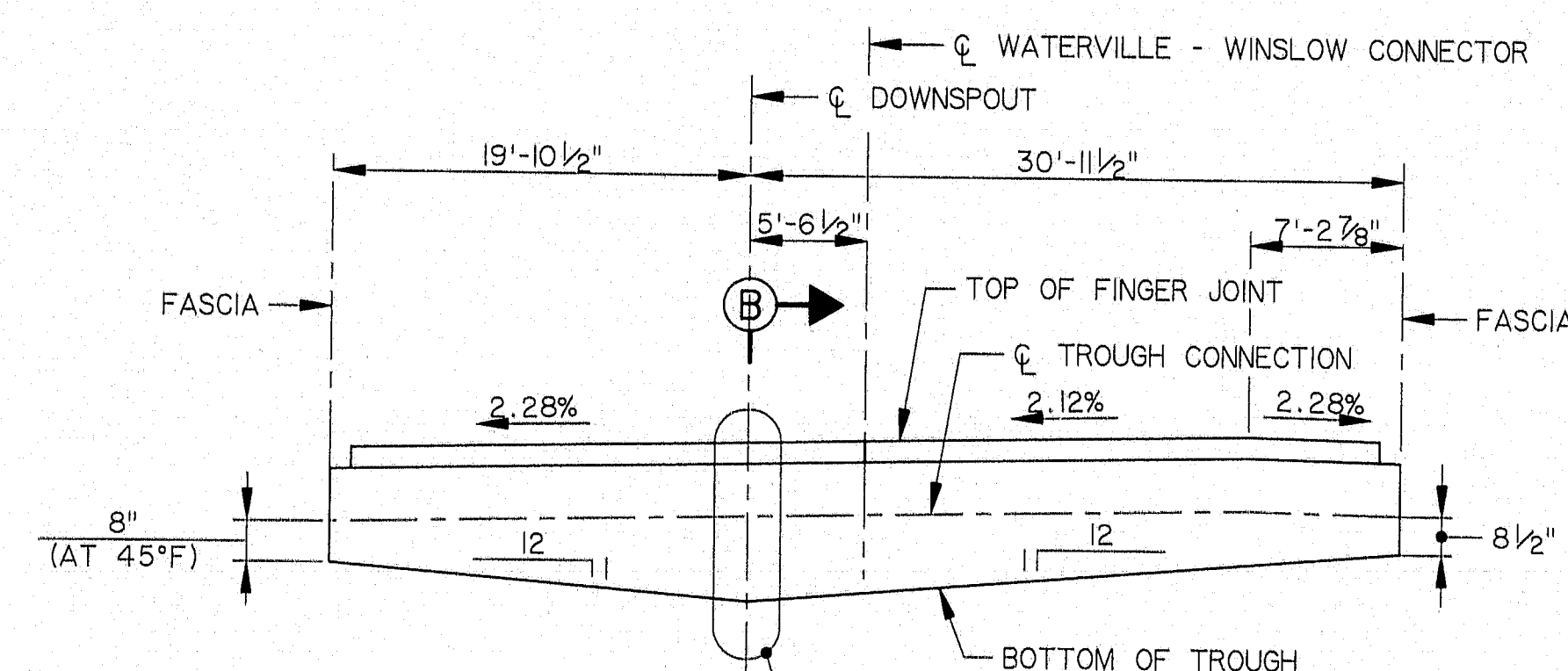
SECTION B-B



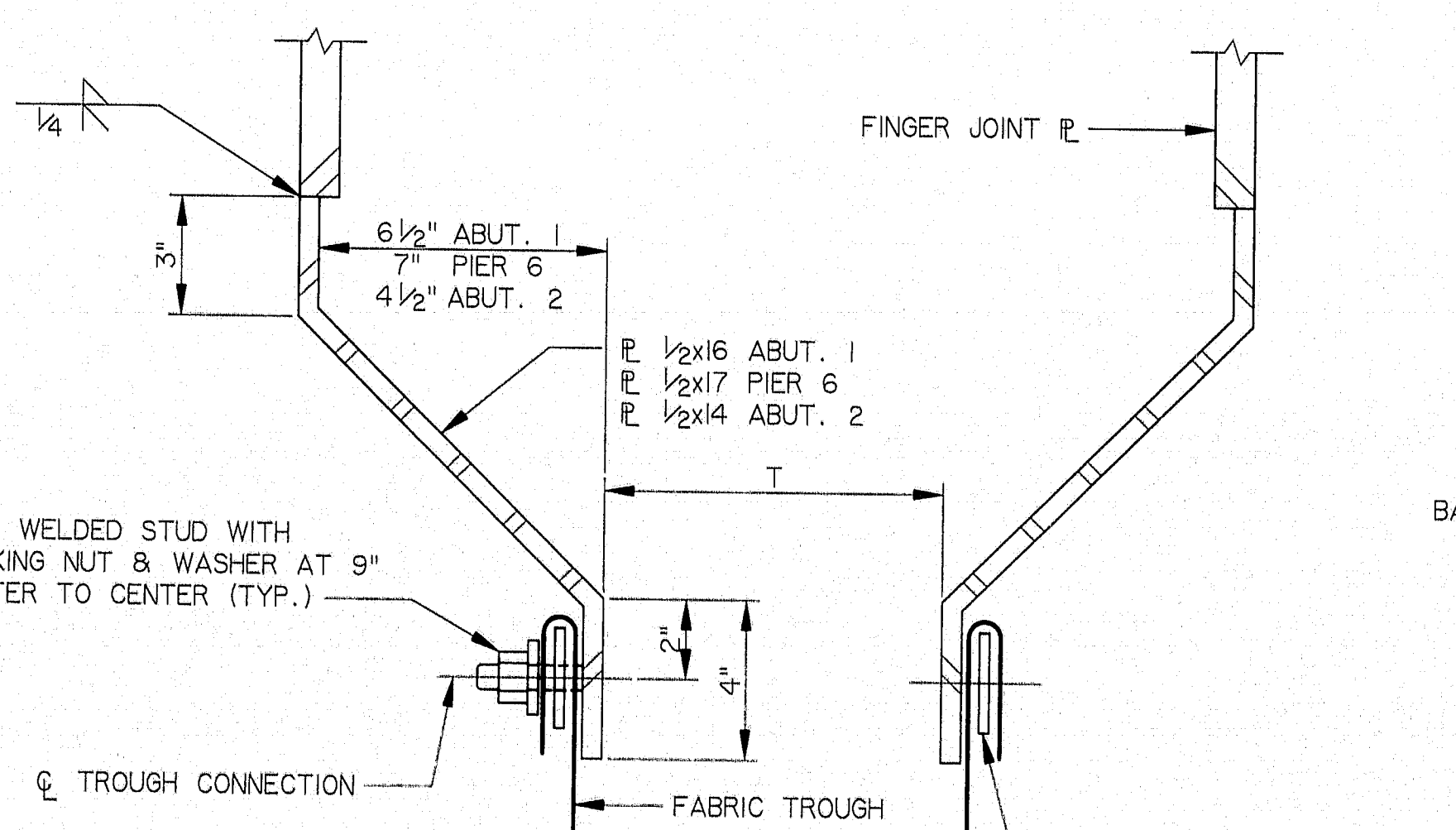
DETAIL B



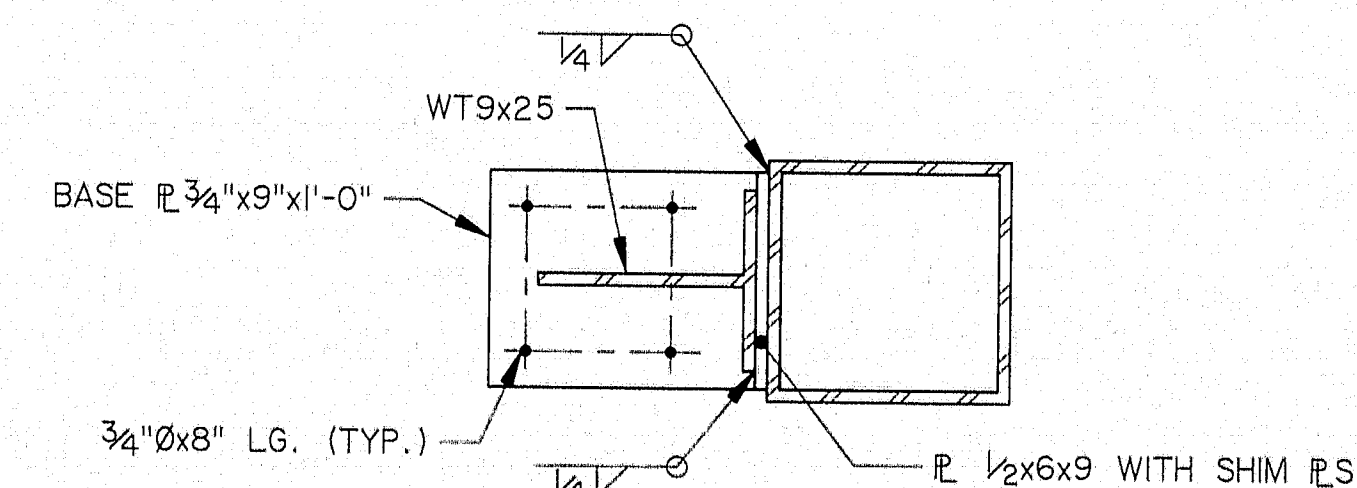
VIEW H-H



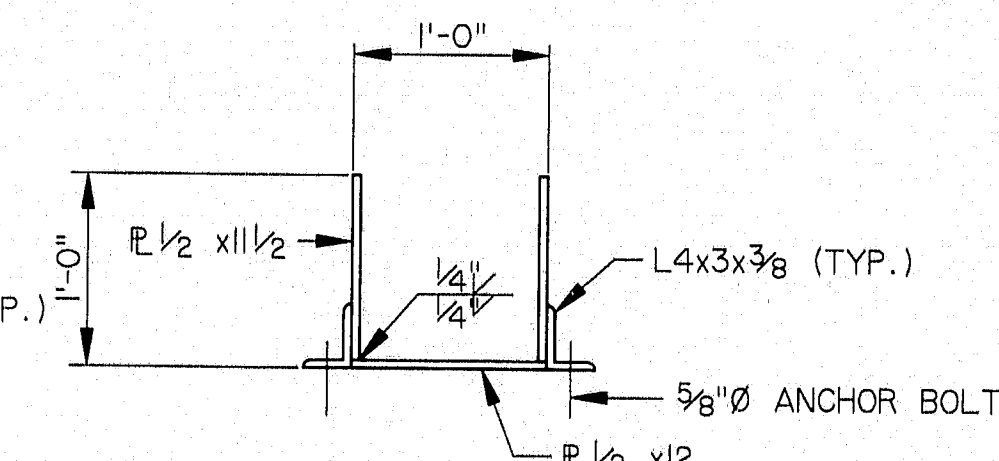
PIER 6 - JOINT LAYOUT
(LOOKING UPSTATION)



DETAIL C



SECTION G-G

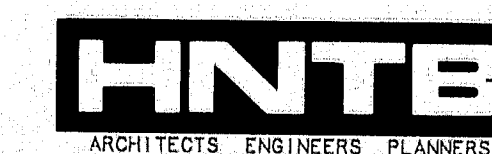


SECTION F-F

AS BUILT
12/13/96

					BY	DATE
				DESIGNED:	SM	9/94
				DRAWN:	RJT	9/94
				CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

	T @ 45°F (INCH)
ABUT. 1	8½
PIER 6	8½
ABUT. 2	7½



115-273

STEEL ALTERNATIVE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT

WATERVILLE - WINSLOW PROJECT

DONALD V. CARTER BRIDGE

DONALD W. CARTER BRIDOL
OVER

OVER
KENNERBEC RIVER

KENNEBEC RIVER

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

EXPANSION JOINT DETAILS

SHEET B78 OF B86 AUGUSTA, MAINE

REMOVABLE SLIDER R ASSEMBLY (R 3/4")

6"

CONCRETE BARRIER

BAR 2" x 3/4"

CONCRETE BARRIER END

R 1/2" x 6"

6 1/2" Ø S.S. HEX CAP SCREWS

1" CL.

BACKWALL

SUPERSTRUCTURE

1/2" - 13 U.N.C. x 1/2 S.S.
 HEX. CAP. SCREWS W/STD. NUTS.
 WELD NUTS TO UNDERSIDE OF 1/2" PLATE.
 COUNTERBORE 3/4" PLATE 1/2" x 3/8" DEEP

6"

3"

3 EQUAL SPACES

3"

1/2" STUD (TYP.)

1/2"

SEE DETAIL "E"

SLOPE

BAR 2"x3/4" BEVEL THICKNESS AS REQUIRED

SLOPE

SHIM

1/2 LEVEL

TYP.

LOCATION	DIMENSION @ 45°	
	A (INCHES)	B (INCHES)
ABUT. #1	5 1/2"	5 1/2"
PIER #6	5 1/2"	5 1/2"
ABUT. #2	4"	4"

					BY	DATE
				DESIGNED:	SM	9/94
				DRAWN:	RJT	9/94
				CHECKED:	DWR	9/94
NO.	REVISION	BY	DATE	IN CHARGE OF	CJM	

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

SHEET B79 OF B86 AUGUSTA, MAINE



043 / WATSON STR. QUARTER STEEL / 020302 / 043 / 020302

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 1 - STRAIGHT BARS														
IP620	6	10	44-0	STR										CAP - SIDE FACE
IP621	6	2	44-0	STR										CAP - SIDE FACE
IP622	6	2	38-6	STR										CAP - SIDE FACE
IP623	6	2	33-0	STR										CAP - SIDE FACE
IP624	6	2	27-6	STR										CAP - SIDE FACE
IP625	6	2	22-0	STR										CAP - SIDE FACE
IP650	6	54	4-0	STR										PEDESTAL/FOOTING DOWEL
IP651	6	54	8-8	STR										PEDESTAL - FACE
IP801	8	28	14-6	STR										FOOTING - SHORT WAY T.
IP802	8	16	26-6	STR										FOOTING - LONG WAY T.
IP826	8	20	17-0	STR										CAP
IP903	9	42	49-0	STR										SHAFT
IP904	9	42	40-0	STR										SHAFT
PIER NO. 1 - BENT BARS														
IP401	4	58	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
IP402	4	116	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
IP403	4	406	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
IP404	4	58	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
IP601	6	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
IP602	6	220	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
IP603	6	770	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
IP604	6	110	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
IP605	6	220	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
IP606	6	110	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
IP607	6	110	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
IP627	6	8	9-8	101	5 - 4	2 - 2								SHAFT - TRANSVERSE TIE
IP628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - BOTTOM FACE
IP629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - END FACE
IP630	6	8	9-0	118	5 - 0	4 - 0								CAP - BOTTOM FACE
IP631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
IP632	6	38	19-0	101	5 - 6	6 - 9								CAP - END FACE
IP633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
IP634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
IP635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
IP636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
IP637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
IP638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
IP640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
IP641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
IP652	6	54	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
IP653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (IP653) INC(A=C+0-1, B=0-1 1/2, D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
IP661					MAX: (A=9-0, B=12-1, C=9-0, D=3-10) (IP661) D=0-0 1/2									
IP803	8	32	17-2	129	14 - 6									FOOTING - SHORT WAY B.
IP804	8	17	29-2	129	26 - 6									FOOTING - LONG WAY B.
IP901	9	42	9-4	118	7 - 9	1 - 7								SHAFT/FOOTING - DOWELS
IP902	9	42	18-4	118	16 - 9	1 - 7								SHAFT/FOOTING - DOWELS
IP1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
IP1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

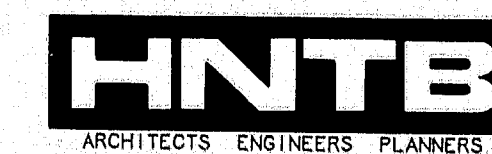
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 2 - STRAIGHT BARS														
2P620	6	10	44-0	STR										CAP - SIDE FACE
2P621	6	2	44-0	STR										CAP - SIDE FACE
2P622	6	2	38-6	STR										CAP - SIDE FACE
2P623	6	2	33-0	STR										CAP - SIDE FACE
2P624	6	2	27-6	STR										CAP - SIDE FACE
2P625	6	2	22-0	STR										CAP - SIDE FACE
2P650	6	64	4-0	STR										PEDESTAL/FOOTING DOWEL
2P651	6	128	20-9	STR										PEDESTAL - FACE
2P801	8	39	17-6	STR										FOOTING - SHORT WAY TOP
2P802	8	19	37-6	STR										FOOTING - LONG WAY TOP
2P826	8	20	17-0	STR										CAP
2P903	9	42	37-10	STR										SHAFT - UPPER
2P904	9	42	43-1	STR										SHAFT - UPPER
2P1104	11	42	41-0	STR										SHAFT - LOWER
2P1105	11	42	43-3	STR										SHAFT - LOWER
PIER NO. 2 - BENT BARS														
2P401	4	110	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
2P402	4	220	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
2P403	4	770	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
2P404	4	110	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
2P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
2P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
2P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
2P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
2P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
2P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
2P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
2P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
2P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
2P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
2P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
2P631	6	8	9-0	119	5 - 0	4 - 0	1 - 7							CAP - END FACE
2P632	6	38	19-0	101	5 - 6	6 - 9								CAP - END FACE
2P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
2P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
2P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
2P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
2P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
2P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
2P640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
2P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
2P652	6	64	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
2P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (2P653) INC(A=C+0-1, B=0-1 1/2, D=0-0 1/2)									PEDESTAL - OUTSIDE TIES
2P691					MAX: (A=11-6, B=16-0, C=11-6, D=5-1) (2P691) D=0-0 1/2									
2P901	9	44	20-8	129	17 - 6									FOOTING - SHORT WAY BOT.
2P902	9	20	40-8	129	37 - 6									FOOTING - LONG WAY BOT.
2P1101	11	42	20-6	118	18 - 6	2 - 0								SHAFT/FOOTING - DOWELS
2P1102	11	42	13-0	118	11 - 0	2 - 0								SHAFT/FOOTING - DOWELS
2P1103	11	30	31-6	118	29 - 6	2 - 0								SHAFT/FOOTING - DOWELS
2P1120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
2P1121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

F.H.K.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	91	103

NO.	REVISION	BY	DATE	IN CHARGE OF	CJM
		DESIGNED: DWR	9/94		
		DRAWN: RJT	9/94		
		CHECKED: SM	9/94		

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.



As BUILT
C600
12/16/16

115-277

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B82 OF B86 AUGUSTA, MAINE

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN		
PIER NO. 4 - STRAIGHT BARS														
4P620	6	10	44-0	STR										CAP - SIDE FACE
4P621	6	2	44-0	STR										CAP - SIDE FACE
4P622	6	2	38-6	STR										CAP - SIDE FACE
4P623	6	2	33-0	STR										CAP - SIDE FACE
4P624	6	2	27-6	STR										CAP - SIDE FACE
4P625	6	2	22-0	STR										CAP - SIDE FACE
4P650	6	62	4-0	STR										PEDESTAL/FOOTING DOWEL
4P651	6	124	17-9	STR										PEDESTAL - FACE
4P801	8	37	19-6	STR										FOOTING - SHORT WAY TOP
4P802	8	21	35-6	STR										FOOTING - LONG WAY TOP
4P826	8	20	17-0	STR										CAP
4P901	9	42	45-2	STR										SHAFT - UPPER
4P902	9	42	50-5	STR										SHAFT - UPPER
4PI001	10	48	19-6	STR										FOOTING - SHORT WAY B.
4PI002	10	27	35-6	STR										FOOTING - LONG WAY B.
4PI101	11	52	6-8	STR										FOOTING/SEAL - DOWEL
4PI105	11	42	35-0	STR										SHAFT - LOWER
4PI106	11	42	37-3	STR										SHAFT - LOWER
PIER NO. 4 - BENT BARS														
4P401	4	110	24-11	117	8 - 8	7 - 7		8 - 8	2 - 5					SHAFT - OUTSIDE TIE
4P402	4	220	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
4P403	4	770	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
4P404	4	110	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
4P601	6	150	24-11	117	8 - 8	7 - 7		8 - 8	2 - 5					SHAFT - OUTSIDE TIE
4P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
4P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
4P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
4P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
4P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
4P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
4P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
4P628	6	12	12-9	117	2 - 2	8 - 5		2 - 2	2 - 8					CAP - END FACE
4P629	6	16	14-2	119	12 - 0	2 - 2		2 - 0						CAP - BOTTOM FACE
4P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
4P631	6	8	9-0	119	5 - 0	4 - 0		1 - 7						CAP - END FACE
4P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
4P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
4P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
4P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
4P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
4P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
4P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
4P640	6	33	8-6	101	5 - 6	1 - 6								CAP - PAD
4P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
4P642	6	12	14-6	118	13 - 0	1 - 6								CAP - PAD
4P652	6	62	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
4P653 TO	6	2 EA	VARIES	117	MIN: (A=B-4, B=11-0, C=B-4, D=3-6) (4P653) INC(A=C+0-1, B=0-1 1/2									PEDESTAL - OUTSIDE TIES
4P685					MAX: (A=11-0, B=15-2, C=11-0, D=4-10) (4P685) D=0-0 1/2)									
4PI103	11	42	19-6	118	17 - 6	2 - 0								SHAFT/FOOTING - DOWELS
4PI104	11	42	12-0	118	10 - 0	2 - 0								SHAFT/FOOTING - DOWELS
4PI107	11	58	45-0	118	43 - 0	2 - 0								SHAFT/FOOTING
4PI120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
4PI121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

I. FOR BENDING BARS DETAILS, SEE SHEET B80.

HNTB

SHEET B83 OF B86 AUGUSTA, MAINE

115-278

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

PLAN (WATERVILLE) (STEEL) (00000) (00000) (00000)

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 5 - STRAIGHT BARS														
5P620	6	10	44-0	STR										CAP - SIDE FACE
5P621	6	2	44-0	STR										CAP - SIDE FACE
5P622	6	2	38-6	STR										CAP - SIDE FACE
5P623	6	2	33-0	STR										CAP - SIDE FACE
5P624	6	2	27-6	STR										CAP - SIDE FACE
5P625	6	2	22-0	STR										CAP - SIDE FACE
5P650	6	64	4-0	STR										PEDESTAL/FOOTING DOWEL
5P651	6	128	20-9	STR										PEDESTAL - FACE
5P801	8	37	17-6	STR										FOOTING - SHORT WAY TOP
5P802	8	19	35-6	STR										FOOTING - LONG WAY TOP
5P826	8	20	17-0	STR										CAP
5P901	9	37	17-6	STR										FOOTING - SHORT WAY BOT.
5P902	9	19	35-6	STR										FOOTING - LONG WAY BOT.
5P903	9	42	47-9	STR										SHAFT - UPPER
5P904	9	42	53-0	STR										SHAFT - UPPER
5P101	11	50	6-8	STR										FOOTING/SEAL - DOWEL
5P104	11	42	41-0	STR										SHAFT - LOWER
5P105	11	42	43-3	STR										SHAFT - LOWER
PIER NO. 5 - BENT BARS														
5P401	4	128	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
5P402	4	256	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
5P403	4	896	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
5P404	4	128	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
5P601	6	150	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
5P602	6	300	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
5P603	6	1050	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
5P604	6	150	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
5P605	6	300	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
5P606	6	150	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
5P607	6	150	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
5P627	6	8	9-8	101	5 - 4	2 - 2								CAP - BOTTOM FACE
5P628	6	12	12-9	117	2 - 2	8 - 5	2 - 2	2 - 8						CAP - END FACE
5P629	6	16	14-2	119	12 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
5P630	6	8	9-0	118	5 - 0	4 - 0								CAP - END FACE
5P631	6	8	9-0	119	5 - 0	4 - 0								CAP - END FACE
5P632	6	38	19-0	101	5 - 6	6 - 9								CAP - STIRRUPS
5P633	6	48	15-10	101	2 - 4	6 - 9								CAP - STIRRUPS
5P634	6	24	17-0	101	3 - 6	6 - 9								CAP - STIRRUPS
5P635	6	40	14-4	101	2 - 4	6 - 0								CAP - STIRRUPS
5P636	6	20	15-6	101	3 - 6	6 - 0								CAP - STIRRUPS
5P637	6	40	12-4	101	2 - 4	5 - 0								CAP - STIRRUPS
5P638	6	20	13-6	101	3 - 6	5 - 0								CAP - STIRRUPS
5P640	6	11	8-6	101	5 - 6	1 - 6								CAP - PAD
5P641	6	6	13-7	101	10 - 7	1 - 6								CAP - PAD
5P652	6	64	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
5P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (5P653) INC(A=C+0-1, B=0-1 1/2, D=0-0 1/2)									
5P691					MAX: (A=11-6, B=16-0, C=11-6, D=5-1) (5P691) D=0-0 1/2									
5P102	11	42	12-0	118	10 - 0	2 - 0								SHAFT/FOOTING - DOWELS
5P103	11	30	30-6	118	28 - 6	2 - 0								SHAFT/FOOTING - DOWELS
5P106	11	42	19-6	118	17 - 6	2 - 0								SHAFT/FOOTING - DOWELS
5P120	11	18	48-0	101	44 - 0	2 - 0								CAP - TOP
5P121	11	12	52-0	101	48 - 0	2 - 0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 6 - STRAIGHT BARS														
6P620	6	10	44-0	STR										CAP - SIDE FACE
6P621	6	2	44-0	STR										CAP - SIDE FACE
6P622	6	2	37-9	STR										CAP - SIDE FACE
6P623	6	2	31-6	STR										CAP - SIDE FACE
6P624	6	2	26-9	STR										CAP - SIDE FACE
6P625	6	2	22-0	STR										CAP - SIDE FACE
6P650	6	54	4-0	STR										PEDESTAL/FOOTING DOWEL
6P651	6	54	11-8	STR										PEDESTAL - FACE
6P801	8	29	14-6	STR										FOOTING - SHORT WAY TOP
6P802	8	16	27-6	STR										FOOTING - LONG WAY TOP
6P826	8	20	17-0	STR										CAP
6P904	9	42	21-6	STR										SHAFT - LOWER
6P905	9	42	56-1	STR										SHAFT - UPPER
6P906	9	42	50-10	STR										SHAFT - UPPER
PIER NO. 6 - BENT BARS														
6P401	4	72	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
6P402	4	144	11-3	108	10 - 9									SHAFT - LONGITUDINAL TIE
6P403	4	504	5-11	126	4 - 10									SHAFT - TRANSVERSE TIE
6P404	4	72	4-3	108	3 - 9									SHAFT - TRANSVERSE TIE
6P601	6	168	24-11	117	8 - 8	7 - 7	8 - 8	2 - 5						SHAFT - OUTSIDE TIE
6P602	6	336	11-8	108	10 - 9									SHAFT - LONGITUDINAL TIE
6P603	6	1176	6-8	126	4 - 10									SHAFT - TRANSVERSE TIE
6P604	6	168	4-8	108	3 - 9									SHAFT - TRANSVERSE TIE
6P605	6	336	9-9	108	8 - 10									SHAFT - LONGITUDINAL TIE
6P606	6	168	5-0	110	3 - 2									SHAFT - TRANSVERSE TIE
6P607	6	168	6-4	110	4 - 6									SHAFT - TRANSVERSE TIE
6P627	6	4	12-2	101	7 - 10	2 - 2								CAP - BOTTOM FACE
6P628	6	28	9-2	128	2 - 6	4 - 2	2 - 6	2 - 8						CAP - END FACE
6P629	6	20	9-2	119	7 - 0	2 - 2	2 - 0							CAP - BOTTOM FACE
6P630	6	12	10-0	118	5 - 0	5 - 0								CAP - END FACE
6P631	6	12	14-0	119	10 - 0	4 - 0	1 - 7							CAP - END FACE
6P632	6	19	27-6	101	8 - 0	9 - 9								CAP - STIRRUPS
6P633	6	46	8-8	105	2 - 6	2 - 2	1 - 3	4 - 0						CAP - STIRRUPS
6P634	6	4	8-4	105	2 - 6	1 - 2	0 - 8	4 - 8						CAP - STIRRUPS
6P635	6	72	17-0	101	5 - 4	5 - 10								CAP - STIRRUPS
6P636	6	48	15-6	101	5 - 4	5 - 1								CAP - STIRRUPS
6P640	6	24	11-0	101	8 - 0	1 - 6								CAP - PAD
6P641	6	24	8-7	101	5 - 7	1 - 6								CAP - PAD
6P642	6	16	4-2	118	2 - 8	1 - 6								CAP - PAD
6P643	6	2	10-0	101	7-0	1 - 6								CAP - PAD
6P644	6	2	8-9	101	5-9	1 - 6								CAP - PAD
6P652	6	54	4-4	118	2 - 10	1 - 6								PEDESTAL - TOP
6P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (6P653) INC(A=C+0-1, B=0-1 1/2, D=0-0 1/2)									
6P664					MAX: (A=9-3, B=12-5, C=9-3, D=3-11 1/2) (6P664) D=0-0 1/2									
6P803	8	17	30-2	129	27 - 6									FOOTING - LONG WAY BOT.
6P901	9	27	17-8	129	14 - 6									FOOTING - SHORT WAY BOT.
6P902	9	42	9-4	118	7-9	1 - 7								SHAFT/FOOTING - DOWELS
6P903	9	42	21-4	118	19 - 9	1 - 7								SHAFT/FOOTING - DOWELS
6P1120	11	12	48-0	101	44 - 0	2 - 0								CAP - TOP
6P1121	11	10	52-0	101	48 - 0	2 - 0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009(002)	93	103

As built
12/3/96

115-279

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B84 OF B86 AUGUSTA, MAINE

NO.	REVISION	BY	DATE	IN CHARGE	CJM
		DESIGNED: DWR	9/94		
		DRAWN: RJT	9/94		
		CHECKED: SM	9/94		

041 (REINFORCING SCHEDULE) 02/04 (02/04) 02/04

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 7 - STRAIGHT BARS														
7P620	6	10	44-0	STR										CAP - SIDE FACE
7P621	6	2	44-0	STR										CAP - SIDE FACE
7P622	6	2	38-6	STR										CAP - SIDE FACE
7P623	6	2	33-0	STR										CAP - SIDE FACE
7P624	6	2	27-6	STR										CAP - SIDE FACE
7P625	6	2	22-0	STR										CAP - SIDE FACE
7P650	6	56	4-0	STR										PEDESTAL/FOOTING DOWEL
7P651	6	56	14-10	STR										PEDESTAL - FACE
7P801	8	34	20-6	STR										FOOTING - SHORT WAY TOP
7P802	8	22	32-6	STR										FOOTING - LONG WAY TOP
7P826	8	20	17-0	STR										CAP
7P902	9	42	58-3	STR										SHAFT - UPPER
7P903	9	42	53-0	STR										SHAFT - UPPER
7P105	11	42	24-6	STR										SHAFT - LOWER
PIER NO. 7 - BENT BARS														
7P401	4	92	24-11	117	8-8	7-7	8-8	2-5						SHAFT - OUTSIDE TIE
7P402	4	184	11-3	108	10-9									SHAFT - LONGITUDINAL TIE
7P403	4	644	5-11	126	4-10									SHAFT - TRANSVERSE TIE
7P404	4	92	4-3	108	3-9									SHAFT - TRANSVERSE TIE
7P601	6	150	24-11	117	8-8	7-7	8-8	2-5						SHAFT - OUTSIDE TIE
7P602	6	300	11-8	108	10-9									SHAFT - LONGITUDINAL TIE
7P603	6	1050	6-8	126	4-10									SHAFT - TRANSVERSE TIE
7P604	6	150	4-8	108	3-9									SHAFT - TRANSVERSE TIE
7P605	6	300	9-9	108	8-10									SHAFT - LONGITUDINAL TIE
7P606	6	150	5-0	110	3-2									SHAFT - TRANSVERSE TIE
7P607	6	150	6-4	110	4-6									SHAFT - TRANSVERSE TIE
7P627	6	8	9-8	101	5-4	2-2								CAP - BOTTOM FACE
7P628	6	12	12-9	117	2-2	8-5	2-2	2-8						CAP - END FACE
7P629	6	16	14-2	119	12-0	2-2	2-0							CAP - BOTTOM FACE
7P630	6	8	10-0	118	5-0	5-0								CAP - END FACE
7P631	6	8	9-0	119	5-0	4-0	1-7							CAP - END FACE
7P632	6	38	20-0	101	5-6	7-3								CAP - STIRRUPS
7P633	6	48	16-10	101	2-4	7-3								CAP - STIRRUPS
7P634	6	24	18-0	101	3-6	7-3								CAP - STIRRUPS
7P635	6	40	15-4	101	2-4	6-6								CAP - STIRRUPS
7P636	6	20	16-6	101	3-6	6-6								CAP - STIRRUPS
7P637	6	40	13-4	101	2-4	5-6								CAP - STIRRUPS
7P638	6	20	14-6	101	3-6	5-6								CAP - STIRRUPS
7P640	6	39	8-6	101	5-6	1-6								CAP - PAD
7P642	6	12	14-6	118	13-0	1-6								CAP - PAD
7P643	6	1	7-3	101	4-3	1-6								CAP - PAD
7P644	6	1	6-0	101	3-0	1-6								CAP - PAD
7P645	6	6	17-6	118	16-0	1-6								CAP - PAD
7P652	6	56	4-4	118	2-10	1-6								PEDESTAL - TOP
7P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (7P653) INC(A=C+0-1, B=0-1 1/2) D=0-0 1/2									PEDESTAL - OUTSIDE TIES
7P667					MAX: (A=9-6, B=12-10, C=9-6, D=4-1) (7P667) D=0-0 1/2									
7P901	9	23	35-8	129	32-6									FOOTING - LONG WAY BOT.
7P1001	10	44	24-2	129	20-6									FOOTING - SHORT WAY BOT.
7P1002	11	30	28-0	118	26-0	2-0								SHAFT/FOOTING - DOWELS
7P1003	11	42	25-9	118	23-9	2-0								SHAFT/FOOTING - DOWELS
7P1004	11	42	13-0	118	11-0	2-0								SHAFT/FOOTING - DOWELS
7P1020	11	14	48-0	101	44-0	2-0								CAP - TOP
7P1021	11	10	52-0	101	48-0	2-0								CAP - TOP

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	R	REMARKS
					FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	FT IN	
PIER NO. 8 - STRAIGHT BARS														
8P620	6	10	44-0	STR										CAP - SIDE FACE
8P621	6	2	44-0	STR										CAP - SIDE FACE
8P622	6	2	38-6	STR										CAP - SIDE FACE
8P623	6	2	33-0	STR										CAP - SIDE FACE
8P624	6	2	27-6	STR										CAP - SIDE FACE
8P625	6	2	22-0	STR										CAP - SIDE FACE
8P650	6	56	4-0	STR										PEDESTAL/FOOTING DOWEL
8P651	6	56	14-10	STR										PEDESTAL - FACE
8P801	8	34	20-6	STR										FOOTING - SHORT WAY TOP
8P802	8	22	32-6	STR										FOOTING - LONG WAY TOP
8P826	8	20	17-0	STR										CAP
8P902	9	42	25-6	STR										SHAFT - UPPER
8P903	9	42	56-0	STR										SHAFT - UPPER
8P904	9	42	40-0	STR										SHAFT - UPPER
8P105	11	42	24-6	STR										SHAFT - LOWER
PIER NO. 8 - BENT BARS														
8P401	4	98	24-11	117	8-8	7-7	8-8	2-5						SHAFT - OUTSIDE TIE
8P402	4	196	11-3	108	10-9									SHAFT - LONGITUDINAL TIE
8P403	4	686	5-11	126	4-10									SHAFT - TRANSVERSE TIE
8P404	4	98	4-3	108	3-9									SHAFT - TRANSVERSE TIE
8P601	6	150	24-11	117	8-8	7-7	8-8	2-5						SHAFT - OUTSIDE TIE
8P602	6	300	11-8	108	10-9									SHAFT - LONGITUDINAL TIE
8P603	6	1050	6-8	126	4-10									SHAFT - TRANSVERSE TIE
8P604	6	150	4-8	108	3-9									SHAFT - TRANSVERSE TIE
8P605	6	300	9-9	108	8-10									SHAFT - LONGITUDINAL TIE
8P606	6	150	5-0	110	3-2									SHAFT - TRANSVERSE TIE
8P607	6	150	6-4	110	4-6									SHAFT - TRANSVERSE TIE
8P627	6	8	9-8	101	5-4	2-2								CAP - BOTTOM FACE
8P628	6	12	12-9	117	2-2	8-5	2-2	2-8						CAP - END FACE
8P629	6	16	14-2	119	12-0	2-2	2-0							CAP - BOTTOM FACE
8P630	6	8	10-0	118	5-0	5-0								CAP - END FACE
8P631	6	8	9-0	119	5-0	4-0	1-7							CAP - END FACE
8P632	6	38	20-0	101	5-6	7-3								CAP - STIRRUPS
8P633	6	48	16-10	101	2-4	7-3								CAP - STIRRUPS
8P634	6	24	18-0	101	3-6	7-3								CAP - STIRRUPS
8P635	6	40	15-4	101	2-4	6-6								CAP - STIRRUPS
8P636	6	20	16-6	101	3-6	6-6								CAP - STIRRUPS
8P637	6	40	13-4	101	2-4	5-6								CAP - STIRRUPS
8P638	6	20	14-6	101	3-6	5-6								CAP - STIRRUPS
8P640	6	39	8-6	101	5-6	1-6								CAP - PAD
8P642	6	12	14-6	118	13-0	1-6								CAP - PAD
8P643	6	1	7-3	101	4-3	1-6								CAP - PAD
8P644	6	1	6-0	101	3-0	1-6								CAP - PAD
8P645	6	6	17-6	118	16-0	1-6								CAP - PAD
8P652	6	56	4-4	118	2-10	1-6								PEDESTAL - TOP
8P653 TO	6	2 EA	VARIES	117	MIN: (A=8-4, B=11-0, C=8-4, D=3-6) (8P653) INC(A=C+0-1, B=0-1 1/2) D=0-0 1/2									PEDESTAL - OUTSIDE TIES
8P667					MAX: (A=9-6, B=12-10, C=9-6, D=4-1) (8P667) D=0-0 1/2									
8P901	9	23	35-8	129	32-6									FOOTING - LONG WAY BOT.
8P1001	10	44	24-2	129	20-6									FOOTING - SHORT WAY BOT.
8P1002	11	30	28-0	118	26-0	2-0								SHAFT/FOOTING - DOWELS
8P1003	11	42	25-9	118	23-9	2-0								SHAFT/FOOTING - DOWELS
8P1004	11	42	13-0	118	11-0	2-0								SHAFT/FOOTING - DOWELS
8P1020	11	12	48-0	101	44-0	2-0								CAP - TOP
8P1021	11	8	52-0	101	48-0	2-0								CAP - TOP

NOTE:

1. FOR BENDING BARS DETAILS, SEE SHEET B80.



F.A.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	0009 (002)	94	103

115-280

STEEL ALTERNATIVE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
WATERVILLE - WINSLOW PROJECT
DONALD V. CARTER BRIDGE
OVER
KENNEBEC RIVER

REINFORCING SCHEDULE

SHEET B85 OF 886 AUGUSTA, MAINE

NO.	REVISION	BY	DATE
		DESIGNED: DWR	9/94
		DRAWN: RJT	9/94
		CHECKED: SM	9/94
		IN CHARGE OF: CUM	

