

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



BANGOR
PENOBSCOT COUNTY
INTERSTATE 95
OVER
MCRR AND PERRY ROAD,
INDUSTRIAL SPUR,
KENDUSKEAG AVENUE,
BROADWAY AND
STILLWATER AVENUE
AND
JOSHUA CHAMBERLAIN BRIDGE
OVER
PENOBSCOT RIVER

PROJECT NO. IM-1292(600)E AND IM-1294(200)E
BRIDGE RESURFACING, JOINT REPAIR
AND CONCRETE REHABILITATION
BRIDGE NOS. 5972, 1429, 5795, 1428, 5800,
1427, 5312, 5798 AND 5789

SPECIFICATIONS

Design: AASHTO LRFD Bridge Design Specifications, Third Edition
2004 and Interim Specifications through 2006.

DESIGN LOADING

Live Load HL - 93 Modified

MATERIALS

Concrete (Unless noted otherwise).....Class "A"
Concrete (Curbs, Sidewalks & Transition Barriers).....Class "LP"
Reinforcing Steel.....ASTM A615/A615M, Grade 60
Structural Steel:
All Material (except as noted).....ASTM A709/A709M, Grade 50W
High Strength Bolts.....ASTM A325, Type 3

BASIC DESIGN STRESSES

Concrete.....f 'c = 4,350 psi
Reinforcing Steel.....f y = 60,000 psi
Structural Steel:
ASTM A 709/A 709M, Grade 50W.....F y = 50,000 psi
ASTM A 709/A 709M, Grade 36.....F y = 36,000 psi
ASTM A 325.....F μ = 120,000 psi

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SCOPE OF WORK

MCRR and Perry Road - Replace wearing surface with Rosphalt,
replace joints and repair deck

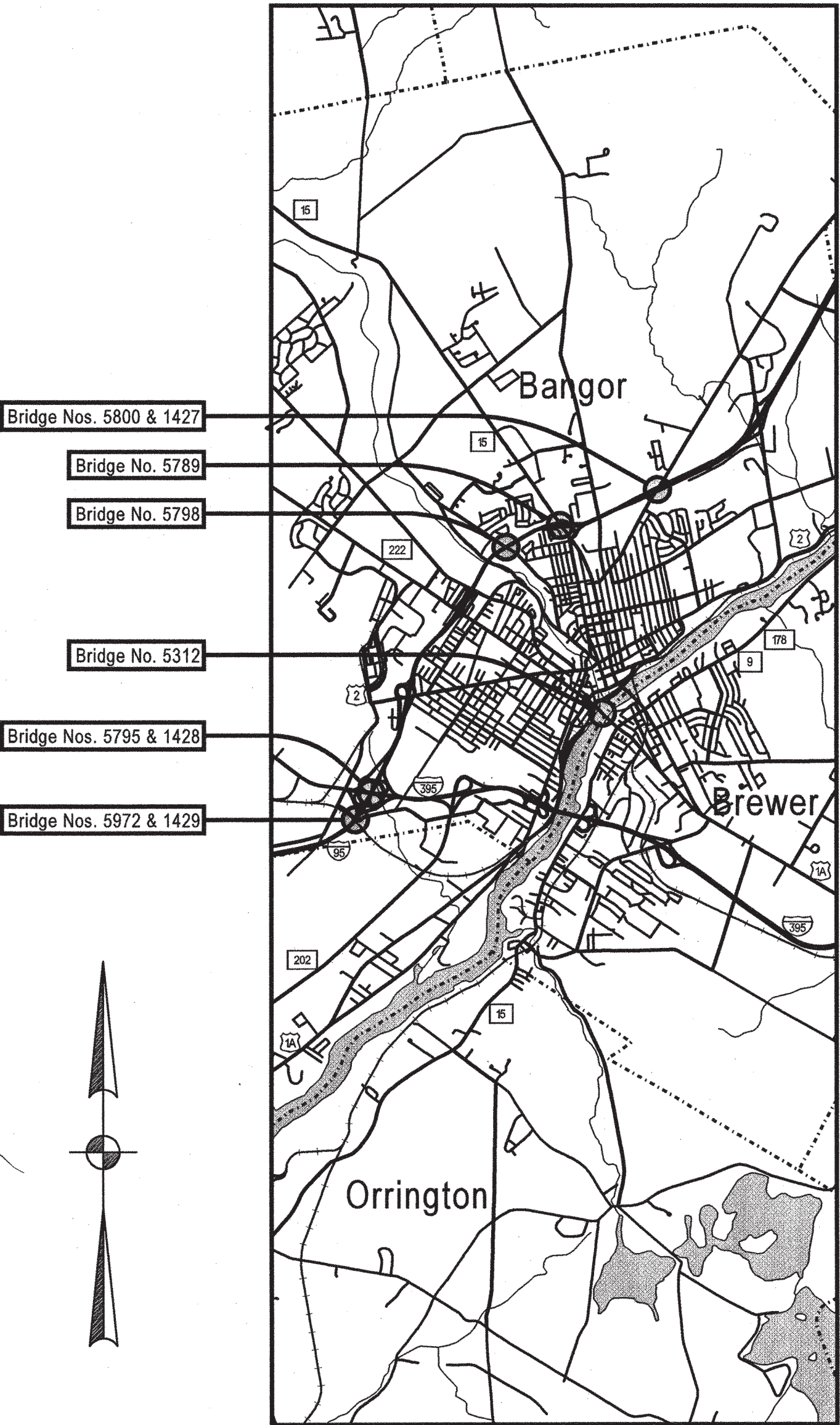
Industrial Spur - Replace wearing surface with Rosphalt, replace
joints and repair deck

Kenduskeag Avenue - Pier rehabilitation

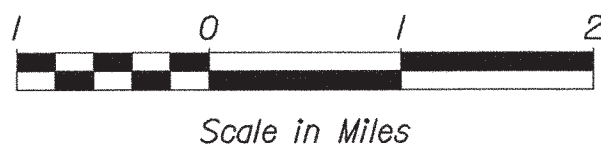
Broadway - Replace wearing surface with Rosphalt, replace joints,
repair deck, and repair backwall and breastwall on
abutments

Stillwater Avenue - Replace wearing surface with Rosphalt and
repair deck

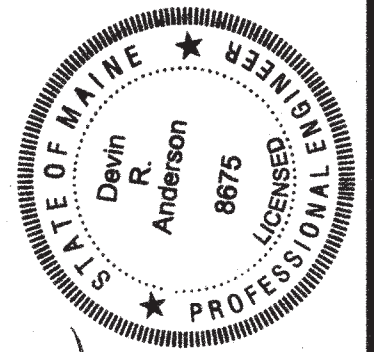
Joshua Chamberlain Bridge - Replace wearing surface with Rosphalt
and repair deck



LOCATION MAP



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER	7/24/07
	CHIEF ENGINEER	07/24/07



Signature: Devin R. Anderson
P.E. NUMBER: 8875
DATE: 7/23/07

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	D. ANDERSON
DESIGNER	M. A. OBAL / J. SHAW
CONSULTANT	J. KETCHUM
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

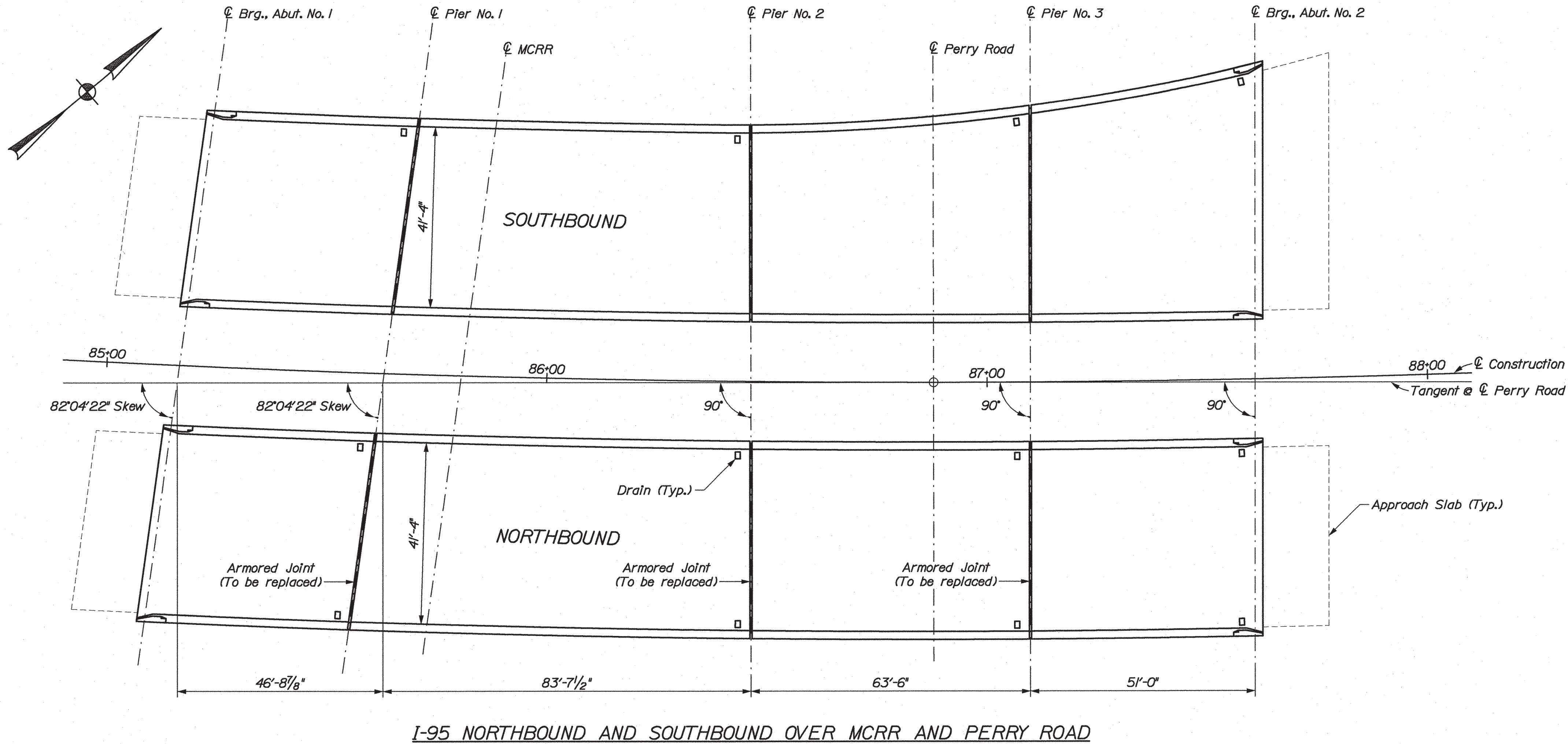
BANGOR
INTERSTATE 95 AND
J. CHAMBERLAIN BRIDGE
TITLE SHEET

SHEET NUMBER

1

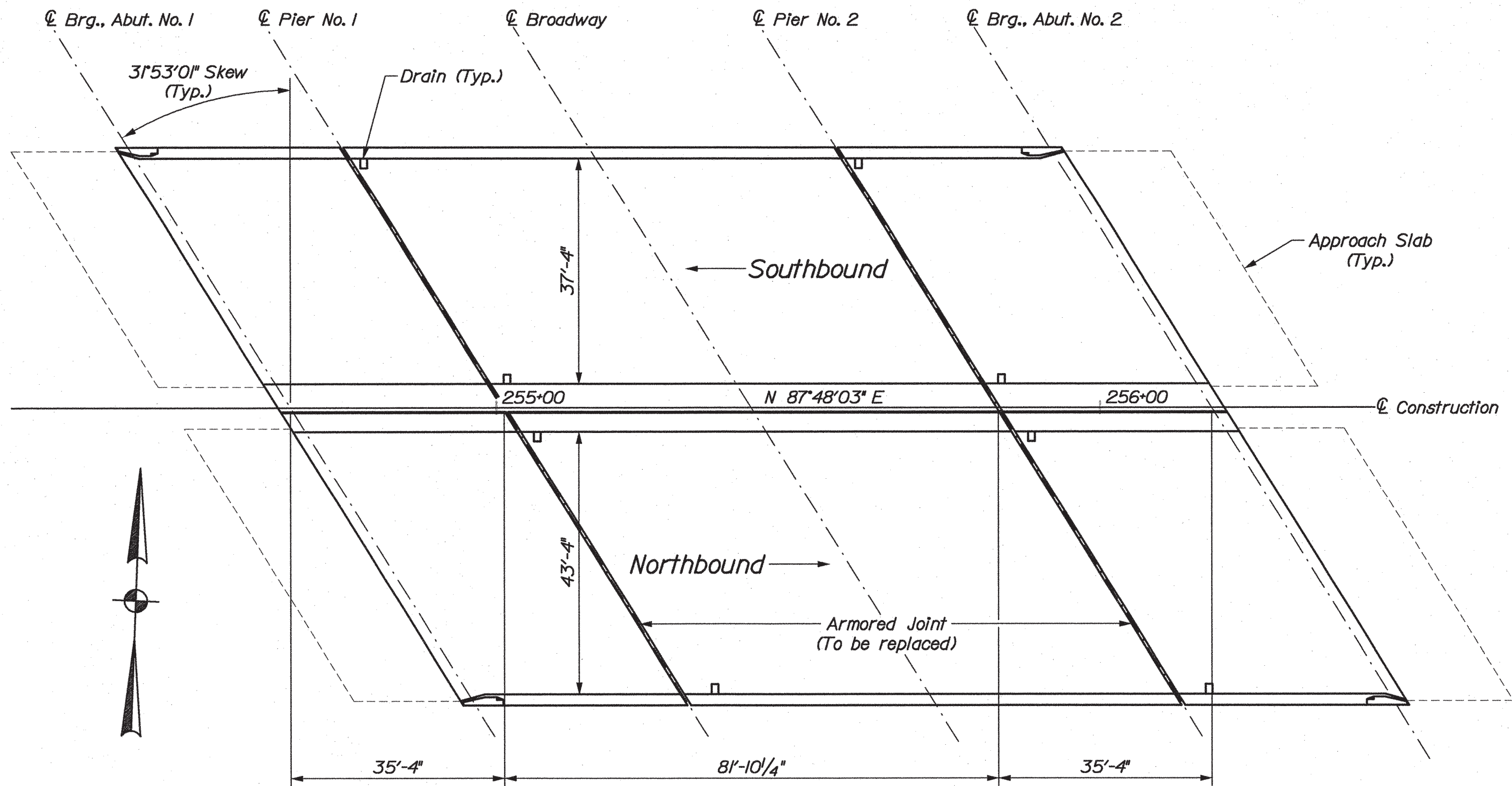
OF 9

PROJ. MANAGER	D. Anderson	BY	DATE
DESIGN-DETAILED	M. A. Iqbal	D. Shaw	Jan. 2007
CHECKED-REVIEWED			
DESIGN-DETAILED2			
DESIGN-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

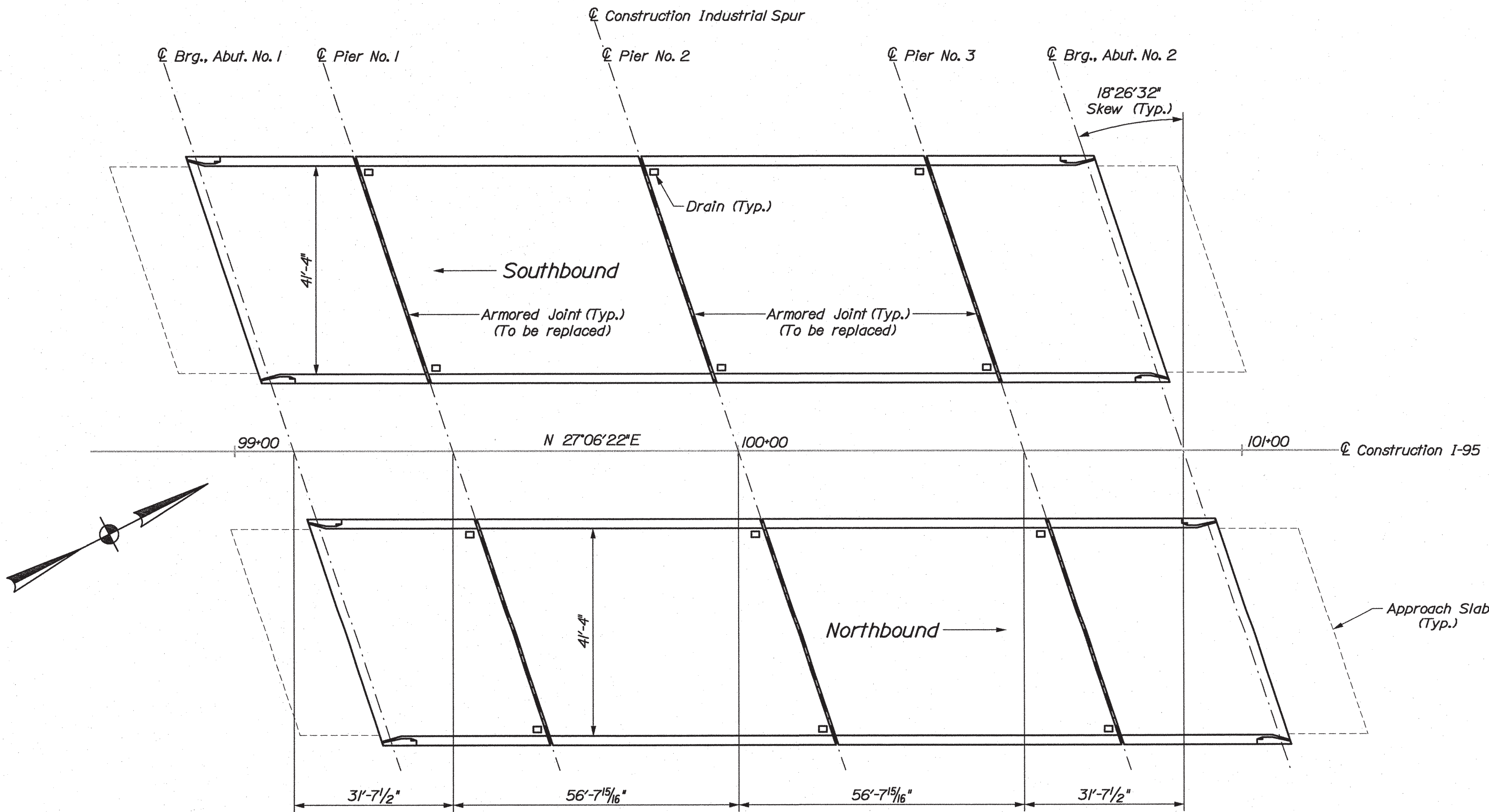


INTERSTATE 95 NORTH AND SOUTHBOUND OVER MCRR AND PERRY ROAD BANGOR PENOBSCOT COUNTY	SHEET NUMBER		STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-1292(600)E & IM-1294(200)E BRIDGE NO. 5972 BRIDGE NO. 1429	
	3 OF 9	GENERAL PLAN	PIN 12926.00 & 12942.00	
			BRIDGE PLANS	

PROJ. MANAGER	D. Anderson	BY	D. Shaw	DATE	Jun. 2007
DESIGN-DETAILED	M. A. Ibbot			SIGNATURE	
CHECKED-REVIEWED				P.E. NUMBER	
DESIGN2-DETAILED2				DATE	
DESIGN3-DETAILED3					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					



I-95 NORTHBOUND AND SOUTHBOUND OVER BROADWAY



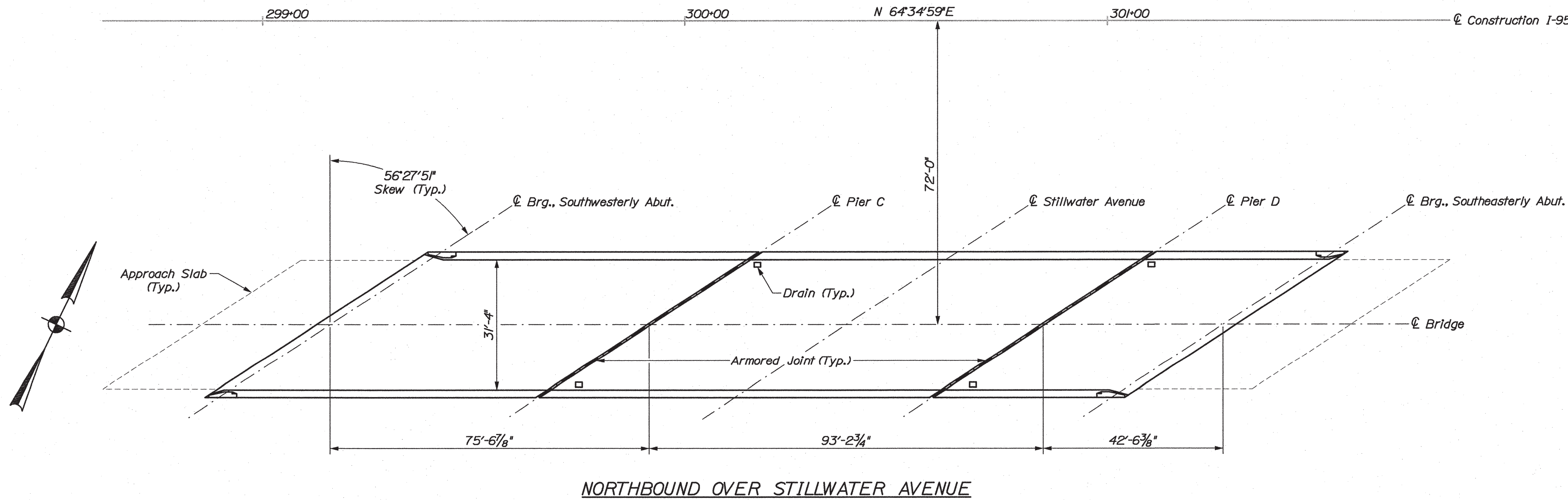
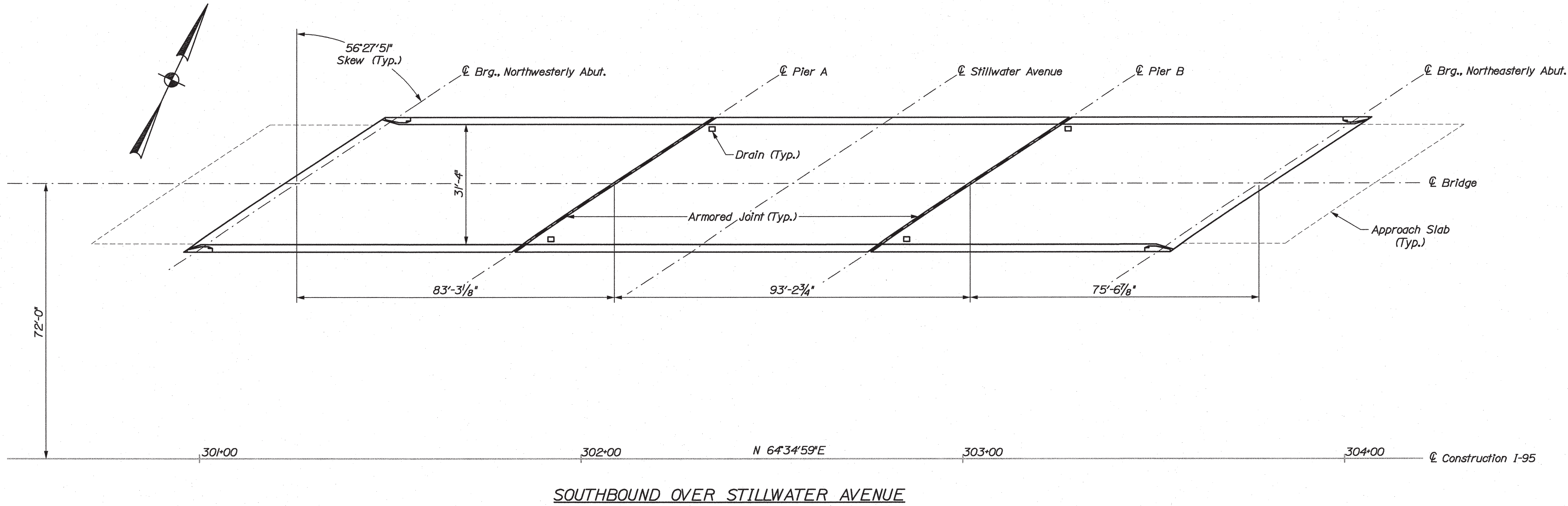
I-95 NORTHBOUND AND SOUTHBOUND OVER INDUSTRIAL SPUR

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
IM-1292(600)E & IM-1294(200)E	
BRIDGE NO. 5789	PIN
BRIDGE NO. 1428	12926.00 & 12942.00
BRIDGE NO. 5795	BRIDGE PLANS

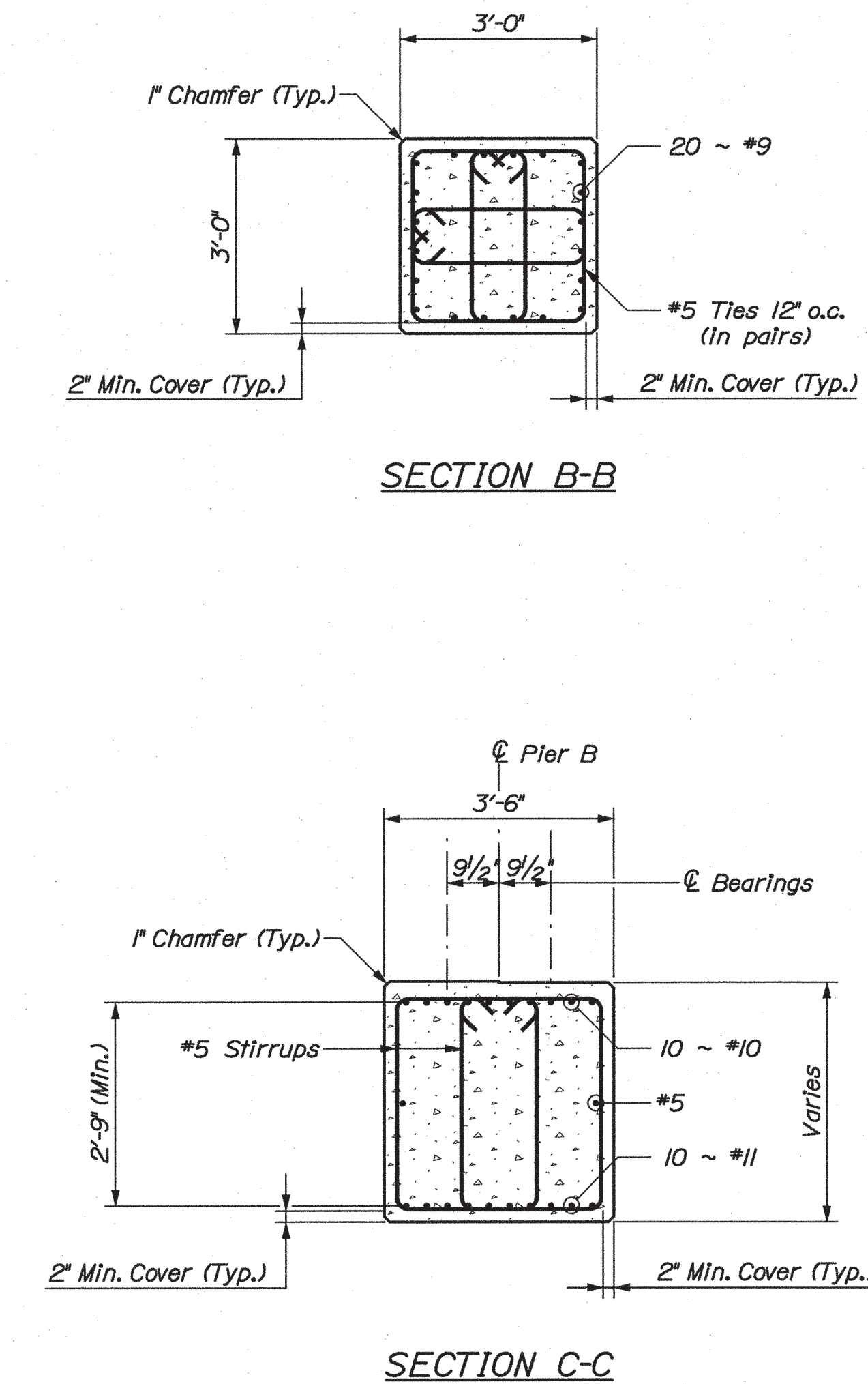
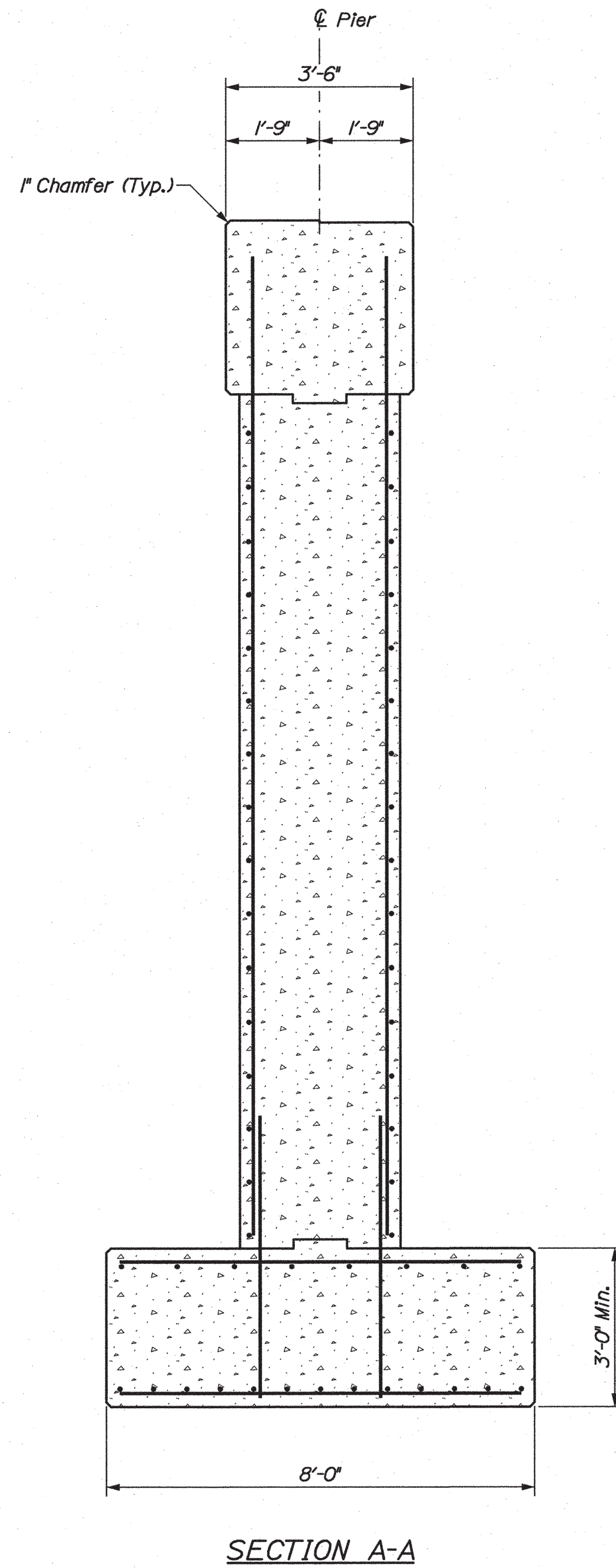
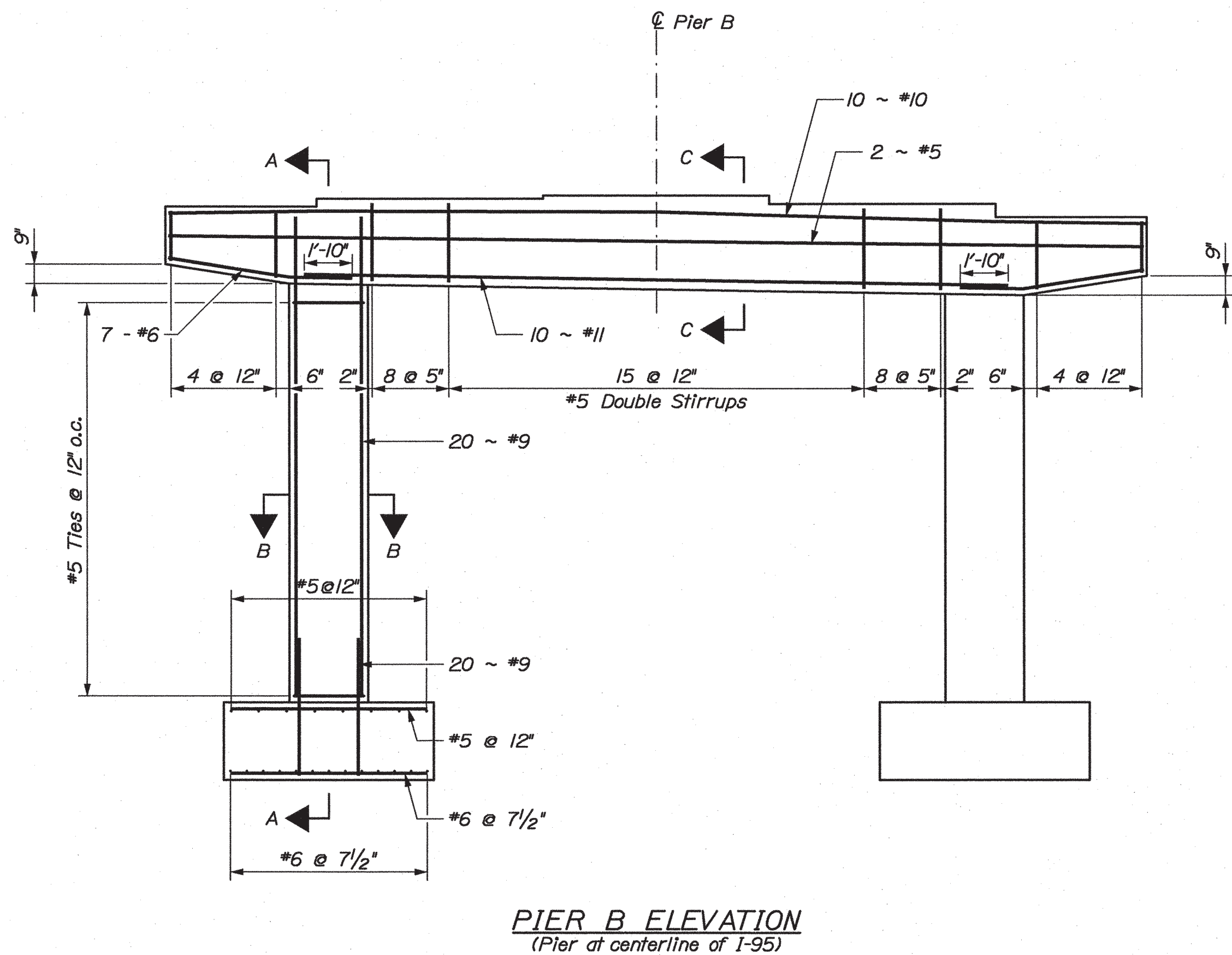
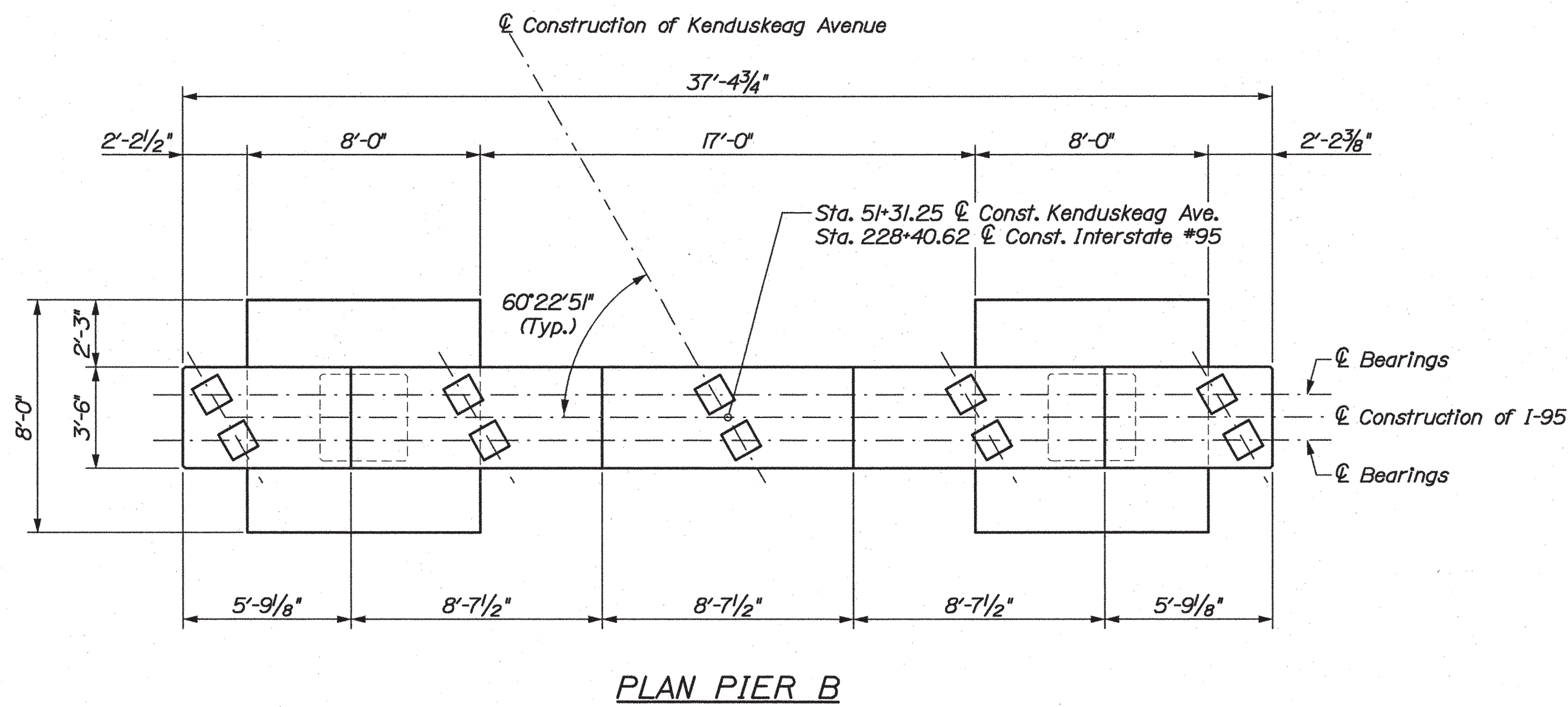
PROJ. MANAGER	DATE	BY	SIGNATURE
D. Anderson	Jun. 2007	D. Shaw	
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

INTERSTATE 95 NORTH AND SOUTHBOUND	
OVER INDUSTRIAL SPUR AND BROADWAY	
BANGOR	
PENOBSCOT COUNTY	
GENERAL PLANS	

SHEET NUMBER
4
OF 9



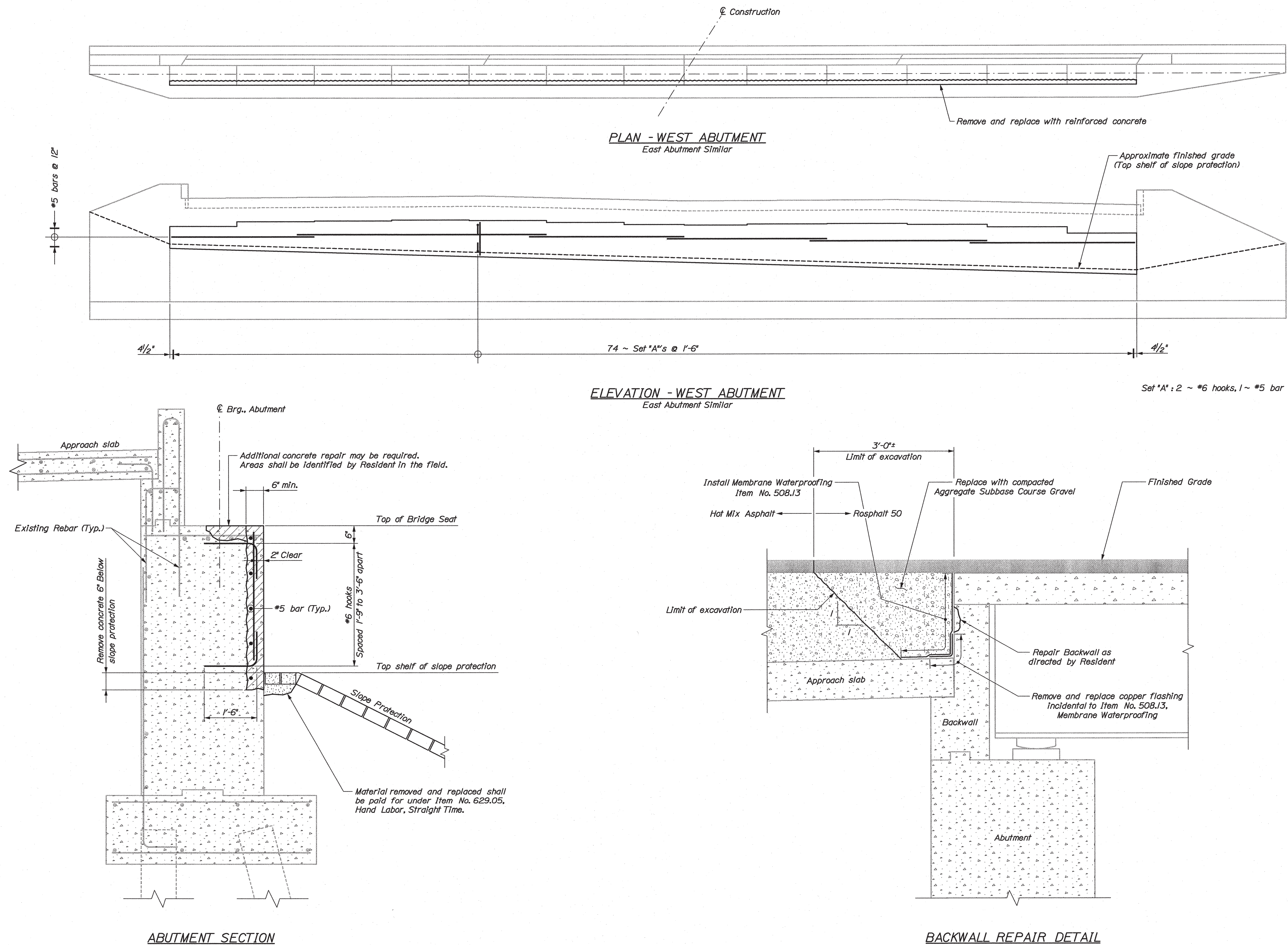
PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN2-DETAILED2	DESIGN3-DETAILED3	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
D. Anderson	M. A. Libal								
BY	D. Shaw								
DATE	Jun. 2007								
SIGNATURE									
P.E. NUMBER									
DATE									

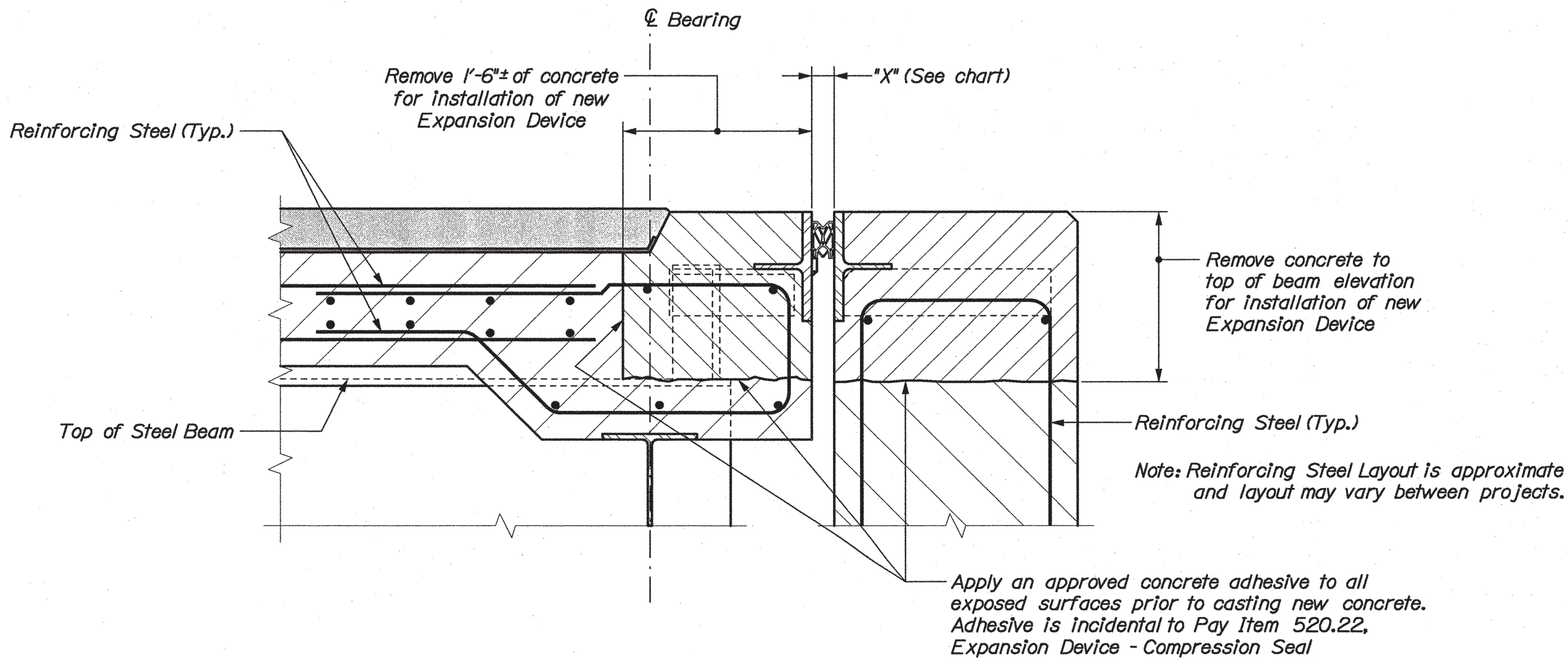


PIER NOTES

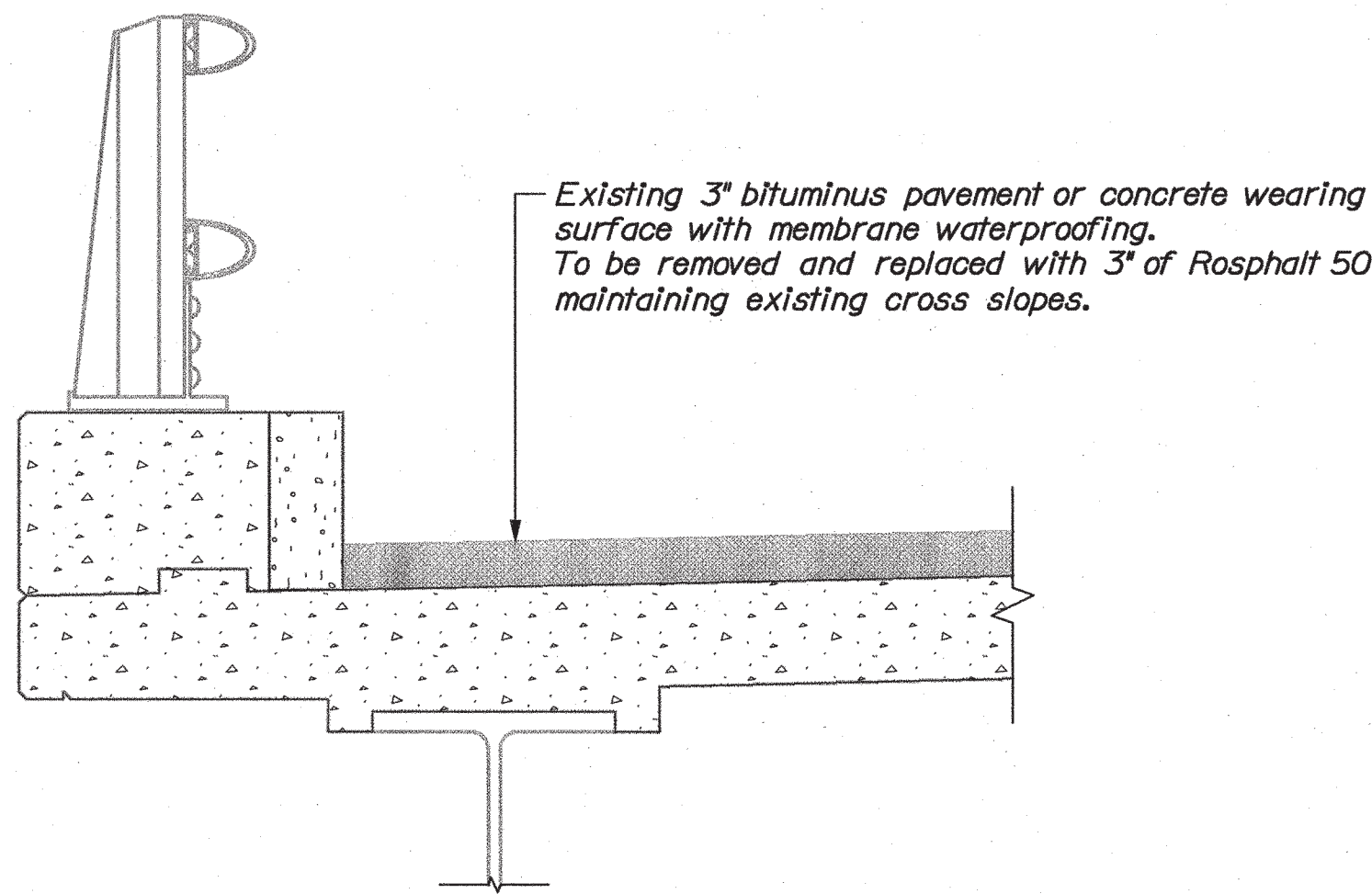
1. Remove a minimum of 2 inches behind rebar and all unsound concrete on all faces, except pier footings. Assume a minimum of 8" of concrete, behind the rebar need to be removed on all faces of the cantilevered ends of the pier cap.
2. If rebar is found to be substantially degraded at some spots, dowel #5 and then vertical and horizontal #5 bars at 1 foot on center and as directed by the Resident. This applies to both column and pier cap. This work shall be incidental to Item No. 518.61, Repair of Vertical Surfaces > 7.9 Inches.
3. Both dead and live load on the pier should be removed by jacking from both sides of the pier using a frame system that is designed by the Contractor and approved by the DOT. All work associated with the jacking system and frame shall be paid for under Item No. 524.30, Temporary Structural Support.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-1292(600)E BRIDGE NO. 5798 PIN 12926.00 BRIDGE PLANS	INTERSTATE 95 NORTH AND SOUTHBOUND UNDER KENDUSKEAG AVENUE BANGOR PIER B REHABILITATION		SHEET NUMBER 7 OF 9	
	PROJ. MANAGER D. Anderson M. A. Ibbot DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	BY D. Shaw	DATE Jun. 2007	SIGNATURE P.E. NUMBER DATE





EXPANSION DEVICE - COMPRESSION SEAL SECTION
(See Standard Details, Section 520 Expansion Device - Compression Seal)



CURB SECTION

		Movement Rating (Rounded)	Seal	Opening			
				@ 30° F	@ 45° F	@ 60° F	@ 75° F
Broadway	Pier No. 1 Pier No. 2	1/2" 1 1/2"	1 5/8" 3"	1 1/8" 2"	1 1/8" 1 3/4"	1 1/8" 1 5/8"	1" 1 1/2"
Industrial Spur (NB and SB same)	Pier No. 1	1 1/8"	2 1/2"	1 5/8" ^m	1 1/2"	1 1/2"	1 3/8"
	Pier No. 2	1 3/8"	1 3/8"	1 1/8"	1 1/8"	1 1/8"	1"
	Pier No. 3	1 1/8"	2 1/2"	1 5/8"	1 1/2"	1 1/2"	1 5/8"
MCRR and Perry Road	Pier No. 1	5/8"	1 3/4"	1 1/4"	1 1/8"	1 1/8"	1"
	Pier No. 2	1 1/8"	4"	2 5/8"	2 1/2"	2 1/4"	2 1/8"
	Pier No. 3	5/8"	1 3/4"	1 1/4"	1 1/8"	1 1/8"	1"

NOTES

1. The expansion devices extend into the curbs per Standard Details, Section 520. The concrete in the curb around the joints and all necessary steel hardware shall be removed and replaced as directed by the Resident. All costs associated with the work described above shall be incidental to Item No. 520.22, Expansion Device - Compression Seal.

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

IM-1292(600)E & IM-1294(200)E

BRIDGE NOS. 5972, 1429, 5795, 1428, 5800, 1427, 5312, 5798 & 5789

PIN 12926.00 & 12942.00

BRIDGE PLANS

INTERSTATE 95

NORTHBOUND AND SOUTHBOUND BRIDGES

BANGOR

PENOBSCOT COUNTY

BRIDGE DETAILS

SHEET NUMBER

9

OF 9

PROJ. MANAGER

DESIGN-DETAILED

CHECKED-REVIEWED

DESIGN2-DETAILED2

DESIGN3-DETAILED3

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

D. Anderson

M. A. Libal

D. Shaw

DATE

BY

SIGNATURE

P.E. NUMBER

DATE

Jun. 2007