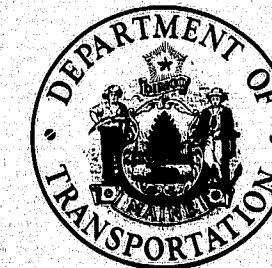


# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## BUREAU OF HIGHWAYS TOWN OF RICHMOND COUNTY-SAGADAHOC MAINE FEDERAL AID INTERSTATE PROJECT NO. 1-95-5(39)90 REED ROAD & BEEDLE ROAD OVER INTERSTATE "95"

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-5(39)	1	11

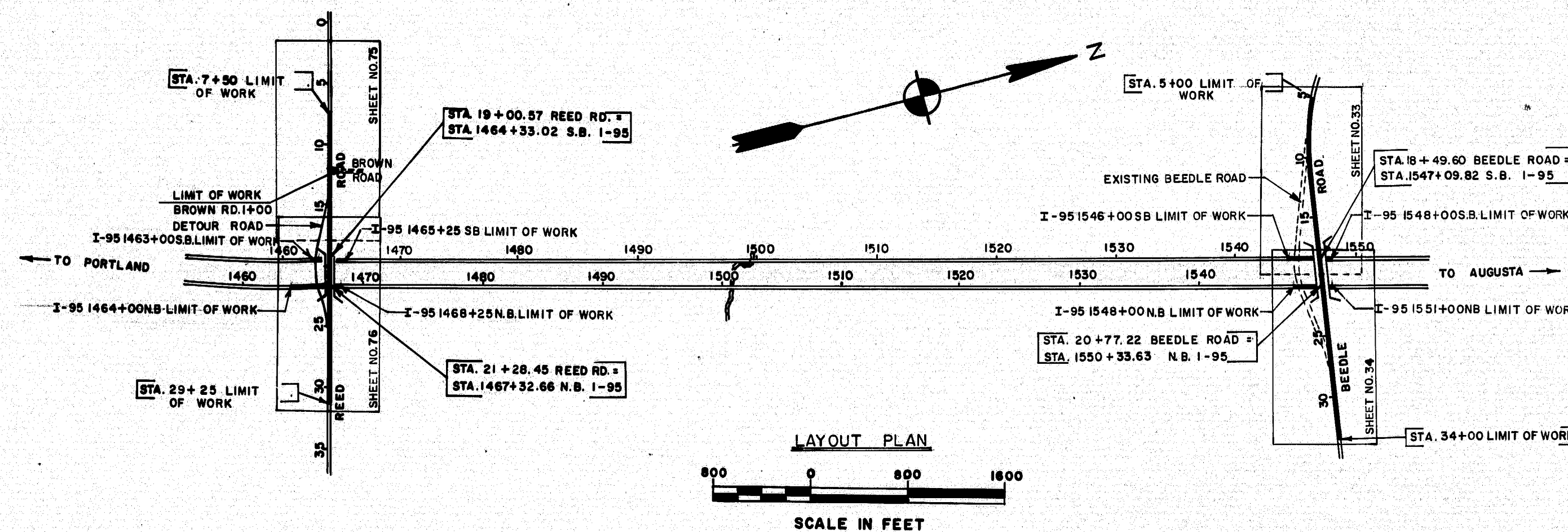
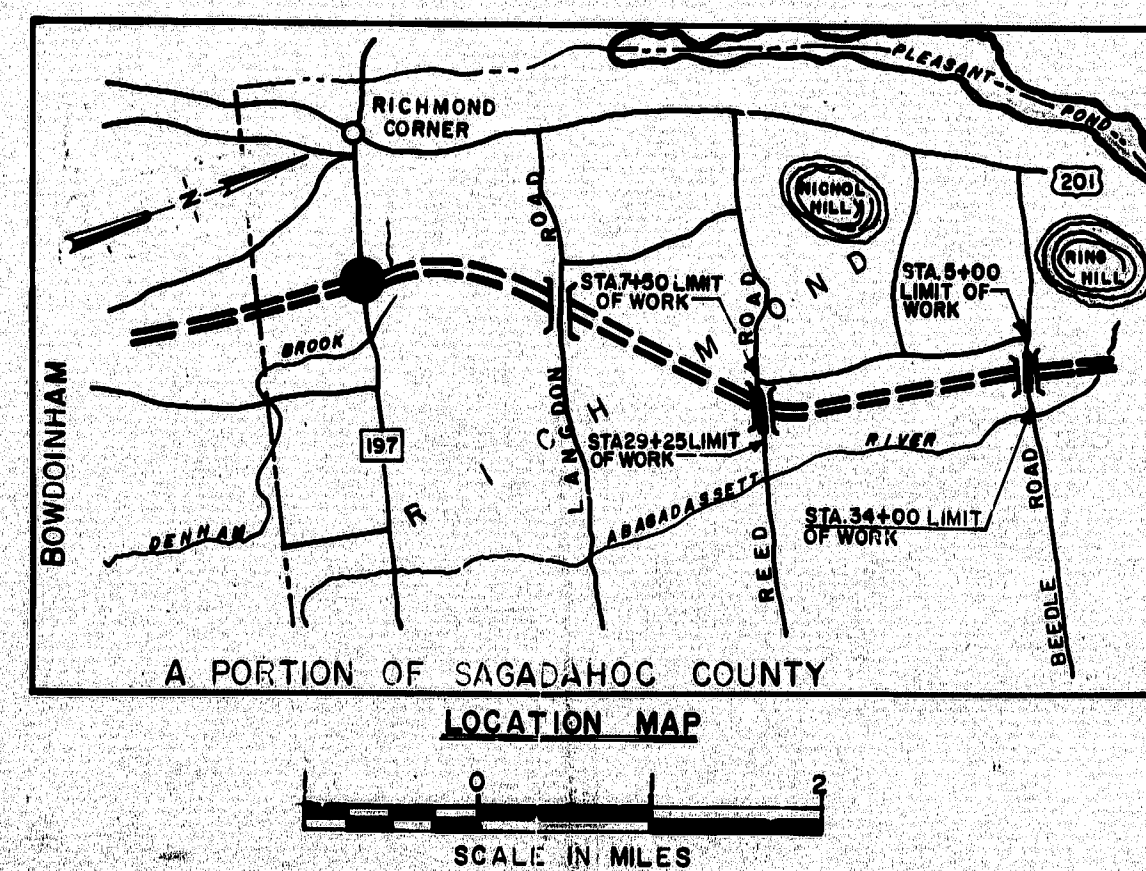
CONVENTIONAL SIGNS	
COUNTY LINES	TRAVELLED WAY - PROPOSED
TOWN LINES	UNDERGROUND UTILITIES - EXISTING
PROPERTY LINES	UNDERGROUND UTILITIES - PROPOSED
R/W LINES - EXISTING	RAILROAD - SINGLE TRACK
R/W LINES - NEW - ACCESS CONTROL	RAILROAD - DOUBLE TRACK
R/W LINES - NEW - NO ACCESS CONTROL	UTILITY POLE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

**SPECIFICATIONS**  
DESIGN - AASHO SPECIFICATIONS FOR HIGHWAY BRIDGES 1973.  
CONTRACT - STATE OF MAINE, STATE HIGHWAY COMMISSION,  
STANDARD SPECIFICATIONS, HIGHWAYS & BRIDGES,  
REVISION OF JUNE 1968.

**DESIGN LOADING**  
LIVE LOAD - HS 20-44

**MATERIALS**  
CONCRETE - Wearing Surface Concrete CLASS "Y"  
All Other CLASS "A"  
REINFORCING STEEL - ASTM A615 Grade 60  
STRUCTURAL STEEL - BEAM FLANGES - ASTM A36, AND  
(SEE BRIDGE PLANS) ASTM A572 Grade 50  
ALL OTHER - ASTM A36  
HIGH STRENGTH BOLTS - ASTM A325

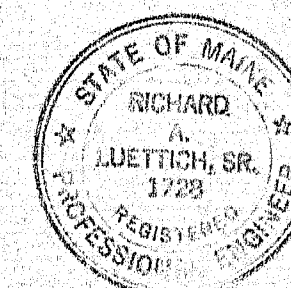
**BASIC ALLOWABLE STRESSES**  
CONCRETE -  $f_c = 12,000$  psi  $n = 10$   
REINFORCING STEEL -  $f_s = 24,000$  psi  
STRUCTURAL STEEL - ASTM A572 Grade 50  $f_s = 27,000$  psi  
ASTM A36  $f_s = 20,000$  psi  
ASTM A325  $f_v = 13,500$  psi



REED ROAD TRAFFIC DATA	
A.D.T.	1975 112
A.D.T.	1995 176
D.H.V.	21
T.(%)	7 %
D.(%)	60 %
V.	45 mph.
P.S.D.(%)	N/A
18 KIPS	4

BEEDLE ROAD TRAFFIC DATA	
A.D.T.	1975 147
A.D.T.	1975 230
D.H.V.	28
T.(%)	7 %
D.(%)	60 %
V.	45 mph.
P.S.D.(%)	N/A
18 KIPS	5

NOTE:  
ALL WORK CONTEMPLATED UNDER THIS  
CONTRACT SHALL BE GOVERNED BY AND IN  
CONFORMITY WITH THE STANDARD SPECIFICATIONS  
(REVISION OF 1968) AND SUPPLE-  
MENTS THERETO, EXCEPT AS MODIFIED ON  
THE PLANS AND IN THE SPECIAL PROVISIONS.



APPROVED:  
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
COMMISSIONER  
BUREAU DIRECTOR & CHIEF ENGINEER  
DATE  
Jan. 14, 1975  
Jan. 14, 1975

UNITED STATES  
DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
REGION 1  
APPROVED:  
DIVISION ENGINEER  
DATE

INDEX OF SHEETS	
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1	TITLE SHEET
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4	GENERAL NOTES & SIGNING
5	DRAINAGE & STANDARD DRIVEWAY ENTRANCE
6	TYPICAL SECTIONS, REED & BEEDLE RD. & I-95 N.B. & S.B.
7	PROFILES - I-95 N.B. & S.B.
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33-34	PLAN & PROFILE - BEEDLE ROAD
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75-76	PLAN & PROFILE - REED ROAD
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100	STANDARD DETAILS AUGUST 1969 ⑤
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109	STANDARD DETAILS BD 101-74 APRIL 1974
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PROJECT DESIGN ENGINEER	DATE
BY	2-5-72
DESIGN - CHECKED	ONE
REVISIONS	
FIELD CHANGES	
PLANS	

ESTIMATED QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	REED ROAD QUANTITY	BEEDLE ROAD QUANTITY	TOTAL QUANTITY
201.11	Clearing	Acre	0.5	—	0.5
201.13	Removing Single Trees, 9" to 24" Tops only	Each	2	—	2
201.14	Removing Single Trees, over 24" to 48" Tops only	Each	3	—	3
201.20	Removing Stumps, over 24" to 48"	Each	4	—	4
203.20	Common Excavation	C.Y.	10,200	7,400	17,600
203.21	Rock Excavation	C.Y.	105	4,345	4,450
203.24	Common Borrow	C.Y.	23,700	—	23,700
203.25	Granular Borrow	C.Y.	12,700	15,700	28,400
203.29	Selected Granular Material	C.Y.	400	950	1,350
206.06	Str. Earth Excar. - Drainage & Minor Strs.	C.Y.	160	200	360
206.07	Str. Rock Excar. - Drainage & Minor Strs.	C.Y.	30	—	30
206.08	Str. Earth Excar. - Abuts. & Ret. Walls	C.Y.	1,310	24	1,334
206.10	Str. Earth Excar. - Piers	C.Y.	45	460	505
304.10	Aggregate Subbase Course - Gravel	C.Y.	5,400	5000	10,400
403.07	Hot Bit. Pavement - Grading B	Ton	450	575	1,025
403.08	Hot Bit. Pavement - Grading C	Ton	320	410	730
403.101	Hot Bit. Pavement - Grading D (Sinks, Drives, etc.)	Ton	35	25	60
403.121	Hot Bit. Pavement - Grading E (Shimming)	Ton	25	25	50
410.14	Cut-back Asphalt, Applied	Gal.	1,850	2,650	4,500
410.15	Emulsified Asphalt, Applied	Gal.	470	600	1,070
410.16	Cover Coat Material, Sand	C.Y.	60	90	150
410.161	Cover Coat Material, Sand (leveling)	C.Y.	50	65	115
411.09	Untreated Aggregate Surface Course	C.Y.	220	150	370
501.216	Steel H-beam Piles 73 lbs./ft.	L.F.	160	855	1015
502.21	Str. Concrete, Abuts. & Ret. Walls	C.Y.	365	325	690
502.23	Str. Concrete, Piers	C.Y.	123	130	253
502.2601	Str. Conc., Rdwy. & Sdk. Slabs on Stl. Bridges	L.S.	1	—	1
502.2602	Str. Conc., Rdwy. & Sdk. Slabs on Stl. Bridges	L.S.	—	1	1
502.2901	Str. Conc., Wearing Surface on Bridges	L.S.	1	—	1
502.2902	Str. Conc., Wearing Surface on Bridges	L.S.	—	1	1
502.3101	Str. Conc., Approach Slabs	L.S.	1	—	1
502.3102	Str. Conc., Approach Slabs	L.S.	—	1	1
503.12	Reinforcing Steel, Fab. & Delivered	lb.	103,000	104,600	207,600
503.13	Reinforcing Steel, Placing	lb.	103,000	104,600	207,600

ESTIMATED QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	REED ROAD QUANTITY	BEEDLE ROAD QUANTITY	TOTAL QUANTITY
504.7001	Str. Steel, Fab. & Delivered	L.S.	1	—	1
504.7002	Str. Steel, Fab. & Delivered	L.S.	—	1	1
504.7101	Str. Steel, Erection	L.S.	1	—	1
504.7102	Str. Steel, Erection	L.S.	—	1	1
504.74	Metal Inserts	Each	134	134	268
505.0801	Shear Connectors	L.S.	1	—	1
505.0802	Shear Connectors	L.S.	—	1	1
506.1401	Field Painting, Structural Steel	L.S.	1	—	1
506.1402	Field Painting, Structural Steel	L.S.	—	1	1
507.141	Aluminum Bridge Railing, Type "A"	L.F.	678	679	1,357
507.151	Aluminum Approach Railing, Type "A"	Each	4	4	8
512.07	French Drain (Stones Only)	C.Y.	20	20	40
513.09	Slope Protection - Port. Cem. Concrete	S.Y.	264	260	524
514.06	Curing Box for Concrete Cylinders	Each	0.5	0.5	1
515.20	Protective Coating for Concrete Surfaces	S.Y.	1,340	1,340	2,680
603.168	15 Inch Culvert Pipe, Option II	L.F.	174	—	174
603.178	18 Inch Culvert Pipe, Option II	L.F.	70	—	70
603.195	24 Inch Reinforced Conc. Pipe Class III	L.F.	76	—	76
603.198	24 Inch Culvert Pipe, Option II	L.F.	—	220	220
604.09	Catch Basins Type B1	Each	—	1	1
605.09	6 Inch Underdrain Type B	L.F.	400	276	676
605.10	6 Inch Underdrain Outlet	L.F.	30	55	85
606.26	Terminal Ends - Single Rail	Each	4	4	8
606.28	Single Posts - Type 1a	Each	—	20	20
606.35	Guard Rail Delineator Posts	Each	5	5	10
606.55	Guard Rail Type 3 - Single Rail	L.F.	1,550	1,775	3,325
606.60	Guard Rail Type 3 - Circular - Greater than 15 R.	L.F.	50	50	100
607.09	Woven Wire Fence - Metal Posts	L.F.	1,120	1,950	3,070
607.15	Drive Gateways - 16 feet - Metal	Each	1	1	2
607.24	Remove and Reset Fence	L.F.	270	—	270
607.242	Remove and Reset Gateway	Each	—	1	1
607.32	Bracing Assembly, Type I - Metal Posts	Each	10	12	22
607.33	Bracing Assembly, Type II - Metal Posts	Each	6	9	15
609.11	Vertical Curb - Type 1	L.F.	31	32	63
609.13	Vertical Bridge Curb - Type 1	L.F.	677	675	1,352
609.25	Curb Transition Section A - Type 1	Each	4	4	8
609.32	Curb Type 3a	L.F.	425	230	655
610.08	Plain Riprap	C.Y.	6	30	36
615.07	Loam	C.Y.	350	495	845
616.08	Sodding	S.Y.	320	360	680
617.09	Erosion Control Mesh	S.Y.	—	230	230
618.13	Seeding, Method No. 1	Unit	7	3	10

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-3439	2	111

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
REED ROAD & BEEDLE ROAD OVER INTERSTATE 95 IN THE TOWN OF RICHMOND SAGadahoc COUNTY
TOTAL ESTIMATE OF QUANTITIES
SHEET 2 OF 111 AUGUSTA, MAINE

147-118



PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	12-5-73
CHECKED	
REVISIONS	
FIELD CHANGES	
PLANS	

ESTIMATED QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	REED ROAD	BEEDLE ROAD	TOTAL QUANTITY
			QUANTITY	QUANTITY	
618.14	Seeding, Method No. 2	Unit	150	265	415
618.15	Temporary Seeding	lb.	150	50	200
619.09	Hay Mulch	Unit	320	320	640
623.06	Right-of-Way Monuments	Each	12	16	28
623.07	Survey Monuments	Each	—	1	1
629.05	Labor, Straight Time	M. hr.	20	20	40
630.06	Traffic Officers	M. hr.	50	50	100
631.09	Aerator (Inc. op. & hauler)	Hour	20	—	20
631.10	Air Compressor (Inc. operator)	Hour	5	5	10
631.11	Air Tool (Inc. op.)	Hour	5	5	10
631.12	All purpose Excavator (Inc. op.)	Hour	15	15	30
631.13	Bulldozer (Inc. op.)	Hour	30	10	40
631.132	Small Bulldozer (Inc. op.)	Hour	—	80	80
631.14	Grader (Inc. op.)	Hour	20	20	40
631.171	Truck - small (Inc. op.)	Hour	20	20	40
631.18	Chain Saw Rental (Inc. op.)	Hour	10	—	10
631.22	Front End Loader (Inc. op.)	Hour	5	5	10
633.09	Portable Barricade	Each	2	2	4
637.07	Sprinkling	M.G.	70	90	160
637.08	Calcium Chloride	Ton	7	9	16
639.09	Field Office, Type B	Each	1	1	2
639.11	Testing Facilities, Soils	L.S.	0.65	0.35	1
639.12	Testing Facilities, Bit. Mixes	L.S.	0.45	0.55	1
656.50	Baled Hay, in place	Each	6	6	12
656.51	Sandbags, in place	Each	6	6	12
656.55	Dumped Stone	C.Y.	15	—	15
656.60	Temporary Berms	L.F.	4,450	—	4,450
656.62	Temporary Slope Drains	L.F.	170	—	170
657.201	Seed and Application, Method A	Unit	100	35	135
659.10	Mobilization	L.S.	0.5	0.5	1
660.21	On-the-job Training	M. hr.	1000	1000	2000

ESTIMATED QUANTITIES OF LUMP SUM ITEMS					
ITEM NO.	DESCRIPTION	UNIT	REED ROAD	BEEDLE ROAD	TOTAL QUANTITY
			QUANTITY	QUANTITY	
502.2601	Str. Concrete, Rdwy. & Sidwk. Slabs on Stl. Bridges	C.Y.	336	—	336
502.2602	Str. Concrete, Rdwy. & Sidwk. Slabs on Stl. Bridges	C.Y.	—	345	345
502.2901	Str. Concrete, Wearing Surface on Bridges	C.Y.	87	—	87
502.2902	Str. Concrete, Wearing Surface on Bridges	C.Y.	—	87	87
502.3101	Str. Concrete, Approach Slabs	C.Y.	21	—	21
502.3102	Str. Concrete, Approach Slabs	C.Y.	—	21	21
504.7001	Str. Steel, Fab. & Delivered	lb.	319,100	—	319,100
504.7002	Str. Steel, Fab. & Delivered	lb.	—	310,800	310,800
504.7101	Str. Steel, Erection	lb.	319,100	—	319,100
504.7102	Str. Steel, Erection	lb.	—	310,800	310,800
505.0801	Shear Connectors	lb.	2,112	—	2,112
505.0802	Shear Connectors	lb.	—	2,176	2,176
506.1401	Field Painting, Str. Steel	lb.	319,100	—	319,100
506.1402	Field Painting, Str. Steel	lb.	—	310,800	310,800

#### SUMMARY OF EXCAVATION AND BORROW

COMMON EXCAVATION FOR ESTIMATE			REED ROAD	BEEDLE ROAD
Common Excavation (from cross sections)	—	8,959	—	7,198
Earth From Drives	—	76	—	64
Grubbing In Fill	—	146	—	121
Reed Road Detour Removal (1-95 ditches)	—	1,000	—	—
Total Common Excavation			= 17,564	
FILL FOR COMMON BORROW CALCULATIONS			Common Fill (from cross sections)	43,311
Grubbing In Fill	—	146	Grubbing In Fill	3,676
			TOTAL FILL = 47,294	
ROCK EXCAVATION FOR ESTIMATE			Rock Excavation (from cross sections)	105
			TOTAL ROCK EXCAVATION = 4,450	

AVAILABLE COMMON EXCAVATION FOR COMMON BORROW CALCULATIONS			(1) Total Common Excavation	17,564
DEDUCTIONS:			Grubbing In Cut Areas	1736 x 5% = 87
Grubbing In Fill Areas	—	267 x 5% = 13	Grubbing In Fill Areas	13
Excavation For Reed Road Detour	—	1,000	Excavation For Reed Road Detour	1,000
(2) Total Deductions	—	1,100	Total Deductions	1,100
Total Available Common Excavation (1) minus (2)	—	16,464	Total Available Common Excavation (1) minus (2)	16,464
Total Available Struct. Excavation (underdrain only)	—	795	Total Available Struct. Excavation (underdrain only)	795
Total Available Bridge Excavation (piers & abut.)	—	1,820	Total Available Bridge Excavation (piers & abut.)	1,820
Total Available Non-Rock Excavation	—	18,479	Total Available Non-Rock Excavation	18,479

COMPUTATION OF COMMON BORROW FOR ESTIMATE			Total Fill	47,294
Total Available Non-Rock Excavation	—	18,479 x 0.85 = 15,707	Total Available Non-Rock Excavation	15,707
Total Available Rock Excavation	—	4,450 x 1.33 = 5,919	Total Available Rock Excavation	5,919
Total Available Structural Rock Excav.	—	80 x 1.33 = 40	Total Available Structural Rock Excav.	40
Total Available Excavation	—	21,666	Total Available Excavation	21,666
Total Fill Minus Total Available Excavation	—	25,588	Total Fill Minus Total Available Excavation	25,588
(1) Common Borrow	—	25,588 x 1.15 = 29,426	(1) Common Borrow	29,426
(2) Granular Borrow To Maintain Traffic	—	5,000 x 1.15 = 5,750	(2) Granular Borrow To Maintain Traffic	5,750
Total Common Borrow (1) Minus (2)	—	23,676	Total Common Borrow (1) Minus (2)	23,676

COMPUTATION OF GRANULAR BORROW FORESTIMATE			Granular Borrow To Maintain Traffic	5,000
Granular Borrow Fill (around piers & abut.)	—	19,669	Granular Borrow Fill (around piers & abut.)	19,669
Total Granular Borrow	—	24,669 x 1.15 = 28,369	Total Granular Borrow	28,369
TOTAL AVAILABLE WASTE STORAGE AREA (from cross sections)			6,819	
POSSIBLE WASTE MATERIAL:			Grubbing In Cut Area	1736
Grubbing In Fill Area	—	267	Grubbing In Fill Area	267
Reed Rd. Detour Removal (1-95 ditches)	—	1,000	Reed Rd. Detour Removal (1-95 ditches)	1,000
Total Waste Material	—	3,003	Total Waste Material	3,003

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	3	111

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
**REED ROAD & BEEDLE ROAD**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**RICHMOND**  
**SAGADAHOC COUNTY**  
TOTAL ESTIMATE OF QUANTITIES  
SHEET 3 OF 111 - AUGUSTA, MAINE

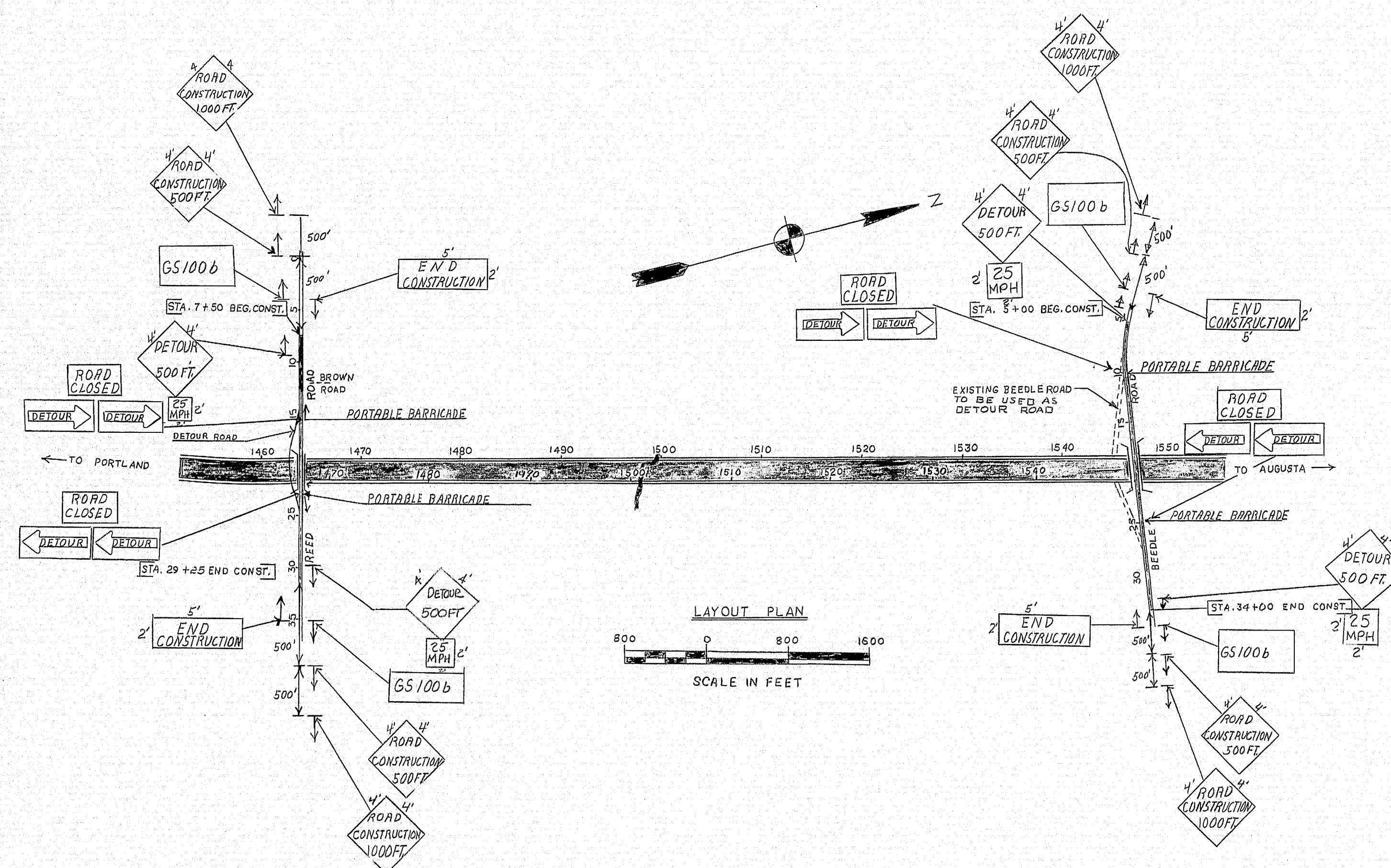
147-119



# GENERAL NOTES

F.H.W.A. NO. 10	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-5(39)	4	111

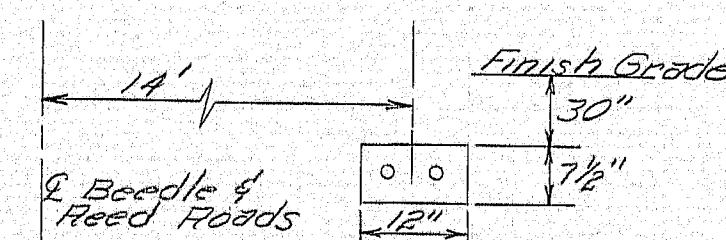
- The utilities involved in this contract are:  
Central Maine Power Company  
New England Telephone & Telegraph Company  
All utility facilities shall be adjusted by the respective utilities unless noted. See note no. 25.
- Clearing limits shall be 15' beyond and parallel to the construction slope line in non-guardrail fill areas, 10' in guardrail fill areas and 10' beyond construction slope limit in cut areas.
- The clearing lines shown on the plans are for estimating purposes only. The actual lines for payment shall be established in the field by the engineer.
- The normal grubbing limit in fills is determined by the intersection of a 1:1 slope from the shoulder berm to the existing ground or, as shown on the cross sections, when the height of fill is 2' or less, the grubbing width shall extend to the intersection of the side slope and the old ground.
- All ditch elevations shown on the cross sections are for the finish ditch flow line.
- All pipes shall have sod placed around inlets and outlets unless otherwise noted on the plans.
- If foundation material is required under culverts it shall meet the requirements for granular borrow under water backfill and will be paid for as granular borrow or common excavation.
- The engineer will designate unsafe recovery areas at the toes of 4:1 fill slopes to be graded by bulldozer and/or other hourly rental items. Boulders and large stumps and other objects shall be buried or removed. The use of borrow or waste material may be authorized for some areas upon completion of the grading, the areas shall be seeded with method no. 2 and mulched.
- Loam has been estimated for all areas designated on the typical sections, for granular borrow fills and for box section back slopes in front of residences. Loam has been estimated for 10% of the remaining slope areas. The resident engineer shall determine in the field, the slopes outside the designated areas to be loamed.
- Loam depths are 4" for seeding method no. 1 and 2" elsewhere, these depths are nominal.
- The fill quantity shown on the cross sections includes the waste storage.
- Driveway fill side slopes shall be 4:1 unless otherwise noted on the plans.
- Paved entrances shall be constructed with 12" agg. subbase coarse-gravel and 2" hot bituminous pavement grading 10'. Unpaved entrances shall be constructed with 12" agg. subbase coarse-gravel and 2" untreated aggregate surface course.
- Curb type 3a to be installed with mold 2.
- Place sod strip (1) foot wide behind curbs in box sections.
- A 3' square riprap pad shall be constructed at U.D. outlets.
- When detour roads are no longer required they shall be regraded to drain as directed by the engineer and paid for under relative equipment rentals, seeding method no. 2, hay mulch, etc. as necessary to complete the job.
- A 20:1 longitudinal transition is recommended from the new base to where the new construction joins the existing unimproved Reed, Brown and Beedle Roads.
- Where transitions from box sections to ditch sections occur, the transitions shall be graded smoothly as directed by the engineer so as not to present an abrupt appearance.
- Single posts type 1a shall be pressure treated and installed without a coat of paint.
- One guardrail delineator post shall be installed at each underdrain outlet and each guardrail terminal end.
- All seeding shall be method no. 2 except lawn areas, which shall be method no. 1 unless otherwise directed by the engineer.
- Mulch shall be applied in areas seeded by method no. 2 and areas seeded by method no. 1 when directed by the engineer.
- The existing slopes on the embankment by others on the Beedle Road shall be seeded with seeding method no. 2 and hay mulched as directed by the engineer.



Construction Signing

## General Notes - Continued

25. Shown on the plans are telephone ducts to be installed by others. Below is the detail of the ducts and encasement as received from New England Telephone Company.



The offset from G thru the bridges is 8'6" right. The conduit runs will be from sta. 14+00 to 26+00 Beedle Rd. and sta. 11+90 to 27+75 Reed Rd.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

General Notes  
Construction Signing

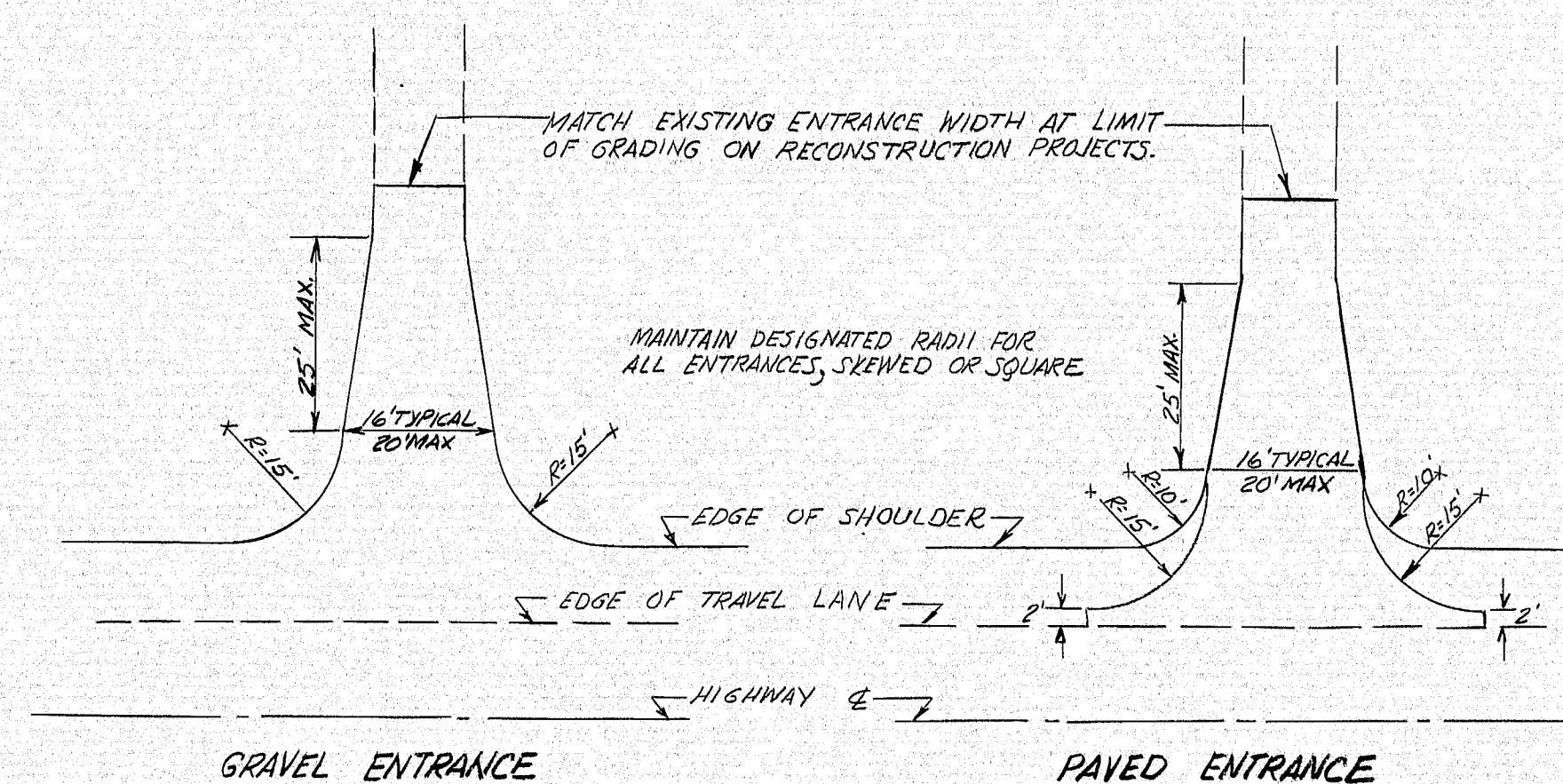
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SHEET 4 OF 111 AUGUSTA, MAINE Feb. 1975  
RICHMOND I-95-5(39)



DRAINAGE																						
STATION	RCP			BCCMP		CMP		CULVERT PIPE		CATCH BASINS					MAN HOLES	UNDERDRAINS				REMARKS		
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1	A2	B1	B2	C1		C2	E	B' LENGTH	C' SIZE		B' OUTLET LENGTH	

DRAINAGE CONT'D.																	B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
																	1	MAINE	1-95-5(39)	5	11
STATION	RCP			BCCMP		CMP		CULVERT PIPE		CATCH BASINS						MAN HOLES	UNDERDRAINS			REMARKS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1	A2	B1	B2	C1	C2		E	B' LENGTH	C' SIZE		B' OUTLET LENGTH



AS BUILT 1976  
 Leonard H. Parker Co. 1977

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 DRAINAGE  
 STANDARD DRIVEWAY  
 ENTRANCE

147-121

RICHMOND I-95-5(39)



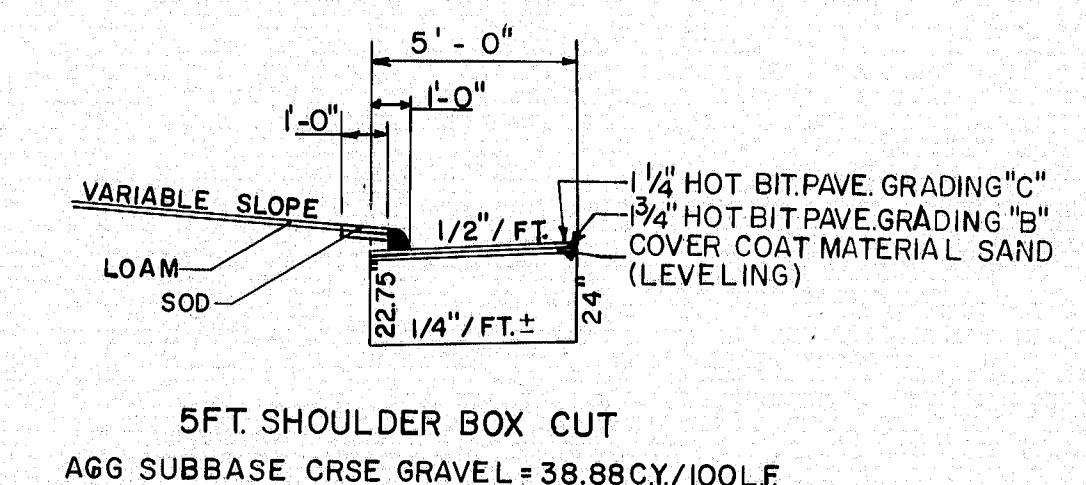
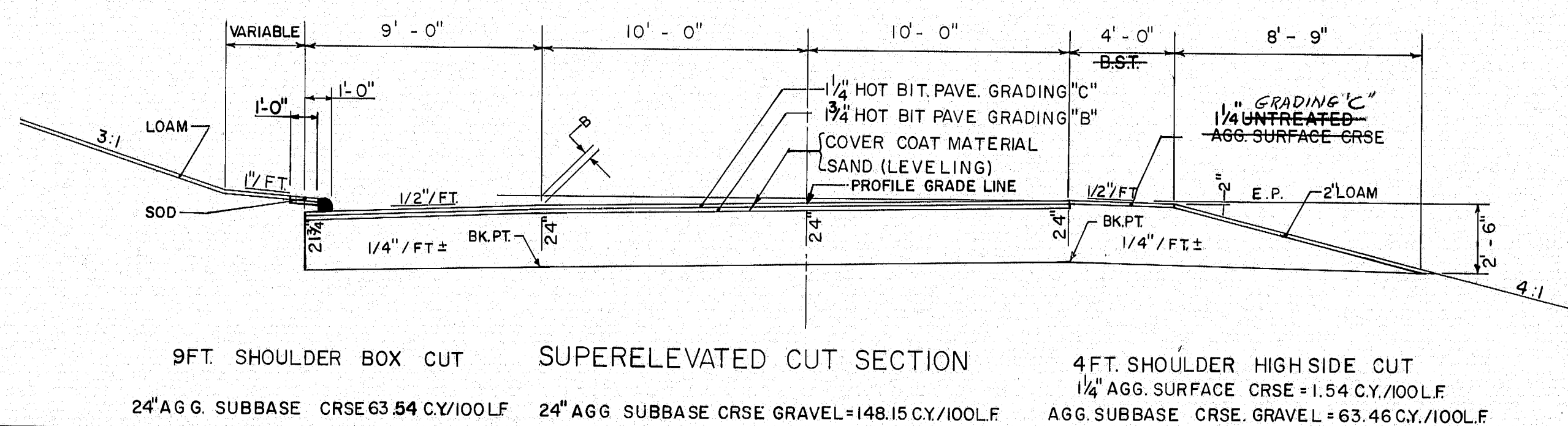
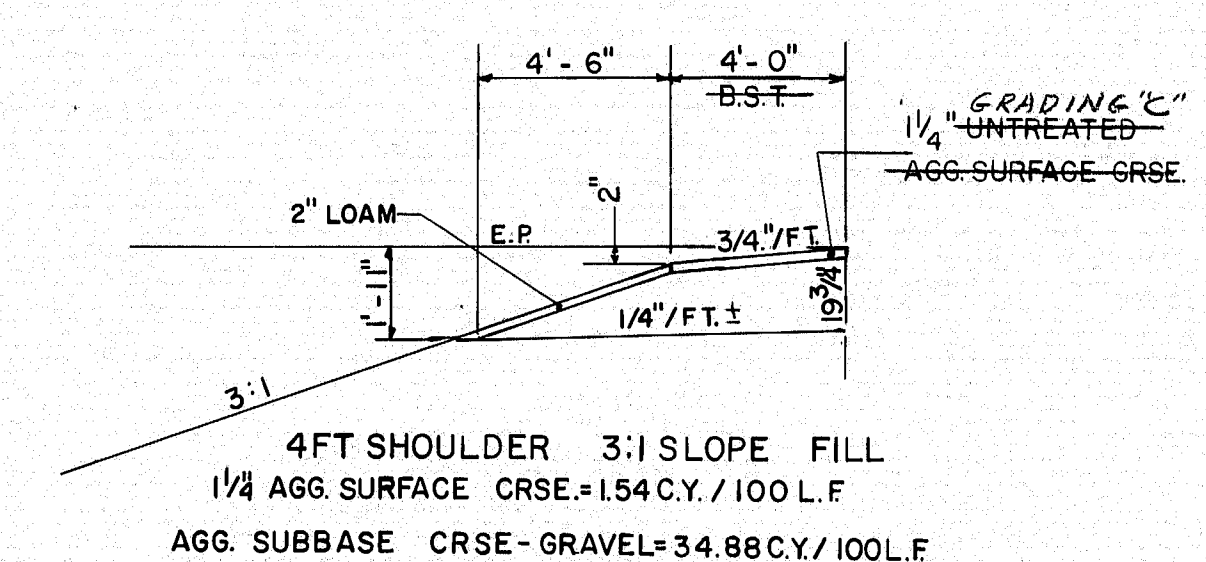
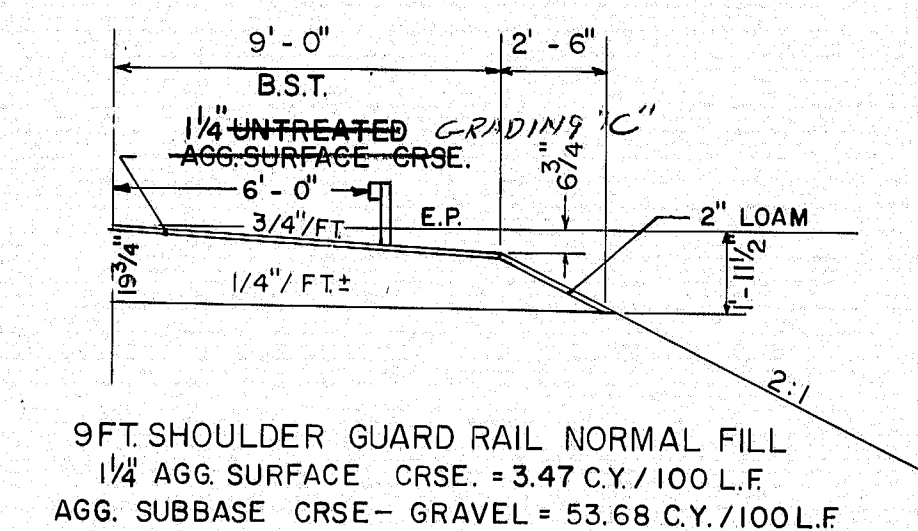
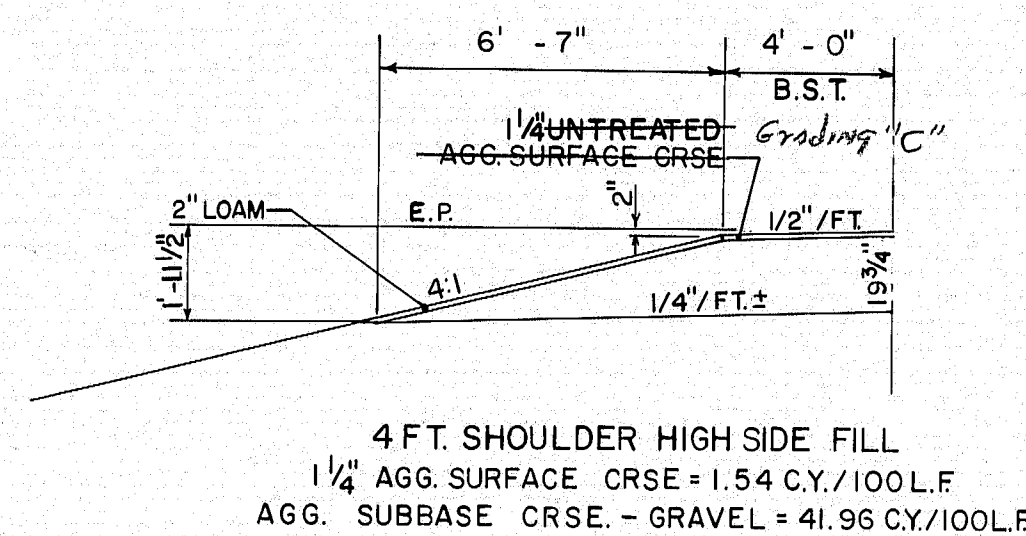
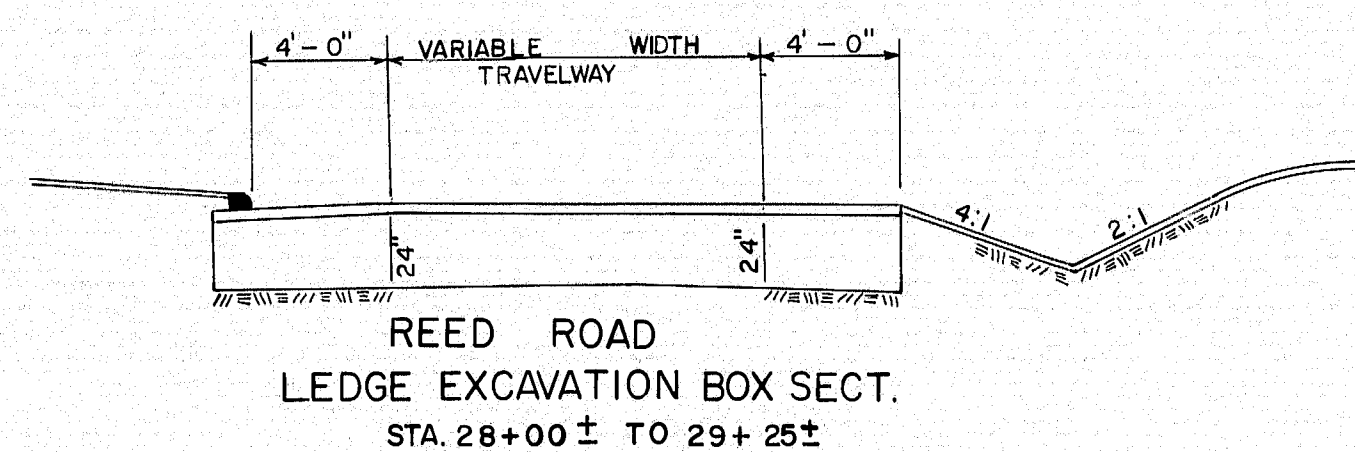
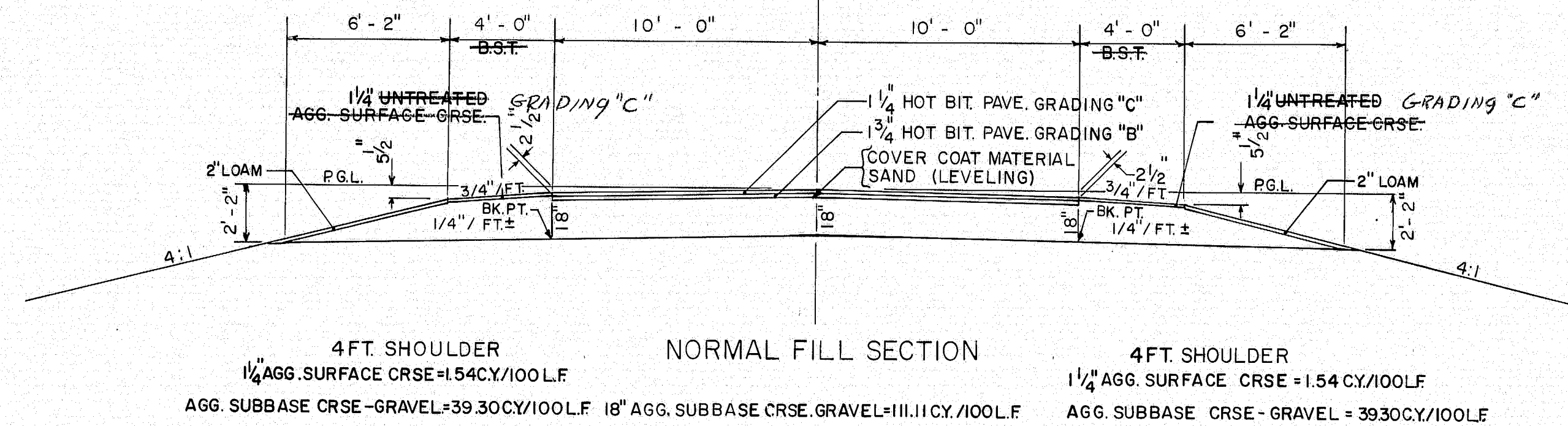
# TYPICAL SECTIONS 3" HOT BITUMINOUS PAVEMENT REED AND BEEDLE ROAD

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-95-5(39)	6	11

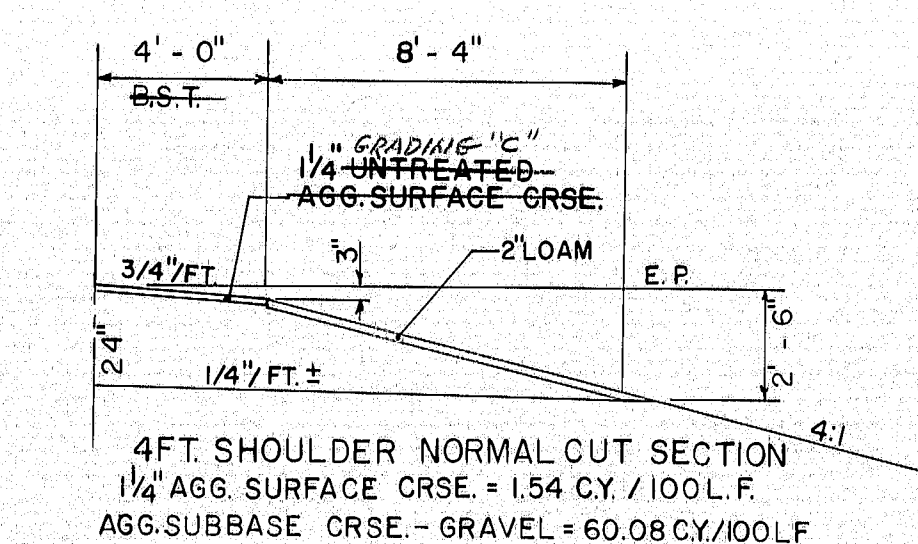
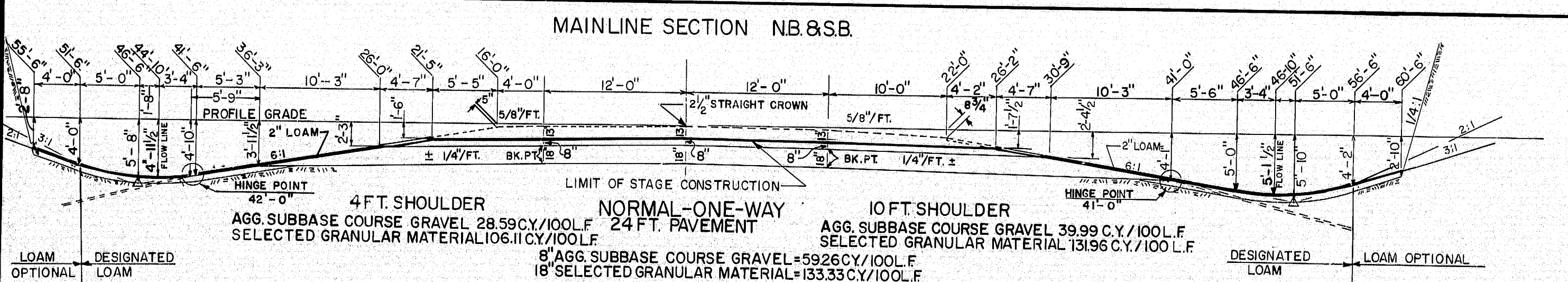
## SUBBASE DEPTHS

**REED ROAD**  
27" SECTION  
STA. 8+00 TO STA. 13+00  
STA. 26+50 TO STA. 29+25  
21" SECTION  
STA. 13+00 TO STA. 26+00  
(MINUS BRIDGE)

**BEEDLE ROAD**  
27" SECTION  
STA. 6+00 TO STA. 11+00  
21" SECTION  
STA. 11+00 TO STA. 27+00  
(MINUS BRIDGE)  
VARIABLE DEPTH SECTION  
STA. 27+00 TO STA. 33+50



NOTE:  
THE PAVEMENT AND BASE DEPTHS AS  
SHOWN ON THE PLANS ARE INTENDED  
TO BE NORMAL.



AS BUILT 1976  
Surrendered to Public by JAN 1977

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS  
REED AND BEEDLE RD.  
MAINLINE NB & SB

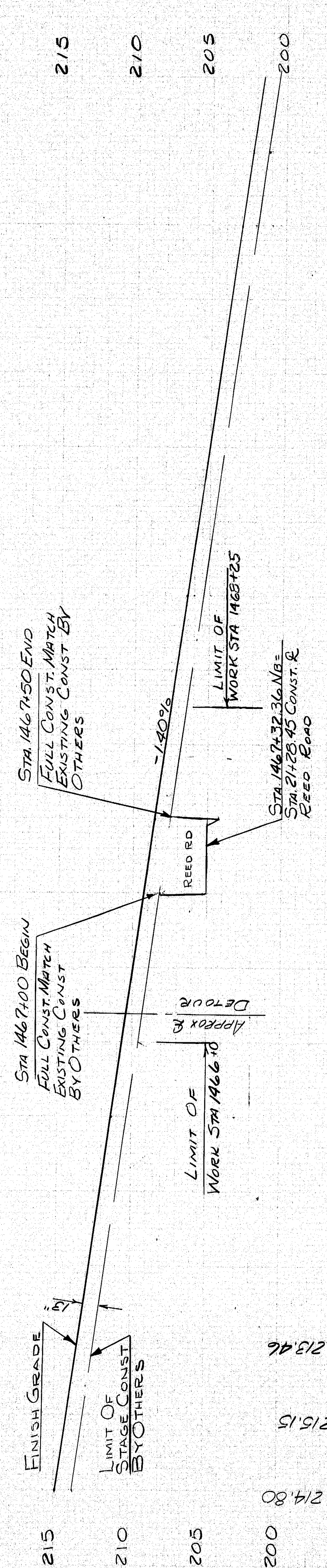
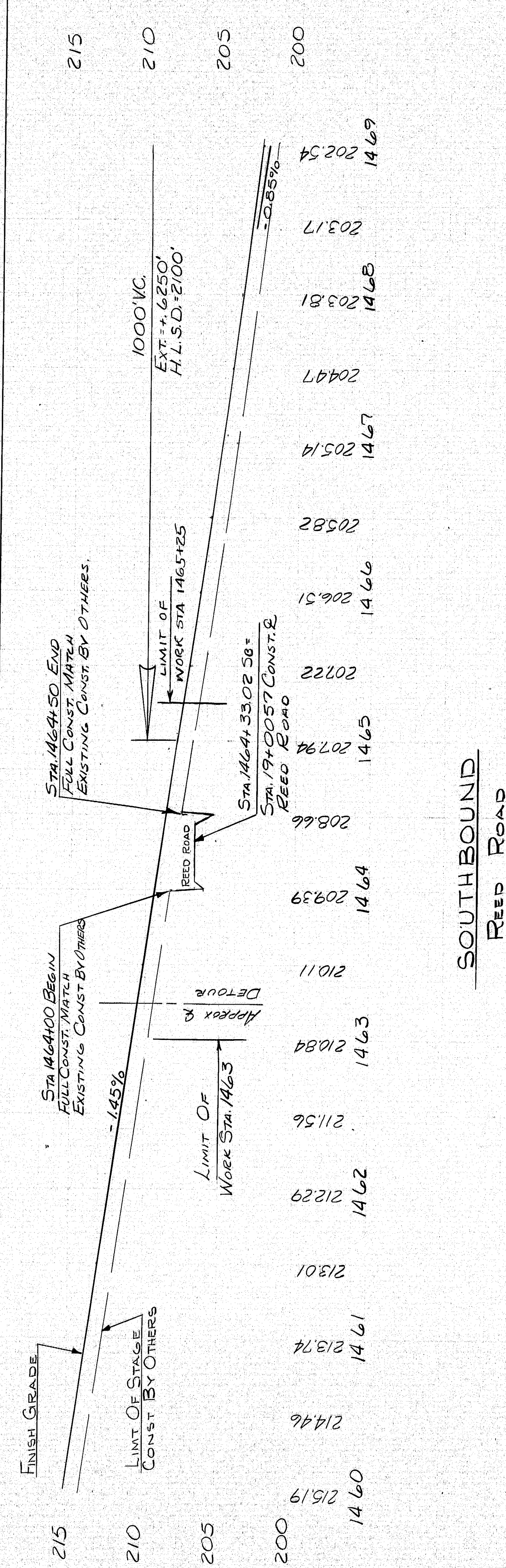
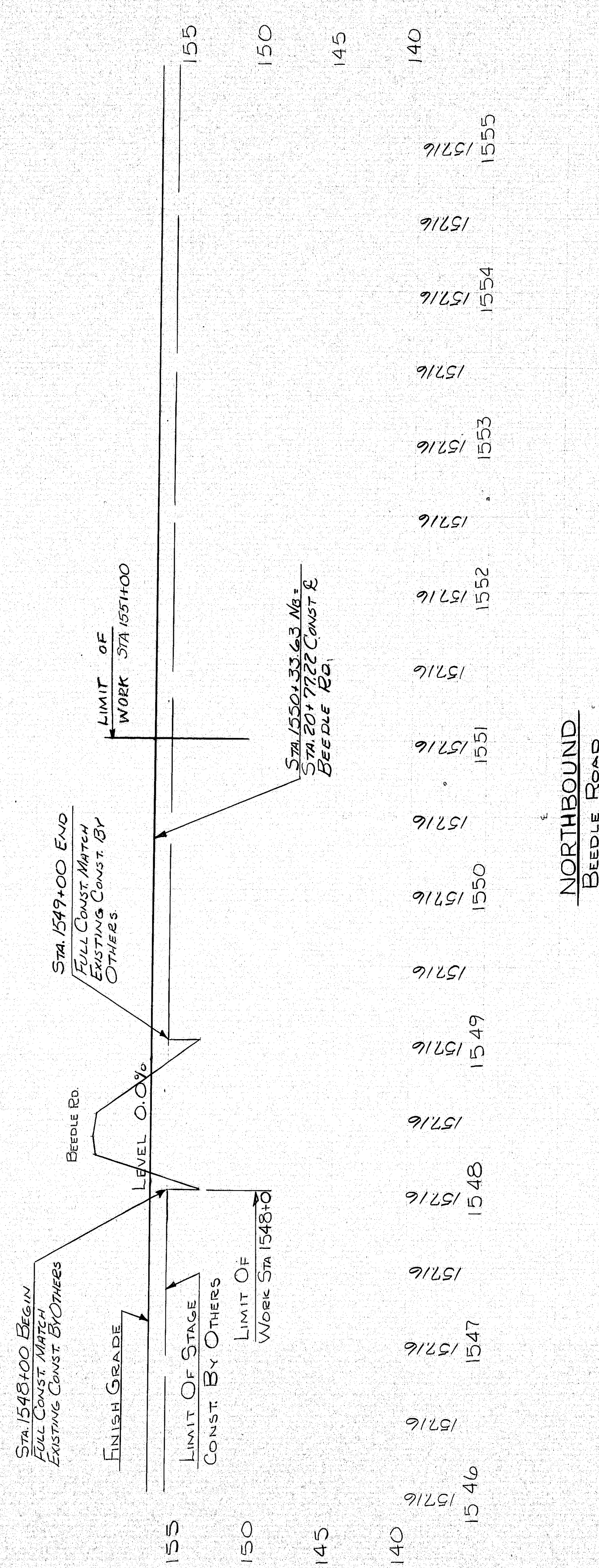
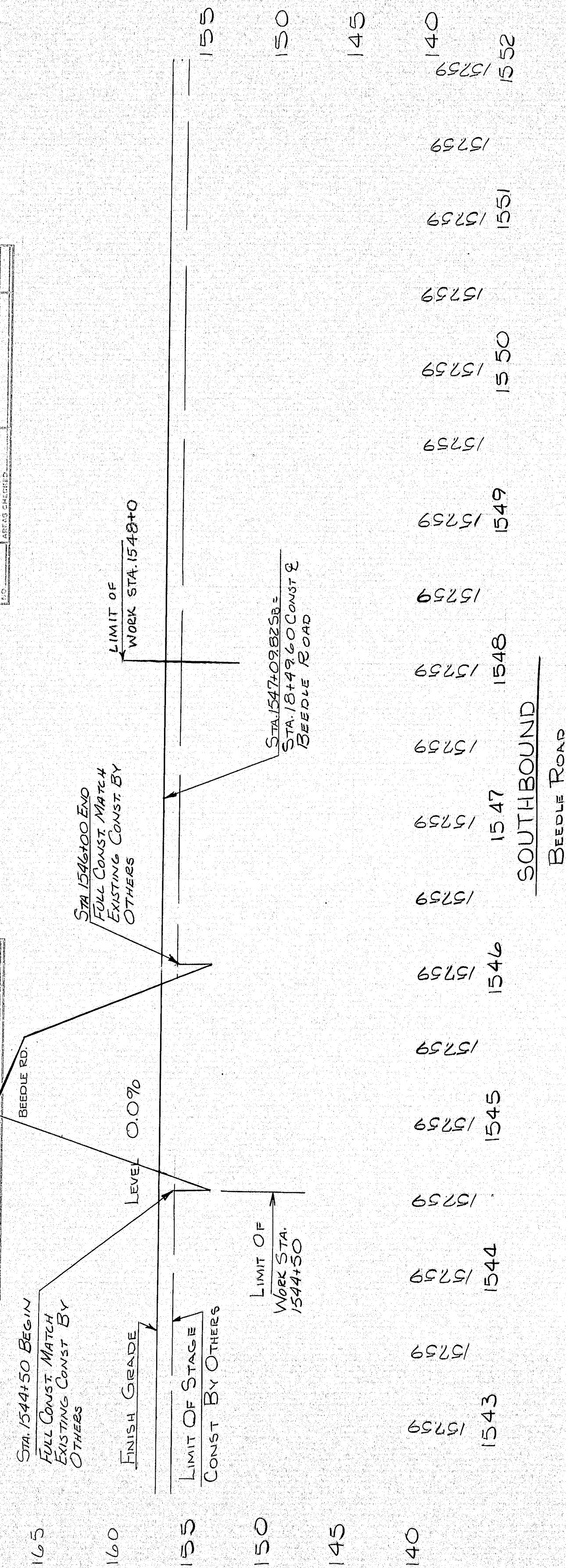
SHEET OF AUGUSTA, MAINE  
RICHMOND 1-95-5(39)

147-122



ORIGINAL	DATE	BY	DATE
SURVEY	12/25		
PLATTED			
DATE			
DATE			

FINAL	DATE	BY	DATE
SURVEY			
PLATTED			
DATE			
DATE			



FILE NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MASS	1-95-5(39)	7	11

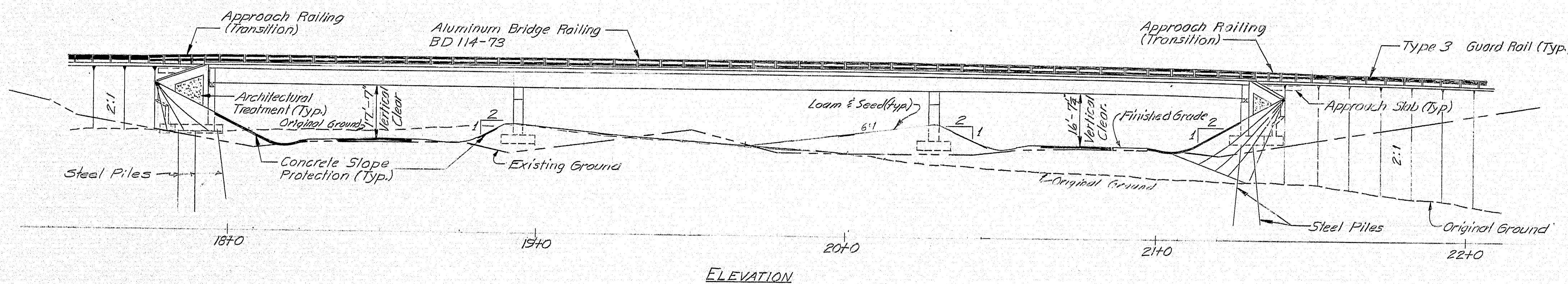
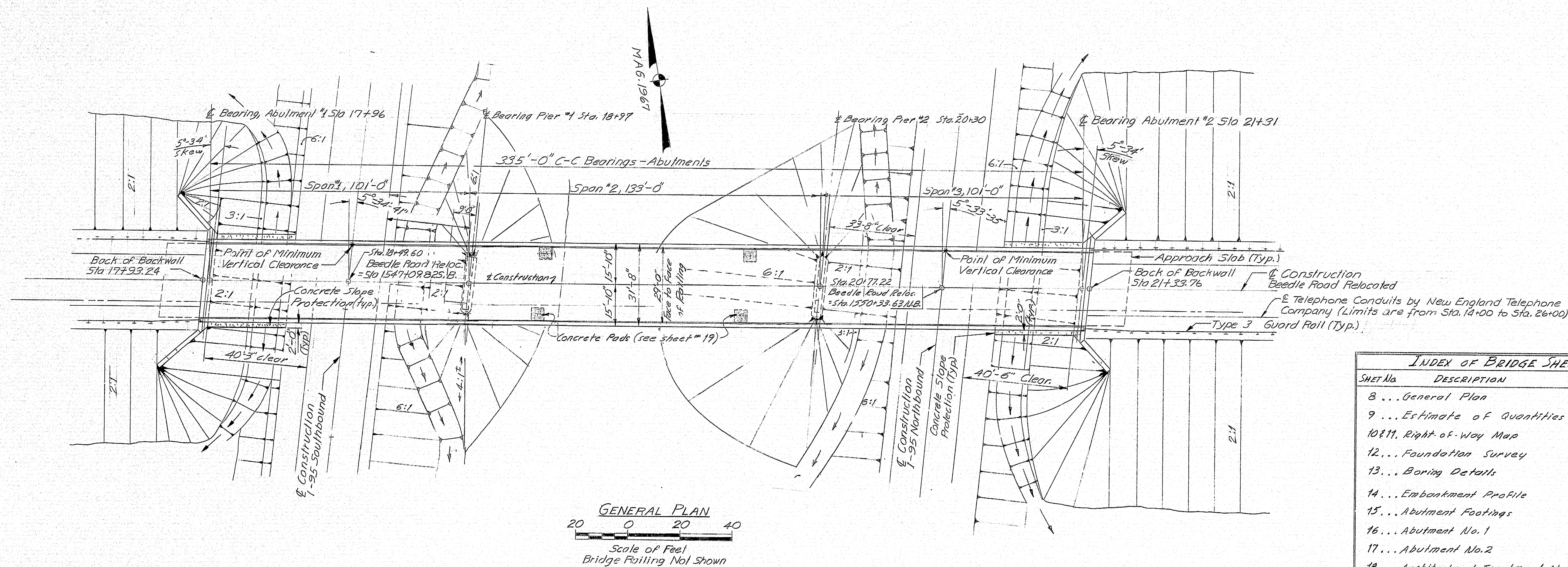
PROFILES OF I-95  
NORTHBOUND & SOUTHBOUND  
REED ROAD AREA  
BEEDLE ROAD AREA

147-123

RICHMOND I-95-5(39)



F.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	8	111



INDEX OF BRIDGE SHEETS	
SHEET No.	DESCRIPTION
8	General Plan
9	Estimate of Quantities
10 & 11	Right-of-Way Map
12	Foundation Survey
13	Boring Details
14	Embankment Profile
15	Abutment Footings
16	Abutment No. 1
17	Abutment No. 2
18	Architectural Treatment Abutments
19	Slope Protection
20	Approach Slabs
21	Pier No. 1
22	Pier No. 2
23	Architectural Treatment Piers
24	Framing Plan
25	Structural Steel
26	Bottom of Slab Elevations & Armored Joint Details
27	Superstructure Span No. 1
28	Superstructure Span No. 2
29	Superstructure Span No. 3
30	Reinforcing Steel Schedule Abutment No. 1
31	Reinforcing Steel Schedule Abutment No. 2
32	Reinforcing Steel Schedule Piers & Superstructure

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**RICHMOND**  
**SAGadahoc COUNTY**  
GENERAL PLAN

SHEET 8 OF 111 AUGUSTA, MAINE Feb. 1975

147-124

PROJECT DESIGN ENGINEER	ALLEN
BY	DATE
DESIGN	11/75
CHECKED	11/75
REVISIONS	11/75
FIELD CHANGES	



ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	Common Excavation	7,400	C.Y.
203.21	Rock Excavation	4,345	C.Y.
203.25	Granular Borrow	15,700	C.Y.
203.29	Selected Granular Material	950	C.Y.
206.06	Str. Earth Excav. - Drainage & Minor Strs.	200	C.Y.
206.08	Str. Earth Excav. - Abuts. & Ret. Walls	24	C.Y.
206.10	Str. Earth Excav. - Piers	460	C.Y.
304.10	Aggregate Subbase Course - Gravel	5,000	C.Y.
403.07	Hot Bit. Pavement, Grading B	575	Ton
403.08	Hot Bit. Pavement, Grading C	410	Ton
403.101	Hot Bit. Pavement, Grading D (Sidewalks, Drives, Etc.)	25	Ton
403.121	Hot Bit. Pavement, Grading E (Shimming)	25	Ton
410.14	Cut-back Asphalt, Applied	2,650	Gal.
410.15	Emulsified Asphalt, Applied	600	Gal.
410.16	Cover Coat Material, Sand	90	C.Y.
410.161	Cover Coat Material, Sand (Leveling)	65	C.Y.
411.09	Untreated Aggregate Surface Course	150	C.Y.
501.216	Steel H-Beam Piles 73 lbs./ft.	855	L.F.
502.21	Structural Concrete, Abuts. & Retaining Walls	325	C.Y.
502.23	Structural Concrete, Piers	130	C.Y.
502.2602	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	1	L.S.
502.2902	Structural Concrete, Wearing Surface on Bridges	1	L.S.
502.3102	Structural Concrete, Approach Slabs	1	L.S.
503.12	Reinforcing Steel, Fab. & Delivered	104,600	Lb.
503.13	Reinforcing Steel, Placing	104,600	Lb.
504.7002	Structural Steel, Fab. & Delivered	1	L.S.
504.7102	Structural Steel, Erection	1	L.S.
504.74	Metal Inserts	134	Each
505.0802	Shear Connectors	1	L.S.
506.1402	Field Painting, Structural Steel	1	L.S.
507.141	Aluminum Bridge Rolling, Type "A"	679	L.F.
507.151	Aluminum Approach Rolling, Type "A"	4	Each
512.07	French Drains (Stones Only)	20	C.Y.
513.09	Slope Protection - Port. Cem. Concrete	560	S.Y.

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
514.06	Curing Box For Concrete Cylinders	85	Each
515.20	Protective Coating For Concrete Surfaces	1,940	S.Y.
603.198	24 Inch Culvert Pipe, Option II	220	L.F.
604.09	Catch Basins Type B1	1	Each
605.09	6 Inch Underdrain Type "B"	276	L.F.
605.10	6 Inch Underdrain Outlet	55	L.F.
606.26	Terminal Ends - Single Rail	4	Each
606.28	Single Posts - Type Ia	20	Each
606.35	Guard Rail Delineator Posts	5	Each
606.51	Guard Rail Type 3 - Single Rail	1,775	L.F.
606.60	Guard Rail Type 3 - Circular - Greater Than 15 Ft. Radius	50	L.F.
607.09	Woven Wire Fence - Metal Posts	1,950	L.F.
607.15	Drive Gateways - 16 Feet - Metal	1	Each
607.242	Remove And Reset Gateway	1	Each
607.32	Bracing Assembly, Type I - Metal Posts	12	Each
607.33	Bracing Assembly, Type II - Wood Posts	9	Each
609.11	Vertical Curb - Type I	32	L.F.
609.13	Vertical Bridge Curb - Type I	675	L.F.
609.25	Curb Transition Section A - Type I	4	Each
609.32	Curb Type 3a	230	L.F.
610.08	Plain Riprap	30	C.Y.
615.07	Loam	495	C.Y.
616.08	Sodding	360	S.Y.
617.09	Erosion Control Mesh	280	S.Y.
618.13	Seeding, Method Number 1	3	Unit
618.14	Seeding, Method Number 2	265	Unit
618.15	Temporary Seeding	50	Lb.
619.09	Hay Mulch	320	Unit
623.06	Right-Of-Way Monuments	16	Each
623.07	Survey Monuments	1	Each
629.05	Labor, Straight Time	20	M.Hr.
630.06	Traffic Officers	50	M.Hr.
631.10	Air Compressor (Inc. Operator)	5	Hour
631.11	Air Tool (Inc. Operator)	5	Hour

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
631.12	All Purpose Excavator (Including Op.)	15	Hour
631.13	Bulldozer (Inc. Op.)	10	Hour
631.132	Small Bulldozer (Inc. Op.)	80	Hour
631.14	Grader (Inc. Op.)	20	Hour
631.171	Truck - Small (Inc. Op.)	20	Hour
631.22	Front End Loader (Inc. Op.)	5	Hour
633.09	Portable Barricade	2	Each
637.07	Sprinkling	90	M.G.
637.08	Calcium Chloride	9	Ton
639.09	Field Office, Type B	1	Each
639.11	Testing Facilities, Soils	0.35	L.S.
639.12	Testing Facilities, Bit Mixes	0.35	L.S.
656.50	Baled Hay, In Place	6	Each
656.51	Sandbags, In Place	6	Each
657.201	Seed And Application, Method A	35	Unit
659.10	Mobilization	0.5	L.S.
660.21	On-The-Job Training (Bid)	1000	M.Hr.

#### ESTIMATED QUANTITIES OF LUMP SUM ITEMS

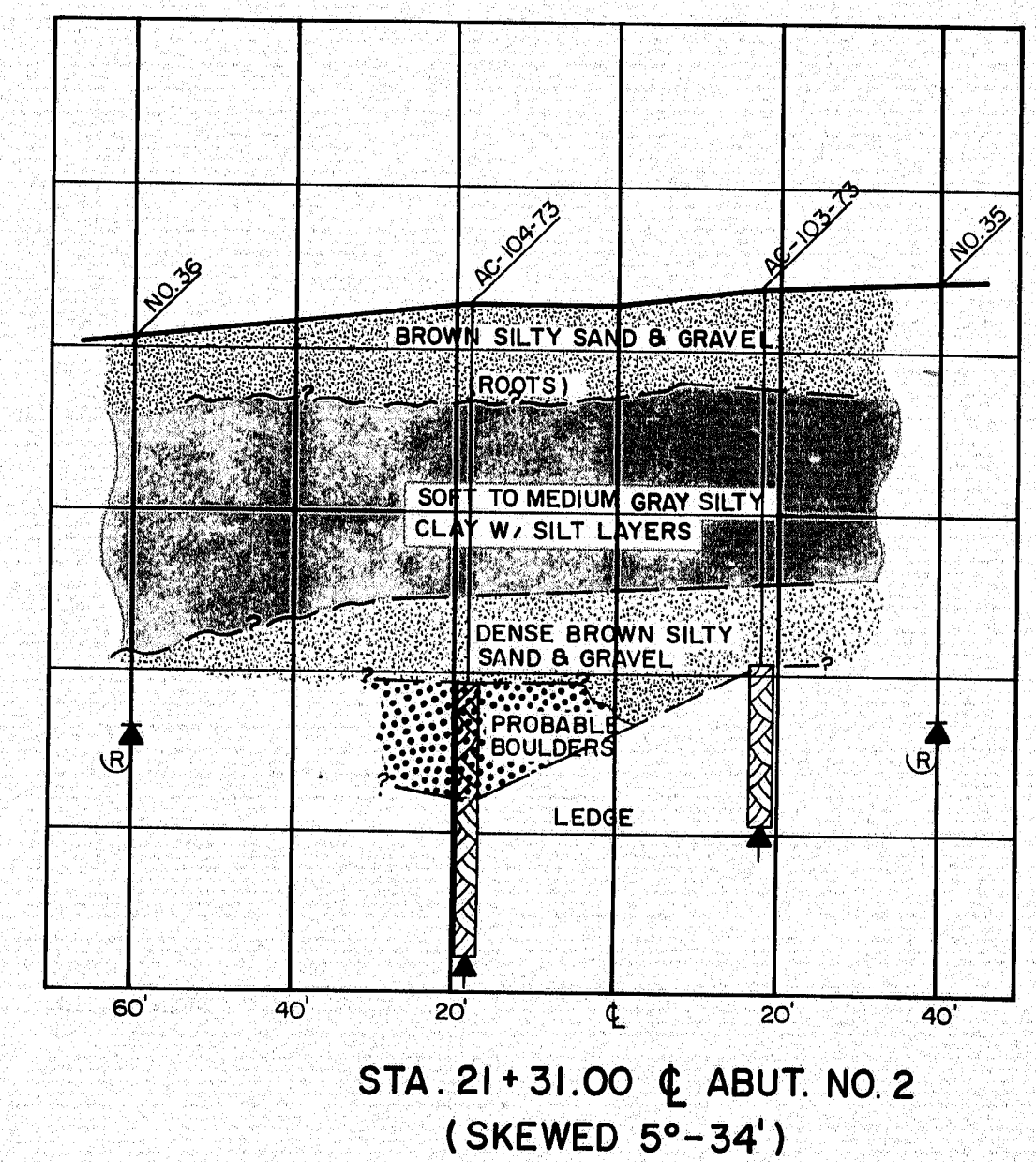
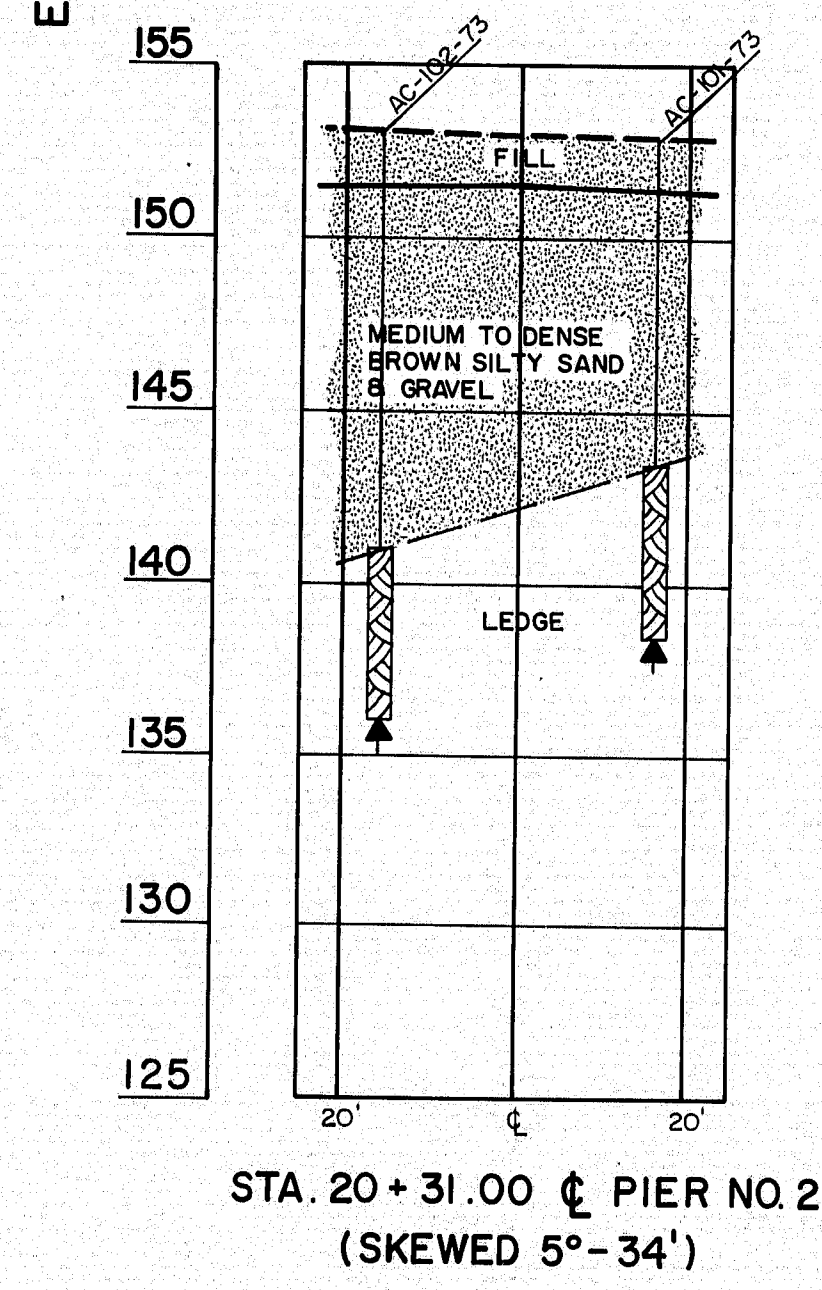
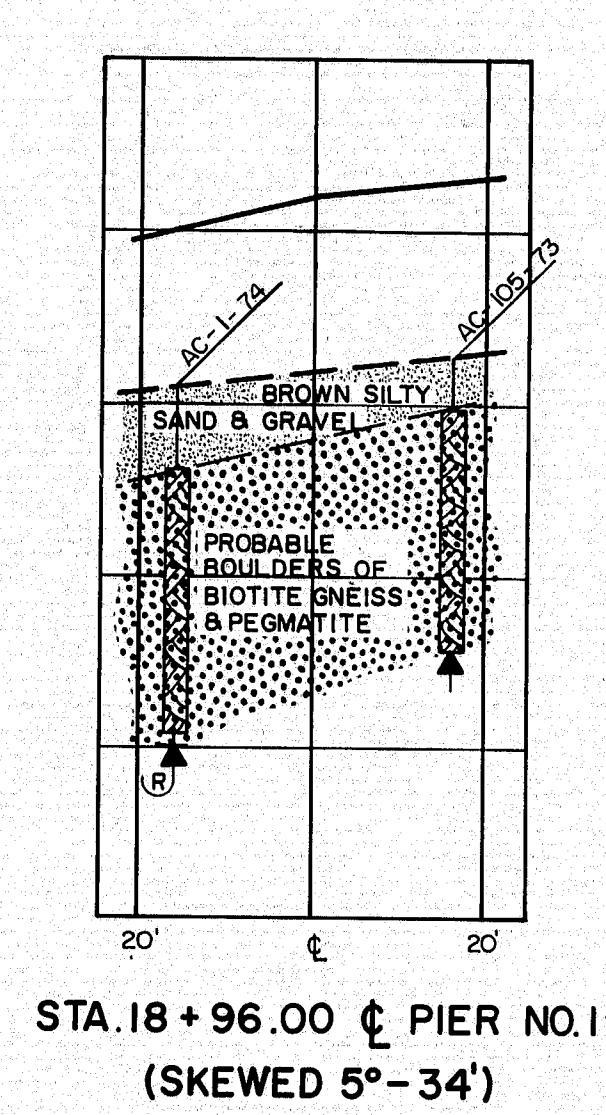
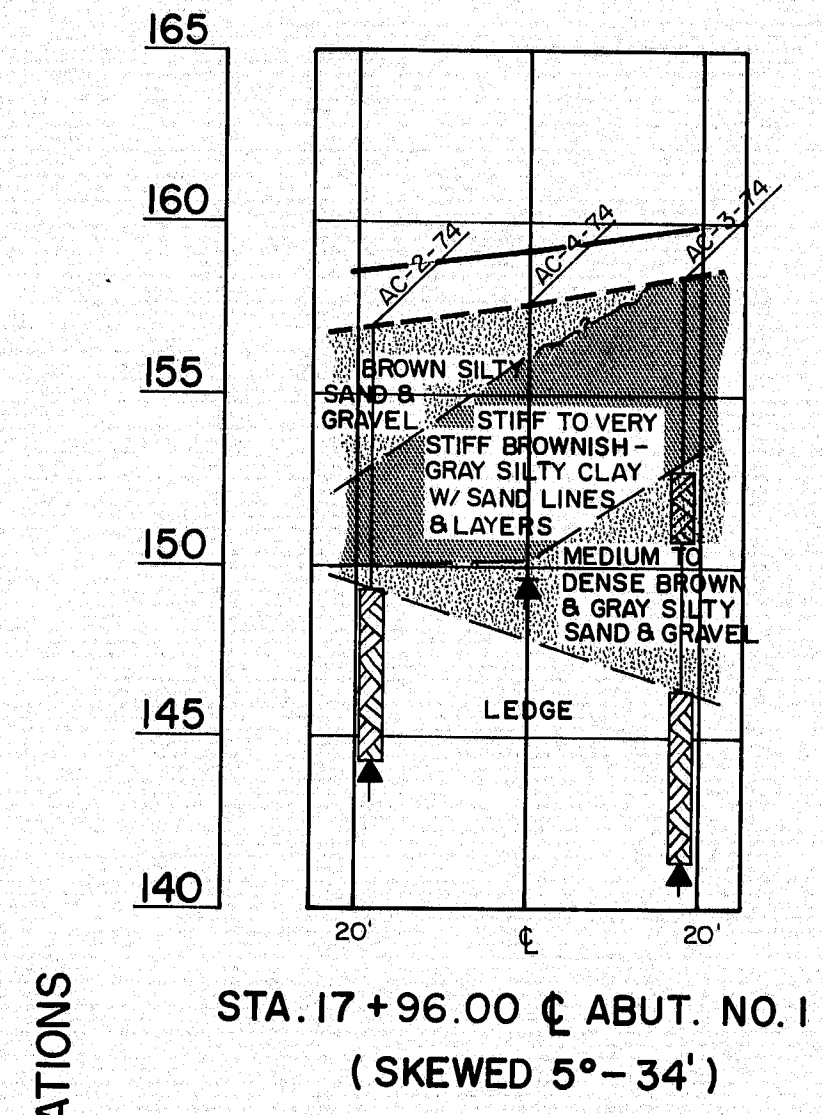
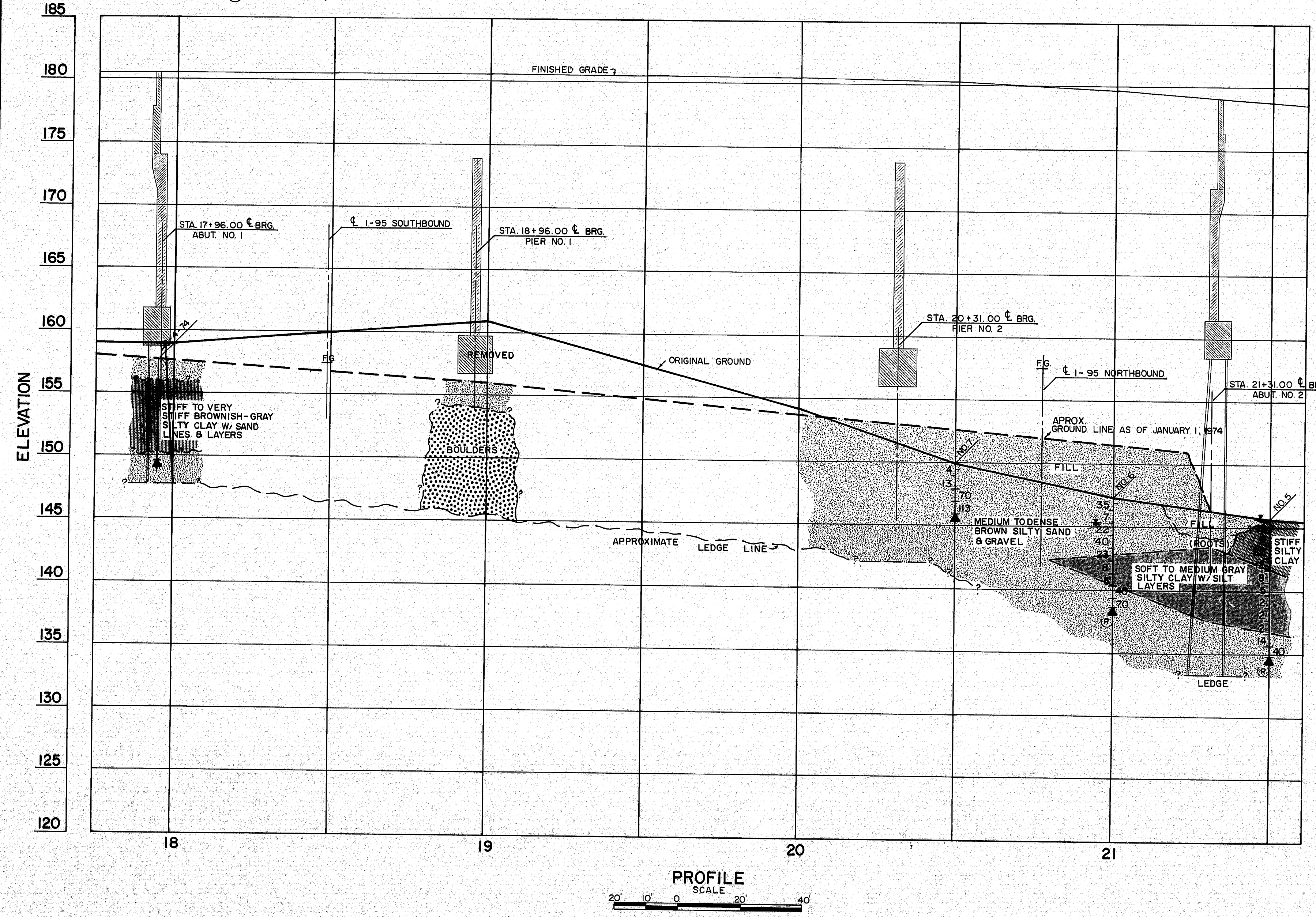
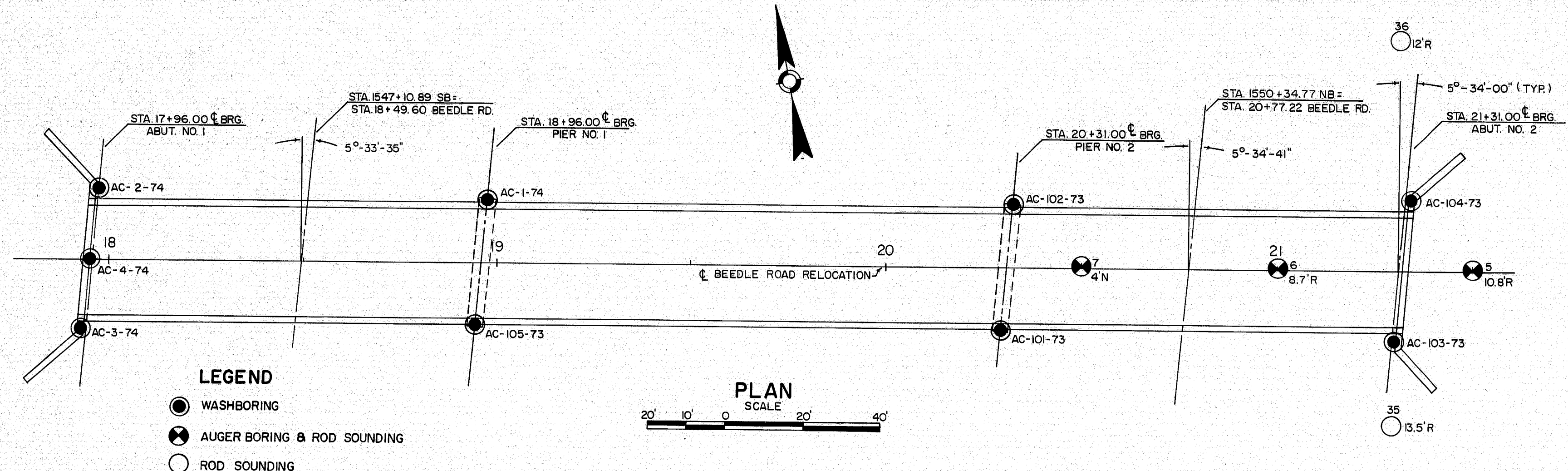
502.2602	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	345	Cubic Yards
502.2902	Structural Concrete, Wearing Surface on Bridges	87	Cubic Yards
502.3102	Structural Concrete, Approach Slabs	21	Cubic Yards
504.7002	Structural Steel, Fab. & Delivered	310,800	Pounds
504.7102	Structural Steel, Erection	310,800	Pounds
505.0802	Shear Connectors	2176	Studs
506.1402	Field Painting, Structural Steel	310,800	Pounds

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
<b>BEEDLE ROAD</b> OVER <b>INTERSTATE 95</b> IN THE TOWN OF <b>RICHMOND</b> <b>SAGadahoc COUNTY</b> ESTIMATE OF QUANTITIES
SHEET 9 OF 111 AUGUSTA, MAINE Feb. 1975

147-125



F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	12	111



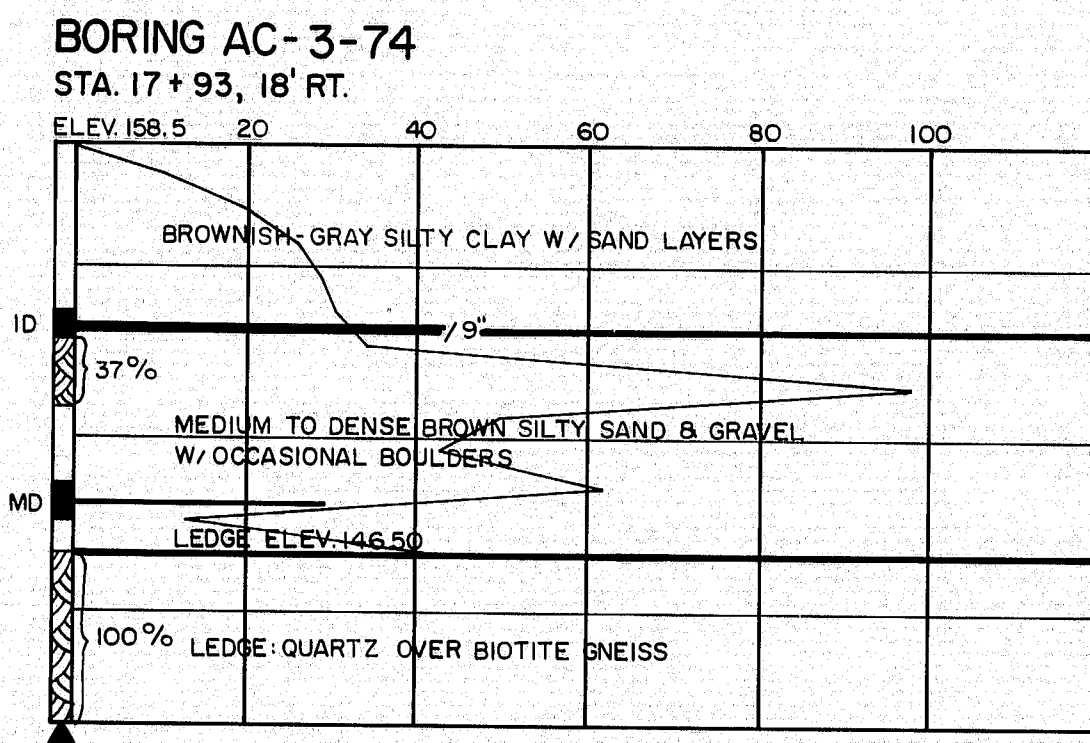
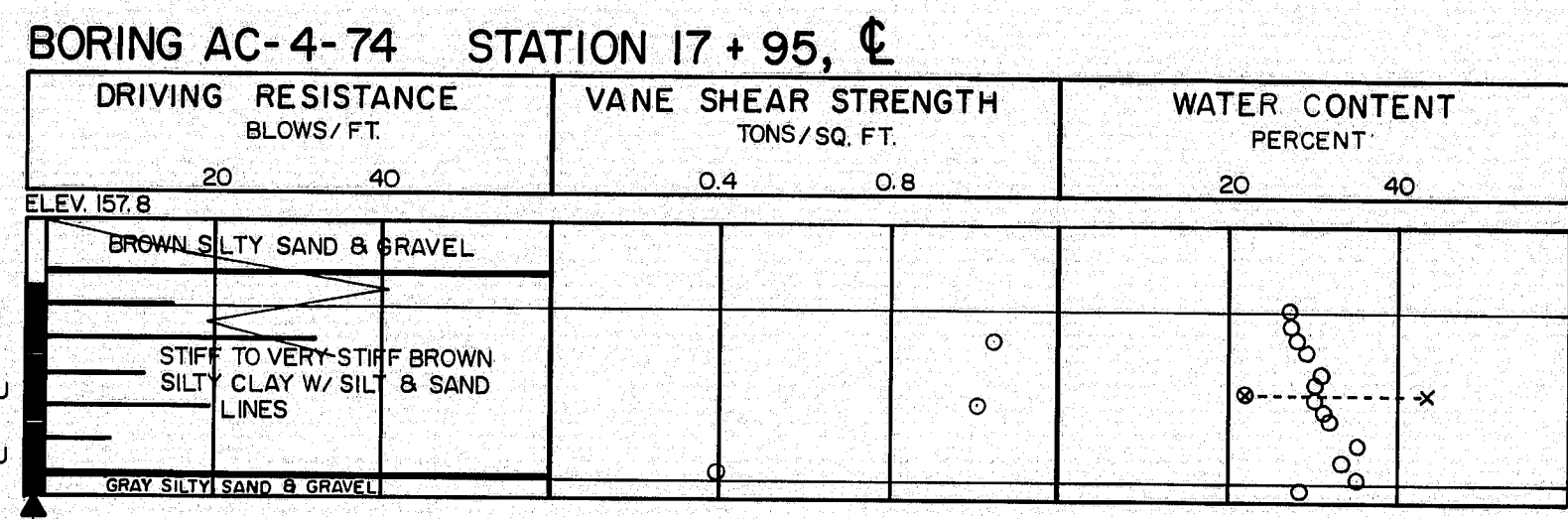
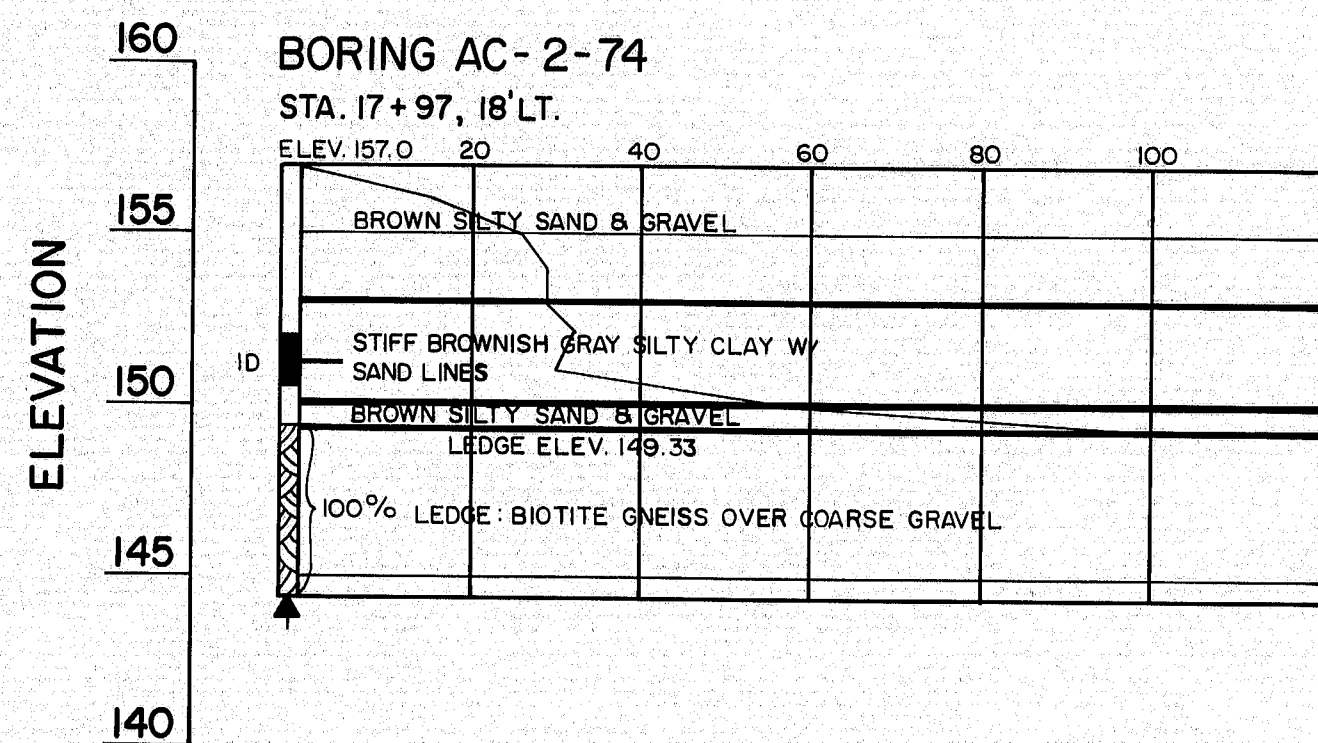
TRANSVERSE SECTIONS  
SCALE 20' 10' 0' 20' 40'

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
BEEDLE ROAD  
OVER  
INTERSTATE I-95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY  
FOUNDATION SURVEY  
SHEET 12 OF 111 AUGUSTA, MAINE Feb. 1975  
**147-126**

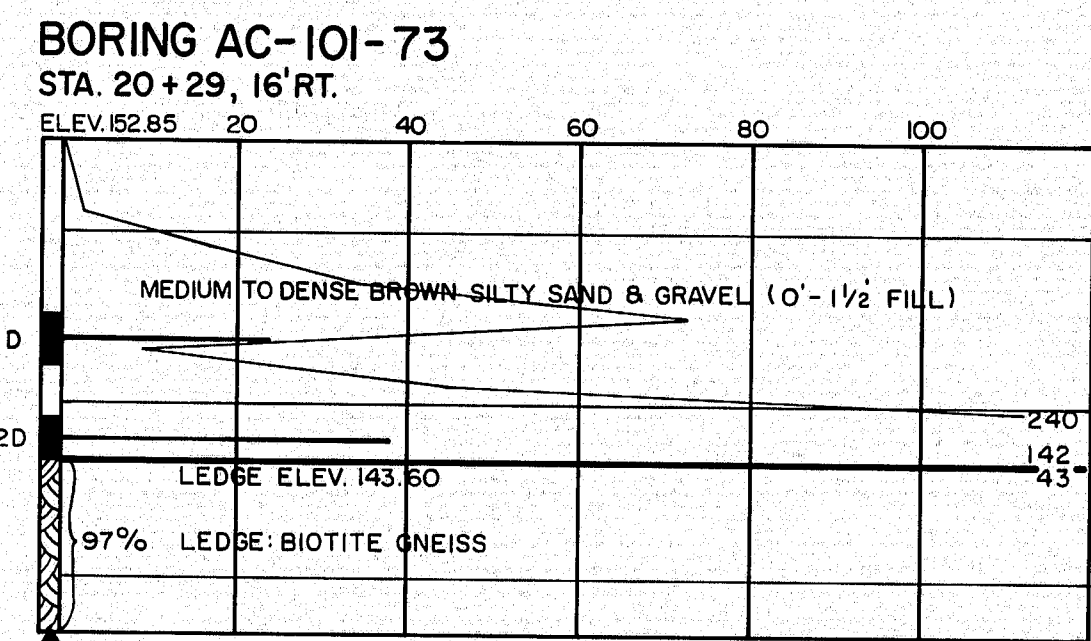
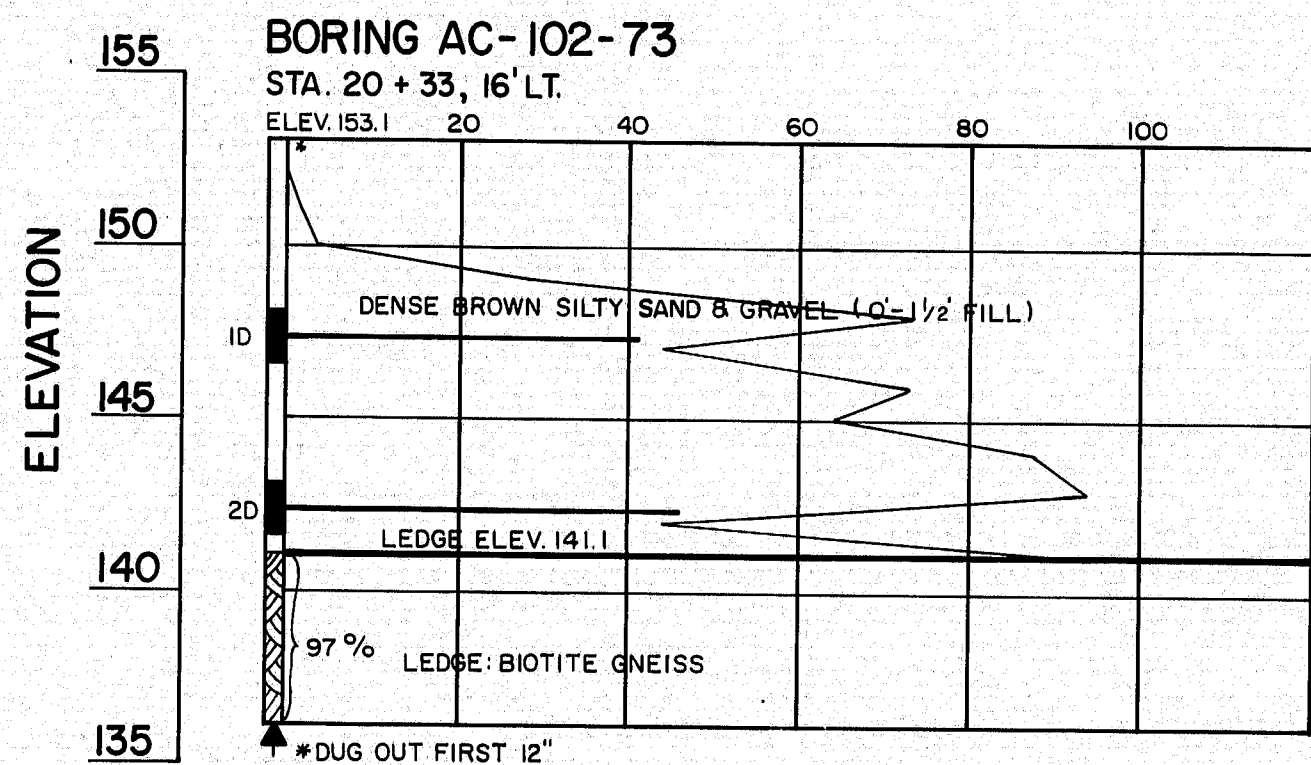
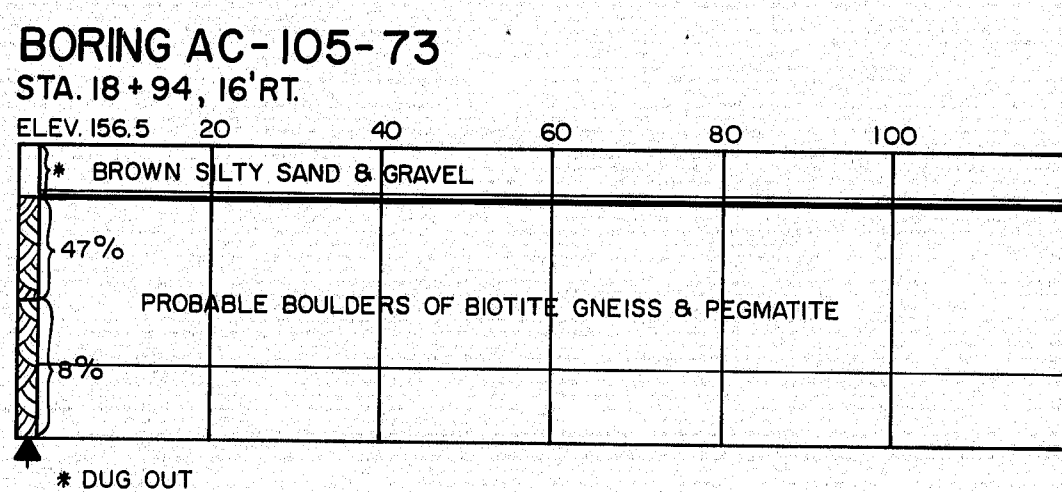
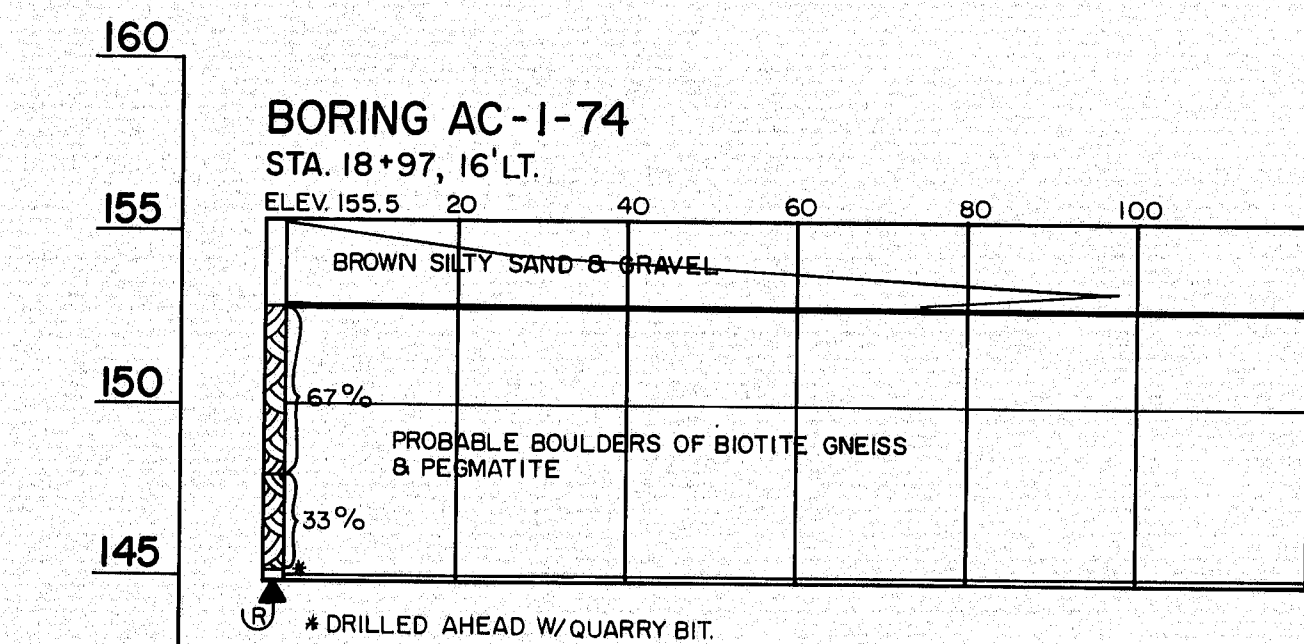
PROJECT DESIGN ENGINEER	BY	DATE
PLANS		
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		



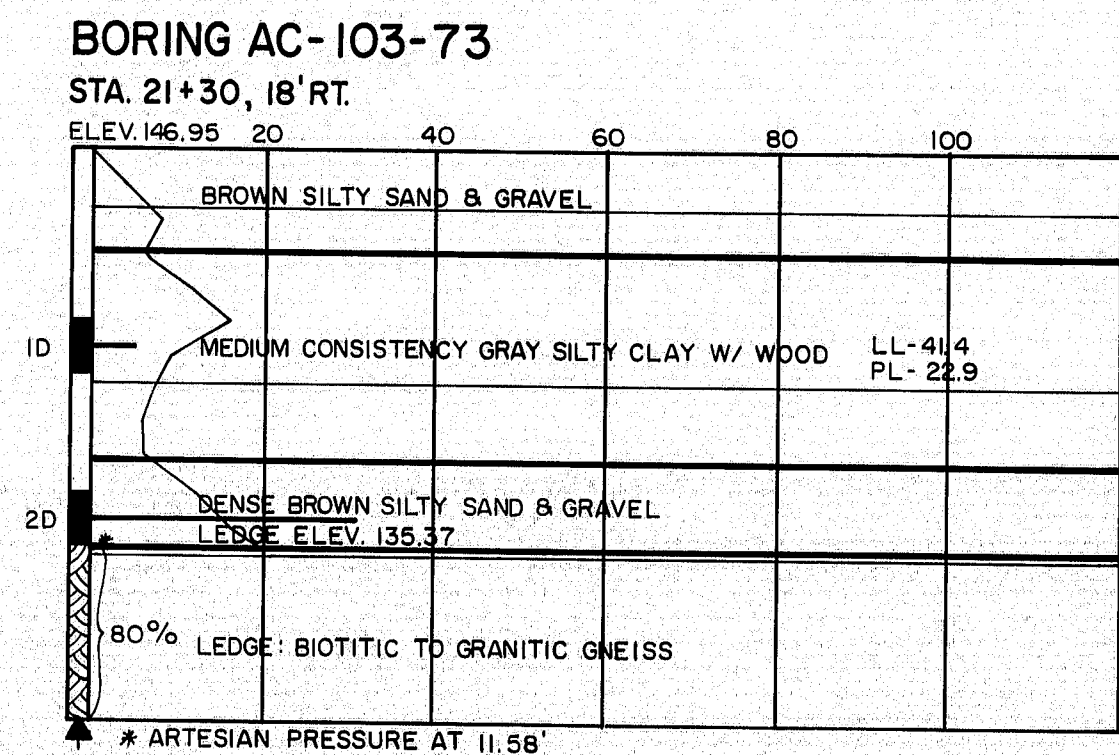
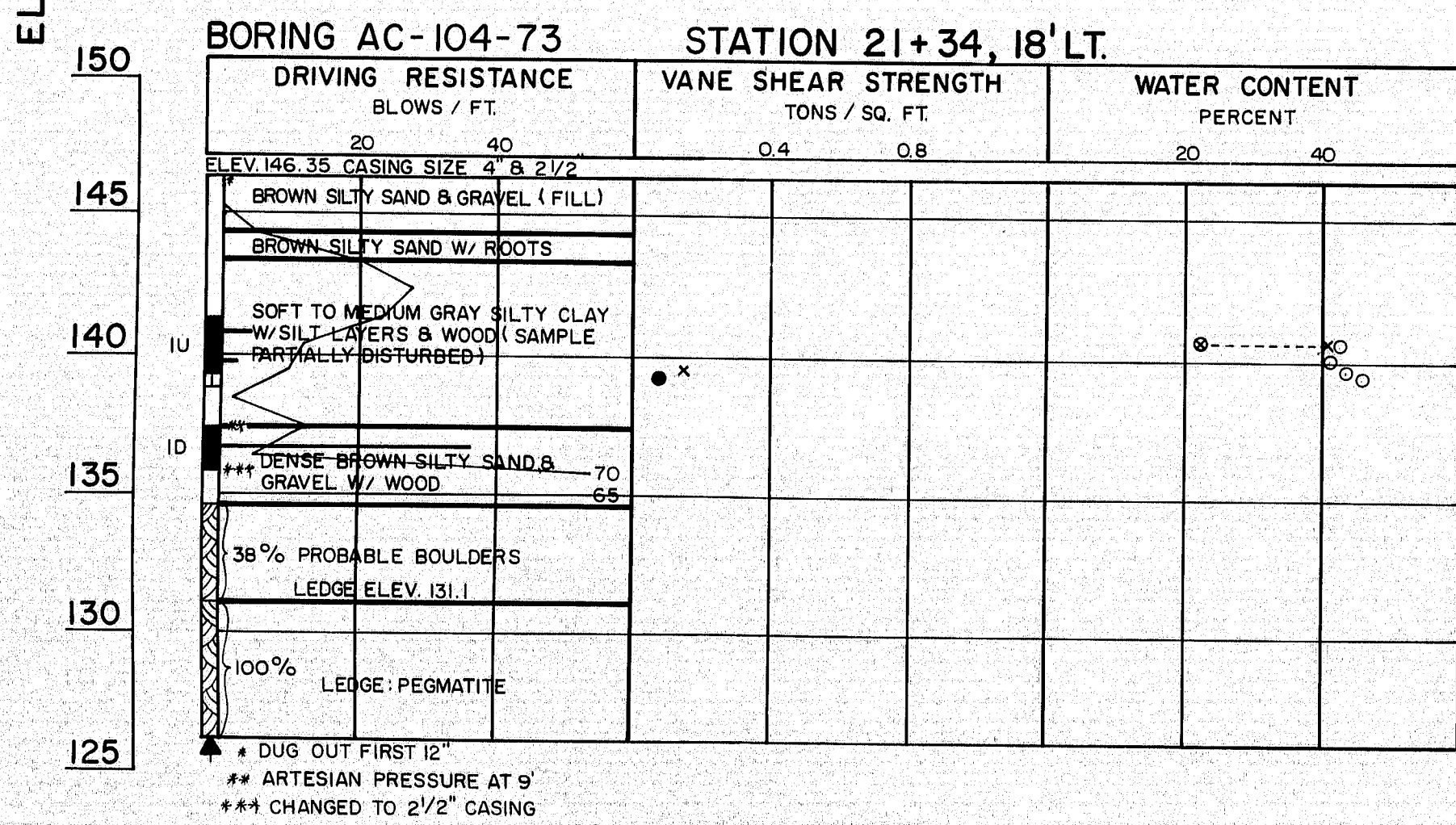
## ABUTMENT NO. 1



## PIER NO. 1



## ABUTMENT NO. 2



### BORING NOTES

- All samples and vanes are made ahead of casing
  - Water elevation
  - Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow
  - Location of sample or sample attempt
  - Number and type of dry samples
  - S & H Sampler no. 1290's
  - 3 1/2" O.D. 16 ga. seamless tubing
  - Unsuccessful sample attempt and type of sample
  - Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow
  - Field vane test
  - Bottom of boring (may not be bottom of soil strata)
  - Refusal of drill rods or casing (may not be ledge)
  - Locations cored by diamond bit and per cent recovery of rock
  - Note: used 2 1/2" casing on all borings unless otherwise noted
- ### SHEAR NOTES
- Field vane shear strengths
  - Laboratory vane shear strengths
  - Shear strengths in excess of capacity of equipment
  - One half unconfined compressive strengths

### WATER CONTENT NOTES

- Natural water contents, given as per cent of dry weight
- Plastic and liquid limits
- Ignition losses are given as per cent of dry weight

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
BEEDLE ROAD  
OVER  
INTERSTATE 1-95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY  
BORING DETAILS

SHEET 13 OF 111 AUGUSTA, MAINE Feb. 1975

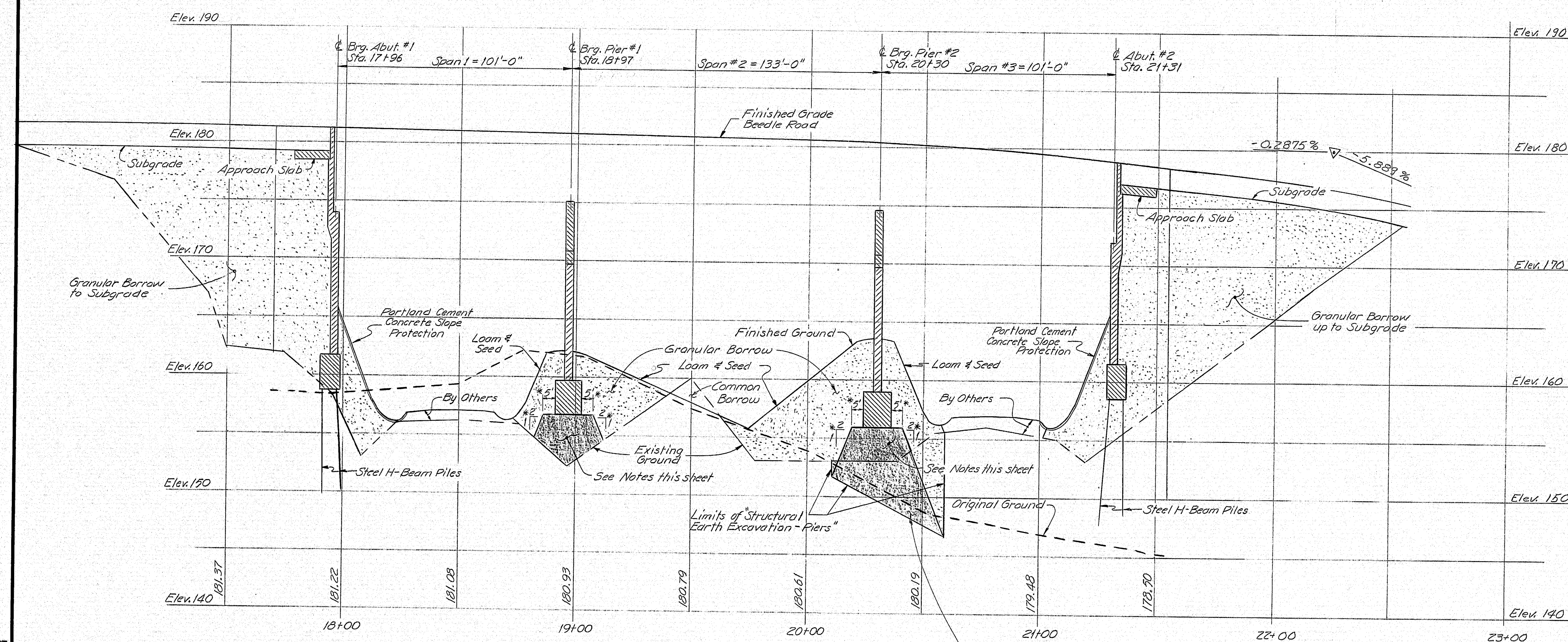
147-127

200-1 2000

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(3)	14	11



\* Typical all around the Pier footings for requirements of Granular Borrow with the gradation of Aggregate Subbase Course - Gravel and 98% maximum density or specified under Supplemental Specification Section 203.

### EMBANKMENT PROFILE Along E Beedle Road

Note: The areas under Piers #1 and #2 shall be prepared and embankments constructed in accordance with Section 203 (Preparation of Foundation and Construction of Embankments in Abutment and Pier Areas)

Excavation required below elevation 145 will be paid for at 1/2 times the unit bid price in conformance with Subsection 206.05

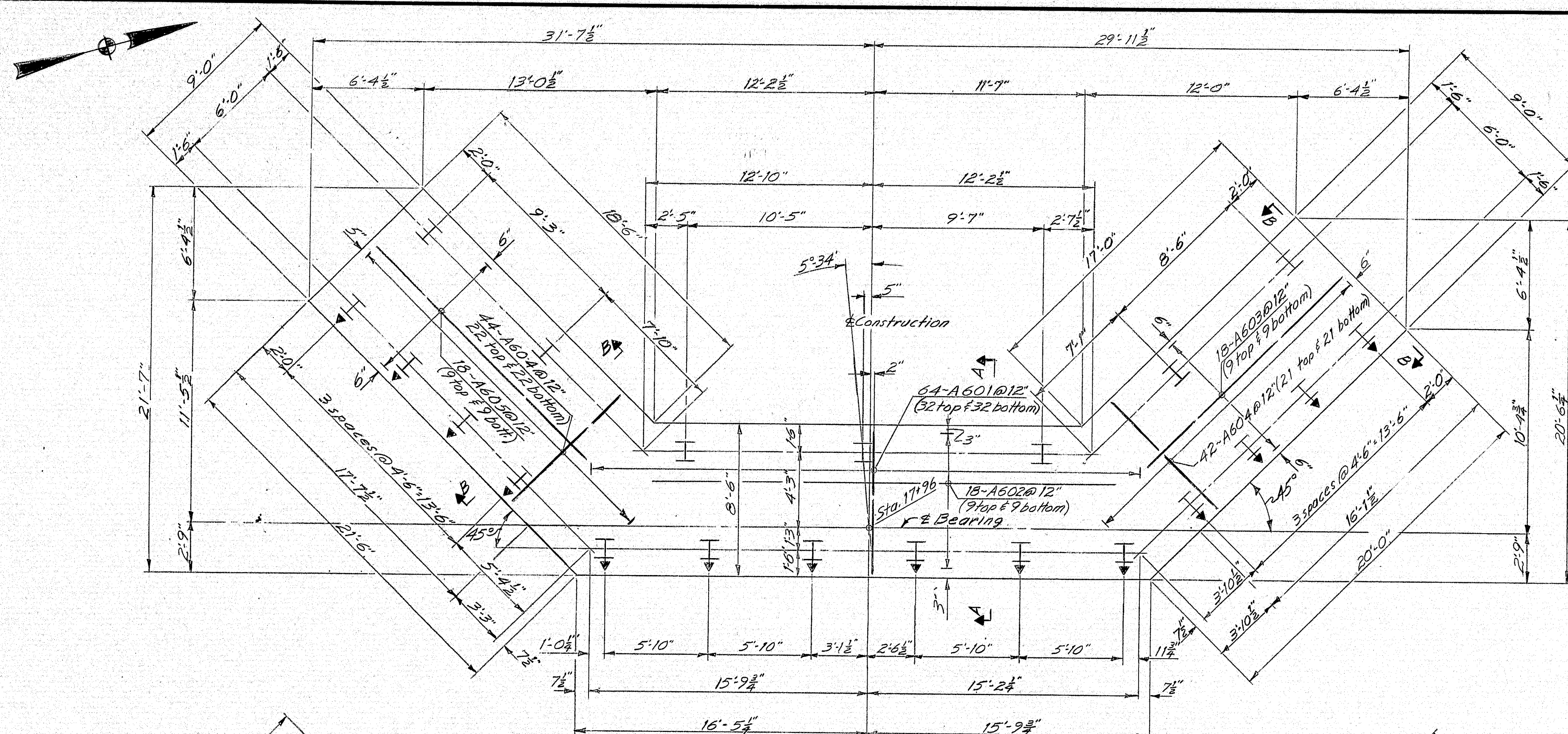
At Pier #2, excavate the existing fill down to the original ground, remove topsoil and prepare the foundation in accordance with Section 203.

PROJECT DESIGN ENGINEER	ALL	DATE	1/12
DESIGN - DETAIL	ALL	BY	GRW
CHECKED			
REVISIONS			
FIELD CHANGES			

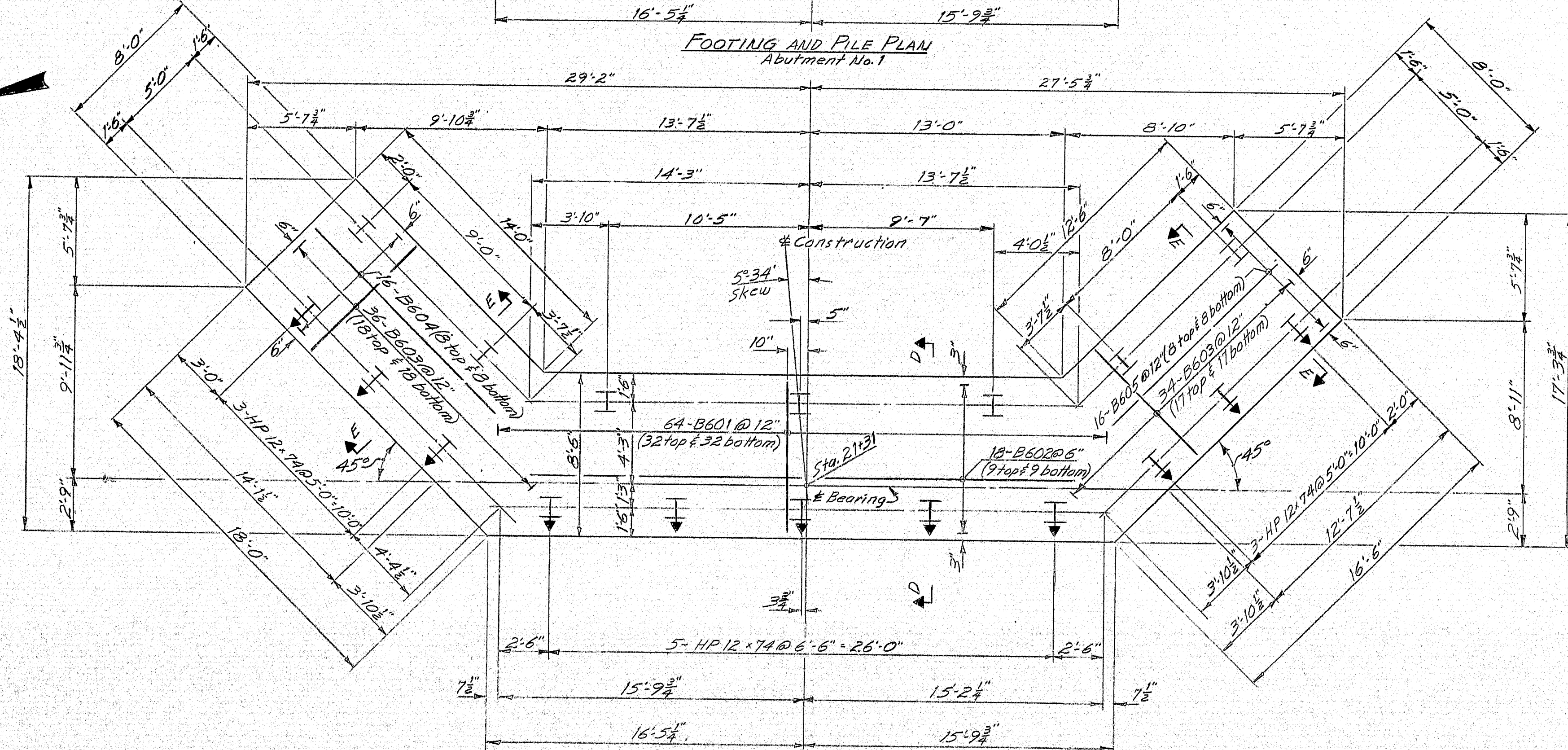
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
  
**BEEDLE ROAD**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**RICHMOND**  
**SAGadahoc COUNTY**  
EMBANKMENT PROFILE  
  
SHEET 14 OF 111 AUGUSTA, MAINE Feb. 1975  
**147-128**



F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	15	11



FOOTING AND PILE PLAN  
Abutment No. 1



FOOTING AND PILE PLAN  
Abutment No. 2

#### PILE NOTES

1. Piles shall be driven to ledge or practical refusal.
2. All piles shall have pointed reinforced tips.
3. Estimated driven lengths of piles are determined from available soils information with no allowance for cut-offs and no allowance for uncertain pile penetration.
4. Piles marked thus,  $\nabla$ , shall be battered 3 inches per foot in the direction of the arrow.
5. Maximum pile load equals: 96.5 tons (including 0 tons allowed for negative skin friction).
6. Following are pile locations, number of piles required, size of piles and estimated driven lengths:  
Abutment No. 1 21-HP 14x73 @ 10 to 15 feet  
Abutment No. 2 18-HP 14x73 @ 20 to 25 feet

#### ABUTMENT NOTES

1. Chamfer all exposed edges of concrete  $\frac{1}{2}$  inch unless otherwise indicated.
2. All reinforcing steel splices and embedments shall be a minimum of 36 bar diameters unless otherwise indicated.
3. Reinforcing steel shall have 2 inches cover unless otherwise indicated.
4. Place reinforcing steel in bridge seats to clear anchor bolts.
5. Break bond at vertical contraction joints by a method approved by the Engineer.
6. Polyvinylchloride Waterstops shall be placed in all Vertical Contraction and Expansion Joints.
7. Waterstops are not required in horizontal construction joints.
8. Protective Coating for Concrete Surfaces shall be applied to the following areas:  
Abutment No. 1- Face and top of backwall, top of concrete curb and bridge seat.

Abutment No. 2- Top of concrete curb and top of backwall.

9. Place 4 inch diameter drains in breastwall and wings at 20 feet maximum spacing. Exact location to be determined by the Engineer in the field. Bevel exposed ends of weepers to match slope protection.

#### REFERENCES

- For Pointed Reinforced Pile Tip Details:  
see Standard sheet BD 104-73.
- For Abutment No. 1 Plan see sheet No. 16.
- For Abutment No. 2 Plan see sheet No. 17.
- For Sections A-A & B-B see sheet No. 16.
- For Sections D-D & E-E see sheet No. 17.

PROJECT DESIGN ENGINEER	DATE
BY	2-7-74
DESIGN - DETAIL	2-7-74
CHECKED	2-7-74
REVISIONS	
FIELD CHANGES	

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

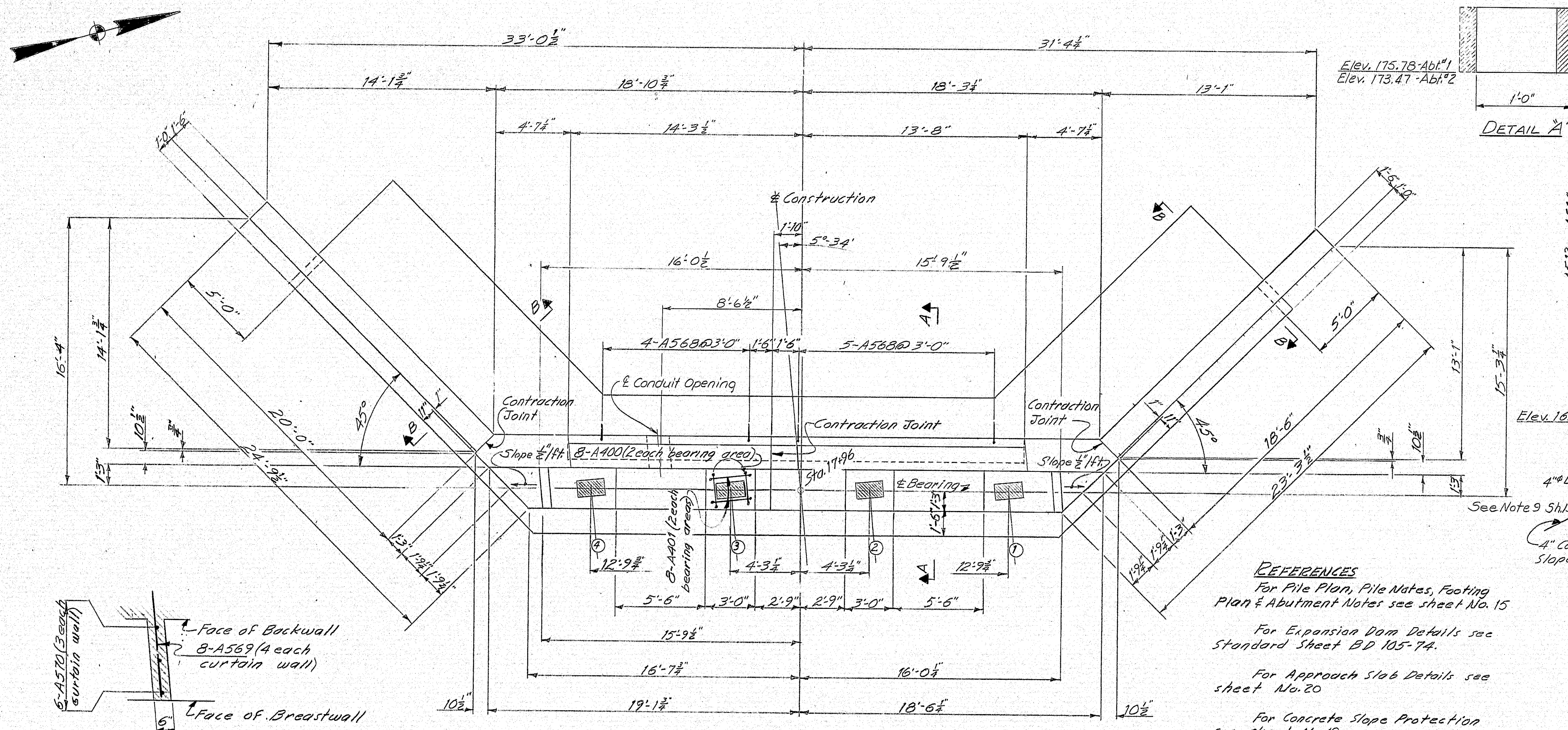
BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY  
ABUTMENT FOOTINGS

SHEET 15 OF 111 AUGUSTA, MAINE Feb. 1975

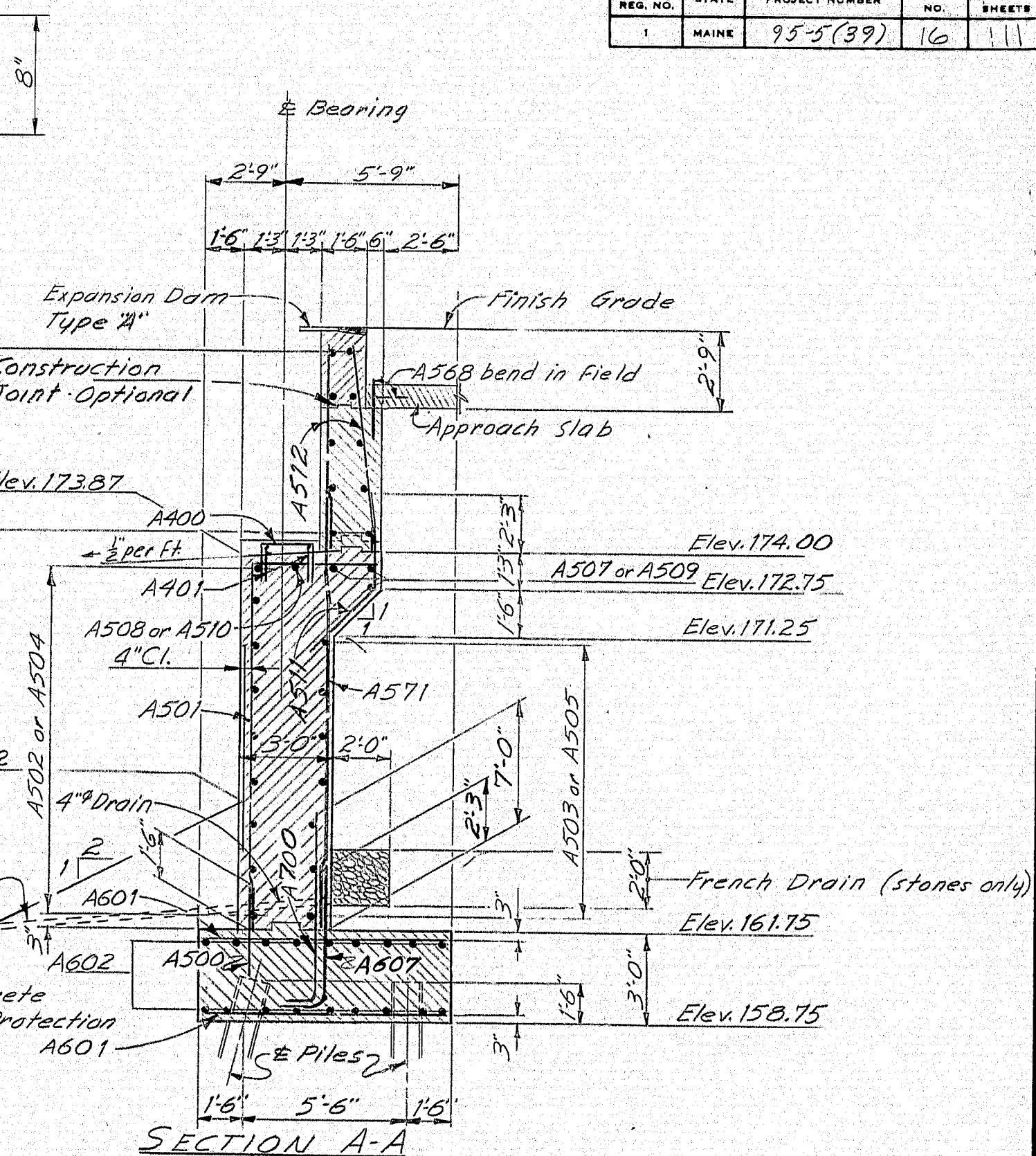
147-129



F.R.W.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	16	111

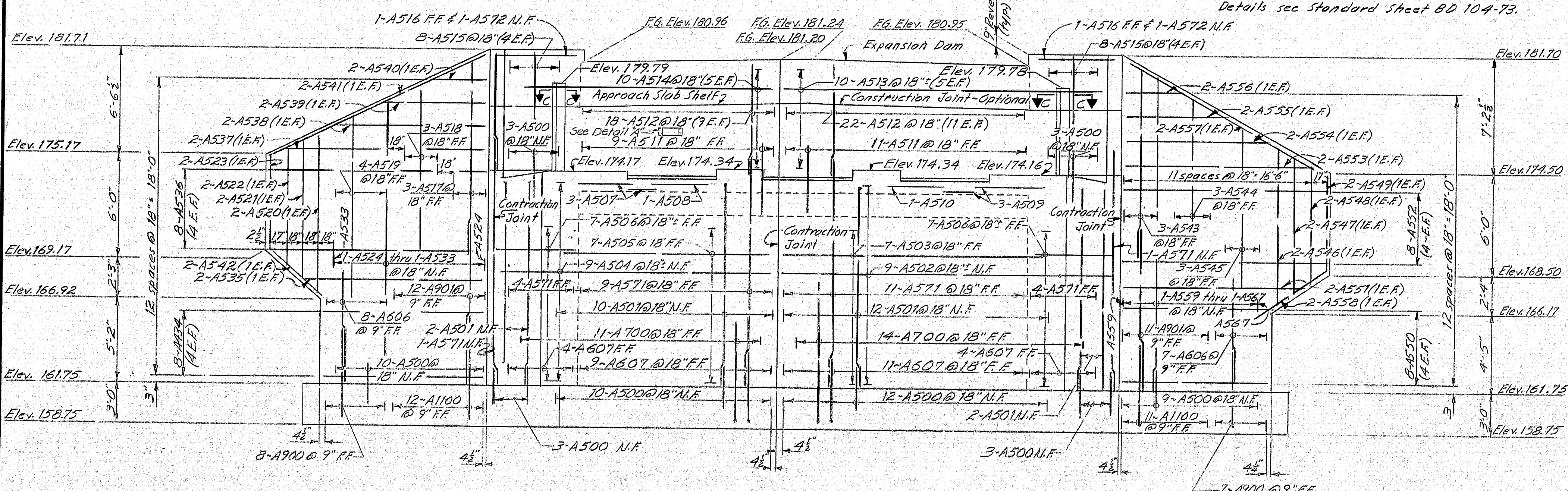


SECTION C-C

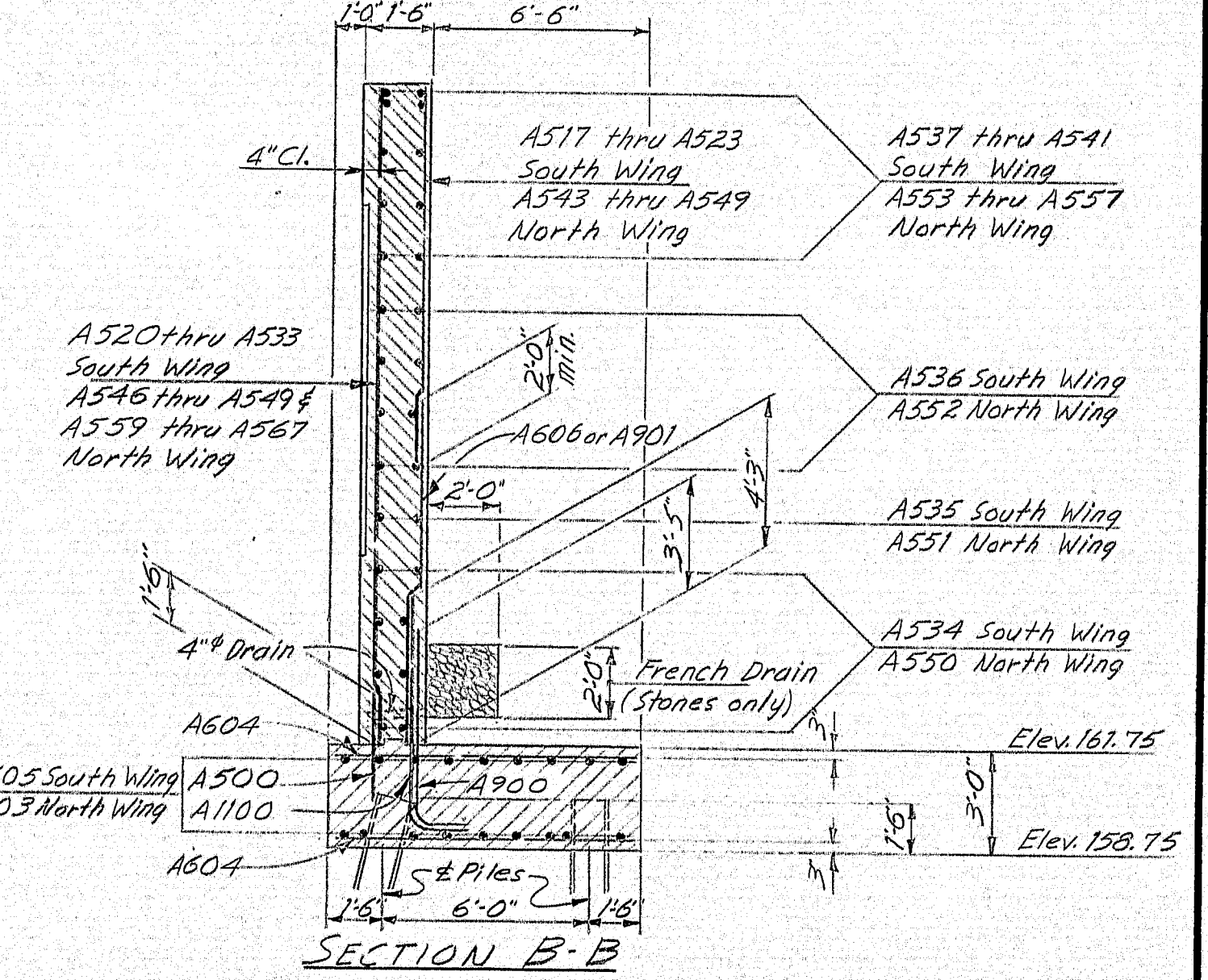


SECTION A-A

**REFERENCES**  
 For Pile Plan, Pile Notes, Footing Plan & Abutment Notes see sheet No. 15  
 For Expansion Dam Details see Standard Sheet BD 105-74.  
 For Approach Slab Details see sheet No. 20  
 For Concrete Slope Protection see sheet No. 19  
 For Construction and Contraction Joint Details see Standard Sheet BD 104-73.



ELEVATION



SECTION B-B

**LEGEND**  
 N.F. = Near Face  
 FF = Far Face  
 EF = Each Face  
 Elev. = Elevation  
 F.G. = Finish Grade

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
**BEEDLE ROAD**  
 OVER  
**INTERSTATE 95**  
 IN THE TOWN OF  
**RICHMOND**  
**SAGadahoc COUNTY**  
 ABUTMENT NO. 1

SHEET 16 OF 111 AUGUSTA, MAINE Feb. 1991

147-130



This engineering drawing illustrates the Beedle Road Over Interstate 95 Abutment No. 2, showing the plan, elevation, and section views.

**Plan View:** Shows the overall layout of the abutment, including the main structure, approach slabs, and construction joints. Key dimensions include a total width of 30'-6 3/4" and a total length of 28'-10 1/2". The plan view also shows the location of the main structure, approach slabs, and construction joints.

**Elevation View:** Shows the vertical profile of the abutment, including the main structure, approach slabs, and construction joints. Key elevations include 179.32, 173.50, 167.50, 165.25, 161.50, and 158.50. The elevation view also shows the location of the main structure, approach slabs, and construction joints.

**Section D-D:** Shows a cross-section of the abutment, including the main structure, approach slabs, and construction joints. Key dimensions include a total width of 10'-1 1/2" and a total height of 10'-9 1/2". The section view also shows the location of the main structure, approach slabs, and construction joints.

**Section E-E:** Shows another cross-section of the abutment, including the main structure, approach slabs, and construction joints. Key dimensions include a total width of 10'-1 1/2" and a total height of 10'-9 1/2". The section view also shows the location of the main structure, approach slabs, and construction joints.

**Legend:** Provides definitions for abbreviations used in the drawing:

- N.F. = Near Face
- FF = Far Face
- E.F. = Each Face
- Elev. = Elevation
- F.G. = Finish Grade

**References:** Lists other sheets and details used in the drawing:

- For Pile Plan, Pile Notes, Footing, and Abutment Notes see sheet No. 15.
- For Armored Joint Details see sheet No. 20.
- For Approach Slab Details see sheet No. 19.
- For Concrete Slope Protection see sheet No. 16.
- For Construction and Construction Joint Details see Standard Detail BD 104-73.
- For Detail 'A' see Sheet #16.

**Notes:** Provides additional information about the drawing:

- For Pile Plan, Pile Notes, Footing, and Abutment Notes see sheet No. 15.
- For Armored Joint Details see sheet No. 20.
- For Approach Slab Details see sheet No. 19.
- For Concrete Slope Protection see sheet No. 16.
- For Construction and Construction Joint Details see Standard Detail BD 104-73.
- For Detail 'A' see Sheet #16.

**State of Maine Department of Transportation:** The drawing is a technical specification for the Beedle Road Over Interstate 95 Abutment No. 2, located in the Town of Richmond, Sagadahoc County, Maine. The drawing is dated August 1975 and is sheet 17 of 17.

147-131 203-1



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	18	111

### NOTES

1.-----All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 18 inches below finished ground.

2.-----Special care shall be exercised so that form joints at the exposed face of concrete shall be tight.

3.-----Before sandblasting, all fins and projections in the concrete shall be removed and all holes patched to create a surface of uniform texture.

4.-----In order to insure a constant surface texture for the areas to be architecturally treated, concrete aggregate shall be from the same source and portland cement shall be from the same manufacturer throughout the entire placement of the abutment wings and breastwalls.

5.-----At the time the concrete is placed, the contractor shall cast 3 sample slabs (2'x2'x4"). 3 samples shall be furnished for this bridge and will not be required at piers if furnished at the abutments.

6.-----Prior to sandblasting, the samples shall be sandblasted, each to a different degree of penetration with a maximum depth of approximately 1/8 inch and under the direction of the Engineer. The most desirable sample will be chosen by the Engineer, and designated areas shall be sandblasted to match this sample.

7.-----Concrete shall not be sandblasted for at least 28 days after placement.

8.-----The contractor shall take the necessary steps to protect materials and equipment from damage by the sandblasting operation. Personnel shall be properly equipped: sandblast hood for operation, and respirators and goggles for all other personnel exposed to dust.

9.-----The contractor shall conform to any applicable safety specifications, such as O.S.H.A., in the sandblasting operation.

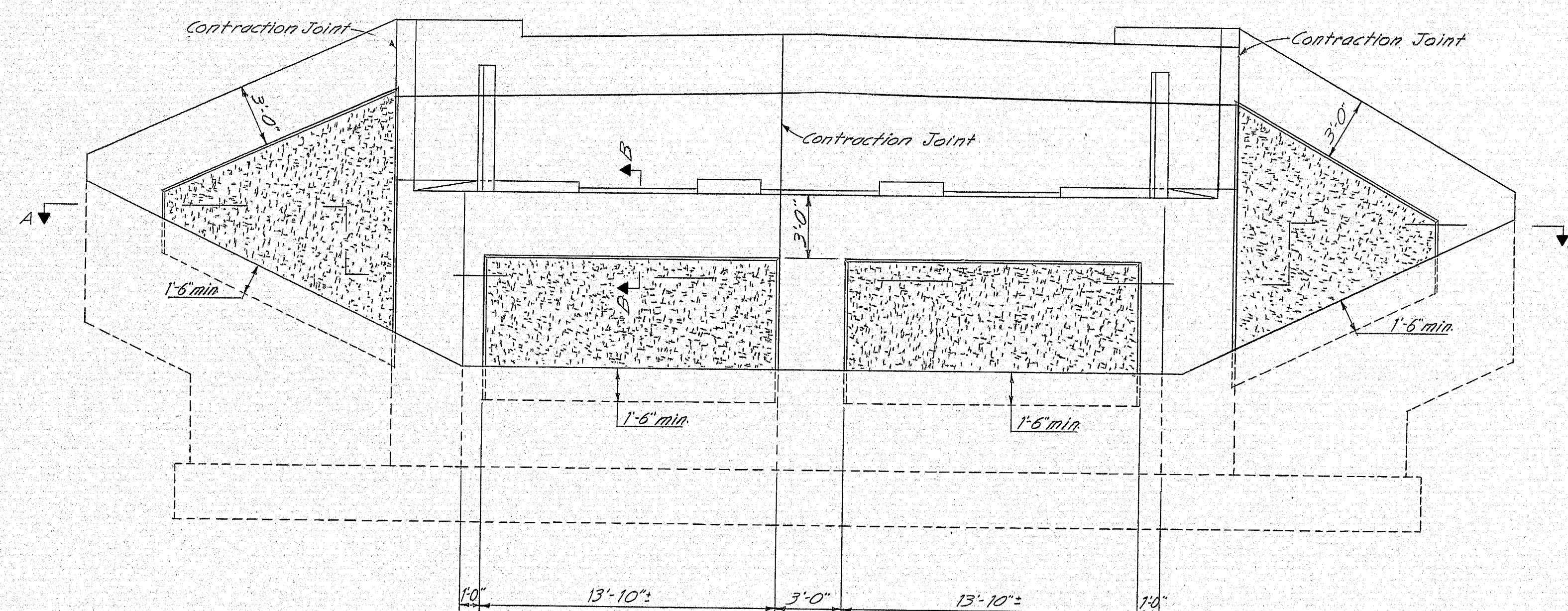
10.-----Payment for sandblasting shall be included in the contract unit price for Item 502.23, "Structural Concrete Abutments and Retaining Walls." No deduction in the concrete pay volume shall be made for the recess in the architectural treatment.

### REFERENCES

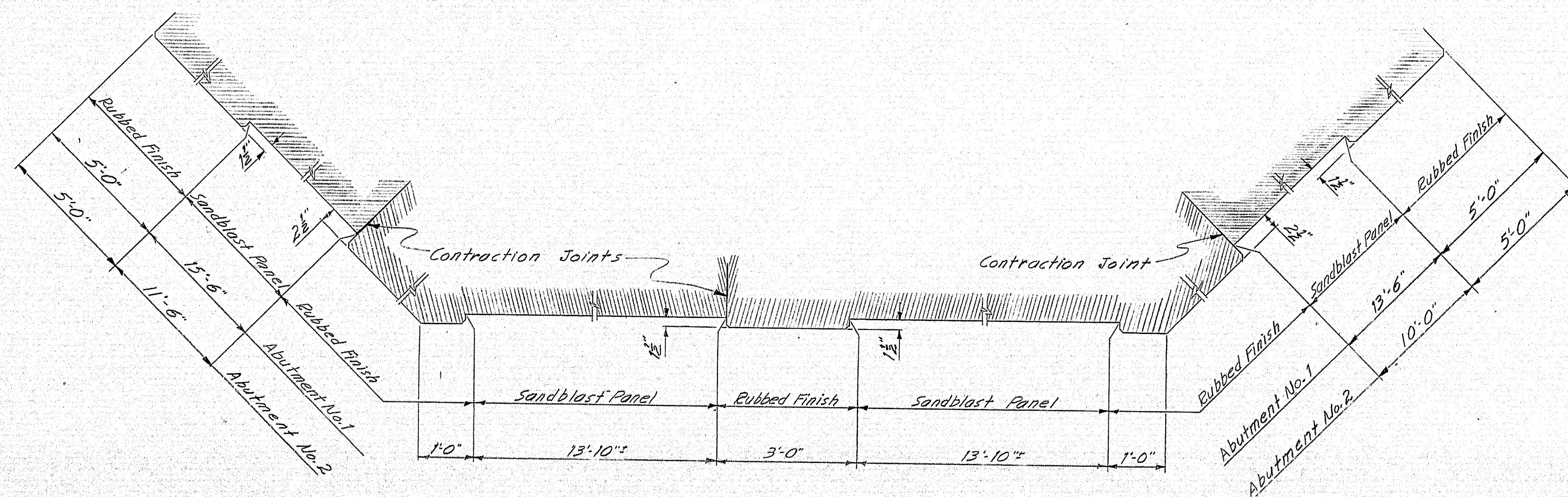
For Abutment No.1 see sheet No.16

For Abutment No.2 see sheet No.17

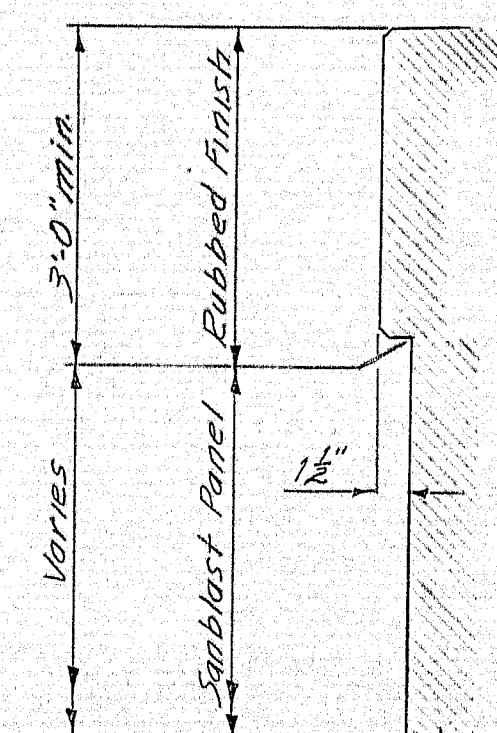
For Concrete Slope Protection see sheet No.19



ELEVATION



SECTION A-A



SECTION B-B

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

BEEBLE ROAD  
OVER

INTERSTATE 95  
IN THE TOWN OF

RICHMOND

SAGADAHOC COUNTY  
ARCHITECTURAL TREATMENT

ABUTMENTS

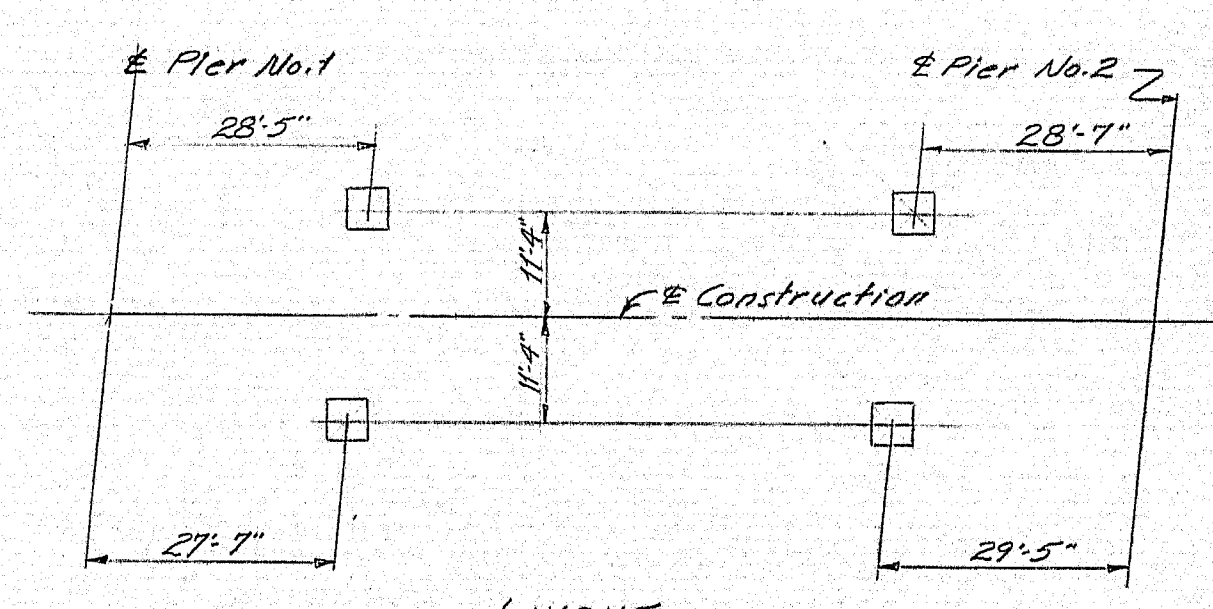
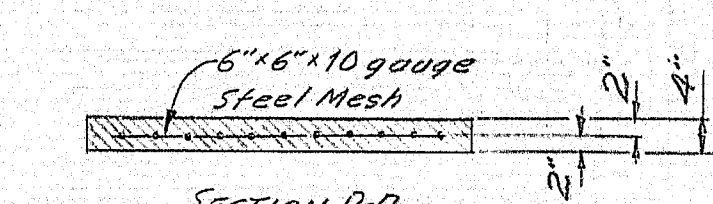
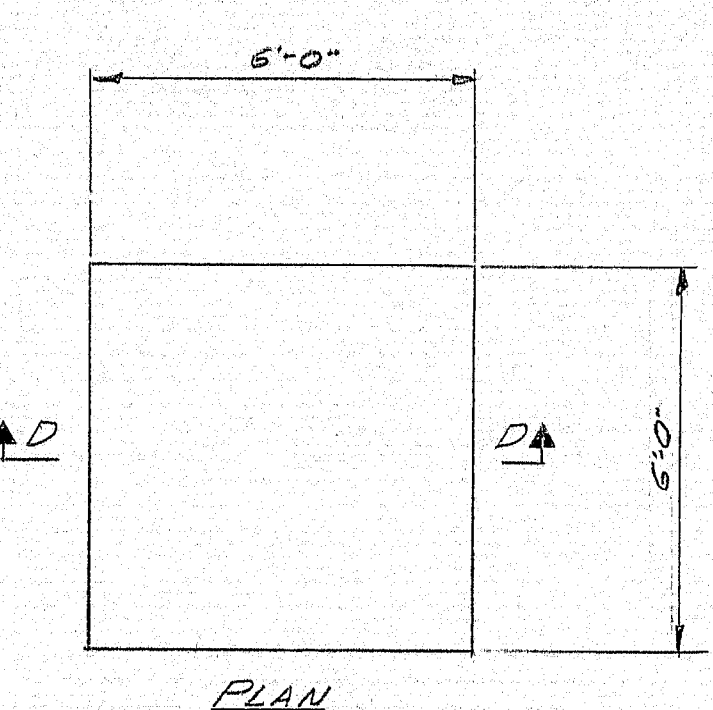
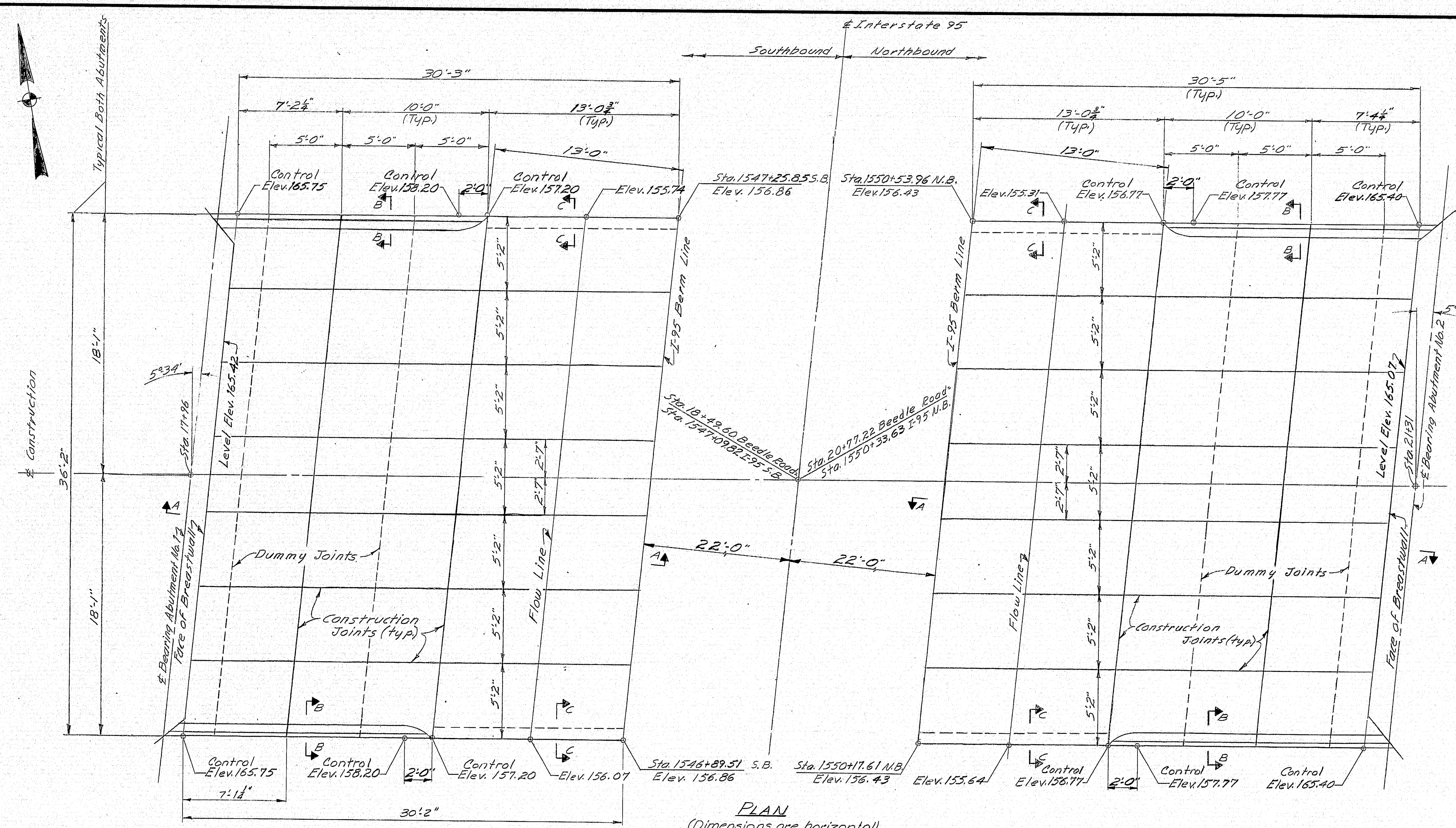
SHEET 18 OF 111 AUGUSTA, MAINE Feb. 1975

147-132

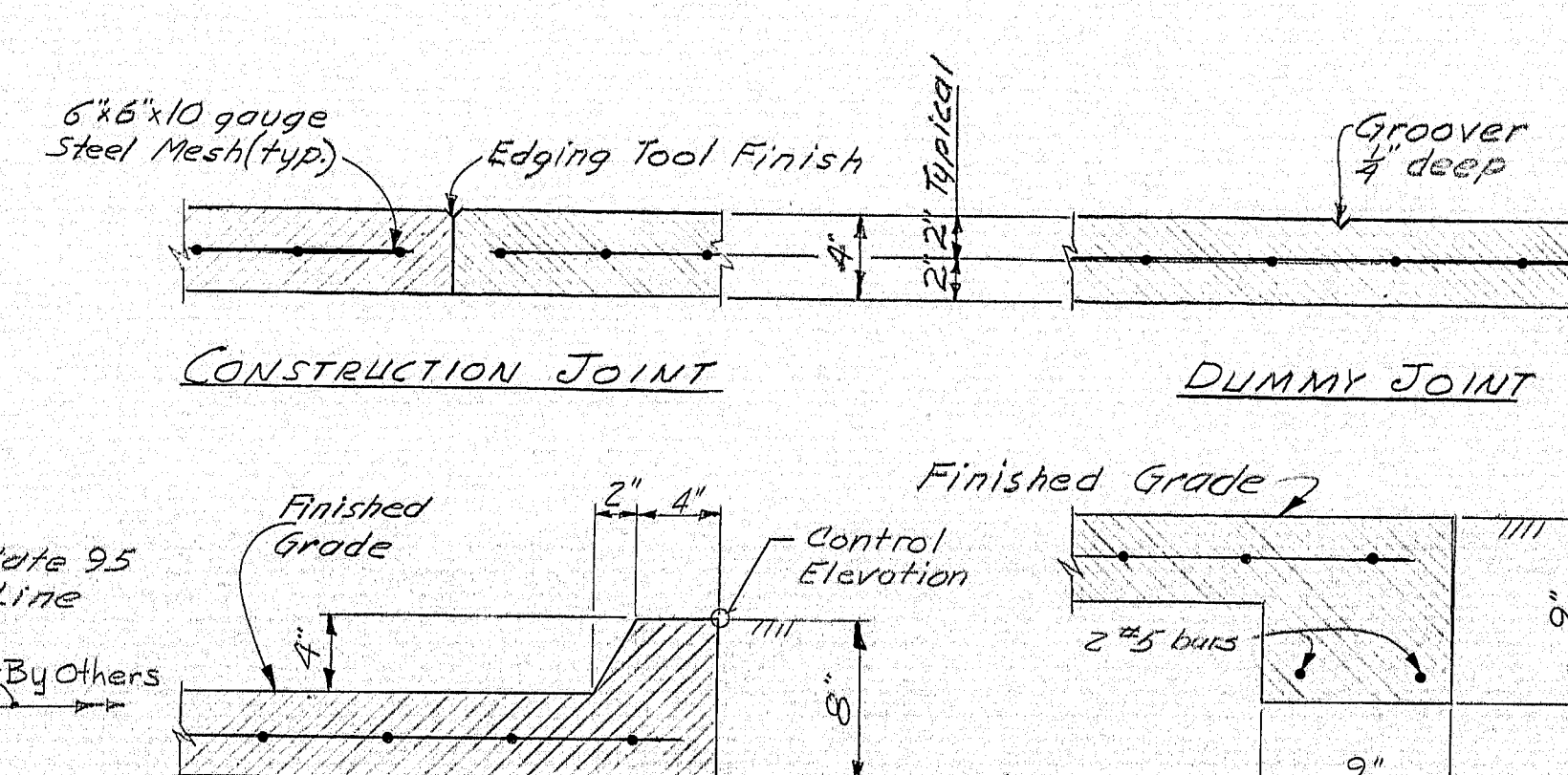
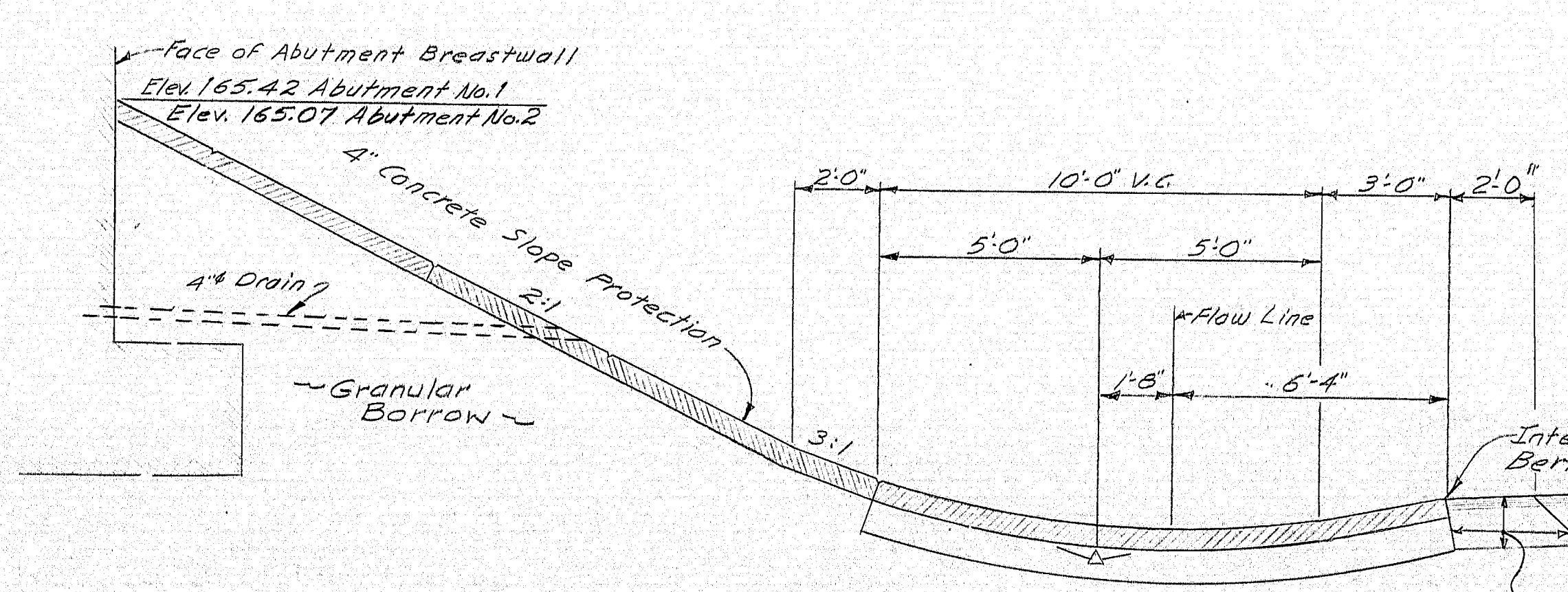
PROJECT DESIGN ENGINEER	DATE
BY	6-74
DESIGN - DETAILED	11-74
CHECKED	
REVISIONS	
FIELD CHANGES	
PLANS	



F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	19	111



NOTES:  
— Steel Mesh shall not pass thru any Construction Joints.  
— Break the bond in Construction Joints by a method approved by the Engineer.  
— Portland Cement Concrete for Slope Protection to be Class A"



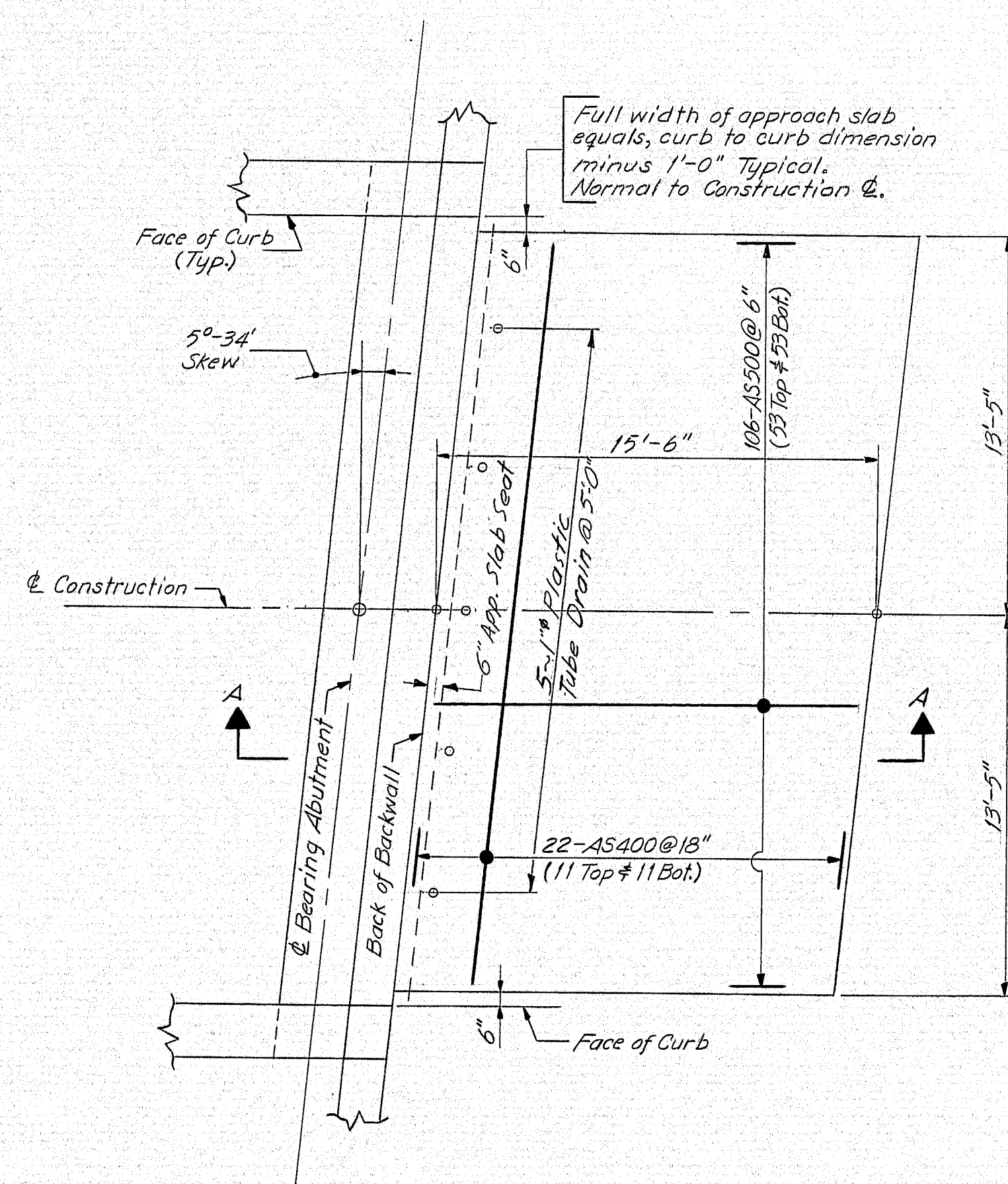
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGADAHOC COUNTY  
SLOPE PROTECTION  
SHEET 19 OF 111 AUGUSTA, MAINE Feb. 1975

PROJECT DESIGN ENGINEER	DATE
BY: [Signature]	1-7-79
DESIGN - CHECKED	1-7-79
REVISIONS	1-7-79
FIELD CHANGES	

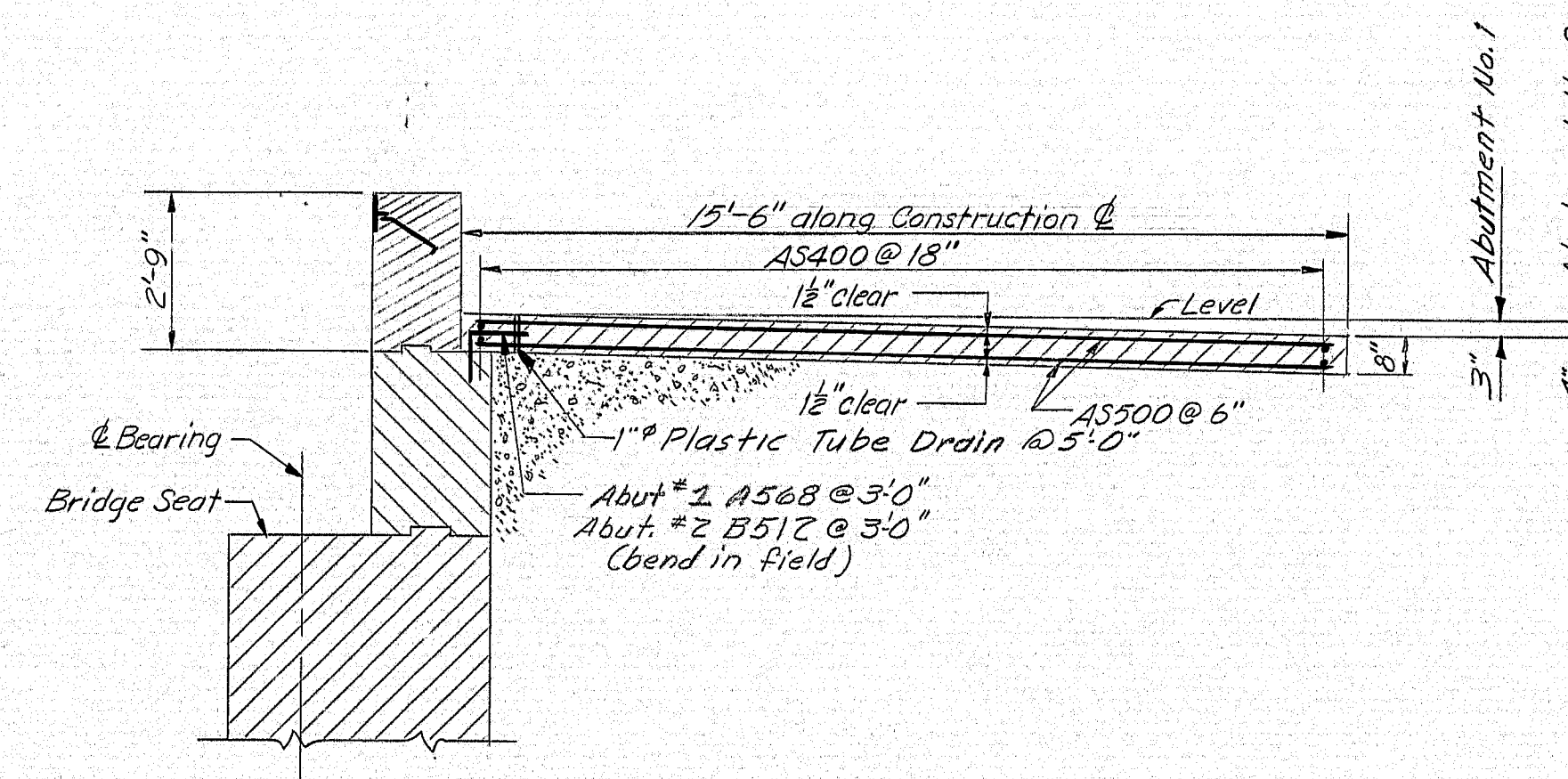
147-133



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(32)	20	111



PLAN  
Abutment No. 2 shown  
Abutment No. 1 opposite hand



SECTION A-A  
8" Structural Concrete Slab

APPROACH SLAB DETAILS

PROJECT DESIGN ENGINEER	DATE
BY	12/14/94
DESIGN - DETAILED	11/28/94
CHECKED	11/28/94
FIELD CHANGES	

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY**

APPROACH SLABS

SHEET 20 OF 111 AUGUSTA, MAINE Feb. 1995

147-134



F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-3 (39)	21	111

#### NOTES

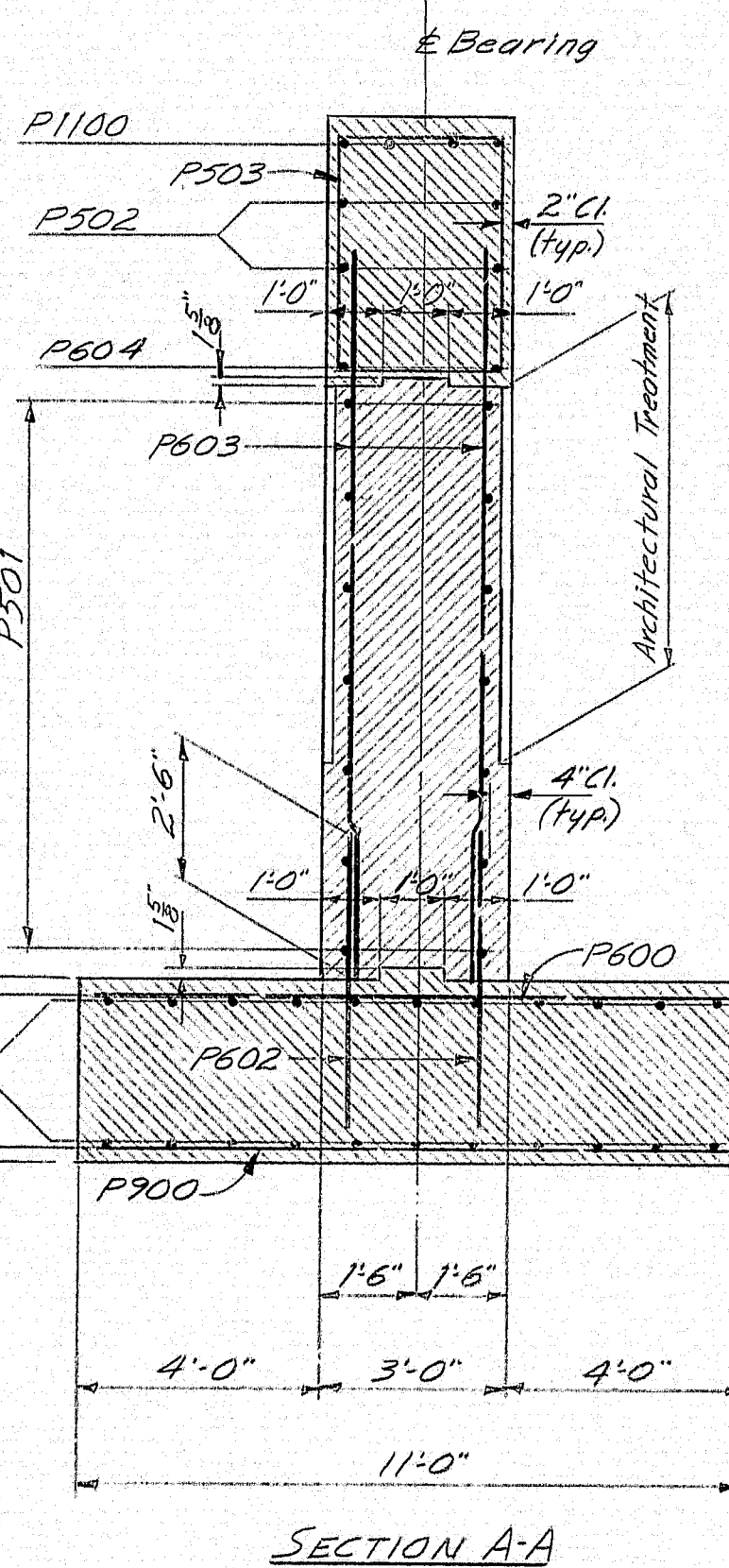
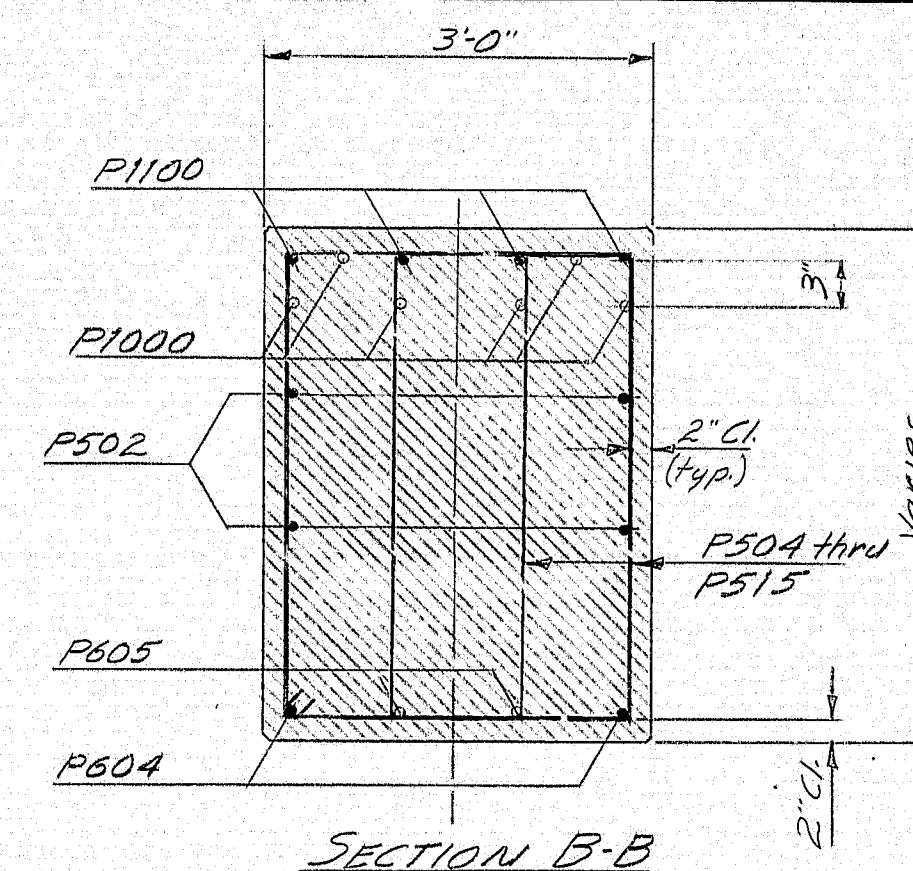
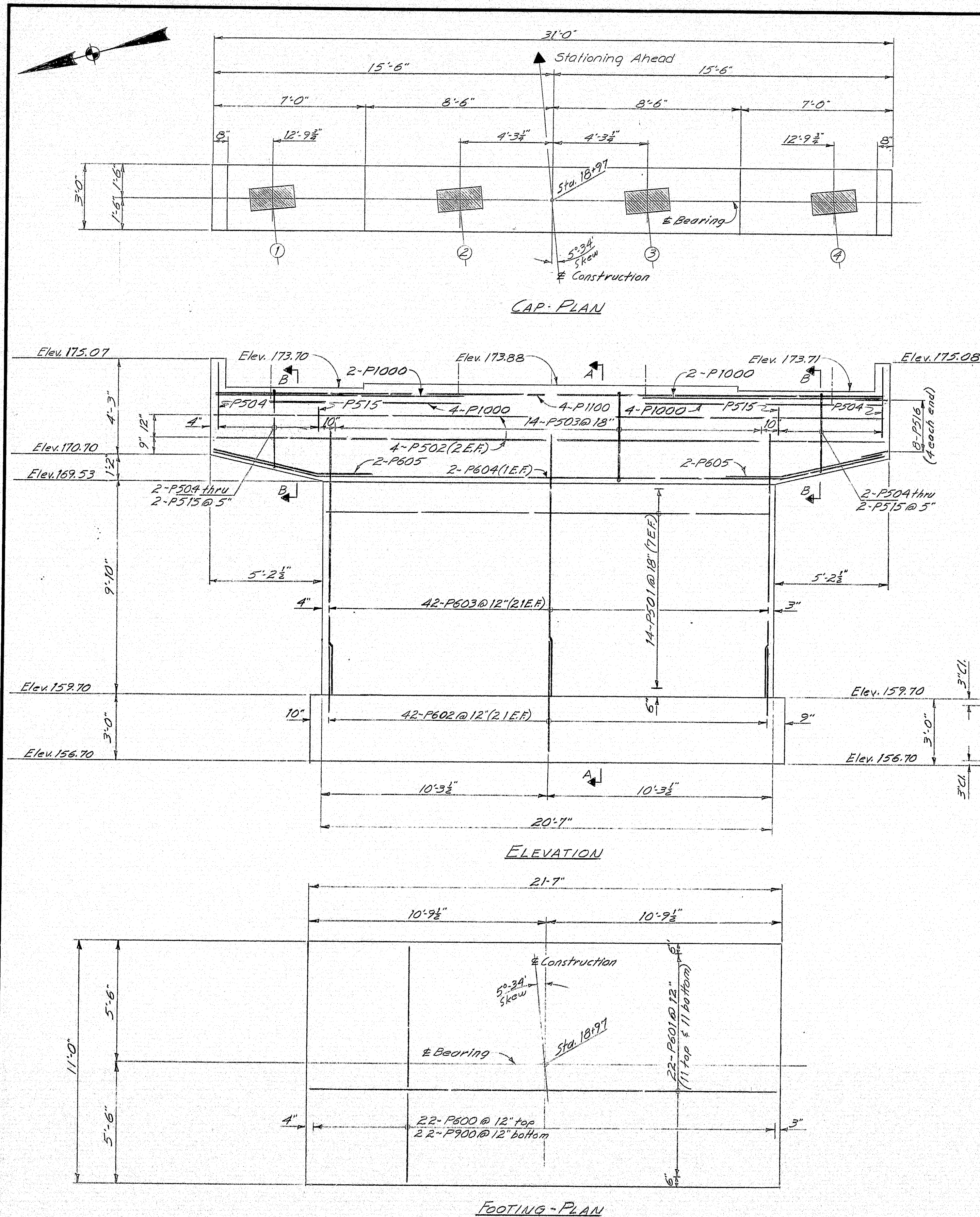
1. Chamfer all exposed edges of concrete  $\frac{1}{2}$  inch unless otherwise indicated.
2. Reinforcing steel shall have 2 inches minimum cover unless otherwise indicated.
3. Place reinforcing steel on bridge seats to clear anchor bolts.
4. All reinforcing steel splices and embedments shall be a minimum of 36 bar diameters unless otherwise indicated.
5. Maximum calculated footing pressure = 4.9 tons per square foot under Group III Loading.

#### REFERENCES

- For Architectural Treatment see sheet No. 23
- For Bearing Pedestal Details (E.P.C.-7) see sheet No. 24 & Standard Detail sheet BD 101-74.

#### LEGEND

- E.F. = Each Face
- Cl. = Clear
- typ. = typical
- Elev. = Elevation
- Sp. = spaces



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGADAHOC COUNTY**

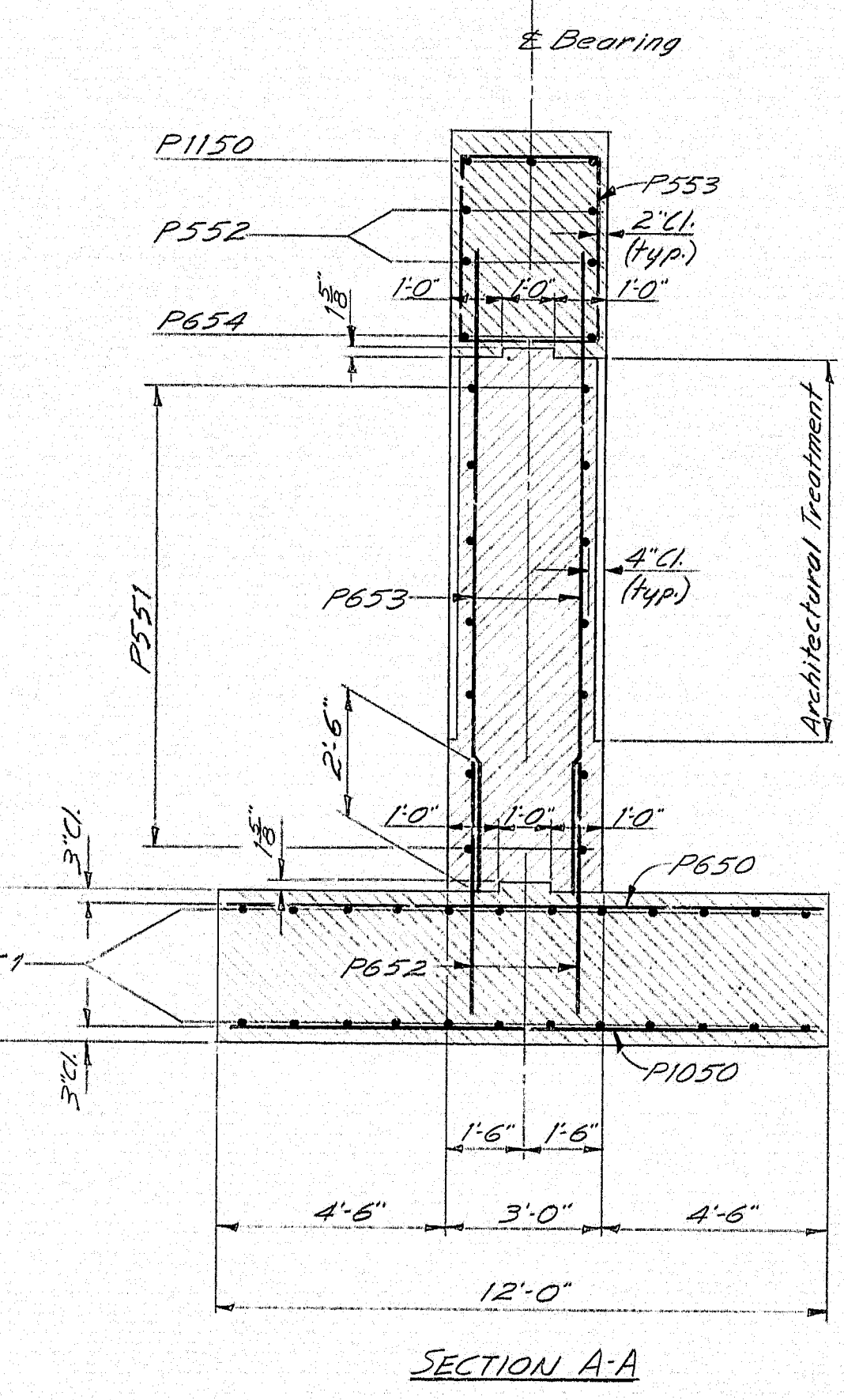
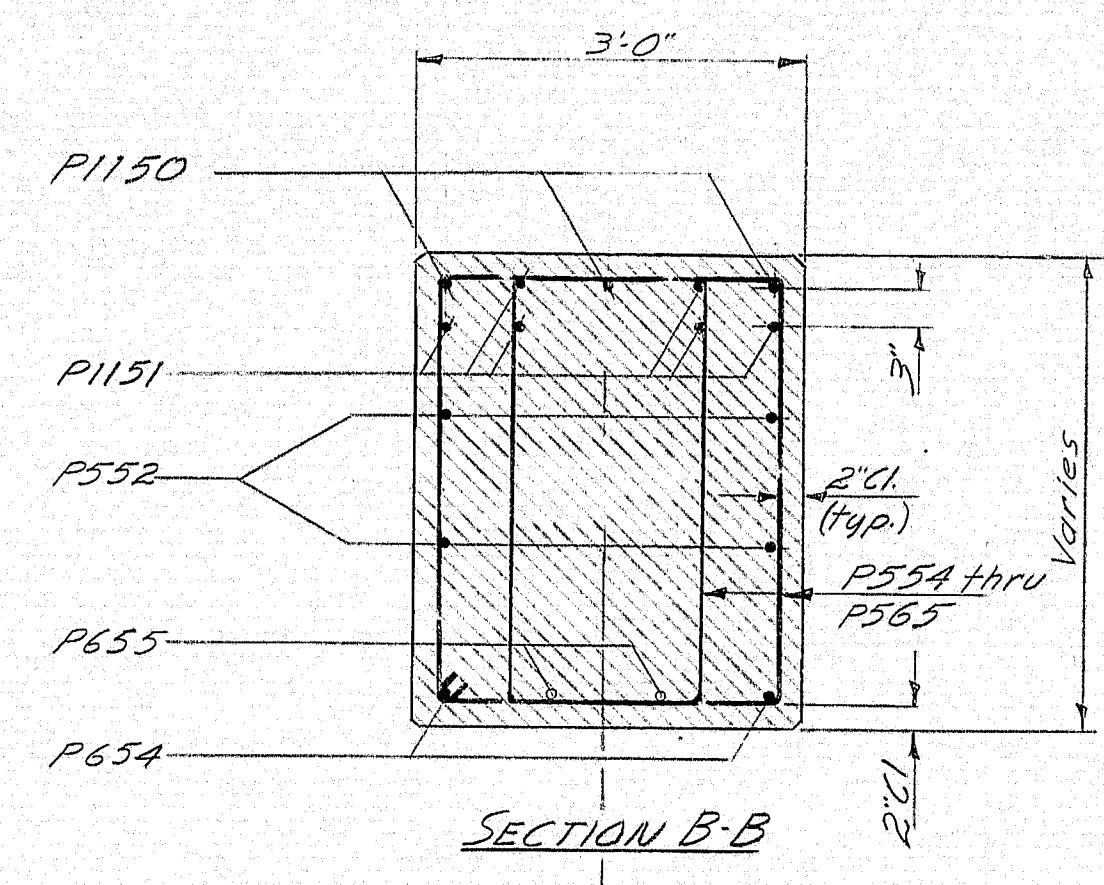
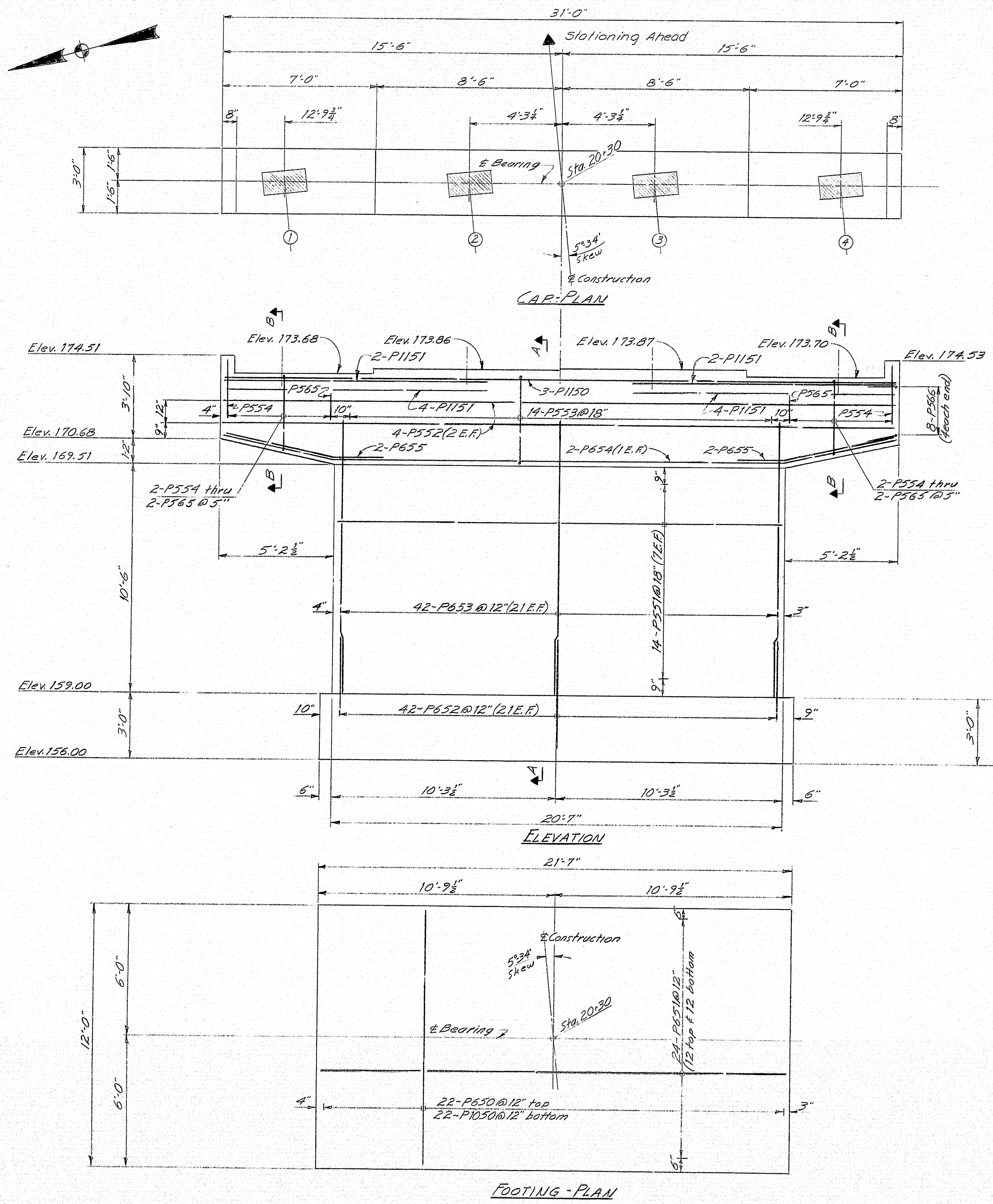
PIER NO. 1

SHEET 21 OF 111 AUGUSTA, MAINE Feb. 1975

147-135



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	22	111



**REFERENCES**

- For Architectural Treatment see sheet #23
- For Pier Notes see sheet #21
- For Bearing Pedestal Details (FPC-5) see sheet #24 & Standard Detail sheet BD 101-74.

**LEGEND**

- E.F. = Each Face
- cl. = clear
- typ. = typical
- Elev. = Elevation
- sp. = spaces

PROJECT DESIGN ENGINEER	DATE
BY	9-74
DESIGN - CHECKED	11-74
REVISIONS	
FIELD CHANGES	

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY**

PIER NO. 2

SHEET 22 OF 111 AUGUSTA, MAINE Feb 1975

147-136



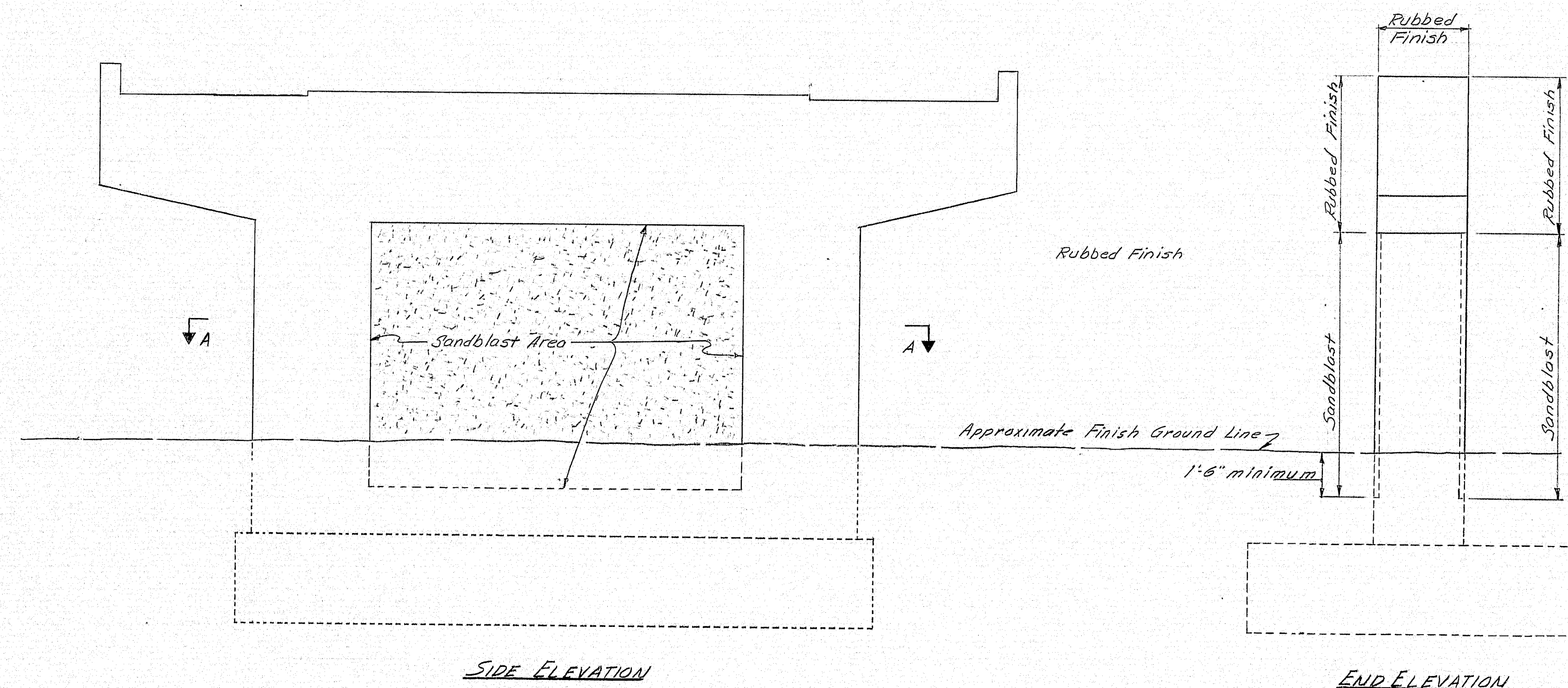
F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	23	111

#### NOTES

- 1.-----All surfaces so designated on the plans shall be sandblasted. These surfaces shall be carried to a minimum depth of 1/8 inches below finish ground line.
- 2.-----Special care shall be exercised so that form joints at the exposed face of concrete shall be tight.
- 3.-----Before sandblasting, all fins and projections in the concrete shall be removed and all holes patched to create a surface of uniform texture.
- 4.-----In order to insure a constant surface texture for areas to be architecturally treated, concrete aggregate shall be from the same source and portland cement shall be from the same manufacturer throughout the entire placement of the pier.
- 5.-----At the time the concrete is placed, the contractor shall cast 3 sample slabs (2'x2'x4"). See note 5 sheet No.18 "Architectural Treatment Abut's."
- 6.-----Prior to sandblasting, the samples shall be sandblasted, each to a different degree of penetration with a minimum depth of approximately 1/8 inches and under the direction of the Engineer. The most desirable sample will be chosen by the Engineer and designated areas shall be sandblasted to match sample.
- 7.-----Concrete shall not be sandblasted for at least 28 days after placement.
- 8.-----The contractor shall take the necessary steps to protect the materials and equipment from damage by the sandblasting operation. Personnel shall be properly equipped: sandblast hood for operation, and respirators and goggles for all other personnel exposed to dust.
- 9.-----The contractor shall conform to any applicable safety specifications, such as O.S.H.A., during the sandblasting operation.
- 10.-----Payment for sandblasting shall be included in the contract unit price for Item 502.23 "Structural Concrete, Piers." No deduction in the concrete pay volume shall be made for the recess in the architectural treatment.

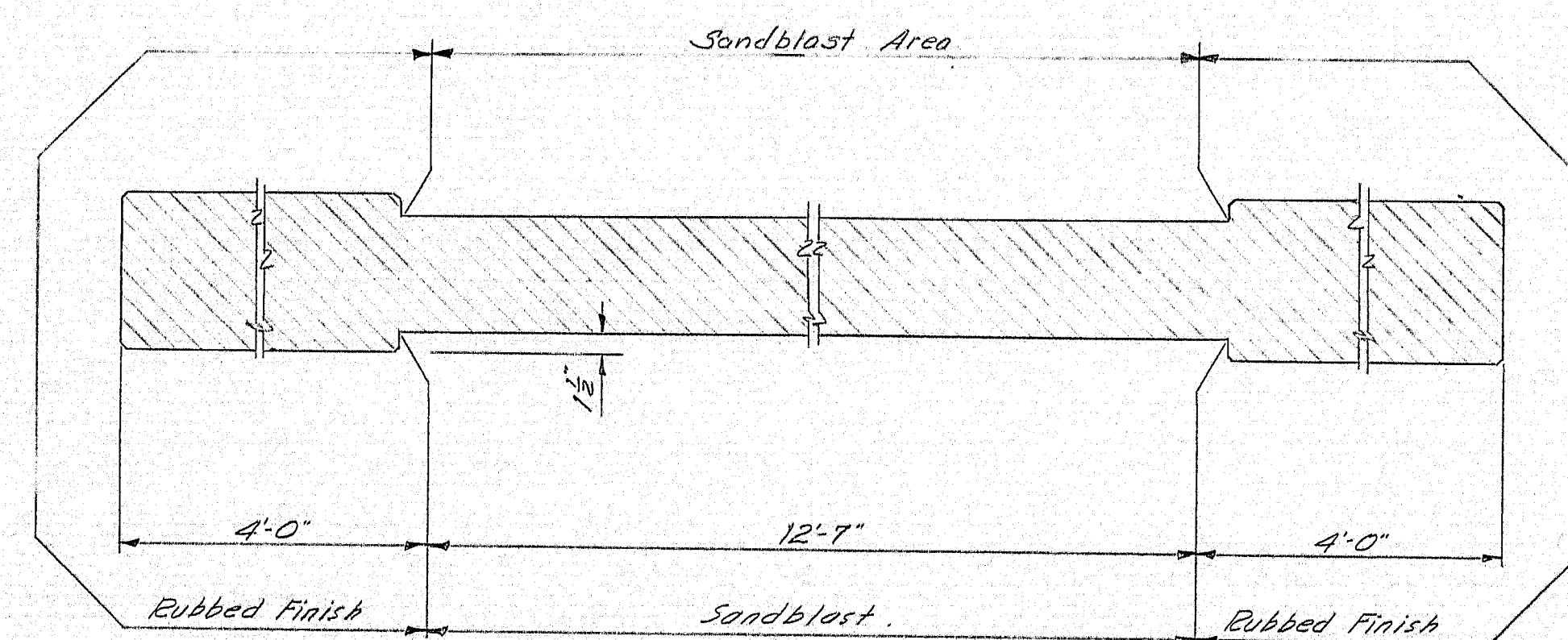
#### REFERENCES

- For Pier No.1 Details: see sheet #21  
For Pier No.2 Details: see sheet #22



SIDE ELEVATION

END ELEVATION



SECTION A-A

PROJECT DESIGN ENGINEER	DATE
BY	9-74
DESIGN - DETAIL	11-74
CHECKED	
REVISIONS	
FIELD CHANGES	

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND

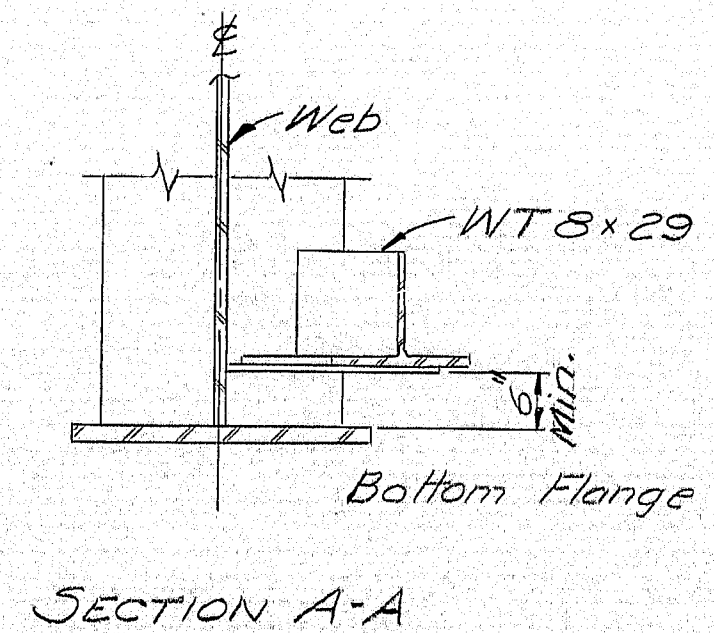
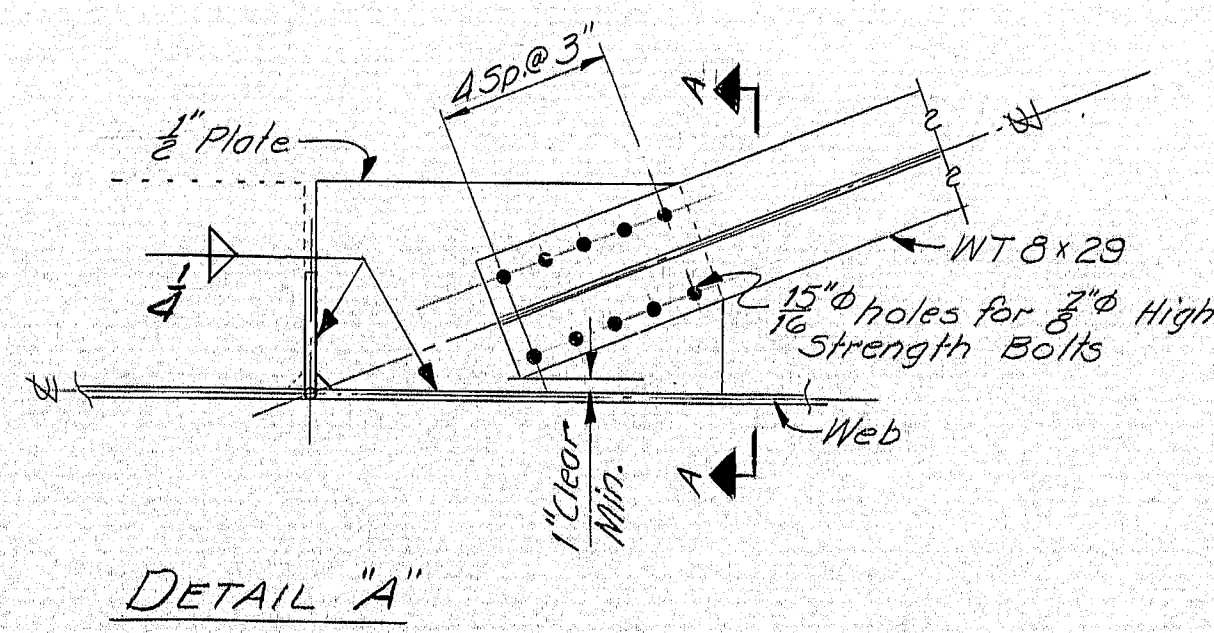
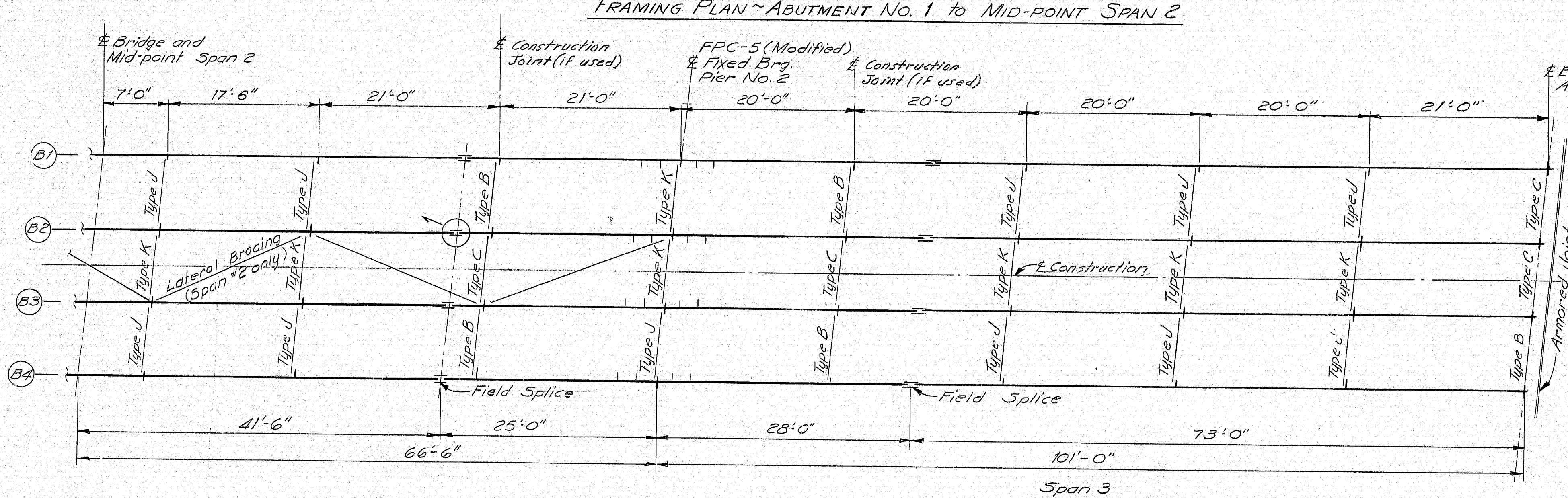
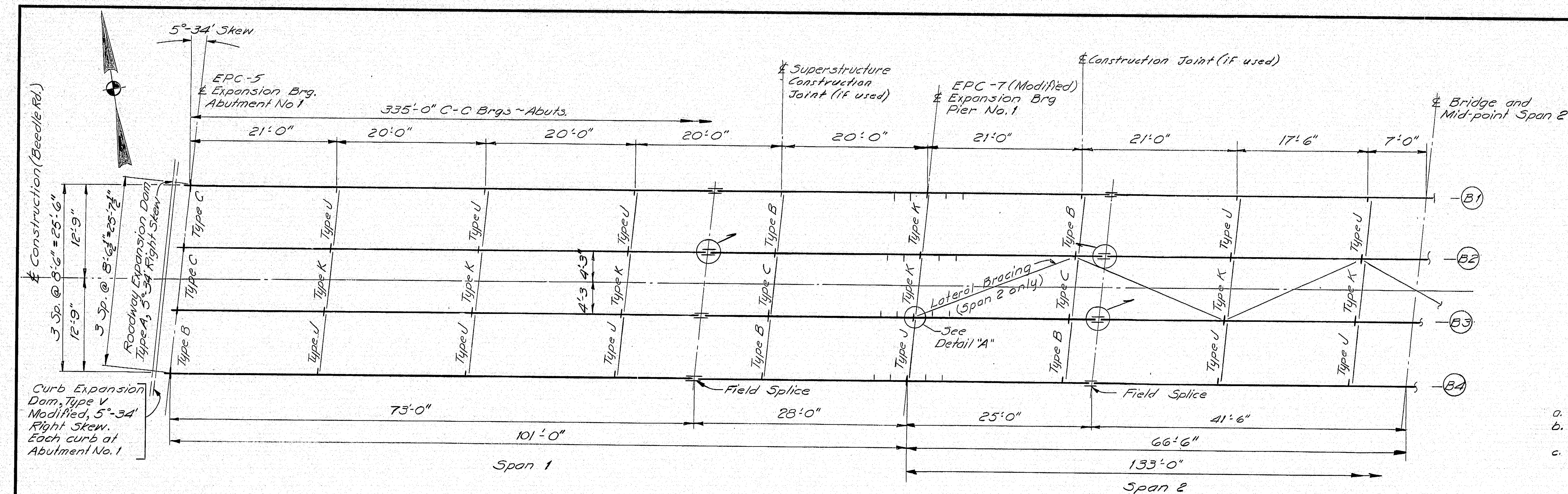
SAGadahoc COUNTY  
ARCHITECTURAL TREATMENT  
PIERS

SHEET 23 OF 111 AUGUSTA, MAINE Feb. 1975

147-137



PROJECT DESIGN ENGINEER	DATE
BY K.L.L.	9/1/74
DESIGN DETAIL	
CHECKED	
REVISIONS	
FIELD CHANGES	



Splices marked thusly denote web splices of extra width. Arrow indicates on which side the extra width has been added. See S.D. 113-72. 15 GUNTS BY: [Signature]

ROCKER SETTING DATA											
Temp in Degrees F @ Setting											
Abutment #1			Pier #1			Abutment #2					
a	b	c	a	b	c	a	b	c	a	b	c
105	-10"	-1"	-13"	-10"	-10"	-1"	-10"	-10"	-1"	-10"	-10"
90	-10"	-1"	-13"	-10"	-10"	-1"	-10"	-10"	-1"	-10"	-10"
75	-10"	-1"	-13"	-10"	-10"	-1"	-10"	-10"	-1"	-10"	-10"
60	-10"	-1"	-13"	-10"	-10"	-1"	-10"	-10"	-1"	-10"	-10"
45	+10"	+1"	0	0	0	0	+10"	+1"	0	0	0
30	+10"	+1"	0	0	0	0	+10"	+1"	0	0	0
15	+10"	+1"	0	0	0	0	+10"	+1"	0	0	0
0	+10"	+1"	0	0	0	0	+10"	+1"	0	0	0
-15	+10"	+1"	0	0	0	0	+10"	+1"	0	0	0

- After Structural Steel erection and before slab placement.
- After slab placement and before curbs and wearing surface placement.
- After placement of slab, curbs, wearing surface, and installation of railings.

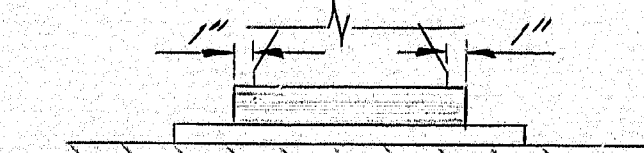
NOTE: Rocker Setting Data as shown shall be used as a guide only. No extra payment will be made for resetting of the rocker bearings, subsequent to the original setting, made by the contractor as required by the Engineer to make the rocker setting conform with Paragraph Four(4) of Subsection 50A.5B.

#### STRUCTURAL STEEL NOTES

- Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.
- No transverse built weld splices in the flange plates or web plates within 10 feet from the points of maximum negative moment or maximum positive moment will be allowed.
- Sections of flange plates or web plates between transverse built weld splices or from field splices shall be not less than 20 feet in length unless otherwise shown on the plans.
- Built weld splices in flanges shall be not closer than one foot from transverse welds in the web plates.
- Bearing stiffeners shall be detailed to be plumb after erection and dead loading of the structure.
- Crossframe connection plates may be either plumb or normal to the top flange.
- Filler plates may be ASTM A36 steel and mill tests for filler plate material will not be required.
- Bearing Assemblies shall be modified as follows:

Bearing Assembly	C	D	E	F	G	U
EPC-3	9"					
EPC-7	17 1/2"	2' 3"				4 1/2"
EPC-5	16"		13"			

\* Distance from edge of Web plate to the edge of Rocker shall be modified from 1/2" to 1", see sketch as follows:



#### REFERENCES:

- Bearing Pedestals ~ BD 101-74
- Armored Joint ~ BD 104-73
- Misc. Structural Details ~ BD 105-74
- Expansion Dam Crossframes ~ BD 113-72
- For Beam Elevation see Sheet No. 25
- For Bottom of Slab Elevations see Sheet No. 26

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**RICHMOND**  
**SAGadahoc COUNTY**  
FRAMING PLAN

SHEET 24 OF 111 AUGUSTA, MAINE FEB. 1975

147-138

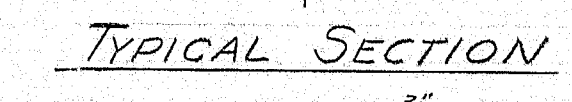


Technical drawing of a bridge girder showing side elevation and typical section.

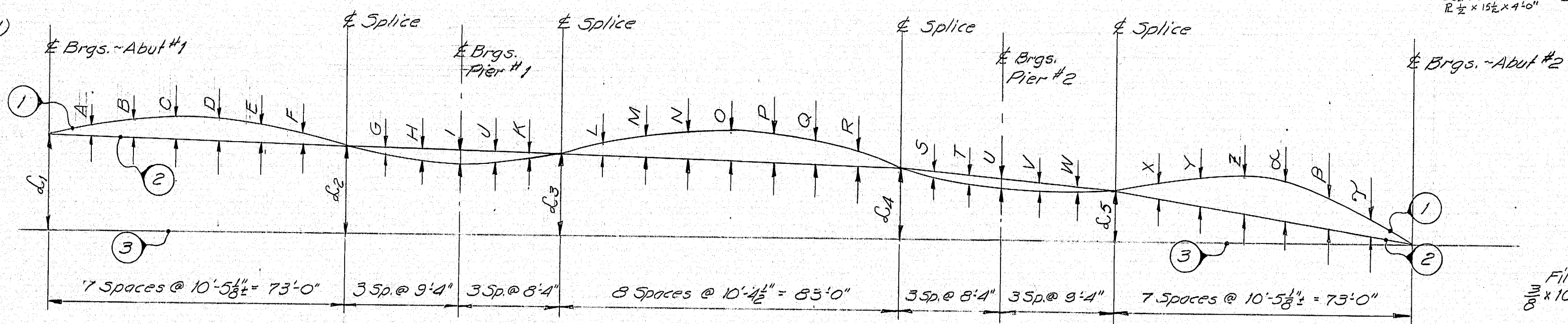
**Side Elevation Details:**

- Spans:** 70 spaces @ 12" = 70'-0", 32 spaces @ 24" = 64'-0", 33 spaces @ 12" = 33'-0".
- Stiffeners:**
  - Top Flange: R  $\frac{3}{4}$  x 12 (ASTM A36)
  - Web: R  $\frac{1}{2}$  x 52 (ASTM A36)
  - Bottom Flange: R 1" x 12 (ASTM A572 Grade 50)
- Field Splices:** Indicated between spans.
- Dimensions:** 73'-0", 101'-0", 28'-0", 25'-0", 41'-6", 66'-6".
- Notes:**
  - Brigs. ~ Abut #1 or Abut #2
  - Brigs. ~ Pier #1 or Pier #2
  - Symmetry Bridge & Midpoint Span #2
  - No Point
  - Top Flange
  - Point tight fit
  - Bearing Stiffener Bar 7 x  $\frac{3}{8}$  (A36) @ Abuts. (Both sides of beam)
  - Full penetration Weld or Grind to Bear
  - Intermediate Stiffeners Required see Detail A
  - Bearing Stiffener Bar 8 x  $\frac{3}{8}$  (A36) @ Piers (Both sides of beam)
  - Field Splice

**TYPICAL SECTION:** Shows a symmetrical I-beam with a top flange and a 3/4 inch thick web.

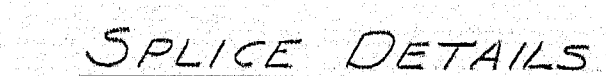


*Note: Where shear connector studs fall on the field splice plates, they shall be placed in a single line on the beam flanges using the same number equally spaced.*



CAMBER DIAGRAM  
(Use with Tables 1 & 2 below.)

Note: Dimensions are in inches.



BOTTOM FLANGE DETAIL (At Splice)

### BEAM STRESS TYPE DIAGRAM

Intermediate Web Stiffeners Bar  $5 \times \frac{3}{8}$  (A36)  
 Place on one(1) side only - see note below.

4'-4" 4'-4" 4'-4" 4'-4"

Bearing Stiffener - see Beam Elev.

Point Tight fit top. (Typ.)

Fillet Both sides

Full penetration weld Bottom or Grind to Bear (Typ.)

Typ. Interm. Stiff.

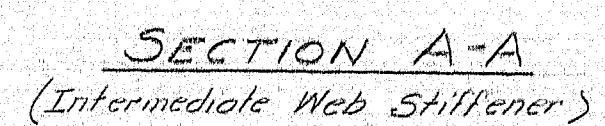
Section A-A

Section A-A

§ Pier 1 or 2

DETAIL "A"

Note: Place Intermediate Web Stiffeners on the exterior beams on the inside.



SECTION A-A

(Intermediate Web Stiffener)

AS B. 1.5. B. 1. A. 1. L. 1.  
5/20/77

**147-139**

PLANS	PROJECT DESIGN ENGINEER	BY	DATE
	DESIGN - DETAILED	<i>K. Leach</i>	<i>8-1-74</i>
	CHECKED	<i>P/L</i>	<i>11-7-74</i>
	REVISIONS		
	FIELD CHANGES		



Note: Bottom of Slab Elevations are adjusted to compensate for the dead load deflections.

### BOTTOM OF SLAB ELEVATIONS

Point Beam	Abut. #1	1	2	3	4	5	6	7	8	9	10	Abut. #2
B1	180.01	180.02	180.03	180.02	180.00	179.96	179.92	179.86	179.81	179.76	179.72	179.72
B2	180.19	180.21	180.22	180.21	180.19	180.15	180.10	180.05	179.99	179.94	179.90	179.90
B3	180.19	180.21	180.22	180.21	180.19	180.16	180.11	180.05	179.99	179.94	179.90	179.90
B4	180.02	180.03	180.04	180.03	180.01	179.97	179.92	179.87	179.81	179.76	179.73	179.73

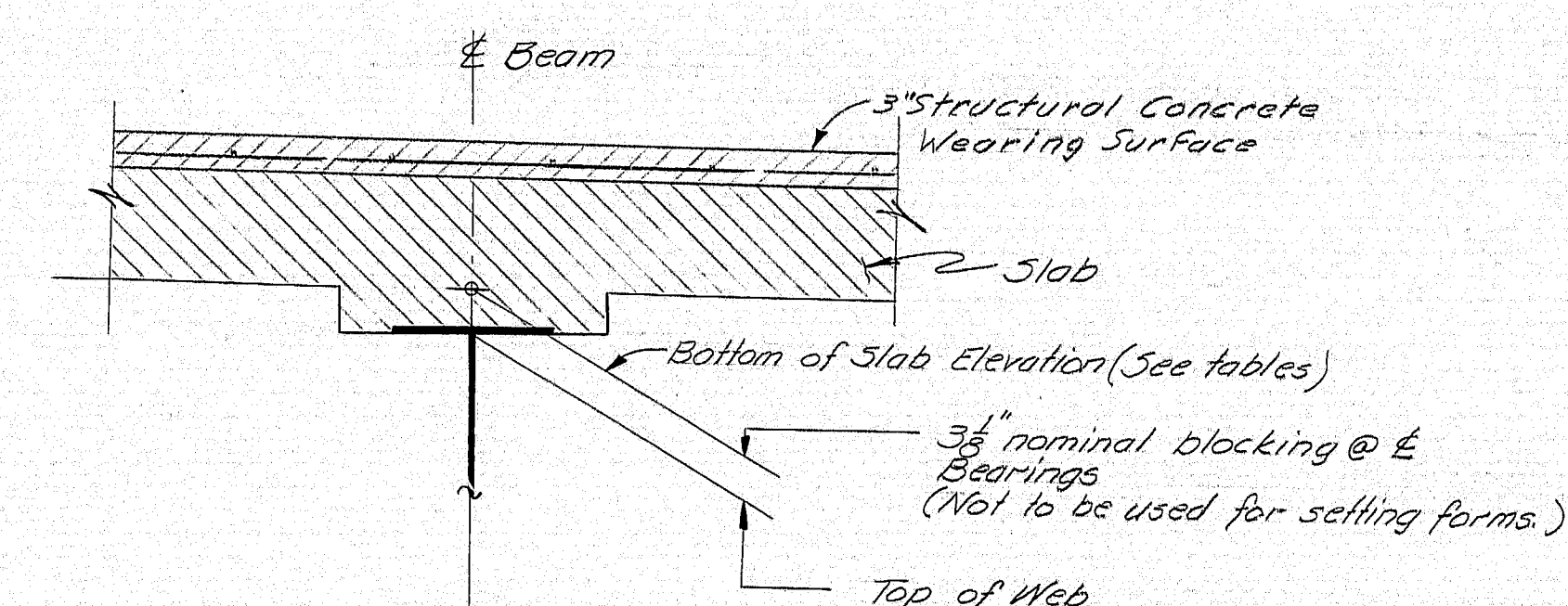
#### SPAN 1

Point Beam	Abut. #1	1	2	3	4	5	6	7	8	9	10	11	12	13	Abut. #2
B1	179.72	179.70	179.70	179.71	179.71	179.71	179.70	179.67	179.63	179.57	179.49	179.39	179.29	179.19	179.16
B2	179.90	179.88	179.88	179.89	179.90	179.90	179.89	179.87	179.82	179.76	179.68	179.58	179.47	179.37	179.34
B3	179.90	179.88	179.89	179.90	179.90	179.91	179.89	179.87	179.83	179.76	179.68	179.58	179.46	179.38	179.35
B4	179.73	179.71	179.71	179.72	179.72	179.71	179.68	179.64	179.58	179.50	179.41	179.31	179.21	179.18	

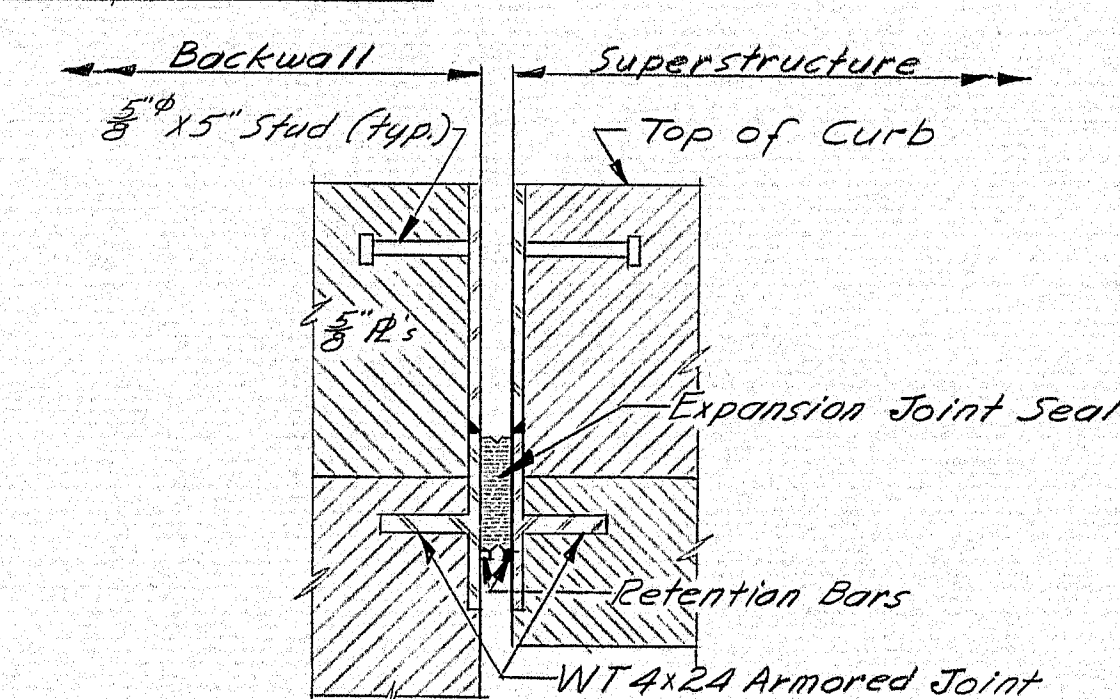
#### SPAN 2

Point Beam	Abut. #2	1	2	3	4	5	6	7	8	9	10	Abut. #2
B1	179.16	179.07	178.98	178.89	178.79	178.67	178.53	178.36	178.16	177.93	177.69	177.66
B2	179.34	179.25	179.17	179.08	178.98	178.86	178.71	178.54	178.35	178.12	177.88	177.85
B3	179.35	179.26	179.18	179.09	178.99	178.87	178.73	178.56	178.36	178.14	177.90	177.87
B4	179.18	179.09	179.01	178.92	178.82	178.71	178.57	178.40	178.20	177.98	177.74	177.71

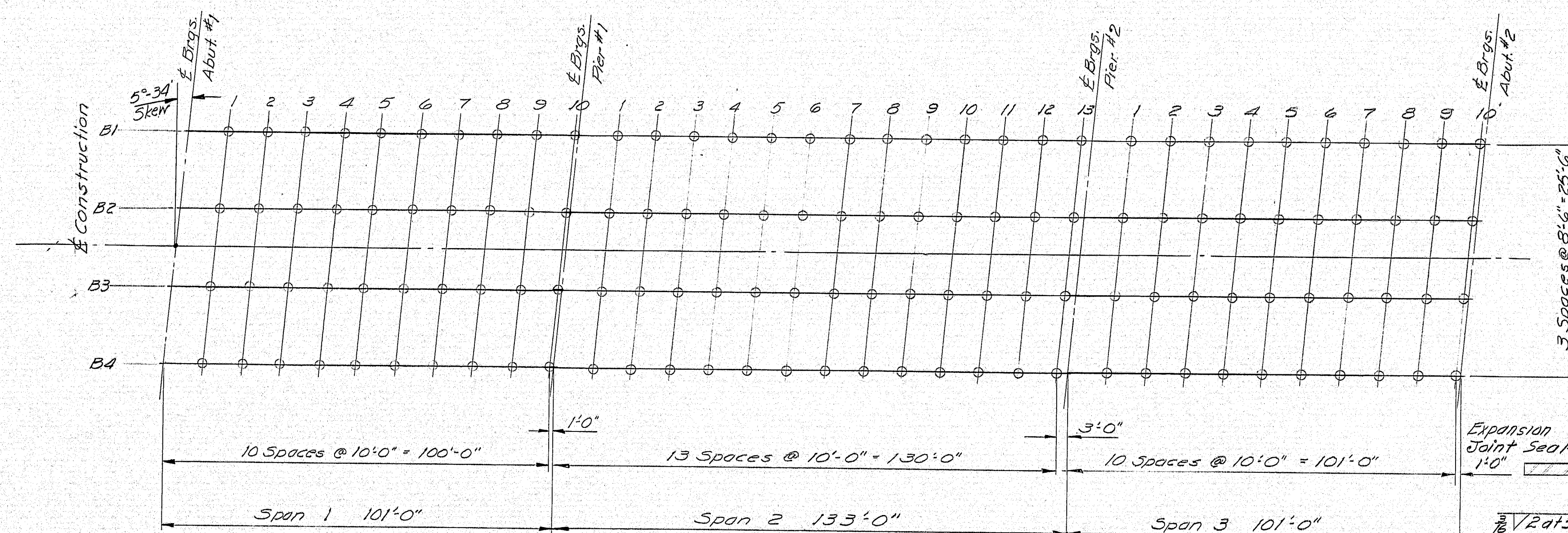
#### SPAN 3



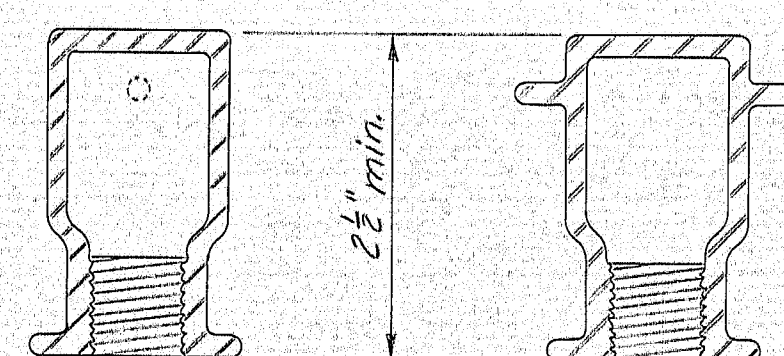
### BLOCKING DETAIL



#### SECTION A-A



### BLOCKING DIAGRAM



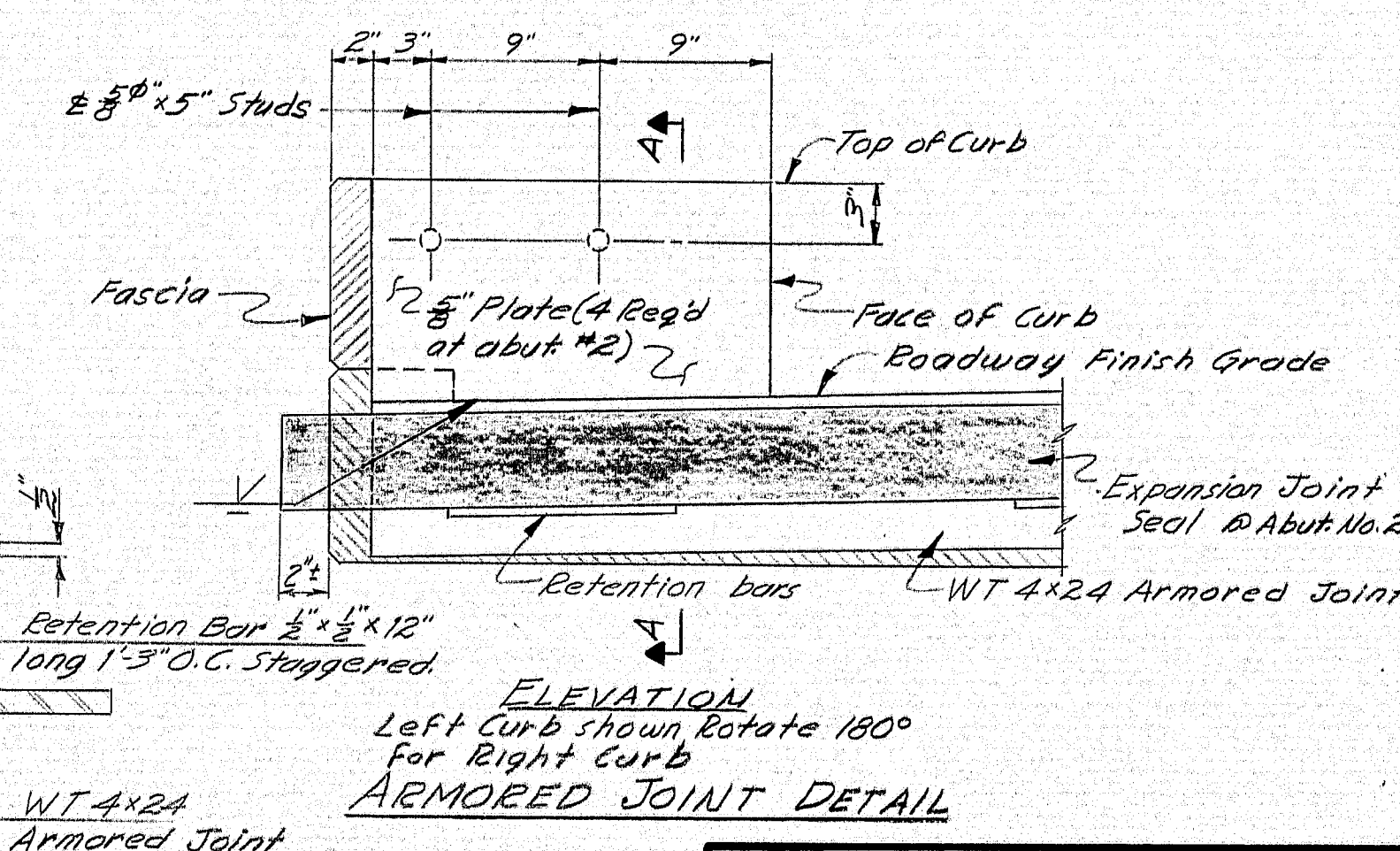
#### METAL INSERT DETAIL

Other configurations may be used if approved by the Engineer.

Metal inserts shall be threaded to receive 3/4" diameter bolts with National Course Threads. Inserts to have a minimum working load of 2500 lbs. and a minimum ultimate strength of 8000 lbs. Metal Inserts to be paid for under Item No. 504.74.

### CONDUIT SUPPORT SYSTEM NOTES

- If longitudinal stay cables are used on the conduit support system, they may be anchored at each end of the superstructure by drilling 3/4" diameter holes through the webs of the end Type 'B' diaphragms or by welding to the Type 'B' diaphragms.
- No portion of the conduit system shall hang below the bottom of the highest beam of the bay in which the conduits are located.



#### ARMORED JOINT DETAIL

### SEAL ARRANGEMENT

(in Armored Joint)

#### NOTES:

- The Seal furnished shall be located at Abutment No. 2 and shall have a Movement Rating of 1.250 inches.
- The seal characteristics shall be submitted to the Engineer for approval prior to the fabrication of the armored joint.
- Set joint opening according to the joint opening shown on the approved Armored Joint shop detail drawing. Adjust joint opening 3 inches for each 15° F above or below 65° F.
- The following movements, due to dead loads (slab, curb, wearing surface and railing), shall be taken into account when setting the armored joint: open 3/8".
- The maximum joint opening shall be 3 inches or -30° F measured parallel to & Construction.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

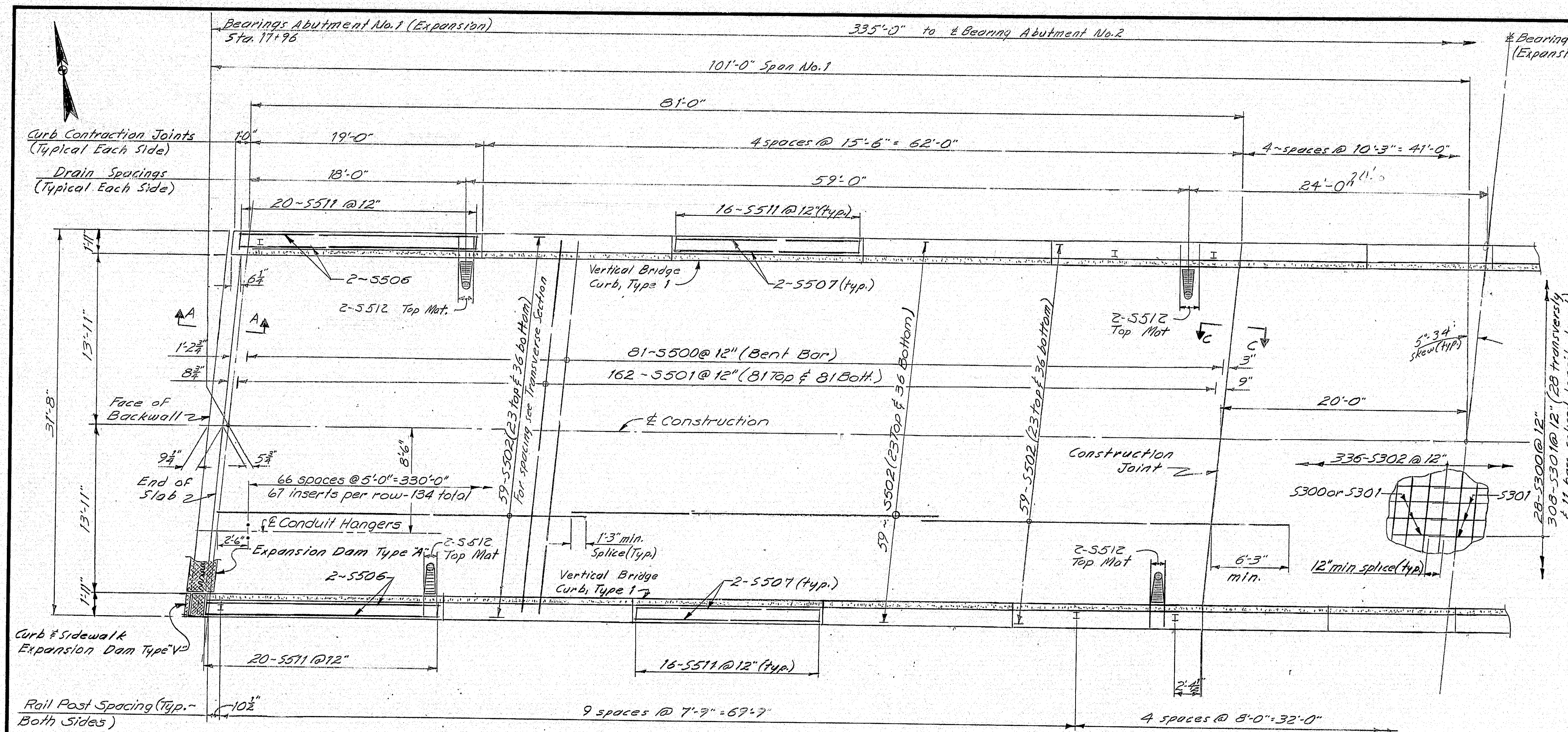
BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND

SAGADAHOC COUNTY  
BOTTOM OF SLAB ELEVATIONS  
& ARMORED JOINT DETAILS

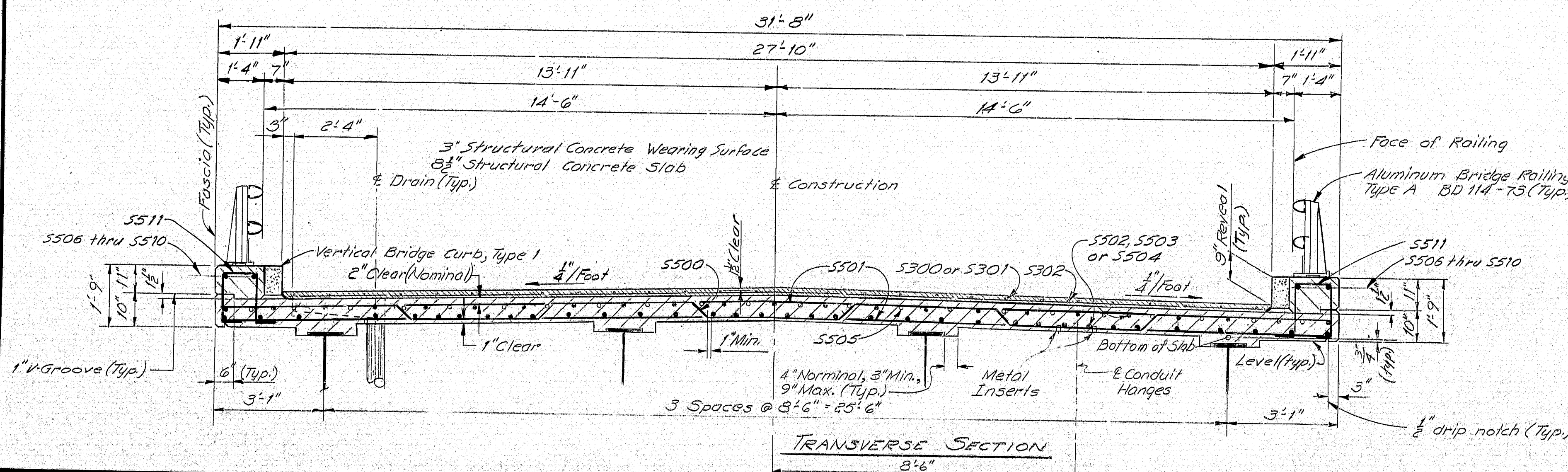
SHEET 26 OF 111 AUGUSTA, MAINE Feb. 1975

147-140

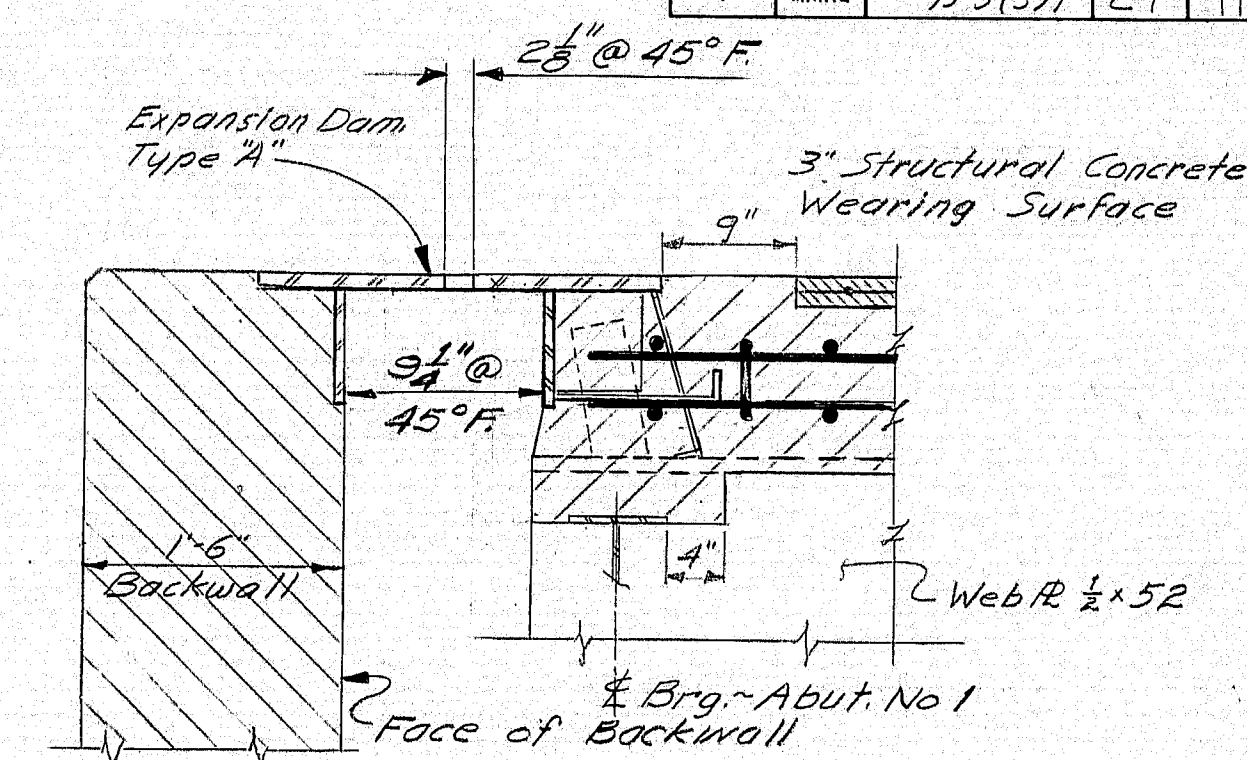




PLAN SPAN No. 1



TRANSVERSE SECTION



SECTION A-A

# SUPERSTRUCTURE NOTES

1. Chamfer all exposed edges of concrete  $\frac{1}{2}$  inch unless otherwise indicated.
2. Form a 1" V-Groove on the outside faces of each contraction joint in the curbs and at the joint between the curb and slab.
3. Break the bond in contraction joints in the concrete curbs by a method approved by the Engineer.
4. Provide joints in the Vertical Bridge Curb, Type 1 at each contraction joint in the concrete curb.
5. Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.
6. Reinforcing steel splices shall be a minimum of 36 bar diameters unless otherwise indicated.
7. "Protective Coating for Concrete Surfaces" shall be applied to the following areas: Top of concrete curbs, fascia, and under the drip notch, and structural concrete wearing surface.
8. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.

## REFERENCES

- For Span No. 2 Plan see sheet No. 28.
- For Span No. 3 Plan see sheet No. 29.
- For Section C-C see sheet No. 28.
- For Slab Placement Sequence see sheet No. 28.
- For Drain & Curb Details see Standard Sheet BD 105-74.
- For Expansion Dam Details see Standard Sheet BD 105-74.
- For Aluminum Bridge Railing see Standard Sheet BD 114-73.
- For details of Metal Inserts see Sheet "26"

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY  
SUPERSTRUCTURE SPAN NO. 1**

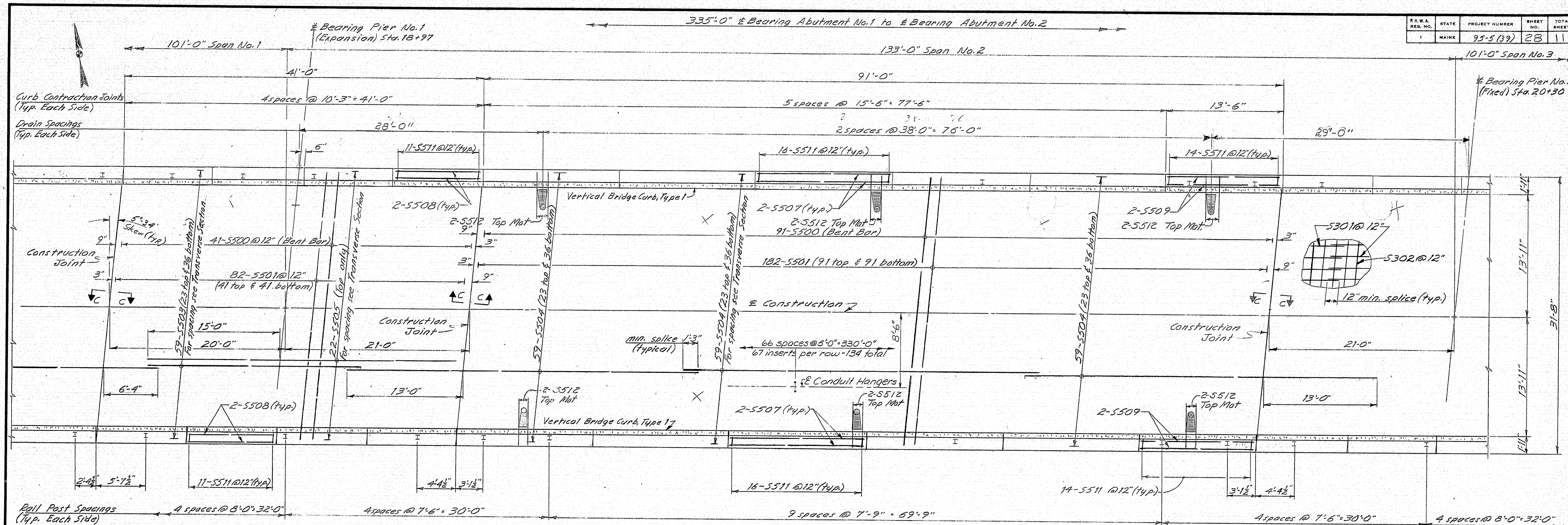
SHEET 27 OF 111 AUGUSTA, MAINE Feb. 1975

147-141

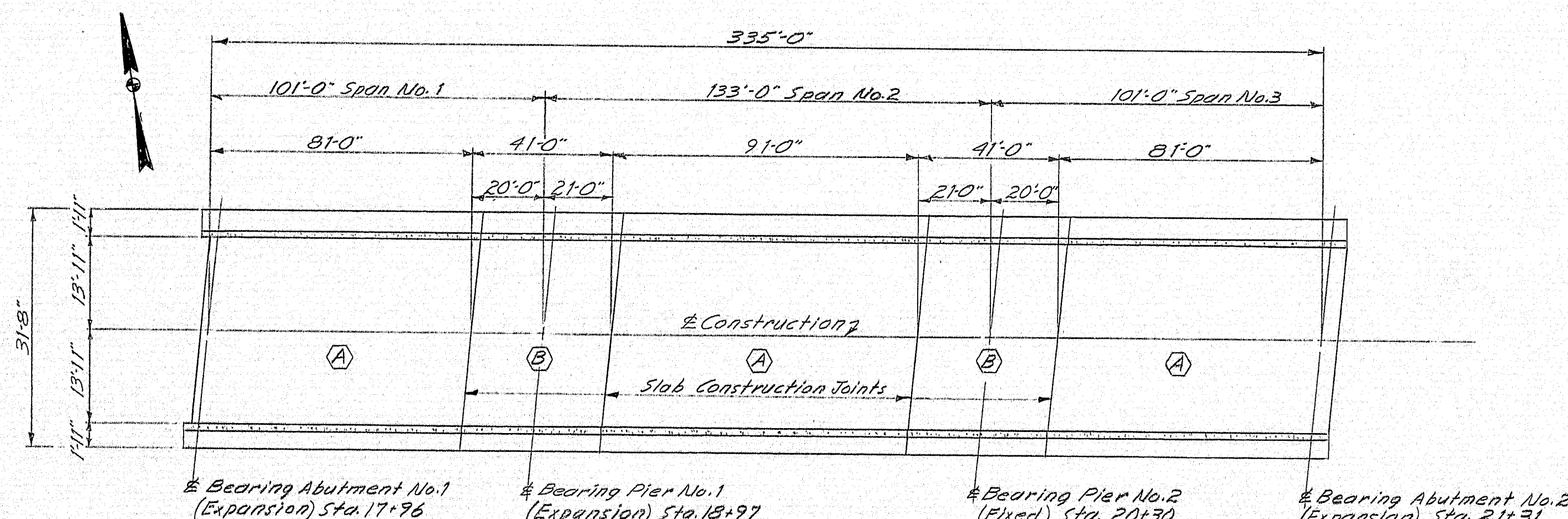
PROJECT DESIGN ENGINEER	DATE
BY E.T.A.	8-77
DESIGN-DETAILED	8-77
REVISIONS	
FIELD CHANGES	



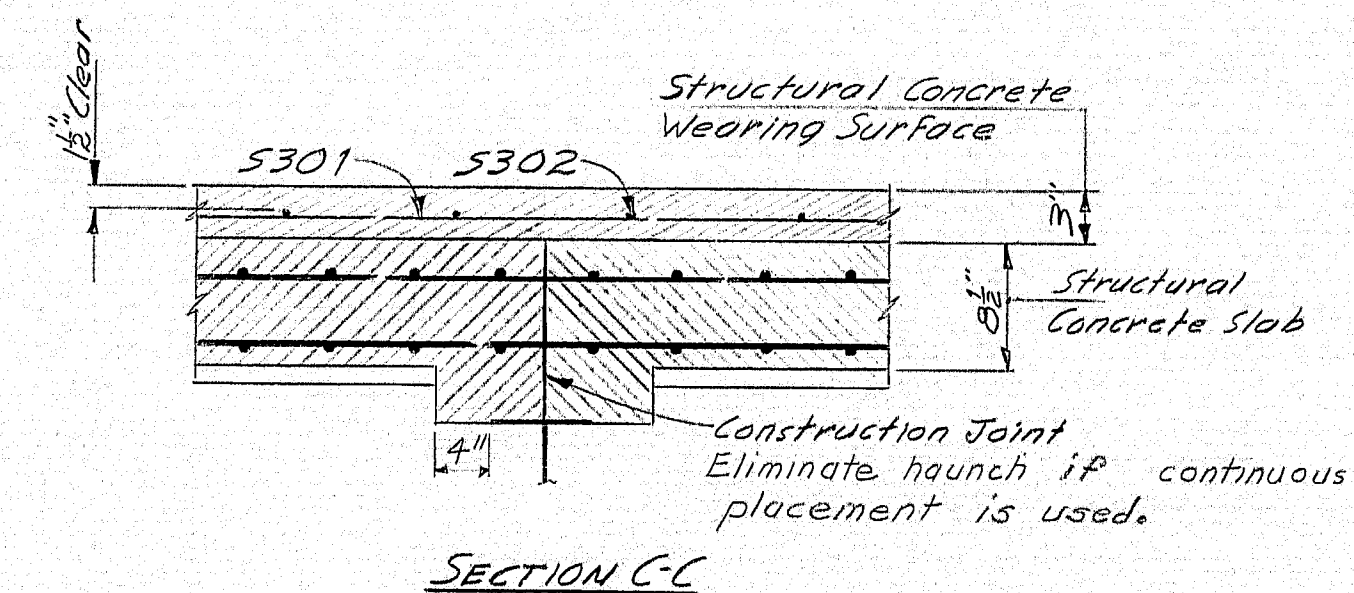
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5 (39)	28	111



PLAN SPAN NO. 2



SLAB PLACEMENT  
See Note



SECTION C-C

- REFERENCES**
- For Superstructure Notes see sheet No. 27
  - For Span No. 1 Plan see sheet No. 27
  - For Span No. 3 Plan see sheet No. 29
  - For Aluminum Bridge Railing see Standard sheet BD 114-73
  - For Drain & Curb Details see Standard sheet BD 104-73
  - For Transverse Section see sheet No. 27

**NOTE**

At the contractor's option Panel Placement or Continuous Placement may be used. The method used shall be approved by the Engineer.

If Panel Placement method is used panels marked (A) shall be placed before placing panels marked (B). A minimum of 5 days shall elapse between placement of panels marked (A) unless all of the (A) panels are placed the same day.

Concrete in the span adjacent to any span being placed shall be kept plastic until the span being placed is completed.

Approved set retarding admixtures shall be used when authorized by the Engineer.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY  
SUPERSTRUCTURE SPAN NO. 2**

SHEET 28 OF 111 AUGUSTA, MAINE Feb. 1997

147-142

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	8/74
CHECKED	8/74
REVISIONS	1/77
FIELD CHANGES	
PLANS	







PROJECT DESIGN ENGINEER	DATE
DESIGNED BY	11-74
PLANS	
REVISIONS	
FIELD CHANGES	

REINFORCING STEEL SCHEDULE																											
STRAIGHT BARS													BENT BARS														
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	
A500	53	3'-0"	Dowel	A553	2	15'-7"	North Wing					A401	8	5'-0"	S	0"	1'-3"	2'-6"	1'-3"	—	—	0"	—	—	—	Bearing Pads	
A503	7	16'-6"	Breastwall	A554	1	11'-9"						A402	8	5'-0"	S	0"	1'-5"	2'-2"	1'-5"	—	—	0"	—	—	—	Bearing Pads	
A505	7	13'-8"		A555		7'-10"																					
A506	14	4'-3"		A556		4'-0"																					
A507	3	17'-0"		A557	1	19'-6"						A501	26	16'-0"	L	4'-2"	11'-10"	—	—	—	—	—	—	—	—	Breastwall	
A508	1	16'-4"		A558	2	7'-0"						A502	9	21'-8"	V	—	—	—	17'-4"	4'-4"	—	—	3'-1"	—	—		
A509	3	20'-0"		A559	1	19'-6"						A504	9	19'-0"	V	—	—	—	14'-8"	4'-4"	—	—	3'-1"	—	—		
A510	1	19'-0"	Breastwall	A560	1	19'-6"						A511	20	6'-6"	V	—	—	—	3'-6"	3'-0"	—	—	2'-1"	—	—	Breastwall	
A512	40	6'-4"	Backwall	A561		18'-4"						A512	2	6'-0"	V				5'-0"	1'-0"			9"				
A513	10	19'-10"		A562		17'-9"																					
A514	10	16'-10"		A563		17'-2"																					
A515	16	7'-2"	Backwall	A564		16'-7"																					
A516	2	4'-3"	Curb	A565		16'-0"						A607	28	6'-7"	J	1'-0"	1'-7"	4'-0"	—	—	—	—	—	—	12"	Footing	
A517	3	12'-0"	South Wing	A566	1	15'-5"																					
A518	3	10'-6"		A567	9	3'-0"	North Wing																				
A519	4	12'-0"		A568	8	3'-6"	Backwall to App. Slab					A700	25	11'-4"	J	1'-0"	1'-7"	8'-9"	—	—	—	—	—	—	12"	Footing	
A520	2	9'-2"		A569	6	7'-3"	Curtain Walls																				
A521	1	8'-0"		A570	30	14'-6"	Curtain Walls																				
A522	1	6'-10"		A571			Breastwall					A900	15	7'-9"	J	1'-0"	1'-7"	5'-2"	—	—	—	—	—	—	12"	Footing	
A523	2	5'-10"																									
A524	1	19'-6"																									
A525	1	19'-1"										A100	23	8'-7"	J	1'-0"	1'-7"	6'-0"	—	—	—	—	—	—	12"	Footing	
A526		18'-7"																									
A527		18'-1"																									
A528		17'-7"																									
A529		17'-1"		A601	64	8'-2"	Footing																				
A530		16'-7"		A602	13	32'-3"																					
A531		16'-1"		A603	18	20'-0"																					
A532	1	15'-7"		A604	86	8'-8"																					
A533	8	14'-8"		A605	13	21'-5"	Footing																				
A534	2	16'-7"		A606	15	7'-0"	Wings																				
A535	8	19'-8"																									
A537	2	18'-6"		A901	23	10'-0"	Wings																				
A538	1	14'-1"						APPROACH SLABS																			
A539		9'-7"																									
A540		5'-0"																									
A541	1	20'-7"						A5400	44	26'-6"	Approach Slabs																
A542	2	7'-0"	South Wing					A5500	212	15'-0"	Approach Slabs																
A543	3	12'-0"	North Wing																								
A544	3	10'-0"																									
A545	3	11'-6"																									
A546	2	9'-7"																									
A547	1	8'-3"																									
A548	1	7'-0"																									
A549	2	5'-9"																									
A550	8	13'-2"																									
A551	2	17'-1"																									
A552	8	18'-2"	North Wing																								
													MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

FHWA NO. 1	STATE MAINE	PROJECT NUMBER 95-5(39)	SHEET NO. 30	TOTAL SHEETS 111
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**TYPE-BENDING DIAGRAMS**

All dimensions are out to out of reinf. bar.  
Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.  
Reinforcing Bar: ASTM A615 Grade 60

**GENERAL NOTES**

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.  
Mark (A502) bar size - #5  
Mark (P1001) bar size - #10  
Mark (S603) bar size - #6

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGadahoc COUNTY**

REINFORCING STEEL SCHEDULE  
ABUTMENT NO. 1

SHEET 30 OF 111 AUGUSTA, MAINE Feb. 1975

**147-144**



REINFORCING STEEL SCHEDULE																											
STRAIGHT BARS												BENT BARS															
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	
B500	49	3'-0"	Dowel	B553	1	14'-9"	South Wing					B501	26	14'-2"	L	4'-2"	10'-0"	—	—	—	—	—	—	—	—	—	Breastwall
B503	7	17'-0"	Breastwall	B554	1	14'-1"						B502	9	22'-2"	V	—	—	—	17'-8"	4'-6"	—	—	—	3'-2"	—	—	
B505	7	14'-0"		B555	1	13'-6"						B504	9	19'-2"	V	—	—	—	14'-8"	4'-6"	—	—	—	3'-2"	—	—	
B506	14	4'-3"		B556	6	9'-8"						B511	20	6'-6"	V	—	—	—	3'-6"	3'-0"	—	—	—	2'-1"	—	—	Breastwall
B507	3	17'-0"		B557	2	13'-6"						B569	2	6'-0"	V				5'-0"	1'-0"				9"			
B508	1	16'-0"		B558	8	14'-8"						B570	28	6'-4"	J	1'-0"	1'-7"	3'-9"	—	—	—	—	—	—	—	12"	Footing
B509	1	19'-0"		B559	2	12'-3"																					
B510	3	20'-0"	Breastwall	B560	1	8'-9"																					
B512	40	6'-2"	Backwall	B561		5'-3"						B701	24	9'-9"	J	1'-0"	1'-7"	7'-2"	—	—	—	—	—	—	—	12"	Footing
B513	10	17'-0"		B562		2'-0"																					
B514	10	20'-0"		B563	1	16'-0"																					
B515	16	7'-0"	Backwall	B564	2	6'-0"	South Wing					B800	7	10'-3"	J	1'-0"	1'-7"	7'-8"	—	—	—	—	—	—	—	12"	Wing Footing
B516	4	4'-3"	Curb	B565	9	3'-0"	Backwall to App. 566					B801	13	7'-3"	J	1'-0"	1'-7"	4'-8"	—	—	—	—	—	—	—	12"	Wing Footing
B517	2	11'-6"	North Wing	B566	6	7'-6"	Curtain Wall																				
B518	1	10'-0"		B567	8	4'-6"	Curtain Wall																				
B519		11'-6"										B900	6	13'-0"	J	1'-0"	1'-7"	10'-5"	—	—	—	—	—	—	—	12"	Wing Footing
B520		10'-0"																									
B521		8'-11"		B571	28	13'-0"	Breastwall																				
B522		7'-10"																									
B523	1	6'-9"																									
B524	2	5'-10"																									
B525	1	17'-4"		B601	64	8'-0"	Footing																				
B526	1	16'-9"		B602	18	30'-0"																					
B527		16'-3"		B603	70	7'-6"																					
B528		15'-9"		B604																							

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	31	111

Figure 1 consists of 18 diagrams labeled A through R, illustrating various types of structural connections and joints. The diagrams are arranged in a grid-like fashion, with some diagrams showing multiple views or details of a connection. The labels are as follows:

- A**: A diagram showing a member with a connection point labeled 'A' and a dimension 'O'.
- B**: A diagram showing a member with a connection point labeled 'B' and a dimension 'O'.
- C**: A diagram showing a member with a connection point labeled 'C' and a dimension 'O'.
- D**: A diagram showing a member with a connection point labeled 'D' and a dimension 'O'.
- E**: A diagram showing a member with a connection point labeled 'E' and a dimension 'O'.
- F**: A diagram showing a member with a connection point labeled 'F' and a dimension 'O'.
- G**: A diagram showing a member with a connection point labeled 'G' and a dimension 'O'.
- H**: A diagram showing a member with a connection point labeled 'H' and a dimension 'O'.
- I**: A diagram showing a member with a connection point labeled 'I' and a dimension 'O'.
- J**: A diagram showing a member with a connection point labeled 'J' and a dimension 'O'.
- K**: A diagram showing a member with a connection point labeled 'K' and a dimension 'O'.
- L**: A diagram showing a member with a connection point labeled 'L' and a dimension 'O'.
- M**: A diagram showing a member with a connection point labeled 'M' and a dimension 'O'.
- N**: A diagram showing a member with a connection point labeled 'N' and a dimension 'O'.
- O**: A diagram showing a member with a connection point labeled 'O' and a dimension 'O'.
- P**: A diagram showing a member with a connection point labeled 'P' and a dimension 'O'.
- Q**: A diagram showing a member with a connection point labeled 'Q' and a dimension 'O'.
- R**: A diagram showing a member with a connection point labeled 'R' and a dimension 'O'.

*Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.*

Reinforcing Bar: ASTM A 615 Grade 60

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.  
Mark (A 502) bar size - #5  
Mark (P 1001) bar size - #10  
Mark (S 603) bar size - #6

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
RICHMOND  
SAGADAHOC COUNTY  
REINFORCING STEEL SCHEDULE  
ABUTMENT NO.**

SHEET 31 OF 111 AUGUSTA, MAINE Feb. 1975

147-145



REINFORCING STEEL SCHEDULE																										
STRAIGHT BARS								BENT BARS																		
MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	LOCATION	MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
<i>PIER No. 1</i>				<i>PIER No. 2</i>				<i>SUPERSTRUCTURE</i>				<i>P I E R N o . 1</i>														
P501	14	20'-0"	Shaft	P551	14	20'-0"	Shaft	5300	28	16'-0"	Wearing Surface															
P502	4	30'-8"	Cap	P552	4	30'-8"	Cap	5301	308	30'-0"	Wearing Surface	P503	14	14'-0"	H	6"	2'-8"	3'-10"	2'-8"	3'-10"	-	6"	-	-	-	Cap
								5302	336	27'-6"	Wearing Surface	P504	4	12'-10"	I	I	1'-11"	4'-0"	1'-11"	4'-0"	-	I	-	-	-	I
												P505	I	10'-6"			2'-10"	I	2'-10"	-		-	-	-		
												P506		10'-8"			2'-11"		2'-11"	-		-	-	-		
P600	22	10'-6"	Footing	P650	22	11'-6"	Footing					P507		10'-10"			3'-0"		3'-0"	-		-	-	-		
P601	22	21'-0"	Footing	P651	22	21'-0"	Footing	5501	672	31'-4"	Slab - Transverse	P508		11'-1"			3'-1 1/2"		3'-1 1/2"	-		-	-	-		
P602	42	5'-0"	Shaft	P652	42	5'-0"	Shaft	5502	334	30'-0"	Slab - Longitudinal	P509		11'-3"			3'-2 1/2"		3'-2 1/2"	-		-	-	-		
P603	42	13'-0"	Shaft	P653	42	12'-9"	Shaft	5503	118	24'-3"	I	P510		11'-5"			3'-3 1/2"		3'-3 1/2"	-		-	-	-		
								5504	177	40'-0"	I	P511		11'-7"			3'-4 1/2"		3'-4 1/2"	-		-	-	-		
								5505	44	35'-0"	Slab - Longitudinal	P512		11'-10"			3'-6"		3'-6"	-		-	-	-		
P900	22	10'-6"	Footing					5506	4	19'-8"	Curb -	P513		12'-0"			3'-7"		3'-7"	-		-	-	-		
				P1050	22	11'-6"	Footing	5507	52	15'-0"	I	P514	I	12'-2"	I	I	3'-8"	I	3'-8"	-	I	-	-	-		
								5508	32	10'-0"		P515	4	12'-4"	H	6"	1'-11"	3'-9"	1'-11"	3'-9"	-	6"	-	-	-	I
P1000	12	12'-0"	Cap					5509	4	13'-0"		P516	8	5'-0"	S	0"	1'-2"	2'-8"	1'-2"	-	-	-	-	-	Cap	
								5510	4	19'-10"	Curb															
				P1150	3	30'-8"	Cap	5512	28	6'-0"	Slab (Top Mat)															
P1100	4	30'-8"	Cap	P1151	12	12'-0"	Cap					P604	2	30'-10"	A	-	-	5'-2"	20'-6"	5'-2"	-	-	1'-2"	-	-	Cap
												P605	4	8'-0"	V	-	-	-	2'-10"	5'-2"	-	-	1'-2"	-	-	Cap
												<i>P I E R N o . 2</i>														
												P553	14	14'-0"	H	6"	2'-8"	3'-10"	2'-8"	3'-10"	-	6"	-	-	-	Cap
												P554	4	12'-6"	I	I	2'-2"	3'-7"	2'-2"	3'-7"	-	I	-	-	-	I
												P555	I	11'-0"			2'-10"	I	2'-10"	-		-	-	-		
												P556		11'-2"												

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-5(39)	32	111

Figure 1 consists of 18 diagrams, labeled A through R, illustrating various types of structural connections and joints. The diagrams are arranged in a grid-like fashion, with each diagram showing a different configuration of beams, columns, and walls, and the resulting structural behavior. The diagrams are labeled as follows:

- A**: A beam connected to a wall, showing a rigid connection.
- B**: A beam connected to a wall, showing a rigid connection with a different geometry.
- C**: A beam connected to a wall, showing a rigid connection with a different geometry.
- D**: A beam connected to a wall, showing a rigid connection with a different geometry.
- E**: A beam connected to a wall, showing a rigid connection with a different geometry.
- F**: A beam connected to a wall, showing a rigid connection with a different geometry.
- G**: A beam connected to a wall, showing a rigid connection with a different geometry.
- H**: A beam connected to a wall, showing a rigid connection with a different geometry.
- I**: A beam connected to a wall, showing a rigid connection with a different geometry.
- J**: A beam connected to a wall, showing a rigid connection with a different geometry.
- K**: A beam connected to a wall, showing a rigid connection with a different geometry.
- L**: A beam connected to a wall, showing a rigid connection with a different geometry.
- M**: A beam connected to a wall, showing a rigid connection with a different geometry.
- N**: A beam connected to a wall, showing a rigid connection with a different geometry.
- O**: A beam connected to a wall, showing a rigid connection with a different geometry.
- P**: A beam connected to a wall, showing a rigid connection with a different geometry.
- Q**: A beam connected to a wall, showing a rigid connection with a different geometry.
- R**: A beam connected to a wall, showing a rigid connection with a different geometry.

Reinforcing Bar : ASTM A 615 Grade 60

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.

Mark (A 502)	bar size - #5
Mark (P 1001)	bar size - #10
Mark (S 603)	bar size - #6

2. Each truss bar (3500) may be replaced by two straight bars (one top & one bottom) of the same bar size as the truss bar. Payment, in either case, shall be based on truss bars as scheduled on the plans.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**BEEDLE ROAD  
OVER  
INTERSTATE 95  
IN THE TOWN OF**

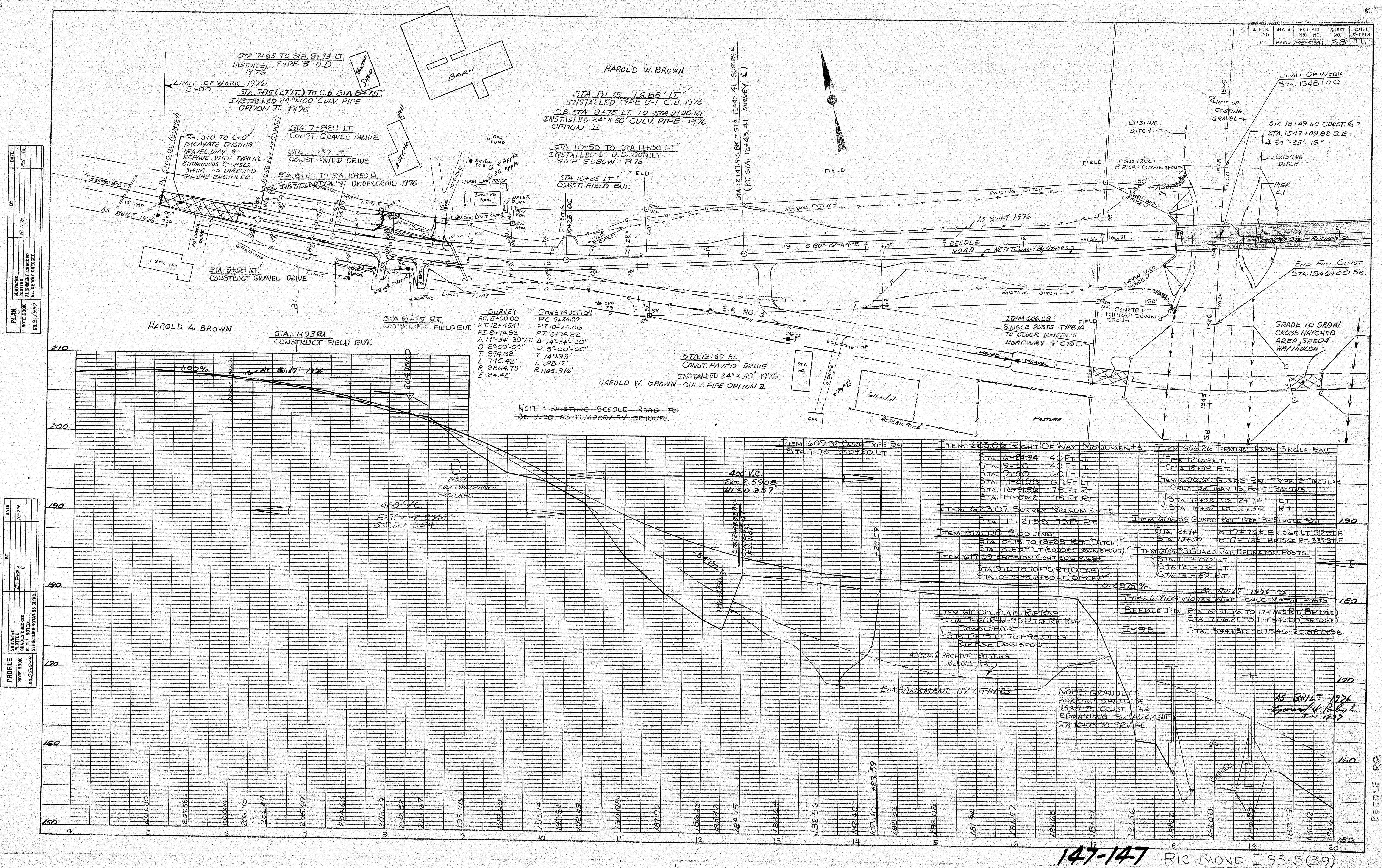
## SAGadahoc COUNTY

REINFORCING STEEL SCHEDULE  
PIERS & SUPERSTRUCTURE  
SHEET 32 OF 111 AUGUSTA, MAINE Feb. 1995

SHEET 32 OF 111 AUGUSTA, MAINE Feb. 1975

147-146

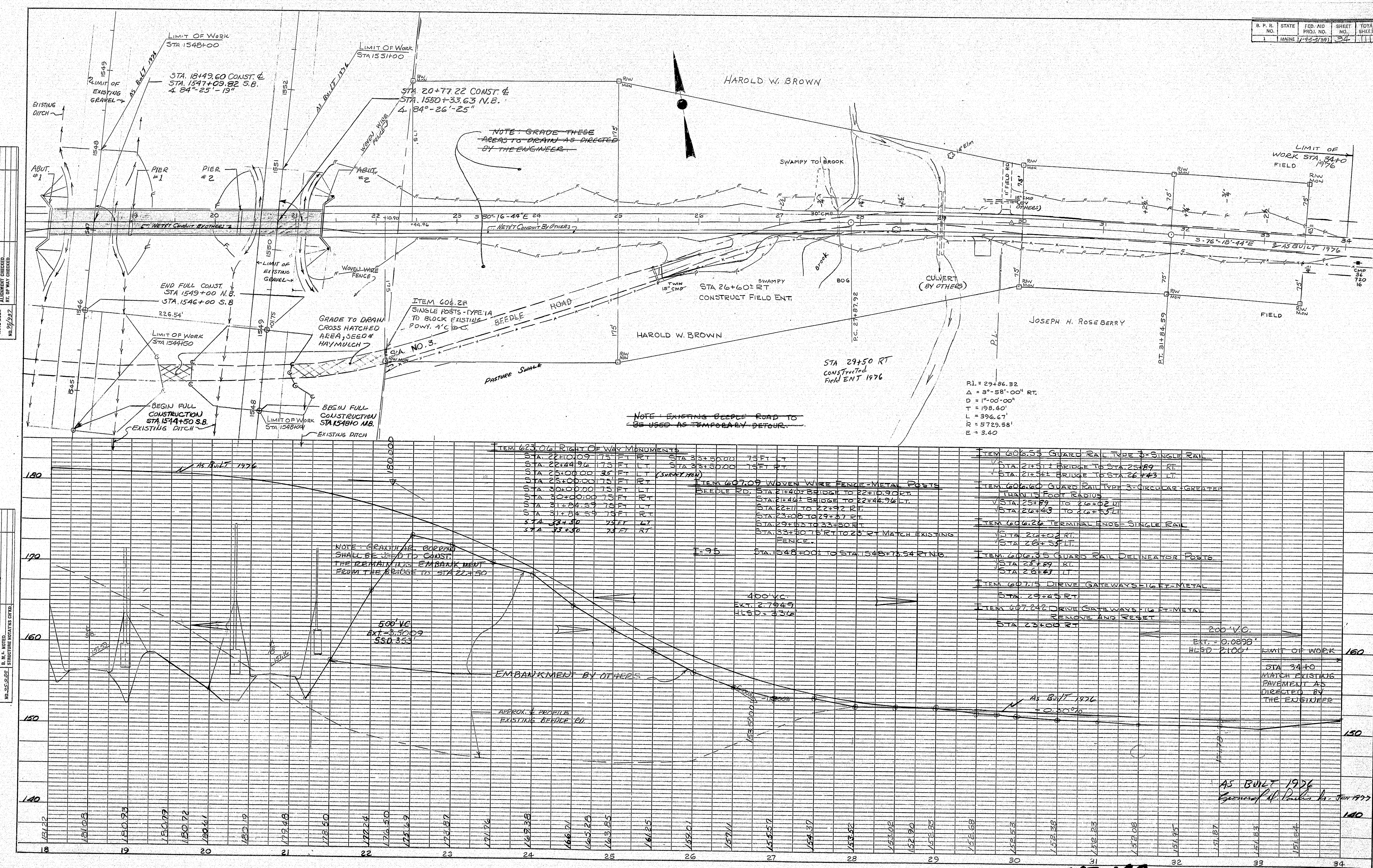






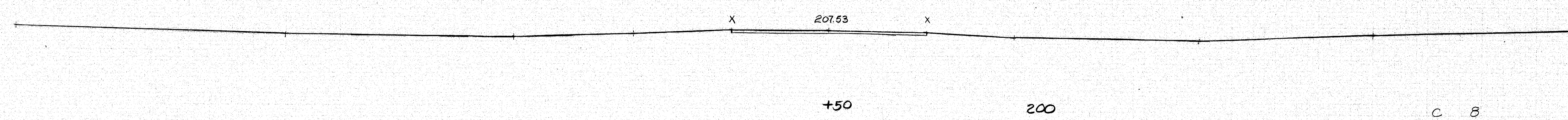
PLAN	DATE	BY
NO. 52-22	5/2/76	...

PROFILE	DATE	BY
NO. 52-22	5/2/76	...

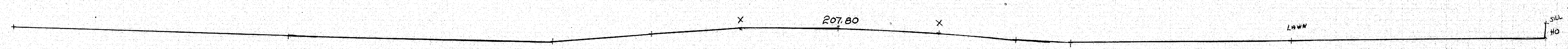




DATE	1-25-5(39)	35	11
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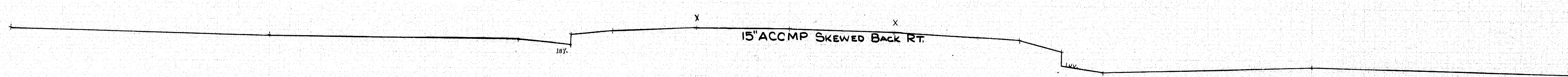
STA. 5+00 TO STA. 6+00  
EXCAVATE EXISTING  
TRAVEL WAY AND REPAVE  
WITH TYPICAL BITUMINOUS  
COURSES. SHIM AS DIRECTED  
BY THE ENGINEER.



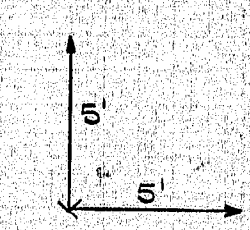
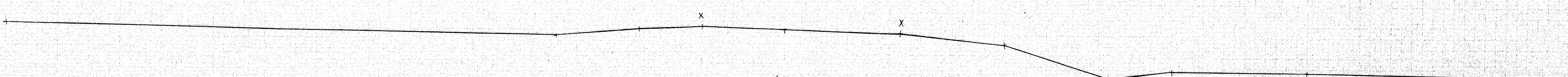
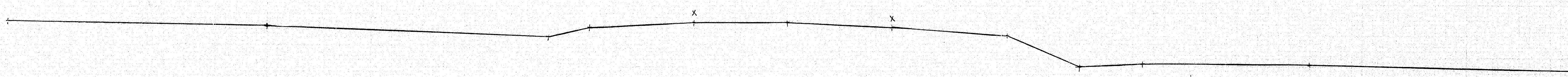
MATCH EXISTING PAVEMENT  
5+00

LIMIT OF WORK  
STA 5+00

LEGEND  
C-CUT  
F-FILL  
G-GRUBBING  
G.B. GRANULAR BORROW  
W.S. WASTE STORAGE



15' ACCMP SKEWED BACK RT.



BEEBLE RD STA. 4+00 TO STA. 5+50

147-149  
RICHMOND I-95-5(39)

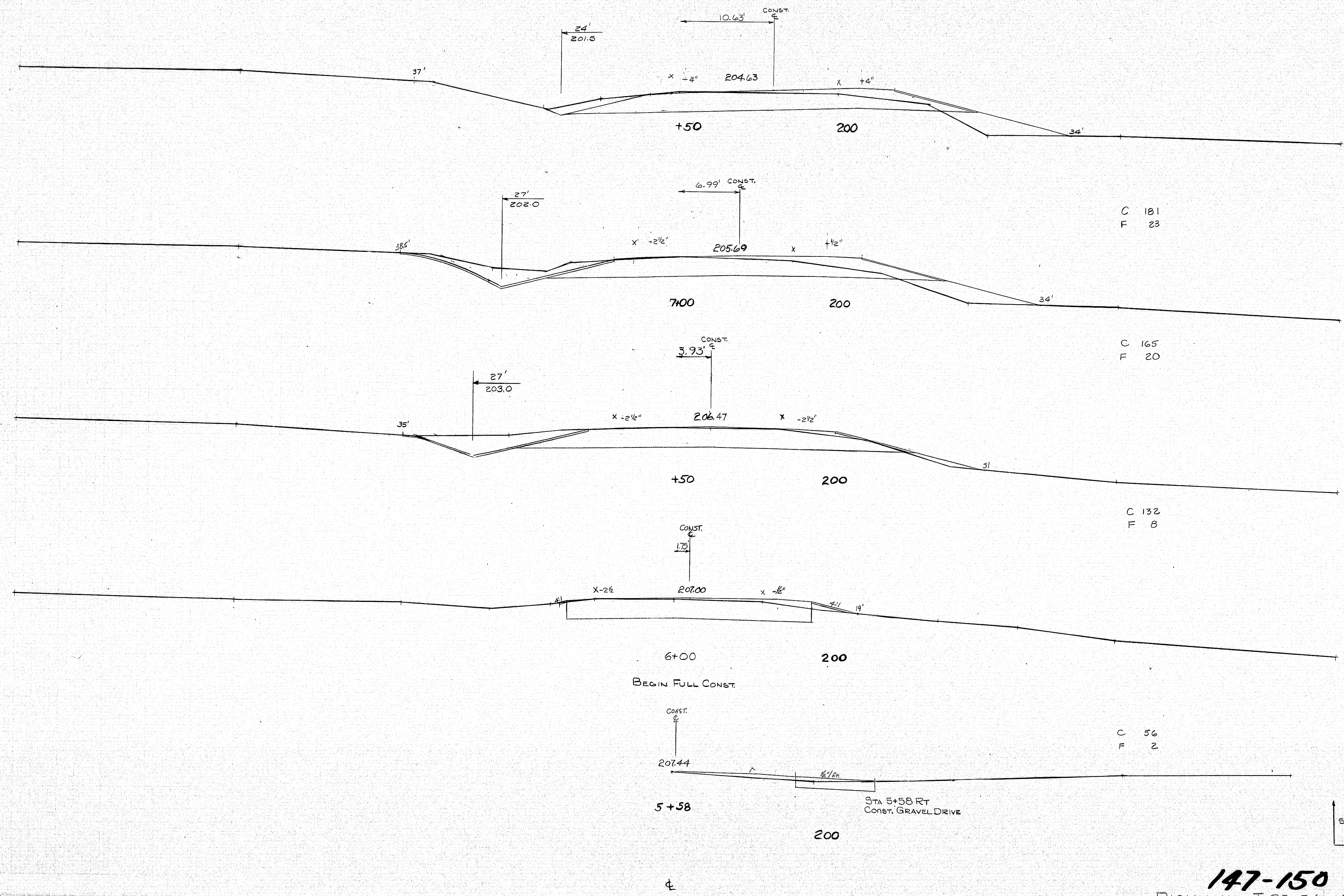
DATE	1-25-5(39)	35	11
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DATE	1-25-5(39)	35	11
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ORIGINAL  
 SURVEY  
 8/1988

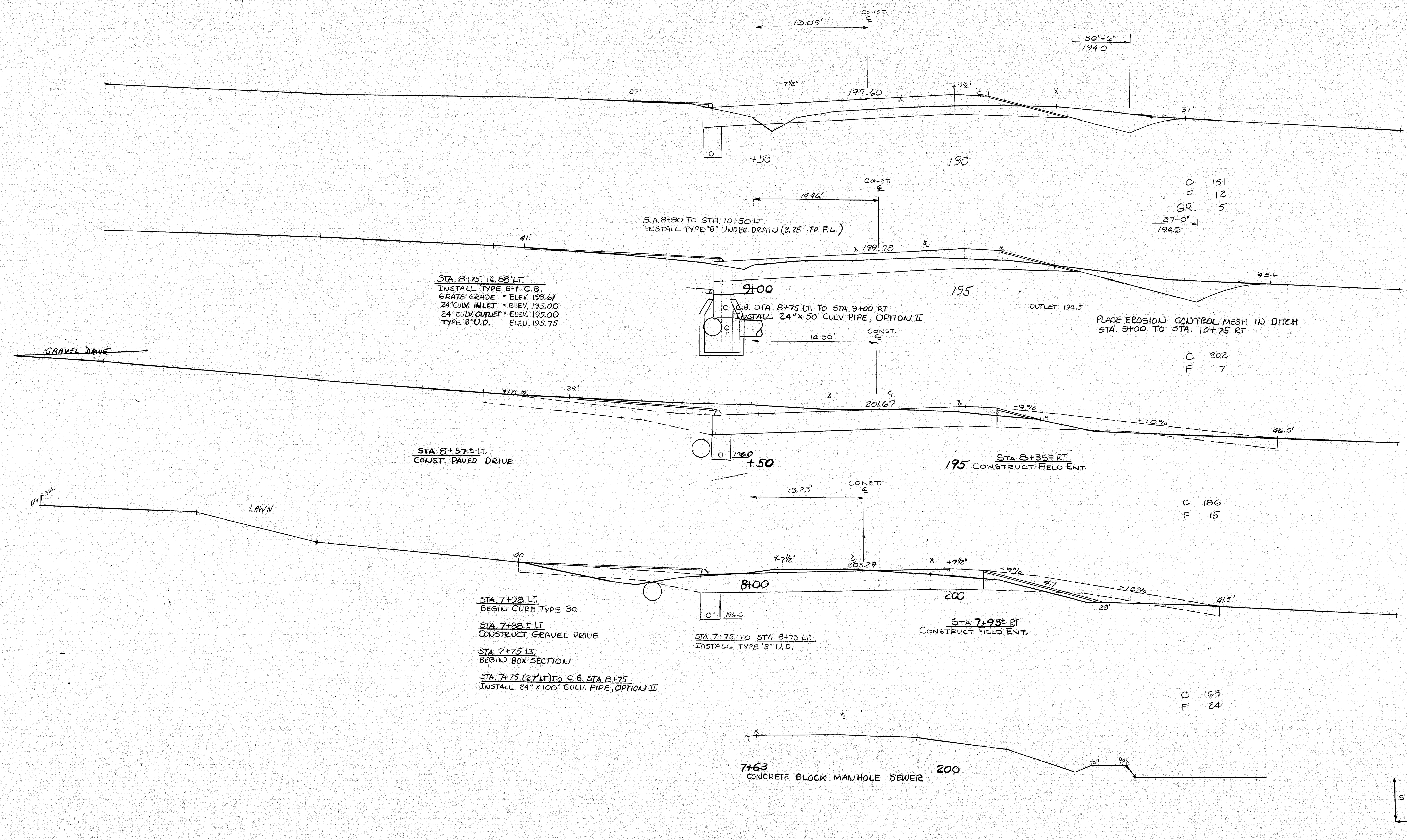
C. D. W. (C.D.W.)  
 8/1988



BEEDE RD. STA. 5+58 TO STA. 7+50

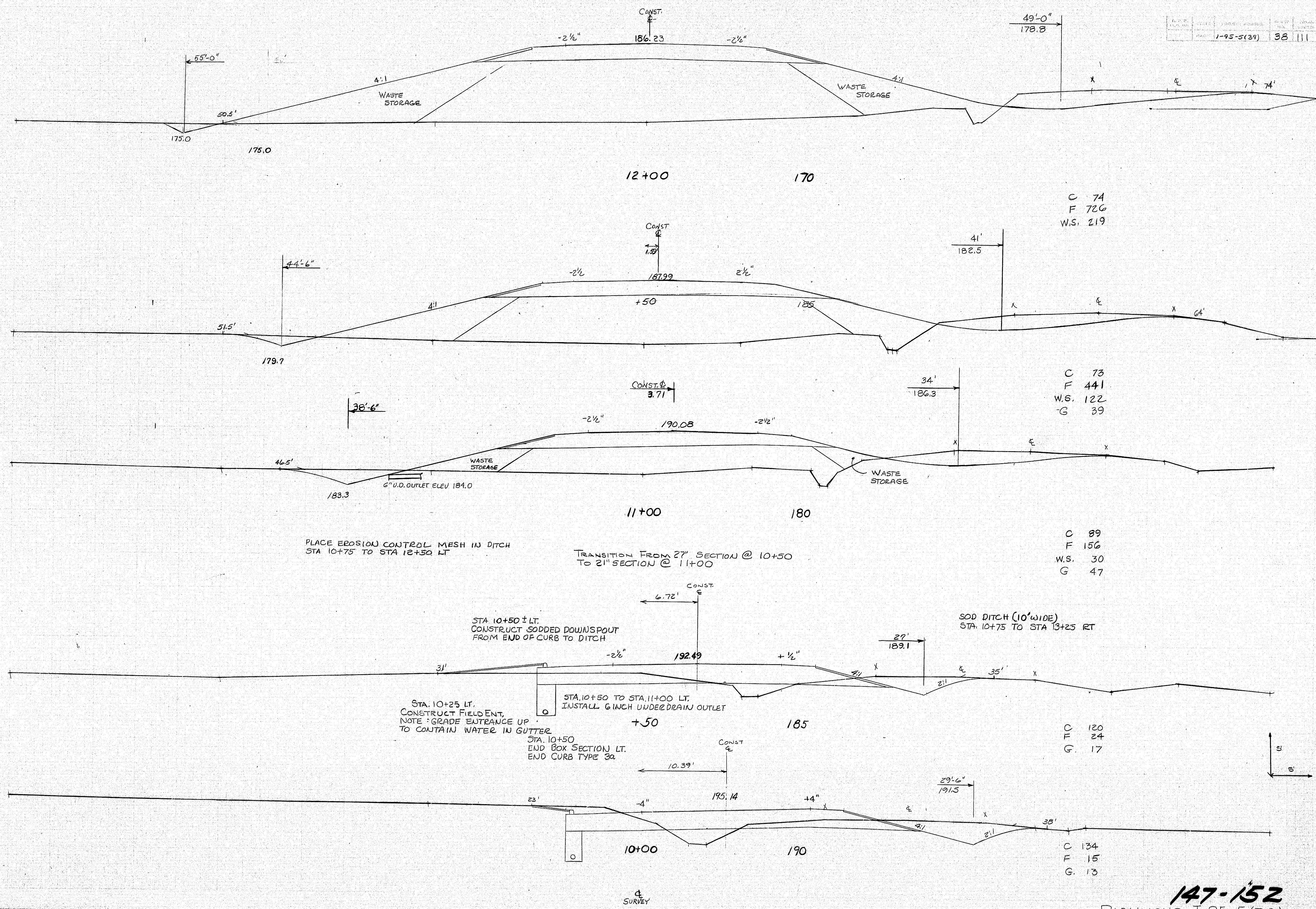
147-150  
 RICHMOND I-95-5(39)





147-151  
RICHMOND I 95-5(39)





147-152  
RICHMOND I-95-5(39)

BEEDE RD. STA. 10+00 TO STA. 12+00



