

SCARBOROUGH
SO. PORTLAND

STATE OF MAINE STATE HIGHWAY COMMISSION



SCARBOROUGH - SOUTH PORTLAND CUMBERLAND COUNTY MAINE FEDERAL AID-INTERSTATE PROJECT NO. 1-295-3(44)45 TOTAL LENGTH 1.231 MILES GRADING, DRAINAGE and BASE PROJECT

PLANS 1 IN. = 50 FT.
PROFILES HORIZ. 1 IN. = 50 FT.
CROSS SECTIONS VERT. 1 IN. = 5 FT.
OR AS SHOWN

BUILT 1971

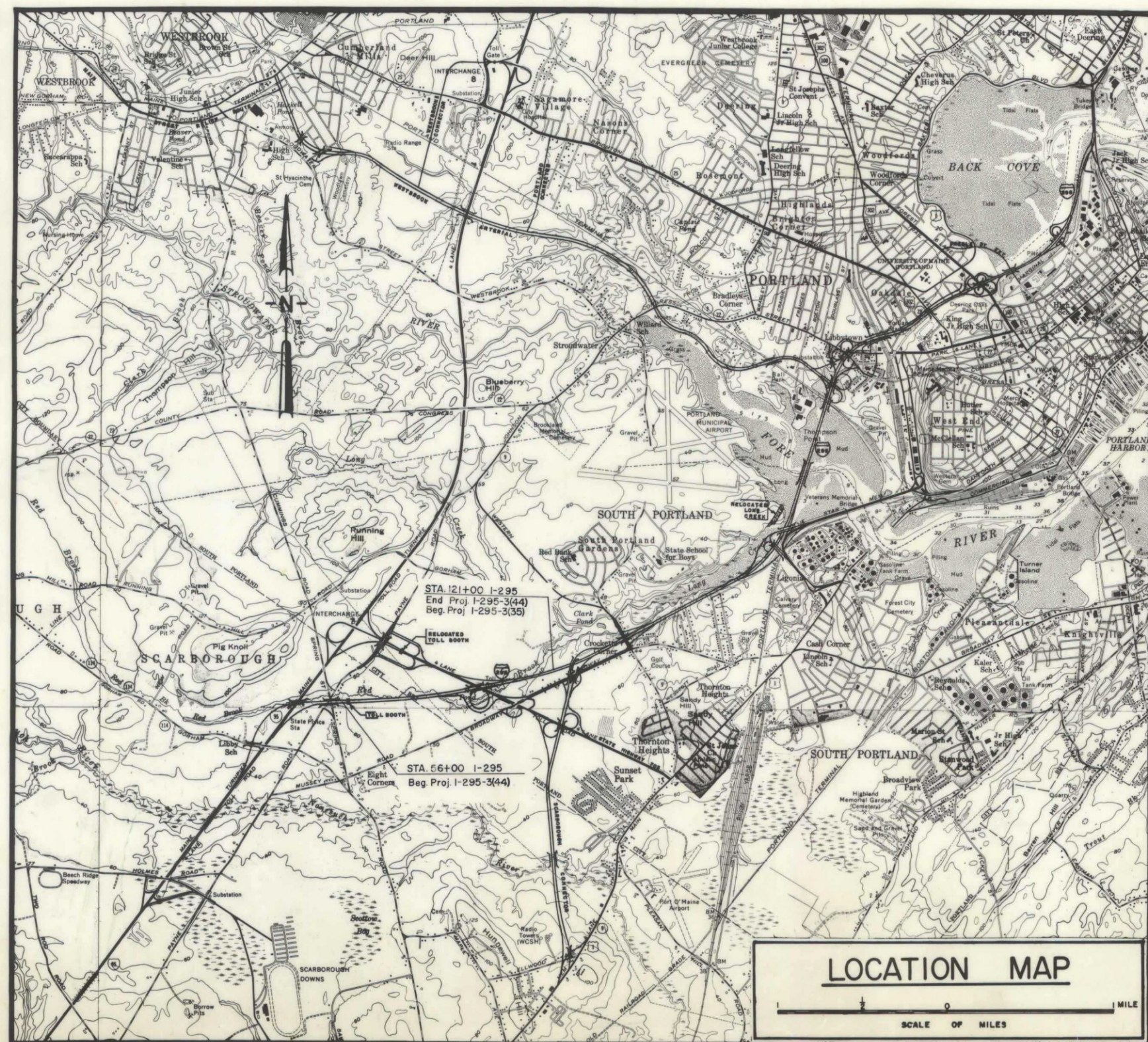
Bridge Maintenance

CONVENTIONAL SIGNS

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

INDEX OF SHEETS

1	TITLE SHEET
2	GENERAL PROJECT INFORMATION SHEET
3-4	TYPICAL SECTIONS
5-6	QUANTITY AND DRAINAGE SHEET
7-19	STANDARD AND SPECIAL DETAIL SHEETS
20-47	I-295 STRUCTURES OVER STATE ROUTE 703
48-51	FOUNDATION PLANS - RED BROOK CULVERTS
52	RED BROOK CULVERT (STA.87+80 I-295)
53	" " " (STA.12+70 RAMP TPK-7) & (STA.2+95 RAMP TPK-5)
54	" " " (STA.108+00 I-295)
55-56	PLAN and PROFILE I-295 STA.50+00 to STA.65+00 & ACCESS ROAD
57	" " " STA.65+00 to STA.80+00
58	" " " STA.80+00 to STA.95+00 & RAMP TPK-7
59-64	" " " STA.95+00 to STA.110+00, RAMPS TPK-5, 6 & 7, & SR.703
65	" " " STA.110+00 to STA.125+00 & RAMP TPK-6
66	GRADING PLAN STA.59+50 to STA.70+25 (TOLL PLAZA AREA)
67-86	CROSS SECTIONS I-295 STA.53+00 to STA.121+00 SCALE: 1"=10'
87-91	" " " RAMP TPK-5 STA.0+00 to STA.13+50 " "
92-93	" " " RAMP TPK-6 STA.17+50 to STA.28+00 " "
94-98	" " " RAMP TPK-7 STA.6+50 to STA.21+50 " "
99-101	" " " ACCESS ROAD STA.11+00 to STA.24+00 SCALE: 1"=5'
102-103	ACCESS SIGNING PLANS



TRAFFIC DATA	N.B.	S.B.
A.D.T. 1970	2,830	2,680
A.D.T. 1990	5,704	5,004
D.H.V.	43	701
T. (%)	5	5
D. (%)		
V.	50	50
P.S.D. (%)		
18 KIPS		

FOR MORE DETAILED TRAFFIC DATA, SEE SHEET NO. 2,
GENERAL PROJECT INFORMATION.

NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968 AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

APPROVED:
MAINE STATE HIGHWAY COMMISSION

David H. Sluven
CHAIRMAN
Robert G. Lockard
Steven D. Shaw
Sylvester A. Poor
CHIEF ENGINEER

DATE

September 14, 1970
September 16, 1970
September 16, 1970
September 16, 1970

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY

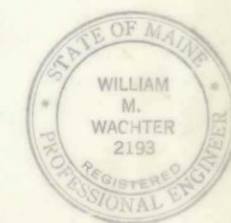
Wm. W. White

MAY 27, 1970
DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
REGION 1

APPROVED:

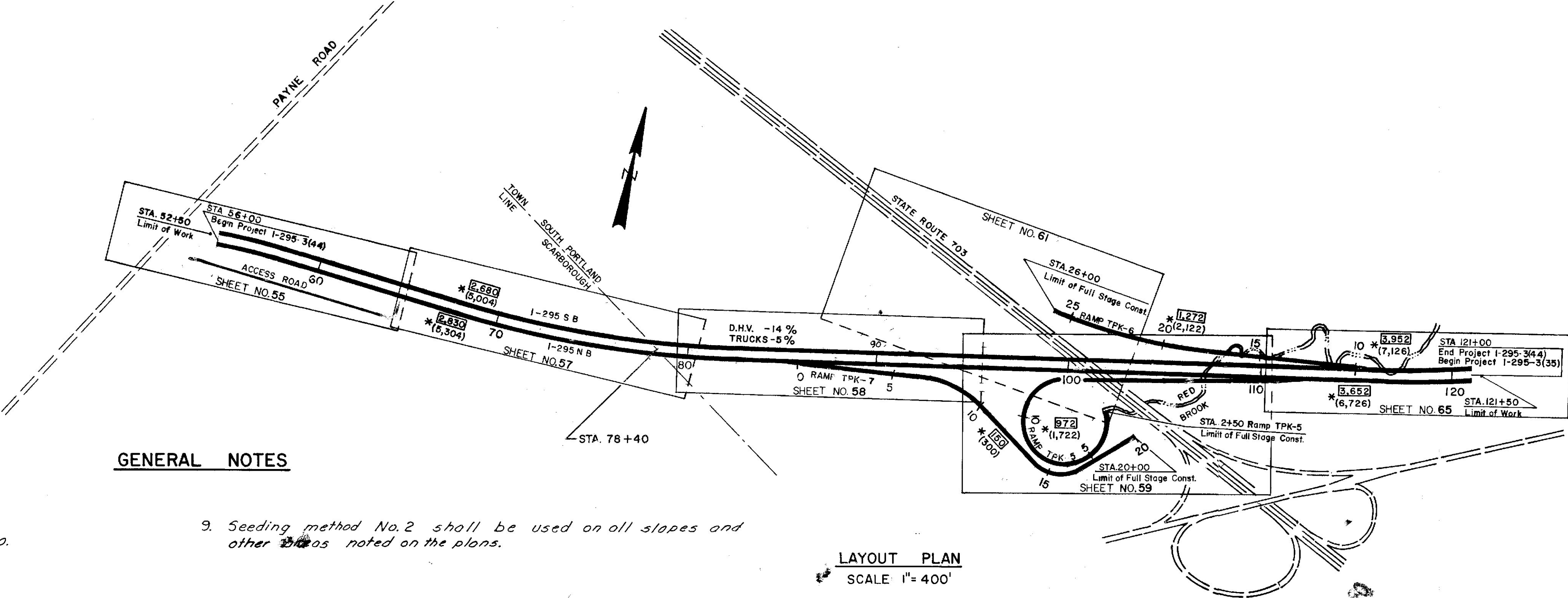
DIVISION ENGINEER DATE



GENERAL PROJECT INFORMATION

R. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295 - 3 (44)	2	103

* TRAFFIC DATA:
1970 AADT 1970
1990 AADT (1990)



GENERAL NOTES

- The utilities involved in this contract are:
Central Maine Power Co.
New England Telephone & Telegraph Co.
Portland Water District
Portland Gas & Light Co.
- All utility facilities are to be adjusted as necessary by the respective utilities unless otherwise noted.
- Removal or abandonment of any existing drainage must first be approved by the Engineer.
- Grubbing in fill will not be required unless the subgrade is within 5' of the existing ground in woods and fields. The width of grubbing is determined by the intersection of a one to one slope from the shoulder berm and existing ground.
- Clearing shall be performed to 5' beyond the slope line in high fill-guard rail sections and in all ditched sections where the depth of ditch is 5' or greater. In low fill sections and ditched sections less than 5' in depth, clearing shall be 15' beyond the slope line. Selective clearing and thinning shall be performed between the clearing limits and ROW lines or selective clearing and thinning lines as shown on the plans.
- P.T.H. shown on the cross sections indicates "Planimeter to Here" for use in quantity calculations only.
- Where erosion control mesh or sod is required for circular ditches the width shall be 1'-2" and each edge shall be approximately the same elevation. Methods of construction shall conform to those shown in the "Standard Details".
- Landscaping - General
The loam, seed and hay mulch notes as shown apply as a general guide. In all cases the Engineer has final authority as to the placement of these items.
- Seeding method No.2 shall be used on all slopes and other areas noted on the plans.
- All loam depths shall be 3". All slopes shall be loamed on this basis unless otherwise noted on the plans.
- Hay mulch and asphalt binder shall be applied to all areas seeded by method No.2.
- All ditch elevations shown on the cross sections are to the top of loam unless otherwise noted.
- All reinforced concrete pipe shall be class III unless otherwise noted on the plans.
- All excavation for relocated channels shall be paid for under item 206.12 Structural Earth Excavation - Channel.
- Riprap used on all relocated channel slopes shall be hand laid and that used on the bottom of the channel shall be plain riprap. Location of these items shall be as shown on the plans or as directed by the Engineer.
- The Contractor Shall Install Woven Wire fencing - Metal Posts Around the property Rt. of I-295 Sta 53+50 Before any other work in the area Begins.
- All muck excavation areas shall be backfilled to 1'-0" above existing ground with granular borrow or excavation meeting the requirements for granular borrow under water backfill.
- The Clearing Limit Lines shown on the plans are for estimating purposes only. The actual clearing Limit Lines for payment shall be field measured.
- Layout for sand drains shall be field adjusted (as directed by the soils Division) in the areas of the structural plate pipes and other culverts.
- Excavation for sight preparation where not shown as muck shall be paid for as Common Excavation.

LAYOUT PLAN
SCALE 1"= 400'

FIELD BOOKS RELATIVE TO PROJECT

- | | | |
|---------|--------------|--|
| 295/153 | 5a. Portland | X-sections Sta 116+00 to 121+00 |
| 295/234 | 5a. Portland | Alignment, ties, topo Sta 50+00 - Sta 116+00 & Med. I-295, Sta. 40+00- Sta 50+00 S.B. lane I-295 |
| 295/235 | 5a. Portland | X-Sections Sta 50+00- Sta 116+00 & Med I-295, Sta. 40+00- Sta. 49+50 S.B. lane I-295 |
| 295/244 | 5a. Portland | Alignment, ties, topo, X-sections N.B. Ramps I-295 to tpke spur State Highway 703, Ramps TPK-5 and TPK-7 |
| 295/246 | 5a. Portland | Alignment, X-section Ramp "S.B." I-295, Ramp TPK-6 |
| 295/251 | 5a. Portland | Benchmarks, ties, X-sections, alignment I-295, Access Road & to toll house |
21. If the contractor elects to leave the build-up of material from the sand drains on the fill, the material shall be upgraded with Common borrow to a standard acceptable to the Engineer. The only payment will be for the Quantity of ITEM No. 203.24 Common Borrow actually used.

Revised As Built (General Note
No. 14, only).
S.W. Ritzky Jr. 5-13-74

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

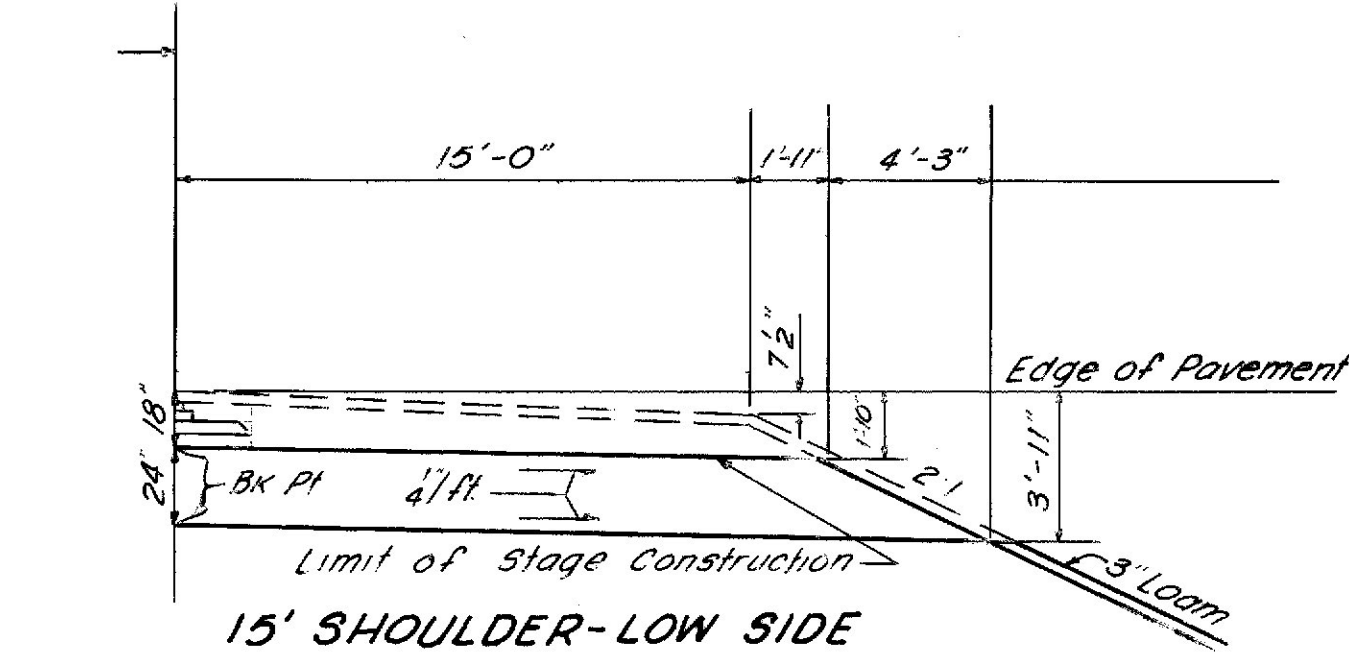
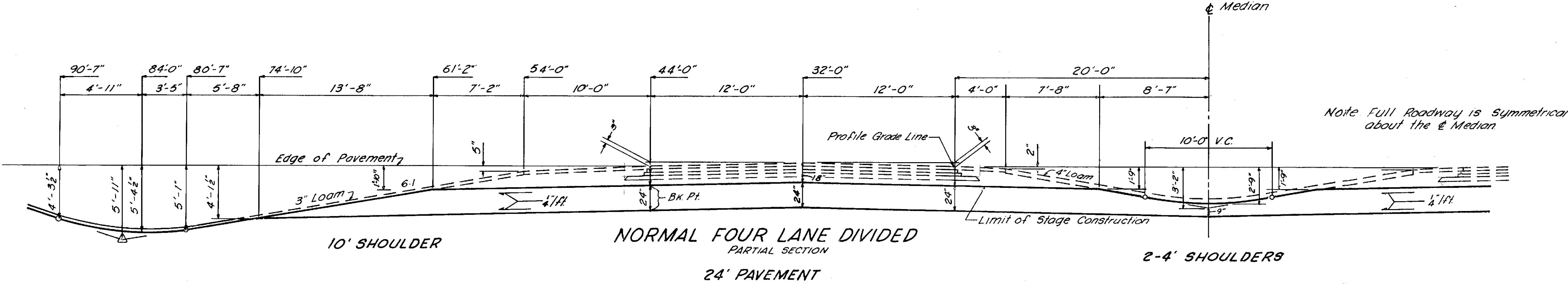
NEW YORK BOSTON KANSAS CITY

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

GENERAL PROJECT
INFORMATION SHEET

STAGE CONSTRUCTION — GRADING AND SUBBASE

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3 (44)	3	103

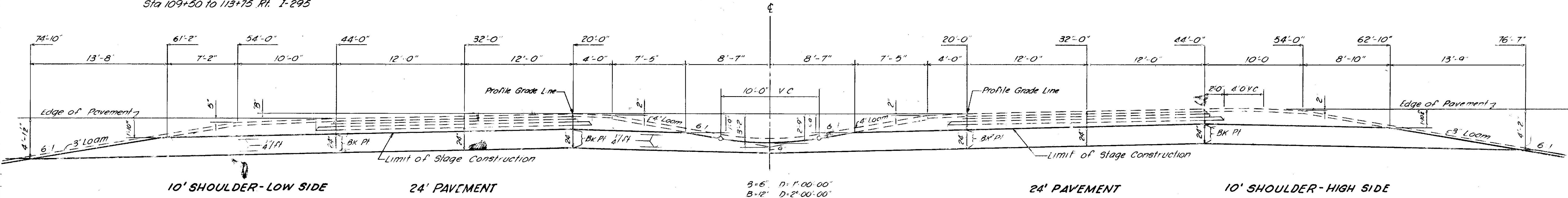


24" Aggregate Subbase Course - Sand = 178.61 CY/100 LF
Sta 54+50 to 63+00 Rt. I-295
Sta 65+00 to 86+00 Lt. I-295
Sta 65+00 to 66+00 Rt. I-295
Sta 91+50 to 97+00 Rt. I-295
Sta 109+50 to 113+75 Rt. I-295

24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

24" Aggregate Subbase Course - Sand = 260.80 CY/100 LF

24" Aggregate Subbase Course - Sand = 141.04 CY/100 LF
Sta 86+50 to 97+00 Lt. I-295
Sta 114+50 to 115+00 Rt. I-295
Sta 115+00 to 119+00 Lt. I-295



24" Aggregate Subbase Course - Sand = 178.61 CY/100 LF
Sta 54+50 to 63+00 Rt. I-295
Sta 65+00 to 86+00 Lt. I-295
Sta 65+00 to 66+00 Rt. I-295
Sta 91+50 to 97+00 Rt. I-295
Sta 109+50 to 113+75 Rt. I-295

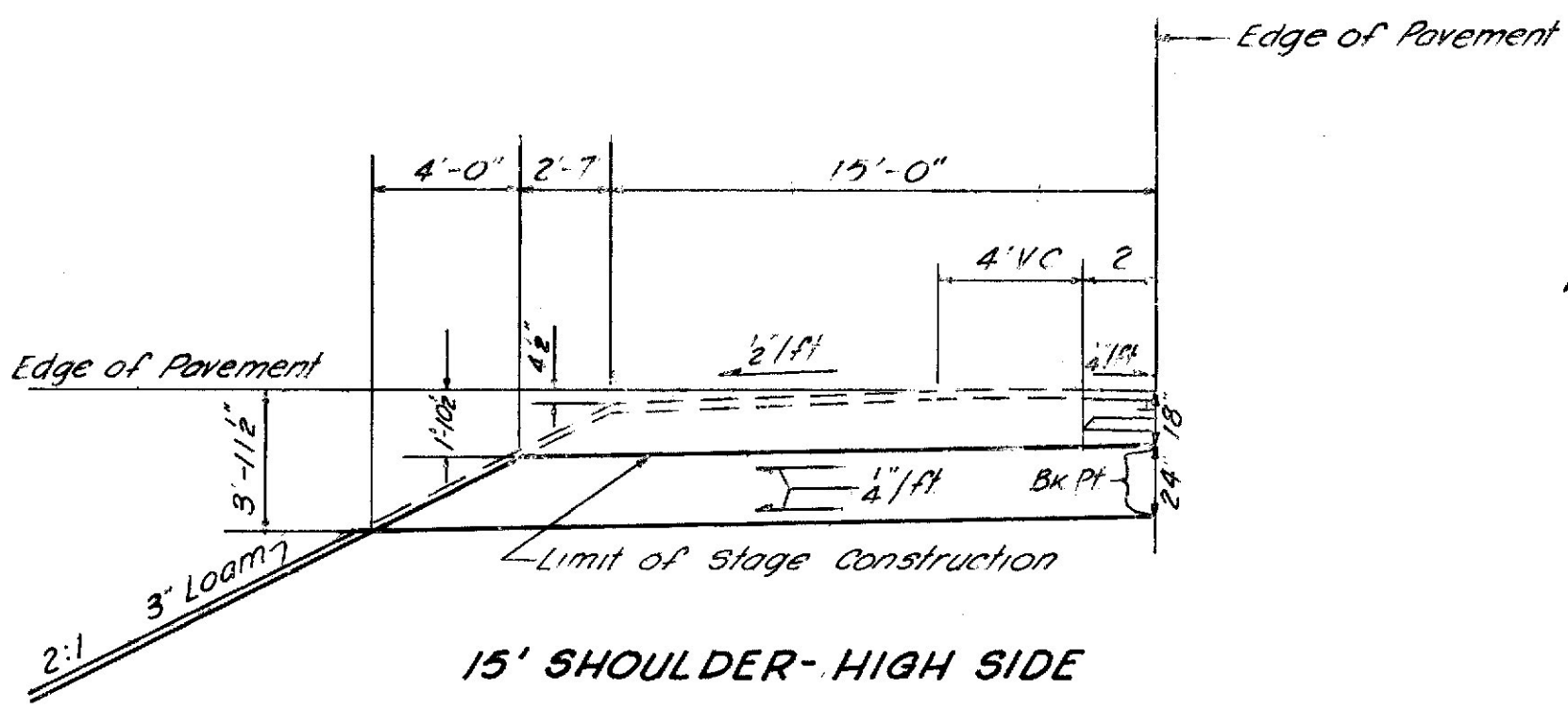
24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

24" Aggregate Subbase Course - Sand = 260.80 CY/100 LF

24" Aggregate Subbase Course - Sand = 177.78 CY/100 LF

24" Aggregate Subbase Course - Sand = 191.06 CY/100 LF

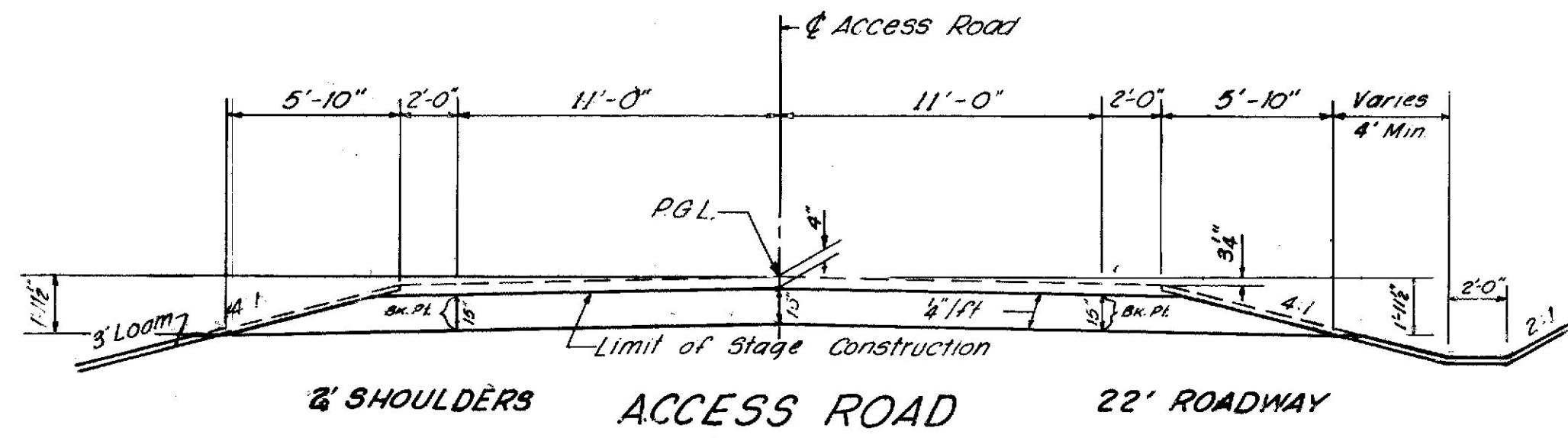
Sta 57+25 to 59+50 Lt. I-295
Sta 66+00 to 83+50 Rt. I-295



24" Aggregate Subbase Course - Sand = 145.00 CY/100 LF
Sta 54+50 to 56+50 Lt. I-295
Sta 115+00 to 117+50 Lt. I-295

- Notes: (As Built, 1971)
- (1) A 5" Layer of Aggregate Subbase Course - Gravel was placed in the following areas:
- Main Line roadway & shoulders NB & SB
 - Sta 56+00 to 63+50
 - 64+50 to 85+25
 - 89+25 to 93+25
 - 96+00 to Bridge Approach Slab @ J.R. 703
 - Main Line roadway & shoulders SB only
 - From Bridge Approach Slab @ J.R. 703 Ahead to Sta 108+00
 - Ramp Tpk-7 roadway & shoulders
 - Sta 3+50 ± (opposite ML 89+25) to 6+75.

- (2) A 4" Layer of Agg. Subbase Crse. - Gravel was placed in the following areas:
- Ramp Tpk-7 roadway & shoulders
 - Sta 6+75 to 7+00 & Sta 12+50 to 20+00.



15" Aggregate Subbase Course - Gravel = 22.39 CY/100 LF

15" Aggregate Subbase Course - Gravel = 101.85 CY/100 LF

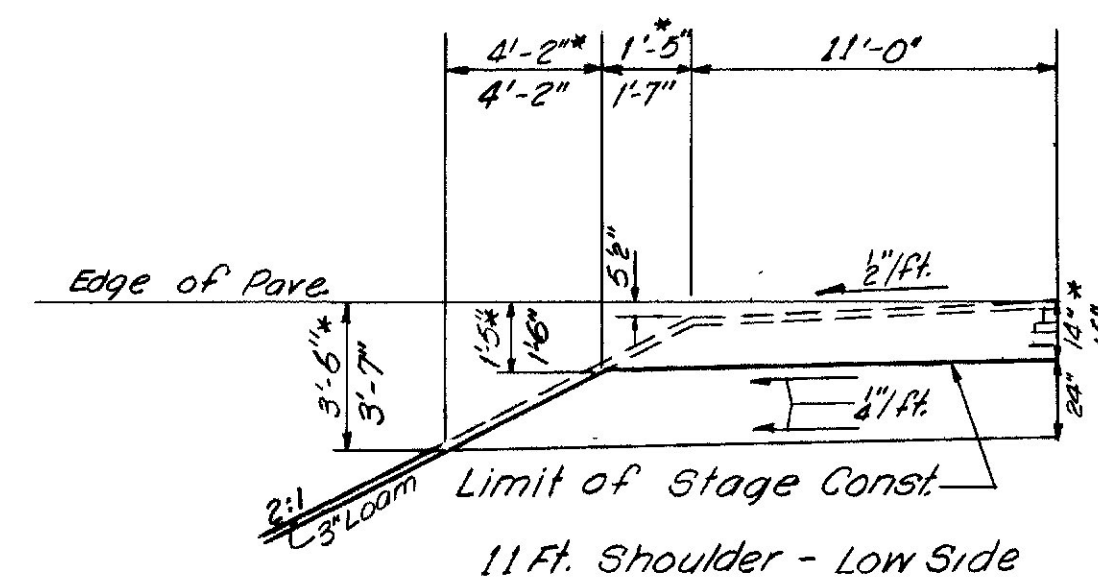
Revised As Built
(Added Gravel Notes)
C.W. Putney Jr. 5-13-74

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

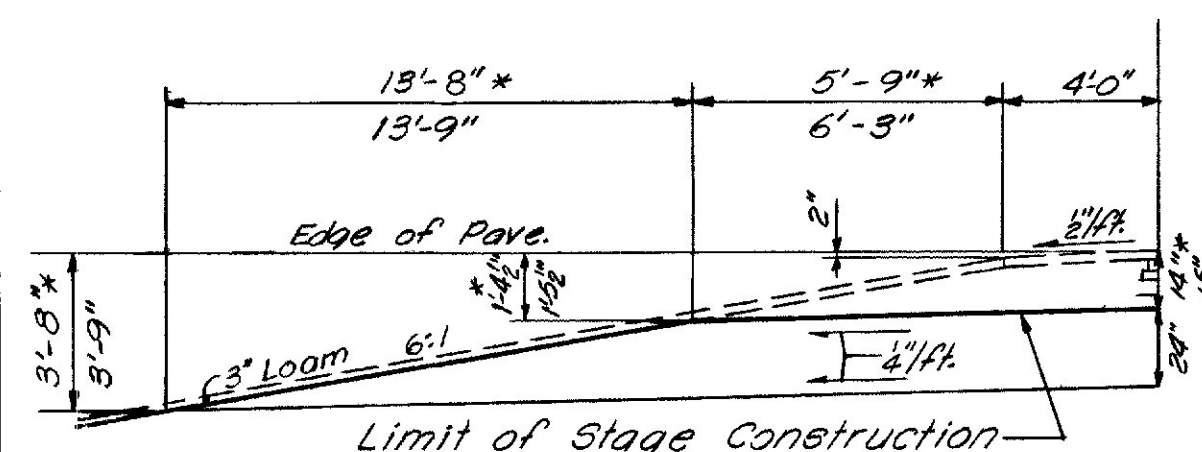
TYPICAL SECTIONS

STAGE CONSTRUCTION — GRADING AND SUBBASE



24" Aggregate Subbase Crse.- Sand = 107.39 C.Y./100 L.F. *
108.65 C.Y./100 L.F.

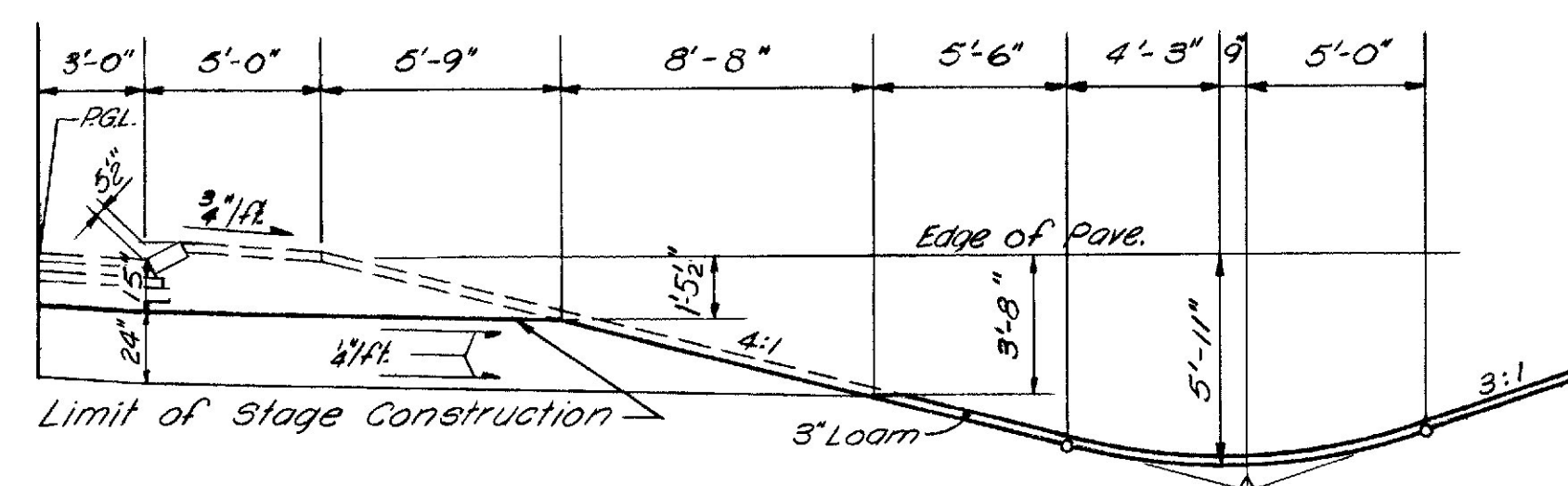
Sta 17+50 to 19+50 Ramp TPK-6
Sta 6+75 to 12+00 Ramp TPK-7



4 Ft. Shoulder - 6:1 Side Slope

24" Aggregate Subbase Course- Sand = 122.83 C.Y./100 L.F. *
126.91 C.Y./100 L.F.

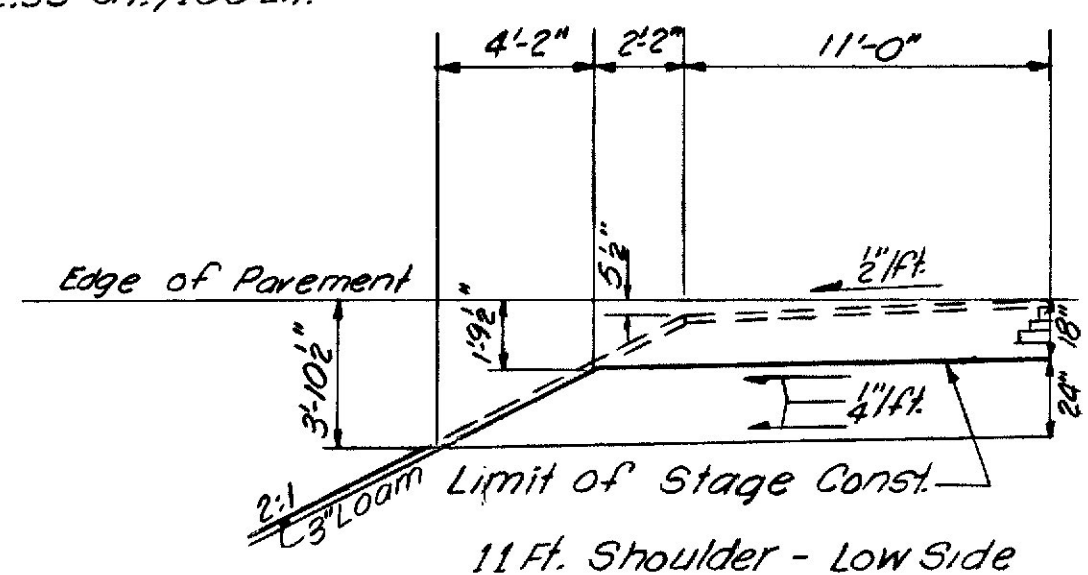
Sta 9+25 to 11+00 Ramp TPK-5
Sta 5+74 to 12+75 Ramp TPK-7



RAMP TPK-5 - 5 Ft. Earth Berm

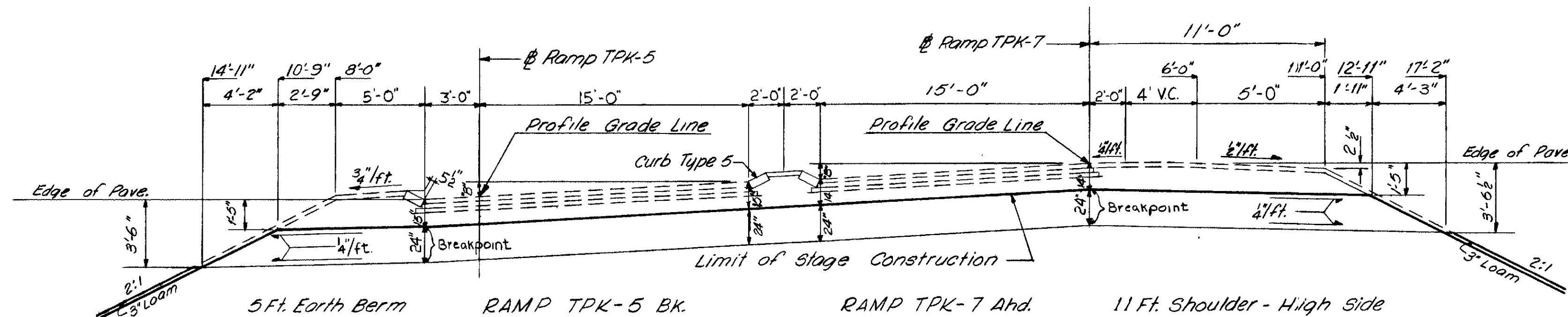
24" Aggregate Subbase Course - Sand = 112.53 C.Y./100 L.F.

Sta 4+00 to 7+00



24" Aggregate Subbase Crse.- Sand = 112.74 CY / 100 L.F

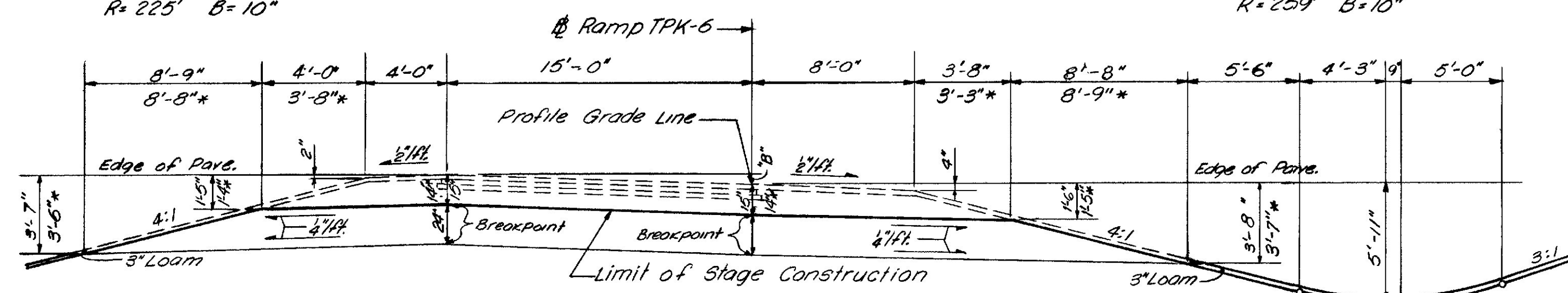
Sta 10+00 to 17+50 Ramp TPK-6
Sta 0+00 to 6+75 Ramp TPK-7



24" Aggregate Subbase Crse.- Sand=72.75 C.Y./100 L.F.

Sta 2+50 to 3+50 Ramp TPK-5
Sta 7+50 to 11+00 Ramp TPK-5

Ramp TPK-5 "B" Value
R = 225' B = 10"



4 Ft. Shld. - High & Low Side

RAMP TPK-5,6 & 7*

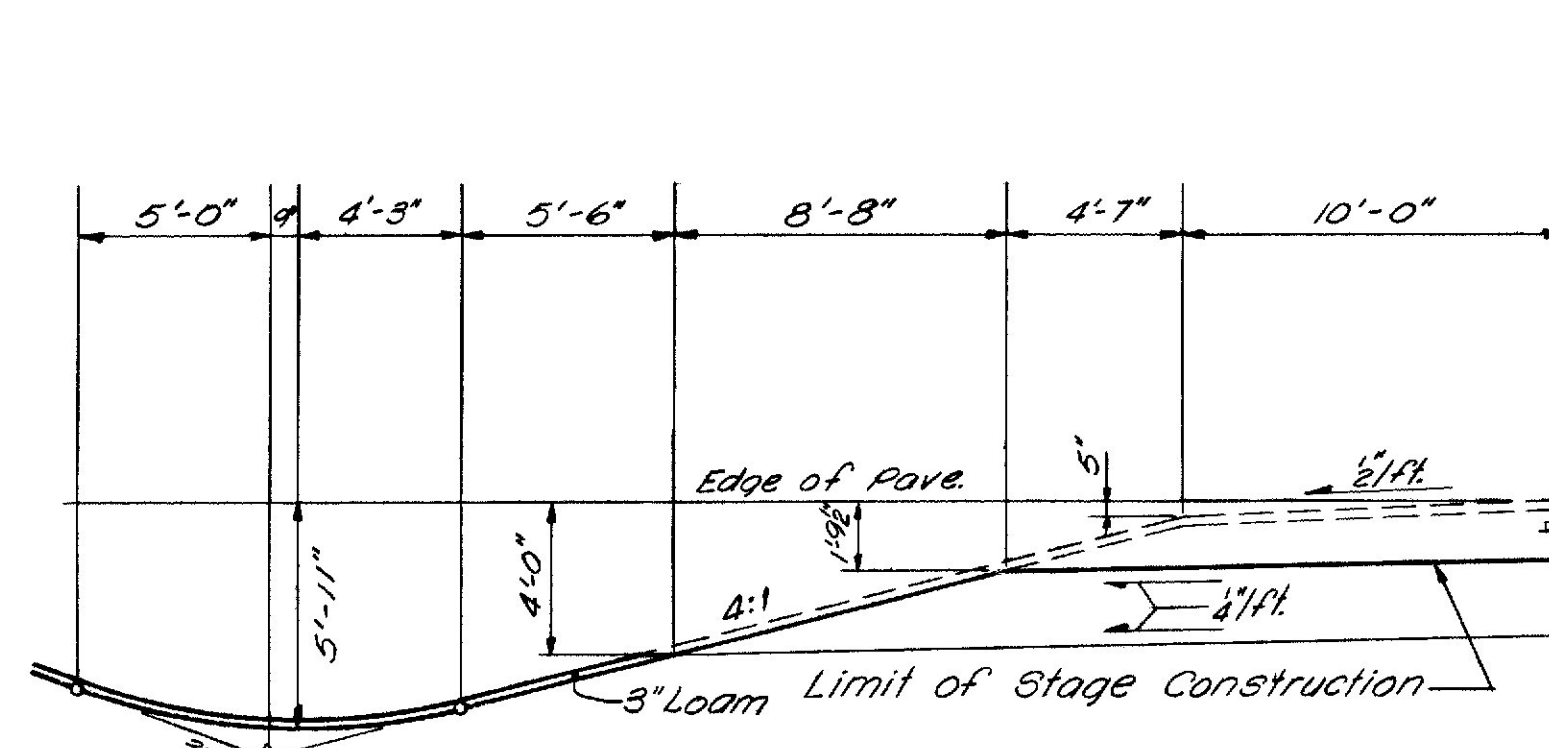
8 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse-Sand=91.44CY/100LF 15 Roadway

Sta 3+50 to 4+25 Ramp TPK-5
Sta 15+94 to 26+00 Ramp TPK-6
Sta 18+25 to 20+00 Ramp TPK-7

24" Apparent Subphase Crse-Spnd = 11111 CY/100 L.F.

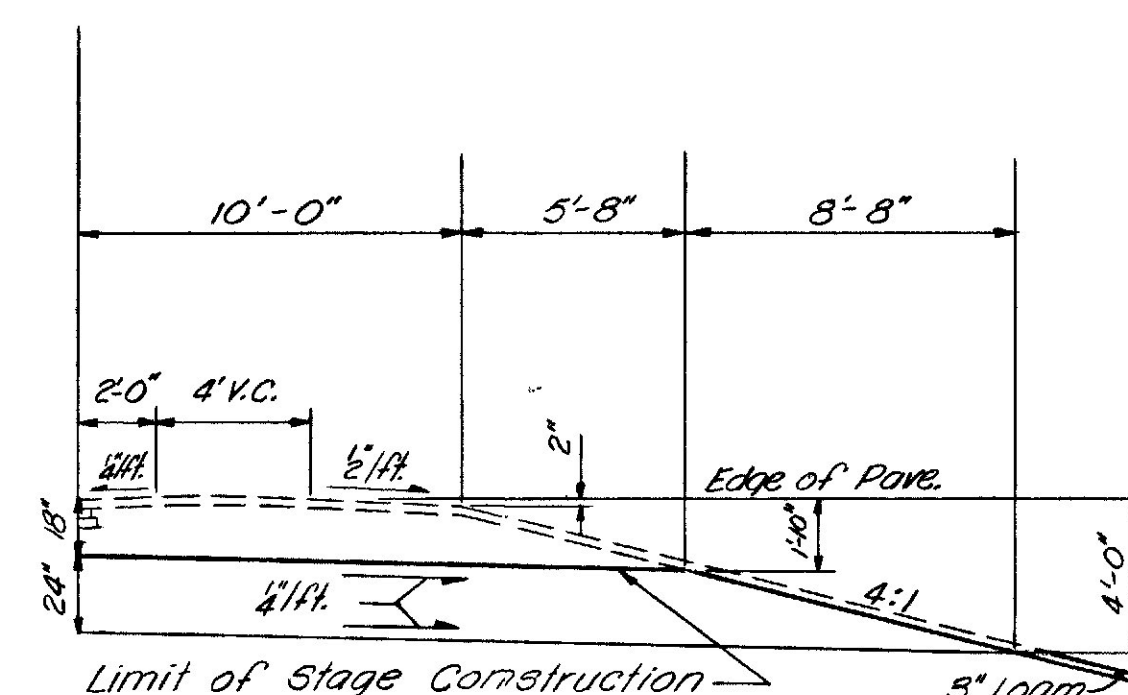
Ramp TPK-6 "B" Value
D = 2°00'-00" B = 6"



10 Ft. Shoulder - Low Side

24" Aggregate Subbase Crse.-Sand=141.06 CY/100 L.F.

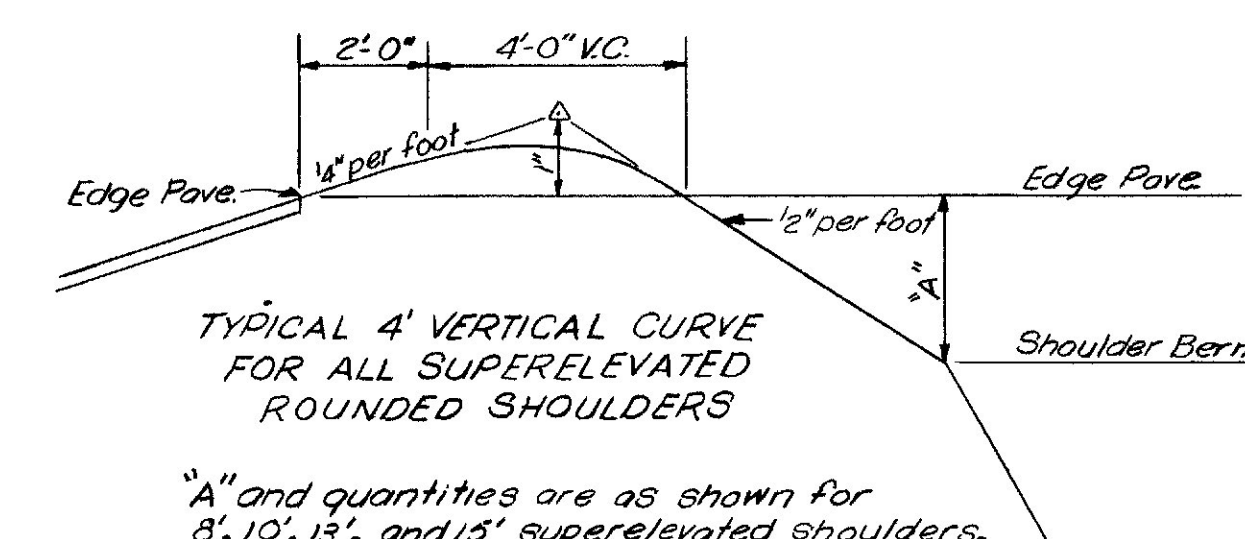
Sta 119+75 to 121+50 Lt. I-295



10 Ft. Shoulder-High Side

24" Aggregate Subbase Crse. - Sand = 144.55 C.Y./100 L.F.

Sta. 118+0.0 to 121+50 Rt. I-295



TYPICAL 4' VERTICAL CURVE
FOR ALL SUPERELEVATED
ROUNDED SHOULDERS

"A" and quantities are as shown for
8', 10', 13', and 15' superelevated shoulders.

Note: Dimensions and Quantities
Shown with an Asterisk (*)
Apply to Ramp TPK-7

See "As Built" Gravel Notes
on Sheet No. 3.

E. W. Putney, Jr. 5-13-74

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY

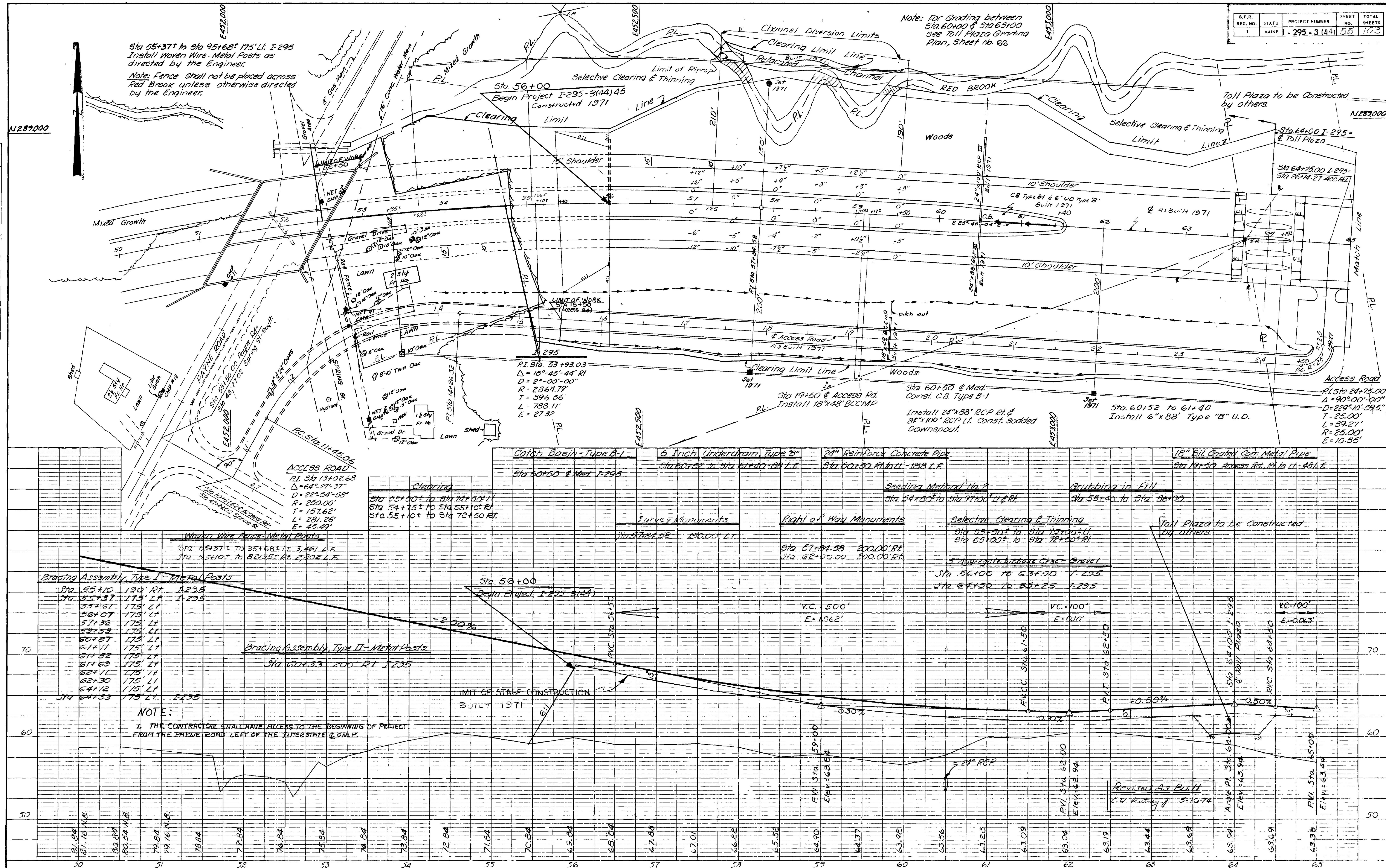
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK			
ALIGNMENT CHECKED			
RT. OF WAY CHECKED			
NO.			

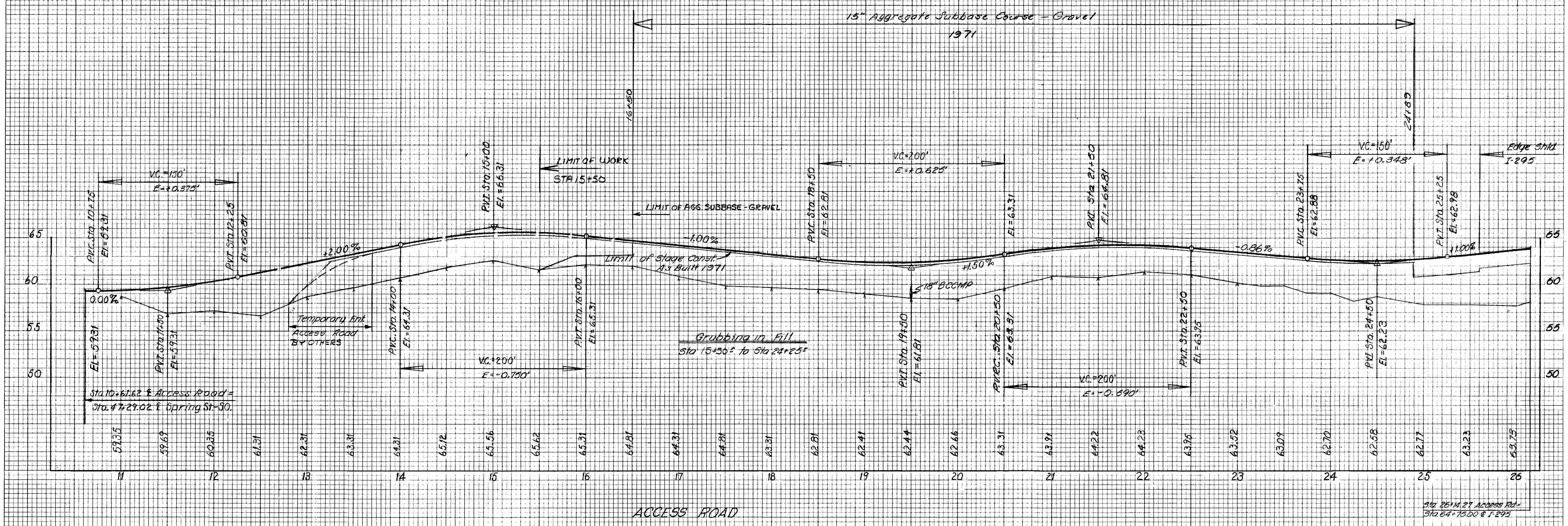
PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK			
ALIGNMENT CHECKED			
RT. OF WAY CHECKED			
NO.			

B.P.R.	STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
1	MAINE	295-3 (44)	55	103



FINAL SURVEY	DATE	BY
SURVEYED		
NOTE BOOK		
NO.		
AREAS CHECKED		

ORIGINAL SURVEY	DATE	BY
SURVEYED	12/29	CLC
NOTE BOOK		
NO.		
AREAS CHECKED		

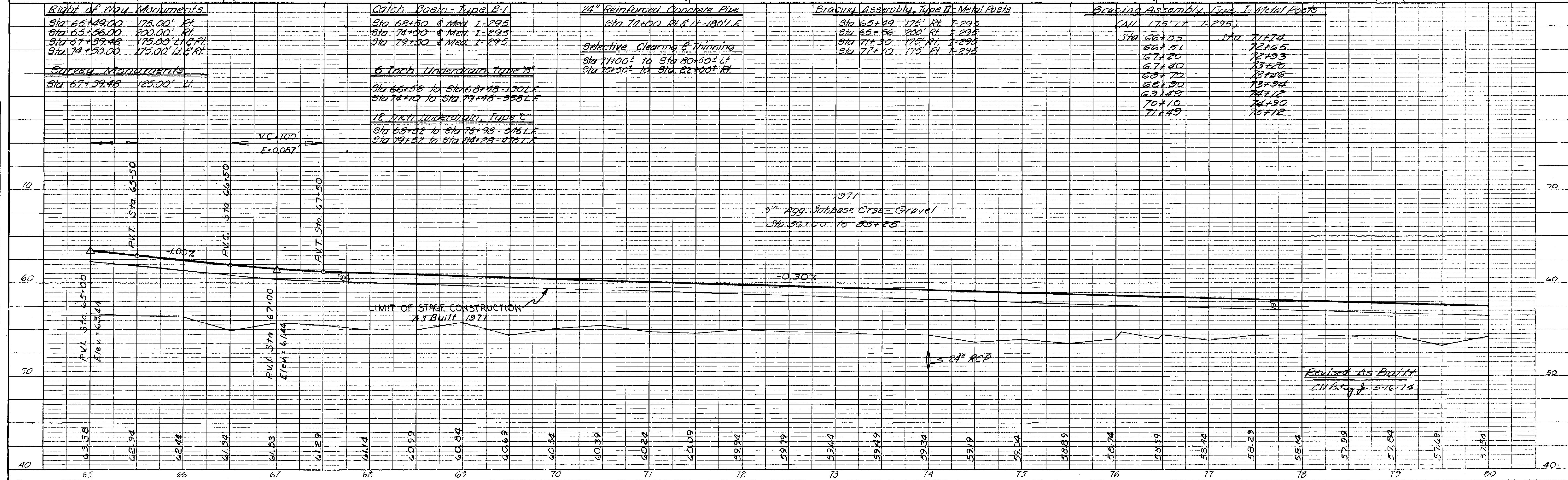
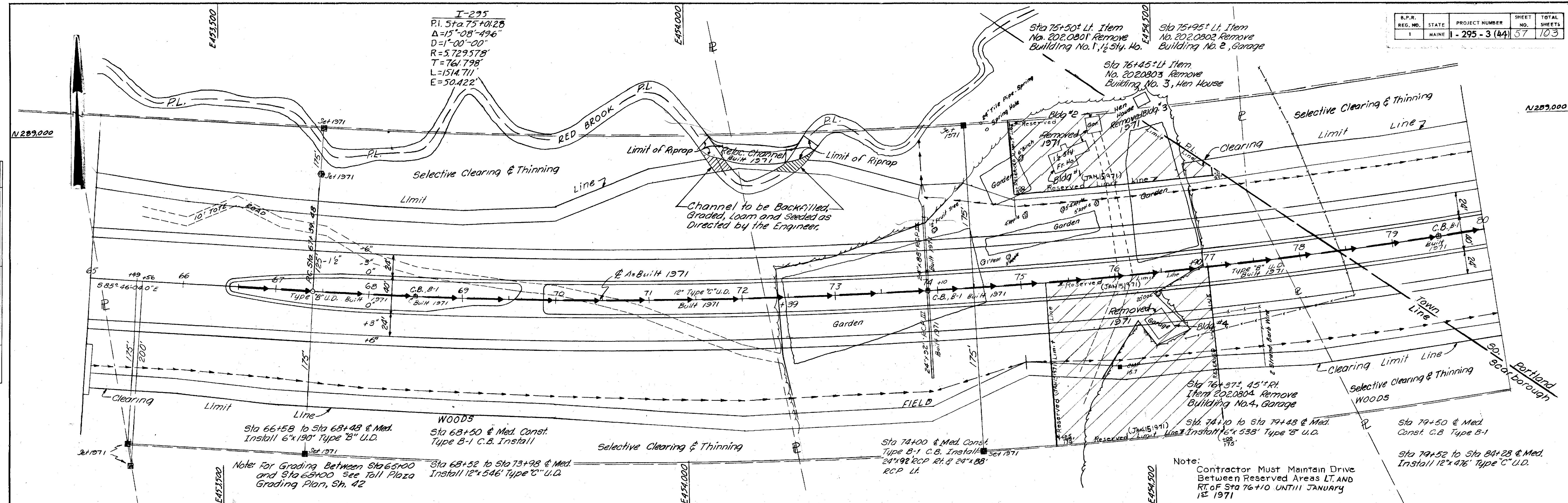


Revised As Built
 8-11-74
 5-16-74

ACCESS ROAD
 PROFILE

PLAN	DATE	BY
SURVEYED		
NOTED		
ALIGNED		
CHECKED		
NO.		

PROFILE	DATE	BY
SURVEYED		
NOTED		
CHECKED		
NO.		



PLAN	SURVEYED	DATE
	BY	
PROFILE	PLOTTED	DATE
	BY	
NOTE BOOK	ALIGNMENT CHECKED	DATE
	RT. OF WAY CHECKED	BY
NO.		

PROFILE	SURVEYED	DATE
	BY	
NOTE BOOK	PLOTTED	DATE
	BY	
NO.		

