

# STATE OF MAINE

## STATE HIGHWAY COMMISSION

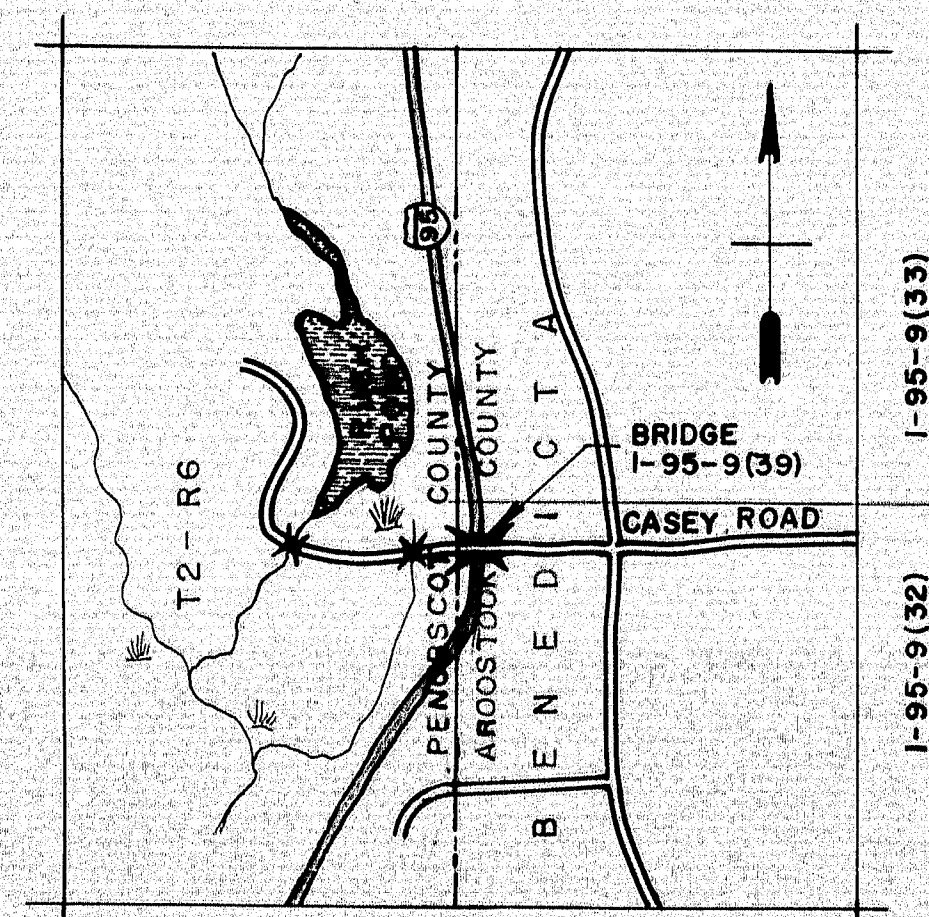


# CASEY ROAD BRIDGE

## OVER

# INTERSTATE 95

IN THE TOWN OF  
BENEDICTA  
ARROOSTOOK COUNTY  
AND THE TOWNSHIP OF  
T2-R6 W.E.L. S.  
PENOBSCOT COUNTY  
FEDERAL AID PROJECT NO. I-95-9(39)254



**LOCATION MAP**  
APPROX. SCALE - 1 INCH = 1 MILE

### INDEX OF SHEETS

- |  |   |
|--|---|
| 1. TITLE SHEET                           | STANDARD DETAIL SHEETS  |
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| 11. ABUTMENT NO. 2                       | 23. BD 108 - 65 ALUMINUM RAILING                                      |
| 12. PIERS                                | 24. AUG. 1965 ④ GUARD RAIL, SOILS CHART                               |
| 13. STRUCTURAL STEEL AND BLOCKING        | 25. AUG. 1965 ⑤ GUARD RAIL CONNECTION TO<br>END POST, GUARD RAIL      |
| 14 & 15. SUPERSTRUCTURE                  |   |
| 16. SLOPE PROTECTION                     |   |
| 17. REINFORCING STEEL SCHEDULE           |   |
|  | 26. AUG. 1965 ⑥ FIELD OFFICE  |

SHEETS 1, 2, 3, 4, 6, 7, 10, 12, 13, 14, 15, 16 AND 17 ARE REVISED.  
SHEETS 8A, 9A, 12A, 13A, AND 15A ARE ADDED.  
ALL OTHER SHEETS - NO CHANGE.

**4 LANE REVISION** DEC. 1966

### TRAFFIC

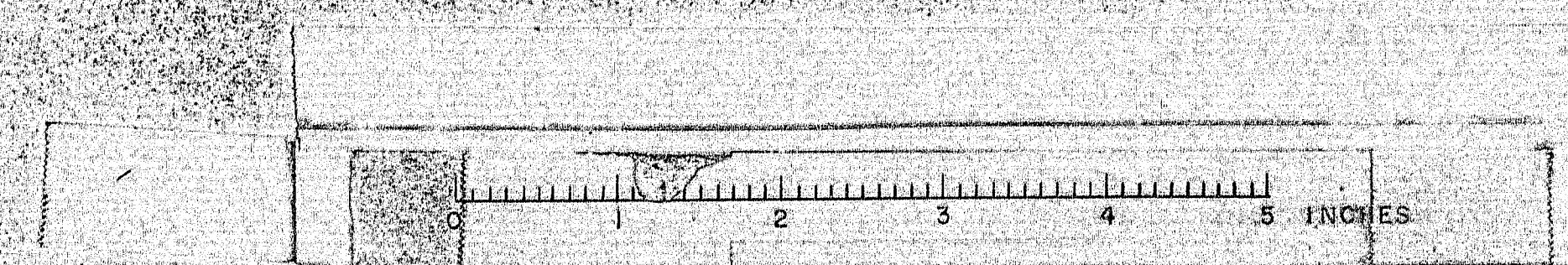
CASEY ROAD  
A.D.T. 1968 10  
A.D.T. 1988 20  
D.H.V. 3  
D. 60 %  
T. 14 %  
V. 40 MPH.

APPROVED  
MAINE STATE HIGHWAY COMMISSION

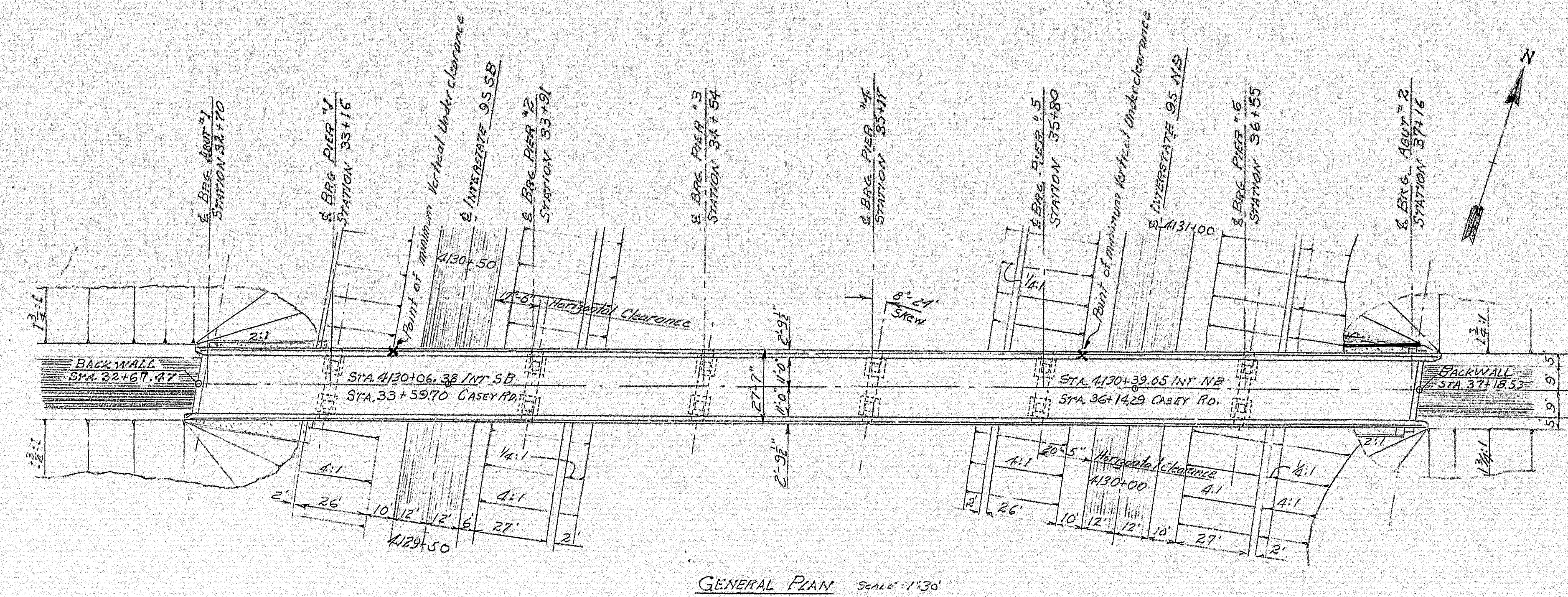
*Carl M. Stephens* CHAIRMAN  
*Bernard C. Lechante*  
*Vanhaman* CHIEF ENGINEER  
DATE

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

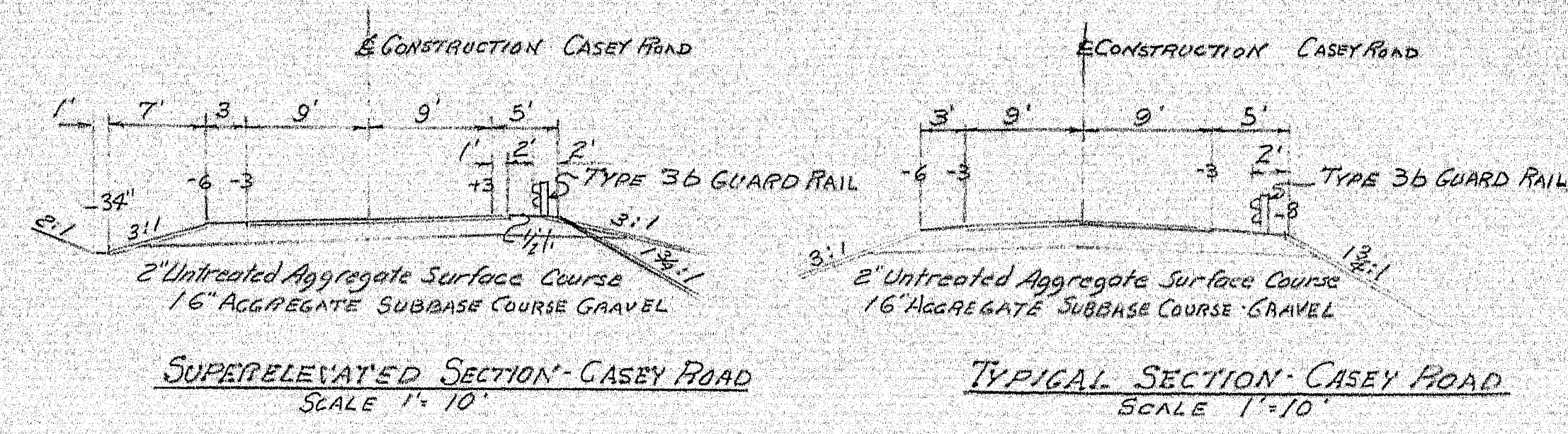
100-160







GENERAL PLAN SCALE 1"=30'



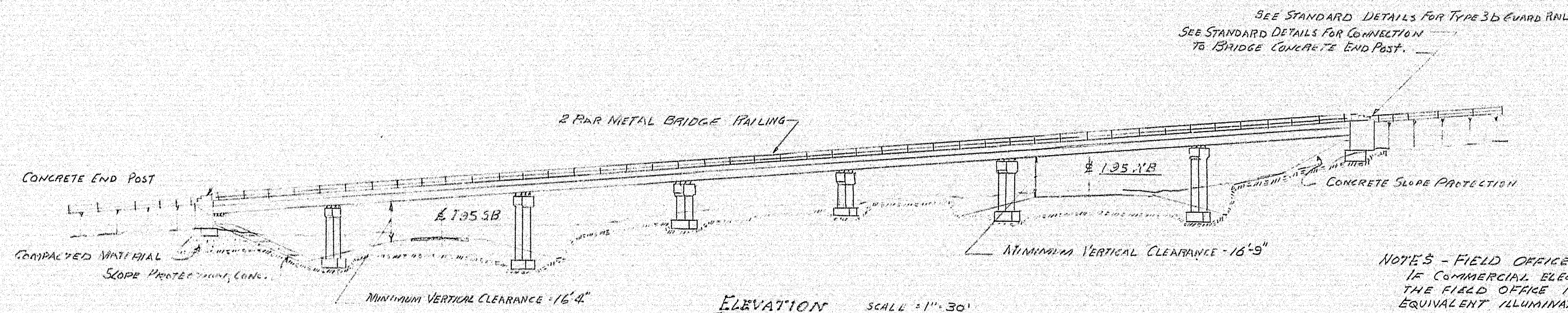
SUPERELEVATED SECTION - CASEY ROAD SCALE 1"=10'

TYPICAL SECTION - CASEY ROAD SCALE 1"=10'

ESTIMATED QUANTITIES			
DISCUSSION	UNIT	STRUCTURE	TOTAL
COMMON EXCAVATION	C.Y.	3000	
COMMON BORROW	C.Y.	22500	
STRUCTURAL EARTH EXCAVATION ABUTTS & PIERS WALLS	C.Y.	50	50
STRUCTURAL ROCK EXCAVATION ABUTTS & PIERS WALLS	C.Y.	15	15
STRUCTURAL ROCK EXCAVATION PIERS	C.Y.	90	90
AGGREGATE SUBBASE COURSE, GRAVEL	C.Y.	2950	
HOT BITUMINOUS PAVEMENT (GRADING C1)	TONS	48	48
UNTREATED AGGREGATE SURFACE COURSE	C.Y.	320	
STRUCTURAL CONCRETE ABUTTS & PIERS WALLS	C.Y.	143	143
STRUCTURAL CONCRETE PIERS	C.Y.	78	78
STRUCT. CONC. ROADWAY & SIDEWALKS ON STEEL BRIDGE	L.S.	75	75
REINFORCING STEEL FABRICATED & DELIVERED	LBS.	48000	48000
REINFORCING STEEL PLACING	LBS.	28000	28000
STRUCTURAL STEEL FABRICATED & DELIVERED	L.S.	75	75
STRUCTURAL STEEL ERECTION	L.S.	75	75
FIELD PAINTING STRUCTURAL STEEL	L.S.	75	75
BRIDGE PAINTING	L.F.	364	364
MEMBRANE WATERPROOFING	S.Y.	441	441
SLOPE PROTECTION	S.Y.	230	230
EPoxy RESIN SURFACE SEALANT	S.Y.	63	63
GUARD RAIL TYPE 36 SINGLE RAIL	L.F.	2600	2600
TERMINAL ENDS - SINGLE RAIL	EACH	4	4
VERTICAL BRIDGE CURB TYPE 1	L.F.	389	389
LOAM	C.Y.	435	435
SEEDING - METHOD 2	UNITS	71	71
HAY MULCH	TONS	4	4
FIELD OFFICE TYPE B	EACH	1	1
GRAVEL BORROW	C.Y.	1250	1250

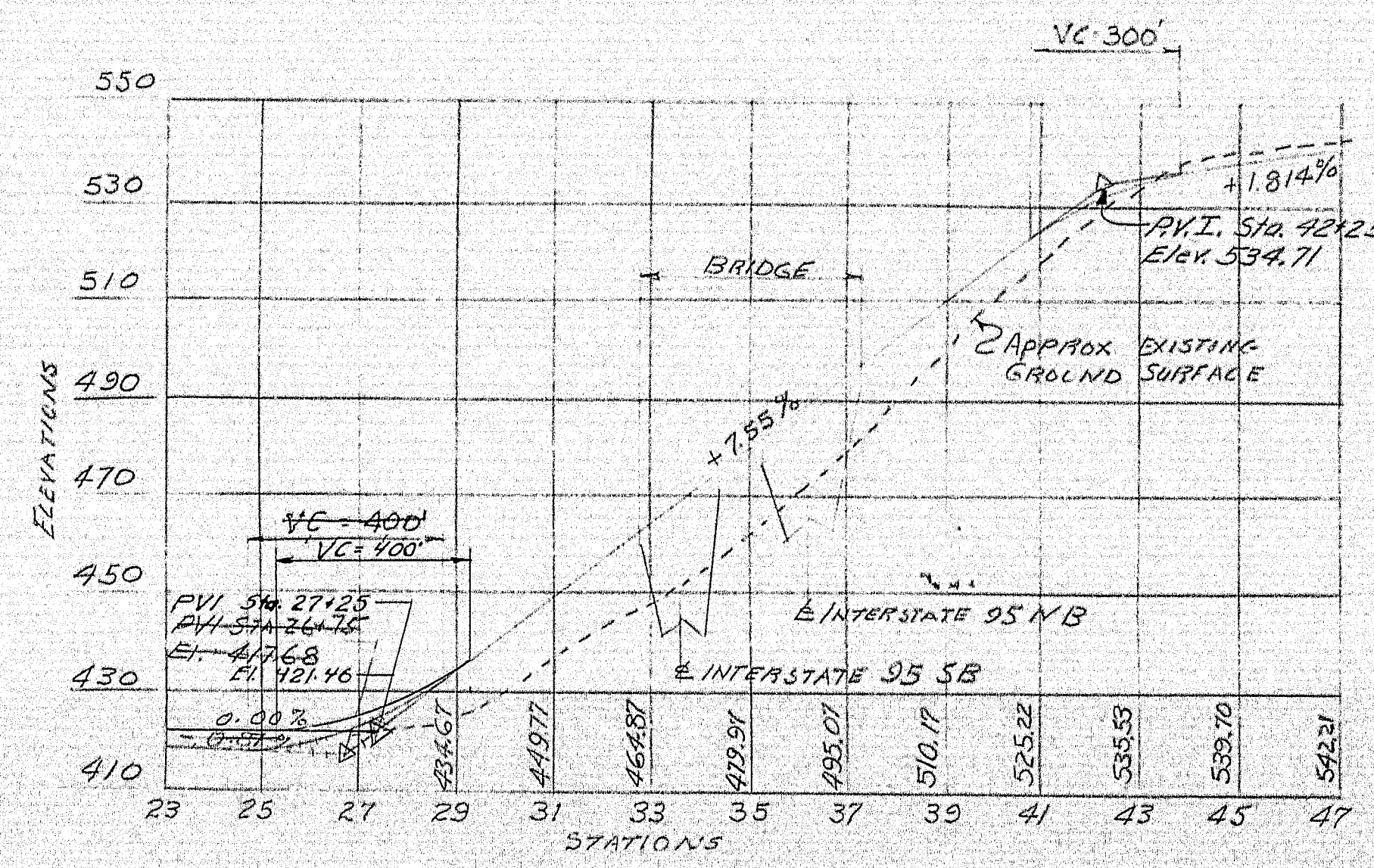
ESTIMATED WEIGHT OF STRUCTURAL STEEL BASED ON NOMINAL SIZES AND NOT INCLUDING WELDS = 122,400 POUNDS  
 ESTIMATED QUANTITY OF STRUCTURAL CONCRETE, ROADWAY AND SIDEWALK SLABS ON STEEL BRIDGES = 149 CUBIC YARDS

NOTE: QUANTITIES DO NOT INCLUDE CHANGE ORDER #4

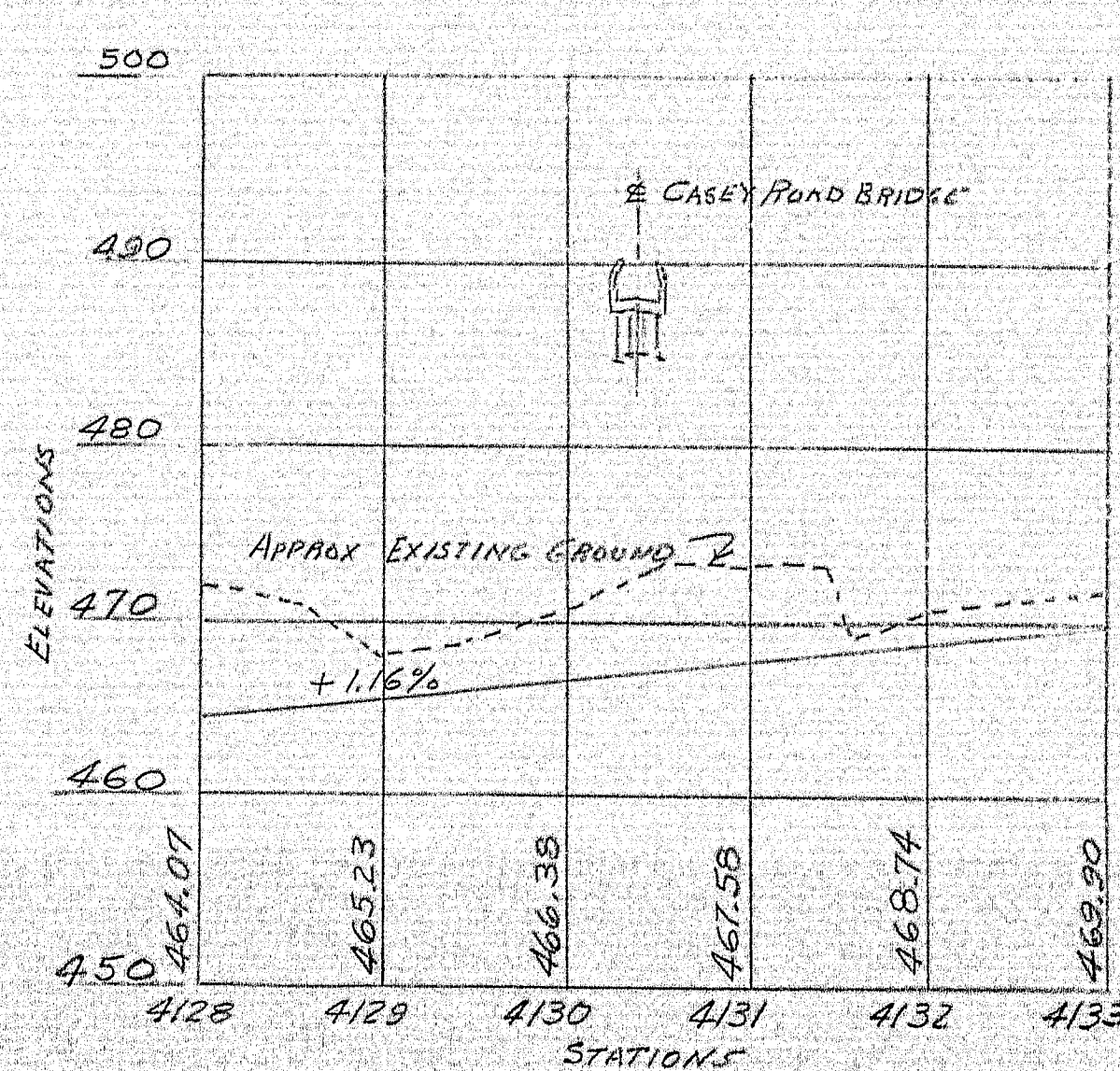


ELEVATION SCALE 1"=30'

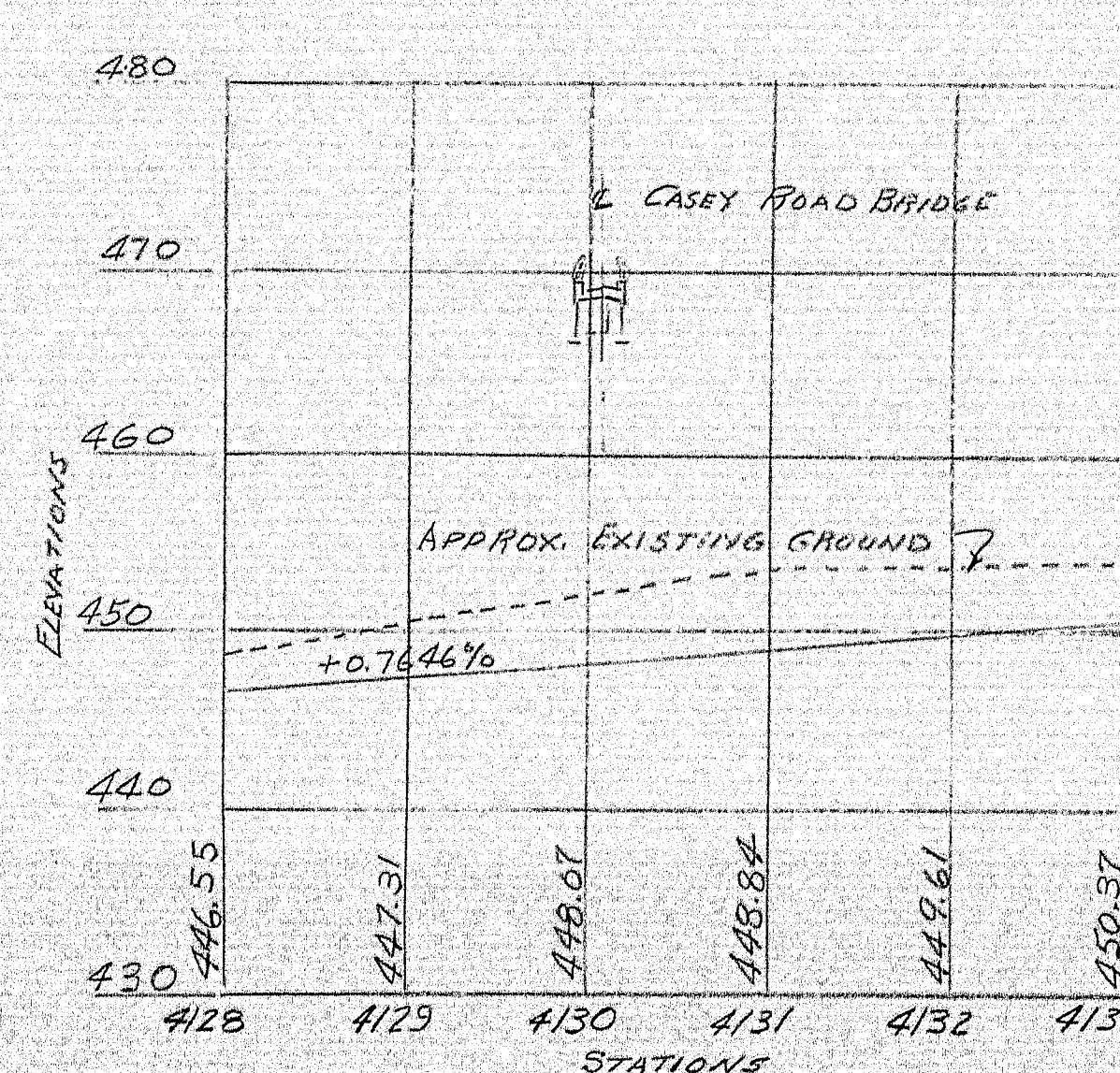
NOTES - FIELD OFFICE  
 IF COMMERCIAL ELECTRICITY FOR LIGHTING THE FIELD OFFICE IS NOT AVAILABLE, THEN EQUIVALENT ILLUMINATION SHALL BE PROVIDED BY THE CONTRACTOR.



PROFILE ALONG CASEY ROAD SCALE HORIZONTAL 1"=300' VERTICAL 1"=30'



PROFILE & INTERSTATE 95 NB SCALE HORIZONTAL 1"=100' VERTICAL 1"=10'



PROFILE & INTERSTATE 95 SB SCALE HORIZONTAL 1"=100' VERTICAL 1"=10'

**SPECIFICATIONS**  
 DESIGN: A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1961 WITH INTERIM SPECIFICATIONS 1961, 1962, 1963 AND 1964.  
 CONTRACT: STATE OF MAINE, STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS HIGHWAYS AND BRIDGES, EDITION OF JUNE 1965 AND SUPPLEMENTAL SPECIFICATIONS.

**LIVE LOADING**  
 H20-44

**ALLOWABLE STRESSES**  
 CONCRETE:  $f_c = 1200$  P.S.I.  $n = 10$   
 REINFORCING STEEL, INTERMEDIATE GRADE  $f_s = 20,000$  P.S.I.  
 STRUCTURAL STEEL A36  $f_s = 20,000$  P.S.I.

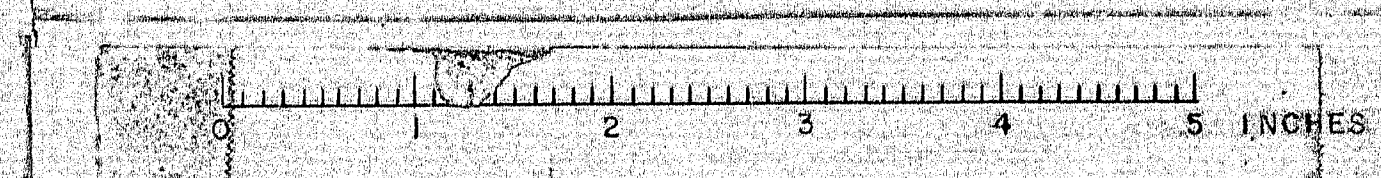
**CONCRETE CLASSIFICATION**  
 STRUCTURAL CONCRETE - CLASS A SLOPE PROTECTION - CLASS Y.  
**STRUCTURAL STEEL CLASSIFICATION**  
 ALL STRUCTURAL STEEL SHALL BE ASTM A36 EXCEPT AS NOTED ON STANDARD DETAILS.

Field Changes (Black Ink) by PJM-Nov. 67

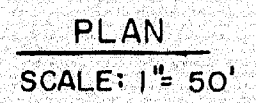
4 LANE REVISION DEC. 1966

DESIGN - H.L.D. Det. J. R. TRACE - J. R. CHECK -	BRIDGE NO. SURVEY PLOT
STATE HIGHWAY COMMISSION BRIDGE DIVISION <b>CASEY ROAD BRIDGE</b> OVER <b>INTERSTATE 95</b> IN THE TOWN OF <b>BENEDICTA, AROOSTOOK COUNTY</b> AND IN THE TOWNSHIP OF <b>T2, R6 W.E.L.S., PENOBSCOT COUNTY</b>	
GENERAL PLAN SHEET 2 OF 26 AUGUSTA, MAINE DEC. 1966	

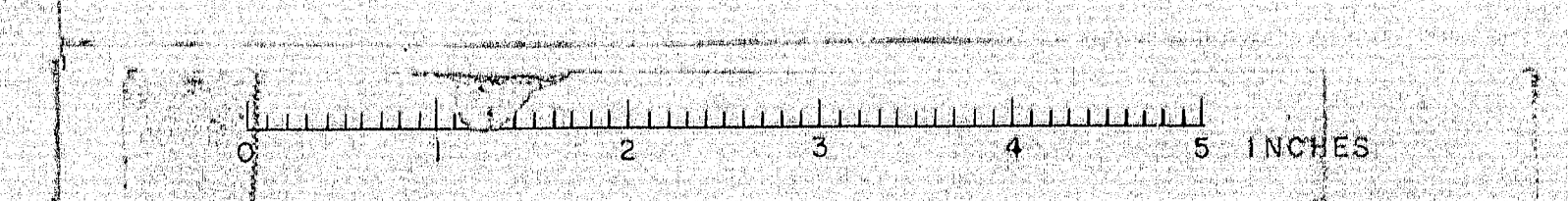
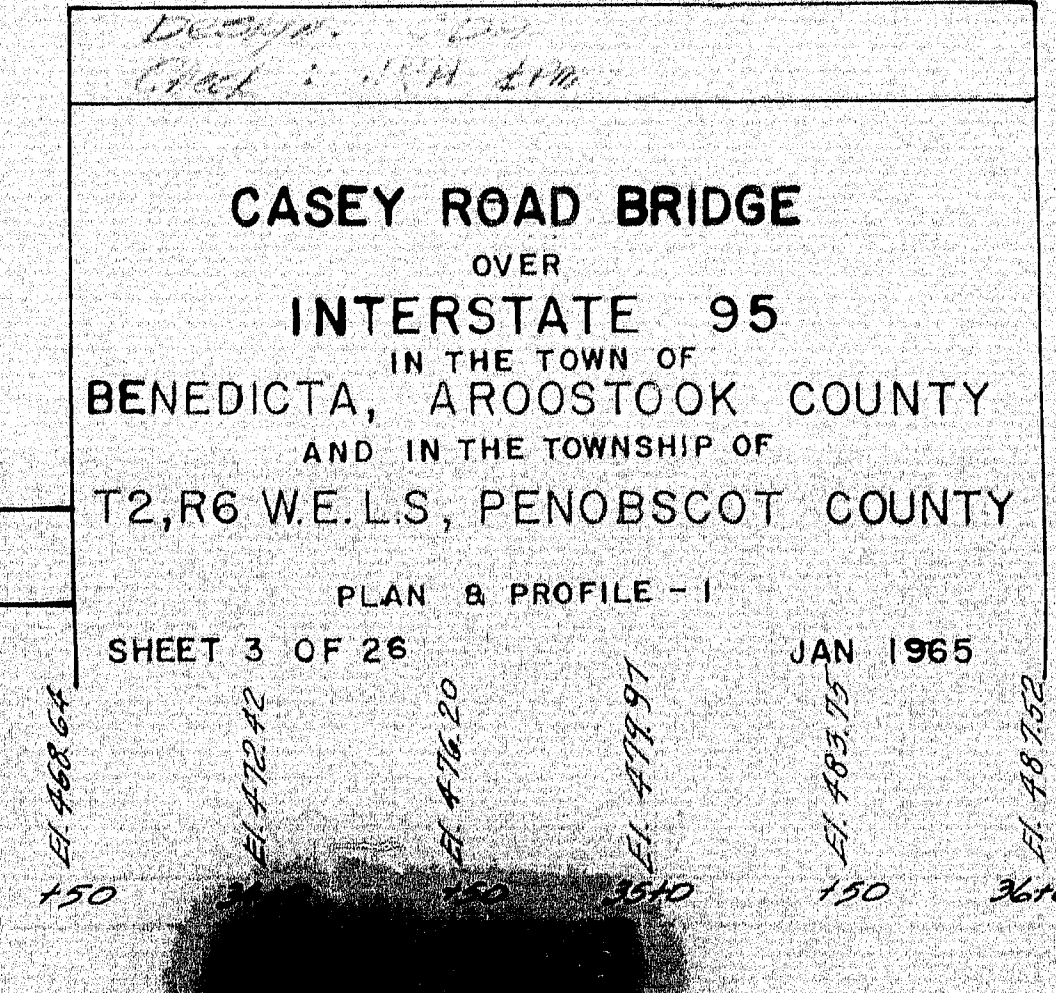
100-161



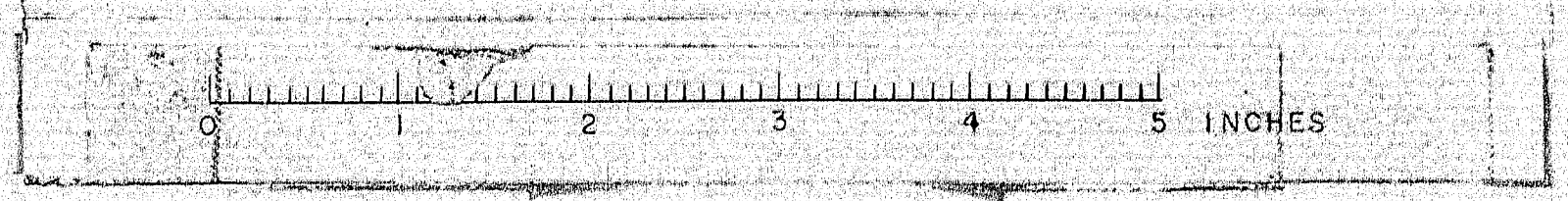
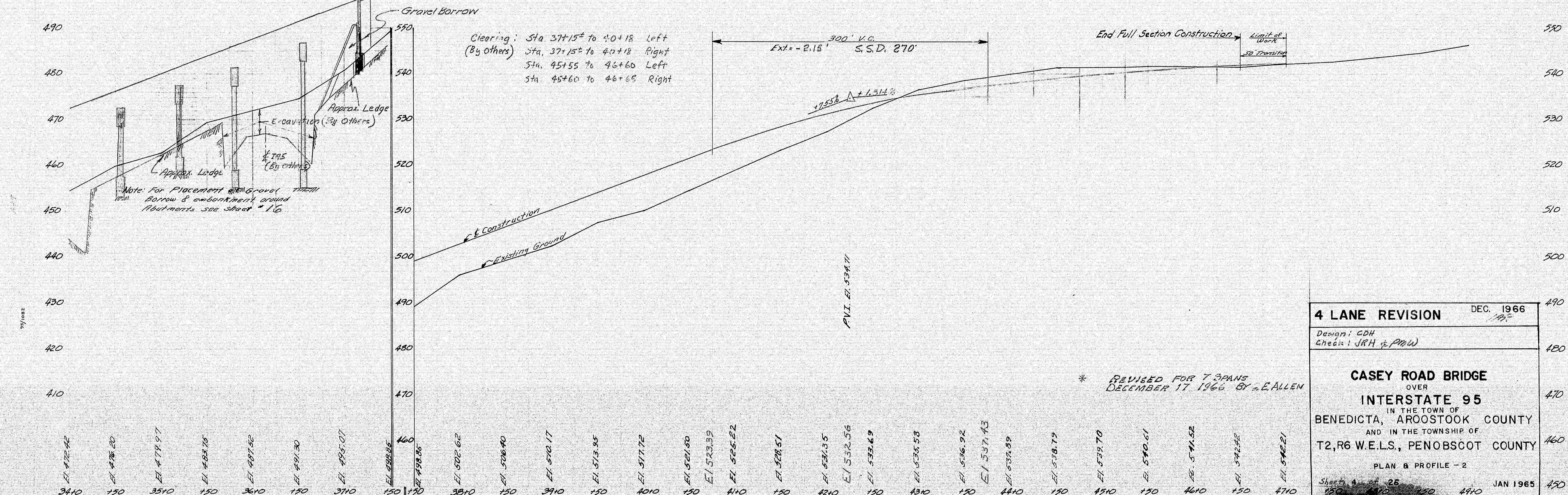




- Clearing: 24 24+50  
(By Others) to 1+1.35435 ± 1.00+  
Sta 24+10  
to Sta. 35+25 ± Right



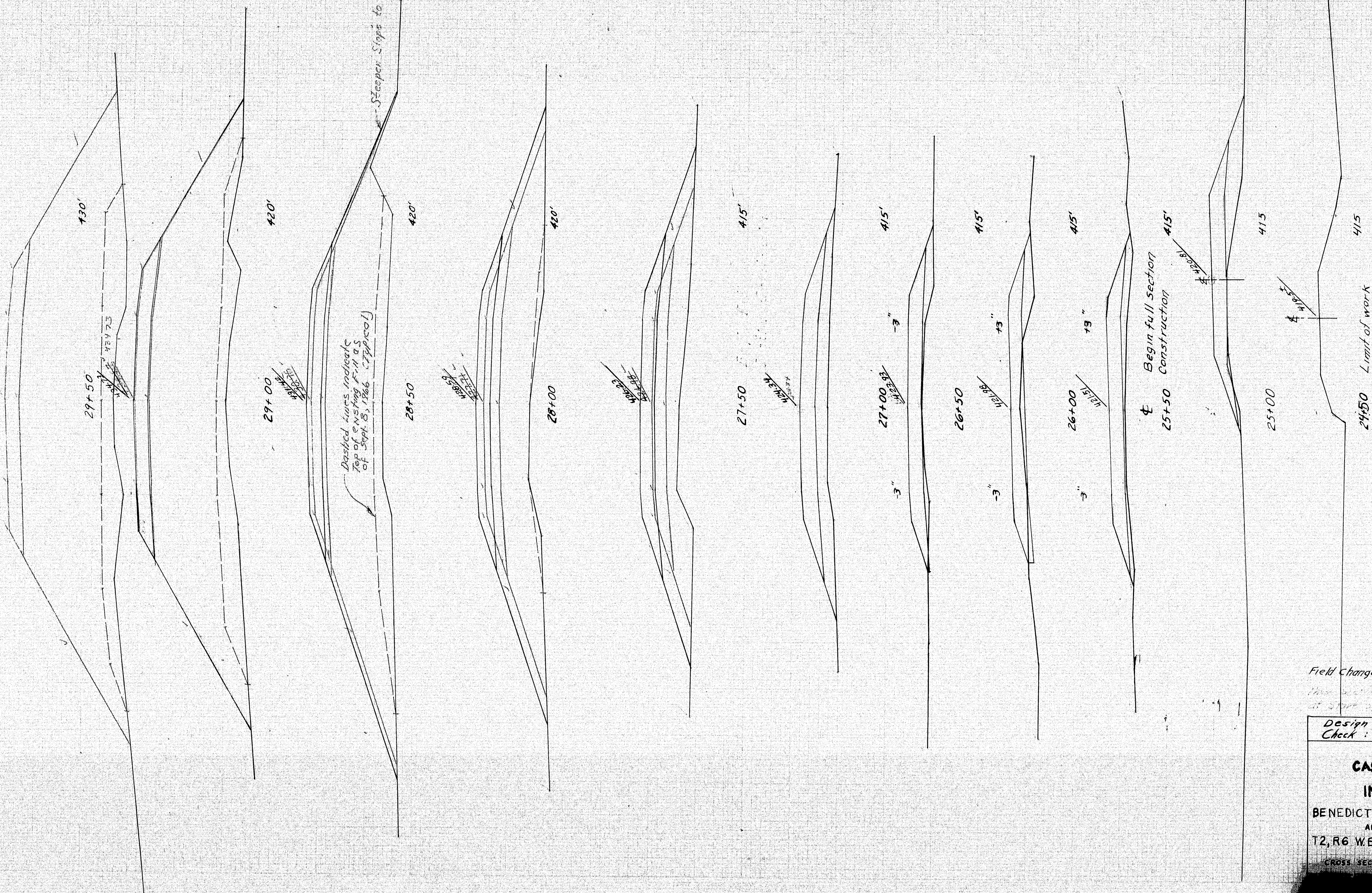






B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-9(39)	1	5

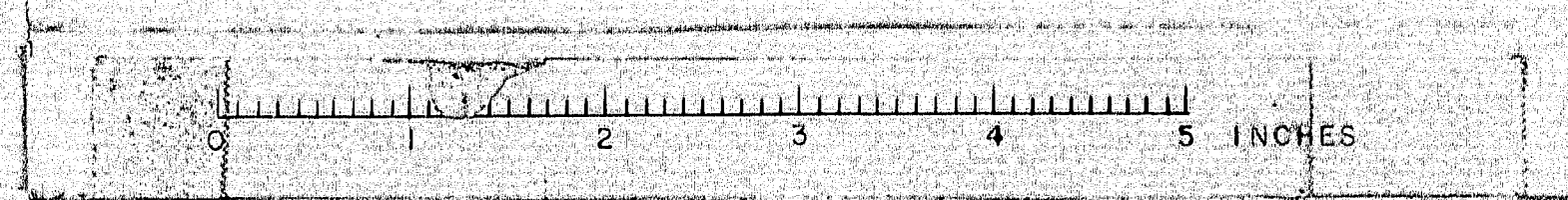
W. K. Barnes, 8/25/66  
W. K. Edgecomb, 9-2-66



Field changes (Finish grade) by P.J.M. Nov. 1967

Design: CDH Plot: W. Edgecomb  
Check: P.J.M. Survey: Barnes

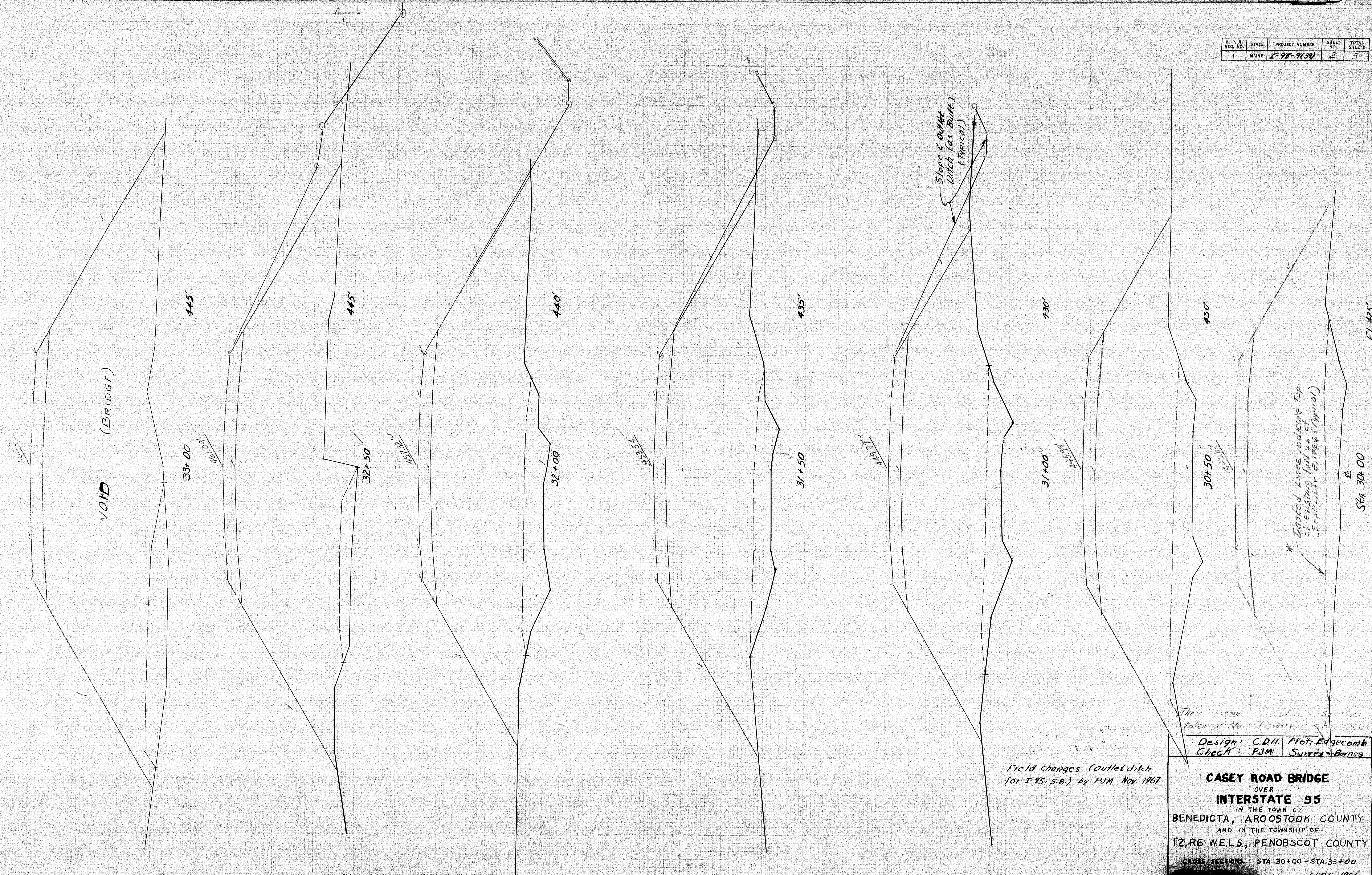
**CASEY ROAD BRIDGE**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
BENEDICTA, AROOSTOOK COUNTY  
AND IN THE TOWNSHIP OF  
T2, R6 WELS, PENOBSCOT COUNTY  
CROSS SECTIONS STA. 25+50 - STA. 29+50  
SEPT. 1966





S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	2-95-9(38)	2	5

Field Changes  
for I-95 S.B.  
by PJM - Nov. 1967





S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-7(37)	3	5

BRIDGE

460

35+50

VOID (BRIDGE)

460

35+00

VOID (BRIDGE)

455

34+50

VOID (BRIDGE)

455

34+00

VOID (BRIDGE)

Dashed line represents  
Top of Existing F.M. 195  
of September 8, 1962  
(Typical)

EL. 415

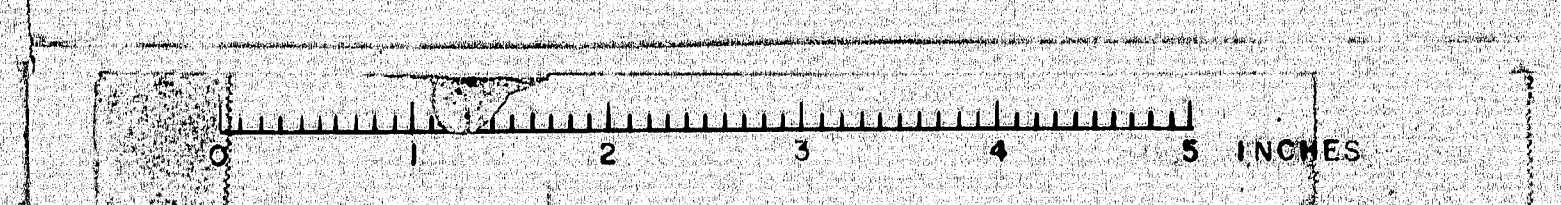
Sta. 33+50

These sections refer to Section 4 of  
at Sta. 12 Construction - Top 11"

DESIGN: CDH  
CHECK: PJM

PLOT: Wedgecomb  
SURVEY: Barnes

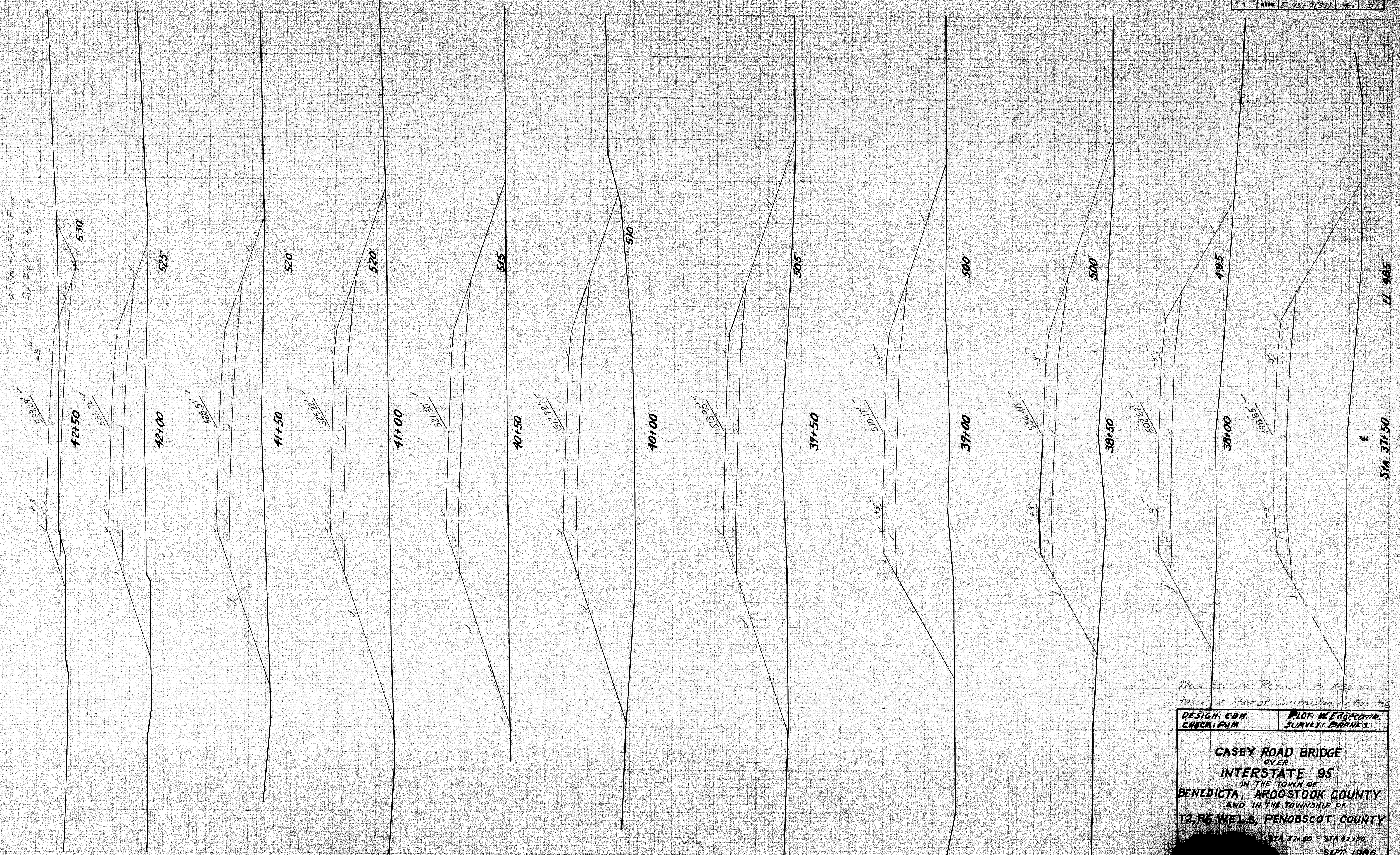
CASEY ROAD BRIDGE  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
BENEDICTA, ARROSTOOK COUNTY  
AND IN THE TOWNSHIP OF  
T2, R6 WELS, PENOBSCOT COUNTY  
STA 33+50 - STA 35+50  
SEPT. 1964





S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	2-95-7(33)	4	5

Intersecting with  
at Sta. 42+50  
for Field Notes



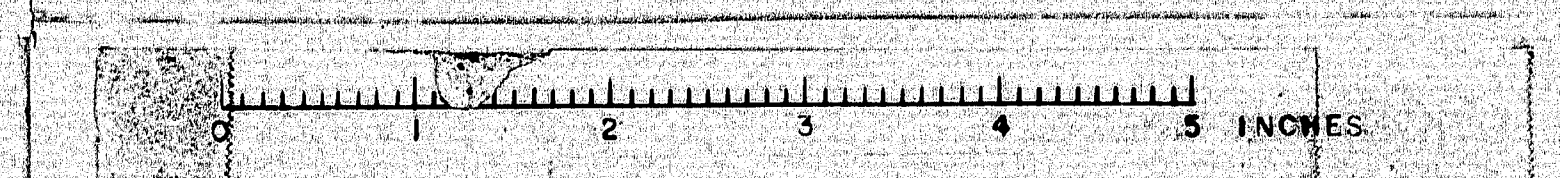
These sections revised to show  
taken at start of construction of I-95

DESIGN: CDM  
CHECK: PUM

PLT: M. Edgecomb  
SURVEY: BARNES

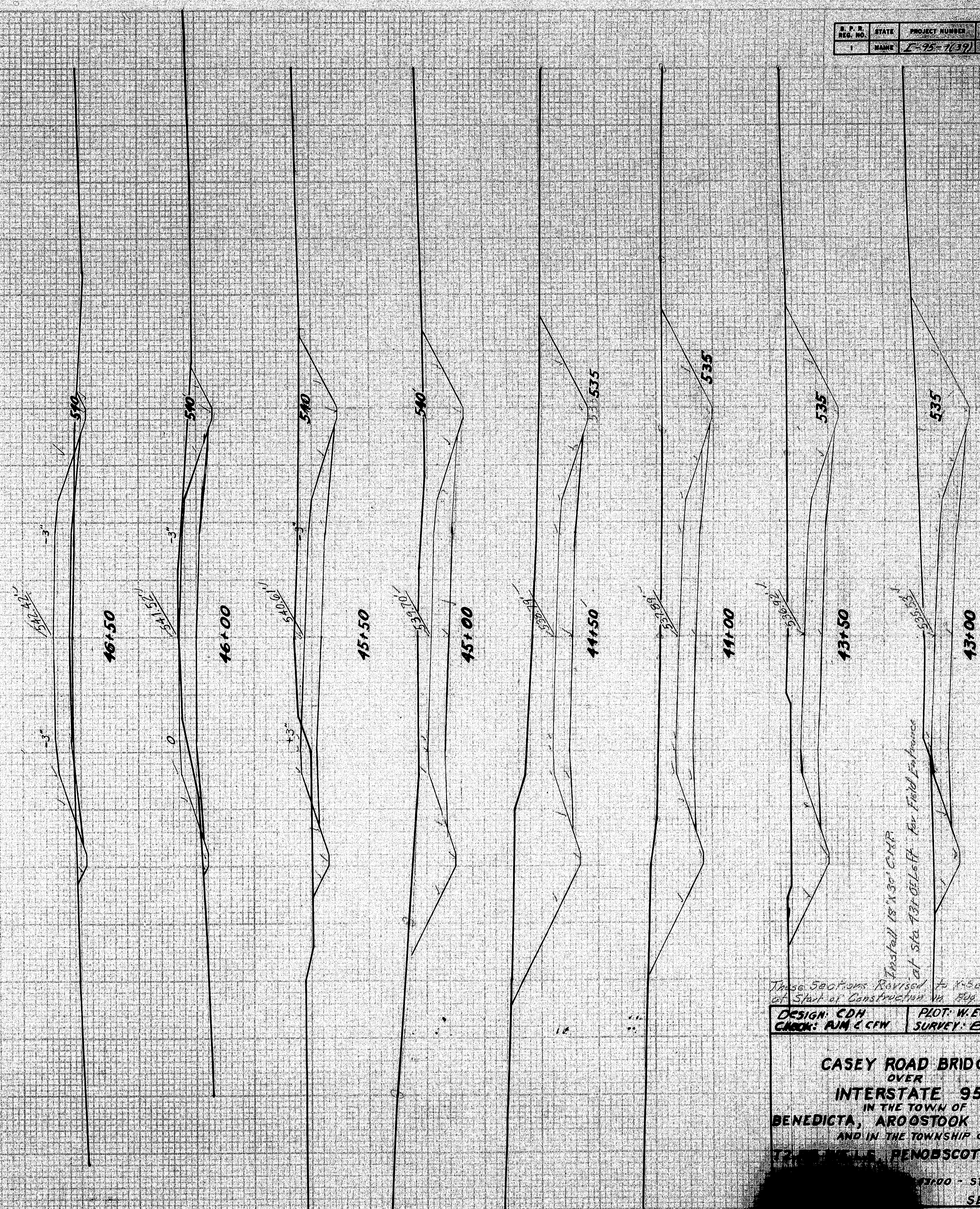
CASEY ROAD BRIDGE  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
BENEDICTA, ARROSTOCK COUNTY  
AND IN THE TOWNSHIP OF  
T2, R6 WELS, PENOBSCOT COUNTY

STA 37+50 - STA 42+50  
SEPT. 1986





STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	E-95-7(39)	5	5

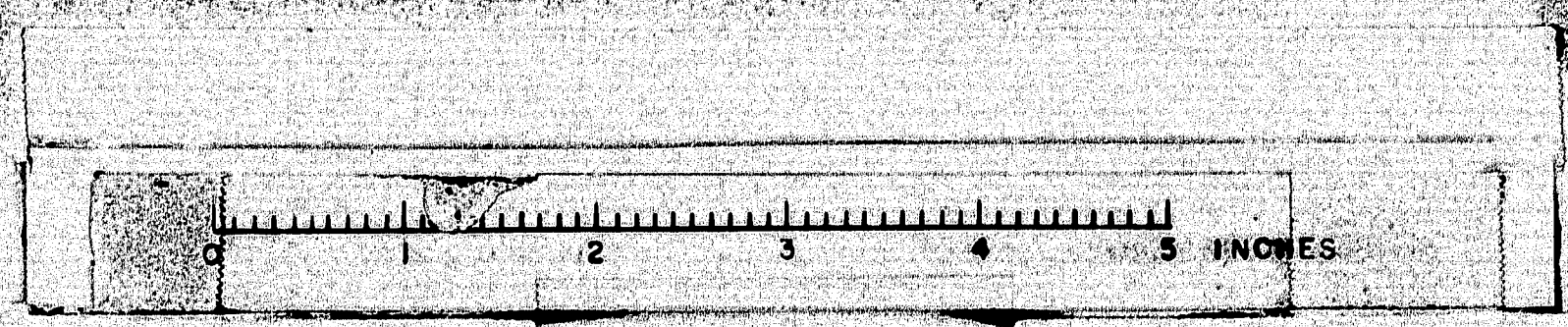


These sections revised to reflect changes at start of construction in Aug. 1966.

DESIGN: CDH  
CHECK: RUM & CFM  
PLOT: W. Edgecomb  
SURVEY: Barnes

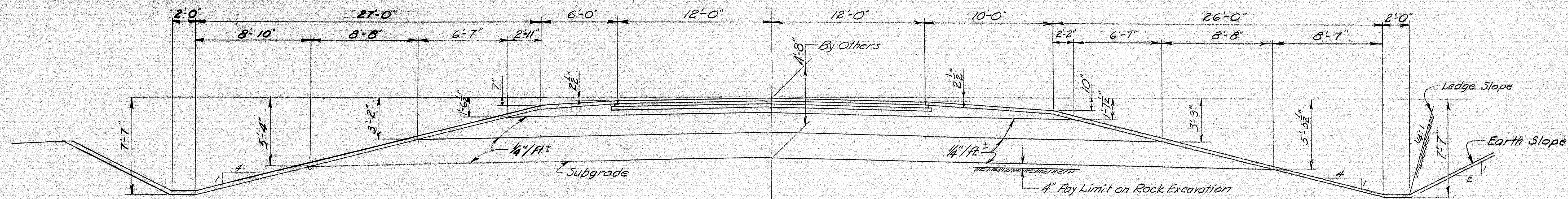
**CASEY ROAD BRIDGE**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**BENEDICTA, AROOSTOOK COUNTY**  
AND IN THE TOWNSHIP OF  
**12, PENOBSCOT COUNTY**  
1100 - STA 16150  
SEPT. 1966

Engl. Books 82-44  
17 Eng. Books 82-44  
17 Eng. Books 82-44



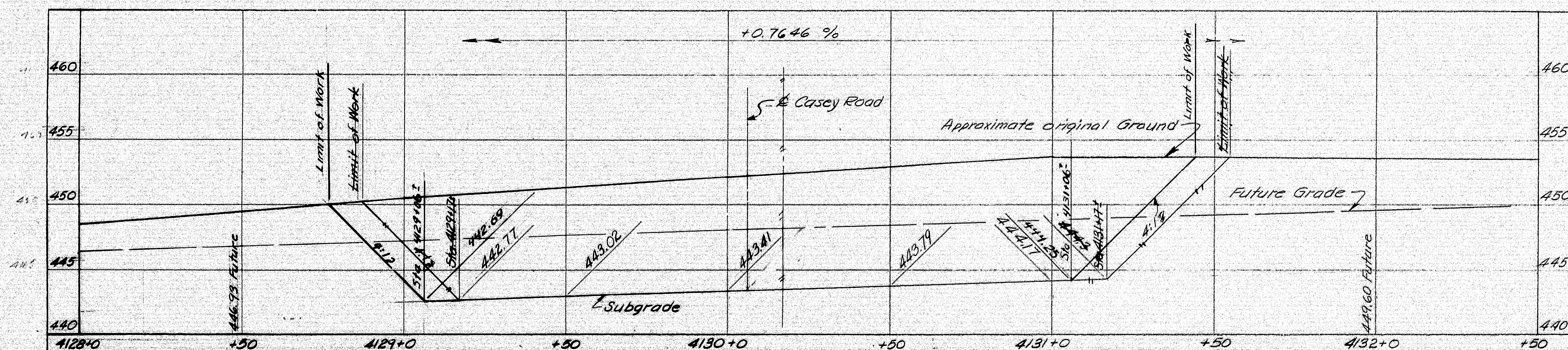


**LEDGE PAY LIMIT**  
The Ledge Backslope line shall start at the back edge of the 2'-0" ditch and allowable overbreakage limit shall be 12" horizontally from that point and up on a 4:1 slope.



TYPICAL SECTION S.B. AT CASEY ROAD BRIDGE  
WITH TRAFFIC

**SCOPE OF WORK I-95 SOUTH BOUND**  
The earth and ledge between Stations 4129+77 and 4131+88 shall be excavated to subgrade and ditch grade and sloped up to original ground as shown below, before any pier or abutment concrete can be placed for Abut. #1 & Piers #1, #2 & #3.

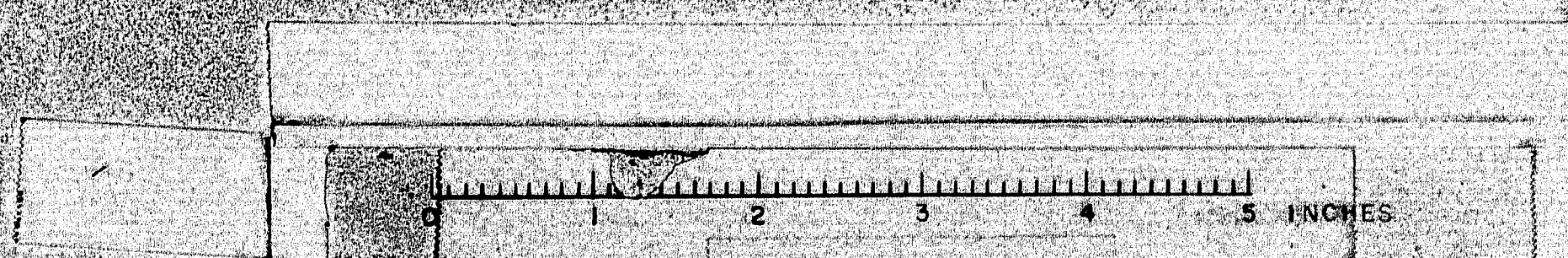


PROFILE I-95 SOUTH BOUND AT CASEY ROAD

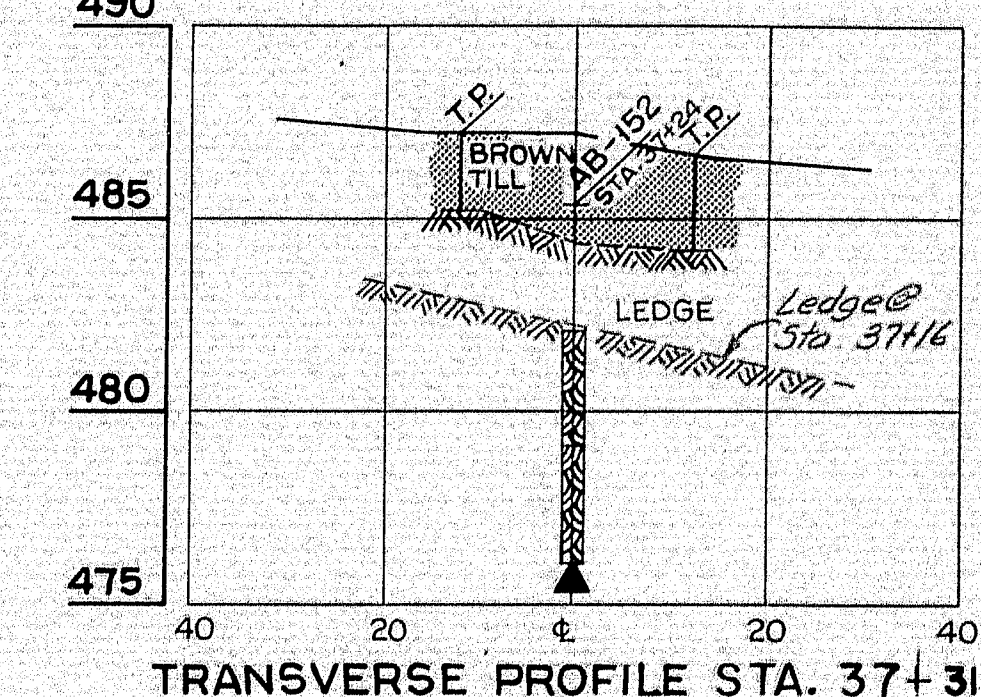
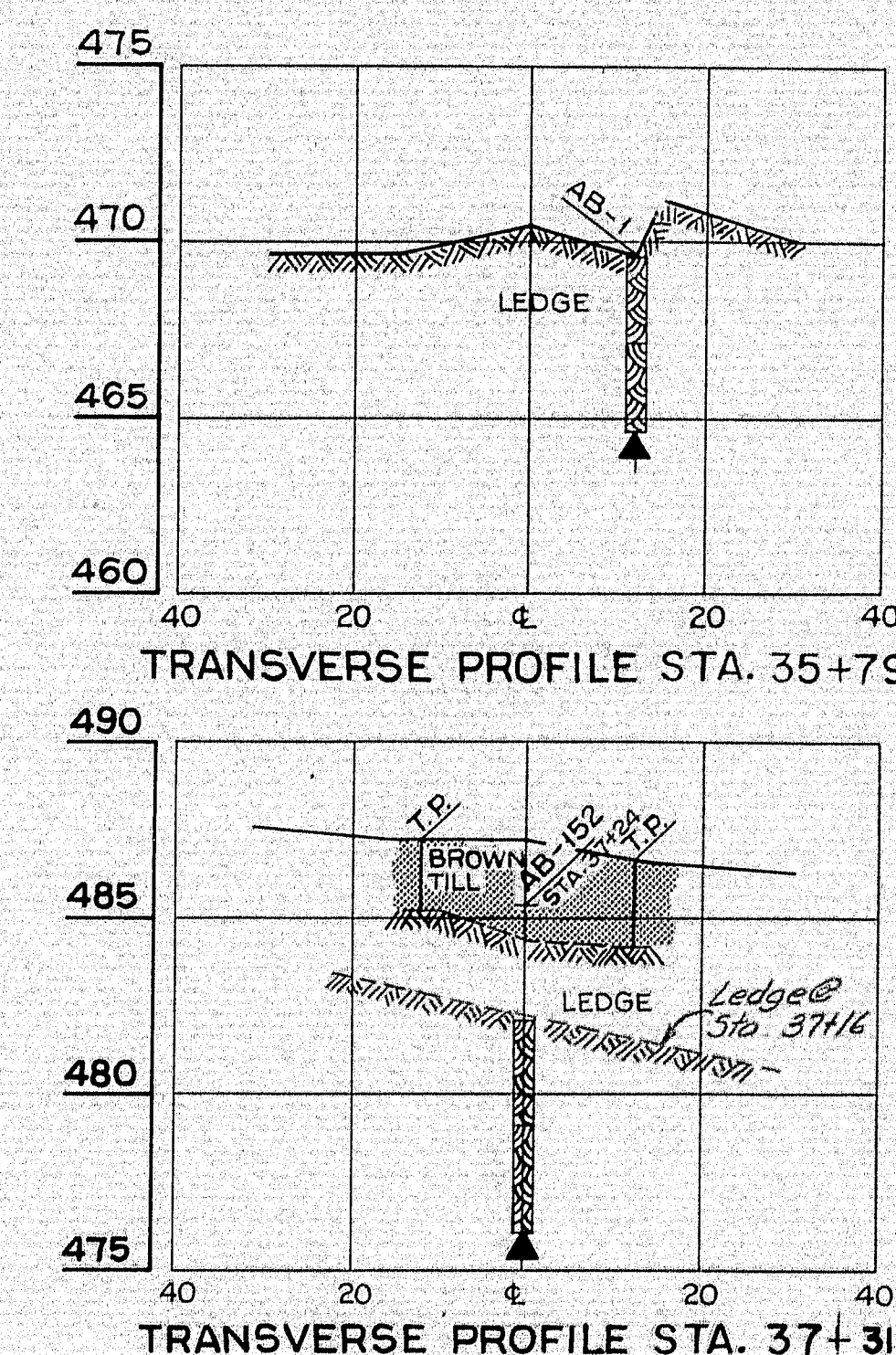
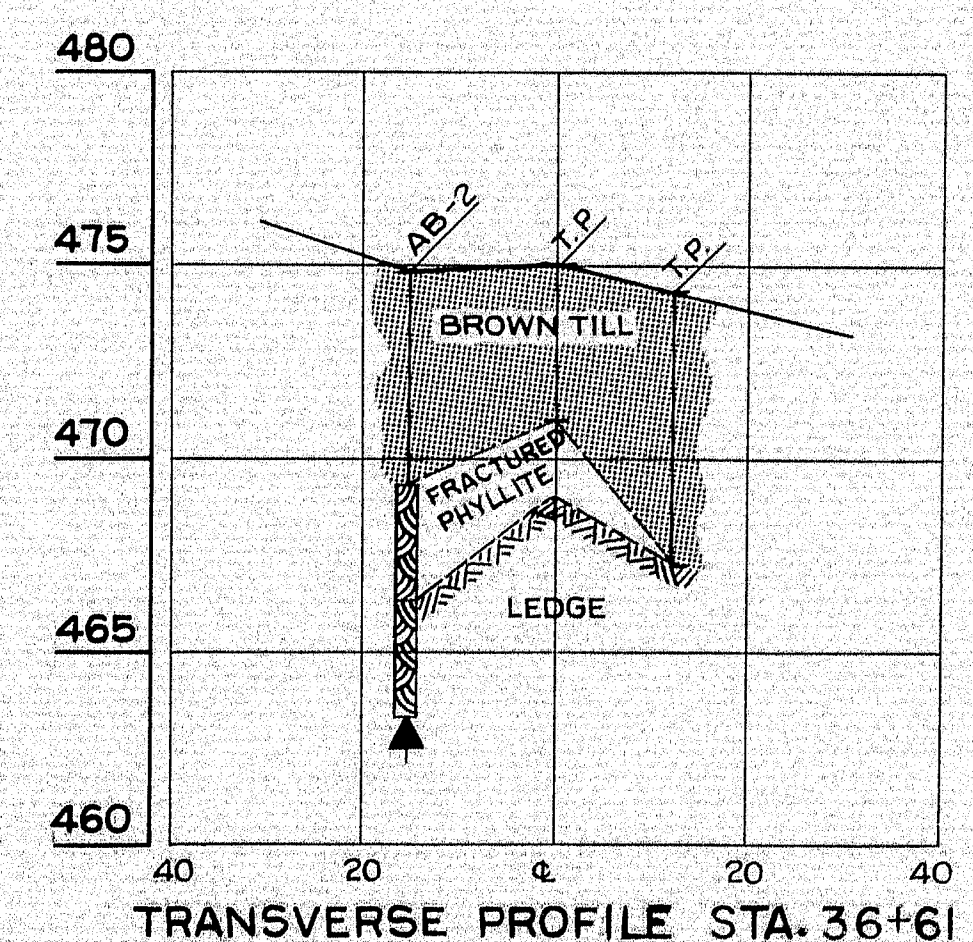
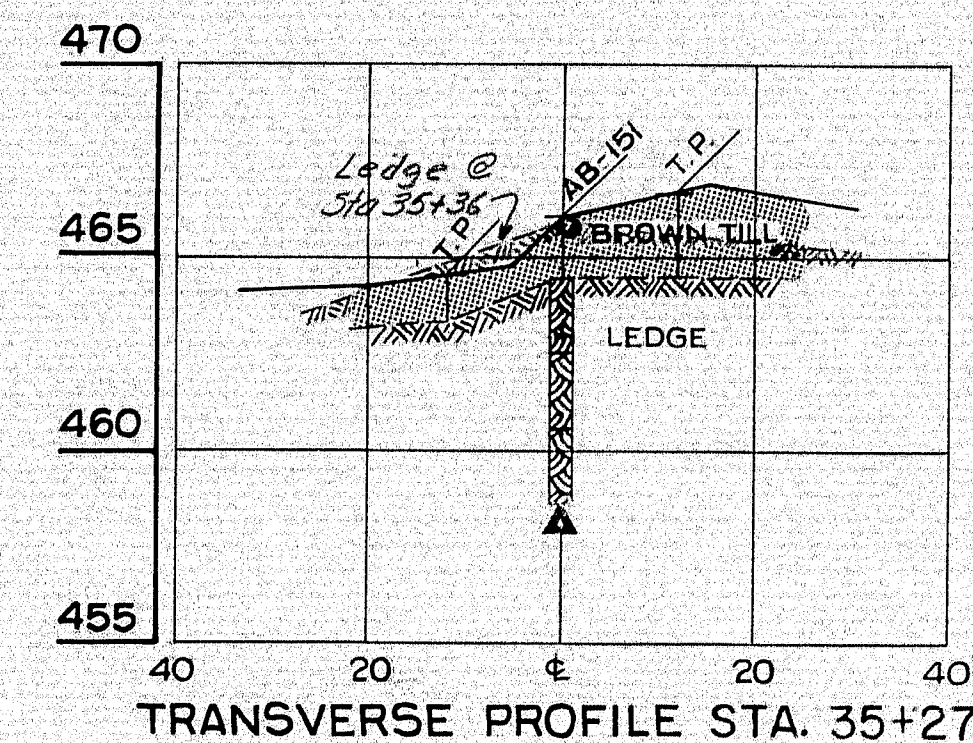
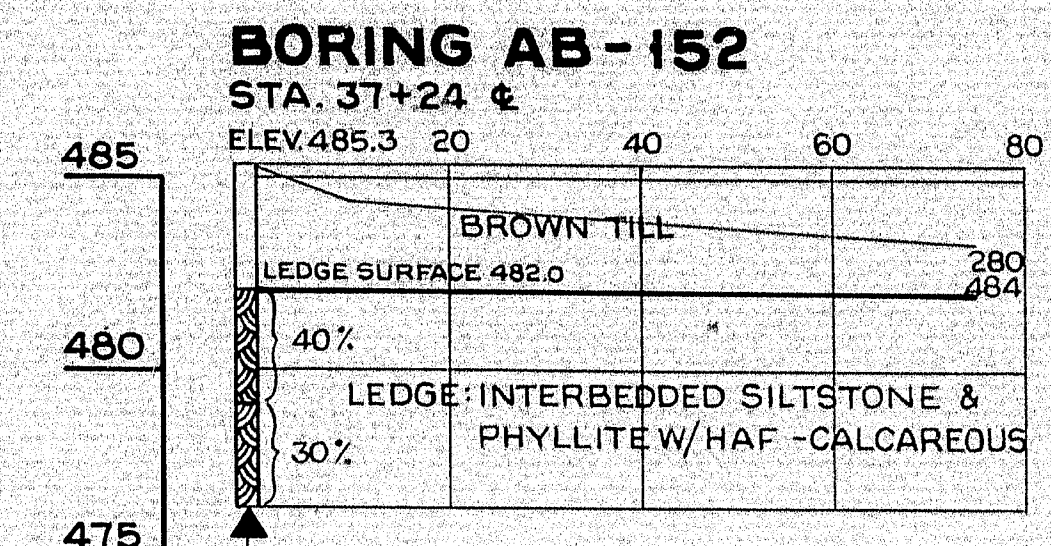
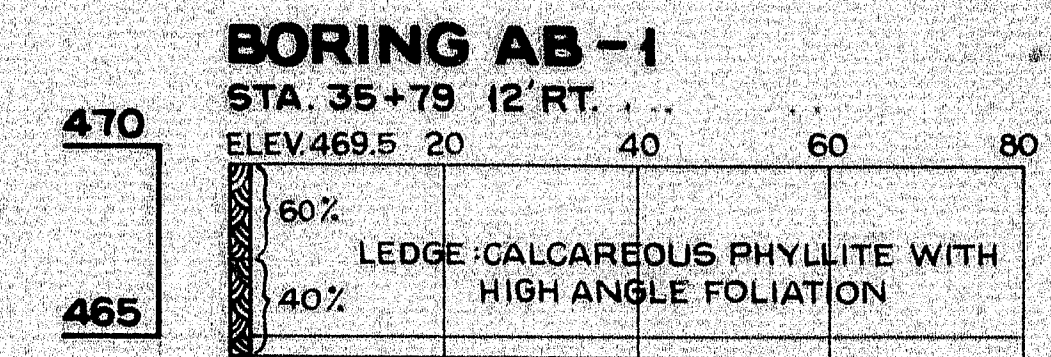
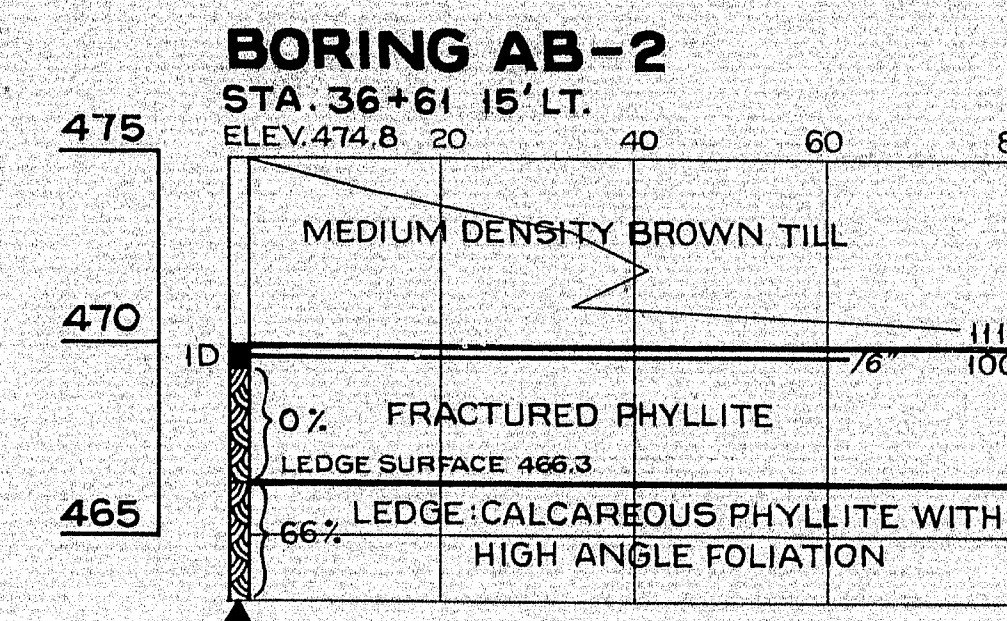
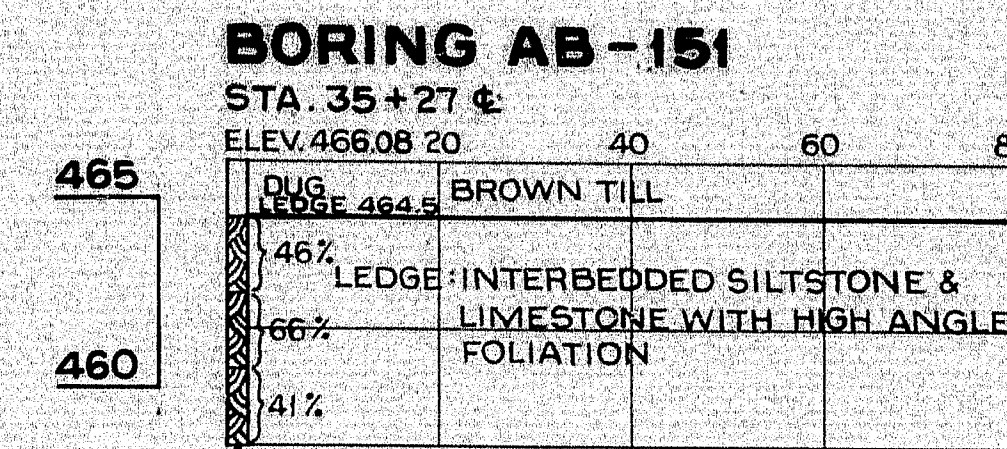
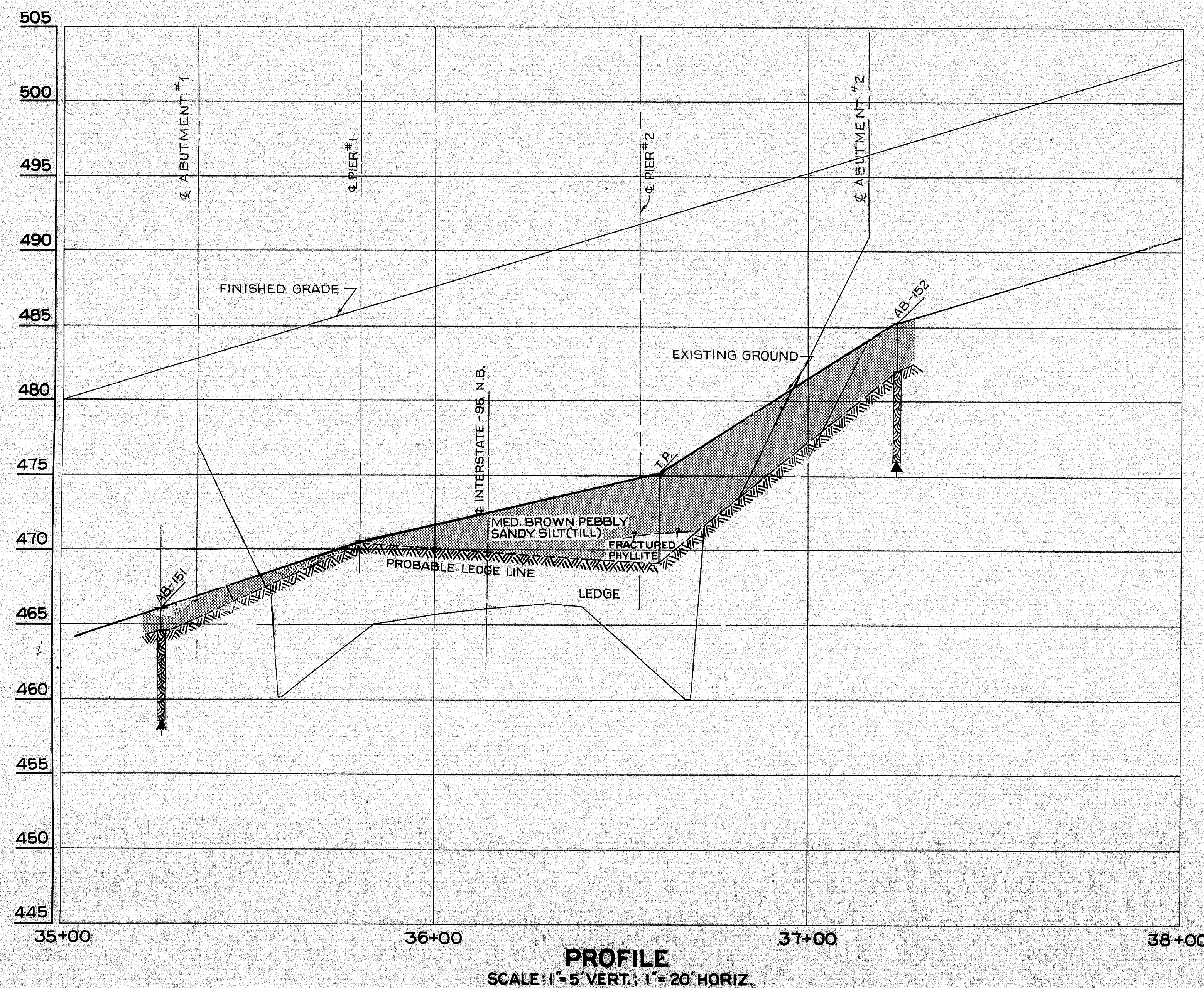
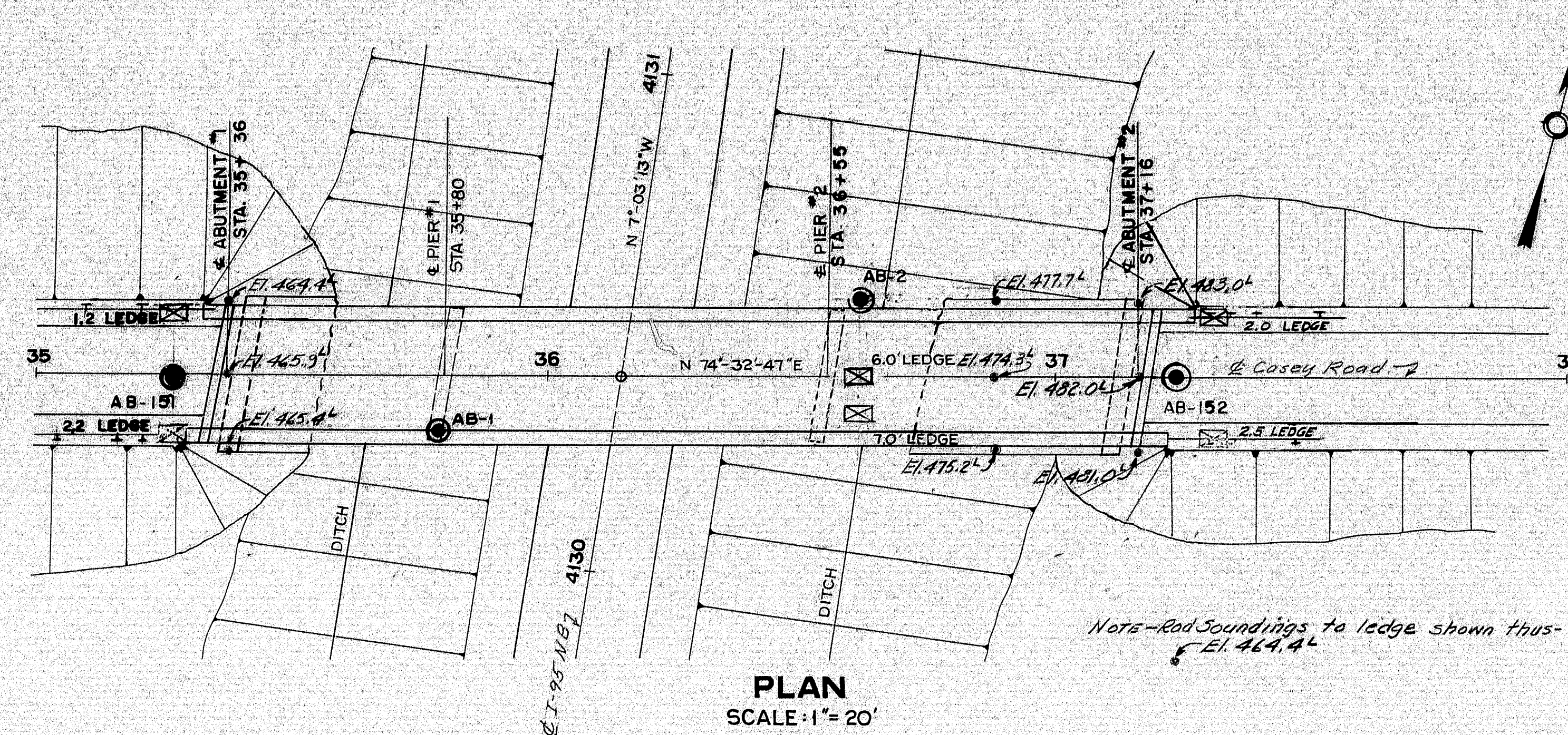
Profile of I-95 S.B. changes made by P.M. - Nov. 1967. (I-95 S.B. intersects Casey Road @ Sta. 4130+06.38 - See Survey). This was used in construction, by order of Geo. Stengel.

<b>4 LANE REVISION</b>		DEC. 1966
DESIGN - H. L. D.	BRIDGE NO. -	VIR
TRACE -	SURVEY -	
CHECK - AR	FLAT -	
STATE HIGHWAY COMMISSION BRIDGE DIVISION <b>CASEY ROAD BRIDGE</b> OVER <b>INTERSTATE 95</b> IN THE TOWN OF <b>BENEDICTA, AROOSTOOK COUNTY</b> AND IN THE TOWNSHIP OF <b>T2, R6 W.E.L.S., PENOBSCOT COUNTY</b> ROAD EXCAVATION I-95 S.B. SHEET 8A OF 26 AUGUSTA, MAINE NOV. 1966		

100-169







#### BORING NOTES

- ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING
- NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FT. WITH 400 FT. LBS. OF ENERGY PER BLOW
- LOCATION OF SAMPLE OR SAMPLE ATTEMPT
- NUMBER AND TYPE OF DRY SAMPLE
- ID S & H SAMPLER #1290'S
- NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FT. WITH 350 FT. LBS. OF ENERGY PER BLOW
- BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)
- LOCATIONS CORED BY DIAMOND BIT AND PERCENT RECOVERY OF ROCK

#### 4 LANE REVISION

DEC. 1966

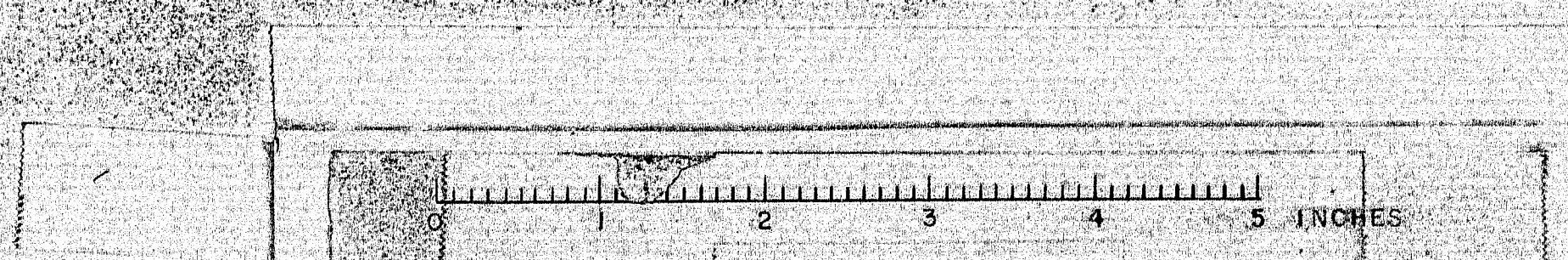
DESIGN - Soils Division  
TRACE -  
CHECK -

BRIDGE NO. SURVEY -  
PLOT -

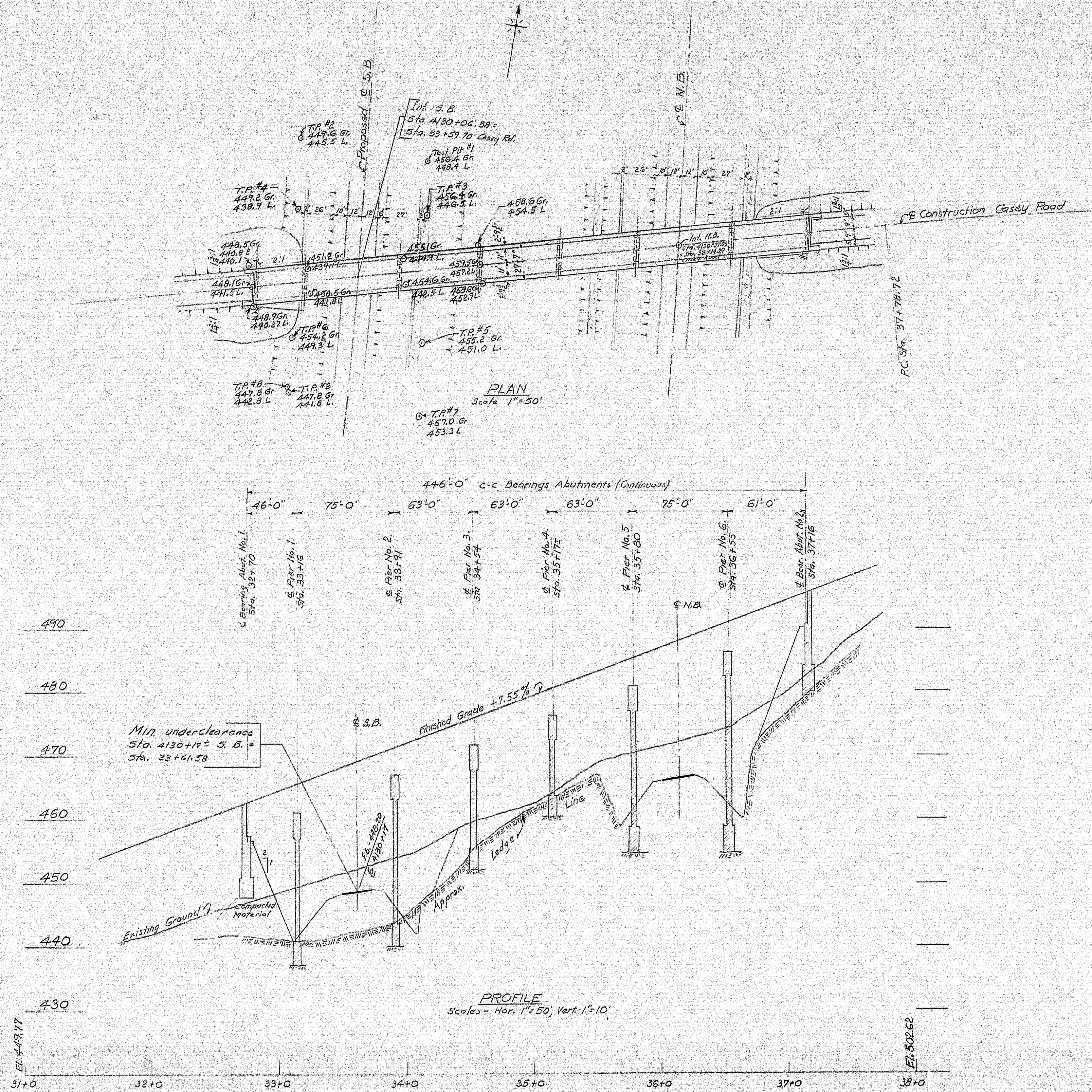
STATE HIGHWAY COMMISSION  
BRIDGE DIVISION  
**CASEY ROAD BRIDGE**  
OVER  
**INTERSTATE 95**  
IN THE TOWN OF  
**BENEDICTA**  
AROSTOOK COUNTY  
FOUNDATION SURVEY

SHEET 9 OF 26 AUGUSTA, MAINE AUG 1965

100-170







Listed below test pits made along I-95 SBL with reference to the Construction Center Line of Casey Road. (Sept. 12, 1966)

Test Pit No.	Station	Offset	Ground	Ledge
#1	34+22	86' Lt.	456.4	448.4
#2	33+24	114' Lt.	449.6	445.5
#3	34+17	43' Lt.	456.4	446.5
#4	33+17	57' Lt.	449.2	438.9
#5	34+03	57' Rt.	455.2	451.0
#6	33+03	43' Rt.	454.2	449.3
#7	33+96	114' Rt.	457.0	453.3
#8	32+96	86' Rt.	447.8	441.8
		84' Rt.	447.8	442.8

Data of Sept. 8, 1966 (Ref. to E Casey Road)

Station	Offset	Ground	Ledge
32+75	15' Rt.	448.9	440.27
32+75	E	448.1	441.5
32+75	15' Lt.	448.5	440.8 & 440.1
33+20	10' Lt.	451.2	439.1
33+20	10' Rt.	450.5	441.8
33+95	10' Lt.	455.1	444.9
33+95	10' Rt.	454.6	442.5
34+55	15' Lt.	458.6	454.5
34+55	E	459.5	457.2
34+55	15' Rt.	458.6	452.9

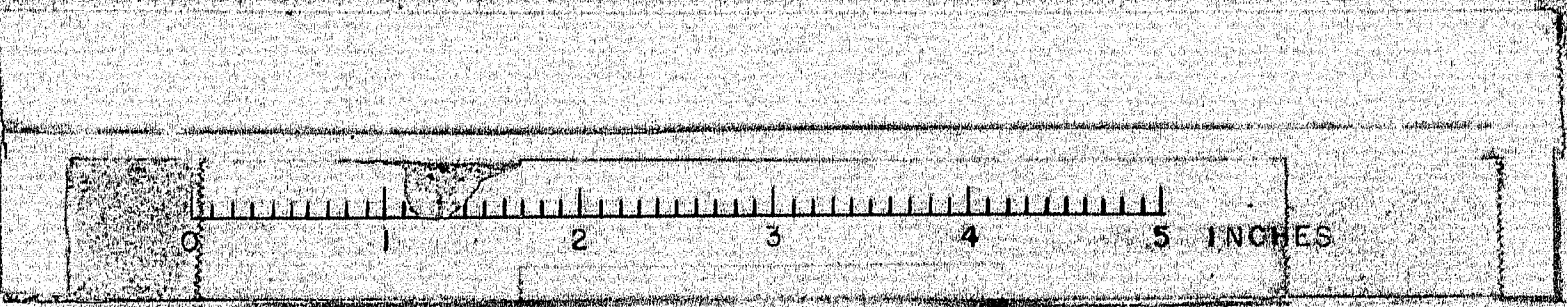
**NOTE**

There will not be any change in the alignment or grade from the original of Casey Road.  
Pier No. 5. is at the same location as original Pier No. 1.  
Pier No. 6. is at the same location as original Pier No. 2.  
Abut. No. 2. is at the same location as original Abut. No. 2.

Excavation for the S.B. lane for about 100 feet north and 100 feet south of the E of Casey Road will be part of this contract.

DESIGN - W. B. Sullivan	BRIDGE NO. SURVEY - PLOT -
TRACK - E.H.L.D.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION <b>CASEY ROAD BRIDGE</b> OVER <b>INTERSTATE 95</b> IN THE TOWN OF <b>BENEDICTA, AROOSTOOK COUNTY</b> AND IN THE TOWNSHIP OF <b>T2,R6W.E.L.S., PENOBSCOT COUNTY</b> SOILS SUPPLEMENT	
4 LANE REVISION	DEC. 1966 VAR
SHEET 9A OF 26 AUGUSTA, MAINE DEC. 1966	

100-171



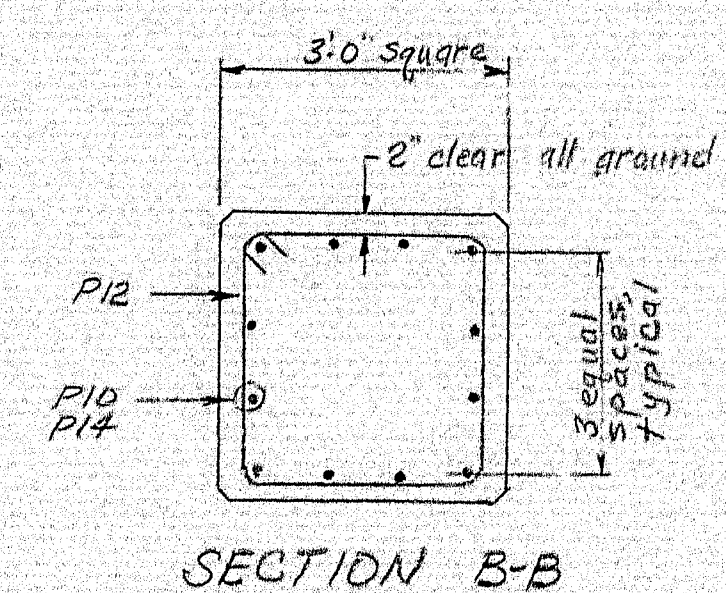
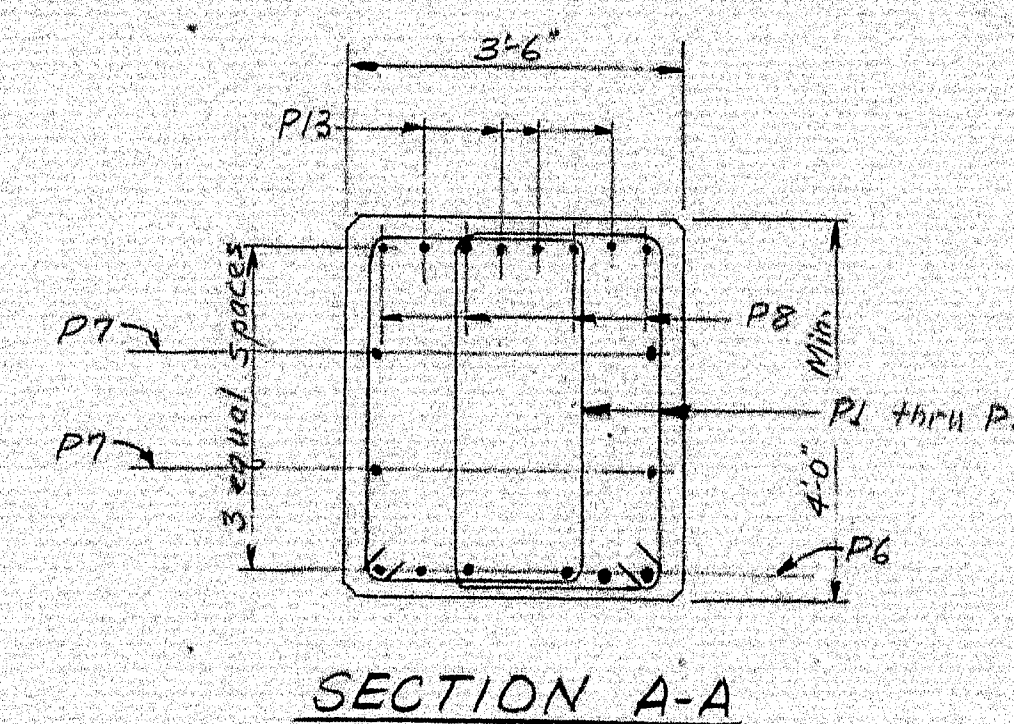
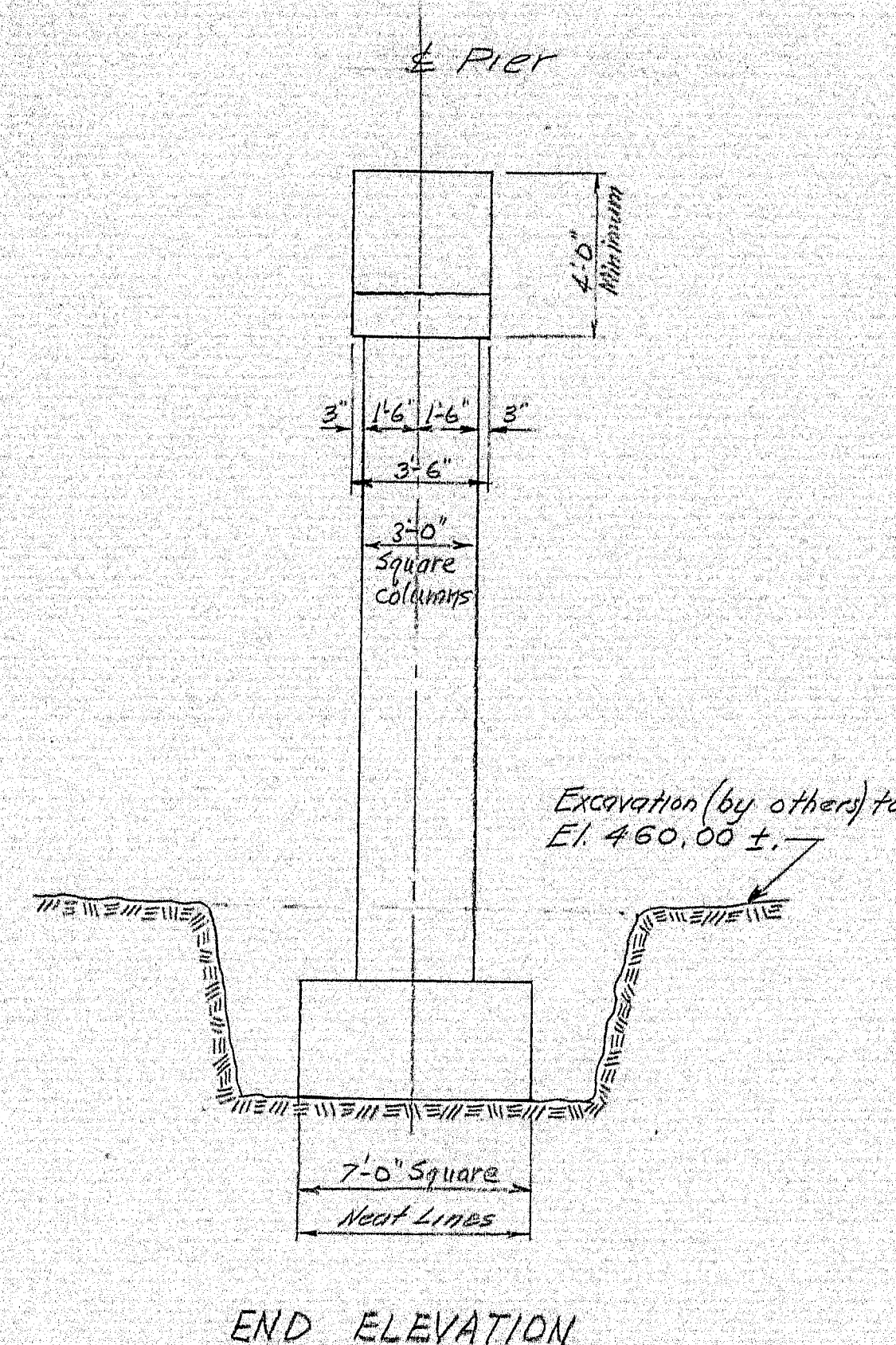
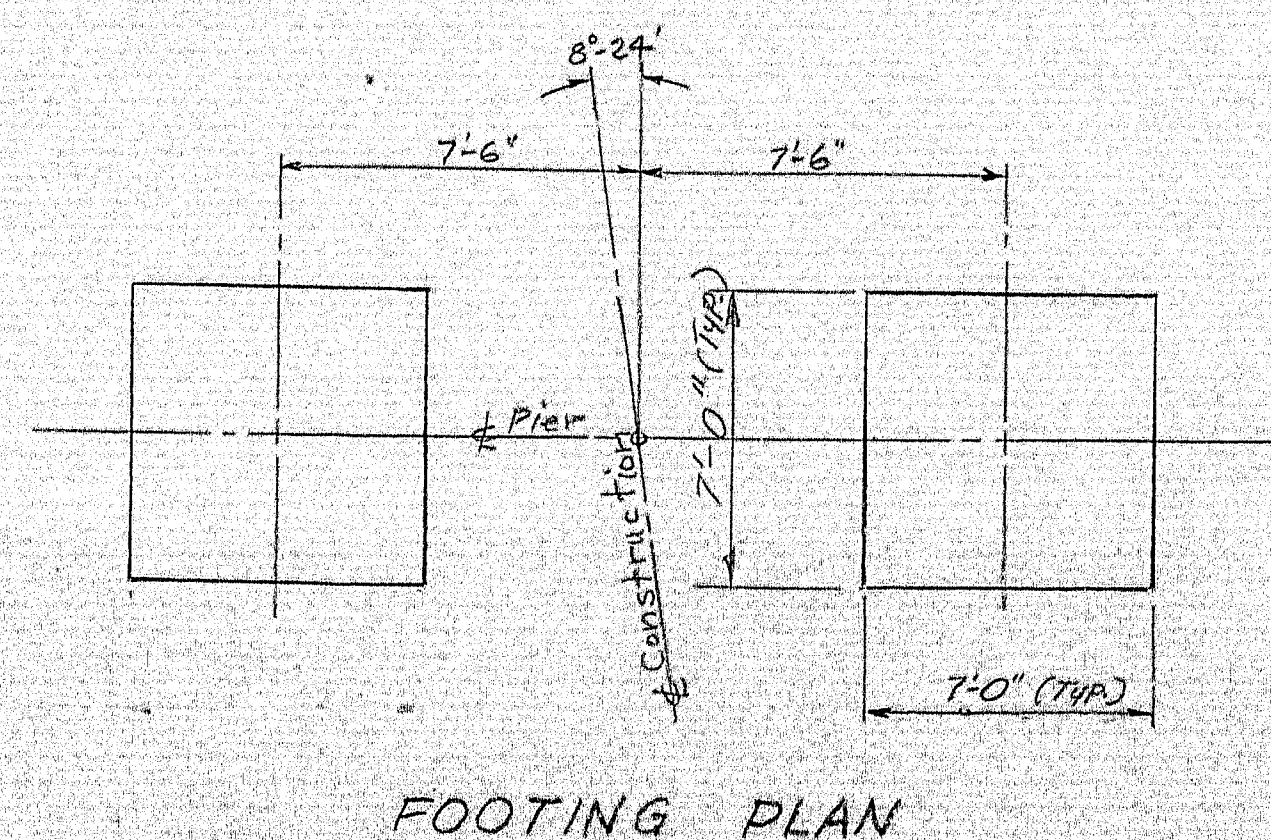
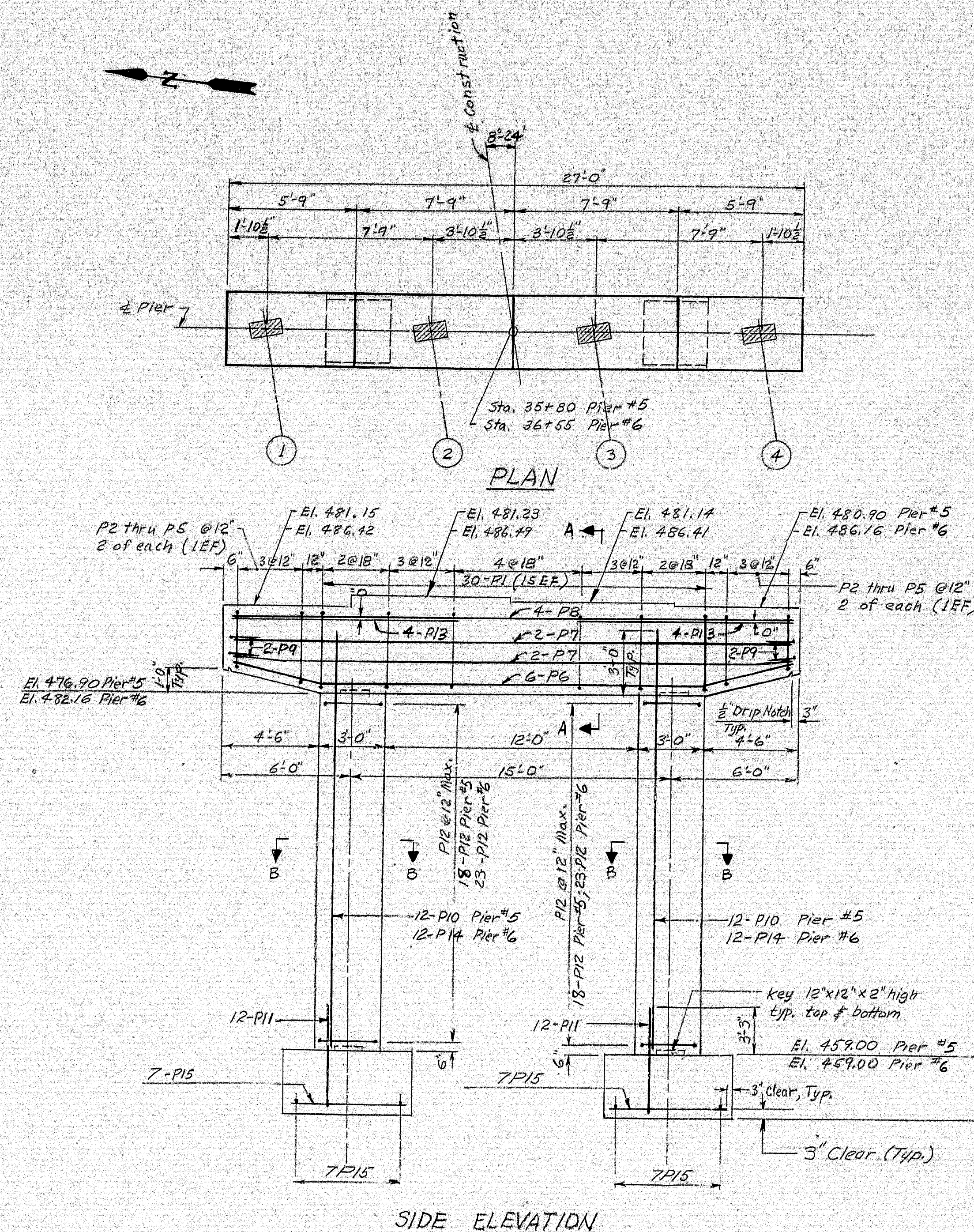












#### GENERAL PIER NOTES

1. Place reinforcing to clear anchor bolts.
2. Reinforcing steel shall have 2" minimum cover.
3. All exposed corners shall have  $\frac{3}{4}$ " chamfer.
4. See Standard Detail sheet BD101-64 for notes concerning preparation of bearing areas.
5. Maximum Design Soil Pressure Piers = 4.8 tons/sq. ft.
6. Footing forms may be omitted if approved by the Engineer. No payment will be made for concrete placed outside the neat lines of the footing as shown. Pay limits for concrete and for rock excavations shall be not more than 6" below indicated elevations.
7. Any excavation of earth or ledge debris required at Piers will be paid for under Item 200.02, Structural Earth Excavation, Abutments and Retaining Walls.

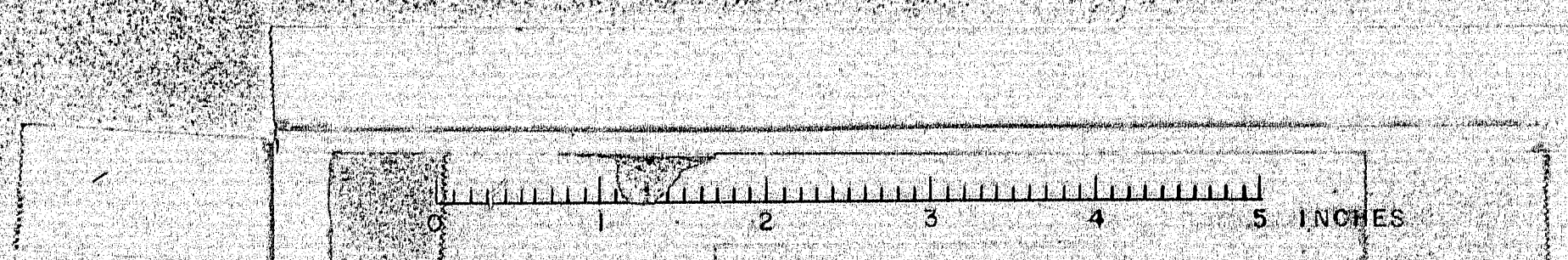
4 LANE REVISION DEC. 1966

Revised: 12-2-66 H. L. Dority

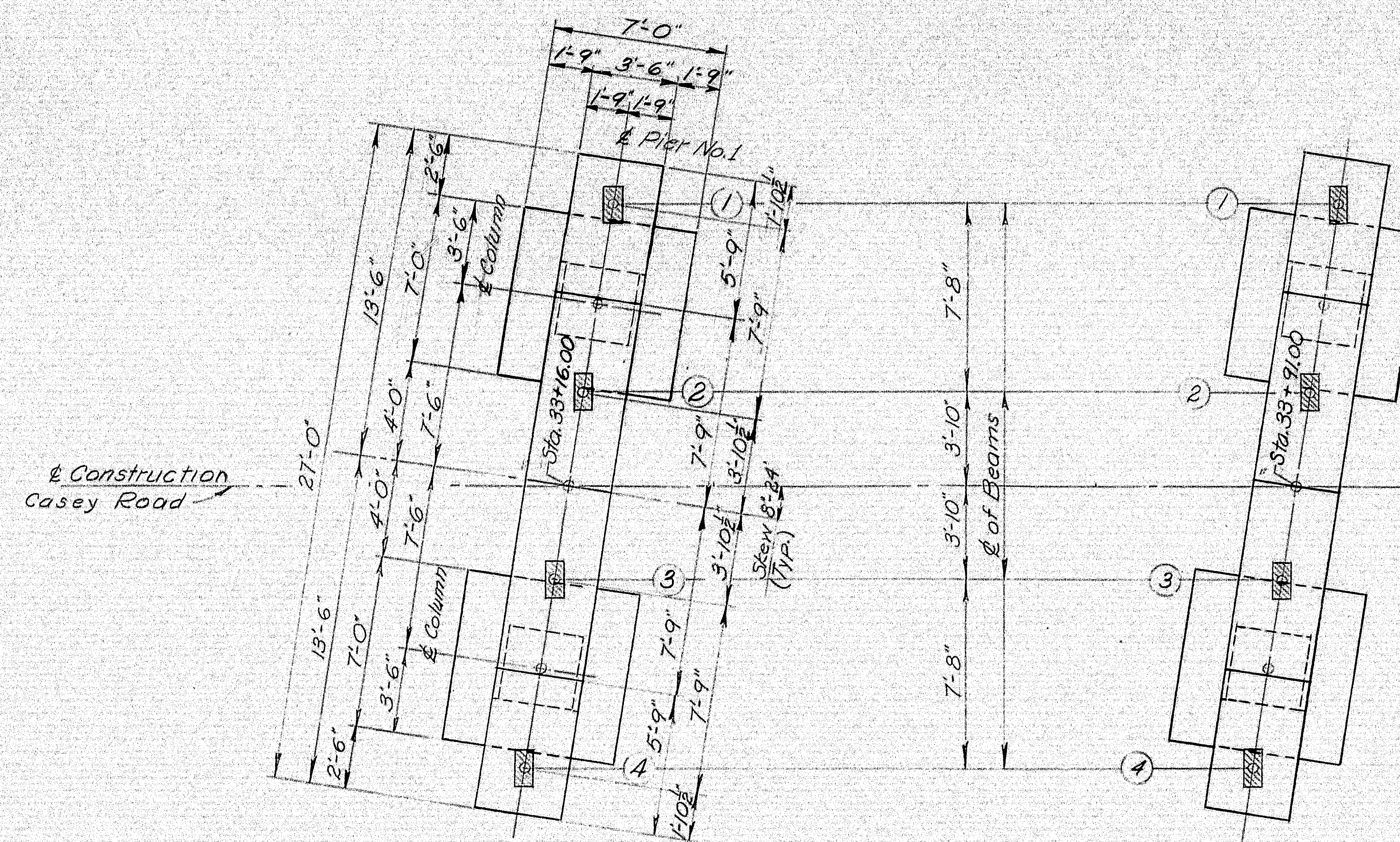
DESIGN - CDH	BRIDGE NO.
TRACE - CDH	SURVEY -
CHECK - PWD	PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
CASEY ROAD BRIDGE	
OVER	
INTERSTATE 95	
IN THE TOWN OF	
BENEDICTA, AROOSTOOK COUNTY	
AND IN THE TOWNSHIP OF	
T2, R6 W.E.L.S., PENOBSCOT COUNTY	
PIERS #5 & #6	
SHEET 12 OF 26 AUGUSTA, MAINE MAR. 1966	

4 LANE REVISION DEC. 1966

100-174



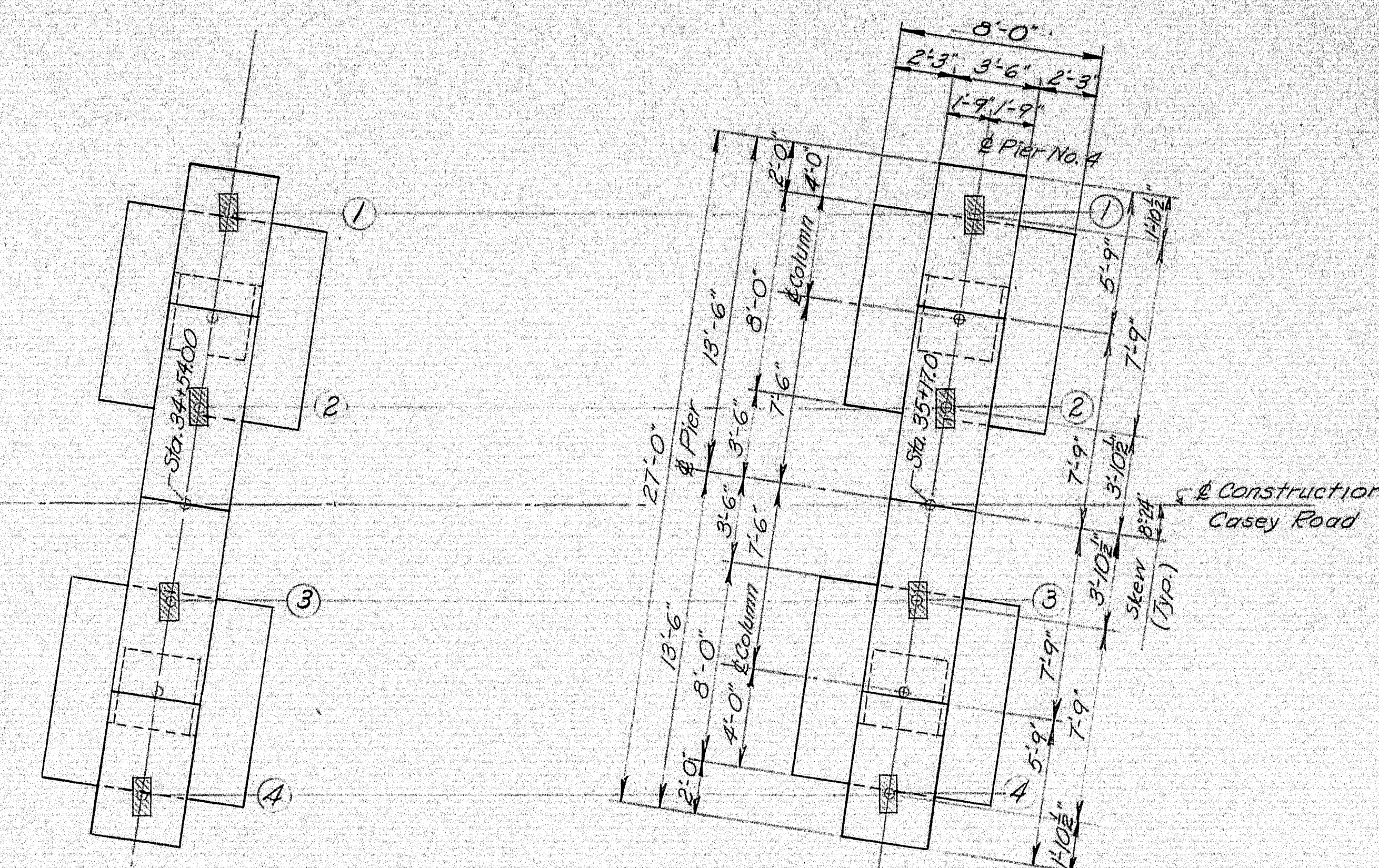




PLAN PIER NO. 1

NOTE: Pier No. 2 similar except for elevations.

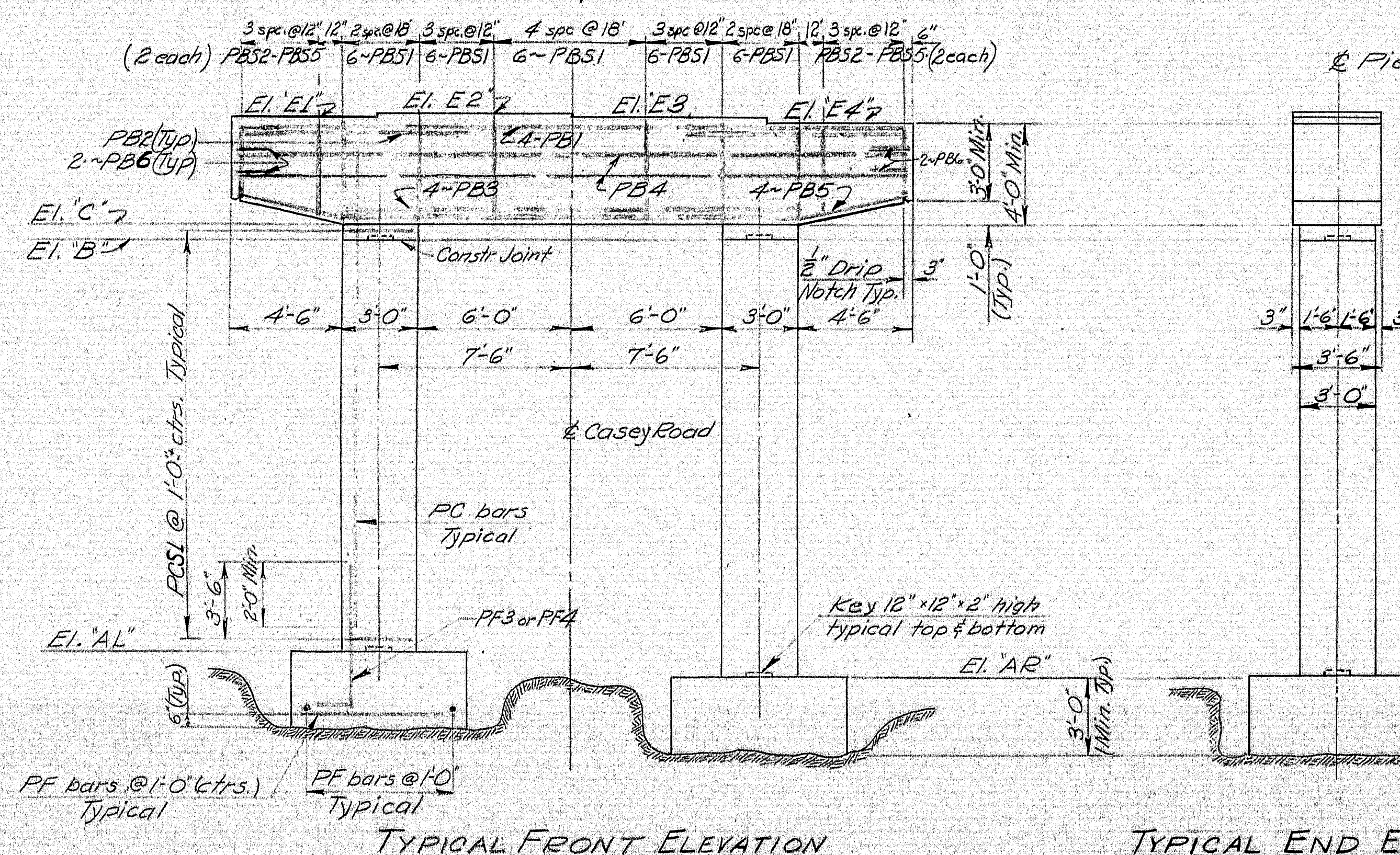
PLAN PIER NO. 2



PLAN PIER NO. 3

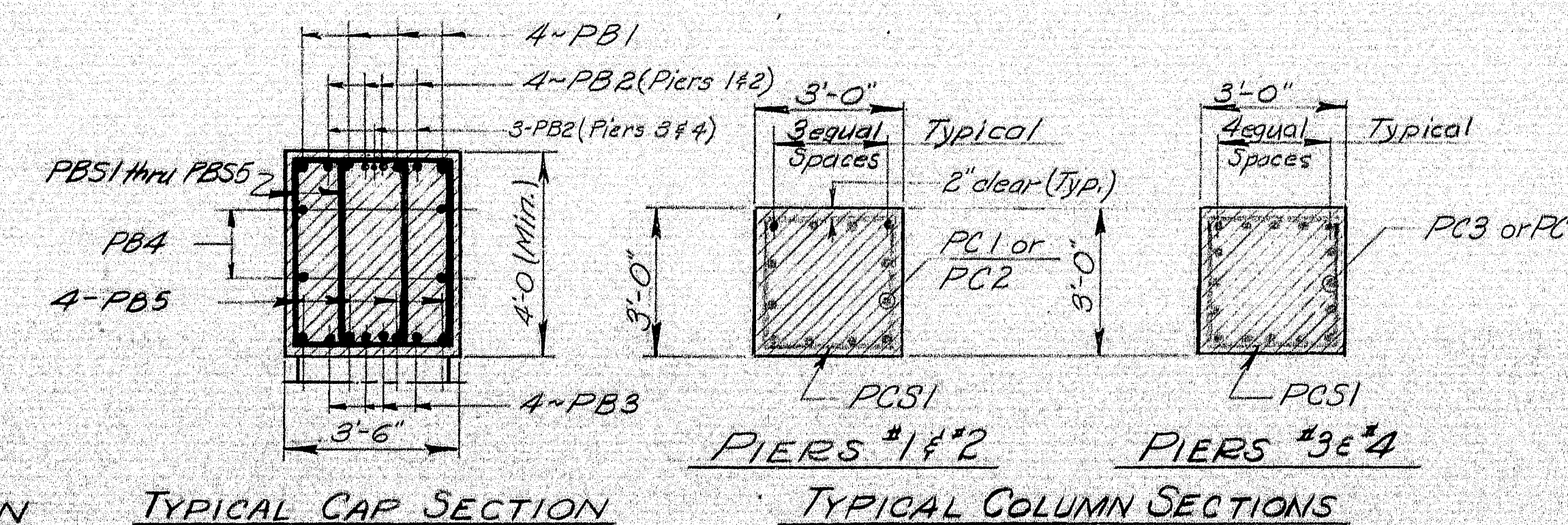
PLAN PIER NO. 4

NOTE: Pier No. 3 similar except for elevations.



TYPICAL FRONT ELEVATION

TYPICAL END ELEVATION



TYPICAL CAP SECTION

TYPICAL COLUMN SECTIONS

PIER	FOOTINGS		ELEVATIONS		CAPS		REINFORCING STEEL	
	AL	AR	B	C	E1	E2	LEFT	RIGHT
#1	439.75	439.75	456.00	456.61	460.87	460.94	14-PF1	12-PC1
#2	440.00	440.00	461.75	462.26	466.51	466.59	14-PF2	12-PC2
#3	456.75	456.75	466.75	467.37	471.63	471.70	14-PF3	12-PC3
#4	466.00	466.00	471.50	472.13	476.39	476.46	14-PF4	12-PC4

NOTE: For Reinforcing steel details see sheet #17 revision of 11-15-66.

NOTES:  
For General Pier Notes see sheet #12

4 LANE REVISION DEC. 1966

NOTE: Plans not complete 11-15-66  
Completed 12-8-66 H.L. Dority

DESIGN: H.L. DORITY  
CHECK: J.H.

BRIDGE NO. 100-175  
SURVEY PLOT

STATE HIGHWAY COMMISSION  
BRIDGE DIVISION

CASEY ROAD BRIDGE

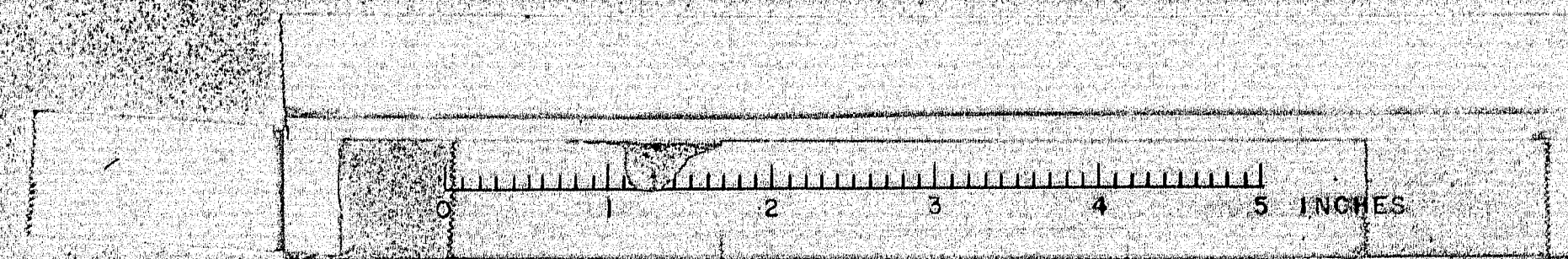
OVER INTERSTATE 95

IN THE TOWN OF BENEDICTA, AROOSTOOK COUNTY

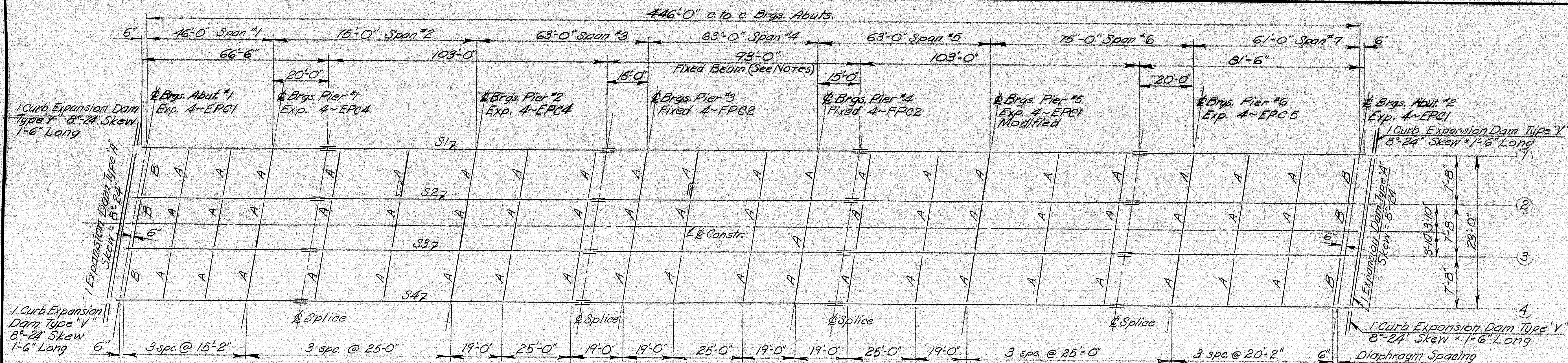
AND IN THE TOWNSHIP OF T2, R6 W.E.L.S., PENOBSCOT COUNTY

PIERS NO. 1, 2, 3, & 4  
SHEET 12A OF 26 AUGUSTA, MAINE NOV. 1966

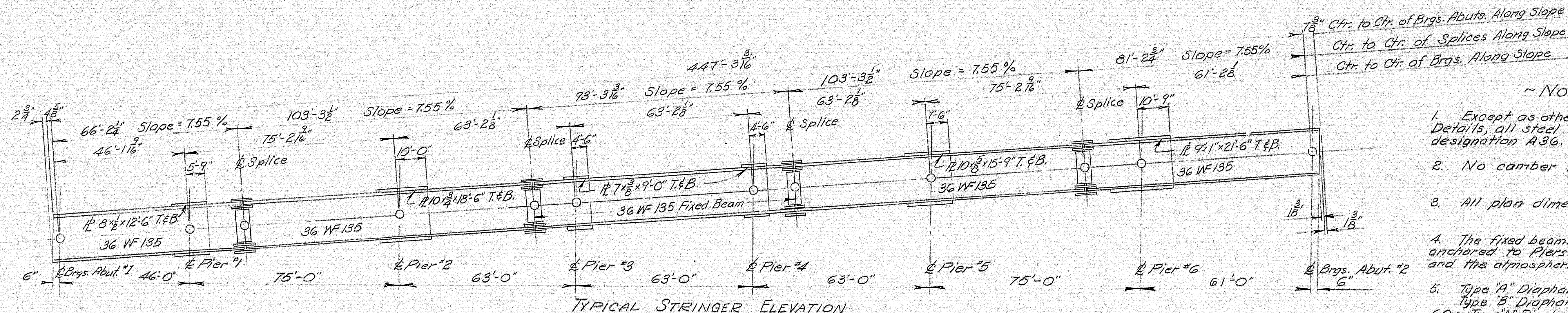
Piers #1, 2, 3 & 4 Casey Road Br I-95-9(39) 100-175



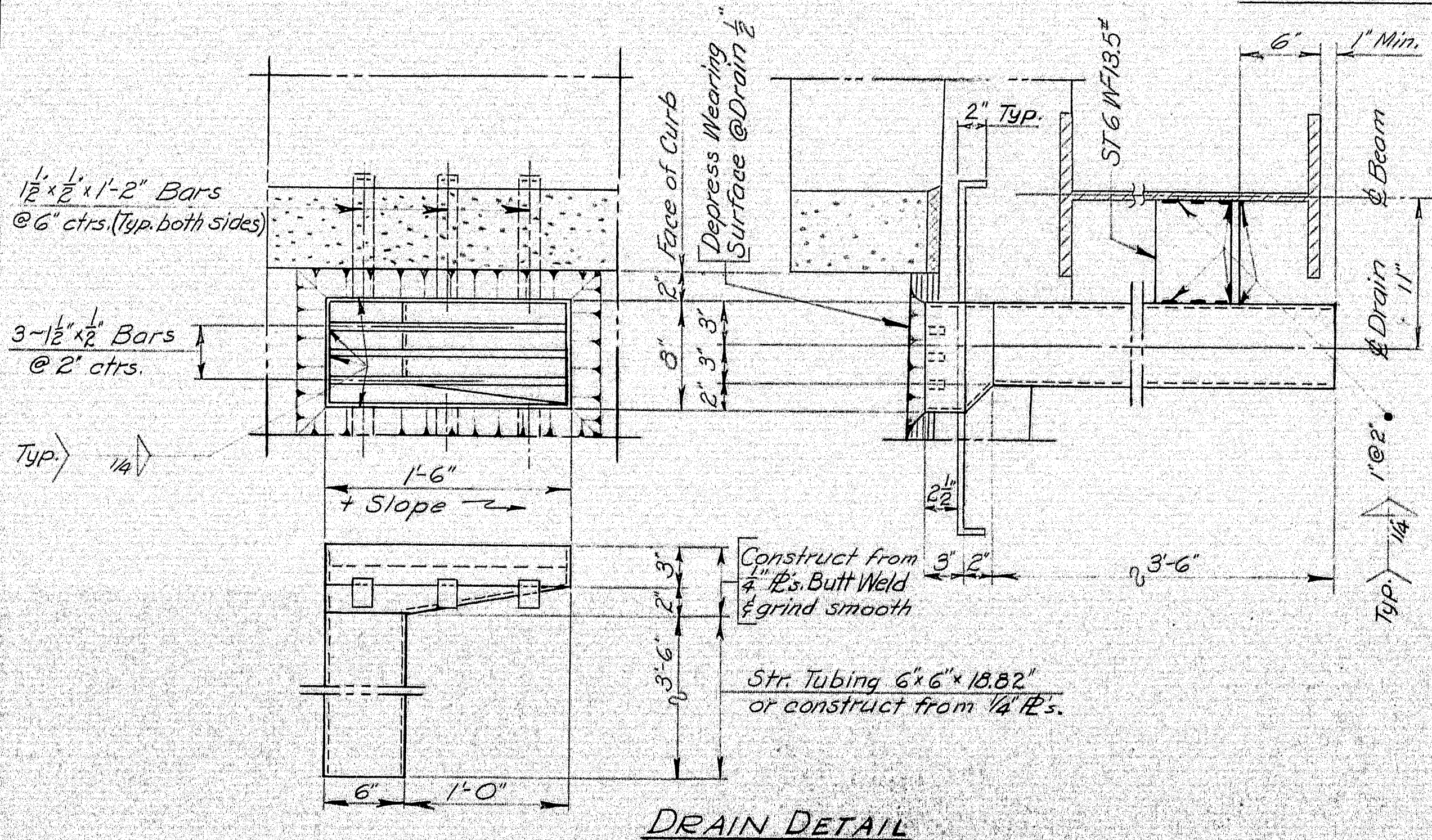




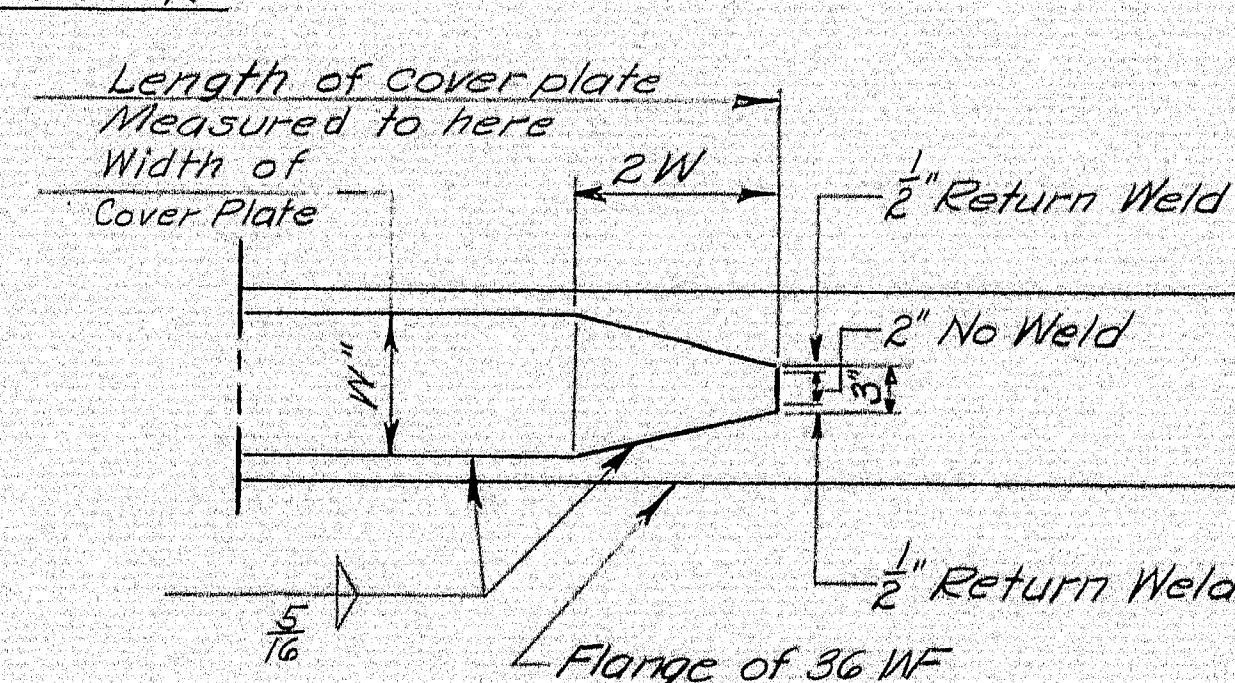
FRAMING PLAN



TYPICAL STRINGER ELEVATION



DRAIN DETAIL



END OF COVER PLATE DETAIL

~ NOTES ~

- Except as otherwise noted on the Standard Details, all steel shall conform to A.S.T.M. designation A36.
- No camber required.
- All plan dimensions are horizontal.
- The fixed beams (span #4) are to be erected and anchored to Piers #3 & #4 when their temperature and the atmospheric temperature is 45°.
- Type 'A' Diaphragm = 'A' Set normal to beam  
Type 'B' Diaphragm = 'B' Set plumb.  
60 ~ Type 'A' Diaphragms required.  
6 ~ Type 'B' Diaphragms required.  
See Standard Details (BD104-64)
- Bearing Devices - See Standard Details (BD101-64)  
EPC1 (modified) - 4 required  
EPC4 - 8 required  
EPC5 - 4 required  
FPC2 - 8 required
- Expansion Dams See Standard Details BD105-64.
- Splices see Standard Details BD103-64.
- 30 ~ Drains required - For location see superstructure sheet nos. 14, 15, & 15A.
- The top slab bars which must be cut at the drains shall be cut at the center of the drain and the end hooked down to clear drain.

DESIGN - H.L. DORRITY  
CHECK - H.L. DORRITY  
BRIDGE NO. 100-176  
STATE HIGHWAY COMMISSION  
BRIDGE DIVISION  
CASEY ROAD BRIDGE  
OVER  
INTERSTATE 95  
IN THE TOWN OF  
BENEDICTA, AROOSTOOK COUNTY  
AND IN THE TOWNSHIP OF  
T2,R6 W.E.L.S., PENOBSCOT COUNTY  
STRUCTURAL STEEL

4 LANE REVISION DEC. 1966

SHEET 13 OF 26 AUGUSTA, MAINE DEC 1966

100-176

