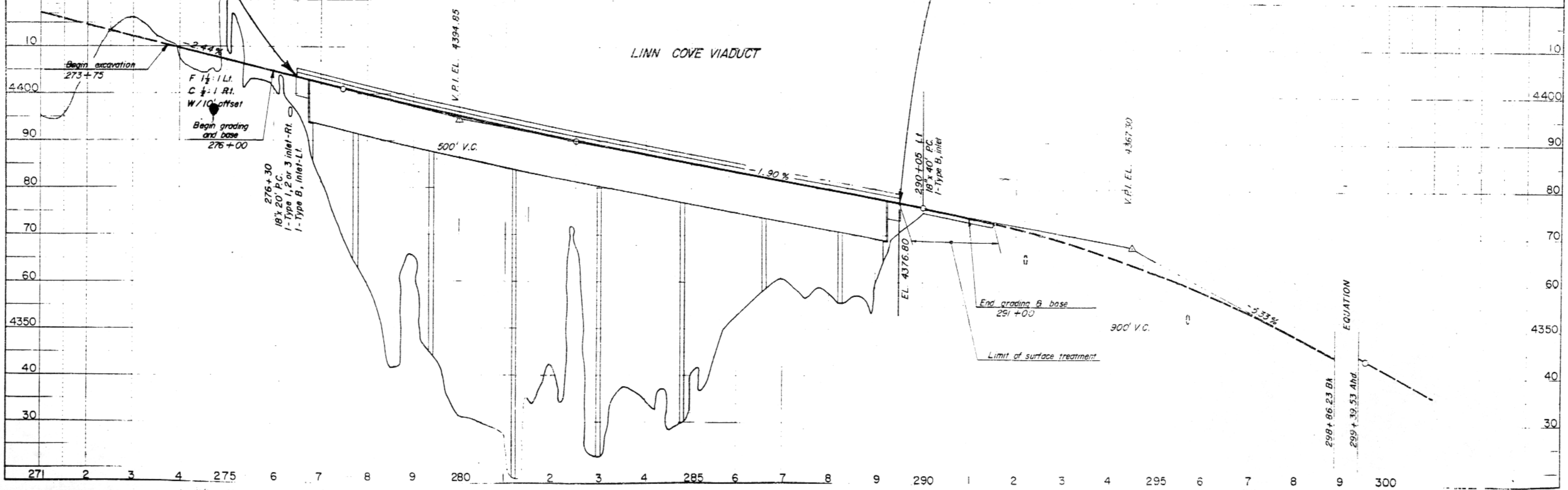
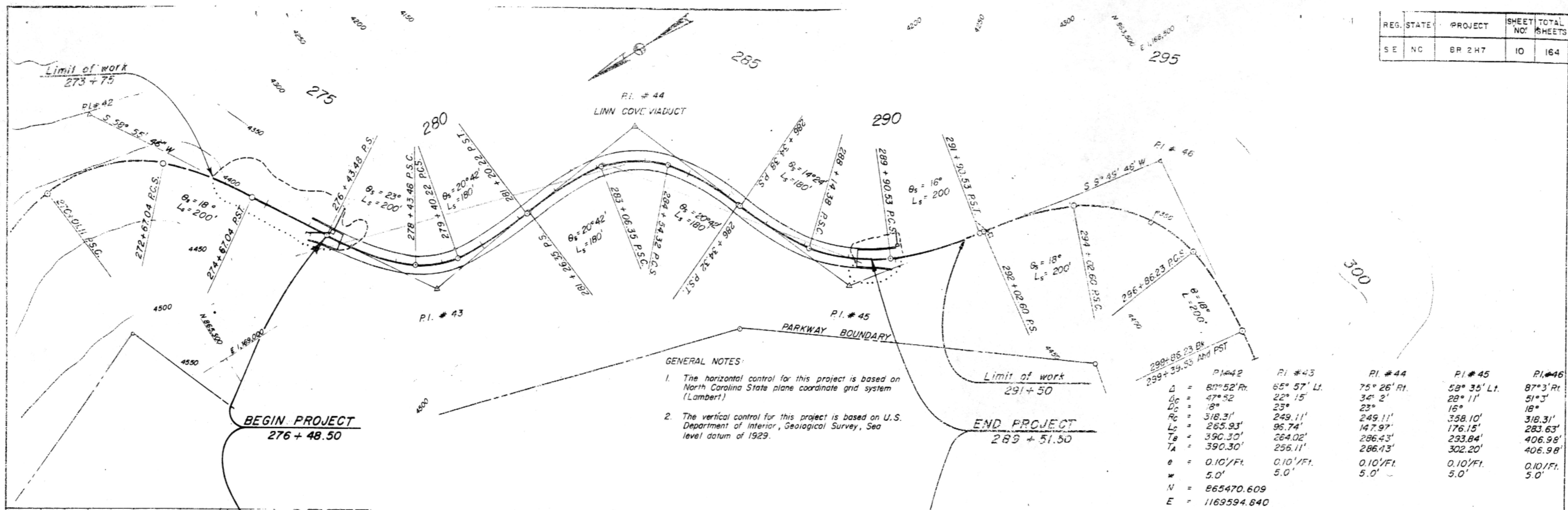
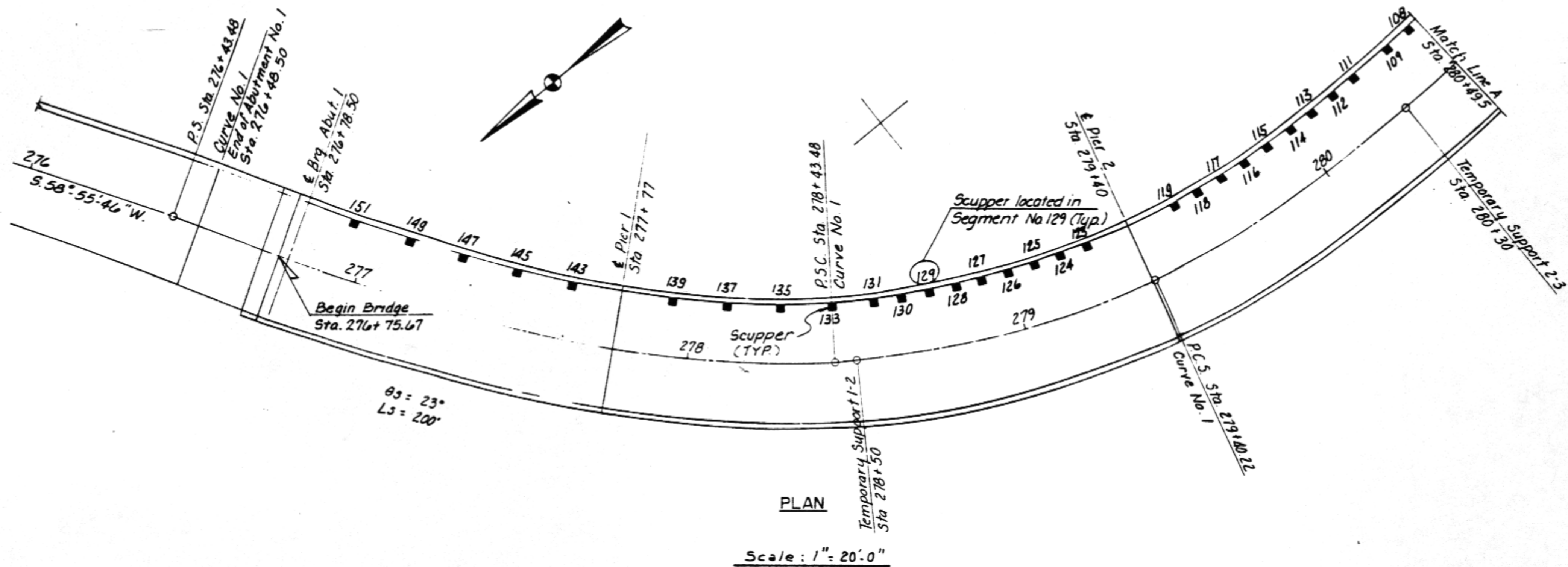


REG.	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
SE	NC	BR 2H7	10	164

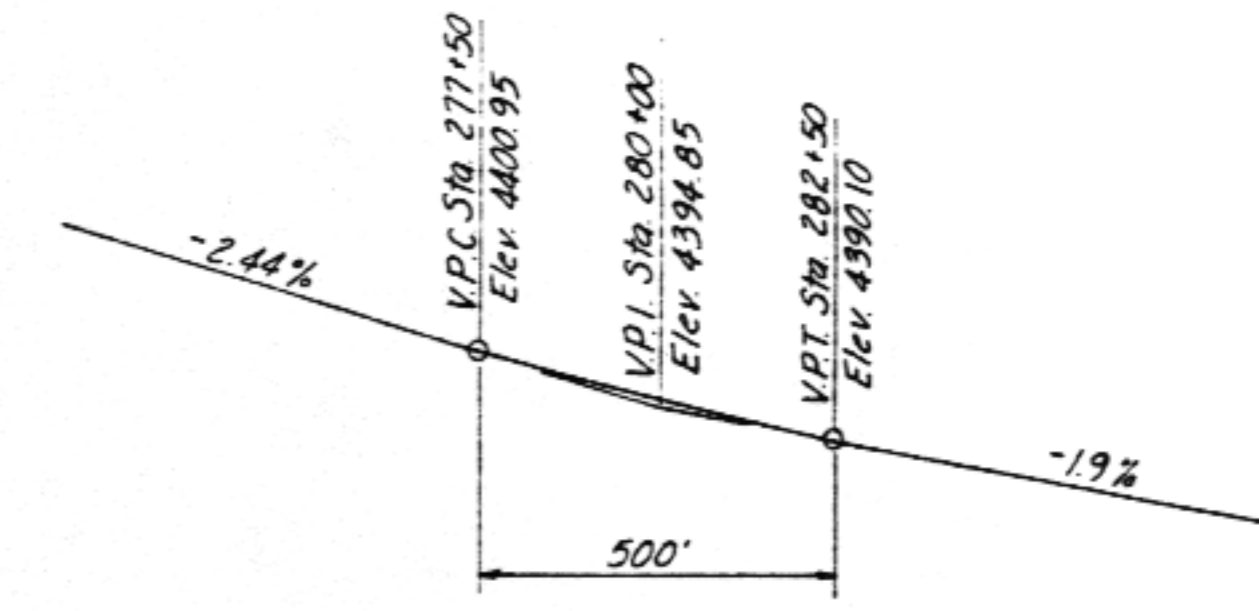
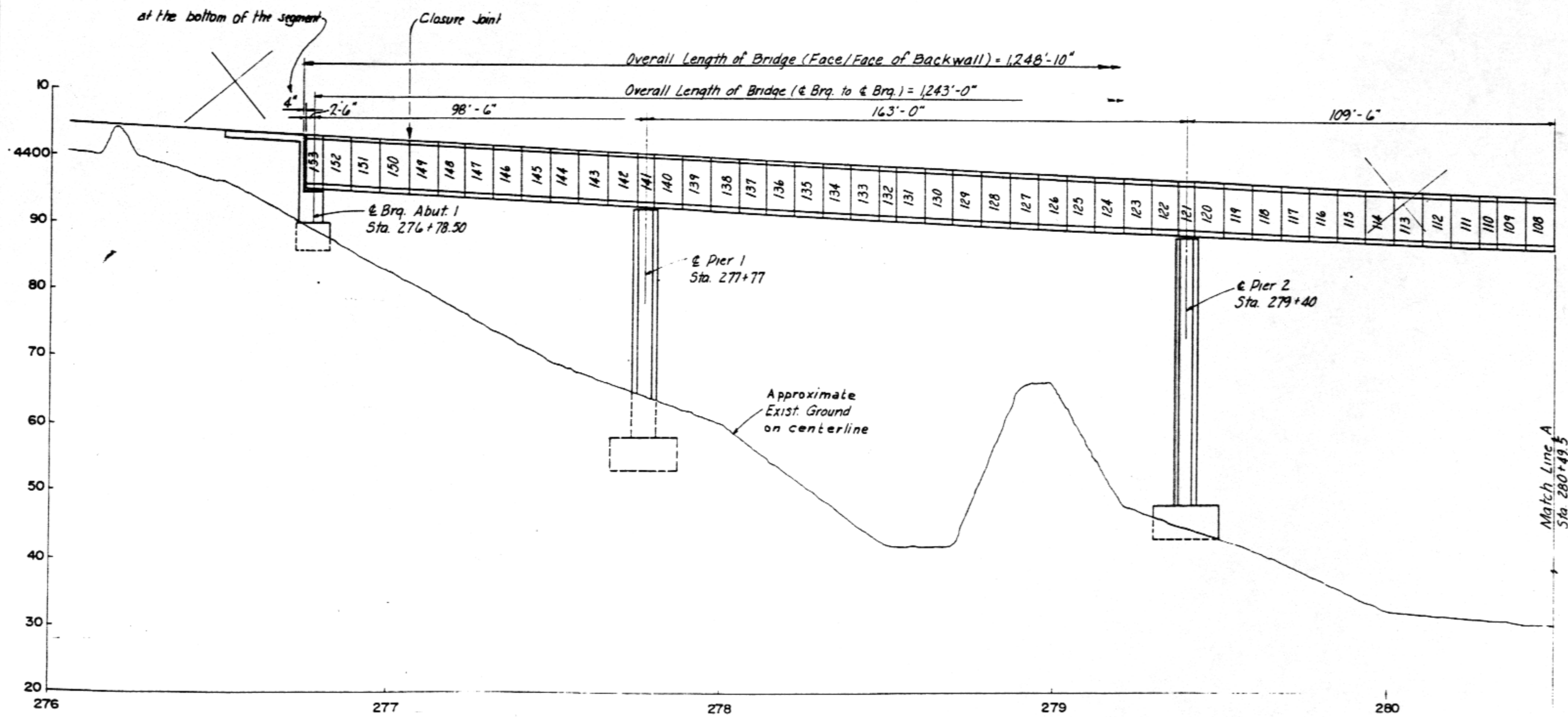


PLAN
SHEET NO. 10
PROJECT BR 2H7

PROFILE
SHEET NO. 10
PROJECT BR 2H7



Note: All horizontal and vertical geometry applies to the centerline of bridge at the top of the bituminous overlay (2" above finished concrete).



VERTICAL CURVE DATA

HORIZONTAL SPIRAL CURVE DATA @ BRIDGE

	CURVE No.1	CURVE No.2	CURVE No.3
Δ	65° 57' Lt.	75° 26' Rt.	58° 35' Lt.
Δc	22° 15'	34° 02'	28° 11'
Dc	23°	23°	16°
Rc	249.11'	249.11'	358.10'
Lc	96.74'	147.97'	176.15'
TB	264.02'	286.43'	293.84'
TA	256.11'	286.43'	302.20'
e	0.10'/Ft.	0.10'/Ft.	0.10'/Ft.

PLAN AND ELEVATION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

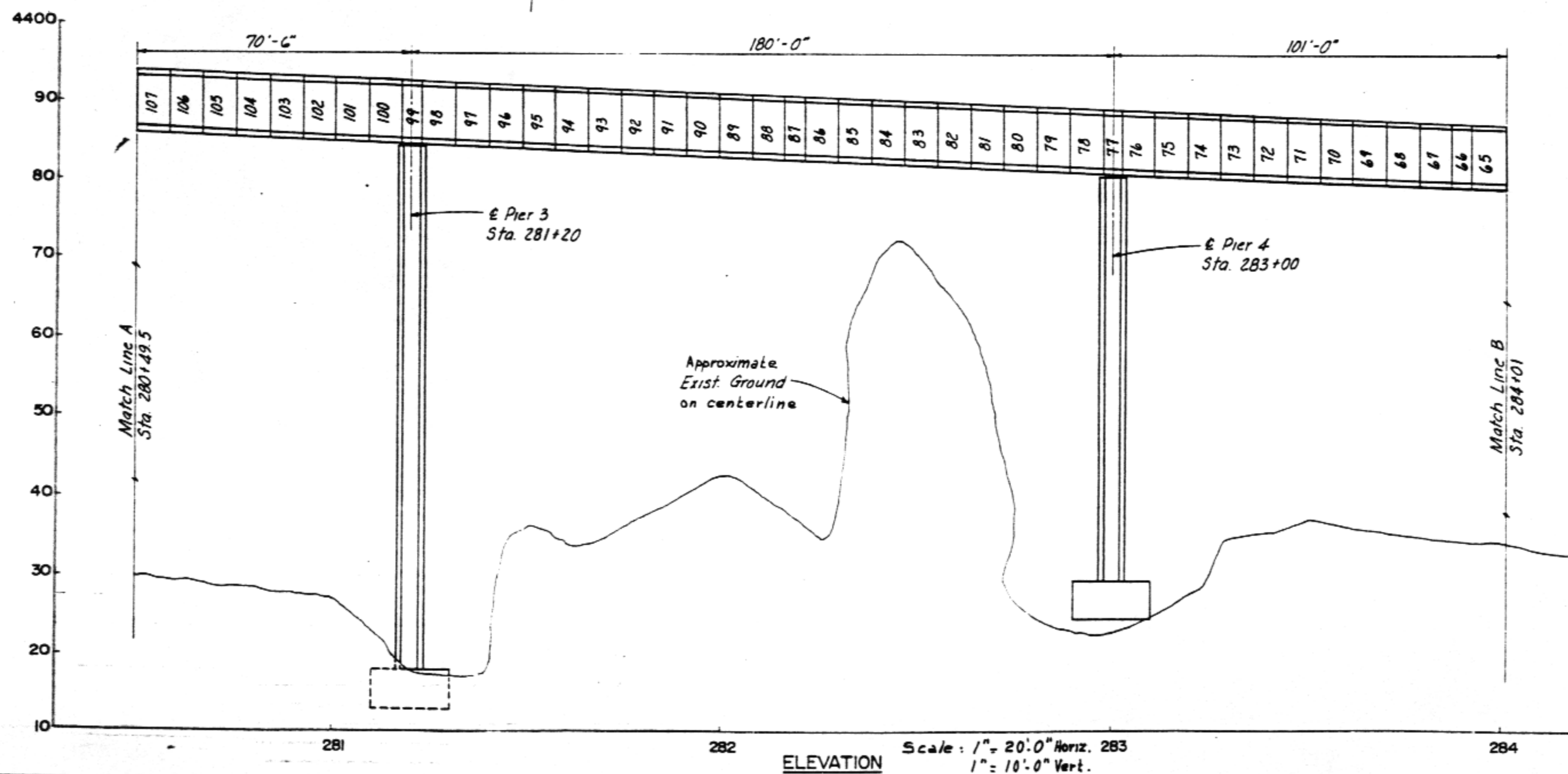
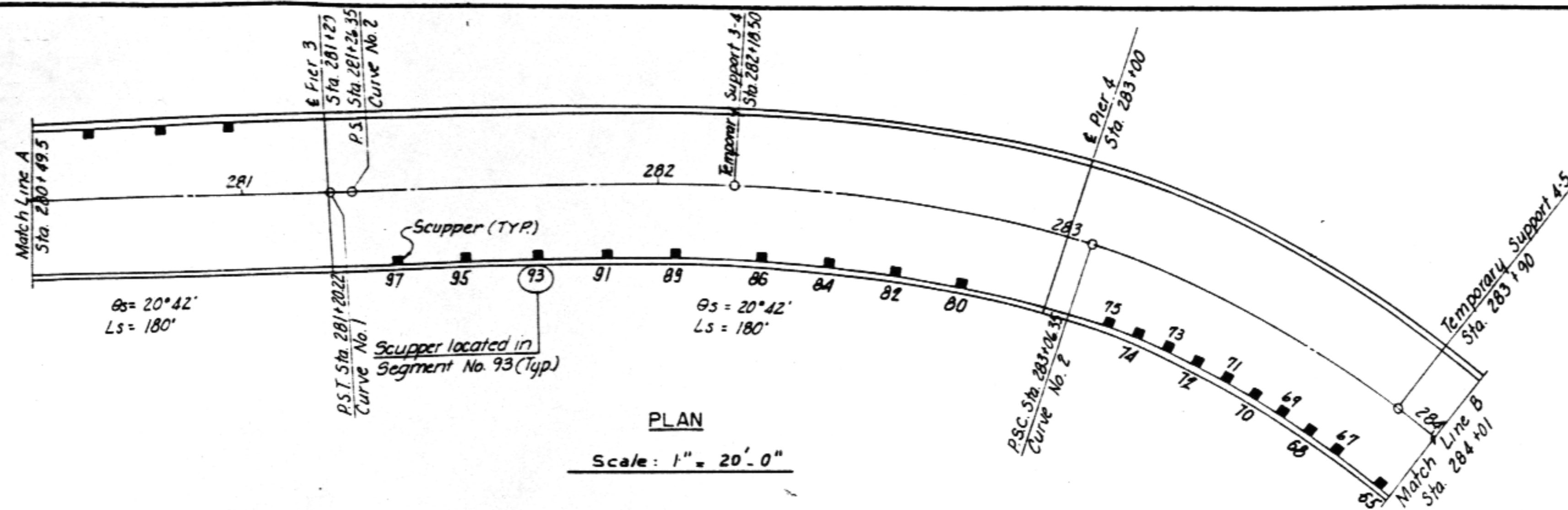
LINN COVE VIADUCT

BARRETT DAFFIN & FIGG / EUROPE ETUDES

REVISIONS		Special Consultant: JEAN M. MULLER		TALLAHASSEE, FL	
Date	Description	Author	Date	APPROVED BY	
		A.P.	2/78		
		Y.G.	7/78		
Checked by				Drawing No. 3	
Checked by				Project No.	
Submitted by					

Note: All dimensions shown on the 'Elevations' are measured horizontally, along Curve, between bearing along the vertical projection of the bridge.

REG.	STATE	PROJECT	SHEET NO.	TOTAL SHEETS
SE	N.C.	BR2H7	20	164



PLAN AND ELEVATION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

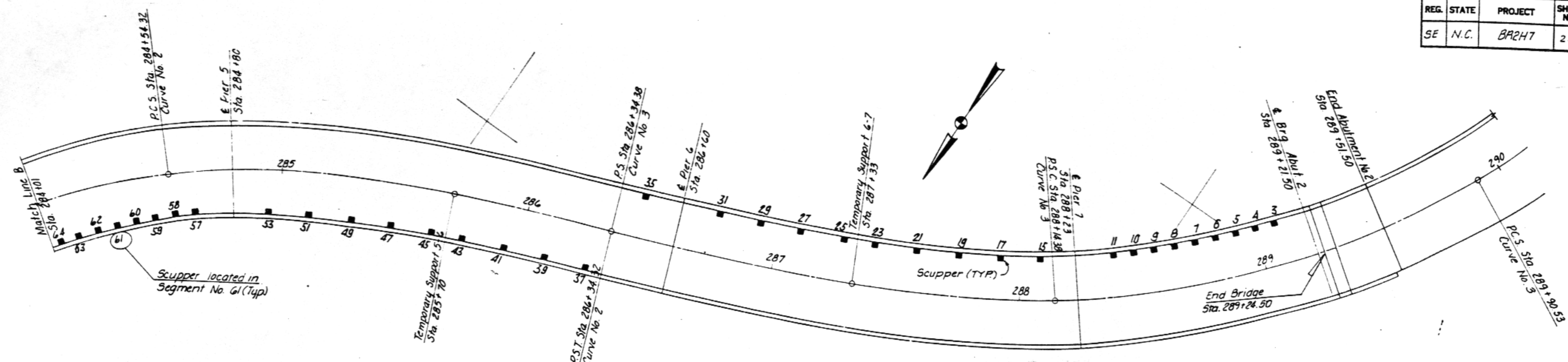
LINN COVE VIADUCT

BARRETT DAFFIN & FIGG / EUROPE ETUDES

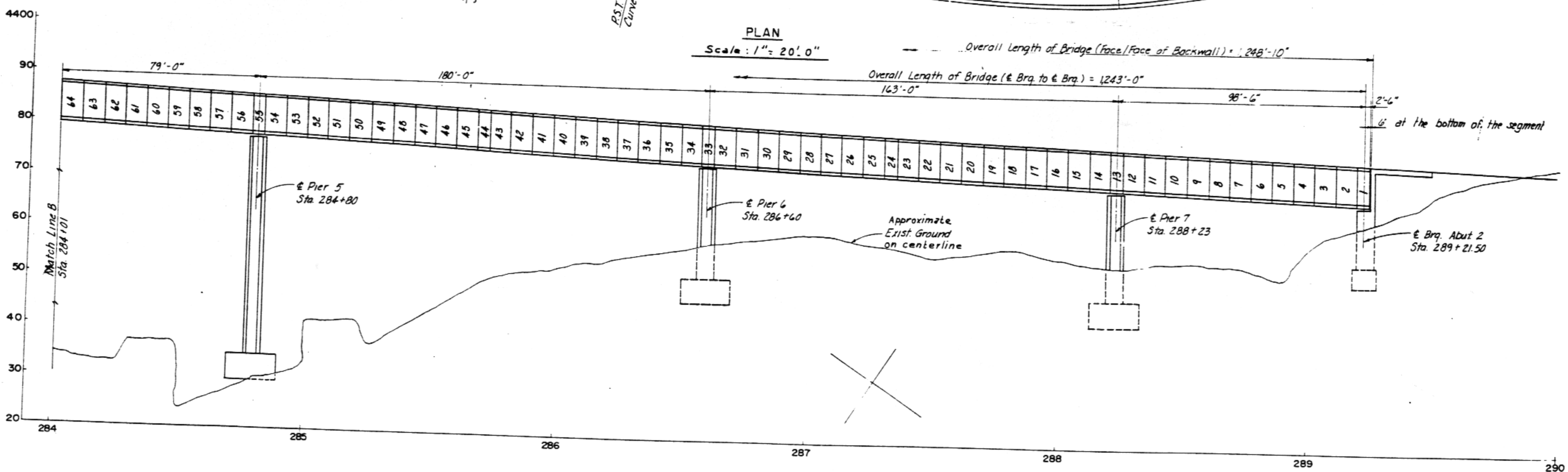
Special Consultant: JEAN M. MULLER TALLAHASSEE, FL

REVISIONS		APPROVED BY	
Date	Description	Names	Dates
		Designed by: B&B	4/78
		Checked by: Y.G.	7/78
		Checked by:	
		Subscribed by: D.C.	

Drawing No. 4 Project No.



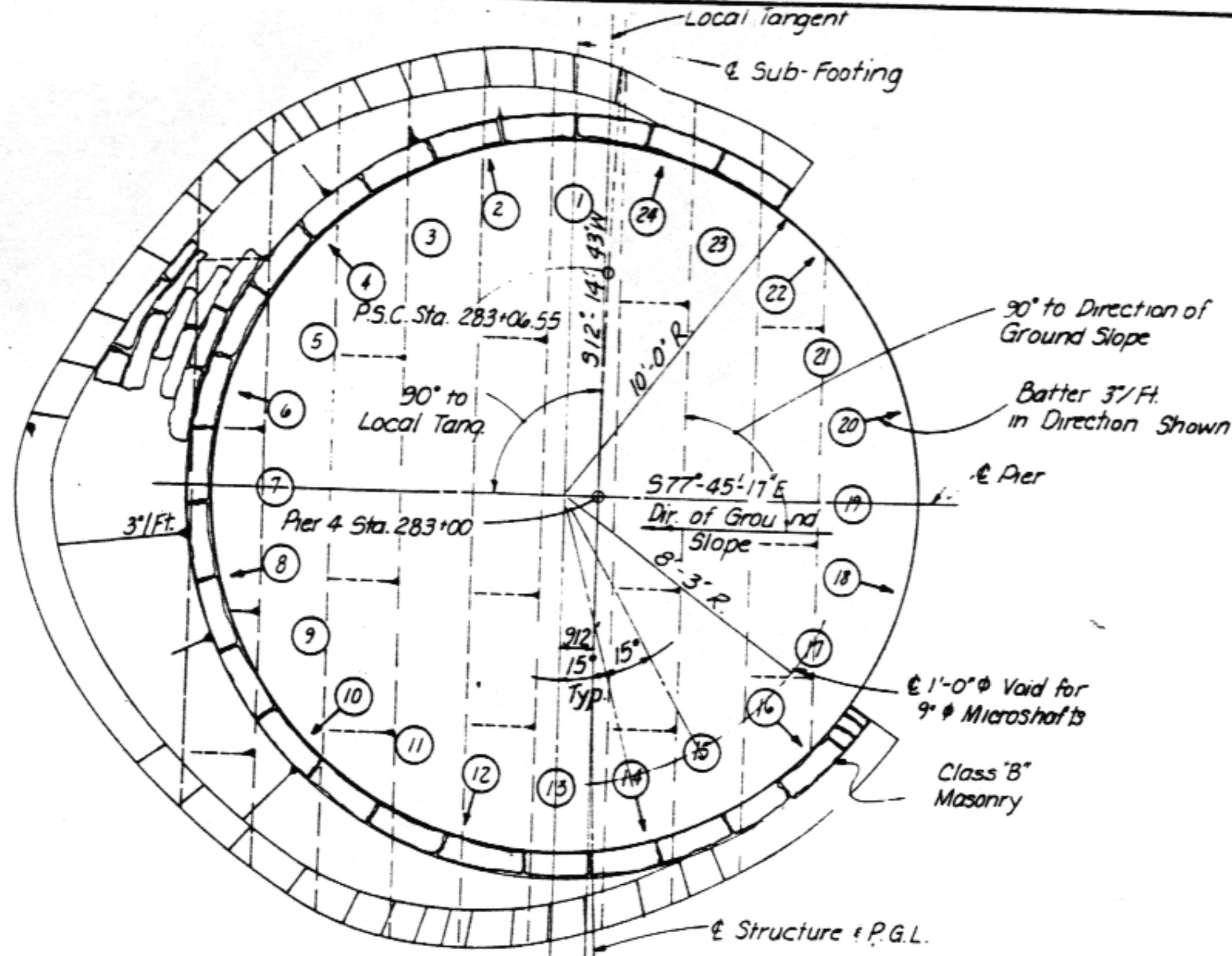
PLAN
Scale: 1" = 20'.0"



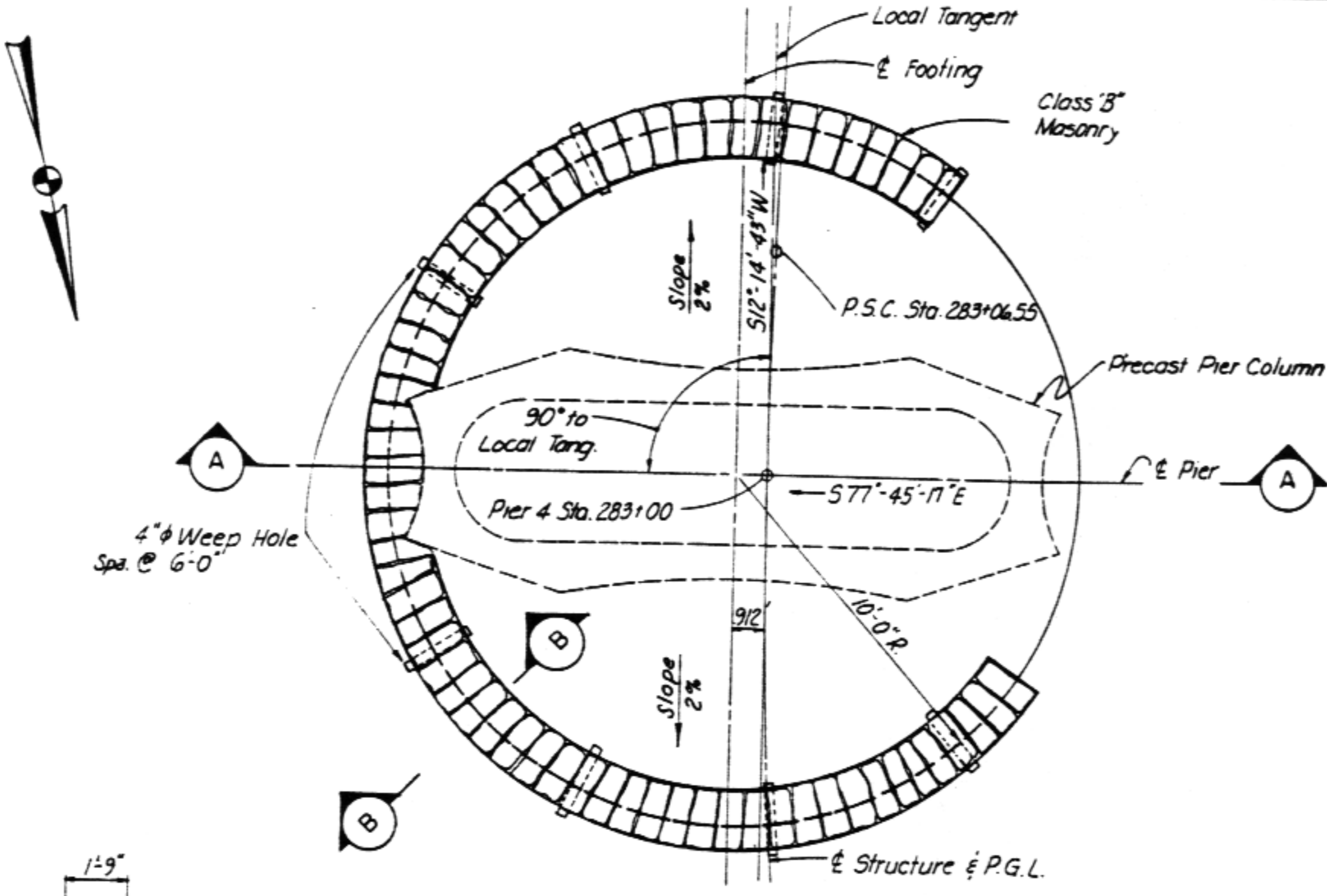
ELEVATION
Scale: 1" = 20'.0" Horiz.
1" = 10'.0" Vert.

PLAN AND ELEVATION

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION			
LINN COVE VIADUCT			
BARRETT DAFFIN & FIGG / EUROPE ETUDES TALLAHASSEE, FL			
Special Consultant: IAN M. MULLER			
REVISIONS		APPROVED BY	
Designated by	B.E.B.	Date	4/79
Checked by	Y.G.	Date	7/79
Quaranteed by			
Checked by			
Supervised by	D.D.	Drawing No.	5
		Project No.	



SUB-FOOTING PLAN



FOOTING PLAN

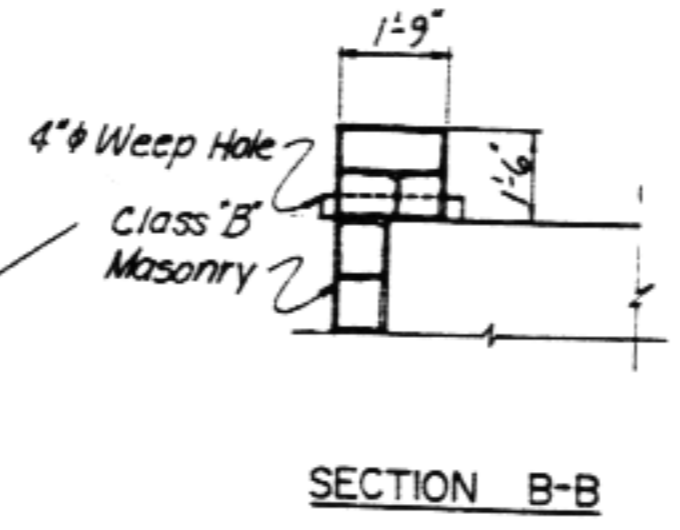
NOTES:

THE EXISTING GROUND LINES SHOWN ARE APPROXIMATE AND MAY VARY WITH ACTUAL FIELD CONDITIONS. ADDITIONALLY, ROCKS OR BOULDERS MAY PROTRUDE INTO THE CONCRETE SUB-FOOTING, PROVIDED THE MINIMUM DIMENSIONS OF SUB-FOOTING CONCRETE ARE AS SHOWN.

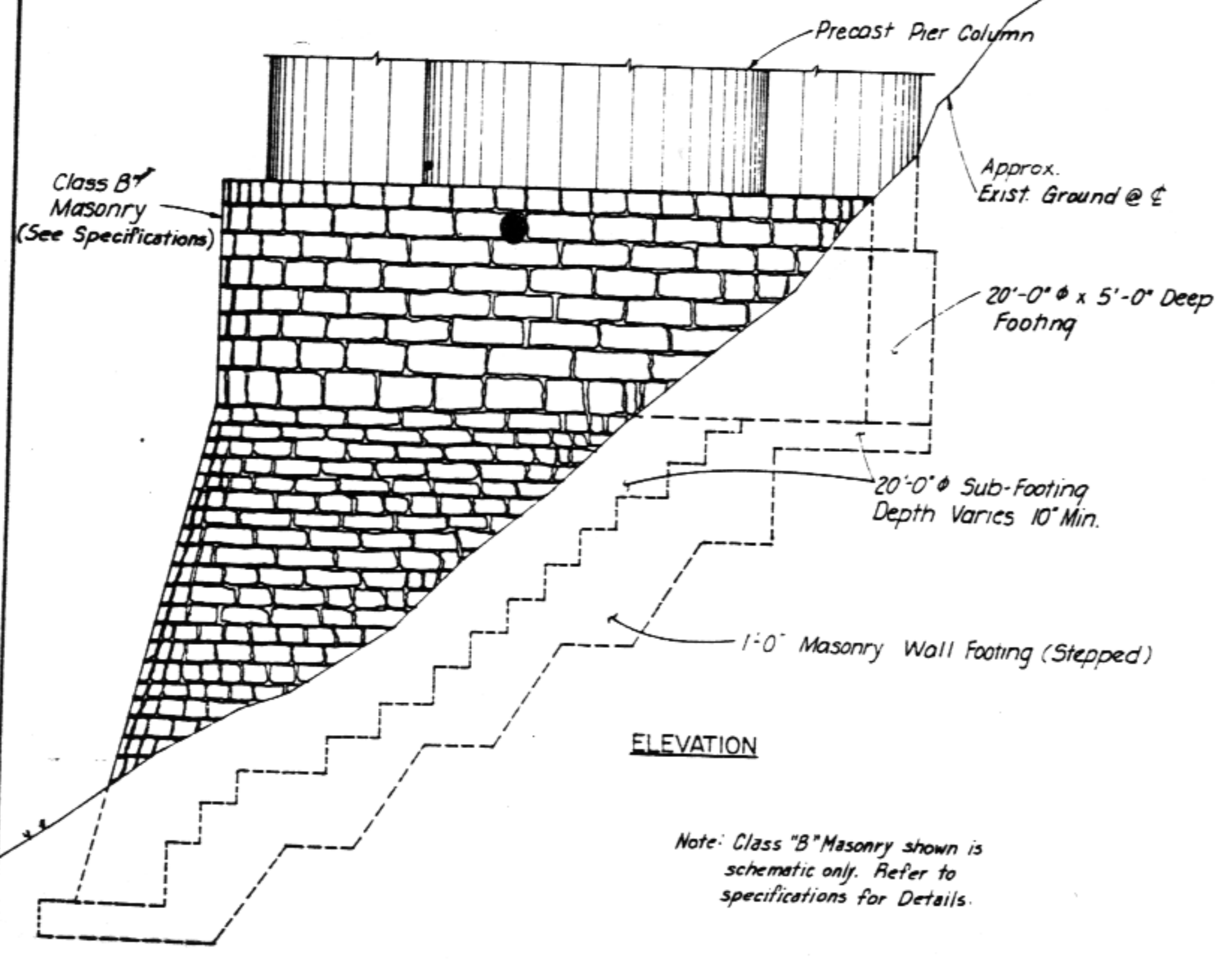
THE ESTIMATED QUANTITIES FOR THE MATERIALS SHOWN ON THIS DRAWING ARE BASED ON THE PLANS AND DETAILS AS DRAWN.

THE AMOUNT AND COST OF FORMED VOIDS REQUIRED TO CONSTRUCT THE SUB-FOOTING SHALL BE INCLUDED IN THE COST OF SUB-FOOTING CONCRETE.

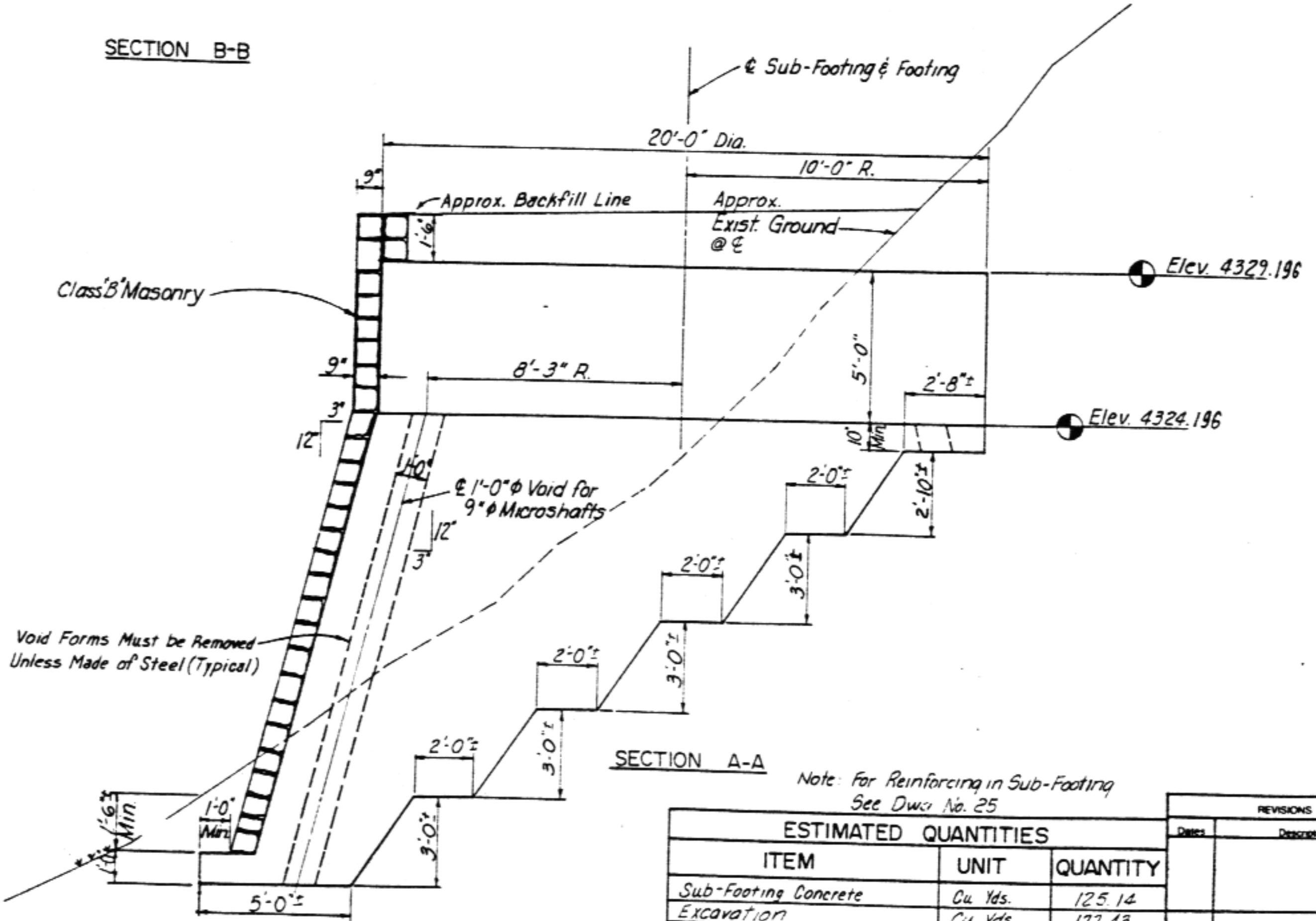
STABILIZATION MICROSHAFTS SHALL BE PLACED PRIOR TO CONSTRUCTION OF SUBFOOTING. (SEE DRAWING NO 23A)



SECTION B-B



ELEVATION



SECTION A-A

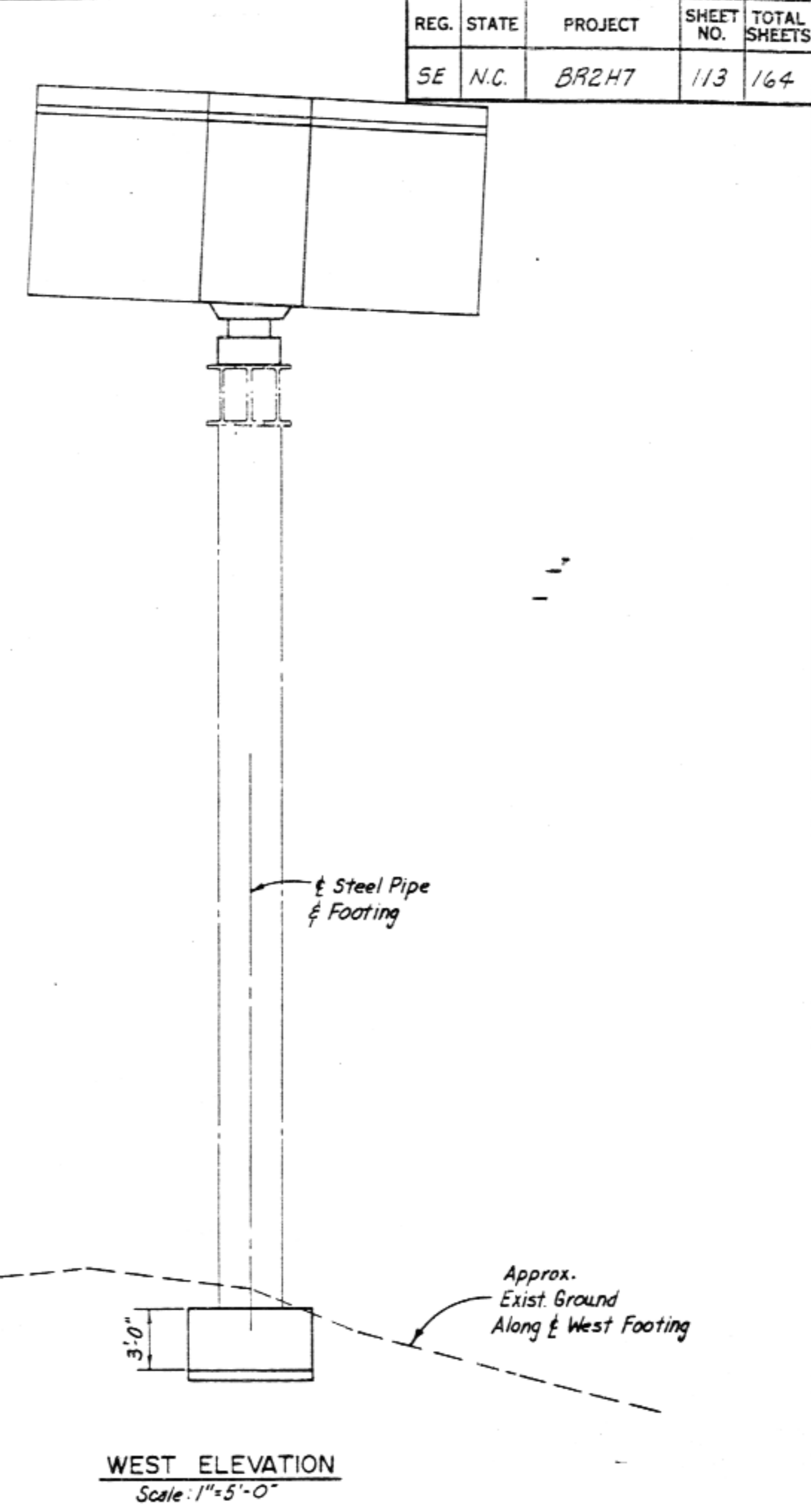
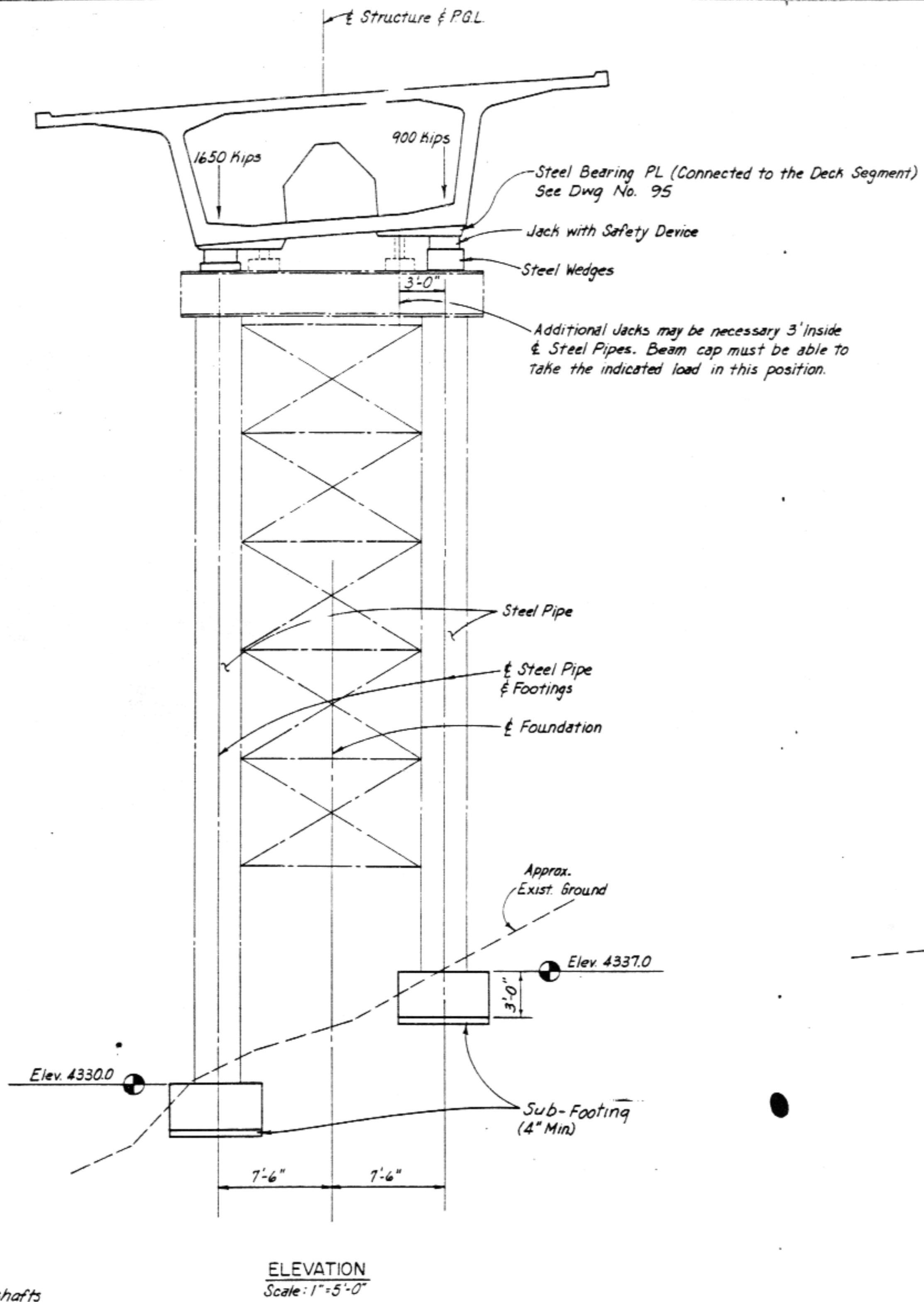
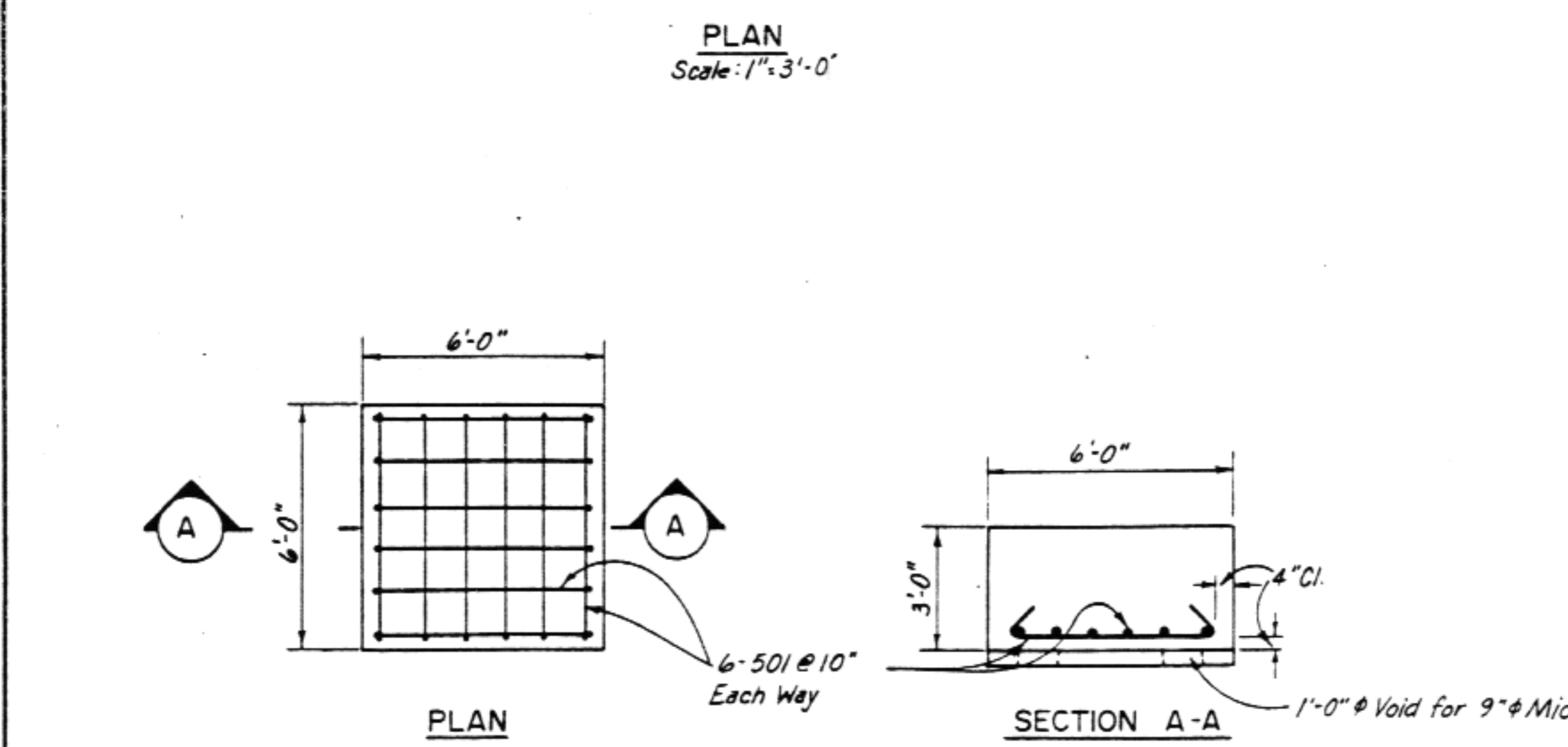
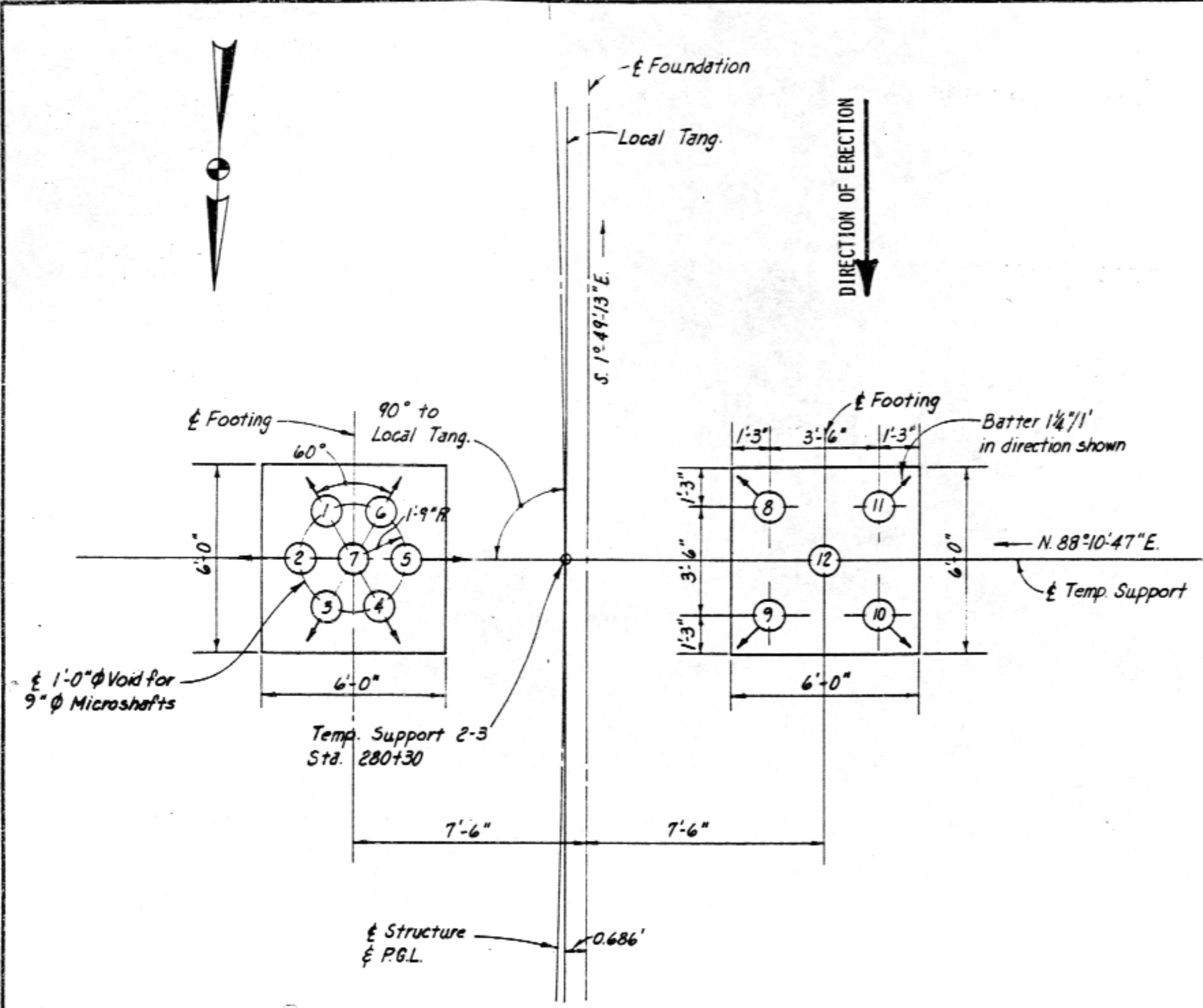
Note for Reinforcing in Sub-Footing
See Dwg. No. 25

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Sub-Footing Concrete	Cu. Yds.	125.14
Excavation	Cu. Yds.	177.43
Class B' Masonry	Cu. Yds.	24.87

PIER 4
SUB FOOTING & FOOTING LAYOUT

Scale : 1" = 3'-0"

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION			
LINN COVE VIADUCT			
BARRETT DAFFIN & FIGG / EUROPE ETUDES			
Special Consultant: IAN M. MULLER TALLAHASSEE, FL			
Designed by	B.E.B.	7.78	APPROVED BY
Checked by	Y.G.	7.78	
Quoted by			
Checked by			
Supervised by	O.D.		
Drawing No.		23	
Project No.			



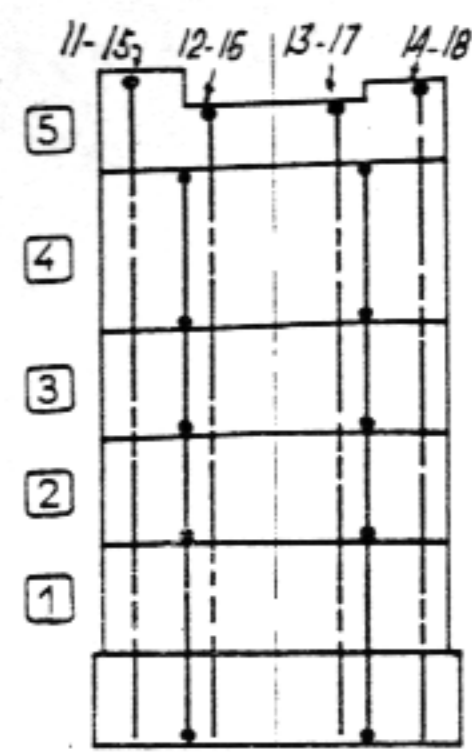
Note:
This frame is schematic only and the design of the frame is the contractor's responsibility.

TEMPORARY SUPPORT 2-3

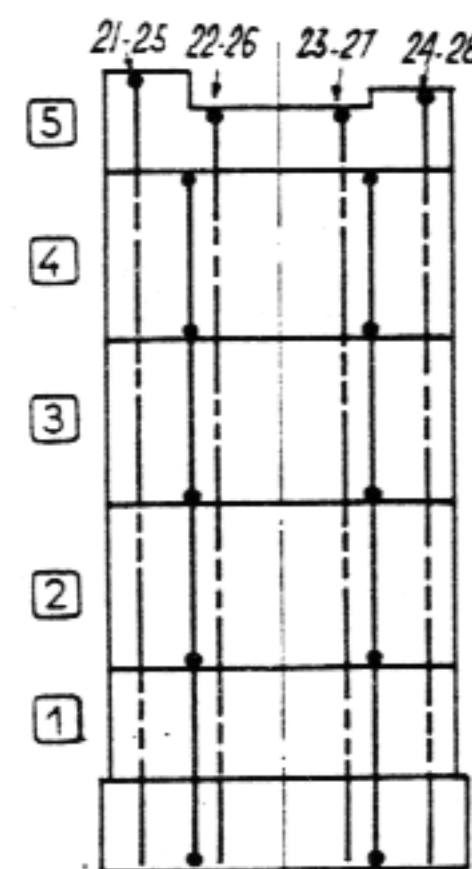
BILL OF REINFORCING				BENDING DIAGRAMS		ESTIMATED QUANTITIES		
MARK	NO.	LENGTH	BENT	STR.		ITEM	UNIT	QUANTITY
501	24	7'-4"	•			Concrete A (AE)	Cu. Yds.	8.00
						Reinforcing Steel	Lbs.	184
						Sub-Footing Concrete B	Cu. Yds.	0.77
						Excavation	Cu. Yds.	10.89

NOTE:
THE ESTIMATED QUANTITIES ARE FOR THE CONTRACTOR'S INFORMATION ONLY. THE COST OF ALL THE CONCRETE, REINFORCING STEEL AND MISCELLANEOUS ITEMS IN THE FOOTINGS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TEMPORARY SUPPORTS (SEE SPECIAL PROVISIONS).

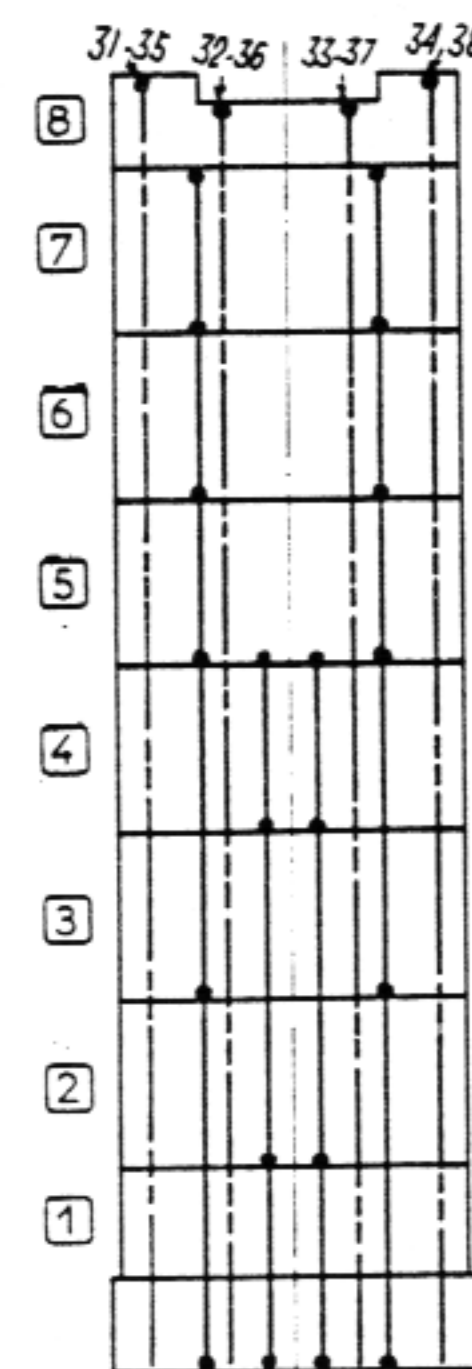
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION			
LINN COVE VIADUCT			
BARRETT DAFFIN & FIGG / EUROPE ETUDES			
Special Consultant: JEAN M. MULLER		TALLAHASSEE, FL	
Designed by	W. L.	7-78	APPROVED BY
Checked by	Y. G.	7-78	
Quantities by	BEB	7-78	
Checked by	Y. G.	7-78	
Supervised by	D.D.		
Drawing No. 96		Project No.	



P 1



P 2



P 3

PIER NO. 1 ERECTION.

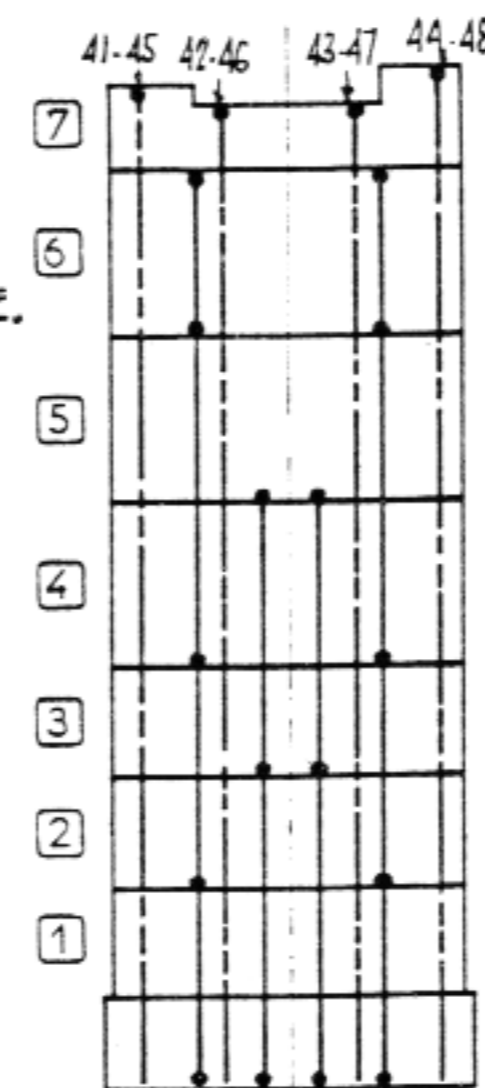
- PLACE THE REINFORCING STEEL OF THE FOOTING.
- INSTALL BOTTOM SEGMENT NO. 1 (SEE DETAIL).
- PLACE POST TENSIONING STEEL ANCHORAGES AND DUCTS, CONNECT THEM WITH THE DUCTS EMBEDDED IN THE PRECAST SEGMENT NO. 1.
- POUR THE CONCRETE OF THE FOOTING, EPOXY INJECT JOINT BETWEEN PRECAST AND POURED IN PLACE CONCRETE.
- SEGMENT NO. 2 MAY BE INSTALLED AFTER THE CONCRETE OF THE FOOTING AND THE EPOXY HAVE REACHED A 2500 PSI COMPRESSIVE STRENGTH.
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 1
- ASSEMBLE SEGMENT NO. 3 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 2
- ASSEMBLE SEGMENT NO. 4 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 3
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO. 5
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (12E17)(3E16)(1E18)(4E15) IN THE SEQUENCE NOTED
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.

PIER NO. 2 ERECTION.

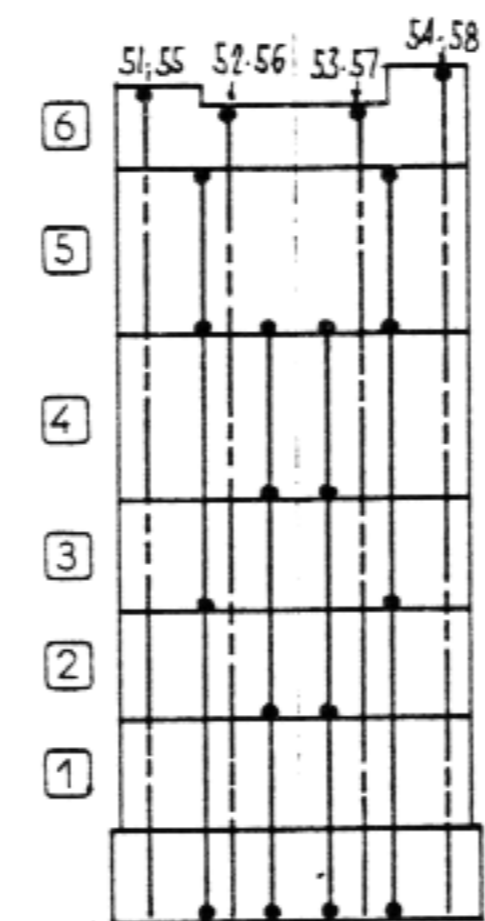
- THRU 5: AS PIER NO. 1 ERECTION
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 1
- ASSEMBLE SEGMENT NO. 3 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 2
- ASSEMBLE SEGMENT NO. 4 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 3
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO. 5
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (22E27)(23E26)(21E28)(24E25)
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.

PIER NO. 3 ERECTION.

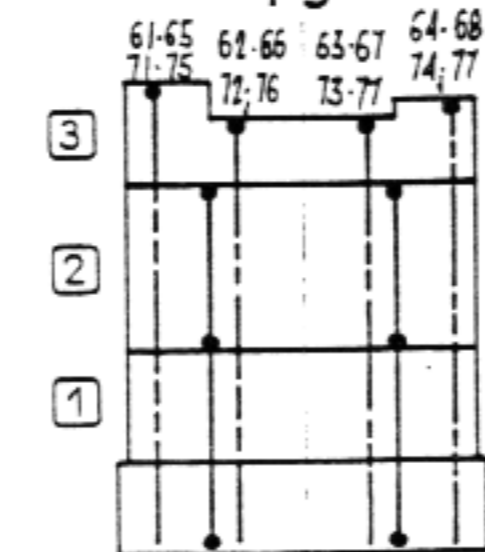
- THRU 5: AS PIER NO. 1 ERECTION
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS A
- ASSEMBLE SEGMENT NO. 3 BY STRESSING BARS B COUPLED WITH BARS B OF SEGMENT NO. 1
- ASSEMBLE SEGMENT NO. 4 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 2 AND BARS B COUPLED WITH BARS B OF SEGMENT NO. 3
- ASSEMBLE SEGMENT NO. 5 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 4
- ASSEMBLE SEGMENT NO. 6 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 5
- ASSEMBLE SEGMENT NO. 7 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 6
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO. 8
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (32E37)(33E36)(31E38)(34E35)
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.



P 4



P 5



P 6
P 7

PIER NO. 4 ERECTION.

- THRU 5: AS PIER NO. 1 ERECTION
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS B COUPLED WITH BARS A OF SEGMENT NO. 1
- ASSEMBLE SEGMENT NO. 3 BY STRESSING BARS A COUPLED WITH BARS B OF SEGMENT NO. 2
- ASSEMBLE SEGMENT NO. 4 BY STRESSING BARS B COUPLED WITH BARS B OF SEGMENT NO. 2
- ASSEMBLE SEGMENT NO. 5 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 3
- ASSEMBLE SEGMENT NO. 6 BY STRESSING BARS B COUPLED WITH BARS B OF SEGMENT NO. 4
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO. 7
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (42E47)(43E46)(41E48)(44E45)
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.

PIER NO. 5 ERECTION.

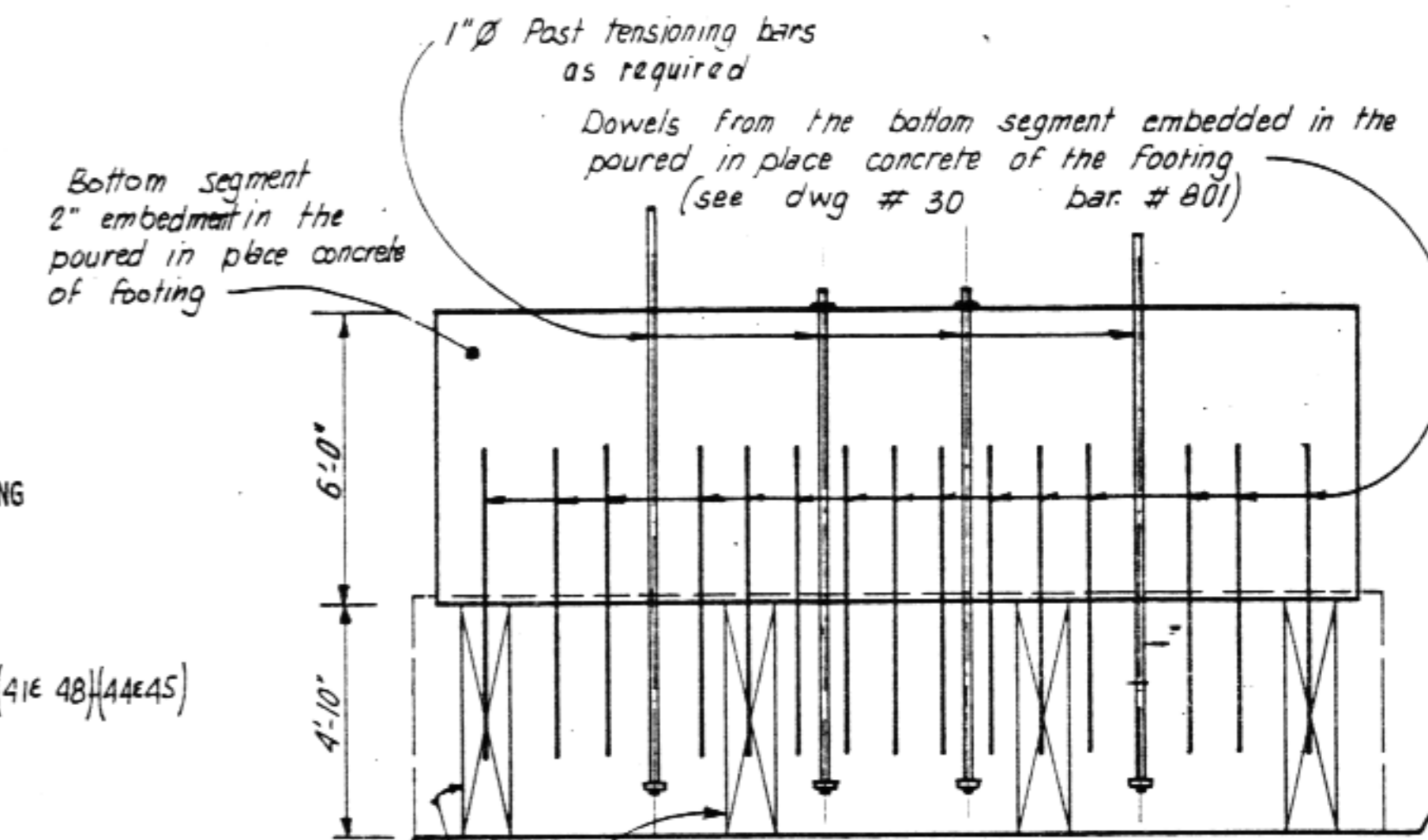
- THRU 5: AS PIER NO. 1 ERECTION
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS A
- ASSEMBLE SEGMENT NO. 3 BY STRESSING BARS B COUPLED WITH BARS B OF SEGMENT NO. 1
- ASSEMBLE SEGMENT NO. 4 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 2 AND BARS B COUPLED WITH BARS B OF SEGMENT NO. 3
- ASSEMBLE SEGMENT NO. 5 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 4
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO. 6
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (52E57)(53E56)(51E58)(54E55)
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.

PIER NO. 6-7 ERECTION.

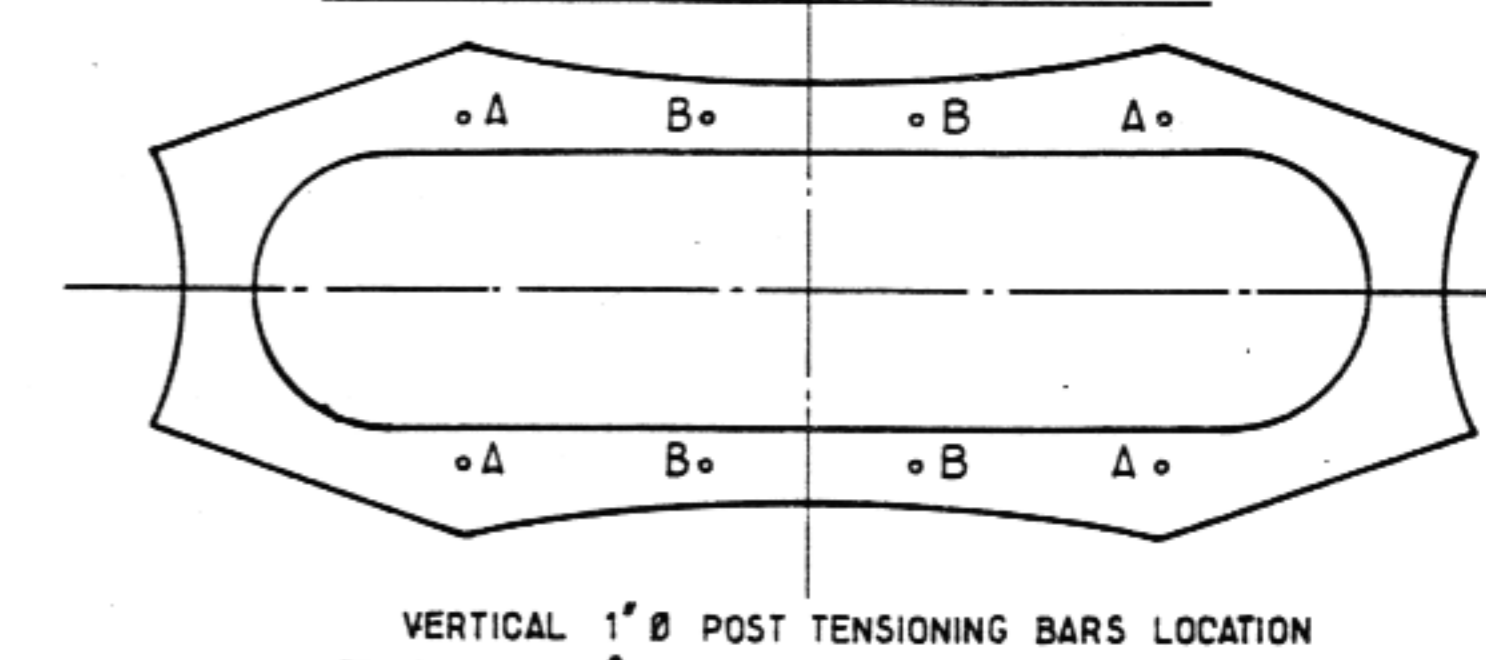
- THRU 5: AS PIER NO. 1 ERECTION
- ASSEMBLE SEGMENT NO. 2 BY STRESSING BARS A COUPLED WITH BARS A OF SEGMENT NO. 1
- SEAL AND GROUT ALL THE VERTICAL POST TENSIONING BARS.
- ASSEMBLE TOP SEGMENT NO.
- THREAD TENDONS 12 X 1/2" STRANDS.
- STRESS FROM THE TOP TENDONS NO. (62E67)(63E66)(61E68)(64E65) PIER 6
- STRESS FROM THE TOP TENDONS NO. (72E77)(73E76)(71E78)(74E75) PIER 7
- SEAL AND GROUT TENDONS 12 X 1/2" STRANDS.

TENDONS 12 X 1/2" STRANDS : JACKING FORCE : 372 KIPS
 ASSUMED ANCHOR SET (DRAW IN) = 0.38"
 1"Ø BARS : JACKING FORCE : 90 KIPS

NOTE: The temporary post tensioning shall not be measured and paid for directly; it will be considered a subsidiary obligation of the contract



BOTTOM SEGMENT INSTALLATION DETAIL



VERTICAL 1" Ø POST TENSIONING BARS LOCATION

CONSTRUCTION NOTES
PIERS 1 THRU 7

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

LINN COVE VIADUCT

BARRETT DAFFIN & FIGG / EUROPE ETUDES

Special Consultant: JEAN M. MULLER TALLAHASSEE, FL

REVISIONS		APPROVED BY	
Dates	Descriptions	Names	Dates
		Designed by R.M.	7.12.78
		Checked by Y.G.	7.27.78
		Quantities by	
		Checked by	
		Supervised by D.D.	

Drawing No. 102
Project No.