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SOUTH CAROLINA STATE HIGHWAY DEPARTMENT COLUMBIA

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

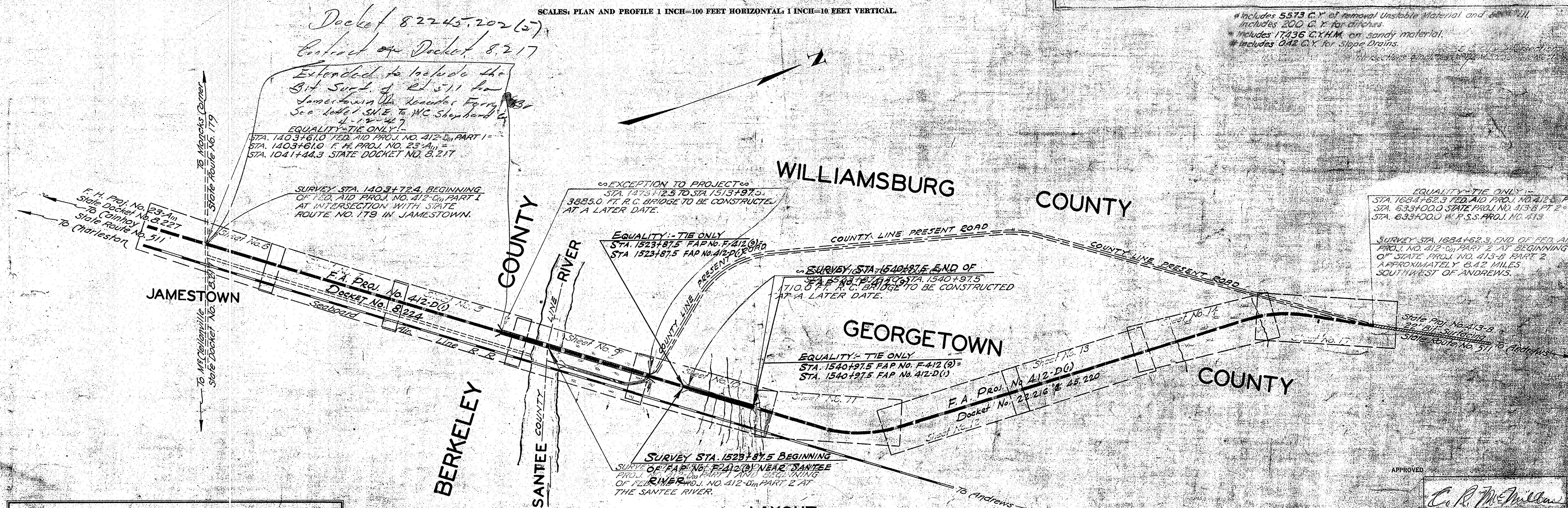
FEDERAL AID PROJ. NO. F-412 (9)
DOCKET NO. 8 2245.202
STATE PROJ. NO. 412 (9)
BERKELEY, GEORGETOWN, WILLIAMSBURG CO'S.

APPROACH TO SANTEE RIVER

SCALE: PLAN AND PROFILE 1 INCH=100 FEET HORIZONTAL; 1 INCH=10 FEET VERTICAL.

SUMMARY OF ESTIMATED QUANTITIES									
STATION	SHEET NO.	ITEM	CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	STRUCT. EXCAV. (CU. YDS.)	PILES (LINEAR FEET)	RIP RAP		
			CLASS "A"	CLASS "B"		TREATED	UNTREATED	TONS	
Clearing & Grubbing on Barrow and Material Pits						10 Acres			
1475-1540		Common Excavation end of bridge	1.26			156,235	250		
Overhaul		TOTALS	1.26			156,235	250		
Prop. (Trade Salvaged and Relined)						285			
3-5-A		Endwalls for Pipe Culverts	2.08						
1586+00		4'x4'x10' R.C. Box Culvert	35.18	3,141	70				
1645+00		4'x4'x10' R.C. Box Culvert	71.67	2,487	25			360	750
1540+957		Fill Slopes end of bridge				47.5	180		375
		TOTALS (Docket No. 22,216)	31,425	1,04	2,967	47.5	180		375
		TOTALS (Docket No. 45,220)	31,425	1,04	2,967	47.5	180		375

* Includes 5573 C.Y. of removal unstable material and 200 C.Y. for ditches.
* Includes 17,436 C.Y.H.M. on sandy material.
* Includes 0.42 C.Y. for slope drains.



CONVENTIONAL SIGNS

State Line	Trolley Poles
County Line	Power Poles
City or Town Limits	Telephone or Telegraph Poles
Property Line	Marsh
Fence	Trees
Retaining Wall	Brush
Existing Road	Stumps
Levee or Embankment	Buildings
Guard Rail	Bridge
Point of Intersection (P. I.)	Concrete Box Culvert
	Pipe Culvert
	Drop Inlet and Culvert
	Hub on Center Line

LEGEND

PROPOSED PROJECT	
OTHER ROADS	

LAYOUT

Scale: 1 inch = 1200 feet

Net Length of Roadway	1.30	32308	Miles
Net Length of Bridges	0.00	00000	Miles
Net Length of Project	1.30	32308	Miles
Length of Exceptions	0.00	00000	Miles
Gross Length of Project	1.30	32308	Miles

Note: All workmanship and material on this project to conform with South Carolina State Highway Department Standard Specifications for Highway Construction dated March 15th, 1939, as approved by the Administration Federal Works Agency.

APPROVED
C. R. McMillan
STATE HIGHWAY ENGINEER
7-12-46

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER
FEDERAL WORKS AGENCY

INDEX OF SHEETS

SHEET No. 1	TITLE PAGE
" " 2	TYPICAL CROSS SECTIONS OF IMPROVEMENT
" " 3	Intersection Standard

SOUTH CAROLINA
STATE HIGHWAY DEPARTMENT
COLUMBIA

**PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY**

DOCKET N° 82245.202 (6)

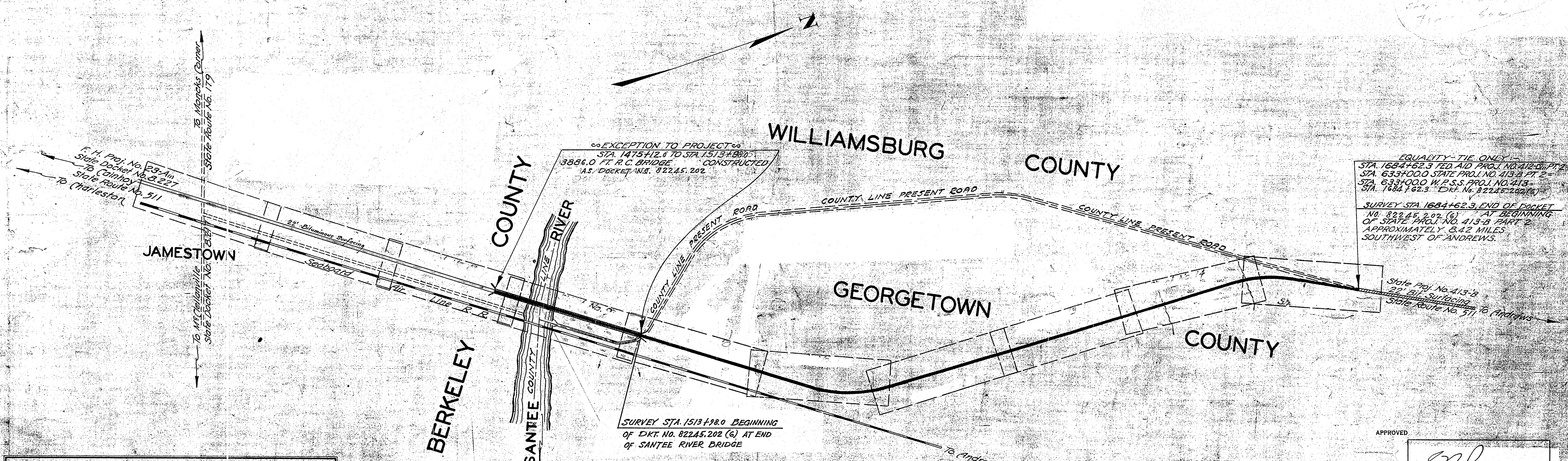
STATE ROUTE NO. 511
BERKELEY-GEORGETOWN-WILLIAMSBURG CO'S
APPROACH AT THE SANTEE RIVER

SCALE: PLAN AND PROFILE 1 INCH=100 FEET HORIZONTAL; 1 INCH=10 FEET VERTICAL

FED. ROAD DIST. NO.	STATE	COUNTY	ROUTE NO.	SHEET NO.	TOTAL SHEETS
31	S. C.	BERKELEY-GEORGETOWN-WILLIAMSBURG	82245.202	511	3

SUMMARY OF ESTIMATED QUANTITIES

Clearing and Grubbing of Borrow and Material Pits	2	Acres
Common Excavation	5,000	C.Y.
Overhaul	101,387	C.Y.H.M.
Selected Material for Shoulders	3891	C.Y.
Earth Type Base Course (Pit Material)	12,614	C.Y.
Scarifying, Mixing, Remixing, Shaping & Reshaping	45,409	M.S.Y.
Add'l. " " " " " "	15,000	"
Bituminous Surfacing (Inverted Penetration with Seal)	43,513	S.Y.



CONVENTIONAL SIGNS:

State Line	Trolley Poles
County Line	Power Poles
City or Town Limits	Telephone or Telegraph Poles
Property Line	Marsh
Fence	Trees
Retaining Wall	Brush
Existing Road	Stumps
and R.O.W. Lines of	Buildings
Proposed Road	Bridge
Railroad	Concrete Box C. Invert
Levee or Embankment	Pipe Culvert
Guard Rail	Drop Inlet and Culvert
Point of Intersection (P.I.)	Hub on Center Line

LEGEND

PROPOSED PROJECT
OTHER ROADS

LAYOUT

Scale: 1 inch = 1200 feet

Net Length of Roadway	3.231	Miles
Net Length of Bridges	—	Miles
Net Length of Project	3.231	Miles
Length of Exceptions	—	Miles
Gross Length of Project	3.231	Miles

Equalized in Stationing

EQUALITY-TIE ONLY

STA. 1684+62.3 FED. AID PROJ. NO. 413-B PART 2

STA. 633+00.0 STATE PROJ. NO. 413-B PART 2

STA. 633+00.0 W. P.S.S. PROJ. NO. 413-B

STA. 1684+62.3 Dkt. No. 82245.202 (6)

SURVEY STA. 1684+62.3 END OF DOCKET NO. 82245.202 (6) AT BEGINNING OF STATE PROJ. NO. 413-B PART 2 APPROXIMATELY 8.42 MILES SOUTHWEST OF ANDREWS.

APPROVED

S. M. Pearson
State Highway Engr.
Date 4/20/48

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

Note: All workmanship and material on this project to conform with South Carolina State Highway Department Standard Specifications for Highway Construction dated March 15th, 1939, as approved by the Administration of Works Agency.

SOUTH CAROLINA HIGHWAY DEPARTMENT
COLUMBIA, S. C.

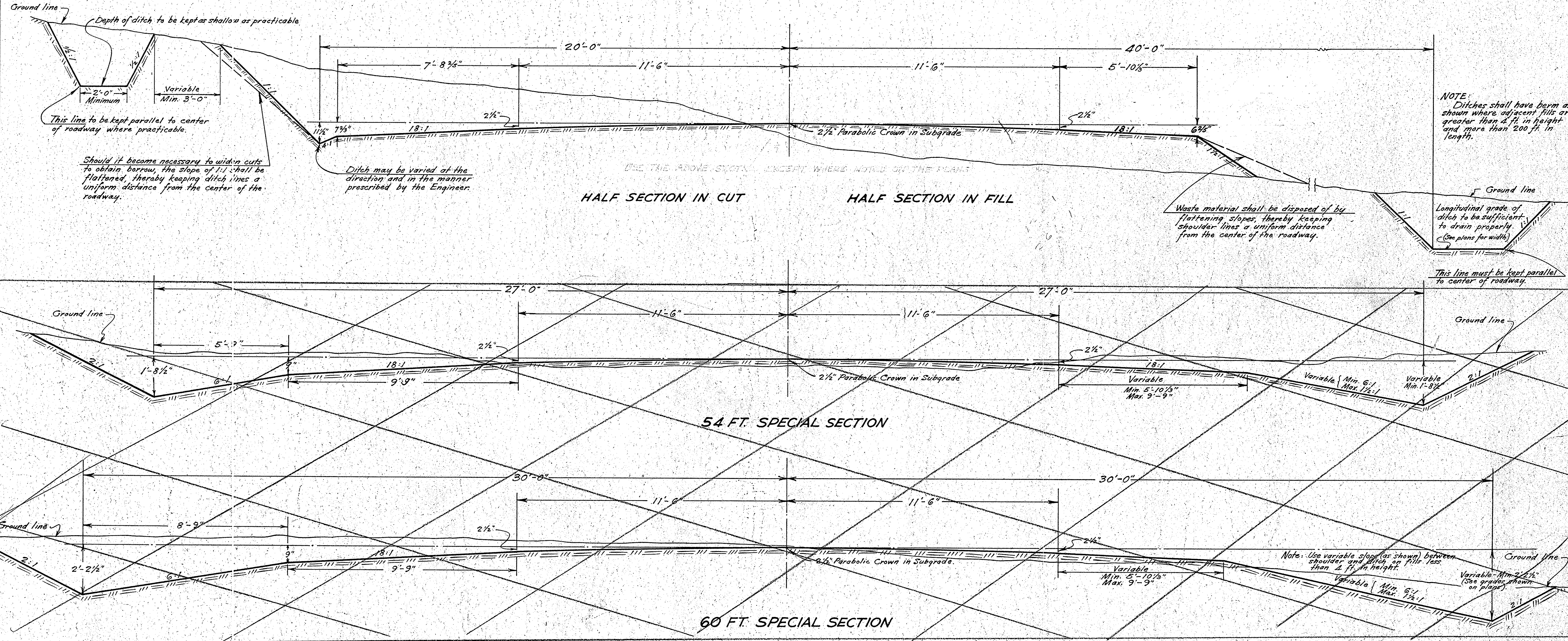
Fed. Road Div. No.	State	County	Fed. Aid Proj. No.	Rt. No.	Sheet No.	Total Sheets
2	S. C.	BERKELEY GEORGETOWN WILLIAMSBURG	FA 12-91	511	2	21

Docket No. 8 2215 202

TYPICAL SECTIONS
FOR
GRADING

SCALE: 1" = 2'-0"

NOTE:
Excavation of Intercepting Ditches should be done in advance of excavation of adjoining roadway cuts. Material excavated from these ditches shall be used on roadway embankments.



Drawn by Carl W. Metz - 6-20-38
Checked by J. D. McRae - 6-21-38

APPROVED

C. L. McMillan

STATE HIGHWAY ENGINEER

3-27-41

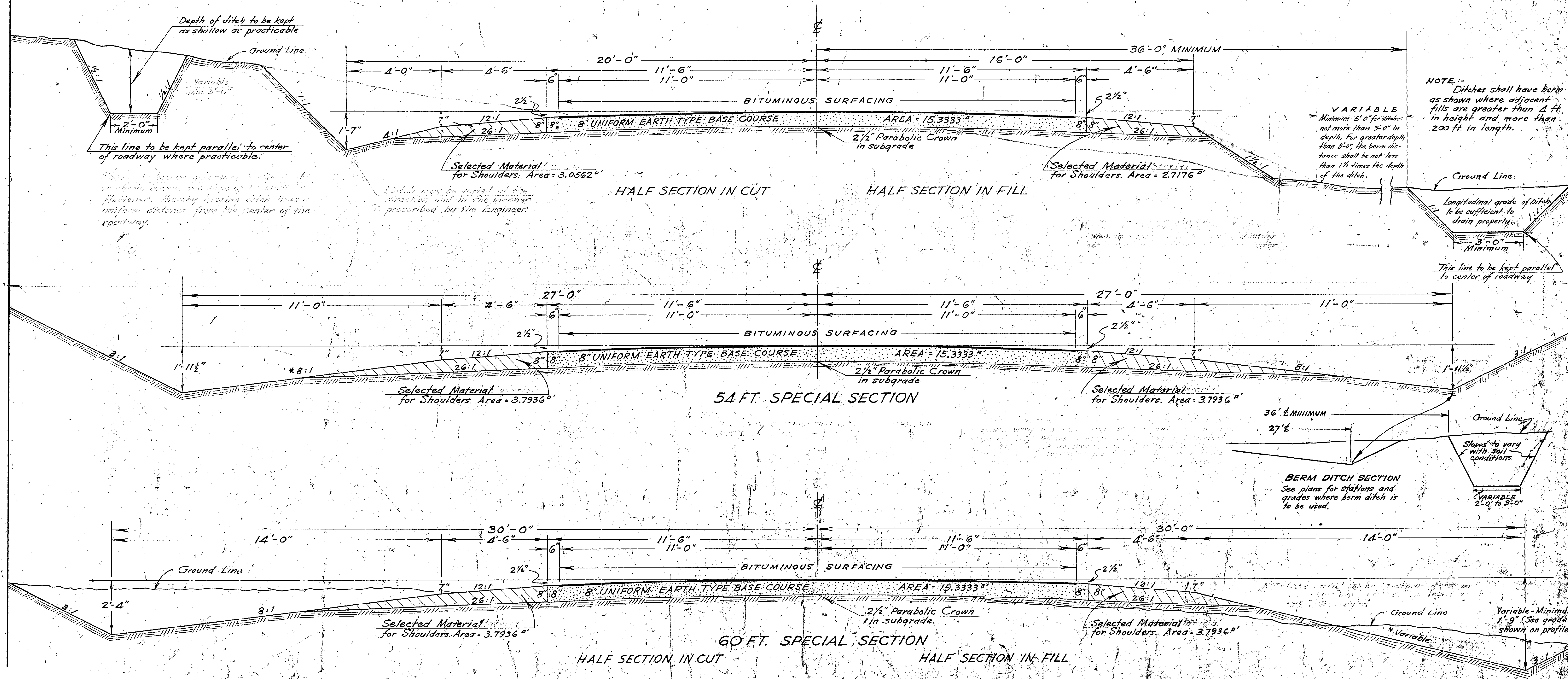
DATE

DRAWING NO.

G-1

SCALE: 1 IN = 2 FT.

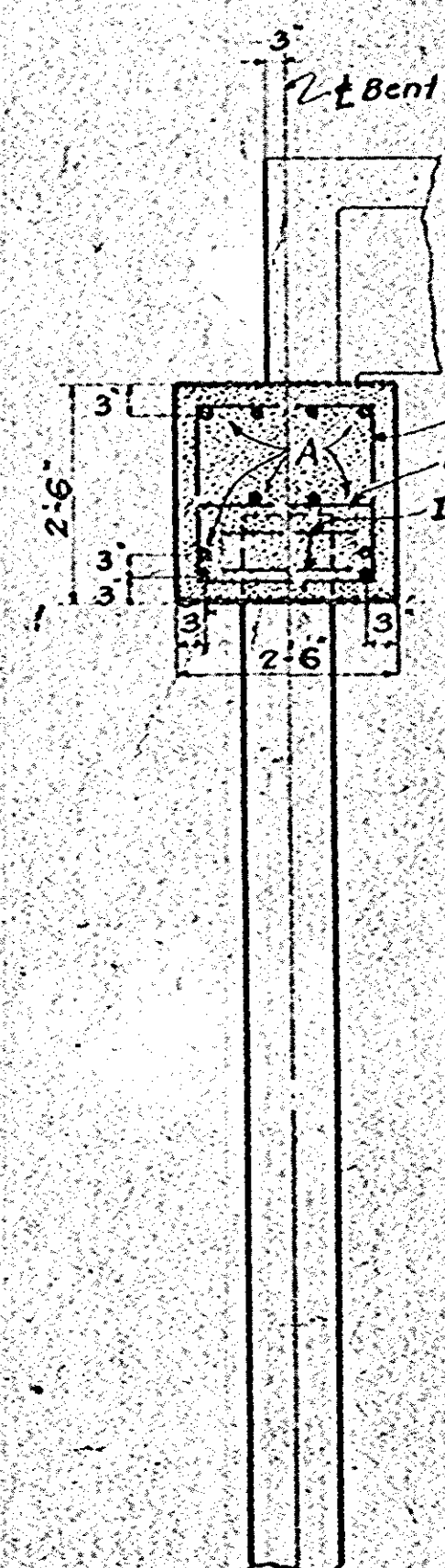
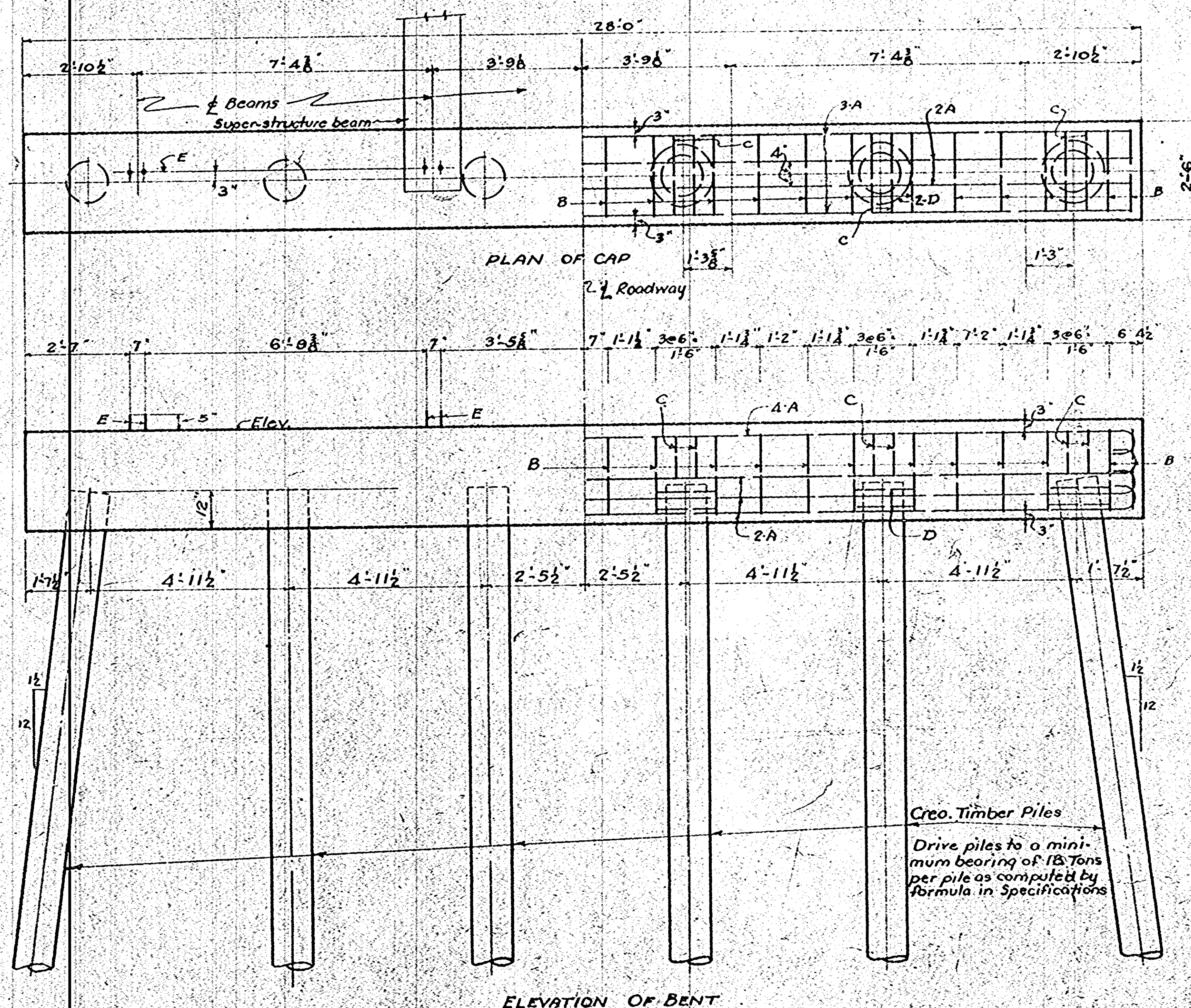
NOTE:-
Ditches shall have berm
as shown where adjacent
fills are greater than 4 ft.
in height and more than
200 ft. in length.



Drawn by T. J. Hendrix 12-15-37
Traced by Carl W. Motz 12-17-37
Checked by L. A. Hendricks 12-18-37

APPROVED *O. Williamson* DATE *1-20-38*
 COUNTY HIGHWAY ENGINEER

B. S. DRAWING
NO. 41



BAR	NO	SIZE	LENGTH	D
A	10	1 1/4	29'-6"	B
B	24	1/2	9'-1"	B
C	12	1/2	7'-8"	B
D	12	1/4	6'-2"	B
E	8	1/4	0'-10"	S

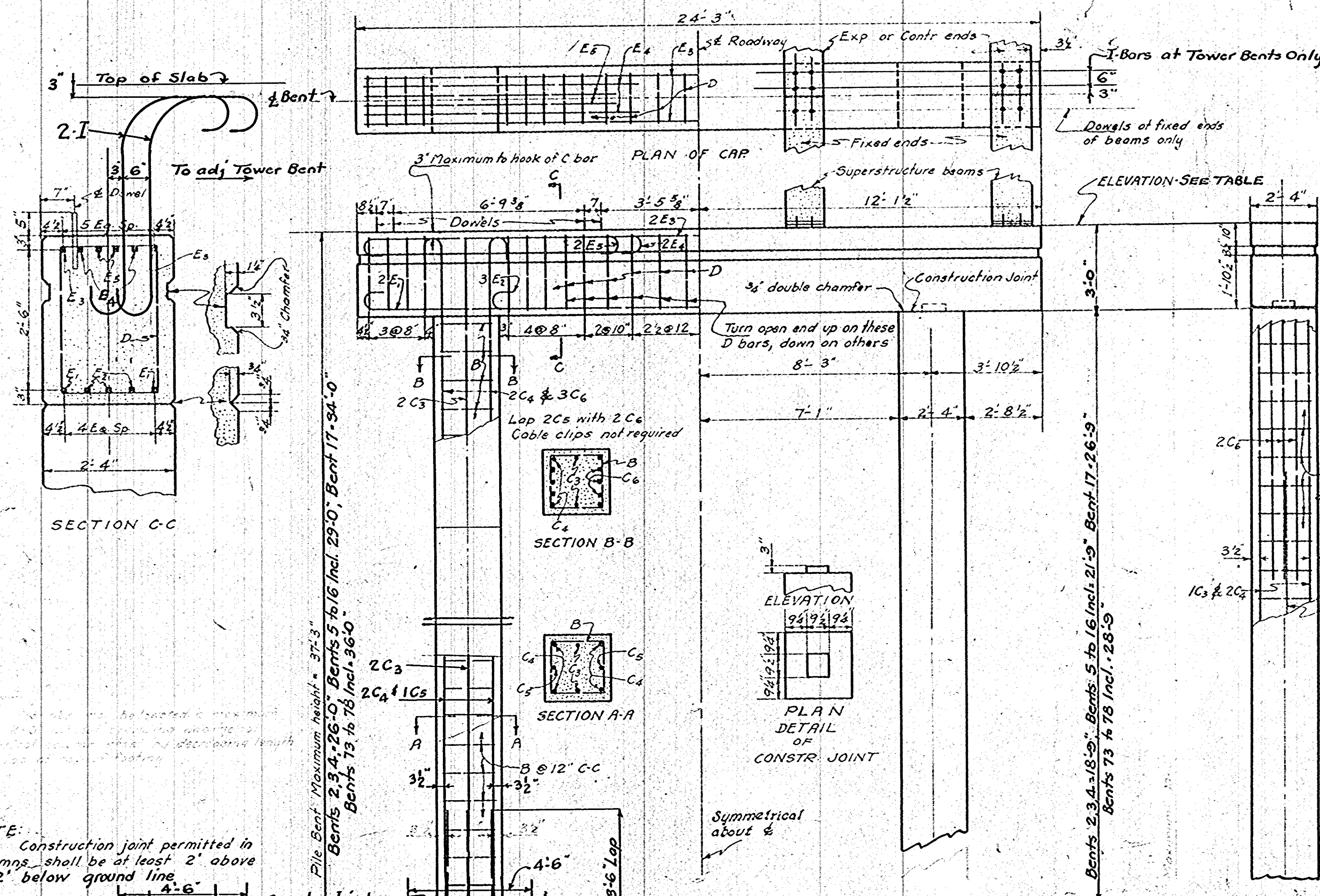
CLASS "A" CONC.	631 C.Y.
REINF. STEEL	1039 LBS

BENTS 1 & 79

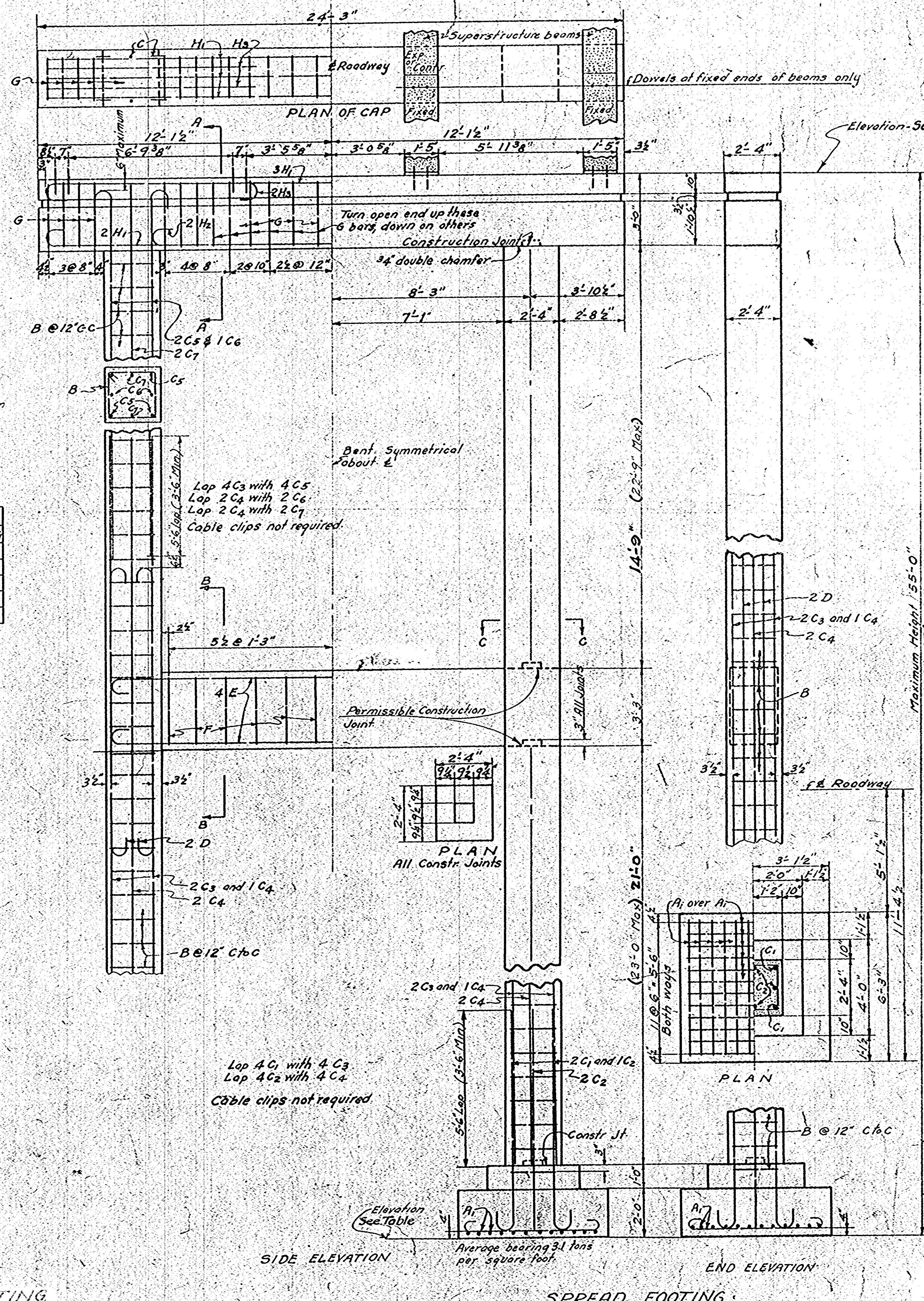
THIS SHEET TO ACCOMPANY C-26-AO-1949
ALTERNATE "A"
 S.C. STATE HIGHWAY DEPARTMENT
 COLUMBIA, S.C.
END BENT 1 - 40 FT. SPAN
 FOR BRIDGE OVER
 SANTEE RIVER

S.C. DOCKET NO. 82245202 BERKELEY COUNTY
 GEORGETOWN
 WILLIAMSBURG
 ROUTE NO. 511 SCALE 1/4"=1'-0" OCT. 1949

END BENT C-26-AO-1949



H-26'-0"				REINFORCING STEEL																					
ONE BENT - PILE FOOTING				H-29'-0" FT. NO.				H-34'-0"				H-36'-0"				BENT NO		BENT NO		BENT NO		BENT NO		BENT NO	
Mark	SIZE	NO.	LENGTH	#	MARK	SIZE	NO.	LENGTH	#	NO.	LENGTH	#	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	
A1	5/8	18	8'-2"	B	A1	5/8	18	8'-2"	B	18	8'-2"	18	8'-2"	18	8'-2"										
A2	5/8	16	7'-8"	B	A2	5/8	6	7'-8"	B	6	7'-8"	6	7'-8"	6	7'-8"										
A3	5/8	12	5'-7"	B	A3	5/8	12	5'-7"	B	12	5'-7"	12	5'-7"	12	5'-7"										
B	5/8	40	8'-0"	B	B	5/8	46	8'-0"	B	56	8'-0"	60	8'-0"	60	8'-0"										
C1	1/2	8	7'-9"	B	C1	1/2	8	7'-9"	B	8	7'-9"	8	7'-9"	8	7'-9"										
C2	7/8	8	7'-9"	B	C2	7/8	8	7'-9"	B	8	7'-9"	8	7'-9"	8	7'-9"										
C3	7/8	4	21'-6"	B	C3	7/8	4	24'-6"	B	4	29'-6"	4	31'-6"	4	31'-6"										
C4	1/2	8	22'-6"	B	C4	1/2	8	25'-6"	B	8	30'-6"	8	32'-6"	8	32'-6"										
C5	7/8	4	12'-9"	B	C5	7/8	4	15'-9"	B	4	20'-9"	4	22'-9"	4	22'-9"										
C6	1/2	12	13'-6"	B	C6	1/2	12	13'-6"	B	12	13'-6"	12	13'-6"	12	13'-6"										
D	1/2	26	9'-10"	B	D	1/2	26	9'-10"	B	26	9'-10"	26	9'-10"	26	9'-10"										
E1	1/2	2	23'-9"	B	E1	1/2	2	23'-9"	B	2	23'-9"	2	23'-9"	2	23'-9"										
E2	1/2	3	16'-9"	B	E2	1/2	3	16'-9"	B	3	16'-9"	3	16'-9"	3	16'-9"										
E3	1/2	2	25'-9"	B	E3	1/2	2	25'-9"	B	2	25'-9"	2	25'-9"	2	25'-9"										
E4	1/2	4	11'-9"	B	E4	1/2	4	11'-9"	B	4	11'-9"	4	11'-9"	4	11'-9"										
E5	1/2	4	11'-0"	B	E5	1/2	4	11'-0"	B	4	11'-0"	4	11'-0"	4	11'-0"										
DOCK	1/2	8	0'-10"	B	DOCK	1/2	8	0'-10"	B	8	0'-10"	8	0'-10"	8	0'-10"										
I	1/2			B	I	1/2	16	7'-6"	B																
QUANTITIES - ONE PILE BENT				QUANTITIES - ONE SPREAD FT. BY																					
Class 'A' Conc. 25.21 CY				Class 'A' Conc. 26.42 CY																					
Reinforcing Steel 3516 Lbs.				Reinforcing Steel 3639 Lbs.																					



Note: Footings may be lowered a maximum of 4'-0" without providing additional vertical column steel, by decreasing length of lap.

ELEVATIONS		
BENT NO.	TOP CAP	BOTTOM FOOTING
18	41.909	-3.091
19	42.023	-2.977
20	42.128	-2.872
21	42.225	-2.775
22	42.312	-2.688

Designed by: D.F.D. Dec 42
 Drawn by: D.F.D. Mar 43
 Checked by: J.K. Dunbar 5-21-43
 Traced by: J.K. Dunbar 5-21-43
 Quantities by: D.F.D. Mar 43
 Checked by: J.K. Dunbar 5-21-43

REINFORCING STEEL		ONE BENT - H=45 FT.		BENT 1	BENT 2	BENT 3	BENT 4	BENT 5	BENT 6	BENT 7
Mark	Size	No.	Length	D	No.	Length	D	No.	Length	D
A1	2"	18	6'-8"	B						
B	4"	80	8'-0"	B						
C1	1"	8	9'-2"	B						
C2	1"	8	9'-2"	B						
C3	1"	8	26'-8"	S						
C4	1"	8	26'-8"	S						
C5	1"	8	21'-4"	B						
C6	1"	8	21'-4"	B						
C7	1"	8	20'-6"	S						
D	3/4"	8	13'-4"	B						
E	1/2"	8	20'-3"	B						
F	1/2"	12	10'-1"	B						
G	1/2"	26	9'-10"	B						
H1	1/2"	5	25'-9"	B						
H2	1/2"	2	16'-9"	B						
H3	1/2"	4	11'-0"	B						
Dowels	1"	8	0'-10"	S						

Note: Prefix designations with appropriate Bent no.

Mark	Size	No.	Length	D	No.	Length	D
A1	5'-8"						
A2	6'-11"						
A3	4'-5"						
D	12'-0"						
E	18'-3"						
H1	23'-9"						
H2	14'-9"						
H3	9'-0"						

BAR HOOK DETAILS

1/2" 2/3" 1/2" and smaller Add 6" per hook.
 2/3" 3/4" 1/2" and 3/4" Add 8" per hook.
 3/4" 1/2" 1/2" and larger Add 12" per hook.

QUANTITIES ONE BENT	
SPREAD FOOTING	
CLASS A CONCRETE	32.34 CY.
REINFORCING STEEL #48A-16s	

Quantities shown are for Height 45'-0"

GENERAL NOTES
 Design data: A.A.S.H.O. Specifications (1941), H15 Six live loading,
 R=20,000 PSI, f_c=10,000 PSI, n=10, V=90 PSI, U=150 PSI,
 All concrete shall be Class A.
 Exposed edges shall be chamfered 1/4" unless otherwise specified.
 All reinforcing steel shall be deformed.

Bents Nos. 18 to 22 Incl. (H=45 Ft.), Total Number = 5

BENTS 18 to 22 - INCL.
 This sheet to accompany Standard C 26-40 1943

ALTERNATE "A" & "B"
 S.C. STATE HIGHWAY DEPARTMENT
 COLUMBIA

INTERIOR BENT FOR 40' SPAN
 BRIDGE OVER
 SANTEE RIVER

DOCKET NO. 82245202 ROUTE 511
 COUNTY GEORGETOWN DATE OCT. 1944
 SCALE 3/8" = 1'-0"

BENT C 26-40 H=55' 1943

Rev. this docket by E.W.G. pld. by P.S.M. 10-44

CROSS SECTION

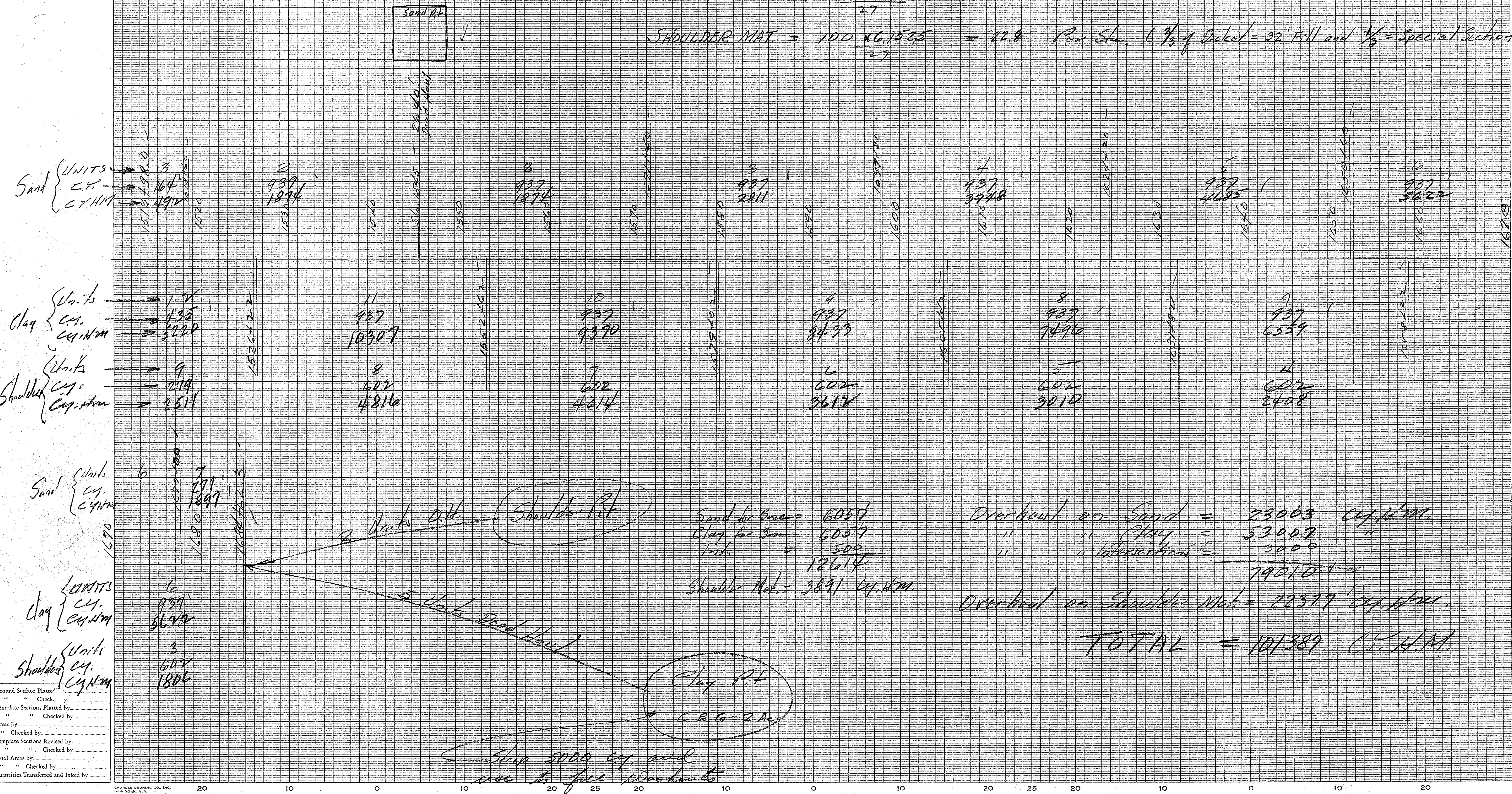
SCALE 1 INCH = 5 FEET

FED. ROAD DIST. NO.	STATE	COUNTY	FED. AID PROJ. NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
14	S. C.					

$$\text{SAND} = 100 \times \frac{333.3 \times 23 + 25\%}{27} = 355 \text{ Per Sta.}$$

$$\text{CLAY} = 100 \times \frac{333.3 \times 20 + 25\%}{27} = 355 \text{ Per Sta.}$$

$$\text{SHOULDER MAT.} = 100 \times \frac{6.1525}{27} = 22.8 \text{ Per Sta. } (1/3 \text{ of Docket} = 32' \text{ Fill and } 1/3 = \text{Special Section})$$



Ground Surface Plotted by _____
 " " Check. by _____
 Template Sections Plotted by _____
 " " Check. by _____
 Areas by _____
 " " Check. by _____
 Template Sections Revised by _____
 " " Check. by _____
 Final Areas by _____
 " " Check. by _____
 Quantities Transferred and Inked by _____