

TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

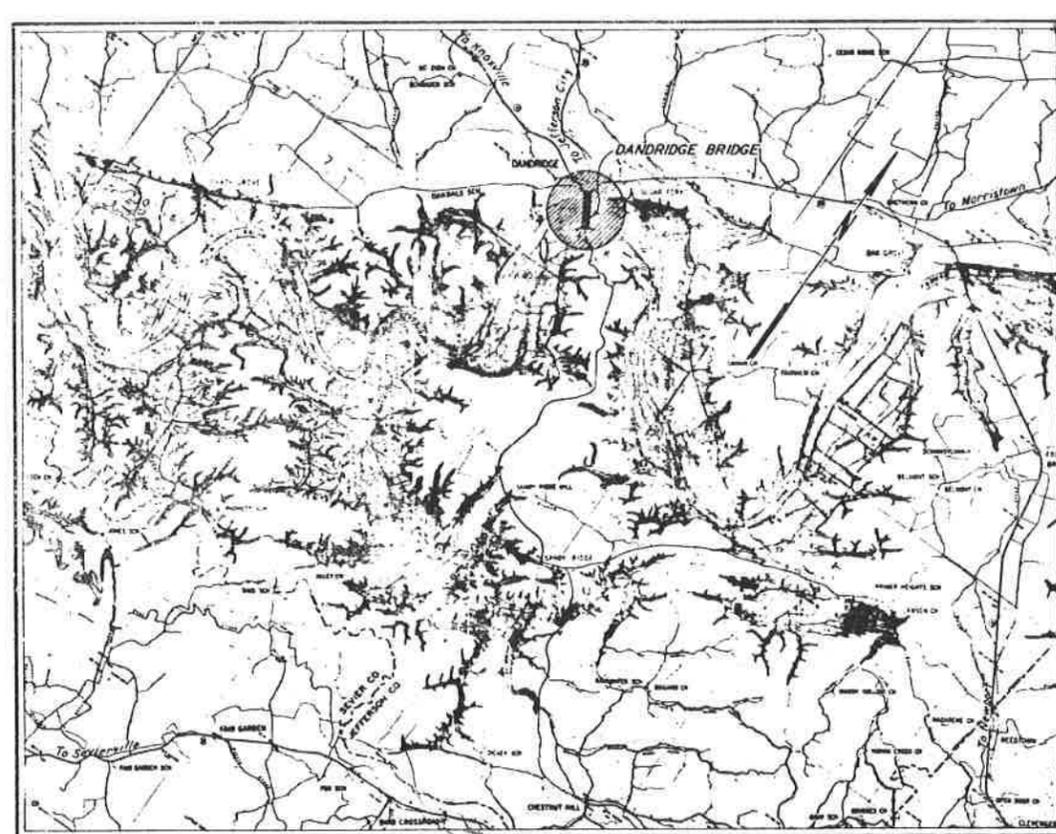
DOUGLAS RESERVOIR
CONSTRUCTION PLANS

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD RIVER
ON DANDRIDGE TO CHESTNUT HILL ROAD
PROJECT 20-4081
JEFFERSON COUNTY, TENNESSEE

INDEX OF DRAWINGS
DRAWINGS BY TENNESSEE VALLEY AUTHORITY

SUMMARY OF QUANTITIES						
ITEM NO.	129	401	418	421*	437	545
ITEM	EXCAV FOR STRS	CLASS A CONC	REINF STEEL	STRUCT STEEL	STEEL BEARING PILING	COFFER DAMS
UNIT	CU YD	CU YD	LB	LB	LIN FT	EACH
WORK DONE BY TENNESSEE VALLEY AUTHORITY						
ABUTMENT 1	---	4325	5,996	---	480	---
PIER 1	46	104.86	19,780	---	1,069	---
PIER 2	60	134.33	23,859	---	589	---
PIER 3	466	512.60	47,558	---	1	---
PIER 4	731	743.52	64,367	---	1	---
PIER 5	401	821.60	71,200	---	1	---
PIER 6	333	743.52	64,367	---	1	---
PIER 7	162	180.36	32,317	---	---	---
ABUTMENT 2	---	5224	6,060	---	399	---
SUBSTRUCTURE	2,199	3,336.28	335,504	---	2,537	4
SUPERSTRUCTURE	---	---	---	---	---	---
TOTAL	2,199	3,336.28	335,504	---	2,537	4
WORK DONE BY CONTRACTOR						
ABUTMENT 1	---	28.07	6,642	---	---	---
ABUTMENT 2	---	29.35	6,599	---	---	---
SUBSTRUCTURE	---	574.2	13,241	---	---	---
SUPERSTRUCTURE	---	691.00	163,540	2,053,656	---	---
TOTAL	---	748.42	176,781	2,053,656	---	---
TOTAL QUANTITIES						
ABUTMENT 1	---	71.32	12,638	---	480	---
PIER 1	46	104.86	19,780	---	1,069	---
PIER 2	60	134.33	23,859	---	589	---
PIER 3	466	512.60	47,558	---	1	---
PIER 4	731	743.52	64,367	---	1	---
PIER 5	401	821.60	71,200	---	1	---
PIER 6	333	743.52	64,367	---	1	---
PIER 7	162	180.36	32,317	---	---	---
ABUTMENT 2	---	81.59	12,659	---	399	---
SUBSTRUCTURE	2,199	3,393.70	348,745	---	2,537	4
SUPERSTRUCTURE	---	691.00	163,540	2,053,656	---	---
TOTAL	2,199	4,084.70	512,285	2,053,656	2,537	4

*Weight includes cast steel, cast iron, forged steel & lead plates.



LOCALITY MAP

GENERAL

4081H 400 TITLE SHEET
401 GENERAL DRAWING

SUBSTRUCTURE

4081H 402 DIAMOND CORE DRILLING
403 ABUTMENT 1
404 ABUTMENT 2
405 FOUNDATION PLAN AND PILE RECORD
406 PIER 1
407 PIER 2
408 PIER 3
409 PIERS 4 & 6
410 PIER 5
411 PIER 7
412 PIERS 3, 4, 5, & 6 REINFORCING STEEL
413 ABUTMENTS & PIERS 1, 2, & 7 REINFORCING STEEL

SUPERSTRUCTURE

4081H 431 ANCHOR BOLT PLAN
432 STRESS SHEET FOR 348'-0" CONTINUOUS GIRDER
433 DETAILS FOR 348'-0" CONTINUOUS GIRDER
434 DETAILS FOR 348'-0" CONTINUOUS GIRDER
435 STRESS SHEET FOR 888'-0" CONTINUOUS TRUSS
436 TYPICAL SECTIONS
437 TYPICAL SECTIONS
438 TRUSS AND FLOOR BEAM DETAILS AT L10
439 STRESS SHEET FOR 231'-0" CONTINUOUS GIRDER
440 DETAILS FOR 231'-0" CONTINUOUS GIRDER
441 DETAILS FOR 231'-0" CONTINUOUS GIRDER
442 SHOES FOR CONTINUOUS GIRDERS
443 SHOES FOR 888'-0" CONTINUOUS TRUSS
444 EXPANSION JOINT EJ1 & EJ2
445 EXPANSION JOINT EJ3 & EJ4
446 RAILINGS AND SCUPPERS I
447 RAILINGS AND SCUPPERS II

450 CONDUIT LAYOUT

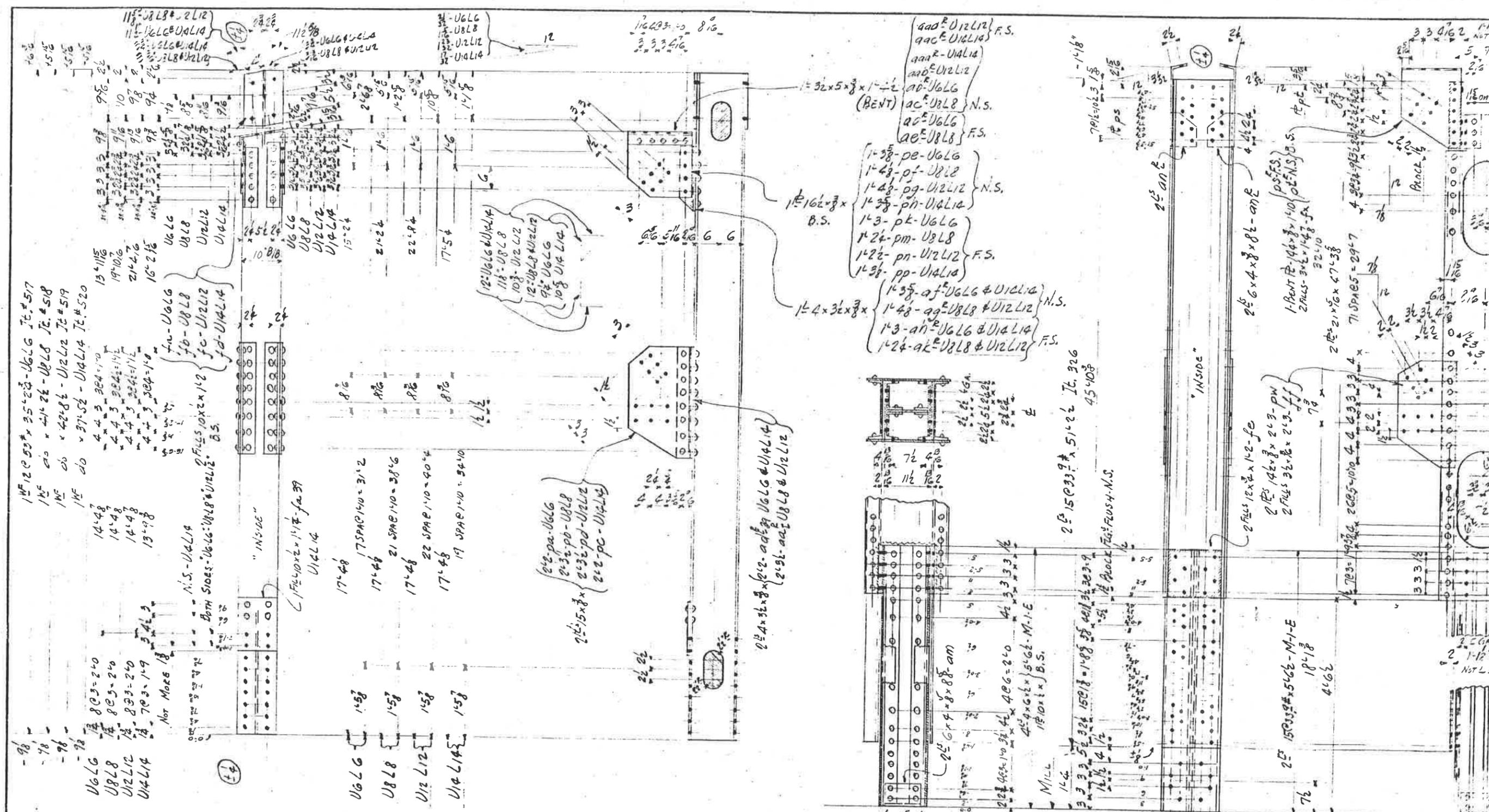
4081H 481 TYPICAL SLAB SECTIONS

DRAWINGS BY NASHVILLE BRIDGE CO.

SHOP DRAWINGS
4081H3001 TO 3048 SHOP DRAWINGS

FILE IN DRAWER 45-92-
NO. SD#833

SUBMITTED *Frank W. Webster* HEAD HIGHWAY ENGINEER DATE
RECOMMENDED *Joseph R. Hill* CHIEF DESIGN ENGINEER DATE
APPROVED *J.B. Parker* CHIEF ENGINEER DATE



1# 12'0" x 35'2 1/2" - U6L6 It. 517
 1# 10'0" x 41'2 1/2" - U8L8 It. 518
 1# 10'0" x 42'8 1/2" - U12L12 It. 519
 1# 10'0" x 37'5 1/2" - U14L14 It. 520

14'-4 1/2"
 14'-4 1/2"
 14'-4 1/2"
 13'-7 1/2"
 Not More

ONE - VERTICAL - RIGHT - M - J - U6L6	AUXE	ONE - VERTICAL - RIGHT - M - F - U6L6
ONE - " - LEFT - " - J - U6L6		ONE - " - LEFT - " - F - U6L6
ONE - " - RIGHT - " - J - U8L8	AUXE	ONE - " - RIGHT - " - F - U8L8
ONE - " - LEFT - " - J - U8L8		ONE - " - LEFT - " - F - U8L8
2 - " - RIGHT - " - E - U12L12		2 - " - RIGHT - " - E - U14L14
2 - " - LEFT - " - E - U12L12		2 - " - LEFT - " - E - U14L14



1# 32' x 5' x 1/2" (BENT)
 ac - U6L6 } N.S.
 ac - U8L8 } F.S.
 ac - U12L12 } F.S.
 ac - U14L14 } F.S.

1# 4' x 3 1/2' x 7/8"
 1# 35' - af - U6L6 & U14L14 } N.S.
 1# 43' - ag - U8L8 & U12L12 } F.S.
 1# 3' - ah - U6L6 & U14L14 } F.S.
 1# 24' - ak - U8L8 & U12L12 } F.S.

2# 15'0" x 3 1/2" x 5 1/2" It. 326
 45'408
 2# 15'0" x 3 1/2" x 5 1/2" It. 326
 45'408

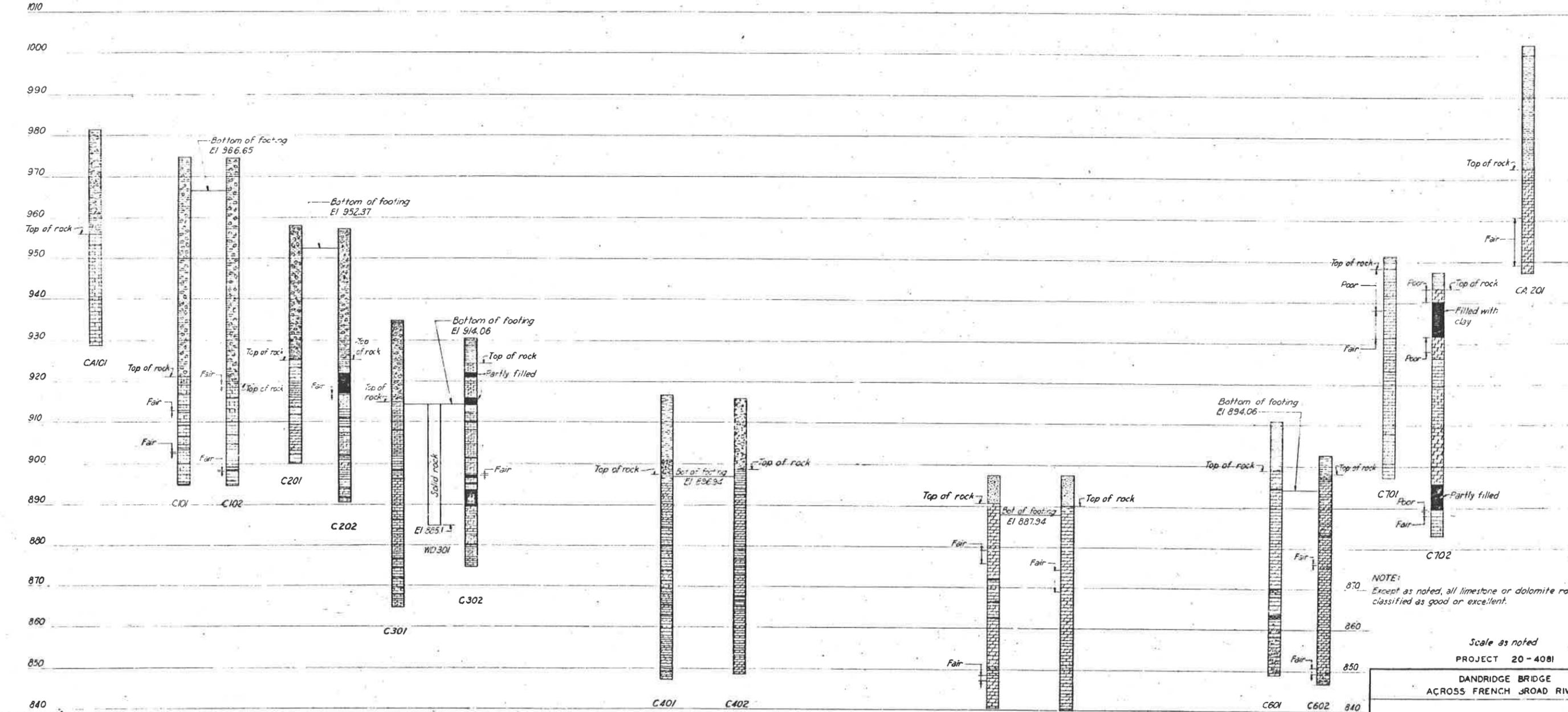
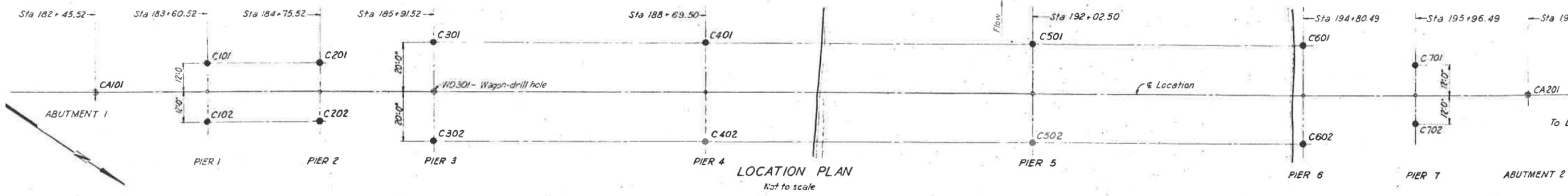
2# 15'0" x 3 1/2" x 5 1/2" M-1-E
 18'18
 4162

NASHVILLE BRIDGE CO.
 NASHVILLE, TENN.
 BESSEMER PLANT
 CONT. #4934
 S.O. #2079-B
 NOTE: ->

SEE DWG. E2 FOR GENERAL NOTES
 OPEN HOLES 1/2" RIVETS 1/2" OR NOTED.

1	DESIGNED BY	J.G.H.
2	CHECKED BY	J.G.H.
3	APPROVED BY	J.G.H.
4	DATE	10/1/51
5	PROJECT	DANDRIDGE TO CHESTNUT
6	SCALE	AS SHOWN
7	REVISIONS	

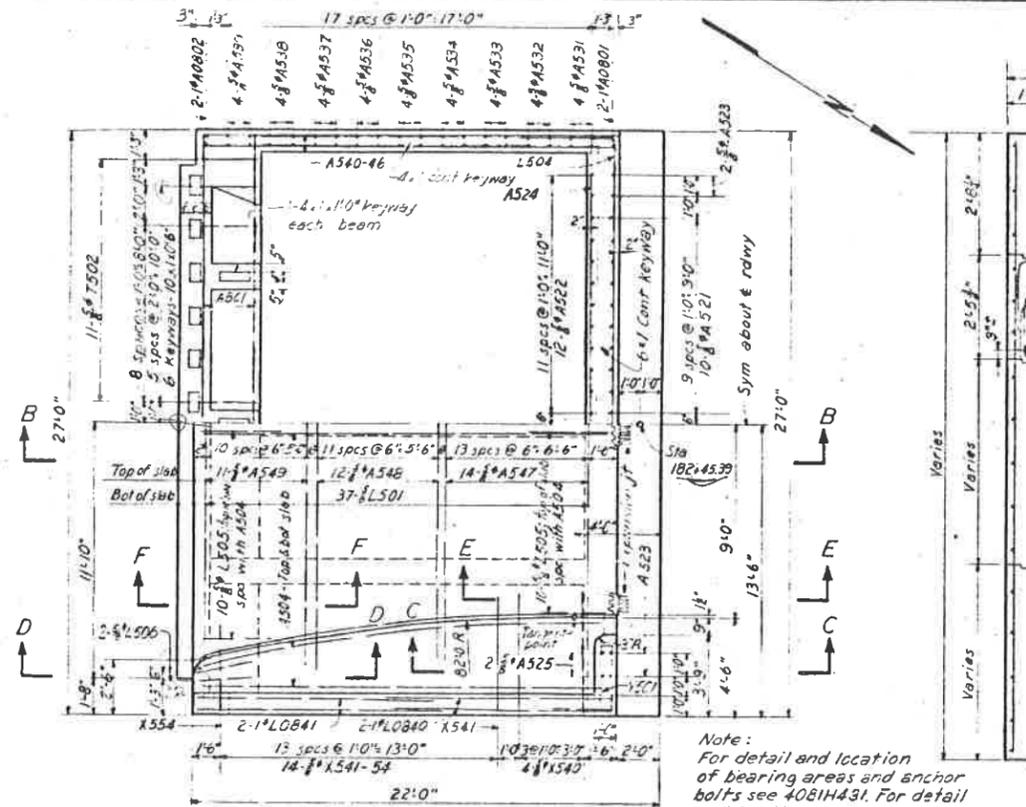
PROJECT 20-4081	
DANDRIDGE TO CHESTNUT	
DANDRIDGE BR	
ACROSS FRENCH BR	
VERTICAL POST	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOVERED
KNOXVILLE	10 5
RECORD DRAWING OR CONSTRUCTION	20 4R 5 4
DATE	10/1/51
BY	J.G.H.



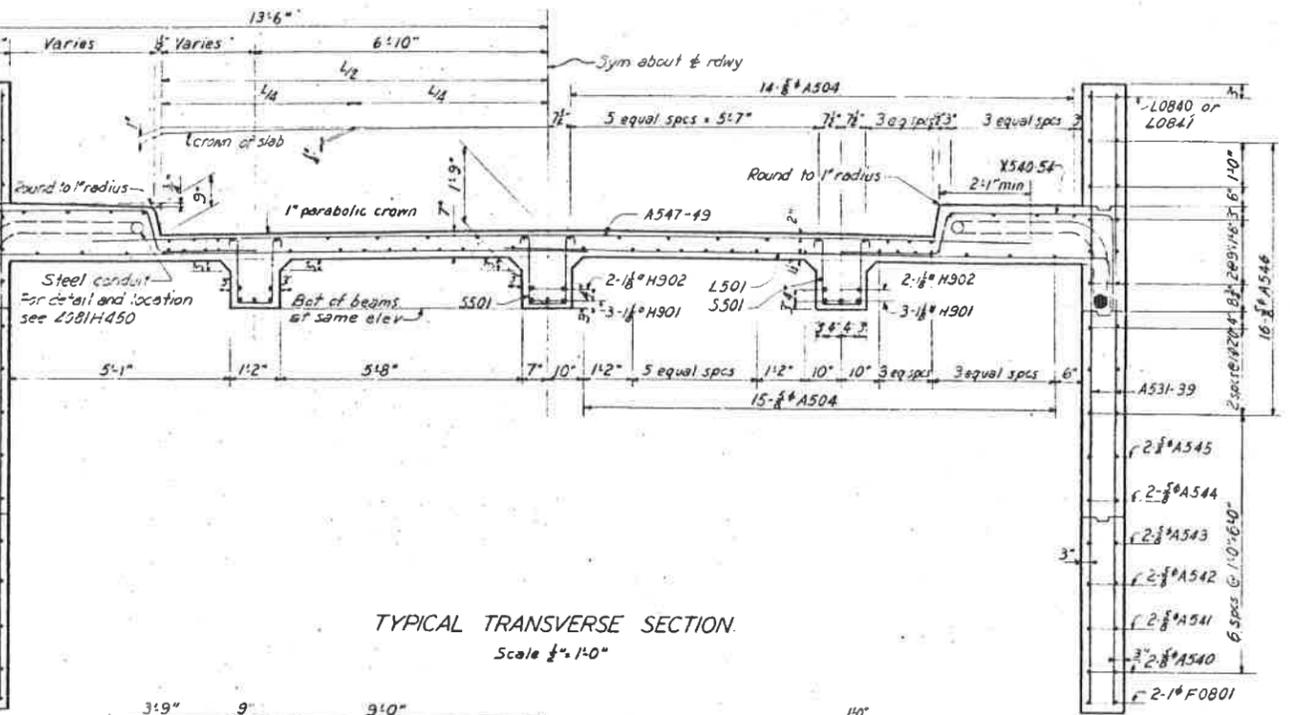
SYMBOLS:

APPROVED: [Signature]
 DATE: 5-27-42
 O. G. HILLYER

Scale as noted
 PROJECT 20-4081
 DANDRIDGE BRIDGE
 ACROSS FRENCH ROAD RIVER
DIAMOND CORE DRILL
 DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT
 STAMPTED: [Signature] RECOMMENDED: [Signature]
 KNOXVILLE 5-27-42 20 HR. 5 4081
 RECORDS SECTION: [Signature]

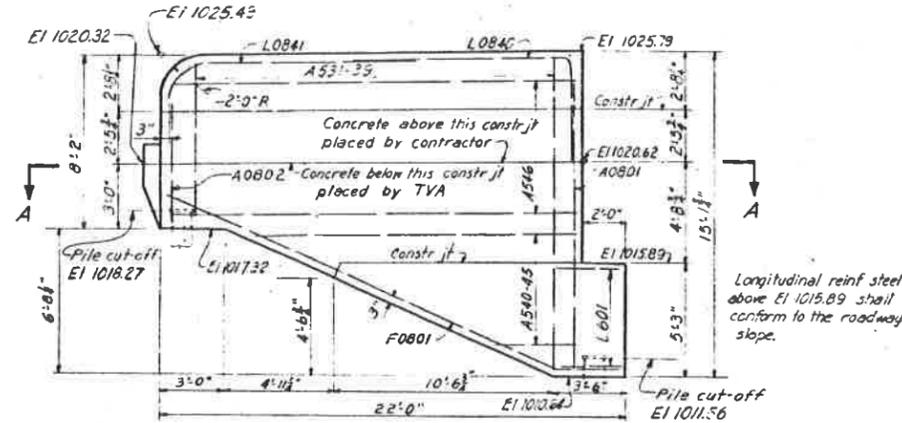


HALF SECTIONAL PLAN A-A
HALF PLAN

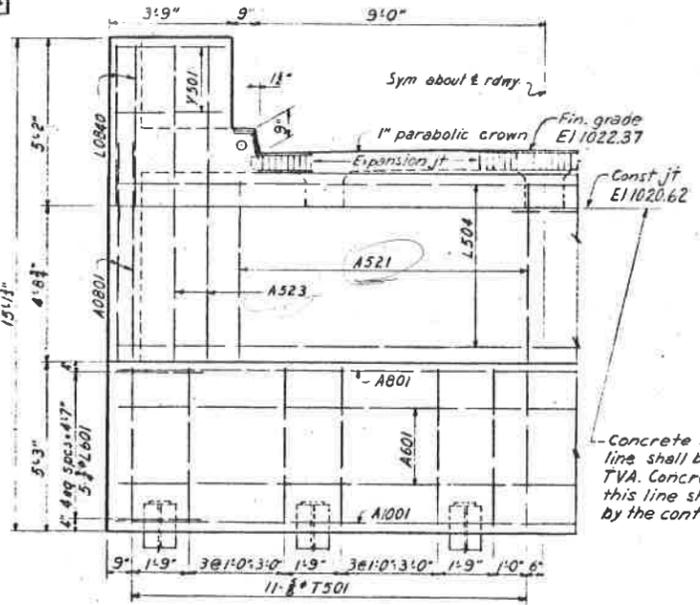


TYPICAL TRANSVERSE SECTION
Scale 1/2" = 1'-0"

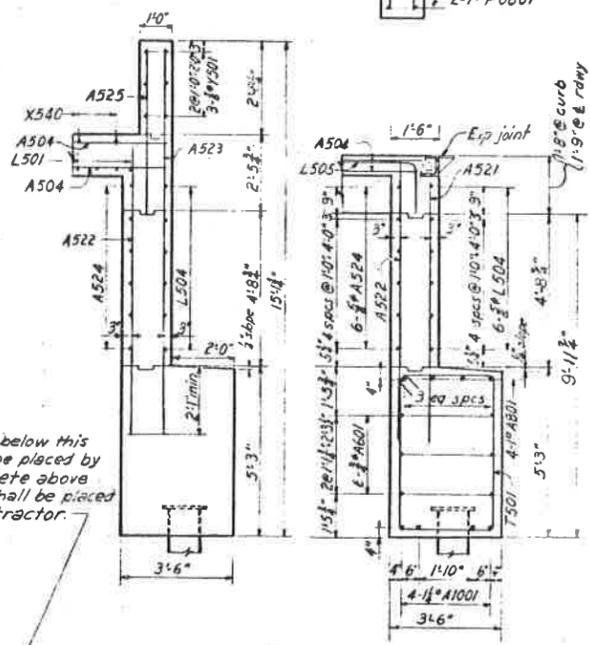
ESTIMATED QUANTITIES FOR ABUTMENTS			
ITEM	By TVA	By	By
Unit	cuyd	lb	ln ft
Abutment 1	43.25	5996	430.3
Abutment 2	52.24	6060	398.36



ELEVATION

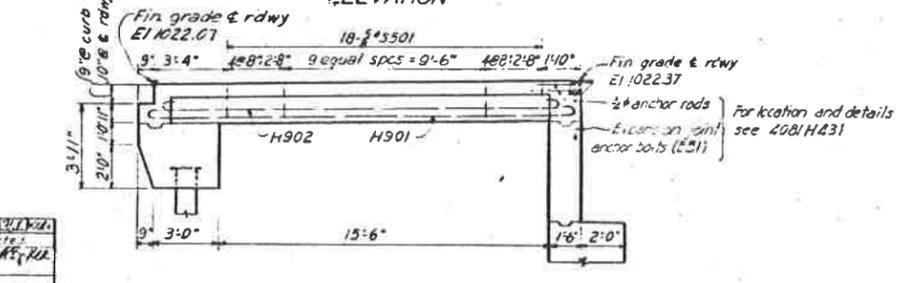


HALF FRONT ELEVATION
Scale 1/2" = 1'-0"

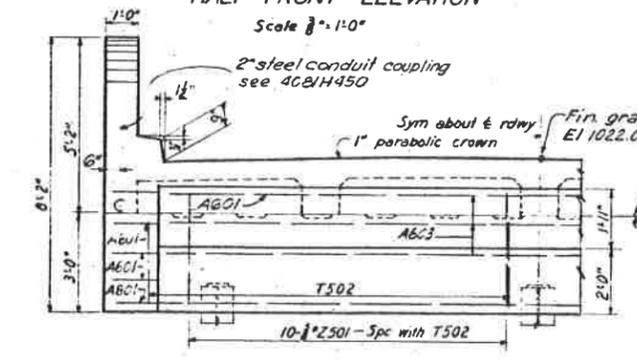


SECTION C-C
Scale 1/2" = 1'-0"

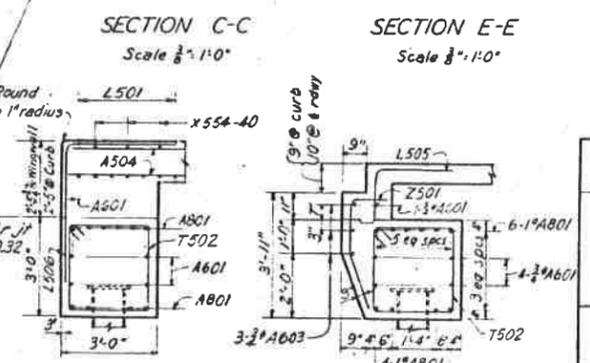
SECTION E-E
Scale 1/2" = 1'-0"



SECTIONAL ELEVATION B-B



HALF REAR ELEVATION
Scale 1/2" = 1'-0"



SECTION D-D
Scale 1/2" = 1'-0"

SECTION F-F
Scale 1/2" = 1'-0"

NOTES:
Reinforcing steel for lower portion of to be constructed by TVA is schedule
Reinforcing steel for upper portion to be constructed by Contractor has scheduled.
Concrete in the portion of the structure by the Contractor shall not be class structural steel is set in final pos.
For additional notes see 4081H405.

COMPANION DRAWINGS: 4081H431

Scale 1/2" = 1'-0"
Except as noted
PROJECT 20-4061

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD

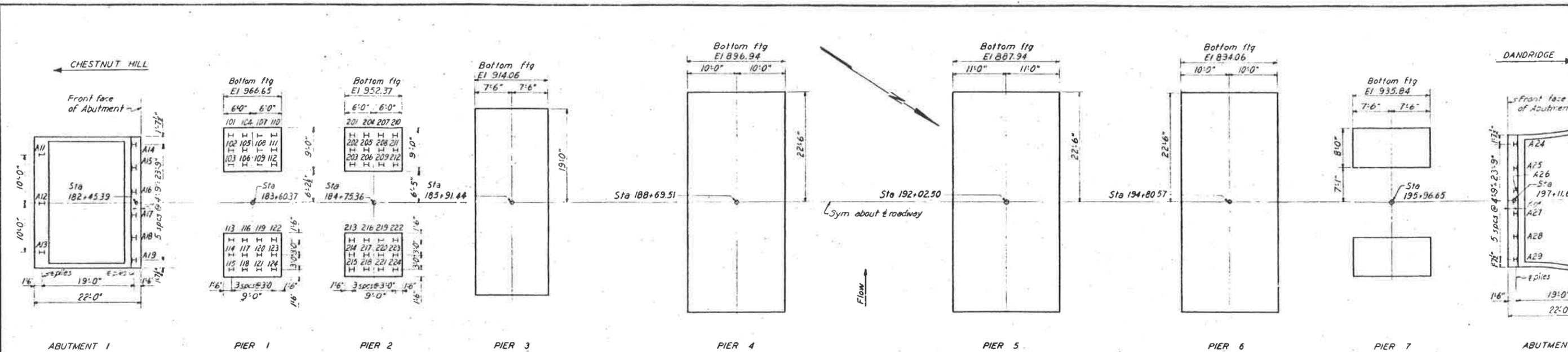
ABUTMENT

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

7-11-42
KNOXVILLE

2.4.40
RECORD ON ALL CONSTRUCTION
1.5.40
CONDUIT
DJB
RJC
30 JUN 1942

Rum
1.1.42
R.H. Camm



FOUNDATION PLAN
Not to scale

SUBSTRUCTURE NOTES:
SPECIFICATIONS: Sections 125, 400, 418, of the TVA Highway Specifications No. T-1 by the Construction and Maintenance

FOUNDATIONS: Abutments 1&2 and Piers 1-7 on steel H piles. The remaining Piers on sound rock capable of sustaining a load of 7 T per sq. ft.

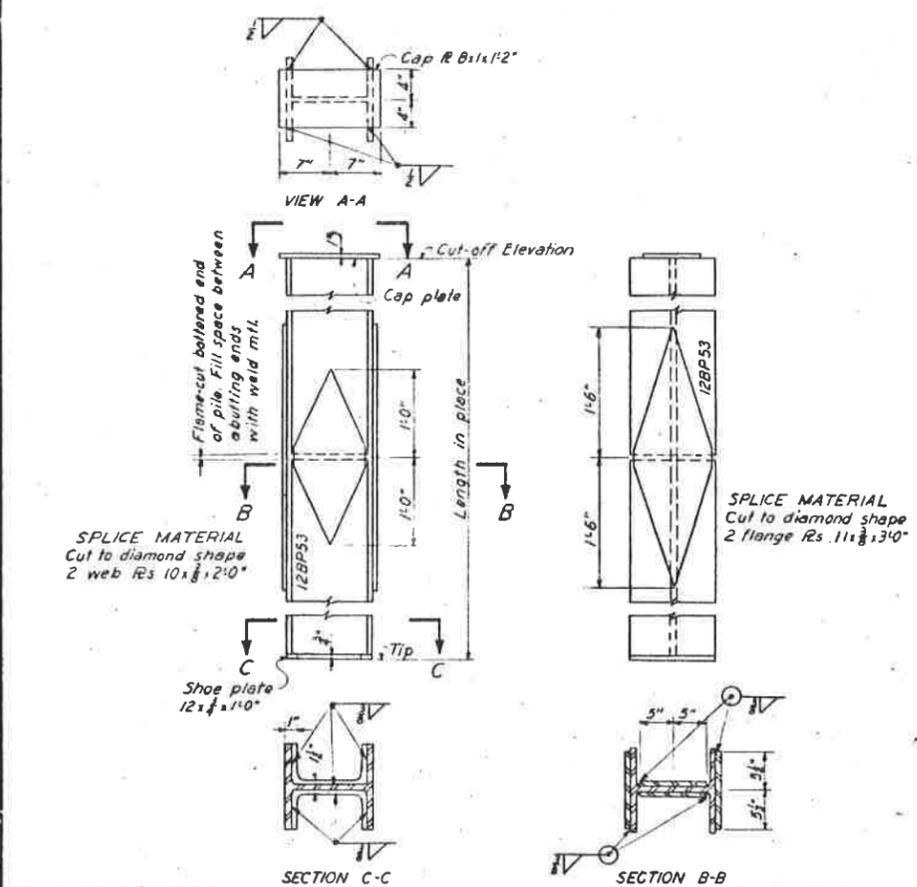
After the foundation rock is exposed, it shall be drilled to a depth of eight feet and center of the footing area. If any cavities are encountered they shall be reported before concrete is placed.

PILING-MATERIAL: Steel H piles shall be structural steel ASTM A7-39. Plates for caps and caps shall be carbon structural steel of commercial quality.

DRIVING: Piles shall be driven with a steam hammer delivering a minimum of 7000 (1100) lbs of blow. All piles shall be driven to rock at the elevations indicated by soundings and

SPLICES: Number and location optional. **WELDING:** Electric arc method AWS 15. **CONCRETE:** All concrete shall be Class type I or type II portland cement. Maximum coarse aggregate shall be size 3. Form vertical surfaces on abutments shall be plywood or similar material having a number of horizontal joints and vertical spaced not closer than 8'-0" on center. Surfaces of Abutments shall be rubbed with Board-mark finish shall be used for other surfaces of substructure. Corners shall be 4" unless otherwise noted.

REINFORCING STEEL: Dimensions relative to reinforcement are to bar centers.



STEEL BEARING PILE
Scale 1/2"=1'-0"

PILE RECORD																	
Pile No.	Elevations			Length in place	Calc brg (tons)	Pile No.	Elevations			Length in place	Calc brg (tons)	Pile No.	Elevations			Length in place	Calc brg (tons)
	Cut-off	Splice	Tip				Cut-off	Splice	Tip				Cut-off	Splice	Tip		
ABUTMENT 1																	
A11	1018.27	1011.91	972.79	45.48	Refusal	101	967.18	935.19	32.29	Refusal	201	953.20	925.22	27.98	Refusal		
A12	1018.27	979.83	959.80	58.47	"	102	"	961.98	922.58	44.50	"	202	"	928.26	24.94	"	
A13	1018.27	949.49	960.41	57.86	"	103	"	962.77	923.77	43.71	"	203	"	934.09	19.11	"	
A14	1011.56	985.23	965.29	46.27	"	104	"	962.19	923.19	44.29	"	204	"	926.17	27.03	"	
A15	"	985.23	961.42	50.14	"	105	"	961.48	922.48	45.00	"	205	"	929.12	24.08	"	
A16	"	985.23	958.24	33.32	"	106	"	959.40	920.40	47.08	"	206	"	928.68	24.52	"	
A17	"	985.23	955.58	55.98	"	107	"	962.31	923.31	44.17	"	207	"	927.46	25.74	"	
A18	"	985.23	954.60	56.96	"	108	"	963.77	924.77	42.71	"	208	"	926.82	26.38	"	
A19	1011.56	975.71	955.91	55.65	"	109	"	964.06	925.06	42.42	"	209	"	928.03	25.17	"	
PIER 1																	
110	"	965.61	926.61	40.87	"	110	"	965.61	926.61	40.87	"	210	"	926.95	26.25	"	
111	"	966.31	927.31	40.17	"	111	"	966.31	927.31	40.17	"	211	"	928.16	25.04	"	
112	"	963.73	924.73	42.75	"	112	"	963.73	924.73	42.75	"	212	"	929.54	23.66	"	
113	"	960.93	921.85	45.63	"	113	"	960.93	921.85	45.63	"	213	"	936.20	17.00	"	
114	"	947.51	921.51	45.97	"	114	"	947.51	921.51	45.97	"	214	"	935.83	17.37	"	
115	"	946.48	920.48	47.00	"	115	"	946.48	920.48	47.00	"	215	"	943.50	93.86	16.34	
116	"	947.03	918.95	48.53	"	116	"	947.03	918.95	48.53	"	216	"	932.47	92.82	27.38	
117	"	944.50	918.90	48.58	"	117	"	944.50	918.90	48.58	"	217	"	927.77	25.43	"	
118	"	947.33	921.33	46.15	"	118	"	947.33	921.33	46.15	"	218	"	923.48	29.72	"	
119	"	959.66	920.58	46.90	"	119	"	959.66	920.58	46.90	"	219	"	925.51	27.65	"	
120	"	947.14	921.06	46.42	"	120	"	947.14	921.06	46.42	"	220	"	925.67	27.53	"	
121	"	947.21	921.21	46.27	"	121	"	947.21	921.21	46.27	"	221	"	929.24	23.96	"	
122	"	961.62	922.54	44.94	"	122	"	961.62	922.54	44.94	"	222	"	928.44	24.76	"	
123	"	948.29	922.21	45.27	"	123	"	948.29	922.21	45.27	"	223	"	927.25	25.95	"	
124	967.18	955.38	920.38	47.10	"	124	967.18	955.38	920.38	47.10	"	224	953.20	927.11	26.09	"	
PIER 2																	
201	953.20	925.22	27.98	Refusal		201	953.20	925.22	27.98	Refusal	201	953.20	925.22	27.98	Refusal		
202	"	928.26	24.94	"		202	"	928.26	24.94	"	202	"	928.26	24.94	"		
203	"	934.09	19.11	"		203	"	934.09	19.11	"	203	"	934.09	19.11	"		
204	"	926.17	27.03	"		204	"	926.17	27.03	"	204	"	926.17	27.03	"		
205	"	929.12	24.08	"		205	"	929.12	24.08	"	205	"	929.12	24.08	"		
206	"	928.68	24.52	"		206	"	928.68	24.52	"	206	"	928.68	24.52	"		
207	"	927.46	25.74	"		207	"	927.46	25.74	"	207	"	927.46	25.74	"		
208	"	926.82	26.38	"		208	"	926.82	26.38	"	208	"	926.82	26.38	"		
209	"	928.03	25.17	"		209	"	928.03	25.17	"	209	"	928.03	25.17	"		
210	"	926.95	26.25	"		210	"	926.95	26.25	"	210	"	926.95	26.25	"		
211	"	928.16	25.04	"		211	"	928.16	25.04	"	211	"	928.16	25.04	"		
212	"	929.54	23.66	"		212	"	929.54	23.66	"	212	"	929.54	23.66	"		
213	"	936.20	17.00	"		213	"	936.20	17.00	"	213	"	936.20	17.00	"		
214	"	935.83	17.37	"		214	"	935.83	17.37	"	214	"	935.83	17.37	"		
215	"	943.50	93.86	16.34		215	"	943.50	93.86	16.34	215	"	943.50	93.86	16.34		
216	"	932.47	92.82	27.38		216	"	932.47	92.82	27.38	216	"	932.47	92.82	27.38		
217	"	927.77	25.43	"		217	"	927.77	25.43	"	217	"	927.77	25.43	"		
218	"	923.48	29.72	"		218	"	923.48	29.72	"	218	"	923.48	29.72	"		
219	"	925.51	27.65	"		219	"	925.51	27.65	"	219	"	925.51	27.65	"		
220	"	925.67	27.53	"		220	"	925.67	27.53	"	220	"	925.67	27.53	"		
221	"	929.24	23.96	"		221	"	929.24	23.96	"	221	"	929.24	23.96	"		
222	"	928.44	24.76	"		222	"	928.44	24.76	"	222	"	928.44	24.76	"		
223	"	927.25	25.95	"		223	"	927.25	25.95	"	223	"	927.25	25.95	"		
224	953.20	927.11	26.09	"		224	953.20	927.11	26.09	"	224	953.20	927.11	26.09	"		

Scale as noted
PROJECT 20-4081

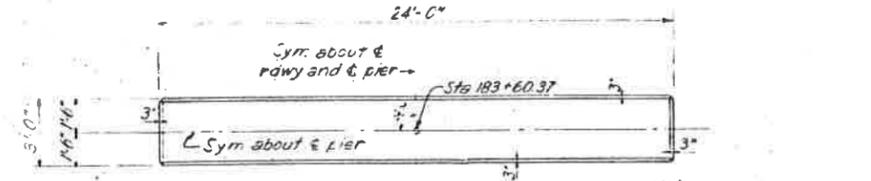
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD RIVER

FOUNDATION PLAN
AND PILE RECORD

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

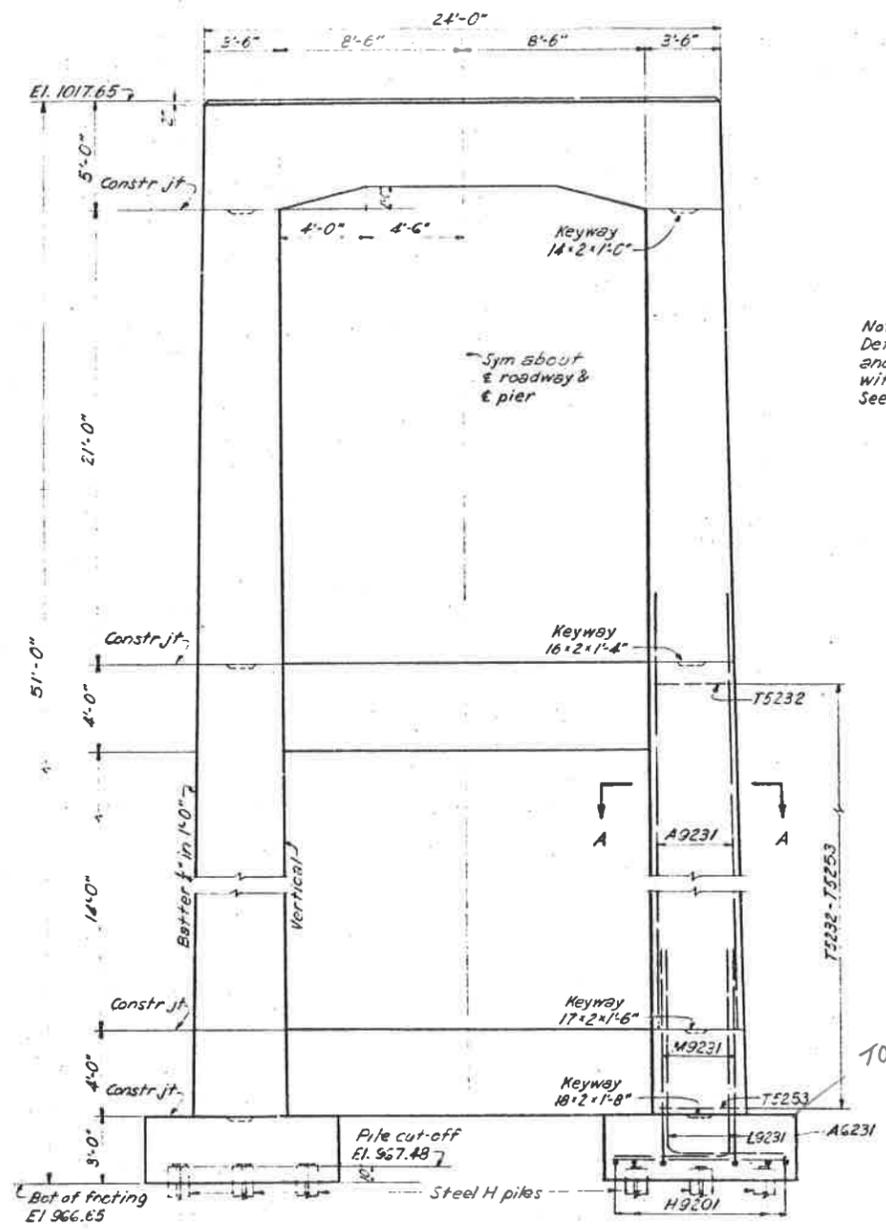
J. E. Johnson
KNOXVILLE 6-25-42 20-4081-5

1. Check all elevations for bridge.
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PLAN OF CAP

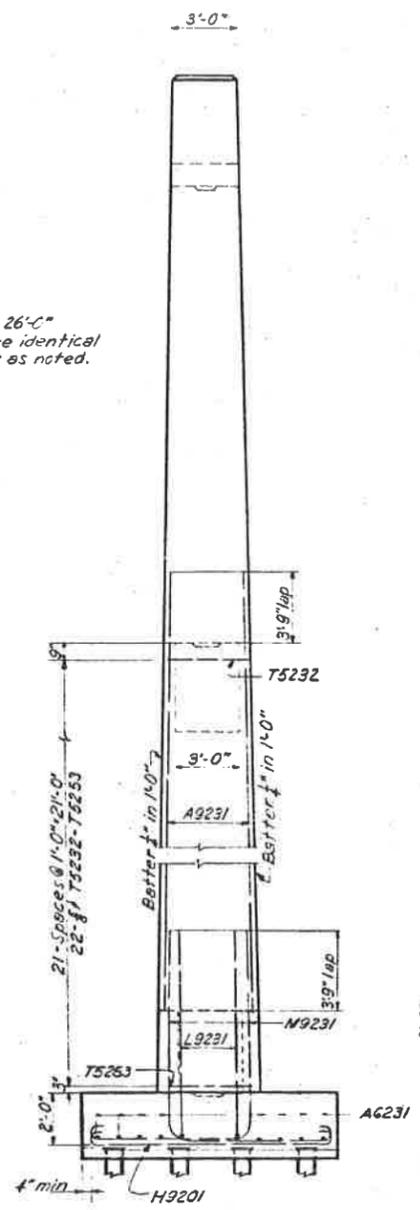
Note:
For detail and location
of bearing areas and
anchor bolts see 4081H431



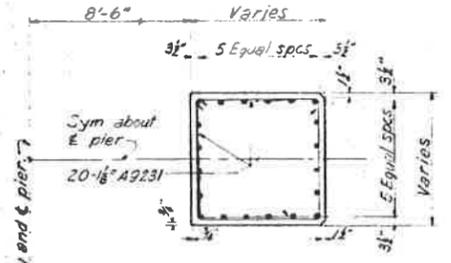
ELEVATION

Note:
Details of the top 26'-0"
and the struts are identical
with Pier 2 except as noted.
See 4081H407.

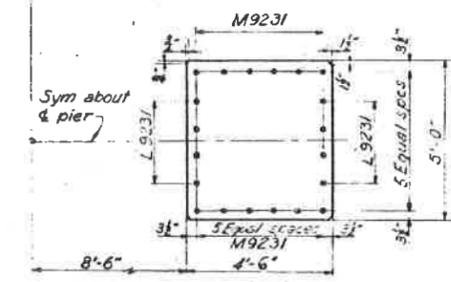
TOF 969.65



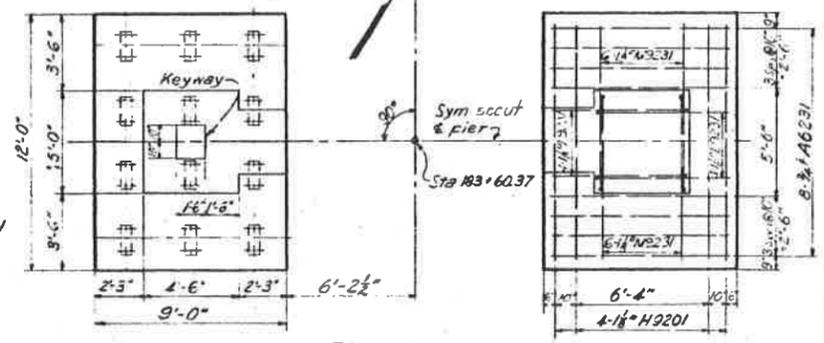
END ELEVATION



SECTION A-A
Scale 3/8" = 1'-0"



DOWEL SPACING
TOP OF FOOTING
Scale 3/8" = 1'-0"



FOOTING PLAN

NOTES:
For notes, pile spacing and pile details
see 4081H405.
For schedule and details of reinforcement
steel see 4081H413.

Scale 3/8" = 1'-0"
Except as noted.
PROJECT 20-40H

DANDRIDGE BRIDGE ACROSS
FRENCH BROAD RIVER

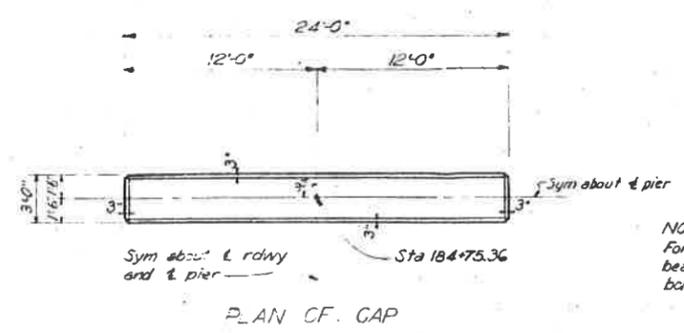
PIER I

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

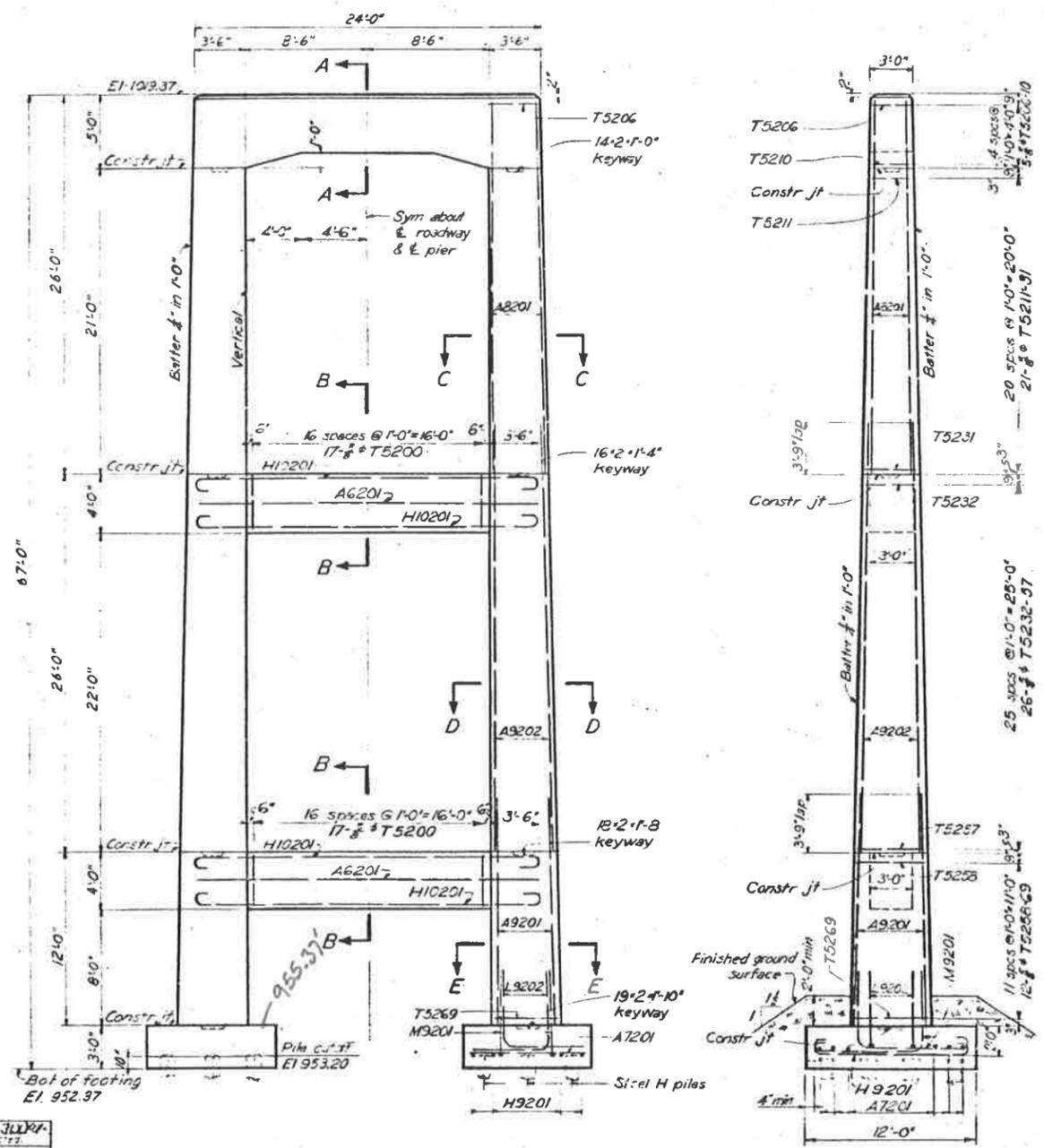
COMPANION DRAWING: 4081H407 & 4081H431

Prepared by
Checked by
KNOXVILLE 6-28-40 20 HR 5 1/2

DESIGNER	DATE	BY
CHECKED	DATE	BY
APPROVED	DATE	BY

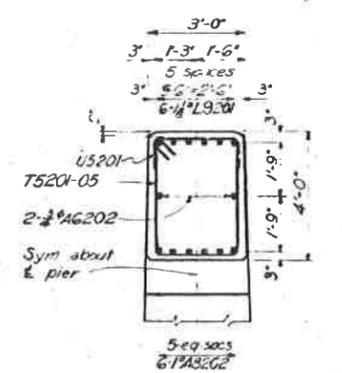


NOTE:
For detail and location of bearing areas & anchor bolts see 40B1H431.

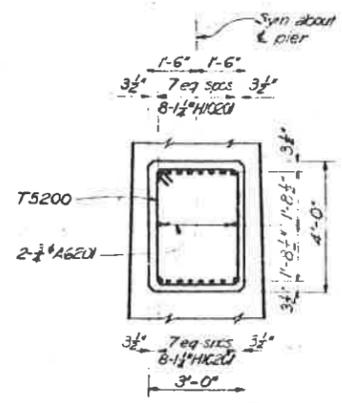


ELEVATION

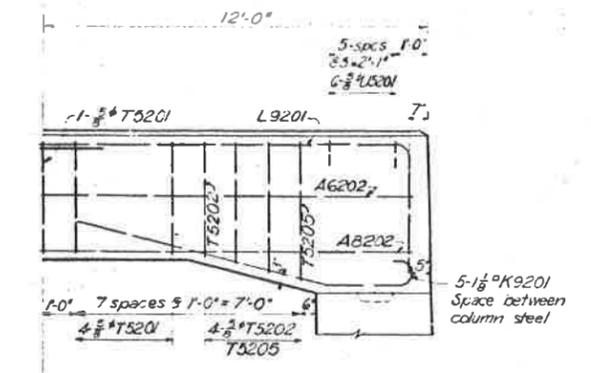
END ELEVATION



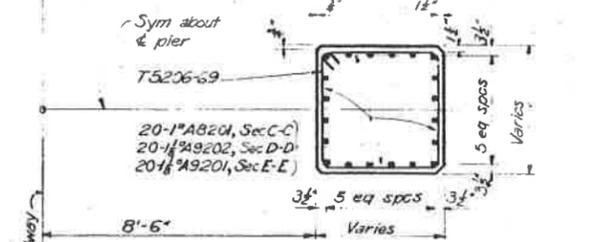
SECTIONAL ELEVATION A-A
Scale 3/8"=1'-0"



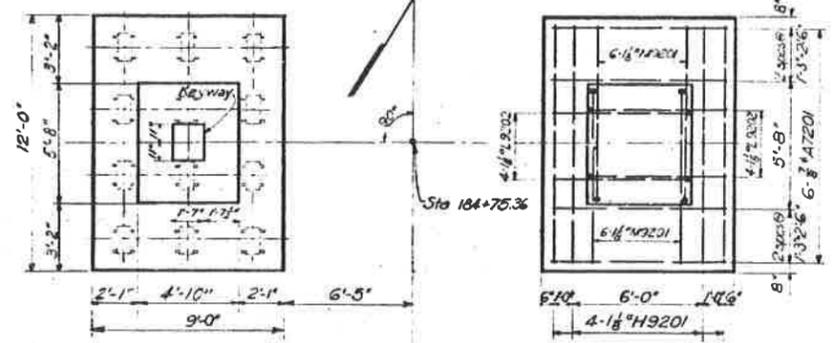
SECTIONAL ELEVATION B-B
Scale 3/8"=1'-0"



HALF ELEVATION OF GAP
Scale 3/8"=1'-0"



SECTION G-G, D-D, & E-E
Scale 3/8"=1'-0"



FOOTING PLAN
Scale 1/2"=1'-0"



DOWEL SPACING
TOP OF FOOTING
Scale 3/8"=1'-0"

NOTES:
For notes, pile spacing and pile details, see 40B1H405.
For schedule and details of reinforcing steel see 40B1H413.

Scale 3/8"=1'-0"
Except as noted
PROJECT 20-4631

DANDRIDGE BRIDGE ACROSS
FRENCH BROAD RIVER

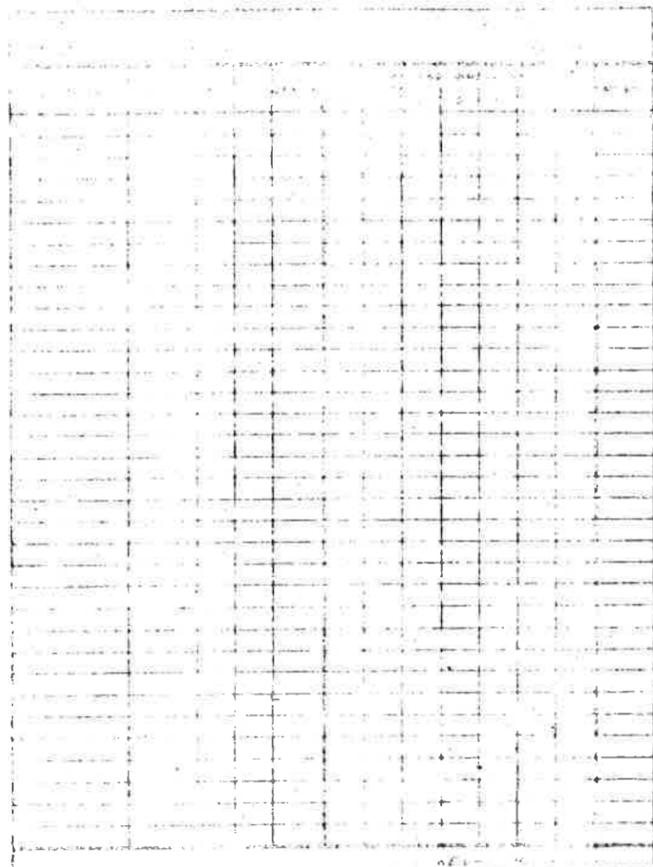
PIER 2

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

DESIGNED BY
Checked by
KNOXVILLE 6-29-42

COMPANION DRAWINGS: 40B1H406, 40B1H411, & 40B1H431.

DESIGNED BY	Checked by
DATE	DATE
SCALE	SCALE
PROJECT	PROJECT
PIER	PIER
NO.	NO.

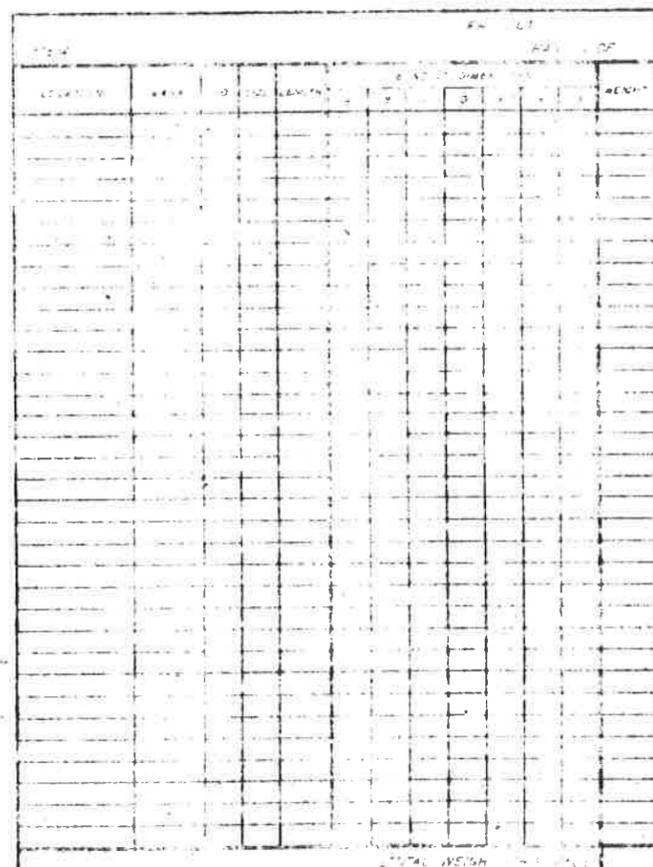
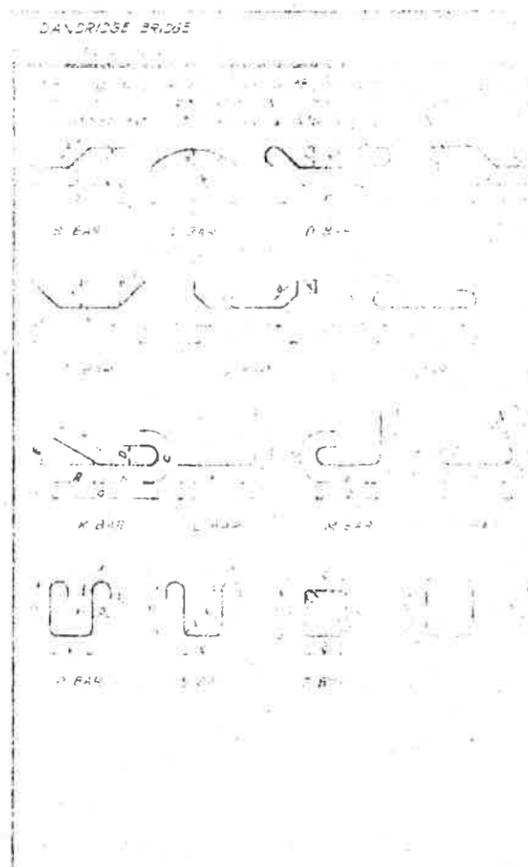


DANDRIDGE BRIDGE
PIER 5
PROJECT 20-4081
PAGE 6 OF 6

LOCATION	MARK	NO.	SIZE	LENGTH	WEIGHT
Webwall	A5101	38	3/8"	9'-1"	360
"	A5102	242	"	22'-8"	5721
"	A5103	342	"	14'-1"	5024
"	A5106	38	"	10'-2"	403
Cap	A6101	8	3/4"	9'-2"	110
Columns	A8101	36	1"	11'-6"	1105
Subshaft	A2102	14	"	25'-2"	941
Footings	A08170	14	"	37'-10"	1414
Columns	A8102	248	1"	15'-4"	12929
Cap	A8102	10	"	26'-7"	904
Columns	A9152	144	1 1/2"	15'-9"	9759
"	A9170	48	"	13'-9"	2840
Footings	H08170	45	1"	23'-4"	2803
"	H10151	22	1 1/2"	46'-10"	5474
Cap	L8101	10	1"	18'-5"	626
Footings	L10170	48	1 1/2"	13'-0"	3315
Footings	M6170	104	3/4"	17'-1"	2669
"	M6171	50	"	18'-0"	1352
Columns	U5101	184	3/8"	9'-8"	1855
"	U5102	192	"	10'-9"	2153
"	U5103	192	"	11'-8"	2336
"	U5104	96	"	12'-8"	1268
"	U5151	192	"	13'-7"	4134
"	U5170	176	"	14'-0"	2570
Cap	U6101	28	3/4"	11'-3"	473
"	U6102	2	"	12'-2"	37
"	U6103	2	"	13'-1"	39
TOTAL WEIGHT					71250

DANDRIDGE BRIDGE
PIER 3
PROJECT 20-4081
PAGE 6 OF 6

LOCATION	MARK	NO.	SIZE	LENGTH	WEIGHT
Webwall	A5101	38	3/8"	9'-1"	360
"	A5102	192	"	22'-8"	4533
"	A5103	228	"	14'-1"	3343
"	A5104	38	"	21'-2"	833
Cap	A6101	8	3/4"	9'-2"	110
Columns	A8101	36	1"	11'-6"	1105
Subshaft	A28102	12	"	25'-2"	506
Columns	A8101	248	1"	15'-4"	12929
Cap	A8102	10	"	26'-7"	904
Columns	A9101	48	1 1/2"	20'-9"	2286
Footings	H9101	25	1 1/2"	16'-7"	1784
"	H9102	14	1 1/2"	39'-7"	2385
Cap	L8101	10	1"	18'-5"	626
Columns	L9101	48	1 1/2"	13'-0"	2595
Subshaft	P6101	13	3/4"	24'-1"	470
Columns	U5101	184	3/8"	9'-8"	1855
"	U5102	192	"	10'-9"	2153
"	U5103	192	"	11'-8"	2336
"	U5104	264	"	12'-8"	3253
Cap	U6101	28	3/4"	11'-3"	473
"	U6102	2	"	12'-2"	37
"	U6103	2	"	13'-1"	39
TOTAL WEIGHT					47559



DANDRIDGE BRIDGE
PIER 6
PROJECT 20-4081
PAGE 6 OF 6

LOCATION	MARK	NO.	SIZE	LENGTH	WEIGHT
Webwall	A5101	38	3/8"	9'-1"	360
"	A5102	224	"	22'-8"	5296
"	A5103	324	"	14'-1"	4465
"	A5105	38	"	13'-2"	522
Cap	A6101	8	3/4"	9'-2"	110
Columns	A8101	36	1"	11'-6"	1105
Subshaft	A28102	14	"	25'-2"	941
"	A28151	13	"	37'-8"	1307
Columns	A8101	248	1"	15'-4"	12929
Cap	A8102	10	"	26'-7"	904
Columns	A9151	48	1 1/2"	16'-9"	3460
"	A9152	96	"	15'-9"	6506
Footings	H7151	45	7/8"	21'-1"	1929
"	H10151	23	1 1/2"	46'-10"	5723
Cap	L8101	10	1"	18'-5"	626
Footings	L9151	48	1 1/2"	12'-7"	2599
"	M6151	104	3/4"	16'-6"	2577
"	F6151	13	"	32'-11"	643
Columns	U5101	184	3/8"	9'-8"	1855
"	U5102	192	"	10'-9"	2153
"	U5103	192	"	11'-8"	2336
"	U5104	96	"	12'-8"	1268
"	U5151	296	"	13'-7"	4134
Cap	U6101	28	3/4"	11'-3"	473
"	U6102	2	"	12'-2"	37
"	U6103	2	"	13'-1"	39
TOTAL WEIGHT					64367

DANDRIDGE BRIDGE
PIER 4
PROJECT 20-4081
PAGE 6 OF 6

LOCATION	MARK	NO.	SIZE	LENGTH	WEIGHT
Webwall	A5101	38	3/8"	9'-1"	360
"	A5102	224	"	22'-8"	5296
"	A5103	304	"	14'-1"	4165
"	A5105	38	"	13'-2"	522
Cap	A6101	8	3/4"	9'-2"	110
Columns	A8101	36	1"	11'-6"	1105
Subshaft	A28102	14	"	25'-2"	941
"	A28151	13	"	37'-8"	1307
Columns	A8101	248	1"	15'-4"	12929
Cap	A8102	10	"	26'-7"	904
Columns	A9151	48	1 1/2"	16'-9"	3460
"	A9152	96	"	15'-9"	6506
Footings	H7151	45	7/8"	21'-1"	1929
"	H10151	23	1 1/2"	46'-10"	5723
Cap	L8101	10	1"	18'-5"	626
Footings	L9151	48	1 1/2"	12'-7"	2599
"	M6151	104	3/4"	16'-6"	2577
"	P6151	13	"	32'-11"	643
Columns	U5101	184	3/8"	9'-8"	1855
"	U5102	192	"	10'-9"	2153
"	U5103	192	"	11'-8"	2336
"	U5104	96	"	12'-8"	1268
"	U5151	296	"	13'-7"	4134
Cap	U6101	28	3/4"	11'-3"	473
"	U6102	2	"	12'-2"	37
"	U6103	2	"	13'-1"	39
TOTAL WEIGHT					64367

NOTES

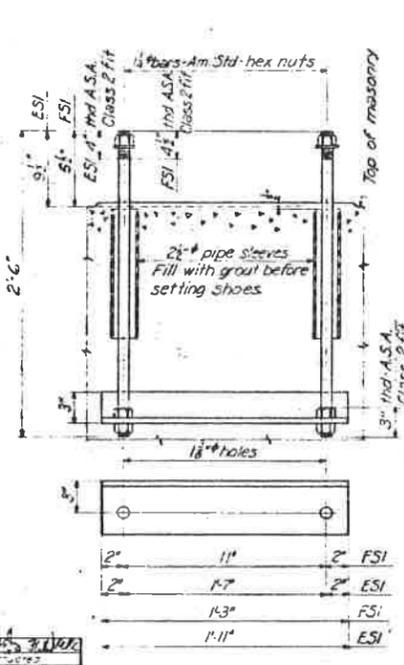
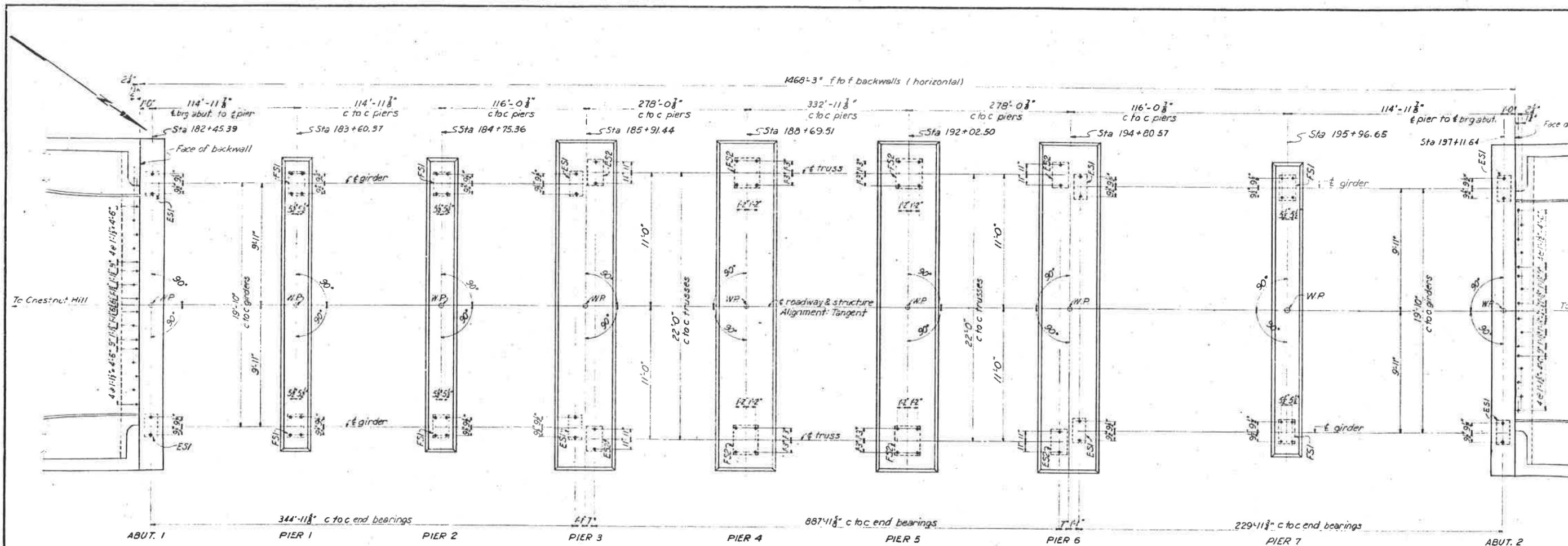
REINFORCING STEEL

DOUGLAS PROJECT
TENNESSEE CANAL AUTHORITY

RECORDED DRAWING

6-13-42

6/15/42



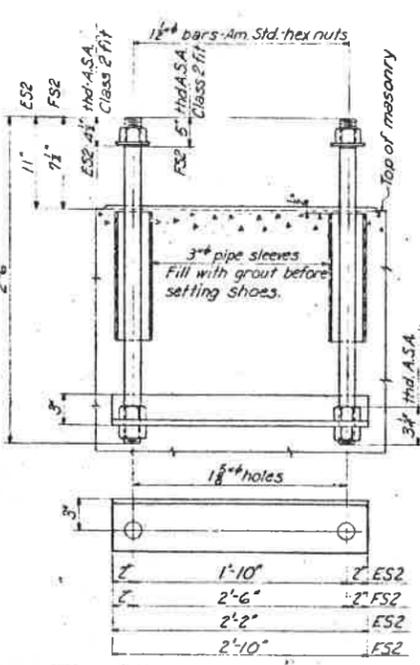
ANCHOR BOLTS FOR FSI & ESI
Scale 1/2"=1'-0"

Material for one bearing FS2
 4 - 1 1/2" x 2'-6" bars - 12 - 1 1/2" hex nuts
 4 - 3" x 3/8" thk washers - 1 1/2" hole
 4 - 3" x 1'-0" pipe sleeves
 2 - Ls 5x3x1/2 x 2'-10"

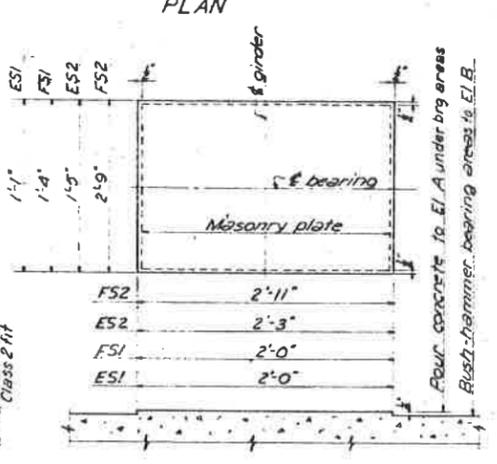
Material for one bearing ES2
 2 - 1 1/2" x 2'-6" bars - 6 - 1 1/2" hex nuts
 2 - 3" x 1'-0" pipe sleeves
 1 - Ls 5x3x1/2 x 2'-2"

Material for one bearing FSI
 4 - 1/2" bars - 2 - 6" - 12 - 3/8" hex nuts
 4 - 2" x 3/8" thk washers - 1 1/2" hole
 4 - 2" pipe sleeves x 1'-0"
 2 - Ls 5x3x1/2 x 1'-3"

Material for one bearing ESI
 2 - 1/2" bars - 2 - 6" - 6 - 1/2" hex nuts
 2 - 2" pipe sleeves x 1'-0"
 1 - L 5x3x1/2 x 1'-11"



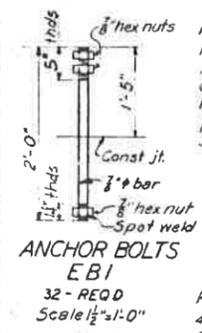
ANCHOR BOLTS FOR FS2 & ES2
Scale 1/2"=1'-0"



DETAIL OF BEARING AREA
N.T.S.

Location	El A	El B	Position
Abut. 1	1015.91	1015.89	Bridge seat
Pier 1	1017.67	1017.65	Cap
" 2	1019.39	1019.37	"
" 3	1021.08	1021.06	"
" 4	1023.96	1023.94	"
" 5	1023.96	1023.94	"
" 6	1021.08	1021.06	"
" 7	1019.36	1019.34	"
Abut. 2	1017.64	1017.62	Bridge seat

BILL OF MATERIAL					
No	Mark	Shape	Length Ft In	Remarks	Weight Lb
24	FS1	1/2" bars	2 6	Thd both ends	250
72		1/2" hex nuts			39
24		Washers 2" x 3/8" thk		1 1/2" hole	5
24		Pipe sleeves 2 1/2"	1 0	Std wt-black	139
12		Ls 5x3x1/2	1 3		192
				Total	625
16	ES1	1 1/2" bars	2 6	Thd both ends	167
48		1 1/2" hex nuts			26
16		Pipe sleeves 2 1/2"	1 0	Std wt-black	93
8		Ls 5x3x1/2	1 11		195
				Total	481
16	FS2	1 1/2" bars	2 6	Thd both ends	240
48		1 1/2" hex nuts			49
16		Washers 3" x 3/8" thk		1 1/2" hole	9
16		Pipe sleeves 3"	1 0	Std wt-black	122
8		Ls 5x3x1/2	2 10		290
				Total	710
8	ES2	1 1/2" bars	2 6	Thd both ends	120
24		1 1/2" hex nuts			25
8		Pipe sleeves 3"	1 0	Std wt-black	61
4		Ls 5x3x1/2	2 2		111
				Total	317
32	E11	3/8" bars	2 0	thd both ends	131
96		3/8" hex nuts			17
				Total	148
				Grand total	2281



ANCHOR BOLTS
EBI
32 - REQD
Scale 1/2"=1'-0"

NOTES:
 Material: Structural steel shall conform to ASTM, A7-39. Anchor bars, nuts, and washers shall conform to ASTM A107-10, Grade 21 or 22. Pipe sleeves shall be standard weight pipe, conforming to ASTM, A120-40. Shop Paint: None.

REFERENCE DRAWINGS:
 4081H401...GENERAL DRAWING
 4081H442...SHOES FOR CONTINUOUS GIRDER
 4081H443...SHOES FOR 8'-0" CONTINUOUS TRUSS
 4081H445...EXPANSION JOINT E-J1 & E-J2

Scale 1/4"=1'-0"
 Except as noted
 PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL

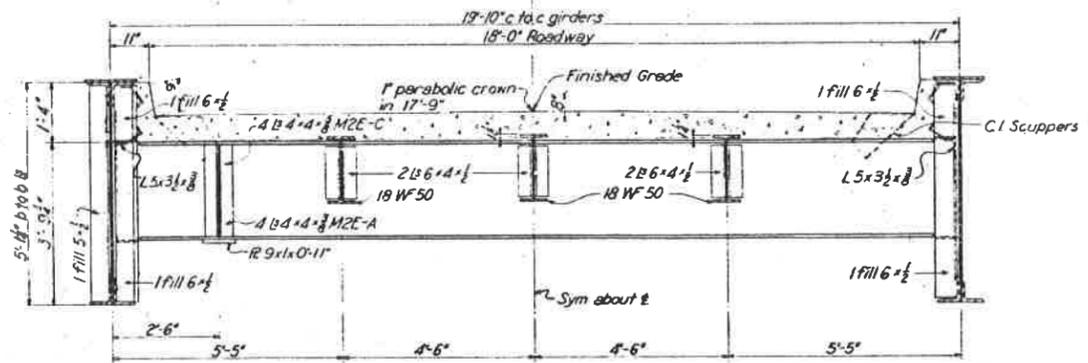
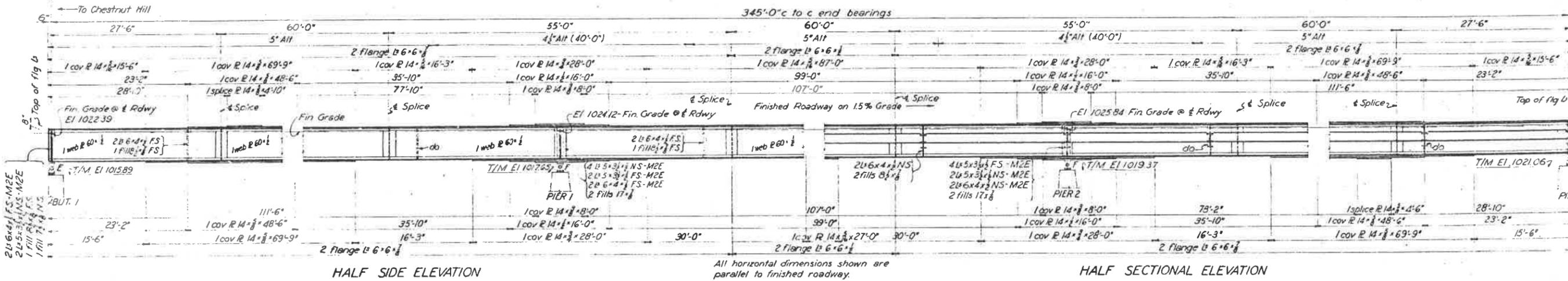
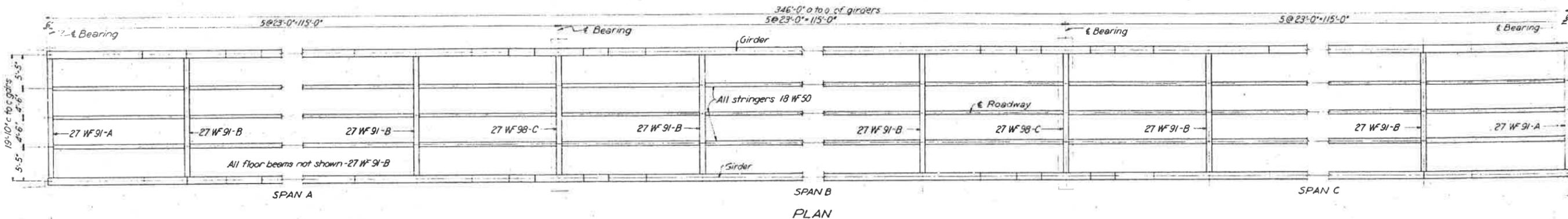
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ANCHOR BOLT PLAN

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

APPROVED: *F. E. Jensen*
 DATE: 6-23-42
 20 HR: 5:14

RECORD DRAWING
 337,081
 Cont TV 73,863

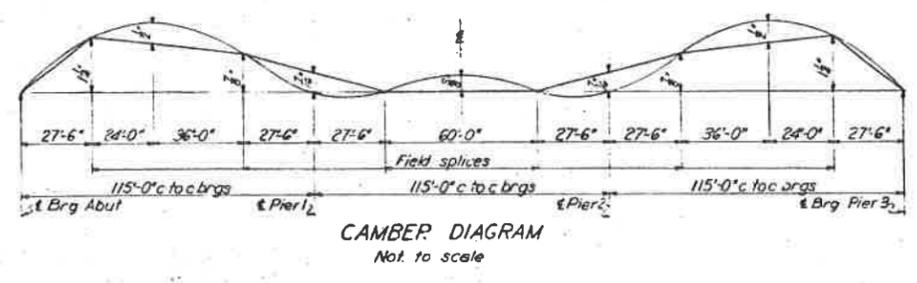
2 SHEETS, 51 USE SHEETS, 91 TOTAL
 REVISIONS: 1. 10-11-42
 2. 1-15-43
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Item	Moment in ft kips				Shear in kips				Section
	DL	LL	I	Total	DL	LL	I	Total	
Stringers	30	69	23	122	5.6	13.2	4.5	23.3	18 WF 50
Floor Beam B	116	142	48	306	17.3	25.8	8.7	51.8	27 WF 91
Floor Beam A	61	142	48	251	9.1	25.8	8.7	43.6	27 WF 91
				Jacking Moment				Jacking Shear	
				158				63.4	
Floor Beam C	117	142	48	307	17.4	25.8	8.7	51.9	27 WF 98
				Jacking Moment				Jacking Shear	
				437				174.6	

Loading	Reaction in kips		Moments in ft kips		
	End support	Center support	End span	Inter. support	Center span
Dead Load	72.3	191.7	+1660	-2020	+420
Live Load	45.0	85.4	+990	-945	+615
Impact	9.4	17.8	+206	-196	+128
Totals	126.7	294.9	+2856	-3161	+1166*

* Includes Reversal



1. REVISIONS TO BE MADE BY THE DESIGNER AND RECORDED AS CONSTRUCTED.
 2. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.
 R.A.D. R.L.G.
 C.H.L.B.B. S.W.S.
 H.A.A.M.

NOTES:
 Specifications: TVA Specifications No. 2012.
 Design Loading: H15 on 2 lanes, AASHTO Specification third Edition, 1941.
 Material: Structural steel shall conform to Rivet steel shall conform to ASTM, A41-39. Cast shoes and rockers shall conform to ASTM. Forged steel pins shall conform to ASTM, A235-42. Lead plates shall conform to Federal Specification QQ-L-201, Grade B.
 Connections: Riveted, unless noted.
 Welding: See Specifications No. 2012.
 Rivets: $\frac{3}{4}$ " except as noted or required for special Open Holes: $\frac{1}{2}$ " except as noted for rivets and Reaming, Shop Assembly, and Camber. See Specifications No. 2012.
 Paint: See Specifications No. 2012.

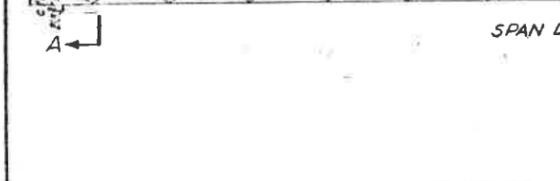
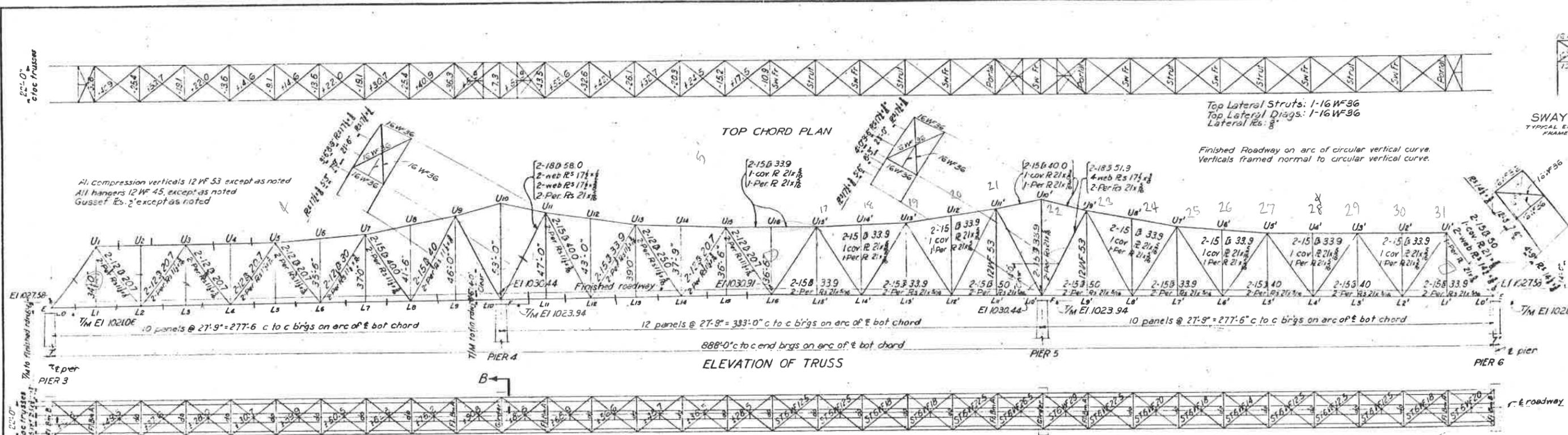
REFERENCE DRAWINGS:
 40BIH401... GENERAL DRAWING
 40BIH442... SHOES FOR CONTINUOUS GIRDER
 40BIH445... EXPANSION JOINT E.J. 1 & 2
 40BIH446... RAILING & SCUPPERS

Scale $\frac{1}{4}$ " = 1'-0"
 Except as noted
 PROJECT 20-40BI

DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 STRESS SHEET
 FOR 346'-0" CONTINUOUS
 DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT
 SUBMITTED: J. E. Johnson
 RECOMMENDED: R. L. G. Smith
 KNOXVILLE 7-3-42 20-40BI-3
 RECORDED & INDEXED

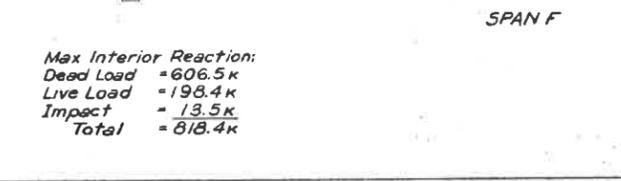
COMPANION DRAWINGS: 40BIH433
 40BIH434

Reqn 337,081 Cont TV 73B63



STRESSES FOR FLOOR SYSTEM

Item	Moment in ft kips				Shear in kips			
	DL	LL	I	Total	DL	LL	I	Total
Interior Stringers	56	107	35	198	8	17	6	31
Exterior Stringers	50	67	22	139	7	11	4	22
Floor beam A	172	176	60	408	32	27	9	68
Floor beam B	96	176	60	332	18	27	9	54
Girder @ L ₀ & L ₁₀	Jacking Mom. 516				Jacking Shear 164			
	177	176	60	413	33	27	9	69
Jacking Mom. 1331				Jacking Shear 574				



Max Interior Reaction:
 Dead Load = 606.5k
 Live Load = 198.4k
 Impact = 13.5k
 Total = 818.4k

Max End Reaction:
 Dead Load = 174.3k
 Live Load = 78.9k
 Impact = 9.2k
 Total = 263.0k

MEMBERS (Stresses shown in kips; + = tension; - = compression)

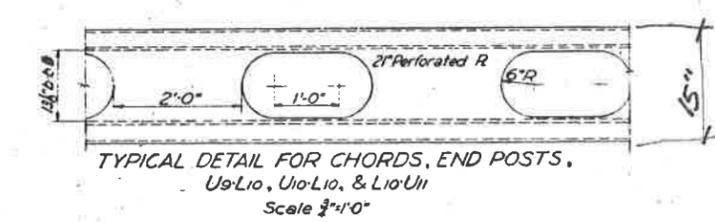
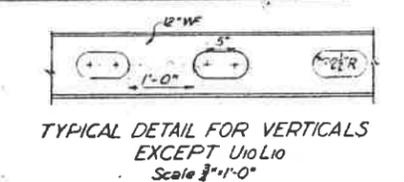
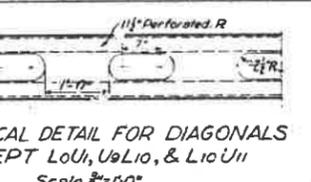
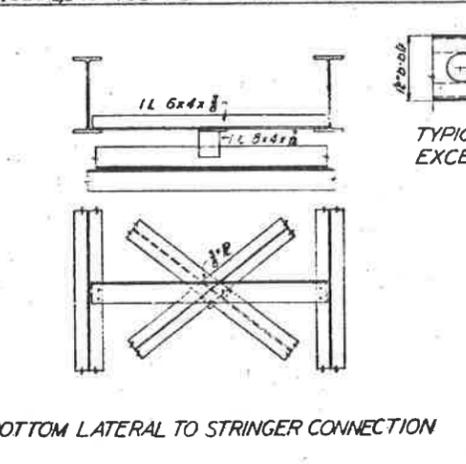
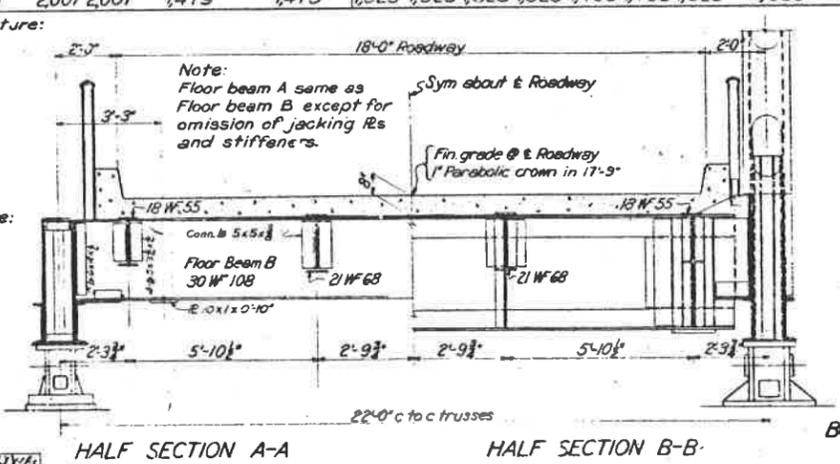
MEMBERS	BOTTOM CHORD								TOP CHORD								DIAGONALS																											
	LoLe		LaLe		LoLo		LaLo		LoLo		LaLo		LoLo		LaLo		LoLo		LaLo		LoLo		LaLo		LoLo		LaLo																	
	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-	Max+	Max-																
Dead Load	+122.4	+241.6	+213.5	+18.5	+130	-245.8	-252.9	-270	-18.9	+119.6	+83.7	-20.49	-230.5	-131.2	+113.1	+376.2	+373.2	+136.1	-61.9	-43.3	-139.1	-193.5	+130.5	-67.5	+4.5	+3.2	+58.4	-130.6	+187.4	-2170	+259.7	-230.3	-220.1	+232.5	-185.8	+153.1	-95.4	+30.7	+21.5	-170.9	+48.8			
Live Load	+52.6	+116.8	+127.5	+80.3	-70.6	-95.2	-91.6	-59.3	+56.4	+106.1	-60.8	-91.6	-128.7	-108.9	+74.2	+126.5	+125.4	+67.0	-86.0	+60.0	-111.9	-90.0	+71.7	-55.8	+42.1	-38.0	+49.7	-63.4	+77.5	-81.1	+93.8	-87.5	-89.7	+97.1	-84.1	+78.8	-65.3	+52.0	-41.2	-57.5	+32.8			
Impact	+6.5	+14.5	+15.8	+10.0	-7.7	-10.4	-11.4	-7.4	+6.2	+11.6	-7.6	-11.4	-16.0	-13.5	+8.1	+13.8	+13.7	+8.3	-9.4	+7.5	-12.2	-11.2	+8.9	-6.9	+5.2	-4.7	+6.2	-7.9	+9.6	-10.1	+11.6	-10.9	-9.8	+10.6	-9.2	+8.6	-7.1	+5.7	-4.5	-6.3	+9.1			
Reversal	+32.7	-32.7						-21.9	+21.9																																			
Total	+161.5	+378.9	+356.8	+141.5	-96.0	-351.4	-355.9	-115.6	+65.6	+237.3	+15.3	-307.9	-395.2	-253.6	+195.4	+516.5	+512.3	+211.4	-169.4	+36.3	-262.2	-294.7	+211.1	-150.2	+71.6	-59.3	+114.3	-201.9	+274.5	-308.2	+365.1	-328.7	-319.6	+340.2	-279.1	+240.5	-167.8	+100.5	-36.3	-234.7	+90.7			
Wind	-96.0	+160.2	+167.3	+133.4	-90.5	-3.4	-166.7	-88.7	+102.9	+140.9	-83.7	-46.0	-62.5	-59.8	+90.5	+17.8	+17.6	+34.9	-78.1	+66.9	-84.7	-40.4																						
Total Incl Wind	+279.5	+539.1	+524.1	+279.9	-188.5	-515.5	-522.6	-204.3	+168.5	+378.2	-68.4	-353.9	-457.7	-313.7	+225.9	+534.3	+529.9	+246.3	-247.5	+103.2	-346.9	-335.1																						

NOTES:
 Specifications: TVA Specifications No 2012
 Design Loading: H15 on 21 struts, AASHTO Specification, 1941.
 Material: Structural steel shall conform to Rivet steel shall conform to ASTM, A101-39, C shoes and rockers shall conform to ASTM, B1. Forged steel pins shall conform to ASTM, class C1. Lead plates shall conform to Federal specifications QQ-L-201, Grade B.
 Connections: Riveted, unless noted.
 Welding: See Specifications No 2012.
 Rivets: 3/4" except as noted or required connections.
 Open Holes: 3/4" except as noted for rivet Reaming, Chop Assembly, and Camber: See No. 2012.
 Paint: See Specifications No. 2012.

UNLOADED STRUCTURE

Member	LoU	UoLo	LoUo
Dead Load	-193.5	-230.3	-220.1
Wind	-47.5	-70.9	-86.9
Total	-241.0	-301.2	-307.0

Mom. due to wind on Unloaded Structure:
 LoU: M = 193.0'k
 UoLo: M = 194.1'k
 LoUo: M = 231.6'k



REFERENCE DRAWINGS:
 408H436 - TYPICAL SECTIONS
 408H437 - TYPICAL SECTIONS

Scale 1"=30'
 Except as noted

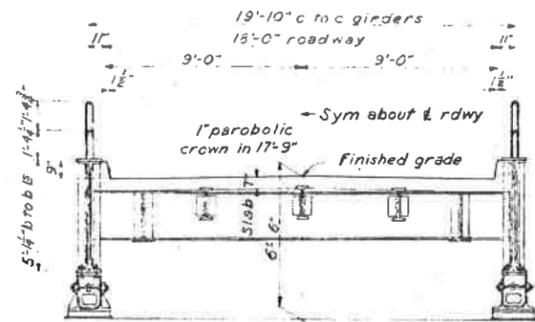
PROJECT 20-408

DANDRIDGE TO CHESTNUT H
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STRESS SHEET
FOR 888'-0" CONTINUOU

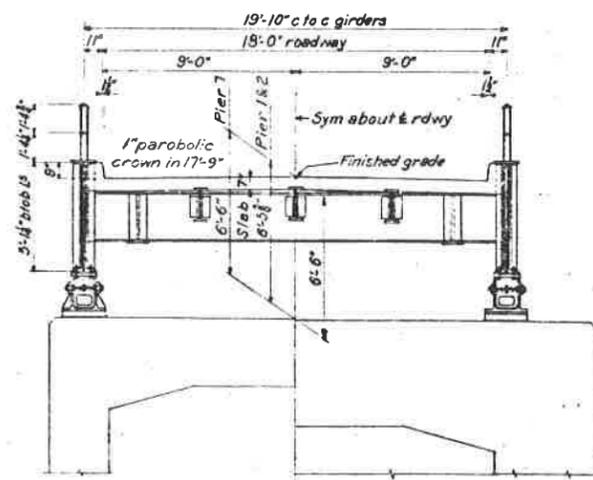
DOUGLAS PROJECT
 TENNESSEE VALLEY AUTH
 DESIGN DEPARTMENT

DESIGNED BY: *P. J. ...*
 CHECKED BY: *W. ...*

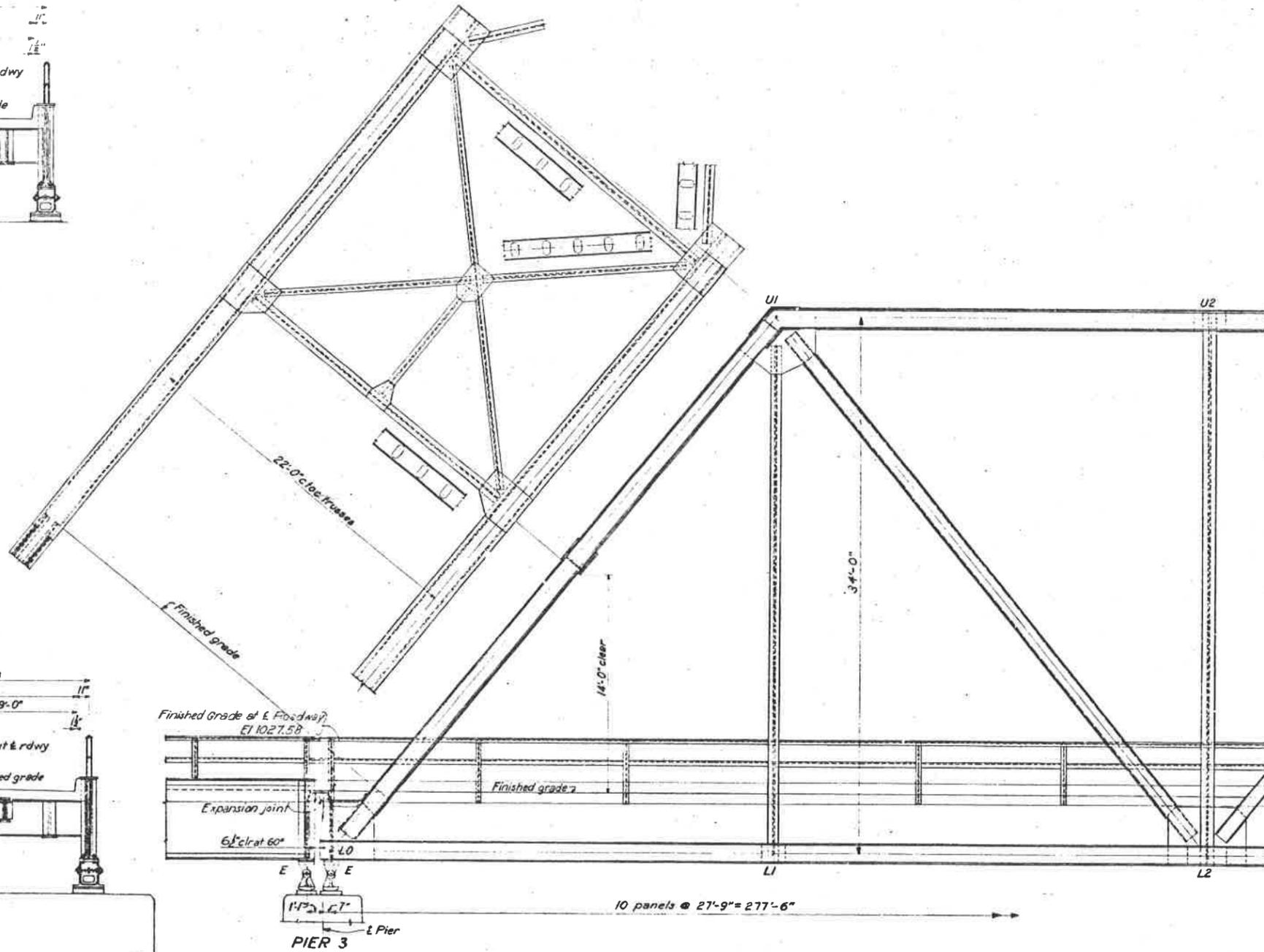
KNOXVILLE 7-3-42 20-408-5



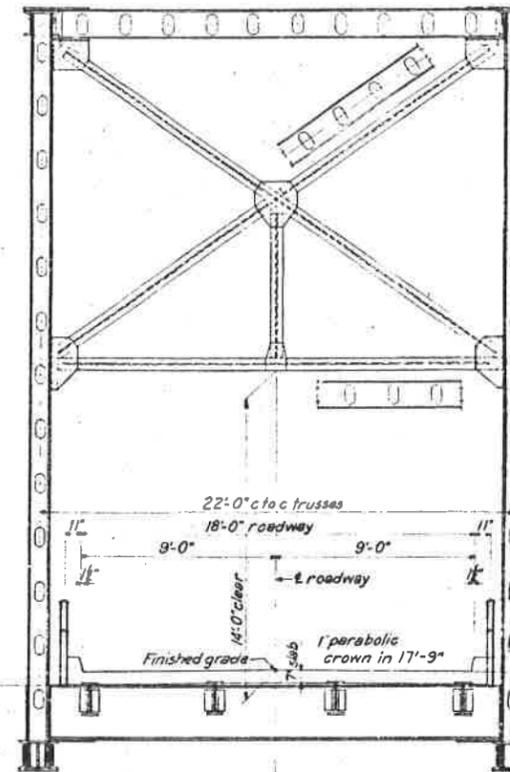
ABUTMENTS 1 & 2
GIRDER SPANS



PIER 1, 2 & 7
PIER 3 & 6
GIRDER SPANS



PART ELEVATION



SECTION AT SWAY FRAME

Scale 1/4" = 1'-0"

PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
TYPICAL SECTION

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

7-3-42
KNOXVILLE

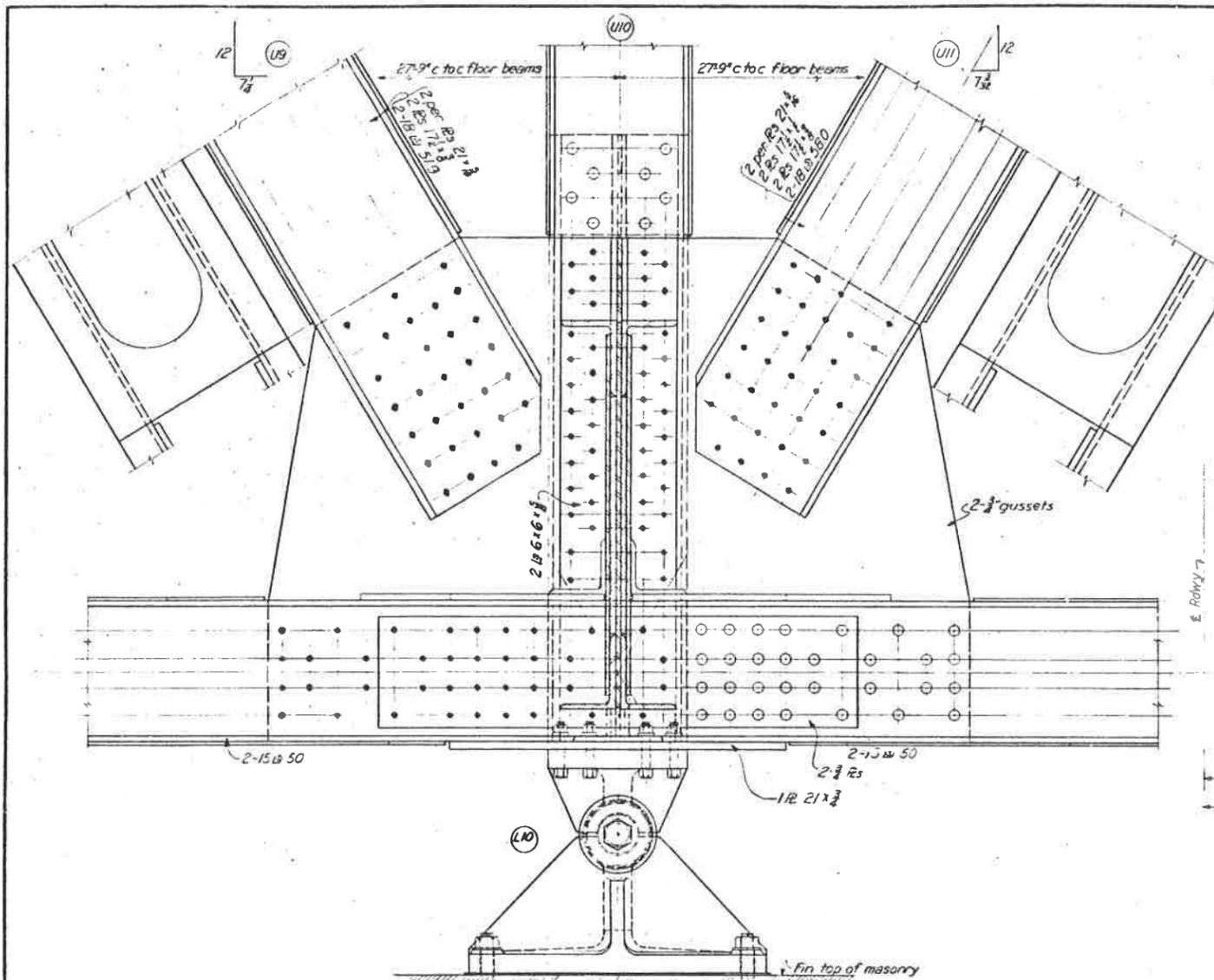
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SECOND DRAWING

COMPANION DRAWING: 4081H437

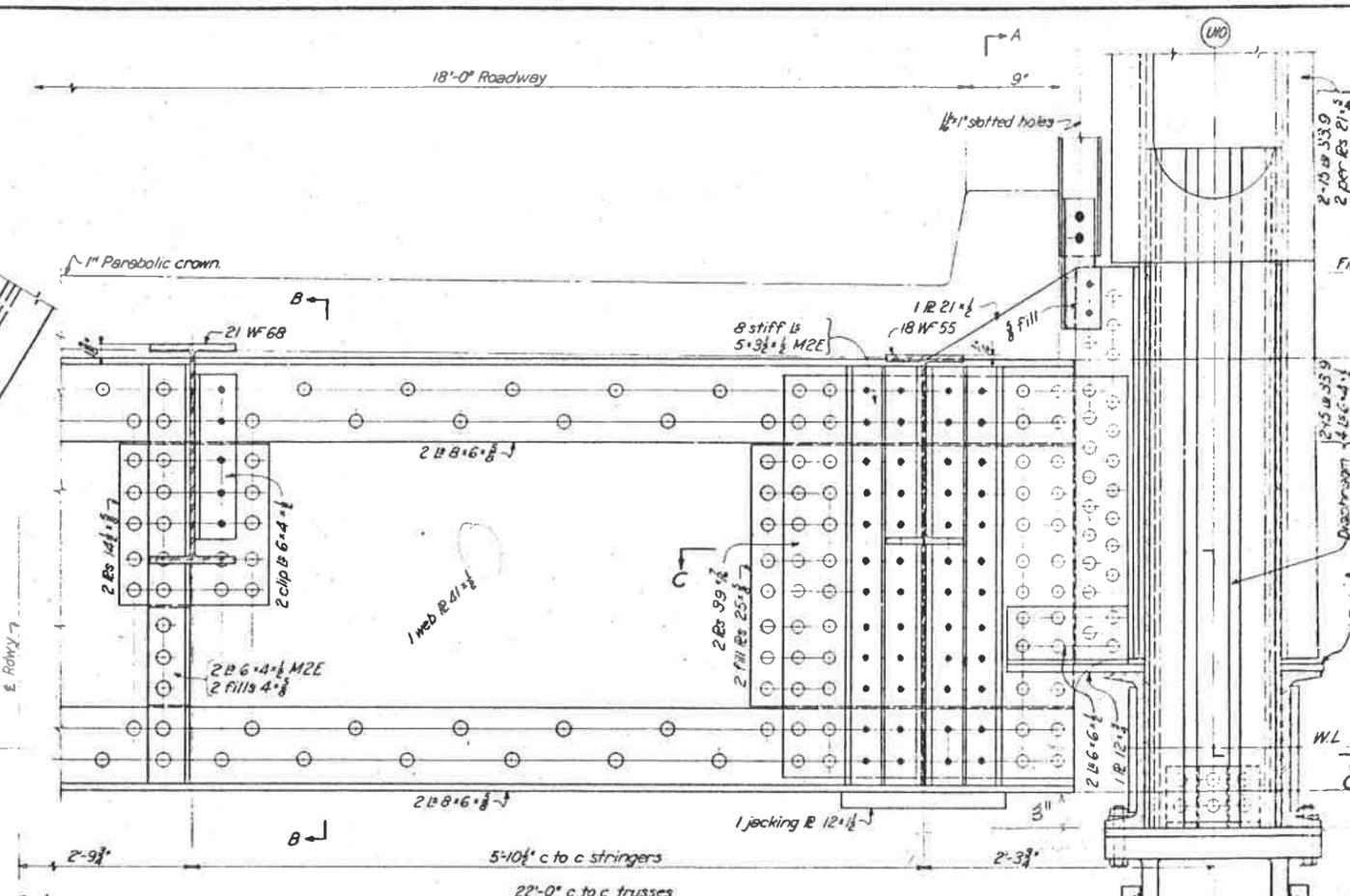
Reqn 337,081

Cont TV 73,863

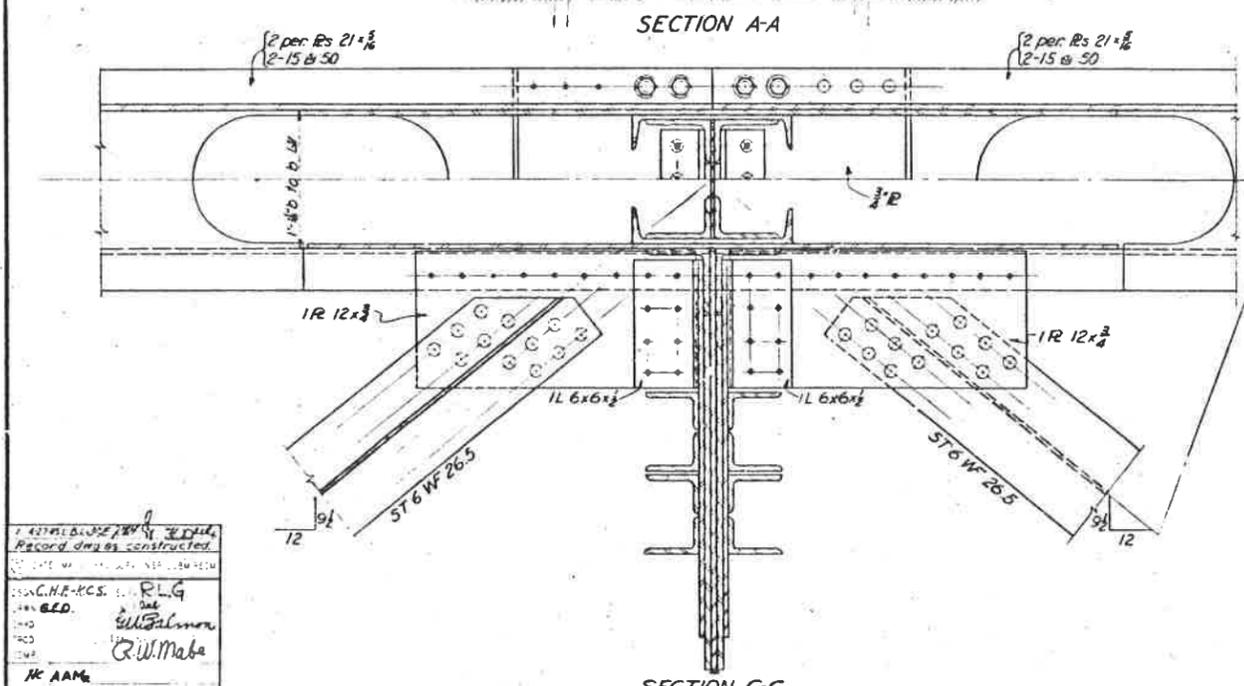
1. 4081H437	3/22/42
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DATE MADE	DATE DESIGNED
DESIGNER	RLC
CHKD	L.B.S.
APP'D	R.W. Mabey
COMP	



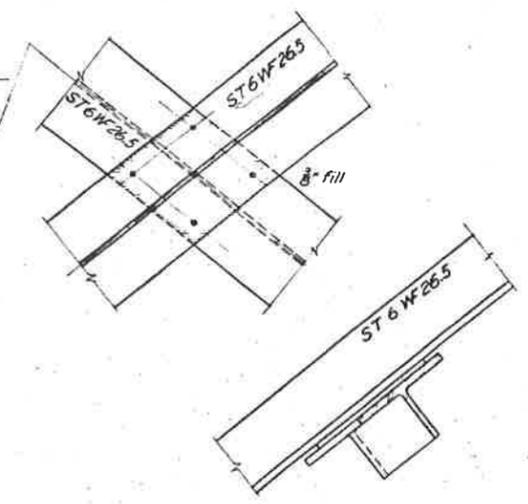
SECTION A-A



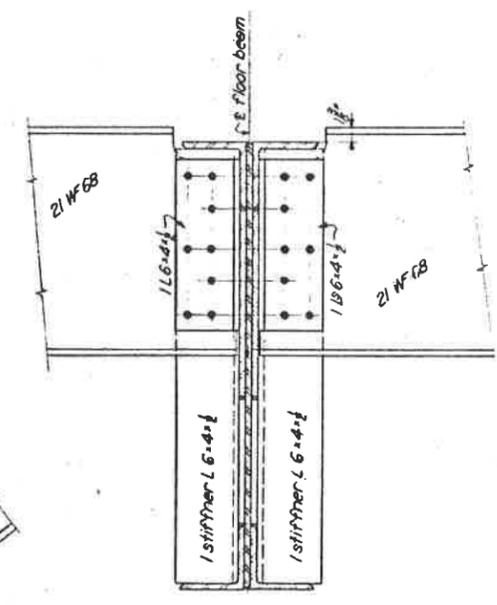
HALF FLOOR BEAM B



SECTION C-C



BOTTOM LATERAL CONNECTION

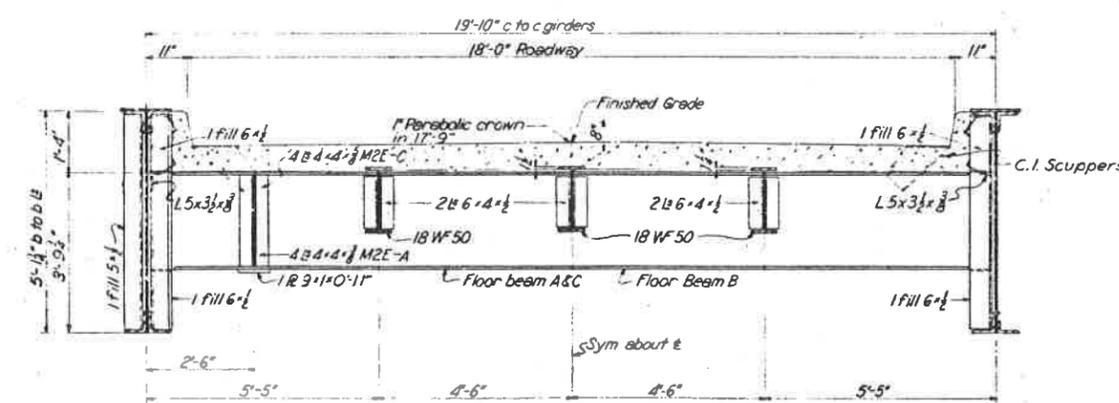
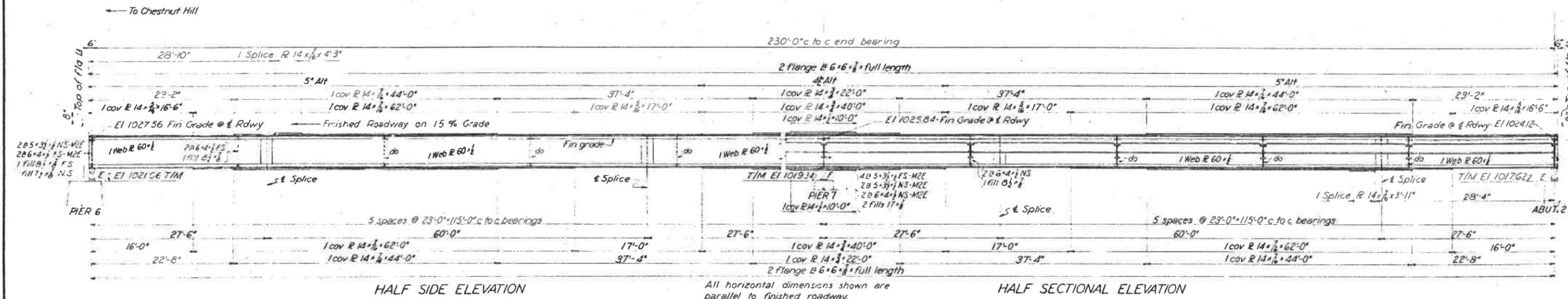
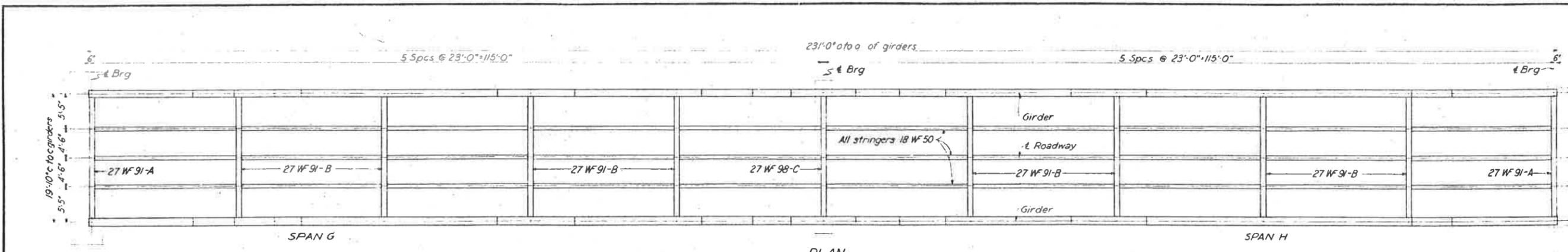


SECTION B-B

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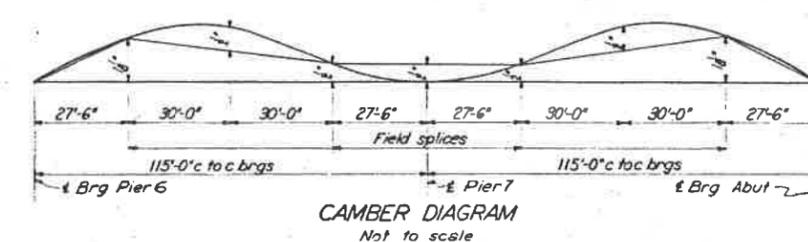
Scale 1/2"=1'-0"
 PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 TRUSS & FLOOR BEAM DETAILS
 DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGNED BY
 R. J. Johnson
 R. L. Smith
 KNOXVILLE 7-3-42 20 15 2
 SPECIAL DRAWING
 100



HALF FLOOR BEAM A & C
Scale 1/2"=1'-0"

HALF FLOOR BEAM B
Scale 1/2"=1'-0"



CAMBER DIAGRAM
Not to scale

Item	Moment in ft kips				Shear in kips				Section
	DL	LL	I	Total	DL	LL	I	Total	
Stringers	30	69	23	122	5.6	13.2	4.5	23.3	18 WF 50
Floor Beam B	116	142	48	306	17.3	25.8	8.7	51.8	27 WF 91
Floor Beam A	61	142	48	251	9.1	25.8	8.7	43.6	27 WF 91
Floor Beam C	Jacking Moment				Jacking Shear				
	117	142	48	307	17.4	25.8	8.7	51.9	27 WF 98
	Jacking Moment				Jacking Shear				
	504				201				

Loading	Reaction in kips		Moment in ft kips	
	End support	Center support	End span	Center support
Dead Load	65.4	217.2	+1400	-2500
Live Load	43.7	88.5	+923	-944
Impact	9.1	18.4	+192	-196
Totals	118.2	324.4	+2515	-3640

NOTES:
 Specifications: TVA Specifications No 2012.
 Design Loading: H15 on 2 lanes, AASHTO Spec third Edition, 1941.
 Material: Structural steel shall conform to Rivet steel shall conform to ASTM, A141-39. C shoes and rockers shall conform to ASTM, A235-4. Forged steel pins shall conform to ASTM, A235-4. Lead plates shall conform to Federal Specification QQ-L-201, Grade B.
 Connections: Riveted, unless noted.
 Welding: See Specifications No 2012.
 Rivets: 3/4" except as noted or required for special Open Holes: 5/8" except as noted for rivets above Reaming, Shop Assembly, and Camber: See Specification No. 2012.
 Paint: See Specifications No 2012.

REFERENCE DRAWINGS:
 4081H401 - GENERAL DRAWING
 4081H442 - SHOES FOR CONTINUOUS
 4081H443 - EXPANSION JOINT EJI & E
 4081H446 - RAILINGS & SCUPPERS

Scale 1/2"=1'-0"
 Except as noted
 PROJECT 20-4081

1-4315-81-7-1-1-1
 Record Draw. as constructed.
 DATE: 7-5-42
 DESIGNED BY: R.L.G.
 DRAWN BY: G.E.A.
 CHECKED BY: L.B.B.
 APPROVED BY: R.W. Mabe
 H.A.A.M.

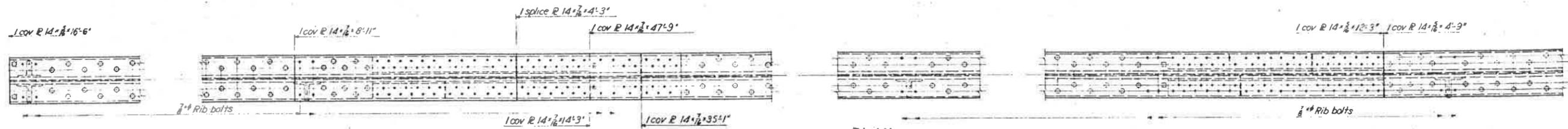
COMPANION DRAWINGS: 4081H440
 4081H441

DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 STRESS SHEET
 FOR 231'-0" CONTINUOUS

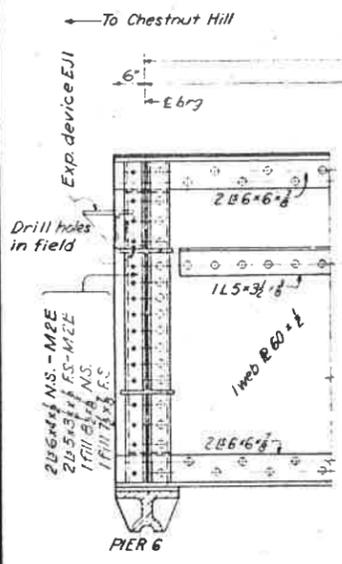
DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

APPROVED: R. G. Johnson
 APPROVED: R. G. Johnson
 KNOXVILLE 7-5-42 20 HR 5 1/2
 RECORD DRAWING

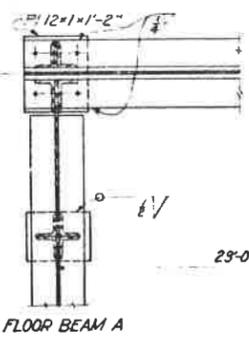
Reqn 337,081
 Cont TV 13,863



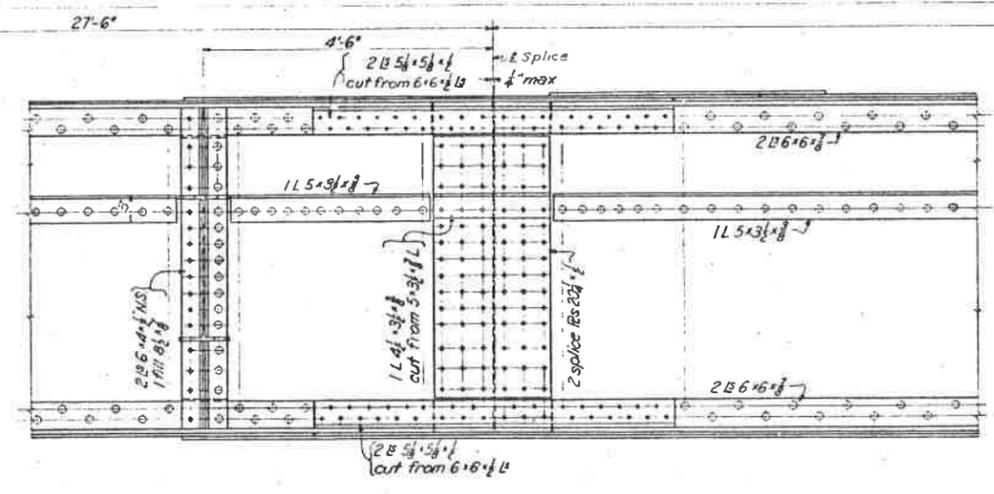
PLAN



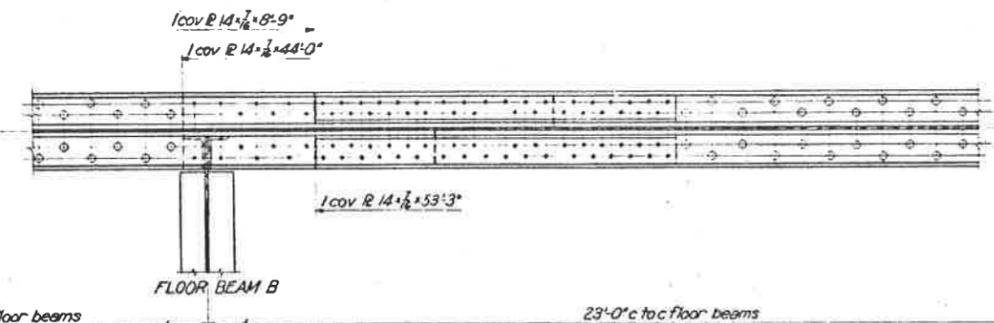
PIER 6



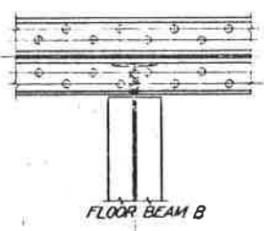
FLOOR BEAM A



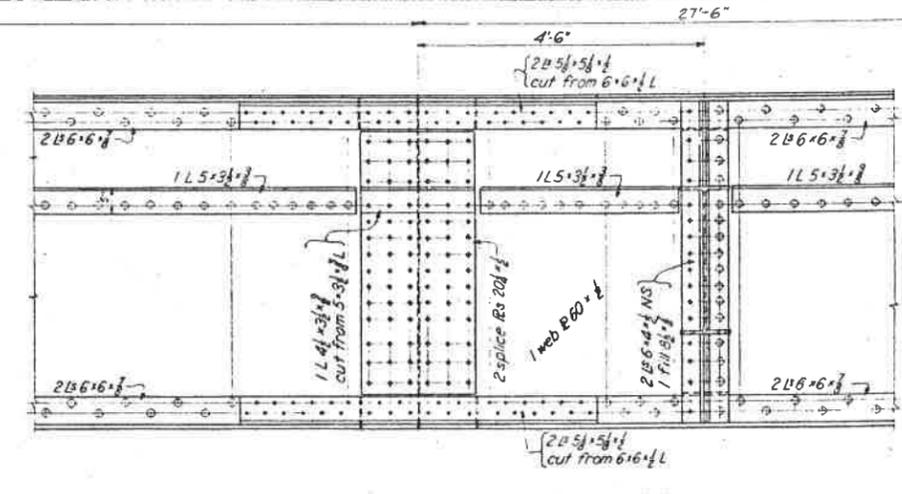
ELEVATION



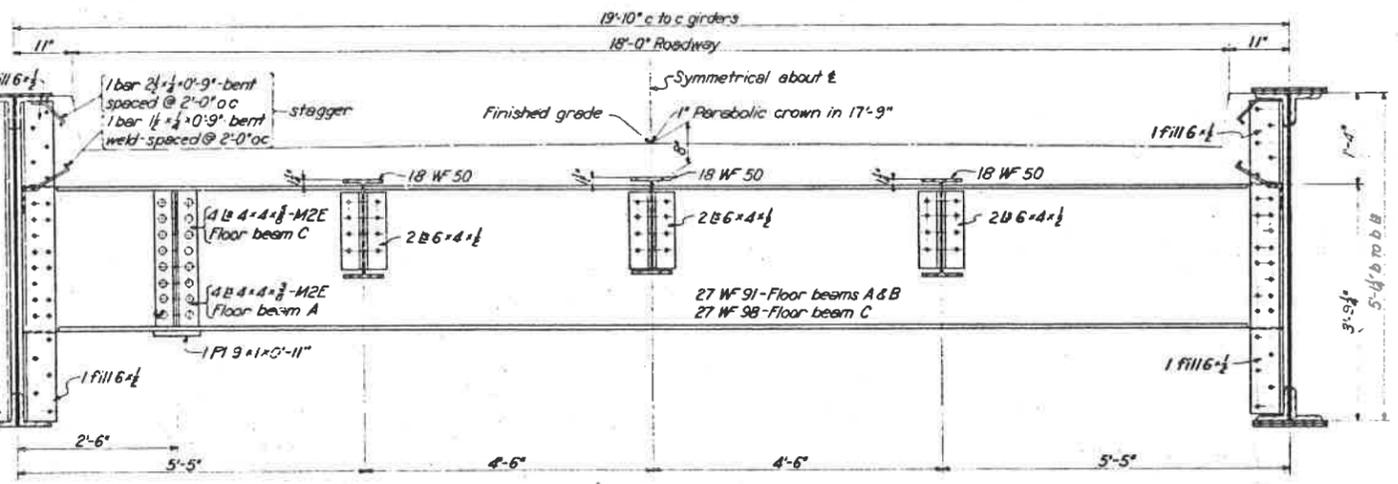
FLOOR BEAM B



FLOOR BEAM B



BOTTOM SECTION



HALF FLOOR BEAM A
FLOOR BEAM C SIMILAR

HALF FLOOR BEAM B

NOTES:
For list see dwg No. 4081 H 439

Scale 3/4" = 1'-0"

PROJECT 20-4081

DANDRIDGE TO CHESTNUT
DANDRIDGE BRIDGE
ACROSS FRENCH BROADWAY
DETAILS FOR 231'-0" CONTINUOUS

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

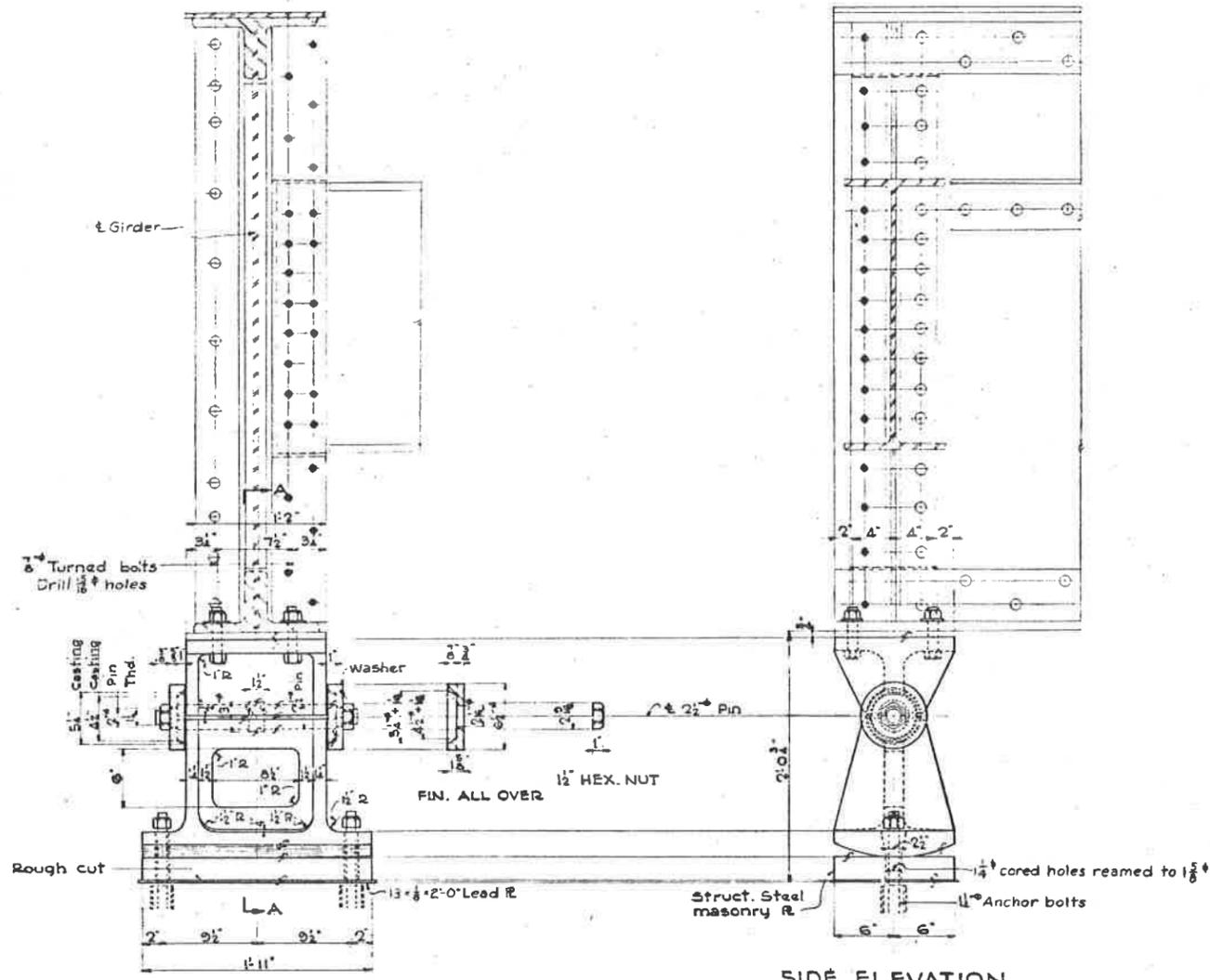
7-3-42
KNOXVILLE

COMPANION DRAWING: 4081H 439
4081H 440

Regr 337,081

Cont TV 73,263

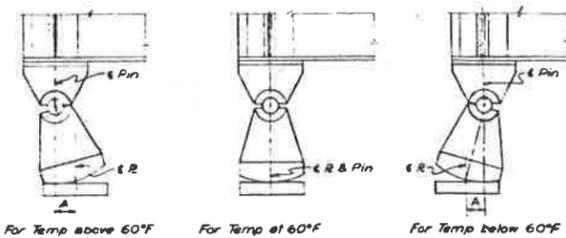
DESIGNER	DATE	BY
REVISION		
APPROVED		



END ELEVATION

SIDE ELEVATION

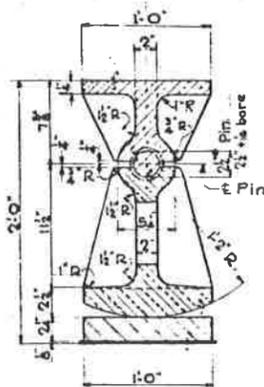
ROCKER SHOE ESI
8 Req'd



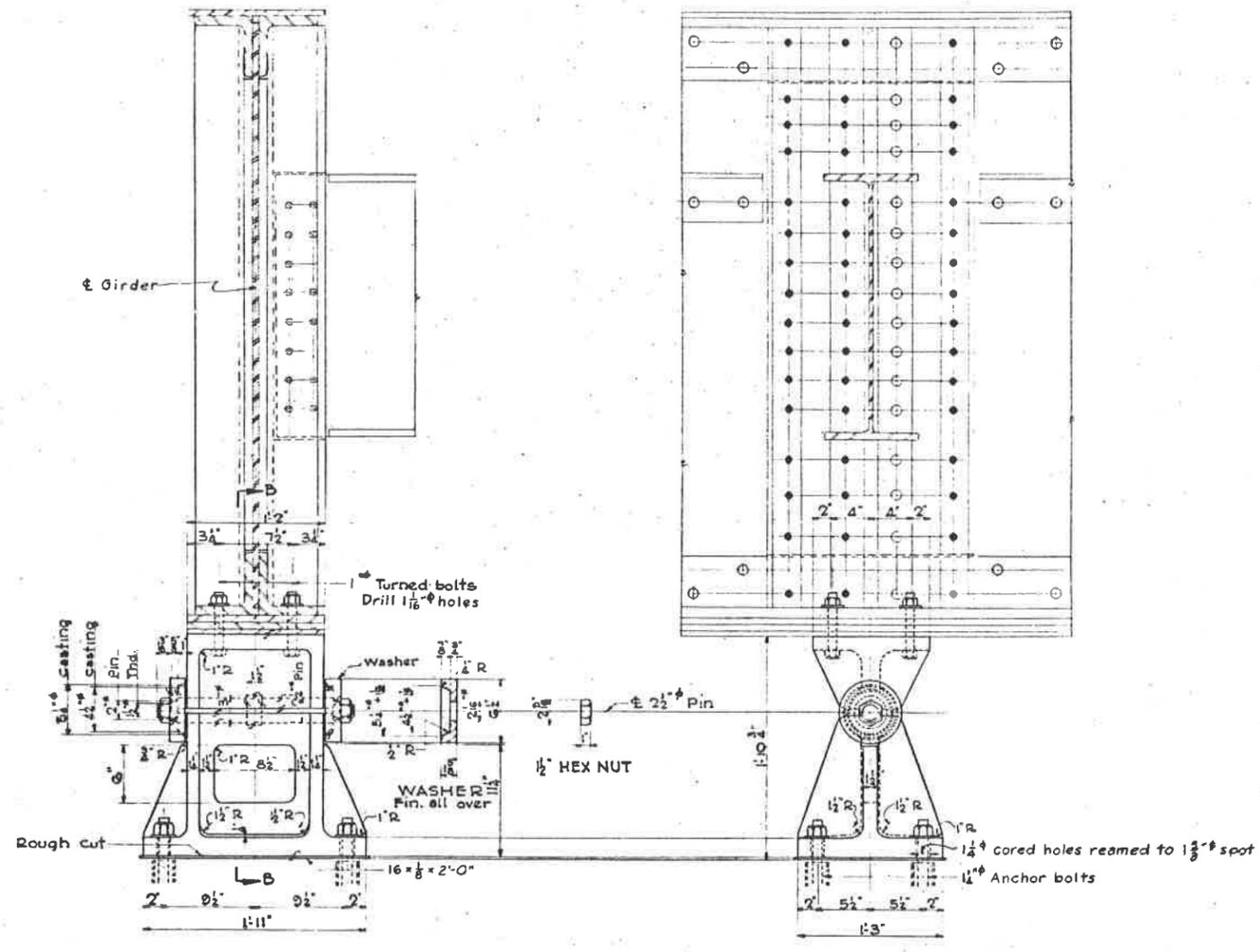
For Temp above 60°F For Temp at 60°F For Temp below 60°F

Temp	0°	20°	40°	60°	80°	100°
A	7/8	3/4	3/4	0	3/8	3/8

SHOE SETTING DIAGRAM
Not To Scale



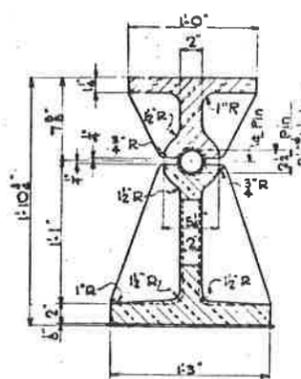
SECTION A-A



END ELEVATION

SIDE ELEVATION

FIXED SHOE FSI
6 Req'd



SECTION B-B

NOTES:
Material: Cast steel shoes shall conform to ASTM, A27-39, Grade B. Bolts, nuts, and washers shall conform to ASTM, A107-40, Grade B, or A7-39. Structural steel shall conform to ASTM, A7-39.
Forged steel pins shall conform to ASTM, A23-39.
Lead plates shall conform to Federal Specification QQ-L-201, Grade B.
Shop paint: See Specifications No. 2021.

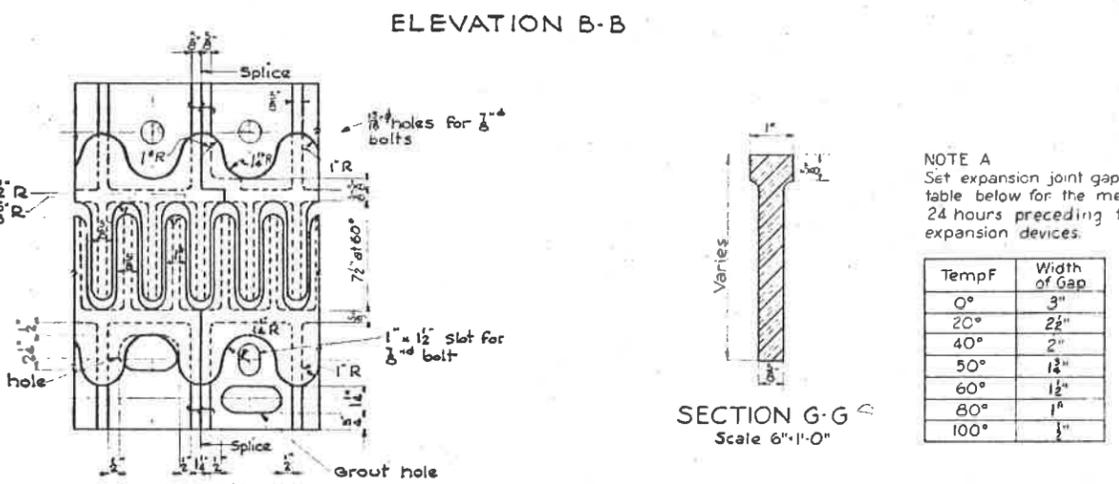
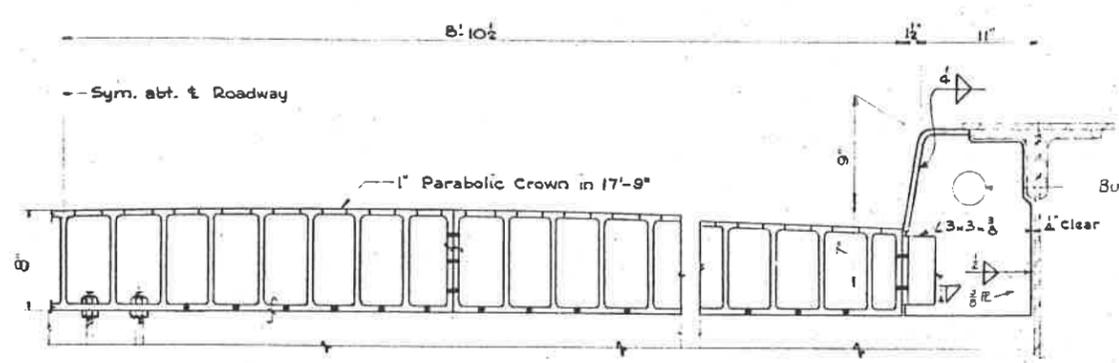
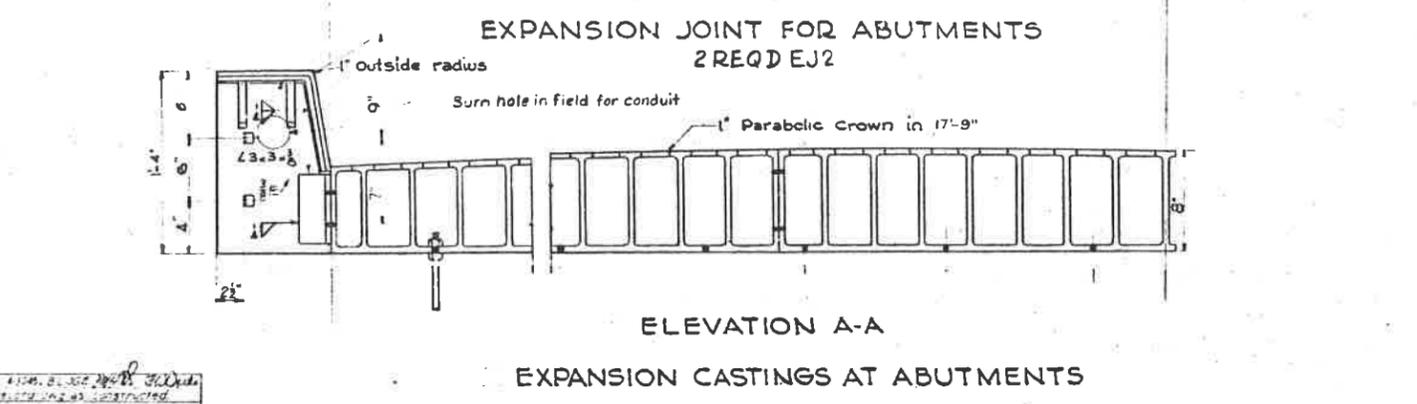
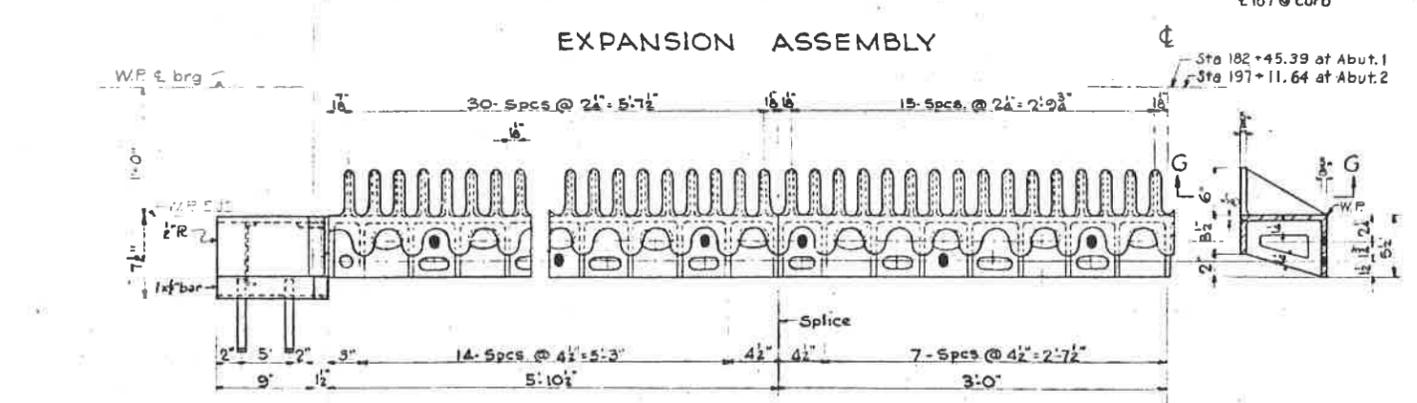
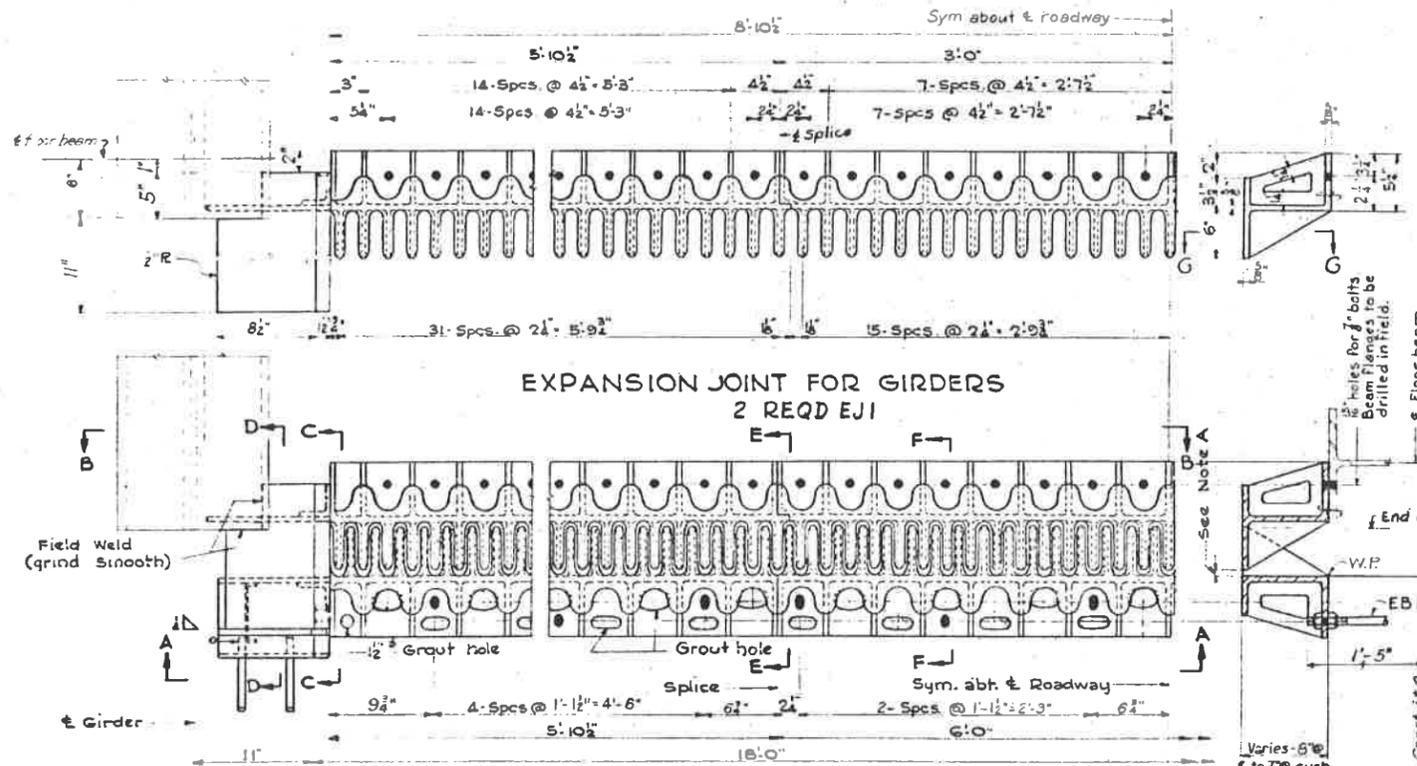
REFERENCE DRAWING
4081 H431 ANCHOR BOLT PLAN

Scale 1/2" = 1'-0"
PROJECT 20-6081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
SHOES FOR CONTINUOUS

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

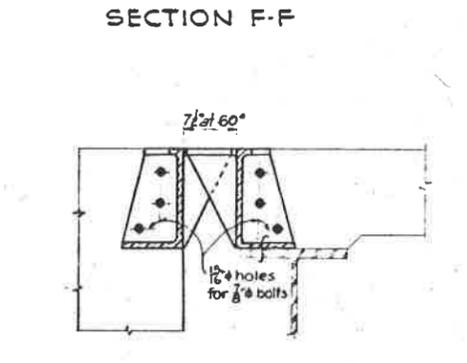
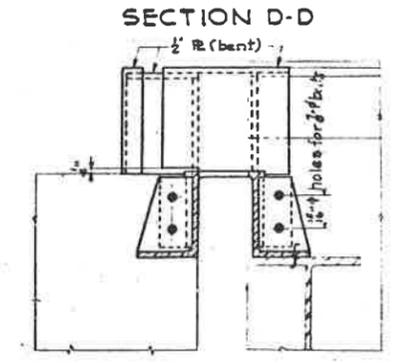
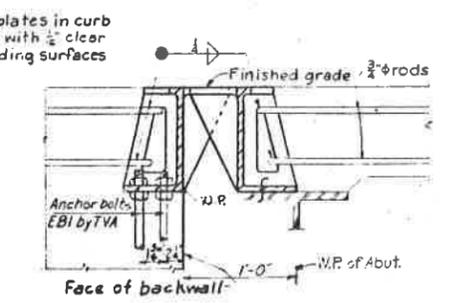
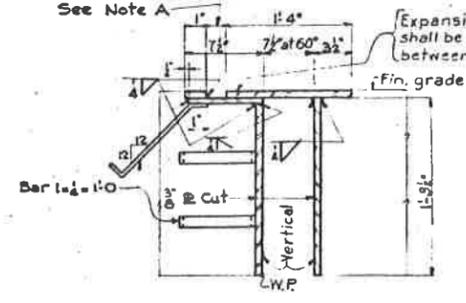
SUBMITTED BY: J. E. Junior
REVISIONS BY: R. L. Bennett
KNOXVILLE 7-3-42



NOTE A
Set expansion joint gap as determined from table below for the mean temperature for 24 hours preceding time of erection of expansion devices.

Temp F	Width of Gap
0°	3"
20°	2 1/2"
40°	2"
50°	1 3/4"
60°	1 1/2"
80°	1"
100°	3/4"

SPLICE & TYPICAL DETAILS



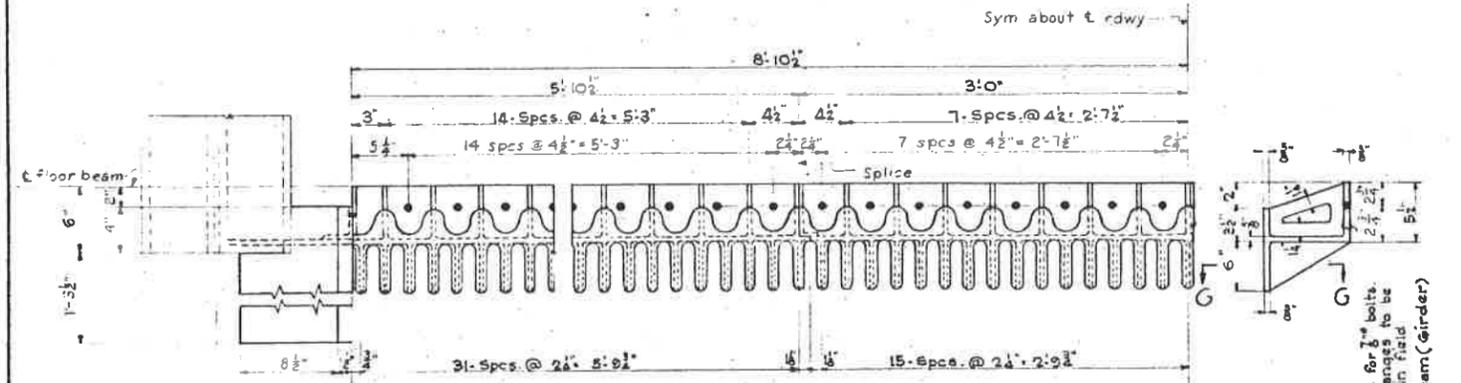
NOTES:
Material: Cast steel expansion devices shall conform to ASTM, A27-39, Grade B1. Bolts, nuts and washers shall conform to ASTM, A107-40, Grade B, or A7-39. Structural steel shall conform to ASTM, A7-39.
Welding: See specifications No. 2012.
Grind casting where req'd to smooth fingerings.
Shop paint: See specifications No. 2012.

REFERENCE DRAWING:
#081H431-----ANCHOR BOLT PLAN

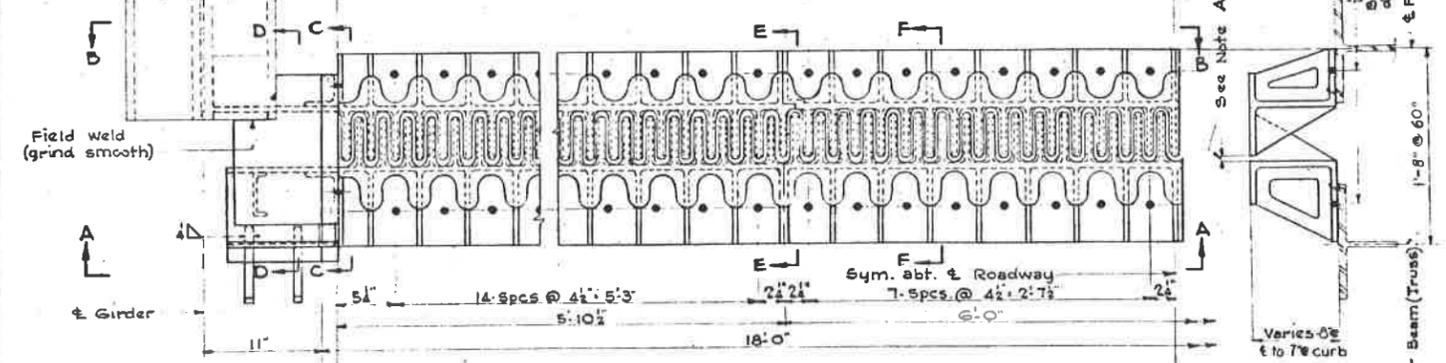
Scale: 1 1/2" = 1'-0"
Except as noted
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
EXPANSION JOINT EJ
DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT
KNOXVILLE 7-8-42 20 11 5 40
FRANK L. WILSON

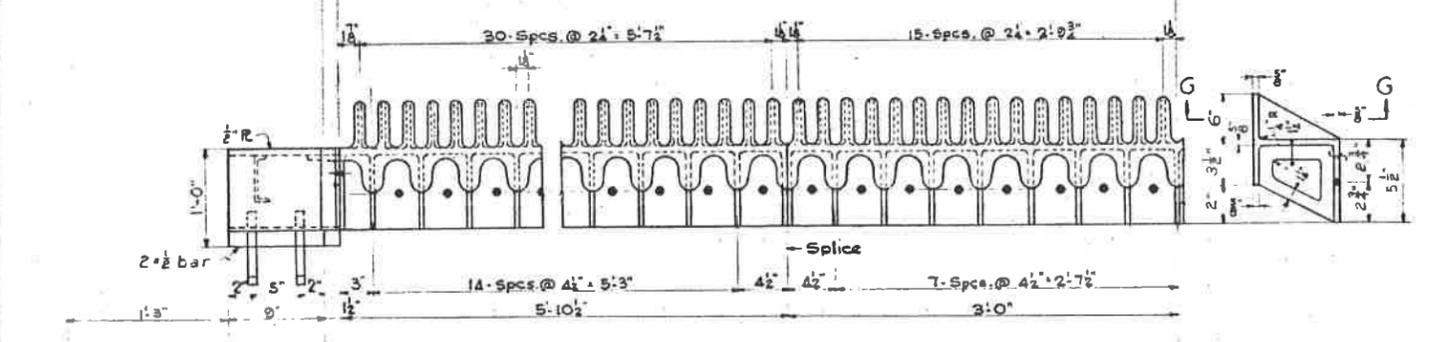
APPROVED: R. J. Mahr
DESIGNED: R. J. Mahr
CHECKED: R. J. Mahr
DATE: 7-8-42



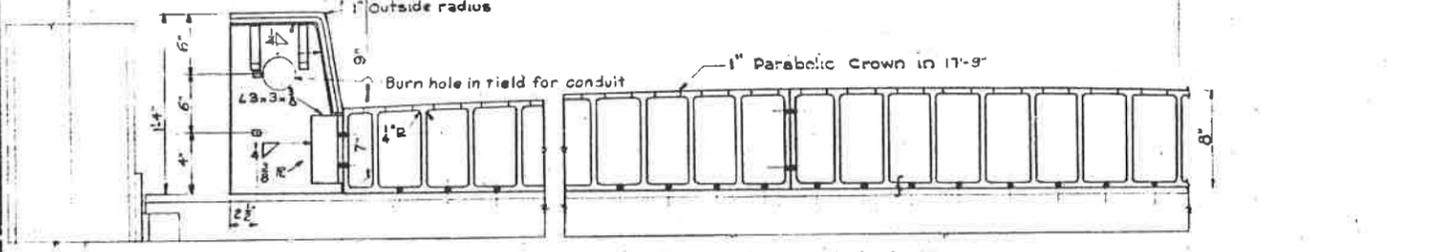
EXPANSION JOINT FOR GIRDERS
2-REQD. EJ3



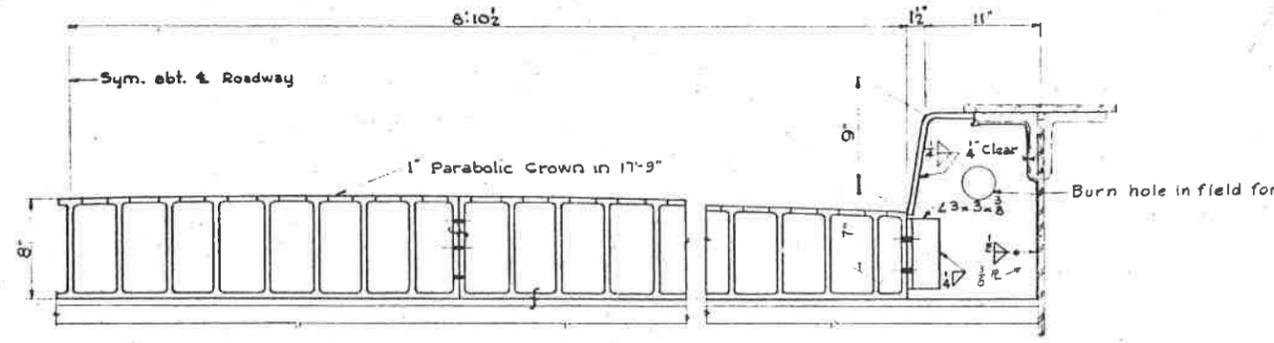
EXPANSION ASSEMBLY



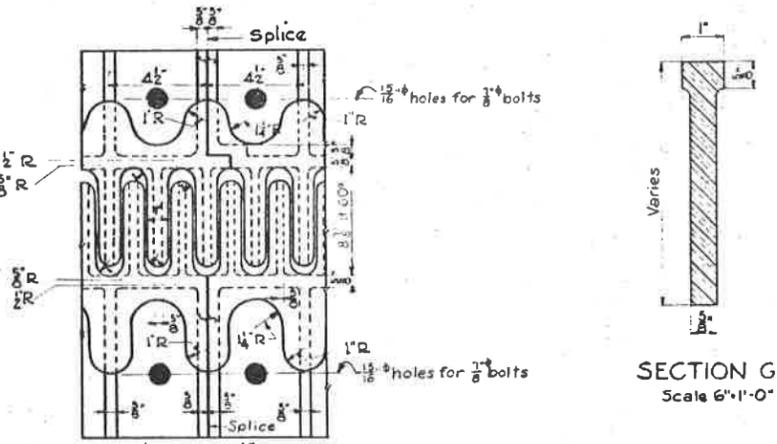
EXPANSION JOINT FOR TRUSS
2-REQD. EJ4



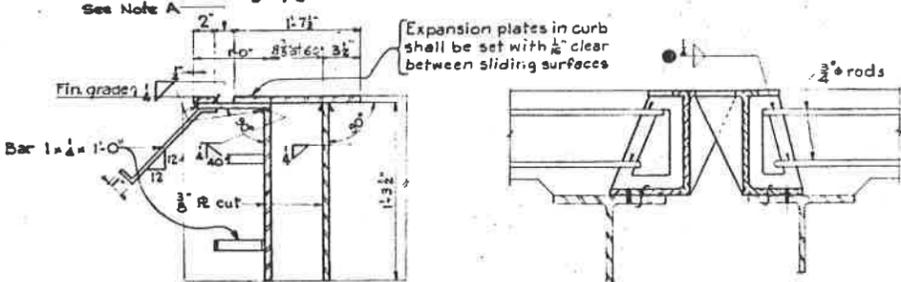
ELEVATION A-A
EXPANSION CASTINGS AT PIERS 3 & 6



ELEVATION B-B

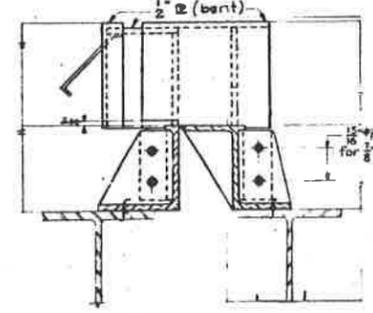


SPLICE & TYPICAL DETAILS

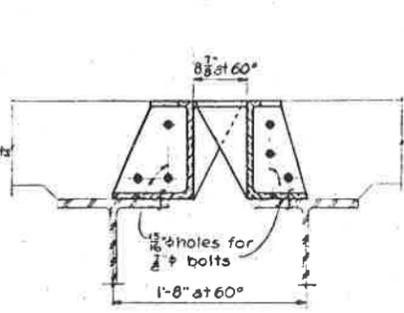


SECTION D-D

SECTION F-F



SECTION C-C



SECTION E-E

NOTE A
Set expansion joint gap as determined from table below for the mean temperature for 24 hours preceding time of erection of expansion devices.

Temp F	Width of Gap
0°	6 1/2"
20°	5 1/2"
40°	4 1/2"
50°	3 1/2"
60°	2 1/2"
80°	1 1/2"
100°	1"

NOTES:
Material: Cast steel expansion devices shall conform to ASTM, A27-39, Grade B1. Bolts, nuts, and washers shall conform to ASTM, A107-40, Grade B or A7-39. Structural steel shall conform to ASTM, A7-39.
Welding: See Specifications No. 2012. Grind casting where reqd to smooth fin fingers.
Shop Point: See Specifications No. 2012.

Scale: 1/2"=1'-0"
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
EXPANSION JOINT EJ

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

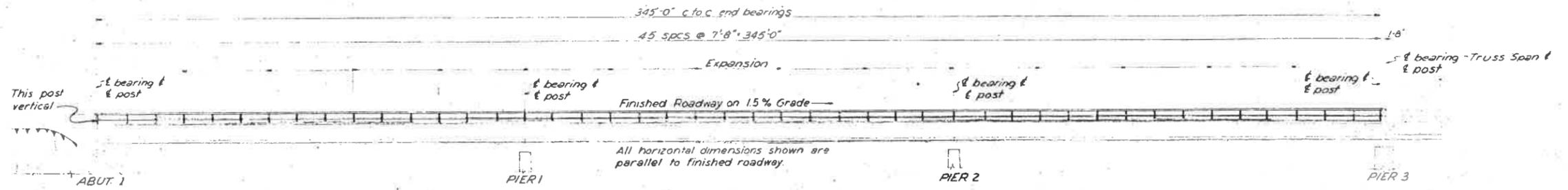
R. E. Johnson
KNOXVILLE 1-7-8-42

20 HR: 5 4
RECORD DRAWING
Frank W. ...

42-0. B. W. J. ...
Record and as constructed

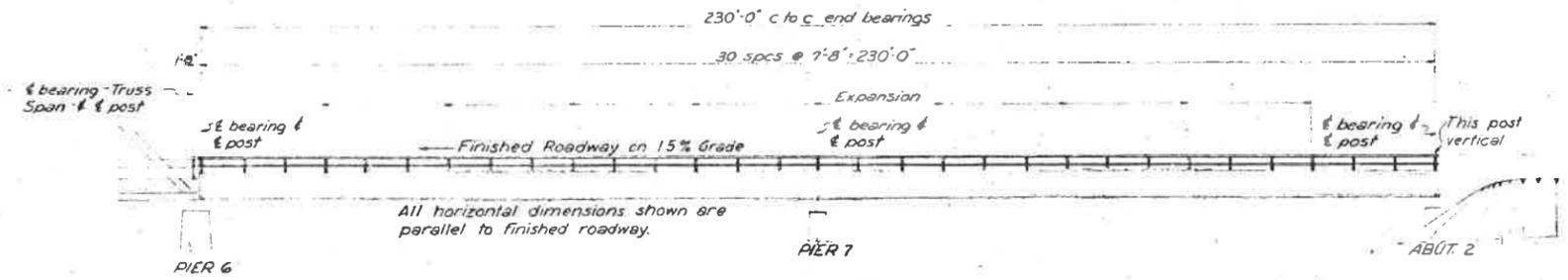
R. W. M. ...
Glen ...
LBB ...
R. W. M. ...
HC AAM ...

Reqn 332,081 Cont TV 73863



All post shall be perpendicular to finished roadway except as noted. Rails shall be parallel to finished roadway.

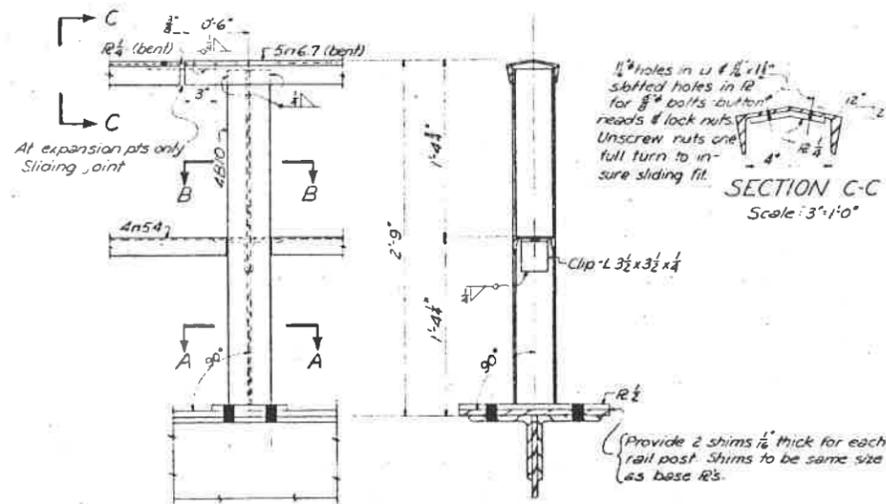
ELEVATION
3-SPAN GIRDER
Not to scale



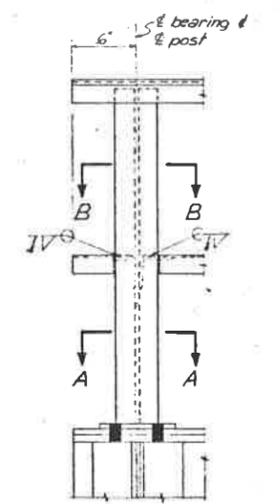
ELEVATION
2-SPAN GIRDER
Not to scale

NOTE A
Set expansion joint gap as determined by table below for the mean temperature for preceding time of erection of expansion

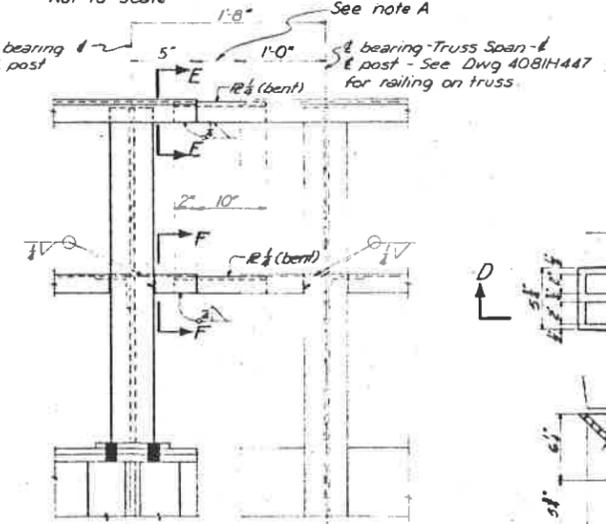
Temp F	0°	20°	40°	50°	60°	80°
Width of Gap	6 1/2"	5 1/4"	4 1/2"	3 1/2"	2 3/4"	1 3/4"



TYPICAL POST & RAILING

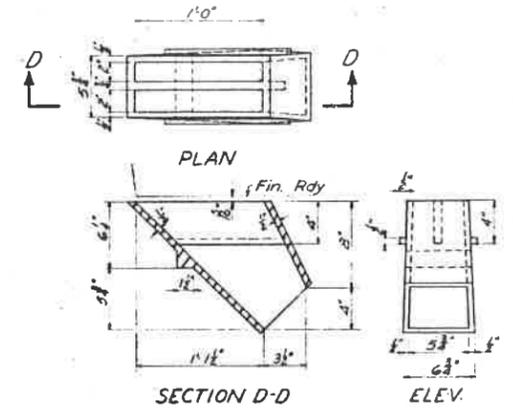


AT ABUTMENTS 1 OR 2
SHOWN FOR 1 - 2 OPP HAND

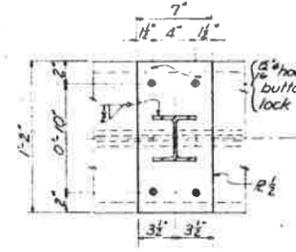


AT PIERS 3 OR 6
SHOWN FOR 3 - 6 OPP HAND

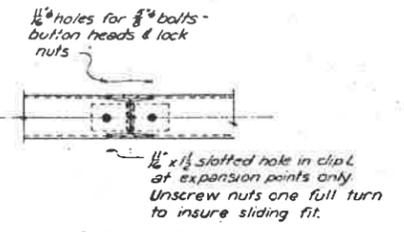
Additional shims required under rail posts:
22 Rs 7 1/2 x 1 1/2 x 2"
12 Rs 7 1/2 x 1 1/2 x 2"
13 Rs 7 1/2 x 1 1/2 x 2"
5 Rs 7 x 1 1/2 x 2"



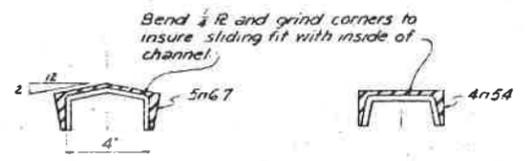
CAST IRON SCUPPER
104 REQD



SECTION A-A



SECTION B-B



SECTION E-E
Scale: 3"-1'-0"

SECTION F-F
Scale: 3"-1'-0"

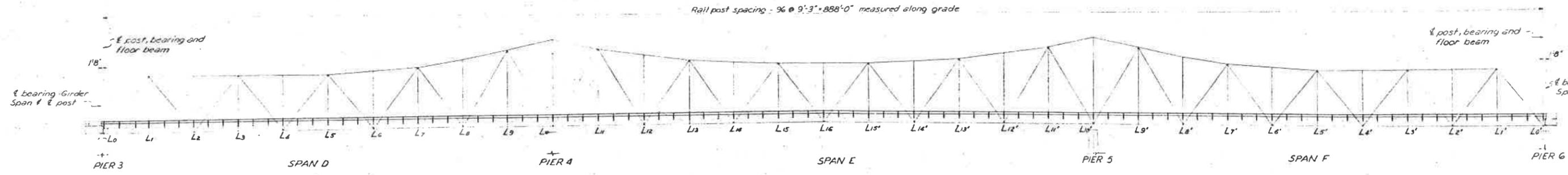
NOTES:
Specifications: TVA Specifications No 20
Material: Structural steel shall conform to A107-40, Grade 21 or 22, or A7-39
Miscellaneous parts shall be carbon steel of standard commercial quality
Scuppers shall be Gray Iron Castings conform ASTM, A48-36, Class 40.
Welding: Electric arc method, see TVA Spec No. 2012.
Fabrication: Welded surfaces exposed shall be ground to a surface finish equal to the adjacent rolled surfaces.
Paint: See Specifications No. 2012

REFERENCE DRAWINGS
4081H401...GENERAL DRAWING
4081H432...STRESS SHEET FOR 346'-0" CONTINUOUS GIRDER
4081H439...STRESS SHEET FOR 231'-0" CONTINUOUS GIRDER

Scale: 1/2"=1'-0"
Except as noted
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
RAILINGS AND SCUPPERS
DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT
COMPANION DRAWINGS: 4081H447
KNOXVILLE 7-3-42 20 HR: 5
Knoxville 7-3-42

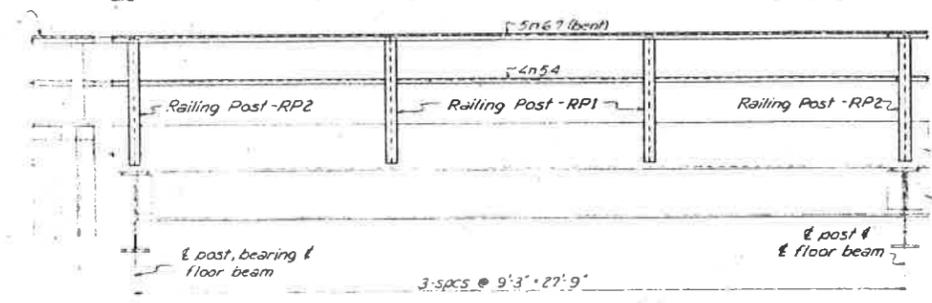
1. 430431.01. 56710. 30041.
Record dwg as constructed.
R.A.D. E.L.G.
C.B.D. L.B.
L.B.B. S.W. Salmon
R.W. Mabe
Mc AAM



ELEVATION
Scale: 1"=30'-0"

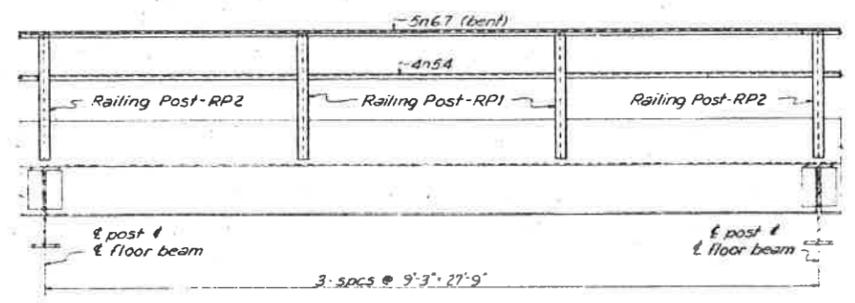
See Dwg. 4081H446 for girder railing

Note: Railing Posts -RP1 to be set perpendicular to grade. Other posts, at intermediate floor beams, shall line up with vertical members of truss. Railing shall be parallel to finished roadway.



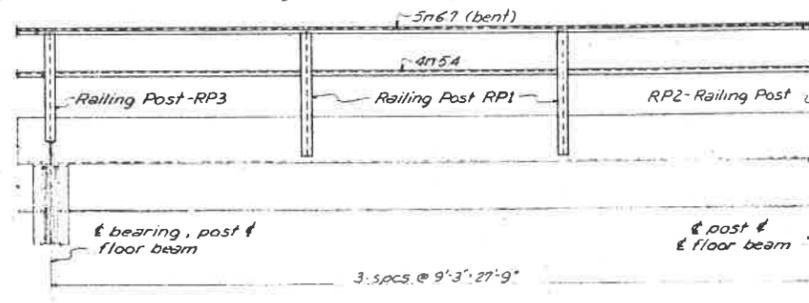
PIER 3 or 6

END PANELS L₀-L₁ & L₀-L₁
PANEL L₀-L₁ SHOWN - L₀-L₁ OPP. HAND



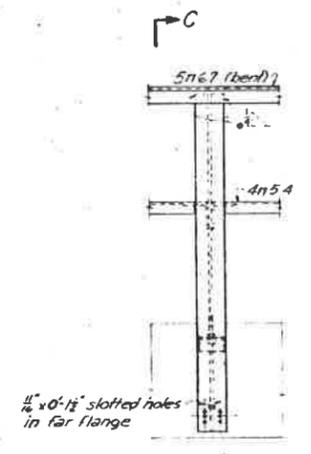
TYPICAL INTERMEDIATE PANEL

RAILING ELEVATIONS
Scale: 3/8"=1'-0"



PIER 4 or 5

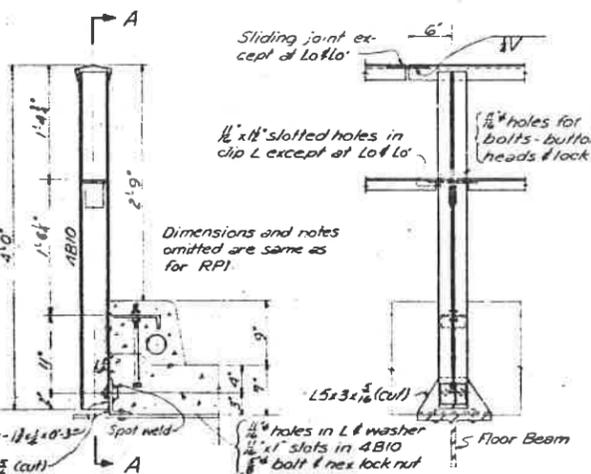
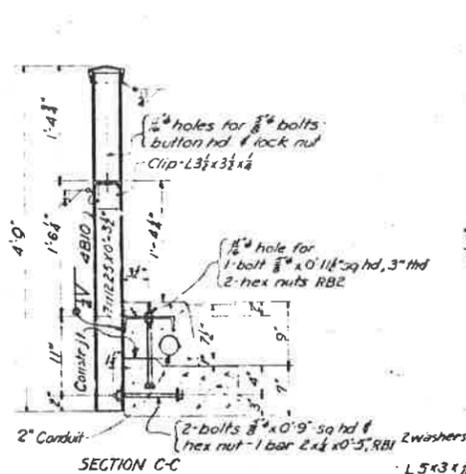
INTERMEDIATE PANELS L₉-L₁₀ & L₉-L₁₀
PANEL L₉-L₁₀ SHOWN - L₉-L₁₀ OPP. HAND



ELEVATION

SECTION C-C

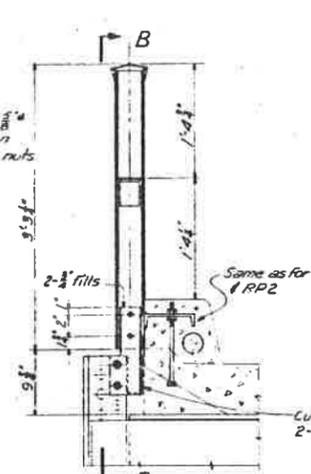
RAILING POST -RP1



ELEVATION

SECTION A-A

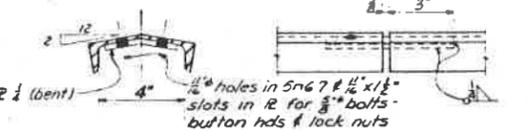
RAILING POST -RP2



ELEVATION

SECTION B-B

RAILING POST -RP3



SLIDING JOINT
Scale: 3/8"=1'-0"

NOTES:
For list see dwg No 4081H446

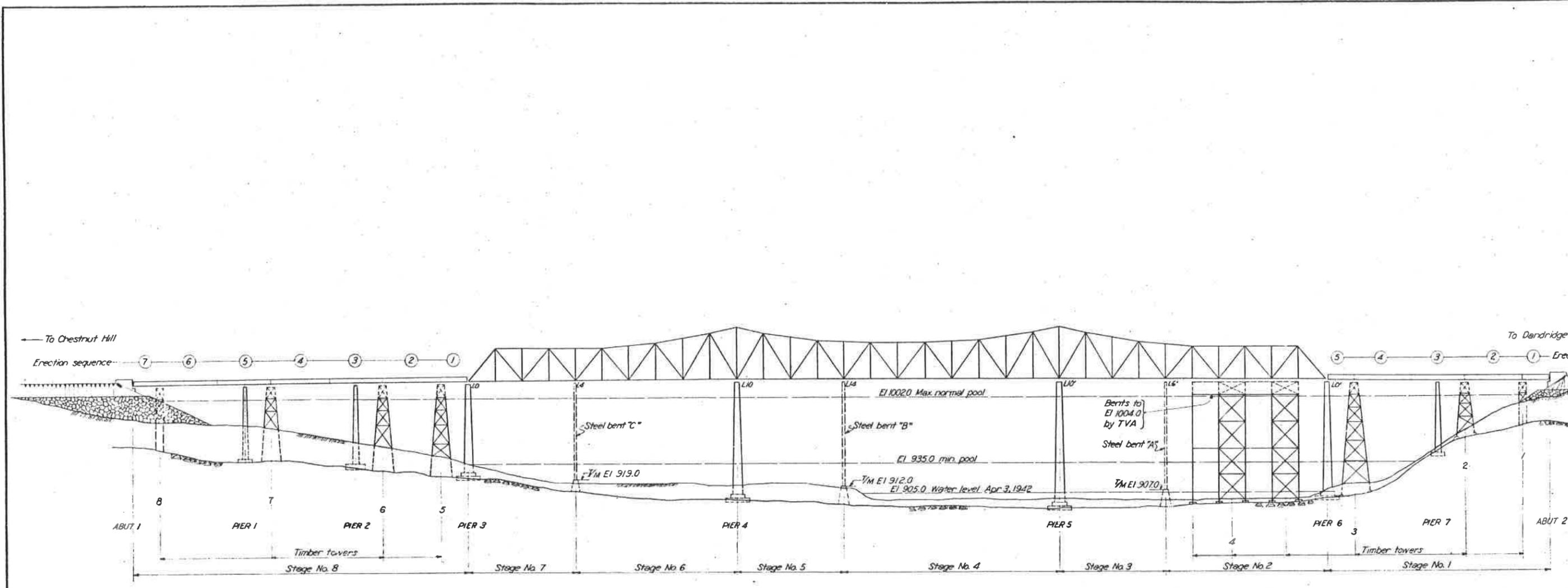
Scale: 1"=1'-0"
Except as noted
PROJECT 20-4081

DESIGN	C.H.R.	DATE	7-3-42
CHECKED	L.B.B.	DATE	7-3-42
APPROVED	R.W. Madala	DATE	7-3-42

DANDRIDGE TO CHESTNUT
DANDRIDGE BRIDGE
ACROSS FRENCH BROOK
RAILINGS AND SCUPPERNS

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

RECOMMENDED
KNOXVILLE 7-3-42 20 HR 5
Reqn 337, DBI Corit TV 73,863



ELEVATION
Scale 1" = 50'

NOTES:
The erection scheme shown is based on erecting sections of the bridge from Dandridge end towards Chestnut Hill. Should the Contractor choose to erect the bridge from the Chestnut Hill end, the sequence will be reversed.
The erection sequence is as follows:
Stage 1 - Erect sections 1 thru 5 of the 246" continuous girders on falsework towers 1, 2, 3, 4 & steel bent A. Stage 2 - Erect the continuous trusses on falsework tower 4 & steel bent A. Stage 3 - Erect the remainder of the trusses in successive 30' cantilevers, using steel bents A, B & C. Stage 4 - Erect sections 6 thru 8 of the 346" continuous girder on falsework towers 5, 6, 7 & 8 as indicated. It may be necessary to support L₀ on jacks during the stage 5, 6 & 7, maintaining a constant reaction at L₀ in order to overstress the chord members. The Authority will design, fabricate, and furnish the steel erection bents A, B & C. The Authority will construct the foundations for the steel bents A, B & C.

DATE	BY	CHKD.	APP.
7-3-42	R.W. Mabe		
CHAS. P. M. R. L. G. G.E.D. 100 L.S.S. R.W. Mabe R. A. M.			

REFERENCE DRAWINGS:
4081M401..... GENERAL DRAWING

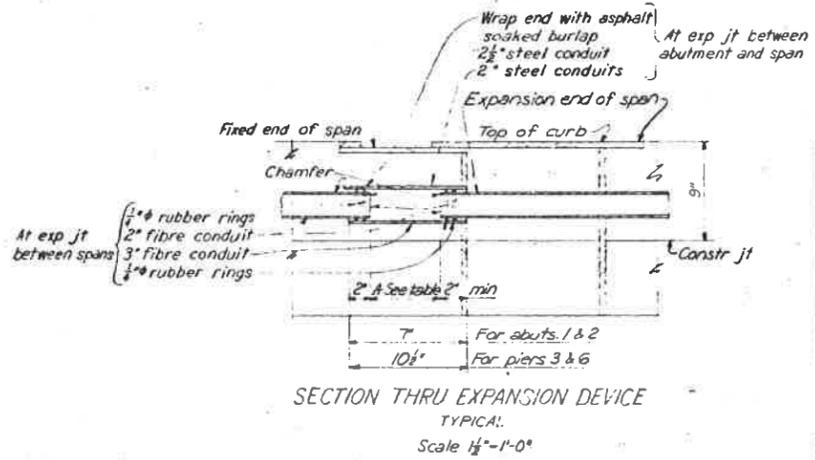
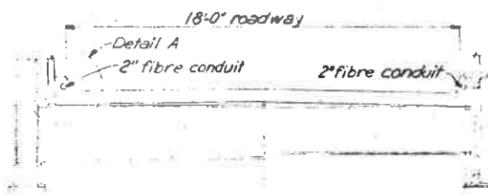
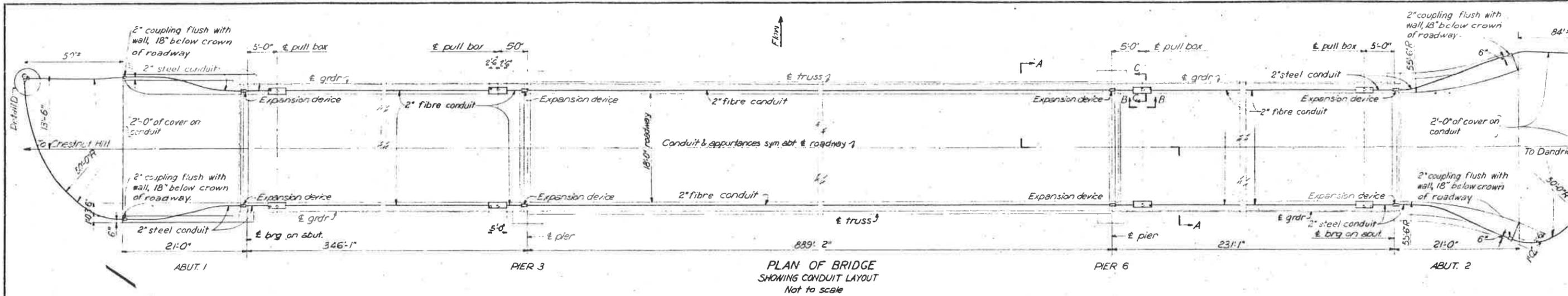
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ERECTION SCHEME

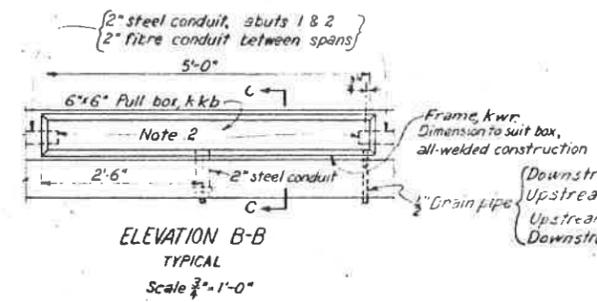
DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

APPROVED	RECOMMENDED
<i>R. J. ...</i>	<i>R. ...</i>
KNOXVILLE	7-3-42 20 HR. 5 20



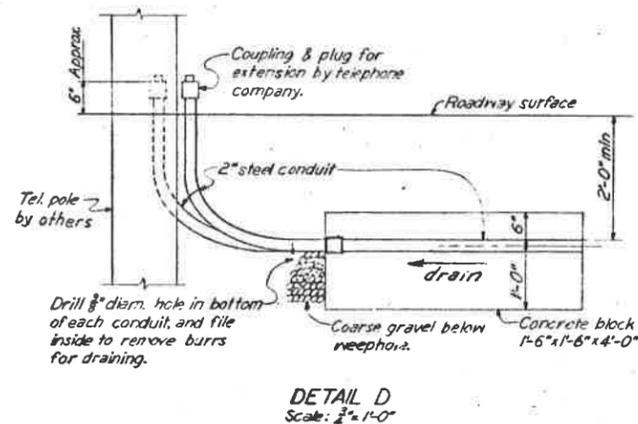
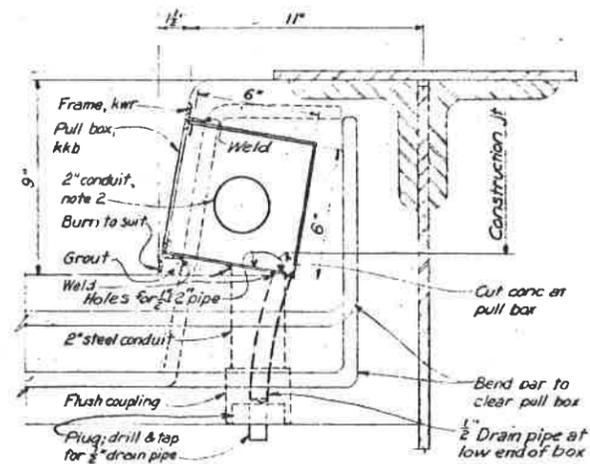
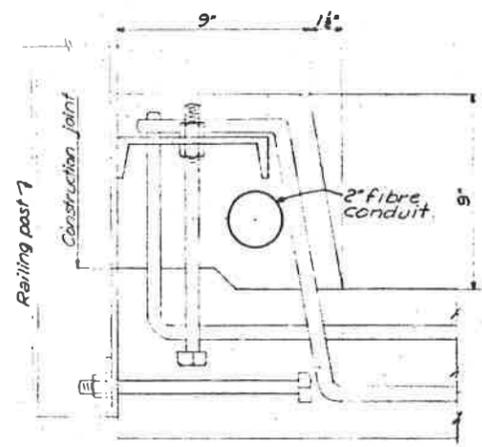
For abuts. 1 & 2		For piers 3 & 6	
A	Temp F	A	
3"	0°	6"	
2 1/2"	20°	5 1/2"	
2"	40°	4 1/2"	
1 1/2"	50°	3 1/2"	
1 1/4"	60°	2 1/2"	
1"	80°	1 1/2"	
1/2"	100°	1/2"	

Note:
Set expansion joint gap as determined from the table above for the mean temperature for the 24 hours preceding time of erection of expansion devices.



- NOTES:
- Conduits and pull boxes furnished by other contractor installed by superstructure contractor.
 - Steel conduits terminate at boxes with kkb and bushings. Fibre conduits extend into boxes approx 18 inches. Chamfer inside of fibre conduit.

- REFERENCE DRAWINGS:
- 4081H444... EXPANSION JOINTS EJI & EJK
 - 4081H445... EXPANSION JOINTS EJ3 & EJ4
 - 4081H461... TYPICAL SLAB DETAIL
 - 4081M450... ELECTRICAL BILL OF MATERIAL



Scale as noted
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD ROAD
CONDUIT LAYOUT

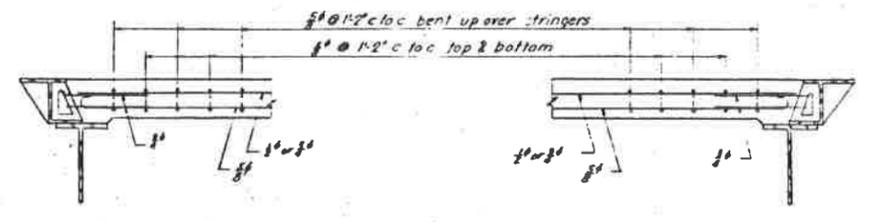
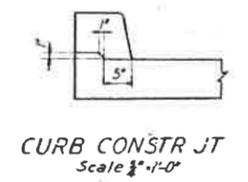
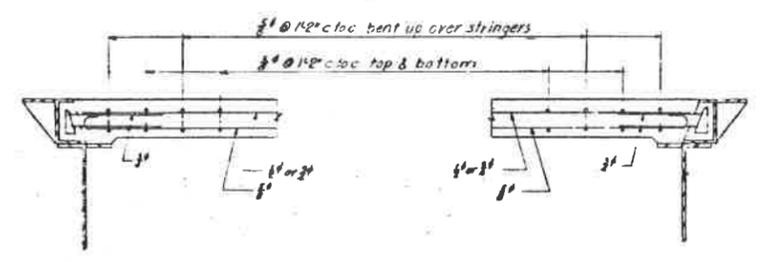
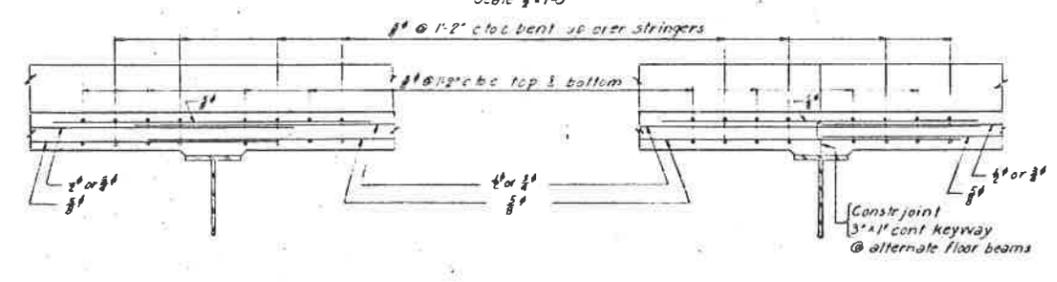
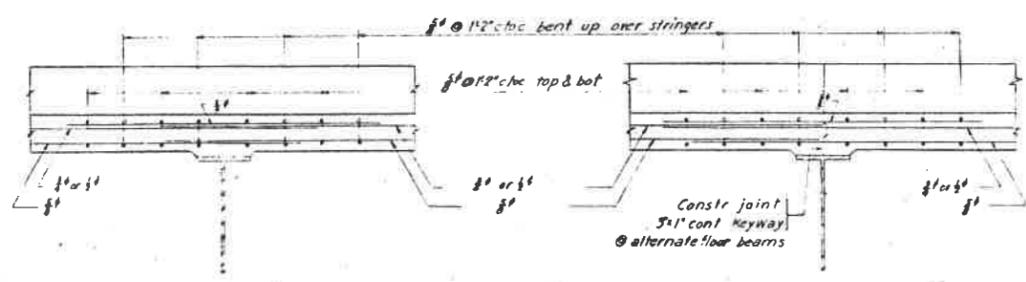
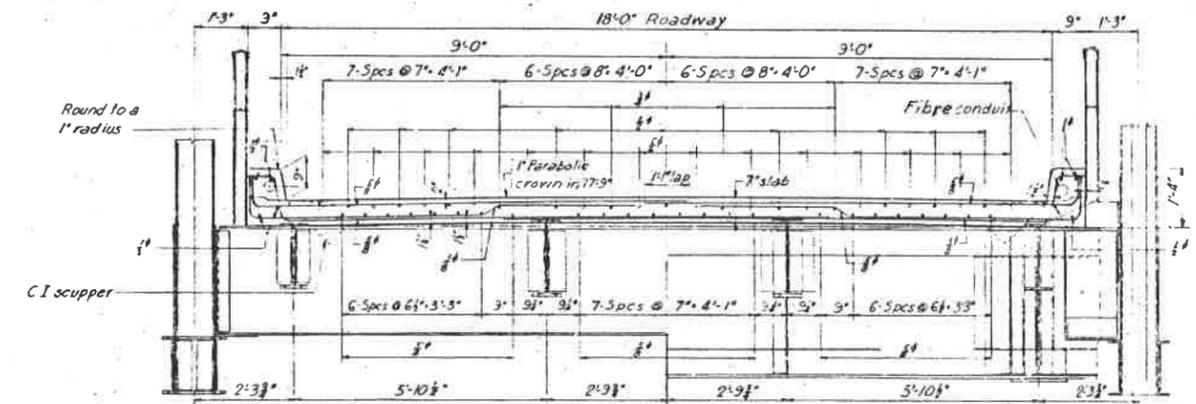
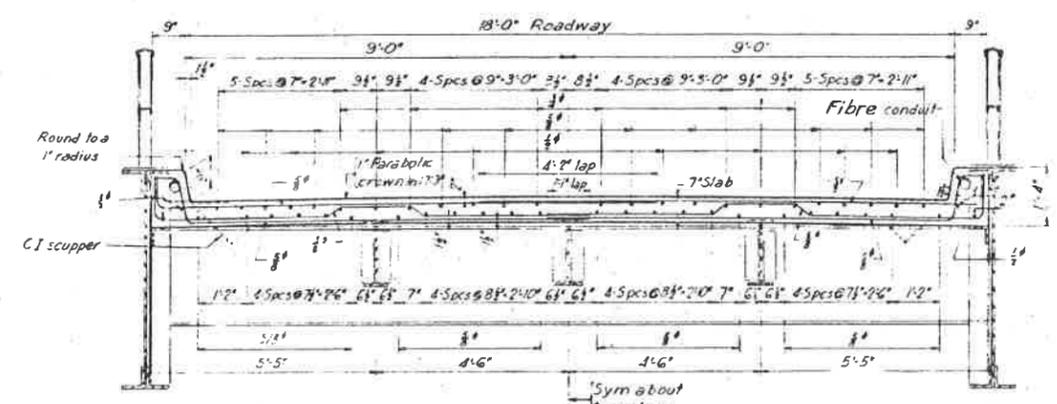
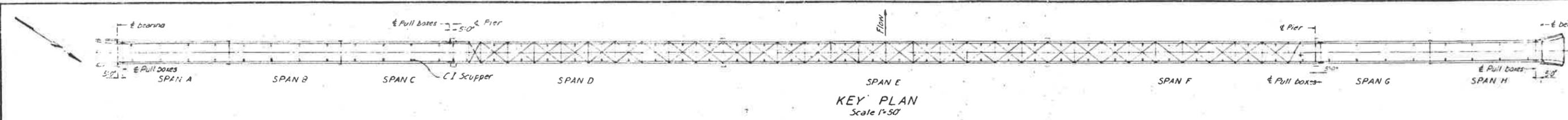
DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

DESIGNED BY: *F. J. Smith*
CHECKED BY: *W. H. Smith*

KNOXVILLE 7-8-42 20-118-514

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Regr. 337,081 Cont. TV 73,863



NOTES
 SPECIFICATIONS: Sections 400 and 418 of Specifications for this project.
 LIVE LOAD: H-15 on two lanes in accordance with AASHTO Specifications.
 CONCRETE: All concrete shall be class with type I or type II portland cement. Minimum size of coarse aggregate shall be no. 4. Forms for vertical surfaces shall be lined with plywood or similar material having no horizontal joints and will joints spaced not less than 8'-0" on center. Exposed corners shall be chamfered as noted otherwise. Exposed vertical surfaces shall be given a rubbed finish.
 REINFORCING STEEL: Material shall conform to the requirements called for in specifications for this project. Dimensions relative to reinforcement are to bar centers.
 CONDUITS AND PULL BOXES: Materials will be furnished by others and installed by the Contractor. Cost of installation shall be in the unit price bid for class A concrete.
 POURING SEQUENCE: Slabs and curbs shall be poured in units of two panels each. Alternate panels may be poured simultaneously, but at least 24 hours shall elapse before pouring adjacent panels.
 Scale as noted

PROJECT 20-4081
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD RIVER

TYPICAL SLAB SECTION

DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

APPROVED: [Signature]
 PREPARED BY: [Signature]

KNOXVILLE 6-20-42 2014

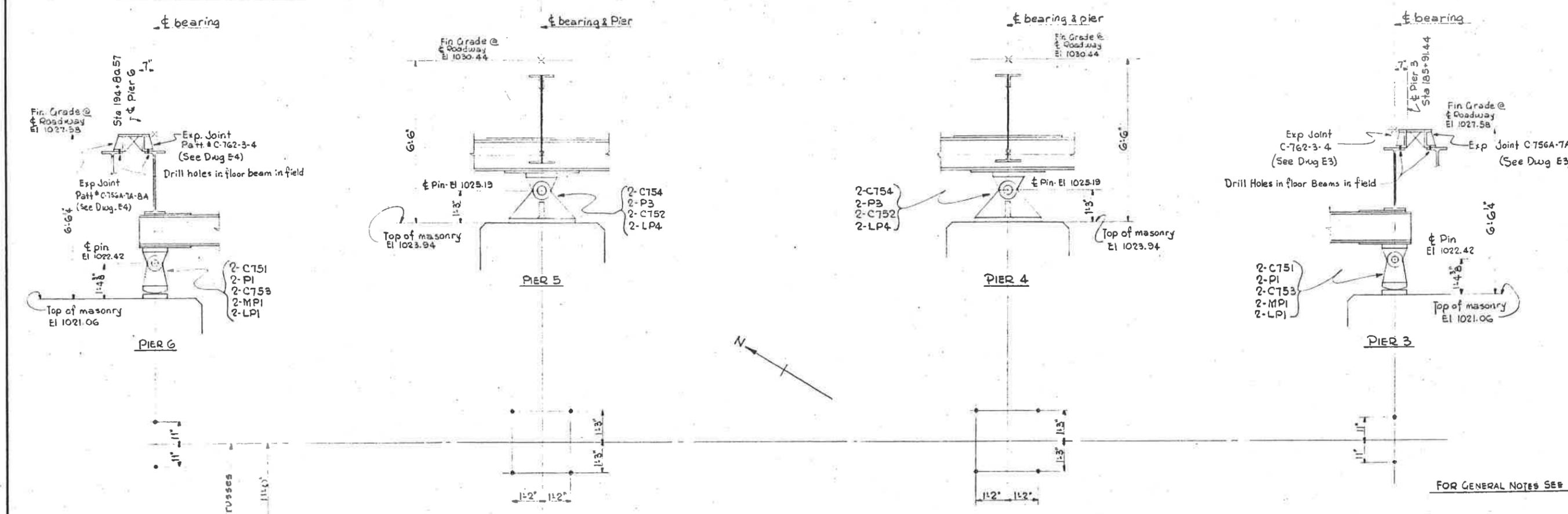
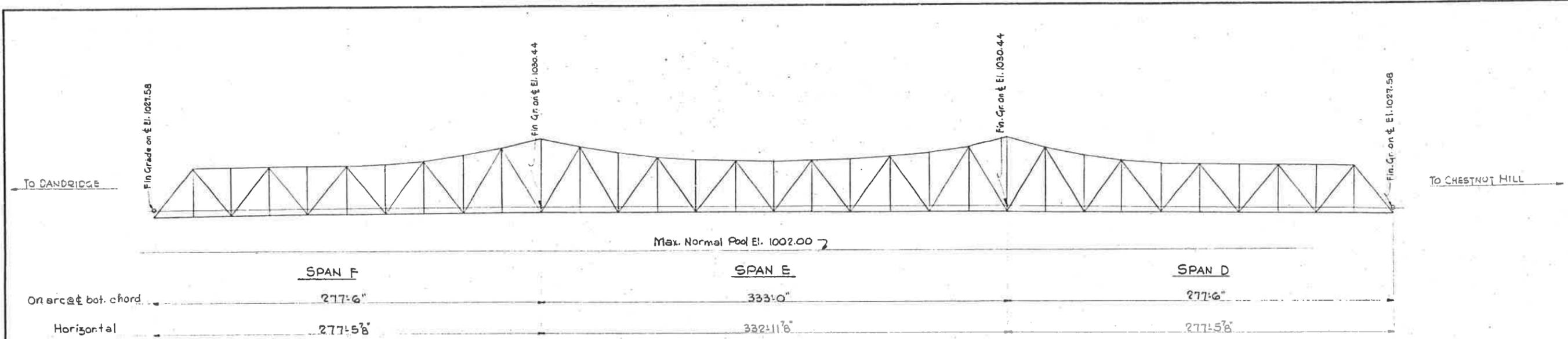
JRG
 J.G.E.
 G.A. Meyer

GIRDER ROADWAY SLAB
 SPANS A,B,C,G&H

SUMMARY OF QUANTITIES		
Item No.	401	418
Item	Class A Concrete	Reinf Steel
Unit	Cu Yd	Lb
Spans A,B&C	166	38,200
Spans D,E&F	415	127,500
Spans G&H	111	25,500
Totals	692	171,000

TRUSS ROADWAY SLAB
 SPANS D,E,&F

6-20-42



ANCHOR BOLT PLAN
(Anchor bolts furnished and set by others)

NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. - BESSEMER PLANT
CONT. C-4934

DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
CONTRACT NO.	
PROJECT NO.	
SCALE	

Revised for
direction from
Chestnut Hill rd.

① ② ③ ④ ⑤ ⑥

Reqn 337,081 - Cont. TV 73,863

PROJECT 20-4081

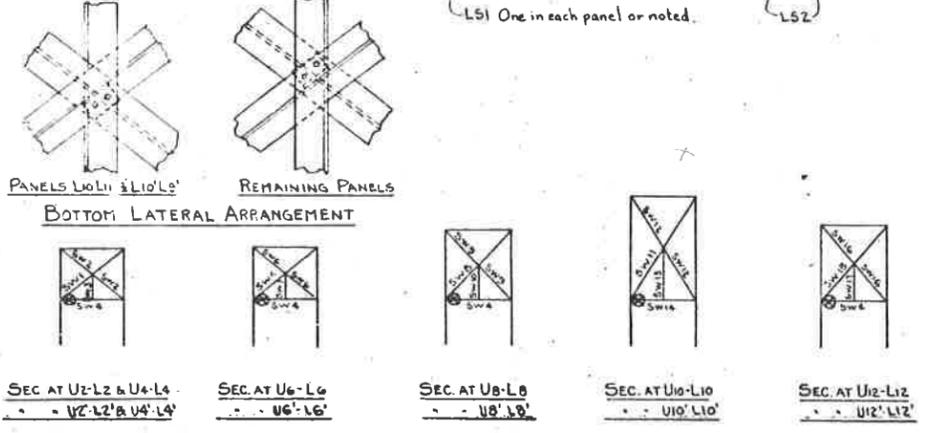
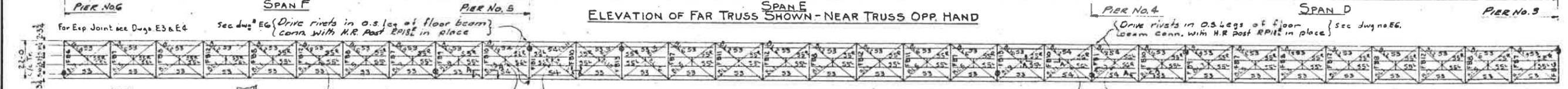
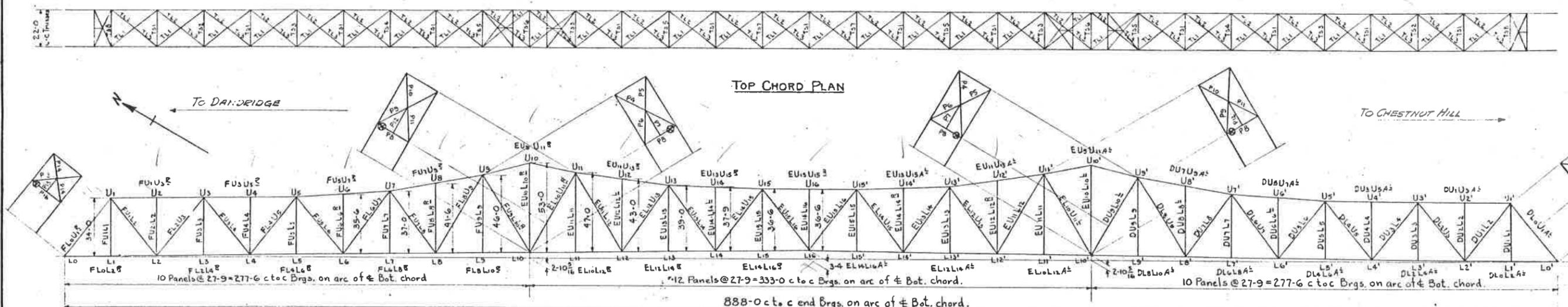
DANDRIDGE TO CHESTNUT HILL

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ERECTION DIAGRAM
FOR 888'-0" CONTINUOUS

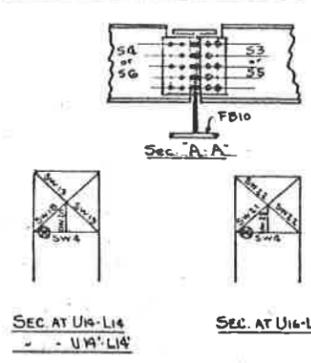
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5
Record Drawing as Constructed	3/27/46

IMPORTANT NOTE TO ERECTOR!
Rivet stringers to floor beams FB10 at L9, L11, L11' and L9' after weighing off reactions at L0 and L0'.



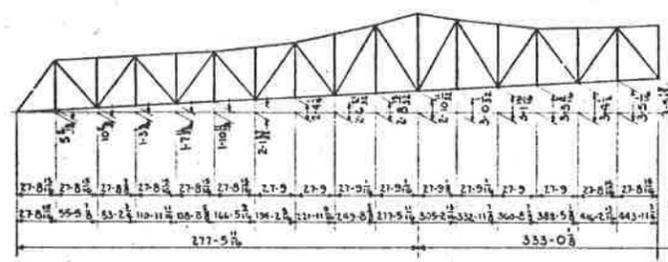
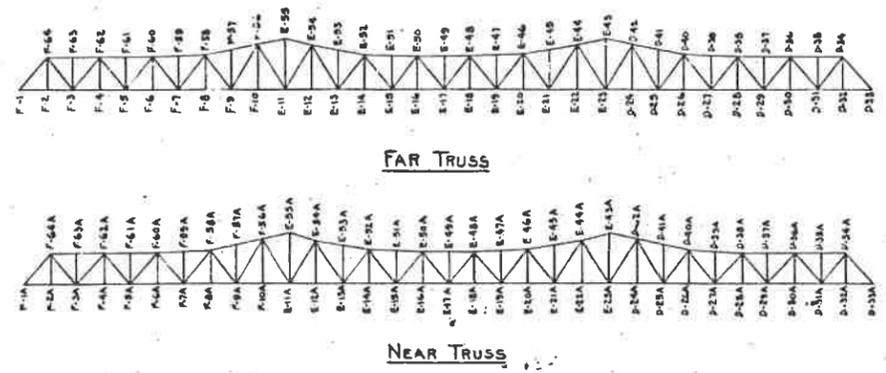
BOTTOM CHORD PLAN AND FLOOR SYSTEM



Note To Erector (See Sec. A-A)
Before Running Derrick Car onto Panel L9'-L6' Stringers 34 & 35 Must Be Securely Fastened To Fl. Bm. FB10 As Follows:
(1) Connect end Conn. U to Stringers With 3/4" Bolts In All Holes
(2) Fl. Bm. With 3/4" Bolts In All Holes
After Derrick Car has passed, L10', Both Thru FB10 At L9' must be Loosened & 3/4" Bolts Thru Stringer Web Removed. Stringers 34 & 35 should be blocked, from & lashed to Floor Beam FB10
Before Derrick Car is Run onto Panels L10'-L11', L11'-L10' and L10'-L9', above Procedure Must Be Repeated At L11', L11' & L9'
After Continuous Truss has been Completely Erected & End Reactions Jacked into Place, Holes Thru Stringer Web shall be reamed to fit & Riveted & Connections to FB10 riveted.
At All Truss Joints, Drive All Rivets That Are in Way of Portal Bracing, Top Chord Bracing & Bott. Chord Bracing before erecting Portals, Top & Bott. Chord Bracing
Clip L' on Bott. End of E-U10-L10 Are to Be Field Welded to Bott. Fl. of Bott. Chord.

GENERAL NOTES

SPECIFICATIONS — TVA Specifications No. 2012
MARKINGS — All main truss members to have span letter as prefix. Marks thus D-L0L2, E-L12L10 or F-L1L2
EXPANSION JOINTS — All expansion joints shall be completely assembled with related built-up members and match marked before shipment. For general arrangement see drawings E1, E3 & E4
SHOP PAINT — One shop coat red lead as per TVA specifications. Surfaces in contact with other metal surfaces after assembly or erection or in contact with concrete shall not be painted. Surfaces to be painted but which will be inaccessible for field painting shall be given two shop coats of paint. Top flanges of all floor beams & stringers shall be painted with two coats of white lead paint as per specifications.
FIELD PAINT — Two coats of white lead paint as per specifications.
HOLES — Where there are more than five thicknesses of material or where any of the main material is over 1/2" thick, all holes shall be sub-punched or sub-drilled 1/8" smaller and after assembling, reamed to larger or drilled from the solid to 1/16" larger than the nominal diameter of the rivet. Holes in all field connections and field splices of main trusses and plate girders shall be sub-punched or sub-drilled 1/8" smaller than the nominal diameter of the rivet and reamed to size with the trusses and girders assembled in shop and then match marked.
TEMPLATES — All holes for floor beam and stringer field end connections shall be sub-punched and reamed to a metal template.
SHEARING — Sheared edges of plates 1/8" thick or over, and carrying calculated stress shall be planed to a depth of 1/8". Re-entrant cuts shall be filleted before cutting.



CAMBER DIAGRAM

NASHVILLE BRIDGE CO.,
NASHVILLE TENN. — BESSEMER PLANT
CONT. 4934

DATE MADE: 1914
BY: M.H.F.
CHECKED: J.G.H.
APP.:

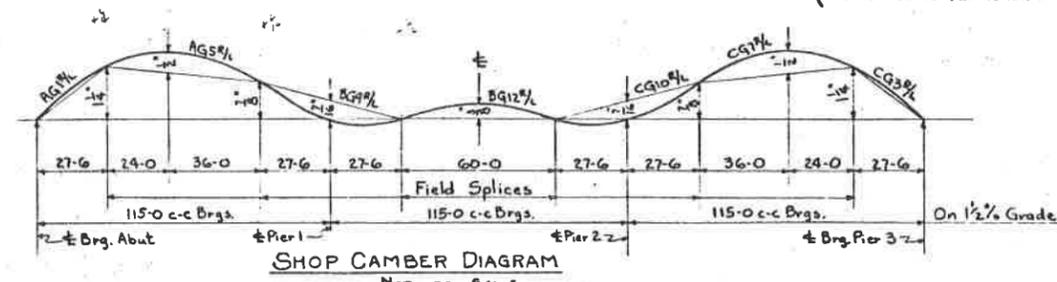
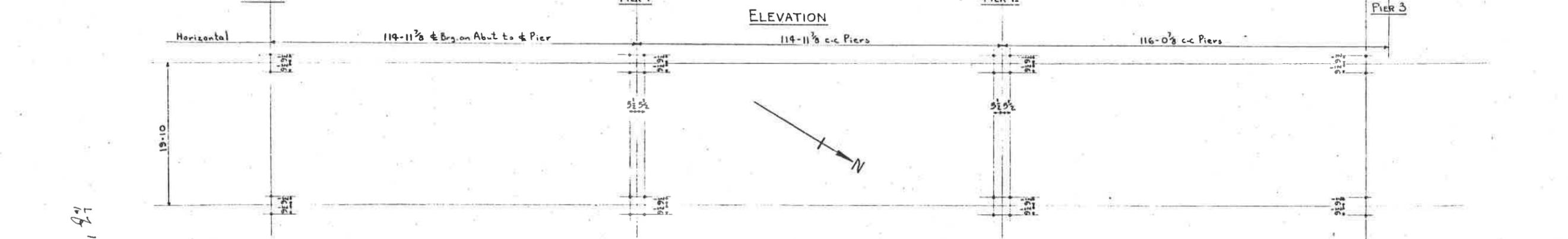
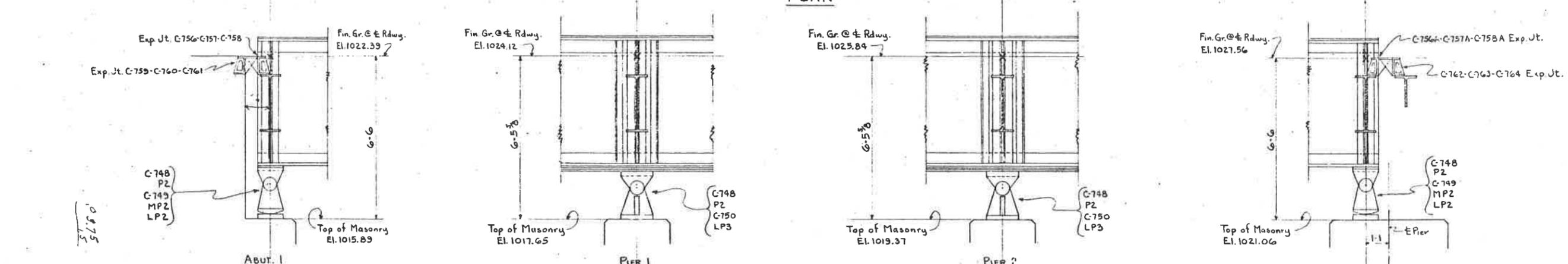
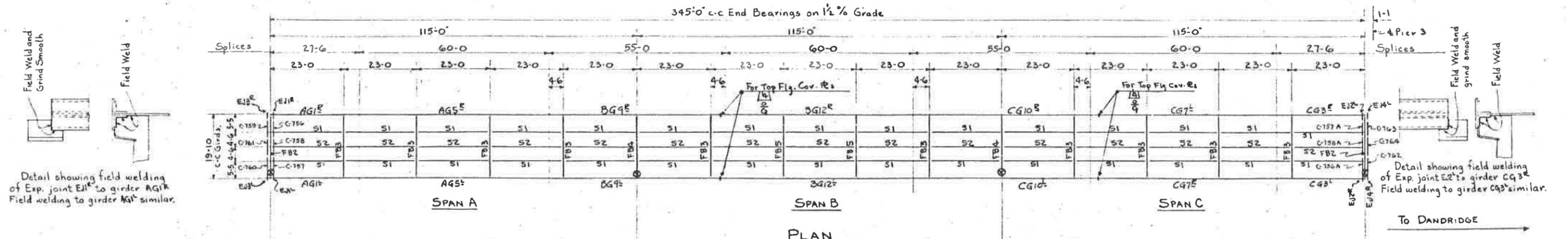
PROJECT 20-4081

DANDRIDGE TO CHESTNUT HI
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ERECTION DIAGRAM
FOR 888'-0" CONTINUOUS

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING OR SUBSTANTIATED	20 HR 5 4
Std. Record Book	20 HR 5 4

Reqn. 337,081 Cont. TV 73,863



NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. - BESSEMER PLANT
CONT. C-4934

FOR GENERAL NOTES SEE DWG. E2

PROJECT 20-4081

DANDRIDGE TO CHESTNUT HWY.
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ERECTION DIAGRAM
FOR 346'-0" CONTINUOUS G.

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

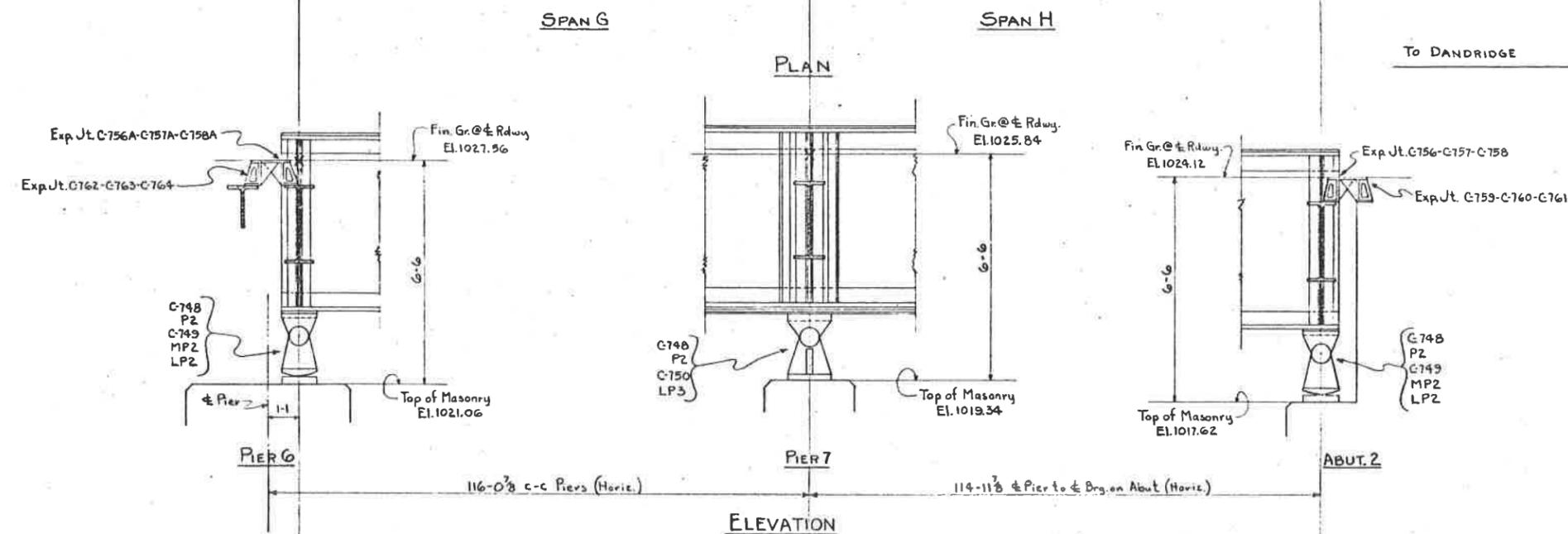
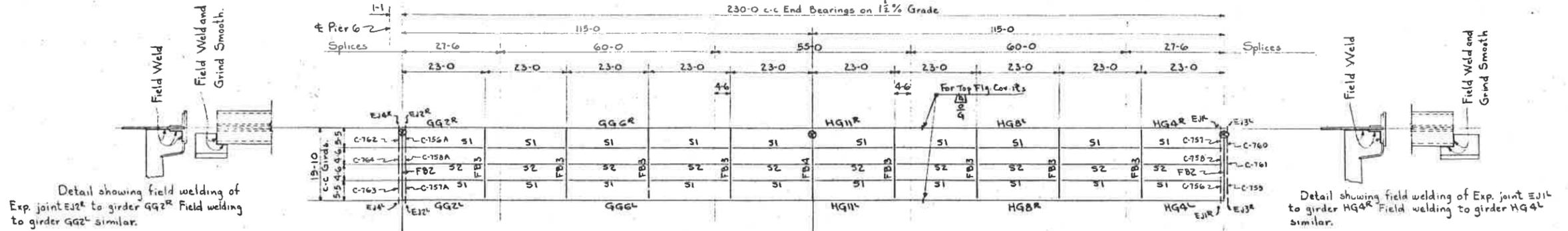
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DESIGNED BY	DATE	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12	NO. 13	NO. 14	NO. 15	NO. 16	NO. 17	NO. 18	NO. 19	NO. 20	
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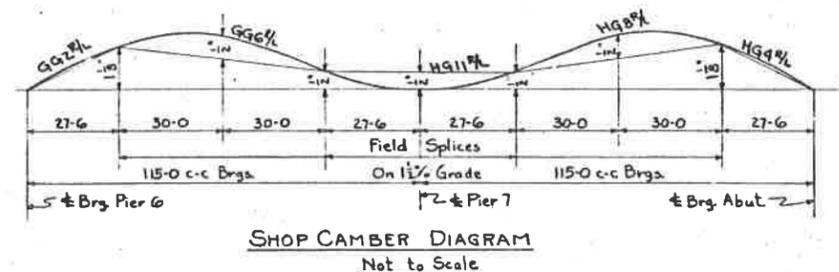
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Reqs. 337,081 Cont. T.V. 73,863

1/20/20



ANCHOR BOLT PLAN
(Anchor bolts furnished and set by others)



NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. - BESSEMER PLANT
CONT. C-4934

FOR GENERAL NOTES SEE DWG. E2

PROJECT 20-4081

DANDRIDGE TO CHESTNUT HI
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
ERECTION DIAGRAM
FOR 231'-0" CONTINUOUS C

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED

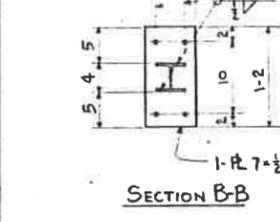
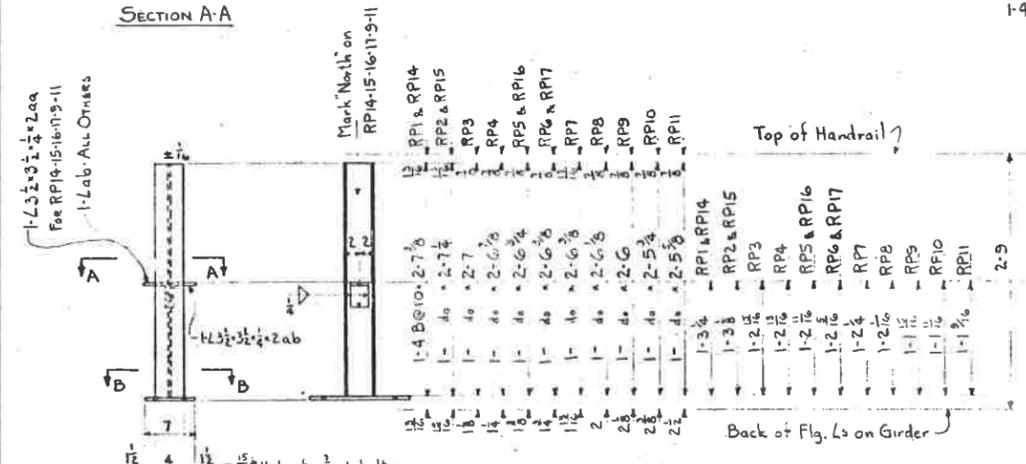
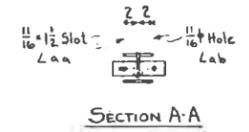
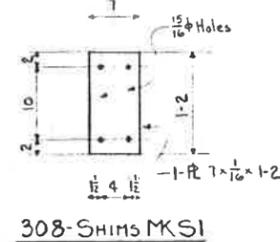
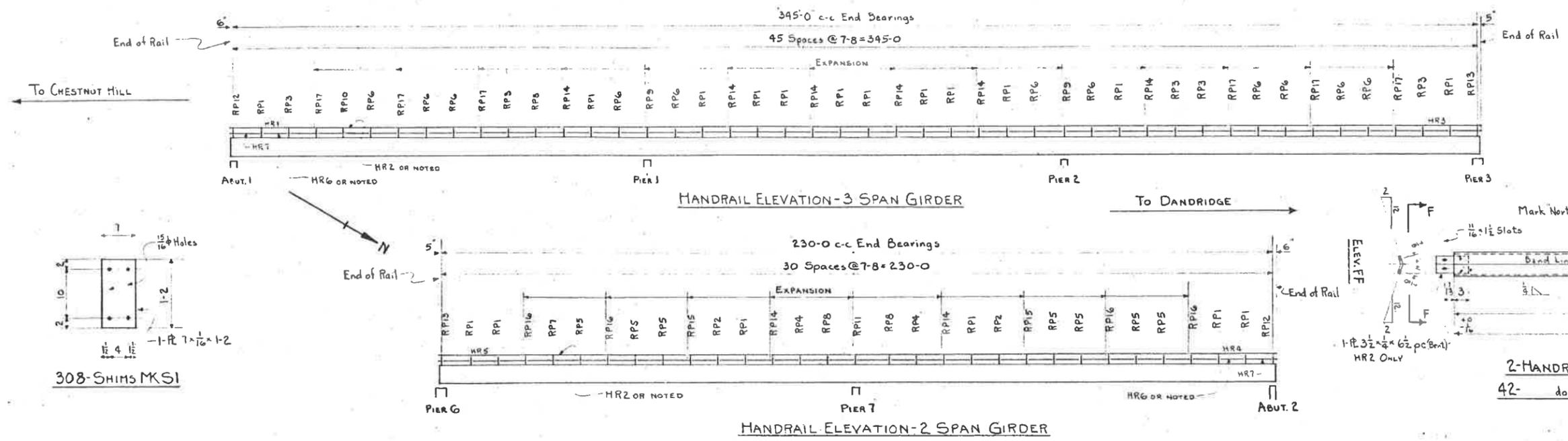
KNOXVILLE	HR 5
MEMPHIS	HR 5

DESIGNED BY	DATE	MADE	CHKD	BY	REV
MHF					
LES					

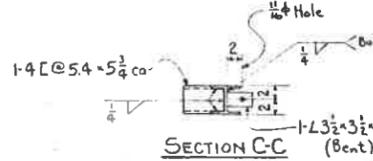
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12/29/42

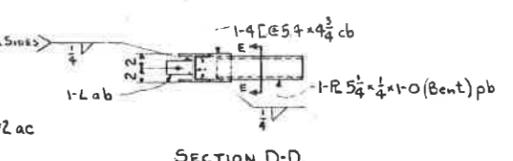
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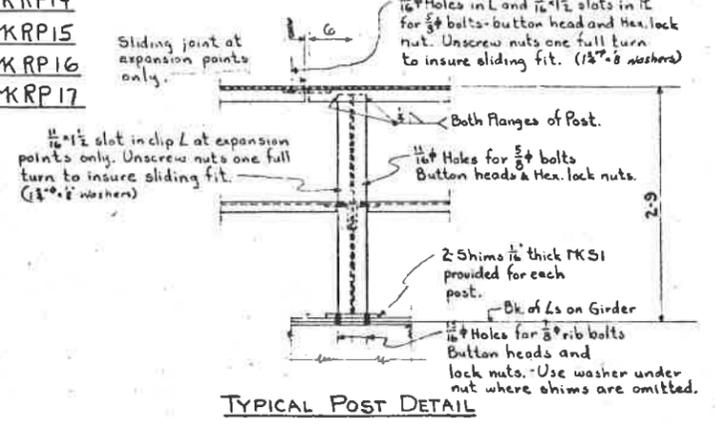
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|------------------------|------------------------|
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| 4- do MK RP2 | 4- do MK RP15 |
| 12- do MK RP3 | 8- do MK RP16 |
| 4- do MK RP4 | 12- do MK RP17 |
| 14- do MK RP5 | |
| 22- do MK RP6 | |
| 2- do MK RP7 | |
| 4- do MK RP8 | |
| 4- do MK RP9 | |
| 2- do MK RP10 | |
| 2- do MK RP11 | |



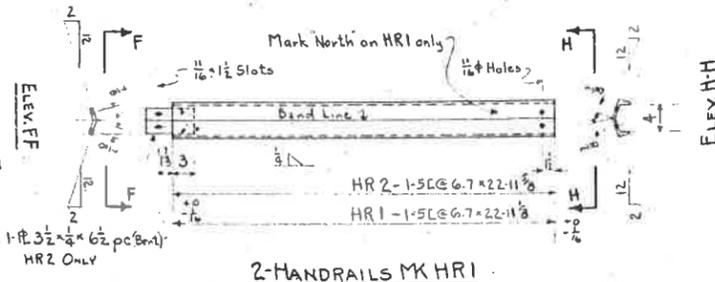
4- RAIL POSTS MK RP12'



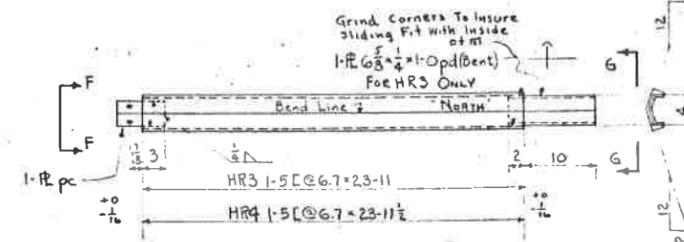
4- RAIL POSTS MK RP13'



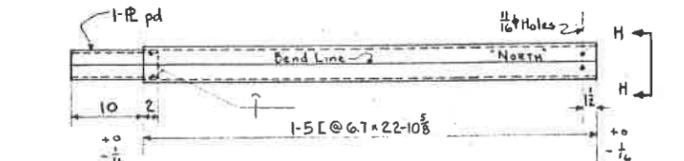
TYPICAL POST DETAIL



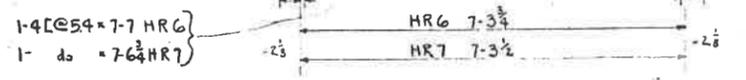
2- HANDRAILS MK HR1
42- do MK HR2



2- HANDRAILS MK HR3
2- do MK HR4



2- HANDRAILS MK HR5



146- HANDRAILS MK HR6
4- do MK HR7

NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. - BESSEMER PLANT
CONT. 4934
S.O. 2483-B BILL No. 52 + 53

FOR GENERAL NOTES SEE DWG. E2
NOTE: Welding - Electric arc method, see TVA Specifications No. 2012
Welded surfaces exposed to view shall be ground to a surface finish equal to that of the adjacent rolled surfaces.

PROJECT 20-4081

DANDRIDGE TO CHESTNUT MI

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
HANDRAIL FOR GIRDER

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5 4
Reqn. 337,081	Cont. TV 73,863

4th Record Block 20 HR 5

1. SIGNED BY ARCHITECT OR ENGINEER
SIGNED AS CONSTRUCTOR
DATE: _____
SCALE: _____

MHF
J.G.H.
ENGINEER

TO DANDRIDGE

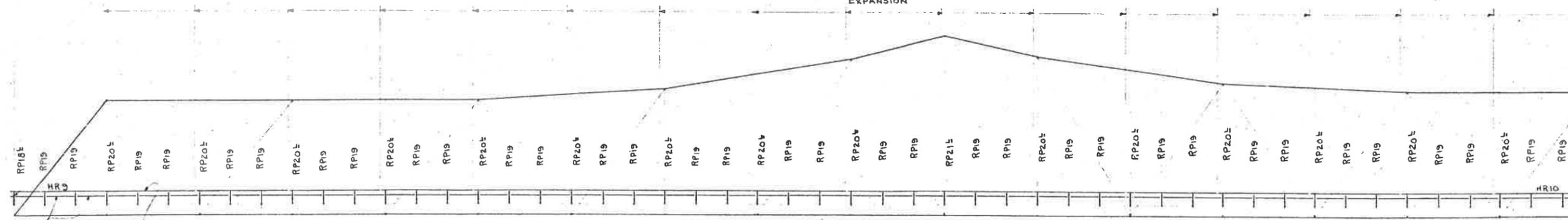
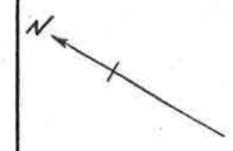
TO CHESTNUT HILL

888-0 c-c End Bearings

48 Rail Post Spaces @ 9-3 = 444-0

End of Rail

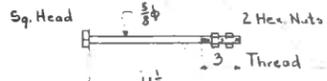
EXPANSION



ELEVATION

L10 MARKS THIS SIDE & AS SHOWN - MARKS FAR SIDE & OPPOSITE HAND OR NOTED

FAR TRUSS AS SHOWN - NEAR TRUSS OPPOSITE HAND



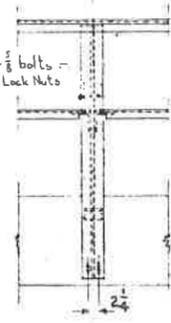
190-BOLTS MKRB2 (No Shop Point)

1/4" Holes for 3/8" bolts - Button Hd. & Lock Nuts

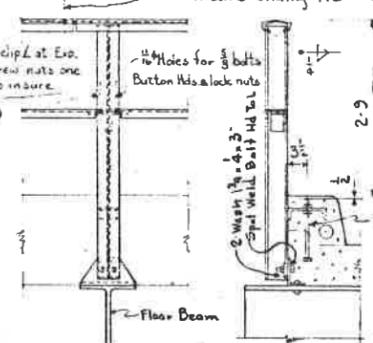
1/4" Holes in L and 1/2" slots in R for 3/8" bolts - button head and lock nut. Unscrew nuts one full turn to insure sliding fit. (1 1/2" Washers)

1/2" Slot in clip L at Exp. points. Unscrew nuts one full turn to insure sliding fit. (1 1/2" Washers)

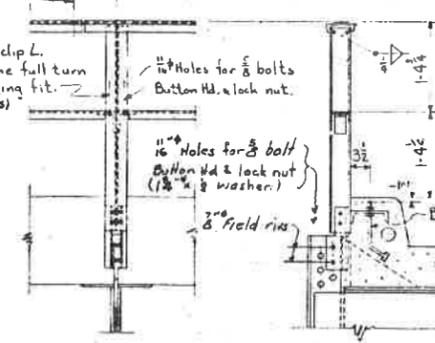
1/2" slot in clip L. Unscrew nut one full turn to insure sliding fit. (1 1/2" Washers)



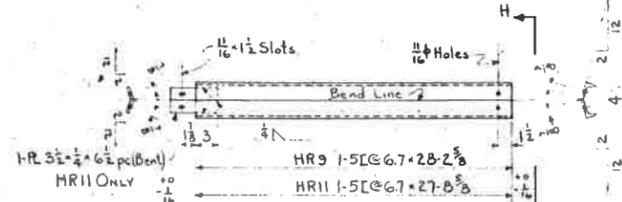
TYPICAL INTERMEDIATE POST



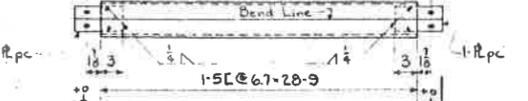
TYPICAL POST AT FLOOR BEAM



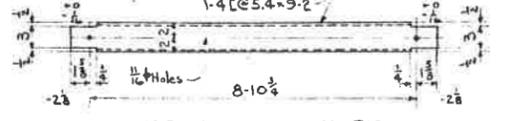
POST AT L10



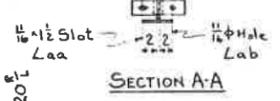
4-HANDRAILS MKHR9 58- do MKHR11



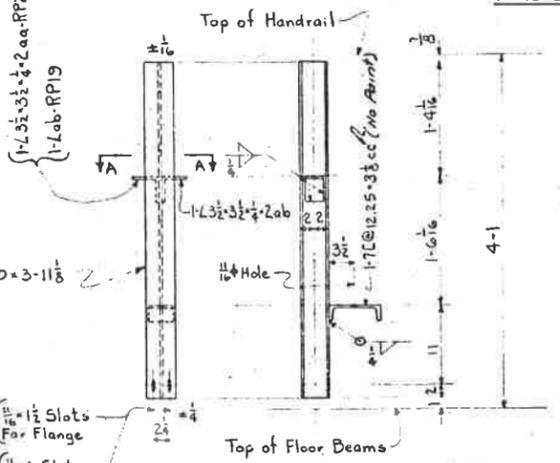
2-HANDRAILS MKHR10



192-HANDRAILS MKHR12

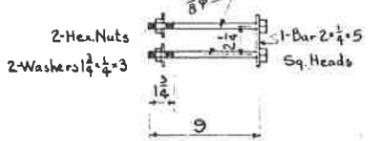


SECTION A-A

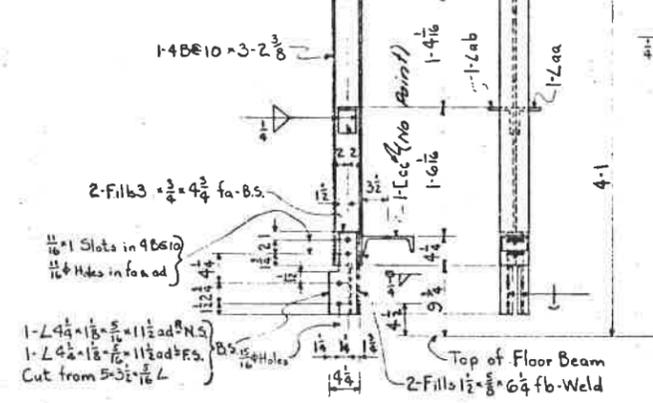


128-RAIL POSTS MKRP19

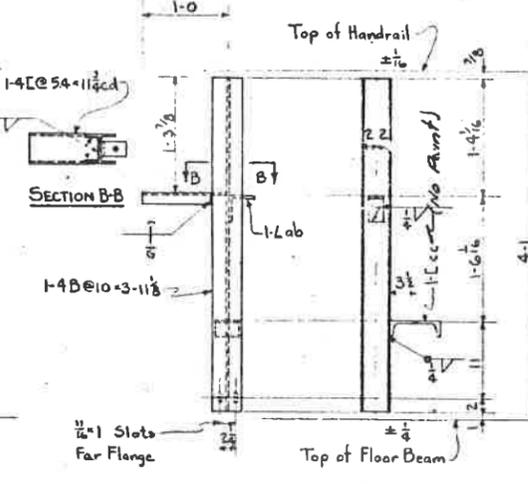
29- do MKRP20^R AS SHOWN
29- do MKRP20^L OPP. HAND



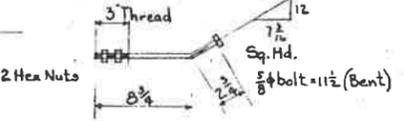
128-BOLTS MKRB1 (No Shop Point)



2-RAIL POSTS MKRP21^R AS SHOWN
2- do MKRP21^L OPP. HAND



2-RAIL POSTS MKRP18^R AS SHOWN
2- do MKRP18^L OPP. HAND



4 BOLTS MKRB3 (No Shop Point)

NASHVILLE BRIDGE CO.
NASHVILLE TENN.-BESSEMER PLANT
CONT. 4934

S.O. 2483-B BILL No. 54+55
FOR GENERAL NOTES SEE DWG. E.2

NOTE - Welding - Electric arc method, see TVA Spec. No. 2012. Welded surfaces exposed to view shall be ground to a surface finish equal to that of the adjacent rolled surfaces.

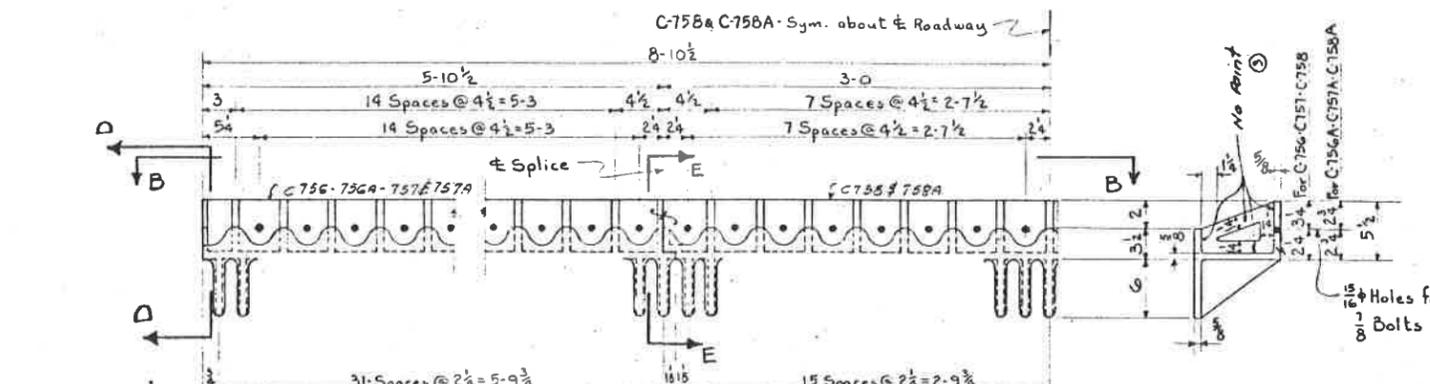
Table with columns for revision number, description, and date. Includes entries for 'DATE VALUED CHG. SUP. VSP. SLOWDOWN' and 'M.H.F. J.G.H. ENGINEER'.

1 Approve... 2 Point Notes 3 Revised for erection from Chestnut Hill end

Reqn. 357, DB1 Cont. TV 73, 863

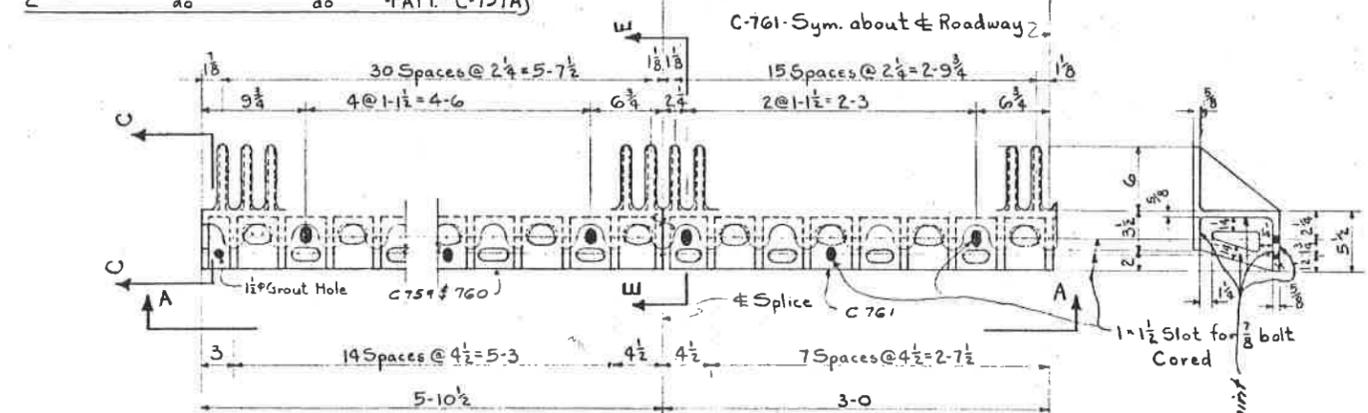
Project information table including 'PROJECT 20-4081', 'DANDRIDGE TO CHESTNUT HILL', 'DANDRIDGE BRIDGE ACROSS FRENCH BROAD HANDRAIL FOR TRUSS S', 'DOUGLAS PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT', and submission/recommendation status.

1 681 Record Block 20 HR 20 14



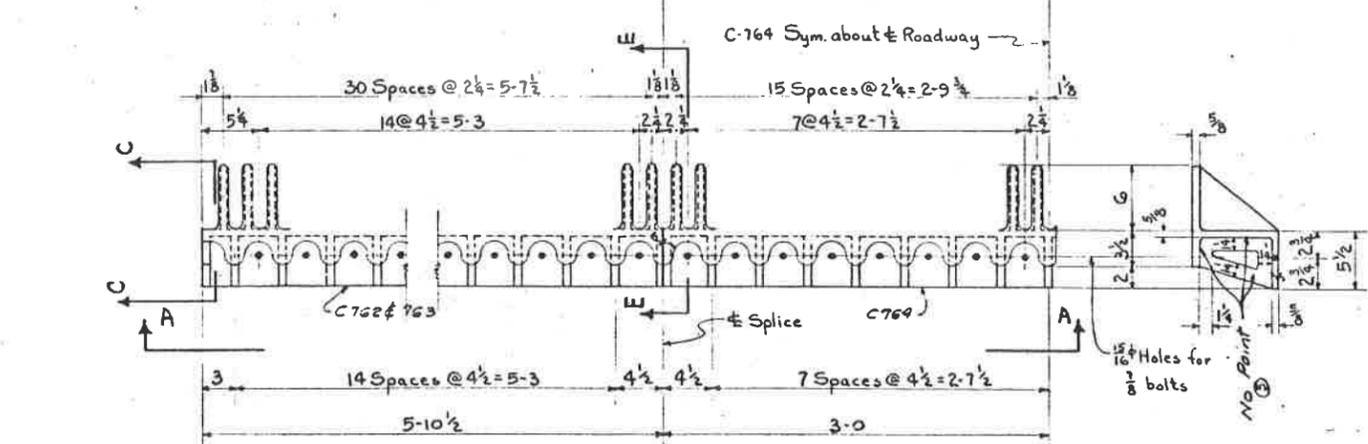
2- EXPANSION JOINTS AS SHOWN - PATT. # C-756
 2- do do - PATT. # C-756A } SAME PATT.
 2- do do OPP. HAND - PATT. # C-757 } SAME PATT.
 2- do do - PATT. # C-757A } SAME PATT.

2- EXPANSION JOINTS AS SHOWN - PATT. # C-758
 2- do do - PATT. # C-758A } SAME PATT.



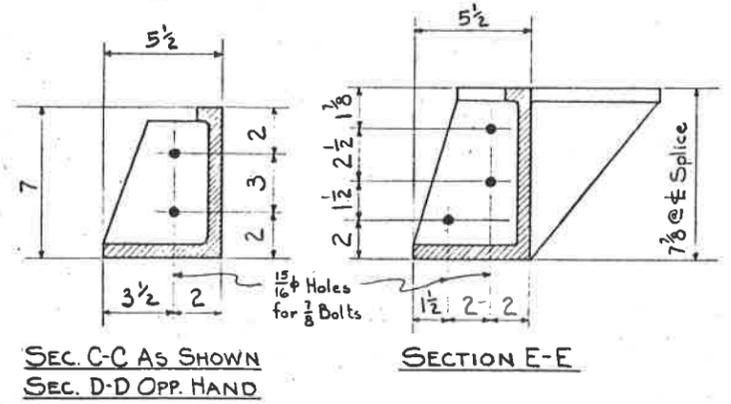
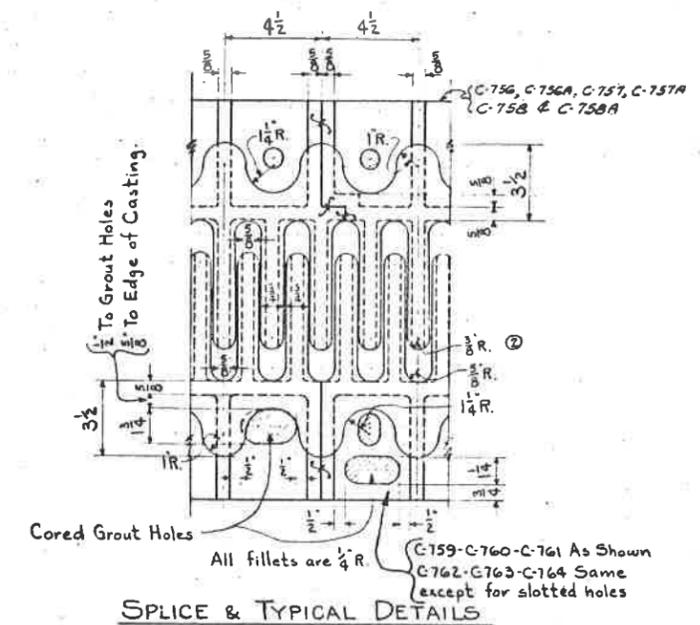
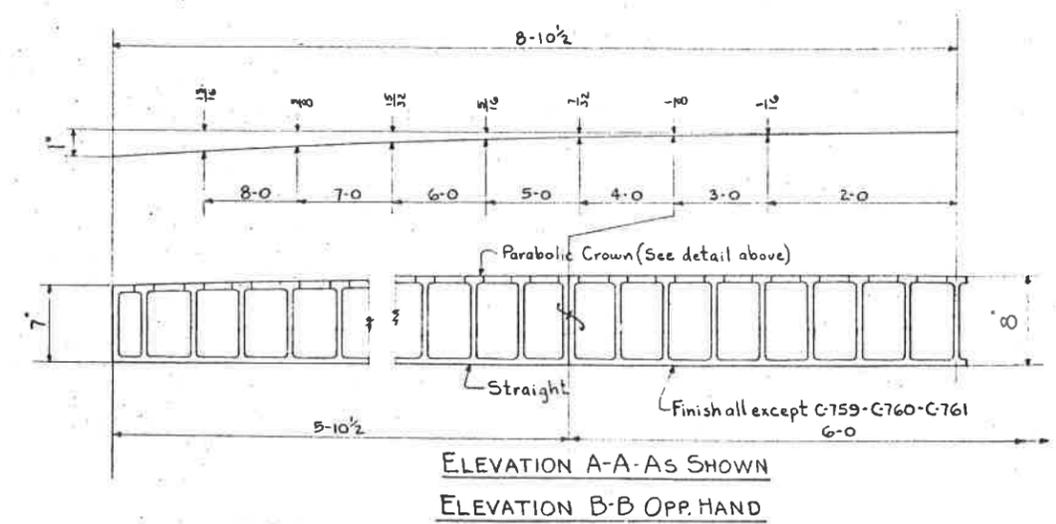
2- EXPANSION JOINTS AS SHOWN - PATT. # C-759
 2- do do OPP. HAND - PATT. # C-760

2- EXPANSION JOINTS AS SHOWN - PATT. # C-761



2- EXPANSION JOINTS AS SHOWN - PATT. # C-762
 2- do do OPP. HAND - PATT. # C-763

2- EXPANSION JOINTS AS SHOWN - PATT. # C-764



NASHVILLE BRIDGE COMPANY
 NASHVILLE TENN - BESSEMER PLANT
 CONT. C-4934
 S.O. 2483-B BILL NO. 5

NOTE -
 Material: Cast Steel Expansion devices shall conform to A.S.T.M., A27-39, Grade B1.
 Grind casting where required to smooth finish on fingers.
 Paint: See Sheet E2
 All machine finished surfaces shall be coated with white lead and tallow as per specifications.
 All steel castings shall be annealed.
 Match Marking: Expansion joint material shall be completely assembled as units with related built members detailed on Dwg. #5 and match marked before shipment.

DATE	MADE	BY	CHKD	BY
		MHF		
		AWO		

1 Approval 2 Forwards to 3 Print Notes 4 5 6

Reqn. 337,081 Cont. TV 73,863

PROJECT 20-4081

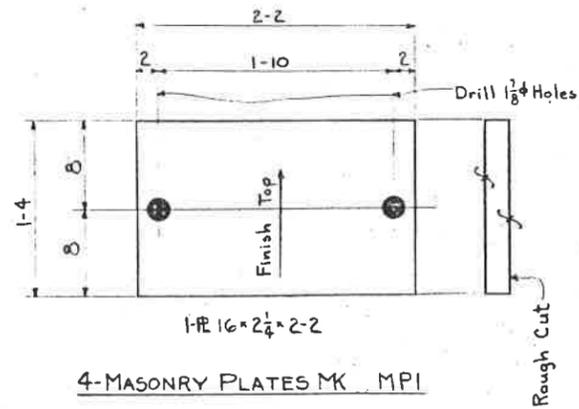
DANDRIDGE TO CHESTNUT H

DANDRIDGE BRID
 ACROSS FRENCH BROAD
 EXPANSION JOINT

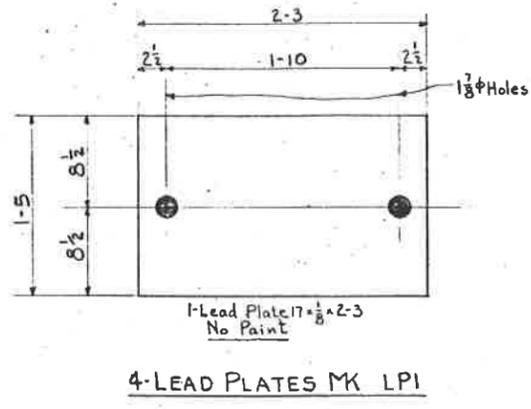
DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHO
 DESIGN DEPARTMENT

APPROVED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5 4

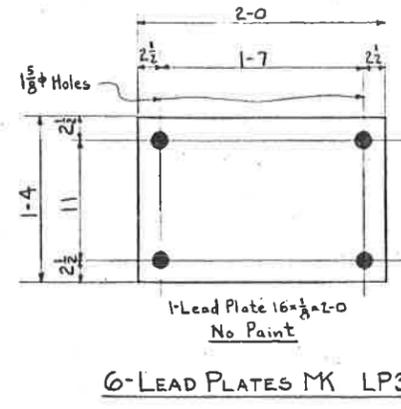
Revised (see sketch) 20/HR/5



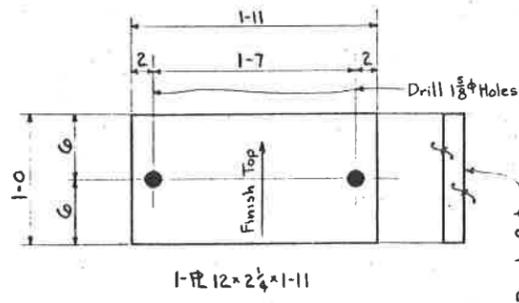
4-MASONRY PLATES MK MPI



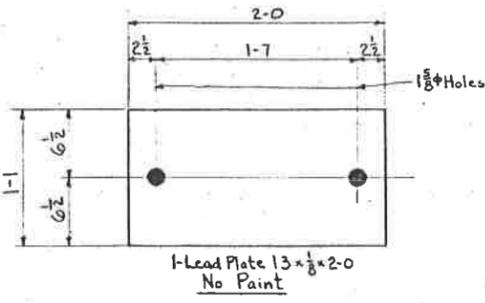
4-LEAD PLATES MK LP1



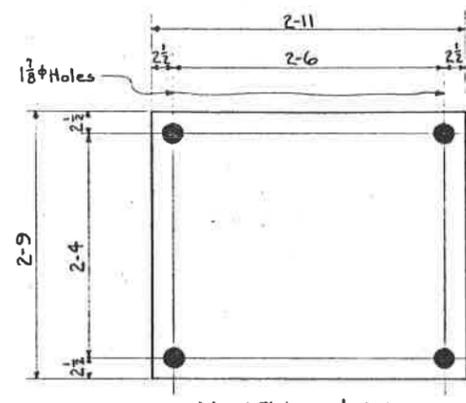
6-LEAD PLATES MK LP3



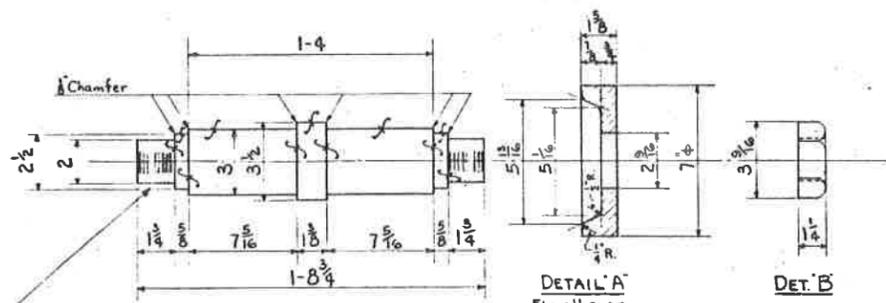
8-MASONRY PLATES MK MP2



8-LEAD PLATES MK LP2

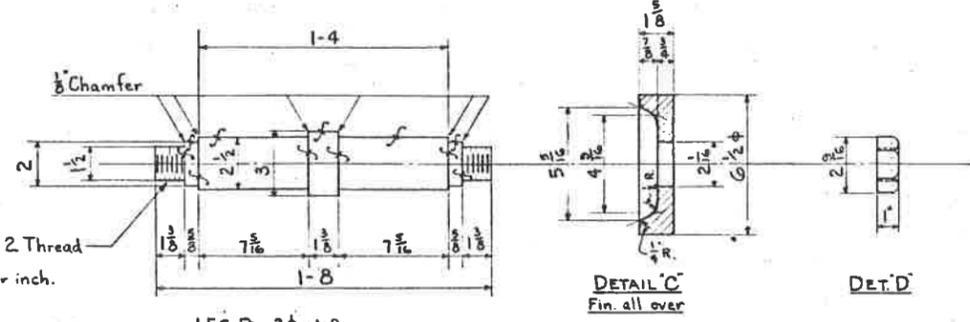


4-LEAD PLATES MK LP4



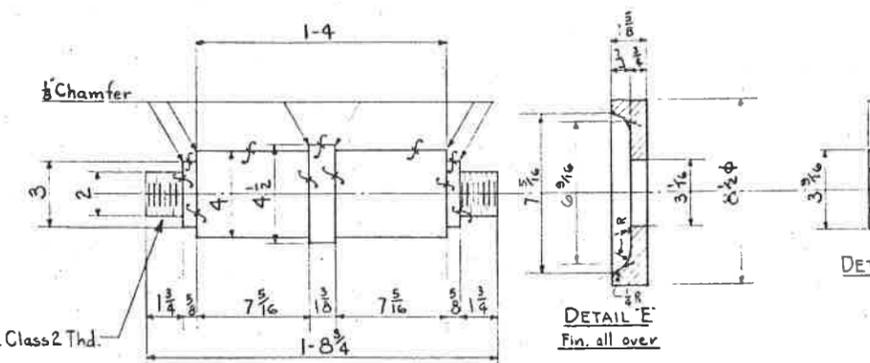
4-PINS MK P1

Am. Std. Free Fit Class 2 Thread
Pitch: 4 1/2 threads per inch.



14-PINS MK P2

Am. Std. Free Fit Class 2 Thread
Pitch: 6 threads per inch.



4-PINS MK P3

Am. Std. Free Fit Class 2 Thd.
Pitch: 4 1/2 threads per inch.

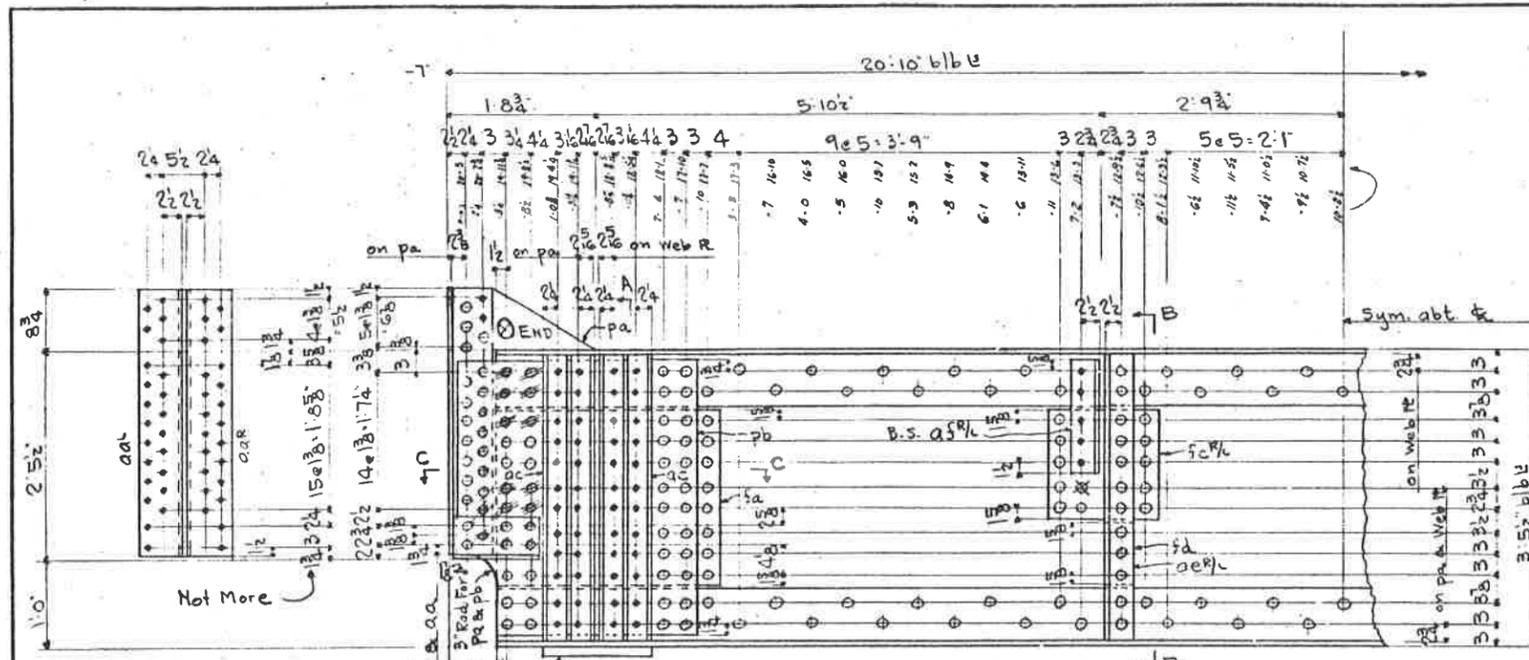
NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. — BESSEMER PLANT
CONT. 4934
S.O. 2483-B BILL No. 7

NOTE—
Material:— Nuts and washers shall conform to A.S.T.M., A107-40, Grade 21 or 22 or A7-39
Forged Steel Pins shall conform to A.S.T.M., A235-40 Class C1.
Lead plates shall conform to Federal Specification QQ-L-201, Grade B.
Structural Steel Masonry Plates shall conform to A.S.T.M., A7-39.
Paint:— See Sheet E2
All finished surfaces shall be coated with white lead and tallow

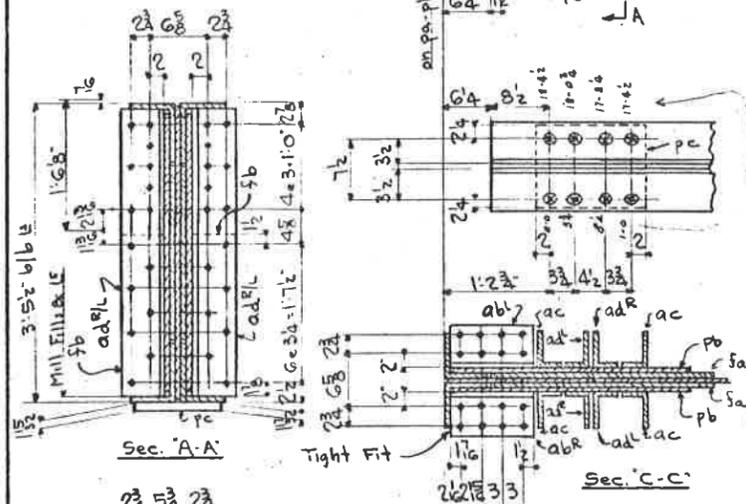
1-5-45 E.M. 200	2-10-45
3-10-45	4-10-45
5-10-45	6-10-45
7-10-45	8-10-45
9-10-45	10-10-45
11-10-45	12-10-45
13-10-45	14-10-45
15-10-45	16-10-45
17-10-45	18-10-45
19-10-45	20-10-45
21-10-45	22-10-45
23-10-45	24-10-45
25-10-45	26-10-45
27-10-45	28-10-45
29-10-45	30-10-45
31-10-45	32-10-45
33-10-45	34-10-45
35-10-45	36-10-45
37-10-45	38-10-45
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43-10-45	44-10-45
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47-10-45	48-10-45
49-10-45	50-10-45
51-10-45	52-10-45
53-10-45	54-10-45
55-10-45	56-10-45
57-10-45	58-10-45
59-10-45	60-10-45
61-10-45	62-10-45
63-10-45	64-10-45
65-10-45	66-10-45
67-10-45	68-10-45
69-10-45	70-10-45
71-10-45	72-10-45
73-10-45	74-10-45
75-10-45	76-10-45
77-10-45	78-10-45
79-10-45	80-10-45
81-10-45	82-10-45
83-10-45	84-10-45
85-10-45	86-10-45
87-10-45	88-10-45
89-10-45	90-10-45
91-10-45	92-10-45
93-10-45	94-10-45
95-10-45	96-10-45
97-10-45	98-10-45
99-10-45	100-10-45

PROJECT 20-4081	
DANDRIDGE TO CHESTNUT HILL	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROAD R	
MASONRY PLATES & PINS	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
SECOND DRAWING AS CONSTRUCTED	20 HR 5 4
Reqn. 337,081	Cont. TV 73,863
SH Record (Close) 20 HR 5 4	

Boh
12/1/42

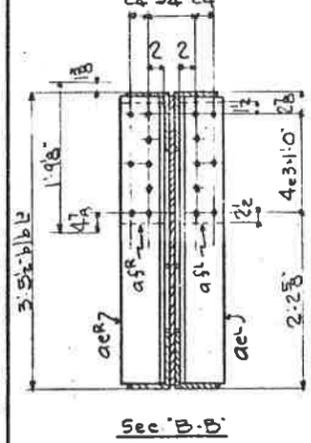


MAKE 2 FLOOR BEAMS MARK FB1

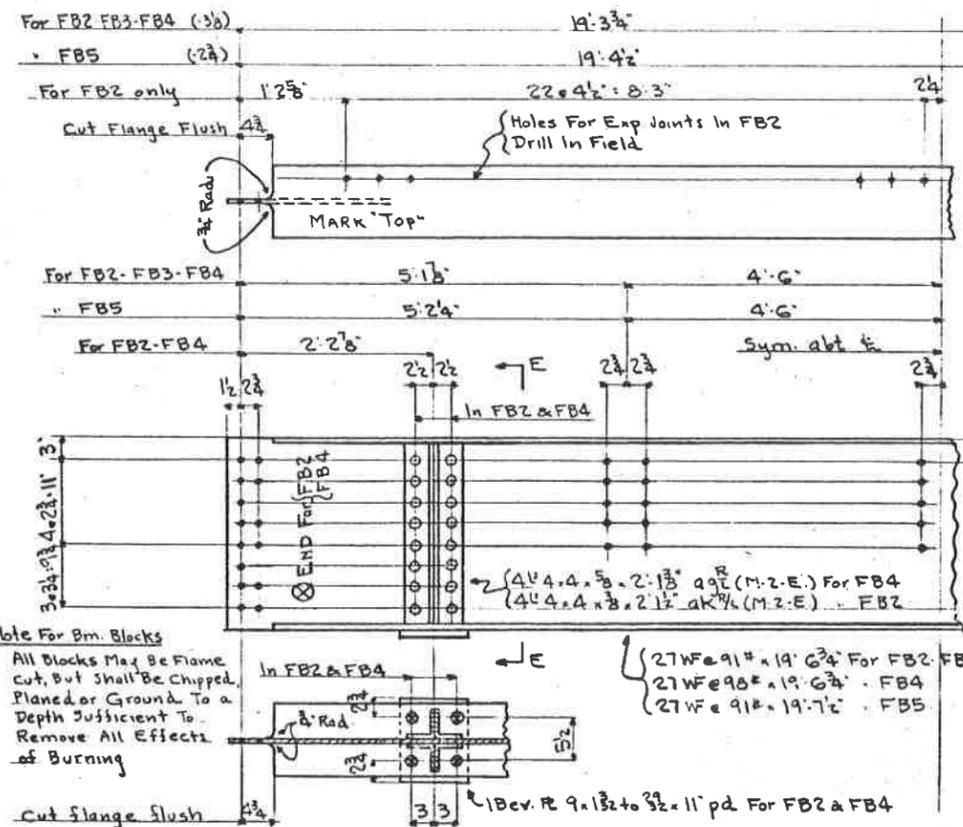


MATERIAL FOR ONE FLOOR BEAM FB1

- 1-Web R 4 1/2 x 17 1/4
- 2-Rs 20 x 2 x 4 1/2 pa
- 4 Flg. L 8 x 6 x 5/8 x 19 1/2
- 4 Flg. L 3 1/2 x 2 1/2 x 10 pb
- 4 Flg. G 3/8 x 3 1/2 x 2 ad R/L
- 4 Fills 25 x 5/8 x 2 7/8 5a
- 4 Flg. G 6 x 2 1/8 ab R/L
- 8 Flg. 5/8 x 2 3/4 x 4 ac M-Z-E (BS)
- 8 Flg. 3/8 x 2 3/4 x 4 ad R/L M-Z-E (BS)
- 4 Fills 6 x 3/8 x 1 10/16 5b (BS) M-Z-E
- 2 Bev. R 1/2 x 1 1/2 x 1 1/2 x 1 1/4 pc
- 4 Flg. 4 x 2 1/2 x 3 1/4 ad R/L M-Z-E
- 4 Flg. 4 x 2 1/2 x 4 ad R/L
- 4 Fills 1 1/2 x 5/8 x 1 3/8 fc R/L
- 4 Fills 4 x 5/8 x 9 1/4 5d



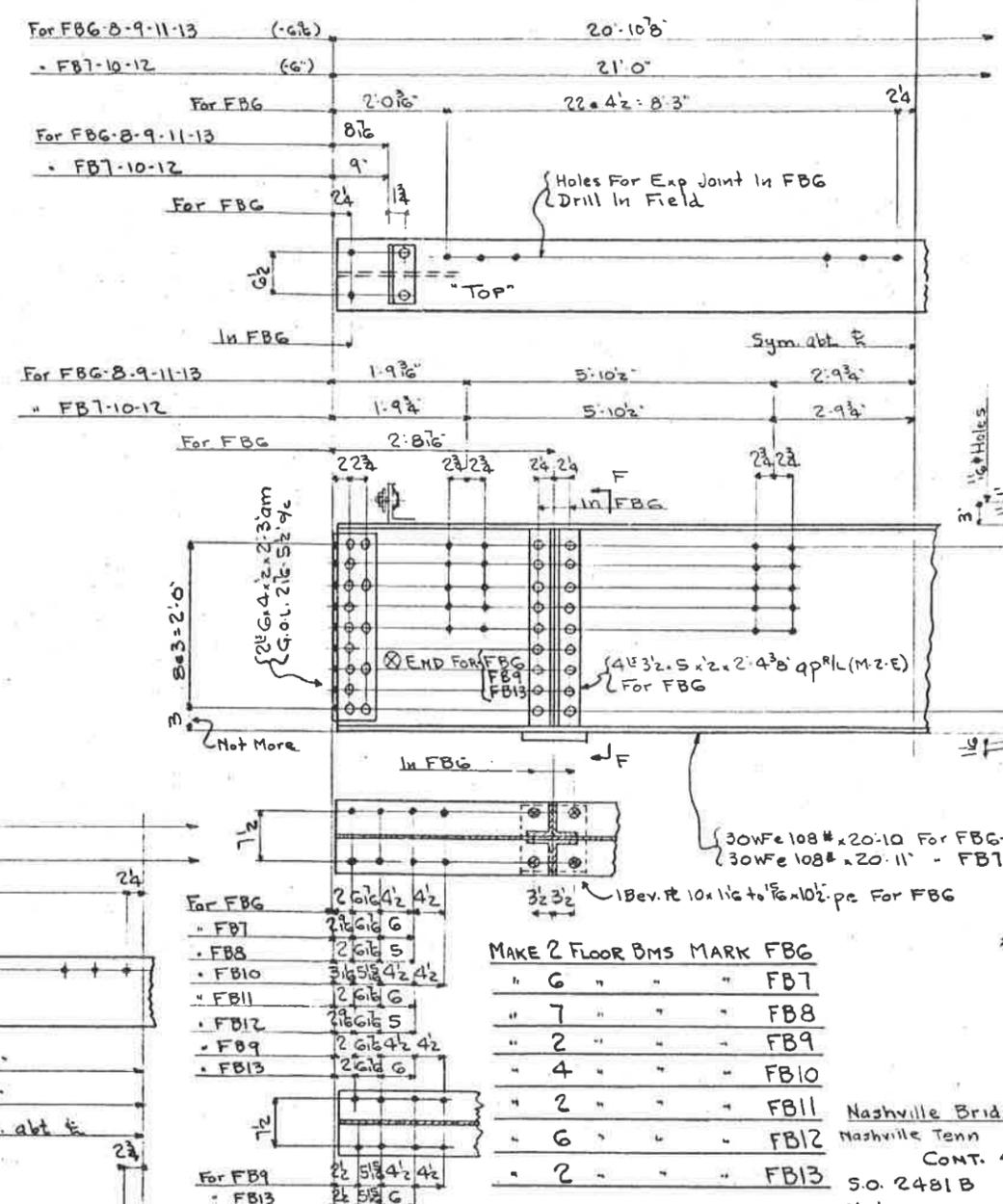
DESIGN	D.G.H.
CHECKED	LES
DATE	
BY	



MAKE 4 FLOOR BEAMS MARK FB2

"	18	"	"	"	FB3
"	3	"	"	"	FB4
"	2	"	"	"	FB5

Note For Bm. Blocks
All blocks may be flame cut, but shall be chipped, planed or ground to a depth sufficient to remove all effects of burning



MAKE 2 FLOOR BMS MARK FB6

For FB6	2'-6 1/2	4 1/2
" FB7	2'-6 1/2	6
" FB8	2'-6 1/2	5
" FB9	2'-6 1/2	4 1/2
" FB10	2'-6 1/2	4 1/2
" FB11	2'-6 1/2	6
" FB12	2'-6 1/2	5
" FB13	2'-6 1/2	4 1/2

Note - shop to paint top flanges of all floor beams.

Nashville Bridge Company
Nashville Tenn Bessemer
CONT. 4934
S.O. 2481 B Bill

Note:
Rivets 7/8" Hole
For General Notes See
Floor Bms with End Conn. U
Made to Exact Length
L & Are Riveted. If Finis
Necessary the Thickness
Conn. U Shall Not Be
More Than 5" At Any Po
Edge Distance 1 1/2" Unless

1 approval 2 Paint note 3 Bolts in FB6 to B13 incl 4 5 6

Rejn 337,081 Cont TV 73,863

PROJECT-20-6081

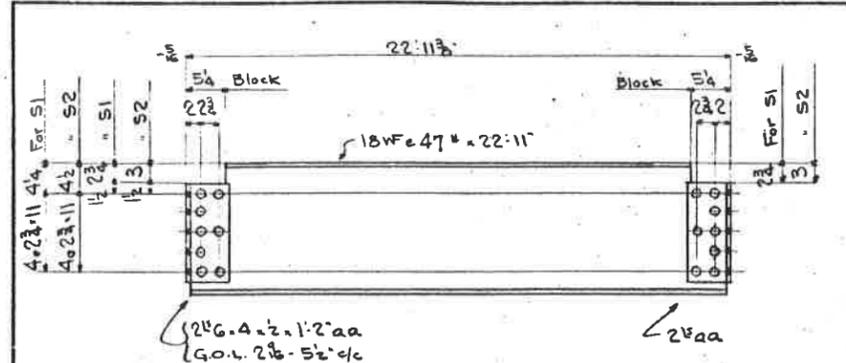
DANDRIDGE TO CHESTNUT HILL

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
FLOOR BEAMS

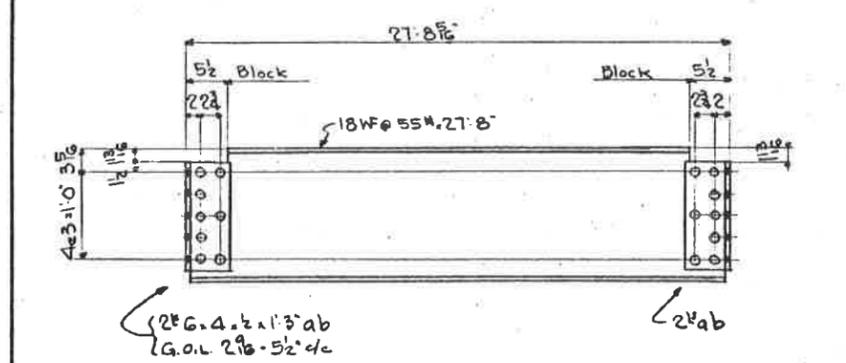
DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5 4

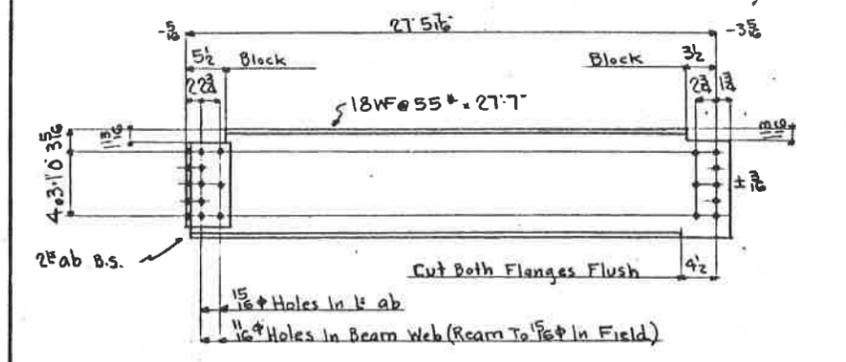
std Record 'Block' 20 HR 5 4



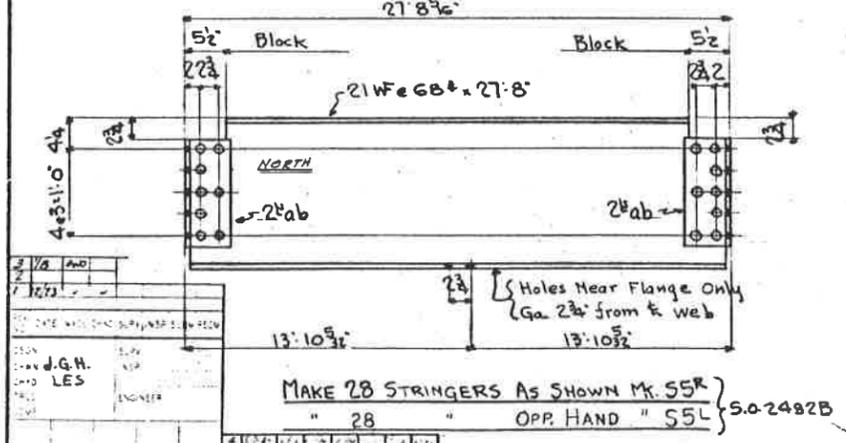
MAKE 50 STRINGERS AS SHOWN MK S1
 " 25 " " " S2 } S.O. 2482B



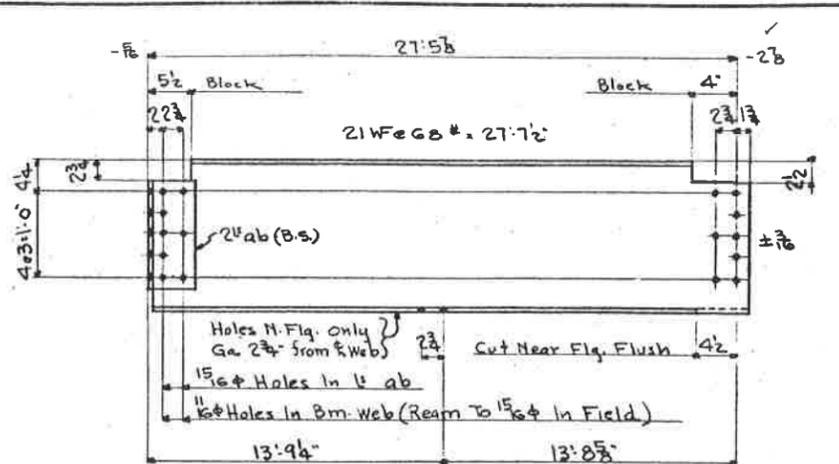
MAKE 50 STRINGERS AS SHOWN MK S3
 S.O. 2482B



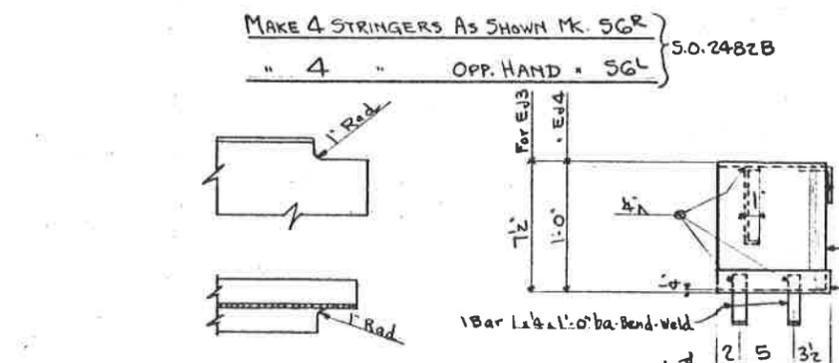
MAKE 8 STRINGERS AS SHOWN MK S4
 S.O. 2482B



MAKE 28 STRINGERS AS SHOWN MK S5R
 " 28 " " " S5L } S.O. 2482B

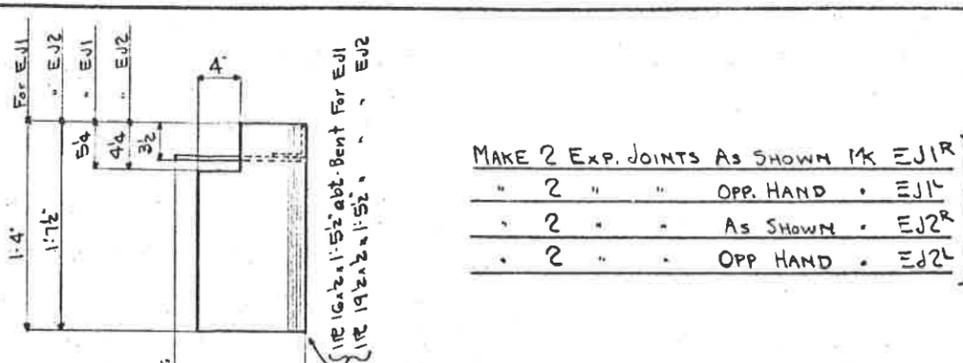


MAKE 4 STRINGERS AS SHOWN MK S6R
 " 4 " " " S6L } S.O. 2482B

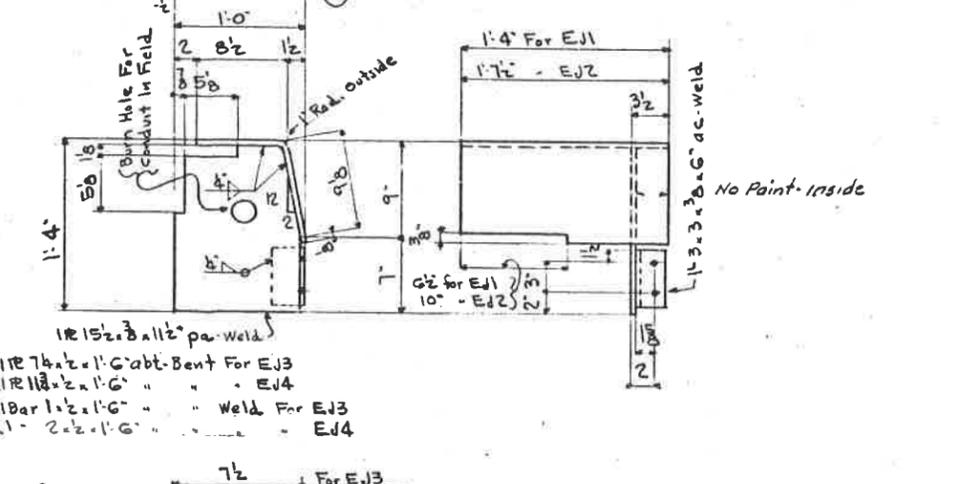


Typical For All Stringer Blocks
 All Blocks May Be Flame Cut, But Shall Be Chipped, Planed Or Ground To A Depth Sufficient To Remove All Effects of Burning

Note To Shop For All Stringers
 All Stringers Shall Be Fabricated To Length (Face To Face of Connection) As Shown With A Tolerance of +0 & -1/8. If Finishing Is Necessary The Thickness of End Conn. V Shall Not Be Reduced More Than 1/8" At Any Point
 Shop to paint top flanges of all stringers



MAKE 2 EXP. JOINTS AS SHOWN MK EJ1R
 " 2 " " " OPP. HAND " EJ1L
 " 2 " " " AS SHOWN " EJ2R
 " 2 " " " OPP. HAND " EJ2L



MAKE 2 EXP. JOINTS AS SHOWN MK EJ3R
 " 2 " " " OPP. HAND " EJ3L
 " 2 " " " AS SHOWN " EJ4R
 " 2 " " " OPP. HAND " EJ4L

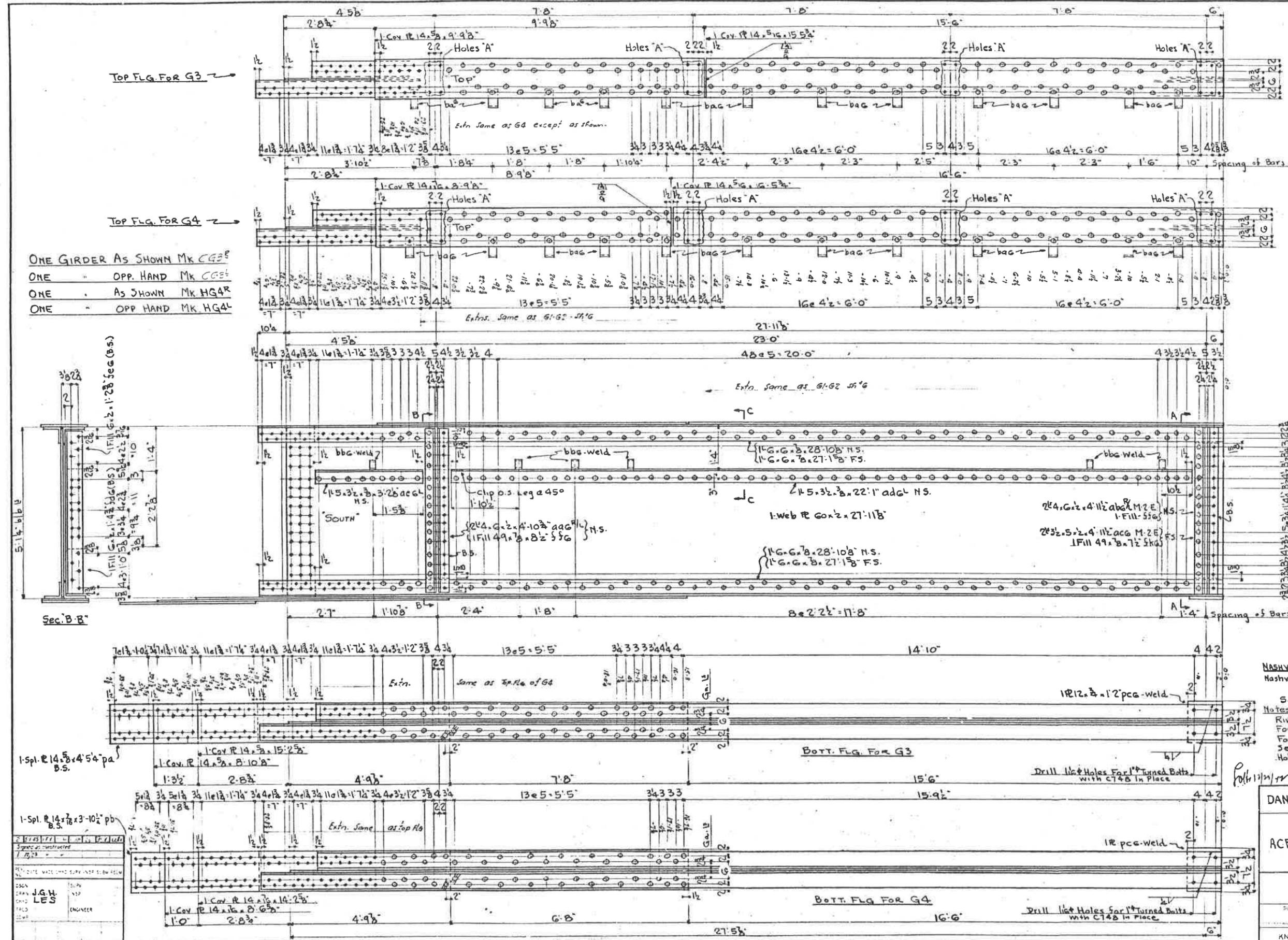
Nashville Bridge Company
 Nashville Tenn. Bessemer
 Cont 4934
 S.O. 2482B Bill No
 S.O. 2483B
 Notes:
 Rivets 3/4" Holes 1 1/2" Unless
 For General Notes See

1	Approved	2	Print Note	3	Reviewed For Construction	4	Checked Out All and
5		6		7		8	

12/27/40

PROJECT 20-4081	
DANDRIDGE TO CHESTNUT H	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROAD	
STRINGERS-EXP JOINT	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5 DV
RECORD DRAWING AS CONSTRUCTED	20 HR 5 40
Req'n 337,081	Cont TV 73,863

3/4" Rivet Block 20 HR 5 40



ONE GIRDER AS SHOWN MK CG3
 ONE OPP. HAND MK CG4
 ONE AS SHOWN MK HGAR
 ONE OPP. HAND MK HGAL

NASHVILLE BRIDGE COMPANY
 Nashville Tenn. Bessemer Plant
 CONT. 4934
 S.O. 2480B Bill No. 13

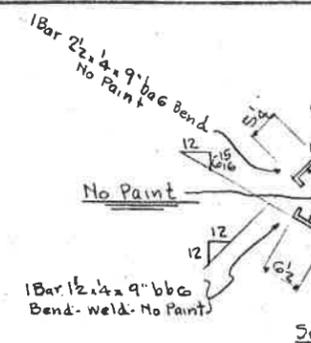
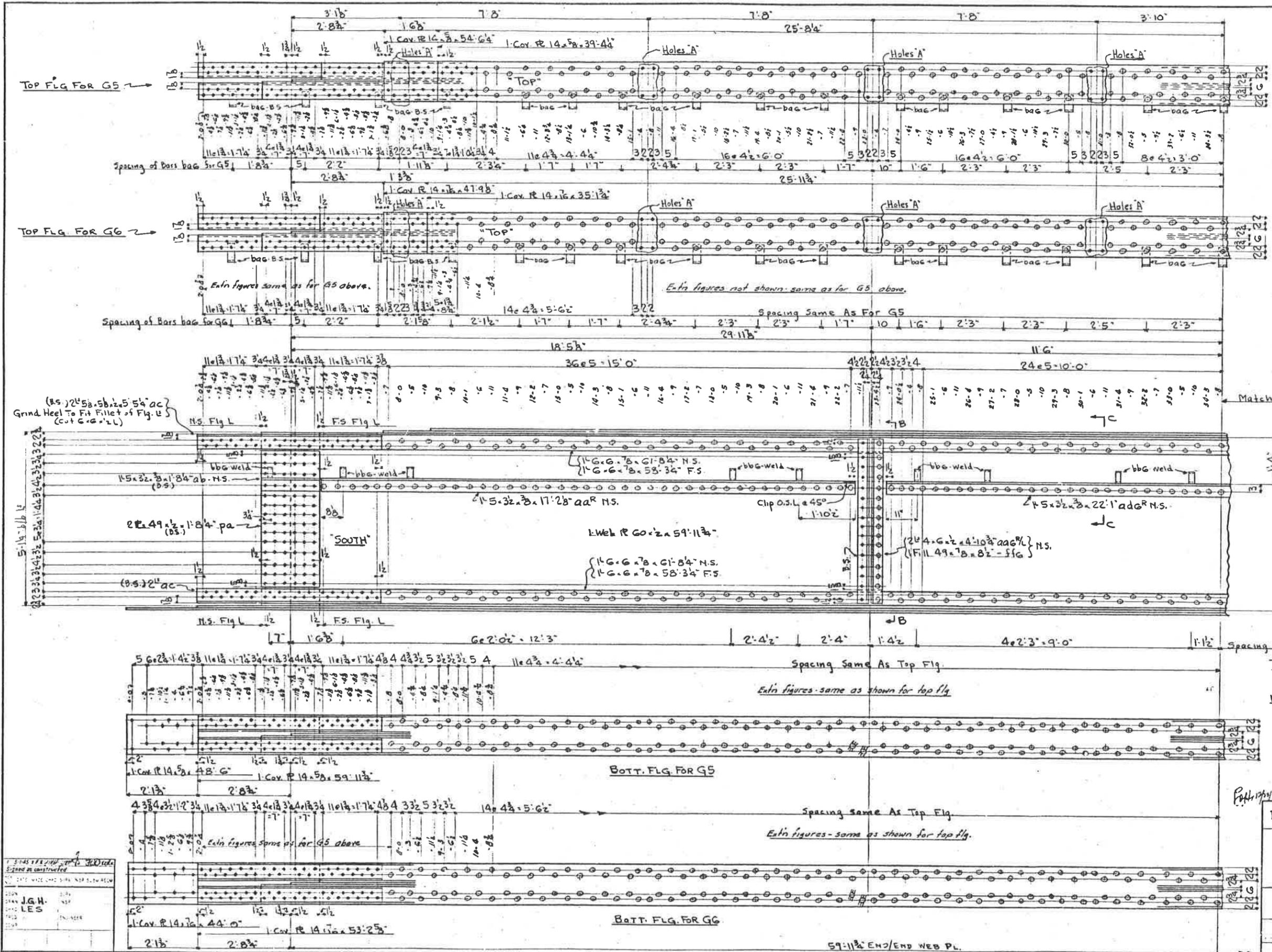
Notes:
 Rivets 7/8" Holes 1 1/8" Unless Noted
 For General Notes See Dwg. # E2
 For Camber Diagrams See Dwg. #
 See Paint Note on Sec. C-C
 Holes Marked 'A' Are for 7/8" Ribbed Bars

DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 GIRDERS

DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5 DV
Approved	20 HR 5 40

Reg'n 331,081 Cont. TV 73,863



ONE GIRDER AS SHOWN M
 ONE " OPP HAND M
 ONE " AS SHOWN I
 ONE " OPP HAND

NASHVILLE BRIDGE COMPANY
 Nashville Tenn. Dessemer Plan
 CONT 4934
 S.O. 2480B Bill No. 14

Notes:
 Rivets 7/8" Holes 1 1/2" Unless Note
 For General Notes See Dwg # 1
 For Camber Diagrams See Dwg # 2
 See Paint Note on Sec. "C-C"
 Holes Marked "A" Are For "A" Rivets
 Work This Dwg with Dwg # 9
 For Part of G5 & G6 To Right
 Line See Dwg # 9

PROJECT 20-4081
 DANDRIDGE TO CHESTNUT H

DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 GIRDERS

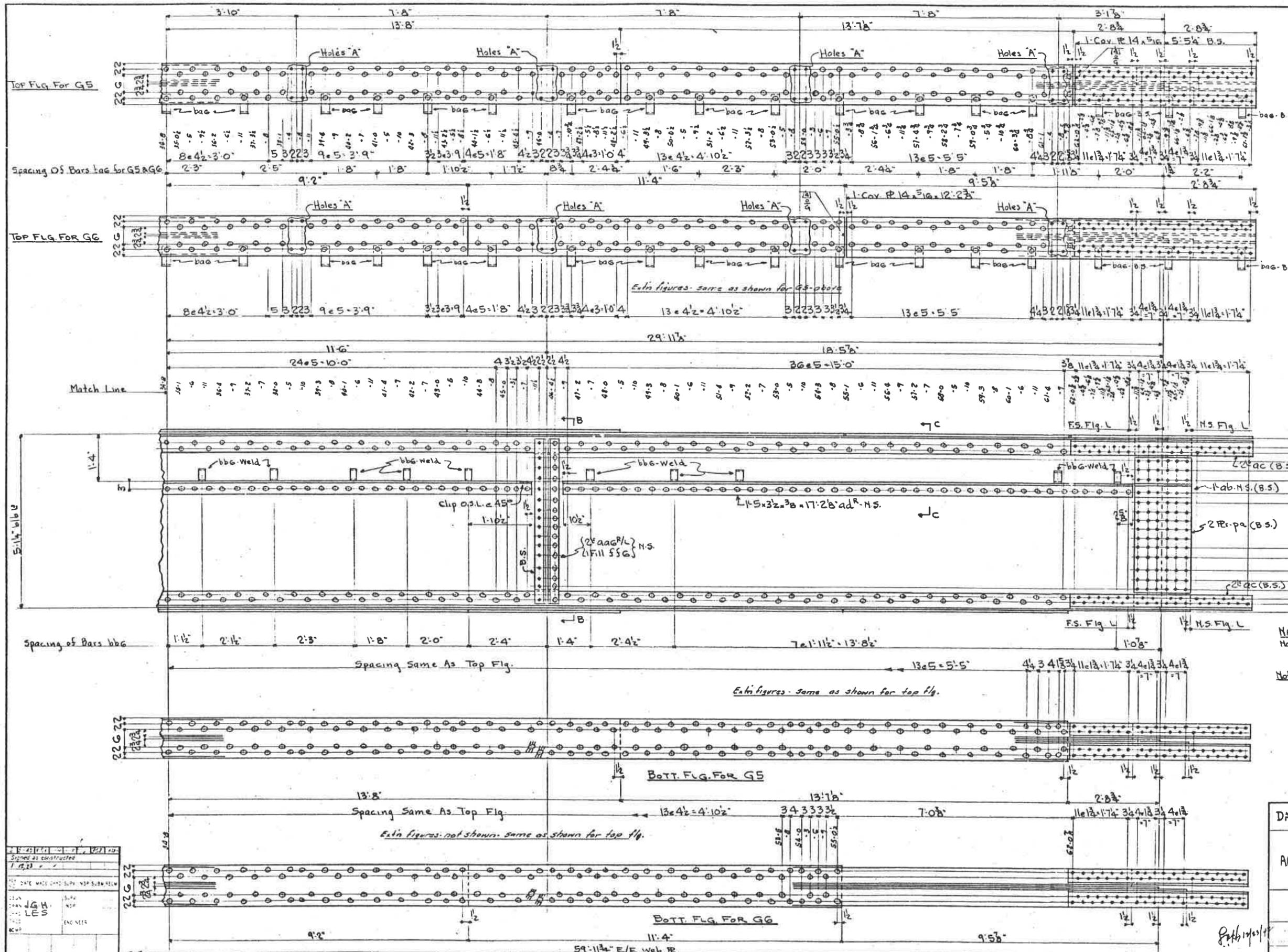
DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5 4

1. STAYS TO BE CONSTRUCTED
 2. DATE MADE AND BY WHOM
 J.G.H.
 LES

Reqn 337,081 Cont. TV 73,363

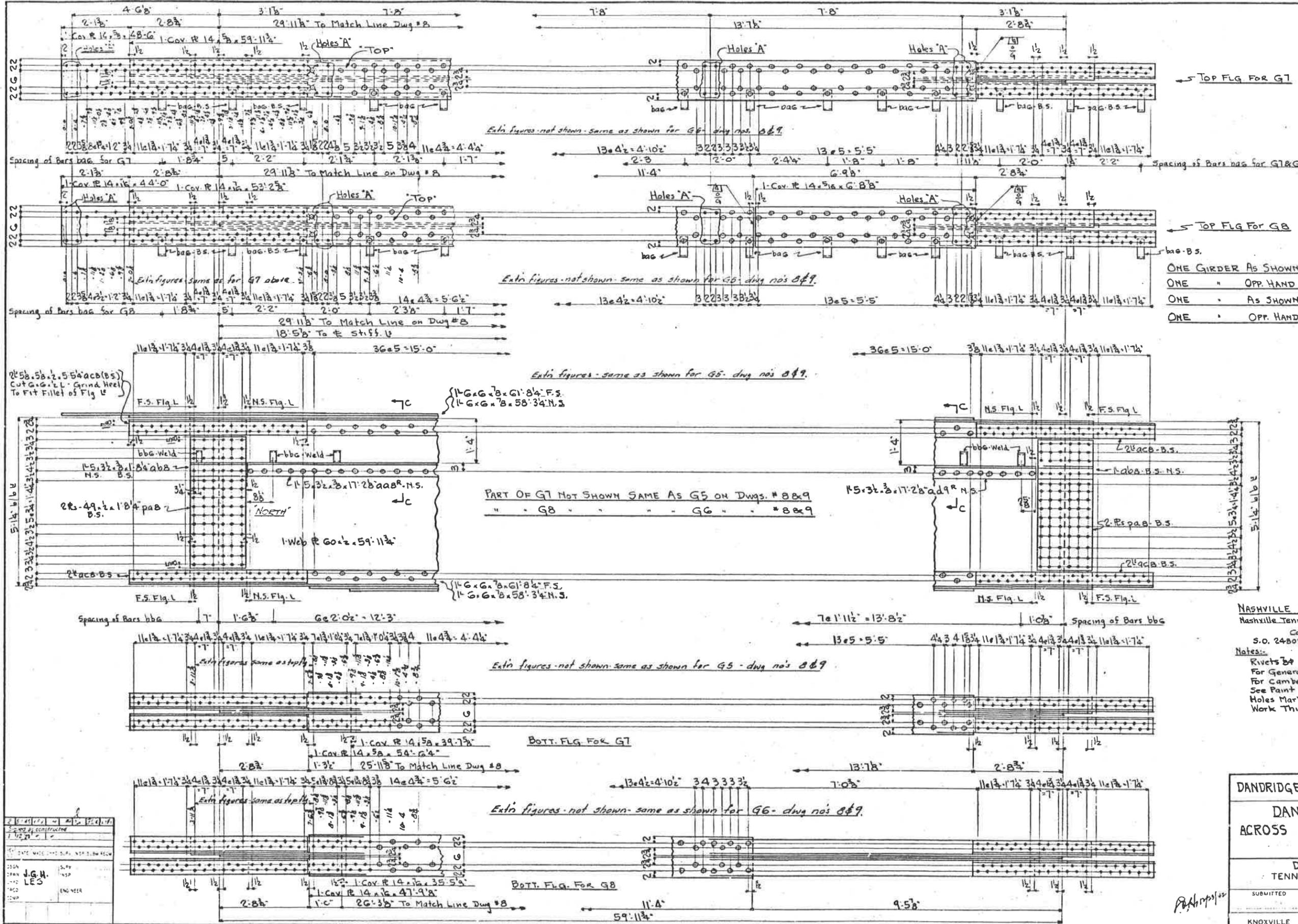
Std Record Block 120 HR 5 4



Signed as constructed
 J.G.H.
 LES
 ENGINEER

NASHVILLE BRIDGE COMPANY
 Nashville, Tenn. Bessemer Plant
 CONT. 4934.
 S.O. 2480B Bill No. 14
Notes:
 Rivets to Holes 5/8" Unless Notes
 For General Notes See Dwg. # E.
 For Camber Diagrams See Dwg. # C.
 See Paint Note on Sec. C.C.
 Holes Marked 'A' Are for 8" Rivets
 Work This Dwg. with Dwg. # B.
 For Sec. B-B, C-C at Part of G.
 Left of Match Line See Dwg. # 4933.

PROJECT 20-4081
DANDRIDGE TO CHESTNUT HIGHWAY
DANDRIDGE BRIDGE
ACROSS FRENCH BROADWAY
GIRDERS
 DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT
 SUBMITTED _____ RECOMMENDED _____
 KNOXVILLE _____ HR 5
 RECORD DRAWING AS CONSTRUCTED _____ 20 HR 5 4
 Req'n 351081 Cont. TV. 13,863



DATE	BY	CHKD	APP'D
1/2/24	J.G.H.	LE.S.	
1/2/24			
1/2/24			
1/2/24			

NASHVILLE BRIDGE COMPANY
 Nashville, Tenn. Bessemer Plant
 CONT. 4934
 S.O. 24808 Bill No. 15

Notes:

- Rivets & Holes Unless Noted For General Notes See Dwg. # E2
- For Camber Diagrams See Dwg. # E2
- See Paint Note on Sec. "C-C"
- Holes Marked "A" Are For Bolt Rib Work This Dwg With Dwg # 8

PROJECT 22-4001.

DANDRIDGE TO CHESTNUT HI

DANDRIDGE BRIDGE

ACROSS FRENCH BROAD

GIRDERS

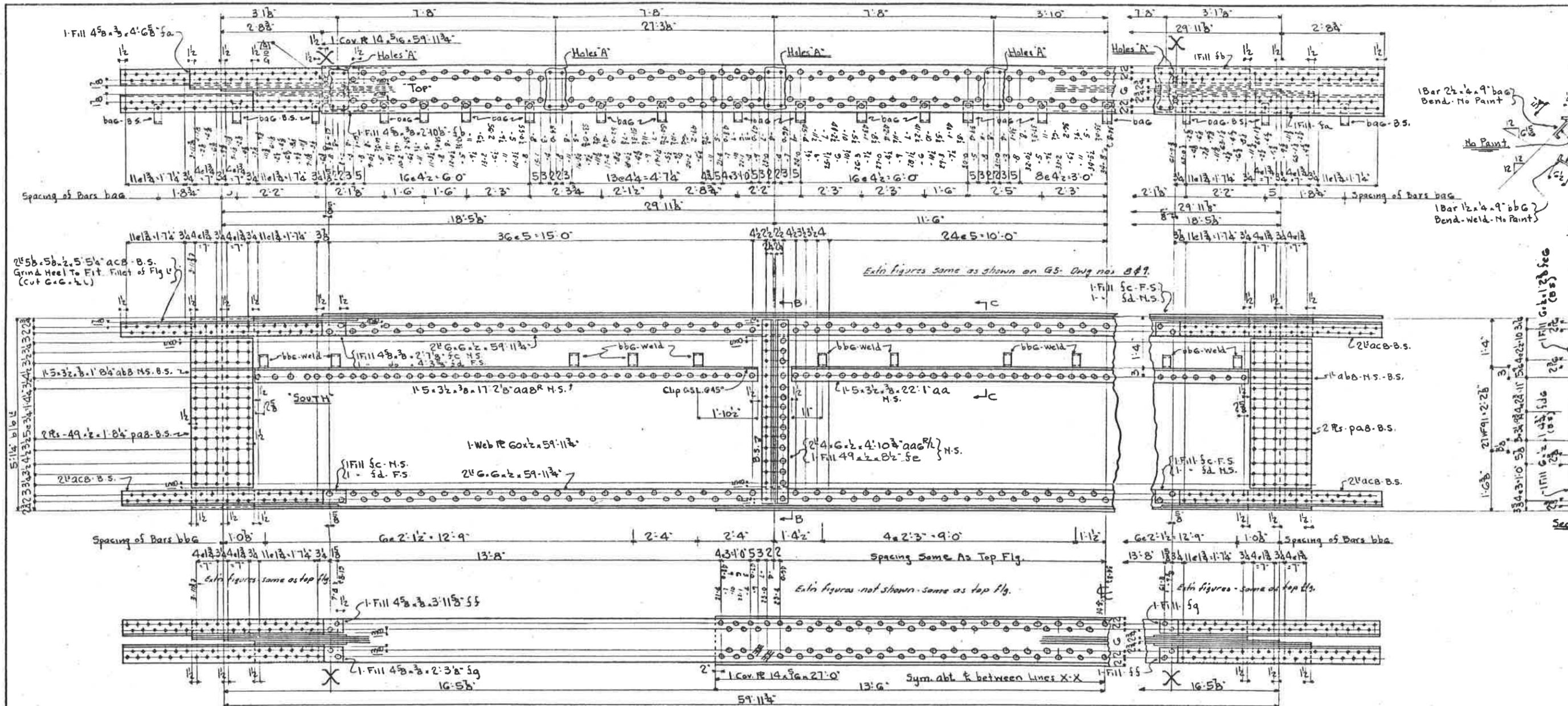
DOUGLAS PROJECT.

TENNESSEE VALLEY AUTHORITY

DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOWLEDGE	HR 5 D
RECORD DRAWING AS CONSTRUCTED	20 HR 5 40

Req'n. 337,081 Cont. TV. 73,863



ONE GIRDER AS SHOWN MK BG12R
 ONE " OPP. HAND - BG12L

NASHVILLE BRIDGE COMPANY
 Nashville Tenn. Bessemer Plant
 Cont 4934
 S.O. 2480B Bill No. /

Notes:
 Rivets & Holes 1/2" Unless Noted
 For General Notes See Dwg. # 3
 For Camber Diagram See Dwg. # 4
 See Paint Note on Sec. "C-C"
 Holes Marked "A" Are For Bolt

DESIGNED BY	J.G.H.
CHECKED BY	LES
DATE MADE	NOV 24 1912
DATE MOD.	
BY	
DATE	
BY	
DATE	

1 Approve 2 3 4 5 6

PROJECT 20 4081

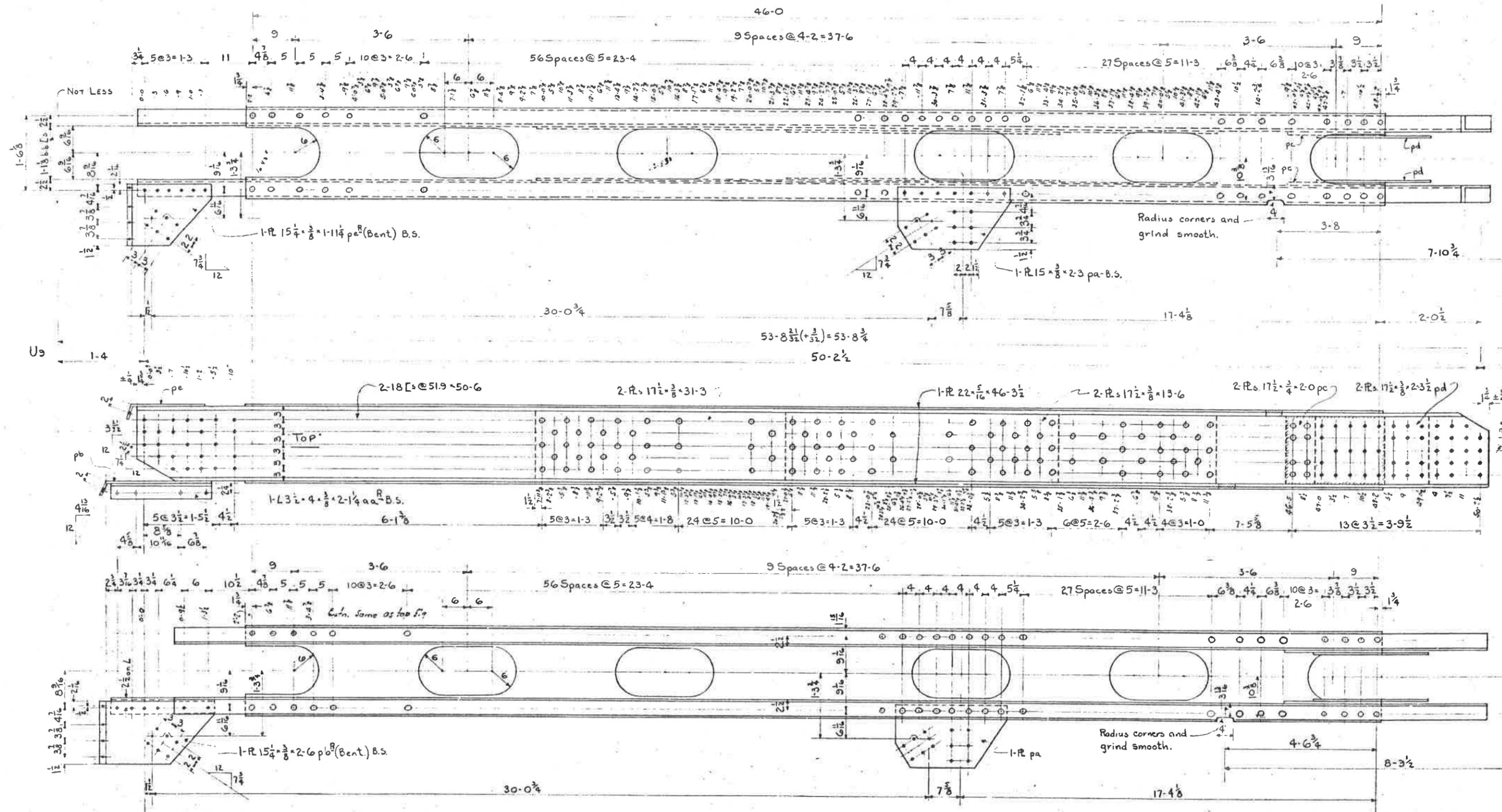
DANDRIDGE TO CHESTNUT HI

DANDRIDGE BRID
 ACROSS FRENCH BROA
 GIRDERS

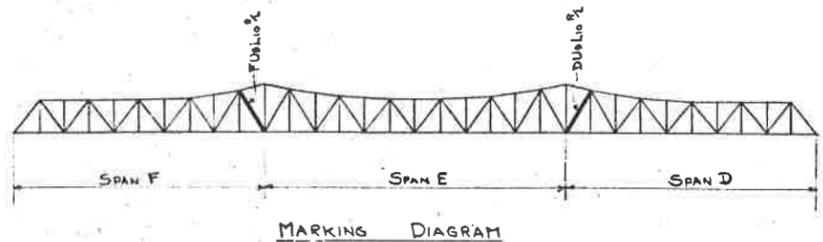
DOUGLAS PROJECT
 TENNESSEE VALLEY AUT
 DESIGN DEPARTMENT

KNOWLEDGE
 RECEIVED AS CONSTRUCTED
 20 MAR 5

2nd Record Block 120 NR 5 G



DATE MADE	DATE REVISION
1-15-1914	1-15-1914
2-15-1914	2-15-1914
3-15-1914	3-15-1914
4-15-1914	4-15-1914
5-15-1914	5-15-1914
6-15-1914	6-15-1914
7-15-1914	7-15-1914
8-15-1914	8-15-1914
9-15-1914	9-15-1914
10-15-1914	10-15-1914
11-15-1914	11-15-1914
12-15-1914	12-15-1914



- ONE-DIAGONAL AS SHOWN MKDU₉LI₀^R
- ONE- do OPP HAND MKFU₉LI₀^L
- ONE- do AS SHOWN MKFU₉LI₀^R
- ONE- do OPP HAND MKDU₉LI₀^L

TRUE %

NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. - BESSEMER PLANT
CONT. 4934

S.O. 2479-B BILL No. 18

FOR GENERAL NOTES SEE DWG. E2

- RIVETS 3/8
- OPEN HOLES 1 1/8
- EDGE DISTANCE 1/2 OR NOTED

Path

① Reused in
Erection from
Current Record

② Approval

③

④

⑤

⑥

Reqn. 337, DBI Cont. TV 73, 863

PROJECT 20-4081

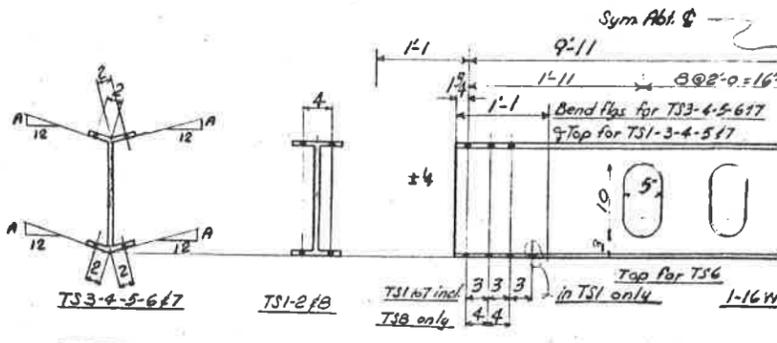
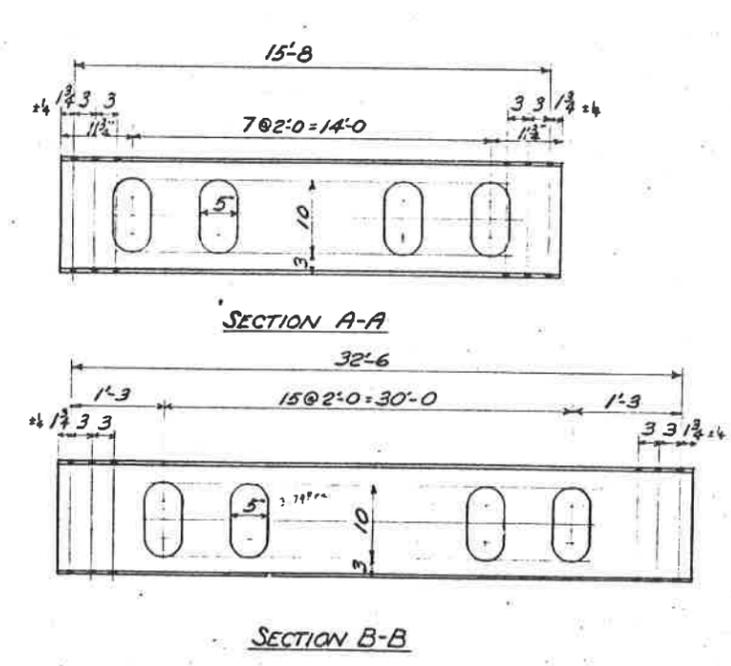
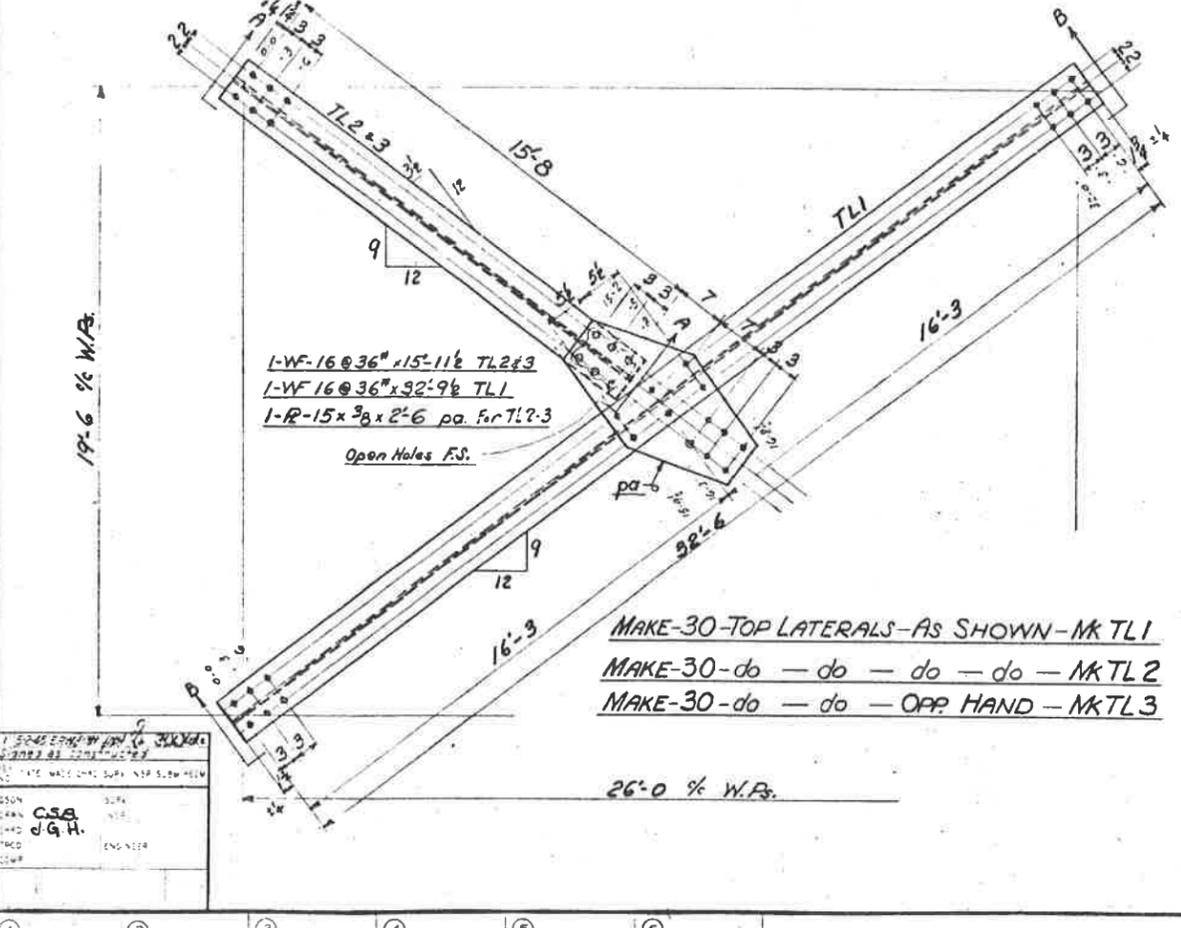
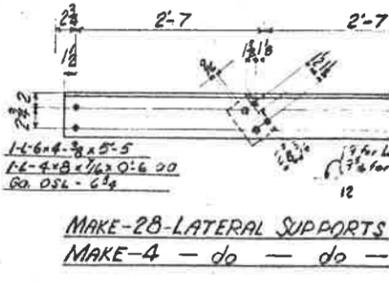
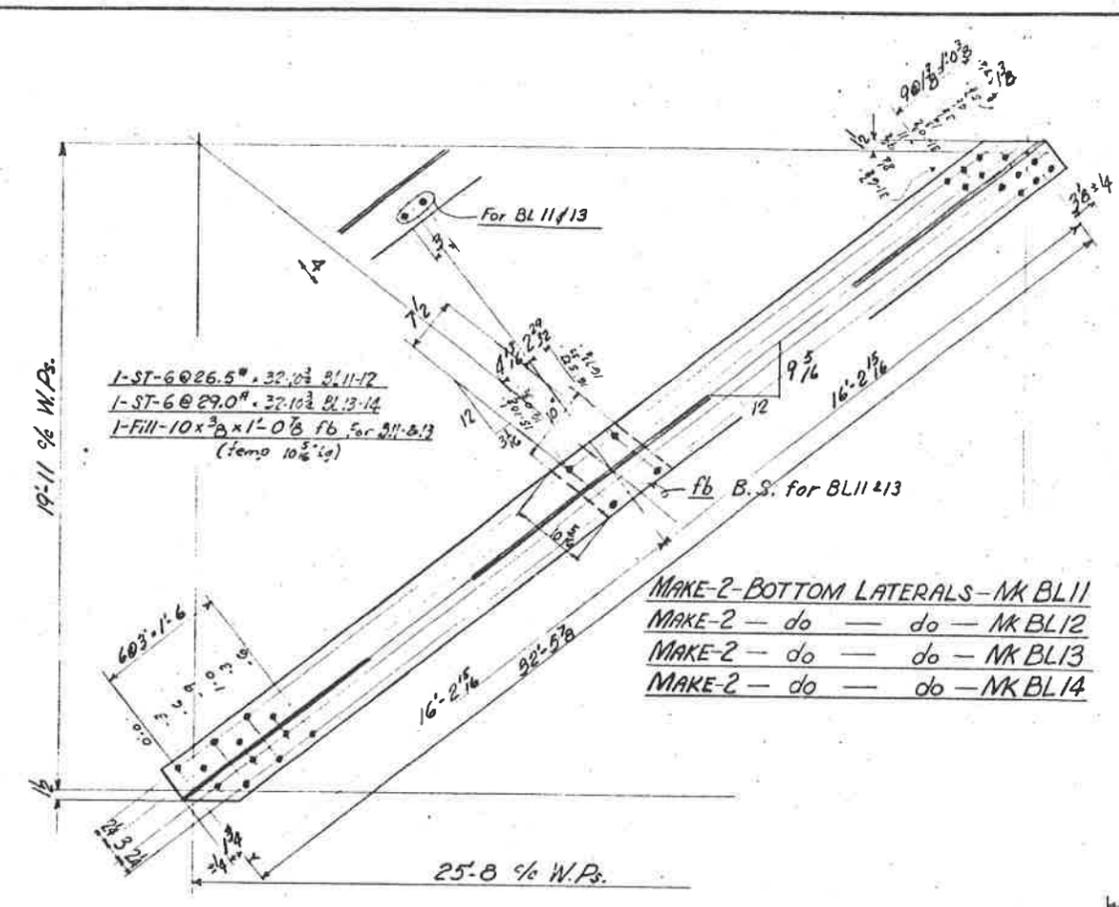
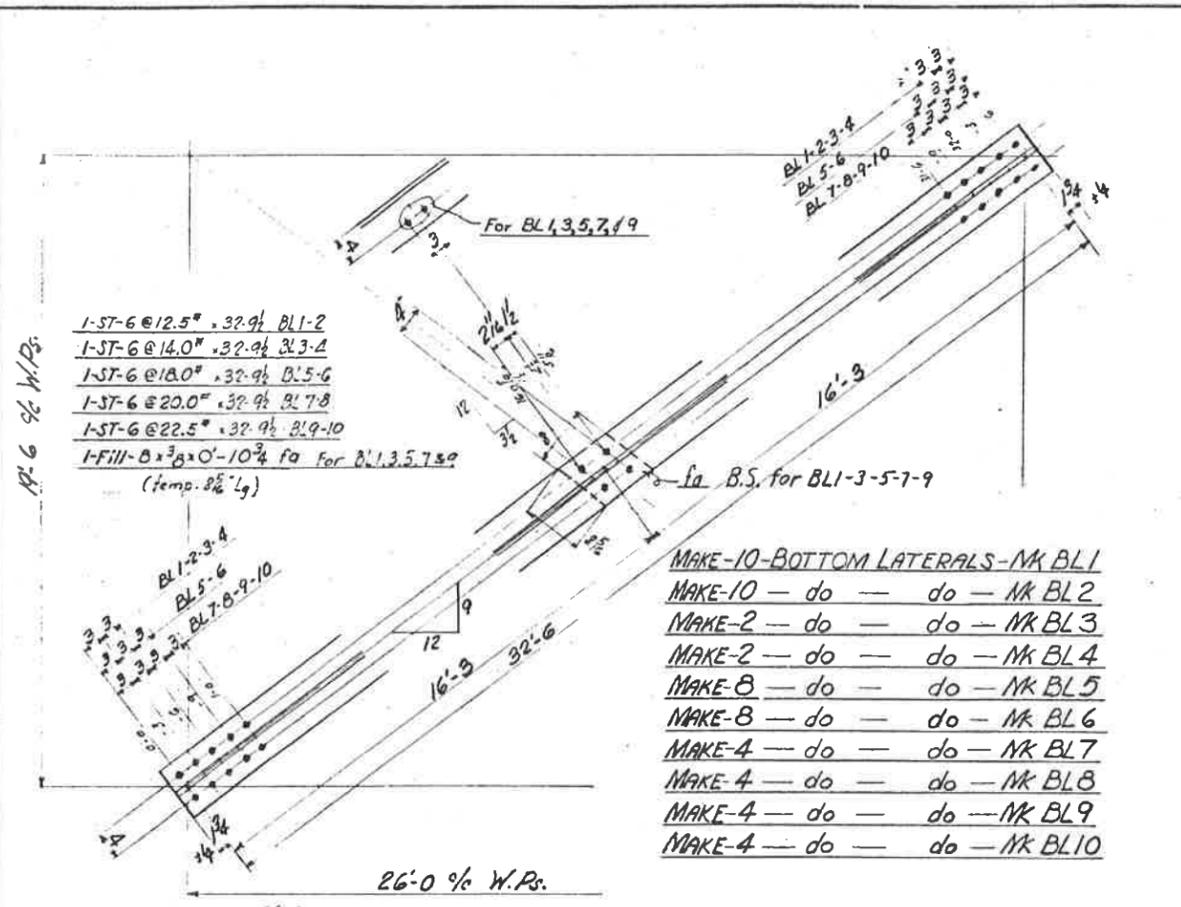
DANDRIDGE TO CHESTNUT HILL

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
DETAILS OF DIAGONAL

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 3

std Record Book 2019/15/4081



MEMBER	BEVEL 7"
TS3	3/8
TS4	5/8
TS5	1/2
TS6	2 1/2
TS7	1/4

- MAKE-13-TOP STRUT-MK TS1
- MAKE-2-do-do-MK TS2
- MAKE-4-do-do-MK TS3
- MAKE-2-do-do-MK TS4
- MAKE-4-do-do-MK TS5
- MAKE-2-do-do-MK TS6
- MAKE-2-do-do-MK TS7
- MAKE-2-do-do-MK TS8

1. 5045 ESHBY AVE. NASHVILLE, TENN.
 2. THE NASHVILLE BRIDGE COMPANY
 3. 1000 1/2 W. 10TH AVE. NASHVILLE, TENN.
 4. 1000 1/2 W. 10TH AVE. NASHVILLE, TENN.
 5. 1000 1/2 W. 10TH AVE. NASHVILLE, TENN.
 6. 1000 1/2 W. 10TH AVE. NASHVILLE, TENN.

CSB
 G.A.H.

NASHVILLE BRIDGE COMPANY
 NASHVILLE, TENN. BESSEMER PLANT
 CONT. 4934

SQ. 2479-B BILL No. 19-20

NOTE:
 SEE DWG. "E2" FOR GENERAL NOTES.
 Rivs. 3/8" Holes 1/2" Unless noted.

PROJECT 20-4081

DANDRIDGE TO CHESTNUT HILL

DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 BOTTOM & TOP LATERALS

DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

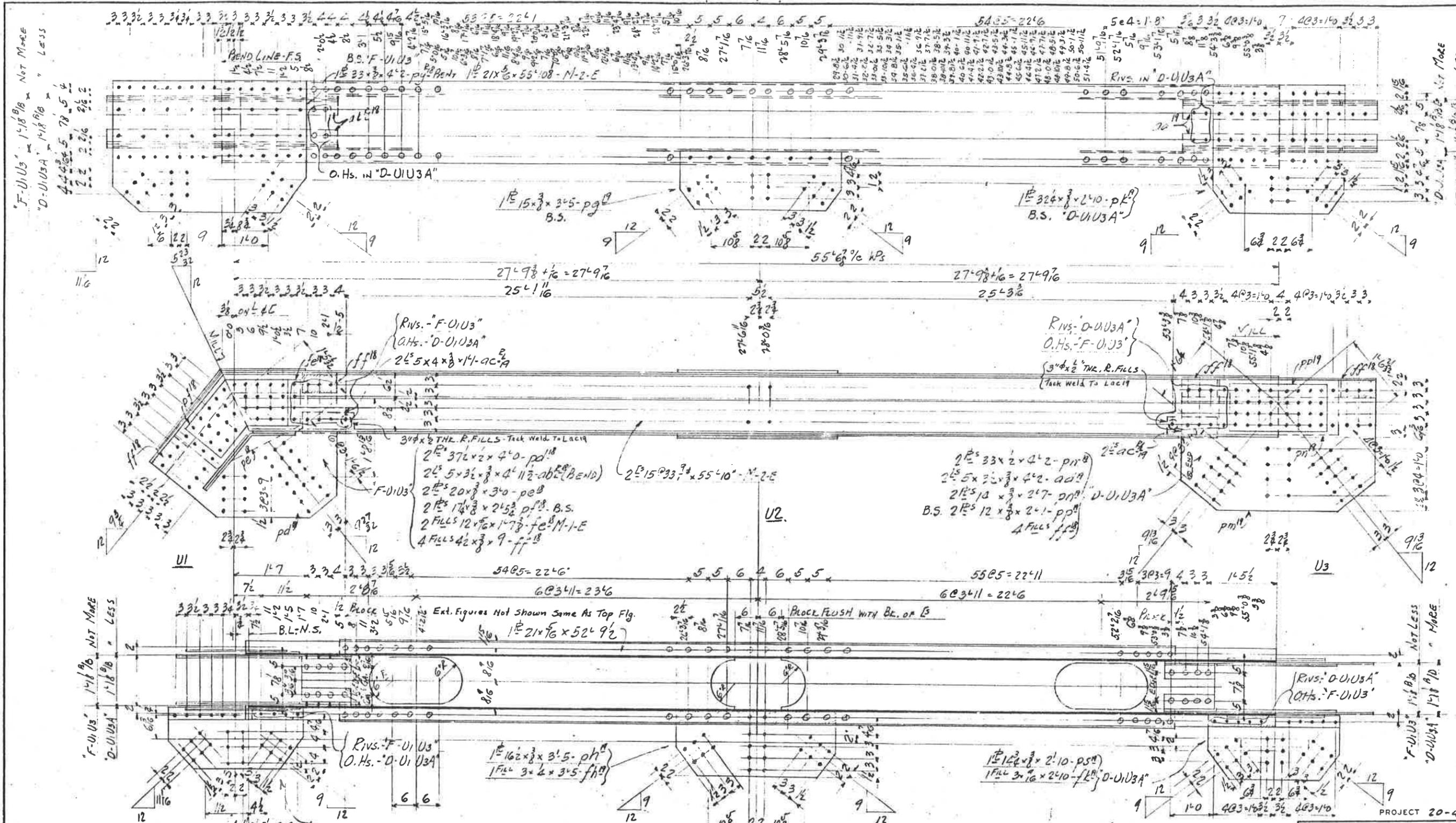
SUBMITTED _____ RECOMMENDED _____

KNOXVILLE

Reqn 337081 Cont. TV T3865

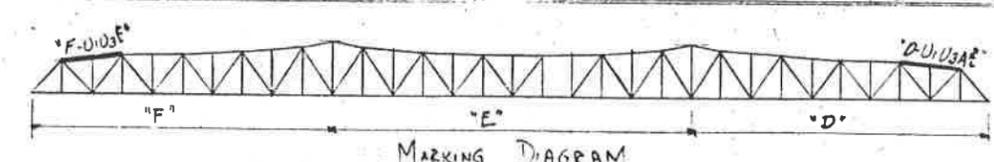
20 MAR 5 1920

add. Record. Block 1 20 no 5



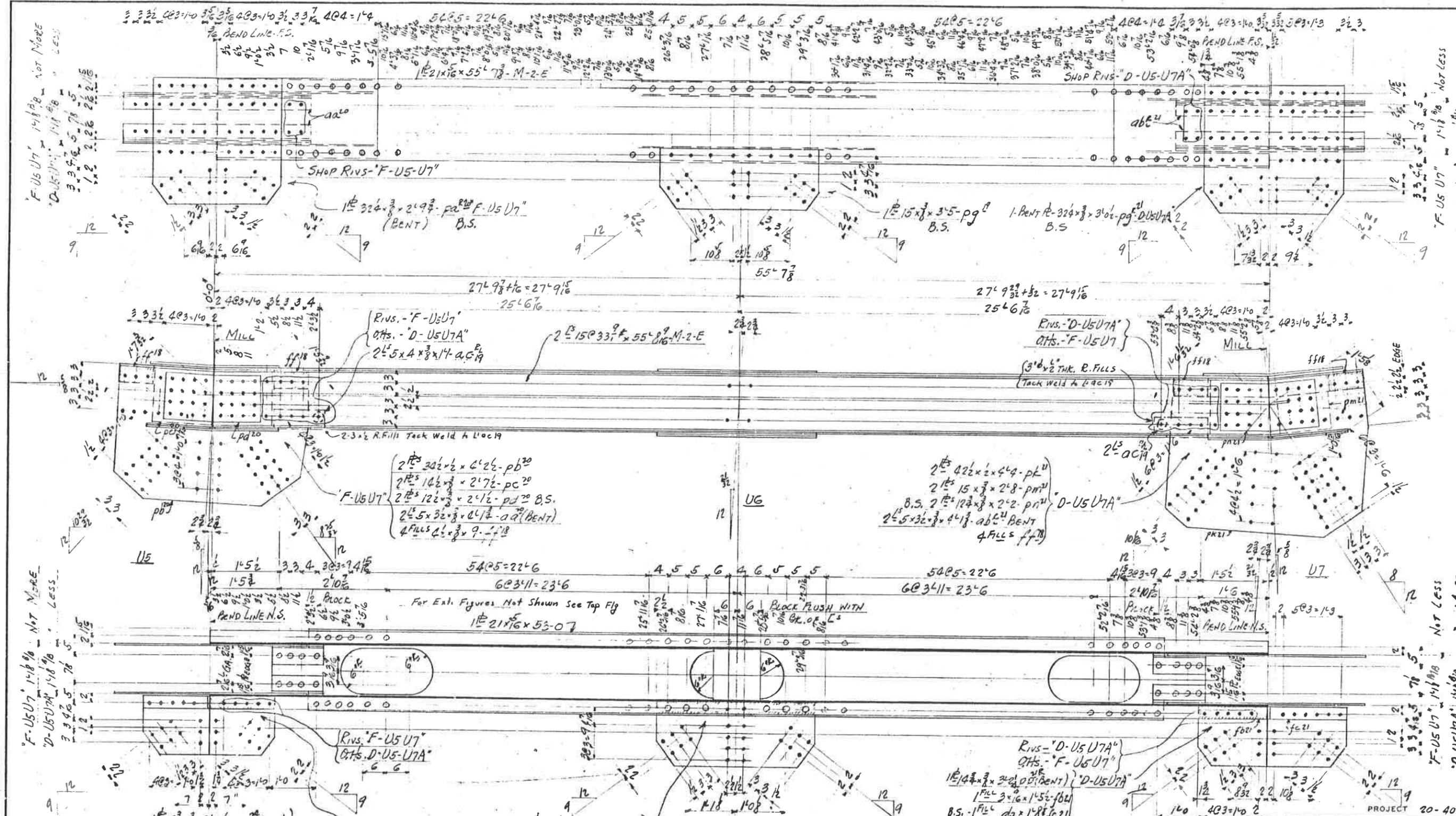
DESIGNED BY	LEWIS J. G. H.
CHECKED BY	
DATE	
PROJECT	
NO.	
SCALE	
APPROVED BY	

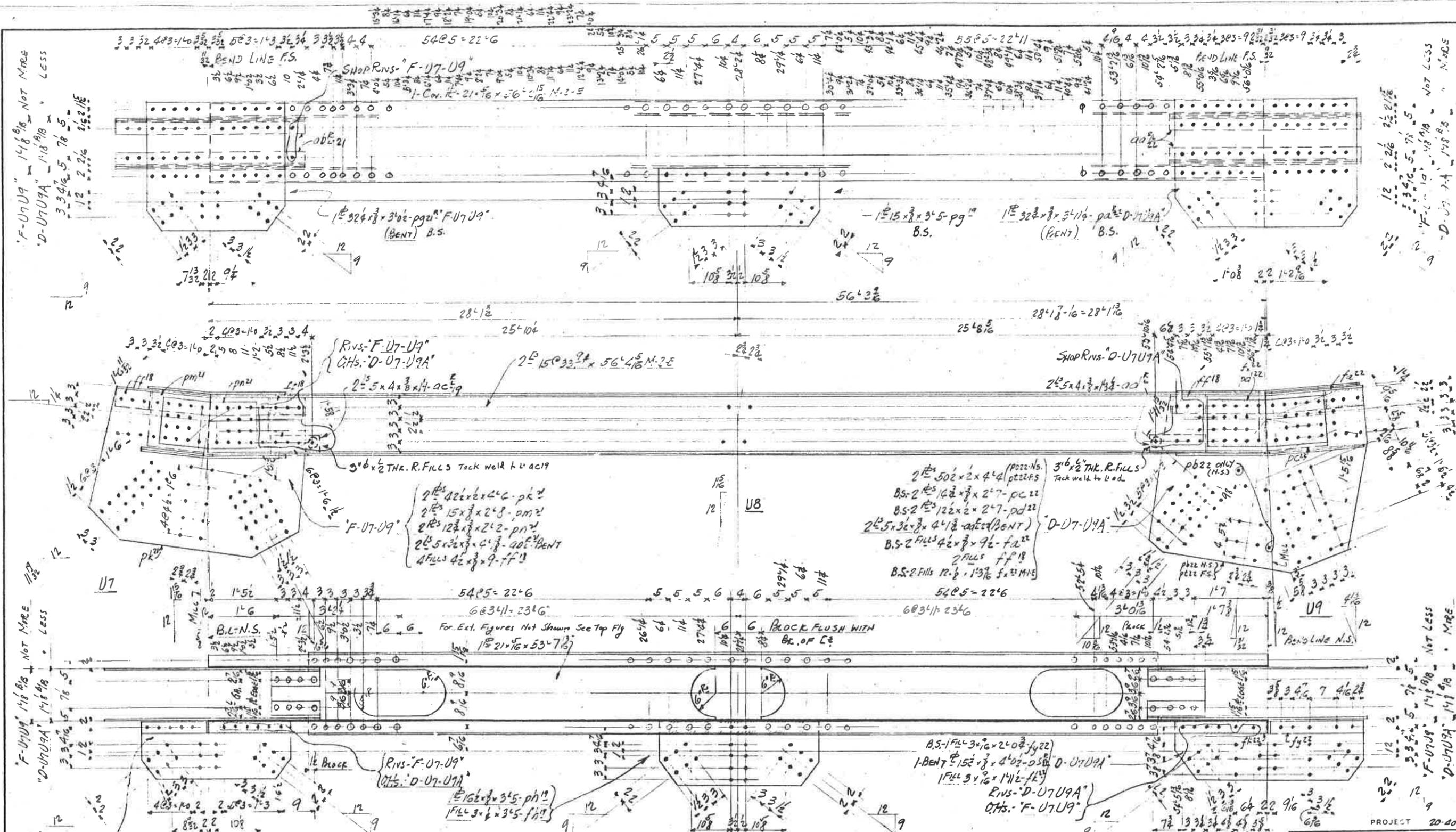
ONE-TOP CHORD - RIGHT - MK "F-U1U3"
 ONE-TOP CHORD - LEFT - MK "F-U1U3"
 ONE-TOP CHORD - RIGHT - MK "D-U1U3A"
 ONE-TOP CHORD - LEFT - MK "D-U1U3A"



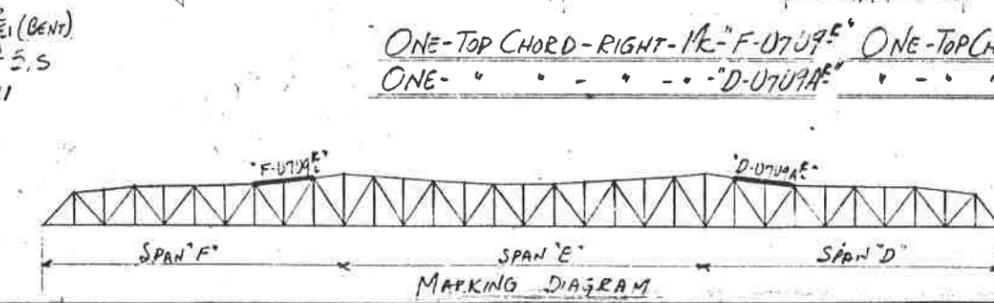
NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. - BESSEMER PLANT
 CONT. 493A
 S.O. 2079-B
 BULL. NO. 28
 NOTE: SEE DWG. "E2" FOR GENERAL NOTES
 7/8" RIVETS OR NOTED

DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROAD	
TOP CHORD DETAIL	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
MEMPHIS	HR 5
CHATTANOOGA	HR 5
SPRINGFIELD	HR 5
MEMPHIS	HR 5
MEMPHIS	HR 5





1	DESIGNED BY	DATE
2	CHECKED BY	DATE
3	APPROVED BY	DATE
4	CONTRACT NO.	
5	PROJECT NO.	
6	SCALE	
7	DATE	
8	BY	
9	FOR	
10	BY	
11	FOR	
12	BY	
13	FOR	
14	BY	
15	FOR	

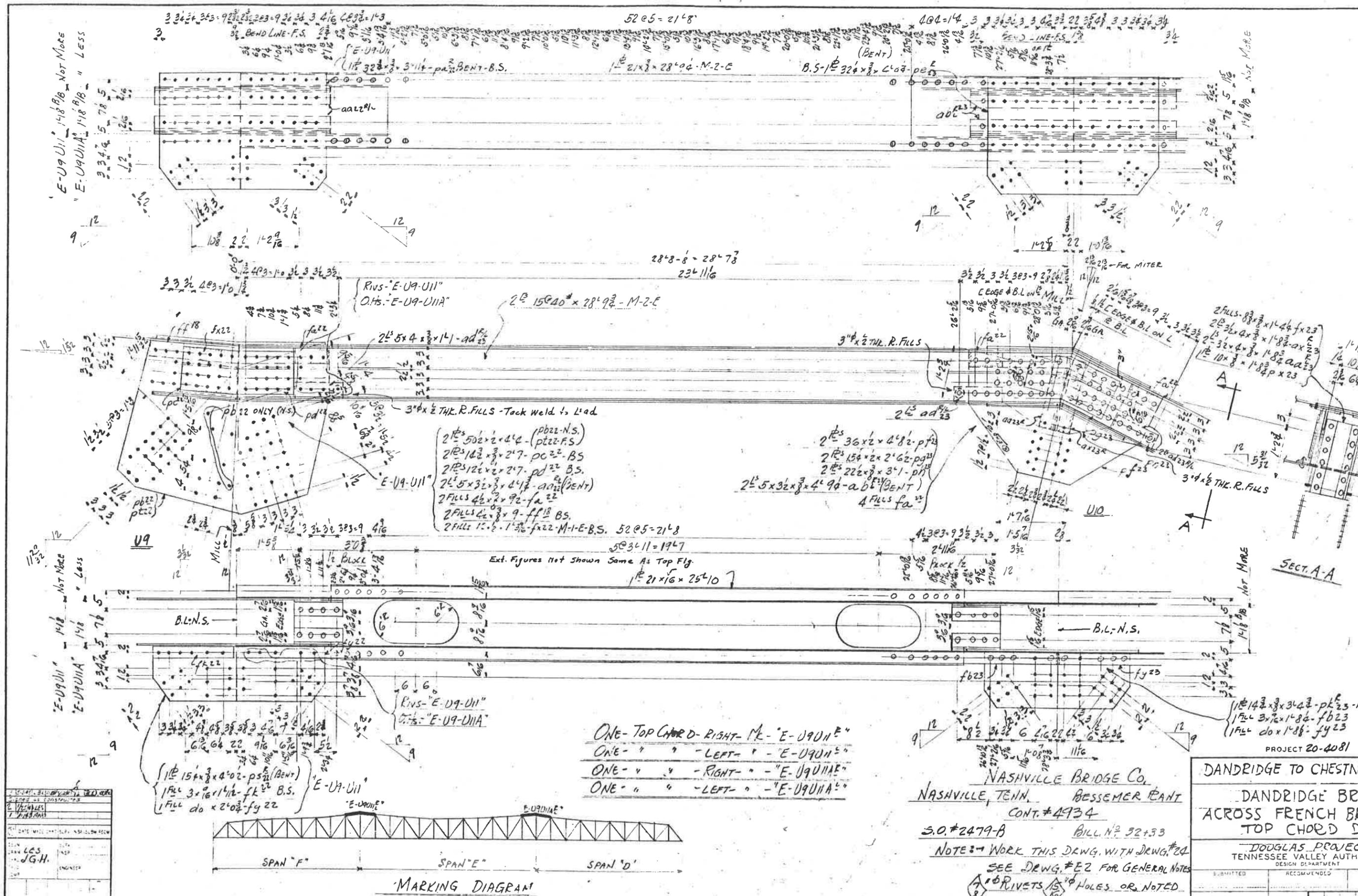


ONE-TOP CHORD-RIGHT-1R-F-07-U9
 ONE-TOP CHORD-LEFT-F-07-U9
 ONE-D-07-U9A

NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. - BESSEMER PLANT
 CONT. #4932
 S.O. #2479-B
 BILL NO. 31

NOTE: SEE DRAWING "E2" FOR GENERAL NOTES.
 RIVETS 15/16" HOLES OR NOTED

DANDRIDGE TO CHESTER	
DANDRIDGE BRIDGE ACROSS FRENCH BROOK TOP CHORD DETAIL	
DOUGLAS PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT	
SUBMITTED	RECEIVED
KNOXVILLE	HR 5
SEAL	20 HR 5
REG. 337,031	CONT. TV 73863



1	DESIGNED BY	DATE
2	CHECKED BY	DATE
3	APPROVED BY	DATE
4	SCALE	
5	PROJECT	
6	DATE	
7	BY	
8	FOR	
9	BY	
10	FOR	

1 Approved for Construction
2 Approved
3
4
5
6

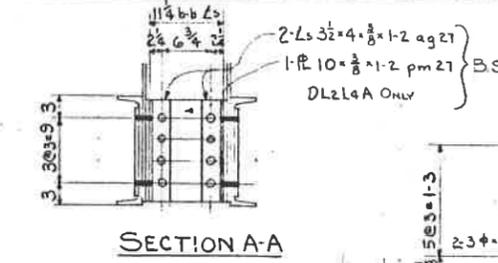
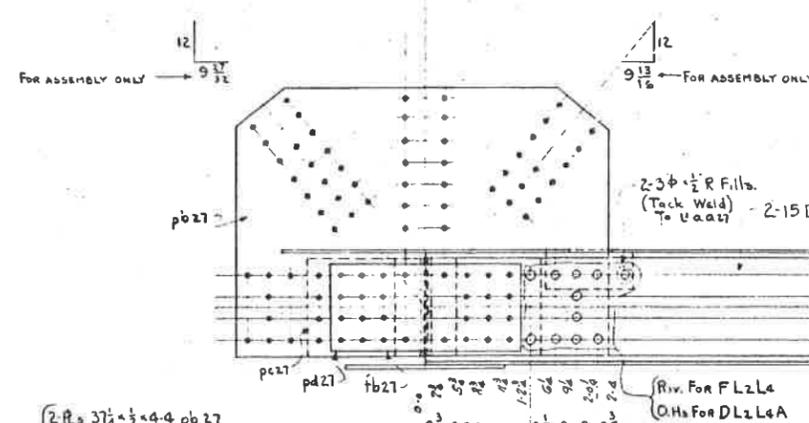
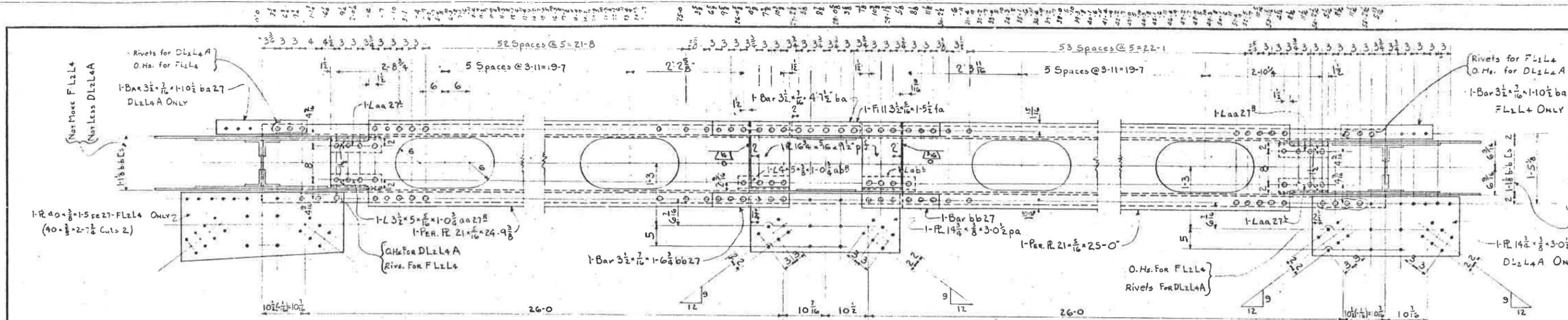
- ONE - TOP CHORD - RIGHT - ME - "E-U9U11"
- ONE - " " - LEFT - "E-U9U11"
- ONE - " " - RIGHT - "E-U9U11A"
- ONE - " " - LEFT - "E-U9U11A"

NASHVILLE BRIDGE CO.
NASHVILLE, TENN. BESSEMER PLANT
CONT. #4934

S.O.#2479-B BILL NO. 32+33
NOTE: WORK THIS DRWG. WITH DRWG.#22
SEE DRWG.#E2 FOR GENERAL NOTES

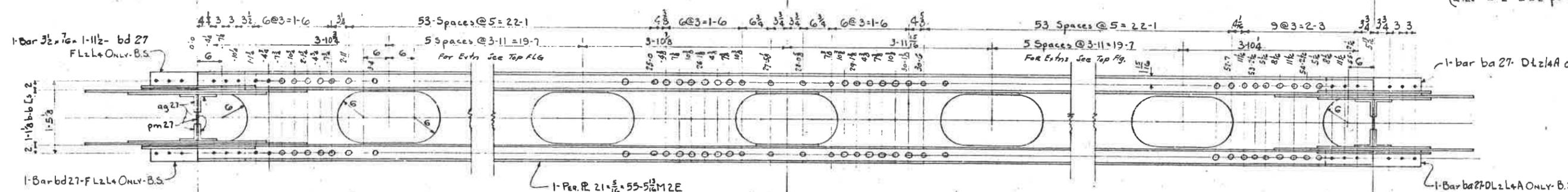
10 RIVETS 15 HOLES OR NOTED

PROJECT 20-4081	
DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BRIDGE	
TOP CHORD DECK	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
RECOMMENDED	APPROVED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5
RECN 337,081	CON. TV 73863
sid Record Bk	10 HR 15



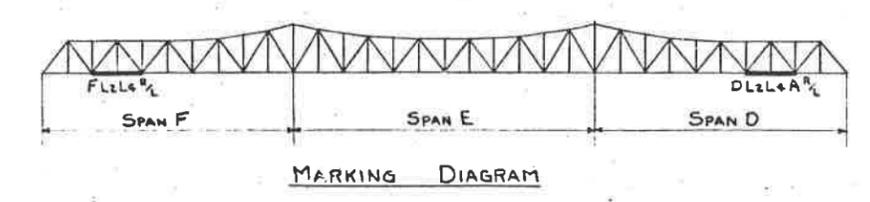
- FLzL4 ONLY
- 2-Rs 3 1/2 x 4 = 4-4 pb 27
 - 2-Rs 14 x 3/8 = 2-8 pc 27
 - 2-Rs 12 x 3/8 = 2-2 1/2 pd 27-B.S.
 - 2-Fills 12 x 3/8 = 1-1 1/4 fb 27 MIE-B.S.
 - 4-Ls 3 1/2 x 4 = 4-2 ag 27-B.S.
 - 1-R 10 x 3/8 = 1-2 pm 27

- DLzL4 ONLY
- 2-Rs 3 1/2 x 4 = 2-3 10 1/2 pc
 - 2-Rs 14 x 3/8 = 2-2 1/2 pd
 - 2-Rs 12 x 3/8 = 2-2 1/2 pe



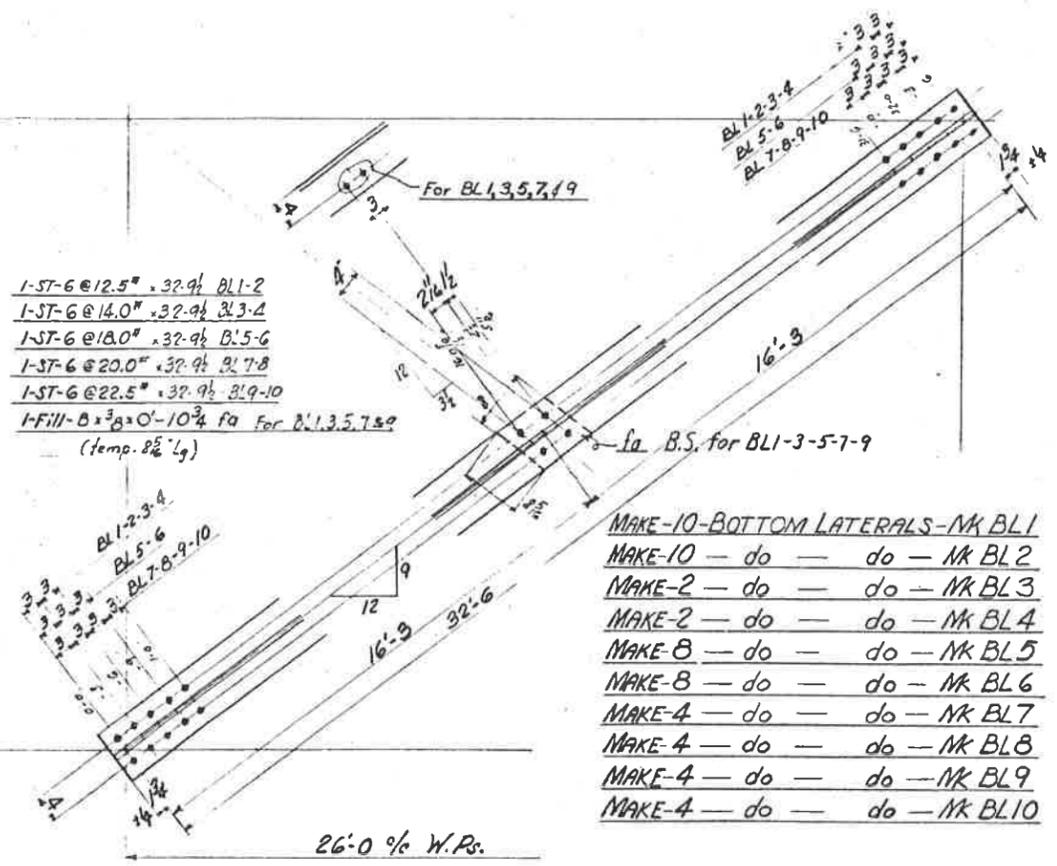
ONE-BOTTOM CHORD-RIGHT MK FLzL4^R
ONE- do do MK DLzL4^R

ONE-BOTTOM CHORD-LEFT MK FLzL4^L
ONE- do do MK DLzL4^L



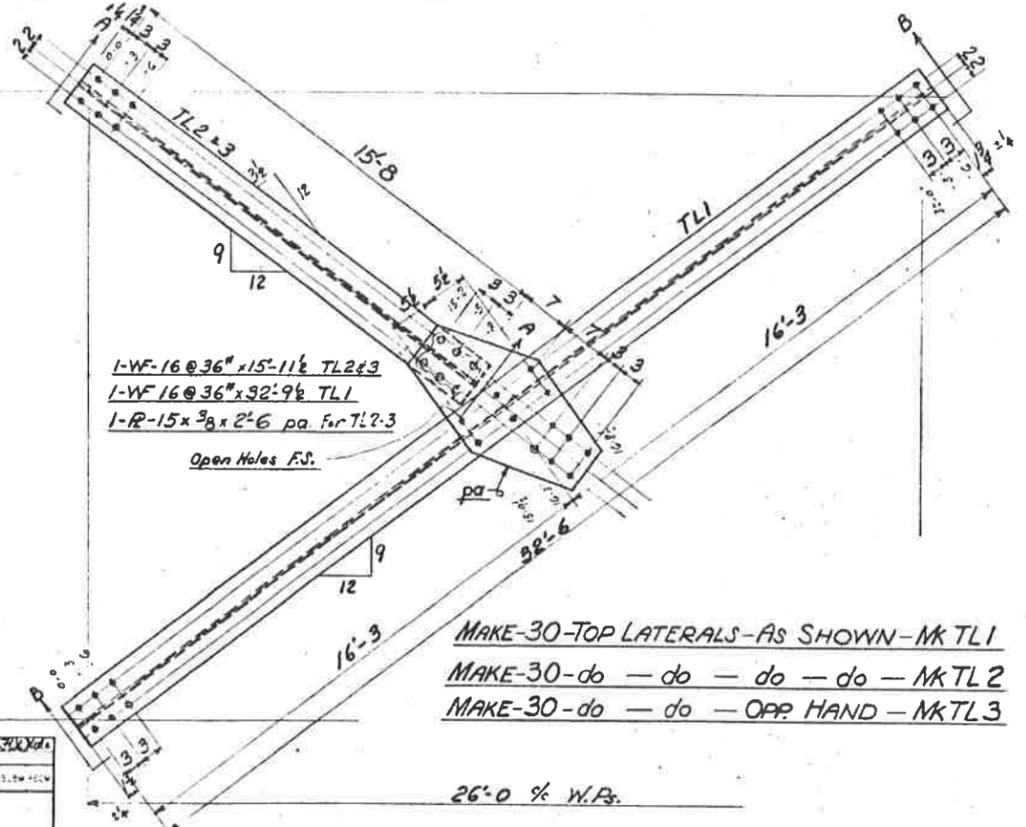
4-25-27	1-1-27	1-1-27
3	6215410	
2	143-11-1	
1	1-1-27	
DATE MADE: 1-1-27		
M.H.F. J.G.H.		

19-6 % W.P.



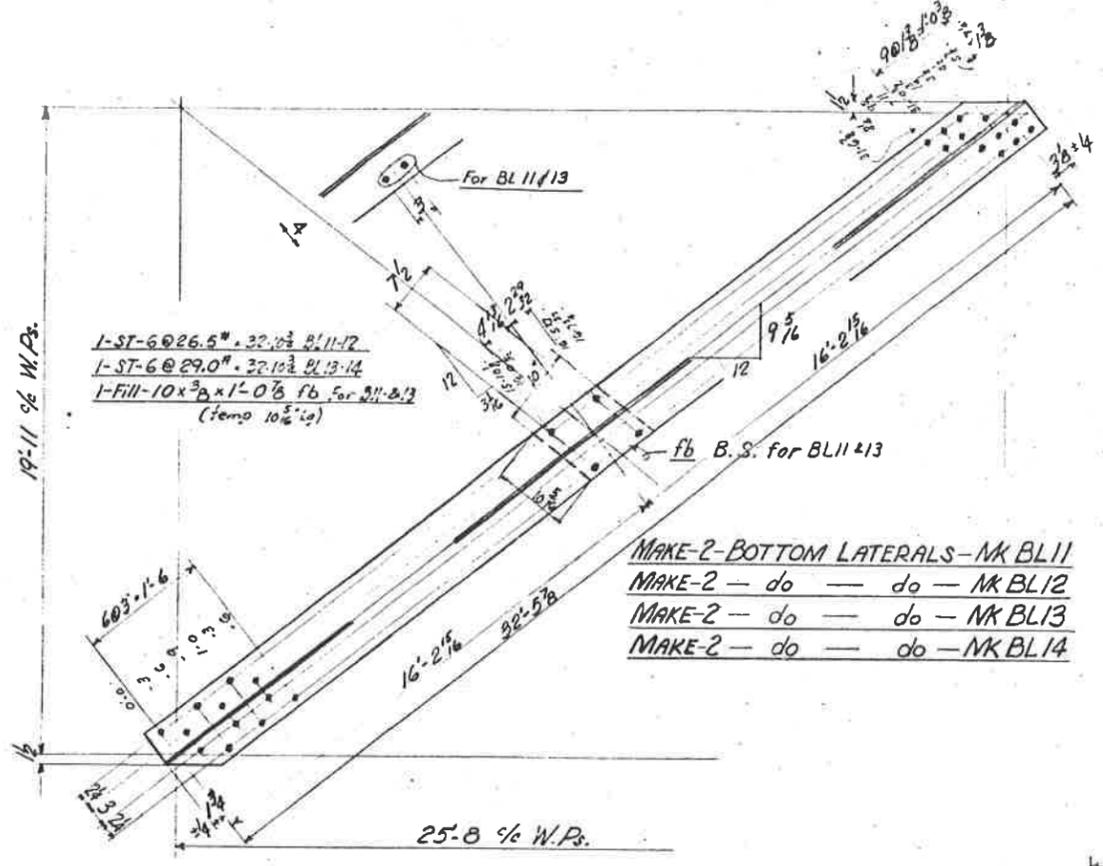
- MAKE-10-BOTTOM LATERALS-MK BL1
 MAKE-10 - do - do - MK BL2
 MAKE-2 - do - do - MK BL3
 MAKE-2 - do - do - MK BL4
 MAKE-8 - do - do - MK BL5
 MAKE-8 - do - do - MK BL6
 MAKE-4 - do - do - MK BL7
 MAKE-4 - do - do - MK BL8
 MAKE-4 - do - do - MK BL9
 MAKE-4 - do - do - MK BL10

19-6 % W.P.

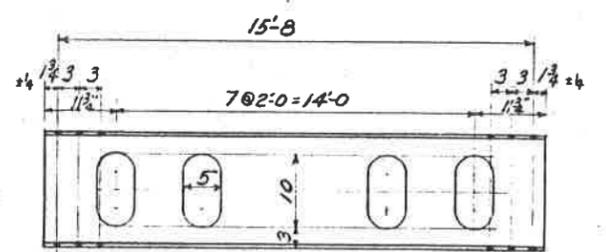
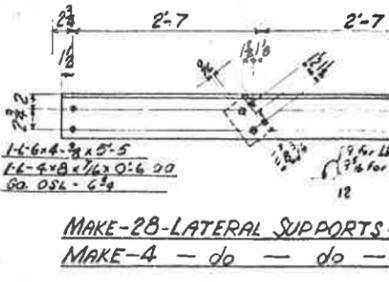


- MAKE-30-TOP LATERALS-AS SHOWN-MK TL1
 MAKE-30-do - do - do - do - MK TL2
 MAKE-30-do - do - do - do - MK TL3

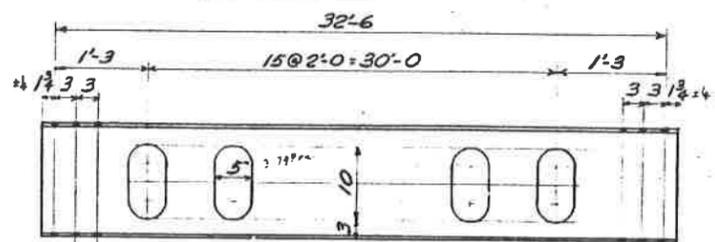
19-11 % W.P.



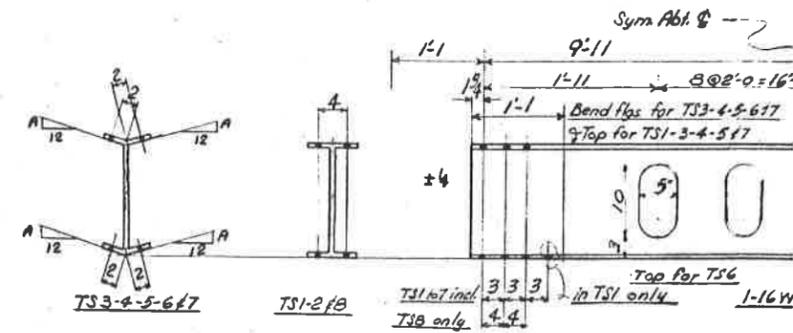
- MAKE-2-BOTTOM LATERALS-MK BL11
 MAKE-2 - do - do - MK BL12
 MAKE-2 - do - do - MK BL13
 MAKE-2 - do - do - MK BL14



SECTION A-A



SECTION B-B



MEMBER	BEVEL 2"
TS3	3/8
TS4	5/8
TS5	1/2
TS6	2 1/2
TS7	1/4

- MAKE-13-TOP STRUT-MK TS1
 MAKE-2-do - do - MK TS2
 MAKE-4 - do - do - MK TS3
 MAKE-2 - do - do - MK TS4
 MAKE-4 - do - do - MK TS5
 MAKE-2 - do - do - MK TS6
 MAKE-2 - do - do - MK TS7
 MAKE-2 - do - do - MK TS8

DESIGN	CSB
CHKD	J.G.H.
ENGR	

NASHVILLE BRIDGE COMPANY
 NASHVILLE, TENN. BESSEMER PLANT
 CONT. 4934

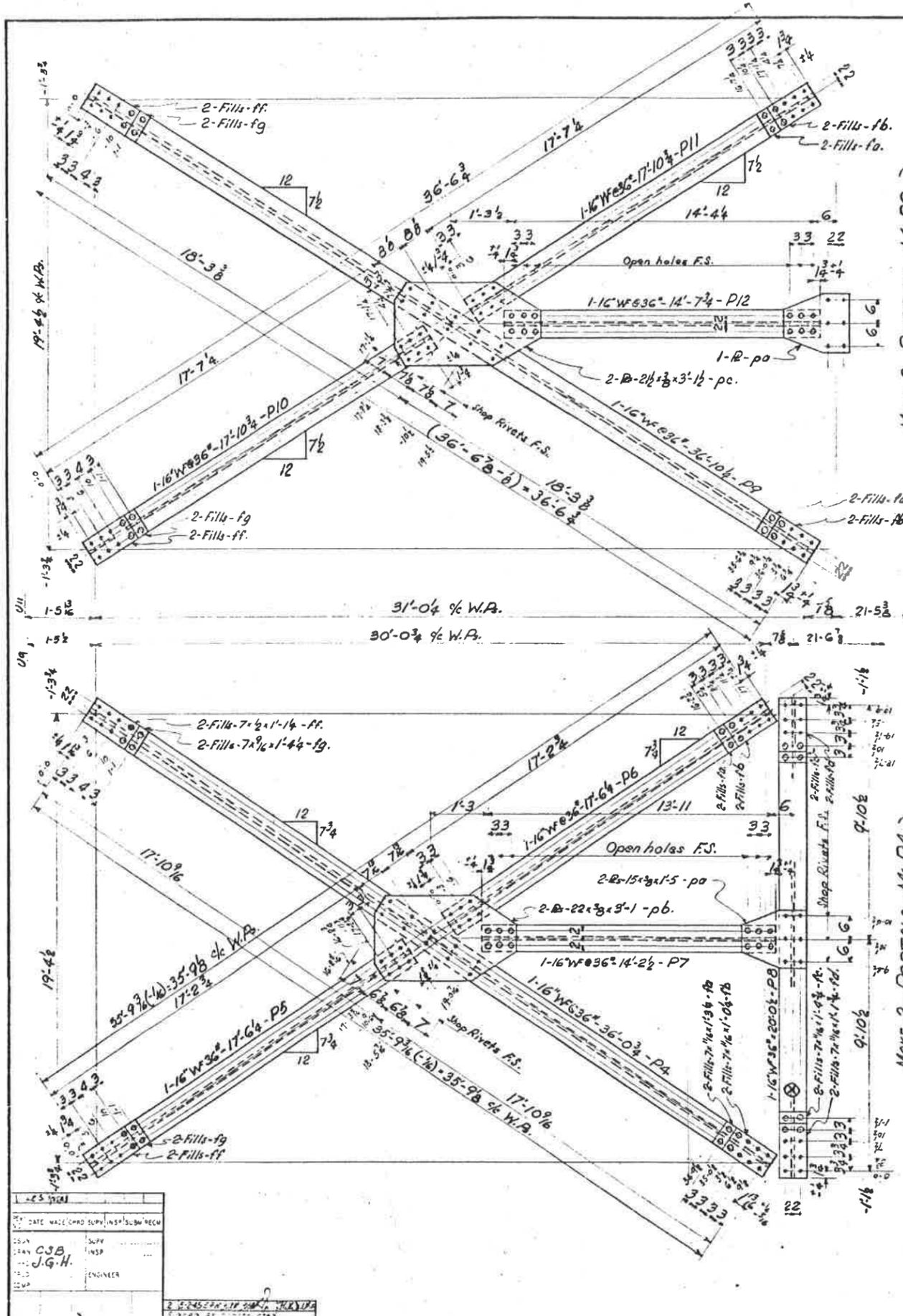
S.O. 2479-B BILL NO. 19 + 20

NOTE:
 SEE DWG. "E2" FOR GENERAL NOTES.
 Rivs. & Holes 1/8 Unless noted.

PROJECT 20-4081
 DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 BOTTOM & TOP LATERALS
 DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

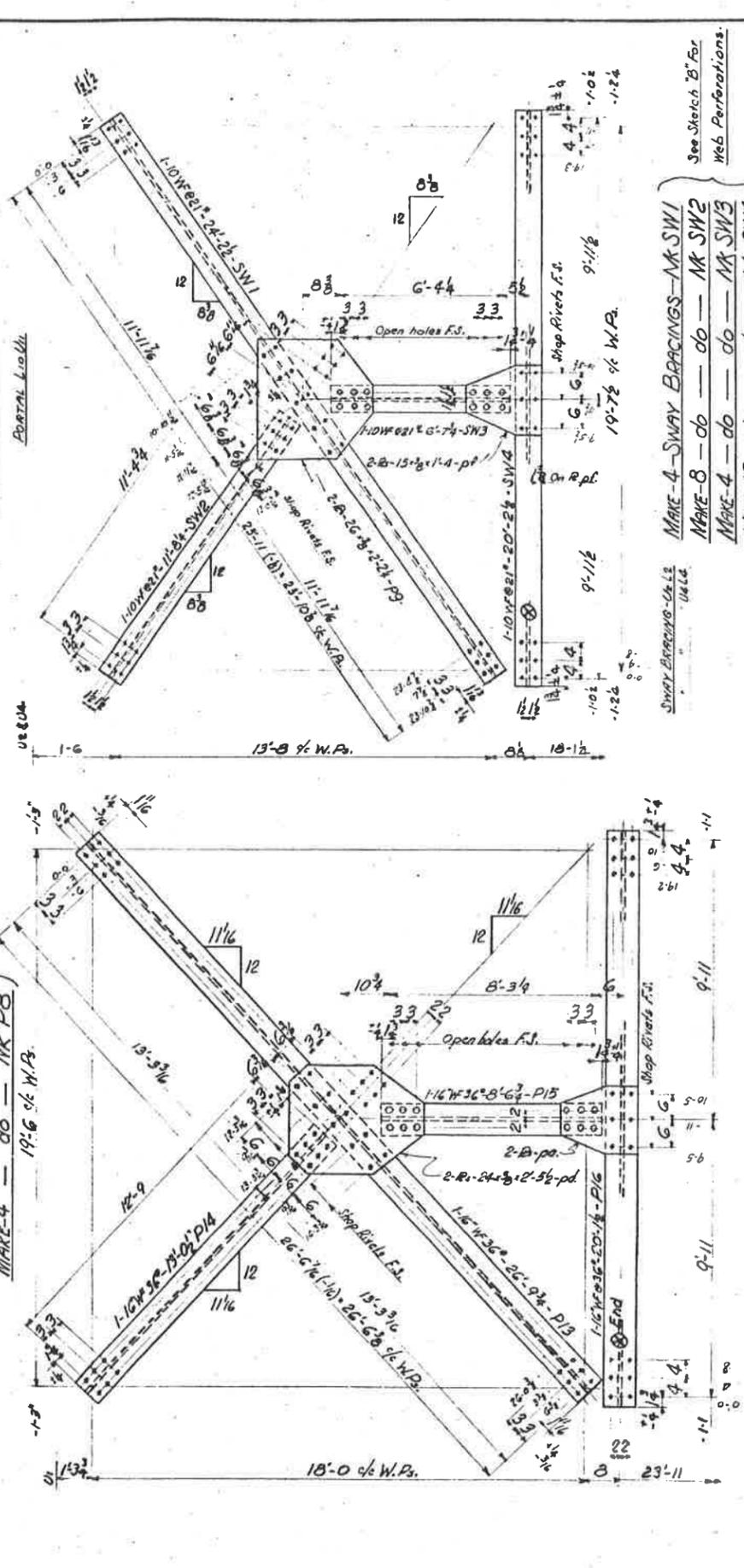
SUBMITTED	RECOMMENDED
KNOXVILLE	
ISSUED DRAWING AS CONSTRUCTED	20 MAR 5 4

Reqn 357081 Cont. TV 73863



MAKE-2-PORTALS-MK P9
 MAKE-2-do-MK P10
 MAKE-2-do-MK P11
 MAKE-2-do-MK P12

MAKE-2-PORTALS-MK P4
 MAKE-2-do-MK P5
 MAKE-2-do-MK P6
 MAKE-2-do-MK P7
 MAKE-4-do-MK P8



MAKE-4-SWAY BRACINGS-MK SW1
 MAKE-8-do-MK SW2
 MAKE-4-do-MK SW3
 MAKE-13-do-MK SW4

MAKE-2-PORTALS-MK P13
 MAKE-4-do-MK P14
 MAKE-2-do-MK P15
 MAKE-2-do-MK P16

See Sketch 'A' For Web Perforations.

1-10 1/2	DA
1-7 1/2	P5/P6
0-11 1/2	P7
1-10 1/2	P8
1-3 1/2	P9
1-9 1/2	P10/P11
1-2 1/2	P12
1-3 1/2	P13
1-4 1/2	P14
1-1 1/2	P15
1-1 1/2	P16

See Sketch 'A' For Web Perforations.

1-10 1/2	SW1
7 @ 2'-0" @ 32'-0"	SW2
6 @ 2'-0" @ 14'-0"	SW3
8 @ 2'-0" @ 16'-0"	SW4
17 @ 2'-0" @ 14'-0"	SW1
7 @ 2'-0" @ 14'-0"	SW2
12 @ 2'-0" @ 24'-0"	SW3
5 @ 2'-0" @ 10'-0"	SW4
3 @ 2'-0" @ 6'-0"	SW1
3 @ 2'-0" @ 16'-0"	SW2

DATE	WAL	CHAS	SUP	INS	SW	TECH
CSB						
J.G.H.						

NASHVILLE BRIDGE COMPANY
 NASHVILLE, TENN. — BESSEMER
 C-4934

SO. 2479-B

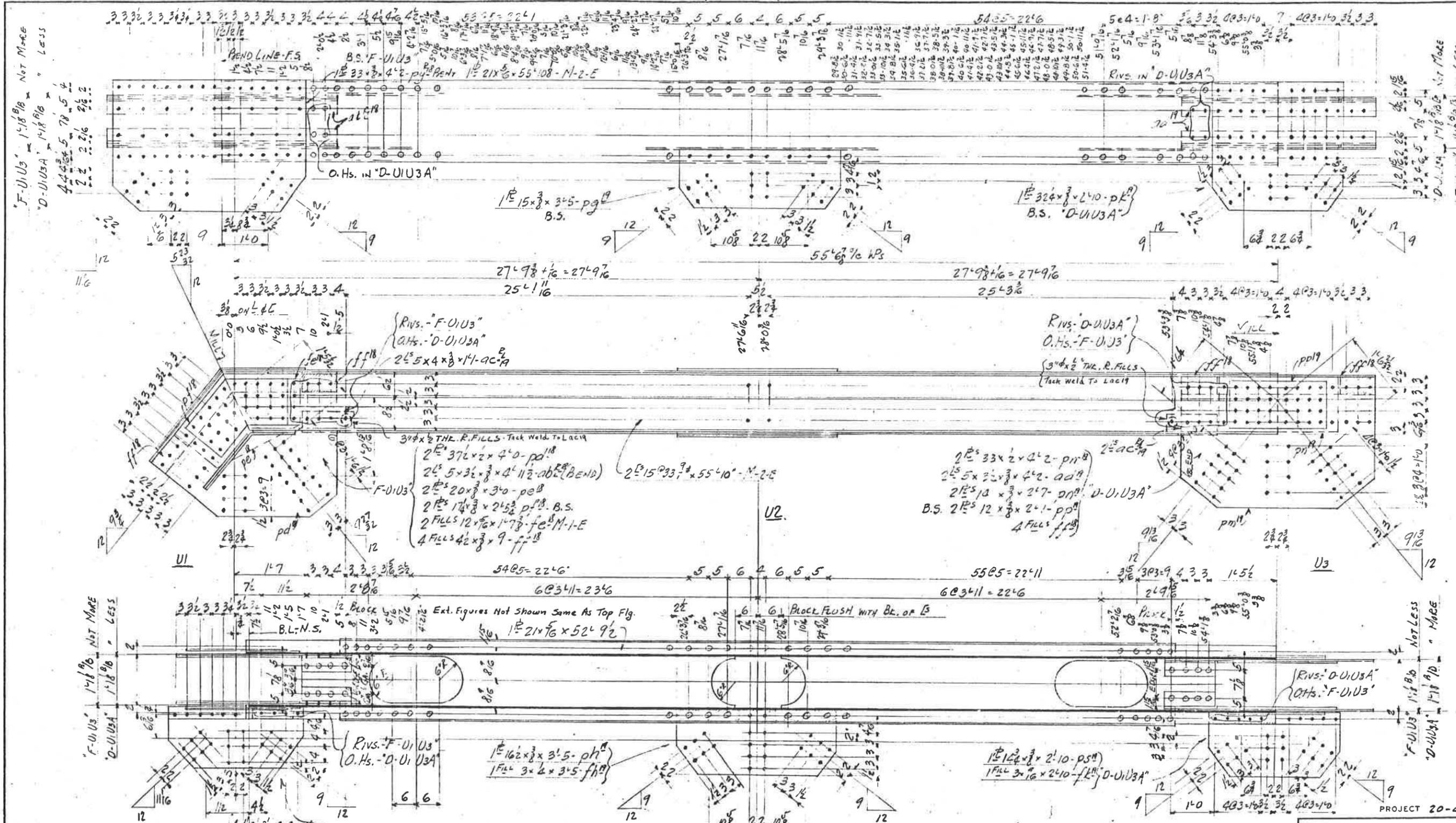
FOR GENERAL NOTES SEE DWG. NO. 20-4081

DANDRIDGE TO CHESTNUT HIGHWAY
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD RIVER
 PORTALS & SWAY BRACINGS

DOUGLAS PROJECT
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5

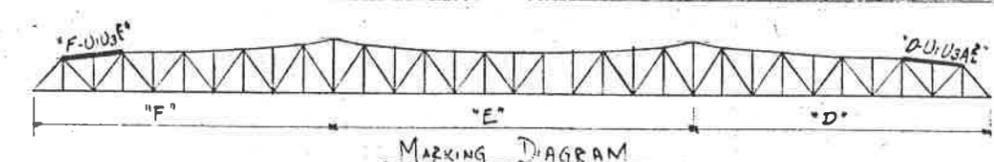
2/d. Record Book 2/28/01



REV.	DATE	BY	CHKD.	DESCRIPTION
1		J.G.H.		DESIGNED AS CONSTRUCTED
2		J.G.H.		REVISED
3		J.G.H.		REVISED

Approved for construction by J.G.H. Date 1/18/10

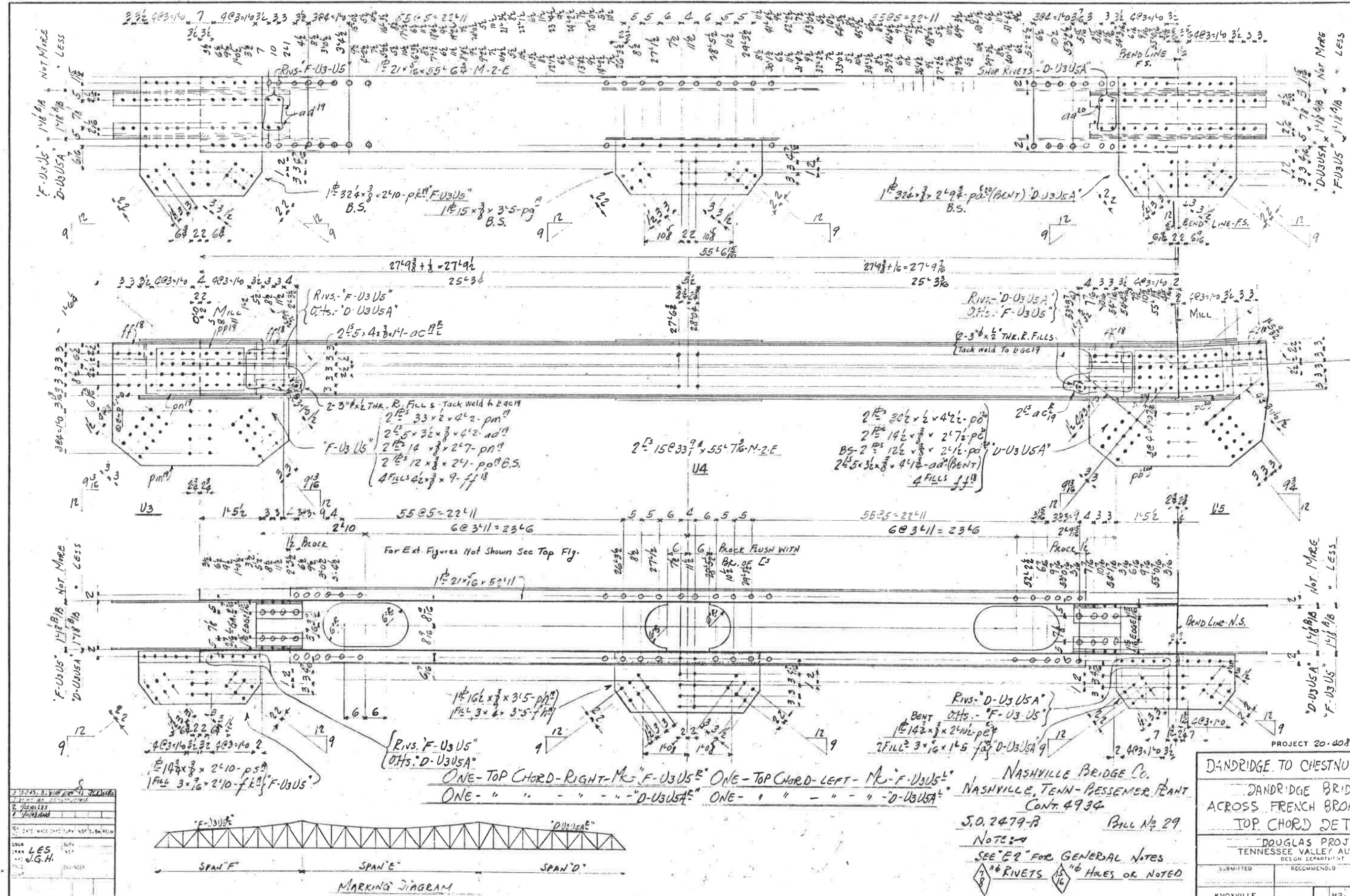
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 ONE-TOP CHORD - LEFT - MR - "F-U1U3"
 ONE-TOP CHORD - RIGHT - MR - "D-U1U3A"
 ONE-TOP CHORD - LEFT - MR - "D-U1U3A"



NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. - BESSEMER PLANT
 CONT. 4934
 S.O. 2479-B BILL NO. 28
 NOTE: SEE DWG. "E2" FOR GENERAL NOTES
 7/8" RIVETS 13/16" OR NOTED

DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE ACROSS FRENCH BROAD TOP CHORD DETAIL	
DOUGLAS PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR. 5:10
REVISIONS AS CONSTRUCTED	20 HR. 5:40
and Record Blk	100 HR. 5:10

REVISIONS AS CONSTRUCTED



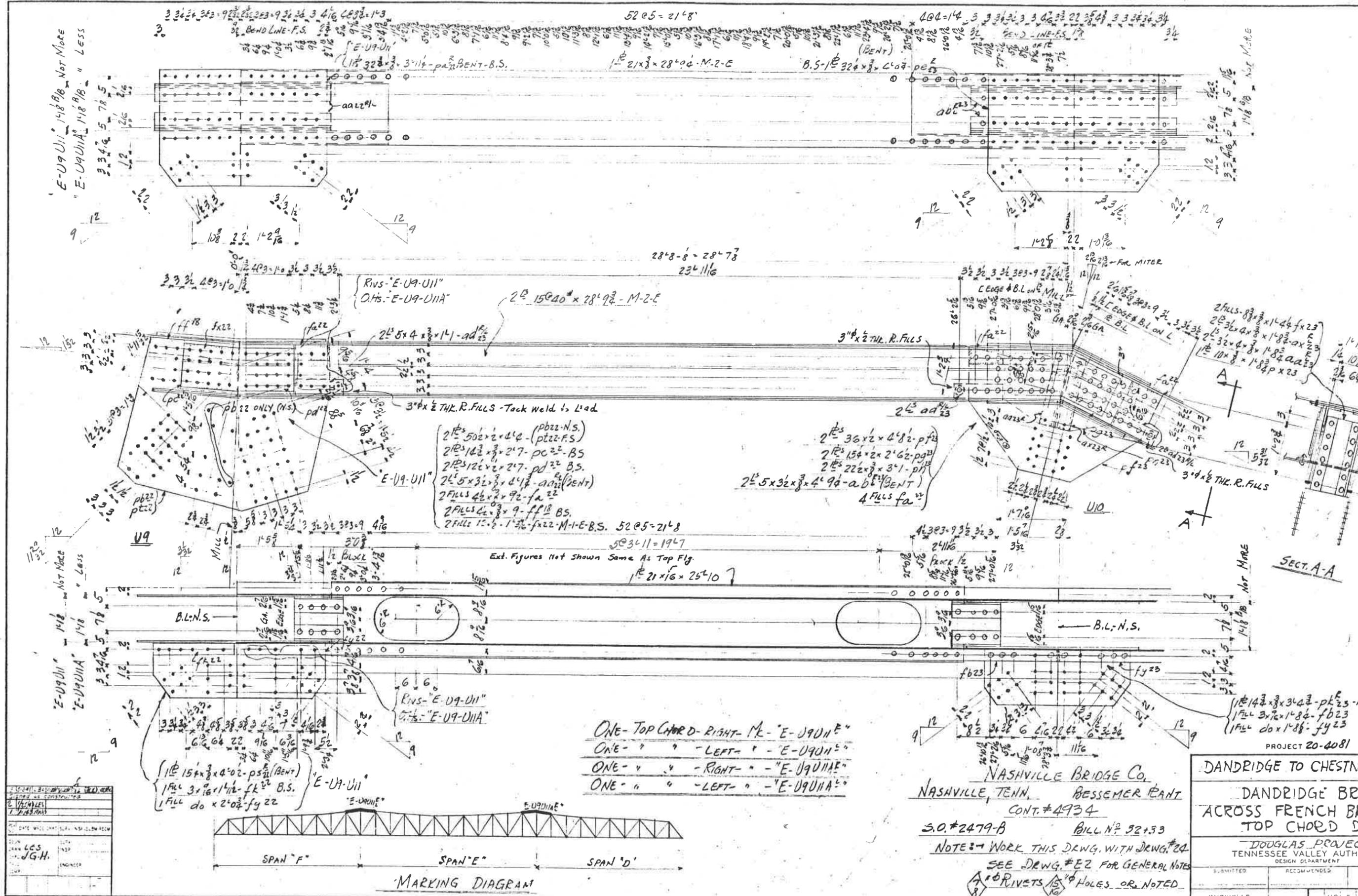
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
SCALE	
PROJECT	
DRWING NO.	
DATE	
BY	
CHECKED	
APPROVED	
SCALE	
PROJECT	
DRWING NO.	
DATE	
BY	
CHECKED	
APPROVED	

1. Revised for construction from Chestnut Hill and
 2. Approval
 3.
 4.
 5.
 6.

NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. PRESSEMER PLANT
 CONT. 4934
 S.O. 2479-B BILL NO. 29
 NOTE: A
 SEE "E" FOR GENERAL NOTES
 7/8" RIVETS 15/16" HOLES OR NOTED

DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROADWAY	
TOP CHORD DETAIL	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR. 5
RECORD DRAWING AS CONSTRUCTED	20 HR. 3
REAR. 337,081 CONT. TV 73863	
(old Record Blk) 100 WA 51	

PROJECT 20-4081



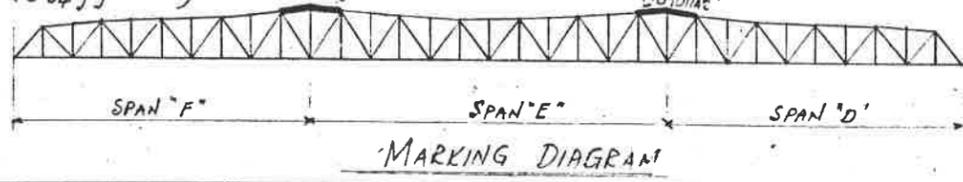
DESIGNED BY	LES J.G.H.
CHECKED BY	J.G.H.
DATE	APPROVED
APPROVED BY	

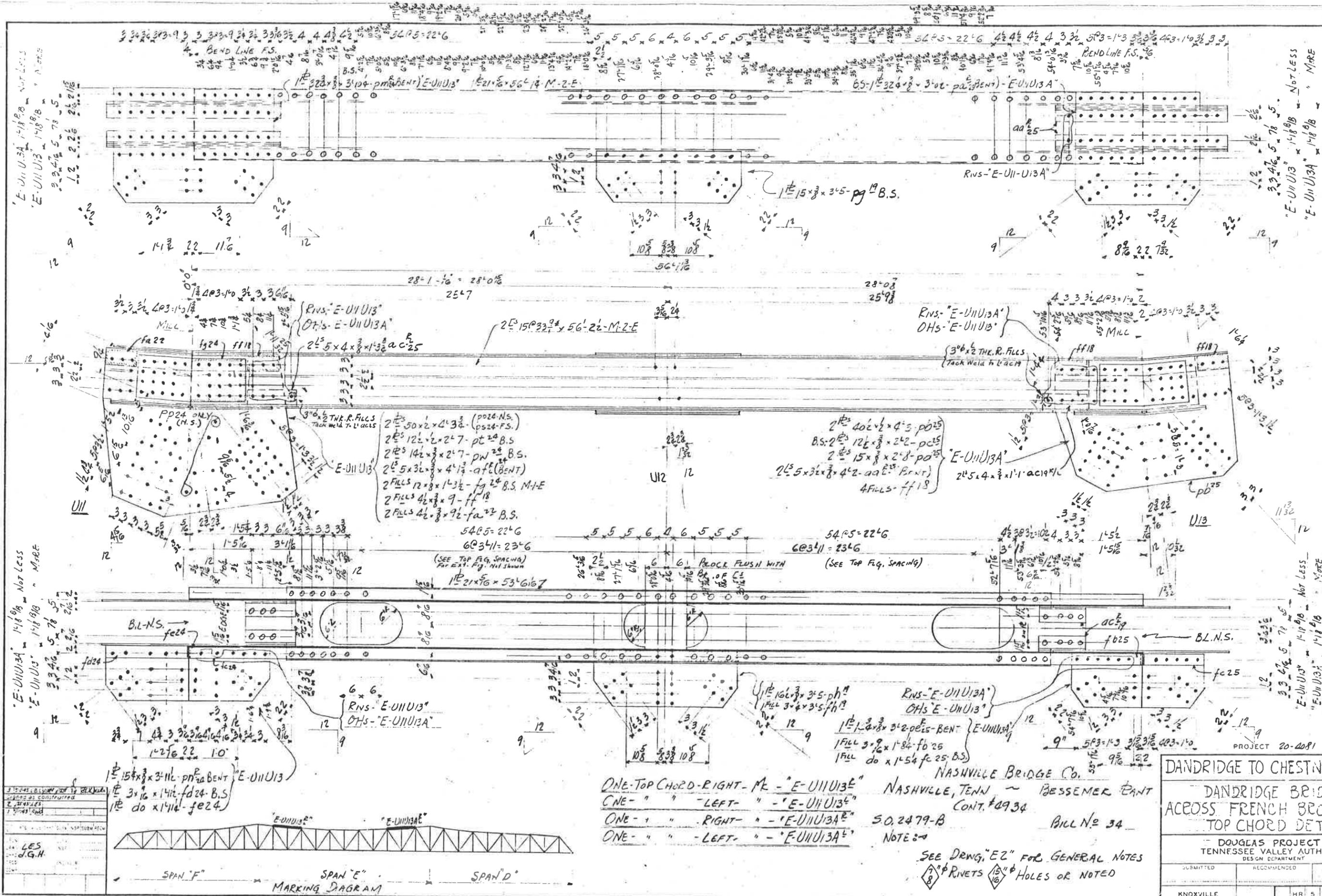
- ONE - TOP CHORD - RIGHT - ME - "E-U9-U11"
- ONE - " " - LEFT - " - "E-U9-U11"
- ONE - " " - RIGHT - " - "E-U9-U11A"
- ONE - " " - LEFT - " - "E-U9-U11A"

NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. BESSEMER PLANT
 CONT. #4934
 S.O. #2479-B BILL NO. 32+53
 NOTE: WORK THIS DRWG. WITH DRWG. #24
 SEE DRWG. #E2 FOR GENERAL NOTES
 10 RIVETS 15 HOLES OR NOTED

PROJECT 20-4081	
DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BRIDGE	
TOP CHORD DECK	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
DATE	APPROVED
KNOXVILLE	HR: 5
RECORD DRAWING AS CONSTRUCTED	20 HR: 5
REQN 337,081	CON: T-73863

Revised for Direction from Chestnut Hill and





3 15445 B.L. NOT LESS
 2 15445 B.L. NOT LESS
 2 15445 B.L. NOT LESS
 1 15445 B.L. NOT LESS

LES
 J.G.H.

1. Revised for
 2. Approval

- ONE-TOP CHORD-RIGHT-MK - "E-U11U13A"
- CNE - " " - LEFT - " - "E-U11U13A"
- ONE - " " - RIGHT - " - "E-U11U13A"
- ONE - " " - LEFT - " - "E-U11U13A"

NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. - BESSEMER BENT
 CONT. #0934
 S.O. 2479-B
 BILL # 34

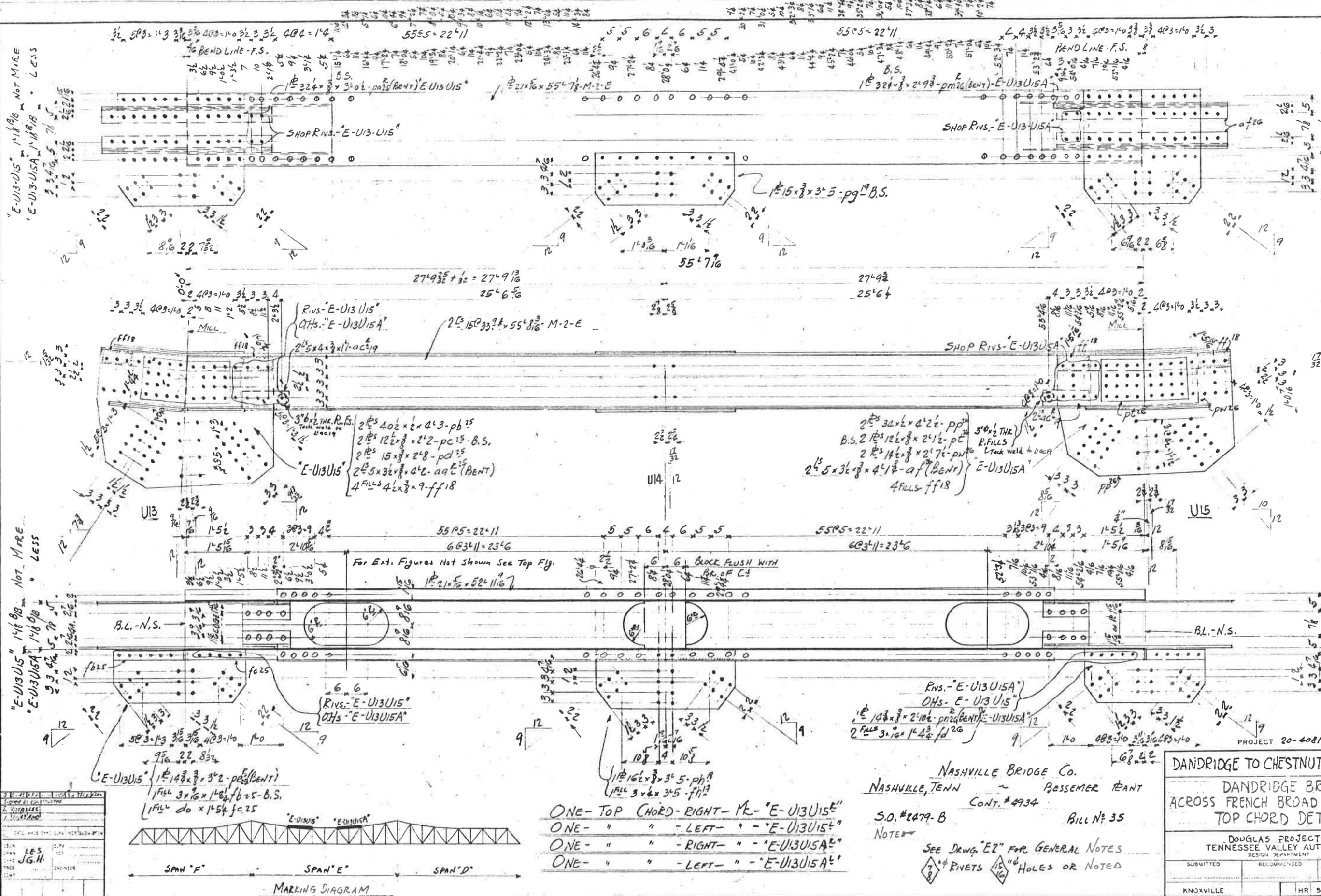
SEE DRWG. "E2" FOR GENERAL NOTES
 7" RIVETS
 15" HOLES OR NOTED

DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROOK	
TOP CHORD DETAIL	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5 41
REQN 337081 CONT. TV 73,863	
SID Record 161k	

PROJECT 20-4081

"E-U11U13A" 1-18-98 Not Less
 "E-U11U13" 1-18-98 Not Less
 "E-U11U13" 1-18-98 Not Less
 "E-U11U13A" 1-18-98 Not Less

"E-U11U13A" 1-18-98 Not Less
 "E-U11U13" 1-18-98 Not Less

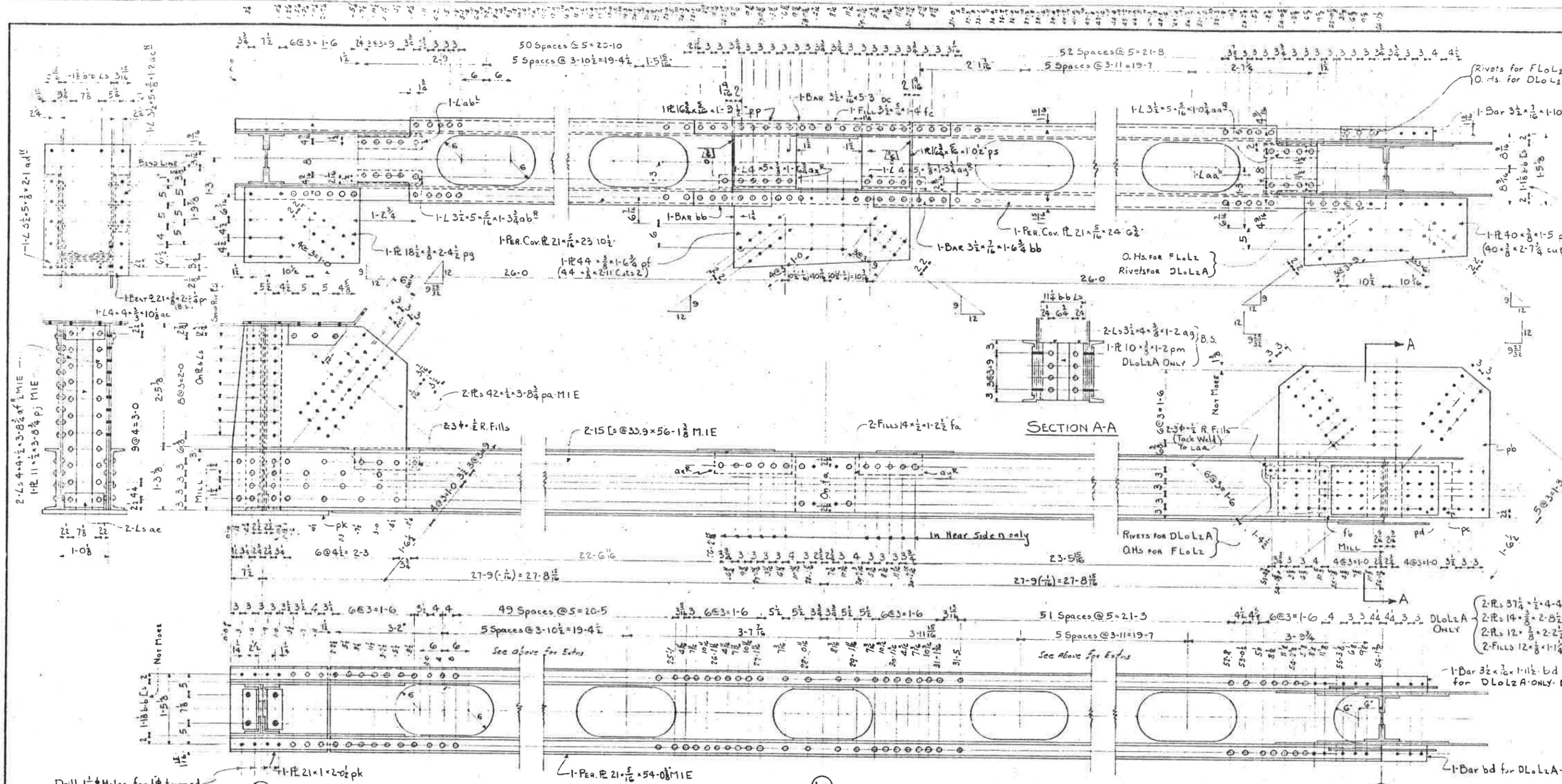


DESIGNED BY	LEWIS J.G.H.
CHECKED BY	
DATE	
SCALE	
PROJECT	
NO.	
DATE	
ENGINEER	

- ONE - TOP CHORD - RIGHT - "E-U13U15"
- ONE - " " - LEFT - "E-U13U15"
- ONE - " " - RIGHT - "E-U13U15"
- ONE - " " - LEFT - "E-U13U15"

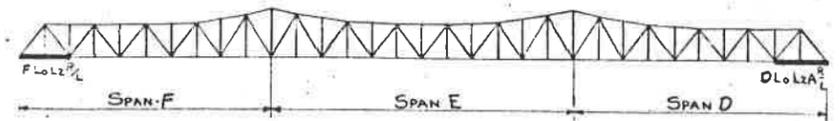
NASHVILLE BRIDGE CO.
 NASHVILLE, TENN. BESSEMER PLANT
 S.O. #2479-B CONT. #4934 BILL #35
 NOTE: SEE DRAWG. "E2" FOR GENERAL NOTES
 7" RIVETS 15" HOLES OR NOTED

DANDRIDGE TO CHESTNUT	
DANDRIDGE BRIDGE	
ACROSS FRENCH BROAD	
TOP CHORD DETAIL	
DOUGLAS PROJECT	
TENNESSEE VALLEY AUTHORITY	
DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5
RECORD DRAWING AS CONSTRUCTED	20 HR 5
REQD. 337,081 CONT. TV 73863	
Old Record Book / 20 MAR 19	



ONE-BOTTOM CHORD-RIGHT MK F-LoLz^R
ONE- do do MK DL-LoLzA^R

ONE-BOTTOM CHORD-LEFT MK F-LoLz^L
ONE- do do MK DL-LoLzA^L



NASHVILLE BRIDGE COMPANY
NASHVILLE TENN. - BESSEMER PLANT
CONT. 4934
S.O. 2479-B BILL No. 36
FOR GENERAL NOTES SEE DWG. E2

RIVETS 7/8" - HOLES 15/16" UNLESS NOTED

NO.	DATE	BY	CHKD.	DESCRIPTION
1	11-15-20	M.H.F.	J.G.H.	DESIGN
2	11-15-20	J.G.H.		CHECK
3	11-15-20			APPROVAL

Revised for
creation from ② Approval
Chestnut Hill end.

③ lateral
cuts at L2

PROJECT 20-4081

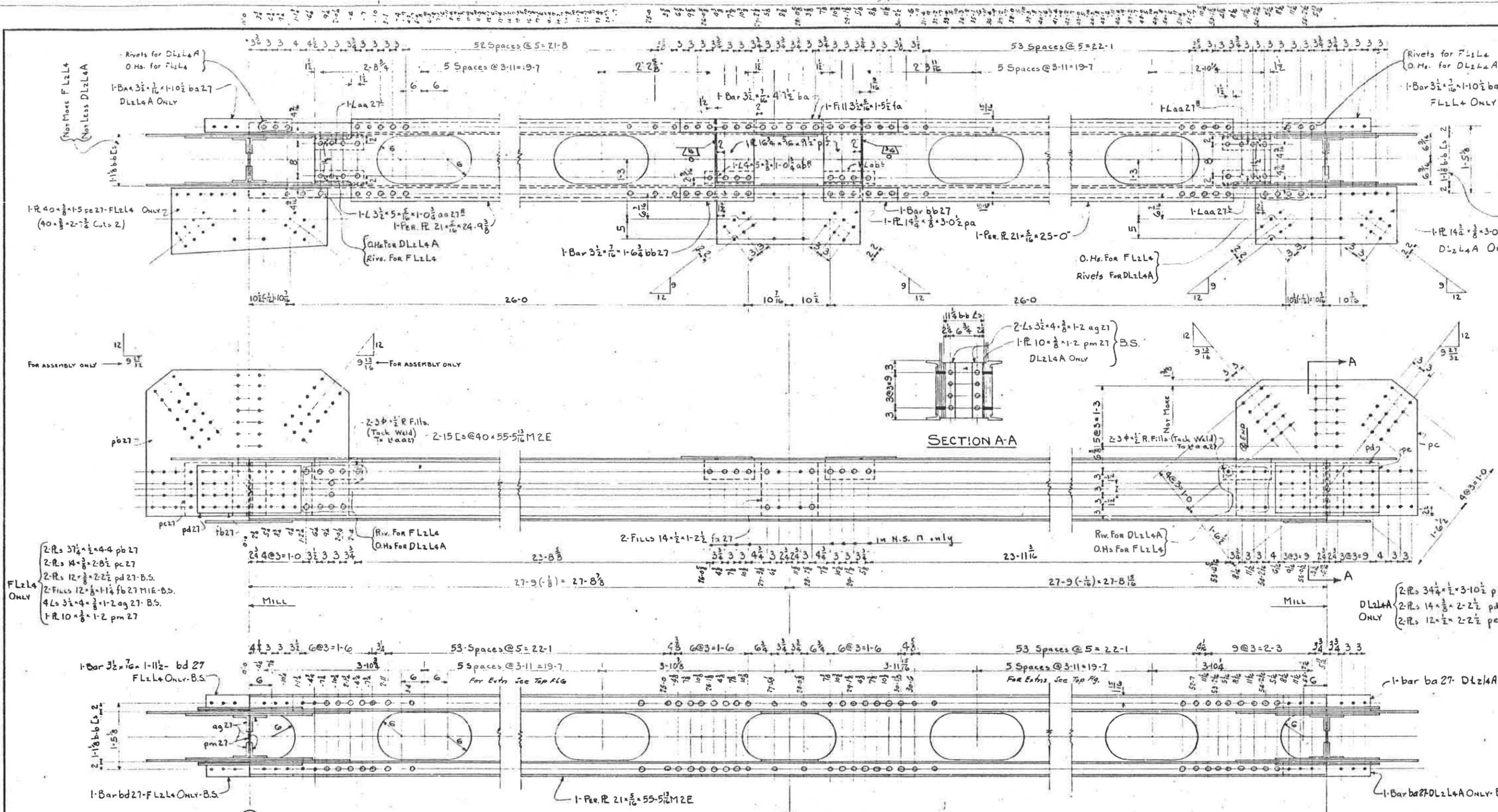
DANDRIDGE TO CHESTNUT HI

DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
BOTTOM CHORD DETAIL

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
NOV 15 1920	
KNOWLEDGE	HR 5 D
RECORD DRAWING AS CONSTRUCTED	20 HR 5 41
Frank W. White	0-22-20
Reqn. 337,001	Cont. TV 73,805

ATA Record 13/16



FLZL4 ONLY

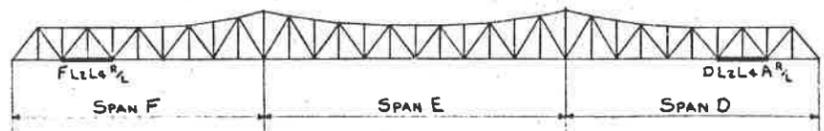
- 2-Rs $3 1/4 \times 1/2 = 4-4$ pb 27
- 2-Rs $14 \times 3/8 = 2-8 1/2$ pc 27
- 2-Rs $12 \times 3/8 = 2-2 1/2$ pd 27-B.S.
- 2-Fills $12 \times 3/8 = 1-1 1/2$ fb 27 M16-B.S.
- 4-Ls $3 1/2 \times 4 \times 3/8 = 1-2$ ag 27-B.S.
- 1-R $10 \times 3/8 = 1-2$ pm 27

DLZL4A ONLY

- 2-Rs $34 1/4 \times 1/2 = 3-10 1/2$ pc
- 2-Rs $14 \times 3/8 = 2-2 1/2$ pd
- 2-Rs $12 \times 1/2 = 2-2 1/2$ pe

ONE-BOTTOM CHORD-RIGHT MK FLZL4^R
ONE- do do MK DLZL4A^R

ONE-BOTTOM CHORD-LEFT MK FLZL4^L
ONE- do do MK DLZL4A^L



MARKING DIAGRAM

DATE	BY	CHKD	APP'D
3/21/04	J.G.H.		
3/21/04	M.H.F.		
3/21/04	J.G.H.		

NASHVILLE BRIDGE COMPANY
NASHVILLE TENN - BESSEMER PLANT
CONT. 4934

S.O. 2419-B BILL No. 37

FOR GENERAL NOTES SEE DWG. E2

RIVETS 7/8" HOLES 15/16" UNLESS NOTED

PROJECT 20-4081

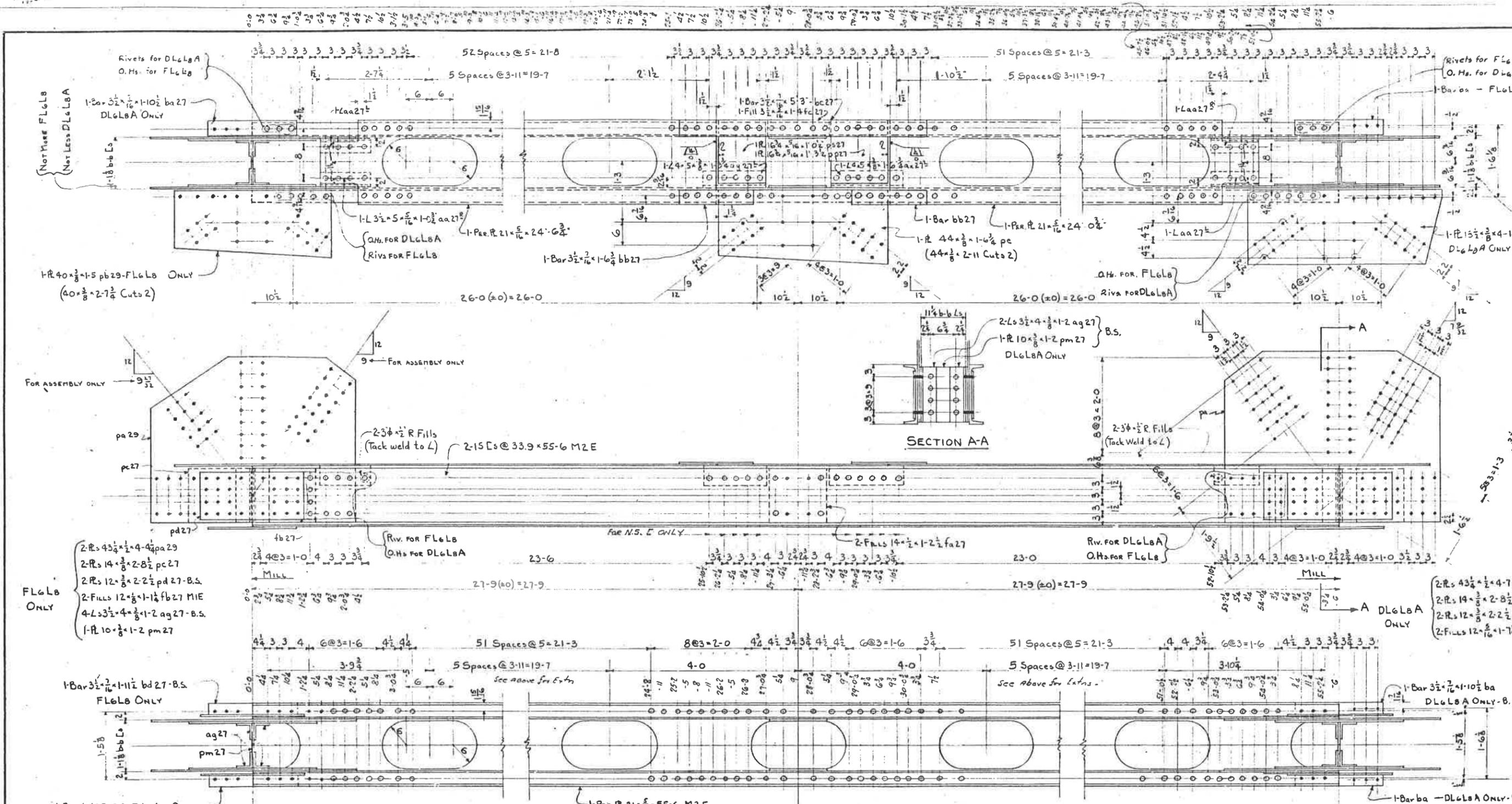
DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE
ACROSS FRENCH BROAD
BOTTOM CHORD DETAIL

DOUGLAS PROJECT
TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED
KNOXVILLE	HR 5 10
RECORD DRAWING	CONSTRUCTED
20 HR 5 4	

Reqn 357,081 Cont. T.V. 73,863

6th Record 18111 20-4115 40



4 5 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
DATE: 11/21/2011
DESIGNER: J.G.H.
CHECKER: J.G.H.

1 Revised for Design from Chestnut Hill end
 2 Approval
 3 Lateral R's of L6 & L8
 4
 5
 6

NASHVILLE BRIDGE COMPANY
 NASHVILLE TENN - BESSEMER PLANT
 CONT. 4934
 S.D. 2419-B BILL No. 37
 FOR GENERAL NOTES SEE DWG. E2
 RIVETS 7/8 - HOLES 15/16 UNLESS NOTED

PROJECT 20-4081	
DANDRIDGE TO CHESTNUT HILL	
DANDRIDGE BRIDGE ACROSS FRENCH BROAD BOTTOM CHORD DETAIL	
DOUGLAS PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT	
SUBMITTED	RECOMMENDED
KNOXVILLE	HR 15
RECORDED DRAWING AS CONSTRUCTED	20 HR 5 40
Reqn. 331, DB1	Cont. TV 73, 863

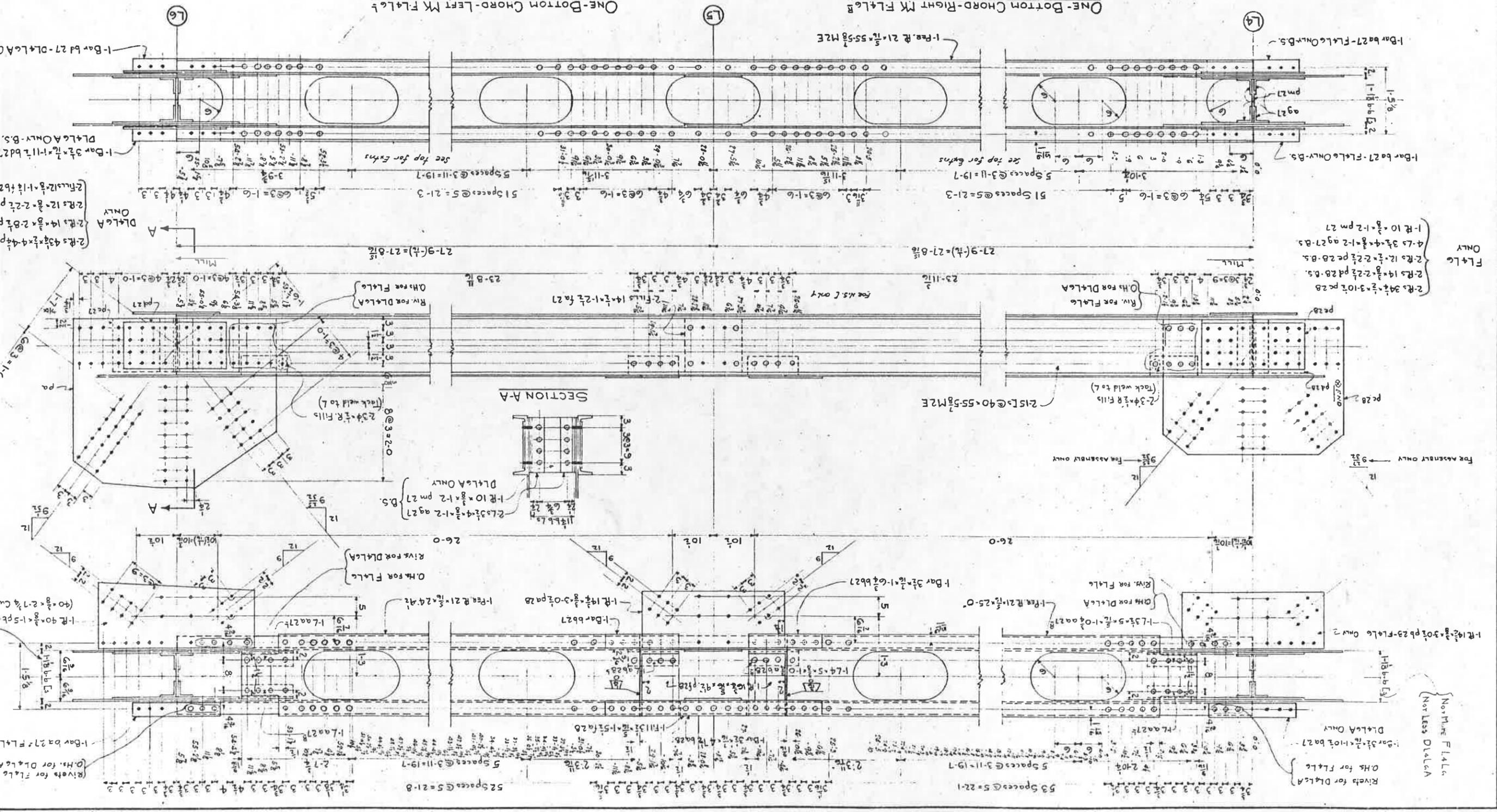
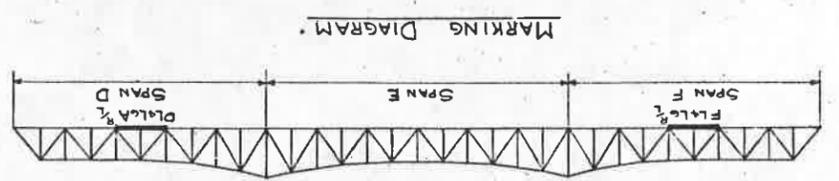
PROJECT 20-4081	DANDRIDGE TO CHESTNUT HILL
DANDRIDGE BRIDGE ACROSS FRENCH BROAD	BOTTOM CHORD DETAIL
DOUGLAS PROJECT	TENNESSEE VALLEY AUTHORITY
DESIGN DEPARTMENT	RECOMMENDED
DATE	HR 5
NO. 20	HR 5

Reg'n. 337,081 Cont. TV 13,663

DATE	NO.
APPROVAL	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
CONTRACT NO.	DATE

Nashville Bridge Company
Nashville Tenn. - Bessmer Plant
Cont. 4934
S.O. 2479-B
Bill No. 38

ONE - Bottom Chord - Left Mk FL+Lc
ONE - Bottom Chord - Right Mk FL+Lc

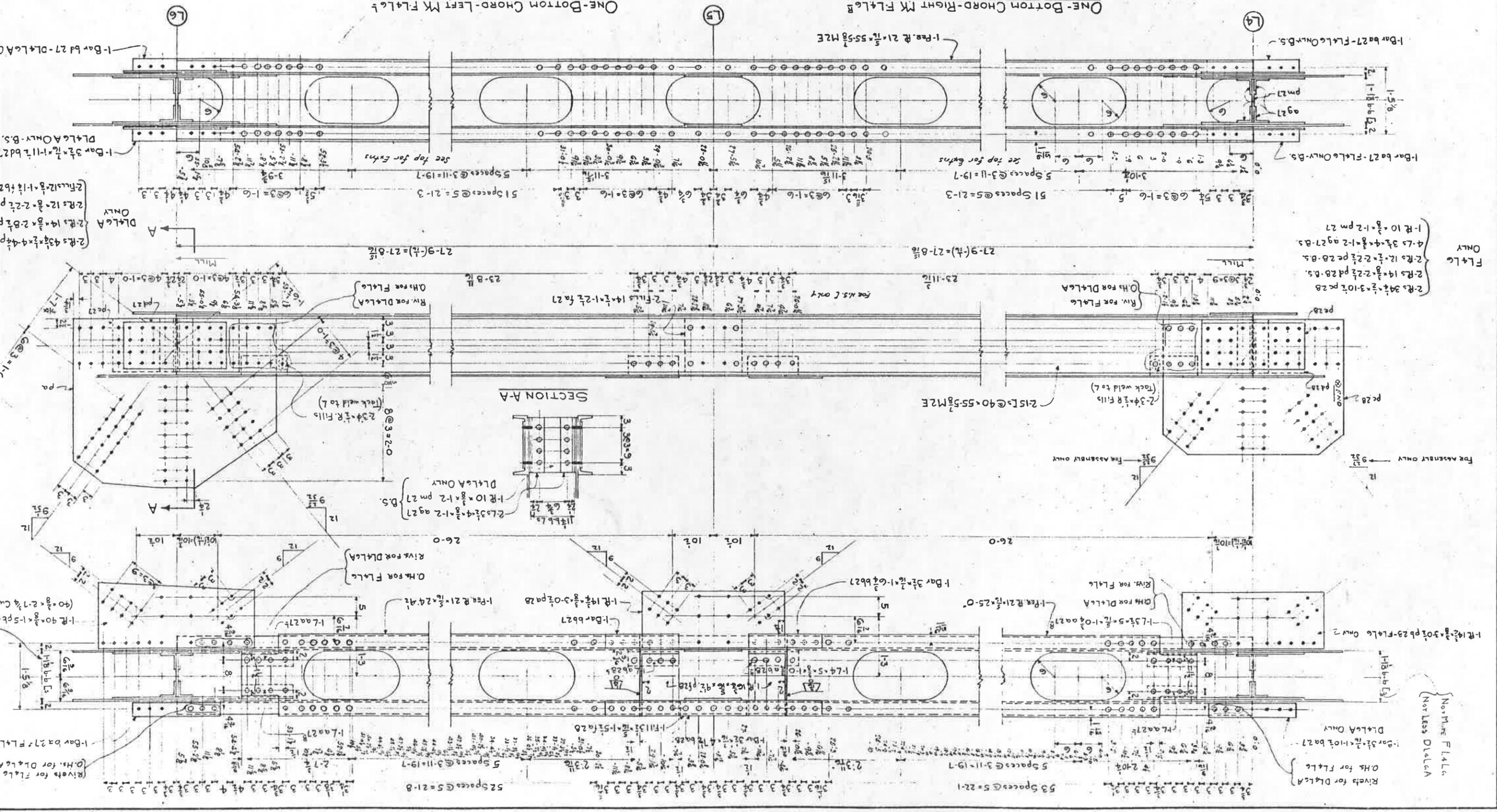
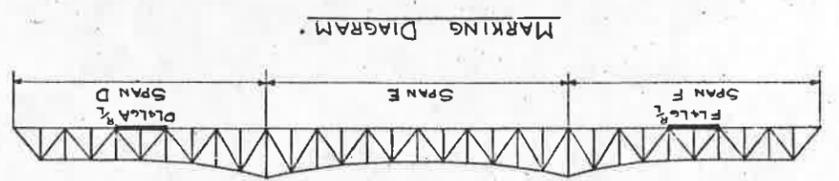


FL+Lc ONLY

Not True FL+Lc
Not Less DL+Lc

FOR GENERAL NOTES SEE Dwg. E2
Rivets 5/8" - Holes 1 1/8" UNLESS NOTED

ONE - Bottom Chord - Left Mk FL+Lc
ONE - Bottom Chord - Right Mk FL+Lc



FL+Lc ONLY

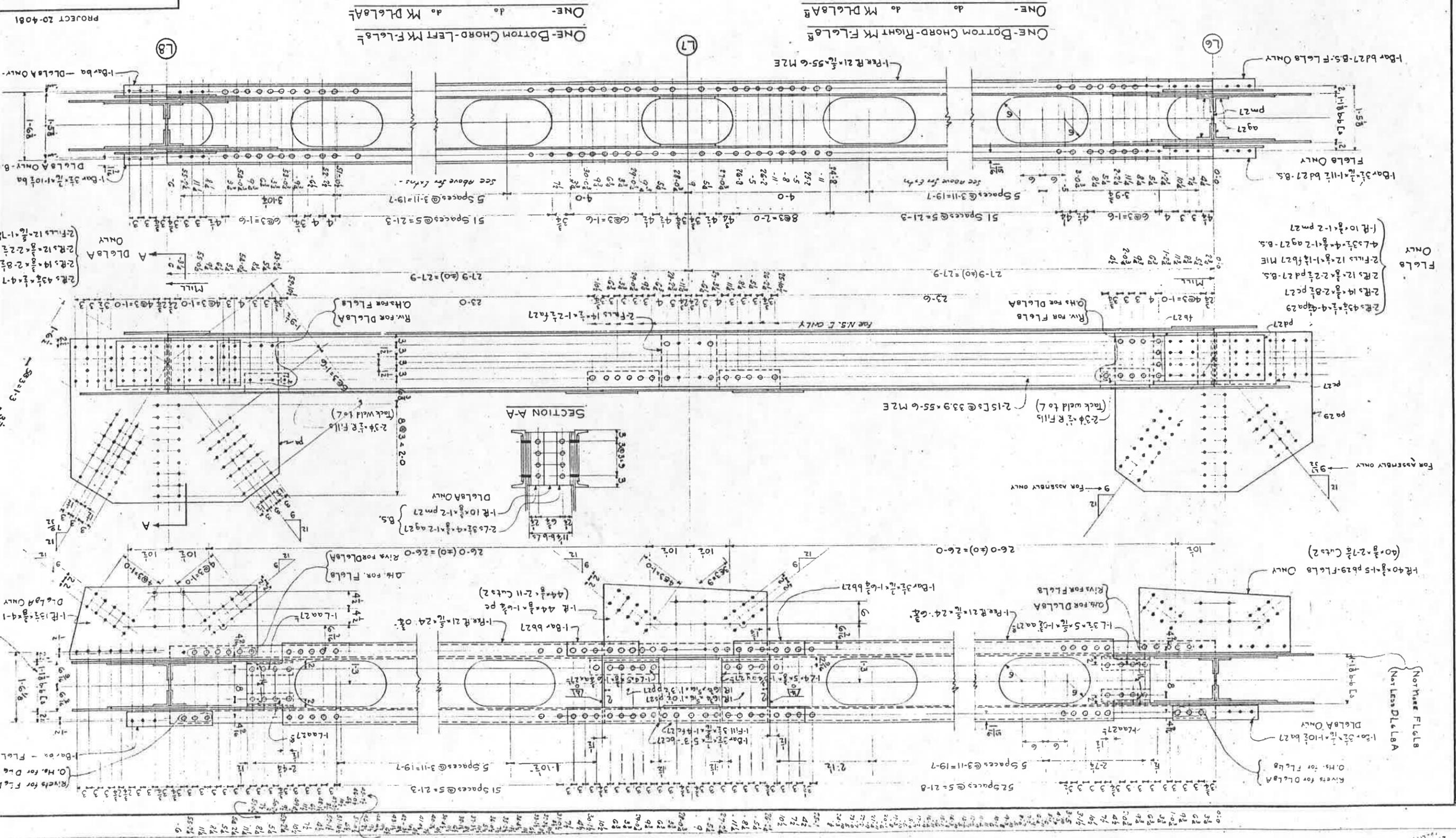
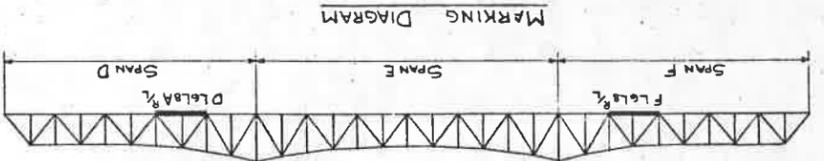
Not True FL+Lc
Not Less DL+Lc

PROJECT 20-4081
 DANDRIDGE TO CHESTNUT H
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROA
 BOTTOM CHORD DET.
 DOUGLAS PROJECT
 TENNESSEE VALEY AUTH
 DESIGN DEPARTMENT
 SUBMITTED
 RECEIVED
 KNOXVILLE
 20 APR 5

Revised for ① Approval ② of L&L ③
 Cont. TV 73.863
 Regn. 337.081

NASHVILLE BRIDGE COMPANY
 NASHVILLE TENN - BESSNER PLANT
 CONT. 4934
 S.O. 2479-B BILL NO. 39
 FOR GENERAL NOTES SEE DWG. E2
 Rivets $\frac{3}{8}$ " - Holes $\frac{15}{16}$ " UNLESS NOTED

NO.	DATE	REVISION
1		AS SHOWN
2		
3		
4		
5		
6		
7		
8		
9		
10		

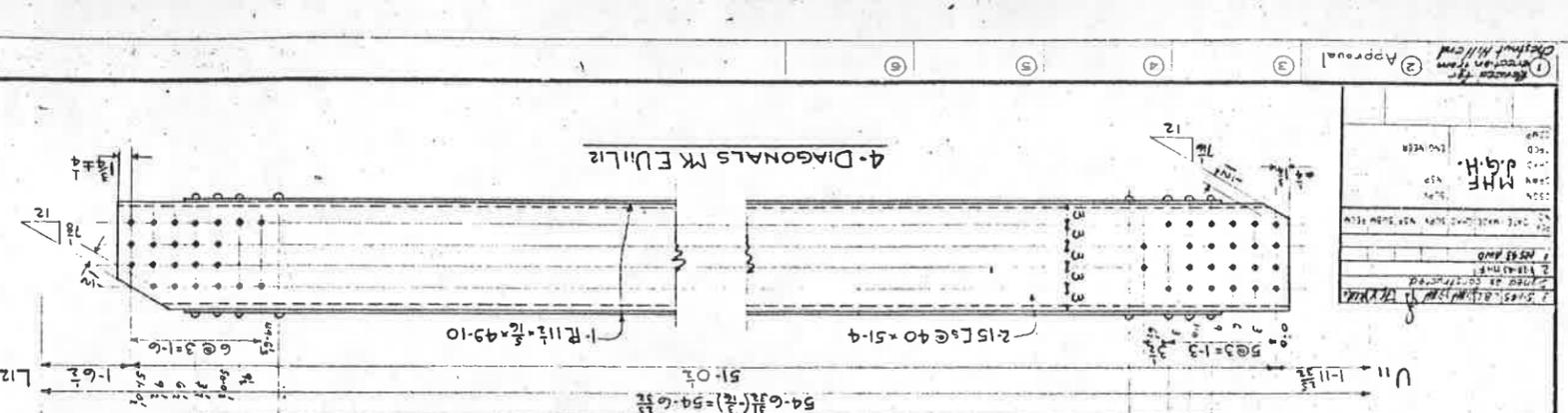
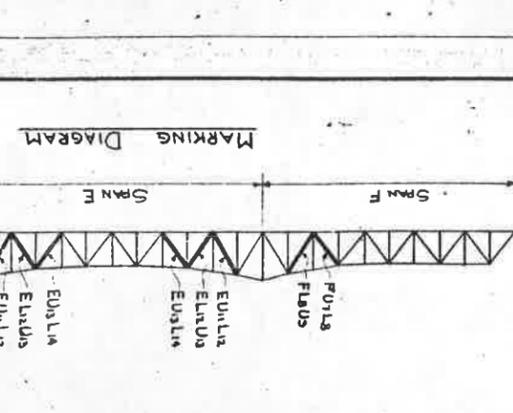


FL6LB ONLY
 2-Rs. 43 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " @ 29
 2-Rs. 14 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " @ 27
 2-Rs. 14 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " @ 27
 2-Rs. 12 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " @ 27
 2-Rs. 12 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " @ 27
 4-Ls. 3 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " @ 1-2 @ 27
 1-R. 10 $\frac{1}{2}$ " x 1-2 @ 27

page 9

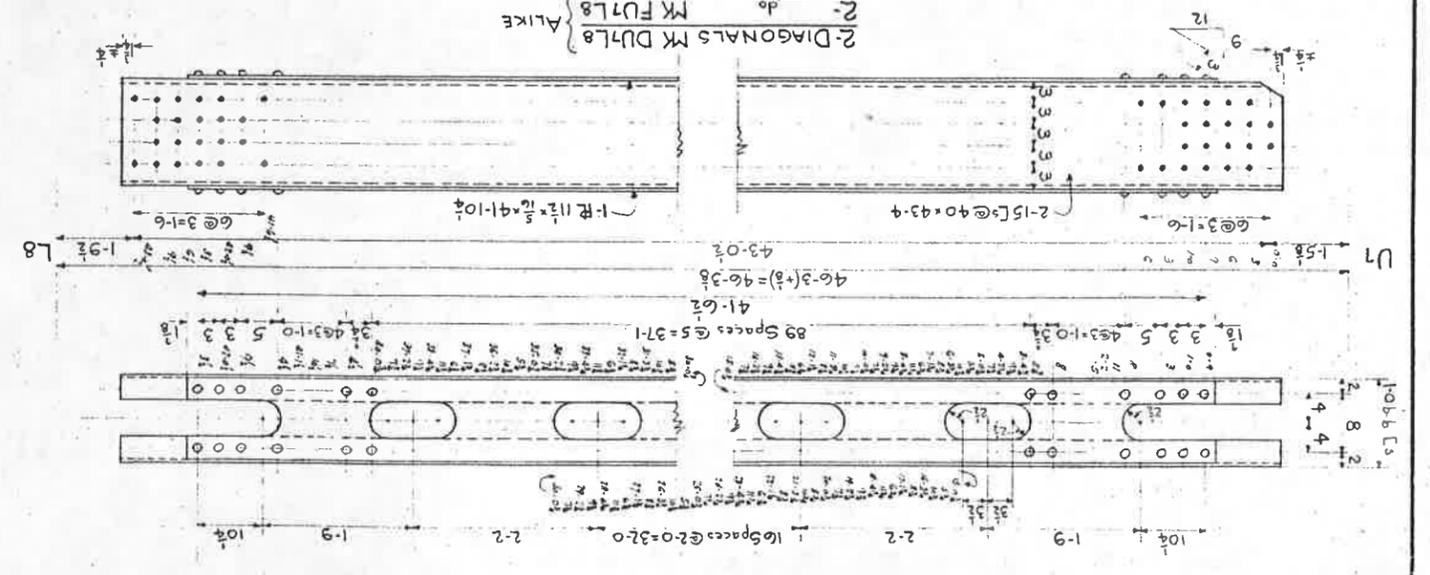
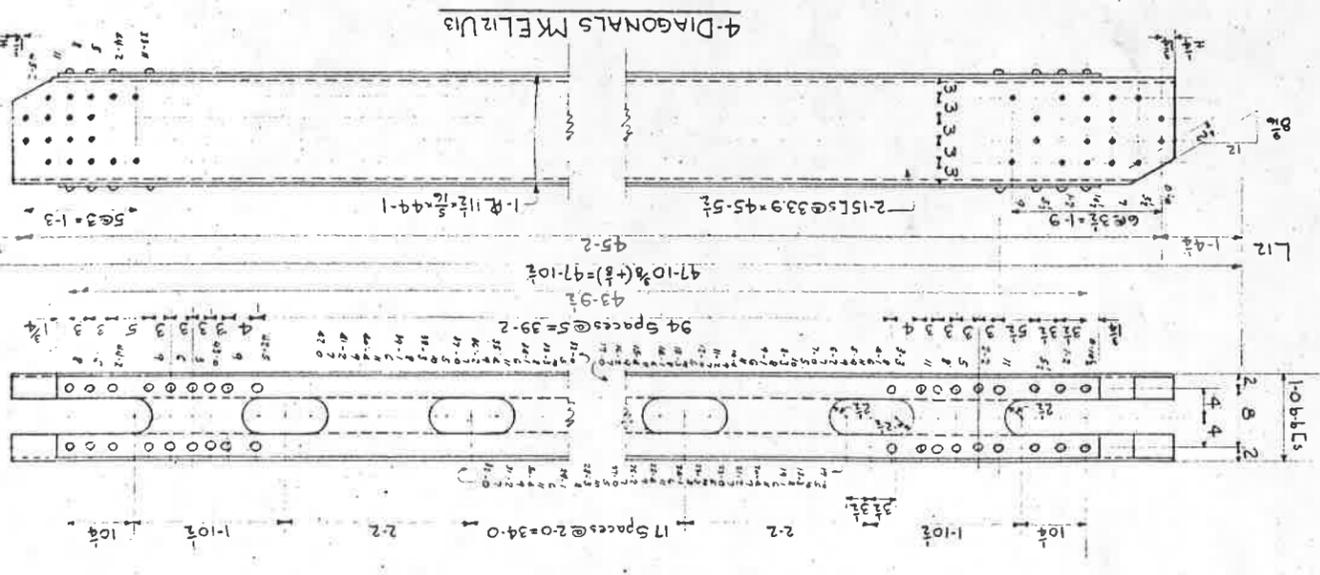
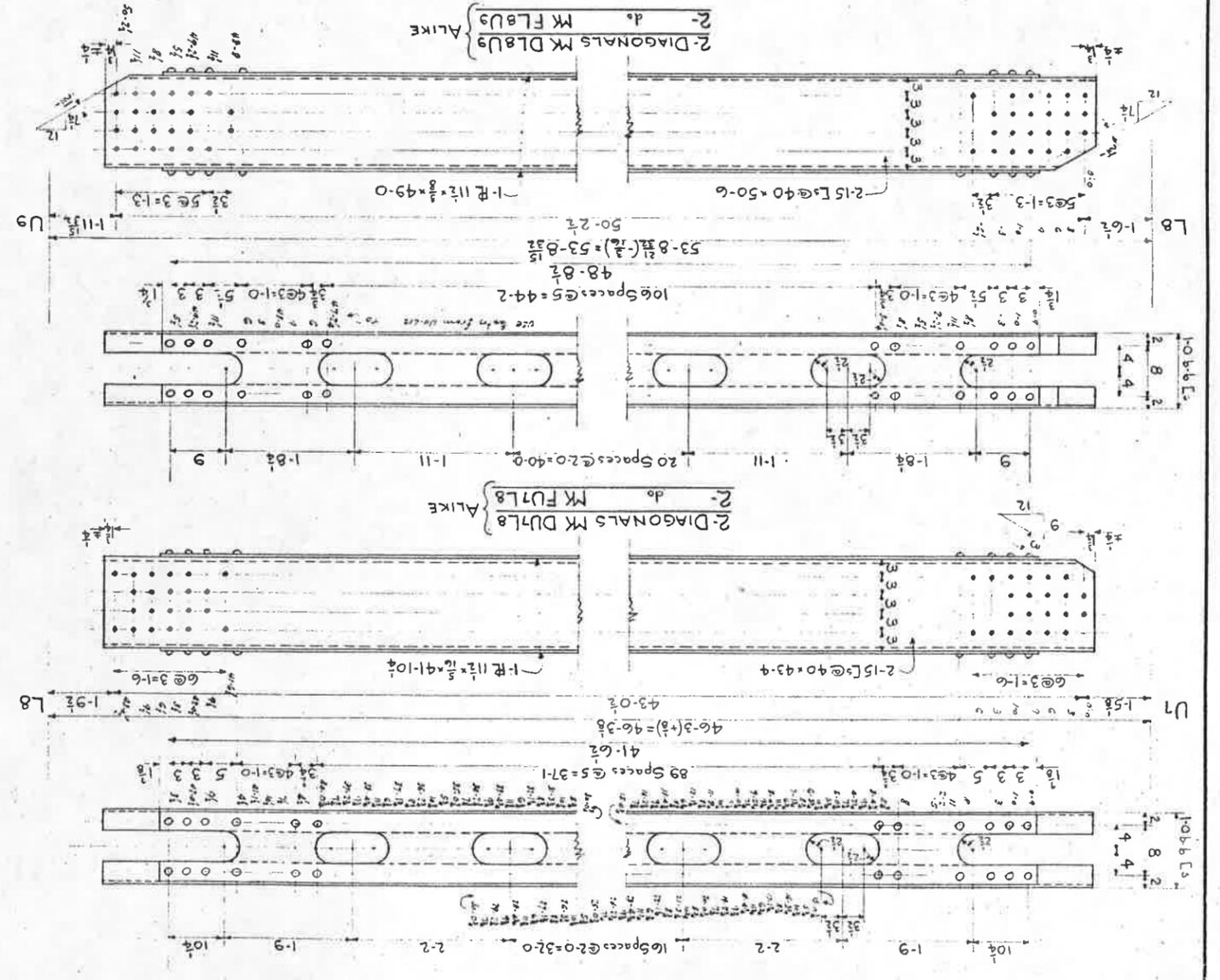
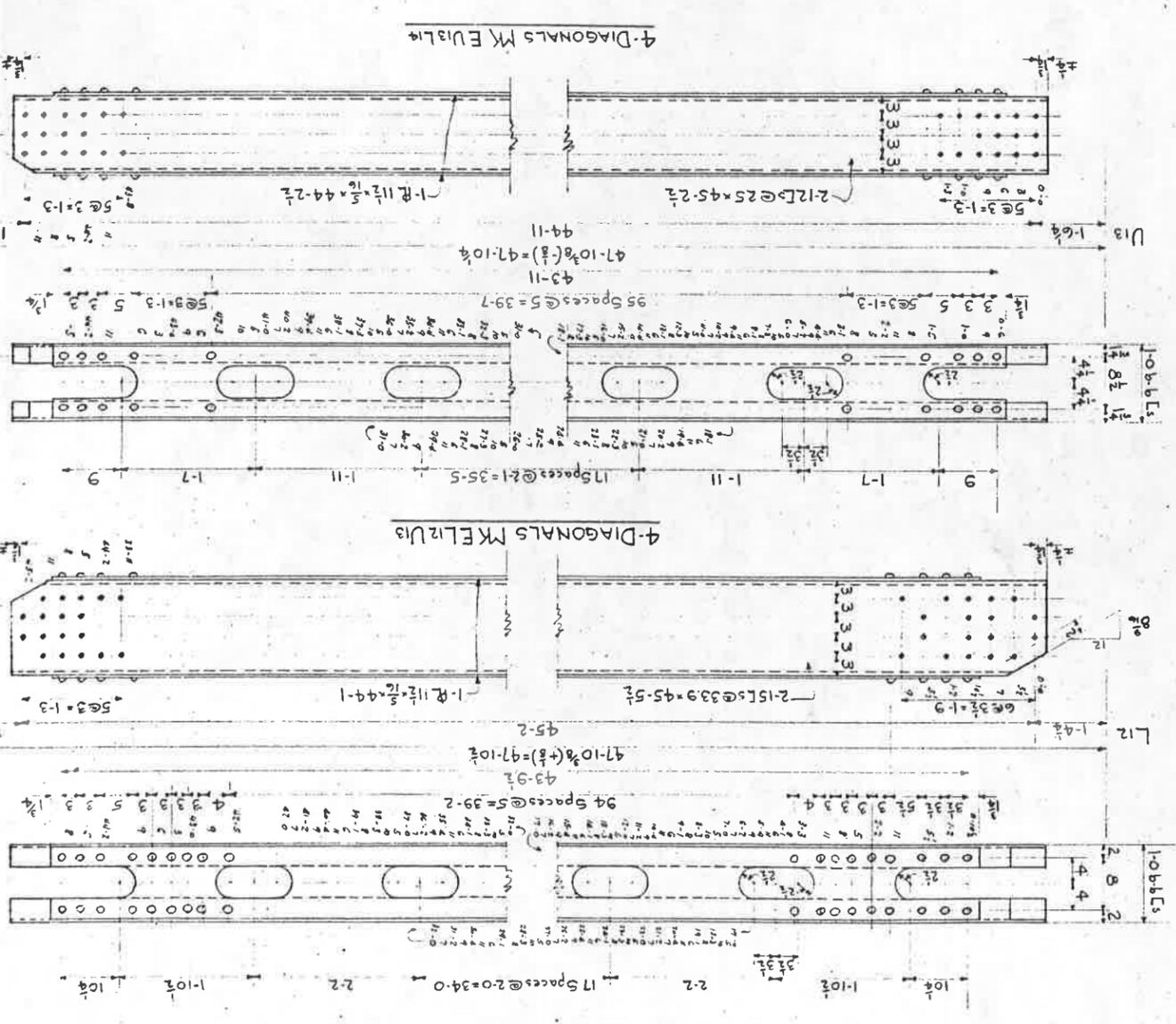
PROJECT 20-4081
 DANDRIDGE TO CHESTNUT HILL
 DANDRIDGE BRIDGE
 ACROSS FRENCH BROAD
 TENNESSEE VALLEY AUTHORITY
 DESIGN DEPARTMENT
 SUBMITTED
 RECOMMENDED
 KNOXVILLE
 20 HR 5 L

Reg'n. 357,081
 Cont. TV 75,863
 Cont. 4934
 S.O. 2479-B
 Bill No. 46
 FOR GENERAL NOTES SEE DWG. E2
 RIVERS $\frac{3}{8}\phi$
 OPEN HOLES $\frac{1}{8}\phi$



APPROVAL	DATE
DESIGN	11/15/11
CHECKED	11/15/11
APPROVED	11/15/11
PROJECT	20-4081
DRAWING	E2
SCALE	AS SHOWN
DATE	11/15/11
BY	M.H.
CHKD	M.H.
APP'D	M.H.

NASHVILLE BRIDGE COMPANY
 NASHVILLE TENN. - DESSNER PLANT
 CONT. 4934
 S.O. 2479-B
 Bill No. 46

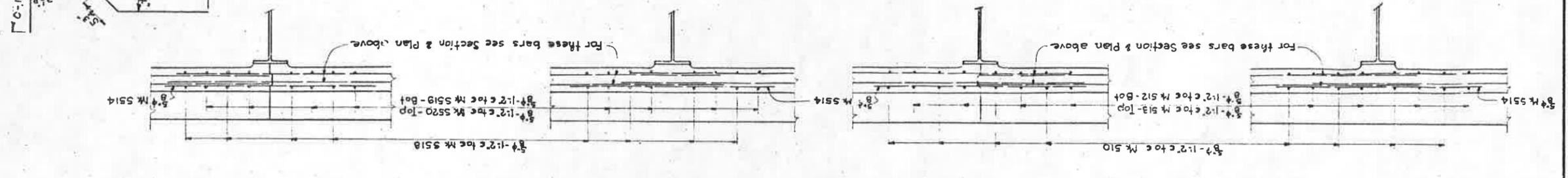
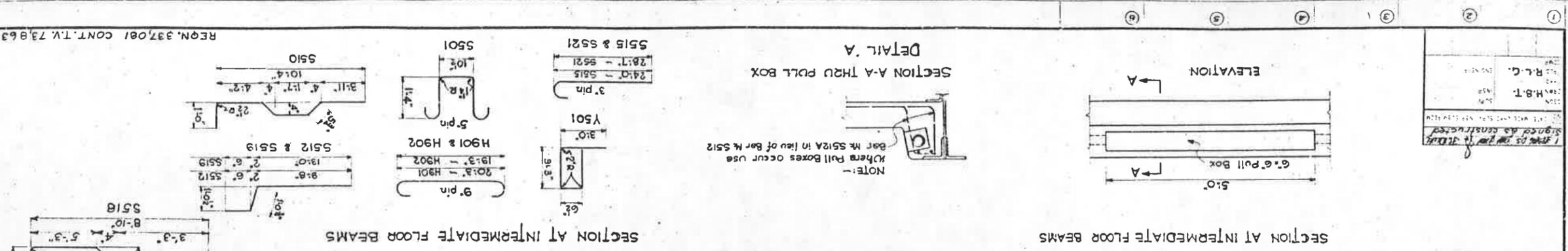


REINFORCING STEEL PLACING SLABS - SPANS AT OHIO AND ABUTMENTS NO. 1 & 2
 DANDRIDGE BRIDGE ACROSS FRENCH BROAD RIVER
 PROJECT 20-4081
 CONTRACTORS - NASHVILLE BRIDGE CO. & MCGARRY - JONES & WOODARD
 NASHVILLE, TENNESSEE.

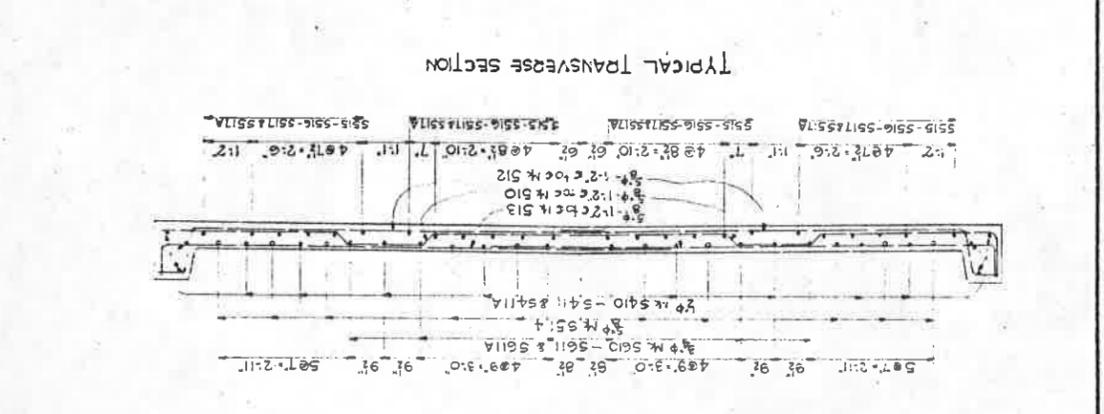
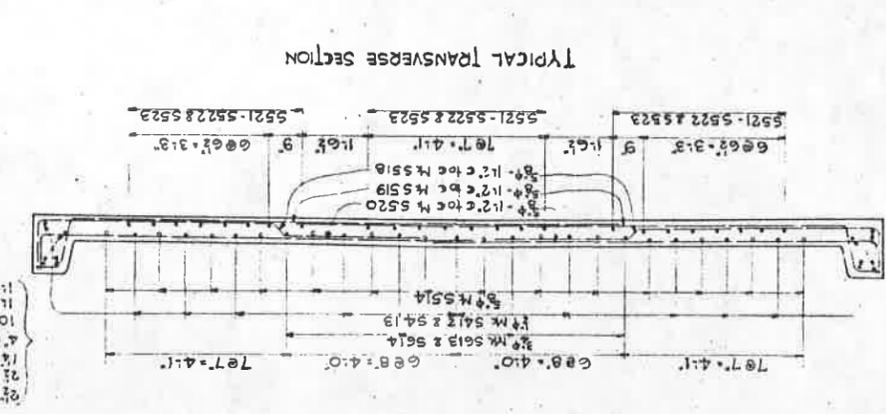
REON. 337081 CONT. T.V. 73, 863
 KNOXVILLE
 20 HR. 5 AC.
 DESIGN DEPARTMENT
 SUBMITTED
 RECOMMENDED

H.B.T.
 R.L.C.
 10/10/20
 10/10/20
 10/10/20
 10/10/20

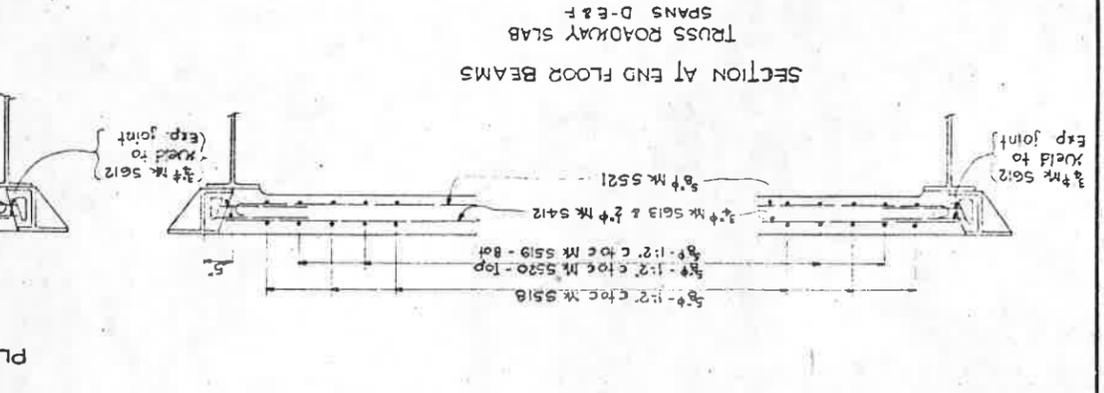
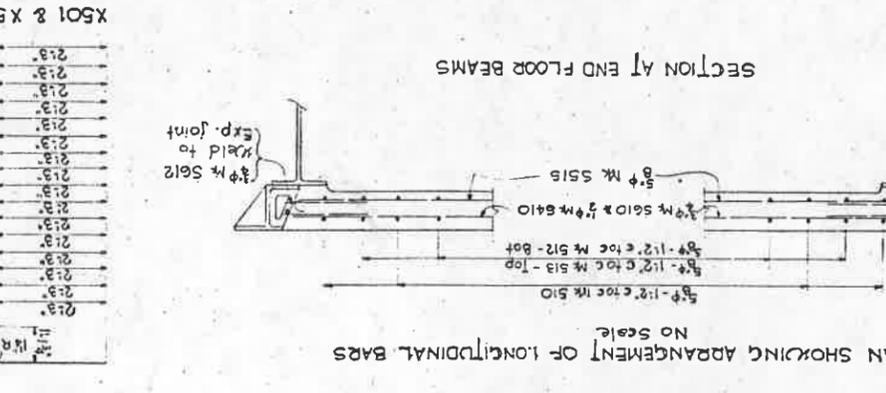
NOTE: - For reinforcing steel placing plan Abutment No. 1 see T.V. Draw. 4081A03 & 4081A04. All dimensions on bent bars are out CONTRACTORS - NASHVILLE BRIDGE CO. & MCGARRY - JONES & WOODARD NASHVILLE, TENNESSEE.



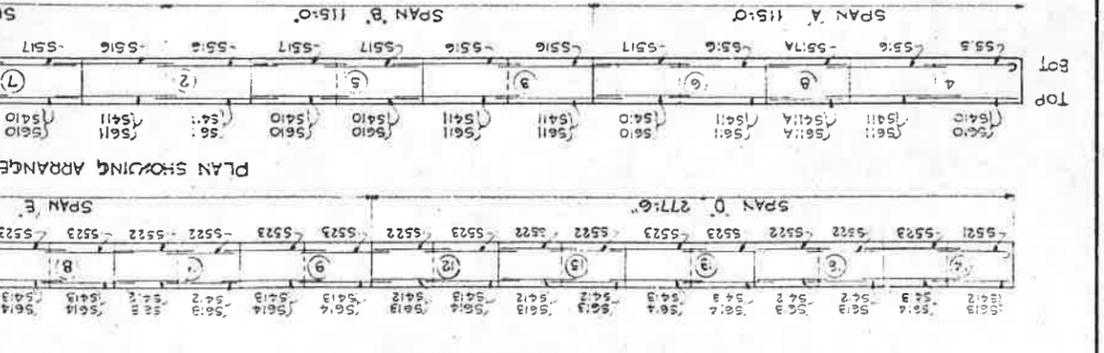
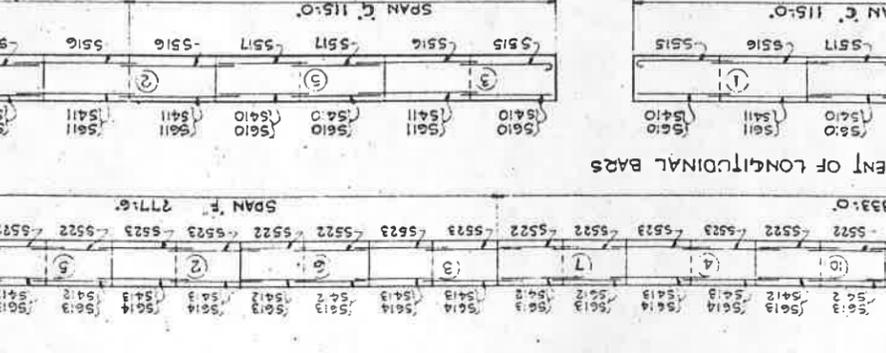
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5523	560	3/4"	307.8"
5522	360	3/4"	281.9"
5521	48	3/4"	291.2"
5514	434	3/4"	510"
5413	255	3/4"	301.3"
5412	289	3/4"	281.7"
5517A	60	3/4"	311.6"
5613	68	3/4"	291.0"
5611A	110	3/4"	361.1"
5520	1490	3/4"	110"
5519	1490	3/4"	141.7"
5518	1492	3/4"	91.11"
5517	1492	3/4"	91.11"
5516	1492	3/4"	91.11"
5515	1492	3/4"	91.11"
5514	1492	3/4"	91.11"
5513	1492	3/4"	91.11"
5512	1492	3/4"	91.11"
5511	1492	3/4"	91.11"
5510	1492	3/4"	91.11"
5509	1492	3/4"	91.11"
5508	1492	3/4"	91.11"
5507	1492	3/4"	91.11"
5506	1492	3/4"	91.11"
5505	1492	3/4"	91.11"
5504	1492	3/4"	91.11"
5503	1492	3/4"	91.11"
5502	1492	3/4"	91.11"
5501	1492	3/4"	91.11"
5500	1492	3/4"	91.11"



5612	94	3/4"	116"
A524	2	3/4"	261.8"
L504	2	3/4"	171.5"
L501	11	3/4"	261.0"
A549	11	3/4"	261.0"
L501	11	3/4"	151.3"
A548	12	3/4"	241.0"
L501	12	3/4"	241.0"
A547	14	3/4"	231.0"
L501	14	3/4"	131.6"
A504	58	3/4"	131.6"
H902	6	3/4"	21.4"
H901	9	3/4"	22.4"
A603	1	3/4"	23.2"
A601	1	3/4"	261.6"
A546	20	3/4"	191.6"
L501	2	3/4"	71.9"
X553	2	3/4"	71.11"
L502	2	3/4"	81.2"
X552	2	3/4"	81.2"
X551	2	3/4"	81.2"
A502	2	3/4"	81.2"
X549	2	3/4"	81.2"
A500	2	3/4"	81.2"
X547	2	3/4"	81.2"
A546	2	3/4"	81.2"
X545	2	3/4"	81.2"
A603	2	3/4"	81.2"
X544	2	3/4"	81.2"
A504	2	3/4"	81.2"
X543	2	3/4"	81.2"
X542	2	3/4"	81.2"
X541	2	3/4"	81.2"
X540	2	3/4"	81.2"



5612	94	3/4"	116"
A524	2	3/4"	261.8"
L504	2	3/4"	171.5"
L501	11	3/4"	261.0"
A549	11	3/4"	261.0"
L501	11	3/4"	151.3"
A548	12	3/4"	241.0"
L501	12	3/4"	241.0"
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X552	2	3/4"	81.2"
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A502	2	3/4"	81.2"
X549	2	3/4"	81.2"
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X547	2	3/4"	81.2"
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X544	2	3/4"	81.2"
A504	2	3/4"	81.2"
X543	2	3/4"	81.2"
X542	2	3/4"	81.2"
X541	2	3/4"	81.2"
X540	2	3/4"	81.2"



BILL OF REINFORCING

