256

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 11201				1	23

INDEX OF SHEETS

STATE OF ARKANSAS

STATE HIGHWAY COMMISSION

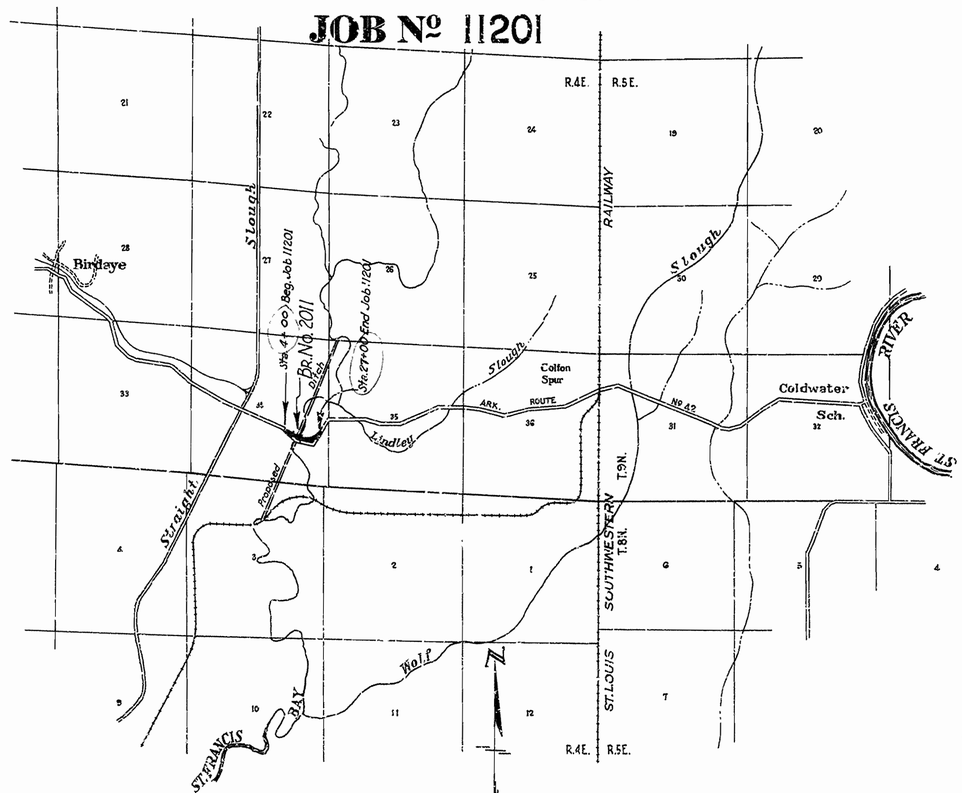
PLAN OF PROPOSED BRIDGE

ST. FRANCIS BAY DITCH

CROSS COUNTY

ROUTE 42 SEC. 3

JOB Nº 11201



LAYOUT

Scale: 2 In. = 1 Mi.

LENGTH OF PROJECT= 2300.0 FT. = 0.435 MI.
LENGTH OF BRIDGES= 349.5 FT. = 0.066 MI.
LENGTH OF EMBANKMENT= 1950.46 FT. = 0.369 MI.
LENGTH OF JOB= 2300.0 FT. = 0.435 MI.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 1st, 1940

PAMPHLETS

Division I
" II Parts 1, 8a, 8b, 8c, 9
" III
" IV

SPECIAL PROVISIONS

		No. of Sheets
2-1	Rev. of Art. 2.11	2
2-5	" of " 2.5	1
4-3	" of " 4.3	1
	State License for Contractors	1
8-2	Employment of Labor	1
9-5	Partial Payments	1
9-6	Common Carrier Rates	1
107-A	Rev. of Art. 107.1	1
450-3	Furnishing Traffic Service Gravel	1
450-5	Traffic Service Gravel	3
803-1	Rev. of Art. 803.21	1
820-1	Engineer's Field Office	1
853-1	Machine Mixing	1
	Required Special Provisions (Job 11201)	1
	Erecting Truss Span (Job 11201)	1
	Award of Contract (6-9-44)	1
	Equipment and Priority (6-23-44)	2
	Revision of Art. 2.6 (5-1-44)	1

QUANTITIES

Revisions:
6-7-44
6-15-44

[redacted]

APPROVED [redacted]
CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED [redacted]
STATE HIGHWAY ENGINEER

N. B. Garver
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE No. 2011

DRAWING No. G416

1TH. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.				
STATE JOB NO. 11201				2	23

TRAFFIC SERVICE GRAVEL

Station	Station	Length	Normal Cu. Yd.	Widening Cu. Yd.
4+00	12+86.00	886.00	310	
16+35.54	27+00	1064.46	373	40
Total			683	40

CLEARING AND GRUBBING

Station	Station	Clearing Acre	Grubbing Acre
4+00	27+00	1.50	1.00

EARTH WORK FOR HWY. EMBANKMENT

Station	Station	Normal Cu. Yd.	Borrow* Cu. Yd.	Total
4+00	12+86	2023		2023
16+35.54	27+00	477	6791*	7268
Totals		2500	6791*	9291

* To be obtained from channel excavation

R/W MARKERS

Description	Class 'A' Concrete Cu. Yd.	Reinforcing Steel Lb.
16 R/W Markers	0.40	35

CHANNEL EXCAVATION

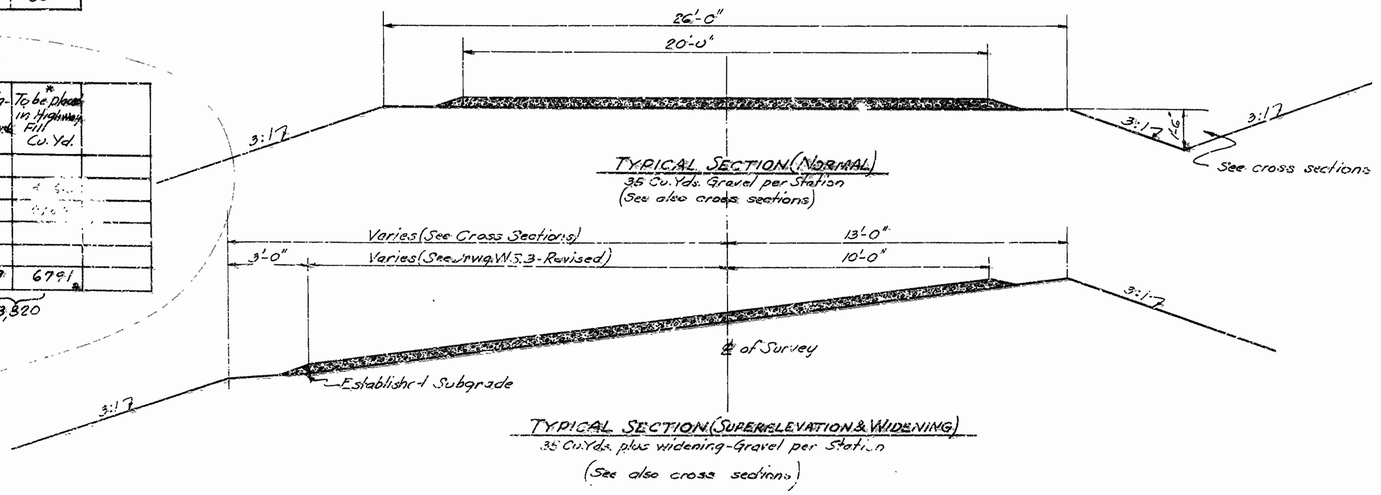
Ditch Station	Ditch Station	West Bank Cu. Yd.	East Bank Cu. Yd.	To be placed in spoil bank Cu. Yd.	To be placed in Highway Fill Cu. Yd.
4+45	7+80	2660		2660	
4+75	7+50		4684		[illegible]
7+50	12+50		11476	9369	[illegible]
Totals		2660	16160	12029	6791*
		18,820		18,820	

BRIDGE QUANTITIES

Item No.	Item	Unit	Bents 1 & 7	Bents 2 to 6 Inc.	Piers 1 & 2	Spans 1 & 8	Spans 2 & 6, 7	Spans 3 & 5	Span 4	Total
103	Dry Excavation for Structures	Cu. Yd.			25					25
103	Wet Excavation for Structures	Cu. Yd.			480					480
SP. & 802	Class 'A' Concrete for Bridges	Cu. Yd.			201.60					201.60
SP. & 802	Class 'S' Concrete for Bridges	Cu. Yd.				27.96	36.57	24.36	99.98	188.89
SP. & 802	Seal Concrete for Bridges	Cu. Yd.			117.50					117.50
SP. & 803	Reinforcing Steel	L. b.			11573	6170	8730	5820	20267	52560
805	Concrete Railing	Lin. Ft.				104	144	96		344
807	Structural Steel in Beam Spans	Lb.	26.6	21.4		16300	27280	18100		62,100
807	Structural Steel in Truss Spans	Lb.							2400	2400
809	Treated Bridge Timber	M.F.B.M.	1.232	1.960						3.192
810	Untreated Timber Piling	Lin. Ft.			1440					1440
810	Treated Timber Piling	Lin. Ft.	420	1000						1420
810	Treated Timber Pile Cut-off	Lin. Ft.	28	50						78
929	Bridge Name Plates (Type B)	Each	2							2
S.P.	Erecting Truss Span	Complete								Complete

SUMMARY OF QUANTITIES

Item No.	Item	Quantity	Unit
101	Clearing	1.50	Acre
101	Grubbing	1.00	Acre
102	Common Excavation	21,320	Cu. Yd.
103	Dry Excavation for Structures	25	Cu. Yd.
103	Wet Excavation for Structures	480	Cu. Yd.
SP. 450-5	Traffic Service Gravel (Class S-1, 2, 3, 4, 5 or 7)	723	Cu. Yd.
SP. & 802	Class 'A' Concrete for Bridges	201.60	Cu. Yd.
SP. & 802	Class 'S' Concrete for Bridges	188.89	Cu. Yd.
SP. & 802	Seal Concrete for Bridges	117.50	Cu. Yd.
SP. & 803	Reinforcing Steel	52560	Lb.
805	Concrete Railing	344	Lin. Ft.
807	Structural Steel in Beam Spans	62100	Lb.
807	Structural Steel in Truss Spans	2400	Lb.
809	Treated Bridge Timber	3.192	M.F.B.M.
810	Untreated Timber Piling	1440	Lin. Ft.
810	Treated Timber Piling	1420	Lin. Ft.
810	Treated Timber Pile Cut-off	78	Lin. Ft.
931	Class 'A' Concrete	0.40	Cu. Yd.
902	Reinforcing Steel	35	Lb.
929	Bridge Name Plates (Type B)	2	Each
S.P.	Erecting Truss Span	Complete	Lump Sum



TYPICAL SECTION (NORMAL)
35 Cu. Yds. Gravel per Station
(See also cross sections)

TYPICAL SECTION (SUPERELEVATION & WIDENING)
35 Cu. Yds. plus widening-Gravel per Station
(See also cross sections)

Revisions:
6-6-44
6-15-44

SUMMARY SHEET
BRIDGE OVER ST. FRANCIS BAY DITCH
CROSS COUNTY
CHERRY VALLEY - TURRELL ROAD
ROUTE 42 SEC. 3

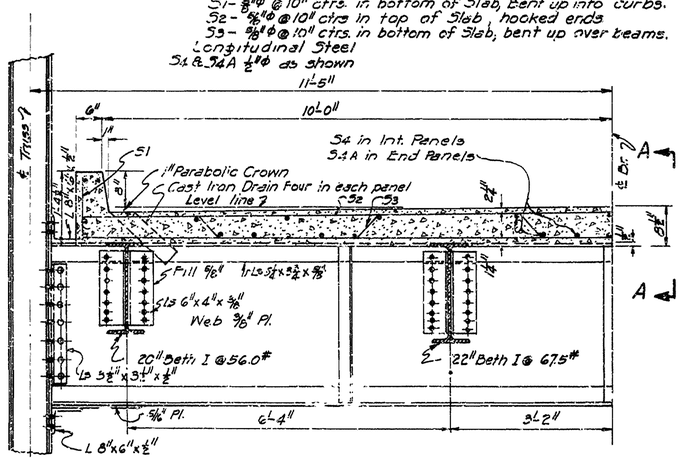
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.P.C. Date:
Traced By: L.P.C. Date: 8-16-43
Checked By: Date:
Scale: in. = ft.

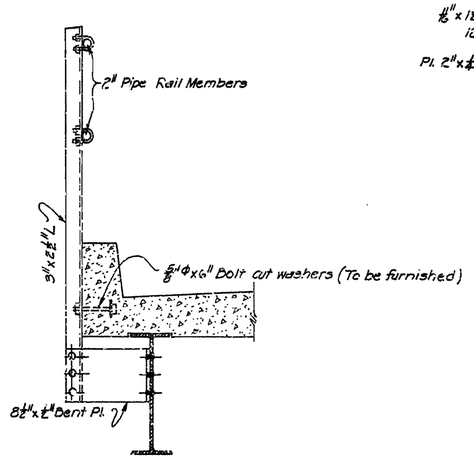
BRIDGE NO. 2011 DRAWING NO. 6417

W. C. Baker
PRINCIPAL HIGHWAY ENGINEER (BRIDGES)

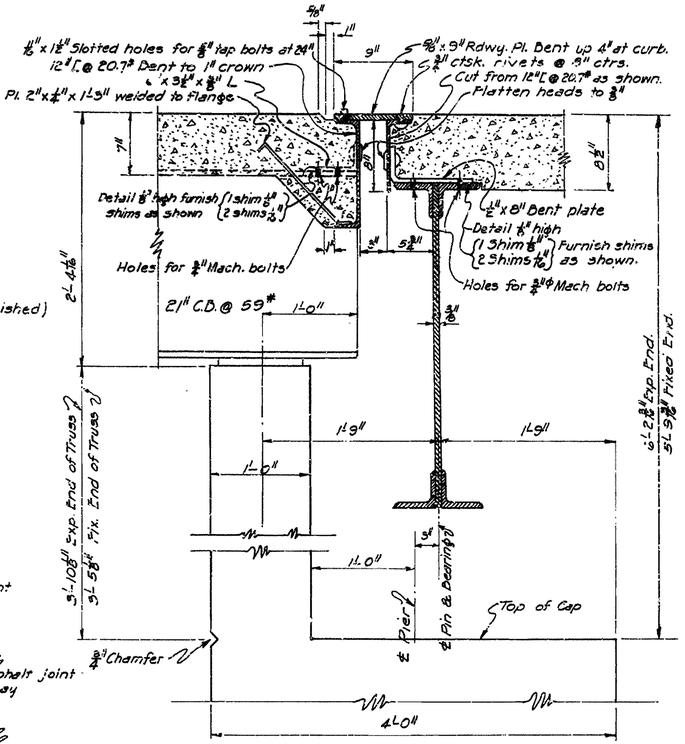
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 11201				9	23



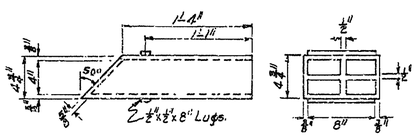
HALF TRANSVERSE SECTION
Scale 5/16"=1'-0"



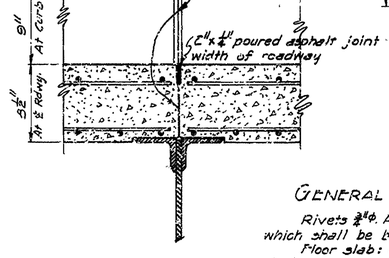
RAIL POST ON TRUSS SPAN
Scale 1"=1'-0"



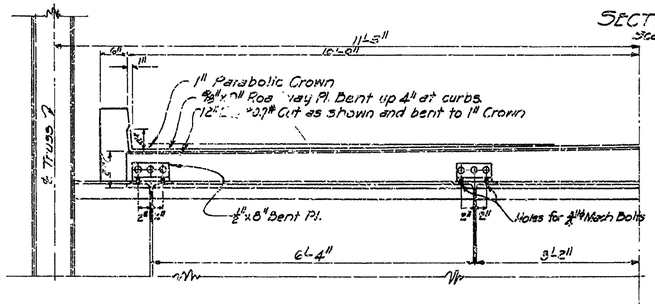
DETAILS OF EXPANSION DEVICES
Scale 1 1/2"=1'-0"



DETAILS OF CAST IRON DRAINS
Scale 1 1/2"=1'-0"



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



DETAILS OF EXPANSION DEVICE ON TRUSS SPAN
Scale 3/4"=1'-0"

Details not shown same as above.

LIST OF BENT BARS

NUMBER	MARK	SIZE	LENGTH	A	B	C	BENDING DIAGRAM
219	S1	5/8"Φ	22'-7"	20'-7"	1'-0"		
219	S2	5/8"Φ	21'-4"	20'-7"			
212	S3	5/8"Φ	22'-3"	21'-1"	3'-0"	21-7"	
160	S4	1/2"Φ	25'-6"	Straight			Intermediate Panels
64	S4A	1/2"Φ	26'-0"	"			End Panels

GENERAL NOTES

Rivets 3/4"Φ. All field connections shall be riveted except portal to web of channel on end post which shall be bolted.

Floor slab: Concrete to be Class "S". One inch has been added for wearing surface. Roadway drains to be paid for as "Reinforcing Steel".

All material in roadway expansion devices on truss span, anchor bolts, rivets and bolts for connections shall be paid for as "Structural Steel In Truss Span".

Floor Slab from floorbeam to floorbeam to struck off with full panel length longitudinal screed. This screed shall be sufficiently stiff as to have no appreciable vertical deflection.

Specifications: Arkansas State Highway Commission Standard Specification for Road and Bridge Construction adopted March 1st. 1940.

DETAILS OF 180' TRUSS SPAN
ST. FRANCIS BAY BRIDGE
OVER CROSS COUNTY DRAINAGE DITCH

ROUTE 42 SEC. 3

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.A.M.C Date: 3-29-43
Traced By: L.A.M.S Date: 4-1-43
Checked By: Date:
Scale: in. = ft. As noted

N. A. Garrett
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE NO. 2011 DRAWING NO. 6422


STATE JOB NO. 11201
3
23
12" White Oak
18" White Oak
61.35'
44.2'
R.P. Δ = Sta. 5+00
N
Straight Slough
4" Iron pipe U.S.E.D. BM.
Timber
Timber
Timber
Timber
1-70' Low Truss
2-16' I-Beam Spans
Conc. Floor - 18' Cl. Rdwy.
S77°E
Δ 2° Rt.
S75°E
Gravel
40'
40'
30' Te. Pole
2W.-Elec.
30' Te. Pole
2W.-Elec.
PLAN
PROFILE
West Approach
BM Elev. 201.79 Top of 4" pipe
60' North of ℄ Highway
210
200
190
0.0%
203.80
DRWG. NO. 6418-A
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7


11201
4 23
18" Black Oak
4" Black Oak
26.4'
31.5'
N
57+85.3 P.O.T.
Timber
S 75° E
Timber
30' Tr. Pole 2 W. No X-Arm Elec.
Gravel
PC 5+90.08
D = 13°
Δ = 25°22'
T = 99.2
R = 440.77
L = 195.13
Cross Spoil Bank
Top Bank
W.E. 5-16-44
BAY DITCH
Proposed Location
USED Traverse 4+30 = Sta. 12+14.6
PT 7+85.21
2660 Cu. Yds. Channel to be placed in spoil bank
40' Tr. Pole 2 W. Elec.
Exist.
ST. FRANCIS
Channel Excav. above old bridge 4684 Cu. Yds. place in Highway Fill
Low Spoil
PC 11+97.5
Original Proposed Location
Top of Bank
Spoil
Top Bank
17+48.7 PC
Old Channel Standing Water
Top Orig. Bank Trees
Δ 61°30'
D. 15°
T. 227.3'
L. 410.0
Timber
cleared
14+75
Gravel
Rt. 42
40' Tr. Pole
30' Tr. Pole
Timber
PT 15+46.67
RP PI 19+75
57.7'
3" Hackberry
48.7'
Power Pole
D = 18°
Δ = 62°51'
T = 194.5
R = 318.3
L = 349.17
7+35
128.1
Beg. Old Bridge
Dropped in Channel
To be removed to Elev. 181.2
Orig. Bank
Channel Excav. below old bridge 11476 Cu. Yd.
Place 2107 C.Y. in Hwy. Fill
Place 9369 C.Y. in Spoil Bank
349'-6" Bridge
(1-24' I-Bm added at East End)
West Approach
Emb. + 15% 2023 Cu. Yds.
Excavation (thru Spoil Bank) 2023 Cu. Yds.
Channel Excavation 2660 Cu. Yds.
(To be placed in spoil bank)
East Approach
Emb. + 10% 7268 Cu. Yds.
Excavation 477 Cu. Yds.
Secure from channel excavation 6791 Cu. Yds.
Channel Excavation 16160 Cu. Yds.
To be placed in spoil bank 9369 Cu. Yds.
0.0%
+1.55%
150' V.C.
H.W. El. 203.5 (from Orig. Plans)
Recent H.W.
W.L. 5-16-44
-1.60%
150' V.C.
0.0%
U.S.E.D. B.M. El. 199.16
On 30" Tree 200' Rt. Sta. 13+00
Note: Profile and Grade elevations shown are finished grade of gravel surface. Cross Sections plotted to Subgrade which is 0.5' lower.
Superelevation and Widening according to Dwgs. WS3 Rev., WS3A Rev., WS3.3
Typical Section Drwg. # 6417
Revised
220
210
200
190
180
170
203.80
203.82
204.09
205.35
206.90
208.45
P.I. 210.0
209.71
210.00
210.00
+25 P.I. 210.00
209.70
210.00
208.82
207.22
205.63
204.30
202.53
+25 P.I.
202.00
202.30
202.00
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
DRWG. NO. 6418-13

260

6		
STATE JOB NO. 11201	5	23

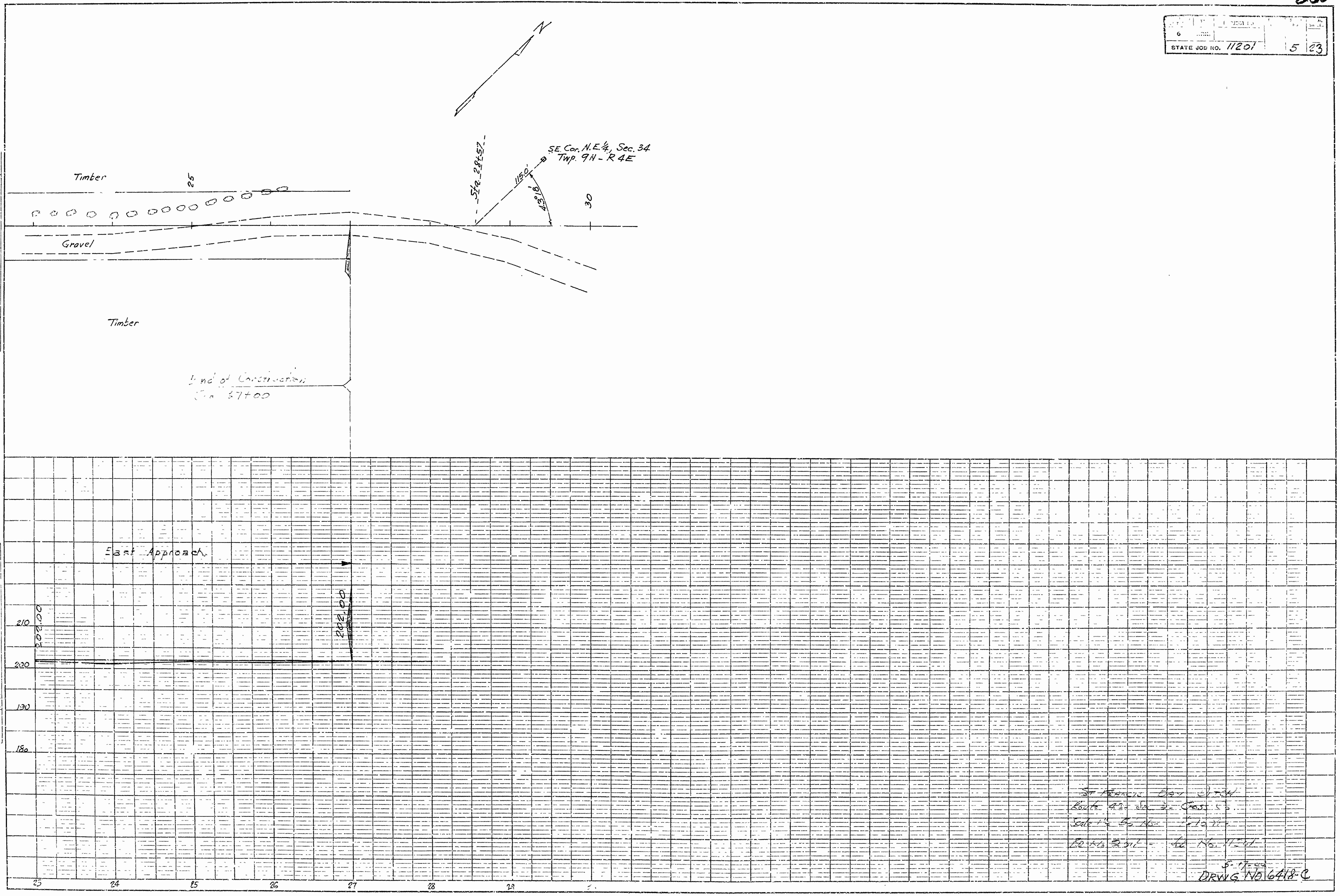
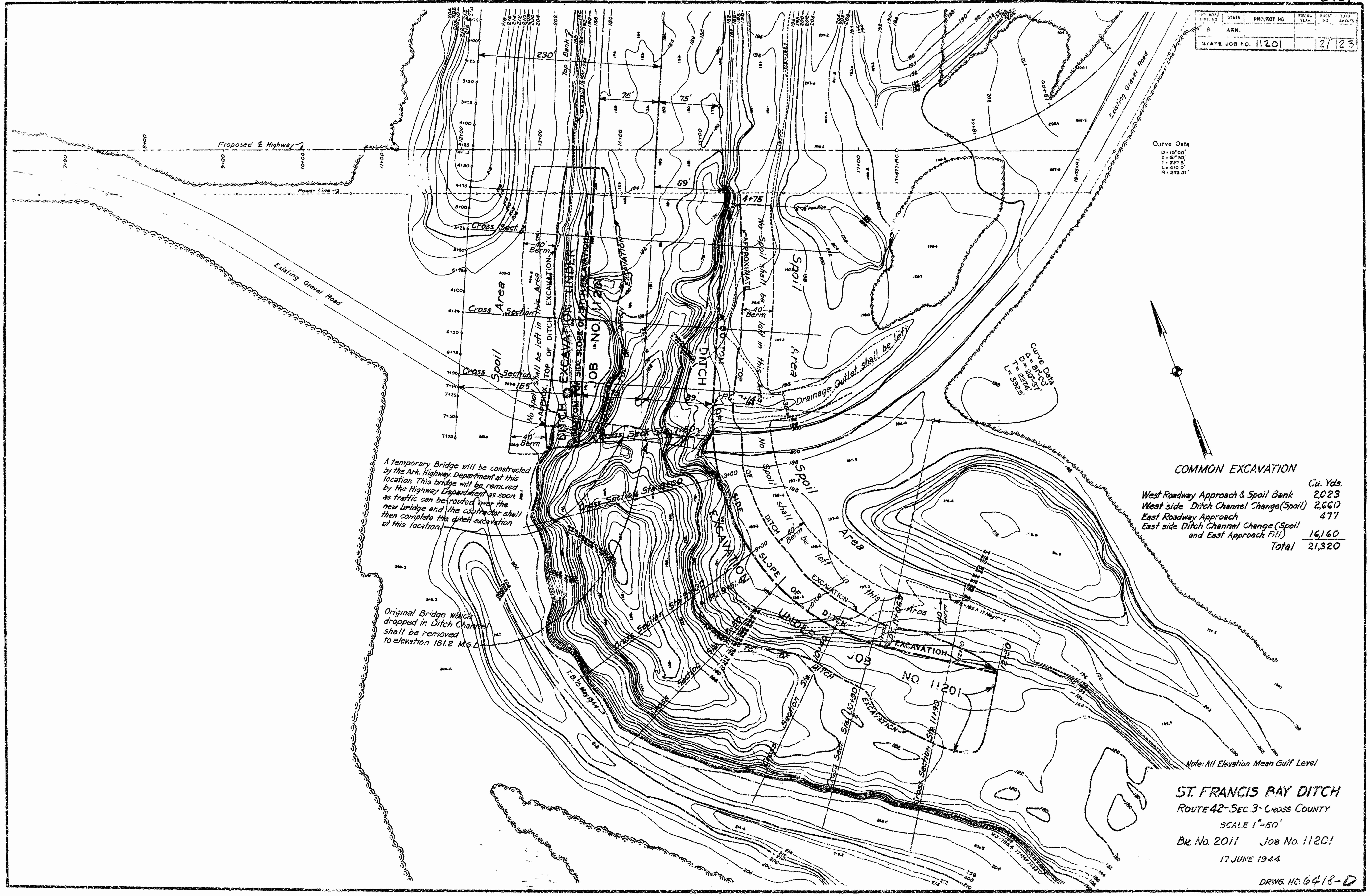


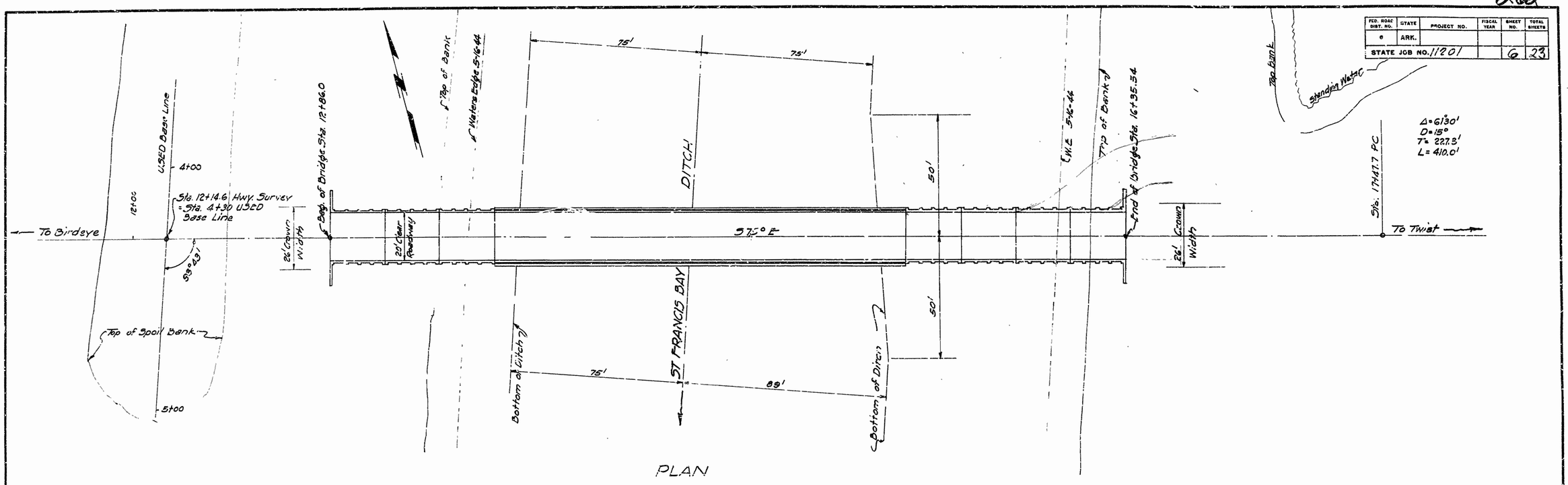
PLATE 1—PLAN-PROFILE
KEUFFEL & ESSER CO. NEW YORK

K & E CO. No. 345-1

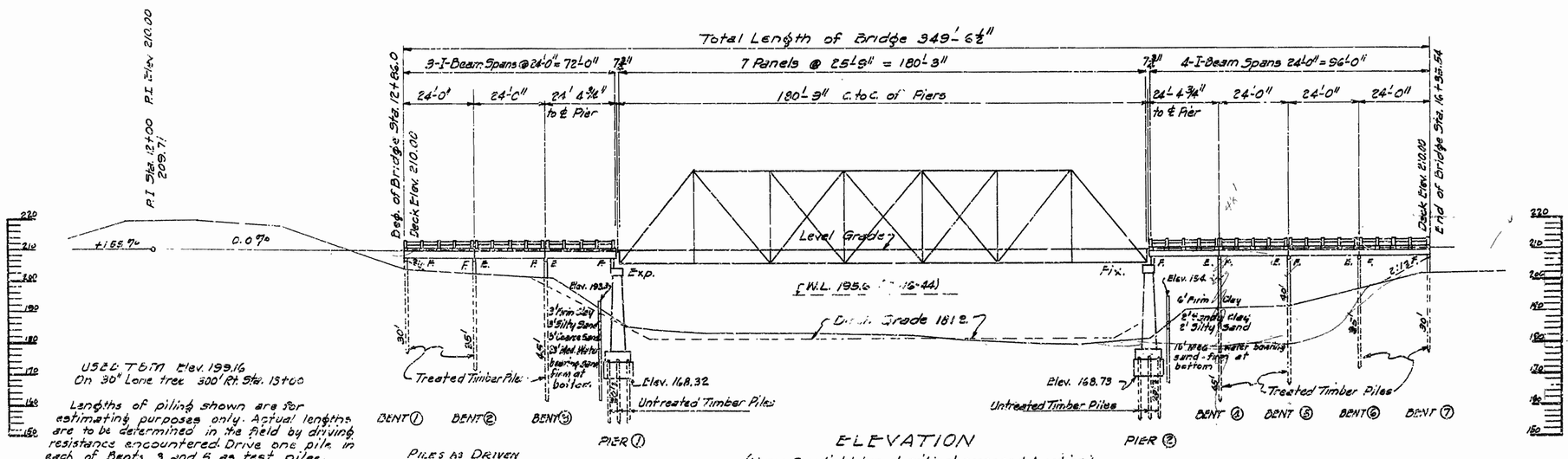

261
6 ARK.
STATE JOB NO. 11201 21 23
Proposed ℄ Highway
Power Line
Existing Gravel Road
Existing Gravel Road
Power Line
Curve Data
D = 15°00'
I = 61°30'
T = 227.3'
L = 410.0'
R = 383.07'
Curve Data
Δ = 81°00'
D = 20°37'
T = 237.4'
L = 392.9'
230'
75'
75'
89'
89'
155'
Top Bank
4+75
Cross Sect.
Cross Section
Cross Section
40' Berm
40' Berm
40' Berm
40' Berm
Spoil Area
Spoil Area
Spoil Area
No Spoil shall be left in this Area
No Spoil shall be left in this Area
No Spoil shall be left in this Area
APPROX. TOP OF DITCH EXCAVATION
APPROXIMATE TOP OF DITCH
DITCH EXCAVATION UNDER JOB NO. 11201
BOTTOM OF SIDE SLOPE OF DITCH EXCAVATION
DITCH BOTTOM
SIDE SLOPE OF DITCH EXCAVATION
EXCAVATION UNDER JOB NO 11201
Drainage Outlet shall be left
P.C. 7+14
Cross Sect. Sta. 7+80
Cross Section Sta. 8+00
Cross Section Sta. 9+00
P.I. 9+51.47
Cross Section
Cross Section Sta. 10+40
Cross Sect. Sta. 10+90
Cross Section Sta. 11+90
A temporary Bridge will be constructed by the Ark. Highway Department at this location. This bridge will be removed by the Highway Department as soon as traffic can be routed over the new bridge and the contractor shall then complete the ditch excavation at this location.
Original Bridge which dropped in Ditch Channel shall be removed to elevation 181.2 M.G.L.
T.B. 15 May 1944
W.S. 195.3 17 May 1944
COMMON EXCAVATION
Cu. Yds.
West Roadway Approach & Spoil Bank 2,023
West side Ditch Channel Change (Spoil) 2,660
East Roadway Approach 477
East side Ditch Channel Change (Spoil and East Approach Fill) 16,160
Total 21,320
Note: All Elevation Mean Gulf Level
ST. FRANCIS BAY DITCH
ROUTE 42 - SEC. 3 - CROSS COUNTY
SCALE 1" = 50'
BR. NO. 2011 JOB NO. 11201
17 JUNE 1944
DRWG. NO. 6418-D

262

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.				
STATE JOB NO. 11201				6	23



PLAN



ELEVATION

(Note:- Soundings taken at original proposed location)

USED TBM Elev. 199.16
On 30" Lone tree 300' Rt. Sta. 13+00

Lengths of piling shown are for estimating purposes only. Actual lengths are to be determined in the field by driving resistance encountered. Drive one pile in each of Bents 3 and 5 as test piles.

PILES AS DRIVEN

	Pile Lengths	
	Maximum	Minimum
Bent 1	29.9'	25.8'
Bent 2	36.9'	33.0'
Bent 3	47.0'	44.5'
Pier 1	22.1'	20.2'
Pier 2	21.2'	20.5'
Bent 4	45.4'	43.6'
Bent 5	40.7'	38.7'
Bent 6	36.0'	2.6'
Bent 7	30.8'	27.5'

RE-DRAWN 6-5-44

LAYOUT OF BRIDGE OVER ST. FRANCIS BAY DITCH CHERRY VALLEY-TURRELL ROAD CROSS COUNTY

ROUTE 42 SEC. 3

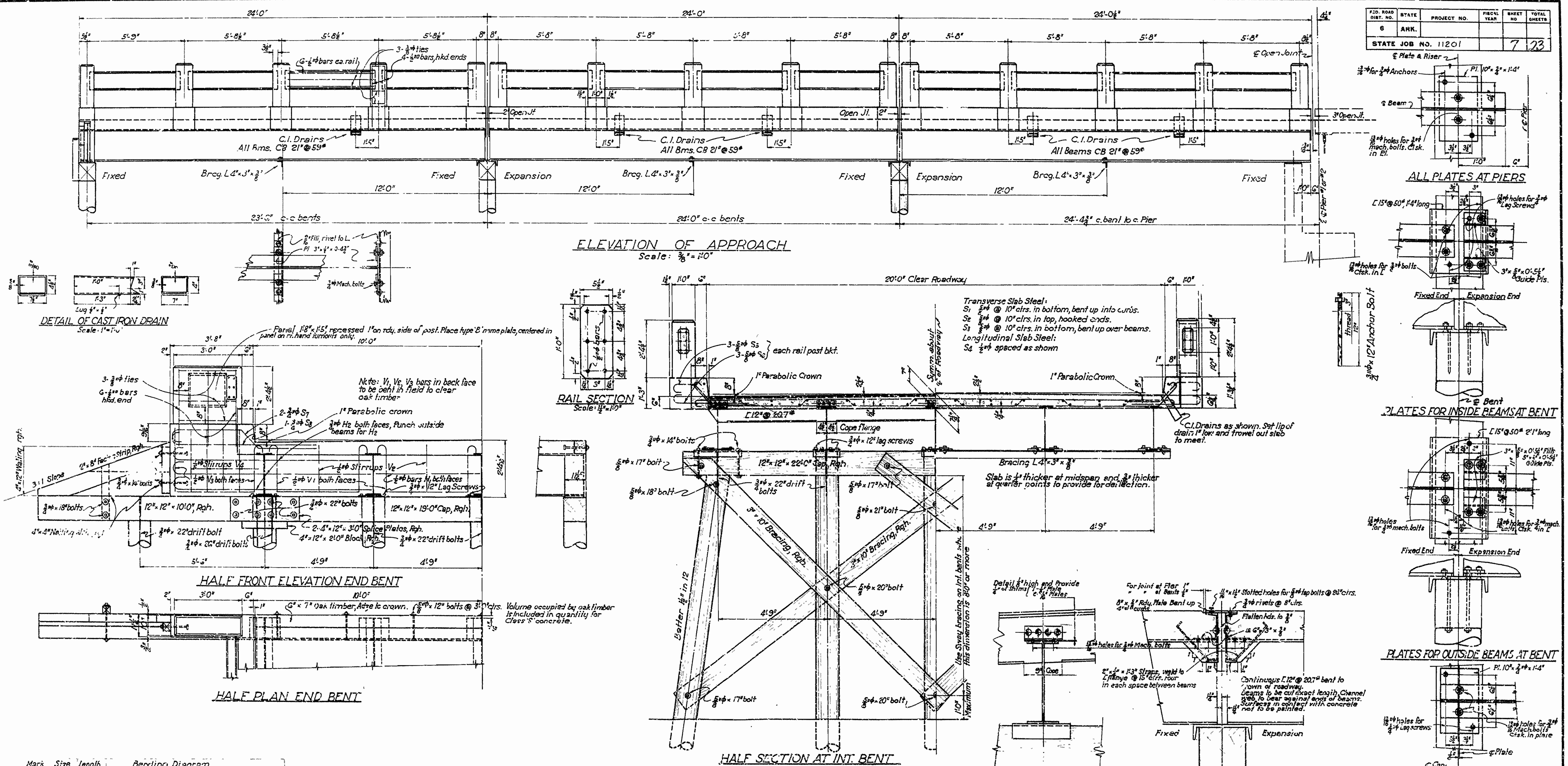
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.P.C. Date: 6-8-44
Traced By: L.A.McC. Date: 6-[illegible]-44
Checked By: _____ Date: _____

Scale: 1 in. = 20 ft.

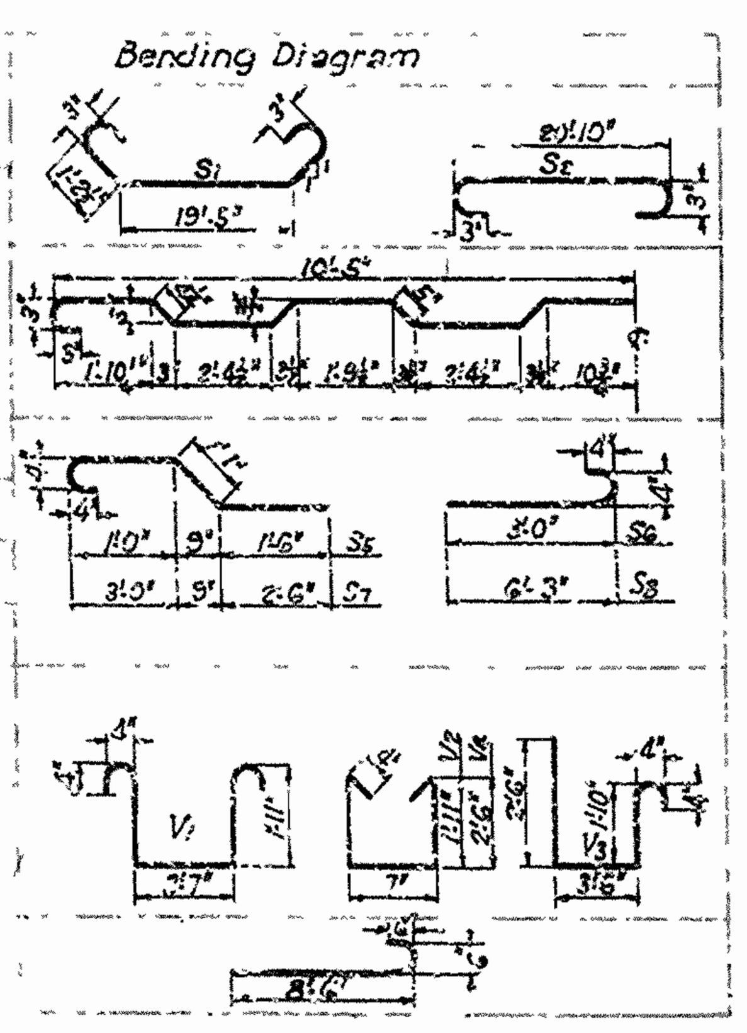
BRIDGE No. 2011 DRAWING No. 6419

T.B. Graves
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)



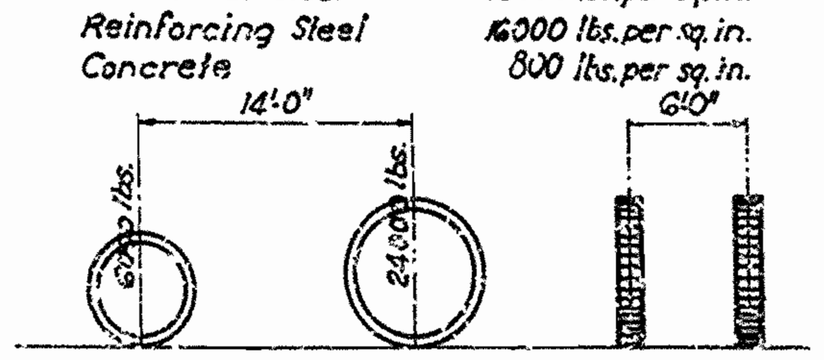
Mark	Size	Length
S1	5/8"φ	22'7"
S2	5/8"φ	21'7"
S3	5/8"φ	22'1"
S5	5/8"φ	4'1"
S6	5/8"φ	3'6"
S7	3/4"φ	7'1"
S8	3/4"φ	6'0"
V1	1/2"φ	8'5"
V2	1/2"φ	5'2"
V3	1/2"φ	3'4"
V4	1/2"φ	6'4"
H2	3/4"φ	9'3"

Bending Diagram



UNIT STRESSES

Structural Steel	18000 lbs. per sq. in.
Reinforcing Steel	18000 lbs. per sq. in.
Concrete	800 lbs. per sq. in.



LIVE LOAD H-15 LOADING

GENERAL NOTES:

All concrete to be Class 'S'. All exposed corners to have 3/4" chamfer unless otherwise noted.

Shop list and bending diagrams of reinforcing steel must be submitted and approved before fabrication is begun.

Roadway drains and oak header bolts are to be paid for at the unit price bid for reinforcing steel.

All timber and piling to be Southern Yellow Pine or Pacific Coast Douglas Fir.

The preservative used for the treatment of timber and piling shall be grade I of Creosote Oil for Structural Timber.

All timber and piling shall be treated with twelve (12) pound treatment of Creosote Oil by the empty cell process.

Malleable or Cast Iron washers to be used under all heads and nuts of bolts when in contact with wood.

All bolts and hardware in contact with wood to be painted with red lead prior to construction and all exposed portions of bolts and hardware to be painted with a black asphaltic paint after construction is completed.

3/4"φ rivets, 13/16"φ open holes. Use 3/4"φ bolts for Structural Steel field connections.

Shop Paint: All Structural Steel shall be given one coat of Red Lead and Raw Linseed Oil before shipment.

Field Paint: 1st. Coat, White Lead tinted with Lamp Black. 2nd. Coat, Aluminum Paint.

This drawing shows general features of design only. Shop drawings shall be made in compliance with the specifications and be approved before fabrication is begun.

Hardware for timber construction shall be paid for at the unit price bid for "Structural Steel in Beam Spans"

Maximum Pile design load 15 Tons.

Piles to be driven to a minimum capacity of 16 Tons.

In order to secure a good riding surface it will be required that the floor slab be struck off with full span length longitudinal screed. This screed shall be sufficiently stiff as to have no appreciable vertical deflection.

Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 1st 1940.

F.D. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 11201				7	23

263

DETAILS OF APPROACHES
BRIDGE OVER ST. FRANCIS BAY DITCH
CHERRY VALLEY-TURRELL ROAD

ROUTE 42 SEC. 3

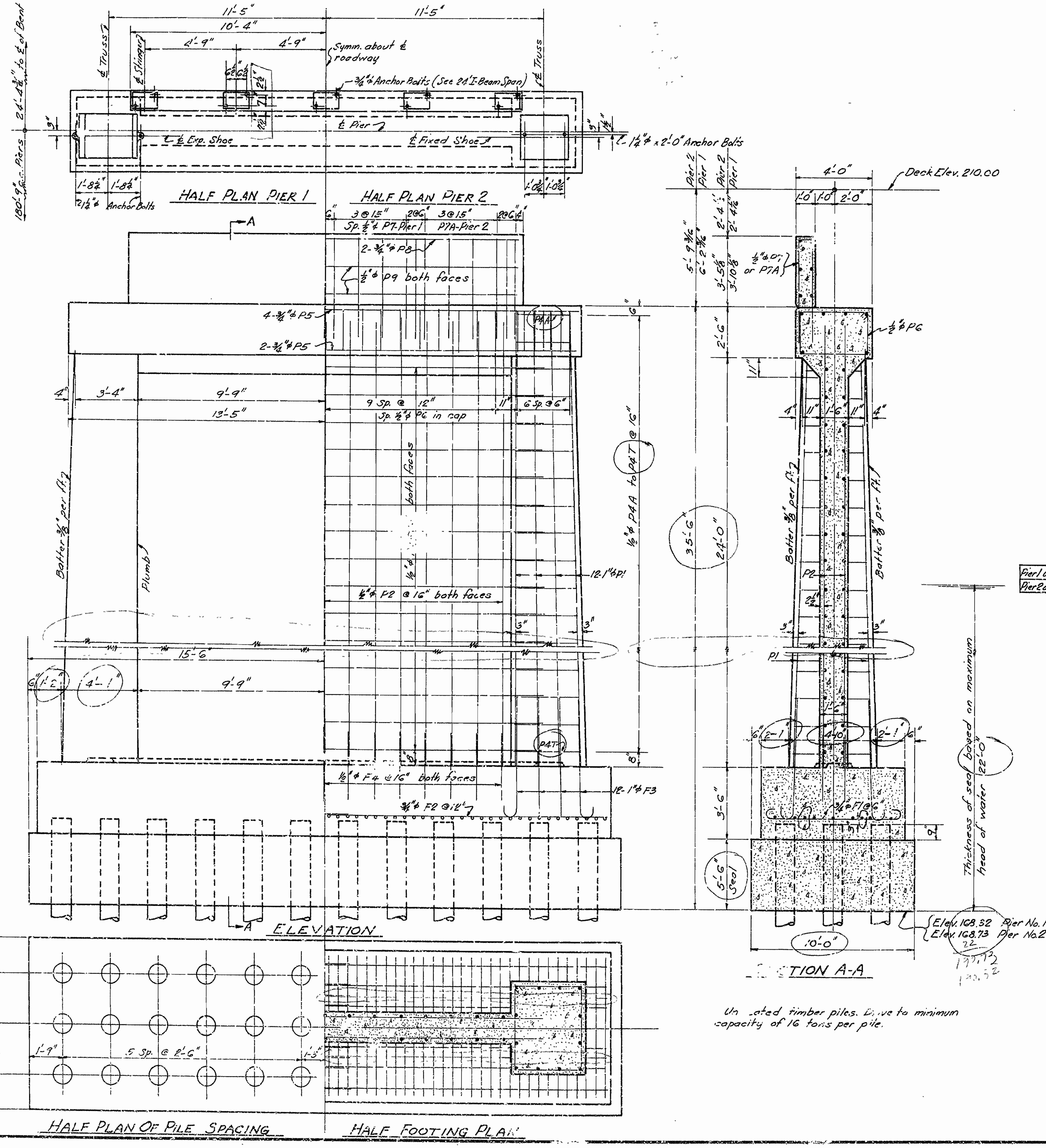
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: E.A.W. Date: 4-3-43
Traced By: E.A.W. Date: 4-5-43
Checked By:
Scale: 1/2 in. = 1 ft. and as noted

N. B. Garver
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE NO. 2011 DRAWING NO. G420

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.				
STATE JOB NO. 11201				8	23



REINFORCING STEEL (1 PIER)

	No.	Mark	Size	Length	A	B	Bending Diagram
	60	F1	¾"φ	10'-0"			F1
	24	F3	1"φ	7'-0"			F3
	2	P4T	½"φ	17'-0"	4'-5"	3'-8½"	
	2	P4S	½"φ	16'-9"	4'-4"	3'-8"	
	2	P4R	½"φ	16'-6"	4'-3"	3'-7½"	
	2	P4Q	½"φ	16'-3"	4'-2"	3'-7"	
	2	P4P	"	16'-0"	4'-1"	3'-6½"	
	2	P4O	"	15'-9"	4'-0"	3'-6"	
	2	P4N	"	15'-6"	3'-11"	3'-5½"	P7, P7A
	2	P4M	"	15'-3"	3'-10"	3'-5"	
	2	P4L	"	15'-0"	3'-9"	3'-4½"	
	2	P4K	"	14'-9"	3'-8"	3'-4"	
	2	P4J	"	14'-6"	3'-7"	3'-3½"	
	2	P4I	"	14'-3"	3'-6"	3'-3"	
	2	P4H	"	14'-0"	3'-5"	3'-2½"	
	2	P4G	"	13'-9"	3'-4"	3'-2"	
	2	P4F	"	13'-6"	3'-3"	3'-1½"	
	2	P4E	"	13'-3"	3'-2"	3'-1"	P4-A to P4T, P6
	2	P4D	"	13'-0"	3'-1"	3'-0½"	
	2	P4C	"	12'-9"	3'-0"	3'-0"	
	2	P4B	"	12'-6"	2'-11"	2'-11½"	
	2	P4A	"	12'-3"	2'-10"	2'-11"	
	33	P6	½"φ	12'-5"	3'-8"	2'-2"	
Pier 1 only	23	P7	½"φ	11'-6"	5'-5"		
Pier 2 only	23	P7A	½"φ	10'-8"	5'-0"		
	18	F2	¾"φ	16'-0"			Straight Bars
	30	F4	½"φ	3'-4"			
	24	P1	1"φ	26'-3"			
	30	P2	½"φ	25'-9"			
	36	P3	½"φ	23'-0"			
	6	P5	¾"φ	26'-6"			
	2	P8	¾"φ	20'-3"			
	4	P9	½"φ	20'-3"			

Dimensions to reinforcing steel are to centers of bars.

General Notes:
All concrete to be Class "A". All exposed corners to have ¾" chamfer. All concrete except seal concrete to be poured in the dry. Construction joints where permitted shall be provided with keys 3" deep. Joints shall be horizontal. Keys in walls to be continuous and occupy the middle third of the width. Keys in columns to occupy the middle third of each dimension.
Reinforcing steel to be deformed bars of structural or intermediate grade. Shop lists and bending diagrams shall be submitted by contractor and approval secured before fabrication is begun.
Specifications:- Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 1, 1940.

This drawing not to scale!

Revisions:
6-6-44
8-25-44 Anchor bolt spacing.

DETAILS OF PIERS
BRIDGE OVER ST. FRANCIS BAY DITCH
CHERRY VALLEY–TURRELL ROAD
CROSS COUNTY
ROUTE 42 SEC. 3

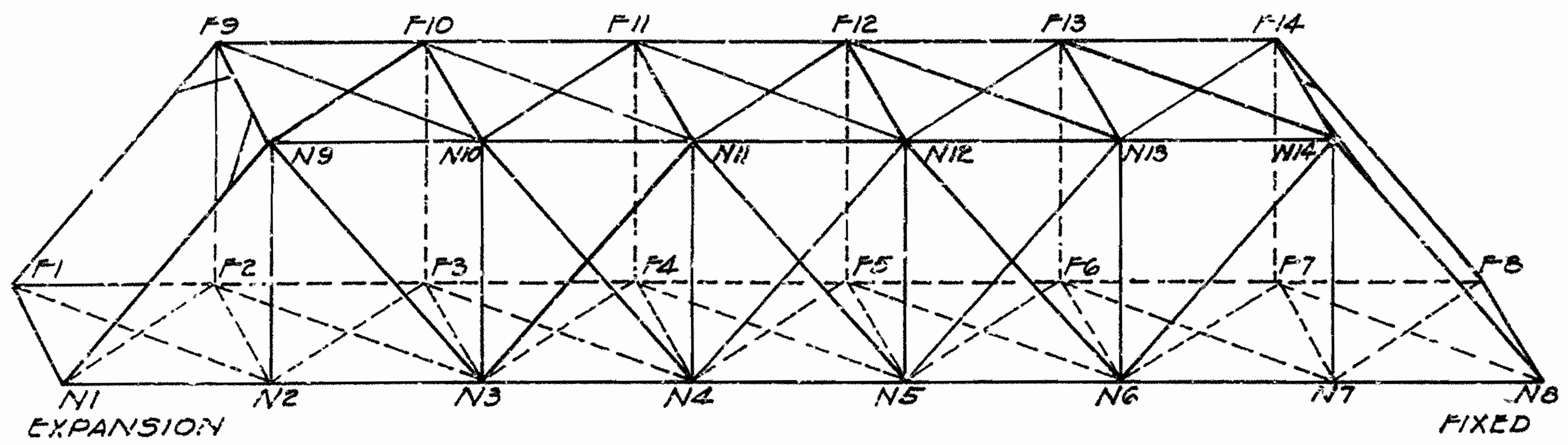
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.P.C. Date: 4-2-43
Traced By: L.P.C. Date: 4-15-43
Checked By: ______ Date: ______
Scale: ⅜ in. = 1 ft.

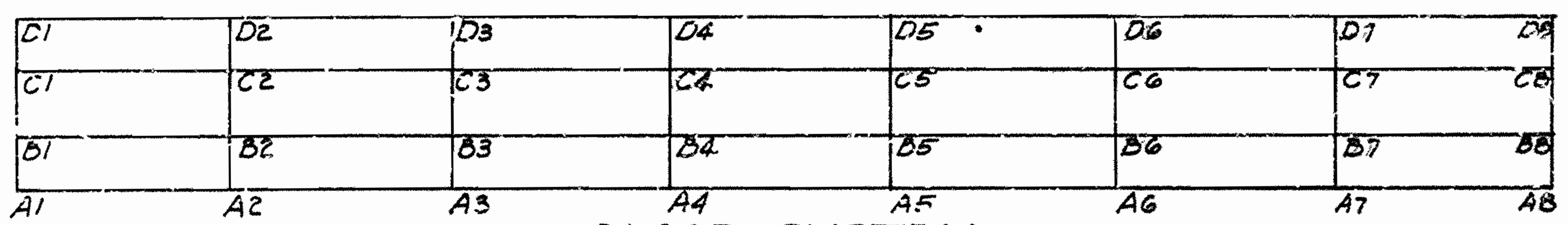
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE NO. 2011 DRAWING NO. 6421

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 11201				10	13



Near Truss Marked N1, N2 etc.
Far Truss Marked F1, F2 etc.

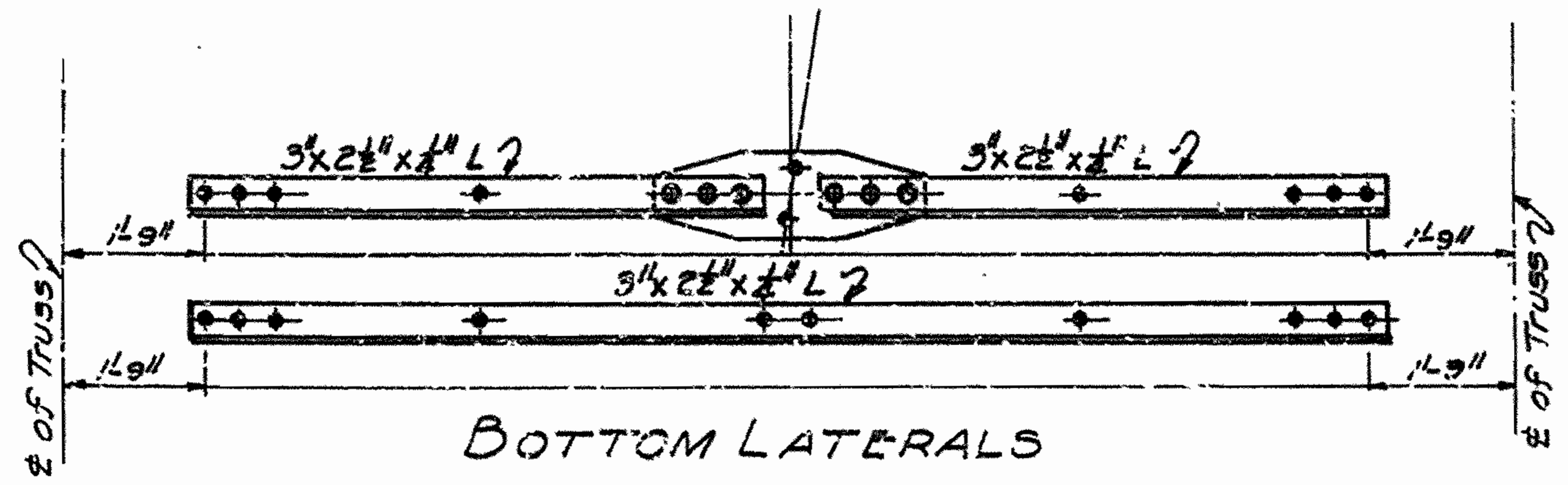


FLOOR SYSTEM

MATCH MARKING DIAGRAM

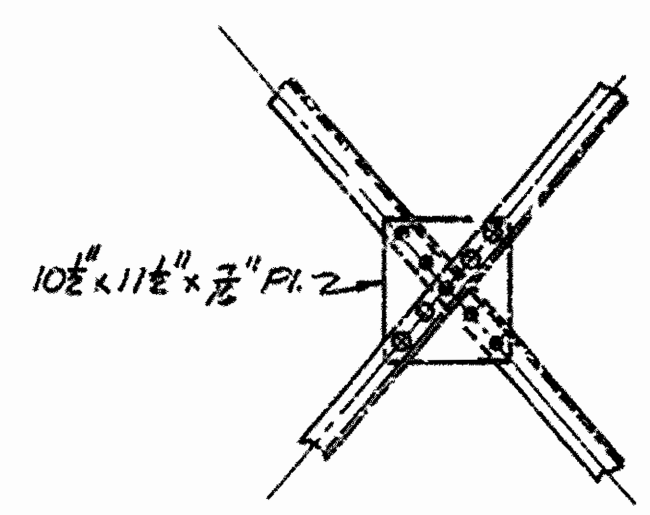
INVENTORY OF MATCH MARKED MEMBERS

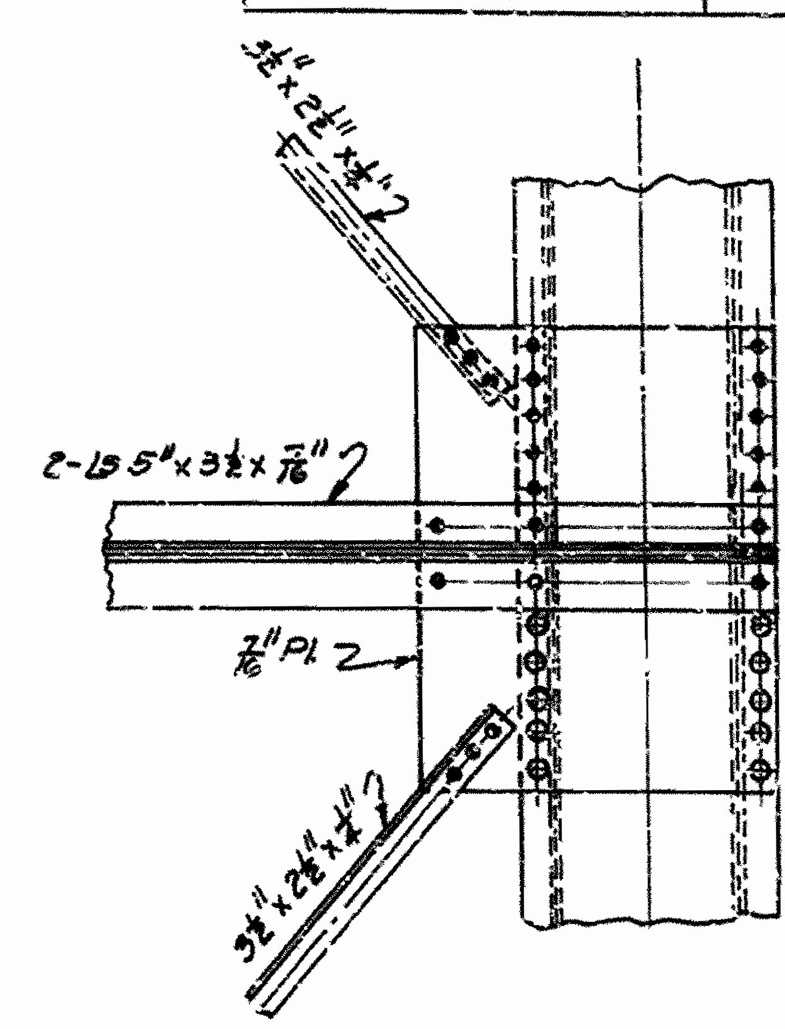
MEMBER	MARK	SECTION	MEMBER	MARK	SECTION	MEMBER	MARK	SECTION
Bot. Chord	N1-N2	2-5″x1 5/16″ Bars	Top Laterals (Cont'd)	F13-N14	1-2½″x3½″ L	Verticals (Cont'd)	F3-F10	2-9″ [6¾″ b.to b. ⅜″ Pl.
″ ″	N2-N3	2-5″x1 5/16″ ″	″ ″ ″	N13-F14	″ ″	″ ″	F4-F11	″ ″
″ ″	N3-N4	2-5″x1 3/16″; 2-5″x1″ ″	Floor Beams	N1-F1	3/8″x36″ Pl; 4 Ls 5⅝″x3⅜″x5/8″	″ ″	F5-F12	″ ″
″ ″	N4-N5	4-5″x1 5/16″ ″	″ ″	N2-F2	″ ″	″ ″	F6-F13	″ ″
″ ″	N5-N6	2-5″x1 3/16″; 2-5″x1″ ″	″ ″	N3-F3	″ ″	″ ″	F7-F14	″ ″
″ ″	N6-N7	2-5″x1 5/16″ ″	″ ″	N4-F4	″ ″	Diagonals	N9-N3	2-6″x1¼″ Bars
″ ″	N7-N8	2-5″x1 5/16″ ″	″ ″	N5-F5	″ ″	″	N10-N4	2-5″x1″ ″
″ ″	F1-F2	2-5″x1 5/16″ ″	″ ″	N6-F6	″ ″	″	N3-N11	1-1¼″ □ ″
	F2-F3	2-5″x1 5/16″ ″	″ ″	N7-F7	″ ″	″	N11-N5	2-2″ □ ″
	F3-F4	2-5″x1 3/16″; 2-5″x1″ ″	″ ″	N8-F8	″ ″	″	N4-N12	2-2″ □ ″
	F4-F5	4-5″x1 5/16″ ″	Top Struts	N9-F9	2-8″x2¼ [7½″ b.to b.	″	N12-N6	1-1¼″ □ ″
″	F5-F6	2-5″x1 5/16″; 2-5″x1″ ″	″ ″	N10-F10	2-5″x3½″ Ls	″	N5-N13	2-5″x1″ ″
″ ″	F6-F7	2-5″x1 5/16″ ″	″ ″	N11-F11	″ ″	″	N6-N14	2-6″x1¼″ ″
″ ″	F7-F8	2-5″x1 5/16″ ″	″ ″	N12-F12	″ ″	″	F9-F3	2-6″x1¼″ ″
Lower Laterals	F1-N2	1-2½″x3″ L	″ ″	N13-F13	″ ″	″	F10-F4	2-5″x1″ ″
″ ″	N1-F2	″ ″	″ ″	N14-F14	2-8″x2¼″ [7½″ b.to b.	″	F3-F11	1-1¼″ □ ″
″ ″	F2-N3	″ ″	Stringers	A1-A2	8½″x20½″ I	″	F11-F5	2-2″ □ ″
″ ″	N2-F3	″ ″	″	A2-A3	8½″x20″ I	″	F4-F12	2-2″ □ ″
″ ″	F3-N4	″ ″	″	A3-A4	″ ″	″	F12-F6	1-1¼″ □ ″
″ ″	N3-F4	″ ″	″	A4-A5	8″x20″ ″	″	F5-F13	2-5″x1″ ″
″ ″	F4-N5	″ ″	″	A5-A6	8¾″x20″ ″	″	F6-F14	2-6″x1¼″ ″
″ ″	N4-F5	″ ″	″	A6-A7	8″x20″ ″	Hand Rail (Exp. End)	1R 17L	2-3″x2½″ Ls With Brkts.
″ ″	F5-N6	″ ″	″	A7-A8	8″x20″ ″	″	2R 18L	″ ″
″ ″	N5-F6	″ ″	″	B1-B2	8½″x22″ ″	″	3R 19L	″ ″
″ ″	F6-N7	″ ″	″	B2-B3	″ ″	″	4R 20L	″ ″
″ ″	N6-F7	″ ″	″	B3-B4	″ ″	″	5R 21L	″ ″
″ ″	F7-N8	″ ″	″	B4-B5	″ ″	″	6R 22L	″ ″
″ ″	N7-F8	″ ″	″	B5-B6	″ ″	″	7R 23L	″ ″
Batter Post	N1-N9	1-22″x½″ Pl.; 2-16″x⅝″ Pl.; 2-3″x3″ Ls; 2-5″x4″ Ls	″	B6-B7	″ ″	″	8R 24L	″ ″
Top Chord	N9-N10	″	″	B7-B8	8½″x22¼″ ″	″	9R 25L	″ ″
″ ″	N10-N11	″	″	C1-C2	″ ″	″	10R 26L	″ ″
″ ″	N11-N12	″	″	C2-C3	8½″x22″ ″	″	11R 27L	″ ″
″ ″	N12-N13	″	″	C3-C4	″ ″	″	12R 28L	″ ″
″ ″	N13-N14	″	″	C4-C5	8½″x22¼″ ″	″	13R 29L	″ ″
Batter Post	N14-N8	″	″	C5-C6	″ ″	″	14R 30L	″ ″
Batter Post	F1-F9	″	″	C6-C7	″ ″	″	15R 31L	″ ″
Top Chord	F9-F10	″	″	C7-C8	8½″x22″ ″	Hand Rail (Fixed End)	16R 32L	″ ″
″ ″	F10-F11	″	″	D1-D2	8¼″x20″ ″			
″ ″	F11-F12	″	″	D2-D3	8½″x20″ ″			
″ ″	F12-F13	″	″	D3-D4	8″x20″ ″			
″ ″	F13-F14	″	″	D4-D5	9½″x20″ ″			
Batter Post	F14-F8	″	″	D5-D6	8½″x20″ ″			
Top Laterals	F9-N10	1-2½″x3½″ L	″	D6-D7	8½″x20″ ″			
″ ″	N9-F10	″	″	D7-D8	8½″x20″ ″			
″ ″	F10-N11	″	Verticals	N2-N9	2-9″ [6¼″ b.to b. ⅜″ Pl.			
″ ″	N10-F11	″	″	N3-N10	″			
″ ″	F11-N12	″	″	N4-N11	″			
″ ″	N11-F12	″	″	N5-N12	″			
″ ″	F12-N13	″	″	N7-N14	″	← Vertical	N6-N13	2-9″ [6¾″ b.to b. ⅜″ Pl.
″ ″	N12-F13	″	″	F2-F9	″			



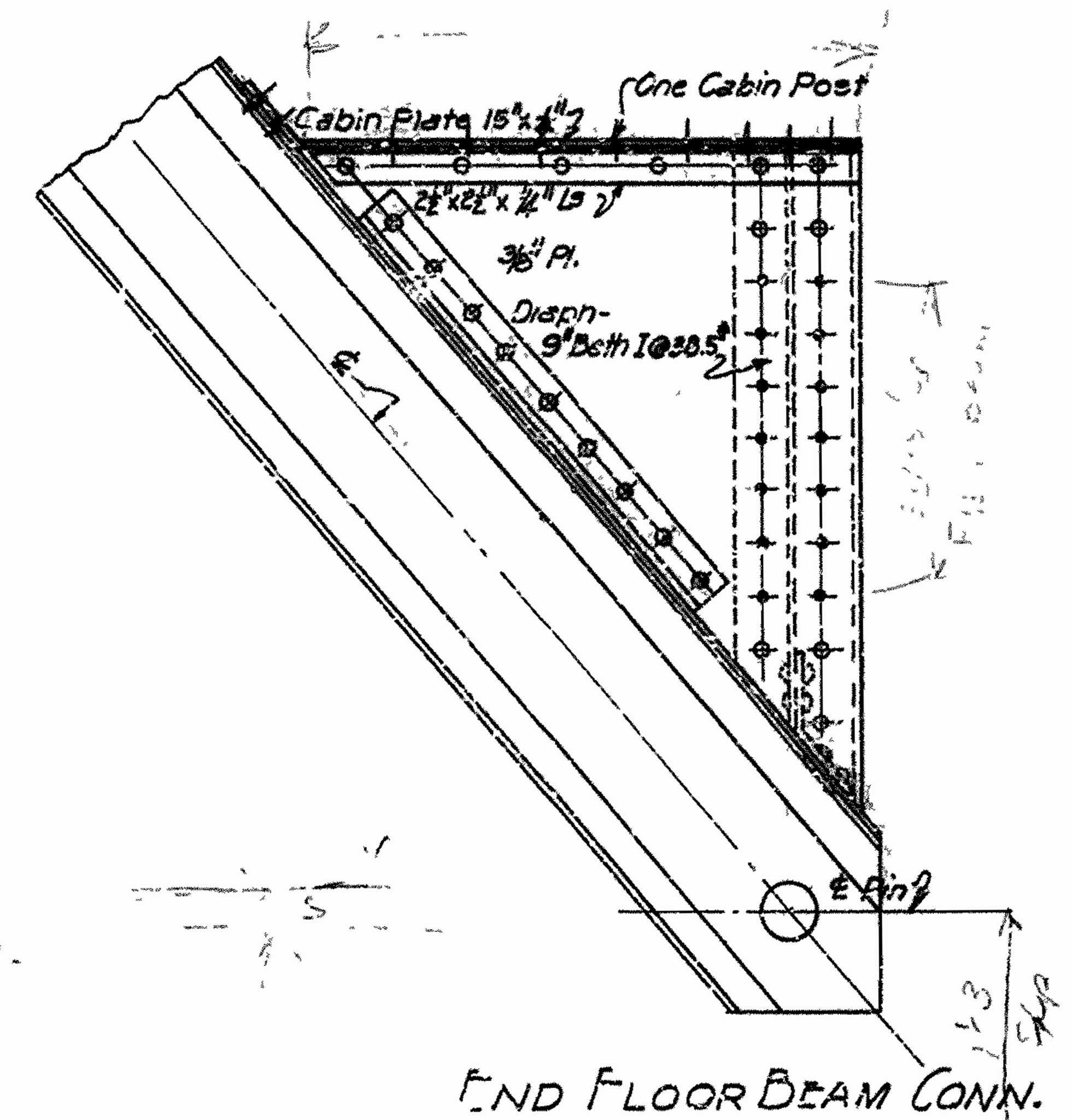
BOTTOM LATERALS

TOP LATERALS





SWAY BRACING



END FLOOR BEAM CONN.

204,500 # in Truss

DETAILS OF 180' TRUSS SPAN
ST. FRANCIS BAY BRIDGE
OVER CROSS COUNTY DRAINAGE DITCH
ROUTE 42 SEC. 3.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.A.M. Date: 4-9-43
Traced By: L.A.M. Date: 4-12-43
Checked By: ______ Date: ______
Scale: 1 in. = ___ ft. No Scale

PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

BRIDGE NO. 2011 DRAWING NO. 6423