

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	5	1975	1	3
PROJECT NUMBER				
L 75-13				
R.O.W. PROJECT NUMBER				

IOWA
DEPARTMENT OF TRANSPORTATION
Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE
SECONDARY ROAD SYSTEM
CRAWFORD COUNTY
99'-10" X 24'-0" I-BEAM BRIDGE
PROJECT NO. L 75-13

SCALES AS NOTED

IOWA STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS SERIES 1972 PLUS CURRENT SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS OF THE IOWA DEPARTMENT OF TRANSPORTATION-- HIGHWAY DIVISION SHALL APPLY TO WORK ON THIS PROJECT.

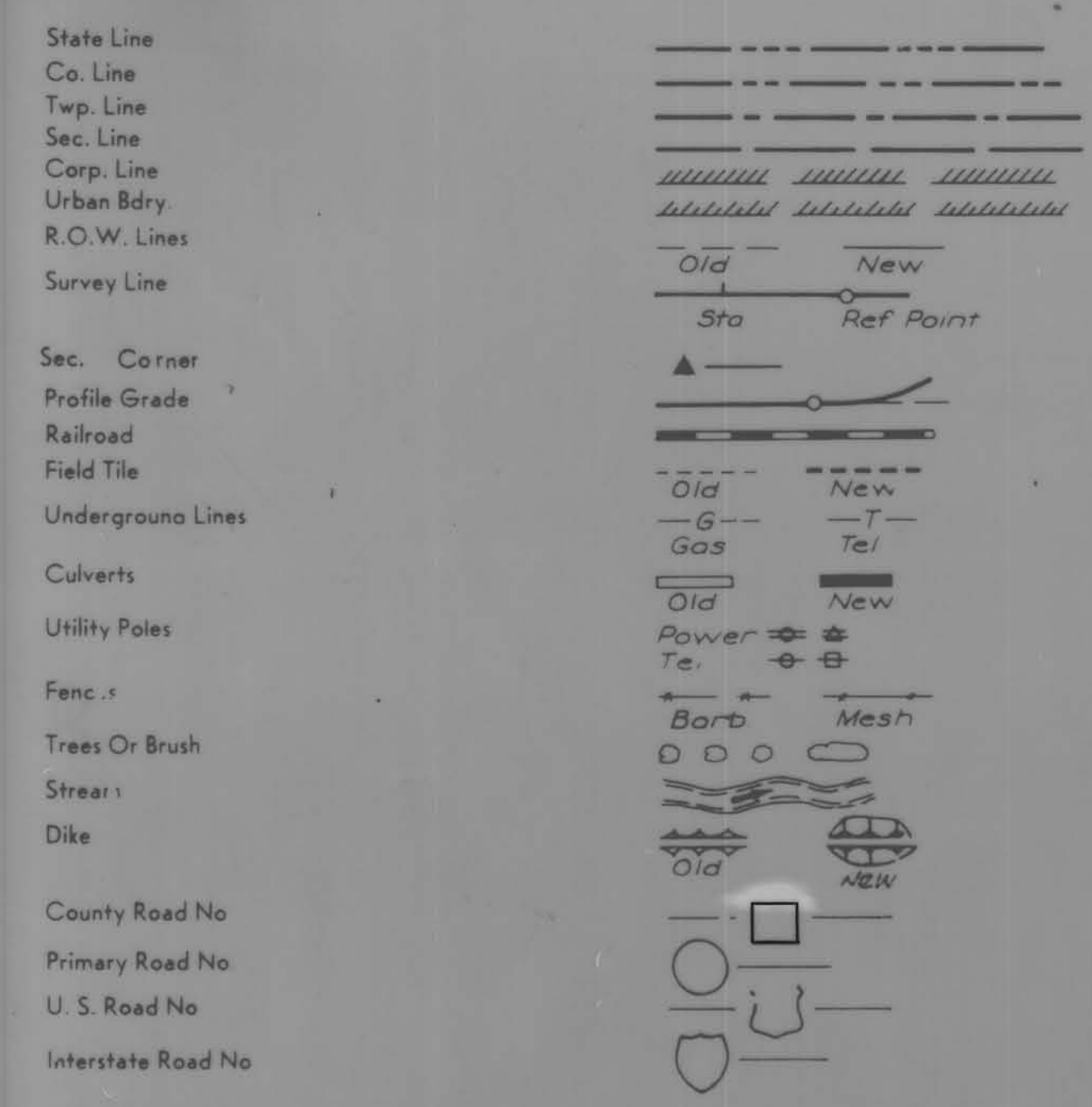
INDEX OF SHEETS

SHEET NO.	ITEM
1	TITLE SHEET, ESTIMATE OF QUANTITIES, MILEAGE SUMMARY, LOCATION MAP, AND CONVENTIONAL SIGNS.
2	PLAN AND PROFILE SHEET
3	DETAILS

MILEAGE SUMMARY

99'-10" = 0.01891 MILE

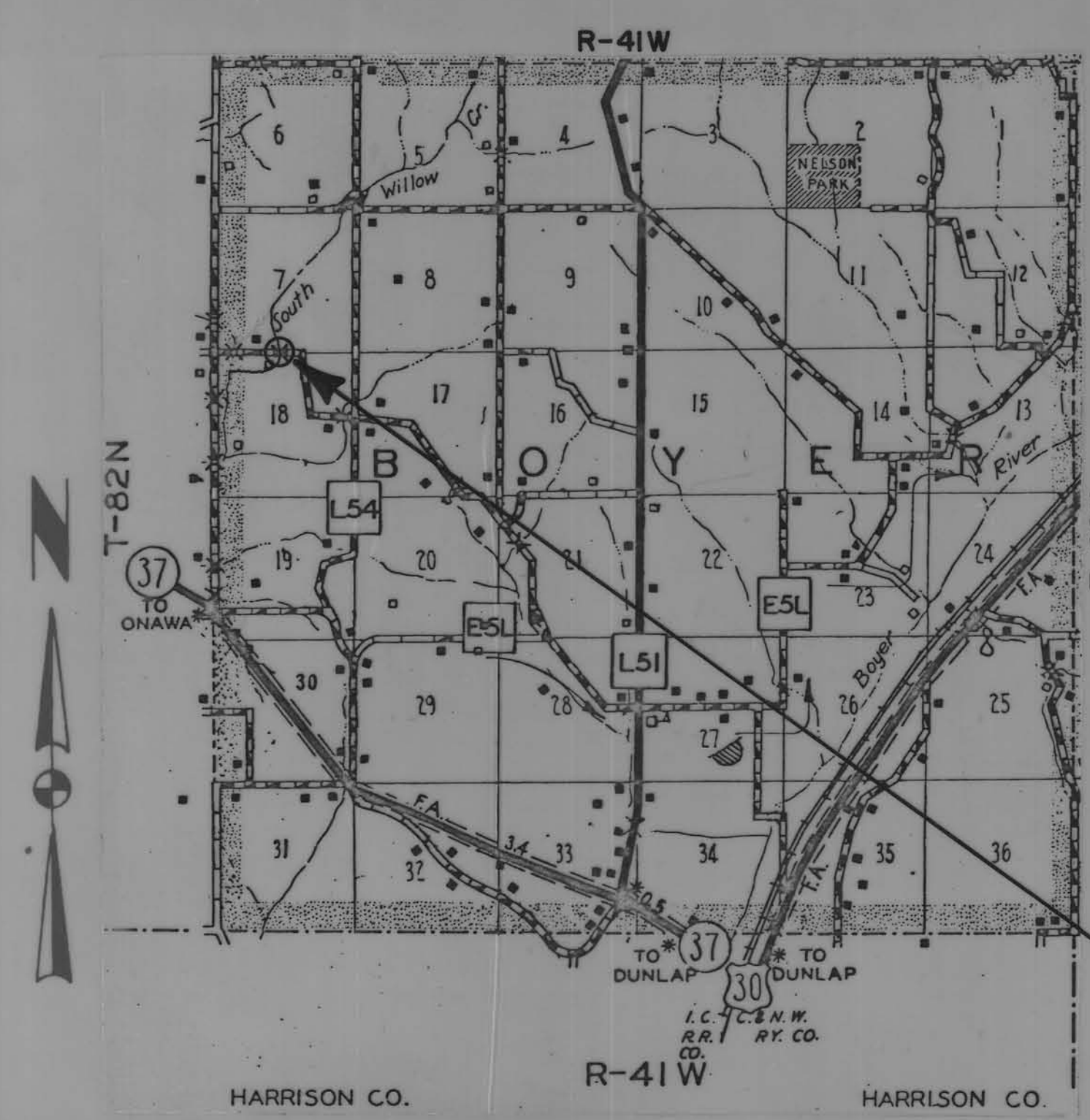
CONVENTIONAL SIGNS



LETTING DATE

PROJECT NO. L 75-13 SEC. 7-18		STA. 9+26.0 BOYER TOWNSHIP			
99'-10" X 24'-0" I-BEAM BRIDGE					
ITEM NO.	ITEM	ABUTMENTS	PIERS	SUPERSTRUCTURE	TOTALS
1	STRUCTURAL CONCRETE CLASS C	14.8 CU.YDS.	13.5 CU.YDS.	—	28.3 CU.YDS.
2	REINFORCING STEEL	1845 LBS.	1394 LBS.	—	3239 LBS.
3	CREOSOTED PILING 12 @ 35'	420 L.F.	—	—	420 L.F.
4	STEEL H PILING 12 @ 60' 10BP 42	—	720 L.F.	—	720 L.F.
5	CREOSOTED WING PILING 4 @ 20'	80 L.F.	—	—	80 L.F.
6	CREOSOTED LUMBER	954 FBM	—	13,248 FBM	14,202 FBM
7	EXCAV. CLASS 10 CHANNEL	—	—	—	700 CU.YDS.
8	EXCAV. CLASS 20	28 CU.YDS.	—	—	28 CU.YDS.
9	STRUCTURAL STEEL	—	—	59,604 LBS.	59,604 LBS.
10	STEEL HANDRAIL	—	—	204 LIN.FT.	204 LIN.FT.
11	REMOVALS	—	—	—	LUMP SUM

NOTE:
CRAWFORD COUNTY TO FURNISH ALL MATERIALS EXCEPT STRUCTURAL CONCRETE AND REINFORCING STEEL. STRUCTURAL STEEL DOES NOT INCLUDE HARDWARE OR 6" X 6" STEEL ANGLES.
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL WHICH IS NOT DESIRABLE TO BE INCORPORATED IN THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. USABLE MATERIAL SHALL BECOME THE PROPERTY OF CRAWFORD COUNTY.



STA. 9+26.0 $\frac{1}{2}$ BRIDGE
99'-10" X 24'-0" I-BEAM BRIDGE

APPROVED
Eileen Seider
Charles J. Smith
LeRoy A. Hansohn
Don H. Green
Sam Rouse
BOARD OF SUPERVISORS

DISTRICT PLANNING ENGINEER
IOWA DEPT. OF TRANSPORTATION
HIGHWAY DIVISION
APPROVED *Thomas E. DeWitte* DATE 12-23-75

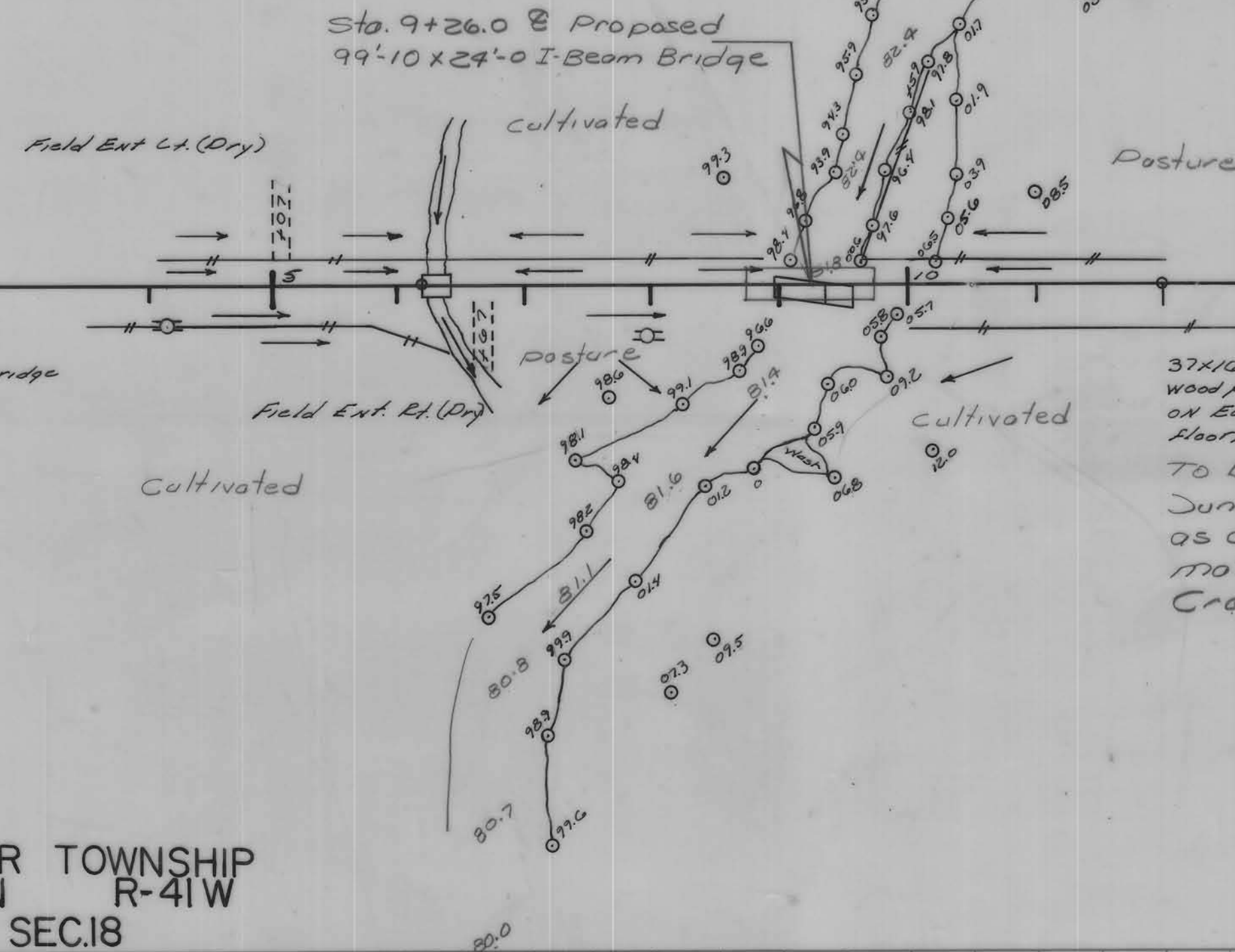
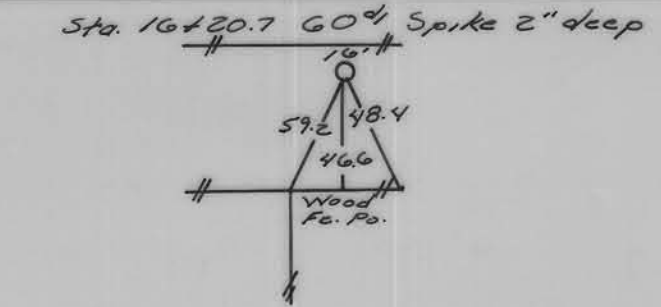
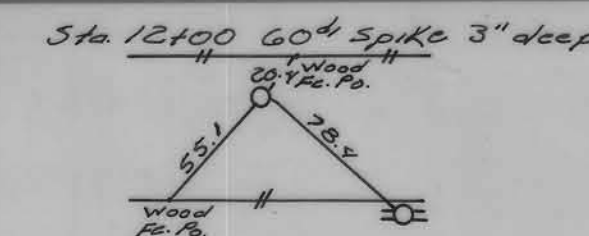
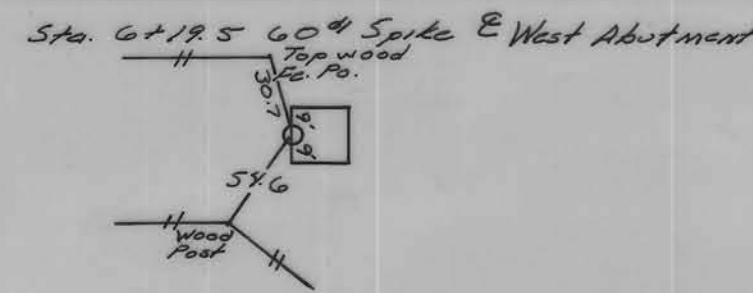
DEPARTMENT OF TRANSPORTATION
IOWA
Highway Division
APPROVED
DEPUTY CHIEF ENGINEER DATE

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY SUPERVISION AND THAT ENGINEERING DECISIONS WITH REGARD TO THE DESIGN WERE MADE BY ME OR BY OTHER DULY REGISTERED PROFESSIONAL ENGINEERS UNDER THE LAWS OF THE STATE OF IOWA.
H. Dale Wright Dec 22, 1975
IOWA REGISTRATION NUMBER 5798 DATE

DEPARTMENT OF TRANSPORTATION
IOWA
Highway Division
APPROVED
DEPUTY CHIEF ENGINEER DATE

(1971) TRAFFIC COUNT 33 V.P.D.

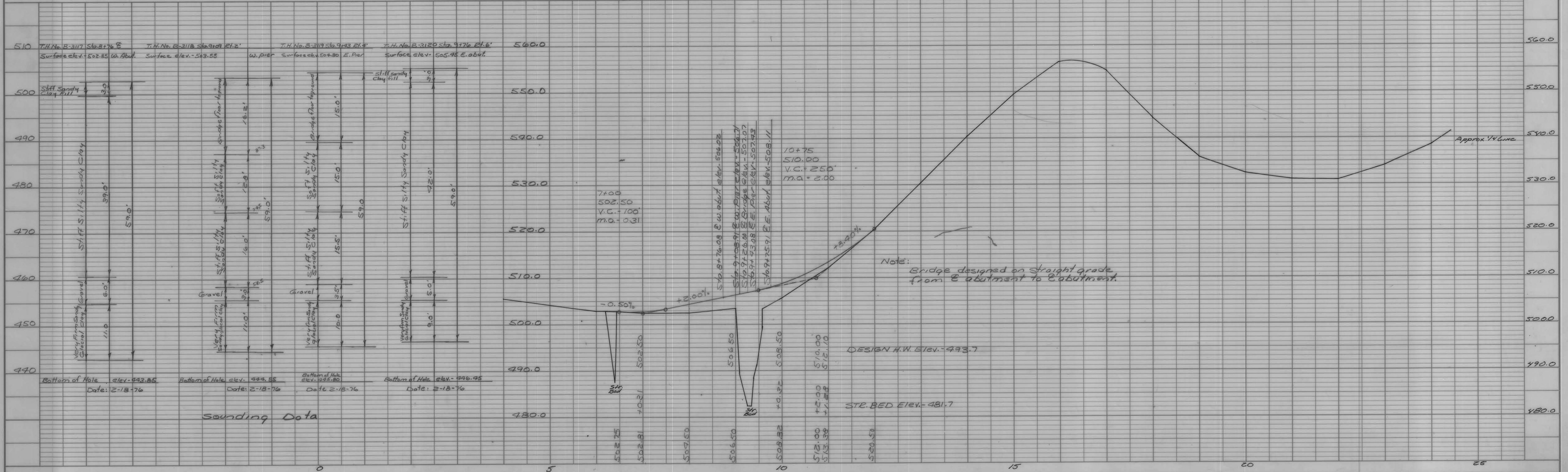
BOYER TOWNSHIP
T-82N R-41W
SEC.7



37x16' I Beam Bridge, wood caps, wood floors, wood piling, & backing. With 24"x16" wood approach on East and wood stringers, piling, backing, floor, & caps. New backing on East Abutment to be removed by contractor for junk, and pile within 300' of site as directed by Engineer. All salvageable material to remain property of Crawford County.

BOYER TOWNSHIP
T-82N R-41W
SEC.18

BM¹ SPIKE IN POWER POLE 38' RT. STA. 8+00 ELEV=500.00

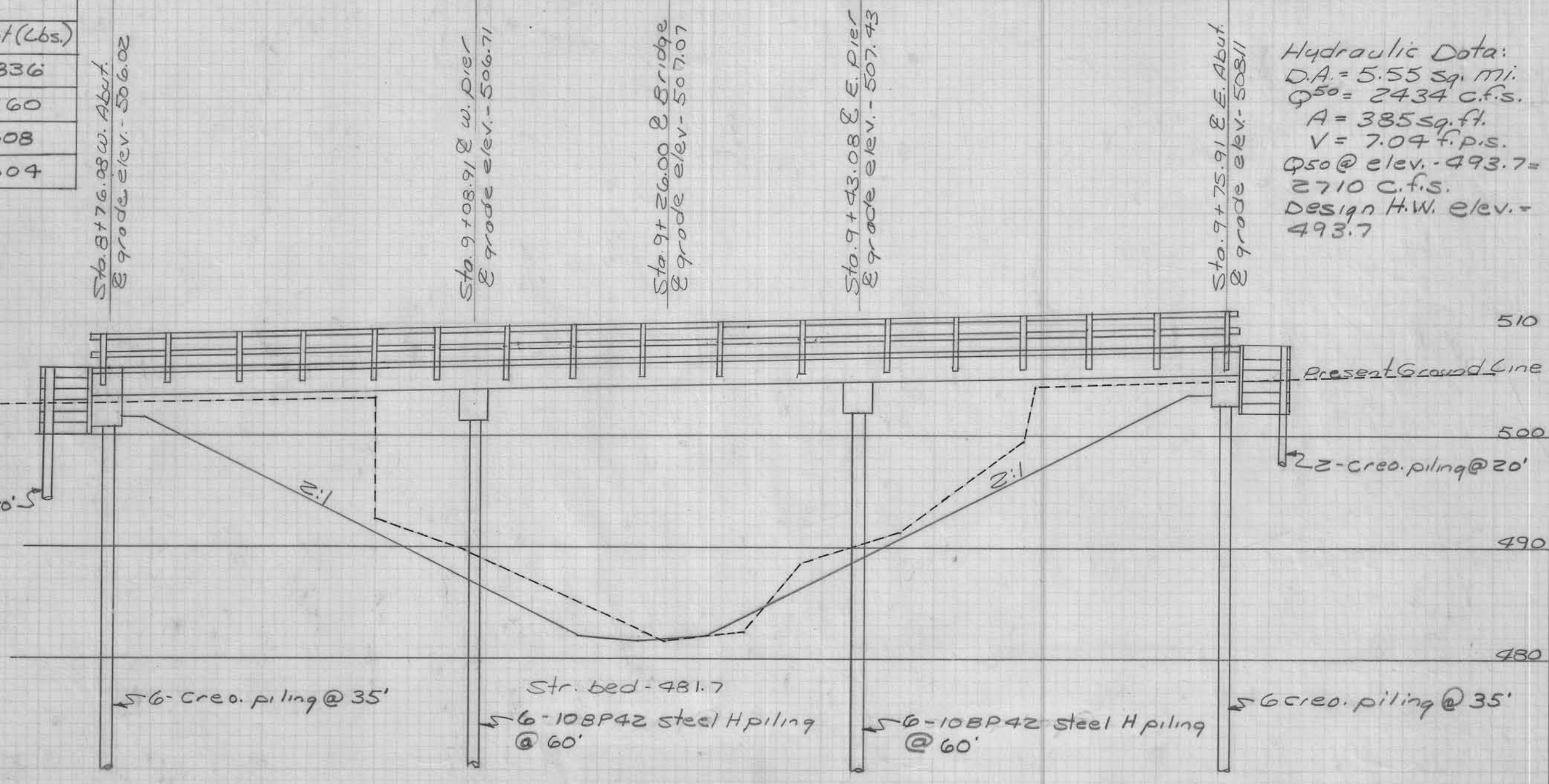
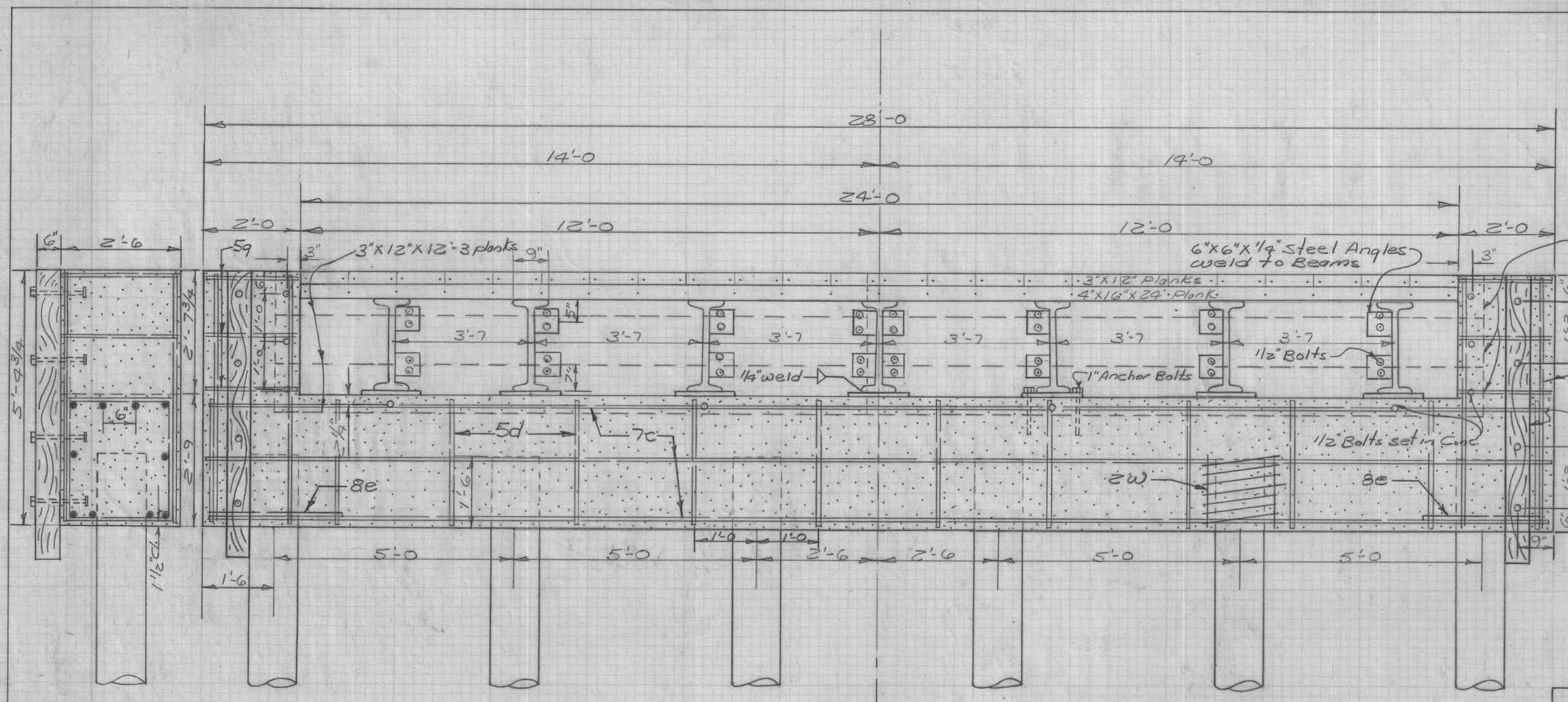


PLAN
DATE
BY
CHECKED
NO. OF REVISIONS CHECKED
NO.

PROFILE
DATE
BY
CHECKED
NO. OF REVISIONS CHECKED
NO.

Structural Steel		
Item	No	Weight (Lbs.)
24" x 34" WF @ 74#	21	52,836
Steel Diaphragms @ 40#	36	5,160
Bearing Plates	42	1,608
Total Weight (Lbs.)		59,604

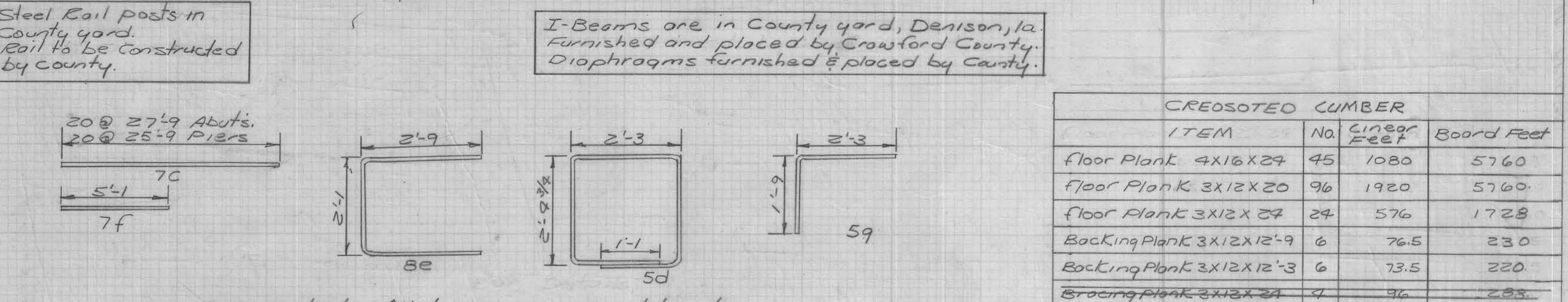
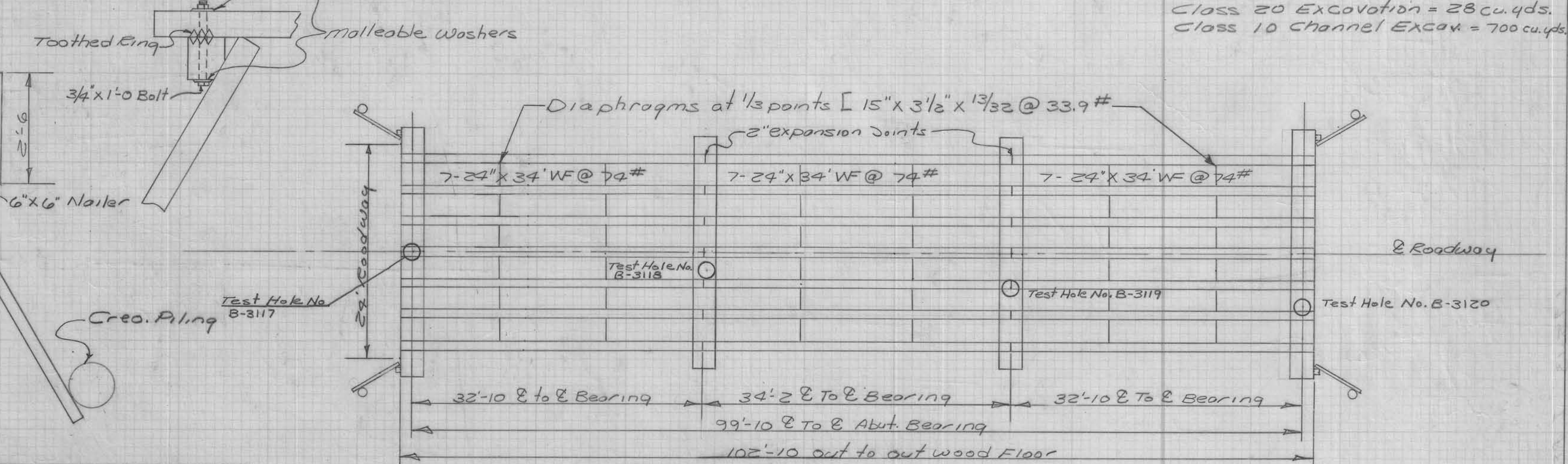
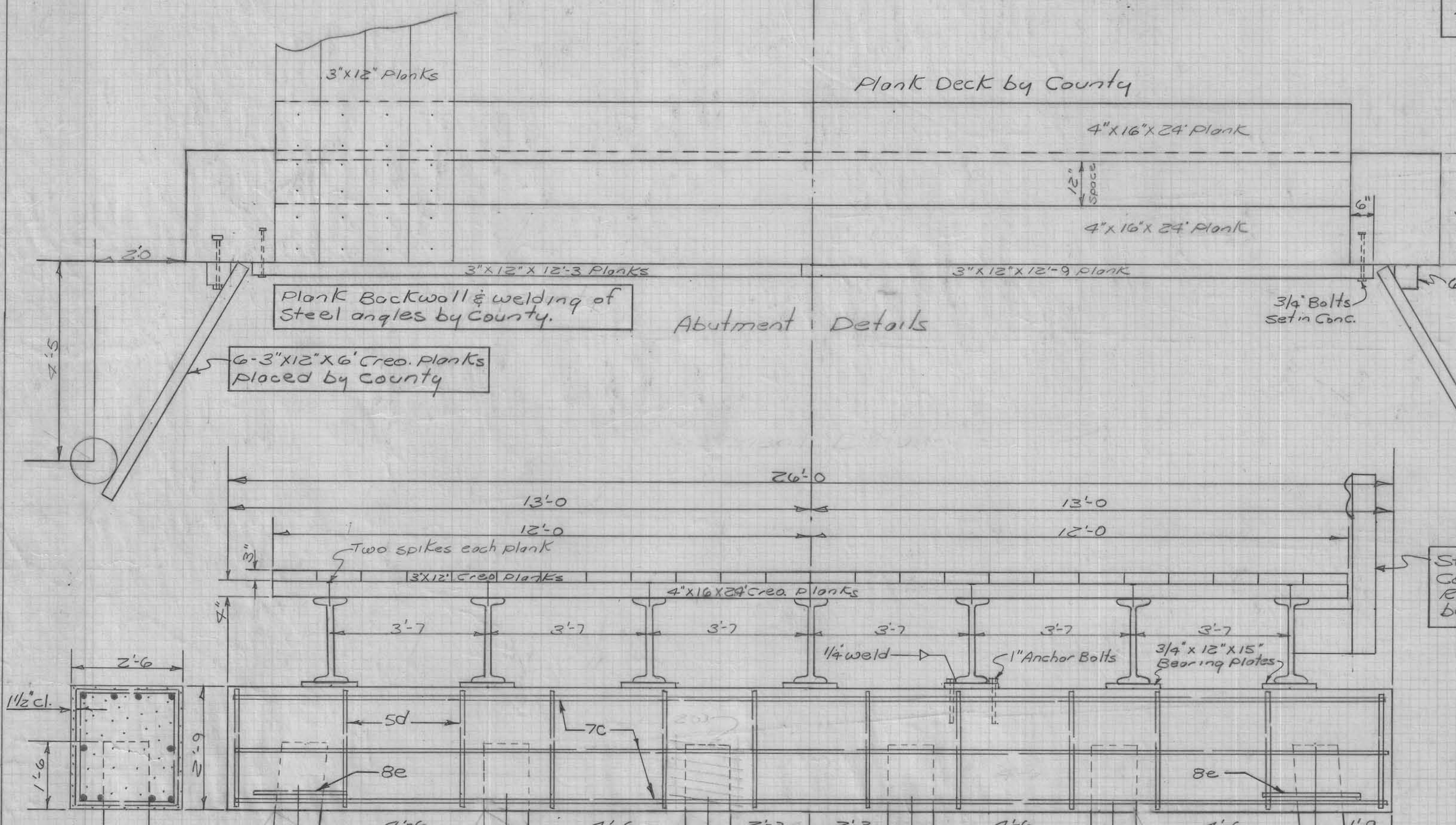
Hydraulic Data:
 D.A. = 5.55 sq. ft.
 Q₅₀ = 2434 c.f.s.
 A = 385 sq. ft.
 V = 7.07 f.p.s.
 Q₅₀ @ elev. - 493.7 =
 2710 c.f.s.
 Design H.W. elev. =
 493.7



Bearing Plates, Bolts, piling, and Creosoted Lumber furnished by County.

West Abutment Top Abut. - 503.96 Piling cut off - 502.21 Bearing required - 18 Ton	West Pier Top pier Cap - 504.15 Piling cut off - 502.90 Bearing required - 25T	East Pier Top pier Cap - 504.87 Piling cut off - 503.62 Bearing required - 25T	East Abutment Top Abut. - 505.55 Piling cut off - 504.30 Bearing required - 18 Ton
---	---	---	---

Class 20 Excavation = 28 cu. yds.
 Class 10 Channel Excav. = 700 cu. yds.



CREOSOTED LUMBER

ITEM	No.	Linear Feet	Board Feet
Floor Plank 4x16x24	45	1080	5760
Floor Plank 3x12x20	96	1920	5760
Floor Plank 3x12x24	24	576	1728
Backing Plank 3x12x12-9	6	76.5	230
Backing Plank 3x12x12-3	6	73.5	220
Bracing Plank 3x12x24	4	96	288
Bracing Plank 3x12x6	4	24	72
Wing Plank 3x12x6	24	144	432
Nailer 6x6x6	4	24	72
Total Board Feet			14,202

2-Abutments Reinforcing Steel				2-Piers Reinforcing Steel			
Bar Size	Length	No.	Weight	Bar Size	Length	No.	Weight
C	27'-9"	20	1134	C	25'-9"	20	1053
d	10'-4 1/2"	24	260	d	10'-4 1/2"	24	260
e	7'-7"	4	81	e	7'-7"	4	81
f	5'-1"	16	166	f	5'-1"	16	166
g	4'-0"	24	100	g	4'-0"	24	100
2w	38'-0"	12	77	2w	38'-0"	12	77
spacers	7/8"	24	27	spacers	7/8"	24	27
Total Weight (Lbs.)			1845	Total Weight (Lbs.)			1374

Two Abutments Class 'C' concrete
 14.8 cu. yds.

Two Piers Class 'C' concrete
 13.5 cu. yds.

Design For
 99'-10" x 24'-0" I-Beam Bridge
 wood piling wood floor
 Concrete Caps Steel Rail
 H-15 Loading
 over South Willow Creek

