


INDEX OF SHEETS

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37	STEEL RAILING, TYPE 2399
38-41	EXISTING BRIDGE PLANS S.N. 034-3302 


LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
630001-12	STEEL PLATE BEAM GUARDRAIL
630106-02	LONG-SPAN GUARDRAIL OVER CULVERT
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY FROM EDGE OF PAVEMENT
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
782001-01	CURB REFLECTORS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 26-3	STEEL PLATE BEAM GUARDRAIL 29" HEIGHT

GENERAL NOTES

- THIS PROJECT IS LOCATED ON VARIOUS ROUTES IN HANCOCK COUNTY. THE WORK INCLUDED IN THE SECTION CONSISTS OF VARIOUS TYPES OF GUARDRAIL REMOVAL, REPLACEMENT, AND ALL OTHER WORK NECESSARY TO COMPLETE THE PROJECT.
- NO MATERIAL SHALL BE LEFT ON OR NEAR THE ROADWAY DURING NON-WORKING HOURS.
- ANY NECESSARY TRAFFIC CONTROL WILL BE PROVIDED BY THE CONTRACTOR. APPROPRIATE STANDARDS ARE INCLUDED IN THE PLANS AND CONTRACT DOCUMENTS.
- ILLINOIS STATE LAW REQUIRES 48 HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (PHONE 800-892-0123) OR FOR NON-MEMBERS THE UTILITY COMPANY DIRECTLY.
- WHEN NO WORK IS BEING PERFORMED, THE FLAGGERS WILL NOT BE REQUIRED. IF THE FLAGGERS ARE NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.
- ARTICLE 701.20 OF THE STANDARD SPECIFICATIONS DISCUSSES AN ADJUSTED UNIT PRICE. NO ADJUSTMENTS SHALL BE MADE TO THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS FOR THIS CONTRACT.
- THE CONTRACTOR IS ADVISED THAT THE GUARDRAIL AND TERMINAL PAY ITEMS INCLUDED IN THE PLANS WILL BE USED TO REPLACE STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS FOR EITHER CURRENT MIDWEST STYLES OR STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS INSTALLED PRIOR TO JANUARY 1, 2007. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UTILIZING THE CURRENT MIDWEST STANDARDS.
- SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
- THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.
- ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE REVISION NUMBER SHOWN IN THE LIST OF ILLINOIS DOT HIGHWAY STANDARDS OR THE COPY INCLUDED IN THESE PLANS.
- GUARDRAIL POSTS THAT NEED TO BE DRIVEN THROUGH EXISTING HOT-MIX ASPHALT SHOULDERS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF STEEL PLATE BEAM GUARDRAIL.
- REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY MUST BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS SHALL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.
- GUARDRAIL REFLECTORS SHALL NOT BE ATTACHED TO TERMINAL SECTIONS.
- FURNISHED EXCAVATION, AS SHOWN, IS FOR CONSTRUCTION OF THE PROPOSED SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS AND FOR SHOULDER WIDENING ALONG STEEL PLATE BEAM GUARDRAIL AS NEEDED. SHOULDER WIDENING AT TYPE 1 (SPECIAL) TERMINALS SHALL BE AS SHOWN ON STANDARD 630301. SHOULDER WIDENING AT STEEL PLATE BEAM GUARDRAIL TYPE A, SIX FOOT POSTS WILL BE TWO FEET BEHIND THE POST AS SHOWN ON STANDARD 630001. SHOULDER WIDENING AT STEEL PLATE BEAM GUARDRAIL TYPE A, NINE FOOT POSTS WILL BE TO THE FACE OF THE POST AS SHOWN ON STANDARD 630001. QUANTITIES SHOWN ARE APPROXIMATE.
- TERMINAL MARKERS - DIRECT APPLIED SHALL BE USED AT ALL PROPOSED TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT LOCATIONS AND AT ALL OTHER EXISTING LOCATIONS AS NOTED ON THE PLANS.
- EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES STEEPER THAN 1:2.



JOB = 2528.1	DESIGNED - CGF	REVISED -  5/31/2019
FILE NAME = 2528.1-shr-gen.dgn	DRAWN - CGF	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - NAK	REVISED -
PLOT DATE = 3/7/2019	DATE - 1/29/2018	REVISED -

**HANCOCK COUNTY
GUARDRAIL IMPROVEMENTS**

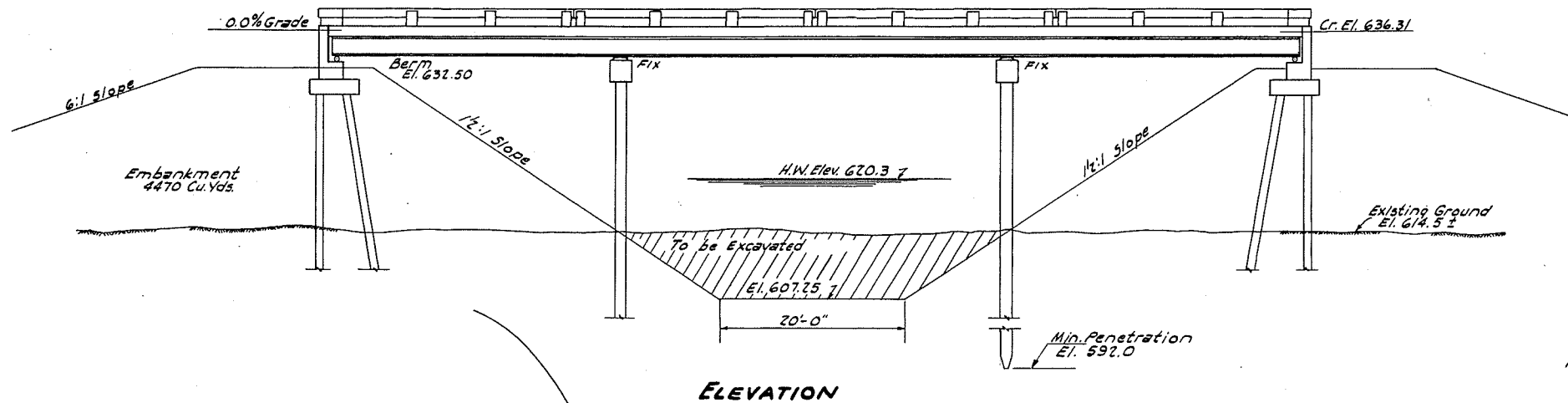
**INDEX OF SHEETS, GENERAL NOTES,
AND STANDARDS**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

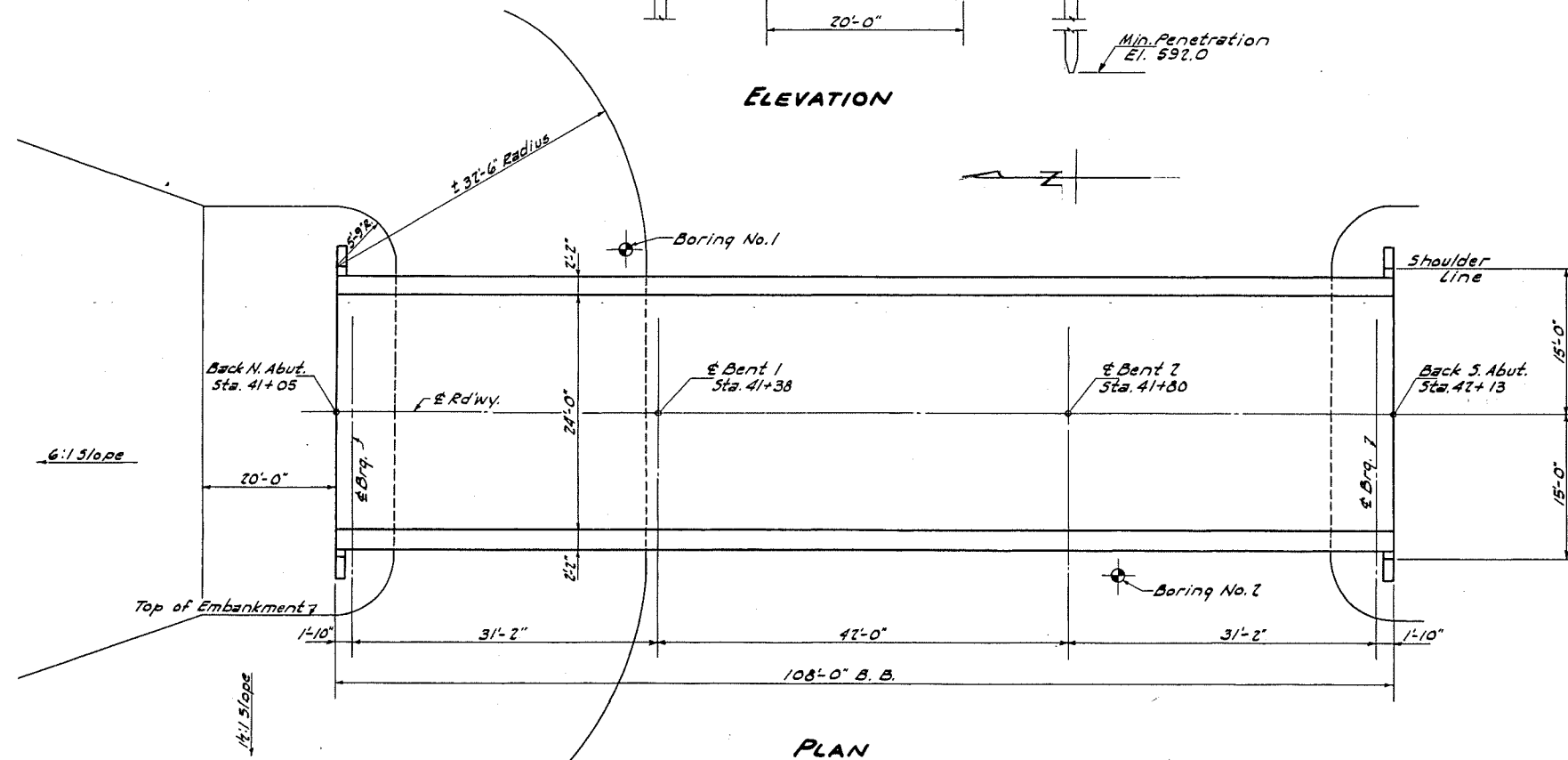
ROUTE VARIOUS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-00132-00-CR	HANCOCK	37	2
CONTRACT NO. 93728				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

No existing Structure
 B.M.#3 - 6" spike in pile of R.R.
 Crestle Rt. Sta. 41+68
 Elev. 618.89

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAS #31	30-1G	HANCOCK	25	18
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT 5-573 (4)	



ELEVATION



PLAN

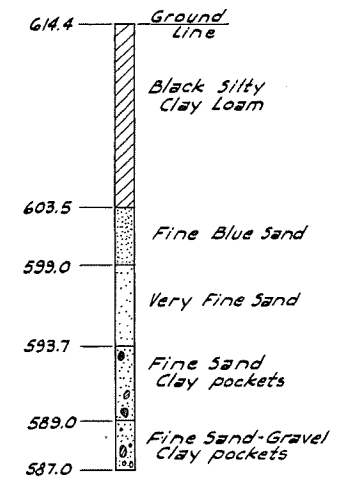
WATERWAY INFORMATION
 Drainage Area 4500 Acres
 Character Rolling-Wooded-Cultivated
 Required Opening (15 Year Flood) 310'±
 Opening Provided 480'

MUD CREEK
 STATION 41+59
 BUILT 1958
 F.A.S. Rt. 431 SEC. 30-1G
 F.A. Proj. 5-573 (4)
 LOADING H15-512

LETTERING - NAME PLATE
 See Standard 2113

GENERAL NOTES

Class X Concrete shall be used thru-out except in handrail.
 Handrail Concrete shall be used in handrail.
 All connections shall be riveted except field connections which may be High Strength Bolts at the approval of the Engineer.
 Rivets 3/4" and open holes 3/8" except as noted.
 All holes for beam splices shall be punched 1/4" and reamed to size with stringers assembled in the shop in proper position.
 Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. All paint to be furnished by the Contractor. Inspection of Structural Steel by Illinois Division of Highways.
 Anchor Bolts shall be set before diaphragms are riveted over Abutts. and Bents.
 The Contractor shall drive one timber and one concrete test pile as directed by the Engineer before ordering the remainder of the piling. The precast concrete pile shall be driven in a permanent location.
 Embankment at abutments shall be constructed to the lines shown before driving piles, see special provisions.



TEST HOLES 1-2 (Same)

BORING DATA

TOTAL BILL OF MATERIAL

ITEM	SUPER.	SUBSTR.	TOTAL
Class X Concrete	Cu.Yds. 76.5	57.6	134.1
Handrail Concrete	Cu.Yds. 5.0		5.0
Reinforcement Bars	Lbs. 16360	4560	20920
Structural Steel	Lbs. 54110		54110
Creosoted Piles (35'lg)	Lin.Ft. 700		700
Precast Conc. Piles (6')	Lin.Ft. 405		405
Test Piles (Timber)	Ea.		one
Test Piles (Precast Conc.)	Ea.		one
Name Plates	Ea.		one

DESIGN DATA
 LOADING H15-512
 fc (with Earth Pressure) 1000 p.s.i.
 fc (w/o Earth Pressure) 1400 p.s.i.
 fs Reinf. 20000 p.s.i.
 fs Structural 18000 p.s.i.
 n = 10

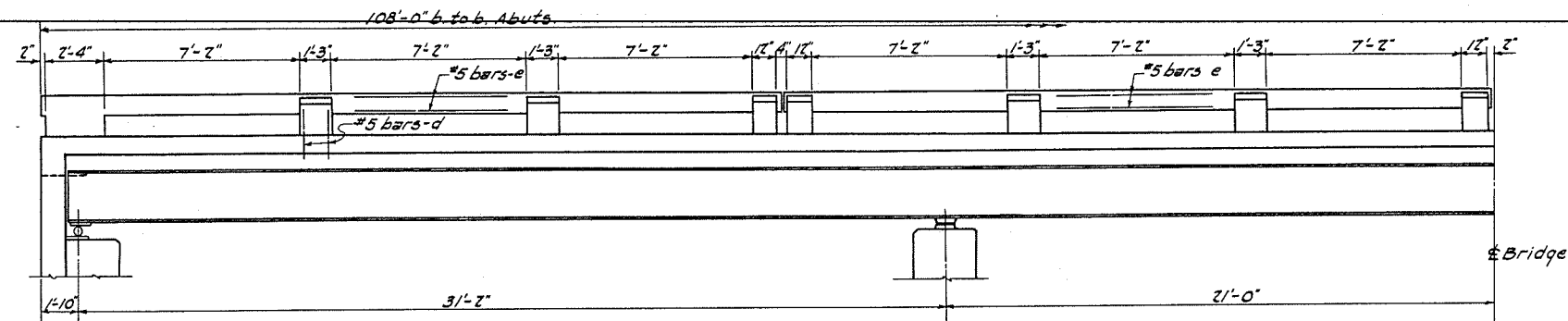
Sheet 38
 CONTRACT NO.: 93728 - LOCATION 55 (SN 034-3302)
 NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY DIMENSIONS.

5/31/2019

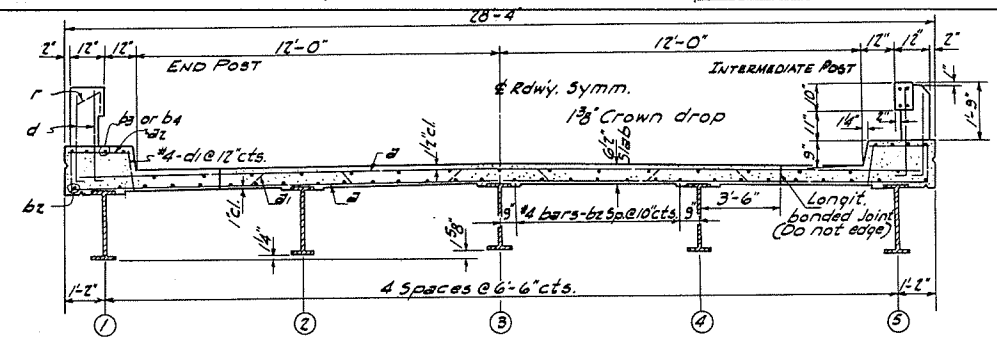
MUD CREEK
 F.A.S. RT. 431 SEC. 30-1G
 PROJ. 5-573 (4)
 HANCOCK COUNTY
 STA. 41+59

Note: For further rail details
See Standard 2070 RB-Type 3B

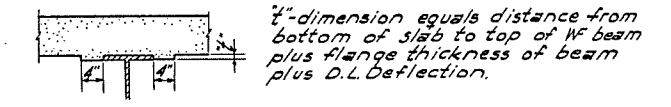
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FAS 431	30-1G	HANCOCK	25	13
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT 5-573(4)	



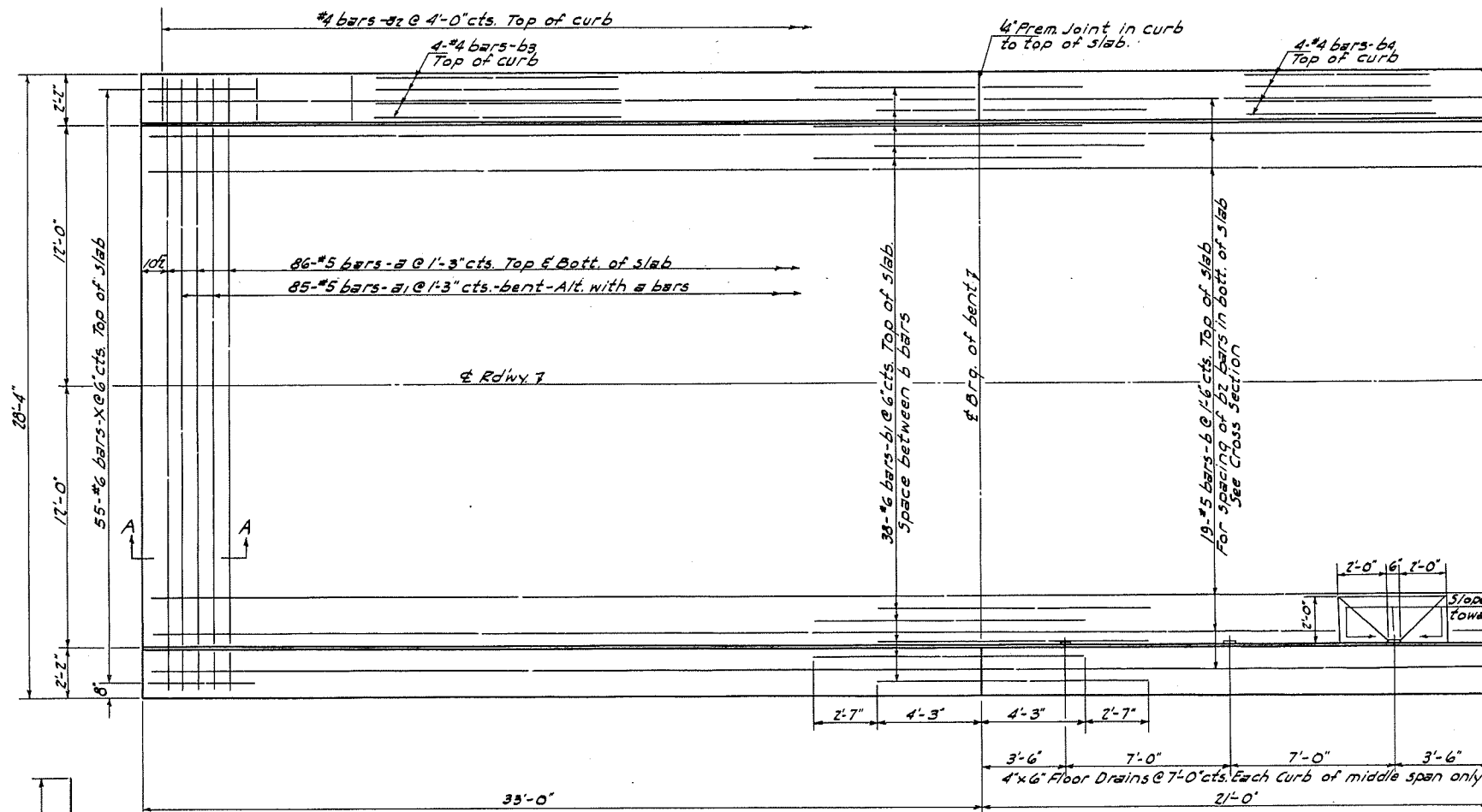
HALF ELEVATION



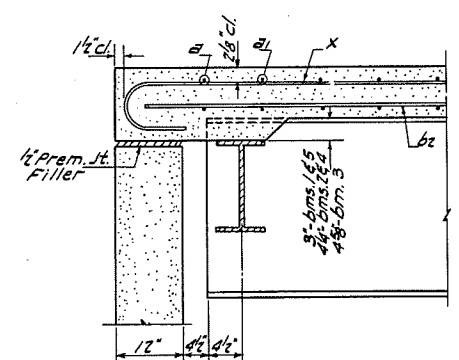
CROSS SECTION



FILLET DETAIL



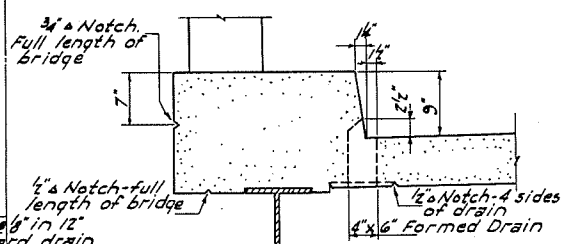
HALF PLAN



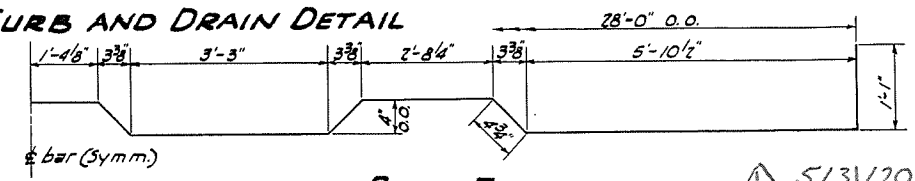
SECTION A-A

BILL OF MATERIAL-SUPERSTR.

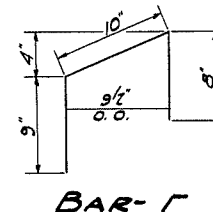
BAR	No.	SIZE	LENGTH	SHAPE
a	172	#5	28'-0"	
a1	85	#5	30'-9"	
a2	54	#4	1'-3"	
b	76	#5	27'-9"	
b1	76	#6	11'-1"	
b2	120	#4	27'-6"	
b3	32	#4	16'-8"	
b4	16	#4	21'-2"	
d	132	#5	3'-0"	L
d1	216	#4	1'-0"	
e	32	#5	26'-2"	
r	64	#4	2'-3"	
x	110	#6	4'-8"	
Class X Concrete			Cu.Yds.	76.5
Reinforcement Bars			Lbs.	16360
Structural Steel			Lbs.	54110
Handrail Concrete			Cu.Yds.	5.0



CURB AND DRAIN DETAIL

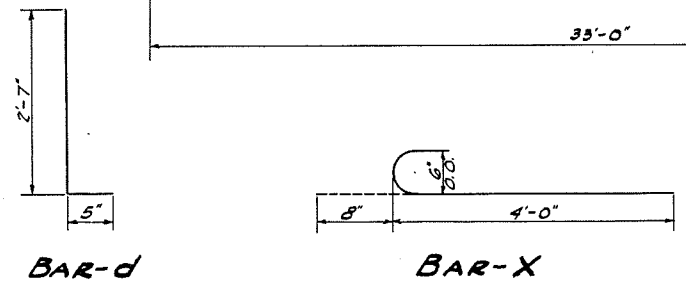


BAR-d



BAR-g

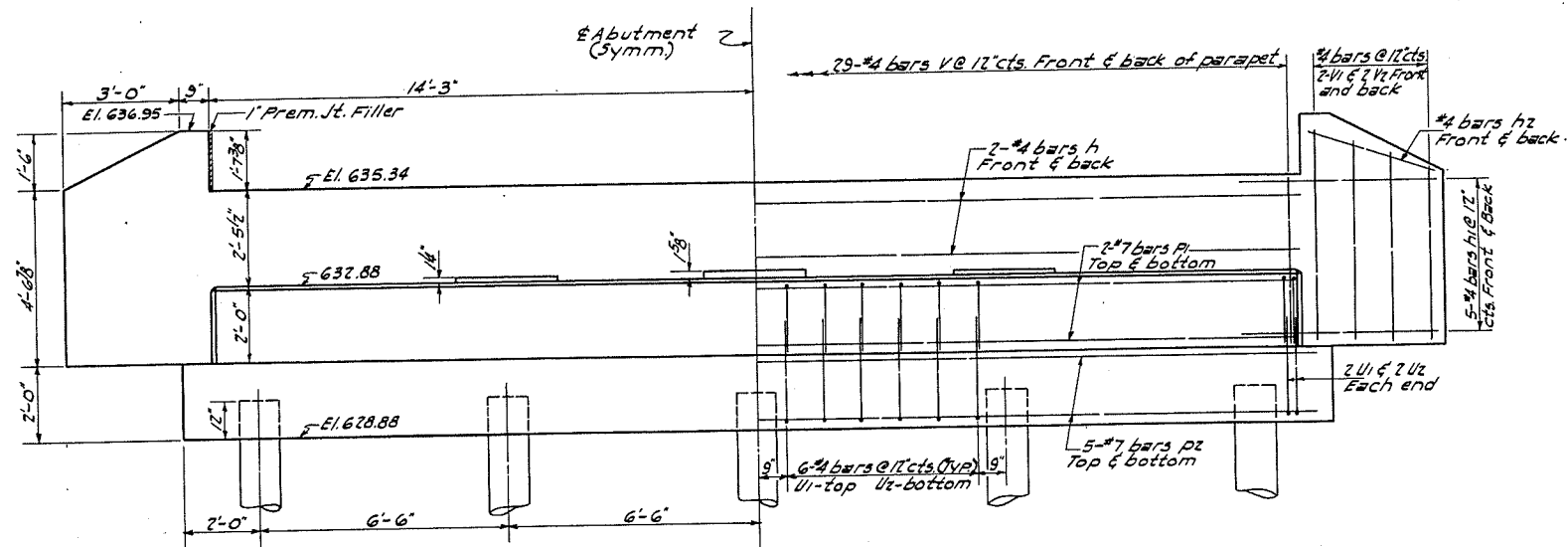
Sheet 39
CONTRACT NO.: 93728 - LOCATION 55 (SN 034-3302)
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BAR-d

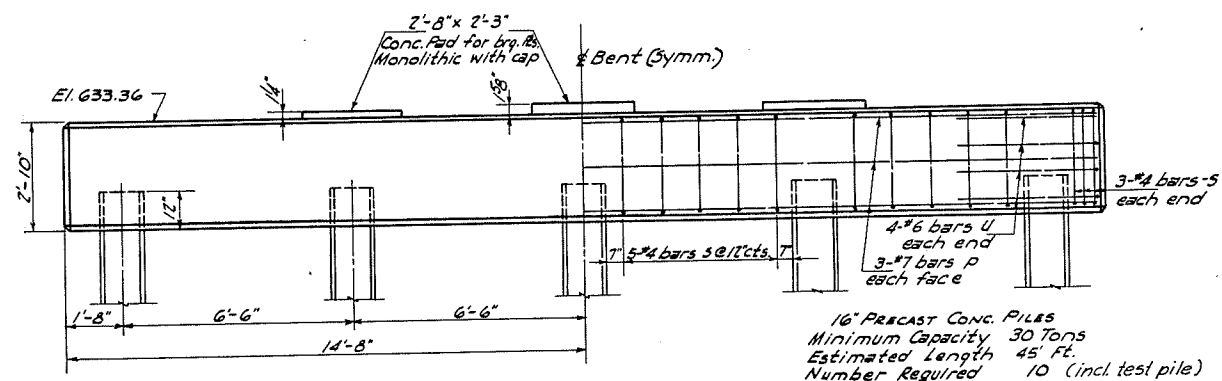
BAR-x

F.A.S. RT. 431 SEC. 30-1G
PROJ. 5-573 (4)
HANCOCK COUNTY
STA. 41+59



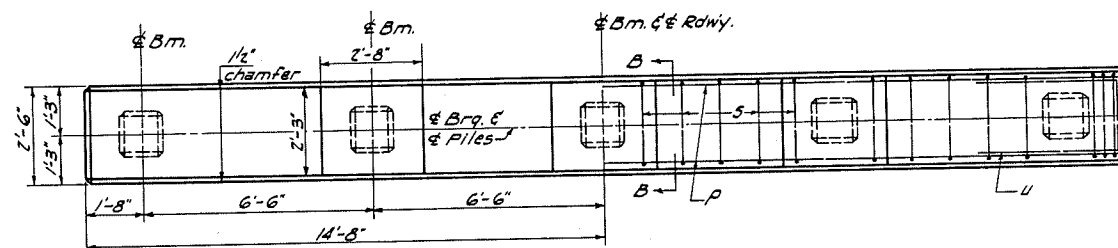
ABUTMENT ELEVATION

CREOSOTED PILES
Minimum Capacity 15 Tons
Estimated Length 35'
Number Required 20

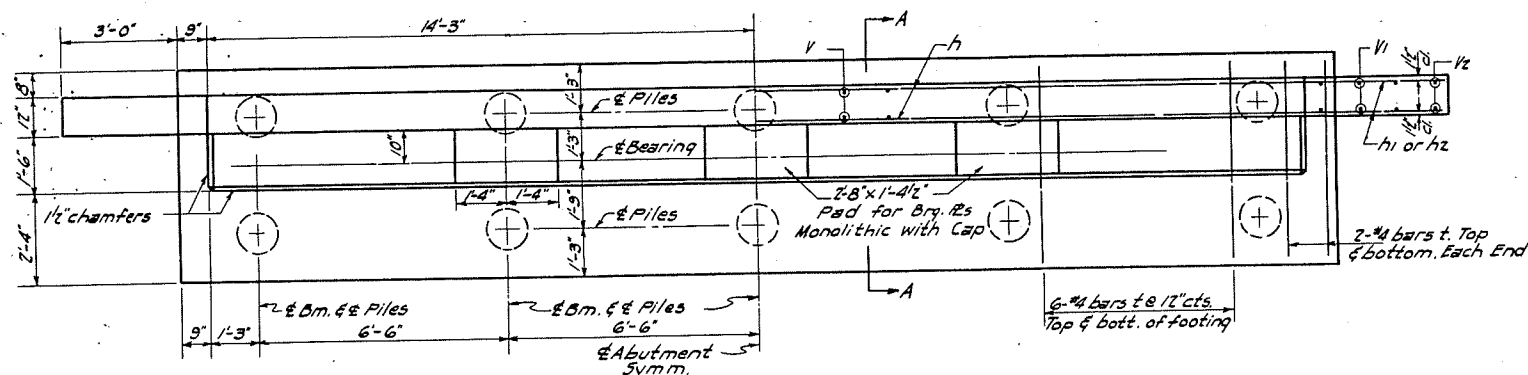


ELEVATION OF BENT

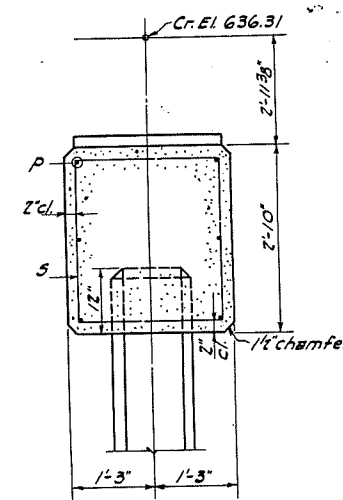
16" PRECAST CONC. PILES
Minimum Capacity 30 Tons
Estimated Length 45' Ft.
Number Required 10 (incl. test pile)



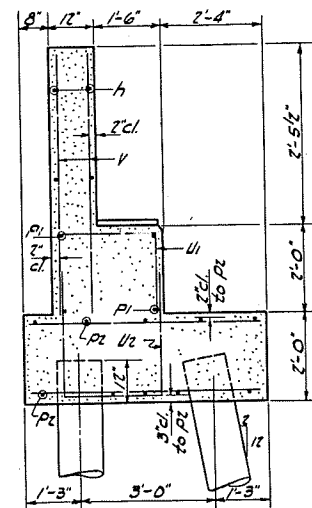
PLAN OF BENT



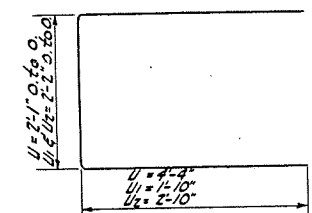
ABUTMENT PLAN



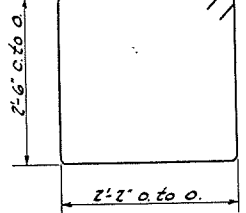
SECTION B-B



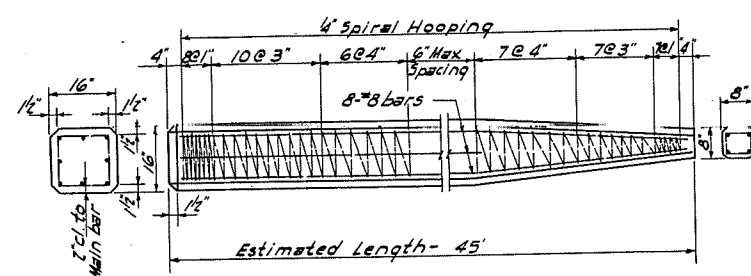
SECTION A-A



BARS U-U1-U2



BAR 5



DETAIL OF PRECAST CONCRETE PILES

NOTE TO CONTRACTOR:
Use three slings placed at .12 x length of pile from each end and at mid-point of pile.

BILL OF MATERIAL
Two Abutments and Two Bents

BAR No.	SIZE	LENGTH	SHAPE
h	#4	28'-6"	---
h1	#4	4'-9"	---
h2	#4	3'-9"	---
P	#7	29'-0"	---
P1	#7	28'-2"	---
P2	#7	29'-9"	---
S	#4	10'-0"	□
t	#4	5'-3"	---
U	#6	10'-9"	---
U1	#4	5'-10"	---
U2	#4	7'-10"	---
V	#4	4'-3"	---
V1	#4	5'-6"	---
V2	#4	4'-6"	---

Class X Concrete	Cu. Yds.	57.6
Reinforcement Bars	Lbs.	4560
Creosoted Piles (35' lq)	Lin. Ft.	700
Timber Test Piles	Each	1
Precast Conc. Piles (45' lq)	Lin. Ft.	405
Concrete Test Piles	Each	1

Sheet 41

CONTRACT NO.: 93728 - LOCATION 55 (SN 034-3302)
NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD-VERIFY DIMENSIONS.

5/31/2019

F.A.S. RT. 431 SEC. 30-16
PROJ. 5-573(4)
HANCOCK COUNTY
STA. 41 + 59

51-05-3000000