

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	(101-B-1)BP	LIVINGSTON	8	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66877		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**FAP ROUTE 68 (IL 23)
SECTION (101-B-1)BP**

**BRIDGE PAINTING
LIVINGSTON COUNTY**

C-93-025-09

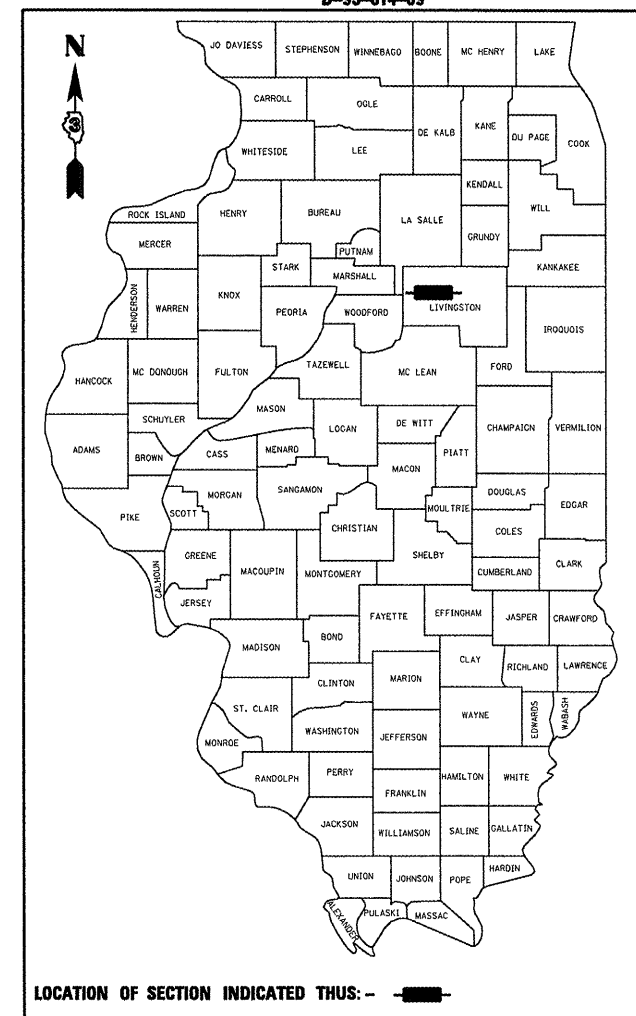
STANDARDS

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTION
- 5 - 8. EXISTING STRUCTURE PLANS

STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-03 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-01 TRAFFIC CONTROL DEVICES

D-93-014-09



FUNCTIONAL CLASSIFICATION
RURAL - MINOR ARTERIAL
F.A.P. ROUTE 68 (IL 23)
2007 ADT = 1700
P.V. = 91.8% M.U. = 2.4% S.U. = 5.9%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

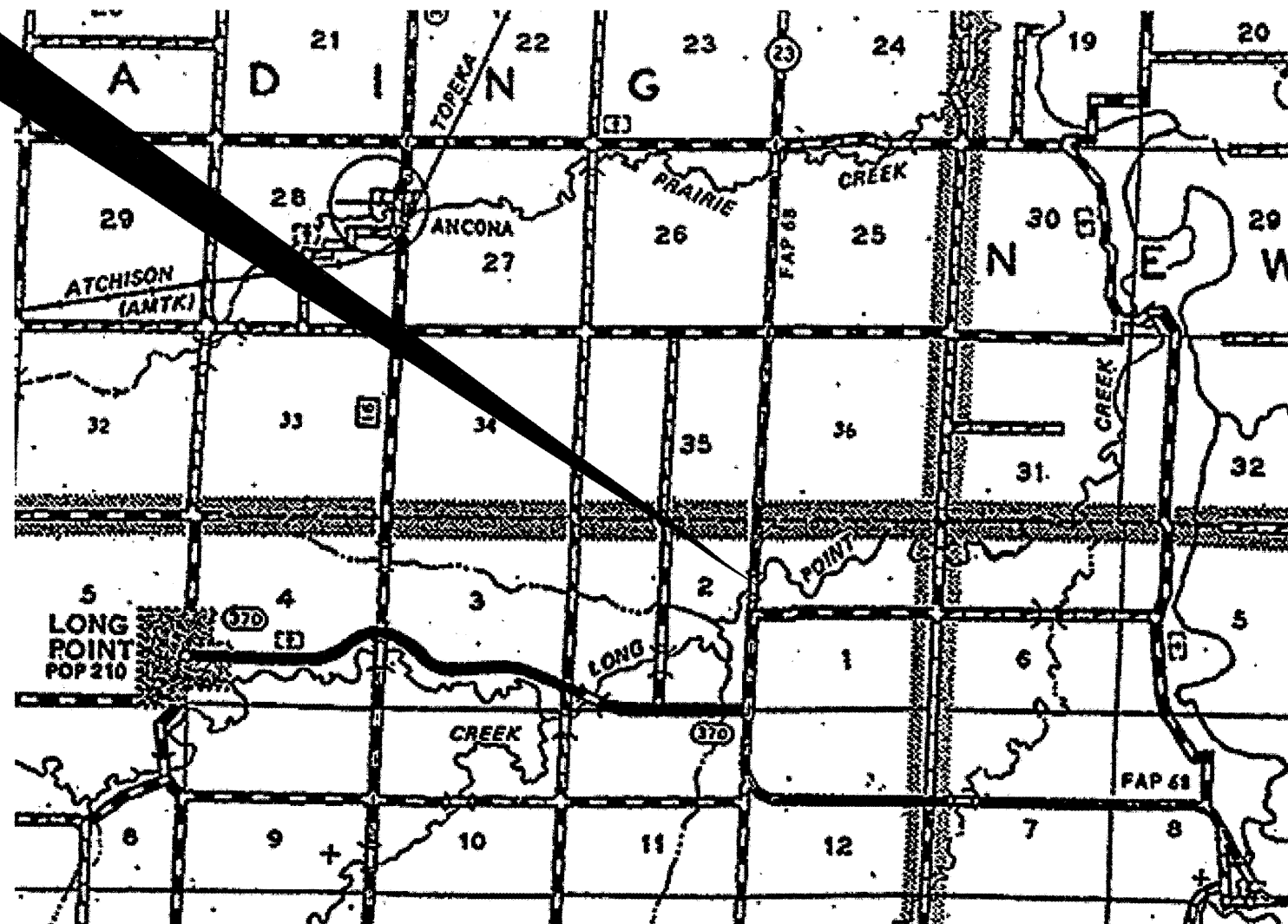
SUBMITTED October 22, 2008
George F. Ryan
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 5, 2008
Eric E. Horn
ENGINEER OF DESIGN AND ENVIRONMENT

December 5, 2008
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

PROJECT LOCATION
SN 053-0154
CARRYING FAP 68 (IL 23) OVER
LONG POINT CREEK
3.46 MILES SOUTH OF IL ROUTE 17



POINT LOCATION

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER JOE KANNEL
UNIT CHIEF RON WOODSHANK

CONTRACT NO. 66877

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID FOR THE WORK.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE CONTRACTOR SHALL BE REQUIRED TO SECURE WASTE CONTAINERS THAT REMAIN ON THE JOB SITE. THIS WILL ENTAIL THAT ALL WASTE CONTAINERS CAN NOT BE MOVED OR OPENED DURING NON-WORKING HOURS.

WORKING DAYS SHALL BE CHARGED UNTIL THE CONTRACTOR/ SUBCONTRACTOR LICENSED TO DISPOSE OF LEAD PAINT RESIDUE HAS REMOVED THE WASTE MATERIAL FROM THE JOB SITE ACCORDING TO ALL FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES.

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4") AMBIENT AIR MONITORS FOR THIS PROJECT THAT SHALL BE USED ACCORDING TO THE SPECIAL PROVISION. FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES", AND AS DIRECTED BY THE ENGINEER.

THE SSPC QP-1 AND QP-2 CERTIFICATIONS WILL NOT BE REQUIRED FOR THIS CONTRACT.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: [Signature]
DISTRICT STUDIES & PLANS ENGINEER

DATE: 10.22.08

EXAMINED BY: [Signature]
DISTRICT CONSTRUCTION ENGINEER

[Signature]
DISTRICT MATERIALS ENGINEER

[Signature]
DISTRICT OPERATIONS ENGINEER

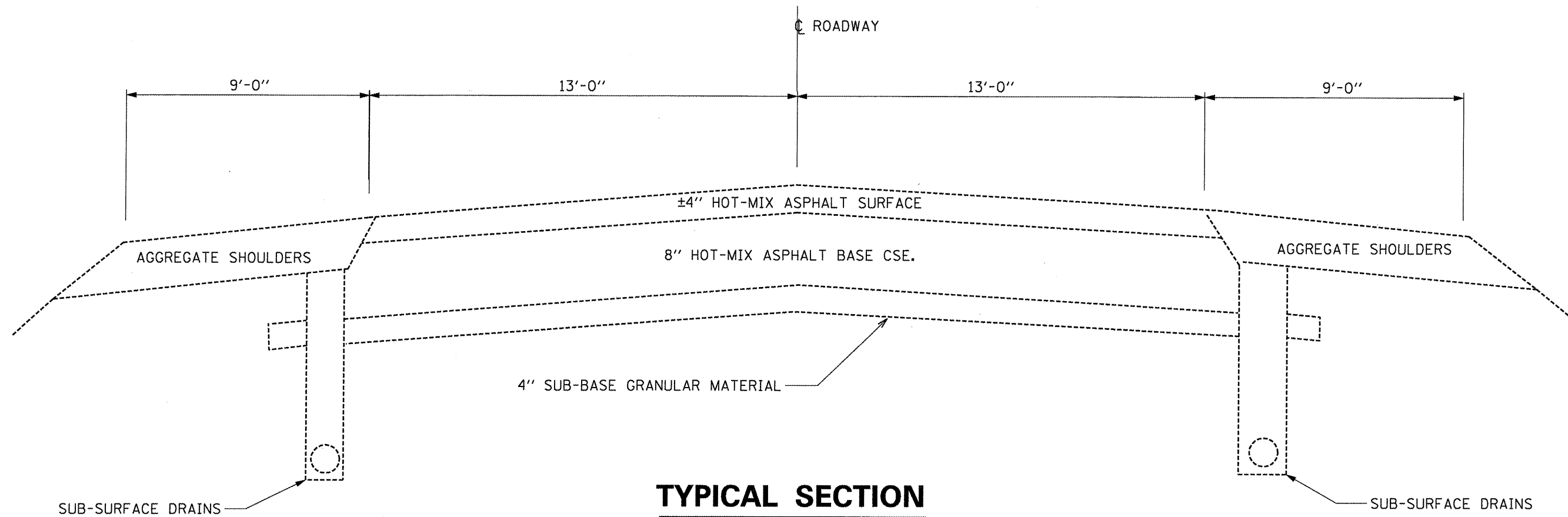
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c:\pwwork\PIWIDOT\WOODSHANKRL\dms58988	4358877 - SN 053-0154-detaile.dgn	DRAWN - RON WOODSHANK	REVISED -			68	(101-B-1)BP	LIVINGSTON	8	2	
	PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 66877					
	PLOT DATE = Oct 07, 2008 - 06:55:30 AM	DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS

SUMMARY OF QUANTITIES

CONSTRUCTION CODE: SFTY-2A

RURAL
100% STATE
TOTAL
QUANTITY

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
50600300	CLEANING AND PAINTING STEEL BRIDGE	L SUM	1
50606400	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
X5067500	BRIDGE CLEANING AND PAINTING WARRANTY	L SUM	1



TYPICAL SECTION

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

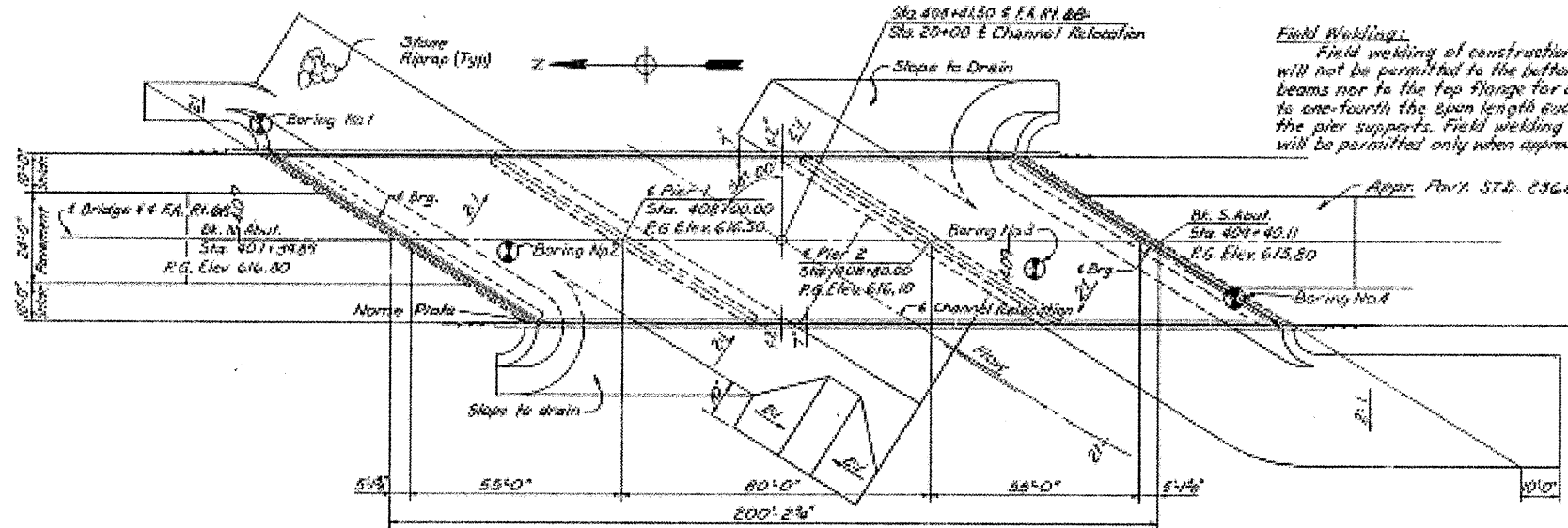
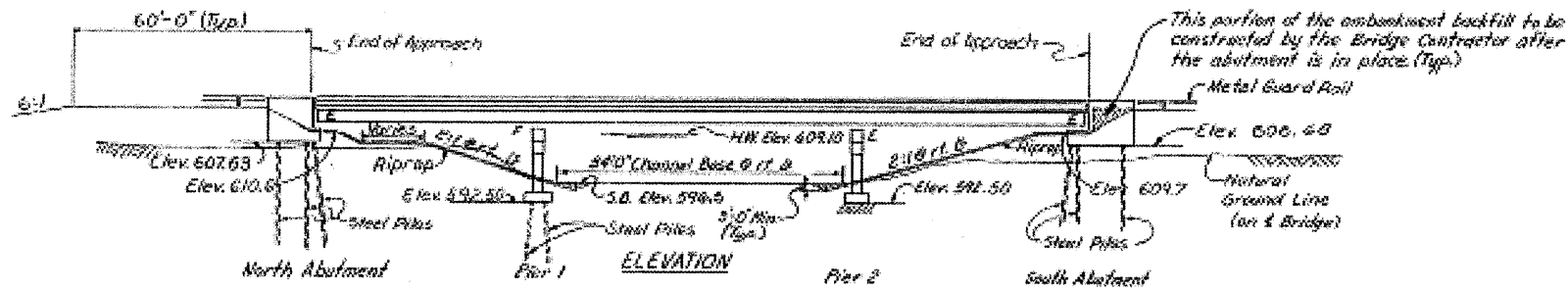
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SCALE:	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	(101-B-1)BP	LIVINGSTON	8	4
CONTRACT NO. 66877				
FED. ROAD DIST. NO. ILLINOIS				

BM #55 "D" on Bridge (Kingwall) 48.5 ft. W of Sta. 408+22.00 Elev. 609.10.
 Existing Structure: Built in 1922, Reinforced Concrete Deck Girders and Closed
 Abutts. Bridge to be removed by Contractor before construction
 of new structure.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	101B	LIVINGSTON	54	19
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		SHEET NO. / 12 SHEETS



WATERWAY INFORMATION

Drainage Area 62 sq. mi.
 Present Opening 426 sq. ft.
 Required Opening 680 sq. ft.
 Proposed Opening 680 sq. ft.
 $Q (50) = 3950$ cfs
 Created Head = 0.73 ft.

DESIGN STRESSES

$k = 1,400$ psi (Curb, Parapet, Sub)
 $f_c = 20,000$ psi (Reinf.)
 $f_s = 80,000$ psi (Struct.) AASHTO M183
 $k_c = 75$ psi (Flg.)
 $n = 9$
 Allow 20% for Future WS

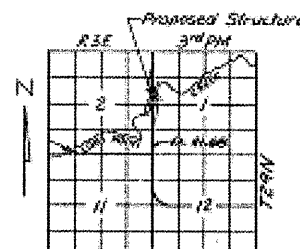
Design Specifications: AASHTO 1973, plus inferences
 as applicable.

LOADING HS 20-44



PROFILE GRADE
 EA. RT. 68

DECK SLAB
 $f_c = 5500$ psi
 $f_y = 60,000$ psi



LOCATION SKETCH

Field Weldings:
 Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

GENERAL NOTES

All contact surfaces of joints for the diaphragms, cross frames and/or lateral bracing shall be free of paint or lacquer. Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied.

All reinforcement bars shall be lapped 26 diameters unless otherwise shown.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

See Proposal for Boring Data.
 Fasteners shall be high strength bolts. Bolts 3/8", open holes 1/2", unless otherwise noted.

All reinf. bars in deck shall conform to AASHTO M-31 or A-53 gr. 60.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to the construction of the abutments.

The Contractor shall drive one steel NP10x42 test pile in a permanent location at the North Abutment as directed by the Engineer prior to ordering the remainder of the piles.

The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.

Anchor bolts shall be set before bolting diaphragms over supports. For field welding see note this sheet.

For Match Tightness requirement and preparation of bearing seats see Sheet 3.

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Structure Excavation	Sq. Yd.	—	236	236
Test Piles	Each	—	1	1
Steel Piles (NP10x42)	Lin. Ft.	—	1502	1502
Class X Concrete	Cu. Yd.	290.9	430.0	728.9
Reinforcement Bars	Lbs.	77,500	89,500	111,000
Structural Steel	LS	—	—	—
Stone Riprap	Sq. Yd.	—	1821	1821
Waterproofing Membrane System	Sq. Yd.	904	—	904
Name Plate	Each	—	1	1
Neoprene Expansion Joint - 2"	Linear Ft.	168	—	168
Protective Coat	Sq. Yd.	158	—	158
Bituminous Concrete Surface Course Class I	Tons	73	—	73
Stud Shear Connectors	Each	1296	—	1296
Removal of Existing Structures #1	Each	—	—	1
Flow Drains	Each	24	—	24

* Calculated Plan Wt. of Structural Steel = 234,200 lbs. AASHTO M183
 ** Surface Course to be Mixture D.

DESIGNED	H.A. Rehagen
CHECKED	W.O. Walden
DRAWN	F.G. Oest
CHECKED	W.O. Walden
CHECKED	H.A. Rehagen

APPROVED
 FOR STRUCTURAL STEEL ONLY



GENERAL PLAN AND ELEVATION
 EA. ROUTE 68 (ILL. 23) OVER
 LONG POINT CREEK
 EA. RT. 68 SEC. 101 B-1
 LIVINGSTON COUNTY
 STATION 408+41.50

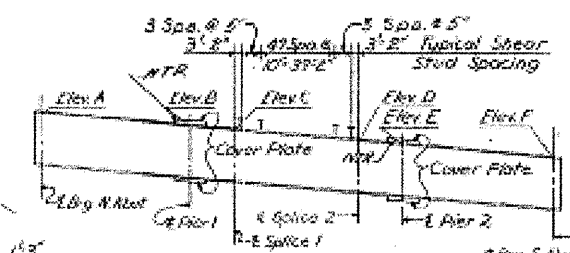
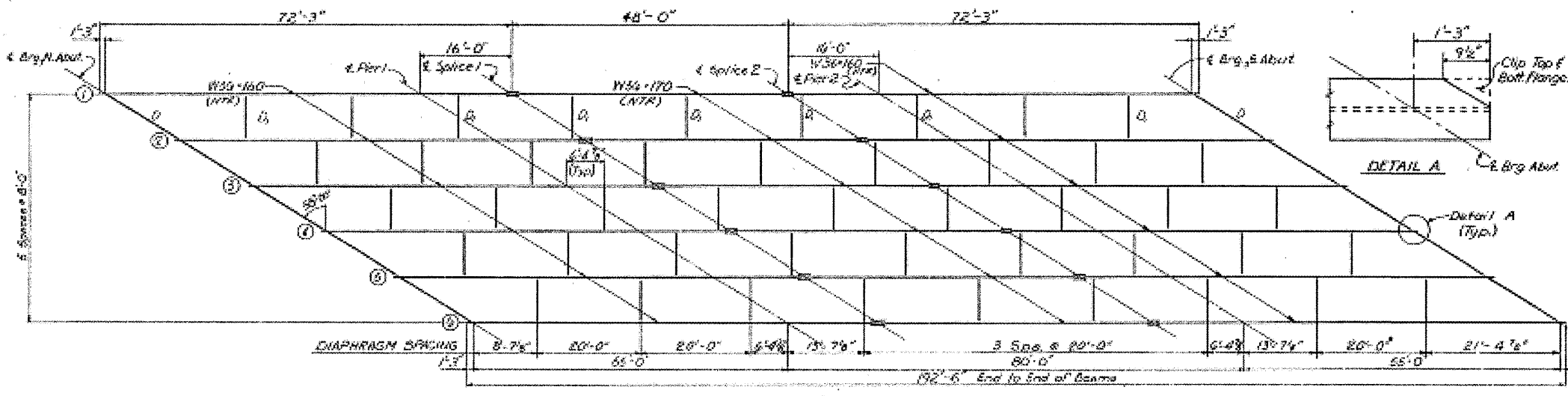
FOR INFORMATION ONLY

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CONTRACT NO.	66877	DRAWN - RON WOODSHANK	REVISED -	SCALE: _____	SHEET NO. 1 OF 4 SHEETS	STA. 407+39.89 TO STA. 409+40.11	FED. ROAD DIST. NO. _____	ILLINOIS	CONTRACT NO. 66877	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

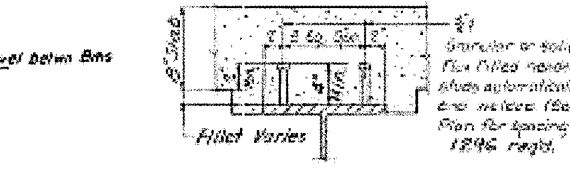
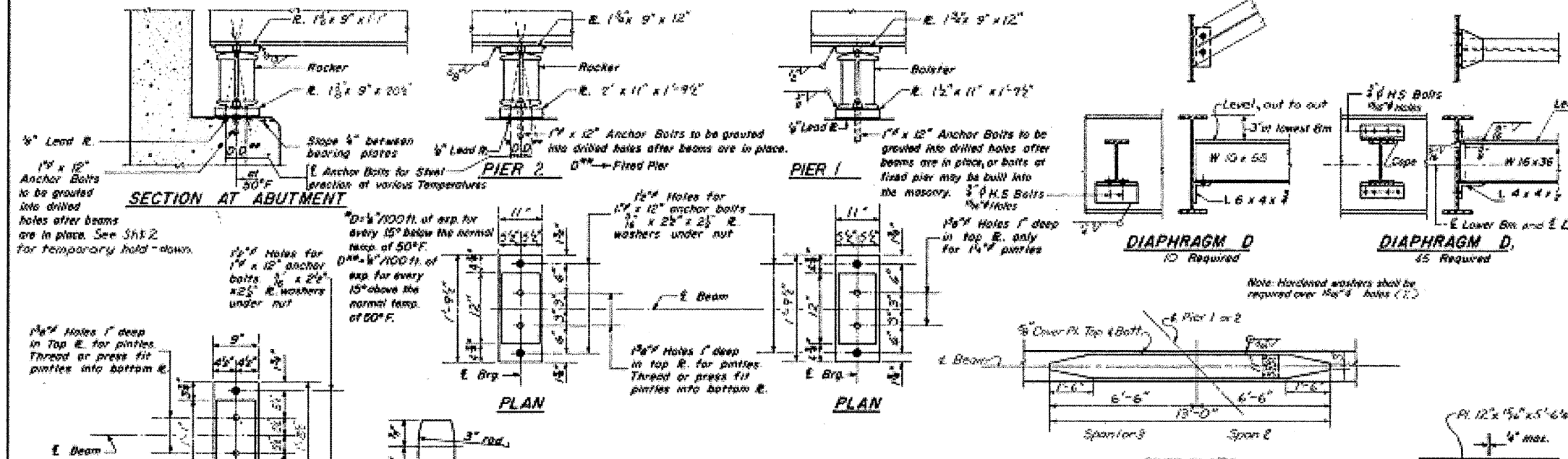
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	101B-1	LIVINGSTON	21	21

ELV.	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6
Elv. A	645.578	645.660	645.741	645.677	645.488	645.288
Elv. B	645.303	645.485	645.467	645.402	645.233	644.983
Elv. C	645.223	645.325	645.307	645.332	645.133	644.903
Elv. D	644.983	645.085	645.147	645.082	644.893	644.663
Elv. E	644.903	645.005	645.067	645.002	644.813	644.583
Elv. F	644.628	644.731	644.793	644.727	644.538	644.308

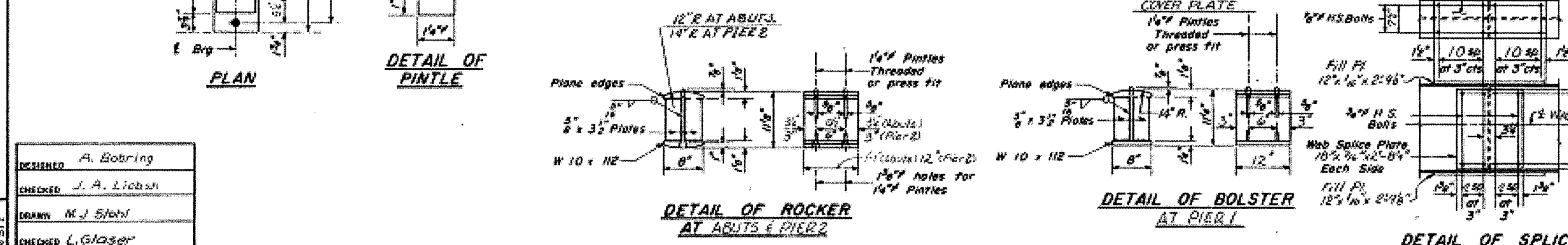


PLAN
NTR: Designates notch toughness requirement

TYPICAL BEAM ELEVATION
Note: Elevations shown at bottom of top flange are for fabrication only.



SHEAR STUDS



Notes:
Bearing seat surfaces shall be constructed or adjusted to the designated elevation within a tolerance of $\pm 1/8$ inch. Adjustment shall be made either by grinding the surface or shimming the bearing. Two $1/2$ inch adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone B. These components are the tension flanges, webs, all splice plate material & top cover plates of the wide flange beams.

NOTES
For Table of Moments and Reactions see Sht 2.

STRUCTURAL STEEL
FA ROUTE 68 (R.L. 23) OVER
LONG POINT CREEK
FA. RT. 68 SEC. 101B-1
LIVINGSTON COUNTY
STATION 408+41.50

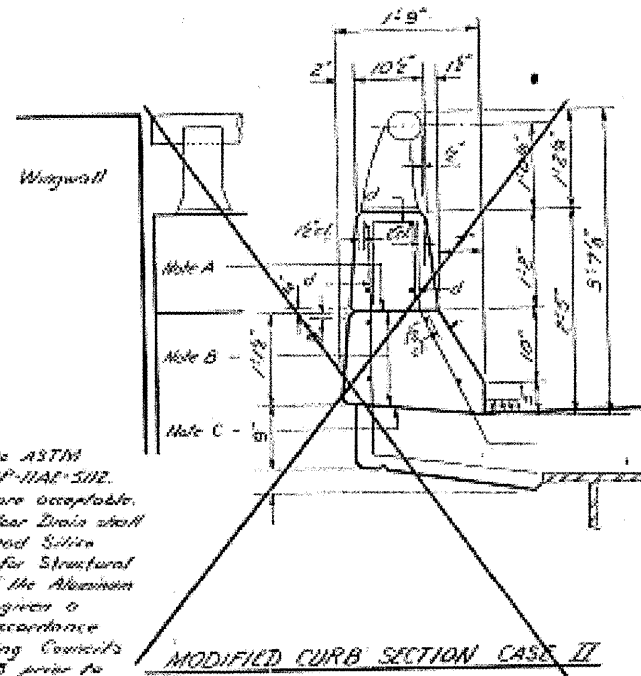
DESIGNED	A. Bobring
CHECKED	J. A. Liebun
DRAWN	M. J. Stahl
CHECKED	L. Glaser

FOR INFORMATION ONLY

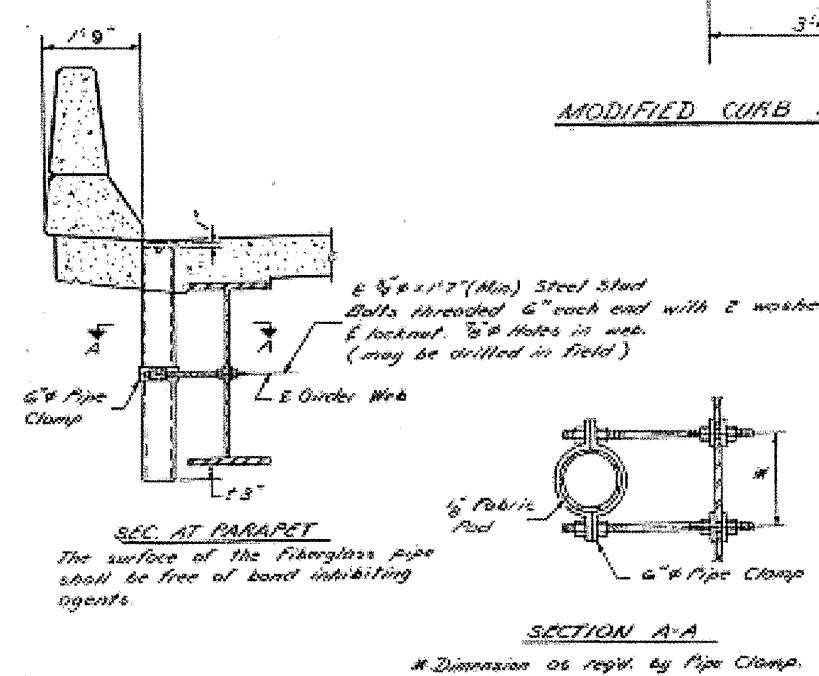
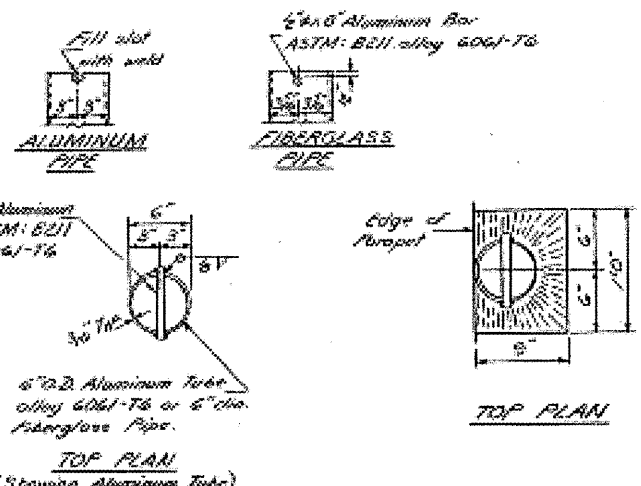
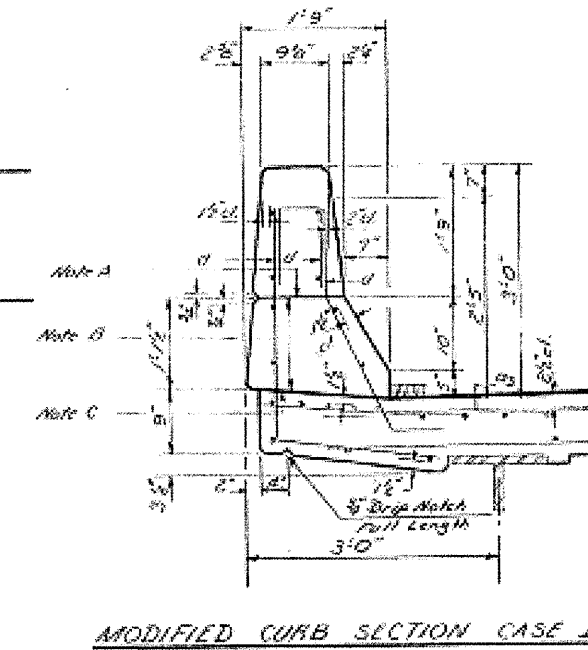
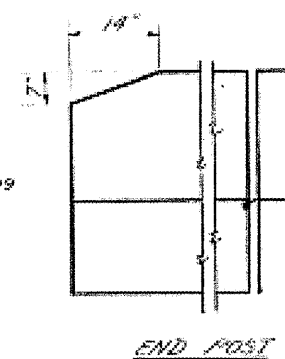
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 68	101-B	Livingston	54	23
SHEET NO. 48 12 SHEETS				

Note: Fiberglass pipe shall conform to ASTM D2996, Designation Code RTRP-11A1-512. Pipes with Class C or F liner are acceptable. The exterior surface of the floor drain shall be painted with the Basic Lead Silica Chromate painting specified for Structural Steel. The exterior surfaces of the Aluminum pipe shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SP1 and SSPC-PT-3 prior to painting.



- Note A: Bonded Construction Joint (Optional)
- Note B: 1/2" Aluminum Sheets ASTM B209 alloy 3003-H14 (Cost incidental to Class X Concrete)
- Note C: Bonded Construction Joint (Mandatory) for all details below Mandatory Joint see Sheet



DESIGNED	EXAMPLED
CHECKED	PAIRED
DRAWN D.D.	APPROVED
CHECKED	

SUPER STRUCTURE
FA, RTE. 68 (ILL. 23) OVER
LONG POINT CREEK
SECTION 101B-1
LIVINGSTON COUNTY
STATION 408+41.50

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	101-B-11BP	LIVINGSTON	8	8
CONTRACT NO. 66877				

FILE NAME	USER NAME	DESIGNED	REVISED
at:\pwork\pvidot\woodshank\dms50988	woodshankr1	RON WOODSHANK	
		DRAWN	REVISED
		RON WOODSHANK	
		CHECKED	REVISED
		DATE	REVISED

SCALE: SHEET NO. 4 OF 4 SHEETS STA. 407+39.89 TO STA. 409+40.11