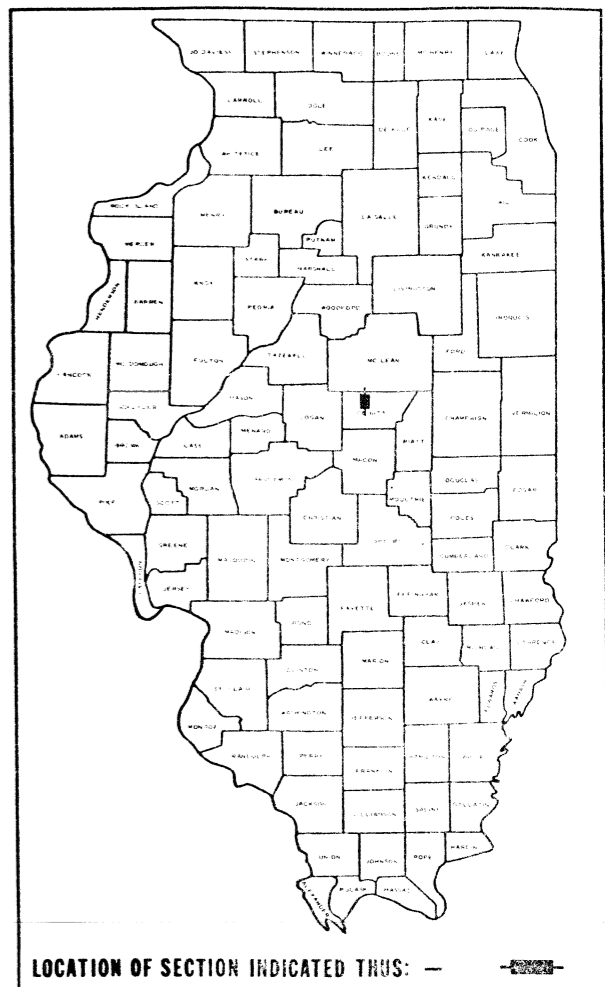


**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
52	53BR	DEWITT	16	1
ILLINOIS PROJECT		BR-F-52(14)		

P-95-043-73



**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1.	COVER SHEET, INDEX OF SHEETS
2.	GENERAL NOTES, SUMMARY OF QUANTITIES
3-4.	PROPOSED TYPICAL CROSS SECTIONS, F.A.P. ROUTE 52
5.	TYPICAL CROSS SECTION OF DETOUR ROAD
6.	EXISTING TYPICAL CROSS SECTION, F.A.P. ROUTE 52
7.	PLAN AND PROFILE, F.A.P. ROUTE 52
8.	PLAN AND PROFILE, DETOUR ROAD
9-10.	DETAILS OF RUNDOWNS
11.	DETAIL OF FIELD ENTRANCES
12-14.	DETAIL OF SPECIAL CULVERT DESIGN 020-2005, STATION 108+78.60
15-16.	STATION CROSS SECTIONS, F.A.P. ROUTE 52, AND DETOUR ROAD

**STANDARDS IN THE PLANS**

STD. NO.	DESCRIPTION
1744-4	RIGHT OF WAY MARKERS
1909-10	BRIDGE APPROACHES
2113-1	NAME PLATE FOR BRIDGES
2116-2	PATCHING DETAILS (P.C.C.)
2130-11	STEEL PLATE BEAM GUARD RAIL
2298-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-7	DESIGN OF TRAFFIC CONTROL DEVICES
2300-1	FLAGMAN TRAFFIC CONTROL SIGN
2303-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES, CASE III
2310-3	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES, CASE IX
2336	TRAFFIC BARRIER TERMINAL, TYPE 1 & 1A
2340-1	TRAFFIC BARRIER TERMINAL, TYPE 5, 5A, 5B & 5C
2301-3	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES, CASE I
2302-3	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES, CASE II
2307-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES, CASE III

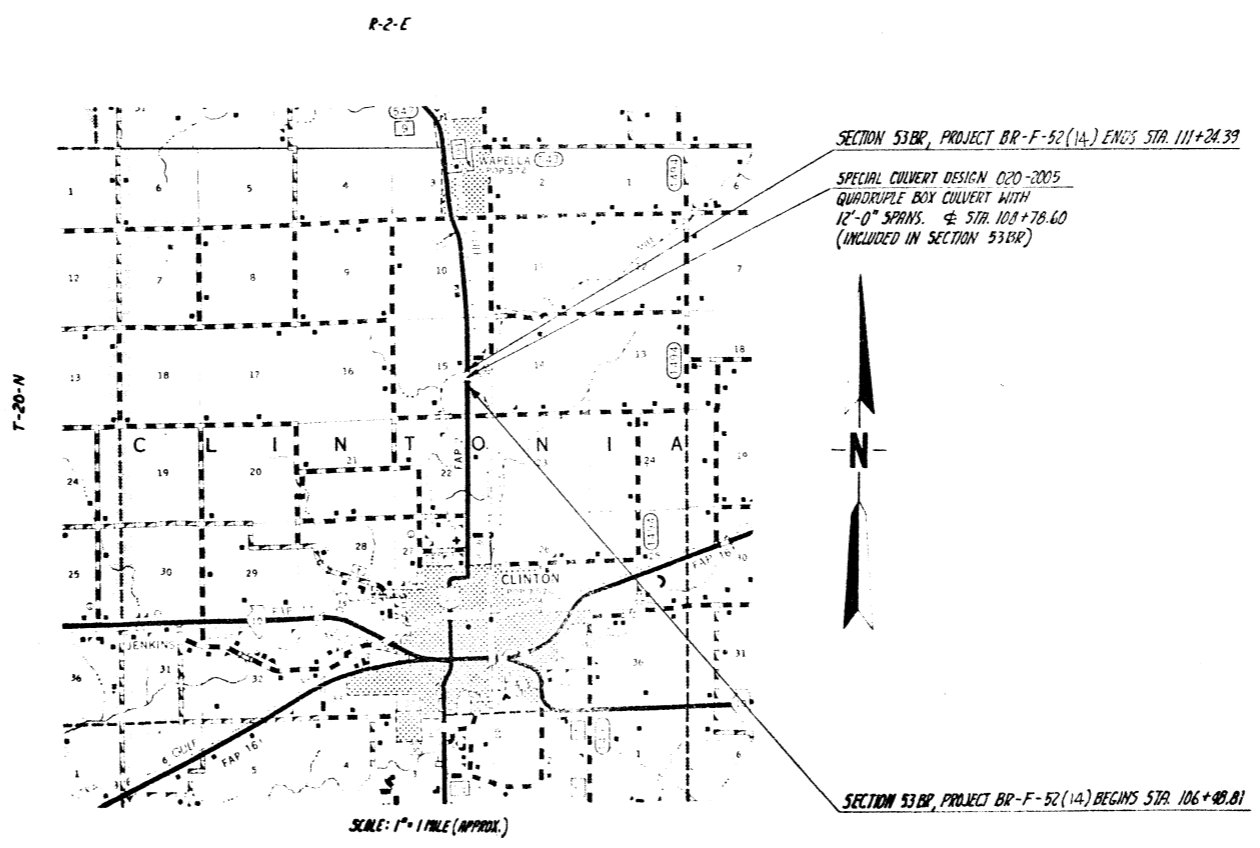
**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

**SCALES**

PLAN	1" = 50'
PROFILE HOR.	1" = 50'
PROFILE VERT.	1" = 5'
CROSS SECTIONS	1" = 10' (HOR) 1" = 5' (VERT)

**F.A. ROUTE 52, SECTION 53BR  
DEWITT COUNTY  
PROJECT BR-F-52(14)**

BRIDGE REPLACEMENT  
C-95-008-79



DESIGN DESIGNATION  
250(99) MAJOR HIGHWAY

TOTAL AND NET LENGTH OF SECTION AND PROJECT = 475.58 FEET = 0.090 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED August 30, 1978

EXAMINED Robert E. Kronec, DISTRICT ENGINEER, Sept 21, 1978

PASSED N. G. Wilcox, ENGINEER OF PLANS AND CONTRACTS, Sept 21, 1978

APPROVED Thomas R. Bright, ENGINEER OF DESIGN, Sept 21, 1978

DIRECTOR OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

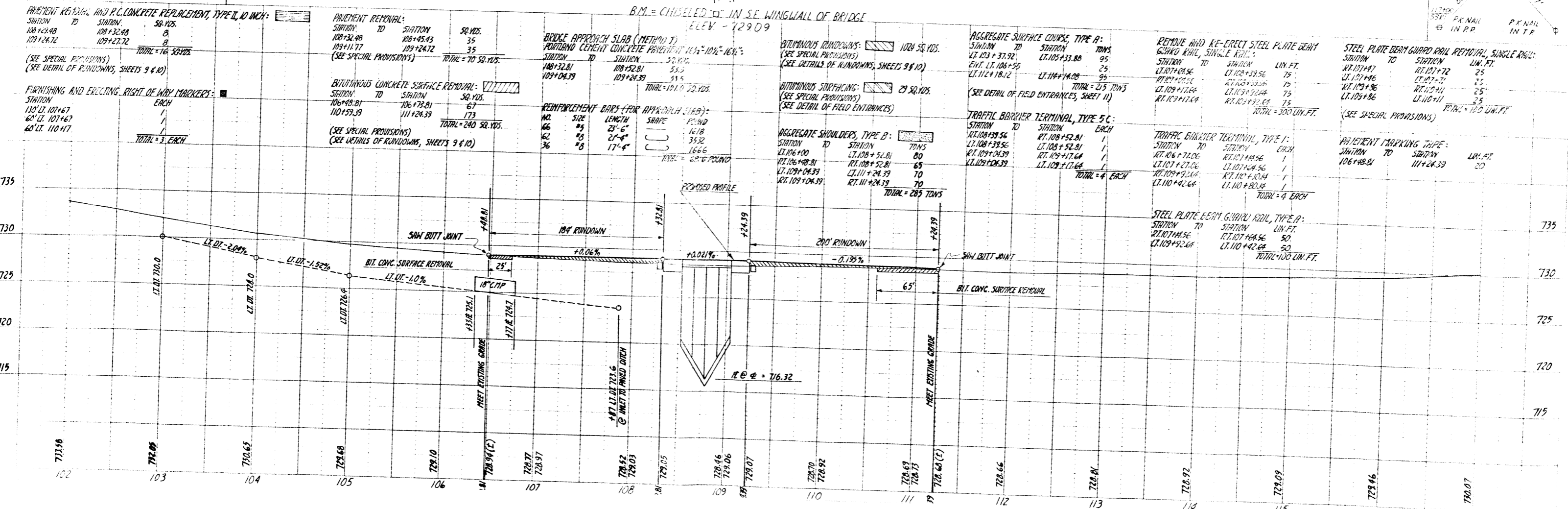
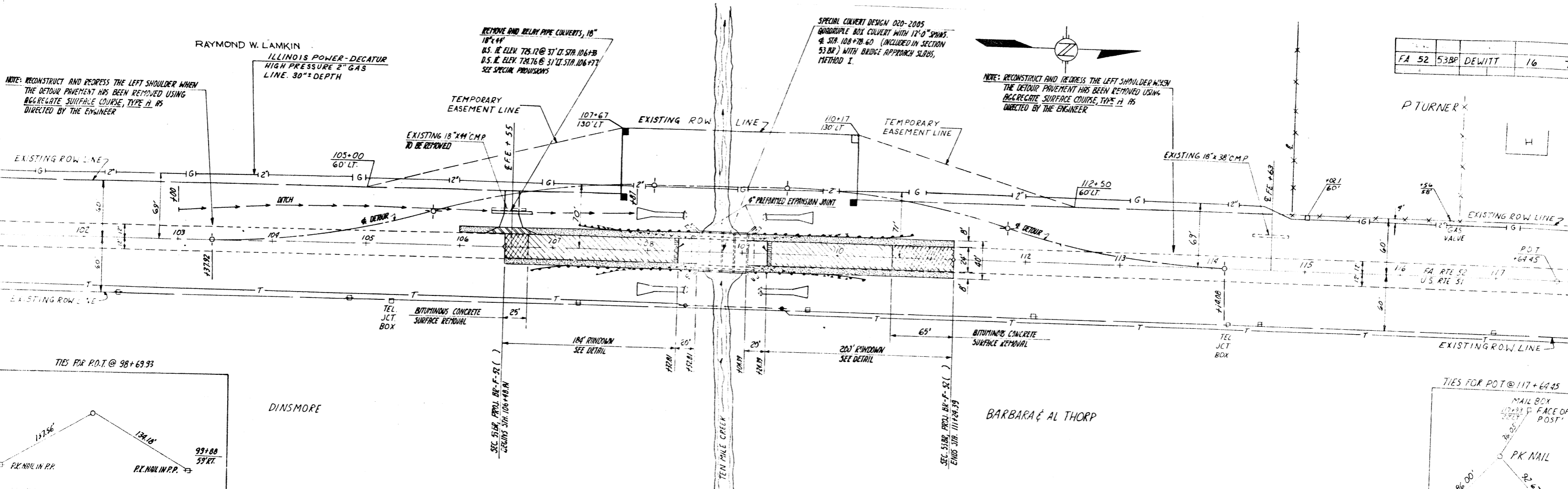
APPROVED \_\_\_\_\_

DIVISION ADMINISTRATOR DATE

920-2005  
CONTRACT NO. 33499

5-104

FA 52	53BP	DEWITT	16	7
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**PAVEMENT REPAIR AND P.C. CONCRETE REPLACEMENT, TYPE II, 10 INCH:**

STATION TO	STATION	SQ. YDS.
108+24.48	108+32.48	8
109+24.72	109+27.72	3
TOTAL		11

(SEE SPECIAL PROVISIONS)  
(SEE DETAIL OF RUNDOWNS, SHEETS 9 & 10)

**FURNISHING AND ERECTING RIGHT OF WAY MARKERS:**

STATION	EACH
130' LT. 107+67	1
60' LT. 107+67	1
60' LT. 110+17	1
TOTAL = 3 EACH	

**PAVEMENT REMOVAL:**

STATION TO	STATION	SQ. YDS.
108+32.48	108+45.43	35
109+11.77	109+24.72	35
TOTAL = 70 SQ. YDS.		

(SEE SPECIAL PROVISIONS)

**BITUMINOUS CONCRETE SURFACE REMOVAL:**

STATION TO	STATION	SQ. YDS.
106+48.81	106+72.81	67
110+59.39	111+24.39	173
TOTAL = 240 SQ. YDS.		

(SEE SPECIAL PROVISIONS)  
(SEE DETAILS OF RUNDOWNS, SHEETS 9 & 10)

**BRIDGE APPROACH SLAB (METHOD 1)**  
PORTLAND CEMENT CONCRETE PAVEMENT 18" 10% 16% 16% 16%

STATION TO	STATION	SQ. YDS.
108+32.81	108+52.81	53.5
109+04.39	109+24.39	53.5
TOTAL = 107.0 SQ. YDS.		

**REINFORCEMENT BARS (FOR APPROACH SLAB):**

NO.	SIZE	LENGTH	SHAPE	WEIGHT
46	#5	23'-6"	U	1618
42	#8	21'-4"	U	3532
36	#8	17'-4"	U	1666
TOTAL = 6816 POUNDS				

**BITUMINOUS RUNDOWNS:**

STATION TO	STATION	TONS
LT. 103+37.92	LT. 105+33.88	95
ENT. LT. 108+55	LT. 112+18.12	25
LT. 112+18.12	LT. 114+14.08	95
TOTAL = 215 TONS		

(SEE SPECIAL PROVISIONS)  
(SEE DETAILS OF RUNDOWNS, SHEETS 9 & 10)

**BITUMINOUS SURFACING:**

STATION TO	STATION	TONS
LT. 106+100	LT. 108+52.81	80
RT. 106+48.81	RT. 108+52.81	65
LT. 109+04.39	LT. 111+24.39	70
RT. 109+04.39	RT. 111+24.39	70
TOTAL = 285 TONS		

(SEE SPECIAL PROVISIONS)  
(SEE DETAIL OF FIELD ENTRANCES)

**AGGREGATE SURFACE COURSE, TYPE A:**

STATION TO	STATION	TONS
LT. 103+37.92	LT. 105+33.88	95
ENT. LT. 108+55	LT. 112+18.12	25
LT. 112+18.12	LT. 114+14.08	95
TOTAL = 215 TONS		

(SEE DETAIL OF FIELD ENTRANCES, SHEET 11)

**TRAFFIC BARRIER TERMINAL, TYPE 5C:**

STATION TO	STATION	EACH
RT. 108+39.56	RT. 108+52.81	1
LT. 108+39.56	LT. 108+52.81	1
RT. 109+04.39	RT. 109+17.64	1
LT. 109+04.39	LT. 109+17.64	1
TOTAL = 4 EACH		

**REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL:**

STATION TO	STATION	LINE FT.
LT. 107+48.56	LT. 108+33.56	75
RT. 107+48.56	RT. 108+33.56	75
LT. 109+17.64	LT. 109+32.64	75
RT. 109+17.64	RT. 109+32.64	75
TOTAL = 300 LINE FT.		

(SEE SPECIAL PROVISIONS)

**TRAFFIC BARRIER TERMINAL, TYPE 1:**

STATION TO	STATION	EACH
RT. 106+72.06	RT. 107+48.56	1
LT. 107+48.56	LT. 107+48.56	1
RT. 109+32.64	RT. 110+42.64	1
LT. 110+42.64	LT. 110+42.64	1
TOTAL = 4 EACH		

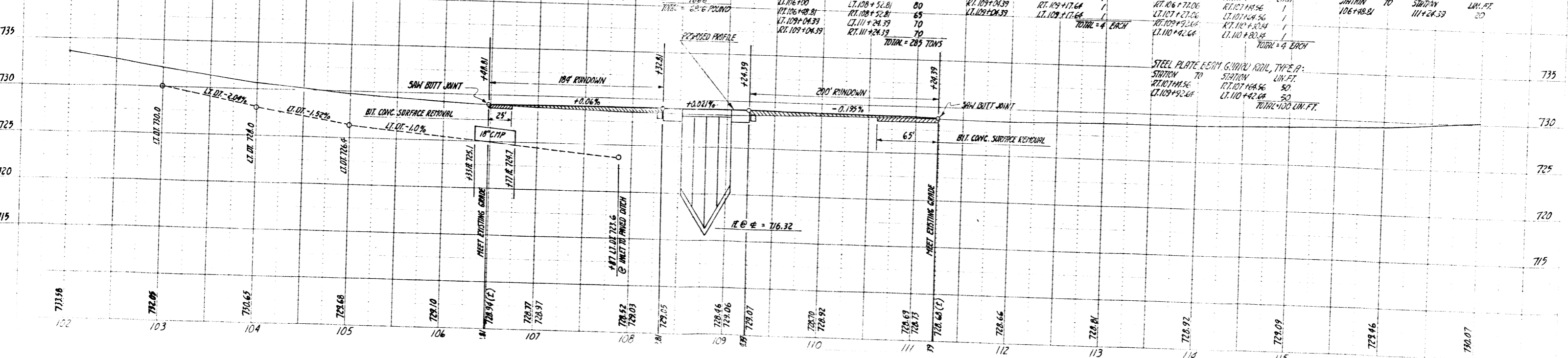
**STEEL PLATE BEAM GUARD RAIL REPAIR, SINGLE RAIL:**

STATION TO	STATION	LINE FT.
LT. 107+47	LT. 107+72	25
LT. 107+72	LT. 107+72	25
RT. 109+36	RT. 110+11	25
LT. 109+36	LT. 110+11	25
TOTAL = 100 LINE FT.		

(SEE SPECIAL PROVISIONS)

**PAVEMENT MARKING TAPE:**

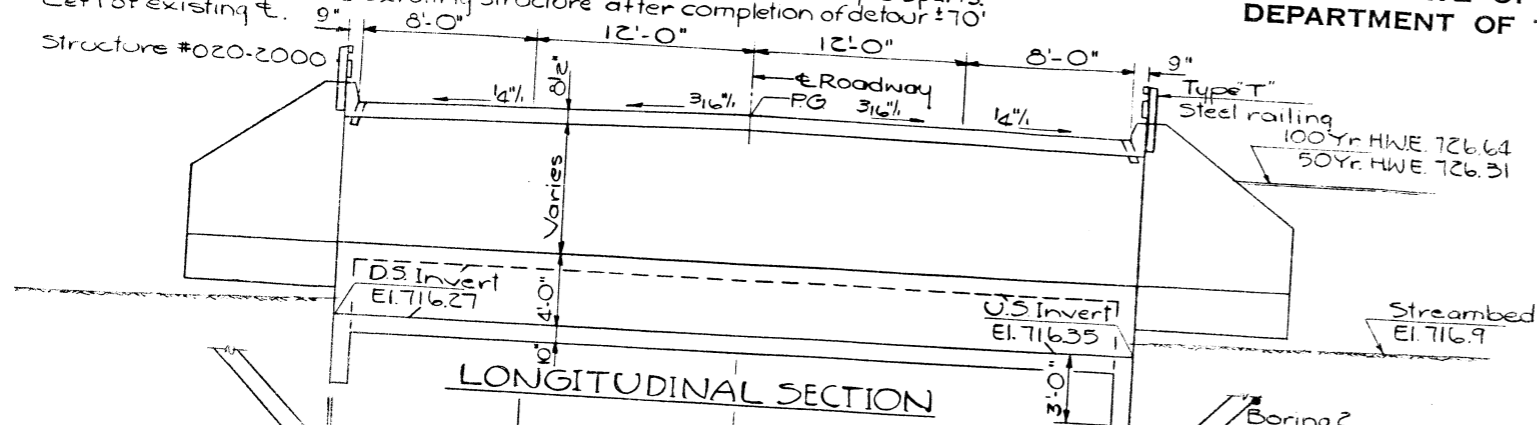
STATION TO	STATION	LINE FT.
106+48.81	111+24.39	80



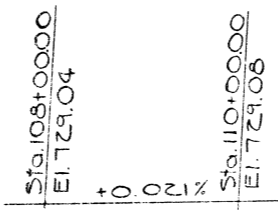
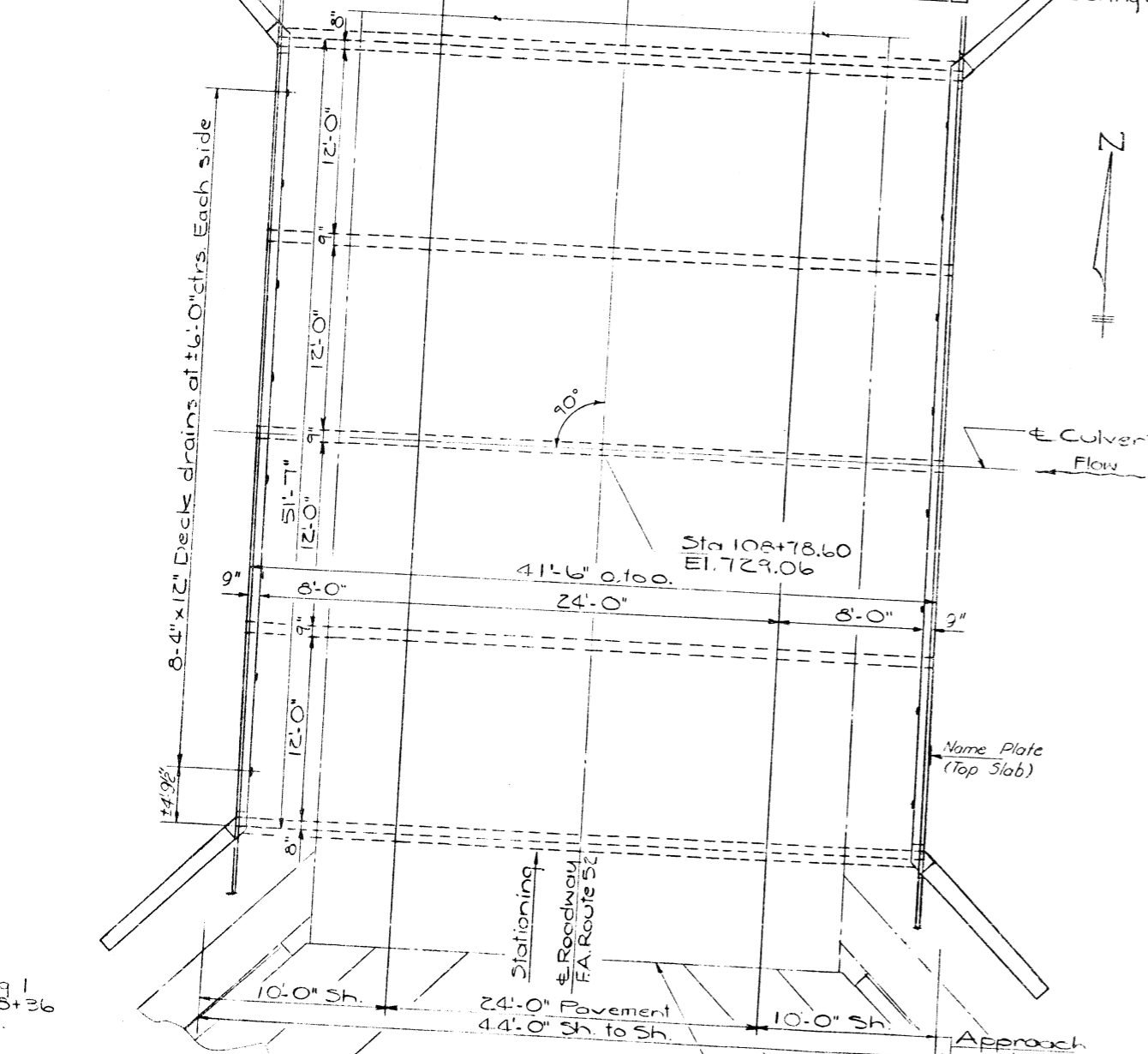
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEETS
P.A. 52	53BR	DEWITT	16	12	16

Bench Mark: Chiseled "B" in SE. wingwall of existing structure over Ten Mile Creek; El. 729.09  
Existing Structure: Built in 1926, widened in 1957 as SBI.2, Sec 53BY.1 - 020-2000 at Sta 108+78. Consists of a 6 barrel 10'x8'-6" culvert with simple spans. Contractor shall remove existing structure after completion of detour.  
Left of existing  $\frac{1}{4}$ " 8'-0" 12'-0" 12'-0" 8'-0" 9"



**GENERAL NOTES**  
Reinforcement bars shall conform to the requirements of AASHTO M31 or M53, Grade 60.  
See the Proposal for Boring Data.  
At least six feet of barrel shall be poured monolithically with wingwalls.



STATION 108+78.60  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A. RT. 52 SEC. 53BR  
LOADING HS20  
STR. NO. 020-2005

NAME PLATE  
(See Std. 2113)

**WATERWAY INFORMATION**

Drainage Area — 15.2 Sq Miles  
Design Discharge (50 Yr.) — 2000 c.f.s.  
Existing Opening (below 50 Yr. HWE) — 460 Sq. Ft.  
Required Opening (below 50 Yr. HWE) — 382 Sq. Ft.  
Proposed Opening (below 50 Yr. HWE) — 382 Sq. Ft.  
Created Head for Design Flood — 0.75 Ft.  
100-Year Discharge — 2300 c.f.s.  
Created Head for 100-Year Flood — 0.82 Ft.

**TOTAL BILL OF MATERIAL**

Item	Unit	Qty
Removal of Existing Structures	Each	1
Class X Concrete	Cu. Yd	200
Reinforcement Bars (Epoxy Coated)	Lbs	2,500
Reinforcement Bars	Lbs	2,500
Steel Railing, Type "T"	Lbs	3,150
Protective Coat	Sq. Yd	100
Name Plates	Each	2

Boring 1  
Sta. 108+36  
53' Lt.

DESIGNED	Robert F. ...
CHECKED	...
DRAWN	R. Doty
CHECKED	...

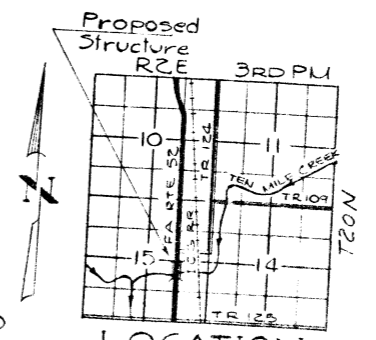
EXAMINED	...
PASSED	...
APPROVED	...

**PLAN**



**DESIGN STRESSES**

$f_c = 3500$  psi  
 $f_y = 60,000$  psi  
Allow 25 PSF for future wearing surface  
Design Specifications: 1977 AASHTO

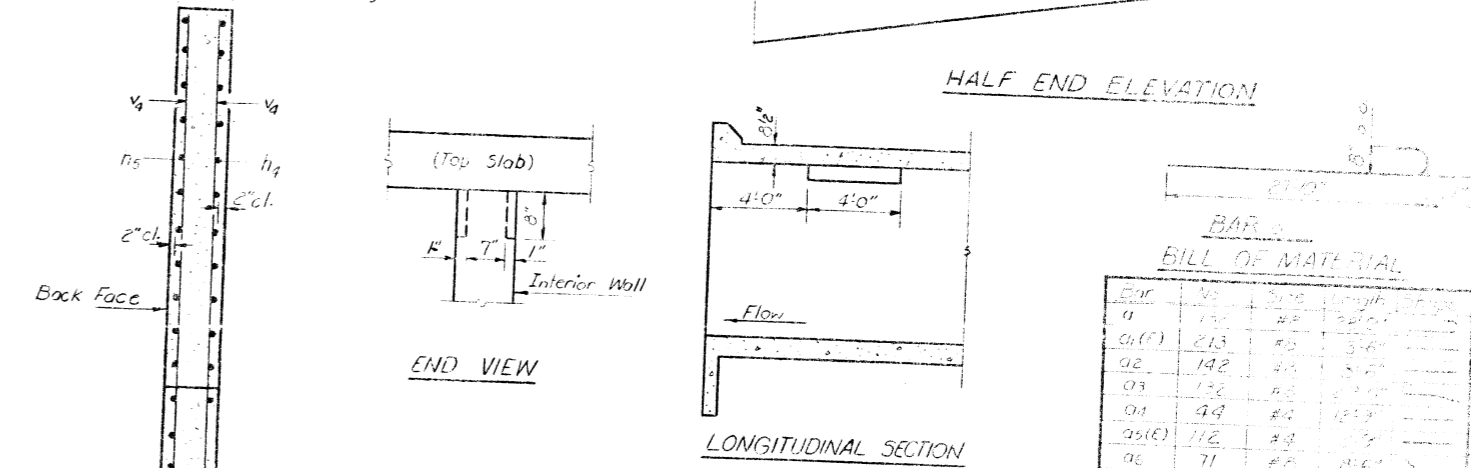
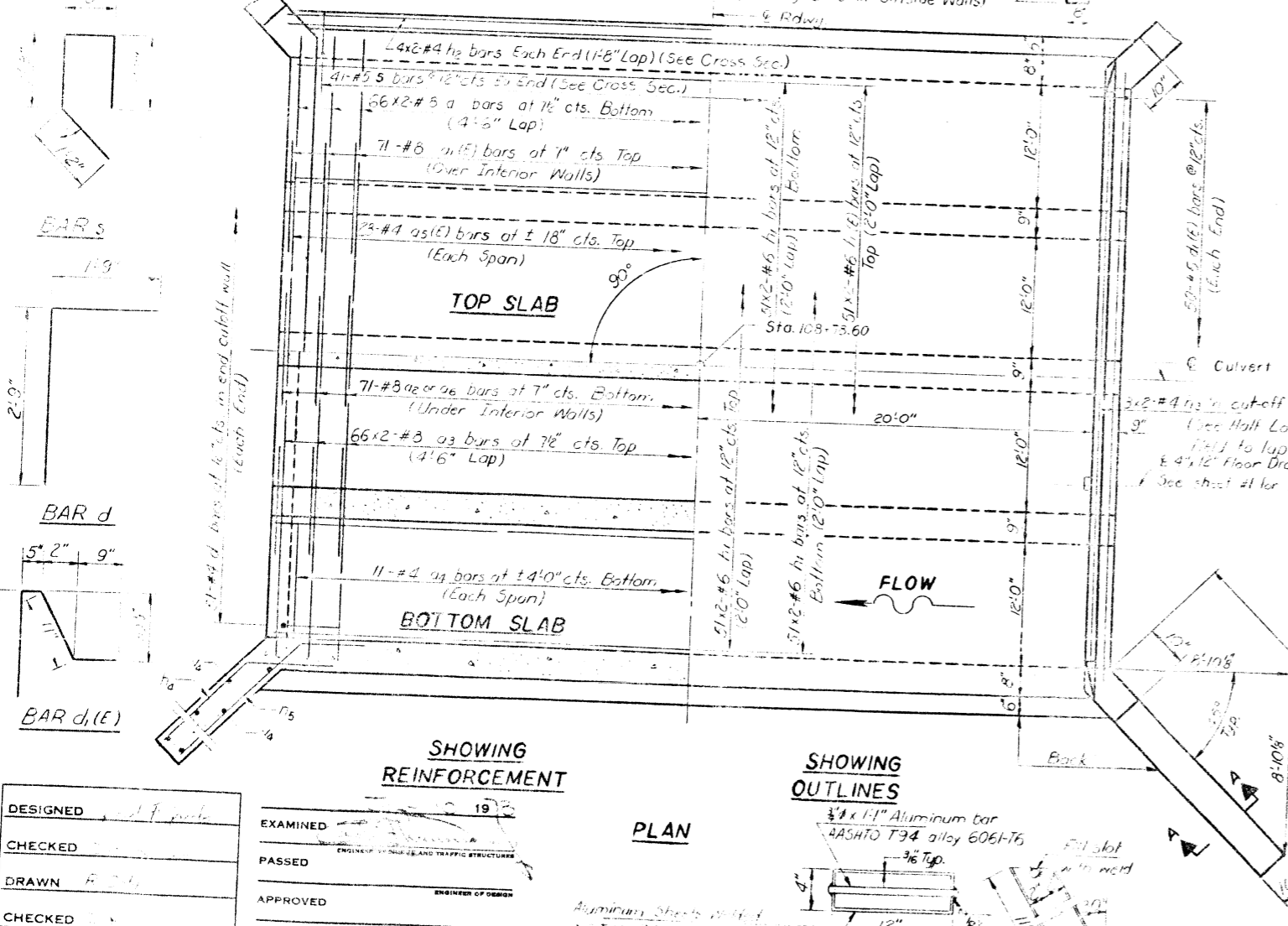
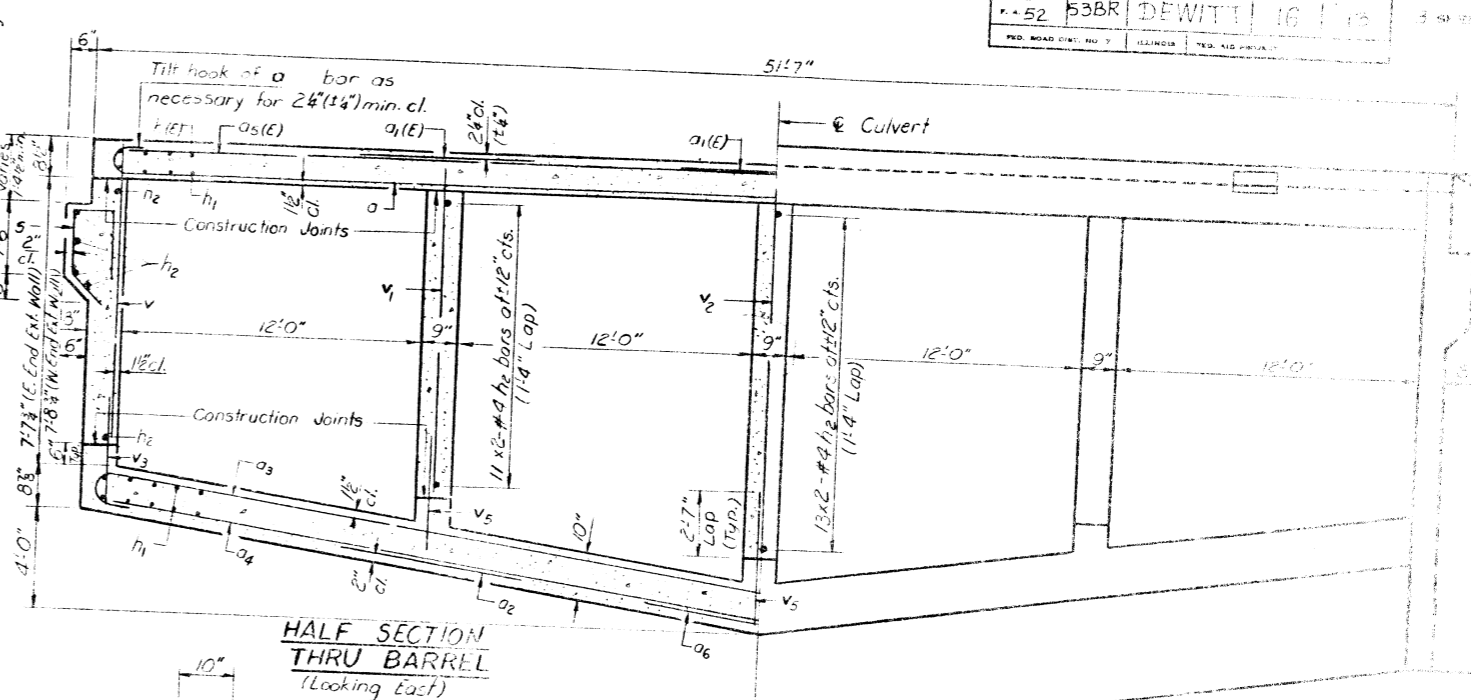
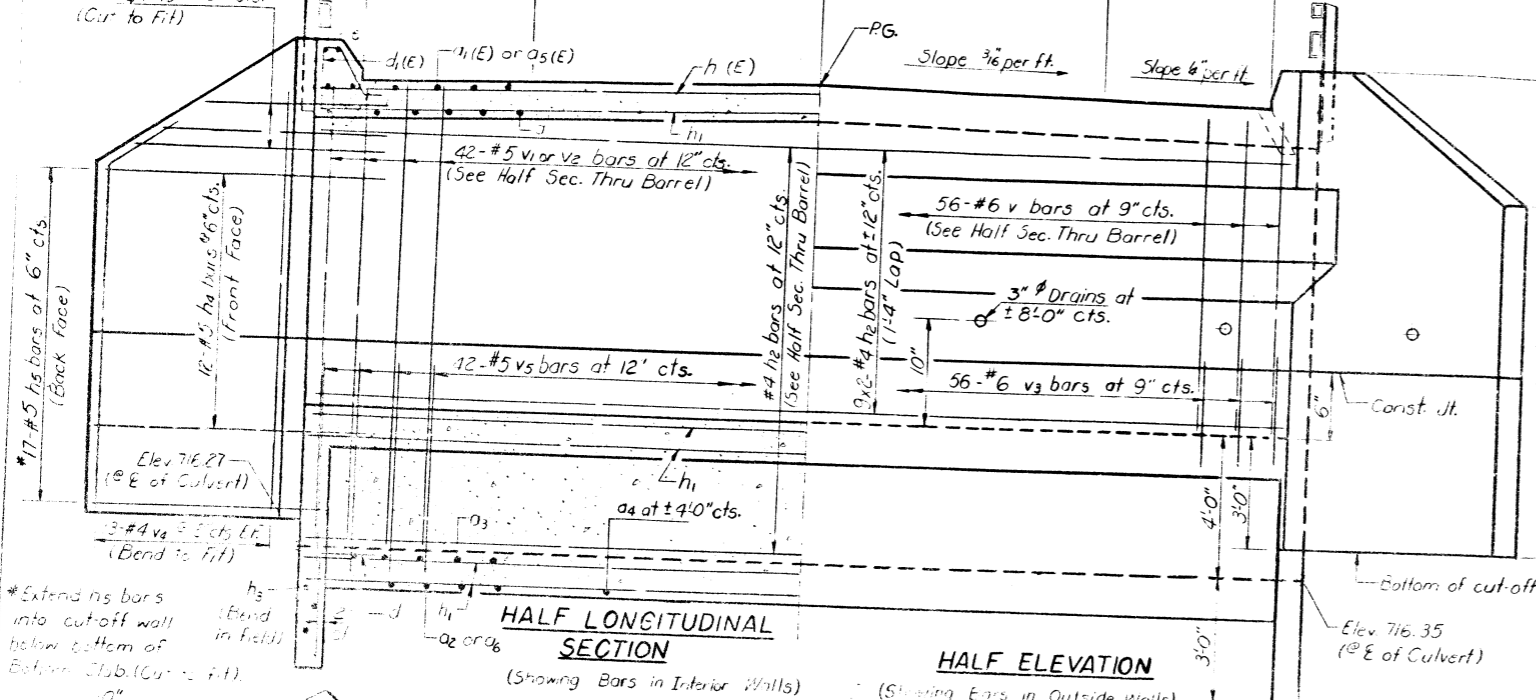


GENERAL PLAN & ELEVATION  
F.A. ROUTE 52 OVER TEN MILE CREEK  
SECTION 53BR

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
52	53BR	DEWITT	16	16
PROJ. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJ. NO.	

NOTE:  
Bars indicated thus 11x2  
#4 etc. indicate 11 lines  
of bars with 2 lengths  
per line.  
7-#5  $a_4$  &  $h_5 = 6"$  cts.  
(Cur to fit)

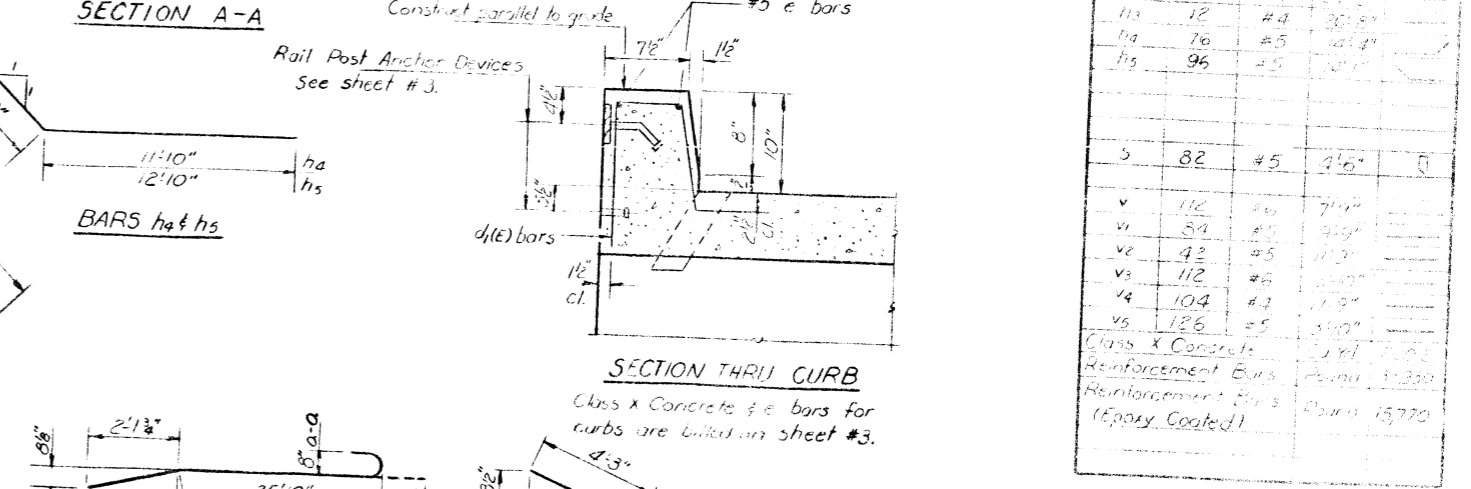


BAR SCHEDULE

Bar	No.	Size	Length	Notes
a1(E)	213	#5	3'0"	
a2	142	#5	3'0"	
a3	152	#5	3'0"	
a4	44	#4	12'0"	
a5(E)	112	#5	3'0"	
a6	71	#8	4'0"	
d	102	#4	4'0"	
d1(E)	100	#5	3'0"	
h1	102	#5	3'0"	
h2	300	#6	2'0"	
h3	122	#4	2'0"	
h4	12	#4	30'0"	
h5	76	#5	10'0"	
h5	96	#5	10'0"	
v	82	#5	4'6"	
v1	112	#6	7'0"	
v2	84	#5	3'0"	
v3	42	#5	11'0"	
v4	112	#6	3'0"	
v5	104	#3	11'0"	
v6	126	#5	3'0"	
v	82	#5	4'6"	
v1	112	#6	7'0"	
v2	84	#5	3'0"	
v3	42	#5	11'0"	
v4	112	#6	3'0"	
v5	104	#3	11'0"	
v6	126	#5	3'0"	

Class X Concrete  
Reinforcement Bars  
Reinforcement Bars  
(Epoxy Coated)

PHOEBE NESTING SITE DETAILS  
Notch formed by rough finished board attached to and removed with formwork. Cost incidental.  
Notch shall be placed on each interior wall at the downstream end only.  
Construct parallel to grade.



DESIGNED  
CHECKED  
DRAWN  
CHECKED

EXAMINED  
PASSED  
APPROVED

1933

ENGINEER OF DESIGN  
DIRECTOR OF HIGHWAYS

Aluminum Straps used  
ASTM B209 alloy 6061-T6  
or Aluminum Extrusions  
ASTM B221 alloy 6061-T6

FLOOR DRAIN

CULVERT DETAILS

