

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LA SALLE	66	1
FED. ROAD DIST. NO. 7	ILLINOIS	CONTRACT NO. 66741		

P-93-030-99  
D-93-013-08



LOCATION OF SECTION INDICATED THUS: —■—

**HIGHWAY CLASSIFICATION**

ROUTE: FAP ROUTE 311 (IL 71)  
FUNCTIONAL CLASS: RURAL OTHER PRINCIPAL ARTERIAL  
ADT: 5,700 (2009)

	050-2047	050-2048	050-2049	050-2050
% P.V.	84.1	84.1	84.1	84.1
% S.U.	4.7	4.7	4.7	4.1
% M.U.	11.2	11.2	11.2	11.8

DESIGN SPEED: 55 MPH  
POSTED SPEED: 55 MPH

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED \_\_\_\_\_ 20 \_\_\_\_\_

*George Rayman*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 2, 20 09

*Charles J. Ingwersoll*  
ENGINEER OF DESIGN AND ENVIRONMENT

October 2, 20 09

*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

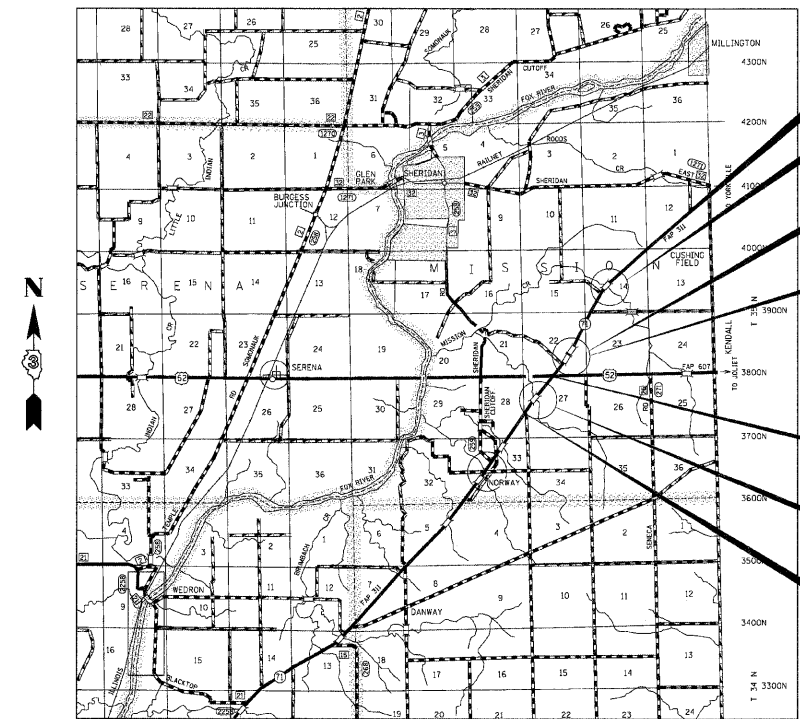
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. ROUTE 311 (IL 71)  
SECTION (3)BR-1,2,3 & (4)BR  
PROJECT ACF-0311(040)  
LA SALLE COUNTY

C - 93 - 021 - 08

PROJECT DESCRIPTION  
REPLACEMENT OF 4 EXISTING BRIDGES WITH  
PRECAST AND CAST-IN-PLACE CONCRETE BOX CULVERTS



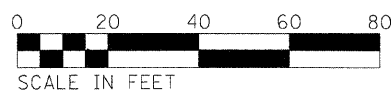
LOCATION MAP  
NOT TO SCALE

- END IMPROVEMENT  
STA 756+50
- S.N. 050-2047  
STA. 754+35.00  
3x10'x7' PRECAST BOX CULVERT
- S.N. 050-2048  
STA. 683+27.88  
2x8'x6' PRECAST BOX CULVERT
- S.N. 050-2049  
STA. 680+72.01  
2x7'x6' PRECAST BOX CULVERT
- FAP 311 (IL 71)
- S.N. 050-2050  
STA. 641+18.00  
2x11'x7' PRECAST BOX CULVERT
- BEGIN IMPROVEMENT  
STA 638+50

GROSS LENGTH = 11800 FT. = 2.23 MI.  
NET LENGTH = 1900 FT. = 0.36 MI.

**INDEX OF SHEETS**

- 1 COVER SHEET
- 2 HIGHWAY STANDARDS, PLAN NOTES, COMMITMENTS
- 3 SUMMARY OF QUANTITIES
- 4-5 TYPICAL SECTIONS
- 6 SCHEDULE OF QUANTITIES
- 7 ALIGNMENT
- 8 SURVEY TIES AND BENCHMARKS
- 9-14 PLAN AND PROFILE
- 15-20 STAGE CONSTRUCTION TRAFFIC CONTROL
- 21-27 STRUCTURE PLANS - S.N. 050-2047
- 28-34 STRUCTURE PLANS - S.N. 050-2048
- 35-41 STRUCTURE PLANS - S.N. 050-2049
- 42-49 STRUCTURE PLANS - S.N. 050-2050
- 50 SHEET WATERPROOFING MEMBRANE DETAILS
- 51-52 DETAILS
- 53-60 CROSS SECTIONS MAINLINE
- 61-66 EXISTING BRIDGE PLANS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES, REDUCED SIZE PLANS WILL NOT  
CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

MICROFILMED \_\_\_\_\_  
REEL NUMBER \_\_\_\_\_  
AWARDED \_\_\_\_\_  
RESIDENT ENGINEER \_\_\_\_\_  
AS BUILT CHANGES WERE MADE  
ON THE FOLLOWING SHEETS \_\_\_\_\_

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

DISTRICT 3 NO. (815) 434-6131  
PROJECT ENGINEER: JOE KANNEL  
UNIT CHIEF: PAT BRABOY  
CONTRACT NO. 66741

DATE TIME  
DON SPEC

**STANDARD DRAWINGS**

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-04 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-03 NAME PLATE FOR BRIDGES
- 542301-02 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 542401-01 METAL END SECTION FOR PIPE CULVERTS
- 606401-01 PAVED DITCH
- 630001-08 STEEL PLATE BEAM GUARDRAIL
- 630101-08 GUARDRAIL MOUNTED ON EXISTING CULVERTS
- 630201-06 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 642001-01 SHOULDER RUMBLE STRIPS
- 667101-01 PERMANENT SURVEY MARKERS
- 701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY
- 701006-03 OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
- 701306-02 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701321-10 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-03 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
- 701901-01 TRAFFIC CONTROL DEVICES
- 704001-05 TEMPORARY CONCRETE BARRIER
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

**COMMITMENTS**

1. ENVIRONMENTAL COORDINATION
2. 404 PERMITS
3. STRUCTURAL STATUS FORMS
4. STORM WATER POLLUTION PREVENTION PLAN
5. LOCATION OF FIELD ENTRANCE BETWEEN SN 050-2048 AND SN 050-2049 IS FIXED

**GENERAL NOTES**

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE.

THE BASE COURSE WIDENING SHALL BE CARRIED THROUGH ALL ENTRANCES, SIDE ROADS, AND MAILBOX TURNOUTS. EXCEPTIONS WILL BE SHOWN ON THE PLANS.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

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

SEEDING SHALL 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.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EXCAVATION.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ADDITIONAL LEVELING BINDER, AT THE RATE GIVEN ON THE TYPICAL SECTIONS, HAS BEEN ADDED TO THE QUANTITIES TO CORRECT TO A 1.5% CROWN ON SECTIONS OF EXISTING ROADWAYS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BIT MATERIALS (PRIME COAT) ON AGGREGATE BASES	0.375	GAL / SQ YD
BITUMINOUS MATERIALS (PRIME COAT)	0.08	GAL / SQ YD
POLYMERIZED BIT MATERIALS (PRIME COAT)	0.10	GAL / SQ YD
FOR ADDITIONAL HMA LIFTS "FOG COAT"	0.08	GAL / SQ YD
FOR ADDITIONAL HMA LIFTS "FOG COAT"	0.05	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: AMEREN IP, NICOR, SBC, VERIZON

NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: NONE

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

STRUCTURE EXCAVATION SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF REMOVAL OF EXISTING STRUCTURES



*Deborah A. Chiofalo* 7-13-09  
Signature Date  
November 30, 2010  
Expires



*Robert A. Cisty* 7-13-09  
Signature Date  
November 30, 2009  
Expires

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

PREPARED BY: *Robert Powell*  
DISTRICT STUDIES & PLANS ENGINEER

DATE: 7-31-09

EXAMINED BY: *Robert Cisty*  
DISTRICT CONSTRUCTION ENGINEER

*John J. Miller*  
DISTRICT MATERIALS ENGINEER

*James A. Wheeler*  
DISTRICT OPERATIONS ENGINEER

FILE NAME - ...ND366741-SHT-StandardNotes.dgn	USER NAME - SAW	DESIGNED - RAC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILLINOIS ROUTE 71 HIGHWAY STANDARDS, PLAN NOTES, COMMITMENTS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT SCALE = 20.0000' / IN.	DRAWN - SAW	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA. 638+50 TO STA. 756+50	311	(3)BR- 1, 2, & (4)BR	LASALLE	66	2
	PLOT DATE = 7/14/2009	CHECKED - RAC	REVISED -											
		DATE - 07/17/09	REVISED -							FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

80% FED.  
20% STATE

CODE NO.	CONSTRUCTION CODE TYPE:		1000	Y007	TOTAL QUANTITY
	ITEM	UNIT			
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	24		24
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	108		108
20200100	EARTH EXCAVATION	CU YD	1826		1826
20400800	FURNISHED EXCAVATION	CU YD	3157		3157
20700110	POROUS GRANULAR EMBANKMENT	TON	4973		4973
* 25000200	SEEDING, CLASS 2	ACRE	2.2		2.2
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	200		200
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	200		200
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	200		200
* 25100115	MULCH, METHOD 2	ACRE	1.6		1.6
* 25100630	EROSION CONTROL BLANKET	SO YD	1528		1528
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	222		222
28000300	TEMPORARY DITCH CHECKS	EACH	16		16
28000400	PERIMETER EROSION BARRIER	FOOT	2820		2820
28000500	INLET AND PIPE PROTECTION	EACH	18		18
28100107	STONE RIPRAP, CLASS A4	SQ YD	225		225
28200200	FILTER FABRIC	SQ YD	225		225
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	920		920
35501326	HOT-MIX ASPHALT BASE COURSE, 10 1/2"	SQ YD	920		920
40200900	AGGREGATE SURFACE COURSE, TYPE B	CU YD	33		33
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	3540		3540
40600300	AGGREGATE (PRIME COAT)	TON	19.9		19.9
40600535	LEVELING BINDER (HAND METHOD), N70	TON	3		3
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	313		313
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	960		960
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	427		427
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	50.1		50.1
44000100	PAVEMENT REMOVAL	SO YD	920		920
44004000	PAVED DITCH REMOVAL	FOOT	890		890
48101200	AGGREGATE SHOULDERS, TYPE B	TON	60.6		60.6
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	85.1		85.1
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	4038		4038
50100100	REMOVAL OF EXISTING STRUCTURES	EACH		4	4
50105200	REMOVE EXISTING CULVERTS	EACH	5		5
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND		8960	8960
50800105	REINFORCEMENT BARS	POUND		38150	38150
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND		1160	1160
51500100	NAME PLATES	EACH		4	4
54003000	CONCRETE BOX CULVERTS	CU YD		284.8	284.8
54010706	PRECAST CONCRETE BOX CULVERT 7' X 6'	FOOT		108	108
54010806	PRECAST CONCRETE BOX CULVERT 8' X 6'	FOOT		122	122

\* SPECIALTY ITEMS

SUMMARY OF QUANTITIES

80% FED.  
20% STATE

CODE NO.	CONSTRUCTION CODE TYPE:		1000	Y007	TOTAL QUANTITY
	ITEM	UNIT			
54011007	PRECAST CONCRETE BOX CULVERT 10' X 7'	FOOT		173	173
* 54011110	PRECAST CONCRETE BOX CULVERT 11' X 7' (SPECIAL)	FOOT		104	104
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	40		40
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	40		40
54213450	END SECTIONS 15"	EACH	2		2
54213453	END SECTIONS 18"	EACH	2		2
60615400	PAVED DITCH, TYPE A-15	FOOT	820		820
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	1362.5		1362.5
* 63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	50		50
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1		1
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	15		15
63200310	GUARDRAIL REMOVAL	FOOT	2243		2243
64200105	SHOULDER RUMBLE STRIP	FOOT	3800		3800
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	2		2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6		6
67100100	MOBILIZATION	L SUM	1		1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	3		3
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1		1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1		1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	60		60
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	3		3
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	200		200
70300625	TEMPORARY PAINT PAVEMENT MARKING LINE 4"	FOOT	10458		10458
70300635	TEMPORARY PAINT PAVEMENT MARKING LINE 6"	FOOT	475		475
70300660	TEMPORARY PAINT PAVEMENT MARKING LINE 24"	FOOT	144		144
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4011		4011
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1210		1210
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1140		1140
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3800		3800
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	475		475
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	28		28
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	24		24
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	16		16
78300100	PAVEMENT MARKING REMOVAL	SQ FT	871		871
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	28		28
X0322121	SHEET WATERPROOFING MEMBRANE SYSTEM	SQ YD		2136	2136
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SO FT		1024	1024
Z0022800	FENCE REMOVAL	FOOT	269		269
Z0030150	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	EACH	8		8
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	8		8

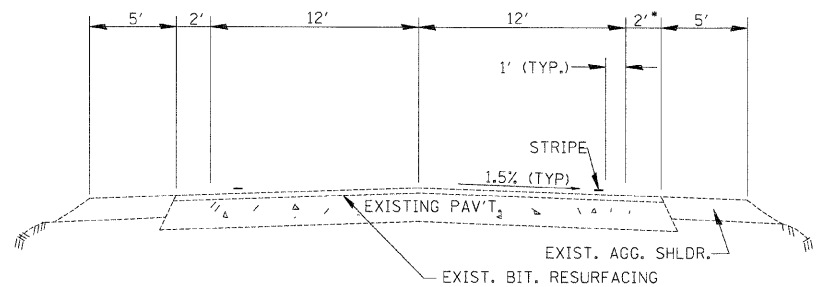
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	PLOT DATE = 7/14/2009	DATE - 07/17/09	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 71  
SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

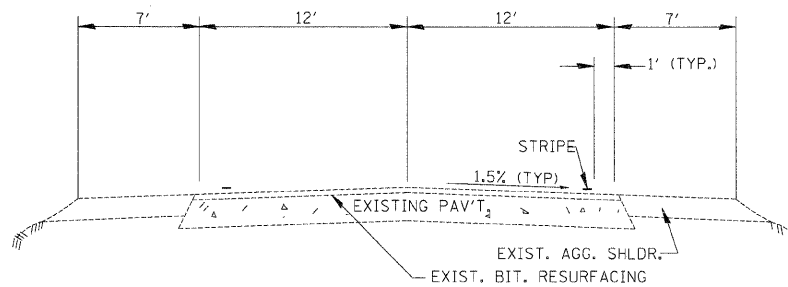
F.A.P. RTE. 311	SECTION (3)BR- 1, 2, & (4)BR	COUNTY LASALLE	TOTAL SHEETS 66	SHEET NO. 3
CONTRACT NO. 66741			ILLINOIS FED. AID PROJECT	



**EXISTING TYPICAL SECTION**

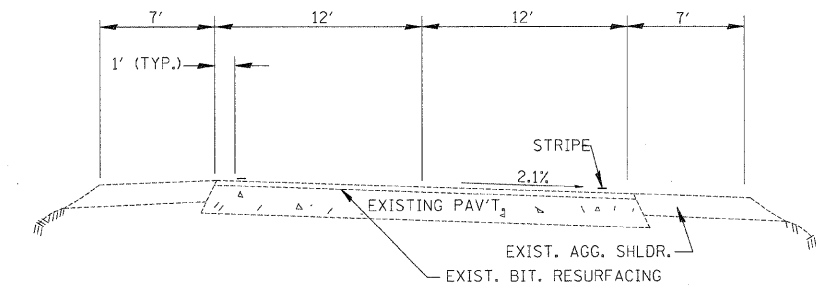
STA. 638+50 TO STA. 640+68  
STA. 641+68 TO STA. 644+00

\*SHOULDER WIDTH VARIES AT GUARDRAIL LOCATIONS



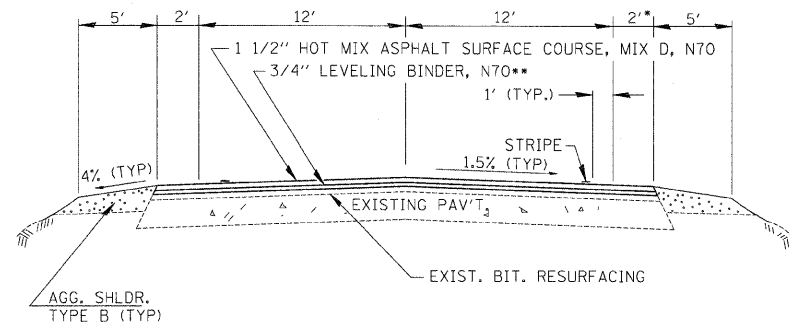
**EXISTING TYPICAL SECTION**

STA. 678+00 TO STA. 680+30  
STA. 681+10 TO STA. 682+85  
STA. 683+70 TO STA. 686+00



**EXISTING TYPICAL SECTION**

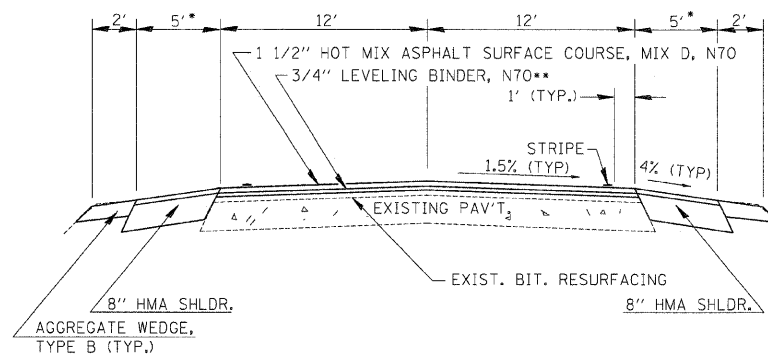
STA. 751+00 TO STA. 753+95  
STA. 754+75 TO STA. 756+50



**PROPOSED TYPICAL SECTION**

STA. 638+50 TO STA. 640+68  
STA. 641+68 TO STA. 644+00

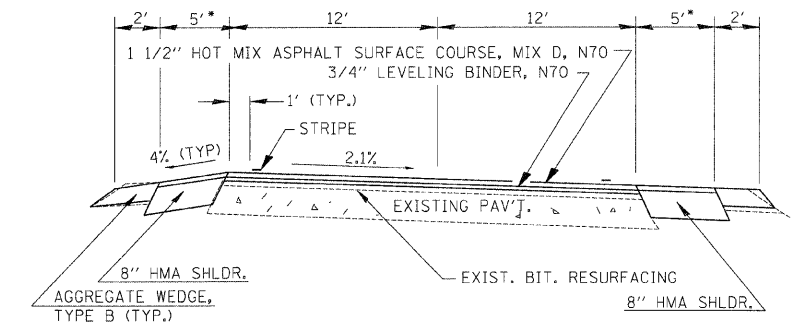
\*SHOULDER WIDTH VARIES AT GUARDRAIL LOCATIONS  
\*\*NOMINAL DEPTH, ACTUAL DEPTH VARIES



**PROPOSED TYPICAL SECTION**

STA. 678+00 TO STA. 680+30  
STA. 681+10 TO STA. 682.85  
STA. 683+70 TO STA. 686+00

\*SHOULDER WIDTH VARIES AT GUARDRAIL LOCATIONS



**PROPOSED TYPICAL SECTION**

STA. 751+00 TO STA. 753+95  
STA. 754+75 TO STA. 756+50

\*SHOULDER WIDTH VARIES AT GUARDRAIL LOCATIONS

	HMA BASE COURSE	HMA LEVEL BINDER	HMA SURFACE	HMA SHOULDERS
PG GRADE****	PG64-22	PG64-22	PG64-22	PG64-22
MAX % RAP ALLOWABLE	SEE	SPECIAL	PROVISION	
DESIGN AIR VOIDS	4.0% @ N70	4.0% @ N70	4.0% @ N70	4.0% @ N50
MIXTURE COMPOSITION	IL 19.0	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0
FRICITION AGGREGATE			MIXTURE D	
DENSITY TEST METHOD	CORES***	SATISFACTION OF ENGINEER	CORES***	CORES***

\*\*\* MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

\*\*\*\* WHEN MORE THAN 20% RAP IS USED, A SOFTER ASPHALT BINDER (PG58-22) MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.

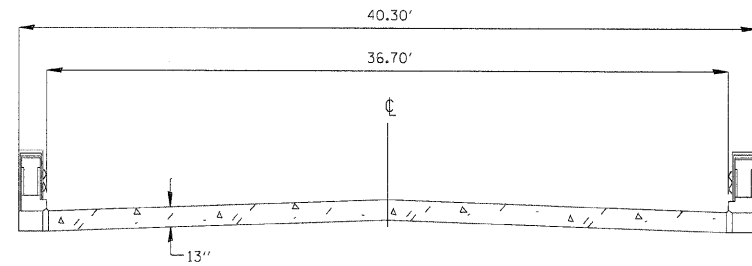
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

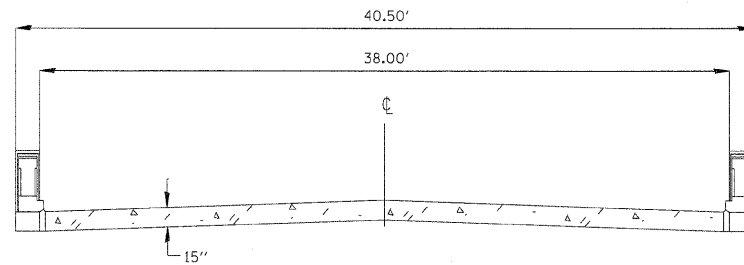
**ILLINOIS ROUTE 71  
TYPICAL SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

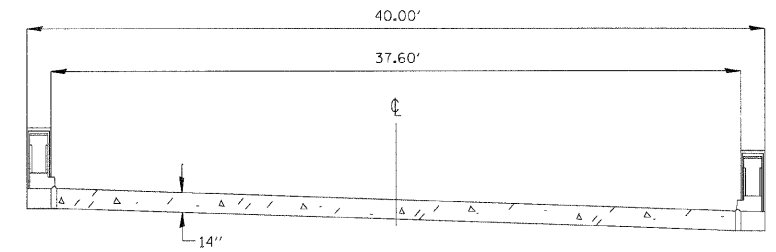
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	4
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 66741	



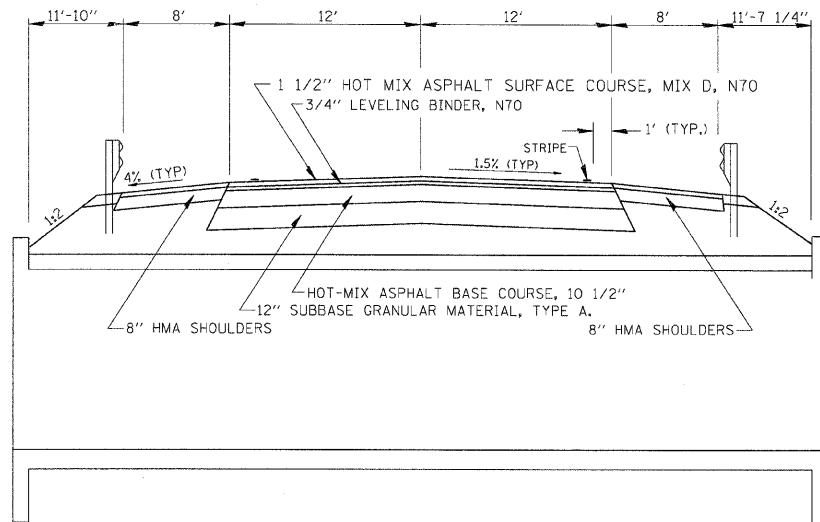
**EXISTING TYPICAL SECTION**  
STA. 640+68 TO STA. 641+68



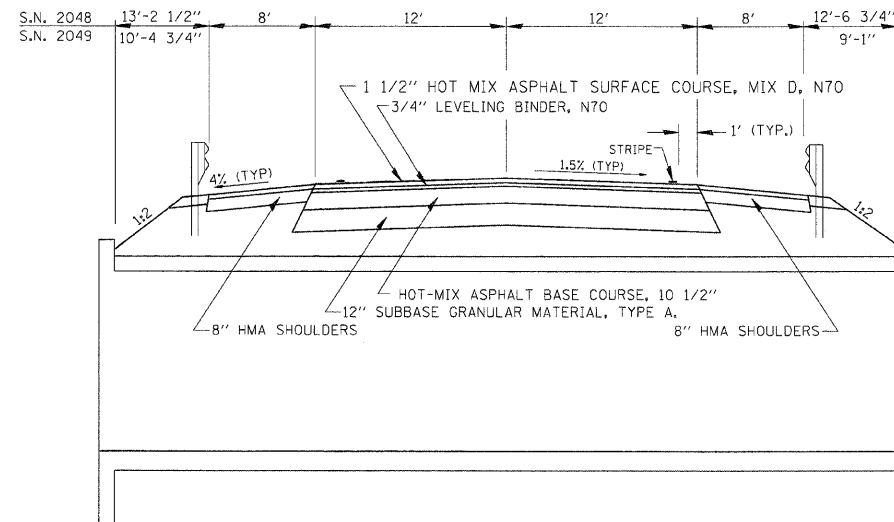
**EXISTING TYPICAL SECTION**  
STA. 680+30 TO STA. 681+10  
STA. 682+85 TO STA. 683+70



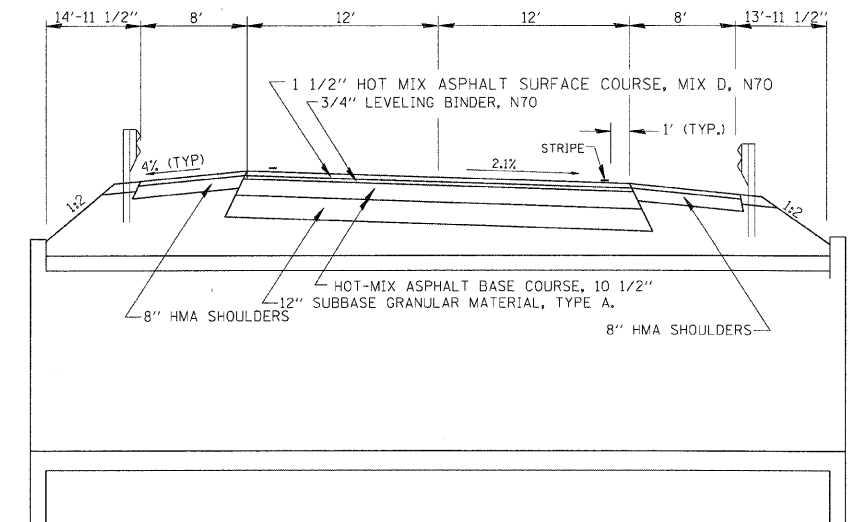
**EXISTING TYPICAL SECTION**  
STA. 753+95 TO STA. 754+75



**PROPOSED TYPICAL SECTION**  
STA. 640+68 TO STA. 641+68  
SN 050-2050



**PROPOSED TYPICAL SECTION**  
STA. 680+30 TO STA. 681+10  
STA. 682+85 TO STA. 683+70  
SN 050-2048 AND SN 050-2049



**PROPOSED TYPICAL SECTION**  
STA. 753+95 TO STA. 754+75  
SN 050-2047

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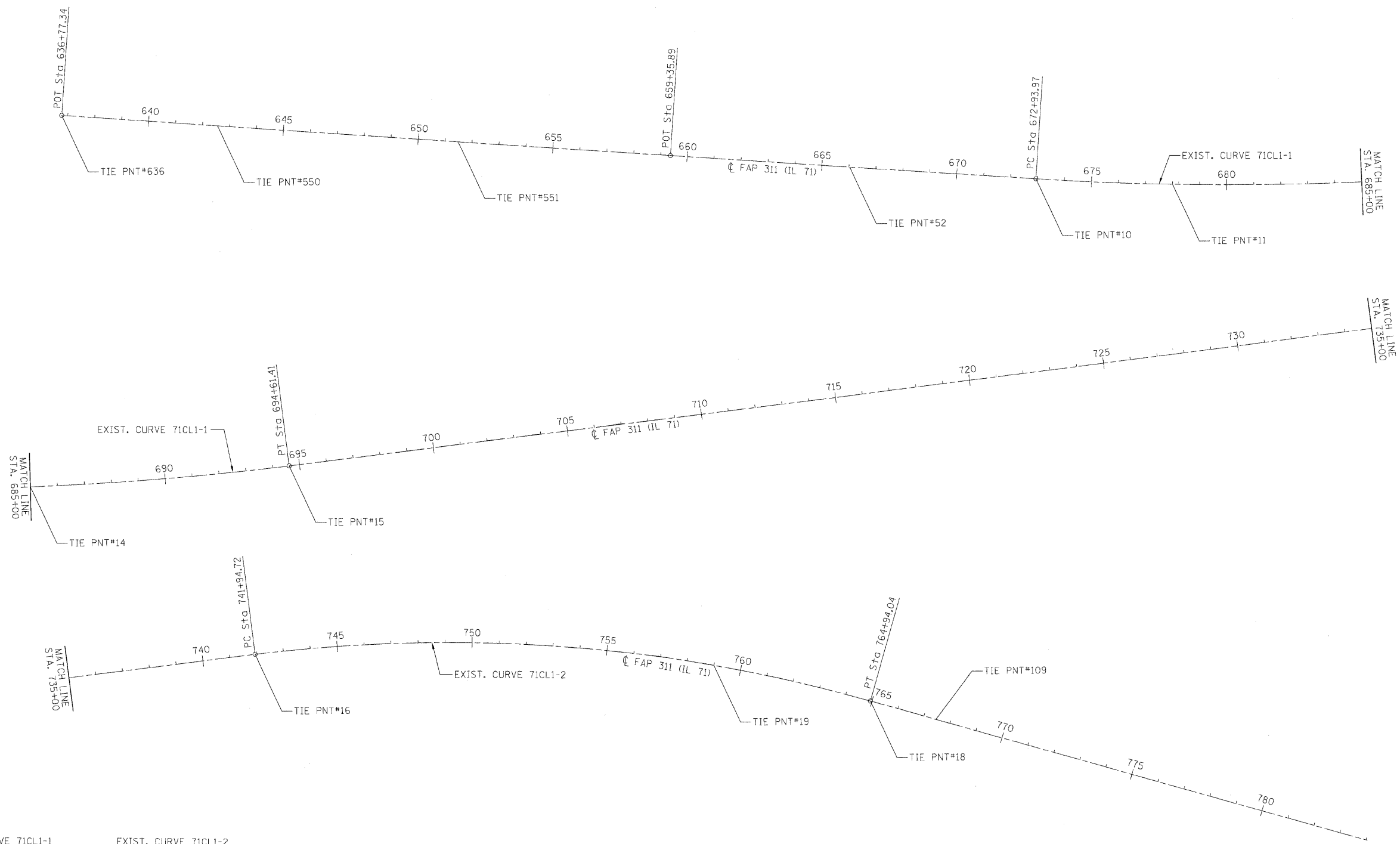
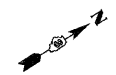
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 71  
TYPICAL SECTIONS

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

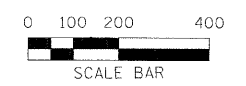
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311	(318R- 1, 2, & 4)BR	LASALLE	66	5
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66741	



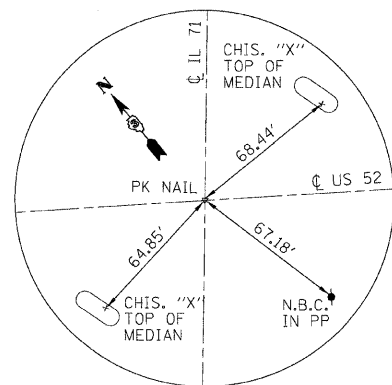


EXIST. CURVE 71CL1-1  
 PI STA. = 683+80.98  
 Δ = 10° 55' 03" (LT)  
 D = 0° 30' 13"  
 R = 11,375.00'  
 T = 1,087.01'  
 L = 2,167.44'  
 E = 51.82'  
 e = ----  
 T.R. = ----  
 S.E. RUN = ----  
 P.C. STA. = 672+93.97  
 P.T. STA. = 694+61.41

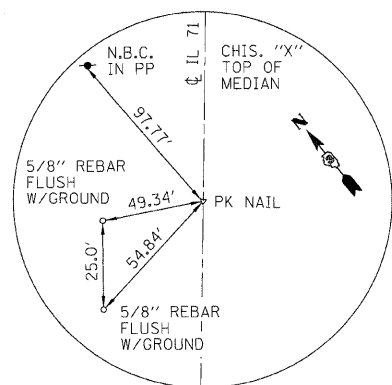
EXIST. CURVE 71CL1-2  
 PI STA. = 753+60.06  
 Δ = 22° 59' 32" (RT)  
 D = 1° 00' 00"  
 R = 5,729.85'  
 T = 1,165.34'  
 L = 2,299.32'  
 E = 117.30'  
 e = ----  
 T.R. = ----  
 S.E. RUN = ----  
 P.C. STA. = 741+94.72  
 P.T. STA. = 764+94.04



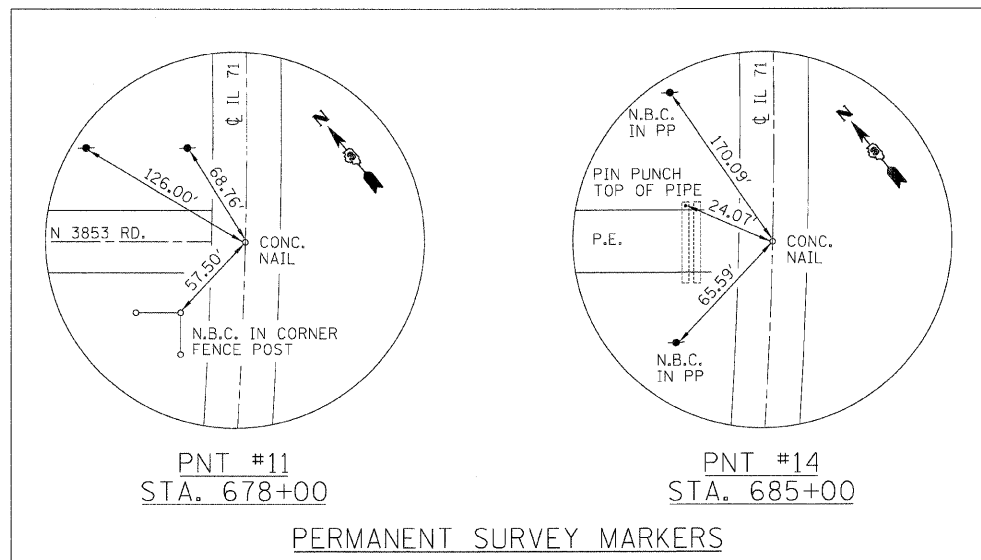
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PLOT SCALE = 20.0000' / IN.	CHECKED - RAC	REVISED -	SCALE:			SHEET NO. OF SHEETS	STA. 638+50 TO STA. 756+50	FED. ROAD DIST. NO. = ILLINOIS FED. AID PROJECT	CONTRACT NO. 66741		
PLOT DATE = 7/14/2009	DATE = 07/17/09	REVISED -									



PNT #52  
STA. 666+02.11



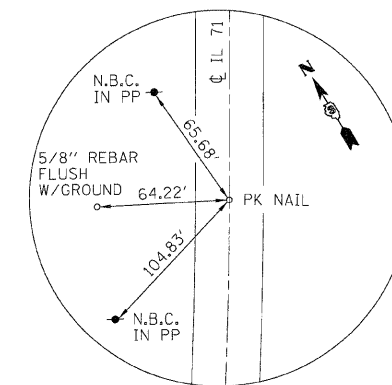
PNT #10  
P.O.C. STA. 672+93.97



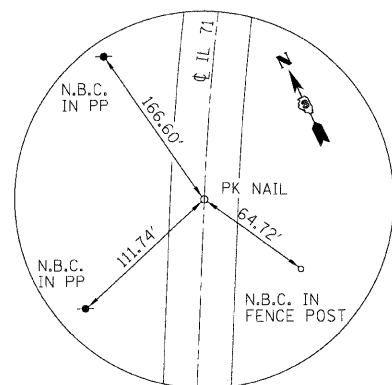
PNT #11  
STA. 678+00

PNT #14  
STA. 685+00

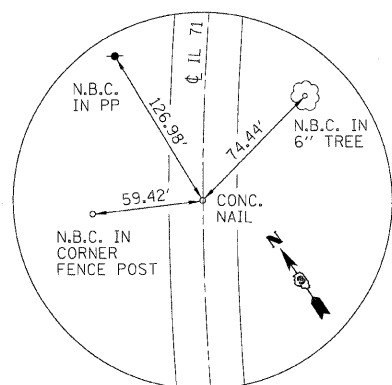
PERMANENT SURVEY MARKERS



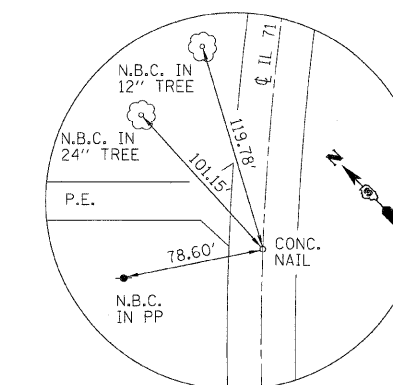
PNT #15  
P.T. STA. 694+61.41



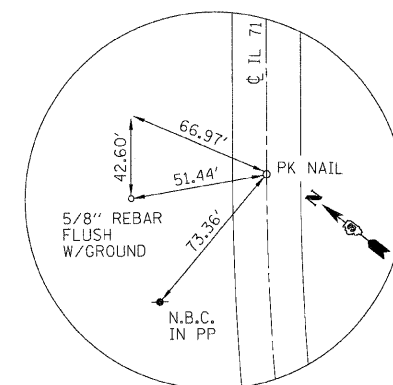
PNT #16  
P.C. STA. 741+94.72



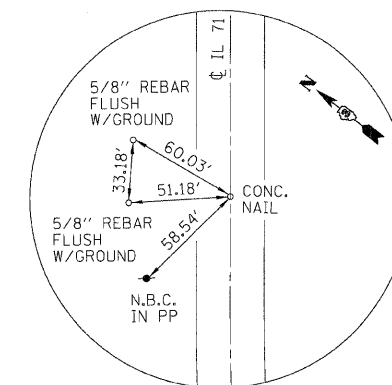
PNT #17  
P.O.C. STA. 666+02.11



PNT #19  
P.O.C. STA. 759+00



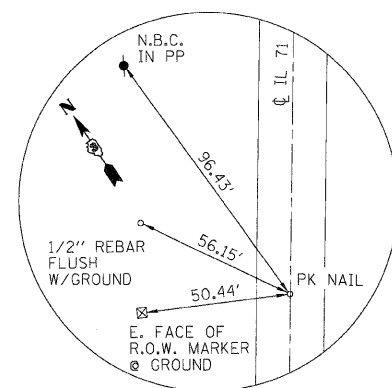
PNT #18  
P.T. STA. 764+94.04



PNT #109  
STA. 767+38.51

BENCHMARKS

BM #100 BRASS DISC, SW QUAD OF INT OF US 52 AND IL 71  
STA 664+13.608, 78.935 LT, ELEV 642.254  
BM #11 RAILROAD SPIKE IN P.P.  
STA 657+20.20 48.30 LT, ELEV 637.194  
BM #13 RAILROAD SPIKE IN P.P.  
STA 647+01.20 49.80 LT, ELEV 638.929



PNT #636  
STA. 636+77.34

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 71  
SURVEY TIES AND BENCHMARKS

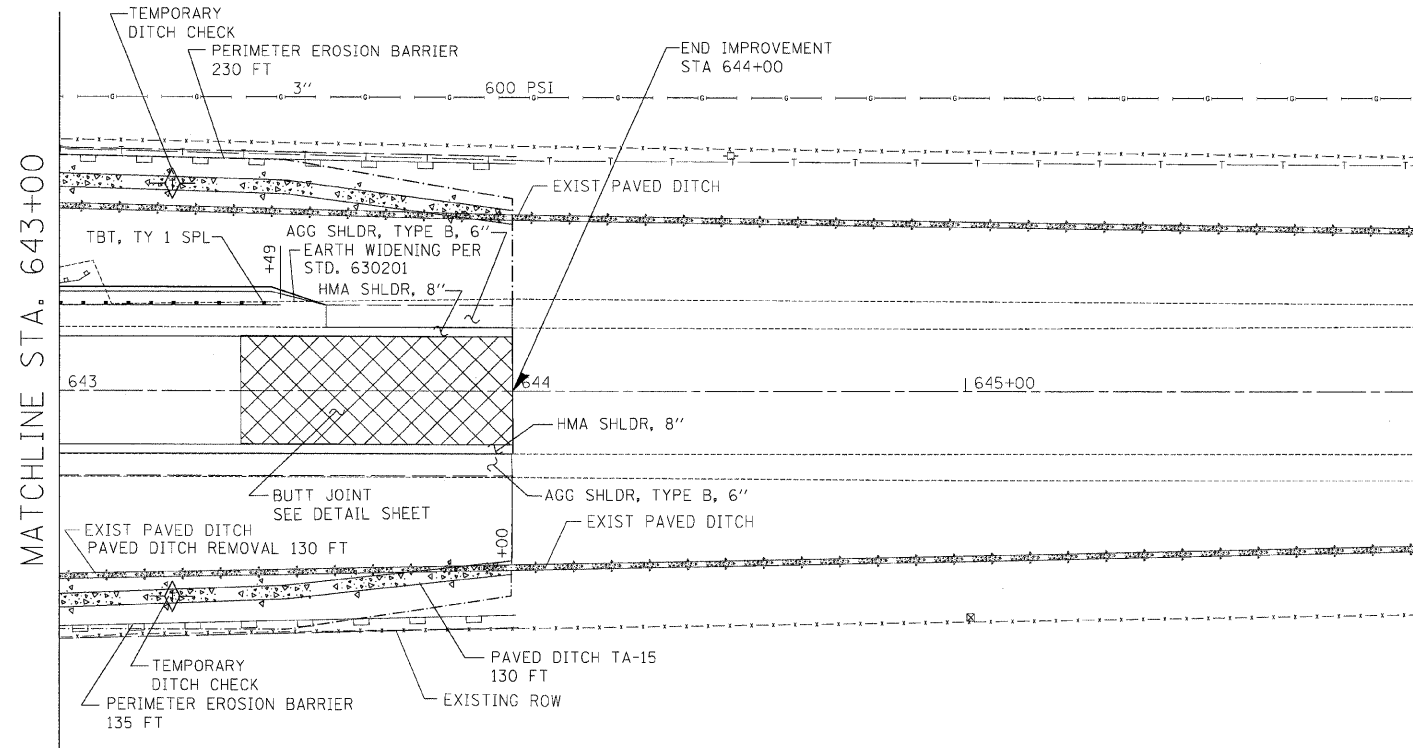
SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	8
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66741	

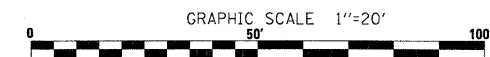




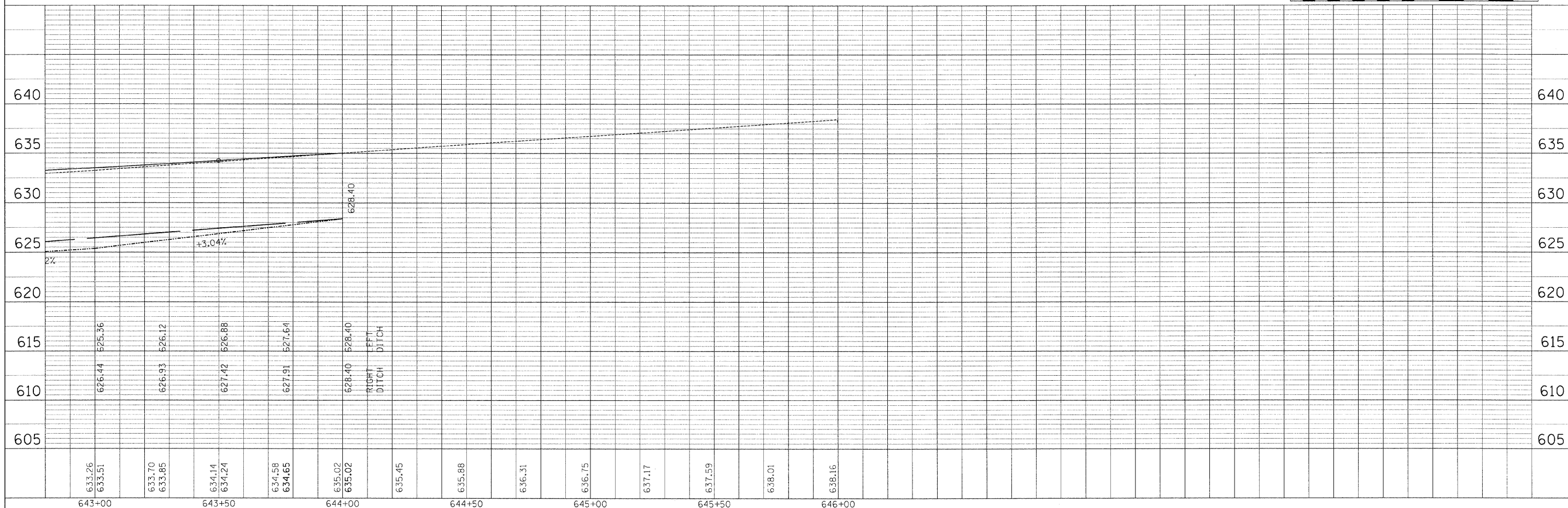
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	NOTED		
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	FILE NAME		



PLAN



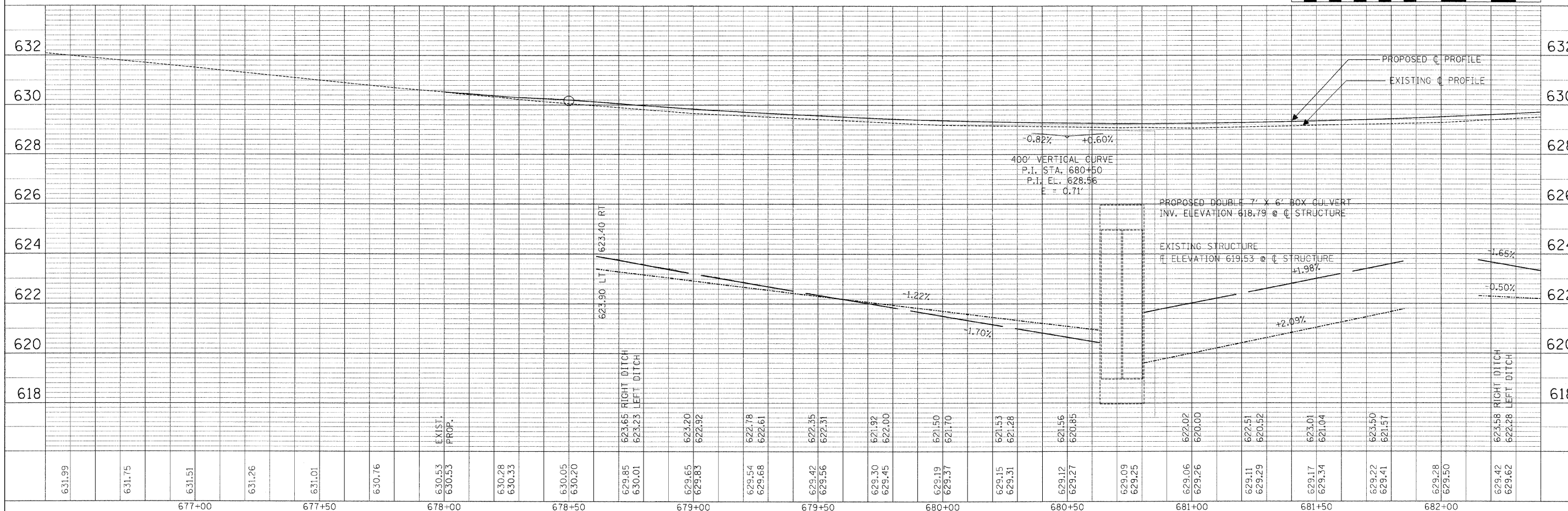
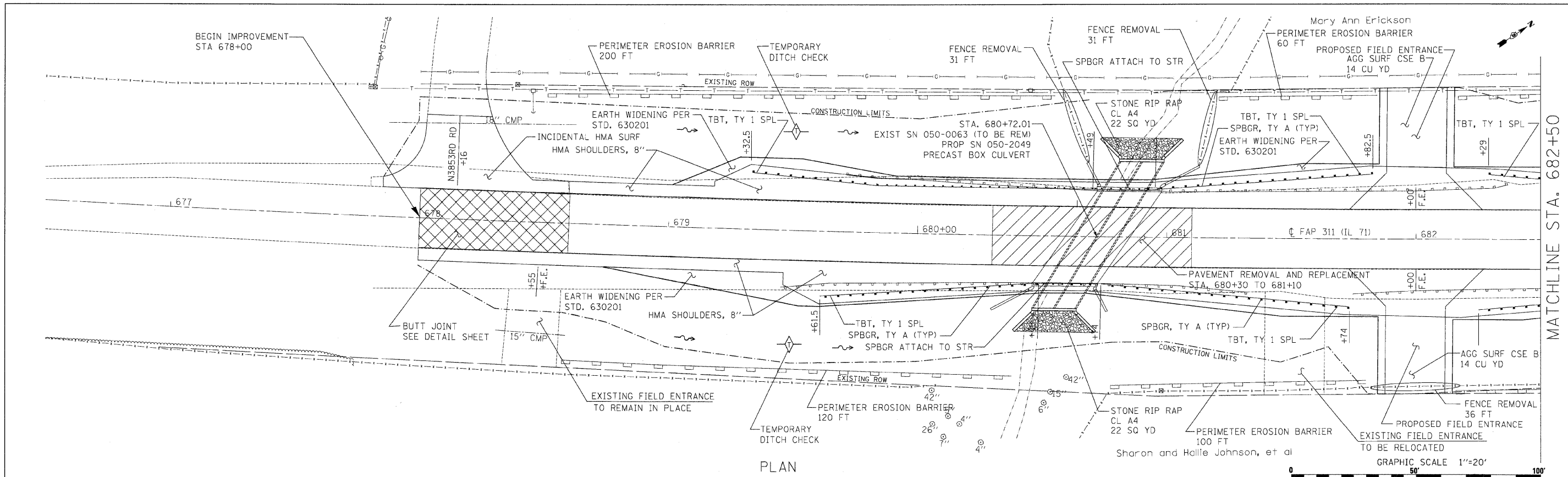
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PLOT DATE = 7/14/2009	DATE = 07/17/09	CHECKED - RAC	REVISED -								
		DATE = 07/17/09	REVISED -								

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	BY	
	DATE	
	NOTE BOOK NO.	
	DATE	
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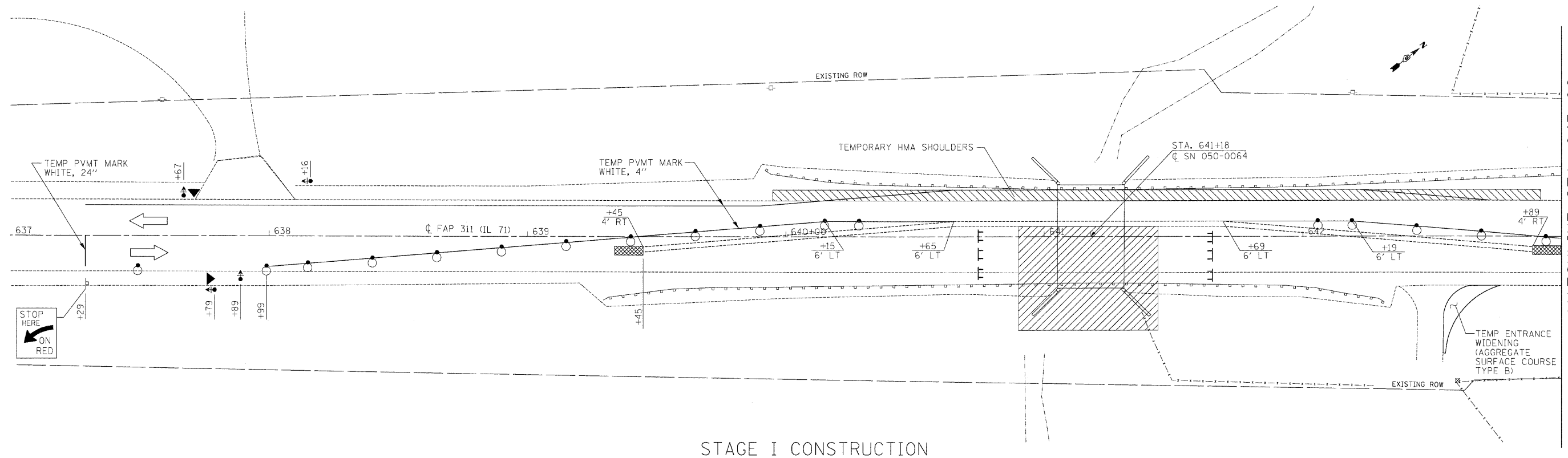


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PLOT SCALE = 20.0000' / IN.		CHECKED - RAC	REVISED -			CONTRACT NO. 66741					
PLOT DATE = 7/14/2009		DATE - 07/17/09	REVISED -			ILLINOIS FED. AID PROJECT					









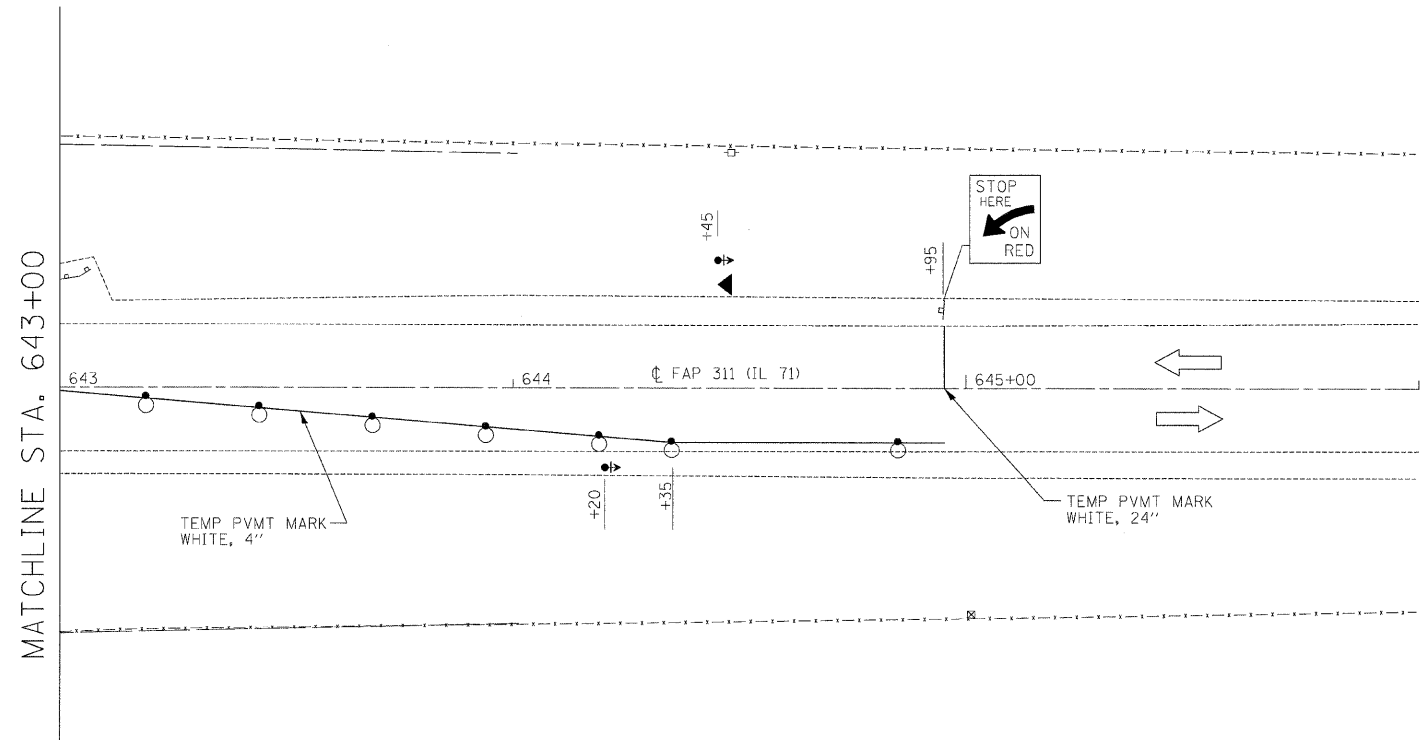
STAGE I CONSTRUCTION

MATCHLINE STA. 643+00

**SEQUENCE OF CONSTRUCTION**

**STAGE I PRECONSTRUCTION**  
 CONSTRUCT TEMPORARY HMA SHOULDERS (PAID FOR AS: HOT-MIX ASPHALT SHOULDERS, 8") ADJACENT TO SOUTHBOUND LANE AND TEMPORARY ENTRANCE WIDENING IN NORTHBOUND LANE TO BE USED FOR STAGE I TRAFFIC USING TRAFFIC CONTROL AND PROTECTION STANDARD 701326.

**STAGE I CONSTRUCTION**  
 CONSTRUCT PROPOSED HMA PAVEMENT, PROPOSED GUARDRAIL, AND THE STAGE I PORTION OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE NORTHBOUND LANES USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.



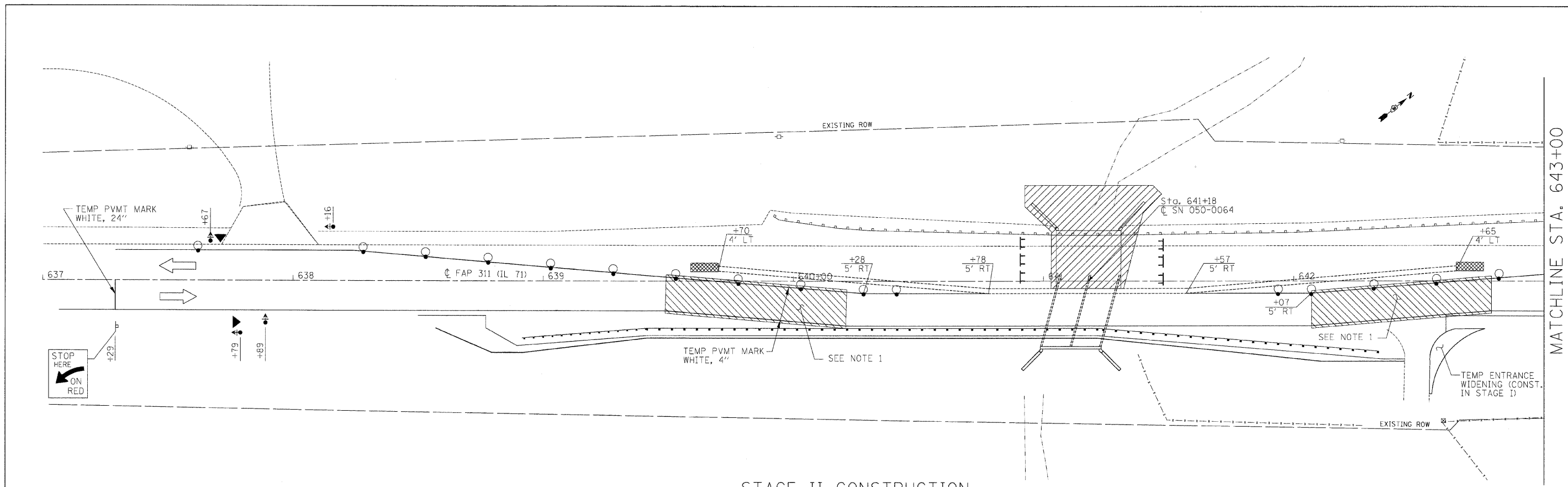
STAGE I CONSTRUCTION

**SIGNING SCHEDULE (SIGNS NOT SHOWN)**

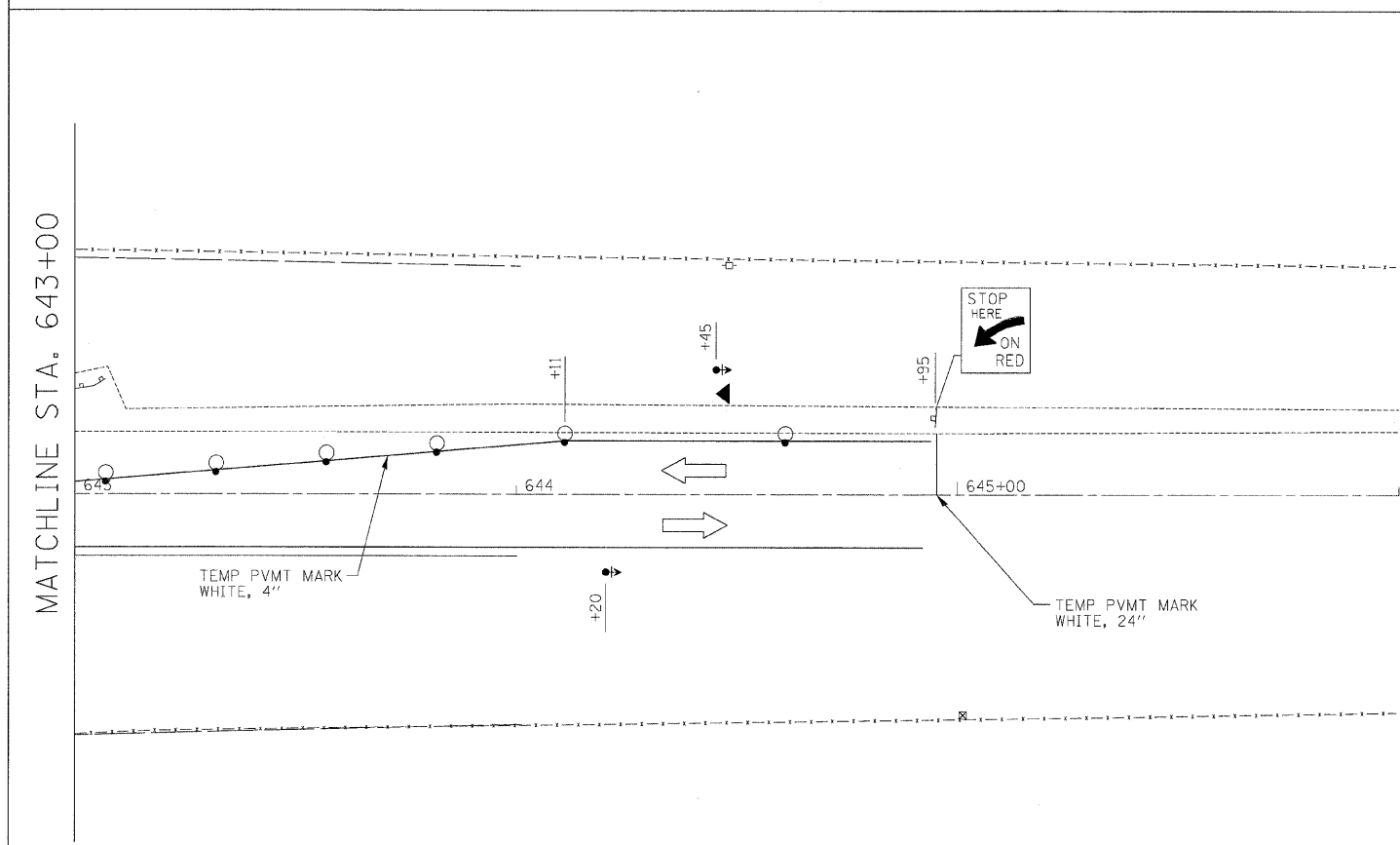
SIGN	LOCATION	OFF.	SIGN DESCRIPTION
W12-1102(O)-48	IL 71 N. OF I-80	RT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W12-1101(O)	IL 71 N. OF I-80	RT	7 MILES AHEAD ATTACHED TO WIDTH REST. SIGN
W12-1103(O)-48	617+29	RT	ROAD CONSTRUCTION AHEAD
W12-1102(O)-48	622+29	RT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(O)-48	627+29	RT	ONE LANE ROAD AHEAD
W13-1(O)-2424	627+29	RT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(O)-2424
W3-3(O)-48	632+29	RT	TRAFFIC SIGNAL AHEAD
W12-1103(O)-48	664+95	LT	ROAD CONSTRUCTION AHEAD
W12-1102(O)-48	659+95	LT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(O)-48	654+95	LT	ONE LANE ROAD AHEAD
W13-1(O)-2424	654+95	LT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(O)-2424
W3-3(O)-48	649+95	LT	TRAFFIC SIGNAL AHEAD

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- IMPACT ATTENUATOR
- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER



STAGE II CONSTRUCTION



STAGE II CONSTRUCTION

NOTE 1:  
 TEMPORARY PAVEMENT (LEVELING BINDER) CONSTRUCTED  
 IN STAGE II PRECONSTRUCTION TO PROVIDE TRANSITION  
 FROM EXISTING TO PROPOSED PAVEMENT

**SEQUENCE OF CONSTRUCTION**

STAGE II PRECONSTRUCTION  
 CONSTRUCT TEMPORARY TRANSITION PAVEMENT USING TRAFFIC CONTROL  
 AND PROTECTION STANDARD 701326.

STAGE II CONSTRUCTION  
 CONSTRUCT HMA PAVEMENT, PROPOSED GUARDRAIL AND THE STAGE II PORTION  
 OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE SOUTHBOUND LANES  
 USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- IMPACT ATTENUATOR
- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

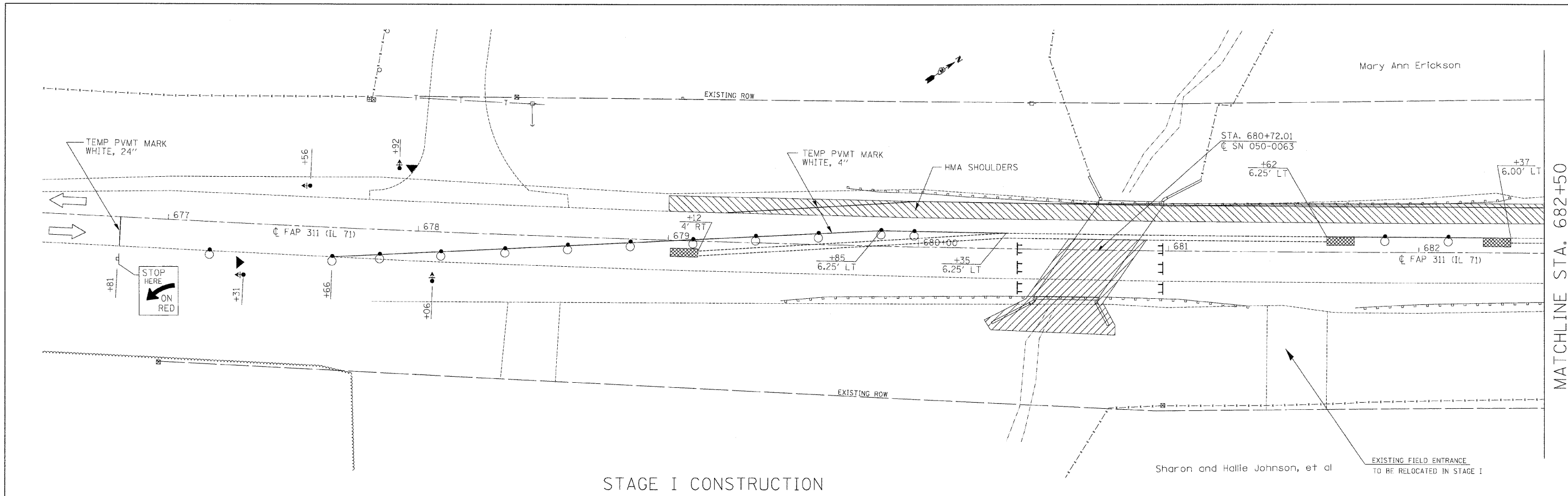
ILLINOIS ROUTE 71  
 STAGE CONSTRUCTION TRAFFIC CONTROL

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	16
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT



Mary Ann Erickson



STAGE I CONSTRUCTION

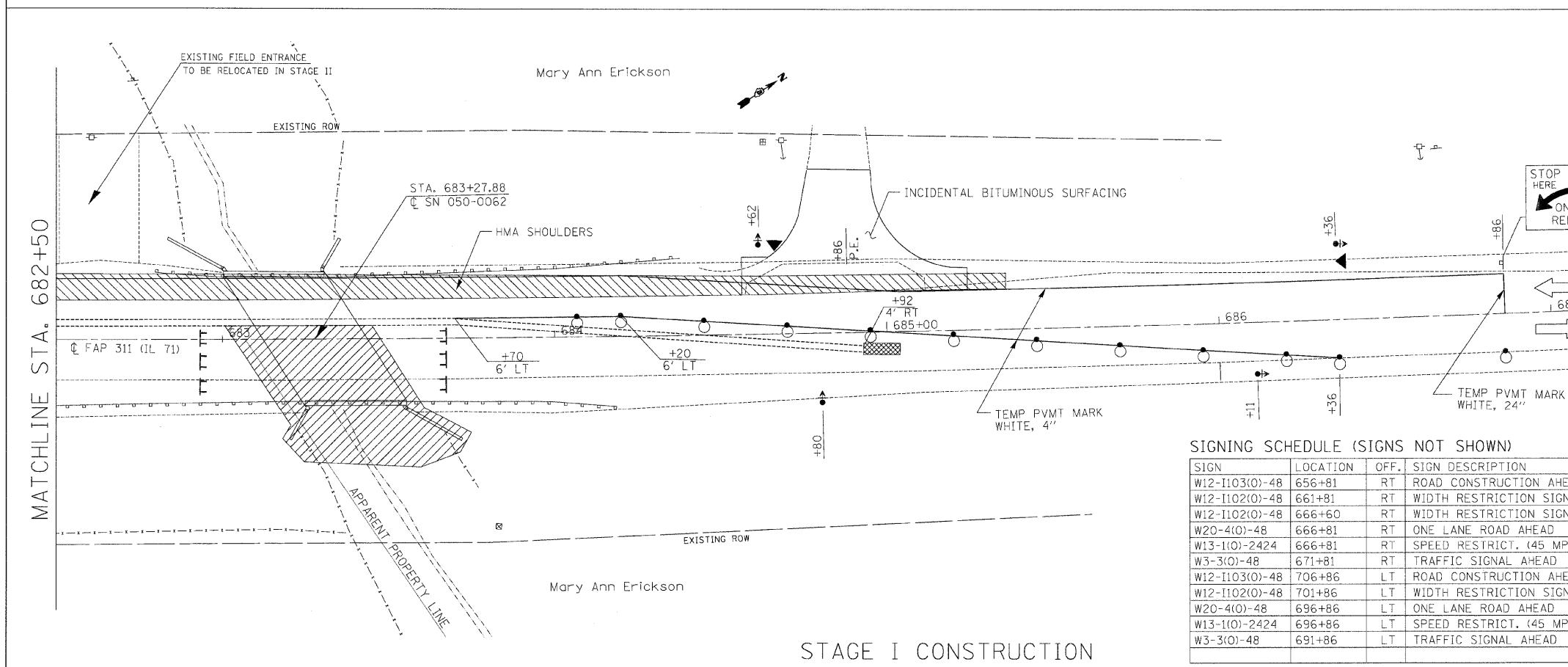
MATCHLINE STA. 682+50

Sharon and Hallie Johnson, et al  
EXISTING FIELD ENTRANCE TO BE RELOCATED IN STAGE I

**SEQUENCE OF CONSTRUCTION**

**STAGE I PRECONSTRUCTION**  
CONSTRUCT HMA SHOULDERS ADJACENT TO SOUTHBOUND LANE TO BE USED FOR STAGE I TRAFFIC AND INCIDENTAL BITUMINOUS SURFACING FOR P.E. AT STA. 684+86 USING TRAFFIC CONTROL AND PROTECTION STANDARD 701326.

**STAGE I CONSTRUCTION**  
CONSTRUCT PROPOSED HMA PAVEMENT, SHOULDERS PROPOSED GUARDRAIL, AND STAGE I PORTION OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE NORTHBOUND LANES USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.



STAGE I CONSTRUCTION

MATCHLINE STA. 682+50

**SIGNING SCHEDULE (SIGNS NOT SHOWN)**

SIGN	LOCATION	OFF.	SIGN DESCRIPTION
W12-I103(0)-48	656+81	RT	ROAD CONSTRUCTION AHEAD
W12-I102(0)-48	661+81	RT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W12-I102(0)-48	666+60	RT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(0)-48	666+81	RT	ONE LANE ROAD AHEAD
W13-1(0)-2424	666+81	RT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(0)-2424
W3-3(0)-48	671+81	RT	TRAFFIC SIGNAL AHEAD
W12-I103(0)-48	706+86	LT	ROAD CONSTRUCTION AHEAD
W12-I102(0)-48	701+86	LT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(0)-48	696+86	LT	ONE LANE ROAD AHEAD
W13-1(0)-2424	696+86	LT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(0)-2424
W3-3(0)-48	691+86	LT	TRAFFIC SIGNAL AHEAD

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- IMPACT ATTENUATOR
- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER

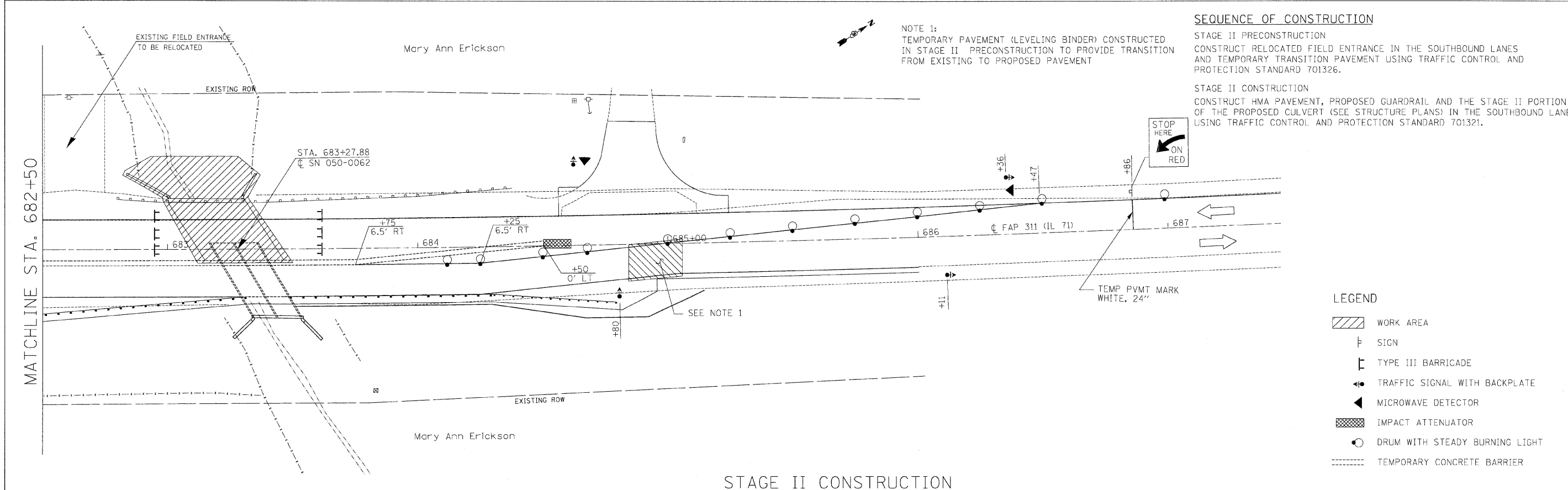
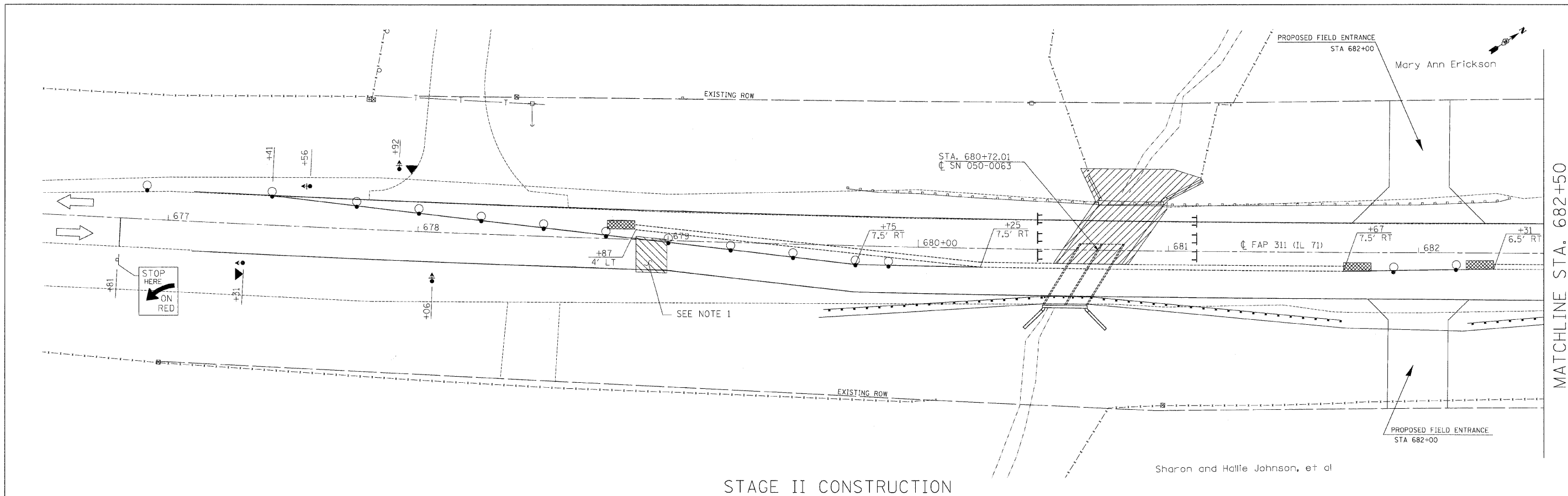
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 71  
STAGE CONSTRUCTION TRAFFIC CONTROL**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	17
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 66741	

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50



NOTE 1:  
 TEMPORARY PAVEMENT (LEVELING BINDER) CONSTRUCTED  
 IN STAGE II PRECONSTRUCTION TO PROVIDE TRANSITION  
 FROM EXISTING TO PROPOSED PAVEMENT

**SEQUENCE OF CONSTRUCTION**  
 STAGE II PRECONSTRUCTION  
 CONSTRUCT RELOCATED FIELD ENTRANCE IN THE SOUTHBOUND LANES  
 AND TEMPORARY TRANSITION PAVEMENT USING TRAFFIC CONTROL AND  
 PROTECTION STANDARD 701326.  
 STAGE II CONSTRUCTION  
 CONSTRUCT HMA PAVEMENT, PROPOSED GUARDRAIL AND THE STAGE II PORTION  
 OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE SOUTHBOUND LANES  
 USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

- LEGEND**
- WORK AREA
  - SIGN
  - TYPE III BARRICADE
  - TRAFFIC SIGNAL WITH BACKPLATE
  - MICROWAVE DETECTOR
  - IMPACT ATTENUATOR
  - DRUM WITH STEADY BURNING LIGHT
  - TEMPORARY CONCRETE BARRIER

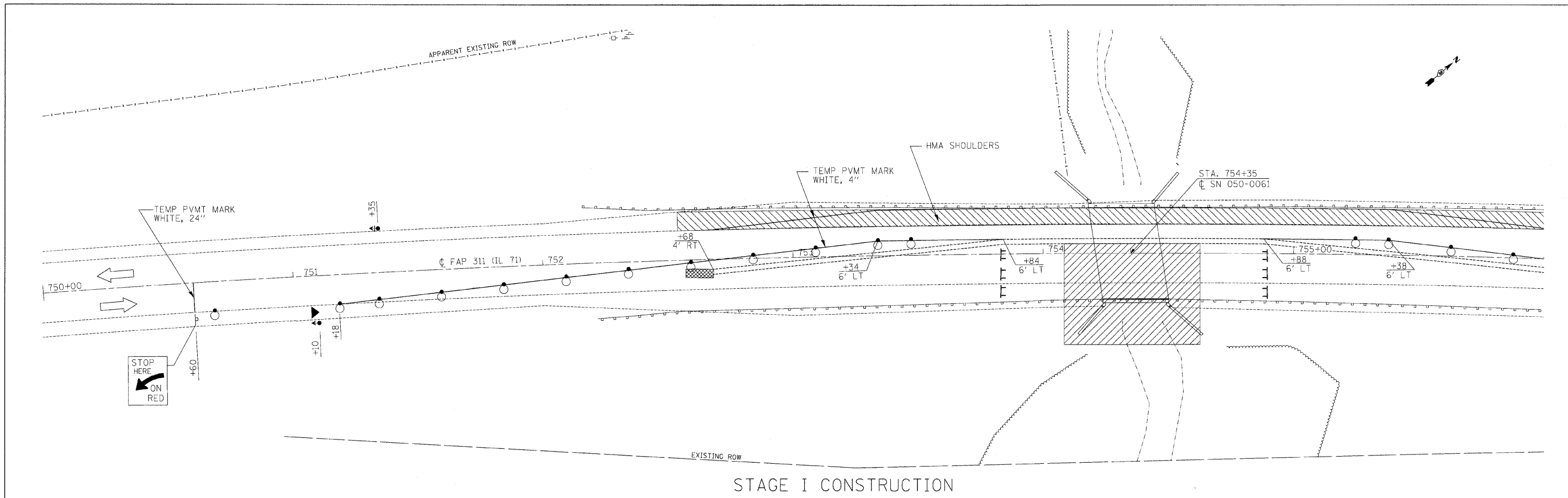
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	PLOT DATE = 7/14/2009	DATE - 07/17/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

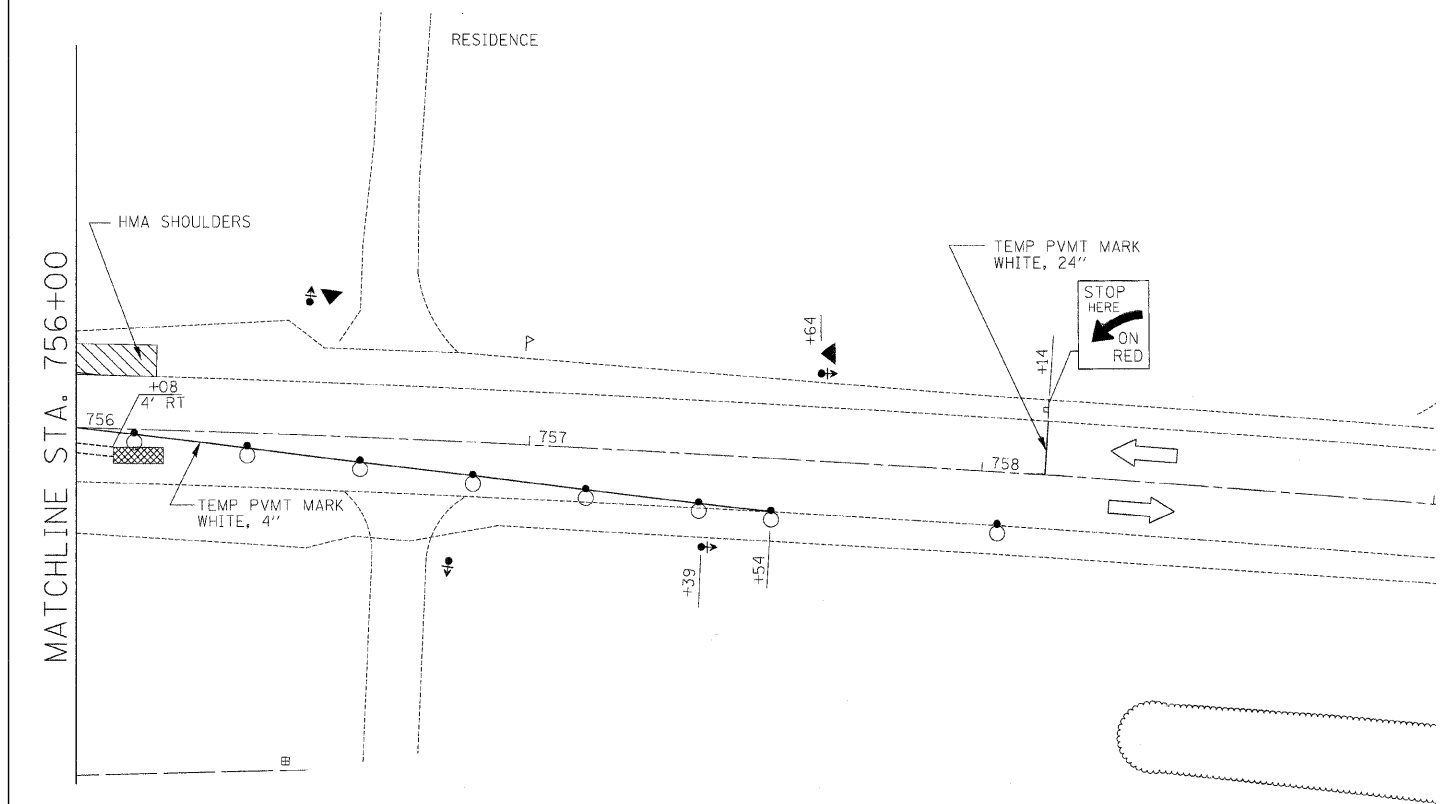
**ILLINOIS ROUTE 71  
 STAGE CONSTRUCTION TRAFFIC CONTROL**

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	18
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 66741	



STAGE I CONSTRUCTION



STAGE I CONSTRUCTION

**SEQUENCE OF CONSTRUCTION**

**STAGE I PRECONSTRUCTION**  
 CONSTRUCT HMA SHOULDERS ADJACENT TO SOUTHBOUND LANE TO BE USED FOR STAGE I TRAFFIC USING TRAFFIC CONTROL AND PROTECTION STANDARD 701326.

**STAGE I CONSTRUCTION**  
 CONSTRUCT PROPOSED HMA PAVEMENT, PROPOSED GUARDRAIL, AND STAGE I PORTION OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE NORTHBOUND LANES USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

**SIGNING SCHEDULE (SIGNS NOT SHOWN)**

SIGN	LOCATION	OFF.	SIGN DESCRIPTION
W12-1103(O)-48	730+60	RT	ROAD CONSTRUCTION AHEAD
W12-1102(O)-48	735+60	RT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(O)-48	740+60	RT	ONE LANE ROAD AHEAD
W13-1(O)-2424	740+60	RT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(O)-2424
W3-3(O)-48	745+60	RT	TRAFFIC SIGNAL AHEAD
W12-1103(O)-48	778+14	LT	ROAD CONSTRUCTION AHEAD
W12-1102(O)-48	773+14	LT	WIDTH RESTRICTION SIGN (SEE DETAILS SHEET)
W20-4(O)-48	768+14	LT	ONE LANE ROAD AHEAD
W13-1(O)-2424	758+14	LT	SPEED RESTRICT. (45 MPH) ATTACHED TO W13-1(O)-2424
W3-3(O)-48	763+14	LT	TRAFFIC SIGNAL AHEAD

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- IMPACT ATTENUATOR
- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER

FILE NAME = ...ND366741-SHT-Stage Const Sheets.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
		DRAWN - SAW	REVISED -
	PLOT SCALE = 20,000' / IN.	CHECKED - RAC	REVISED -
	PLOT DATE = 7/14/2009	DATE - 07/17/09	REVISED -

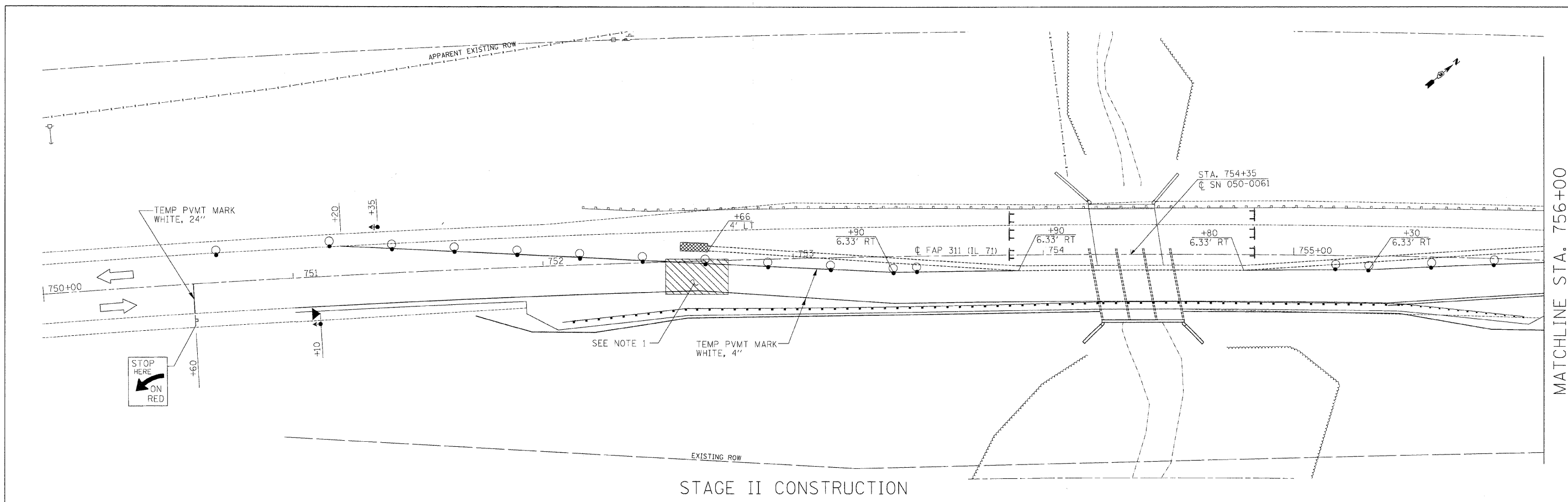
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 71  
 STAGE CONSTRUCTION TRAFFIC CONTROL

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

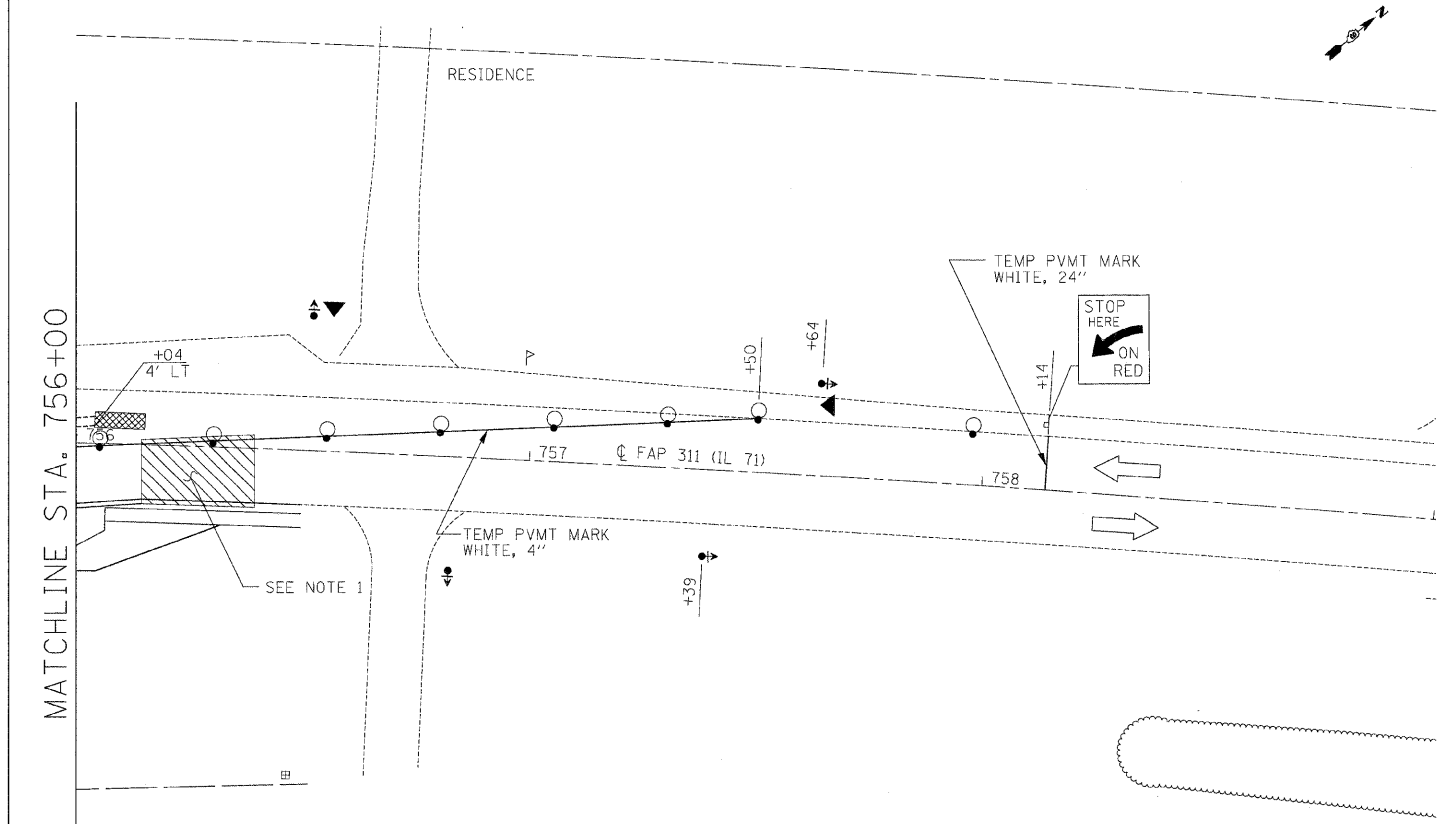
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	19
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

CONTRACT NO. 66741



STAGE II CONSTRUCTION

MATCHLINE STA. 756+00



STAGE II CONSTRUCTION

NOTE 1:  
TEMPORARY PAVEMENT (LEVELING BINDER) CONSTRUCTED  
IN STAGE II PRECONSTRUCTION TO PROVIDE TRANSITION  
FROM EXISTING TO PROPOSED PAVEMENT

**SEQUENCE OF CONSTRUCTION**

STAGE II PRECONSTRUCTION  
CONSTRUCT TEMPORARY TRANSITION PAVEMENT USING TRAFFIC CONTROL  
AND PROTECTION STANDARD 701326.

STAGE II CONSTRUCTION  
CONSTRUCT HMA PAVEMENT, PROPOSED GUARDRAIL AND THE STAGE II PORTION  
OF THE PROPOSED CULVERT (SEE STRUCTURE PLANS) IN THE SOUTHBOUND LANES  
USING TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

**LEGEND**

- WORK AREA
- SIGN
- TYPE III BARRICADE
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- IMPACT ATTENUATOR
- DRUM WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER

FILE NAME = ...ND366741-SHT-Stage Const Sheets.dgn	USER NAME = SAW	DESIGNED - RAC	REVISED -
PLOT SCALE = 20.0000' / IN.	CHECKED - RAC	DRAWN - SAW	REVISED -
PLOT DATE = 7/14/2009	DATE - 07/17/09		REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 71  
STAGE CONSTRUCTION TRAFFIC CONTROL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	20
			CONTRACT NO. 66741	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

Bench Mark:

Existing Structure: S.N. 050-0061 was originally constructed in 1947. The existing structure is a 40' wide cast-in-place reinforced concrete slab bridge on closed concrete abutments. The structure measures 24'-2" long.

Staging shall be used during construction of the proposed triple box culvert.

No Salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 311	*	LaSalle	66	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

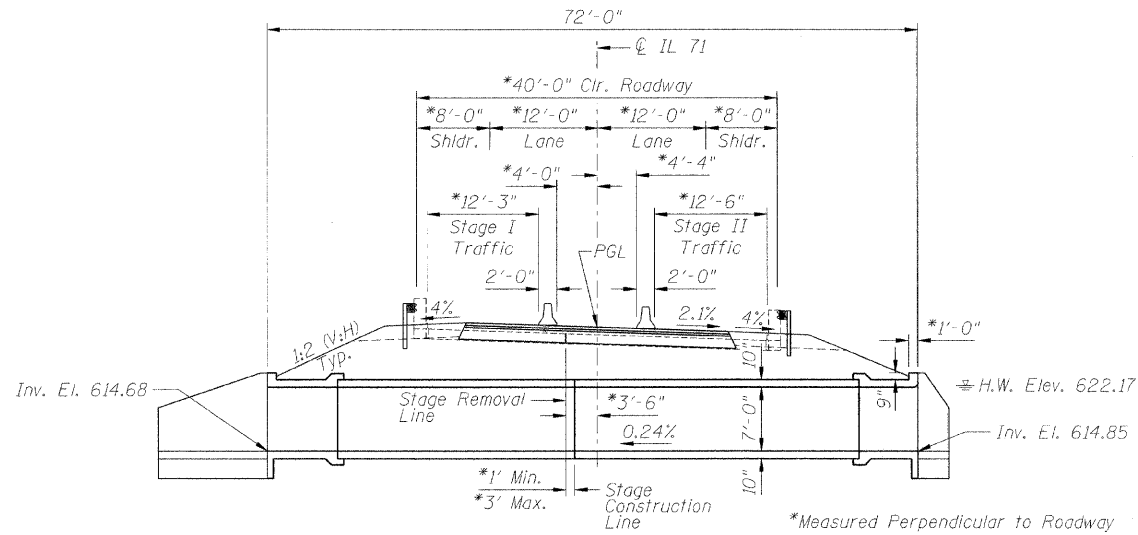
\*(3)BR-1,2,3 & (4)BR Contract #66741

GENERAL NOTES

1. Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M. 259.
2. Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
3. Reinforcement bars designated (E) shall be epoxy coated.
4. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	13,280
Reinforcement Bars (Epoxy Coated)	Pound	430
Temporary Soil Retention System	Sq. Ft.	456
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	91.0
Precast Concrete Box Culvert 10'x7'	Foot	173
Sheet Waterproofing Membrane System	Sq. Yd.	748



LONGITUDINAL SECTION

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.  
Design Fill Hl. > 2'

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

PRECAST

$f'_c = 5,000$  psi  
 $f_y = 65,000$  psi (welded wire fabric)

CAST-IN-PLACE

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

HORIZONTAL CURVE DATA

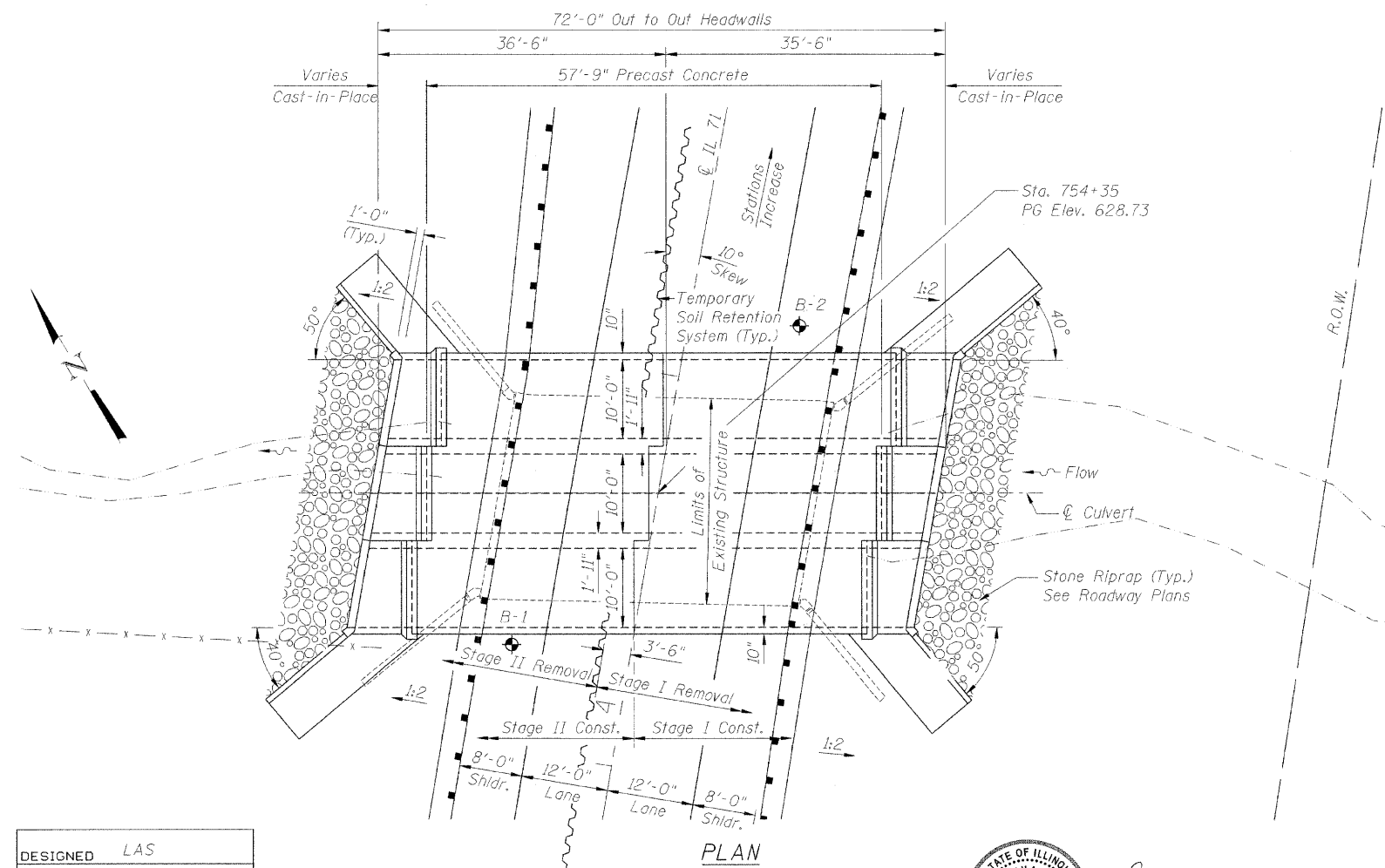
PI Sta. = 753+60.06  
 $\Delta = 22^\circ 59' 32''$  (RT)  
 $D = 1^\circ 00' 00''$   
 $R = 5,729.85'$   
 $T = 1165.34'$   
 $L = 2,299.32'$   
 $E = 117.30'$   
S.E. 2.1%  
P.C. Sta. = 741+94.72  
P.T. Sta. = 764+94.04

WATERWAY INFORMATION

Drainage Area = 3.85 Sq. Mi.				Exist. Low Grade El. = 628.22 @ Sta. 754+35					
				Prop. Low Grade El. = 628.22 @ Sta. 754+35					
Flood	Freq. Year	Q cfs	Opening Sq. Ft.		Nat. H.W.E.	Head - Foot		Headwater Elev. (ft)	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	50	669	138	210	622.6	0.4	0.0	623.0	622.60
Base	100	760	143	210	622.8	0.6	0.1	623.4	622.90
Overtopping									
Max. Calc.	500	981	157	210	623.4	0.8	0.2	624.2	623.60

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	612.00	612.00

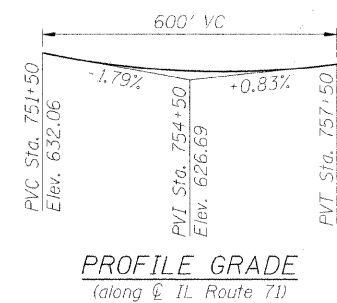


PLAN

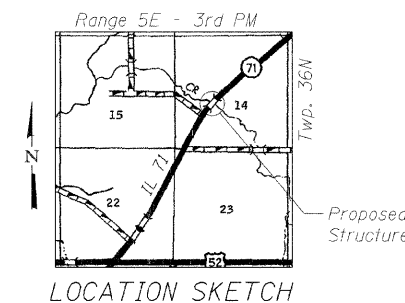
DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



Signature: *Dustin J. Johnson*  
Date: 9-30-09  
November 30, 2010  
Expires



PROFILE GRADE  
(along  $\bar{C}$  IL Route 71)



LOCATION SKETCH

GENERAL PLAN  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	22

SHEET NO. 2  
7 SHEETS

\* (3)BR-1,2,3 & (4)BR Contract #66741

NOTES

- ① 11- #8 a<sub>1</sub> bars @ 7½" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
4- #4 a<sub>2</sub> bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ② \*\*4- #8 a<sub>1</sub> bars @ 7½" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
\*\*2- #4 a<sub>2</sub> bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ③ \*10- #6 h<sub>2</sub> bars @ 1'-1" cts.  
(Bottom of Top Slab)  
\*8- #5 h<sub>3</sub> bars @ 1'-5" cts.  
(Top of Bottom Slab & Bottom of Bottom Slab)
- ④ 7½" Top  
2'-0" Bottom

\* Cut bar, see Cut Diagrams on Sheet 4

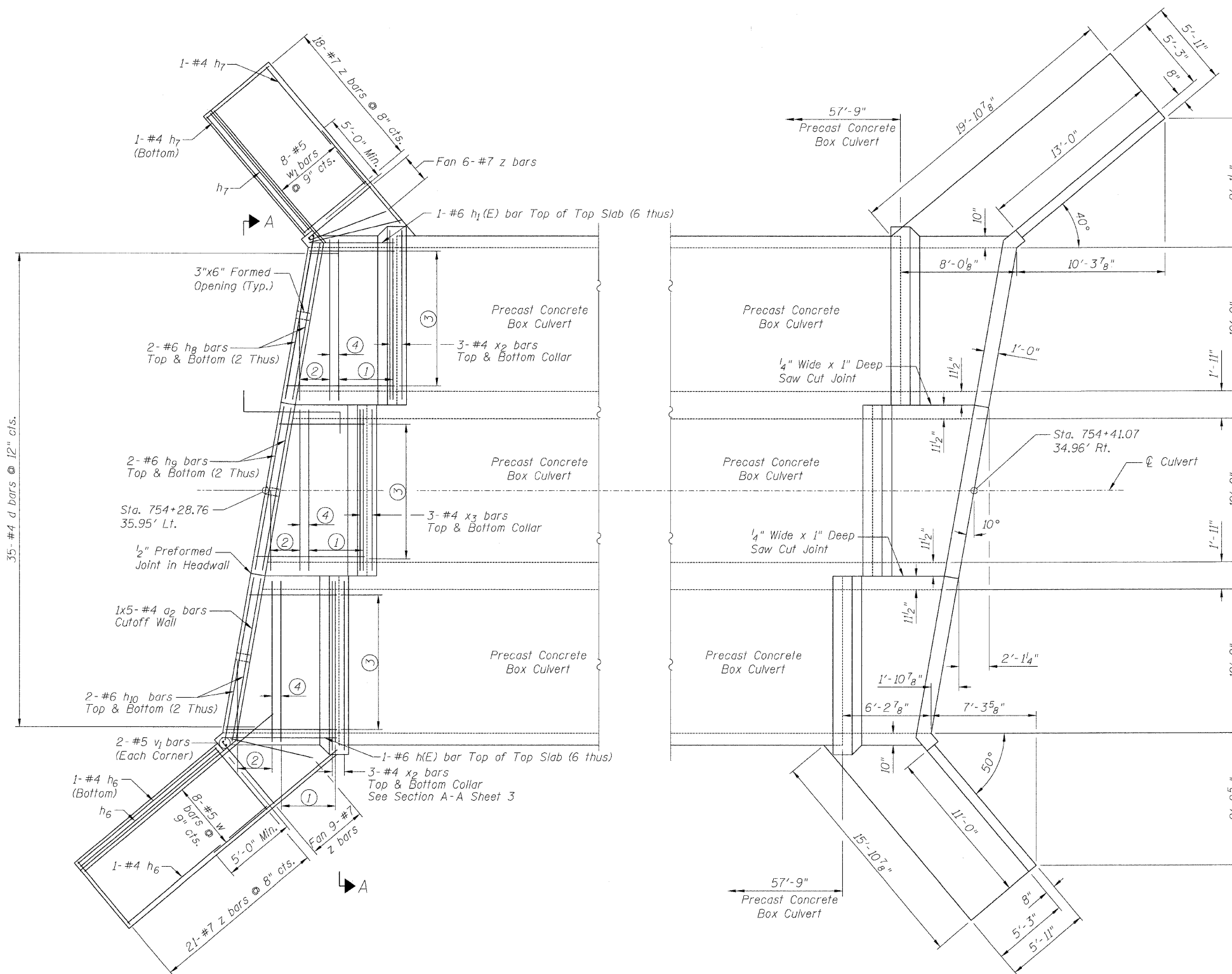
\*\* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

Bars indicated thus 1x5- #4 etc. indicates 1 line of bars with 5 lengths per line.

For Elevation View & Section A-A, see Sheet 3.

For Section Thru Wingwall, Headwall Details & Bill of Material, see Sheet 4.

Minimum Lap #4 bar = 1'-4"



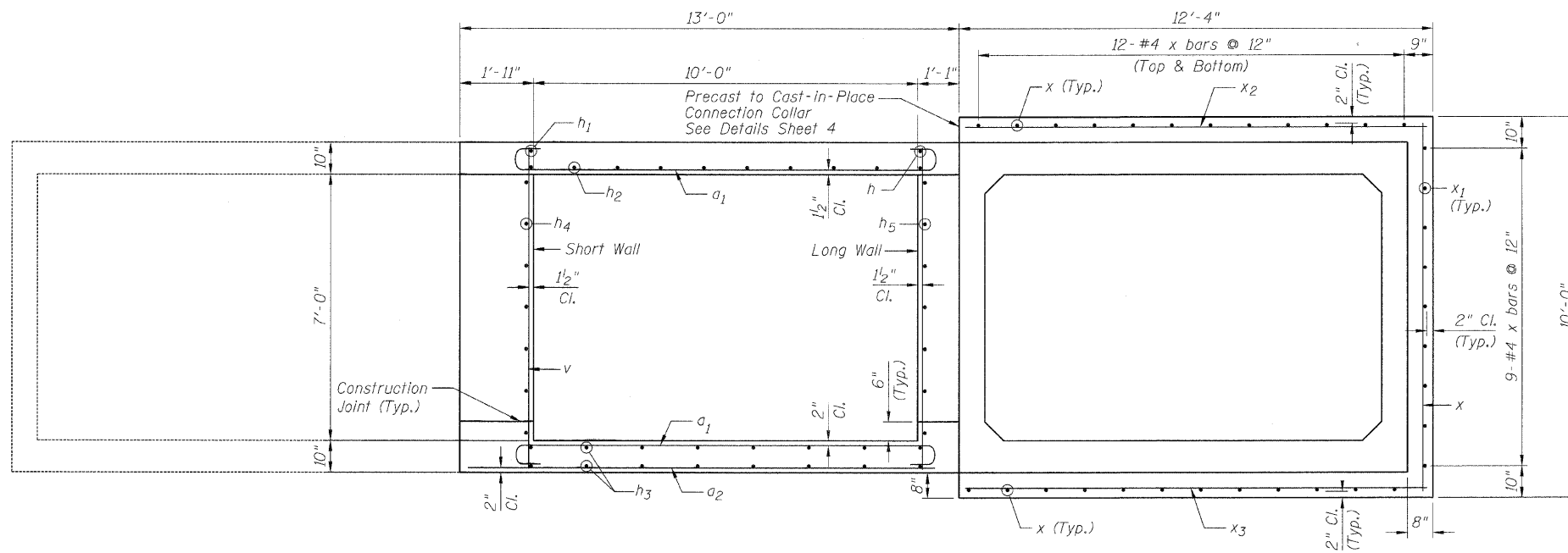
PLAN

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

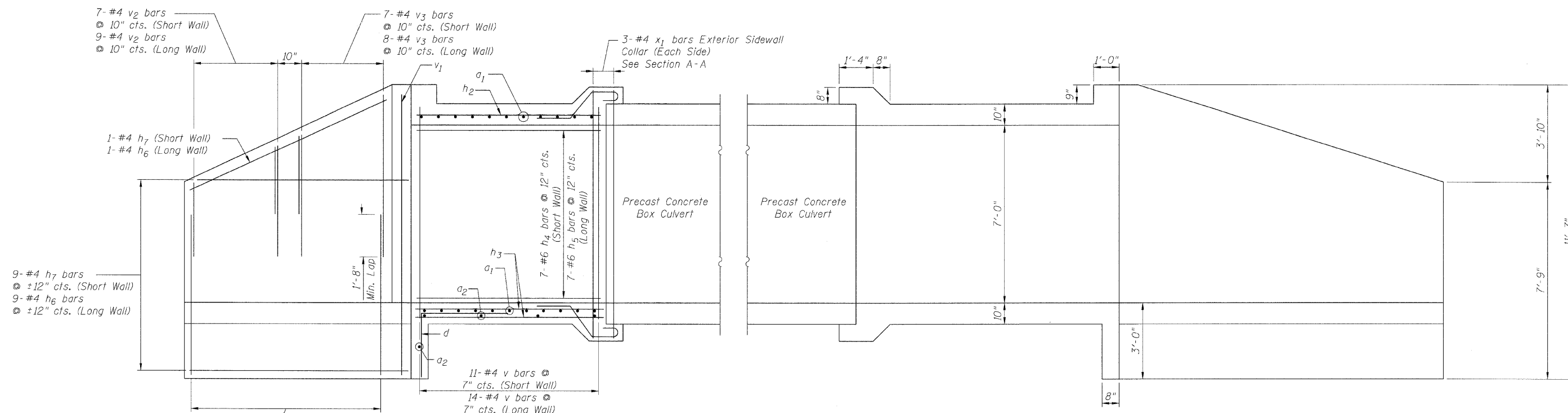
BOX CULVERT PLAN  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.P. 311	*	LaSalle	66	23	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	* (3)BR-1,2,3 & (4)BR Contract #66741		



SECTION A-A



ELEVATION

Note: Tilt hook of  $a_1$  bars if necessary for  $1\frac{1}{2}$ " min. cl.

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

CULVERT SECTIONS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	24
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

\*(3)BR-1,2,3 & (4)BR Contract #66741

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>1</sub>	156	#8	13'-3"	
a <sub>2</sub>	40	#4	11'-5"	
d	70	#4	4'-6"	
h	6	#6	7'-8"	
h <sub>1</sub>	6	#6	5'-11"	
h <sub>2</sub>	30	#6	13'-7"	
h <sub>3</sub>	48	#5	13'-7"	
h <sub>4</sub>	42	#6	5'-11"	
h <sub>5</sub>	42	#6	7'-8"	
h <sub>6</sub>	24	#4	12'-8"	
h <sub>7</sub>	24	#4	10'-8"	
h <sub>8</sub>	8	#6	10'-7"	
h <sub>9</sub>	8	#6	11'-7"	
h <sub>10</sub>	8	#6	10'-11"	
v	150	#4	8'-4"	
v <sub>1</sub>	8	#5	11'-3"	
v <sub>2</sub>	32	#4	4'-5"	
v <sub>3</sub>	30	#4	6'-4"	
v <sub>4</sub> (E)	62	#5	6'-7"	
w	16	#5	15'-6"	
w <sub>1</sub>	16	#5	12'-8"	
x	180	#4	5'-4"	
x <sub>1</sub>	12	#4	9'-8"	
x <sub>2</sub>	24	#4	12'-0"	
x <sub>3</sub>	12	#4	11'-7"	
z	108	#7	8'-4"	
Item		Unit	Quantity	
Concrete Box Culverts		Cu. Yd.	91.0	
Reinforcement Bars		Pound	13,280	
Reinforcement Bars (Epoxy Coated)		Pound	430	

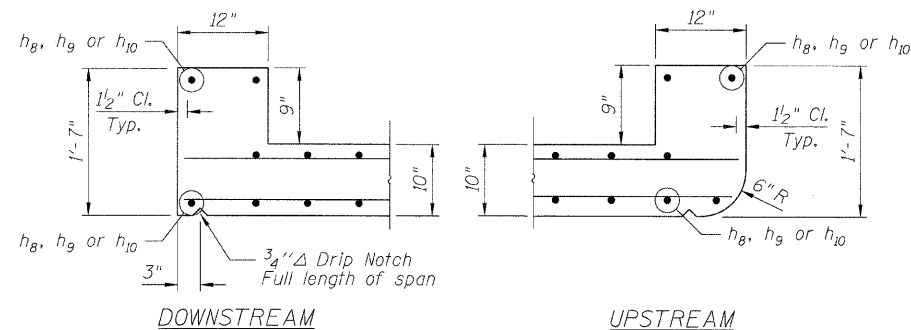
NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

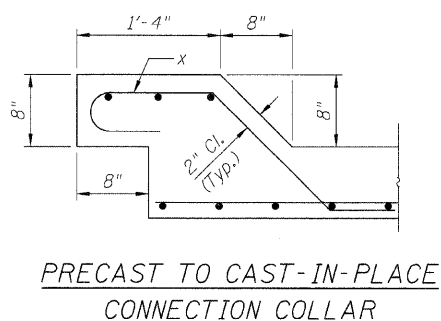
Reinforcement bars designated (E) shall be epoxy coated.

All construction joints shall be bonded.

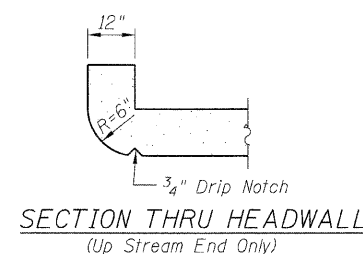
CULVERT DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047



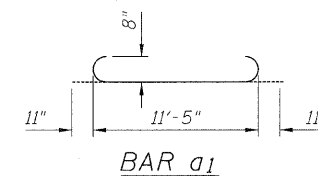
HEADWALL DETAILS



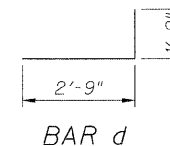
PRECAST TO CAST-IN-PLACE  
CONNECTION COLLAR



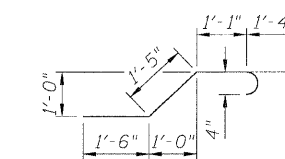
SECTION THRU HEADWALL  
(Up Stream End Only)



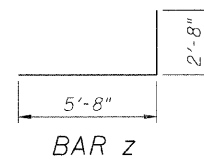
BAR a<sub>1</sub>



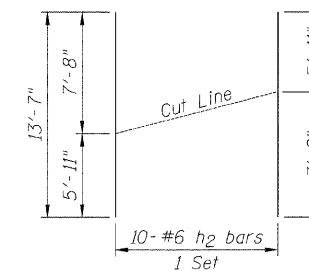
BAR d



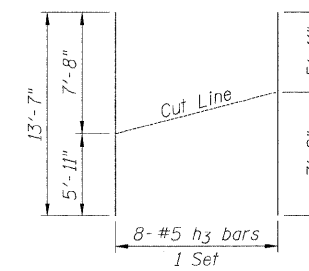
BAR x



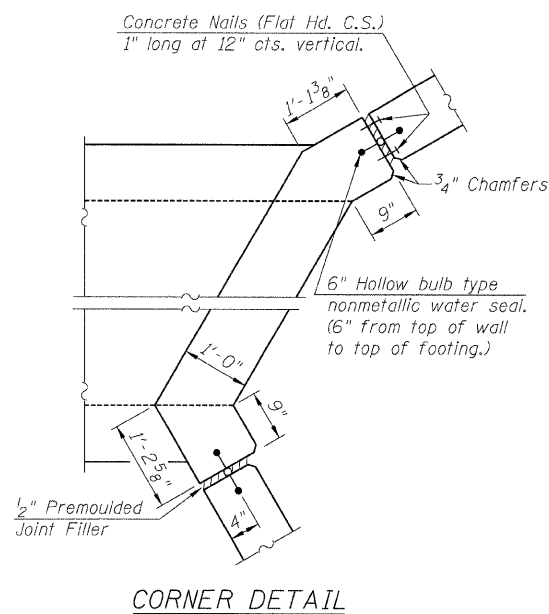
BAR z



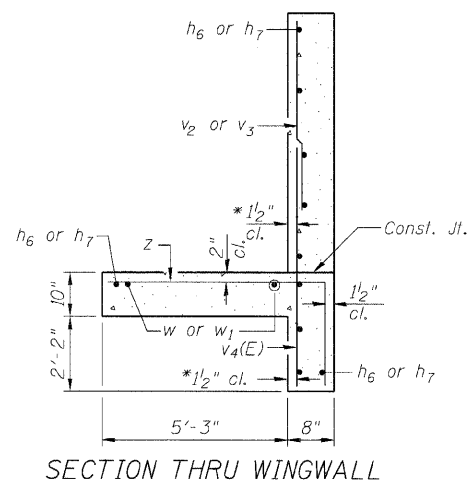
BAR h<sub>2</sub>  
CUT DIAGRAM



BAR h<sub>3</sub>  
CUT DIAGRAM

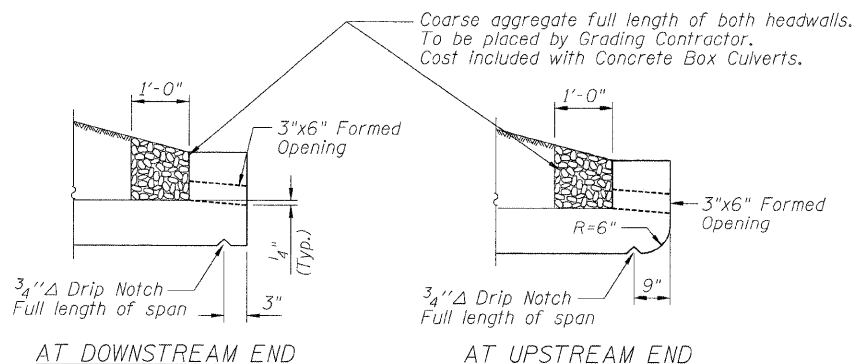


CORNER DETAIL



SECTION THRU WINGWALL

\* v bars shall not be placed more than 1/2" cl. from back face of wingwall.



DRAIN DETAIL

DESIGN STRESSES

f<sub>y</sub> = 60,000 psi  
f'<sub>c</sub> = 3,500 psi  
Max. Soil Pressure under footing = 3,124 psf

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

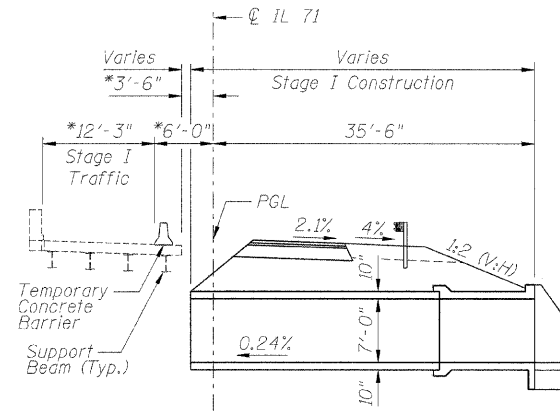
SHEET NO. 5

7 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

NOTES

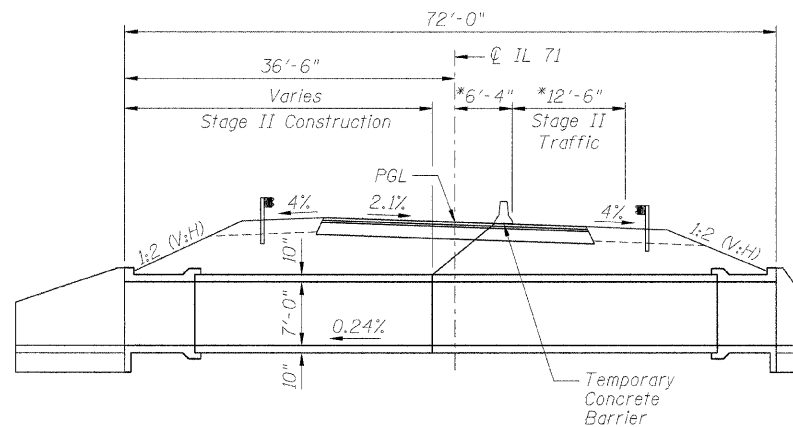
1. Minimum Section Modulus for sheet piling is 36 in<sup>3</sup>/ft.
2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
3. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Soil Retention System.
4. The Contractor is advised that the existing concrete slab is in a deteriorated condition with reduced load carrying capacity. Support beams @ 5'-0" cts. for the existing slab have been installed. It is the Contractor's responsibility to account for the condition of the slab when developing construction procedures.
5. If the Contractor's construction procedure involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing concrete slab. To distribute load and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying slab.
6. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.



STAGE I

(Looking Northeast)

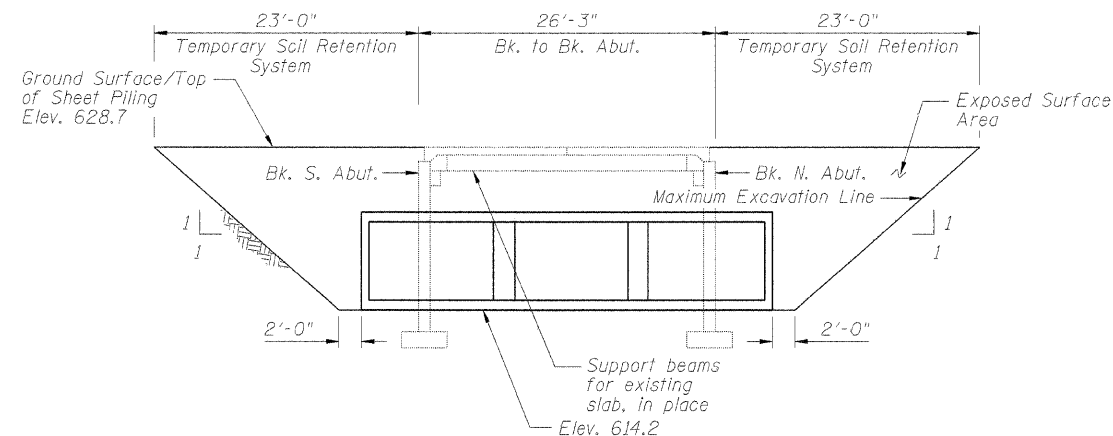
\* Measured Perpendicular to Roadway



STAGE II

(Looking Northeast)

\* Measured Perpendicular to Roadway



TEMPORARY SOIL RETENTION SYSTEM

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Temporary Soil Retention System	Sq. Ft.	456

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STAGE CONSTRUCTION  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO.
F.A.P. 311		LaSalle	66	26	7 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

\*(3)BR-1,2,3 & (4)BR Contract #66741

SOIL BORING B-1 (Page 1 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 1 of 2  
Date 9/26/06

ROUTE FA-97 (IL 71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 3-B LOCATION SW 1/4, SEC. 14, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0061  
Station 754+35  
BORING NO. #1: SW Quad. S Abut.  
Station 754+13  
Offset 15.00ft Left  
Ground Surface Elev. 628.05 ft

DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)
				Augered, white, shoulder stone and black brown, Silty Clay- fill	5	7	25.6	
626.05	4							
	3	2.5	28.8					
	4	P						
	3							
	2	2.5	29.0					
	4	P						
621.05	1			Very stiff, gray, Silty Clay Loam Till	5			
	2	2.1	21.3					
	3	B						
	2							
	2	2.5	16.8					
	4	P						
617.05	1			Stiff, black, Silty Clay Loam	3	1.0	13.3	
	3	2.0	29.7					
	3	P						
614.05	2			Very stiff, gray, Silty Clay Loam Till	5			
	3	2.5	19.5					
	5	S						
611.55	2			Stiff, brownish gray, Sandy Clay Loam Till	8			
	3	1.5	12.1					
	3	P						
608.55	2							

Surface Water Elev. 617.17 ft  
Stream Bed Elev. \_\_\_\_\_ ft  
Groundwater Elev.:  
First Encounter 608.6 ft  
Upon Completion 614.1 ft  
After \_\_\_\_\_ Hrs.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

SOIL BORING B-1 (Page 2 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 2 of 2  
Date 9/26/06

ROUTE FA-97 (IL 71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 3-B LOCATION SW 1/4, SEC. 14, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0061  
Station 754+35  
BORING NO. #1: SW Quad. S Abut.  
Station 754+13  
Offset 15.00ft Left  
Ground Surface Elev. 628.05 ft

DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)
	16		20.6	Dense, gray, fine to medium, Sand with pieces of gray, Silty Clay Loam Till and layers of ultra fine, Sand/Silt	8			
	23				8			no recovery
588.05	7			42' sampling interval: washed (continued)				
	10	3.0	65.6	Very stiff, 6" gray, Silty Clay over dark brown, highly organic, Silty Clay- buried soil				
	15	P						
	5							
	7	4.0	45.7					
	9	P						
581.55	5			Dense, brown gray, Sandy Loam with some layers unconsolidated				
	8	2.0	17.6					
	10	S						
	3							
	6	3.0	25.4					
	9	P						
578.05	3			Very stiff, tan gray, Silt with minor Clay and layers of Silty Clay after 55'				
	9							
	16	2.5	22.7	59.5' sample interval- rock in shoe- no recovery				
	16	P						
	3							
	7	3.0	19.1					
	6	P						
	3							
	12	3.7	9.6					
	16	S						
	4	2.0	21.4					
	5	P						
	9							

Surface Water Elev. 617.17 ft  
Stream Bed Elev. \_\_\_\_\_ ft  
Groundwater Elev.:  
First Encounter 608.6 ft  
Upon Completion 614.1 ft  
After \_\_\_\_\_ Hrs.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

BORING LOGS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 754+35  
S.N. 050-2047



Bench Mark:

Existing Structure: S.N. 050-0062 was originally constructed in 1947. The existing structure is a 40'-6" wide cast-in-place reinforced concrete slab bridge on closed concrete abutments. The structure measures 30'-4 3/4" back to back of abutments.

Staging shall be used during construction of the proposed double box culvert.

No Salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	28
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

\*(3)BR-1,2,3 & (4)BR Contract #66741

GENERAL NOTES

1. Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M. 259.
2. Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
3. Reinforcement bars designated (E) shall be epoxy coated.
4. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	7,510
Reinforcement Bars (Epoxy Coated)	Pound	230
Furnishing & Erecting Structural Steel	Pound	3,250
Temporary Soil Retention System	Sq. Ft.	188
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	60.6
Precast Concrete Box Culvert 8'x6'	Foot	122
Sheet Waterproofing Membrane System	Sq. Yd.	449

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.  
Design Fill Ht. > 2'

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

PRECAST

$f'_c = 5,000$  psi  
 $f_y = 65,000$  psi (welded wire fabric)

CAST-IN-PLACE

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

HORIZONTAL CURVE DATA

PI Sta. = 683+80.98  
 $\Delta = 10^\circ 55' 03''$  (LT)  
 $D = 0^\circ 30' 13''$   
 $R = 11,375.00'$   
 $T = 1,087.01'$   
 $L = 2,167.44'$   
 $E = 51.82'$   
P.C. Sta. = 672+93.97  
P.T. Sta. = 694+61.41

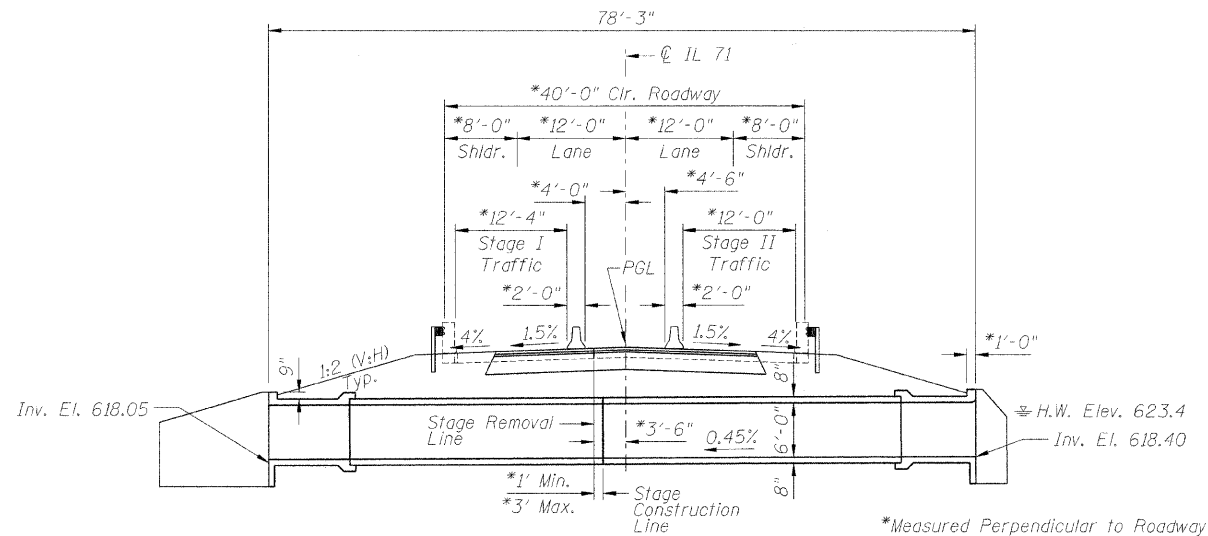
WATERWAY INFORMATION

Drainage Area = 0.65 Sq. Mi.  
Exist. Low Grade Elev. 629.06 @ Sta. 181+00 Prop. Low Grade Elev. 629.06 @ Sta. 181+00

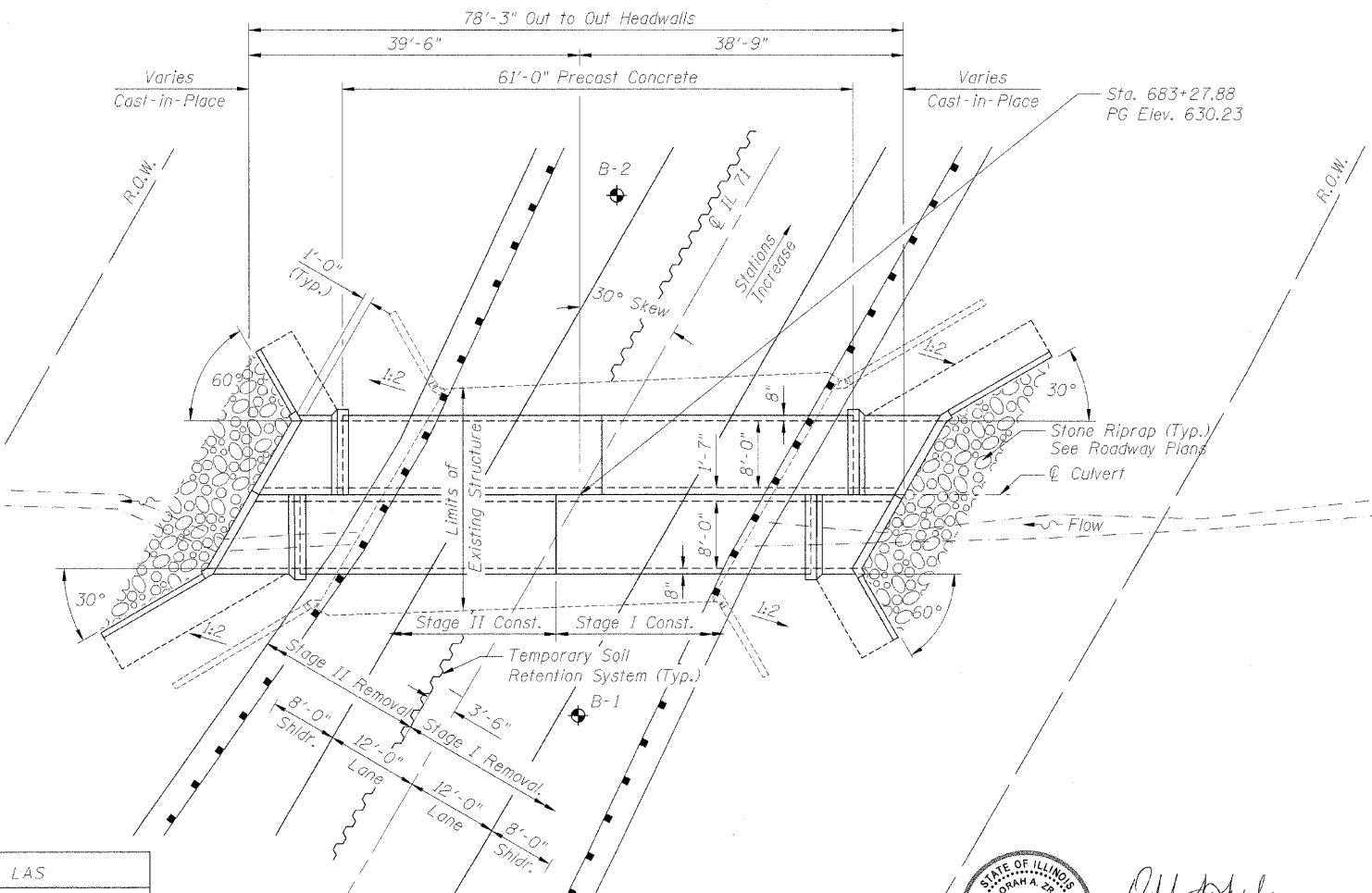
Flood Year	Freq. cfs	Opening Sq. Ft.		Nat. H.W.E.	Head - Foot		Headwater Elev. (ft)		
		Existing	Proposed		Existing	Proposed	Existing	Proposed	
Design	10	162	48	70	622.8	0.4	0	623.2	622.8
Base	50	252	61	80	623.4	0.5	0	623.9	623.4
Max. Calc.	100	289	66	83	623.6	0.5	0	624.1	623.6
Overtopping	500	379	76	90	624.0	0.6	0	624.6	624.0

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	615.40	615.05



LONGITUDINAL SECTION

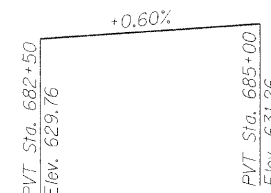


PLAN

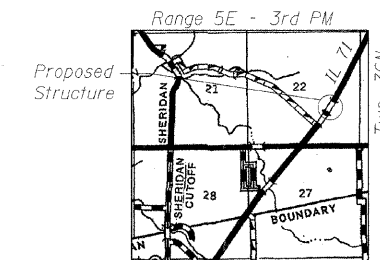
DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



Signature: *Daniel J. John*  
Date: 9-30-09  
November 30, 2010 Expires



PROFILE GRADE  
(along C.L. Route 71)



LOCATION SKETCH

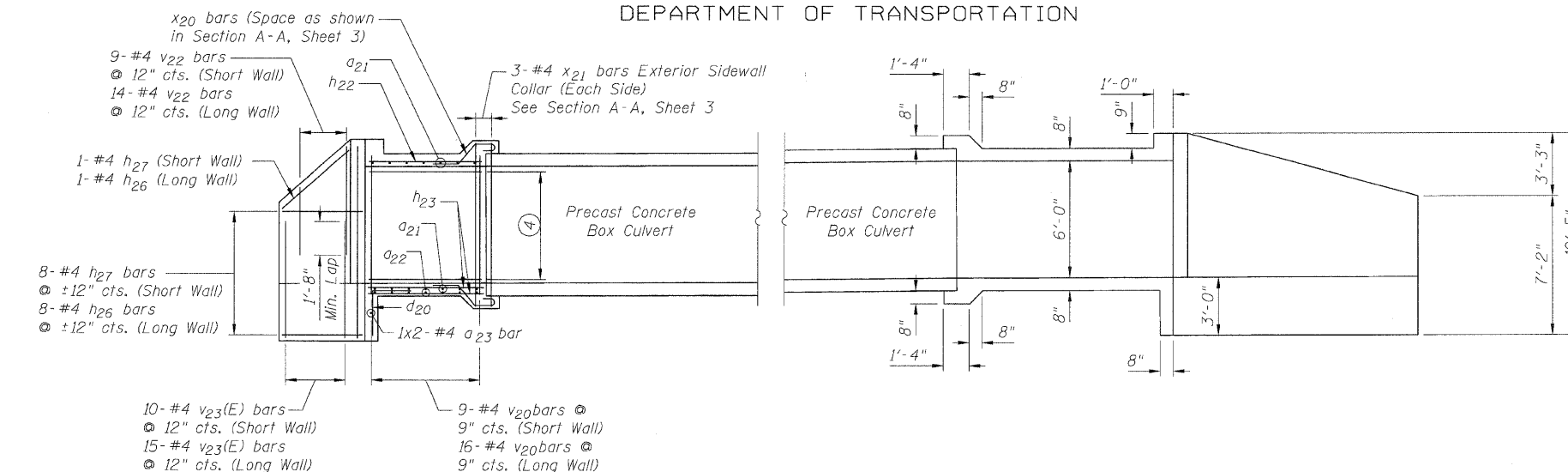
GENERAL PLAN  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	29
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 2  
7 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741



ELEVATION

NOTES

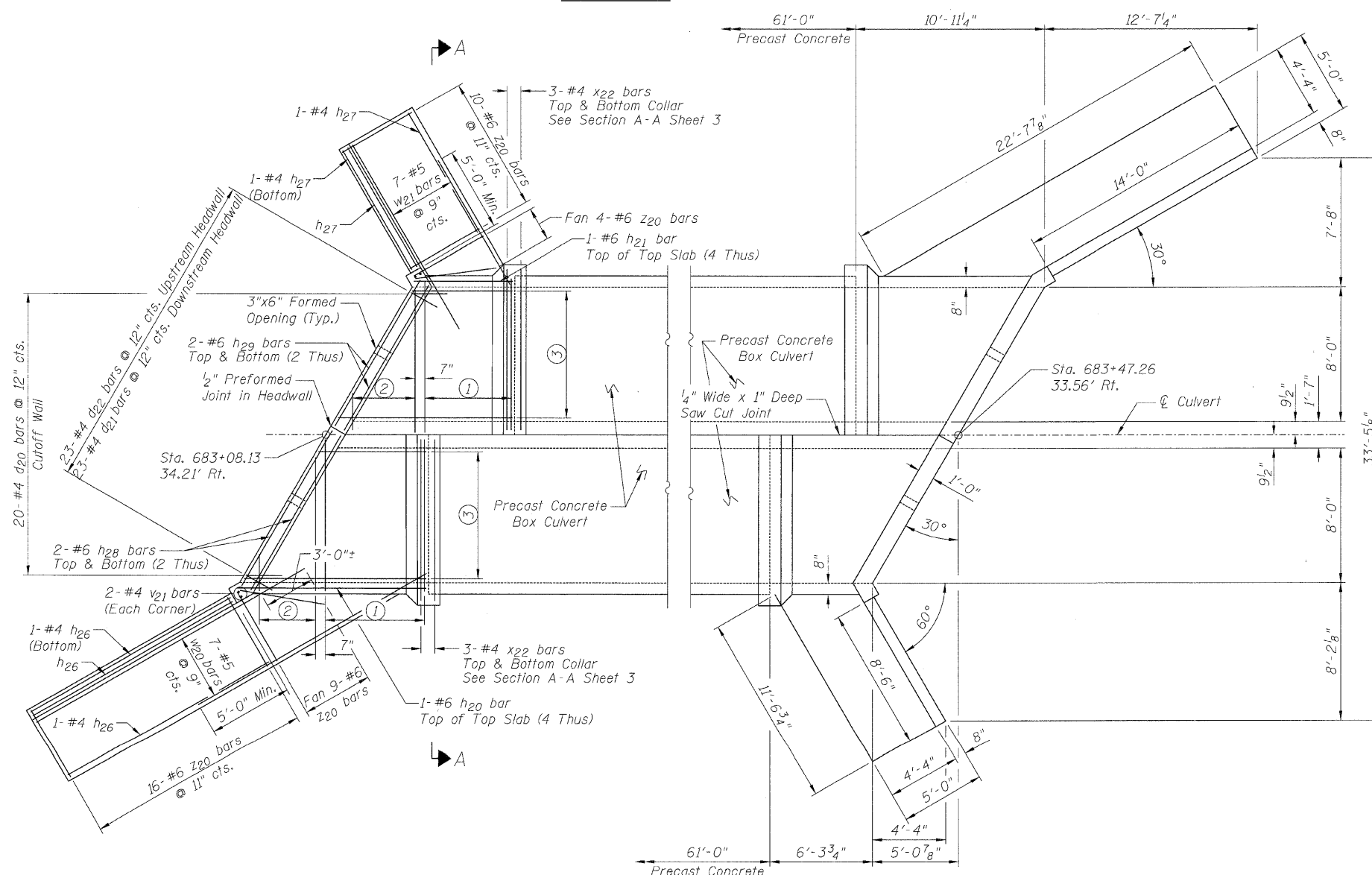
- ① 11-#7 a21 bars @ 7" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
4-#4 a22 bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ② \*\*9-#7 a21 bars @ 7" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
\*\*3-#4 a22 bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ③ \*7-#6 h22 bars @ 16" cts.  
(Bottom of Top Slab)  
\*9-#4 h23 bars @ 12" cts.  
(Top of Bottom Slab & Bottom of Bottom Slab)
- ④ 6-#5 h24 bars @ 12" cts.  
(Short Wall)  
6-#5 h25 bars @ 12" cts.  
(Long Wall)

\* Cut bar, see Cut Diagrams on Sheet 3

\*\* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

Bars indicated thus 1x2-#4 etc. indicates 1 line of bars with 2 lengths per line.

For Section A-A, see Sheet 3.



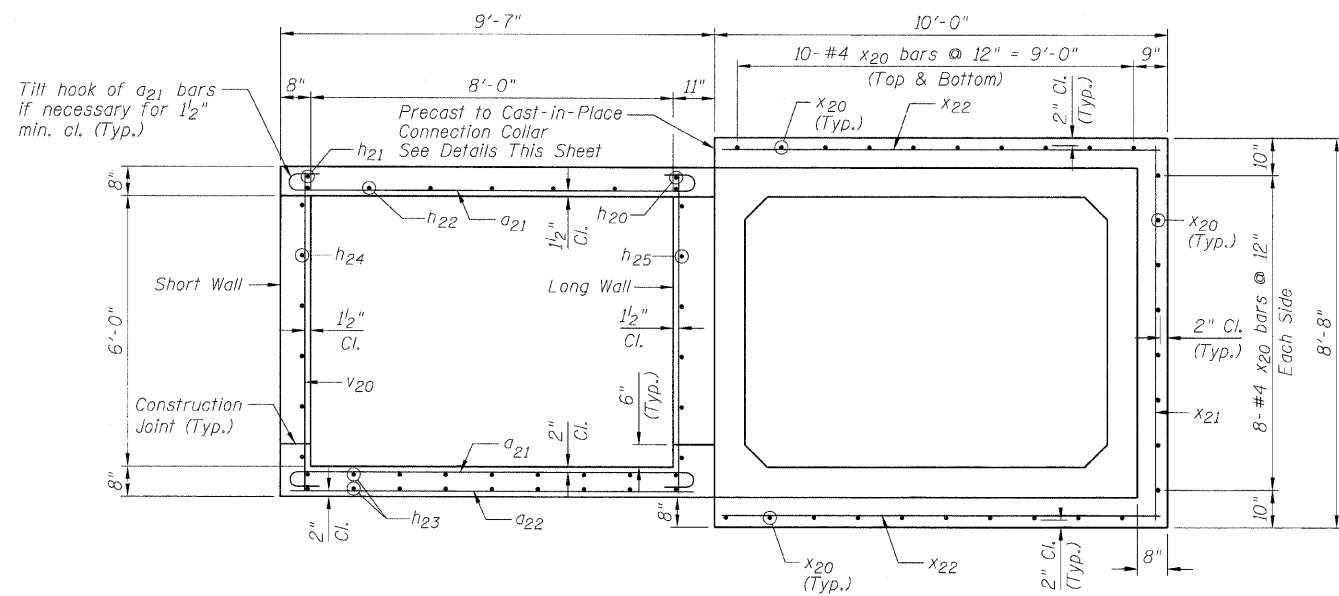
PLAN

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

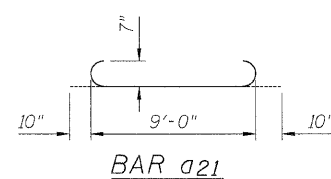
BOX CULVERT END SECTIONS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

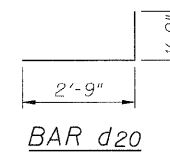
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	30
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
*(3)BR-1,2,3 & (4)BR Contract #66741				



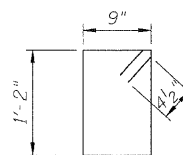
SECTION A-A



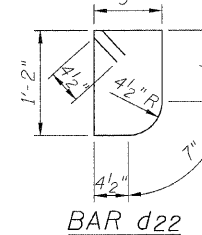
BAR a21



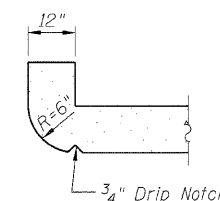
BAR d20



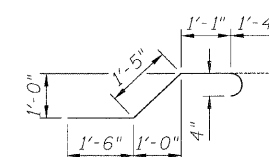
BAR d21



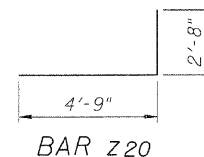
BAR d22



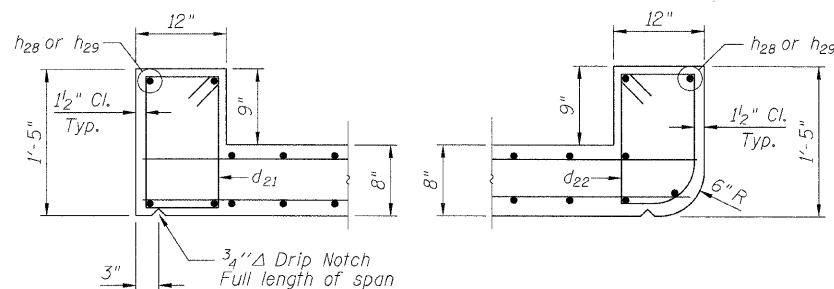
SECTION THRU HEADWALL  
(Up Stream End Only)



BAR x20



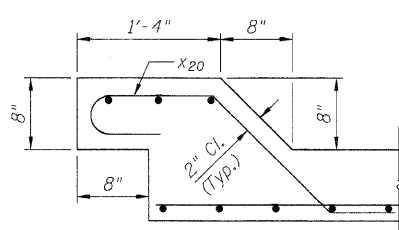
BAR z20



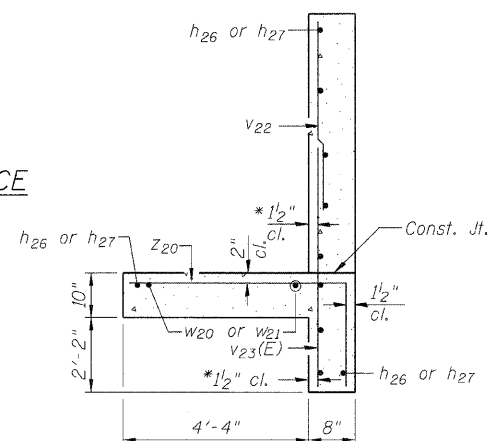
DOWNSTREAM

UPSTREAM

HEADWALL DETAILS



PRECAST TO CAST-IN-PLACE  
CONNECTION COLLAR



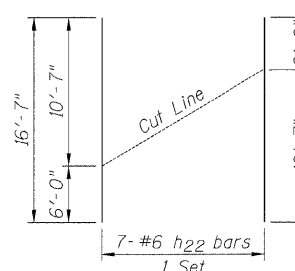
SECTION A-A

\* v bars shall not be placed more than 1/2" cl. from back face of wingwall.

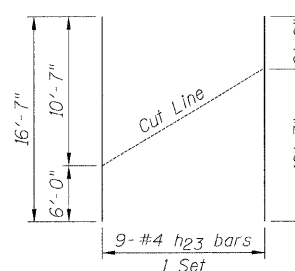
DESIGN STRESSES

$f_y = 60,000$  psi  
 $f'_c = 3,500$  psi

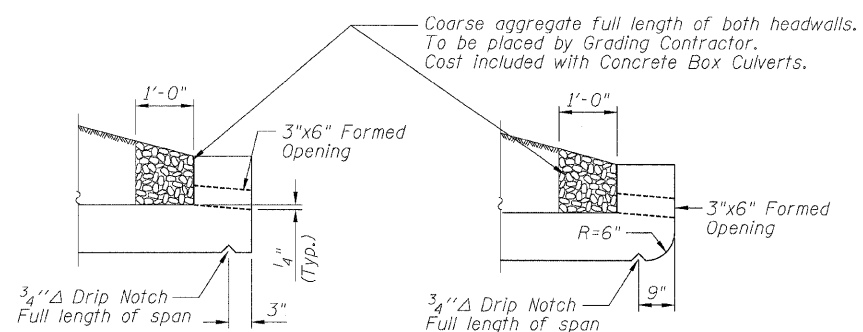
Max. Soil Pressure under footing = 2,655 psf



BAR h22  
CUT DIAGRAM



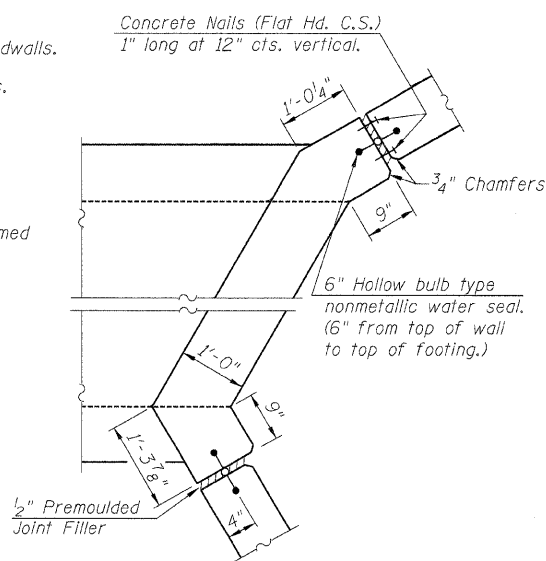
BAR h23  
CUT DIAGRAM



AT DOWNSTREAM END

AT UPSTREAM END

DRAIN DETAIL



CORNER DETAIL

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a21	124	#7	10'-8"	
a22	22	#4	9'-0"	
a23	4	#4	11'-7"	
d20	40	#4	4'-6"	
d21	23	#4	4'-7"	
d22	23	#4	4'-5"	
h20	4	#6	10'-7"	
h21	4	#6	6'-0"	
h22	14	#6	16'-7"	
h23	36	#4	16'-7"	
h24	24	#5	6'-0"	
h25	24	#5	10'-7"	
h26	22	#4	13'-8"	
h27	22	#4	8'-2"	
h28	8	#6	9'-10"	
h29	8	#6	9'-3"	
v20	100	#4	7'-0"	
v21	8	#4	10'-1"	
v22	46	#4	5'-0"	
v23(E)	50	#4	6'-10"	
w20	14	#5	16'-7"	
w21	14	#5	11'-0"	
x20	112	#4	5'-4"	
x21	12	#4	8'-4"	
x22	24	#4	9'-8"	
z20	78	#6	7'-5"	
Item	Unit	Quantity		
Concrete Box Culverts	Cu. Yd.	60.6		
Reinforcement Bars	Pound	7,510		
Reinforcement Bars (Epoxy Coated)	Pound	230		

NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Reinforcement bars designated (E) shall be epoxy coated.

All construction joints shall be bonded.

CULVERT DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

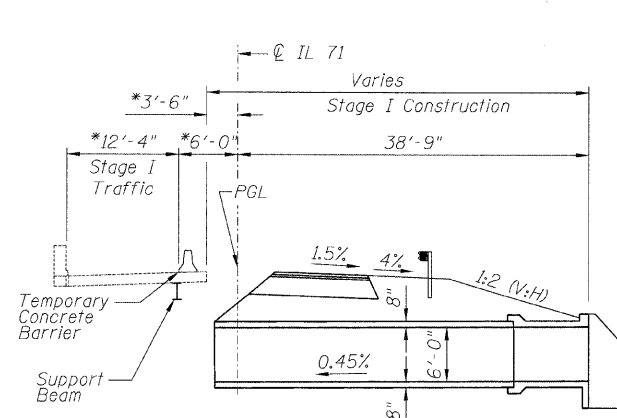
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 311	*	LaSalle	66	31
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

\* (3)BR-1,2,3 & (4)BR Contract #66741

NOTES

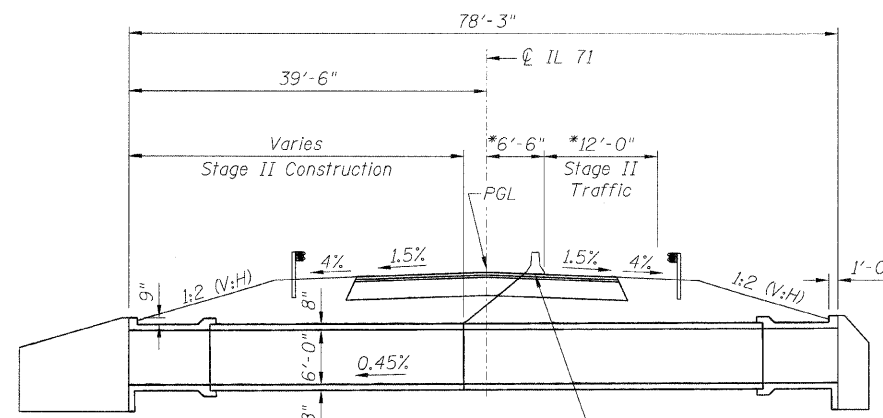
1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Soil Retention System.
3. Prior to removal of existing structure, install support beam for existing slab as shown and detailed on Slab Support Details sheet.
4. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
5. The Contractor is advised that the existing concrete slab is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the slab when developing construction procedures.
6. If the Contractor's construction procedure involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing concrete slab. To distribute load and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying slab.



STAGE I

(Looking Northeast)

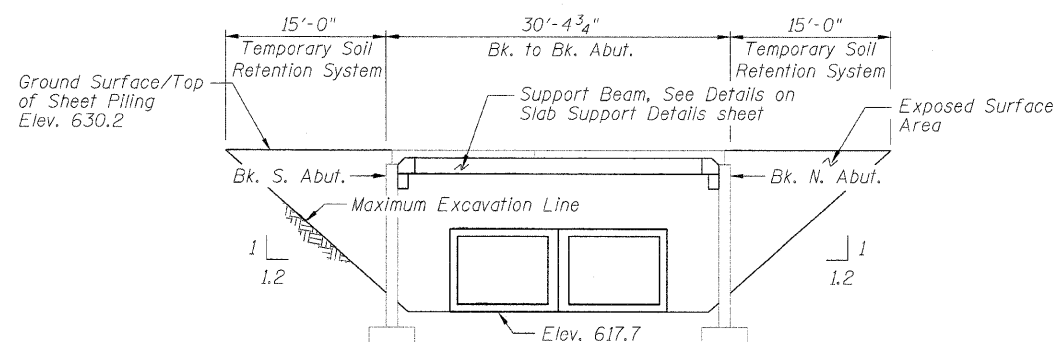
\* Measured Perpendicular to Roadway



STAGE II

(Looking Northeast)

\* Measured Perpendicular to Roadway



TEMPORARY SOIL RETENTION SYSTEM

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Temporary Soil Retention System	Sq. Ft.	188

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STAGE CONSTRUCTION  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	HAZARD	SHEET NO.	SHEET NO. 5 7 SHEETS
F.A.P. 311	*	LaSalle	66	32	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	*(3)BR-1,2,3 & (4)BR Contract #66741		

GENERAL NOTES

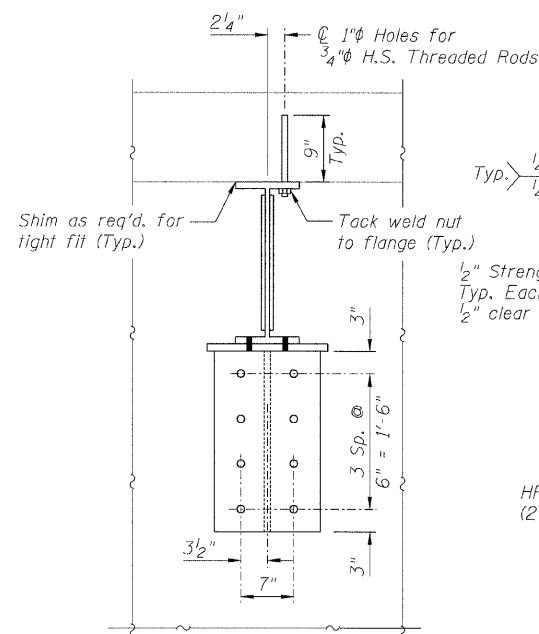
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary 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 work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.  
See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods: Minimum Embedment 9".  
The cost of epoxy grouting threaded rods on the abutments and slab shall be included with Furnishing and Erecting Structural Steel.  
The Contractor has the option of using used steel. See Special Provisions.

BILL OF MATERIAL

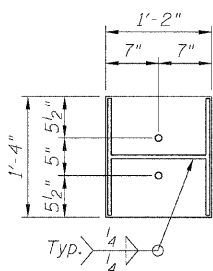
ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	3,250

\* $\varnothing$  Threaded rods (1 per span) Place additional tapered shims at midpoints between threaded rod and abutment face. Securely weld shims to top flange to support beam. Minimum shim size is 6" x flange width.

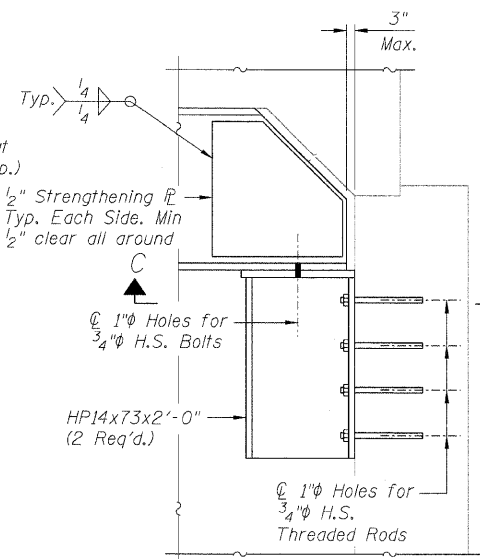
\*\*Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum girder depth = 24". No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans.



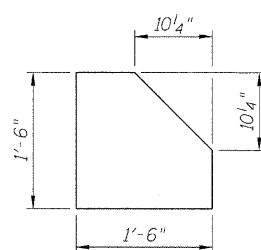
SECTION A-A  
(Typical End Section)



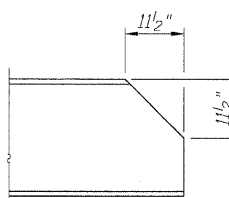
SECTION C-C  
PL 1"x1'-2"x1'-4"  
(2 Req'd.)



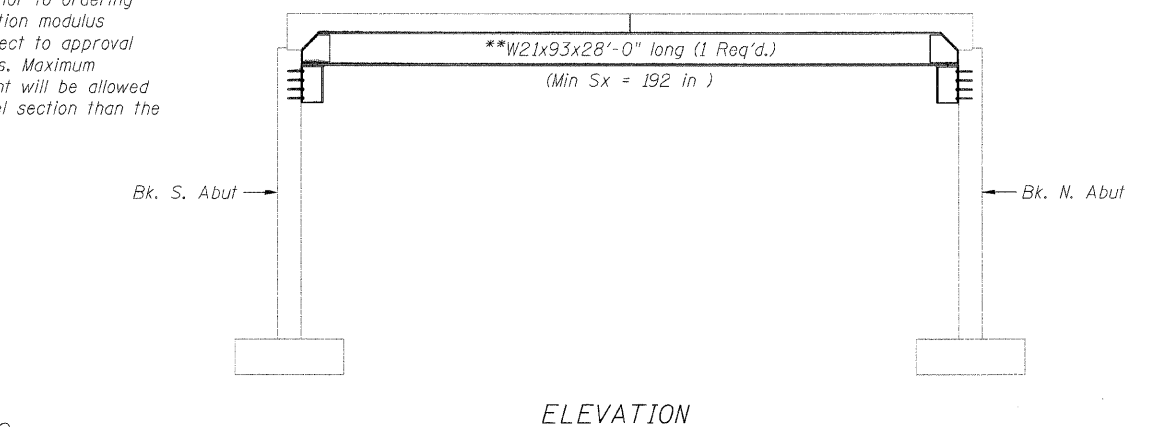
SECTION B-B  
(Typical End Section)



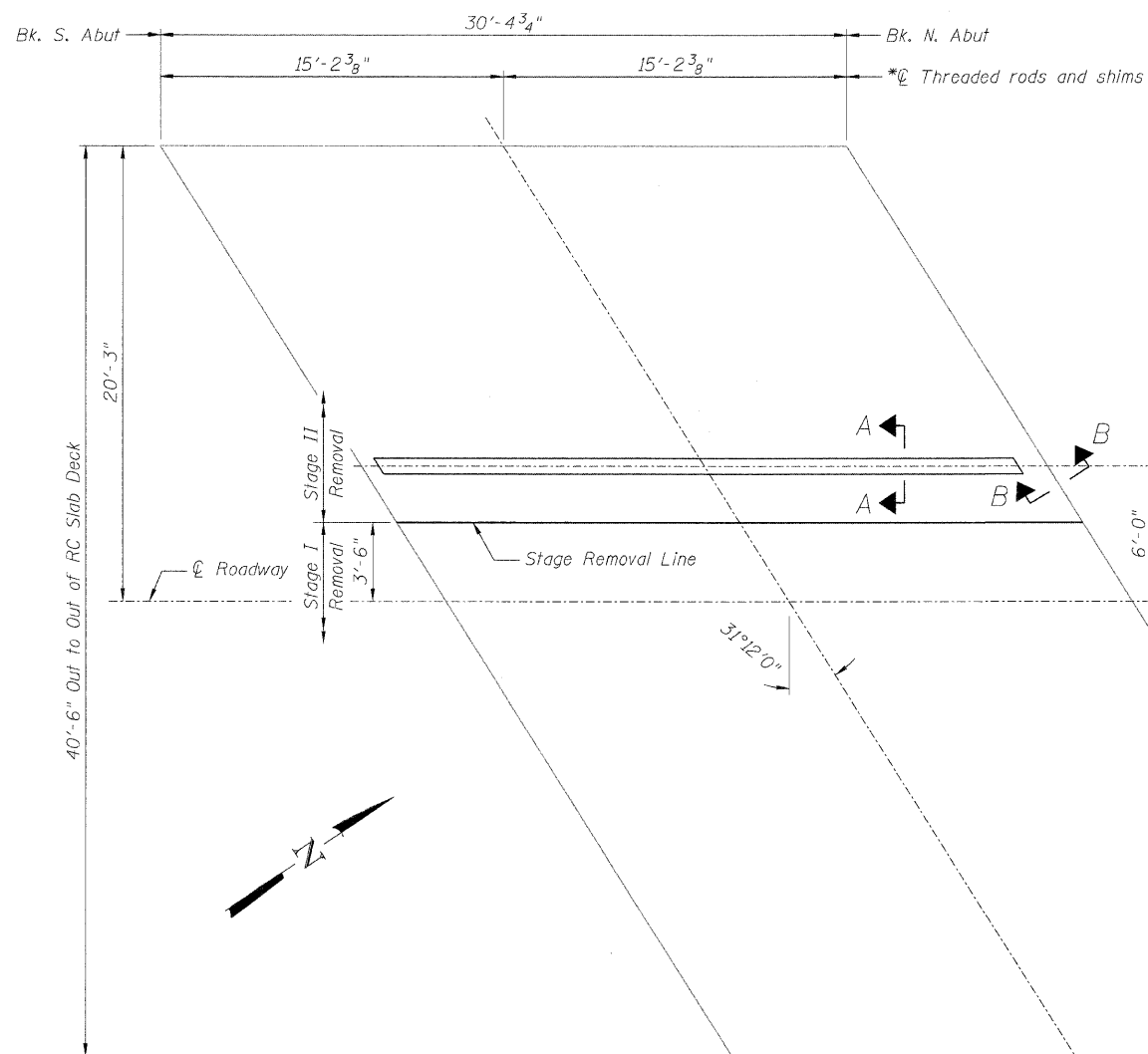
STRENGTHENING PL  
PL 1/2"x1'-6"x1'-6"  
(4 Req'd.)



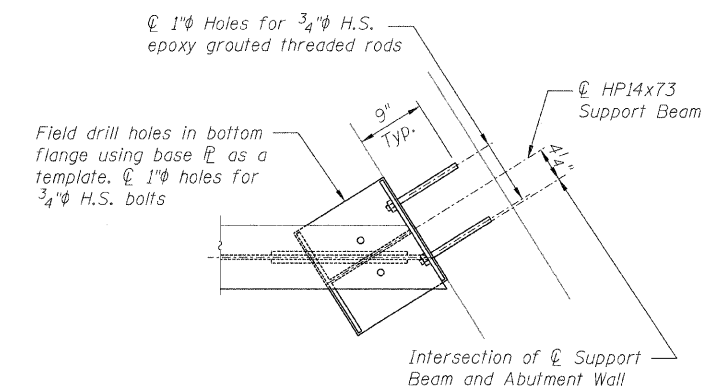
TYPICAL W SECTION  
END CUT DETAIL



ELEVATION



PLAN



TYPICAL PLAN AT  
SUPPORT BEAM END

SLAB SUPPORT DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING B-1 (Page 1 of 2)

SOIL BORING B-1 (Page 2 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 1 of 2  
Date 9/19/06

ROUTE FA-97 (IL71) DESCRIPTION IL 7. Creek and Cattle Crs LOGGED BY Larry Myers  
SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0062  
Station 683+28

BORING NO. 1 S.E. Quad  
Station 683.05  
Offset 13.00ft Rt  
Ground Surface Elev. 629.66 ft

DEPTH (ft)	BLU (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLU (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION
				Augered, white, shoulder stone and black, Silty Clay - fill					Hard, gray, Silty Clay Loam Till (continued)
627.66	4	3.0	28.8	Very stiff, black, Silty Clay with gravel pieces - fill	627.66	3			Very stiff, gray, Sandy Clay Loam Till with layers of Silt and fine Sand
	5	P				5	2.7	11.3	
	3					3			
	3	3.0	30.1			6	2.5	13.6	
	4	P				15	S		
622.66	2			Very stiff, brown, Silty Clay (Loess)	623.16	8			Hard, brownish gray, Sandy Clay Loam Till with pockets of loamy, Sand and Gravel
	3	2.5	26.9			20	>4.5	8.9	
	4	P				24	P		
620.16	2			Stiff, brown, Silty Clay Loam to Loam with layers of loamy, Sand and Gravel		5			
	2	2.0	22.8			7	rock in		
	2	P				11	shoe		
618.16	4			Hard, brown, Silty Clay Loam Till		3			
	7	7.4	18.3			4	2.3	49.3	
	12	S				4	B		
615.66	4			Hard, gray, Silty Clay Loam Till	615.16	wh			Stiff, grayish brown, Silt with minor, Clay and layers of Silty Loam to Silty Clay
	10	8.5	17.6			1	1.0	22.7	
	17	S				4	P		Stiff, brown, Silty Clay
	5					2			
	7	4.1	21.1			3	1.6	27.0	
	9	S				5	B		
	4					1			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 2 of 2  
Date 9/19/06

ROUTE FA-97 (IL71) DESCRIPTION IL 7. Creek and Cattle Crs LOGGED BY Larry Myers  
SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0062  
Station 683+28

BORING NO. 1 S.E. Quad  
Station 683.05  
Offset 13.00ft Rt  
Ground Surface Elev. 629.66 ft

DEPTH (ft)	BLU (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLU (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION
				Stiff, brown, Silty Clay (continued)					Stiff, gray, Silt (continued)
588.16	2	1.2	26.7		588.16	17	2.0	19.8	
	4	B				19	P		
	wh			Stiff, brownish gray, Silty Clay Loam to Clay Loam	585.16	3			Very stiff, gray, Sandy Clay Loam Till with large, Limestone pieces
	2	1.0	17.9			4	2.2	13.0	
	3	B				6	S		
585.16	wh			Very stiff, gray, Sandy Clay Loam Till		12			
	5	3.0	12.5			22	2.0	6.6	
	8	P				51	P		
582.66	4			Medium gray, fine, Sand to fine, Gravel with layers of Sandy Loam	582.66	50			St Peter Sandstone with very dense, white, Sand at 67'-67' 5" (Weathered Bedrock)
	7		15.5		582.16	100(1)		21.5	
	11						P		End of Boring
580.66	5			Very stiff, black, Silty Clay with organics - (paleo soil/Peat/Old swamp backwater?)		5			
	7	4.0	28.4			7			
	16	P				16			
	4					4			
	6	2.2	34.4			11	S		
	11	S				4			
	wh					4			
	7	2.3	30.9			7			
	10	S				10			
573.66	8			Stiff, gray, Silt		12	2.0	19.6	
	12	P				16			
	5					5			

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DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BORING LOGS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 683+27.88  
S.N. 050-2048

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	34
7 SHEETS				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
*(3)BR-1,2,3 & (4)BR Contract #66741				

SOIL BORING B-2 (Page 1 of 2)

SOIL BORING B-2 (Page 2 of 2)

<p><b>Illinois Department of Transportation</b> Division of Highways District #3, Ottawa</p>	<p><b>SOIL BORING LOG</b></p>	Page 1 of 2																																																																																																																																																																																																																																										
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610.94	3				3																																																																																																																																																																																																																																							

The Unconfined Compressive Strength (UCS) Failure Mode is Indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, from 137 (Rev. 8-99)

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BORING LOGS  
 IL 71 OVER MISSION CREEK  
 FAP ROUTE 311  
 SECTION (3)BR-1,2,3 & (4)BR  
 LASALLE COUNTY  
 STA. 683+27.88  
 S.N. 050-2048

Bench Mark:

Existing Structure: S.N. 050-0063 was originally constructed in 1947. The existing structure is a 40'-6" wide cast-in-place reinforced concrete slab bridge on closed concrete abutments. The structure measures 26'-1" back to back of abutments.

Staging shall be used during construction of the proposed double box culvert.

No Salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 311	*	LaSalle	66	35	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741

GENERAL NOTES

- Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M. 259.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	6,260
Reinforcement Bars (Epoxy Coated)	Pound	230
Furnishing & Erecting Structural Steel	Pound	2,840
Temporary Soil Retention System	Sq. Ft.	148
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	52.8
Precast Concrete Box Culvert 7'x6'	Foot	108
Sheet Waterproofing Membrane System	Sq. Yd.	395

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.  
Design Fill Ht. > 2'

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

PRECAST

$f'_c = 5,000$  psi  
 $f_y = 65,000$  psi (welded wire fabric)

CAST-IN-PLACE

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

HORIZONTAL CURVE DATA

PI Sta. = 683+80.98  
 $\Delta = 10^\circ 55' 03''$  (LT)  
 $D = 0^\circ 30' 13''$   
 $R = 11,375.00'$   
 $T = 1,087.01'$   
 $L = 2,167.44'$   
 $E = 51.82'$   
P.C. Sta. = 672+93.97  
P.T. Sta. = 694+61.41

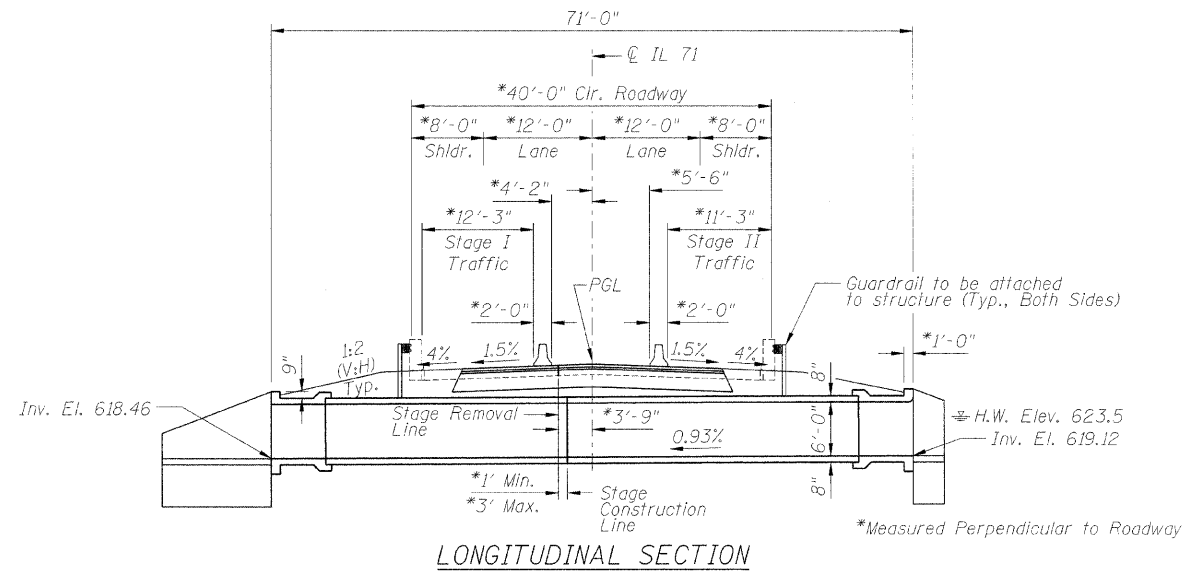
WATERWAY INFORMATION

Drainage Area = 0.75 Sq. Mi.  
Exist. Low Grade Elev. 629.06 @ Sta. 181+00 Prop. Low Grade Elev. 629.06 @ Sta. 181+00

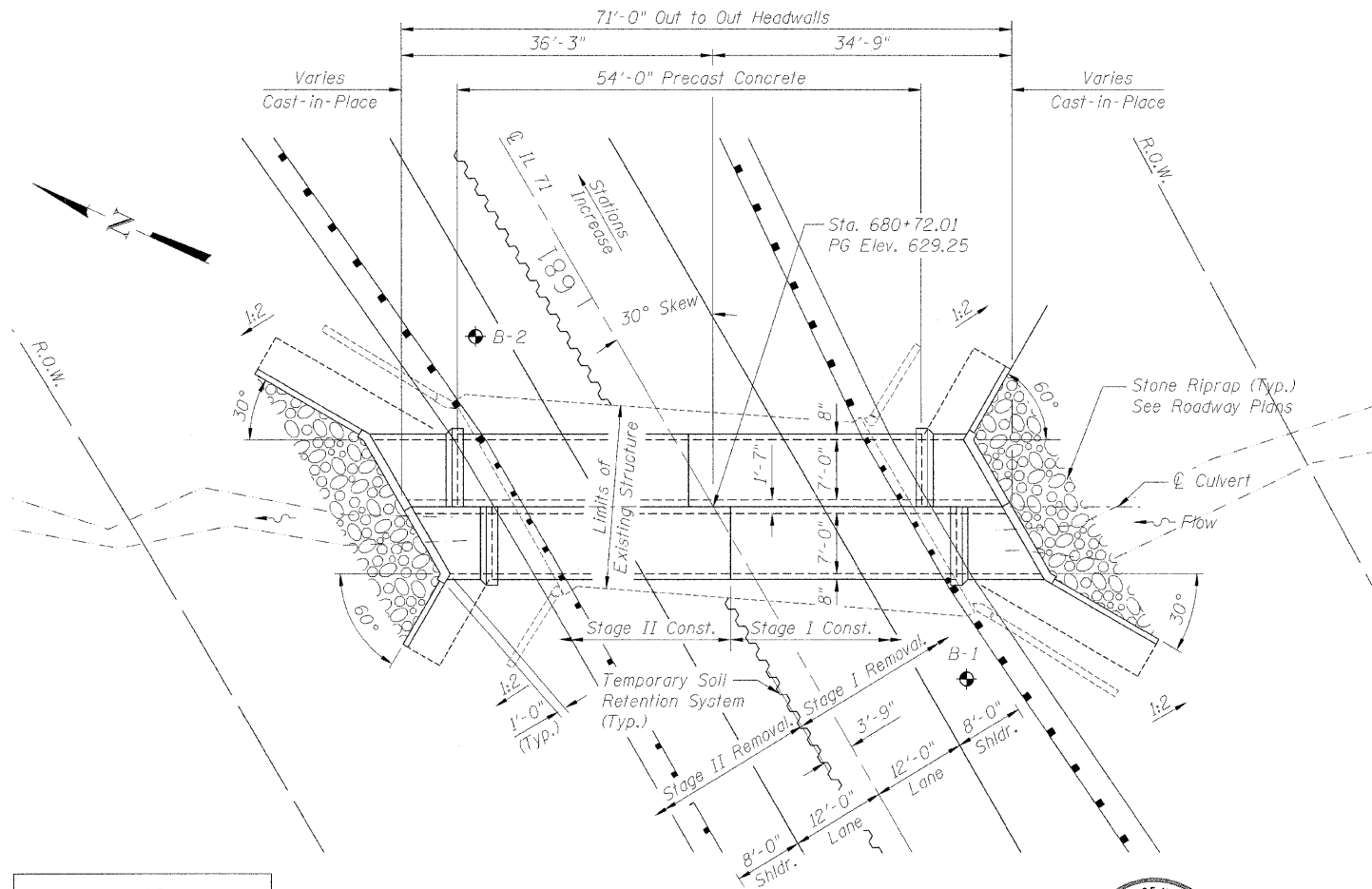
Flood Year	Freq. cfs	Opening Sq. Ft.		Nat. H.W.E.	Head - Foot		Headwater Elev. (ft)		
		Existing	Proposed		Existing	Proposed	Existing	Proposed	
Design	10	179	34	54	623.0	0.3	0.1	623.3	623.1
Base	50	278	44	61	623.5	0.6	0.1	624.1	623.6
Overtopping	100	319	48	64	623.7	0.7	0.1	624.4	623.8
Max. Calc.	500	420	54	68	624.0	1.0	0.4	625.0	624.4

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	616.12	615.46



LONGITUDINAL SECTION

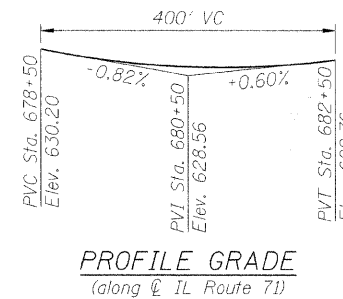


PLAN

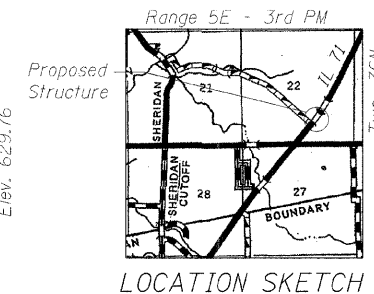
DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



Signature: *Deborah A. Erick* Date: 9-30-09  
November 30, 2010 Expires



PROFILE GRADE  
(along IL Route 71)



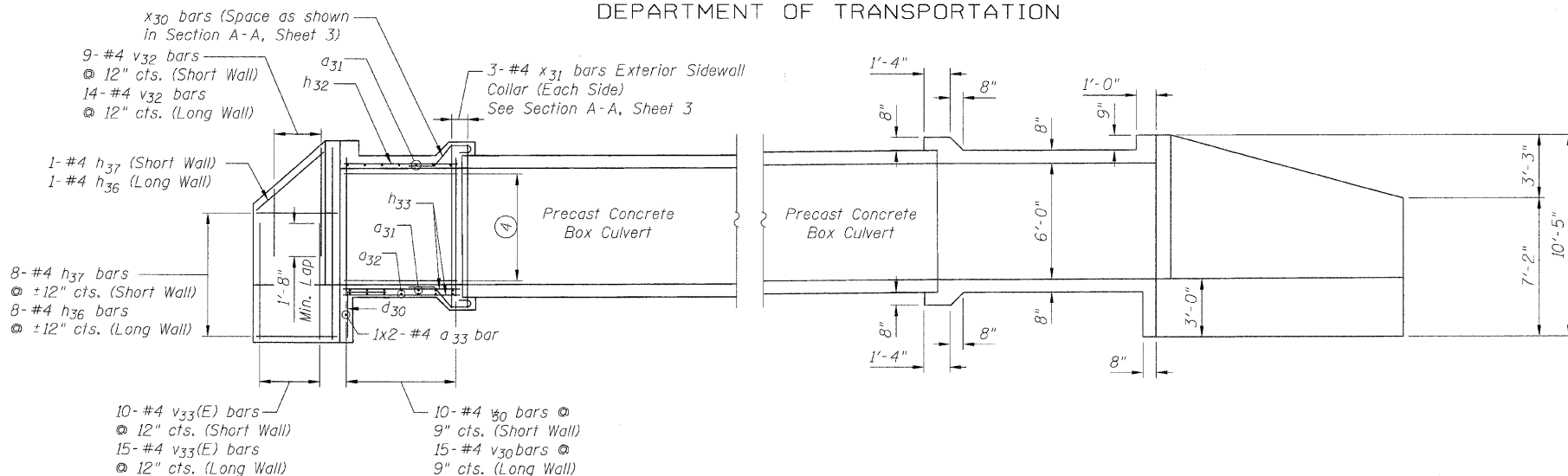
LOCATION SKETCH

GENERAL PLAN  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049

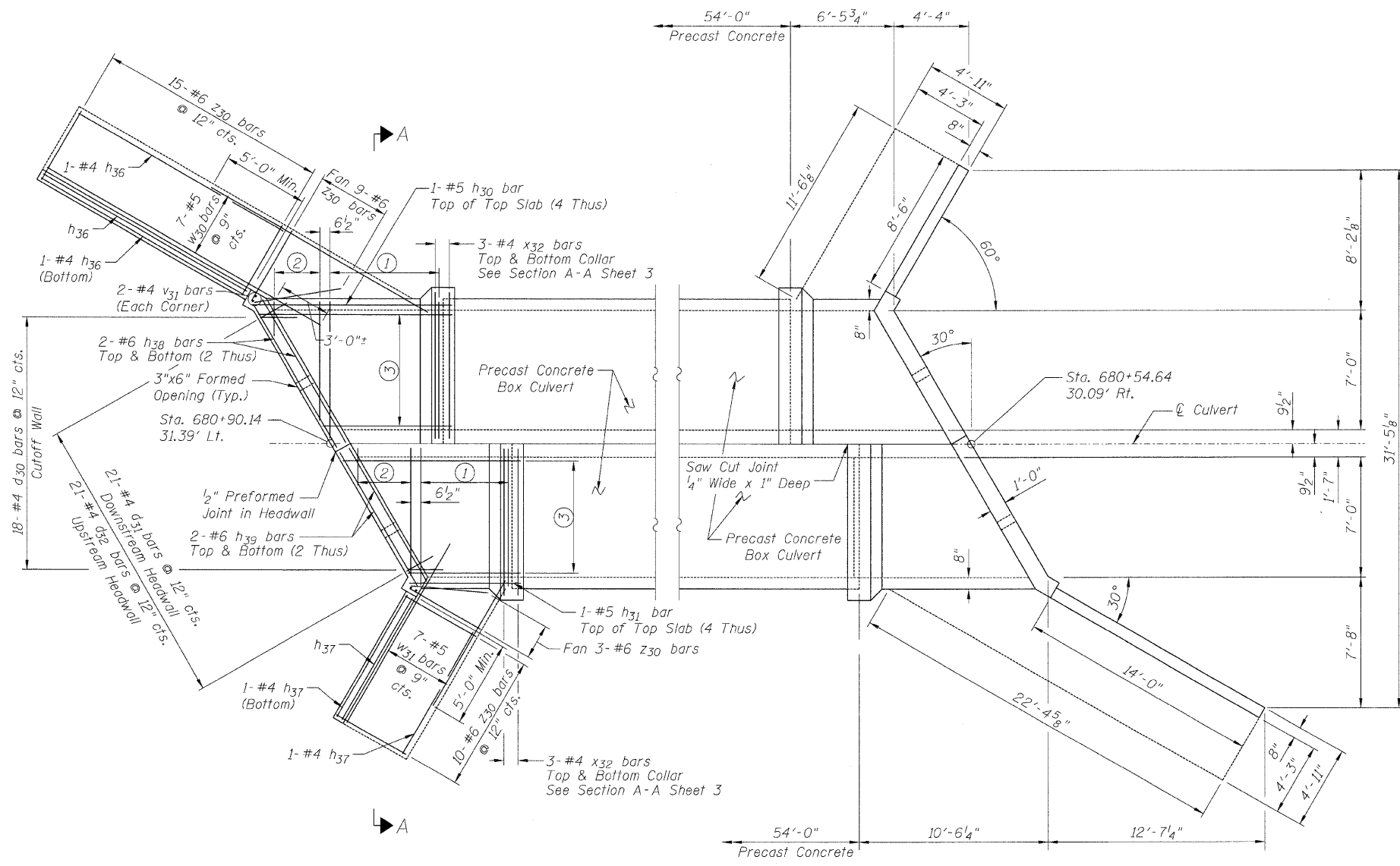
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 311	*	LaSalle	66	36
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

\* (3)BR-1,2,3 & (4)BR Contract #66741



ELEVATION



PLAN

NOTES

- ① 13-#6 a31 bars @ 6 1/2" cts. (Bottom of Top Slab & Top of Bottom Slab)  
4-#4 a32 bars @ 2'-0" cts. (Bottom of Bottom Slab)
  - ② \*\*8-#6 a31 bars @ 6 1/2" cts. (Bottom of Top Slab & Top of Bottom Slab)  
\*\*3-#4 a32 bars @ 2'-0" cts. (Bottom of Bottom Slab)
  - ③ \*8-#5 h32 bars @ 12" cts. (Bottom of Top Slab)  
\*7-#4 h33 bars @ 14" cts. (Top of Bottom Slab & Bottom of Bottom Slab)
  - ④ 6-#5 h34 bars @ 12" cts. (Short Wall)  
6-#5 h35 bars @ 12" cts. (Long Wall)
- \* Cut bar, see Cut Diagrams on Sheet 3
- \*\* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.
- Bars indicated thus 1x2-#4 etc. indicates 1 line of bars with 2 lengths per line.
- For Section A-A, see Sheet 3.

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BOX CULVERT END SECTIONS  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 311	*	LaSalle	66	37
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
*(3)BR-1,2,3 & (4)BR Contract #66741				

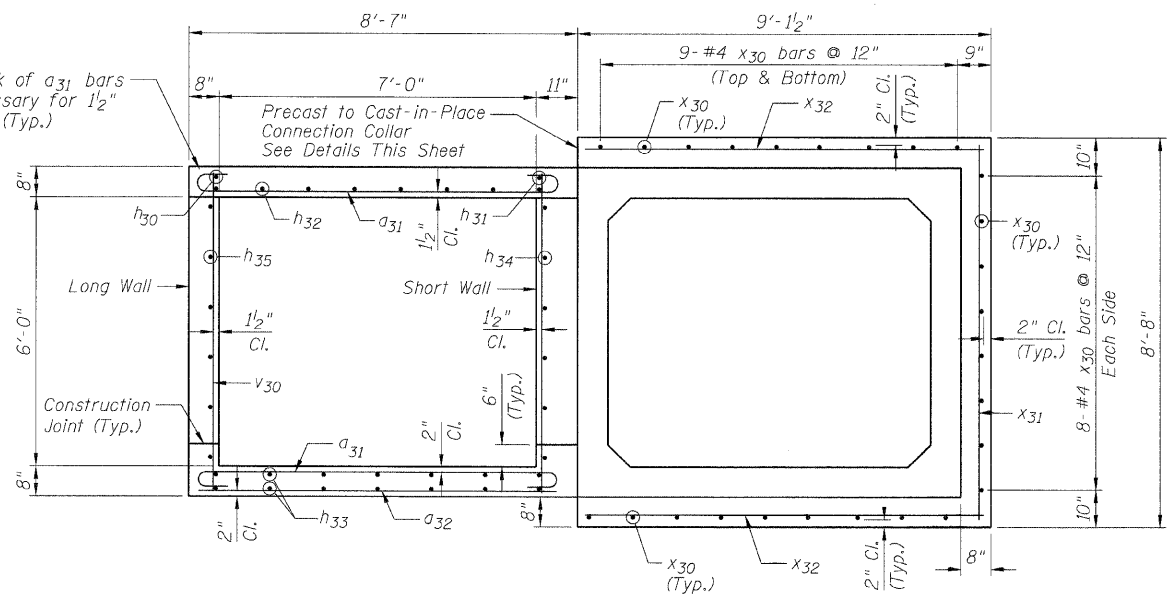
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>31</sub>	132	#6	9'-0"	U
a <sub>32</sub>	22	#4	7'-8"	—
a <sub>33</sub>	4	#4	10'-8"	—
d <sub>30</sub>	36	#4	4'-6"	—
d <sub>31</sub>	21	#4	4'-7"	—
d <sub>32</sub>	21	#4	4'-5"	—
h <sub>30</sub>	4	#5	10'-2"	—
h <sub>31</sub>	4	#5	6'-2"	—
h <sub>32</sub>	16	#5	16'-4"	—
h <sub>33</sub>	28	#4	16'-4"	—
h <sub>34</sub>	24	#5	6'-2"	—
h <sub>35</sub>	24	#5	10'-2"	—
h <sub>36</sub>	22	#4	13'-8"	—
h <sub>37</sub>	22	#4	8'-2"	—
h <sub>38</sub>	8	#6	9'-3"	—
h <sub>39</sub>	8	#6	8'-8"	—
v <sub>30</sub>	100	#4	7'-0"	—
v <sub>31</sub>	8	#4	10'-1"	—
v <sub>32</sub>	46	#4	5'-0"	—
v <sub>33(E)</sub>	50	#4	6'-10"	—
w <sub>30</sub>	14	#5	18'-0"	—
w <sub>31</sub>	14	#5	12'-6"	—
x <sub>30</sub>	104	#4	5'-4"	—
x <sub>31</sub>	12	#4	8'-4"	—
x <sub>32</sub>	24	#4	8'-9"	—
z <sub>30</sub>	74	#6	7'-4"	—
Item	Unit	Quantity		
Concrete Box Culverts	Cu. Yd.	52.8		
Reinforcement Bars	Pound	6,260		
Reinforcement Bars (Epoxy Coated)	Pound	230		

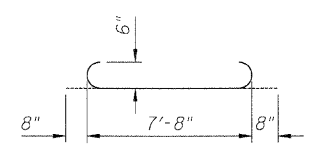
NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.  
Reinforcement bars designated (E) shall be epoxy coated.  
All construction joints shall be bonded.

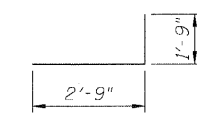
CULVERT DETAILS  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049



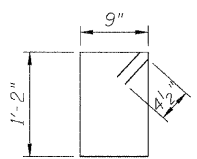
SECTION A-A



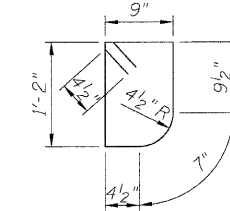
BAR a31



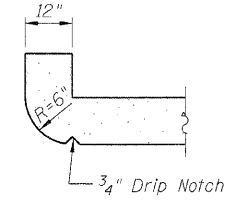
BAR d30



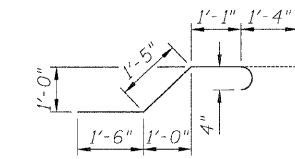
BAR d31



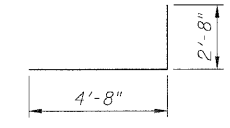
BAR d32



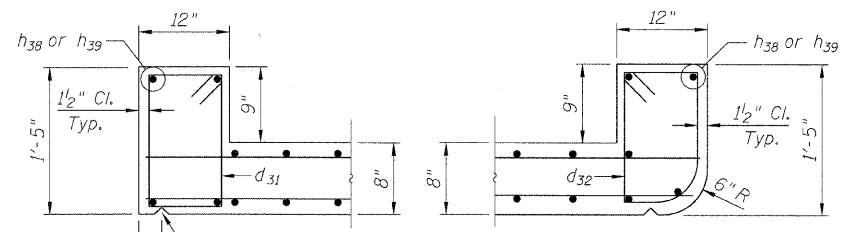
SECTION THRU HEADWALL  
(Up Stream End Only)



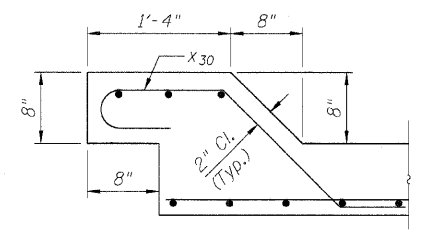
BAR x30



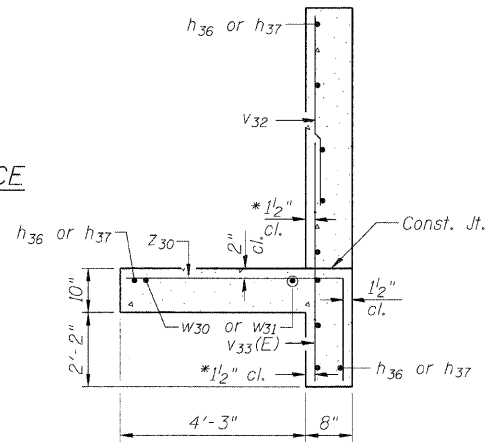
BAR z30



HEADWALL DETAILS



PRECAST TO CAST-IN-PLACE  
CONNECTION COLLAR



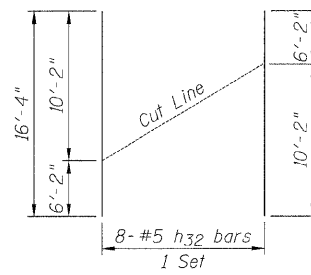
SECTION A-A

\* v bars shall not be placed more than 1/2" cl. from back face of wingwall.

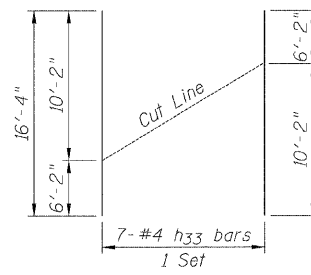
DESIGN STRESSES

f<sub>y</sub> = 60,000 psi  
f'<sub>c</sub> = 3,500 psi

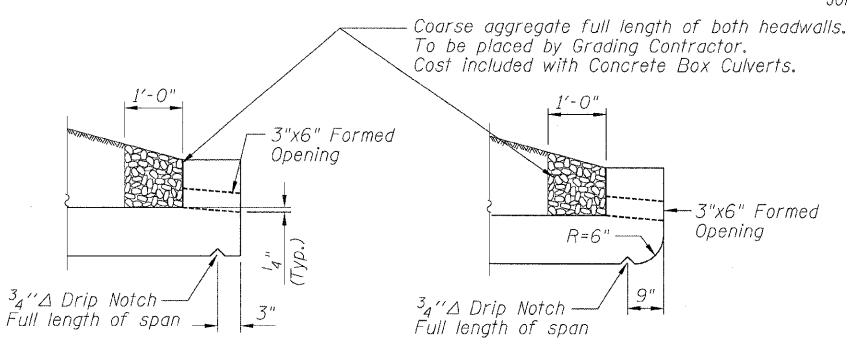
Max. Soil Pressure under footing = 2,479 psf



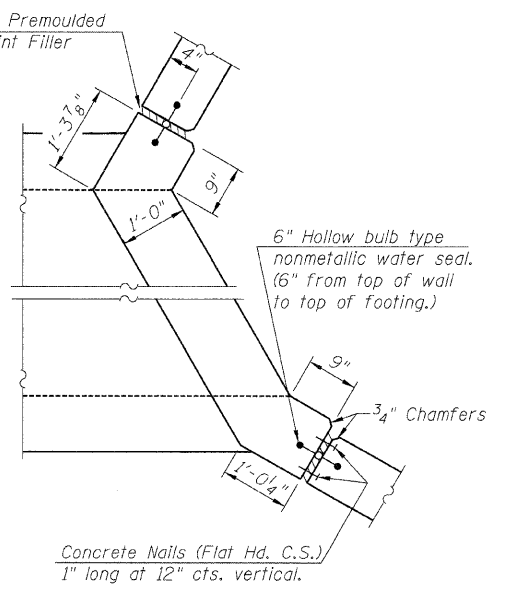
BAR h32  
CUT DIAGRAM



BAR h33  
CUT DIAGRAM



DRAIN DETAIL



CORNER DETAIL

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	IST. SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	38
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

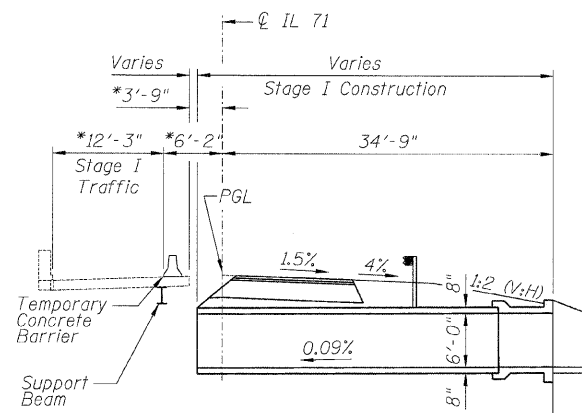
SHEET NO. 4

7 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

NOTES

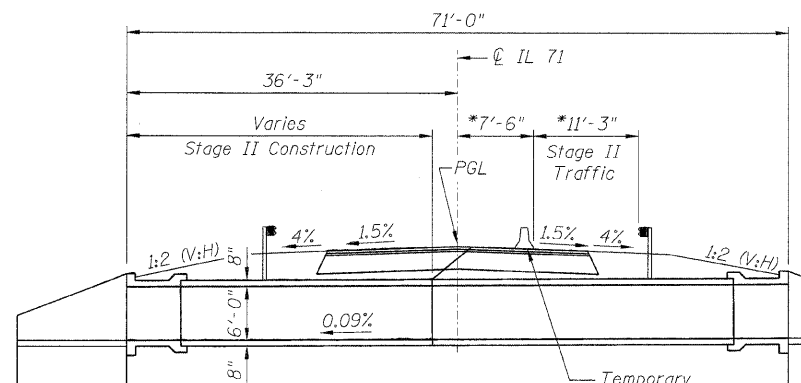
1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Soil Retention System.
3. Prior to removal of existing structure, install support beam for existing slab as shown and detailed on Slab Support Details sheet.
4. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
5. The Contractor is advised that the existing concrete slab is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the slab when developing construction procedures.
6. If the Contractor's construction procedure involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing concrete slab. To distribute load and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying slab.



STAGE I

(Looking Northeast)

\* Measured Perpendicular to Roadway



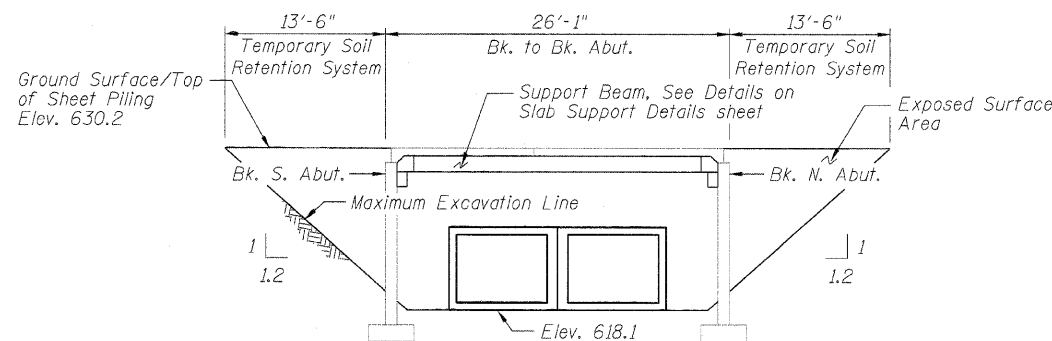
STAGE II

(Looking Northeast)

\* Measured Perpendicular to Roadway

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Temporary Soil Retention System	Sq. Ft.	148



TEMPORARY SOIL RETENTION SYSTEM

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STAGE CONSTRUCTION  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 5 7 SHEETS
F.A.P. 311	*	LaSalle	66	39	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

\*(3)BR-1,2,3 & (4)BR Contract #66741

GENERAL NOTES

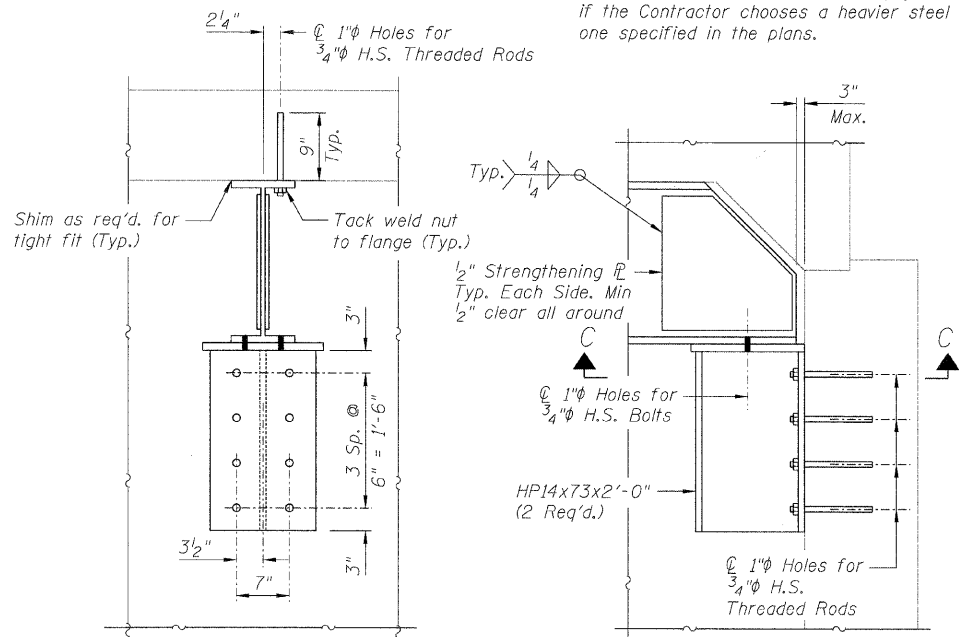
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
 Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary 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 work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.  
 See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods: Minimum Embedment 9".  
 The cost of epoxy grouting threaded rods on the abutments and slab shall be included with Furnishing and Erecting Structural Steel.  
 The Contractor has the option of using used steel. See Special Provisions.

BILL OF MATERIAL

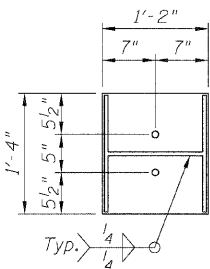
ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	2,840

\* $\varnothing$  Threaded rods (1 per span) Place additional tapered shims at midpoints between threaded rod and abutment face. Securely weld shims to top flange to support beam. Minimum shim size is 6" x flange width.

\*\*Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum girder depth = 24". No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans.

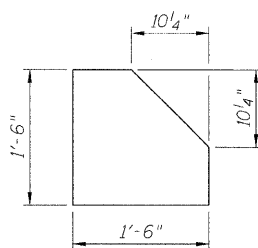


SECTION A-A  
(Typical End Section)

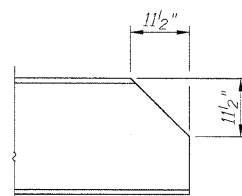


SECTION C-C  
 $\varnothing$  1"x1'-2"x1'-4"  
(2 Req'd.)

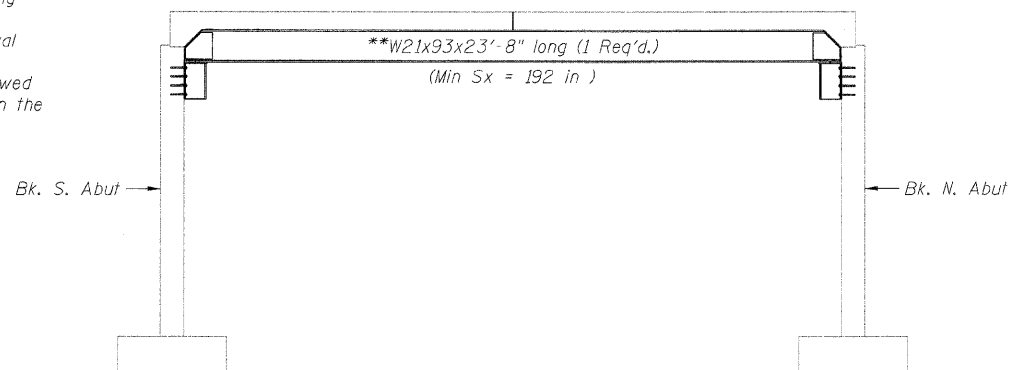
SECTION B-B  
(Typical End Section)



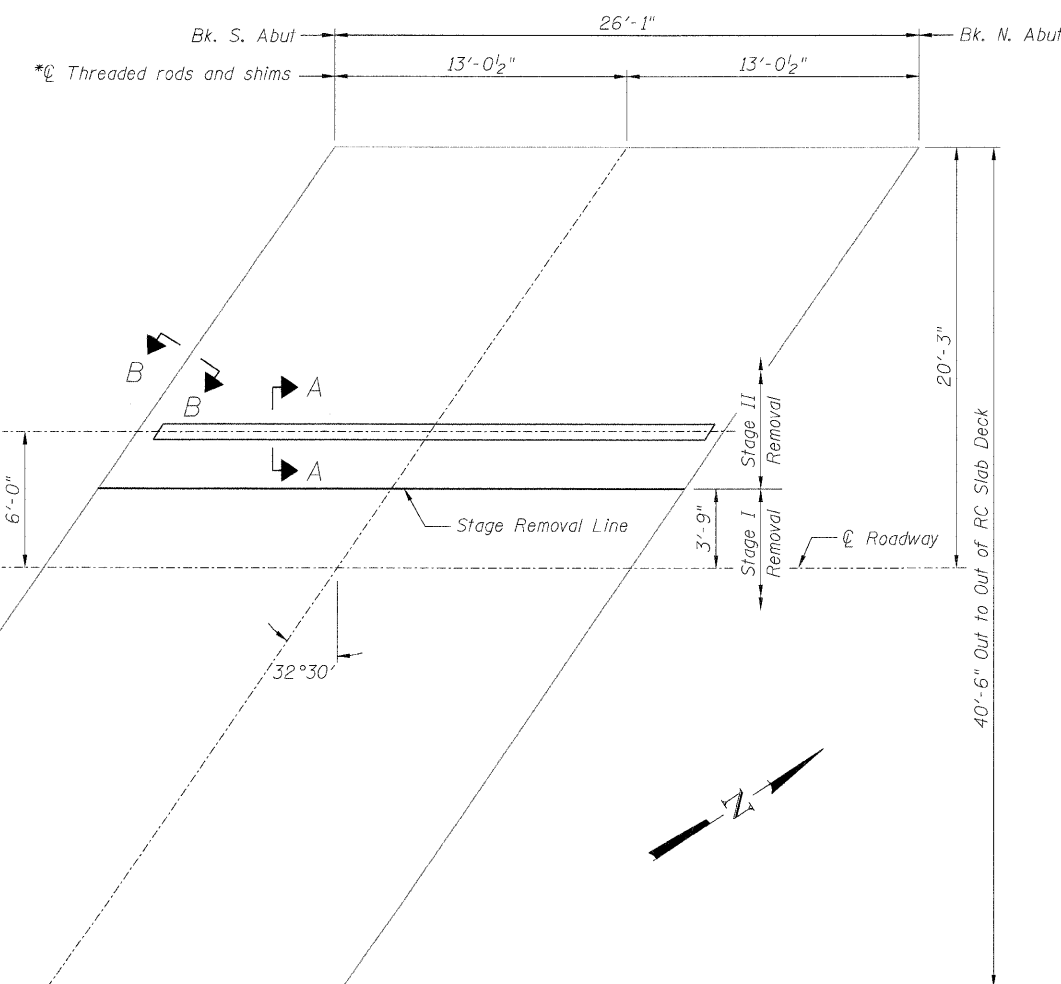
STRENGTHENING PLATE  
 $\varnothing$  1/2"x1'-6"x1'-6"  
(4 Req'd.)



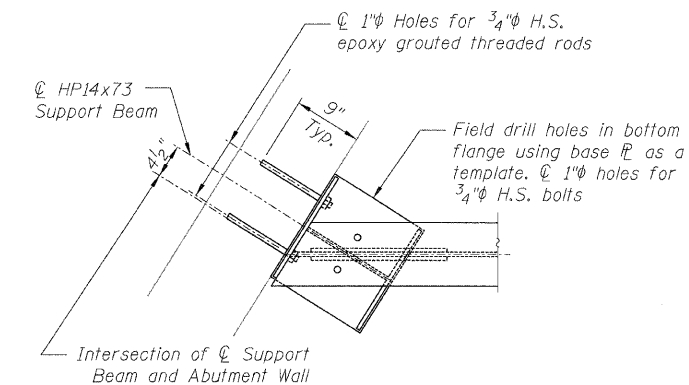
TYPICAL W SECTION  
END CUT DETAIL



ELEVATION



PLAN



TYPICAL PLAN AT  
SUPPORT BEAM END

SLAB SUPPORT DETAILS  
 IL 71 OVER BRANCH OF MISSION CREEK  
 FAP ROUTE 311  
 SECTION (3)BR-1,2,3 & (4)BR  
 LASALLE COUNTY  
 STA. 680+72.01  
 S.N. 050-2049

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	101% SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	40
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 6  
7 SHEETS  
\*(3)BR-1,2,3 & (4)BR Contract #66741

SOIL BORING B-1 (Page 1 of 2)

SOIL BORING B-1 (Page 2 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 1 of 2  
Date 9/18/06

ROUTE FA-97 (IL 71) DESCRIPTION IL 71, Branch of Mission Creek LOGGED BY Larry Myers  
SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0063  
Station 680+72  
BORING NO. #1, SE Quad  
Station 680+40  
Offset 15.50ft RL  
Ground Surface Elev. 626.66 ft

DEPTH (ft)	LOG	UCS (tsf)	MOS (%)	DESCRIPTION	DEPTH (ft)	LOG	UCS (tsf)	MOS (%)
0				Augered, white, shoulder stone, and black, Silty Clay Loam- fill	0			
626.66					608.66			
4				Very stiff, black brown, Silty Clay/Silty Clay Loam- fill	14			
2	2.5	26.1			17			
5	P			Stiff, brownish gray, Sandy Clay Loam Till	20			
3					23			
3	3.0	30.5			25			
5	P				28			
2					30			
4	2.5	26.2			33			
4	P			Stiff, blue gray, Silty Clay with pockets of Loam	35			
620.16					38			
2					40			
3	2.0	28.2			43			
4	P				46			
617.16					49			
1					52			
4	3.0	13.0			55			
4	P				58			
614.66					61			
4					64			
9	7.4	18.5			67			
14	S				70			
8					73			
9	6.6	19.8			76			
21	S				79			
6					82			
20					85			

Surface Water Elev. 618.98 ft  
Stream Bed Elev. \_\_\_\_\_ ft  
Groundwater Elev.:  
First Encounter \_\_\_\_\_ ft  
Upon Completion 10.5' ft  
After \_\_\_\_\_ Hrs. \_\_\_\_\_ ft

Hard, gray, Silty Clay Till (continued)  
Stiff, brownish gray, Sandy Clay Loam Till  
Hard, brown, Silty Clay Loam Till with pockets of Silty Loam Till  
Stiff, brown, Silty Clay with layers of brown, Clay and Silt ribbons  
Very stiff, brown, Clay with Silt pockets @ 44.5'

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 2 of 2  
Date 9/18/06

ROUTE FA-97 (IL 71) DESCRIPTION IL 71, Branch of Mission Creek LOGGED BY Larry Myers  
SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0063  
Station 680+72  
BORING NO. #1, SE Quad  
Station 680+40  
Offset 15.50ft RL  
Ground Surface Elev. 626.66 ft

DEPTH (ft)	LOG	UCS (tsf)	MOS (%)	DESCRIPTION	DEPTH (ft)	LOG	UCS (tsf)	MOS (%)
6				Very stiff, brown, Clay with Silt pockets @ 44.5' (continued)	14			
8					16			
4					18			
4	2.0	25.9			20			
5	B			St Peter Sandstone, and weathered, dense, white, Sand @ surface <6" End of Boring	22			
600.66					24			
6					26			
6					28			
7	2.1	15.1			30			
5	B				32			
6					34			
9	2.0	21.4			36			
16	P				38			
9					40			
571.66					42			
					44			
					46			
					48			
					50			
					52			
					54			
					56			
					58			
					60			

Surface Water Elev. 618.98 ft  
Stream Bed Elev. \_\_\_\_\_ ft  
Groundwater Elev.:  
First Encounter \_\_\_\_\_ ft  
Upon Completion 10.5' ft  
After \_\_\_\_\_ Hrs. \_\_\_\_\_ ft

Hard, gray, Silty Clay Till (continued)  
Stiff, brownish gray, Sandy Clay Loam Till  
Hard, brown, Silty Clay Loam Till with pockets of Silty Loam Till  
Stiff, brown, Silty Clay with layers of brown, Clay and Silt ribbons  
Very stiff, brown, Clay with Silt pockets @ 44.5'

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BORING LOGS  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	IS/MS SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	41
FED. ROAD DIST. NO. 7				
ILLINOIS				
FED. AID PROJECT				

\* (3)BR-1,2,3 & (4)BR Contract #66741

SOIL BORING B-2 (Page 1 of 2)

Page 1 of 2

Date 9/25/06

LOGGED BY Larry Myers

ROUTE FA-97 (IL 71) DESCRIPTION IL 71, Branch of Mission Creek

SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E

COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0083  
Station 680+72

BORING NO. #2: NW Quad  
Station 581+03  
Offset 14.00 ft Lt.  
Ground Surface Elev. 631.44 ft

DEPTH (ft)	BLOW COUNT (blows/ft)	UNSATURATED PENETROMETER (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UNSATURATED PENETROMETER (tsf)	MOISTURE (%)
0				Augered, white, shoulder stone and black, Silty Clay - fill	0			
4	4	3.5	27.6	Very stiff, gray, Silty Clay Till (continued)	3	2.1	24.4	
5	5	P			4	B		
6	4	3.5	27.6	Very stiff, gray, Sandy Clay Loam Till with large, Gravel pieces and Loam pockets	5			
8	2				5			
10	3	3.0	25.1	Very stiff, grayish brown, Silty Clay with small Silt pockets and Clay pockets	9	rock	10.8	
14	4	P			17	in shoe		
16	2			Very stiff, gray, Silty Clay Till	18			
18	3	3.0	23.6		19			
20	4	P		Hard, brown, Silty Clay Loam Till	20			
22	3				21			
24	4	4.1	22.4	Very stiff, grayish brown, Silty Clay with small Silt pockets and Clay pockets	22	6	2.5	11.8
26	5	S			23	B		
28	4			Very stiff, gray, Silty Clay Till	24			
30	6	6.8	20.2		25			
32	6	S		Stiff to very stiff, gray, Silty Clay Loam	26			
34	4				27			
36	4	3.1	22.0		28	5	2.1	26.3
38	5	S			29	7	S	
40	2				30			
42	4	2.5	23.2		31			
44	4	B			32			
46	2				33			
48	2				34			
50	1				35			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

SOIL BORING B-2 (Page 2 of 2)

Page 2 of 2

Date 9/25/06

LOGGED BY Larry Myers

ROUTE FA-97 (IL 71) DESCRIPTION IL 71, Branch of Mission Creek

SECTION 3-B LOCATION SE 1/4, SEC. 22, TWP. 35N, RNG. 05E

COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0083  
Station 680+72

BORING NO. #2: NW Quad  
Station 581+03  
Offset 14.00 ft Lt.  
Ground Surface Elev. 631.44 ft

DEPTH (ft)	BLOW COUNT (blows/ft)	UNSATURATED PENETROMETER (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UNSATURATED PENETROMETER (tsf)	MOISTURE (%)
12	2.5	17.8		Stiff to very stiff, gray, Silty Clay with layers of gray, Silt (continued)	36			
16	P				37			
18				White, St. Peter Sandstone, weathered and dense, white, Sand in top 6" Hard @ 65' End of Boring	38	100/6	19.5	
19					39			
20				Very stiff, gray, Silty Clay Loam Till with layers of Silt	40			
22					41			
24				Dense, gray, fine, Sand to coarse. Gravel	42			
26					43			
28				Very stiff, gray, Silty Clay with layers of gray, Silt	44			
30					45			
32					46			
34					47			
36					48			
38					49			
40					50			
42					51			
44					52			
46					53			
48					54			
50					55			
52					56			
54					57			
56					58			
58					59			
60					60			
62					61			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

BORING LOGS  
IL 71 OVER BRANCH OF MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 680+72.01  
S.N. 050-2049

Bench Mark:

Existing Structure: S.N. 050-0064 was originally constructed in 1947. The existing structure is a 40'-4" wide cast-in-place reinforced concrete slab bridge on closed concrete abutments. The structure measures 26'-0" back to back of abutments.

Staging shall be used during construction of the proposed double box culvert.

No Salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 1
F.A.P. 311	*	LaSalle	66	42
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		8 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

GENERAL NOTES

1. Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M. 259.
2. Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
3. Reinforcement bars designated (E) shall be epoxy coated.
4. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	11,100
Reinforcement Bars (Epoxy Coated)	Pound	270
Furnishing & Erecting Structural Steel	Pound	2,870
Temporary Soil Retention System	Sq. Ft.	232
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	80.4
Precast Concrete Box Culvert 11'x7' (Special)	Foot	104
Sheet Waterproofing Membrane System	Sq. Yd.	544

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.  
Design Fill Ht. > 2'

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

PRECAST

$f'_c = 5,000$  psi  
 $f_y = 65,000$  psi (welded wire fabric)

CAST-IN-PLACE

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

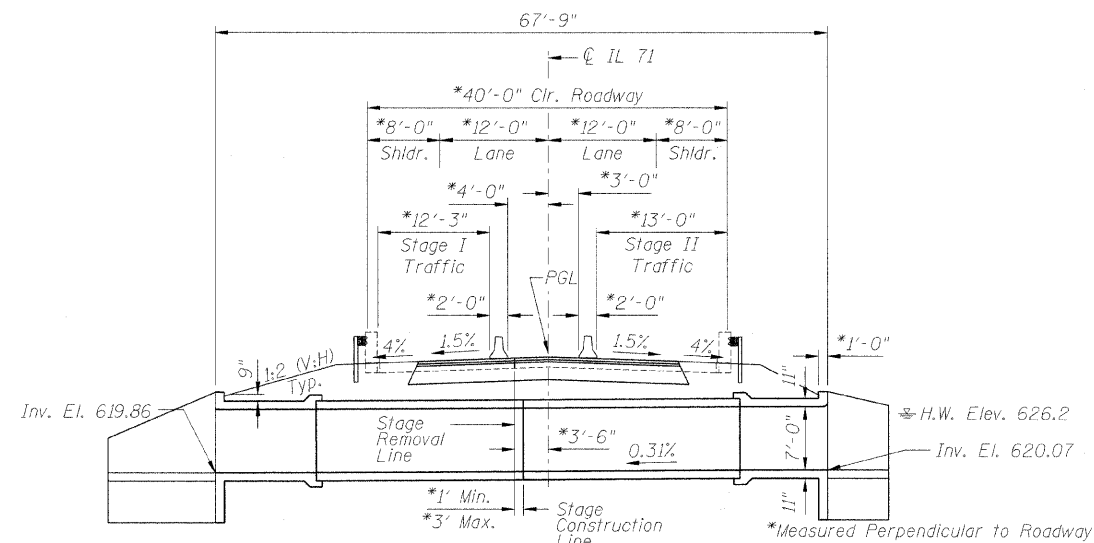
WATERWAY INFORMATION

Drainage Area = 2.3 Sq. Mi.  
Exist. Low Grade Elev. 631.13 @ Sta. 641+18 Prop. Low Grade Elev. 631.13 @ Sta. 641+18

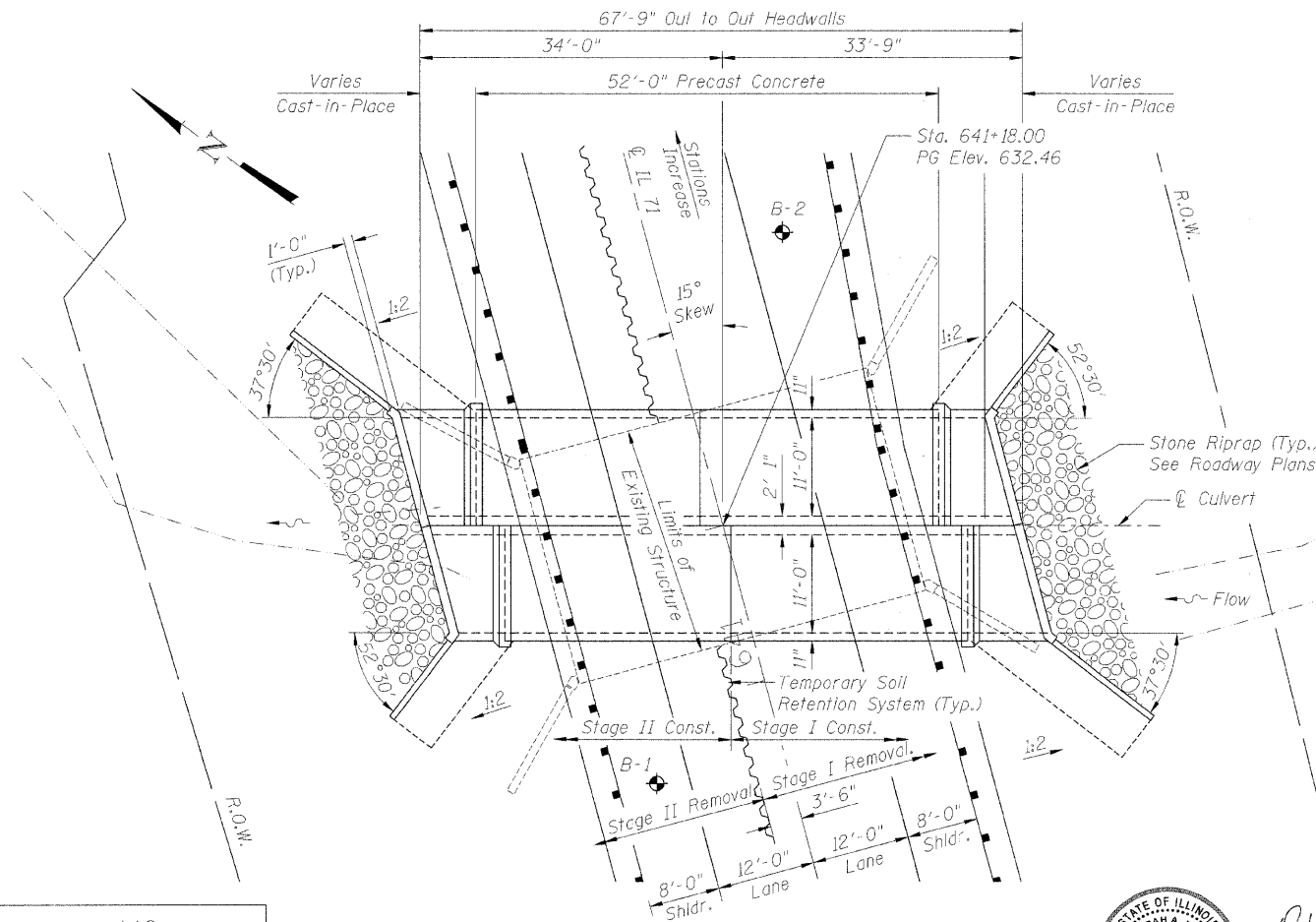
Flood	Freq. Year	Opening Sq. Ft.		Nat. H.W.E.	Head - Foot		Headwater Elev. (ft)		
		Existing	Proposed		Existing	Proposed	Existing	Proposed	
Design	10	346	90	119	625.5	0.4	0.0	625.9	625.5
Base	50	531	107	135	626.2	0.5	0.0	626.7	626.2
Overtopping	100	606	112	139	626.4	0.6	0.0	627.0	626.4
Max. Calc.	500	790	119	146	626.7	1.0	0.1	627.7	626.8

DESIGN SCOUR ELEVATION TABLE

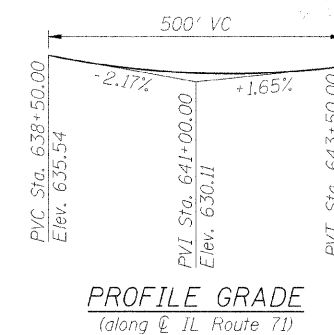
Design Scour Elevation (ft.)	Upstream	Downstream
	617.07	616.86



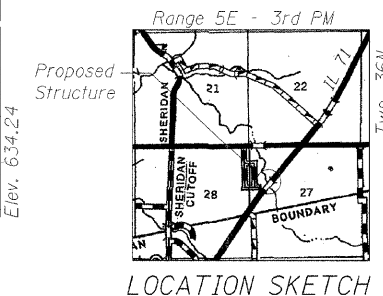
LONGITUDINAL SECTION



PLAN



PROFILE GRADE  
(along IL Route 71)



LOCATION SKETCH

GENERAL PLAN  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS



Signature: *Derek J. J...*  
Date: 9-30-09  
Expires: November 30, 2010

DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	#	LaSalle	66	43
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

\*(3)BR-1,2,3 & (4)BR Contract #66741

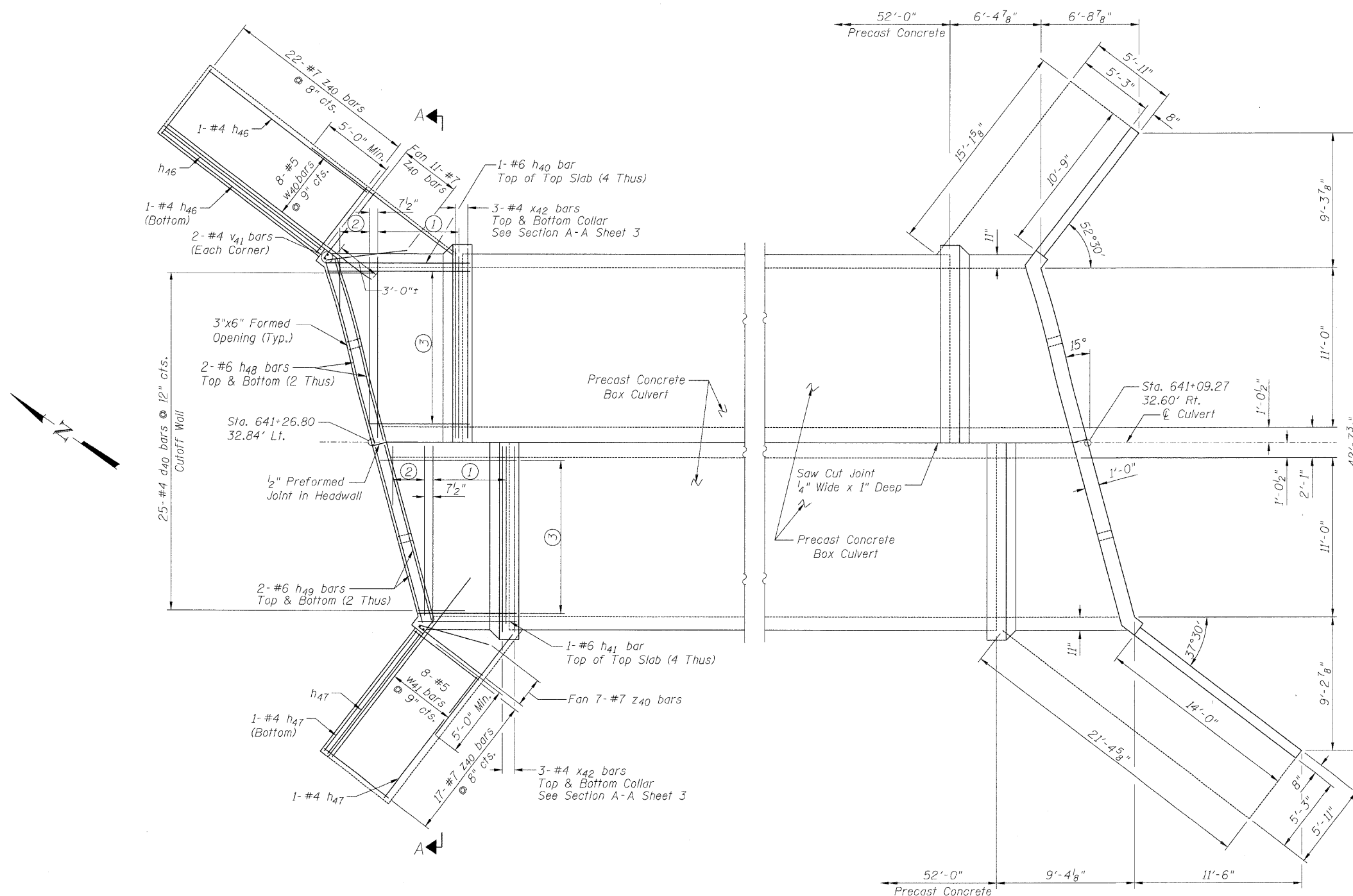
NOTES

- ① 11- #8 a<sub>41</sub> bars @ 7½" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
4- #4 a<sub>42</sub> bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ② \*\*6- #8 a<sub>41</sub> bars @ 7½" cts.  
(Bottom of Top Slab & Top of Bottom Slab)  
\*\*2- #4 a<sub>42</sub> bars @ 2'-0" cts.  
(Bottom of Bottom Slab)
- ③ \*12- #6 h<sub>42</sub> bars @ 12" cts.  
(Bottom of Top Slab)  
\*10- #5 h<sub>43</sub> bars @ 14" cts.  
(Top of Bottom Slab & Bottom of Bottom Slab)

\* Cut bar, see Cut Diagrams on Sheet 4

\*\* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

For Section A-A, see Sheet 3.



PLAN

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BOX CULVERT PLAN  
IL 71 MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

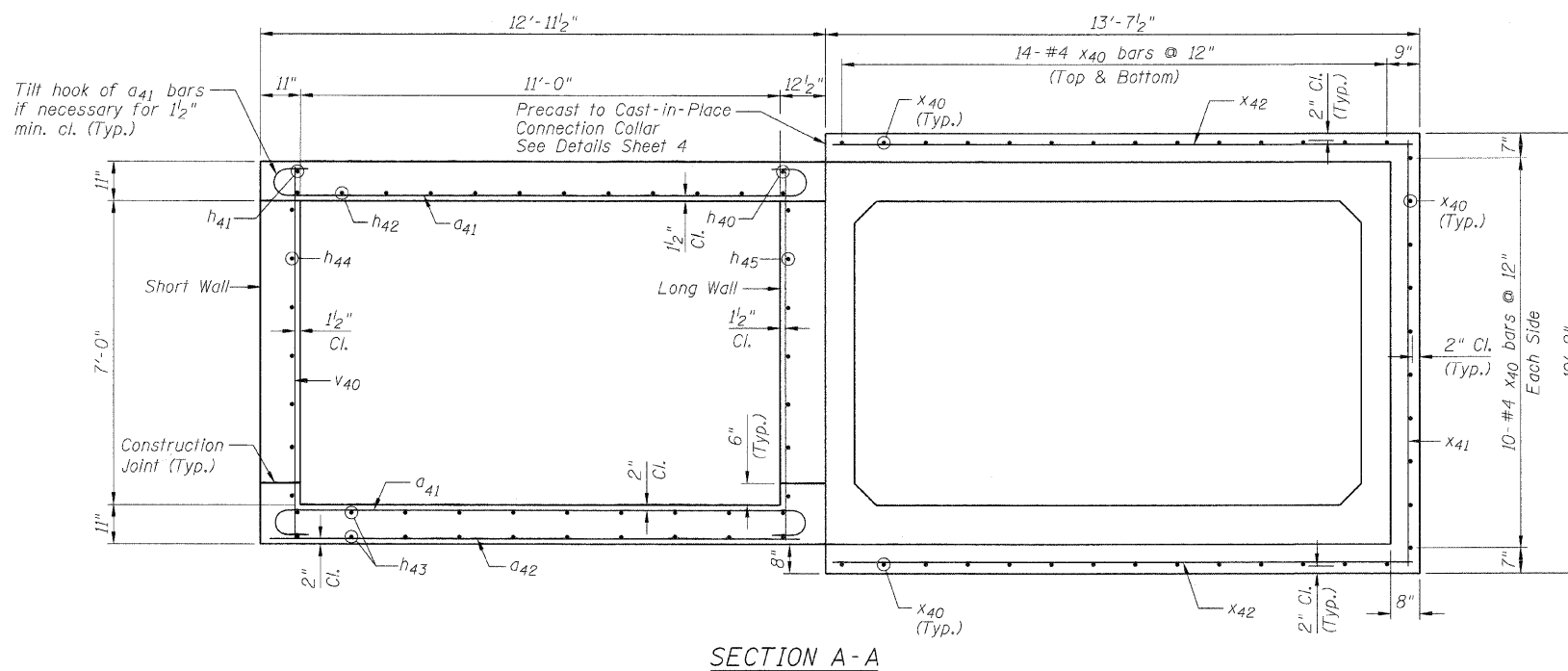
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATION	SHEET NO.
F.A.P. 311	*	LaSalle	66	44
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3

8 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741



SECTION A-A

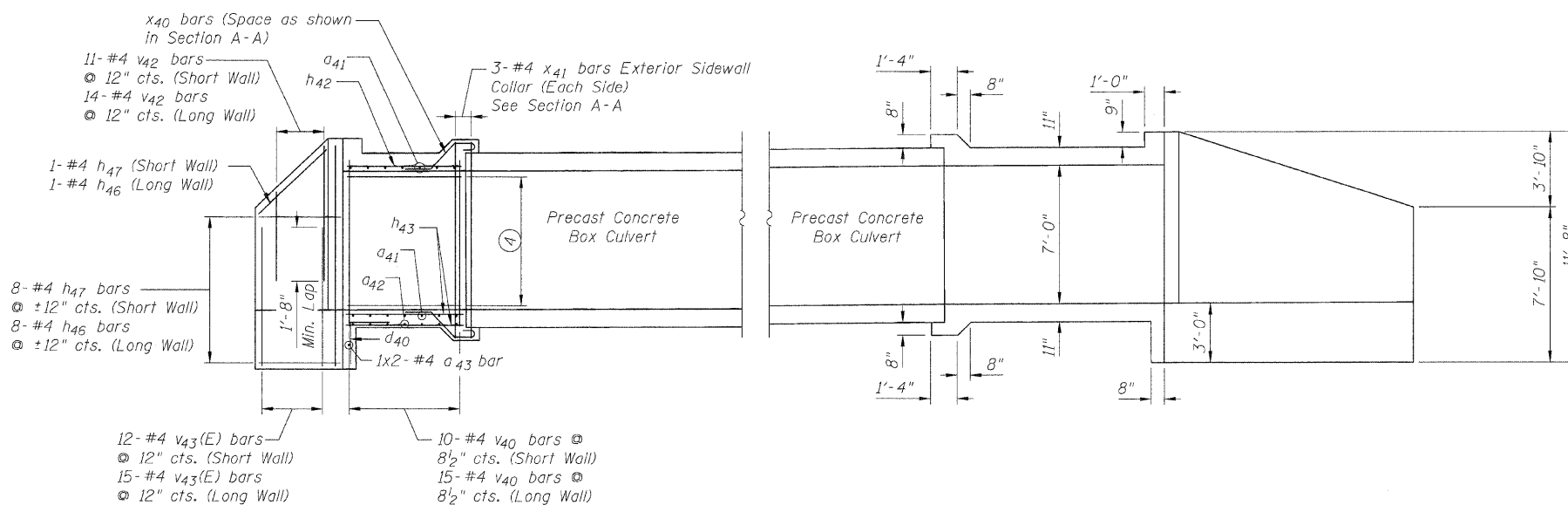
NOTES

- ④ 7-#6 h<sub>44</sub> bars @ 12" cts. (Short Wall)
- 7-#6 h<sub>45</sub> bars @ 12" cts. (Long Wall)

\* Cut bar, see Cut Diagrams on Sheet 4

\*\* a bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert.

Bars indicated thus 1x2-#4 etc. indicates 1 line of bars with 2 lengths per line.



ELEVATION

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

CULVERT SECTIONS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 8 SHEETS
F.A.P. 311	*	LaSalle	66	45	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a41	112	#8	13'-8"	U
a42	20	#4	11'-10"	—
a43	4	#4	13'-2"	—
d40	50	#4	4'-6"	L
h40	4	#6	9'-0"	—
h41	4	#6	6'-0"	—
h42	24	#6	15'-0"	—
h43	40	#5	15'-0"	—
h44	28	#6	6'-0"	—
h45	28	#6	9'-0"	—
h46	22	#4	13'-8"	—
h47	22	#4	10'-5"	—
h48	8	#6	12'-7"	—
h49	8	#6	12'-2"	—
v40	100	#4	8'-6"	—
v41	8	#4	11'-4"	—
v42	50	#4	5'-10"	—
v43(E)	54	#4	7'-6"	—
w40	16	#5	17'-9"	—
w41	16	#5	14'-6"	—
x40	152	#4	5'-4"	S
x41	12	#4	9'-10"	—
x42	24	#4	13'-3"	—
z40	114	#7	8'-4"	L

Item	Unit	Quantity
Concrete Box Culverts	Cu. Yd.	80.4
Reinforcement Bars	Pound	11,100
Reinforcement Bars (Epoxy Coated)	Pound	270

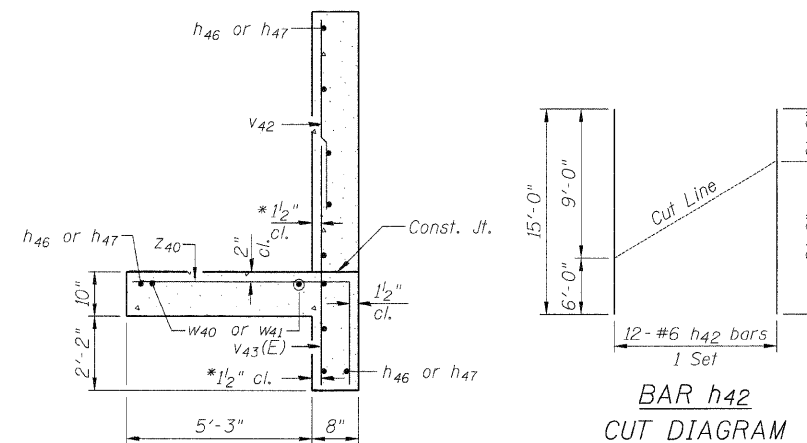
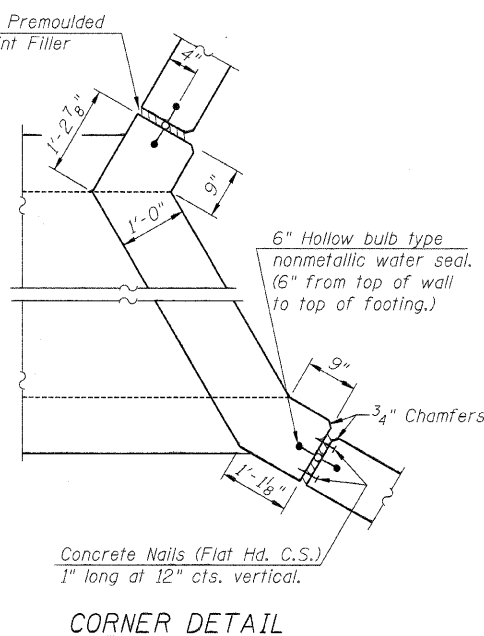
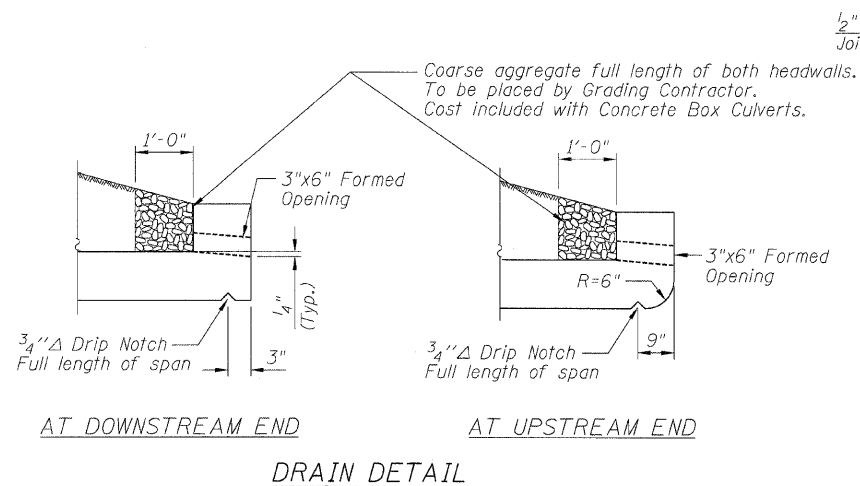
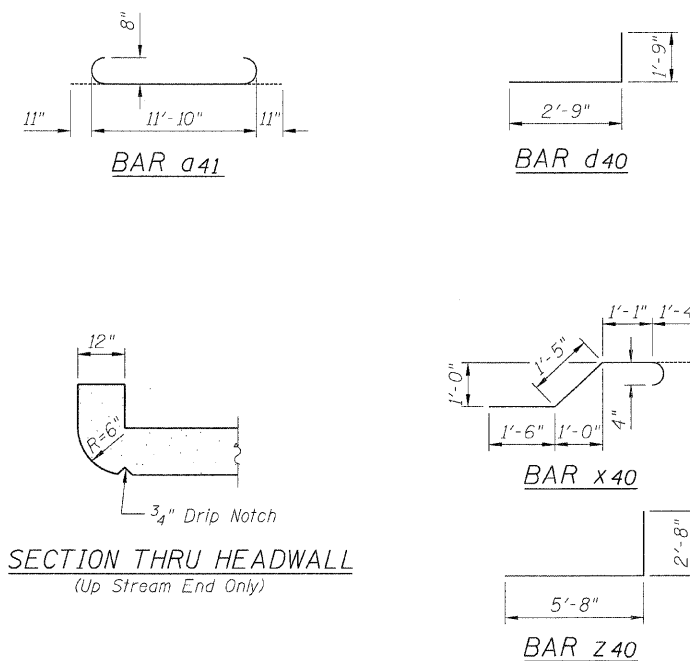
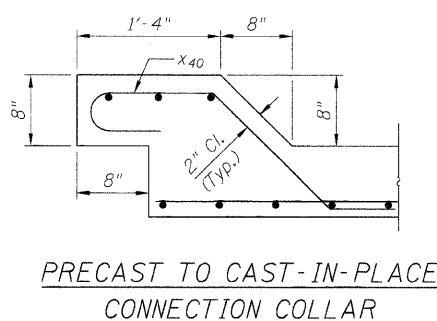
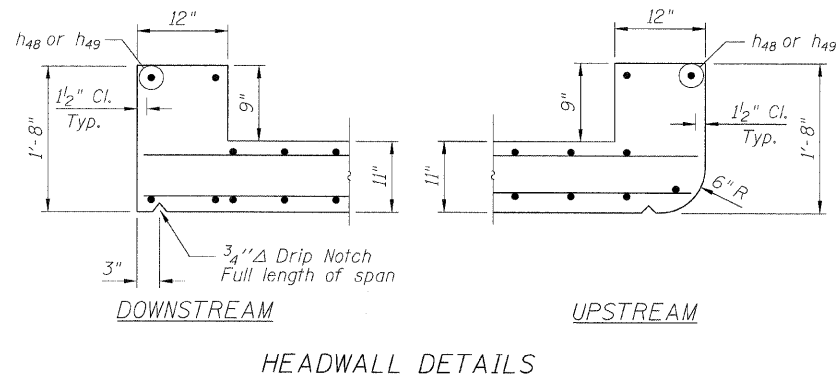
NOTES

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Reinforcement bars designated (E) shall be epoxy coated.

All construction joints shall be bonded.

CULVERT DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

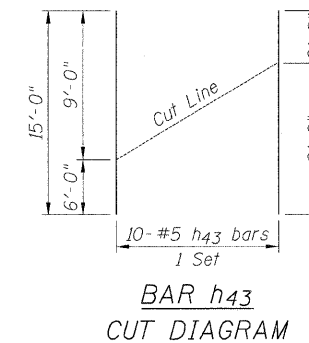


\* v bars shall not be placed more than 1 1/2" cl. from back face of wingwall.

DESIGN STRESSES

$f_y = 60,000$  psi  
 $f'_c = 3,500$  psi

Max. Soil Pressure under footing = 3,124 psf



DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 311	*	LaSalle	66	46
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

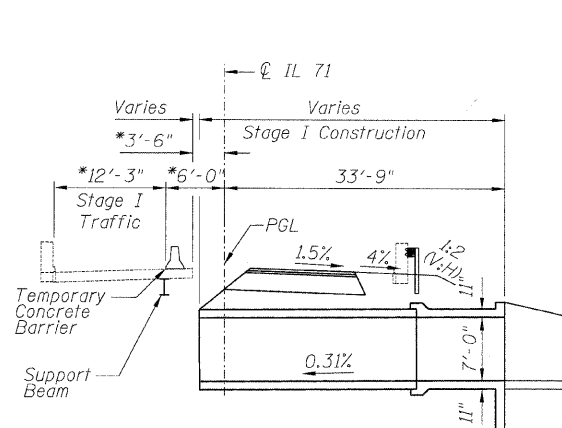
SHEET NO. 5

8 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

NOTES

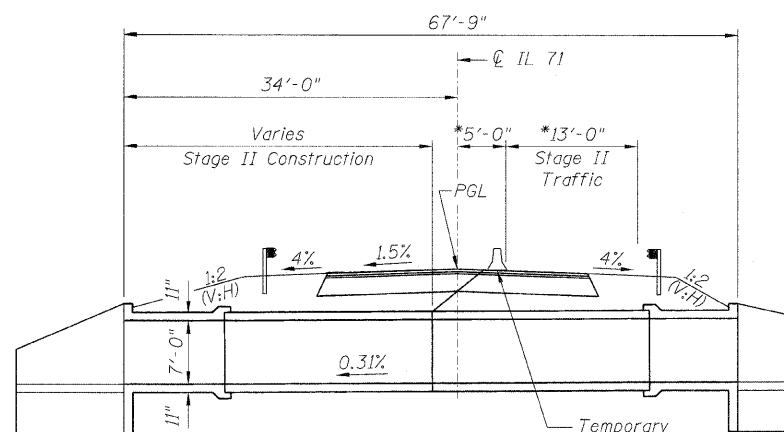
1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Soil Retention System.
3. Prior to removal of existing structure, install support beam for existing slab as shown and detailed on Slab Support Details sheet.
4. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
5. The Contractor is advised that the existing concrete slab is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the slab when developing construction procedures.
6. If the Contractor's construction procedure involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing concrete slab. To distribute load and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying slab.



STAGE I

(Looking Northeast)

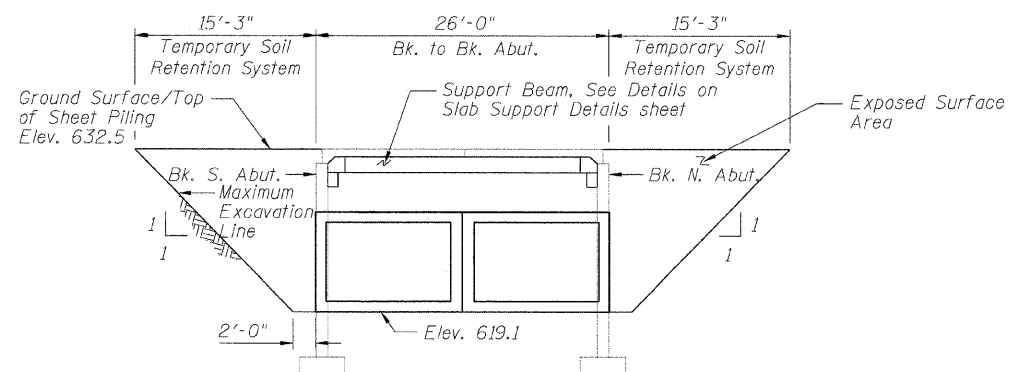
\* Measured Perpendicular to Roadway



STAGE II

(Looking Northeast)

\* Measured Perpendicular to Roadway



TEMPORARY SOIL RETENTION SYSTEM

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Temporary Soil Retention System	Sq. Ft.	232

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STAGE CONSTRUCTION  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

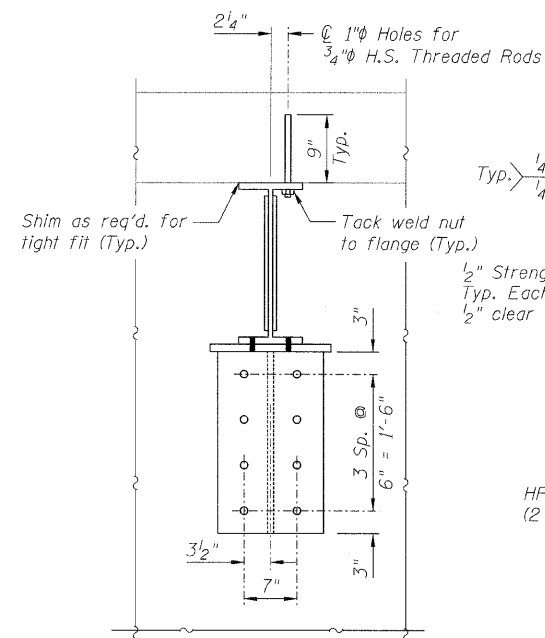
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 311	*	LaSalle	66	47
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

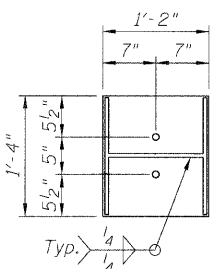
\* (3)BR-1,2,3 & (4)BR Contract #66741

\* $\odot$  Threaded rods (1 per span) Place additional tapered shims at midpoints between threaded rod and abutment face. Securely weld shims to top flange to support beam. Minimum shim size is 6" x flange width.

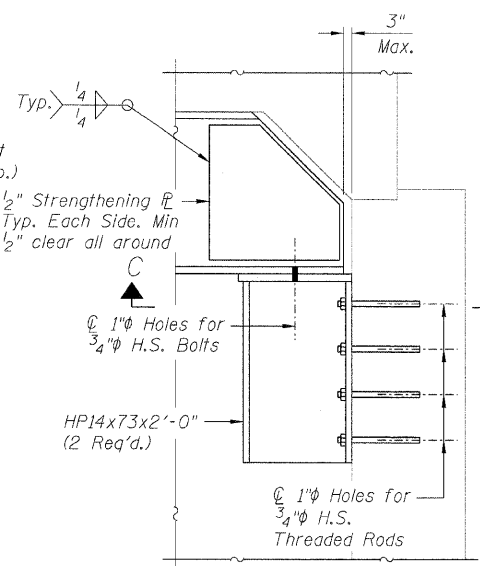
\*\*Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum girder depth = 24". No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans.



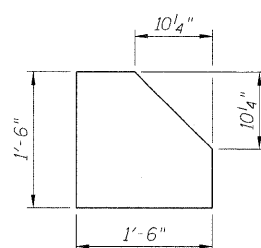
SECTION A-A  
(Typical End Section)



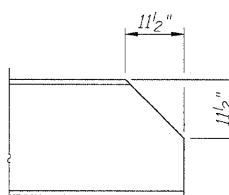
SECTION C-C  
PL 1"x1'-2"x1'-4"  
(2 Req'd.)



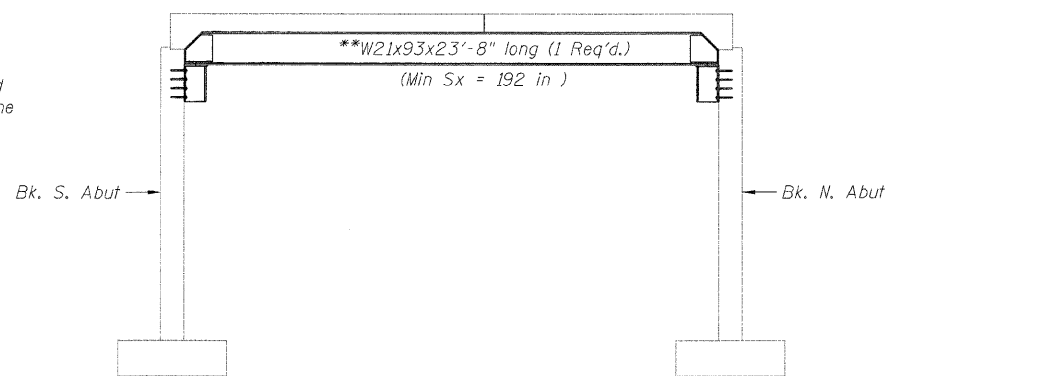
SECTION B-B  
(Typical End Section)



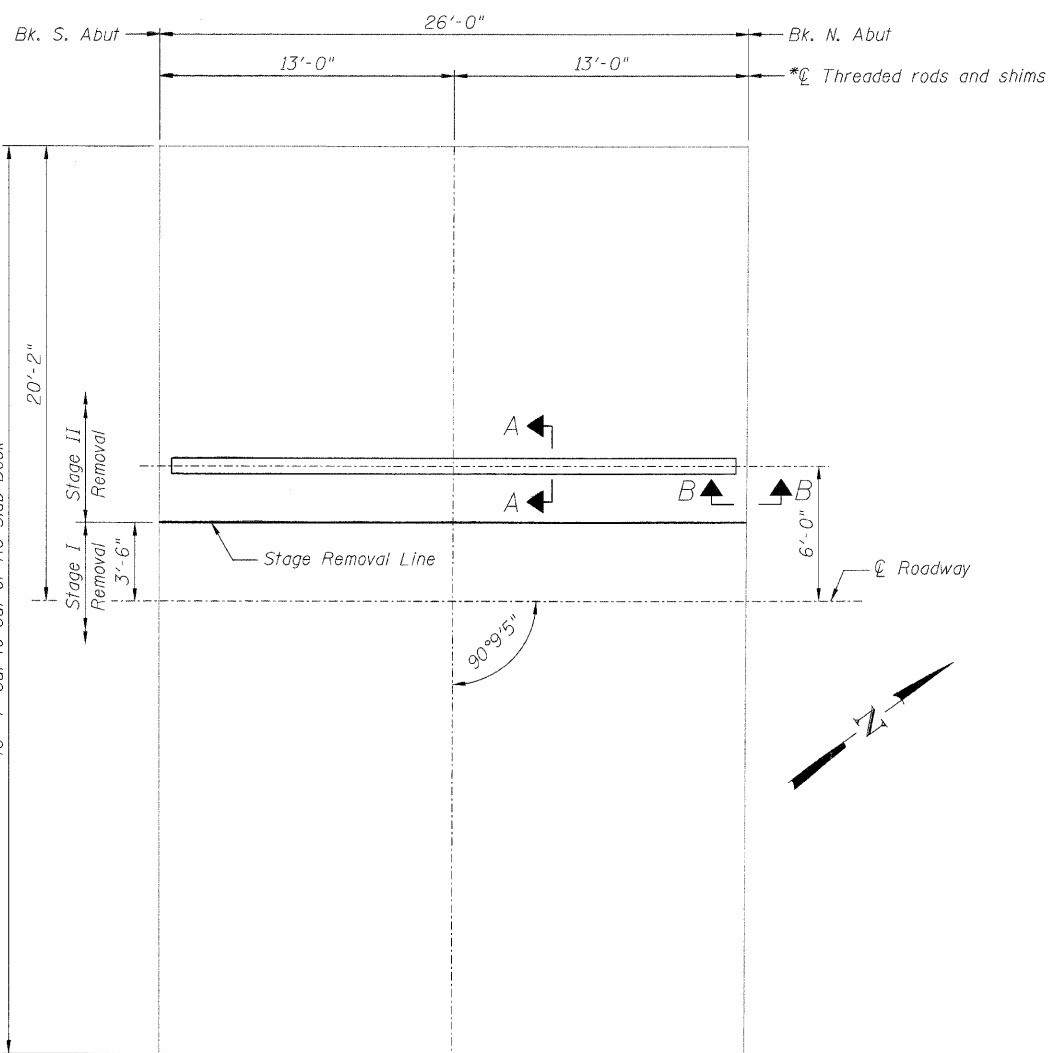
STRENGTHENING PLATE  
PL 1/2"x1'-6"x1'-6"  
(4 Req'd.)



TYPICAL W SECTION  
END CUT DETAIL



ELEVATION



PLAN

**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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 work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

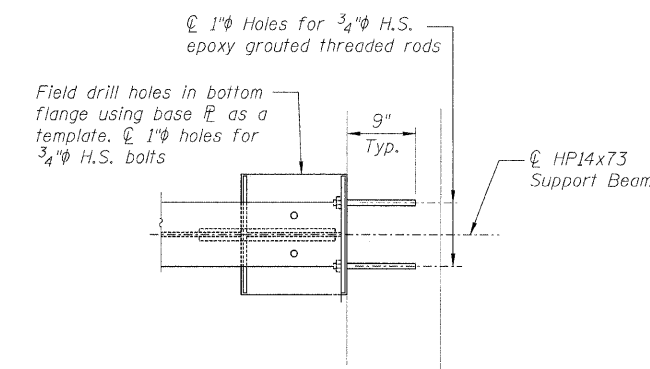
See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods: Minimum Embedment 9".

The cost of epoxy grouting threaded rods on the abutments and slab shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	2,870



TYPICAL PLAN AT  
SUPPORT BEAM END

SLAB SUPPORT DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
F.A.P. 311	*	LaSalle	66	48
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7  
8 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

SOIL BORING B-1 (Page 1 of 2)

SOIL BORING B-1 (Page 2 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG**

Page 1 of 2  
Date 9/14/06

ROUTE FA-97 (IL71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 4-B LOCATION NW 1/4, SEC. 27, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0064  
Station 641+18  
BORING NO. #1: SW Quad: S Abut.  
Station 640+92  
Offset 14.50ft Lt  
Ground Surface Elev. 630.98 ft

DEPTH (ft)	DIAMETER (in)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	FAILURE MODE (%)	DEPT (ft)	DIAMETER (in)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	FAILURE MODE (%)
0				633.68			
				577.0			
0				609.48	10	4.0	9.9
628.98	14	2.5	22.5	609.48	9	4.0	9.9
	3	P			3	3.5	9.1
626.98	3	P			6	S	
	3				3		
	4	3.0	27.8		5	3.5	9.9
	5	P			6	S	
	2	2.3	32.6		9		
	4	P			19	4.0	9.6
621.98	4				20	P	
	4				5		
	5	4.1	24.0		12	2.5	18.2
	6	S			13	P	
618.98	5				20		
	7	5.0	22.2		32	3.5	17.8
	12	S			55	P	
	5				5		
	7	5.0	22.3		15	10.0	15.8
	11	S			25	S	
614.48	3				22		
	4	1.9	27.1		19	4.0	15.9
	5	B			28	P	
					6		
610.98	2		14.6				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG**

Page 2 of 2  
Date 9/14/06

ROUTE FA-97 (IL71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 4-B LOCATION NW 1/4, SEC. 27, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0064  
Station 641+18  
BORING NO. #1: SW Quad: S Abut.  
Station 640+92  
Offset 14.50ft Lt  
Ground Surface Elev. 630.98 ft

DEPTH (ft)	DIAMETER (in)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	FAILURE MODE (%)	DEPT (ft)	DIAMETER (in)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	FAILURE MODE (%)
0				633.68			
				577.0			
0				609.48	10	4.0	9.9
628.98	14	2.5	22.5	609.48	9	4.0	9.9
	3	P			3	3.5	9.1
626.98	3	P			6	S	
	3				3		
	4	3.0	27.8		5	3.5	9.9
	5	P			6	S	
	2	2.3	32.6		9		
	4	P			19	4.0	9.6
621.98	4				20	P	
	4				5		
	5	4.1	24.0		12	2.5	18.2
	6	S			13	P	
618.98	5				20		
	7	5.0	22.2		32	3.5	17.8
	12	S			55	P	
	5				5		
	7	5.0	22.3		15	10.0	15.8
	11	S			25	S	
614.48	3				22		
	4	1.9	27.1		19	4.0	15.9
	5	B			28	P	
					6		
610.98	2		14.6				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BORING LOGS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING B-2 (Page 1 of 2)

SOIL BORING B-2 (Page 2 of 2)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 1 of 2  
Date 9/15/06

ROUTE FA-97 (IL71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 4-B LOCATION NW 1/4, SEC. 27, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0064  
Station 641+18  
BORING NO. #2: NE Quad: N Abut.  
Station 641+48  
Offset 15.00 ft R1  
Ground Surface Elev. 631.05 ft

DEPTH (ft)	LOG	SOIL	TEST	UCS	TEST	UCS	TEST	UCS	TEST
(ft)	(6")	(tsf)	(%)	(ft)	(6")	(tsf)	(%)	(ft)	(6")
0		Augered, white, shoulder Stone and brown. Sand and Gravel and washed, river rock (drainable backfill?)							
609.05		Hard, gray, Silty Clay Till (continued)		6	2.1	28.7			
609.05		Hard, gray, Silty Clay Till		9	B				
628.55		Silt, black, Silty Clay with organics		25	3				
628.55				9	3.5	9.5			
622.05		Very stiff, gray brown, Silty Clay		10	P				
622.05				2	2.0	30.9			
617.05		Very stiff, gray, Silty Clay Till		10					
617.05				3	2.5	26.1			
598.05		Hard, gray, Silty Clay with numerous Silt pockets		15	P				
598.05				5	2.7	24.7			
582.55		Hard, brown, Silty Clay with numerous Silt pockets and ribbons		12					
582.55				14	7.7	15.1			
				26	S				
				5					
				6	2.7	24.8			
				7	S				
				20					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)

BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
District #3, Ottawa

**SOIL BORING LOG** Page 2 of 2  
Date 9/15/06

ROUTE FA-97 (IL71) DESCRIPTION IL 71 over Mission Creek LOGGED BY Larry Myers  
SECTION 4-B LOCATION NW 1/4, SEC. 27, TWP. 35N, RNG. 05E  
COUNTY La Salle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 050-0064  
Station 641+18  
BORING NO. #2: NE Quad: N Abut.  
Station 641+48  
Offset 15.00 ft R1  
Ground Surface Elev. 631.05 ft

DEPTH (ft)	LOG	SOIL	TEST	UCS	TEST	UCS	TEST	UCS	TEST
(ft)	(6")	(tsf)	(%)	(ft)	(6")	(tsf)	(%)	(ft)	(6")
609.05		Hard, brown, Silty Clay with numerous Silt pockets and ribbons (continued)		12	4.1	19.4			
609.05				15	S				
609.05		Dense, gray, fine, Sand to coarse, Gravel with layers of fine to coarse, Sand Free H2O @ 53.5' (continued)		18					
609.05		Hard, gray, Silty Clay Loam to Sandy Loam Till		20					
609.05				64.5'	interval: washed				
609.05				31					
609.05				35	10.1	7.6			
609.05				42	S				
609.05		End of Boring							
584.05		Hard, gray, Silty Clay Loam to Sandy Clay Till with fine, Sand pockets		10					
584.05				10					
584.05				12	4.2	8.7			
584.05				15	S				
584.05				26	S				
577.55		Dense, gray, fine, Sand to coarse, Gravel with layers of fine to coarse, Sand Free H2O @ 53.5'		12					
577.55				15					
577.55				11	4				
577.55				22					
577.55				10					
577.55				10					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)

BBS, from 137 (Rev. 8-99)

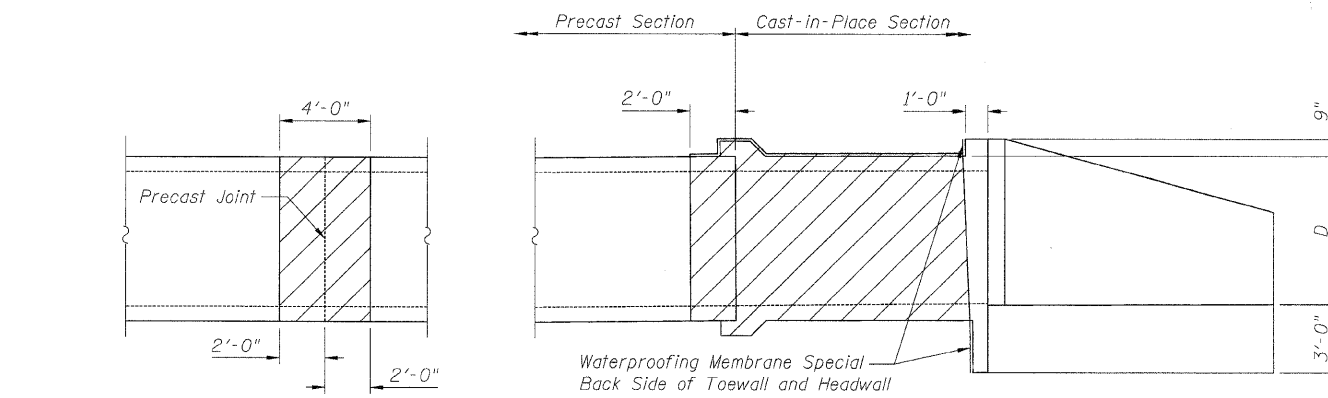
DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

BORING LOGS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 641+18.00  
S.N. 050-2050

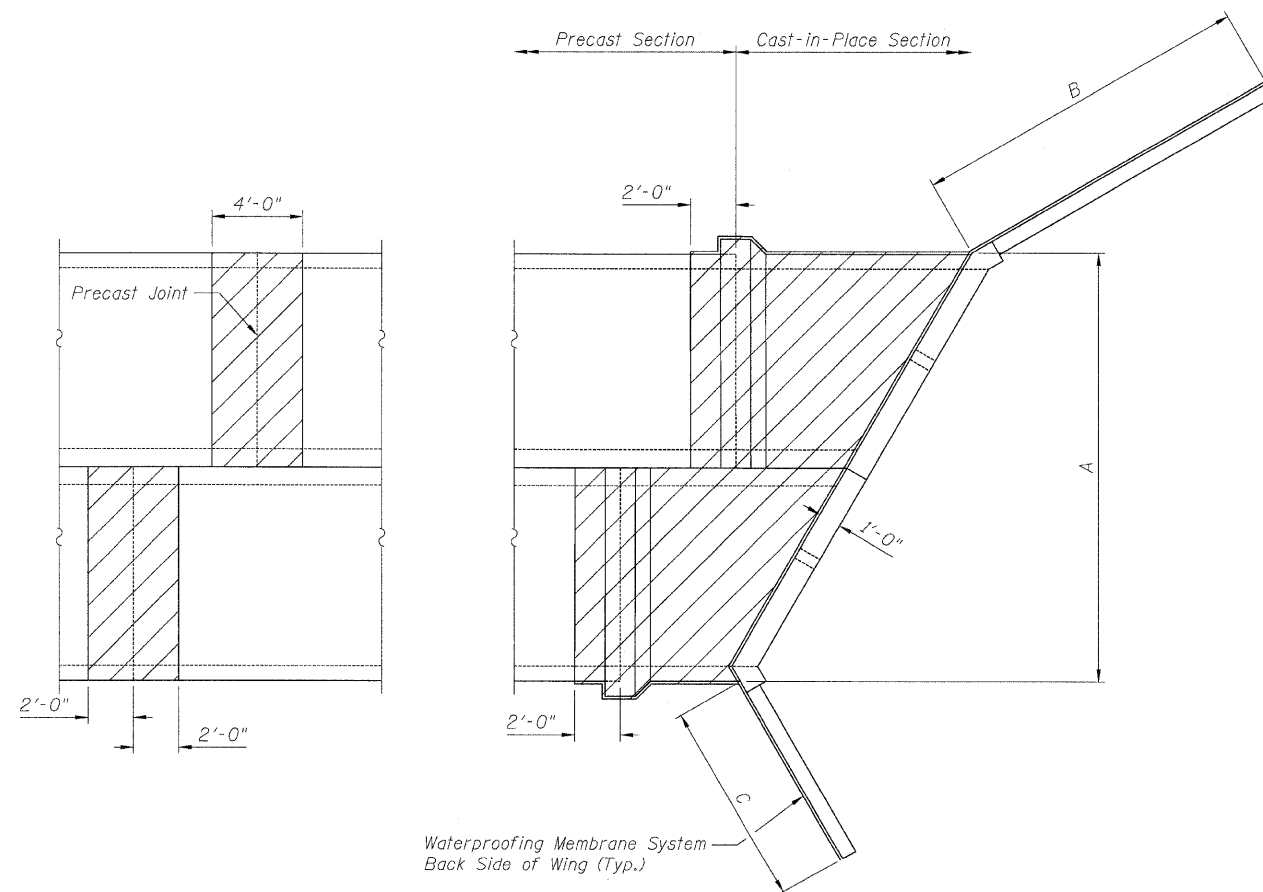
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.P. 311	*	LaSalle	66	50
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

\*(3)BR-1,2,3 & (4)BR Contract #66741



ELEVATION



TOP PLAN

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

NOTES

The exposed surfaces as indicated shall be protected by the Waterproofing Membrane as per the manufacturer's recommendations.

A manufacturer's representative shall be on site during the installation of the Waterproofing Membrane to provide technical support when required. All cost incurred due to the on-site representative shall not be paid for separately but shall be included in the unit cost of the Waterproofing Membrane work.

The Contractor shall install the Waterproofing Membrane according to the Manufacturer's recommendations, plan details and as directed by the Engineer.

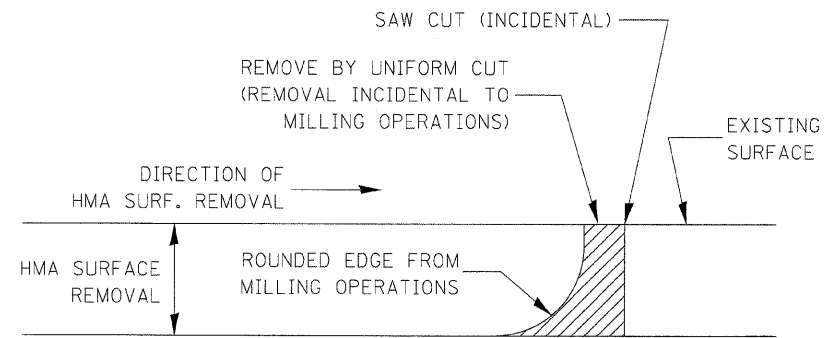
TABLE OF DIMENSIONS

Structure No.	A	B	C	D
050-2047	35'-6"	14'-1 <sup>3</sup> / <sub>8</sub> "	12'-2 <sup>5</sup> / <sub>8</sub> "	7'-10"
050-2048	18'-11"	15'-0 <sup>1</sup> / <sub>4</sub> "	9'-9 <sup>7</sup> / <sub>8</sub> "	6'-8"
050-2049	16'-11"	9'-9 <sup>7</sup> / <sub>8</sub> "	15'-0 <sup>1</sup> / <sub>4</sub> "	6'-8"
050-2050	25'-11"	11'-11 <sup>7</sup> / <sub>8</sub> "	15'-1 <sup>1</sup> / <sub>8</sub> "	7'-11"

BILL OF MATERIAL

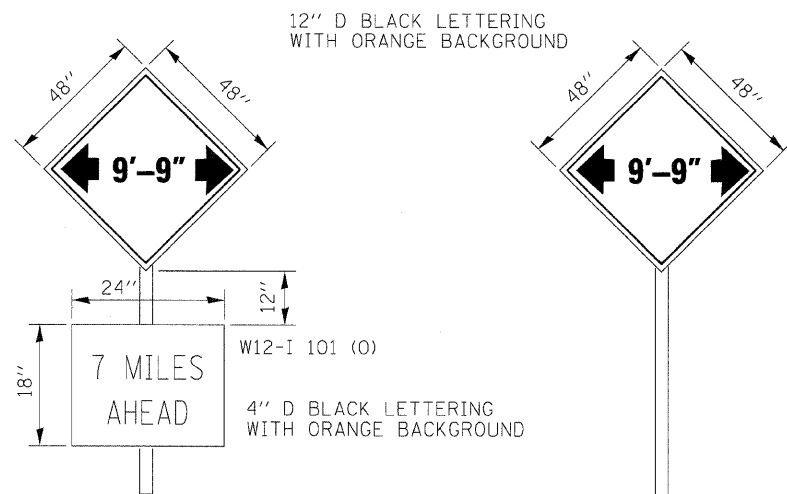
ITEM	UNIT	TOTAL
Sheet Waterproofing Membrane System	Sq. Yd.	2,136

SHEET WATERPROOFING MEMBRANE DETAILS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY  
STA. 638+50 TO STA. 756+50  
S.N. 050-2047, 050-2048, 050-2049 & 050-2050



NOTE:  
 WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

### HMA DETAIL AT BUTT JOINTS



TO BE POST MOUNTED AS SHOWN ELSEWHERE IN THE PLANS.

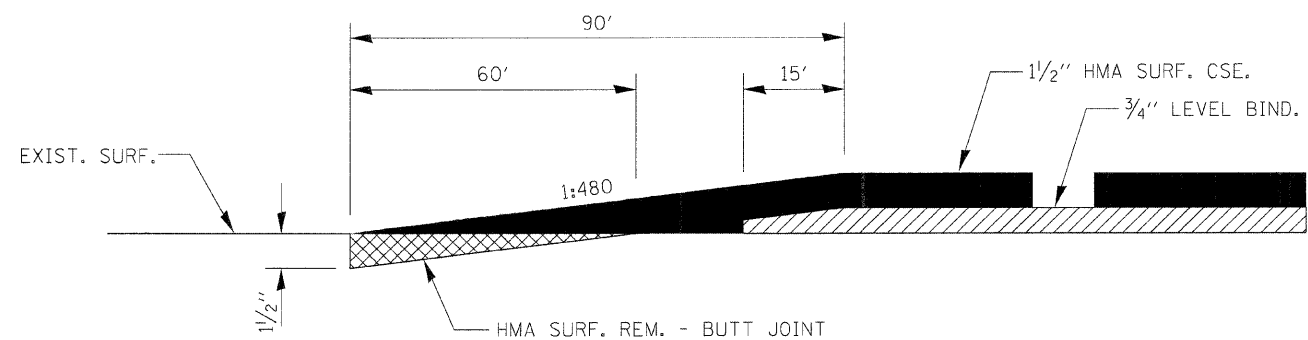
THE ENGINEER WILL NOTIFY DISTRICT 3 BUREAU OF OPERATIONS 14 CALENDAR DAYS PRIOR TO INSTALLING ANY TRAFFIC CONTROL DEVICES THAT WILL RESTRICT THE PAVEMENT WIDTH.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO MEET THIS REQUIREMENT.

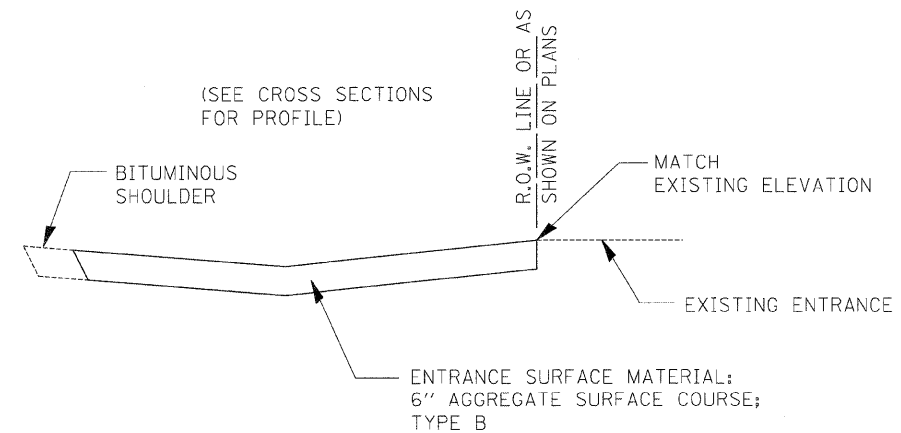
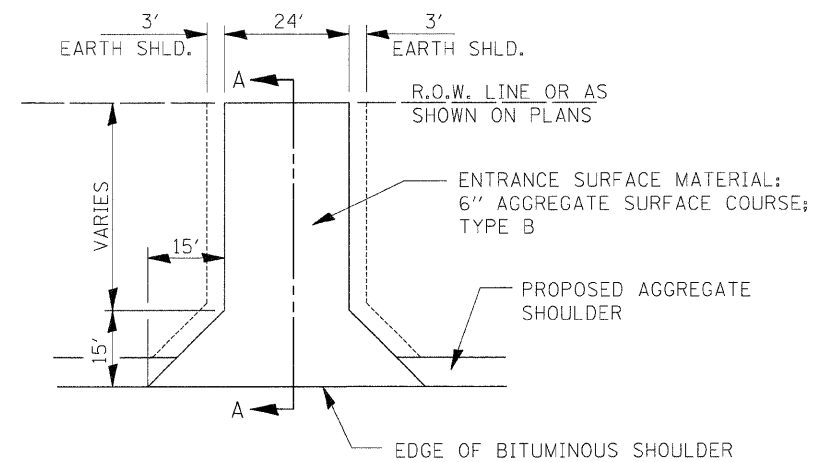
COST OF SUPPLYING, INSTALLING, MAINTAINING AND REMOVING WIDTH RESTRICTION SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

### WIDTH RESTRICTION SIGNING DETAILS

SEE STAGE CONSTRUCTION PLANS FOR THE LOCATION OF THE PROPOSED SIGNS



### BUTT JOINT DETAIL



### FIELD ENTRANCE DETAIL

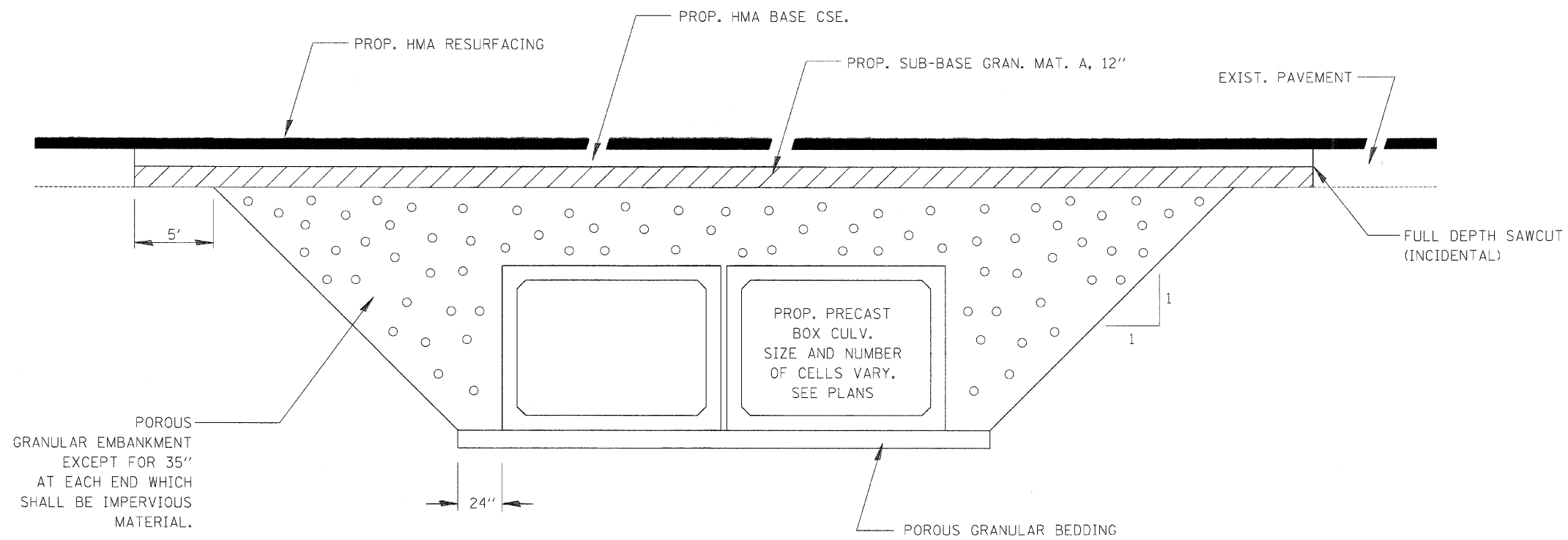
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	PLOT DATE = 7/14/2009	DATE - 07/17/09	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 71  
 DETAILS

SCALE: SHEET NO. OF SHEETS STA. 638+50 TO STA. 756+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	51
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66741	

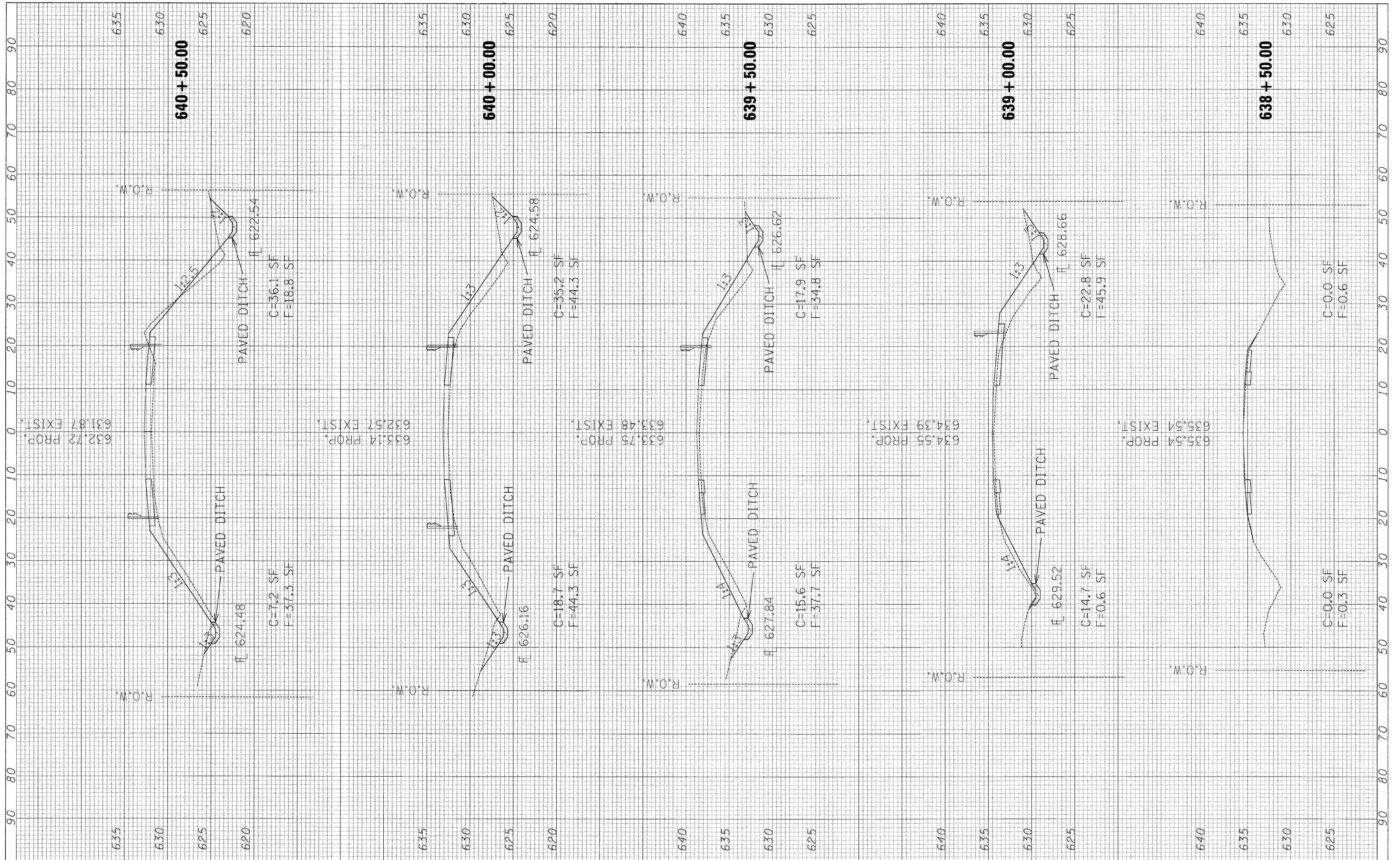


**SECTION THROUGH PRECAST BOX CULVERT**

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	PLOT SCALE = 20.0000' / IN.	DRAWN - SAW	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA. 638+50 TO STA. 756+50	311	(3)BR- 1, 2, & (4)BR	LASALLE	66	52
	PLOT DATE = 7/14/2009	CHECKED - RAC	REVISED -											
		DATE - 07/17/09	REVISED -							FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		CONTRACT NO. 66741

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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CHECKED - RAC	REVISED -
DATE - 07/17/09	REVISED -

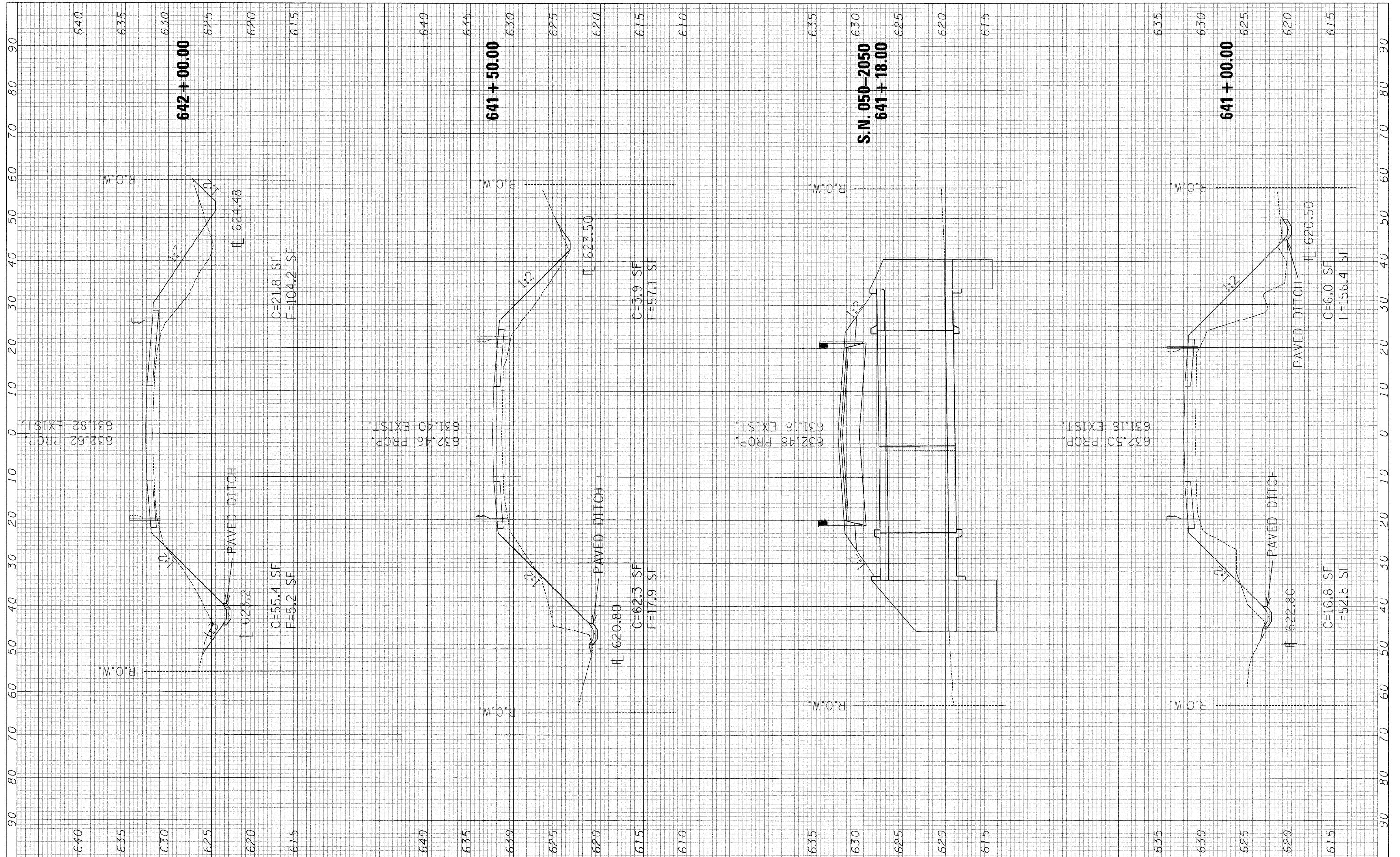
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 71  
 CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 638+50.00 TO STA. 640+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	53
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66741	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



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 PLOT SCALE = 1/8" = 100'-0"  
 PLOT DATE = 7/14/2009

DESIGNED - RAC  
 DRAWN - SAW  
 CHECKED - RAC  
 DATE - 07/17/09

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

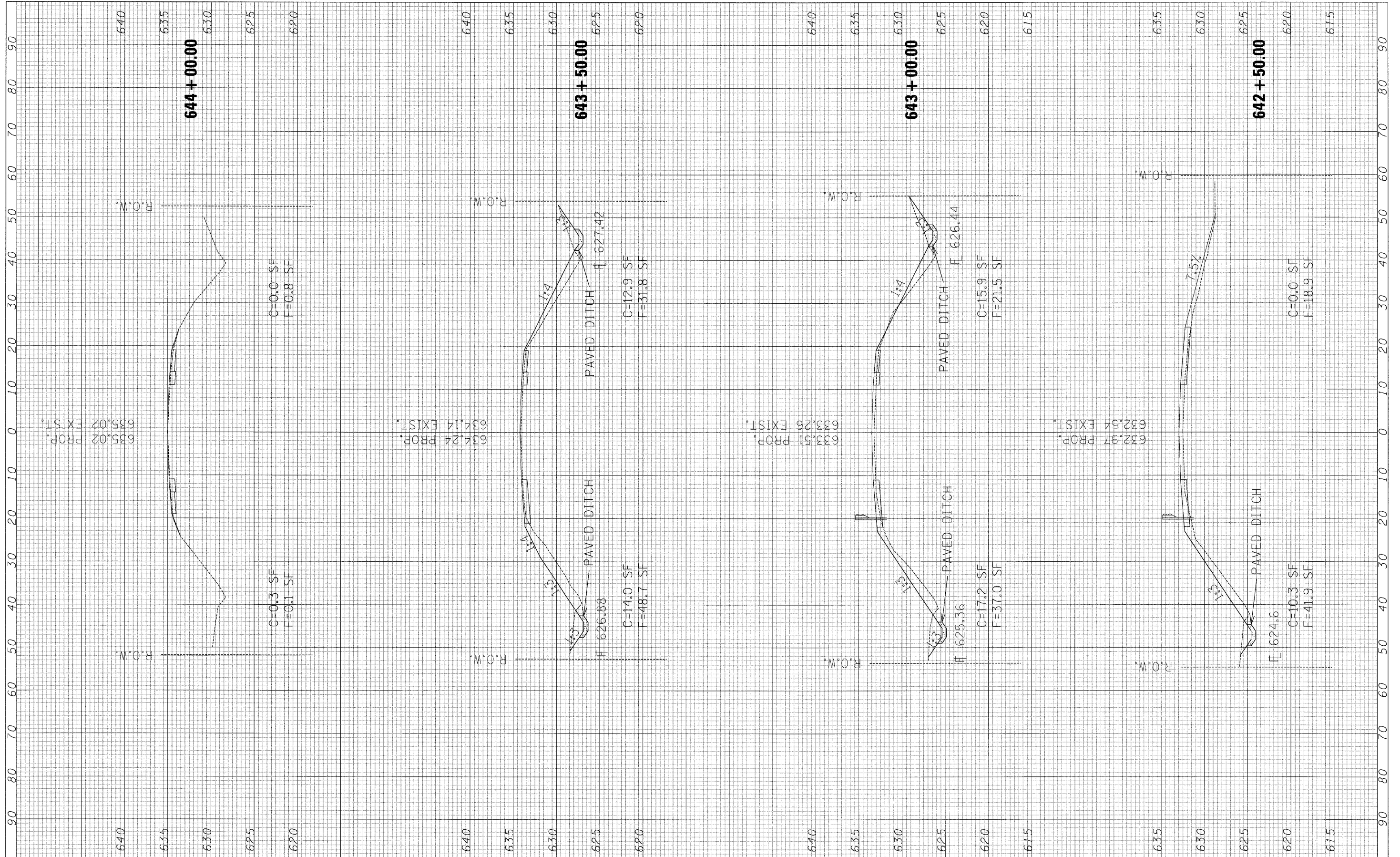
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 71  
CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 640+50.00 TO STA. 642+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	54
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 66741		

FINAL SURVEY NO.	SURVEYED BY	DATE
NOTE BOOK NO.	PLOTTED BY	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED BY	DATE
NOTE BOOK NO.	PLOTTED BY	
	TEMPLATE	
	AREAS CHECKED	



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DESIGNED - RAC  
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 CHECKED - RAC  
 DATE - 07/17/09

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 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

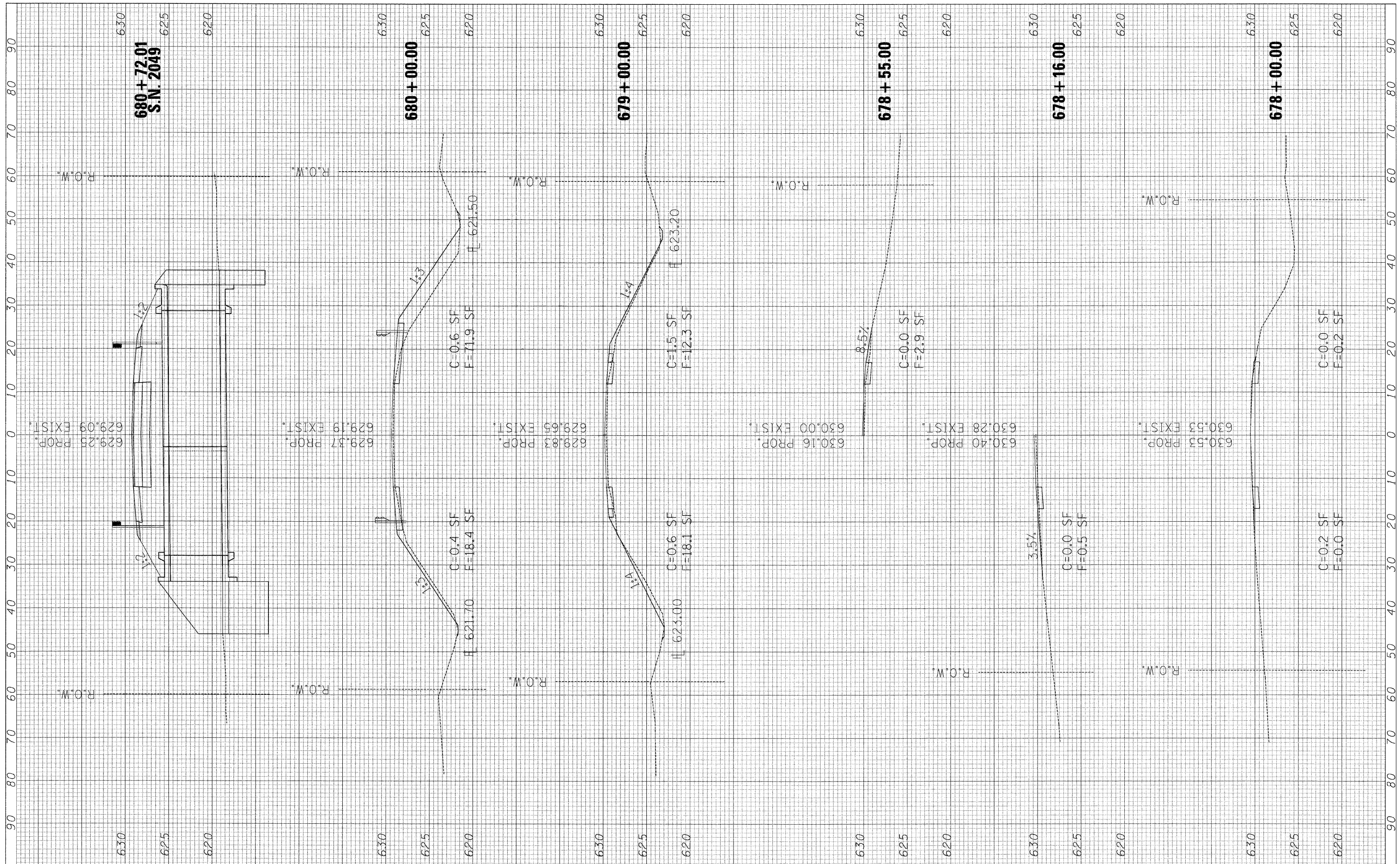
**ILLINOIS ROUTE 71  
 CROSS SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. 642+50.00 TO STA. 644+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR- 1, 2, & (4)BR	LASALLE	66	55
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 66741	

FINAL SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



FILE NAME = ...D0366741-SHT-XS Sheets SN 2048 & 2049.dgn

USER NAME = SAW  
 PLOT SCALE = 10.0000" / IN.  
 PLOT DATE = 7/14/2009

DESIGNED - RAC  
 DRAWN - SAW  
 CHECKED - RAC  
 DATE - 07/17/09

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

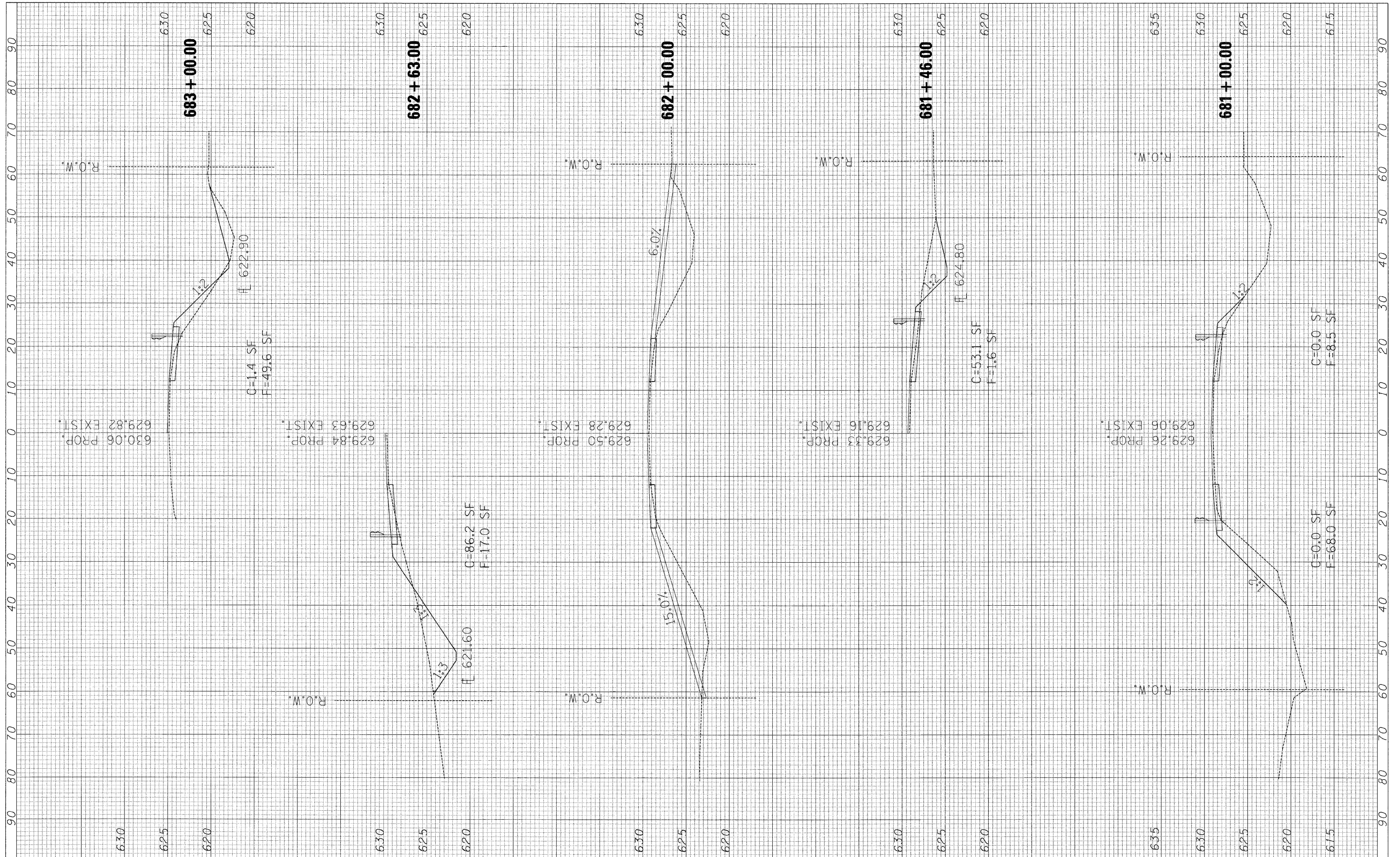
**ILLINOIS ROUTE 71  
 CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 678+00.00 TO STA. 680+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	3(BR) - 1, 2 & 3	LASALLE	66	56
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66741	



FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



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 PLOT SCALE = 10.0000' / IN.  
 PLOT DATE = 7/14/2009

DESIGNED - RAC  
 DRAWN - SAW  
 CHECKED - RAC  
 DATE - 07/17/09

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET NO. OF SHEETS STA. 680+79.00 TO STA. 682+63.00

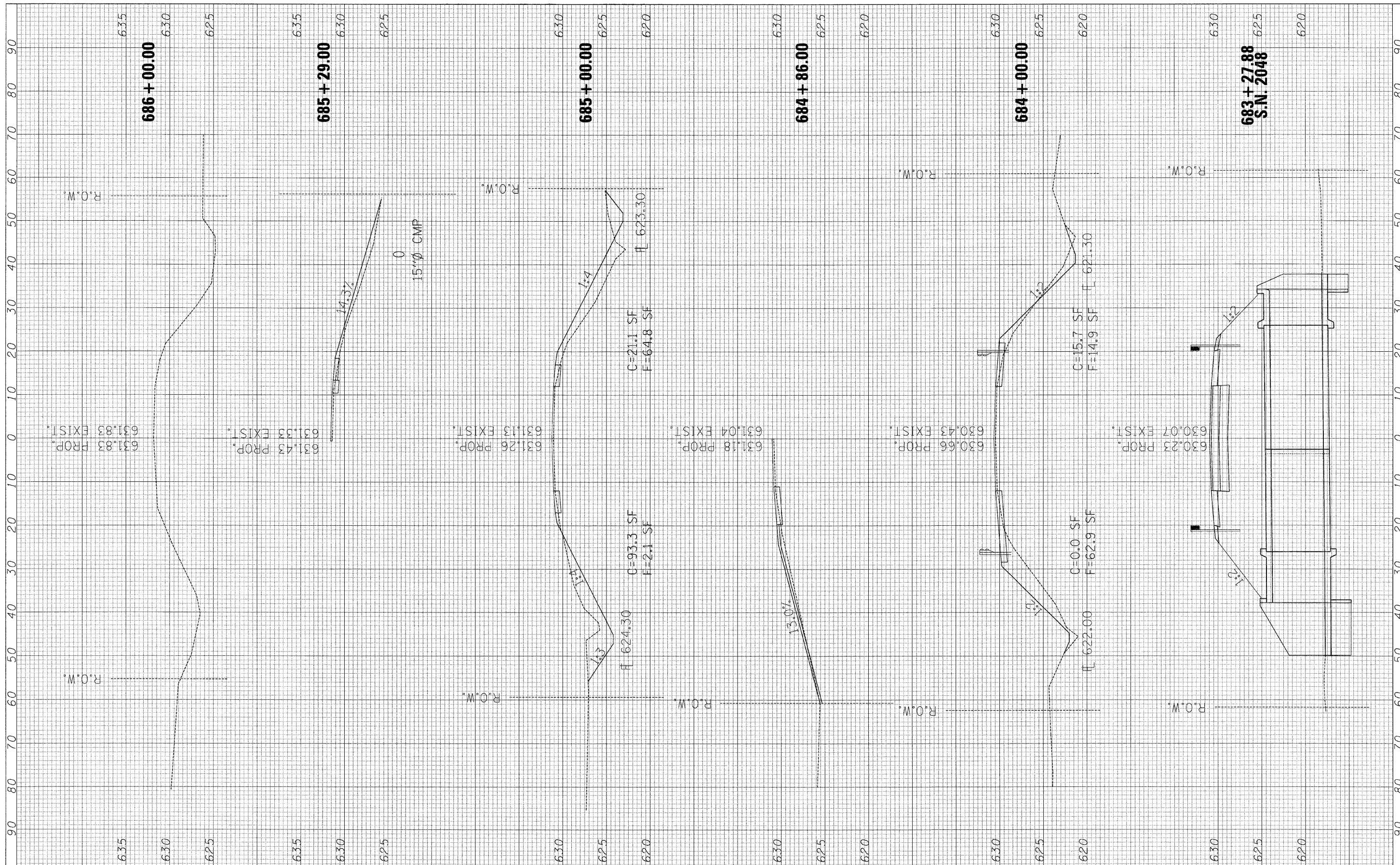
**ILLINOIS ROUTE 71  
 CROSS SECTIONS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR-1,2,3 & (4)BR	LASALLE	66	57
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 66741

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



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REVISIONS:  
 REVISION NO. | DATE | BY | DESCRIPTION

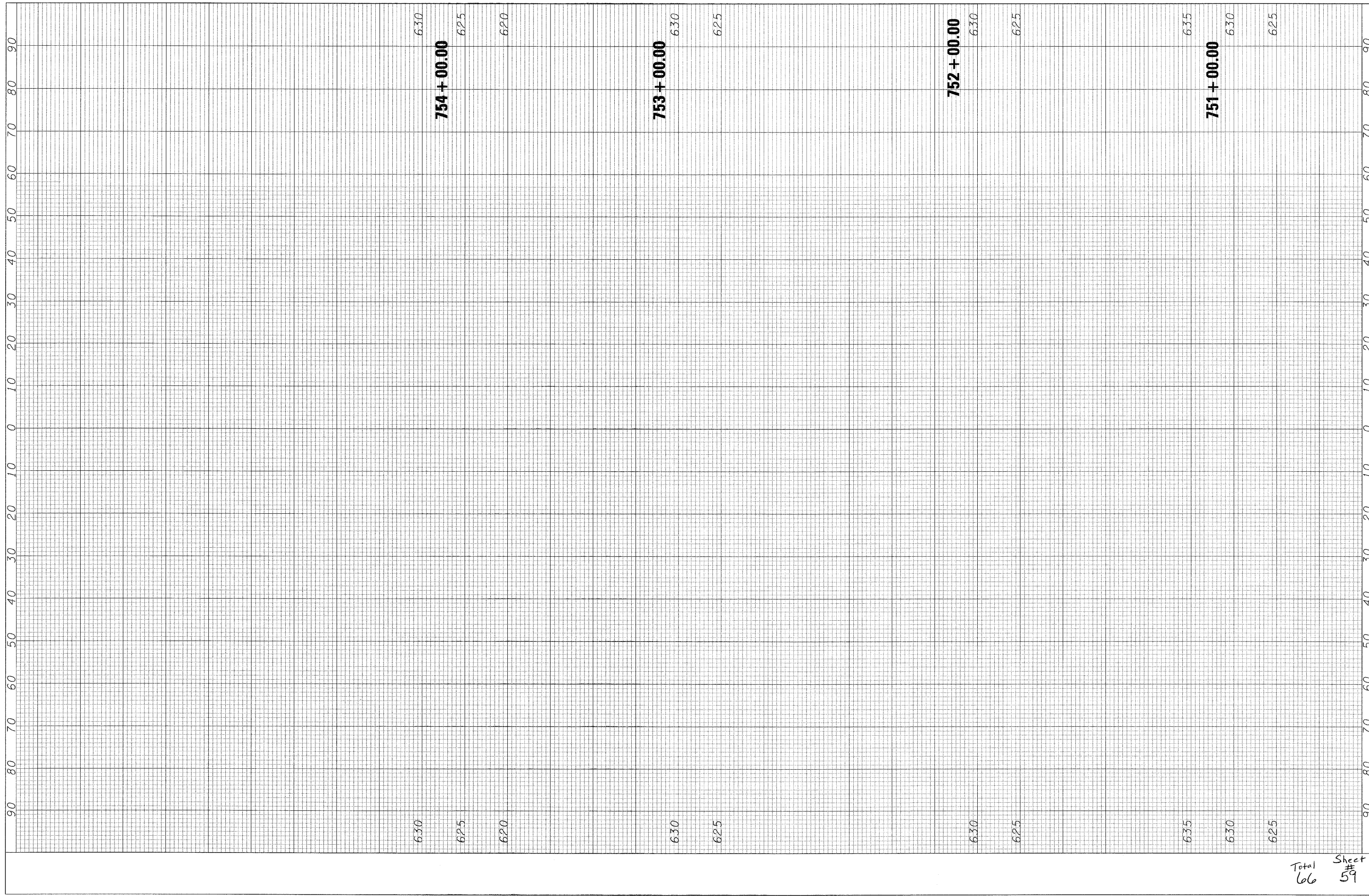
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 71  
 CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 683+00.00 TO STA. 686+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR-1,2,3 & (4)BR	LASALLE	66	58
CONTRACT NO. 66741			ILLINOIS FED. AID PROJECT	

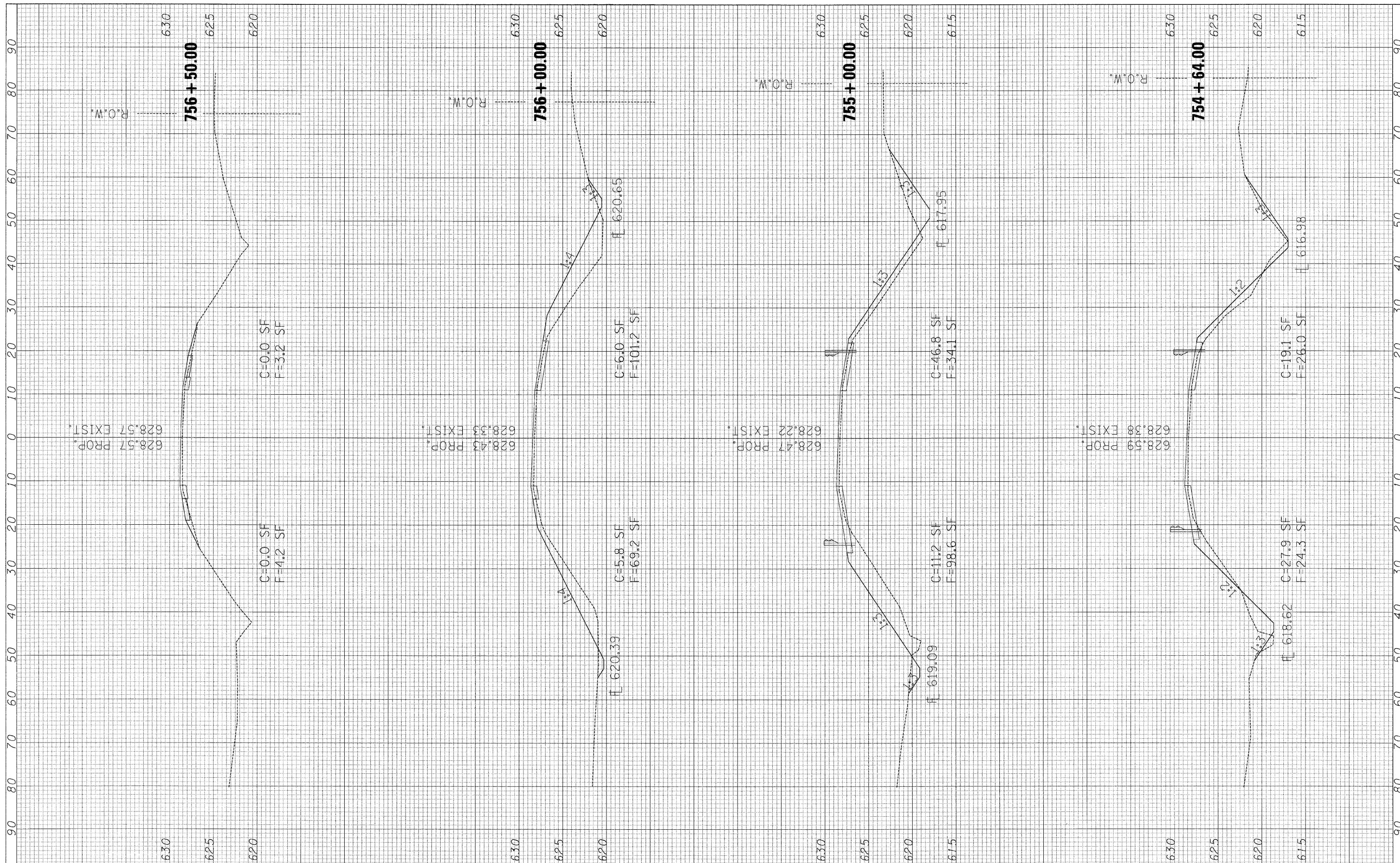
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NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
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	AREAS CHECKED		



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DRAWN - SAW	REVISD -
CHECKED - RAC	REVISD -
DATE - 07/17/09	REVISD -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 71  
 CROSS SECTIONS**

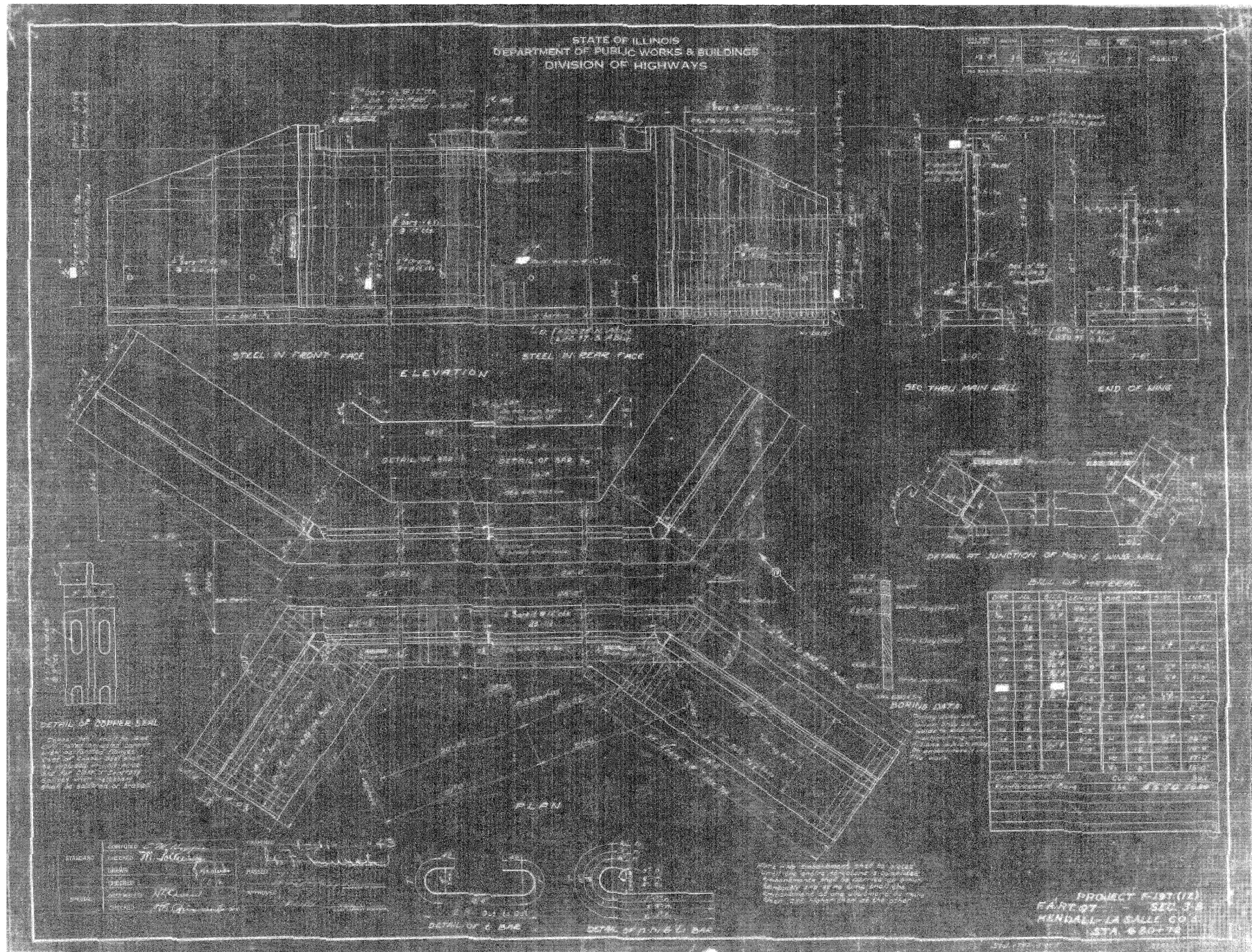
SCALE: SHEET NO. OF SHEETS STA. 754+64.00 TO STA. 756+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(3)BR-1,2,3 & (4)BR	LASALLE	66	60
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 66741	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 311	*	LaSalle	66	61	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741

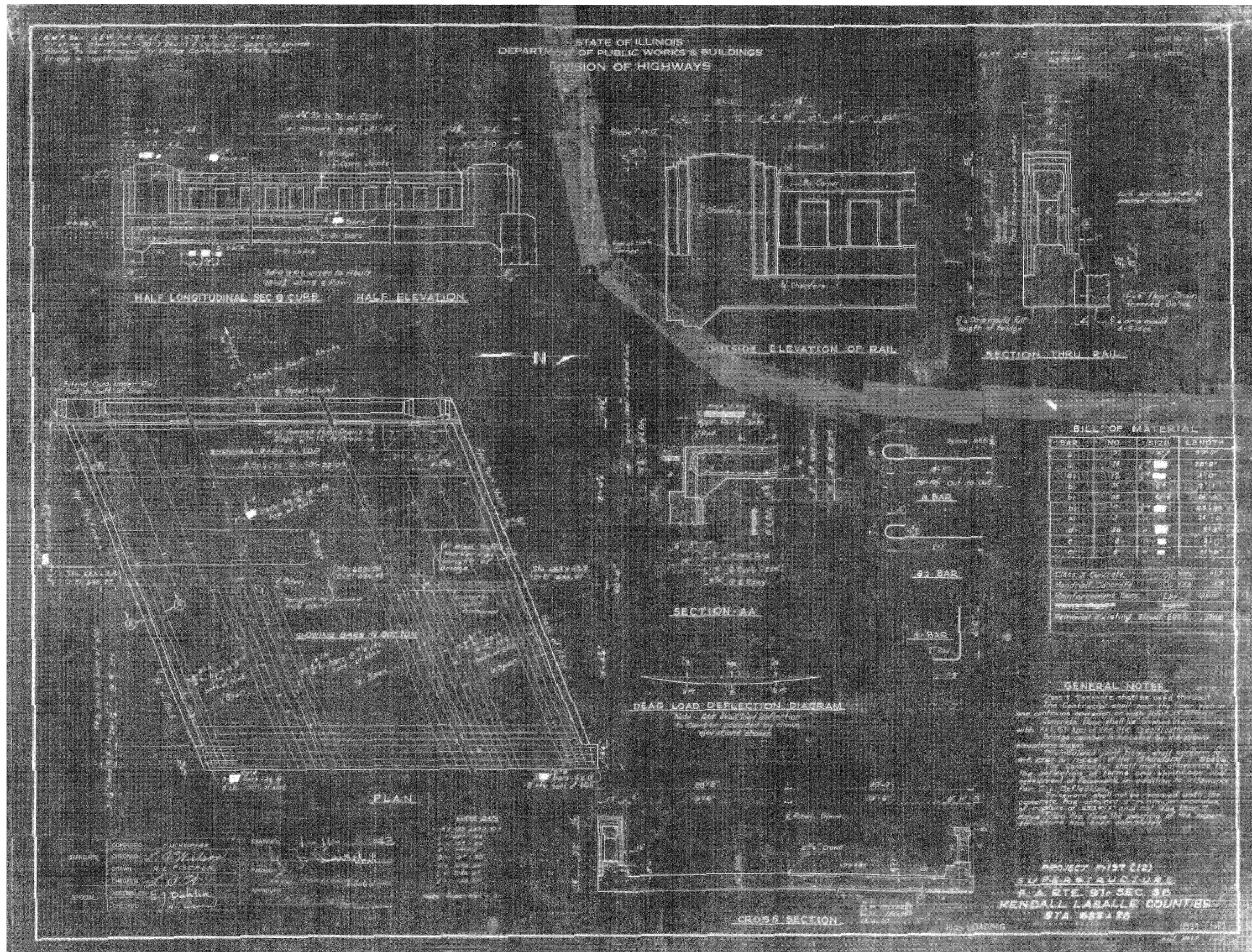


EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
F.A.P. 311	*	LaSalle	66	62	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741

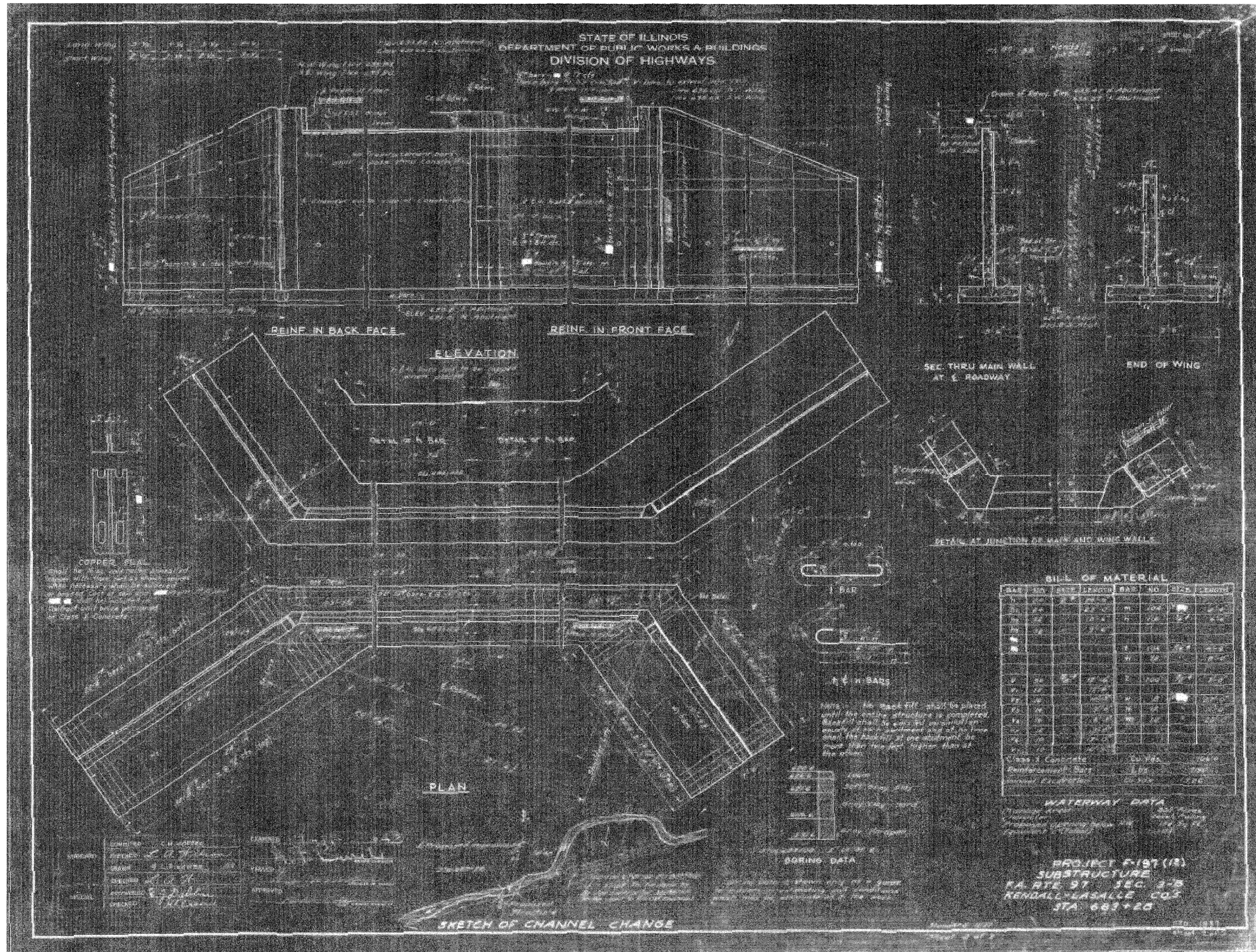


EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.P. 311	*	LaSalle	66	63	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741

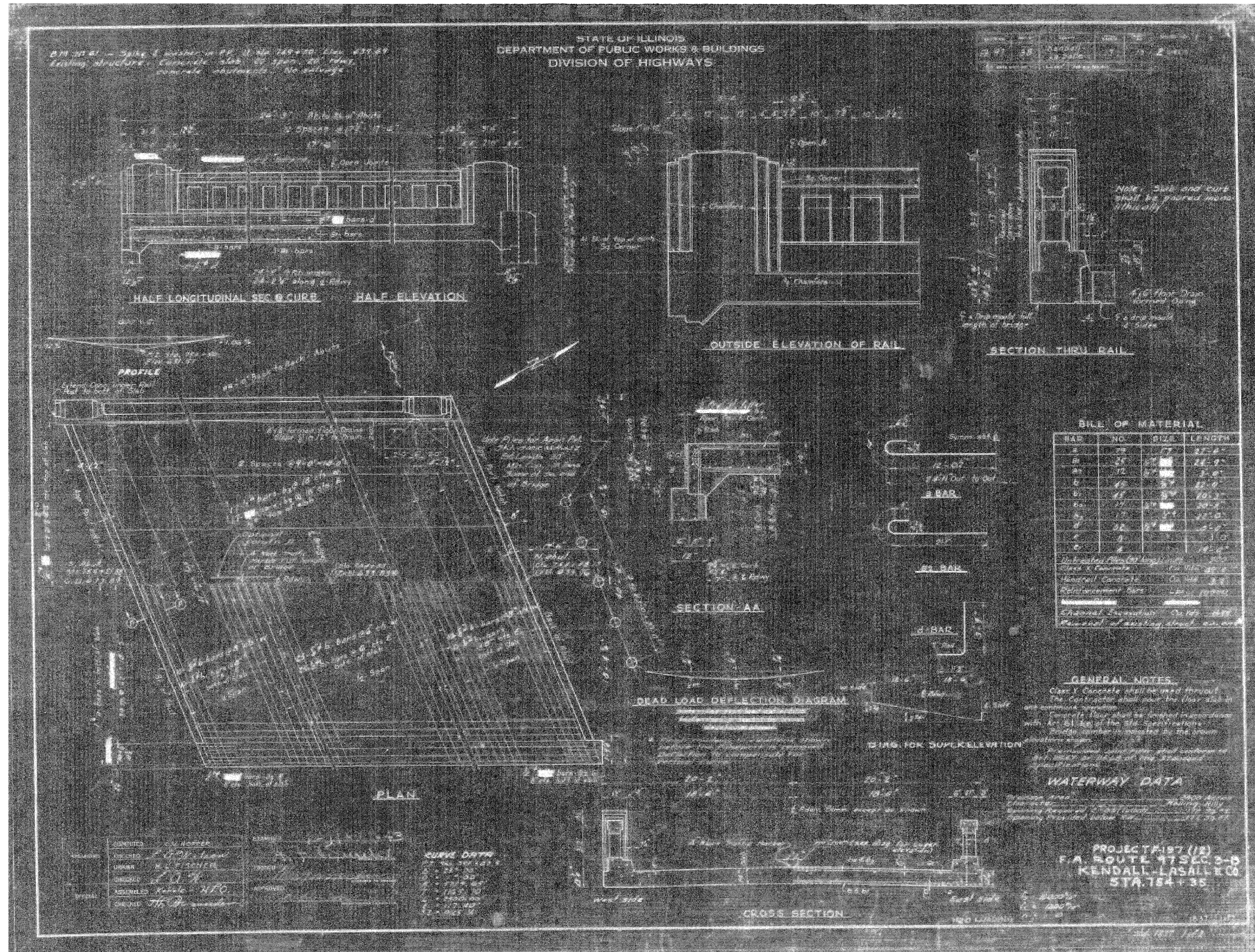


EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
F.A.P. 311	*	LaSalle	66	64	6 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

\*(3)BR-1,2,3 & (4)BR Contract #66741



EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY



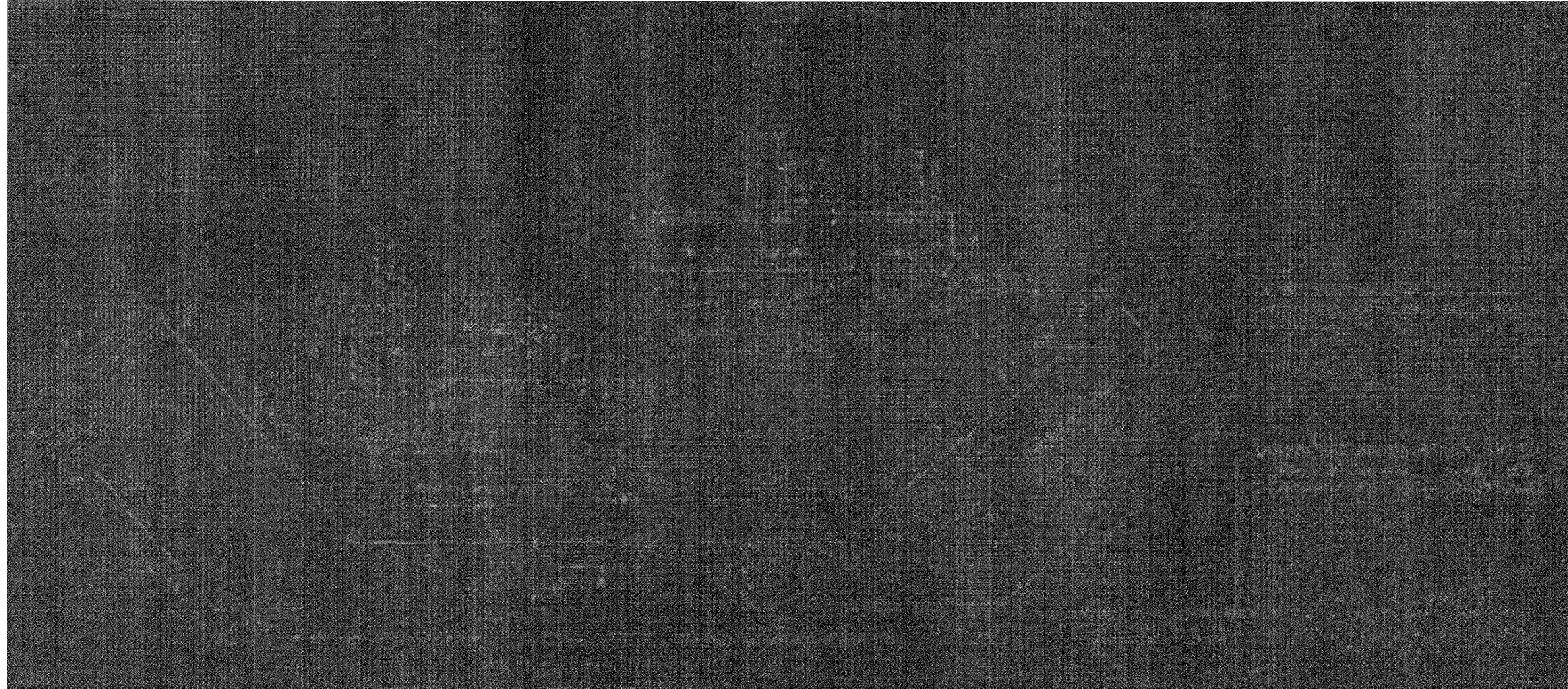
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 311	*	LaSalle	66	65
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5

6 SHEETS

\*(3)BR-1,2,3 & (4)BR Contract #66741

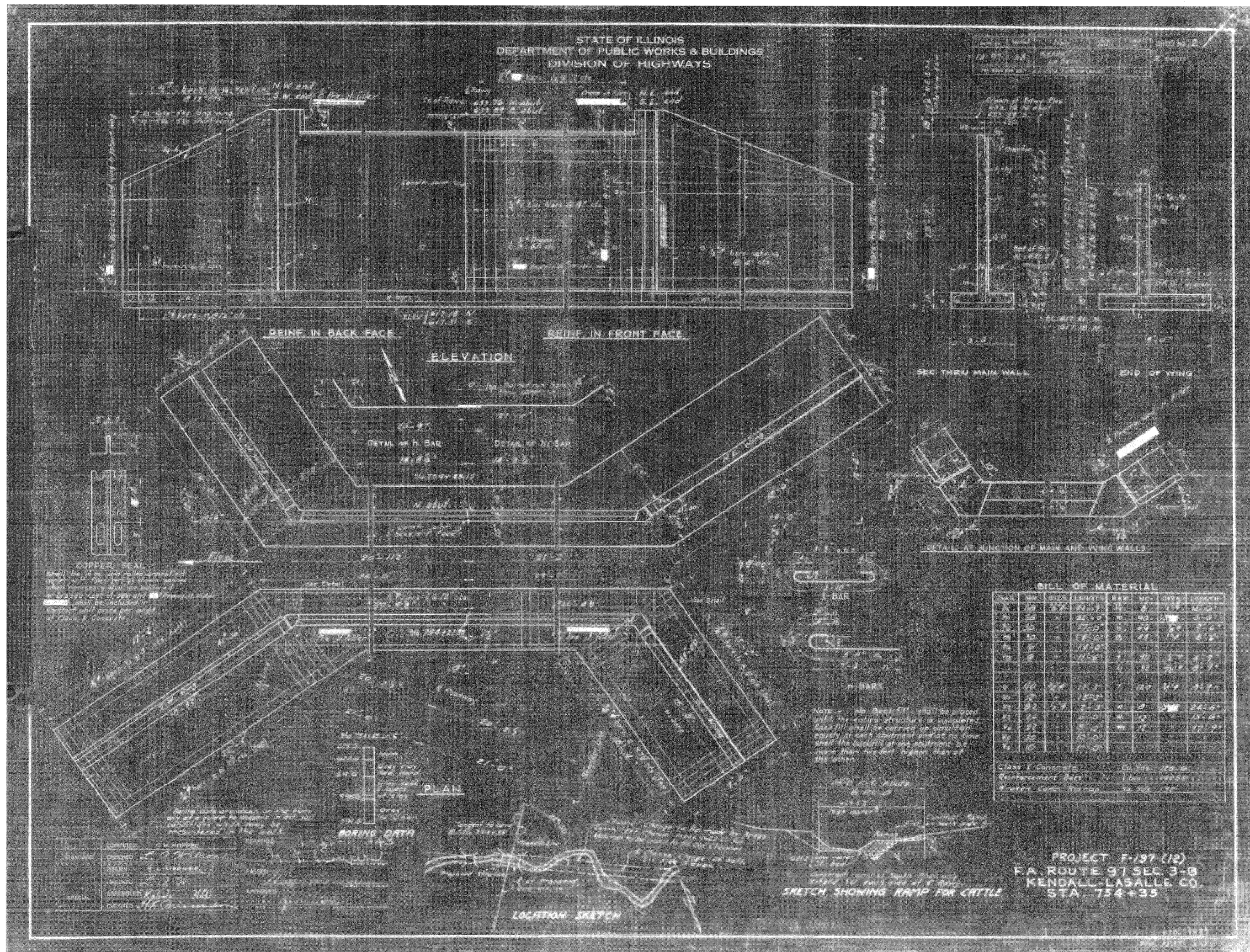


EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
F.A.P. 311	*	LaSalle	66	66	6 SHEETS
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT			

\*(3)BR-1,2,3 & (4)BR Contract #66741



EXISTING BRIDGE PLANS  
IL 71 OVER MISSION CREEK  
FAP ROUTE 311  
SECTION (3)BR-1,2,3 & (4)BR  
LASALLE COUNTY