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- 58-61 CROSS SECTIONS SHEETS SN 050-0143 (EX.) & SN 050-2055 (PROP)
- 62-65 CROSS SECTIONS SHEETS SN 050-0156 (EX.) & SN 050-2056 (PROP)
- 66-69 CROSS SECTIONS SHEETS SN 050-0072 (EX.) & SN 050-2057 (PROP)

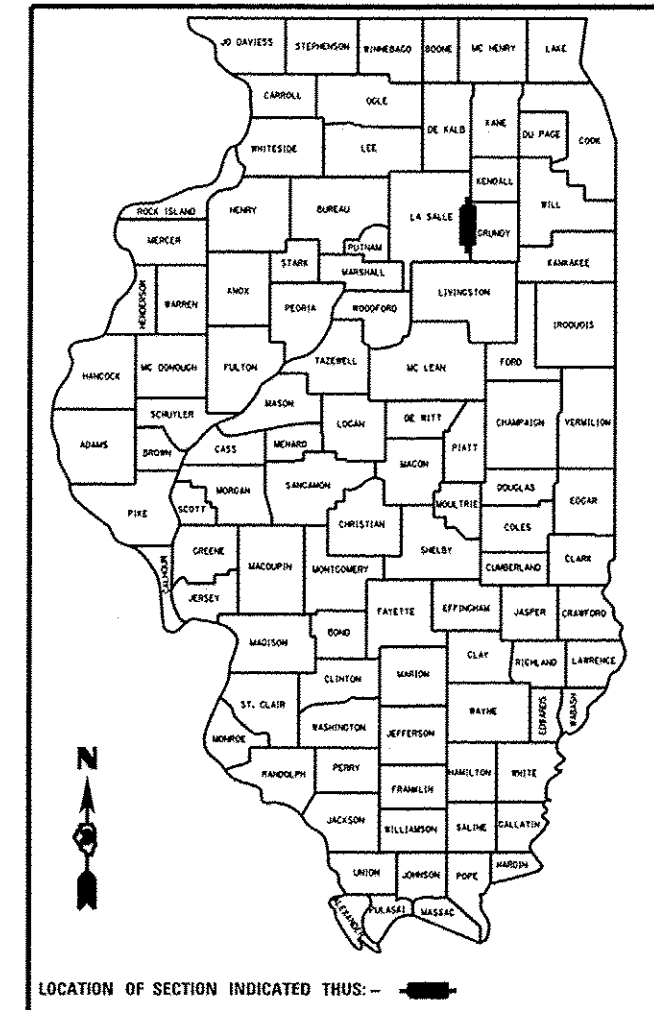
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

FAP ROUTE 786 (IL 170)
SECTION (110)BR-1,2,3
PROJECT: ACF-0786(012)
REMOVE 3 BRIDGES AND REPLACE
WITH 3 BOX CULVERTS
LASALLE COUNTY

C-93-020-13

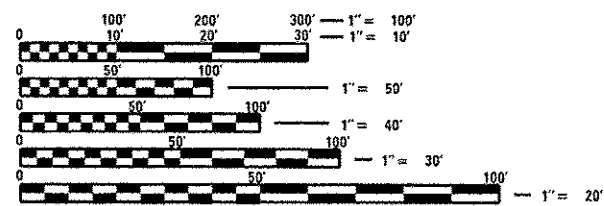
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1,2,3	LASALLE	69	1
ILLINOIS CONTRACT NO. 66B19				

P-93-030-11
D-93-021-13



LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
202001-01	EARTH MEDIAN DITCH CHECK
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-03	TRAFFIC CONTROL DEVICES
780001-04	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

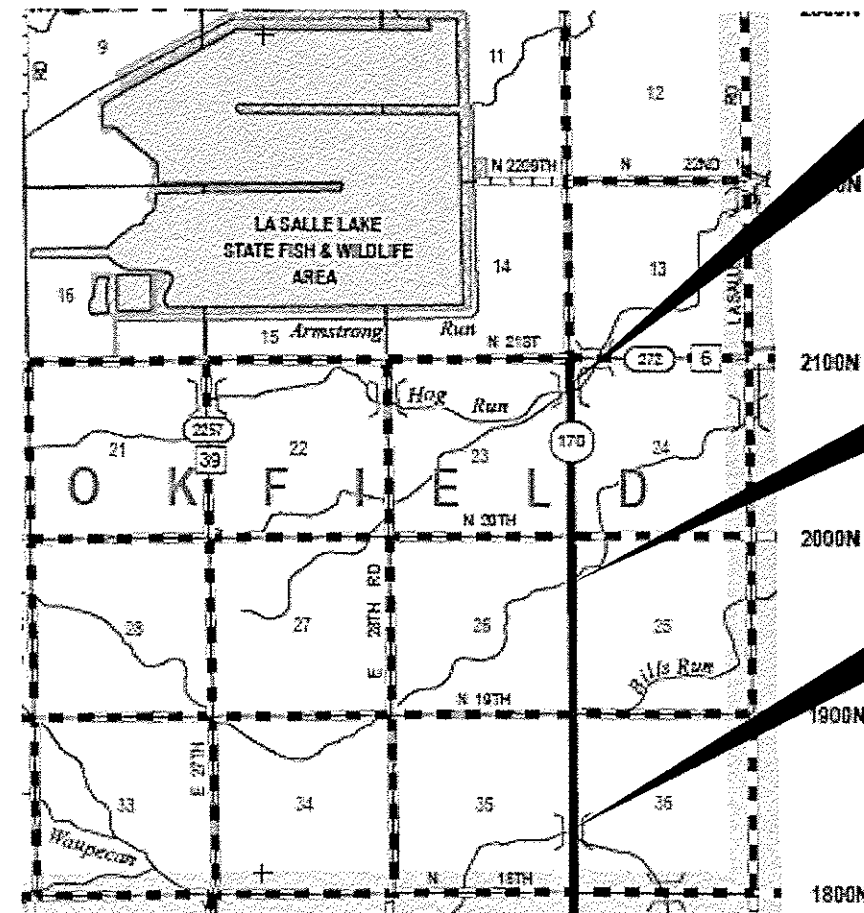


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: CRAIG REED, P.E.
PROJECT MANAGER: PAT BRABOY, P.E.

CONTRACT NO. 66B19



EXIST SN 050-0143
PROP SN 050-2055

EXIST SN 050-0156
PROP SN 050-2056

EXIST SN 050-0072
PROP SN 050-2057

GROSS LENGTH = 13,850 FT. = 2.62 MILE
 NET LENGTH = 1,925 FT. = 0.36 MILE

FUNCTIONAL CLASSIFICATION:
RURAL MINOR ARTERIAL
 2012 ADT = 1880
 P.V. 65% S.U. 24% M.U. 11%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED Aug. 6th 2013
Paul G. [Signature]
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 6 2013
John D. Baranzelli, P.E.
 ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6 2013
Omer Osman, P.E.
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

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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 REMOVAL OF END SECTIONS SHALL BE INCLUDED IN THE COST OF PIPE CULVERT REMOVAL.

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.

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 FURNISHED EXCAVATION.

SHORT TERM PAVEMENT MARKINGS SHALL BE USED FOR THE PRIME COAT APPLICATION AND EACH RESURFACING LIFT.

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.

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 INCLUDED IN THESE PLANS.

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

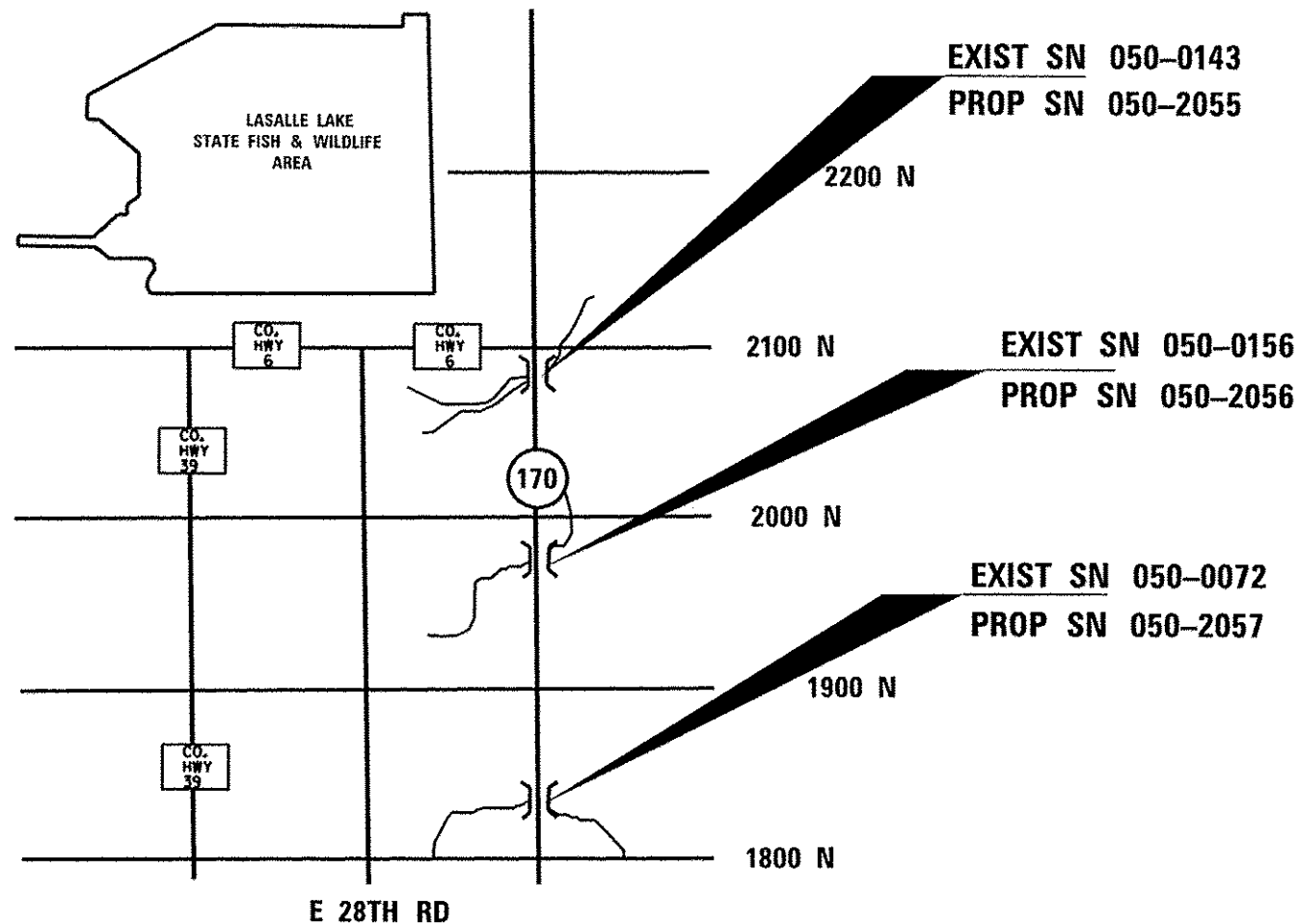
GRANULAR MATERIALS	2.05	TONS / CU YD
BIT MATERIALS (PRIME COAT) ON AGGREGATE BASES	0.375	GAL / SQ YD
BITUMINOUS MATERIALS (PRIME COAT)	0.08	GAL / SQ YD
FOG COAT (BETWEEN ADDITIONAL HMA LIFTS)	0.05	GAL / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION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

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

ALL EXCAVATED MATERIAL MUST REMAIN ON THE JOBSITE. NO MATERIAL IS ALLOWED TO BE REMOVED OUTSIDE THE RIGHT-OF-WAY.

COMMITMENTS:

1. STORM WATER POLLUTION PREVENTION PLAN
2. 404 PERMIT
3. ENVIRONMENT COORDINATION
4. PRE/POST INSPECTION OF DETOUR ROUTE
5. NON-MOWABLE SLOPES
6. R. E. TO NOTIFY EMERGENCY SERVICE TWO WEEKS PRIOR TO DETOUR.



LOCATION MAP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: *Tom Bernik*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-5-13

EXAMINED BY: *Herbert J. ...*
DISTRICT CONSTRUCTION ENGINEER

...
DISTRICT MATERIALS ENGINEER

...
DISTRICT OPERATIONS ENGINEER

80% FED. / 20% STATE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				ROADWAY 0004 RURAL	BOX CULVERT 0011 PROP. S. N. 050-2055	BOX CULVERT 0040 PROP. S. N. 050-2056	BOX CULVERT 0011 PROP. S. N. 050-2057
20200100	EARTH EXCAVATION	CU YD	704	704			
20400800	FURNISHED EXCAVATION	CU YD	1221	1221			
20700220	POROUS GRANULAR EMBANKMENT	CU YD	1436		374	533	529
25000210	SEEDING, CLASS 2A	ACRE	2.4	2.4			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	219	219			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	219	219			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	219	219			
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SO YD	11761	11761			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	486	486			
28000305	TEMPORARY DITCH CHECKS	FOOT	360	360			
28000400	PERIMETER EROSION BARRIER	FOOT	443	443			
28100107	STONE RIPRAP, CLASS A4	SO YD	1152		267	321	564
28200200	FILTER FABRIC	SO YD	1152		267	321	564
35100300	AGGREGATE BASE COURSE, TYPE A 4"	SO YD	578	578			

FILE NAME * #FILE#	USER NAME * #USER*	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE. 786	SECTION (110)BR-1,2,3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 3
#MODEL#	PLOT SCALE * #SCALE*	CHECKED - _____	REVISED - _____					SCALE: _____	SHEET _____	OF _____	SHEETS	STA. _____
	PLOT DATE * #DATE*	DATE - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							

Rev

801. FED. / 201. STATE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				ROADWAY 0004 RURAL	BOX CULVERT 0011 PROP. S. N. 050-2055	BOX CULVERT 0040 PROP. S. N. 050-2056	BOX CULVERT 0011 PROP. S. N. 050-2057
35501343	HOT-MIX ASPHALT BASE COURSE, 15"	SO YD	578	578			
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	77	77			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2	2			
40600525	LEVELING BINDER (HAND METHOD), N50	TON	3	3			
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	268	268			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	1560	1560			
40600990	TEMPORARY RAMP	SO YD	54	54			
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	537	537			
44000100	PAVEMENT REMOVAL	SO YD	360	360			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	32	32			
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	1213	1213			
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1		
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1	
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1				1

80% FED. / 20% STATE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				ROADWAY 0004 RURAL	BOX CULVERT 0011 PROP. S. N. 050-2055	BOX CULVERT 0040 PROP. S. N. 050-2056	BOX CULVERT 0011 PROP. S. N. 050-2057
50105220	PIPE CULVERT REMOVAL	FOOT	48	48			
50200100	STRUCTURE EXCAVATION	CU YD	41.2				41.2
50300225	CONCRETE STRUCTURES	CU YD	14.6				14.6
50500505	STUD SHEAR CONNECTORS	EACH	54				54
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	53,970				53,970
51500100	NAME PLATES	EACH	3		1	1	1
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2		2		
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2			2	
54003000	CONCRETE BOX CULVERTS	CU YD	227				227
54010909	PRECAST CONCRETE BOX CULVERTS 9' X 9'	FOOT	114			114	
54011007	PRECAST CONCRETE BOX CULVERTS 10' X 7'	FOOT	96		96		
54213453	END SECTIONS 18"	EACH	4	4			
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	3.5				3.5
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	680	680			

Rev.

*specialty items

FILE NAME *	USER NAME * #USER#	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE. 786	SECTION (110)BR-1,2,3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 5
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#MODELNAME#	PLOT DATE * #DATE#	CHECKED - _____	REVISED - _____		[ILLINOIS] FED. AID PROJECT							
		DATE - _____	REVISED - _____									

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				ROADWAY 0004 RURAL	BOX CULVERT 0011 PROP. S. N. 050-2055	BOX CULVERT 0040 PROP. S. N. 050-2056	BOX CULVERT 0011 PROP. S. N. 050-2057
* 6300025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	194	194			
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	12	12			
63200310	GUARDRAIL REMOVAL	FOOT	2451	2451			
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	15	15			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			
67100100	MOBILIZATION	L SUM	1	1			
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	578	578			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3850	3850			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	481	481			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	192	192			
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	7700	7700			
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	963	963			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	24	24			

* Specialty Items

FILE NAME *	USER NAME * USER*	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES		F.A.P. RTE. 786	SECTION (110BR-1,2,3)	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 6	
#FILEL*	PLOT SCALE * #SCALE*	DRAWN - _____	REVISED - _____				SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66819		ILLINOIS FED. AID PROJECT
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		DATE - _____	REVISED - _____									

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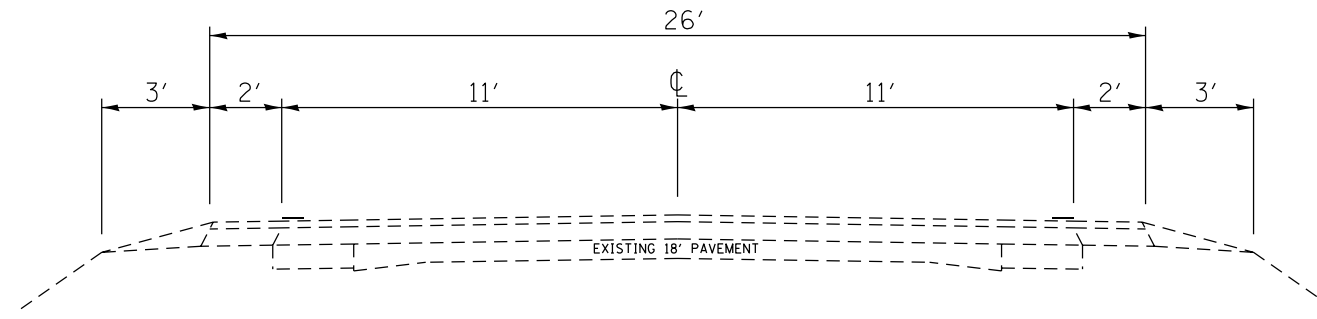
801.FED. | 201.STATE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				ROADWAY 0004 RURAL	BOX CULVERT 0011 PROP. S. N. 050-2055	BOX CULVERT 0040 PROP. S. N. 050-2056	BOX CULVERT 0011 PROP. S. N. 050-2057
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	24	24			
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	12	12			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	24	24			
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	102	102			
* X0324455	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	537				537
X4060110	BITUMINOUS MATERIALS (PRIME COAT)	POUND	4313	4313			
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	42.5	42.5			
* Z0007118	UNTREATED TIMBER LAGGING	SO FT	177				177
* Z0026402	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	171				171

* Specialty Items

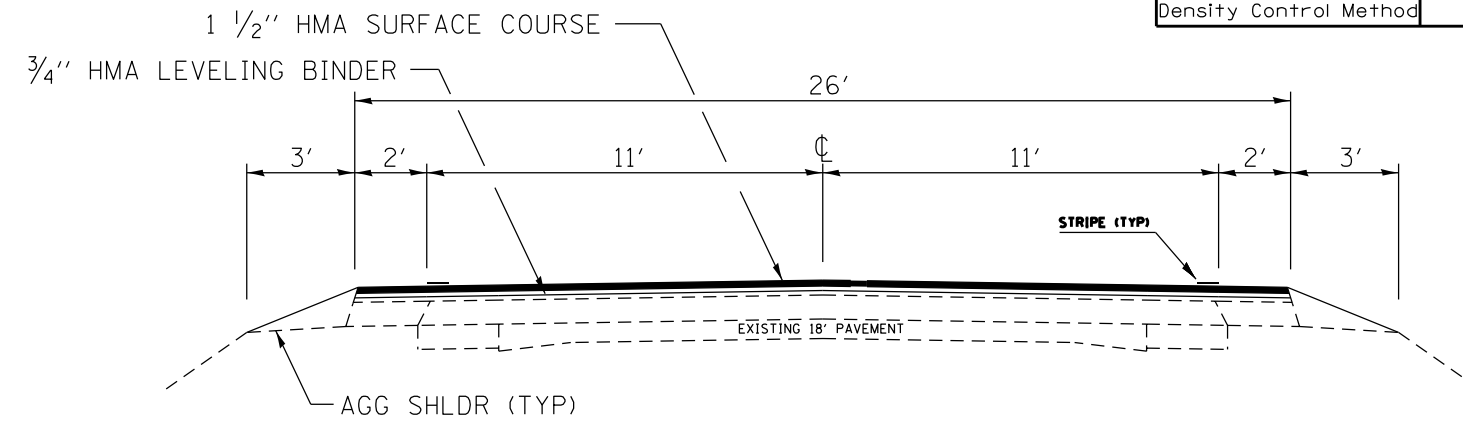
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#FILEL*	PLOT SCALE * #SCALE*	DRAWN - _____	REVISED - _____					SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66819	
#MODELNAME*	PLOT DATE * #DATE*	CHECKED - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							
		DATE - _____	REVISED - _____									



EXISTING ROADWAY TYPICAL

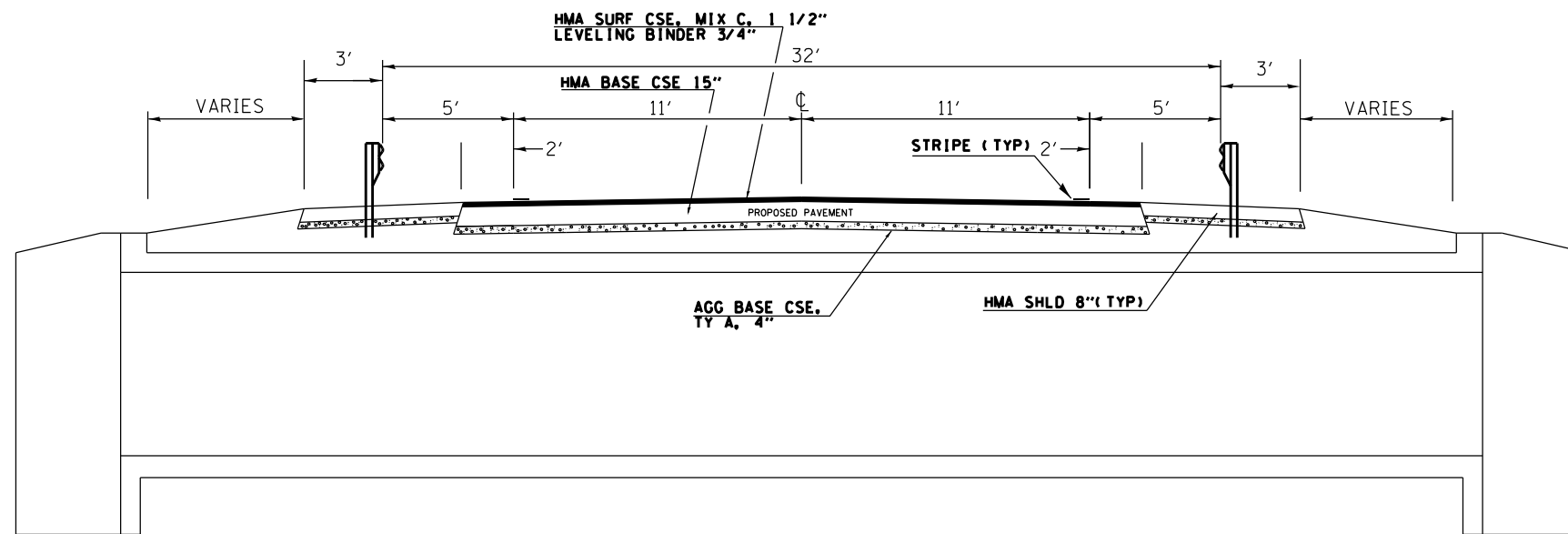
- STA 311+00 TO STA 313+95
- STA 314+17 TO STA 317+00
- STA 366+50 TO STA 369+25
- STA 369+59 TO STA 372+50
- STA 442+25 TO STA 445+30
- STA 445+75 TO STA 449+50

	HMA Surface	HMA Leveling Binder	Binder	HMA Shoulders
PG Grade	PG64-22	PG64-22	PG64-22	PG64-22
Design Air Voids	4.0% @ N50	4.0% @ N50	4.0% @ N50	2.0% @ N30
Mixture Composition	IL 9.5	IL 9.5 FG	IL 19.0	Other
Friction Aggregate	Mixture C			
Density Control Method	Cores	Cores	Cores	Cores



PROPOSED ROADWAY TYPICAL

- STA 311+00 TO STA 313+95
- STA 314+17 TO STA 317+00
- STA 366+50 TO STA 369+25
- STA 369+59 TO STA 372+50
- STA 442+25 TO STA 445+30
- STA 445+75 TO STA 449+50



PROPOSED TYPICAL SECTION

STA 313+69 TO STA 314+31 (OVER PROP SN 050-2055)

STA 369+17 TO STA 369+79 (OVER PROP SN 050-2056)

STA 445+22 TO STA 445+98 (OVER PROP SN 050-2057)

FILE NAME =	USER NAME = \$USER\$	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT TYPICALS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$	PLOT SCALE = \$SCALE\$	DRAWN - _____	REVISED - _____				786	1108R-1.2.3	LASALLE	69	9
\$MODELNAME\$	PLOT DATE = \$DATE\$	CHECKED - _____	REVISED - _____		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 66819		ILLINOIS FED. AID PROJECT		
		DATE - _____	REVISED - _____								

MAINLINE SCHEDULE										
STA. TO STA.	LENGTH	AREA	HMA SURF CSE MIX C N50	LEVEL BINDER (MM)	LEVEL BINDER (HM)	MIX FOR JTS, CRACKS & FLGWYS	BIT. MAT'L (PR CT)	AGG SHLD TY B	AGG SURFACE COURSE	TEMP RAMP
LASALLE COUNTY	FT	SO YD	TONS	TONS	TONS	TONS	POUND	TONS	TONS	SO YD
SN 050-0143										
311+00	317+00	600	1960	164.6	82.3	1.0	0.6	1323.0	10.0	18.0
SUBTOTAL		600	1,960	165	82	1	0.6	1,323	10	18
SN 050-0156										
366+50	372+50	600	1960	164.6	82.3	1.0	0.6	1323.0	11.0	18.0
SUBTOTAL		600	1,960	165	82	1	1	1,323	11	18
SN 050-0072										
442+25	449+50	725	2470	207.5	103.7	1.2	0.7	1667.3	11.0	18.0
448+23	RT		122						10.3	
448+94	LT		102						8.6	
SUBTOTAL		725	2,470	207	104	1	1	1,667	11	18
GRAND TOTALS				537	268	3	2	4313	32	54

PAVEMENT REMOVAL AND REPLACEMENT						
STA. TO STA.	LENGTH	AGGREGATE BASE COURSE TYPE A 4"	HMA BASE COURSE 15"	PAVEMENT REMOVAL	HMA SURF. REMOVAL BUTT JOINT	POROUS GRANULAR EMBANKMENT
LASALLE COUNTY	FT	SO YD	SO YD	SO YD	SO YD	CU YD
SN 050-0143						
311+00	311+90	90			260	
313+69	314+31	62	179.0	179.0		374
313+69	313+89	20		57.7		
314+11	314+31	20		57.7		
316+10	317+00	90			260	
SUBTOTAL			179	179	115	520
SN 050-0156						
366+50	367+40	90			260	
369+17	369+79	62	179.0	179.0		533.0
369+17	369+37	20		57.7		
371+60	372+50	90		57.7	260	
SUBTOTAL			179	179	115	520
SN 050-0072						
442+25	443+15	90			260	
445+22	445+98	76	220.0	220.0		529.0
445+22	445+44	22		64.5		
445+76	445+98	22		64.5		
448+60	449+50	90			260	
SUBTOTAL			220	220	129	529
GRAND TOTALS			578	578	360	1560

DRAINAGE SCHEDULE			
LOCATION	PIPE CULVERT, CLASS D, TYPE 1, 18"	END SECTIONS 18"	PIPE CULVERT REMOVAL
STA TO STA	FOOT	EACH	FOOT
SN 050-0072			
STA 447+95.56, 33.13' RT - 448+50.54, 31.01 RT	55	2	24
STA 448+70.63, 36.63 LT. - 449+17.15, 30.03 LT	47	2	24
SN 050-0072 SUBTOTAL	102	4	48
TOTAL	102	4	48

EARTH EXCAVATION SCHEDULE					
(1) STA TO STA	(2) EARTH EX	(3) EARTH EX ADJ FOR SHRINKAGE	(4) EMBANK	(5) EARTHWORK BAL WASTE(+) OR SHORTAGE(-)	
	LANE	CU YD	CU YD	CU YD	CU YD
SN 050-0143	NB/SB	233.7	175	331.1	-156
SN 050-0156	NB/SB	181.8	136	335	-199
SN 050-0072	NB/SB	288	216	1083	-867
GRAND TOTALS		704	528	1749	-1221

COLUMNS 2, AND 4-LOCATION AND QUANTITIES FROM CROSS SECTIONS
 COLUMN 3- QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR A SHRINKAGE FACTOR OF 25% (1- SHRINKAGE FACTOR)
 COLUMN 5 EARTHWORK REQUIRED (PAY FOR AS FINISHED EXCAVATION)

NOTE ALL MATERIAL EXCAVATED ON THIS PROJECT MUST BE USED AS FILL. NO MATERIAL WILL BE ALLOWED TO BE REMOVED FROM THE PROJECT

R.O.W. MARKERS	
LOCATION	FURNISH AND ERECT ROW MARKERS
LOCATION	EACH
SN 050-0143	
STA 311+00, 31.96' LT	1
STA 312+00, 50' LT	1
STA 316+00, 50' LT	1
STA 317+00, 29.97' LT	1
SN 050-0143 TOTAL	4
SN 050-0156	
STA 366+50, 39.72' LT	1
STA 367+50, 50' LT	1
STA 371+50, 50' LT	1
STA 372+50, 39.86' LT	1
SN 050-0156 TOTAL	4
SN 050-0072	
STA 442+25, 39.52' RT	1
STA 443+25, 55' RT	1
STA 444+50, 41.03' LT	1
STA 445+50, 55' LT	1
STA 448+50, 55' LT	1
STA 448+50, 55' RT	1
STA 449+50, 39.19' RT	1
STA 449+50, 39.87' LT	1
SN 050-0072 TOTAL	7
GRAND TOTAL	15

PAVEMENT MARKING SCHEDULE										
LOCATION		DISTANCE	PAINT PVT MK 4"	PAINT PVT MK 6"	TEMP MARK 4"	TEMP MARK 6"	SHORT-TERM MARK	WORK ZONE PAVT MARK REM	RAISED REFLECTIVE PVMT MARKERS	REMOVAL RAISED REFLECTIVE PVT MARKERS
STA		FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SO. FT.	EACH	EACH
050-0143										
311+00	TO 317+00	600	1200	150	1200	150	180	60	8	8
(2) DOUBLE APPLICATION			1200	150						
050-0143 SUBTOTAL			2400	300	1200	150	180	60	8	8
050-0156										
366+50	TO 372+50	600	1200	150	1200	150	180	60	8	8
(2) DOUBLE APPLICATION			1200	150						
050-0156 SUBTOTAL			2400	300	1200	150	180	60	8	8
050-0072										
442+25	TO 449+50	725	1450	181	1450	181	218	72	9	9
(2) DOUBLE APPLICATION			1450	181						
050-0072 SUBTOTAL			2900	363	1450	181	218	72	9	9
GRAND TOTAL		1925	7700	963	3850	481	578	192	24	24

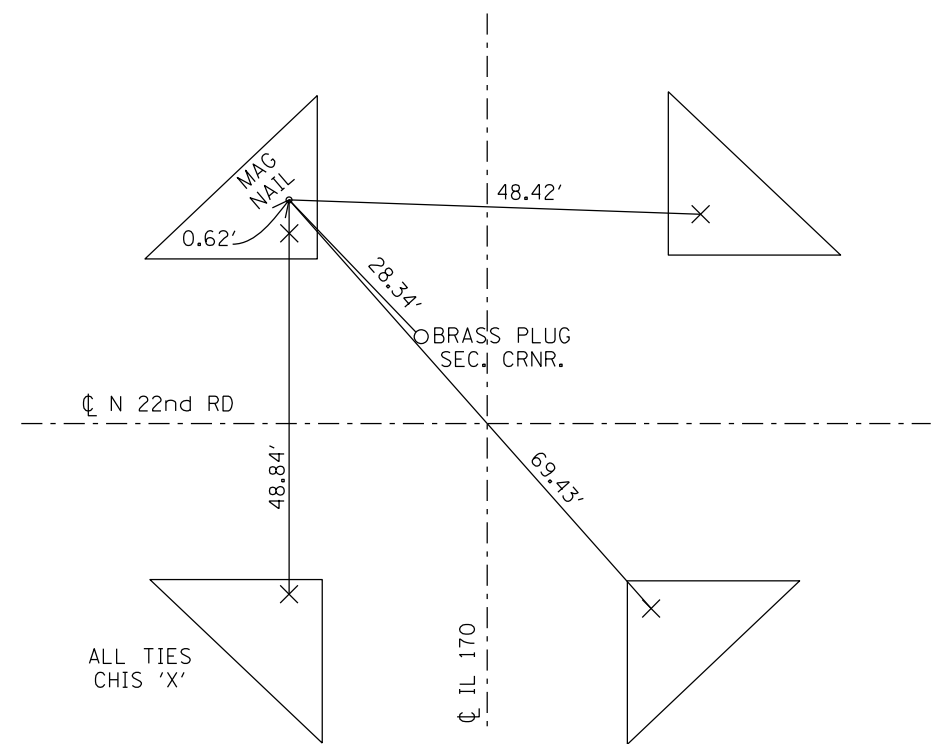
(1) R.E. TO VERIFY NO PASSING ZONES PRIOR TO MILLING OPERATION
(2) PAINT MUST BE DONE IN A DOUBLE APPLICATION

SEEDING SCHEDULE									
LOCATION	LANE	SEEDING CLASS 2A	NITROGEN FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	PHOSPHOROUS FERTILIZER NUTRIENT	HEAVY DUTY EROSION CONTROL BLANKET	TEMP DITCH CHECKS	PERIMETER EROSION BARRIER*	TEMP EROSION CONTROL SEEDING
STA TO STA		ACRE	POUND	POUND	POUND	S.Y.	FOOT	FOOT	POUND
S.N. 050-0143									
STA 311+00 TO STA 314+00 LT	NB	0.20	18	18	18	968	30	30	40
STA 311+00 TO STA 314+00 RT	SB	0.20	18	18	18	968	30	30	40
STA 314+00 TO STA 317+00 LT	NB	0.20	18	18	18	968	30	30	40
STA 314+00 TO STA 317+00 RT	SB	0.20	18	18	18	968	30	30	40
S.N. 050-0143 SUBTOTAL		0.80	72	72	72	3872	120	120	160
S.N. 050-0156									
STA 366+50 TO STA 369+50 LT	NB	0.18	16	16	16	871	30	30	36
STA 366+50 TO STA 369+50 RT	SB	0.12	11	11	11	581	30	28	24
STA 369+50 TO STA 372+50 LT	NB	0.20	18	18	18	968	30	30	40
STA 369+50 TO STA 372+50 RT	SB	0.19	17	17	17	920	30	28	38
S.N. 050-0156 SUBTOTAL		0.69	62	62	62	3340	120	116	138
S.N. 050-0072									
STA 442+25 TO STA 445+50 LT	NB	0.17	15	15	15	823	30	51	34
STA 442+25 TO STA 445+50 RT	SB	0.22	20	20	20	1065	30	53	44
STA 445+50 TO STA 449+50 LT	NB	0.24	22	22	22	1162	30	54	48
STA 445+50 TO STA 449+50 RT	SB	0.31	28	28	28	1500	30	49	62
S.N. 050-0072 SUBTOTAL		0.94	85	85	85	4550	120	207	188
GRAND TOTAL		2.4	219	219	219	11761	360	443	486

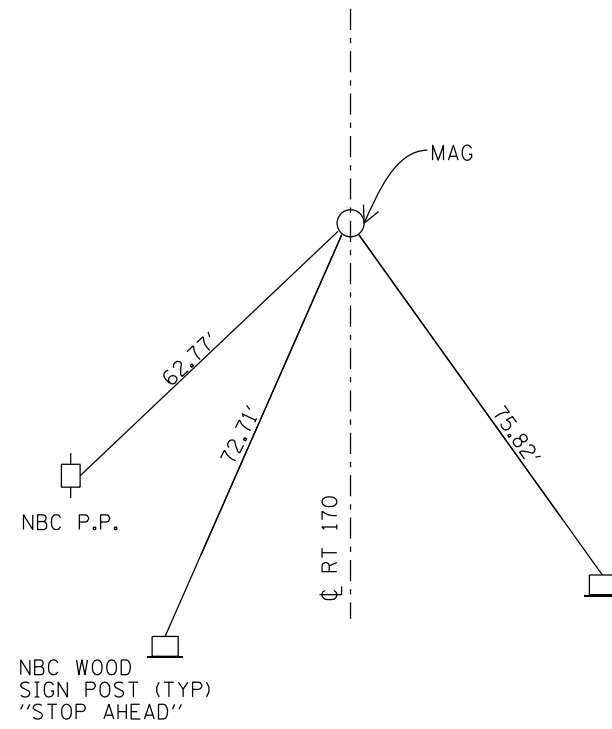
*PLACE ALONG CREEK, SOUTH SIDE AND NORTH SIDE

GUARDRAIL								
	NBL/SBL	TERM MRK, DA	TBT TY I SP (FLARED)	SPBGR TY A 6' POSTS (FOOT)	SPBGR ATTACHED TO STRUCTURE	HMA SHLD 8"	GR REMOVAL FOOT	GUARDRAIL MARKERS TYPE A
STA TO STA		EA	EA	FT	FT	SO YD	FOOT	EA
SN # 050-0143								
EAST SIDE OF STRUCTURE	NBI	2				194	405	4
STA 313+14 TO STA 313+64	NBI		1					
STA 313+64 TO STA 313+89	NBI			25				
STA 313+89 TO STA 314+11	NBI				28			
STA 314+11 TO STA 314+93	NBI			82				
STA 314+93 TO STA 315+43	NBI		1					
WEST SIDE OF STRUCTURE	SBI	2				194	404	4
STA 312+71 TO STA 313+21	SBI		1					
STA 313+21 TO STA 313+89	SBI			68				
STA 313+89 TO STA 314+11	SBI				28			
STA 314+11 TO STA 314+48	SBI			37				
STA 314+48 TO STA 314+98	SBI		1					
SN # 050-0143 SUBTOTAL		4	4	212	56	388	809	8
SN # 050-0156								
EAST SIDE OF STRUCTURE	NBI	2				194	405	4
STA 368+49 TO STA 368+99	NBI		1					
STA 368+99 TO STA 369+30	NBI			31				
STA 369+30 TO STA 369+52	NBI				28			
STA 369+52 TO STA 370+27	NBI			60				
STA 370+27 TO STA 370+77	NBI		1					
WEST SIDE OF STRUCTURE	SBI	2				197	405	4
STA 368+19 TO STA 368+69	SBI		1					
STA 368+69 TO STA 369+44	SBI			75				
STA 369+44 TO STA 369+66	SBI				28			
STA 369+66 TO STA 369+97	SBI			31				
STA 369+97 TO STA 370+47	SBI		1					
SN # 050-0156 SUBTOTAL		4	4	197	56	391	810	8
SN # 050-0072								
EAST SIDE OF STRUCTURE	NBI	2				214	416	4
STA 444+70 TO STA 445+20	NBI		1					
STA 445+20 TO STA 445+58	NBI			38				
STA 445+58 TO STA 445+99	NBI				41			
STA 445+99 TO STA 447+04	NBI			105				
STA 447+04 TO STA 447+54	NBI		1					
WEST SIDE OF STRUCTURE	SBI	2				220	416	4
STA 443+66 TO STA 444+16	SBI		1					
STA 444+16 TO STA 445+23	SBI			107				
STA 444+23 TO STA 445+64	SBI				41			
STA 445+64 TO STA 445+85	SBI			21				
STA 445+85 TO STA 446+35	SBI		1					
SN # 050-0072 SUBTOTAL		4	4	271	82	434	832	8
GRAND TOTAL		12	12	680	194	1213	2451	24

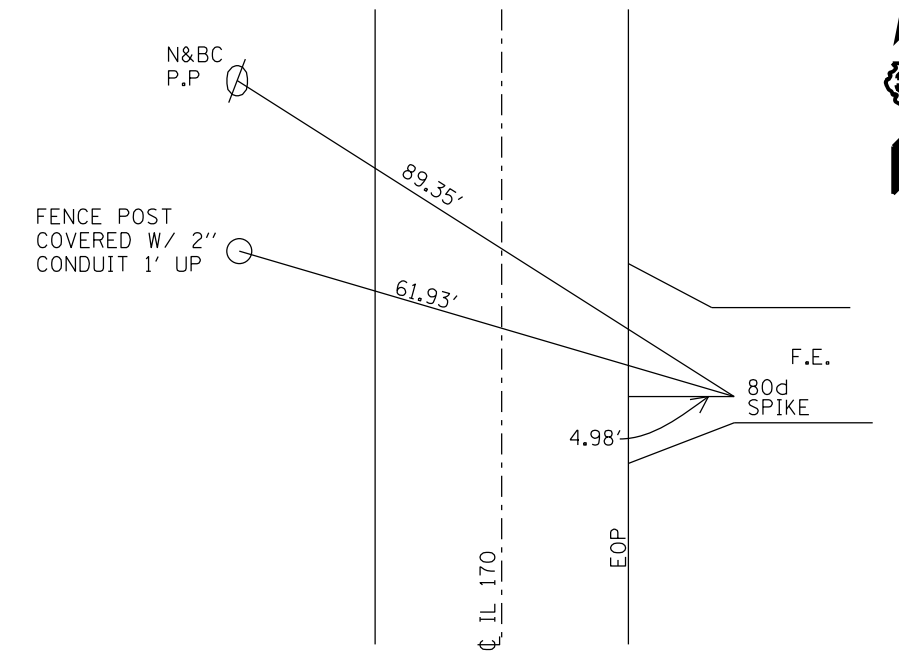
PNT 170500
 STA 304+34.86, 17.90' RT



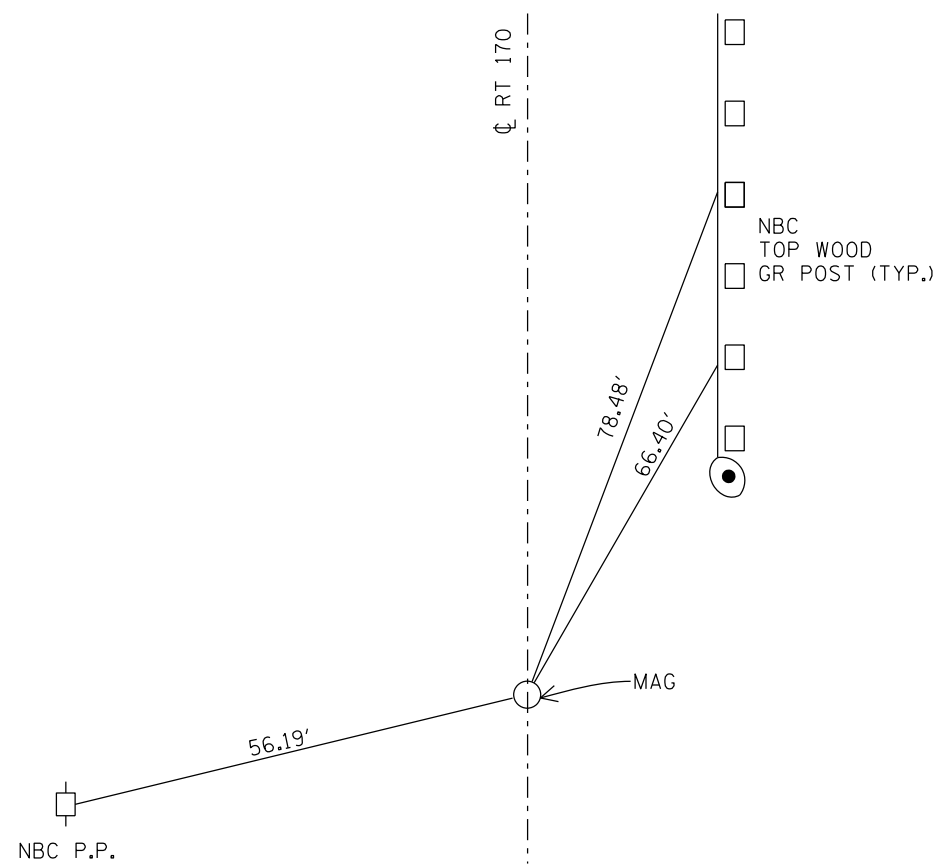
POT 311+00.00



PNT 170501
 STA. 318+09.01 16.43' LT.



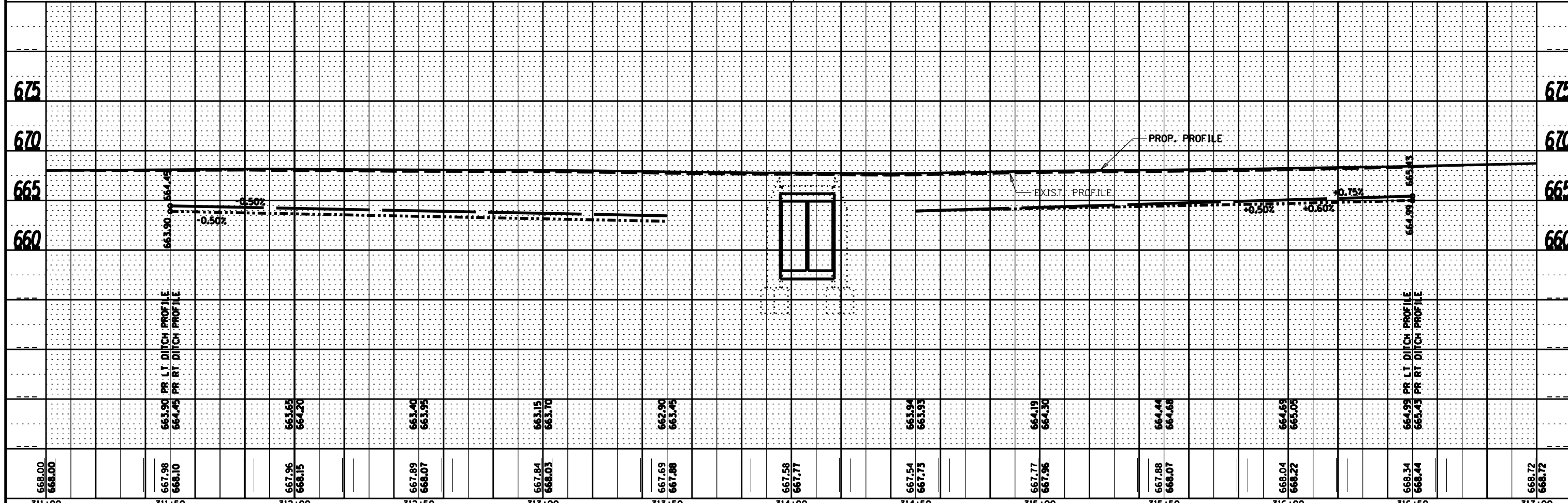
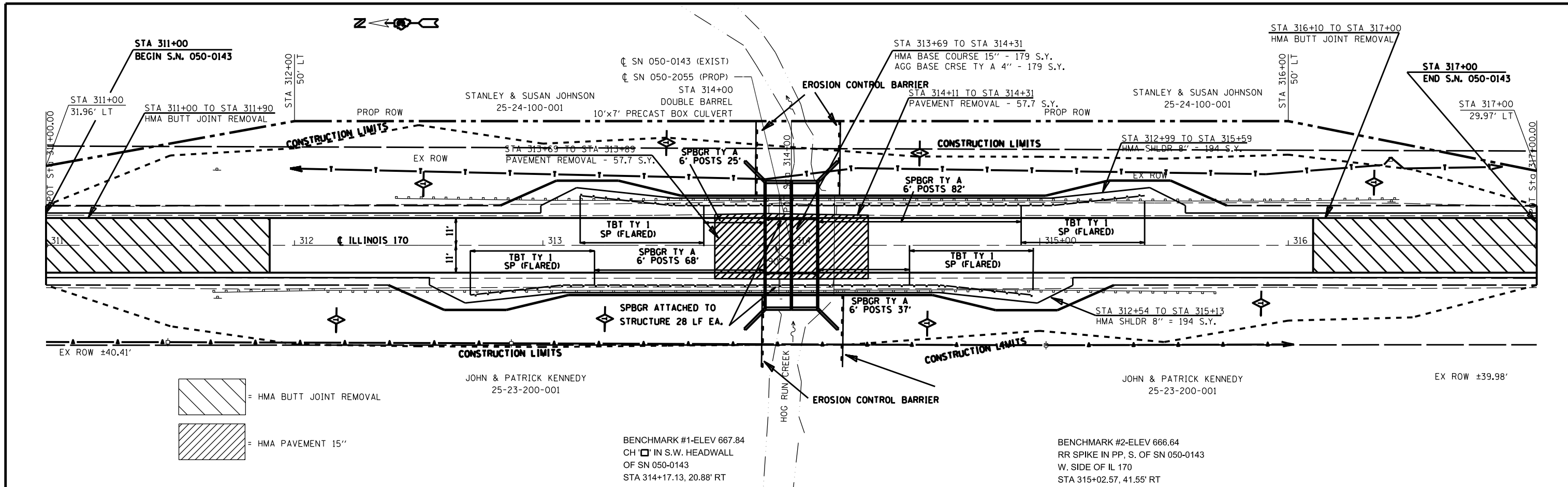
POT 317+ 00.00



FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TIE POINTS - EXIST. SN 050-0143		F.A.P. RTE. 786	SECTION 110BR-1.2.3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 15	
FILEL		DRAWN -	REVISED -		SCALE: _____	SHEET _____	OF _____	SHEETS	STA. _____	TO STA. _____	CONTRACT NO. 66819	
Default		CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE -	REVISED -									

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	

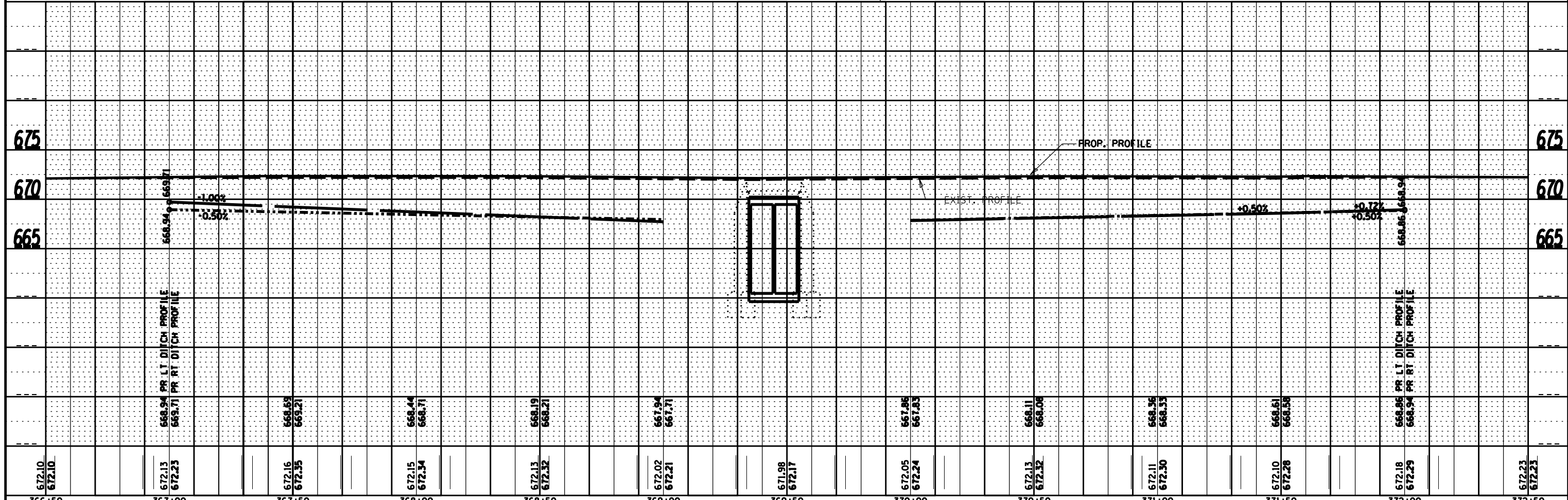
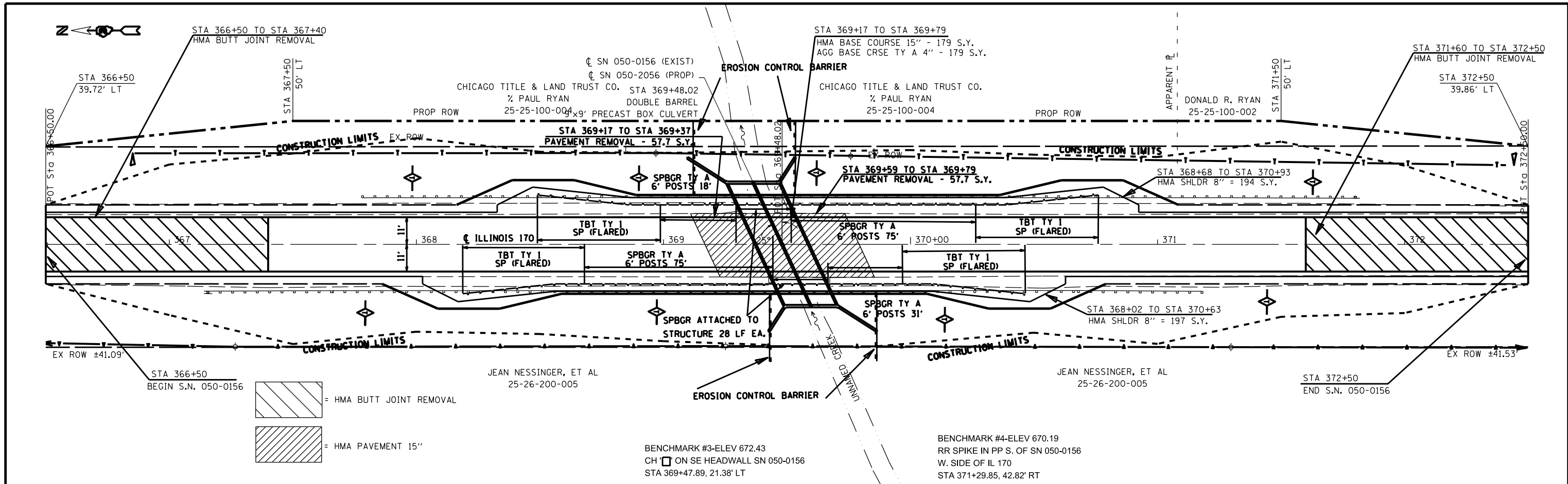
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE (PROPOSED) SN 050-2055		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FILEL		DRAWN -	REVISED -				786	110BR-1.2.3	LASALLE	69	18	
		CHECKED -	REVISED -				CONTRACT NO. 66819					
		DATE -	REVISED -				ILLINOIS FED. AID PROJECT					

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		

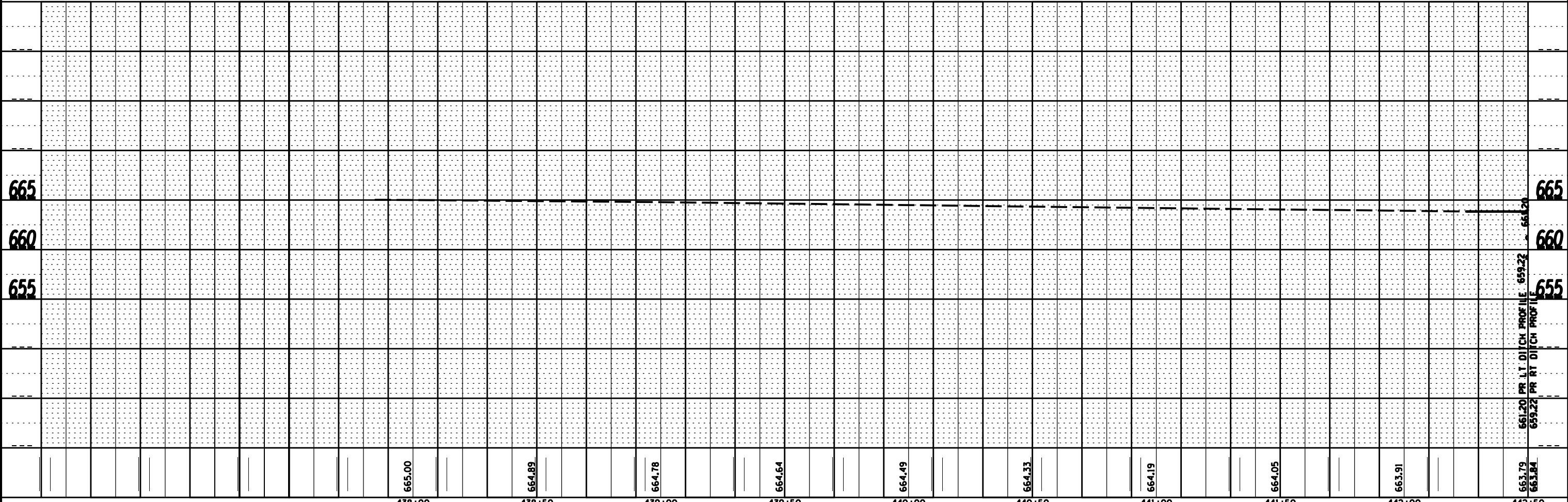
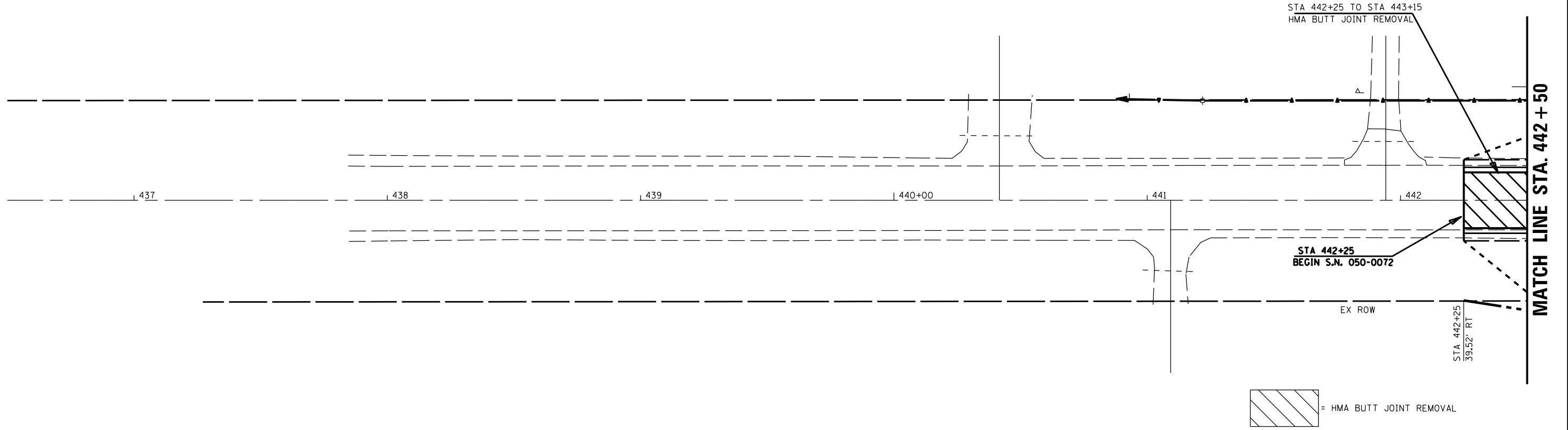


FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE (PROPOSED) SN 050-2056 SCALE: _____ SHEET 1 OF 1 SHEETS STA. 366+50 TO STA. 372+50	F.A.P. RTE. 786	SECTION 1101BR-1.2.3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 19	
FILEL	PLOT SCALE = *SCALE*	DRAWN -	REVISED -			CONTRACT NO. 66819					
	PLOT DATE = *DATE*	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT					
		DATE -	REVISED -								



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	ALIGNMENT CHECKED		
	STRUCTURE CHECKED		
	CADD FILE NAME		
NOTE BOOK NO.			

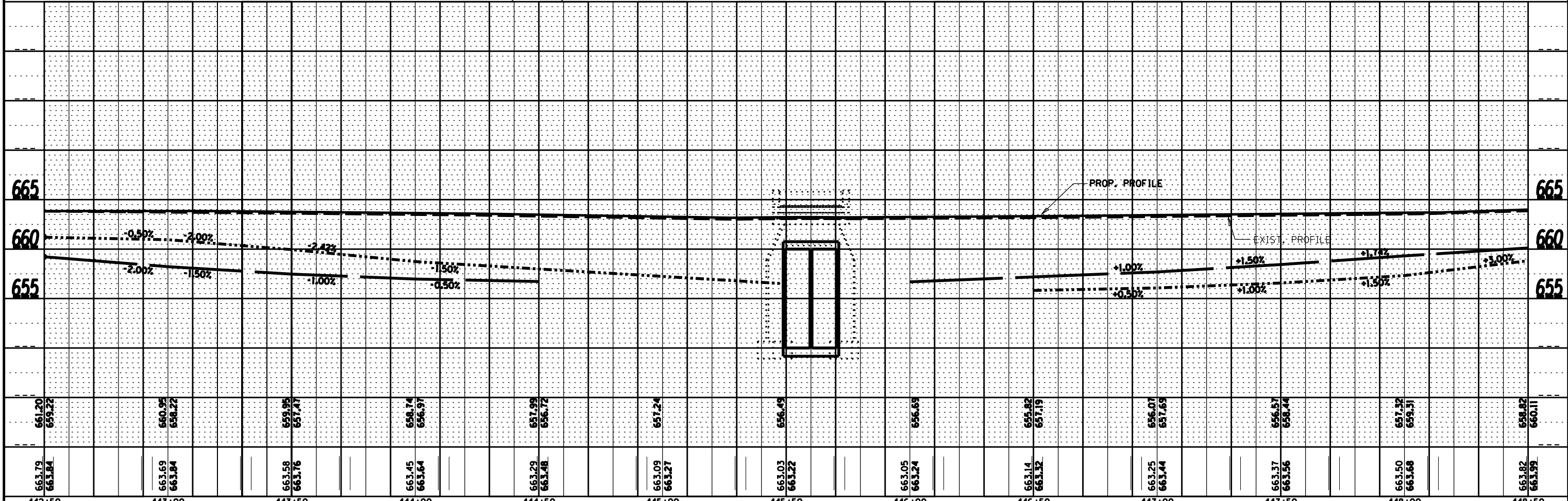
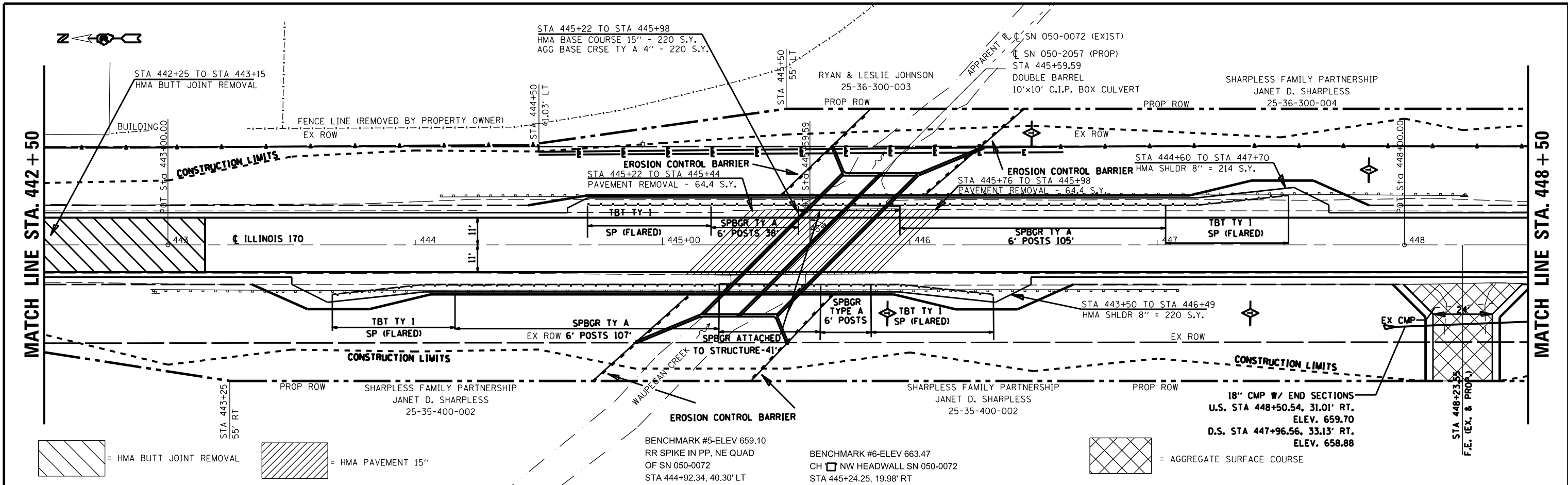
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	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
NOTE BOOK NO.			



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE (PROPOSED) SN 050-2057	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FILEL	PLOT SCALE = *SCALE*	DRAWN -	REVISED -			786	1108R-1.2.3	LASALLE	69	20	
	PLOT DATE = *DATE*	CHECKED -	REVISED -			CONTRACT NO. 66819					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS OK'D	
	ROAD FILE NAME	
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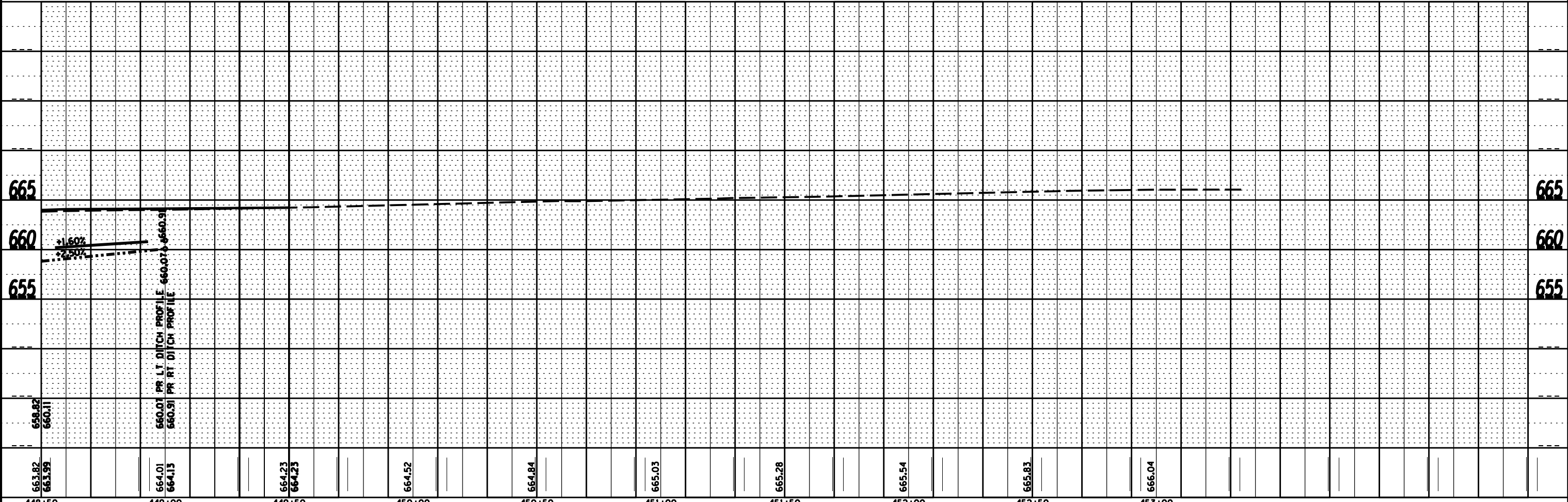
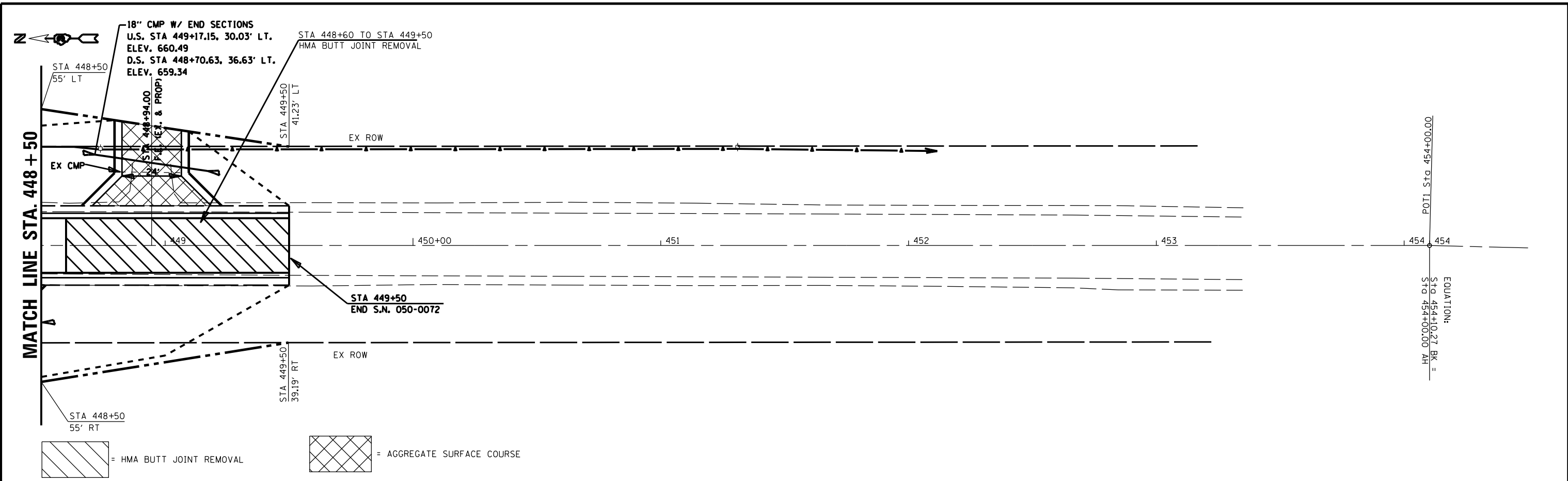
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE (PROPOSED) SN 050-2057		F.A.P. RTE. 786	SECTION 1108R-1.2.3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 21	
FILEL		DRAWN -	REVISED -		SCALE: _____	SHEET 2 OF 3 SHEETS	STA. 442+50 TO STA. 448+50	CONTRACT NO. 66819		ILLINOIS FED. AID PROJECT		
		CHECKED -	REVISED -									
		DATE -	REVISED -									

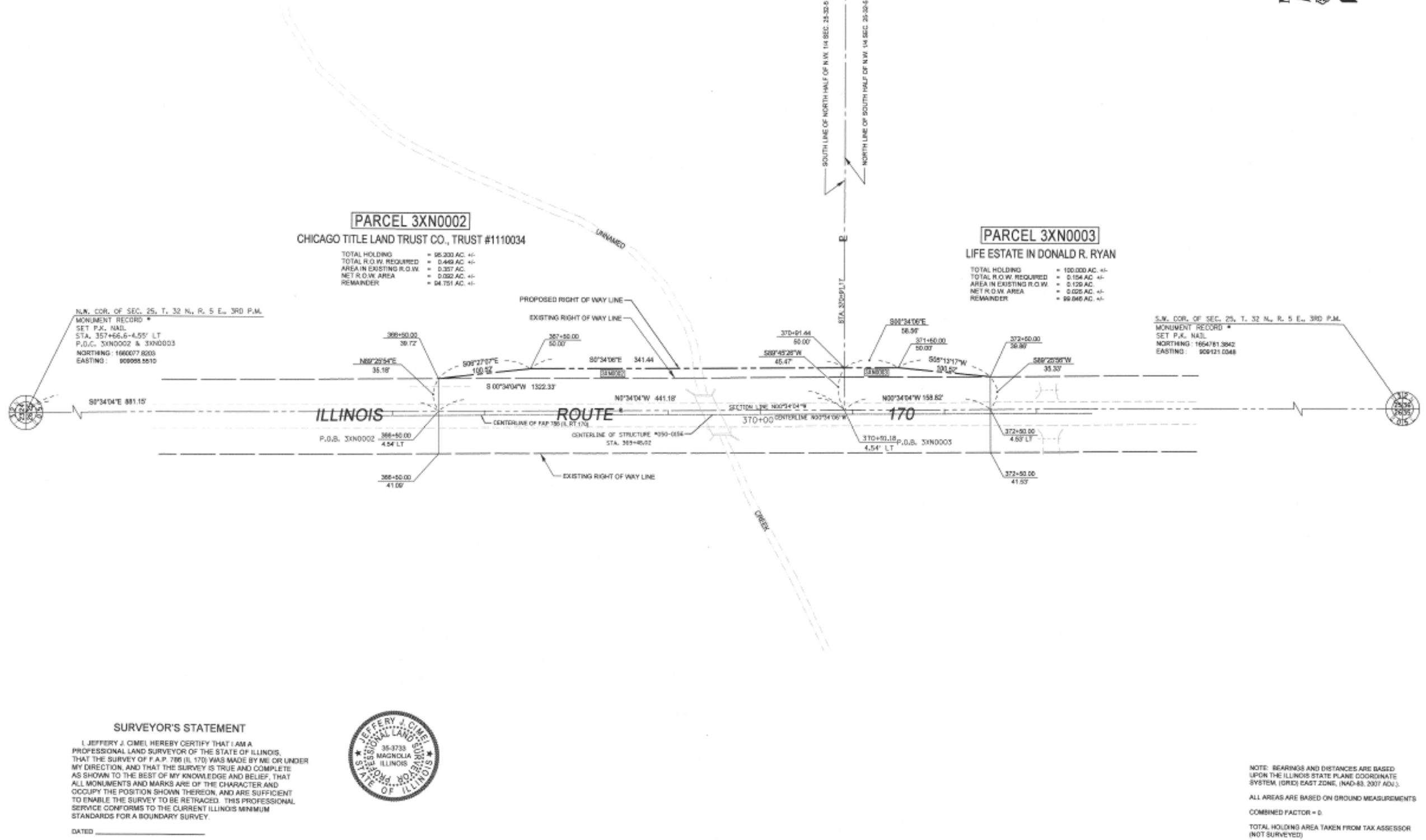
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	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	FILE NAME		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NO.		
	STRUCTURE		
	NOTATION		
	CHFD		



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE (PROPOSED) SN 050-2057 SCALE: _____ SHEET 3 OF 3 SHEETS STA. 448+50 TO STA. 454+50	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILE#		DRAWN -	REVISED -			786	110BR-1.2.3	LASALLE	69	22	
		CHECKED -	REVISED -			CONTRACT NO. 66819					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

NORTHWEST 1/4 OF SEC. 25, T. 32 N., R. 5 E., 3RD P.M.



PARCEL 3XN0002
 CHICAGO TITLE LAND TRUST CO., TRUST #1110034
 TOTAL HOLDING = 95.233 AC +/-
 TOTAL R.O.W. REQUIRED = 0.449 AC +/-
 AREA IN EXISTING R.O.W. = 0.357 AC +/-
 NET R.O.W. AREA = 0.092 AC +/-
 REMAINDER = 94.751 AC +/-

PARCEL 3XN0003
 LIFE ESTATE IN DONALD R. RYAN
 TOTAL HOLDING = 100.000 AC +/-
 TOTAL R.O.W. REQUIRED = 0.154 AC +/-
 AREA IN EXISTING R.O.W. = 0.129 AC +/-
 NET R.O.W. AREA = 0.025 AC +/-
 REMAINDER = 99.846 AC +/-

N.W. COR. OF SEC. 25, T. 32 N., R. 5 E., 3RD P.M.
 MONUMENT RECORD *
 SET P.K. NAIL
 STA. 357+66.6-4.55' LT
 P.O.C. 3XN0002 & 3XN0003
 NORTHING: 166007.8203
 EASTING: 909093.5510

S.W. COR. OF SEC. 25, T. 32 N., R. 5 E., 3RD P.M.
 MONUMENT RECORD *
 SET P.K. NAIL
 NORTHING: 1664781.3842
 EASTING: 909121.0248

SURVEYOR'S STATEMENT
 I, JEFFERY J. CIMEL HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 786 (IL 170) WAS MADE BY ME OR UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.
 DATED _____
 BY: JEFFERY J. CIMEL, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3733 (EXPIRES NOV. 2014)



NOTE: BEARINGS AND DISTANCES ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, (GRID) EAST ZONE, (NAD-83, 2007 ADJ.).
 ALL AREAS ARE BASED ON GROUND MEASUREMENTS
 COMBINED FACTOR = 0.
 TOTAL HOLDING AREA TAKEN FROM TAX ASSESSOR (NOT SURVEYED)
 0 50 100 150
 SCALE IN FEET

NORTHEAST 1/4 OF SEC. 26, T. 32 N., R. 5 E., 3RD P.M.

FILE NAME =	USER NAME = *USER*	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROW SHEET-EXIST SN 050-0143	F.A.P. RTE. 786	SECTION (110)BR-1,2,3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 23	
FILEL	PLOT SCALE = *SCALE*	DRAWN - _____	REVISED - _____			SCALE: _____	SHEET _____ OF _____ SHEETS	CONTRACT NO. 66B19		ILLINOIS FED. AID PROJECT	
MODELNAME	PLOT DATE = *DATE*	CHECKED - _____	REVISED - _____			STA. _____ TO STA. _____					
		DATE - _____	REVISED - _____								

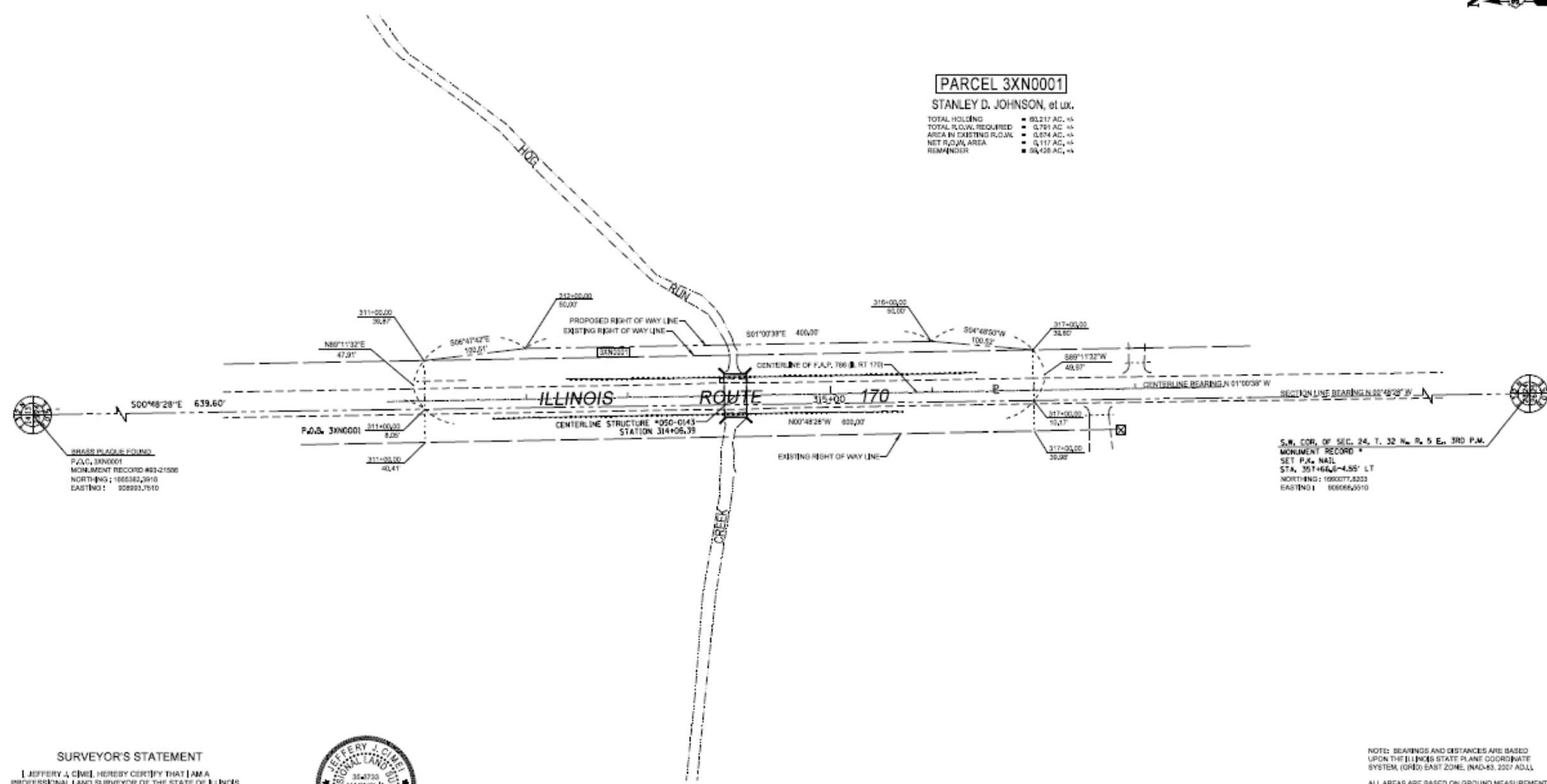
NORTHWEST 1/4 OF SEC. 24, T. 32 N., R. 5 E., 3RD P.M.



PARCEL 3XN0001

STANLEY D. JOHNSON, et ux.

TOTAL HOLDING ■ 0.217 AC. ±
 TOTAL R.O.W. REQUIRED ■ 0.791 AC. ±
 AREA IN EXISTING R.O.W. ■ 0.574 AC. ±
 NET R.O.W. AREA ■ 0.117 AC. ±
 REMAINDER ■ 04,428 AC. ±



BRASS PLUGS FOUND
 PARCEL 3XN0001
 MONUMENT RECORD # 23-21508
 NORTHING: 1665362.2918
 EASTING: 908932.7510

S.W. COR. OF SEC. 24, T. 32 N., R. 5 E., 3RD P.M.
 MONUMENT RECORD #
 SET P.A. NAIL
 STA. 357+66.6-4.55' LT
 NORTHING: 1665077.8203
 EASTING: 908966.5010

SURVEYOR'S STATEMENT

I, JEFFERY J. CIMEI, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 786 (L 170) WAS MADE BY ME OR UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



DATED _____
 BY: _____
 JEFFERY J. CIMEI, ILLINOIS PROFESSIONAL
 LAND SURVEYOR NO. 35-3733 (EXPIRES NOV. 2014)

NOTE: BEARINGS AND DISTANCES ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, (GRID) EAST ZONE, (NAD-83, 2007 AD-LL). ALL AREAS ARE BASED ON GROUND MEASUREMENTS. CORRECTION FACTOR = 0. TOTAL HOLDING AREA TAKEN FROM TAX ASSESSOR (NOT SURVEYED).



NORTHEAST 1/4 OF SEC. 23, T. 32 N., R. 5 E., 3RD P.M.

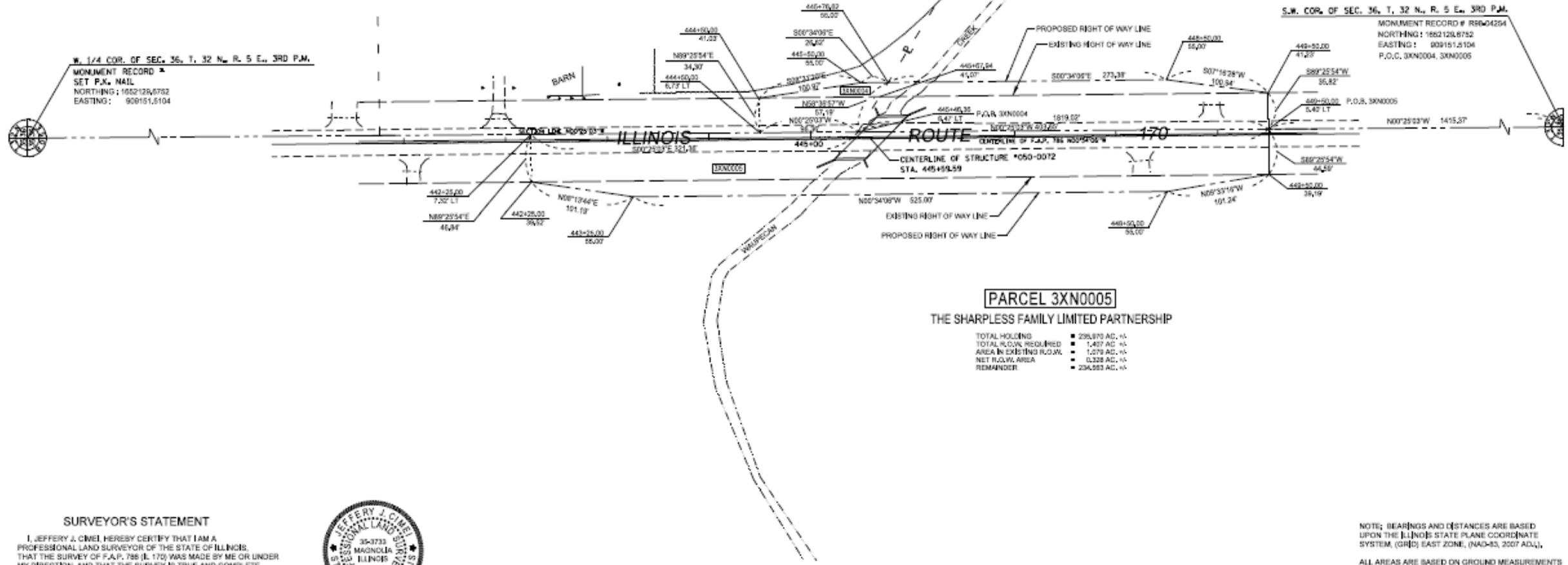
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#FILEL#	PLOT SCALE = #SCALE#	DRAWN - _____	REVISED - _____		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 66B19					
#MODELNAME#	PLOT DATE = #DATE#	CHECKED - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							
		DATE - _____	REVISED - _____									

SOUTHWEST 1/4 OF SEC. 36, T. 32 N., R. 5 E., 3RD P.M.



PARCEL 3XN0004

RYAN A. JOHNSON, et ux.
 TOTAL HOLDING ■ 4.500 AC. ±
 TOTAL R.O.W. REQUIRED ■ 0.100 AC. ±
 AREA IN EXISTING R.O.W. ■ 0.085 AC. ±
 NET R.O.W. AREA ■ 0.023 AC. ±
 REMAINDER ■ 3.892 AC. ±



S.W. COR. OF SEC. 36, T. 32 N., R. 5 E., 3RD P.M.

MONUMENT RECORD # R864254
 NORTHING: 1882128.8752
 EASTING: 909151.5104
 P.O.C. 3XN0004, 3XN0005

W. 1/4 COR. OF SEC. 36, T. 32 N., R. 5 E., 3RD P.M.

MONUMENT RECORD #
 SET P.K. NAIL
 NORTHING: 1882128.8752
 EASTING: 909151.5104

PARCEL 3XN0005

THE SHARPLESS FAMILY LIMITED PARTNERSHIP
 TOTAL HOLDING ■ 208.870 AC. ±
 TOTAL R.O.W. REQUIRED ■ 1.407 AC. ±
 AREA IN EXISTING R.O.W. ■ 1.279 AC. ±
 NET R.O.W. AREA ■ 0.228 AC. ±
 REMAINDER ■ 204.593 AC. ±

SURVEYOR'S STATEMENT

I, JEFFERY J. CIMEL, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS THAT THE SURVEY OF F.A.P. 786 (IL 170) WAS MADE BY ME OR UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



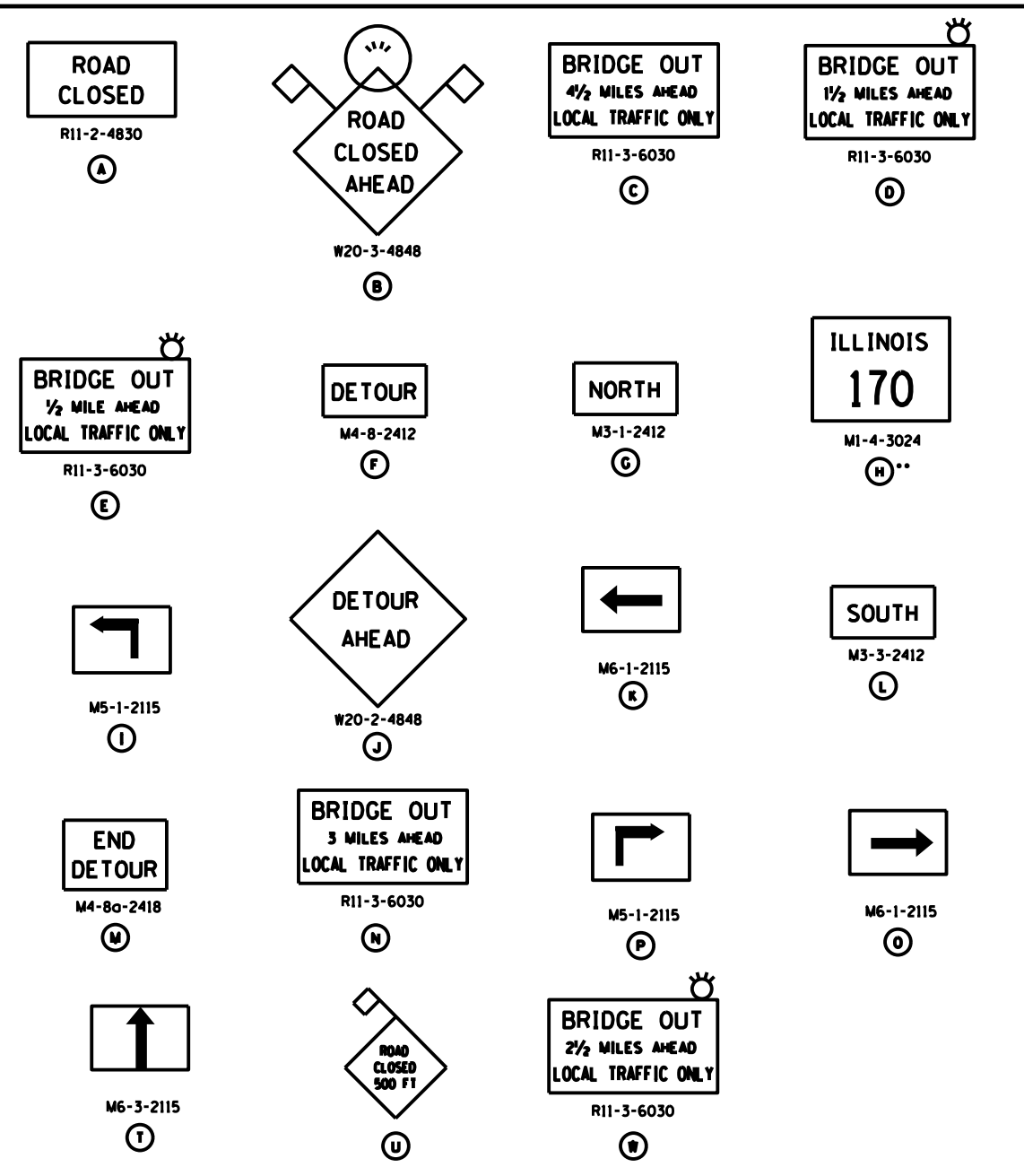
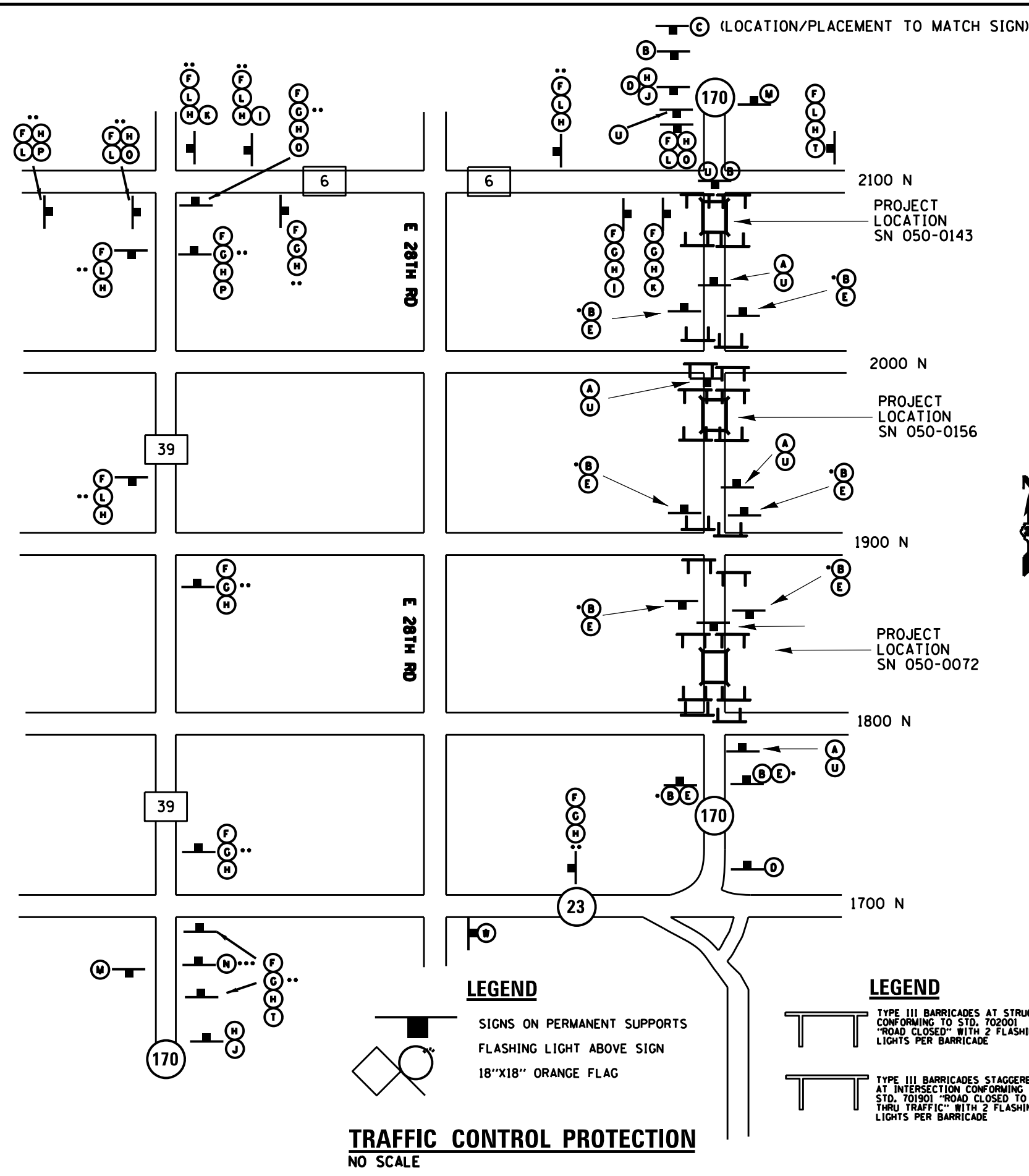
DATED _____
 BY _____
 JEFFERY J. CIMEL, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3733 (EXPIRES NOV, 2014)

NOTE: BEARINGS AND DISTANCES ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, (GRID) EAST ZONE, (NAD-83, 2011 ADJ.).
 ALL AREAS ARE BASED ON GROUND MEASUREMENTS
 COMBINED FACTOR = 0
 TOTAL HOLDING AREA TAKEN FROM TAX ASSESSOR (NOT SURVEYED)



SOUTHWEST 1/4 OF SEC. 35, T. 32 N., R. 5 E., 3RD P.M.

FILE NAME =	USER NAME = #USER#	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROW SHEET-EXIST SN 050-0072	F.A.P. RY. 786	SECTION (110)BR-1,2,3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 25		
#FILE#	PLOT SCALE = #SCALE#	DRAWN - _____	REVISED - _____			SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 66B19			
#MODELNAME#	PLOT DATE = #DATE#	CHECKED - _____	REVISED - _____			ILLINOIS FED. AID PROJECT						
		DATE - _____	REVISED - _____									



PLAN NOTES:

1. THE FOLLOWING SIGNS NEED TO BE BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND. SIGNS: B, F, I, J, K, M, P, O, T AND U.
2. SIGNS ON THE POST NEED TO BE POSITIONED FROM TOP TO BOTTOM AS "DETOUR" SIGN OVER "CARDINAL DIRECTION" OVER "ROUTE MARKER" OVER "DIRECTIONAL ARROW".
3. REFER TO STANDARD B.L.R. 22-7 FOR FURTHER CLARIFICATION OF SIGNAGE PLACEMENT.
4. EACH SIGN ASSEMBLY TYPE TO BE PLACED ADJACENT TO EXISTING CO. HWY. 39 AND CO. HWY. 6 ROUTE SIGNS
5. PLACE SIGN AT APPROPRIATE LOCATION JUST NORTH OF RANSOM 3 MILES FROM SN 050-0072

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED, UNLESS NOTED OTHERWISE.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL)
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE ILLINOIS 170 ROUTE MARKERS FOR THIS PROJECT. THE ROUTE MARKERS NEED TO BE 30" X 24" BLACK ON WHITE WITH 3D LETTERING FOR "ILLINOIS" AND 10D LETTERING FOR "170".

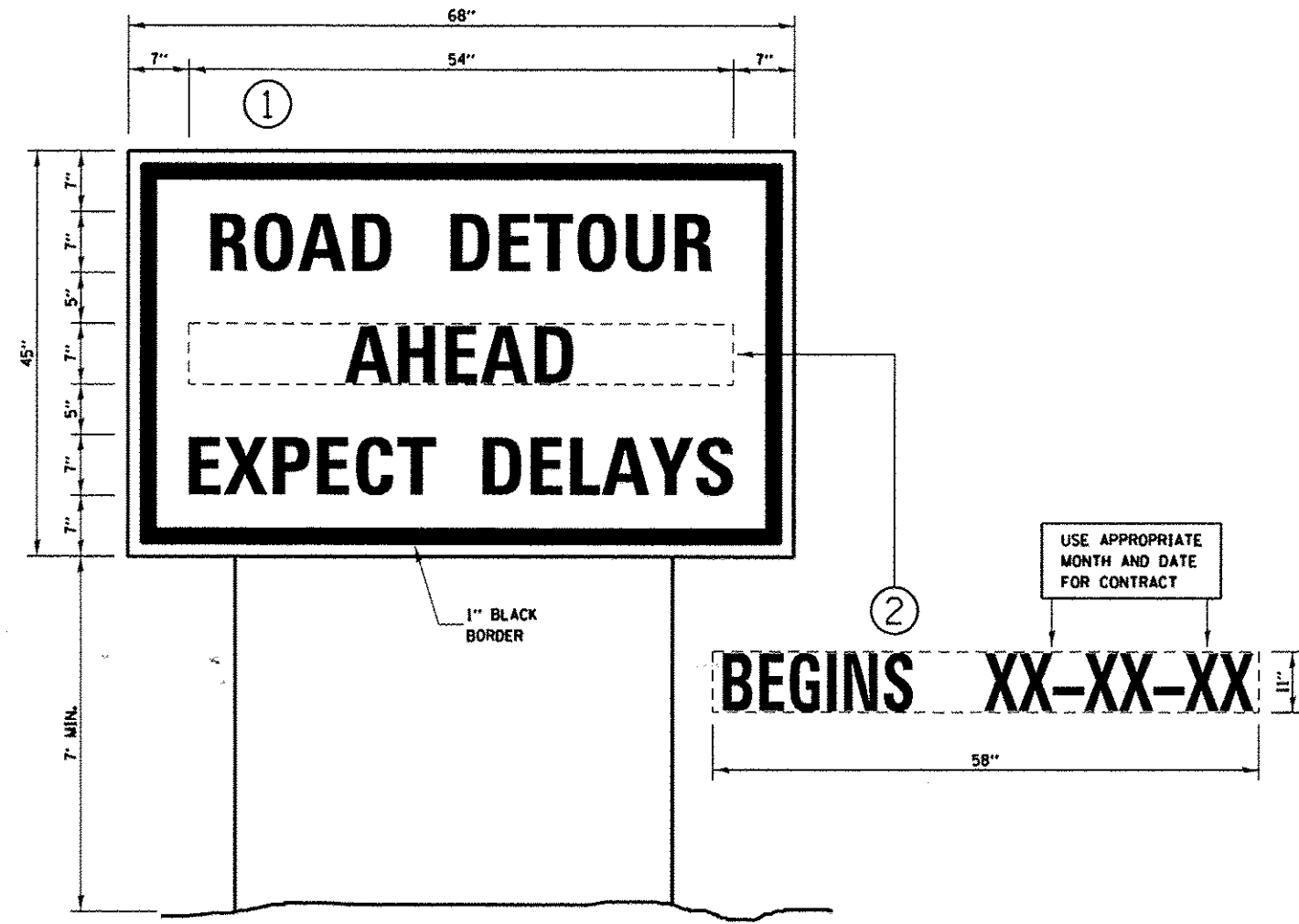
TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR

**TRAFFIC CONTROL PROTECTION
NO SCALE**

LEGEND
 SIGNS ON PERMANENT SUPPORTS
 FLASHING LIGHT ABOVE SIGN
 18"X18" ORANGE FLAG

LEGEND
 TYPE III BARRICADES AT STRUCTURE CONFORMING TO STD. 702001 "ROAD CLOSED" WITH 2 FLASHING LIGHTS PER BARRICADE
 TYPE III BARRICADES STAGGERED AT INTERSECTION CONFORMING TO STD. 701901 "ROAD CLOSED TO THRU TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FILEL		DRAWN -	REVISED -			786	110BR-1.2.3	LASALLE	69	26	
MODELNAME		CHECKED -	REVISED -			CONTRACT NO. 66819					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



TEMPORARY INFORMATION SIGN

NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS 500 FT. IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF DETOUR.
4. REMOVE PANEL ② ON THAT DATE.
5. SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGN" FOR ADDITIONAL INFORMATION.
6. SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR TEMPORARY INFORMATION SIGN. INSTALLED SIGN PANEL 2 SHALL NOT BE MEASURED SEPERATELY BUT SHALL BE CONSIDERED INCLUDED IN THE SQUARE FOOTAGE OF SIGN 1.

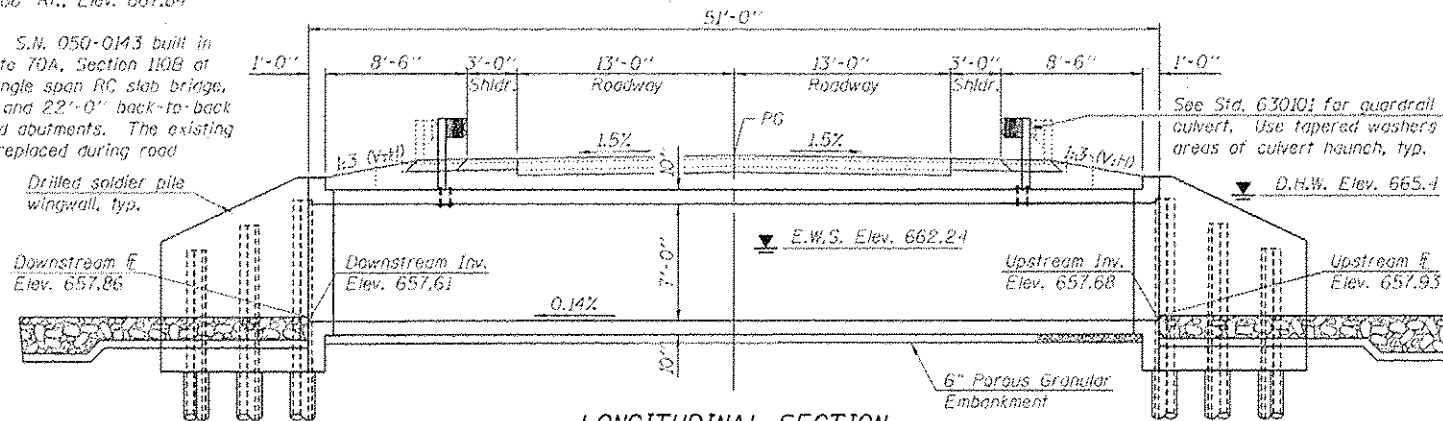
FILE NAME *	USER NAME * #USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILEL*	PLOT SCALE * #SCALE*	DRAWN -	REVISED -			786	(110)BR-1,2,3	LASALLE	69	27	
#MODELNAME*	PLOT DATE * #DATE*	CHECKED -	REVISED -			CONTRACT NO. 66B19					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
						SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____			

Rev.

Benchmark: Chisled "a" on SW headwall of S.N. 050-0143:
Sta. 314+17.13, 20.80' Rt., Elev. 667.84

Existing Structure: S.N. 050-0143 built in 1933 as S.B.I. Route 70A, Section 110B at Sta. 314+05. A single span RC slab bridge, 43'-0" out-to-out and 22'-0" back-to-back abutments on closed abutments. The existing structure shall be replaced during road closure.

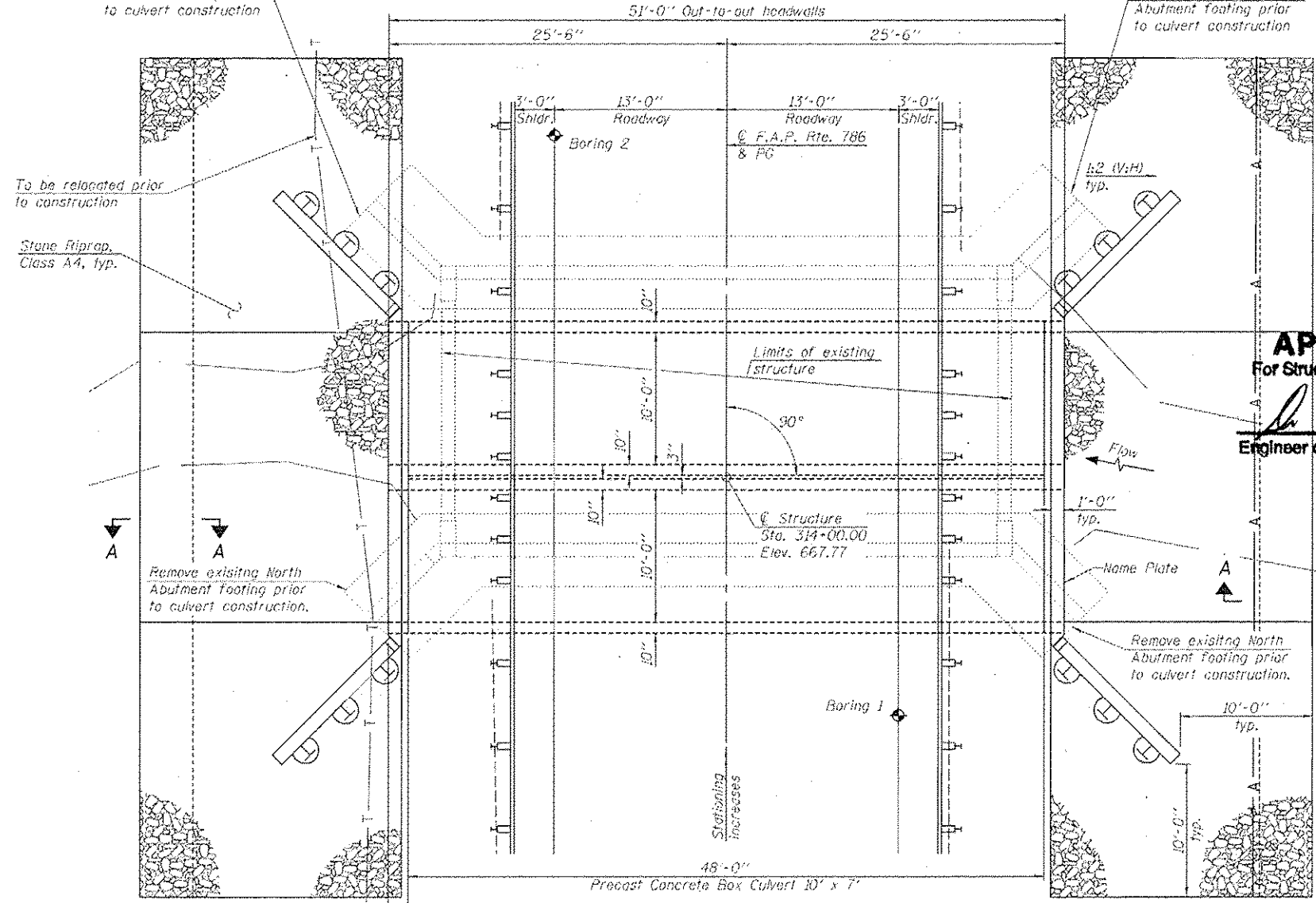
No Salvage



LONGITUDINAL SECTION

Remove existing South Abutment Footing prior to culvert construction

Remove existing South Abutment Footing prior to culvert construction



PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	654.68	654.61

STATION 314+00.00
BUILT 201 BY
STATE OF ILLINOIS
F.A.P. RTE. 786 SEC. 110BR-2
LOADING HL-93
STRUCTURE NO. 050-2055

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. yd.	267
Filter Fabric	Sq. yd.	267
Removal of Existing Structures No. 1	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culvert 10' x 7'	Foot	96.0
Membrane Waterproofing for Culverts	Sq. yd.	141.9

CULVERT CONSTRUCTION SEQUENCE

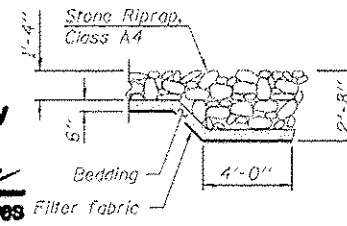
1. Remove existing structure.
2. Build cutoff wall.
3. Prepare bed.
4. Place precast box culvert sections.
5. Form and place concrete for portion of end sections to be cast onto precast box sections.
6. Drill soldier piles (May be completed prior to box placement).
7. Install timber lagging.
8. Place and compact backfill behind wall to top of timber lagging.
9. Place geocomposite wall drain.
10. Install shear stud connectors.
11. Place rebar and form wall face.
12. Cast concrete wingwall.
13. Remove temp. soldier pile and remaining timber outside wall limits.
14. Place remainder of backfill to proposed ground surface elevations on both sides of wall. (Backfill front of wall as much as possible before backfilling is completed.)

WATERWAY INFORMATION

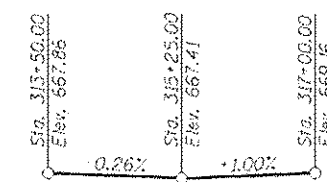
Drainage Area = 4.54 sq. mi.		Existing Low Grade Elev. 667.50 @ Sta. 314+39.88			
		Proposed Low Grade Elev. 667.62 @ Sta. 314+14.50			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. Head - Ft.	Headwater El.
			Exist. Prop.	Exist. Prop.	Exist. Prop.
Design	10	418	136 140	665.2 665.5	0.1 0.3 665.5 665.5
Base	100	621	137 140	665.4 665.3	0.9 0.9 666.3 666.3
Overtopping	-	702	137 140	665.5 666.6	1.1 1.1 666.6 666.6
Max. Calc.	500	894	137 140	665.7 667.2	1.6 1.7 667.2 667.3

Existing 10-year velocity = 3.1 ft./sec.
Proposed 10-year velocity = 3.0 ft./sec.

APPROVED
For Structural Adequacy Only
Dr. Carl Ruyter
Engineer of Bridges & Structures

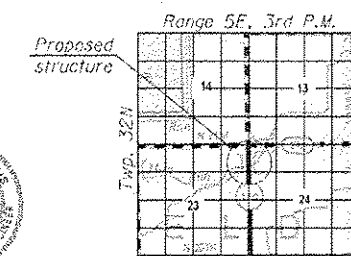


SECTION A-A



PROFILE GRADE

(Along E. F.A.P. Rte. 786)



LOCATION SKETCH

INDEX OF SHEETS

- 1 - General Plan & Elevation
- 2-4 - Box Culvert End Section Details
- 5 - Bar Splicer Assembly Details and Waterproofing Limits
- 6 - Soil Boring Logs

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition
ASTM C1577

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (AASHTO M270, Grade 36)

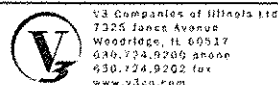
PRECAST UNITS

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

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

GENERAL PLAN & ELEVATION
IL. RTE. 170 OVER HOG RUN
F.A.P. RTE. 786 - SEC. (110) BR-2
LASALLE COUNTY
STATION 314+00.00
STRUCTURE NO. 050-2055



DESIGNED - CJB	REVISOR
CHECKED - CCF	REVISOR
DRAWN - CCF	REVISOR
CHECKED - CJB	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SHEET NO. 1 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-2	LASALLE	69	28
			CONTRACT NO. 66B19	

GENERAL NOTES

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The design fill height for this structure is maximum 2.29 feet and minimum 2.02 feet at edge of shoulder. The precast concrete box culvert sections shall conform to the requirements of ASTM C1577.

Areas of the precast box culvert in contact with cast-in-place concrete shall be sand blasted, cleaned, and wetted prior to placing concrete in the field according to Article 503.09(b) of the Standard Specifications.

In order to minimize excessive deflection and/or stresses in the soldier piles, compaction equipment used within 4 feet of the back face of the timber lagging shall be limited to lightweight mechanical tampers, rollers, or vibratory systems. Build top of headwalls parallel to the grade lines.

All construction joints shall be bonded according to Article 503.09 of the Standard Specifications.

End Sections will be paid for at the contract unit price each for BOX CULVERT END SECTIONS, CULVERT NO. 1 as outlined in Section 540 of the Standard Specifications.

The box culvert end section shall be built in the field and a precast option is not allowed. Class SI concrete shall be used for the concrete cast in the field for the cutoff walls, portions of the end sections being cast onto the end of the precast box sections, and the concrete facing for the walls. Concrete, rebar, and welded wire fabric quantities and lengths calculated for the end sections may vary based upon the precast box culverts supplied.

The ends of the precast box sections adjacent to the end sections shall be formed without the tongue and groove shapes specified in Article 8.1 of ASTM C1577.

The longitudinal reinforcement of the welded wire fabric extending from the precast boxes into the end sections shall have a minimum area of 0.20 in²/ft. Substitution of reinforcement bars for welded wire fabric is not allowed.

The joints between precast box sections shall be sealed and all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place, and protected during the backfilling process.

Contractor shall excavate behind existing abutments prior to removal of superstructure to balance front and back soil pressure. Due to low fill, provide Membrane Waterproofing for Culverts over the top of the culvert. See Special Provisions.

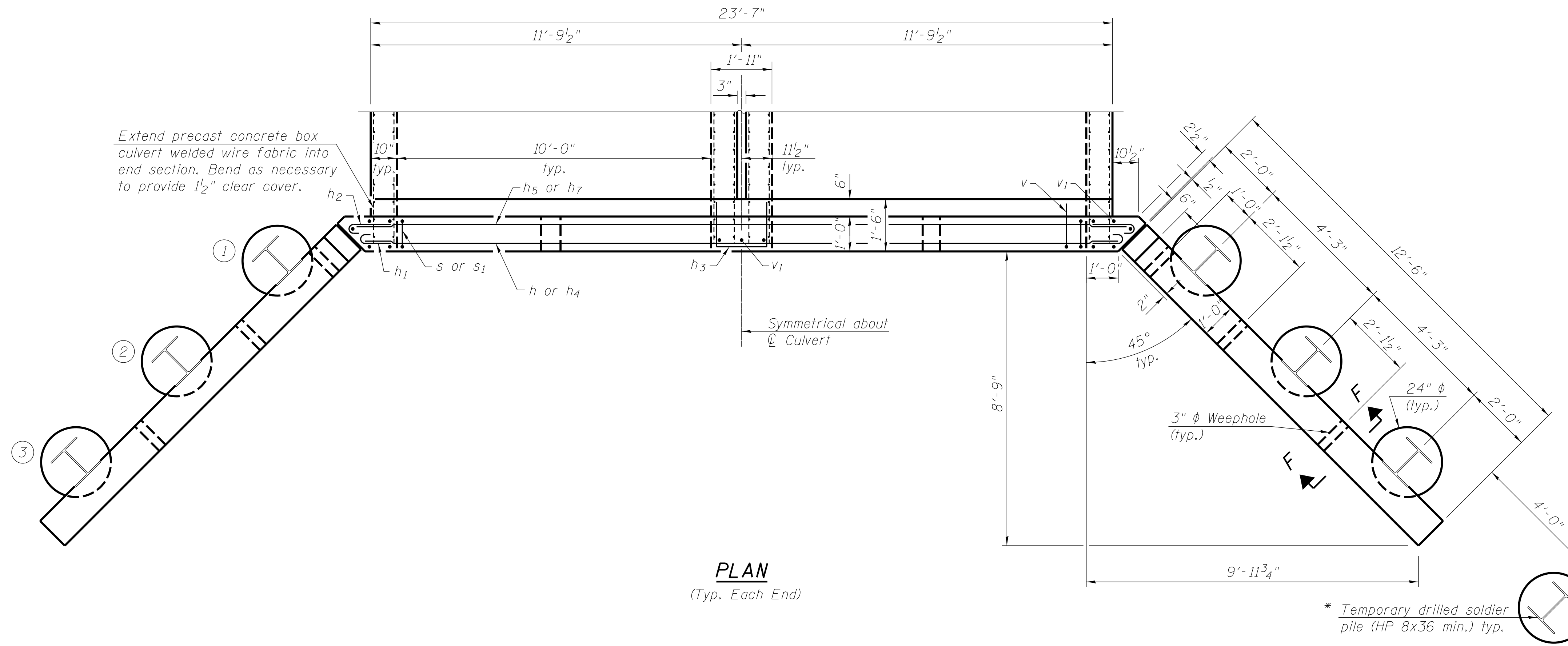
Note:
See sheet 3 of 6 for Sections B-B thru E-E.
See sheet 4 of 6 for Section F-F.

BILL OF MATERIAL

Item	Unit	Total
Box Culvert End Sections, Culvert No. 1	Each	2

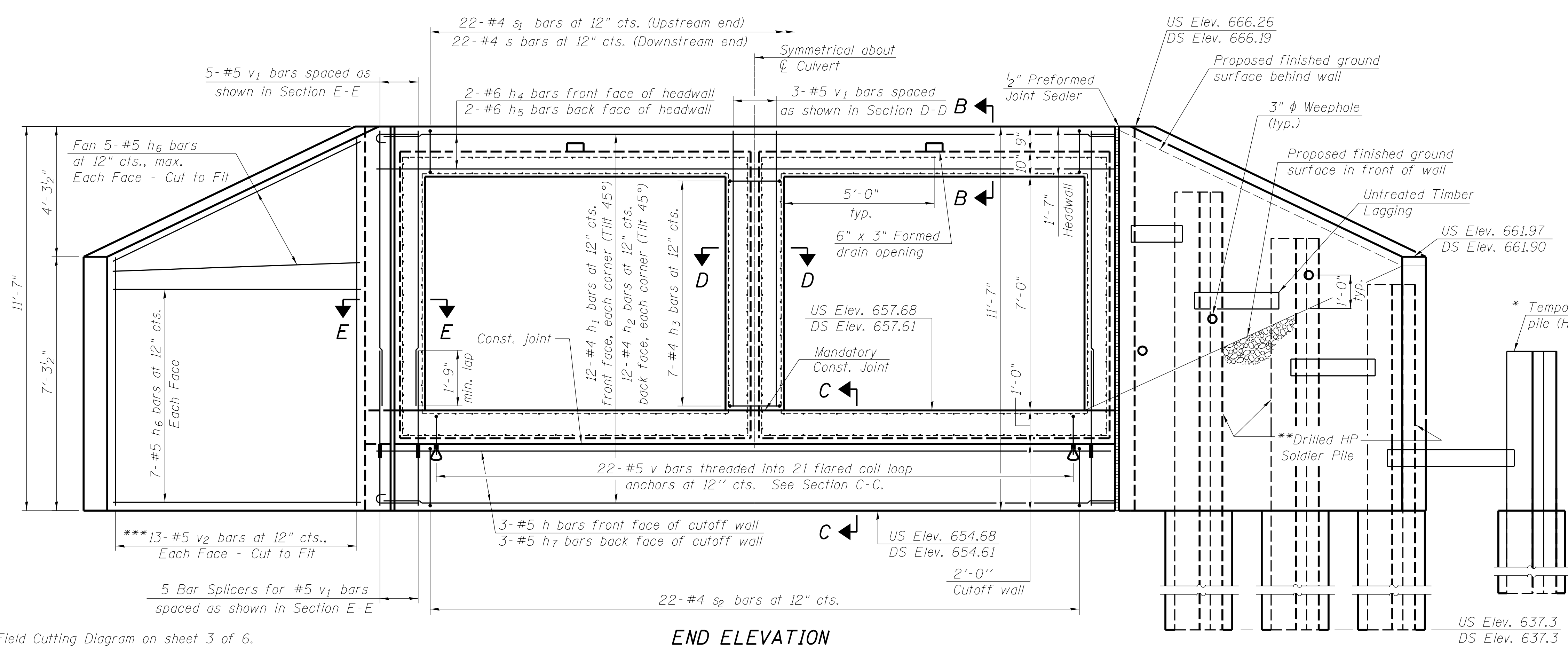
* The temporary soldier pile is required to facilitate backfilling of the wall prior to casting the concrete face. The temporary soldier pile shall be in accordance with the Special Provisions for Drilled Soldier Pile Retaining Wall except the material for the temporary soldier pile may be new or used. After the concrete face has been allowed to cure, the temporary soldier pile shall be removed 2 ft. below streambed along with adjacent timber lagging. Cost included with Box Culvert End Section.

** See Table A on sheet 4 of 6 for HP Soldier Pile details.



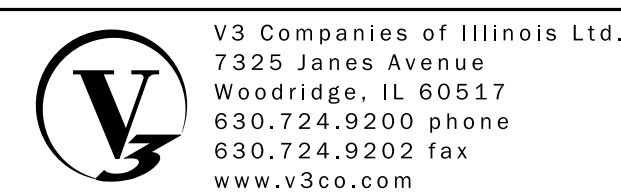
PLAN
(Typ. Each End)

* Temporary drilled soldier pile (HP 8x36 min.) typ.



END ELEVATION

*** See Field Cutting Diagram on sheet 3 of 6.



USER NAME =	DESIGNED - CJB	REVISIONS
PLOT SCALE =	CHECKED - CCF	REVISIONS
PLOT DATE =	DRAWN - CCF	REVISIONS
	CHECKED - CJB	REVISIONS

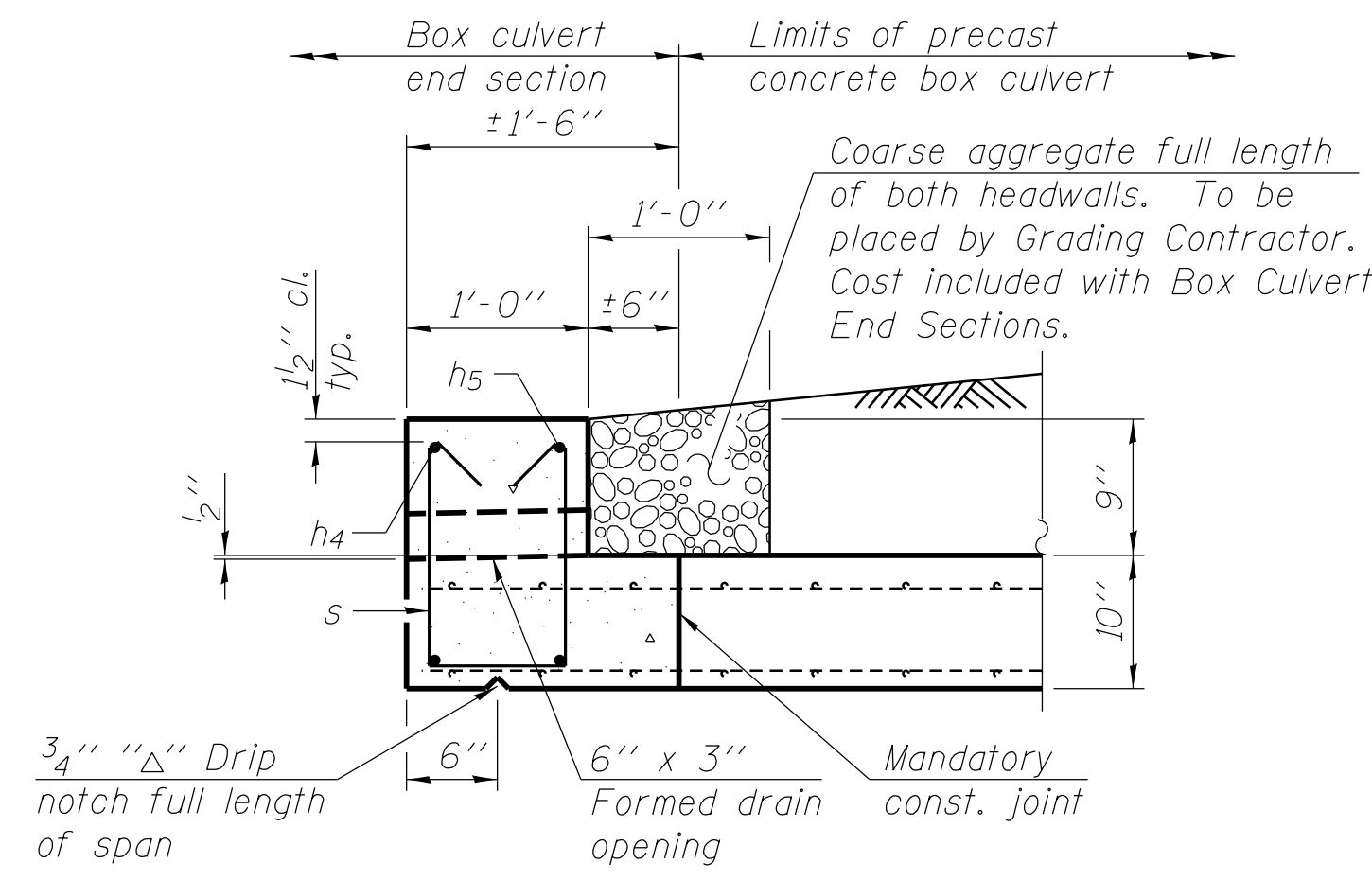
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2055**

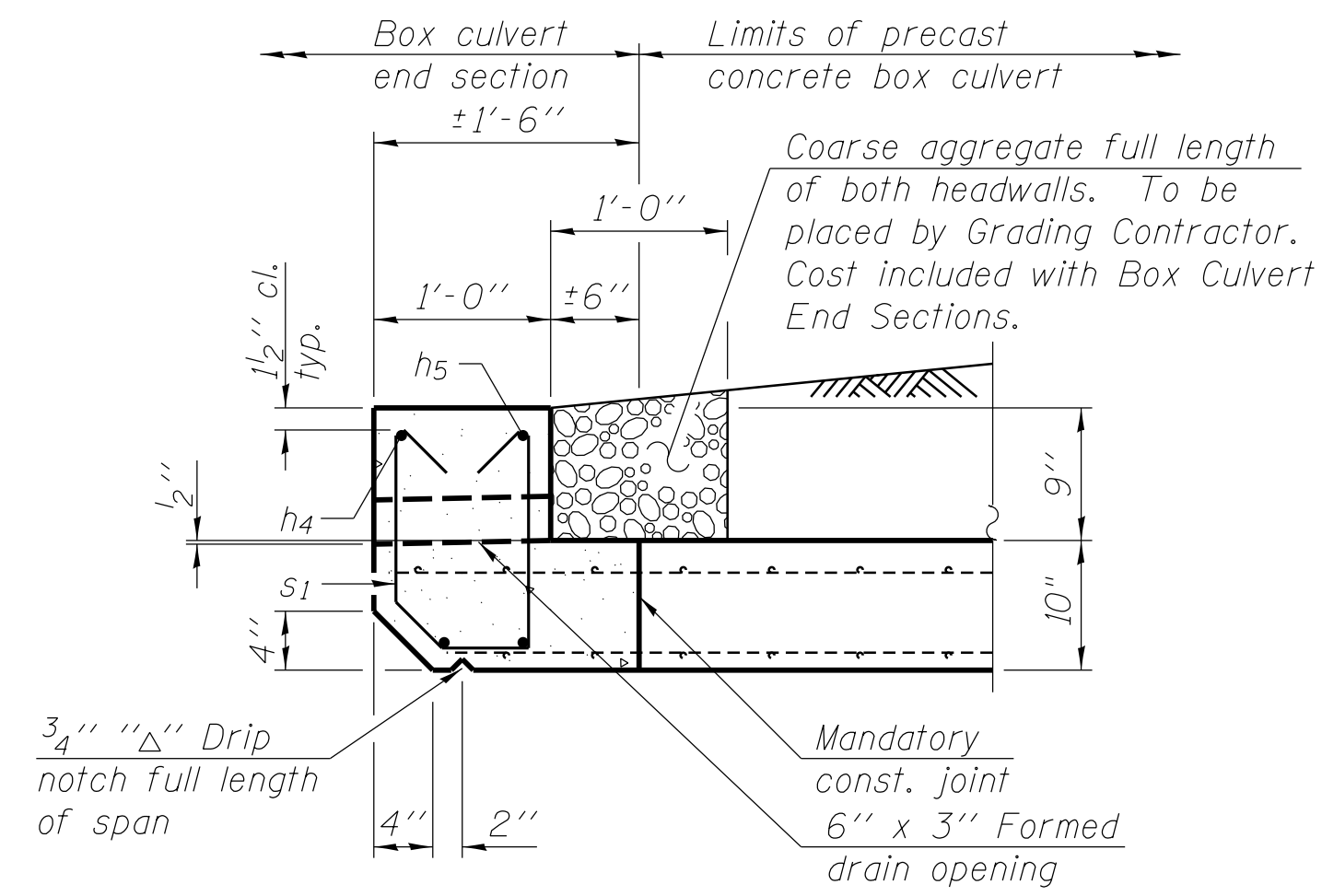
SHEET NO. 2 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-2	LASALLE	69	29
CONTRACT NO. 66B19				

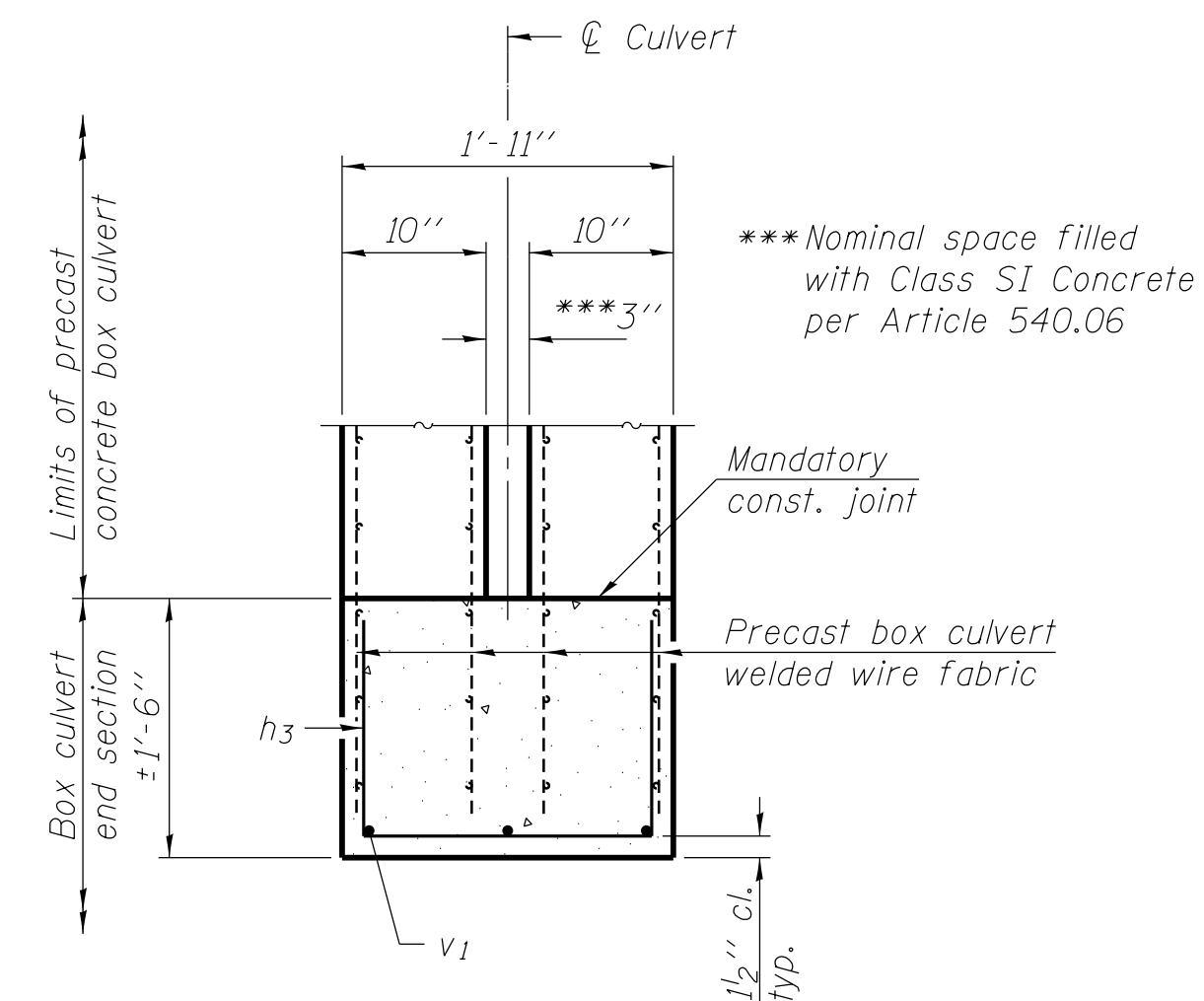
ILLINOIS FED. AID PROJECT



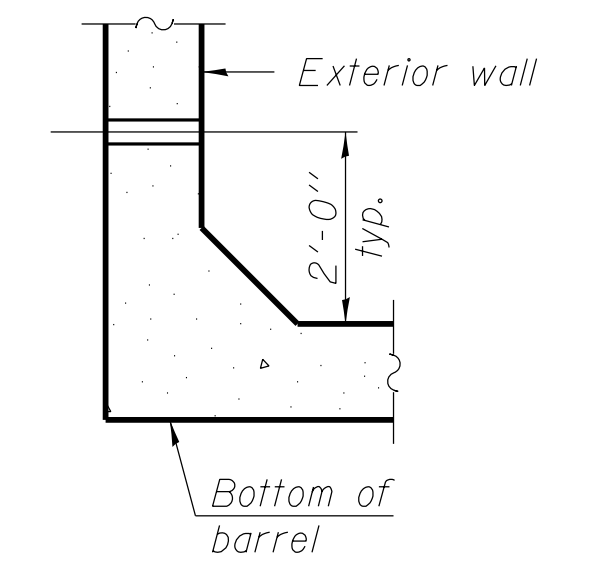
SECTION B-B
(Downstream Section)



SECTION B-B
(Upstream Section)

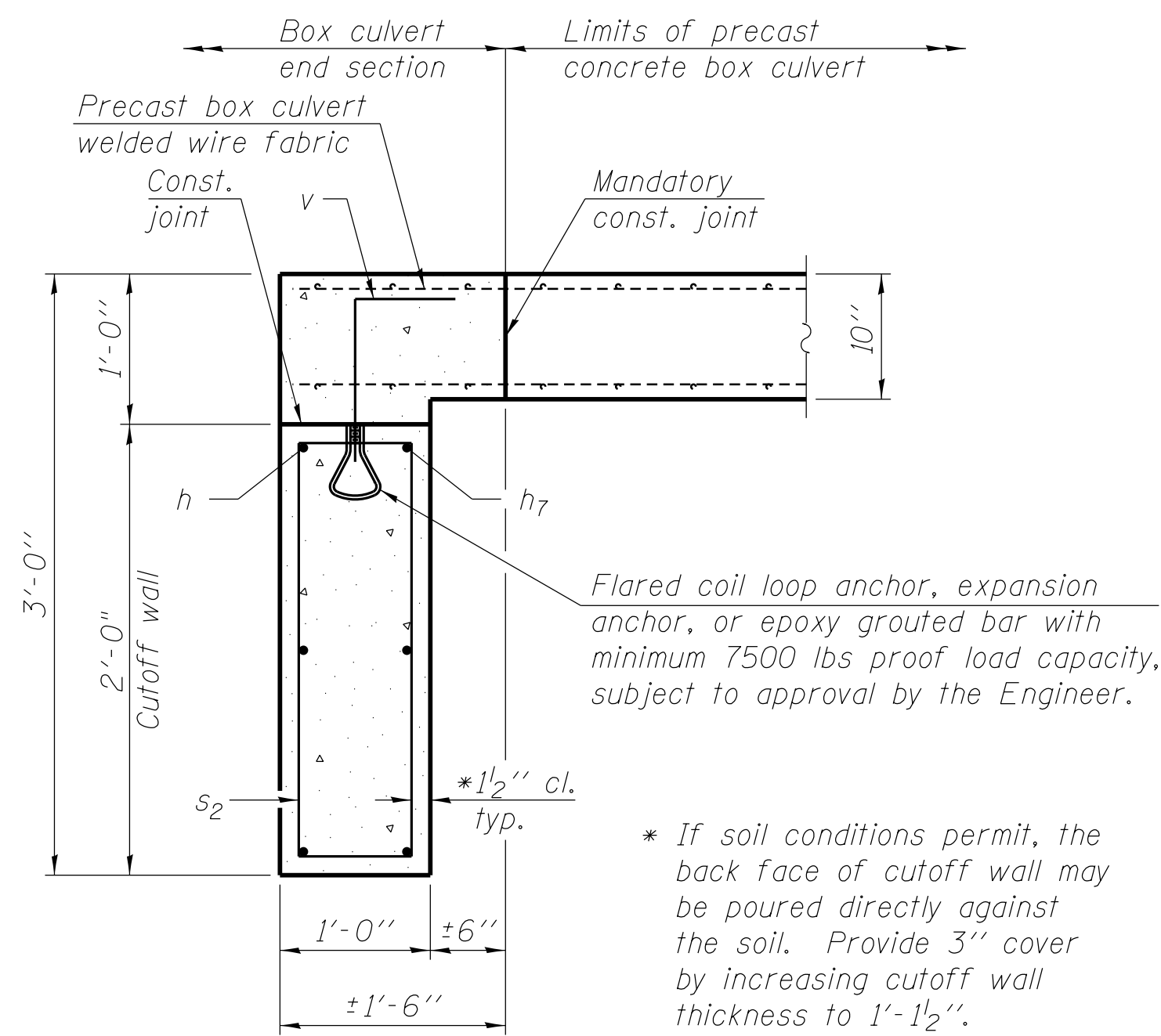


SECTION D-D
(Typ. Both Ends)

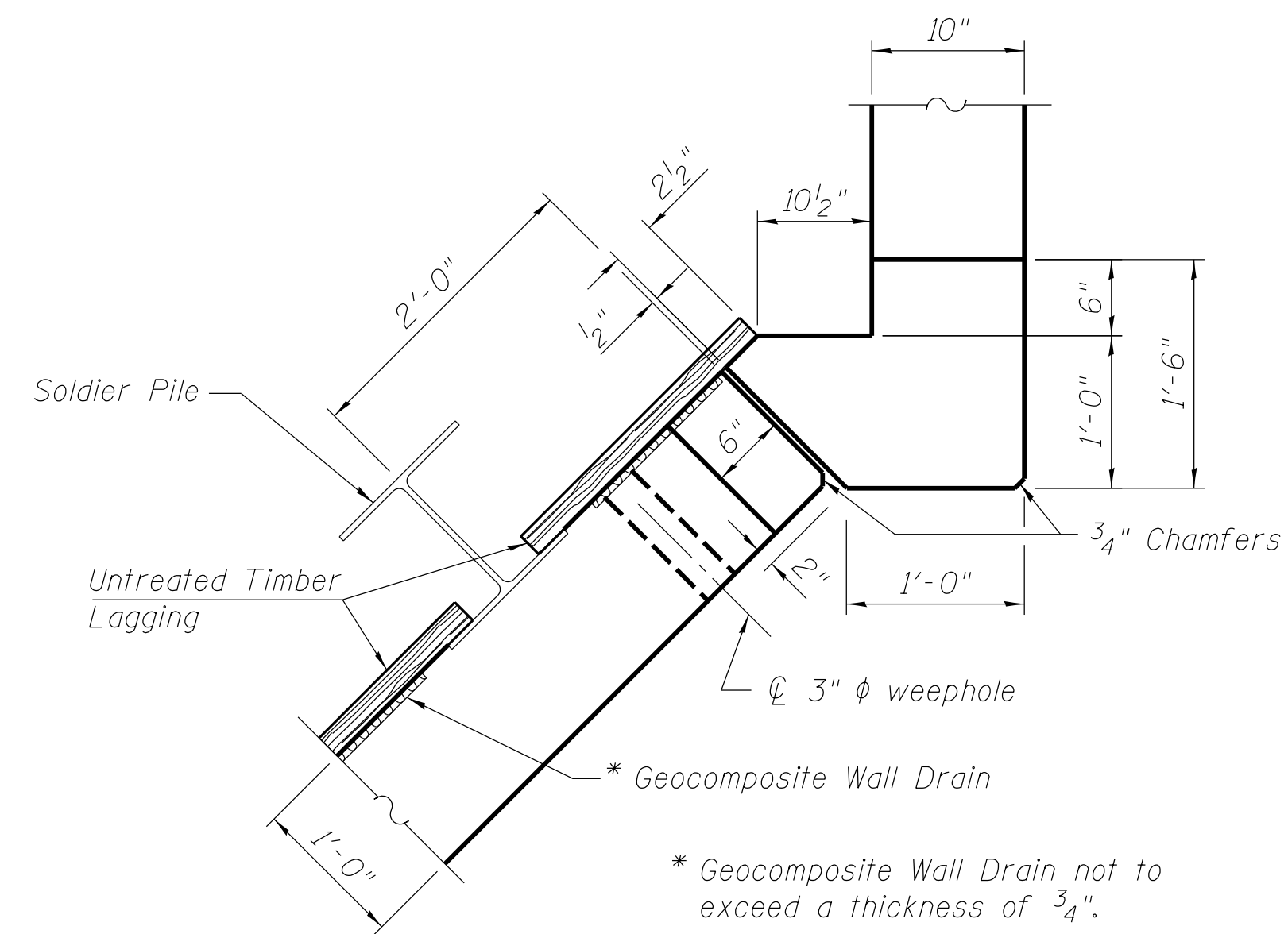


DRAIN DETAIL

Provide 3" Ø drain holes in exterior walls at ±8' cts. See Article 503.11 of the Standard Specifications.

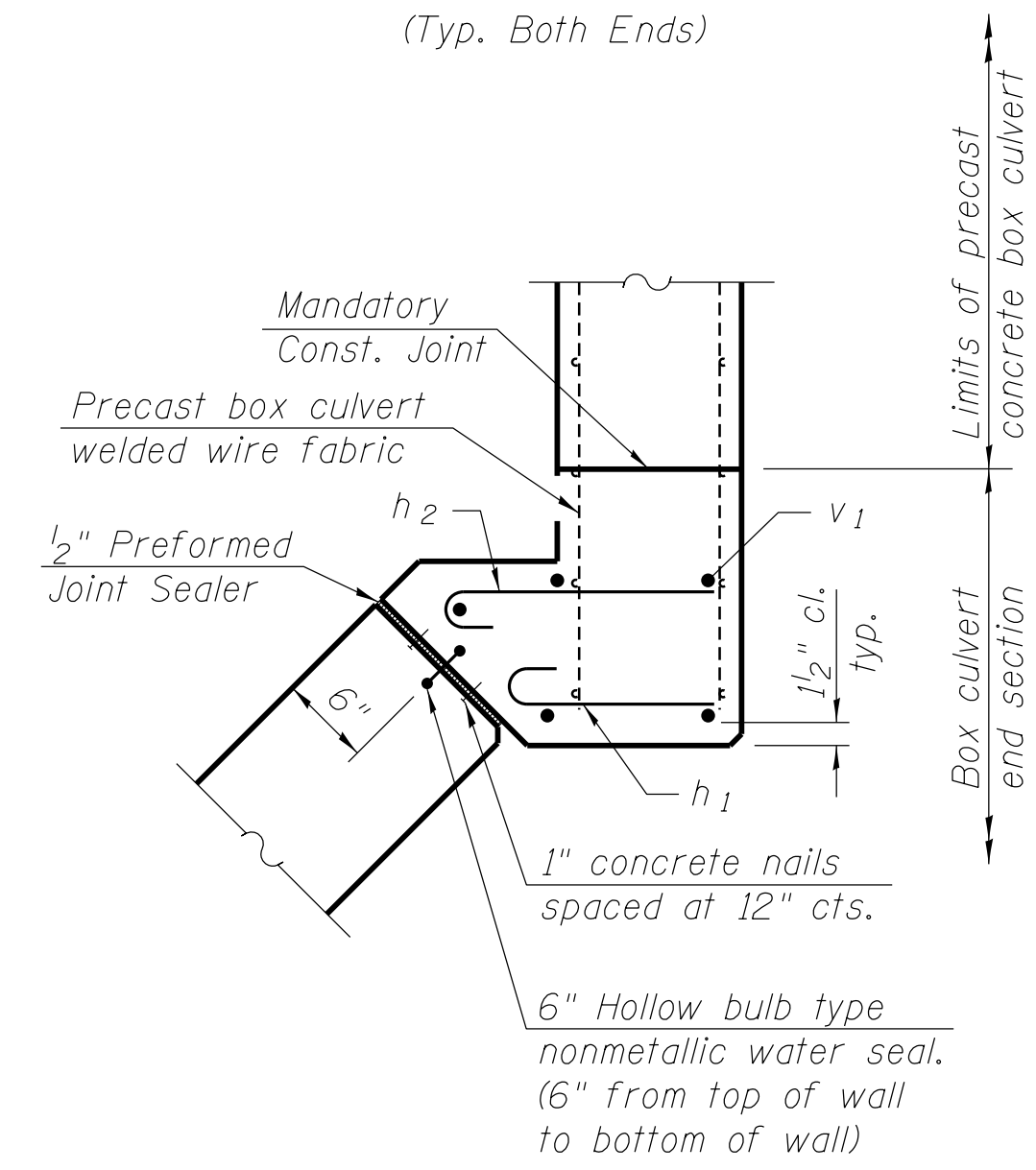


SECTION C-C



SECTION E-E

(Showing dimensions, wall drain, and weephole)



SECTION E-E

(Showing reinforcement and seal)

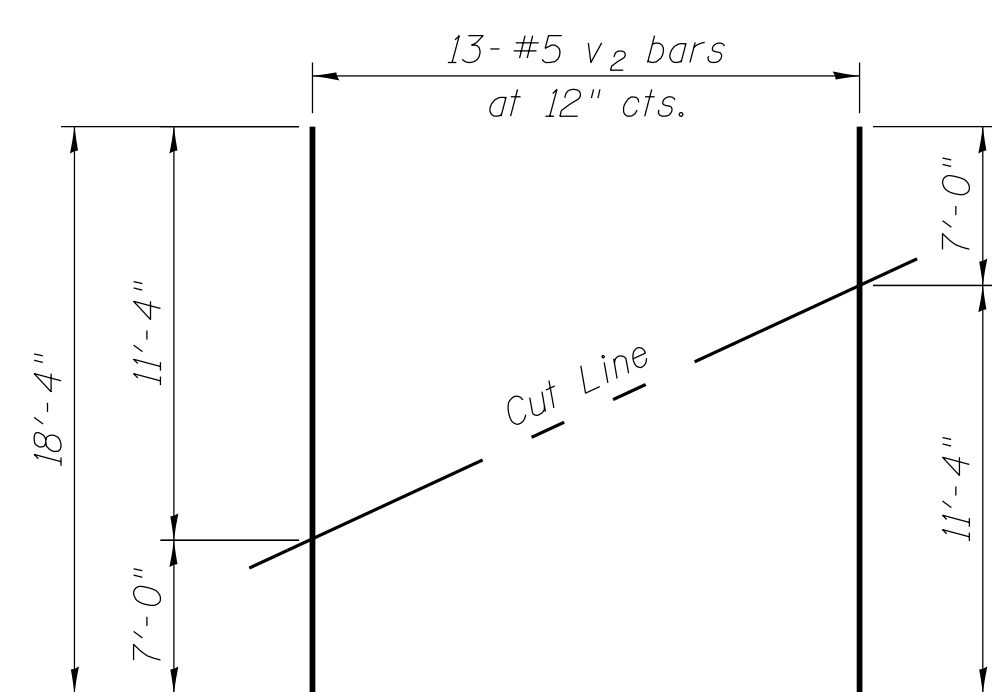
ONE END SECTION BILL OF MATERIAL

(For information only)

Bar	No.	Size	Length	Shape
h	3	#5	23'-5"	—
h ₁	24	#4	1'-5"	U
h ₂	24	#4	1'-9"	U
h ₃	7	#4	4'-2"	U
h ₄	2	#6	23'-7"	—
h ₅	2	#6	25'-0"	—
h ₆	48	#5	12'-3"	—
h ₇	3	#5	25'-0"	—
s	22	#4	4'-2"	U
s ₁	22	#4	4'-0"	U
s ₂	22	#4	5'-9"	U
v	22	#5	1'-9"	—
v ₁	13	#5	8'-4"	—
v ₂	26	#5	18'-4"	—
Concrete Structures			Cu. Yd.	8.8
Stud Shear Connectors			Each	52
Reinforcement Bars			Pound	1,780
Bar Splicers			Each	10
Furnishing Soldier Piles (HP Section)			Foot	174
Drilling and Setting Soldier Piles (in soil)			Cu. Ft.	365
Untreated Timber Lagging			Sq. Ft.	188
Concrete Box Culverts			Cu. Yd.	6.1
Geocomposite Wall Drain			Sq. Yd.	5

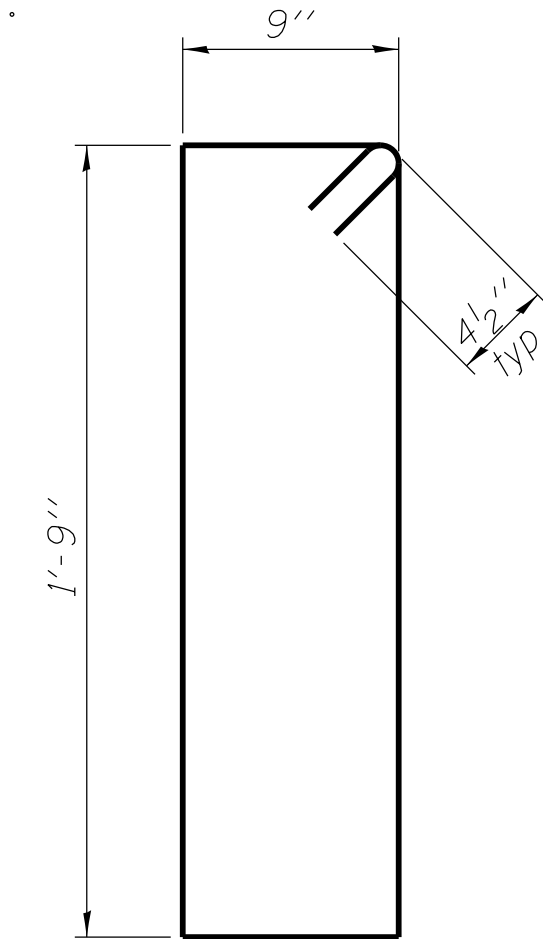
** Only s or s₁ bars are required for each end section.

The above pay items will not be measured for payment but shall be included in the contract unit price each for Box Culvert End Sections of the culvert number specified.

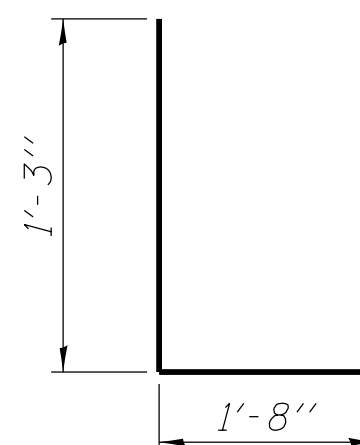


FIELD CUTTING DIAGRAM

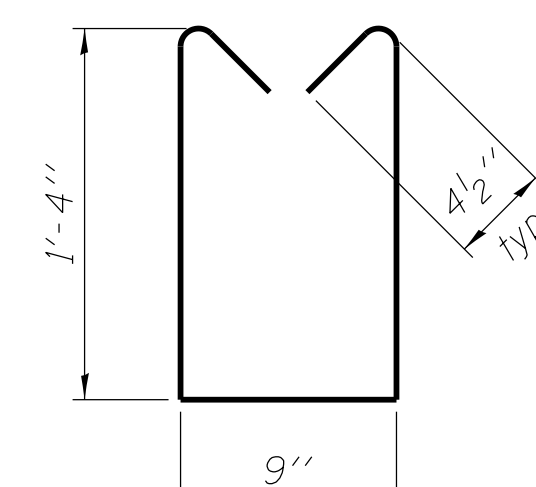
Order v₂ bars full length. Cut to fit and use remainder of bar in opposite face.



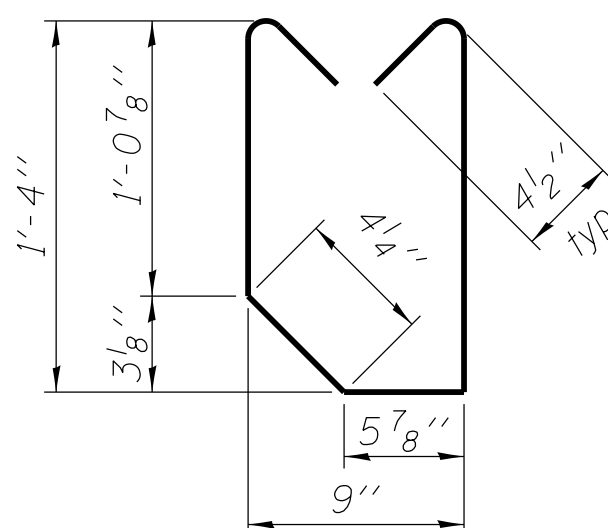
BAR s₂



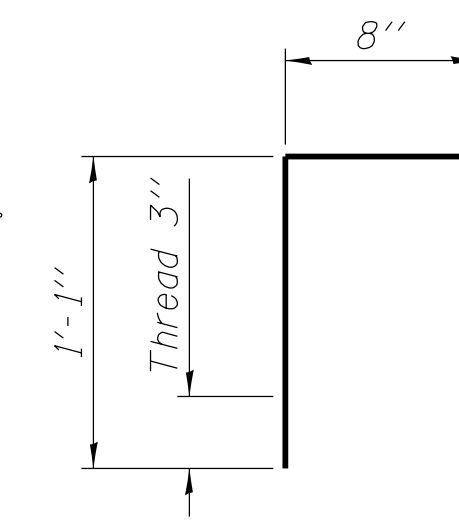
BAR h₃



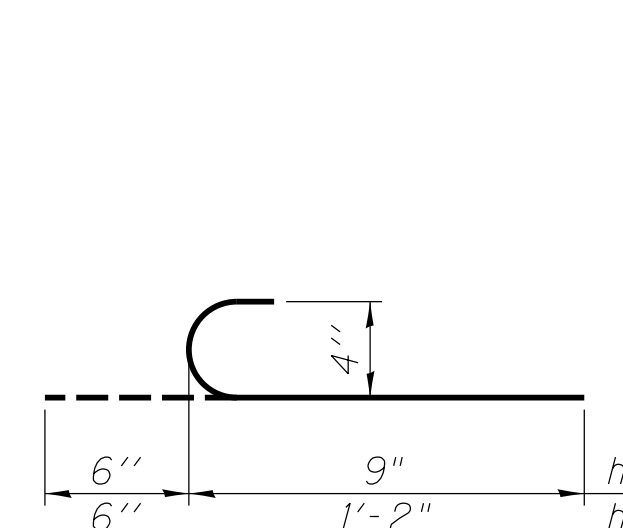
BAR s



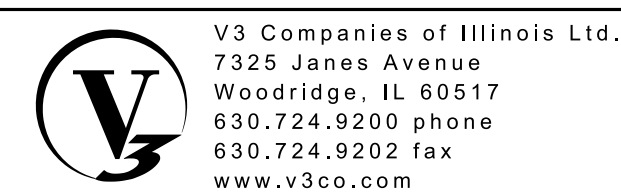
BAR s₁



BAR v



BARS h₁ and h₂



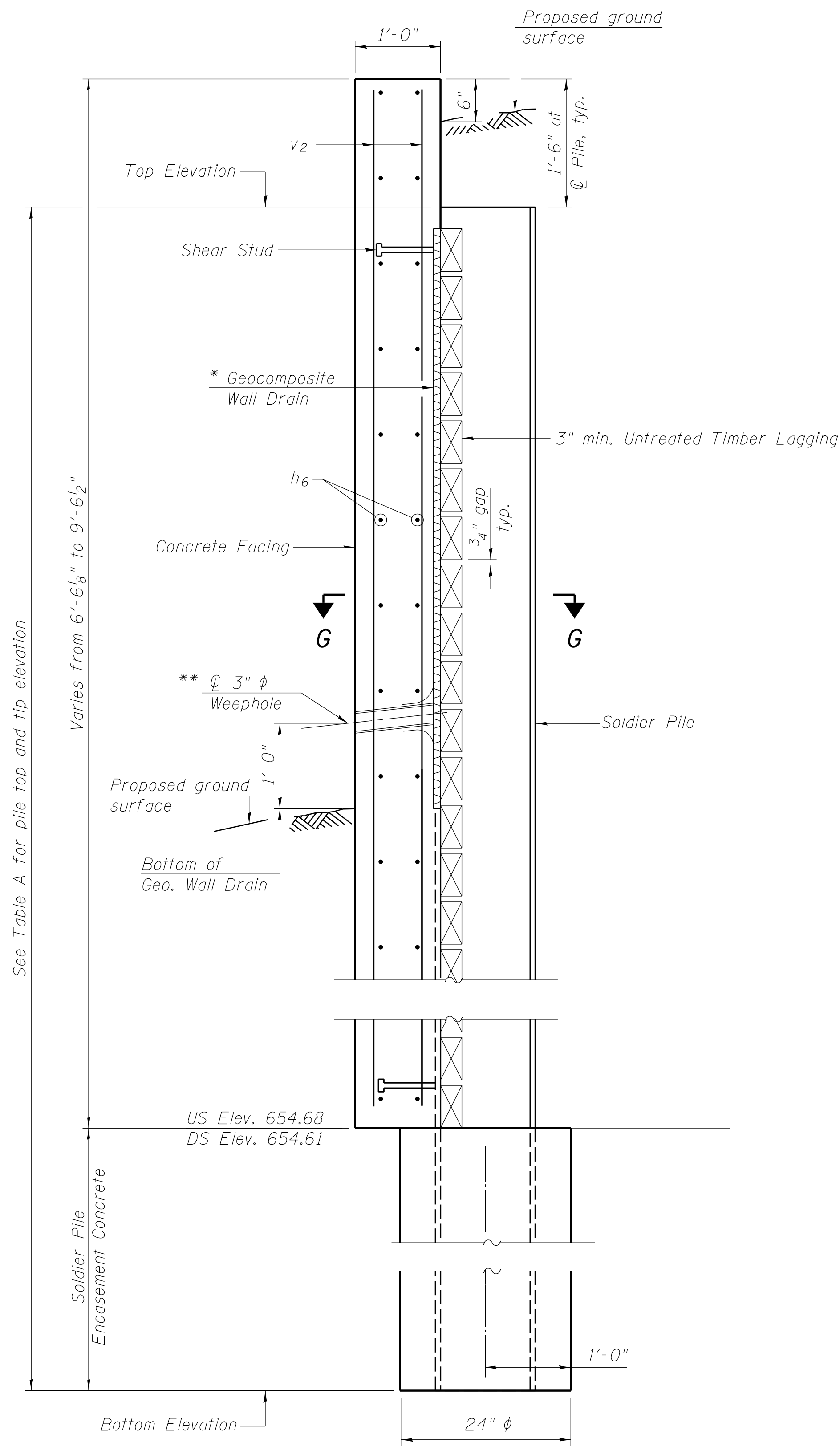
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PLOT SCALE =	CHECKED - CCF	REVISED
PLOT DATE =	DRAWN - CCF	REVISED
	CHECKED - CCF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

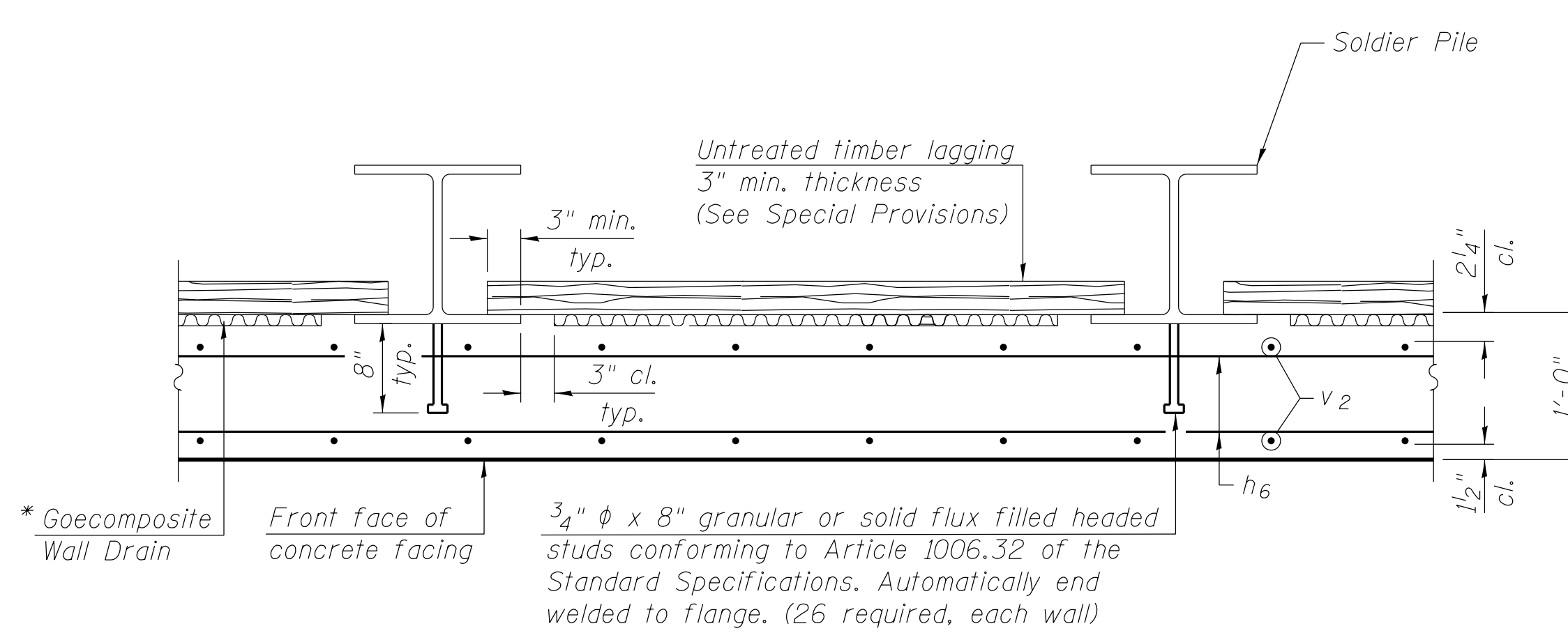
BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2055

SHEET NO. 3 OF 6 SHEETS

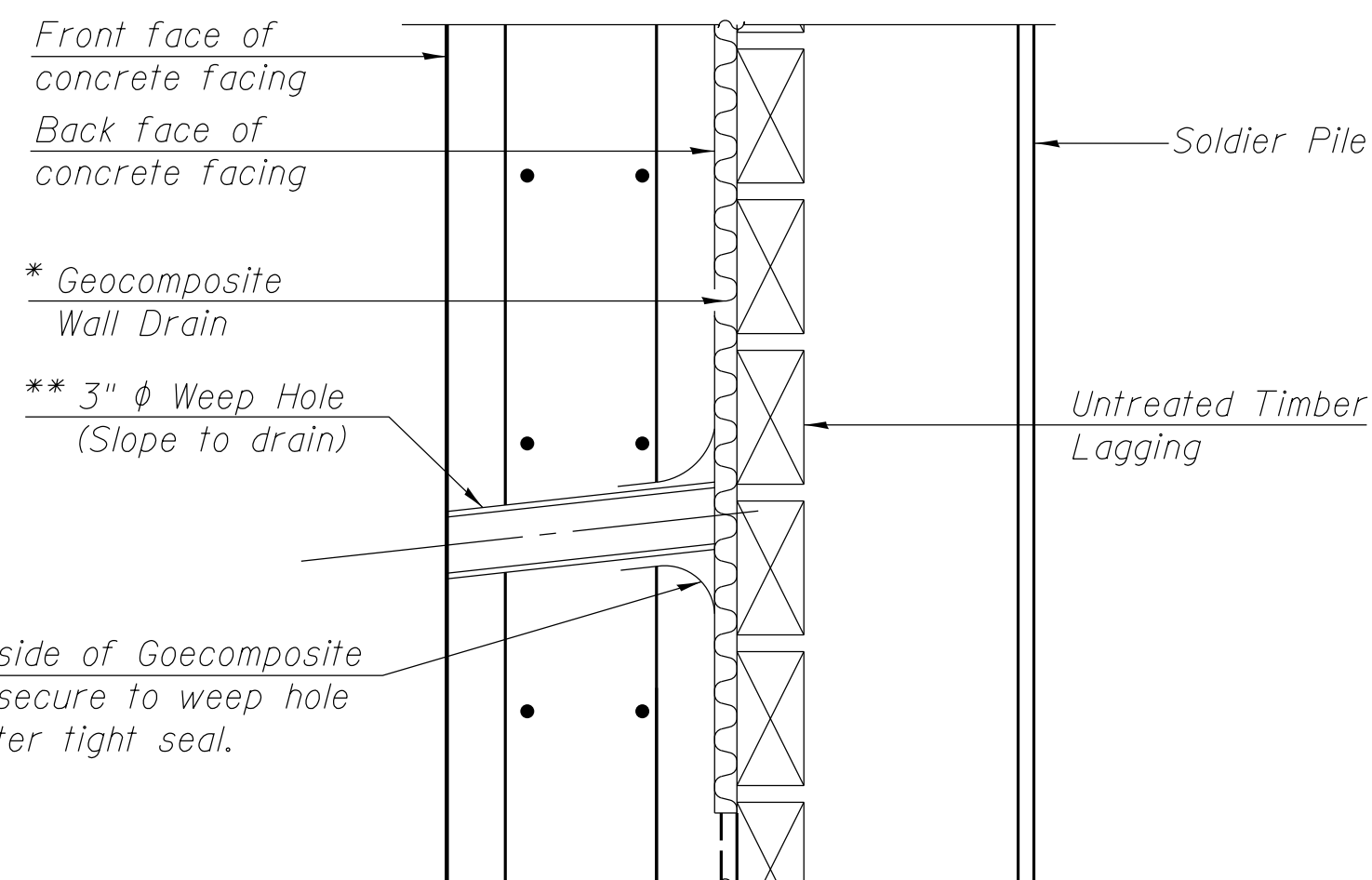
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-2	LASALLE	69	30
CONTRACT NO. 66B19				
ILLINOIS FED. AID PROJECT				



SECTION F-F



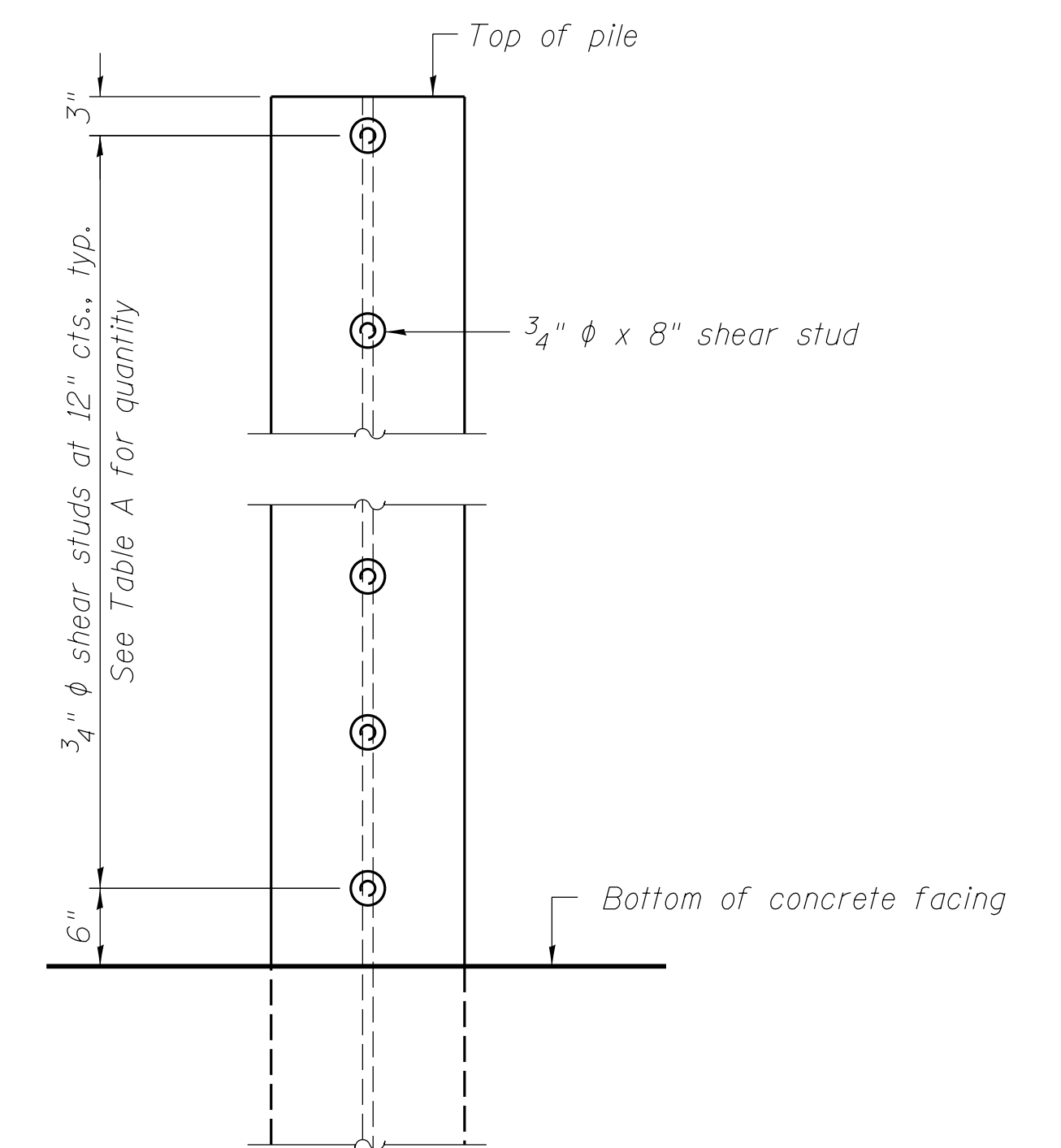
SECTION G-G



WEEP HOLE DRAIN DETAIL

** Cost of the weep hole drain and the connection to the geocomposite wall drain are included with Box Culvert End Sections.

Note:
The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.



SHEAR STUD DETAIL

(Elevation of Pile Shown)

TABLE A

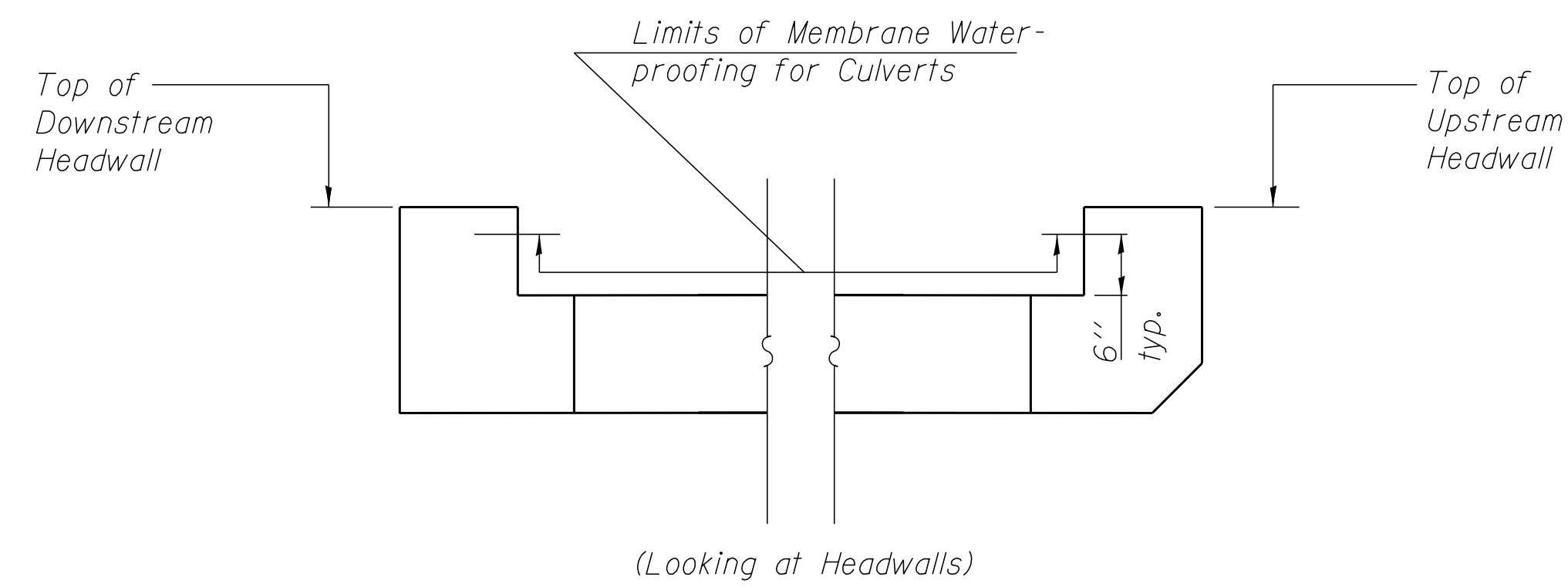
(Upstream)

Soldier Pile	Pile Size	Top Elevation (ft.)	Bottom Elevation (ft.)	Total Height (ft.)	Number of Shear Studs
1	HP 14 x 89	664.22	637.3	26.92	10
2	HP 14 x 89	662.70	637.3	25.40	9
3	HP 14 x 89	661.19	637.3	23.89	7
4	HP 8x36 (min.)	659.04	648.8	10.24	

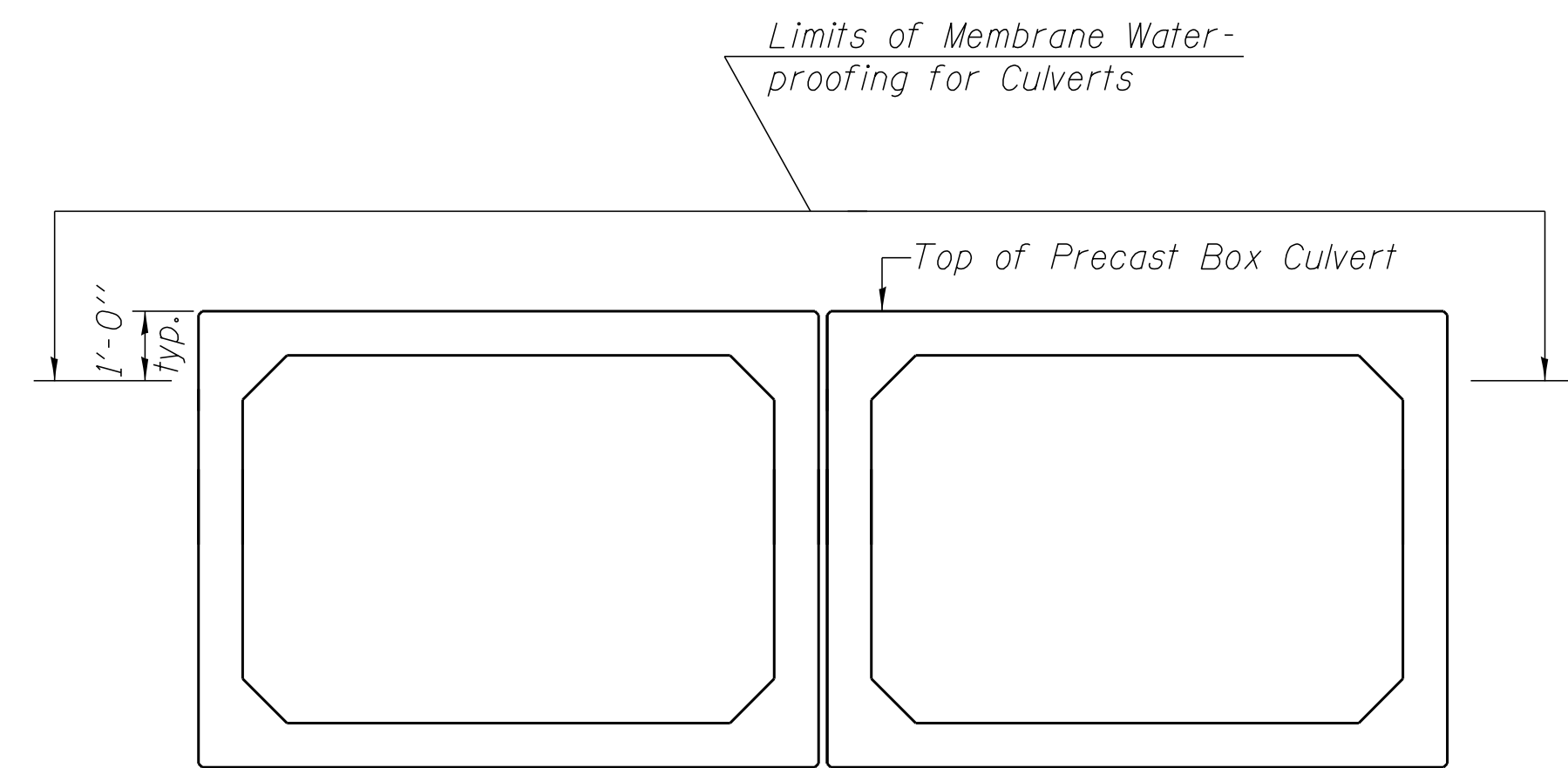
TABLE A

(Downstream)

Soldier Pile	Pile Size	Top Elevation (ft.)	Bottom Elevation (ft.)	Total Height (ft.)	Number of Shear Studs
1	HP 14 x 89	664.15	637.3	26.85	10
2	HP 14 x 89	662.63	637.3	25.33	9
3	HP 14 x 89	661.12	637.3	23.82	7
4	HP 8x36 (min.)	658.97	648.8	10.17	



(Looking at Headwalls)



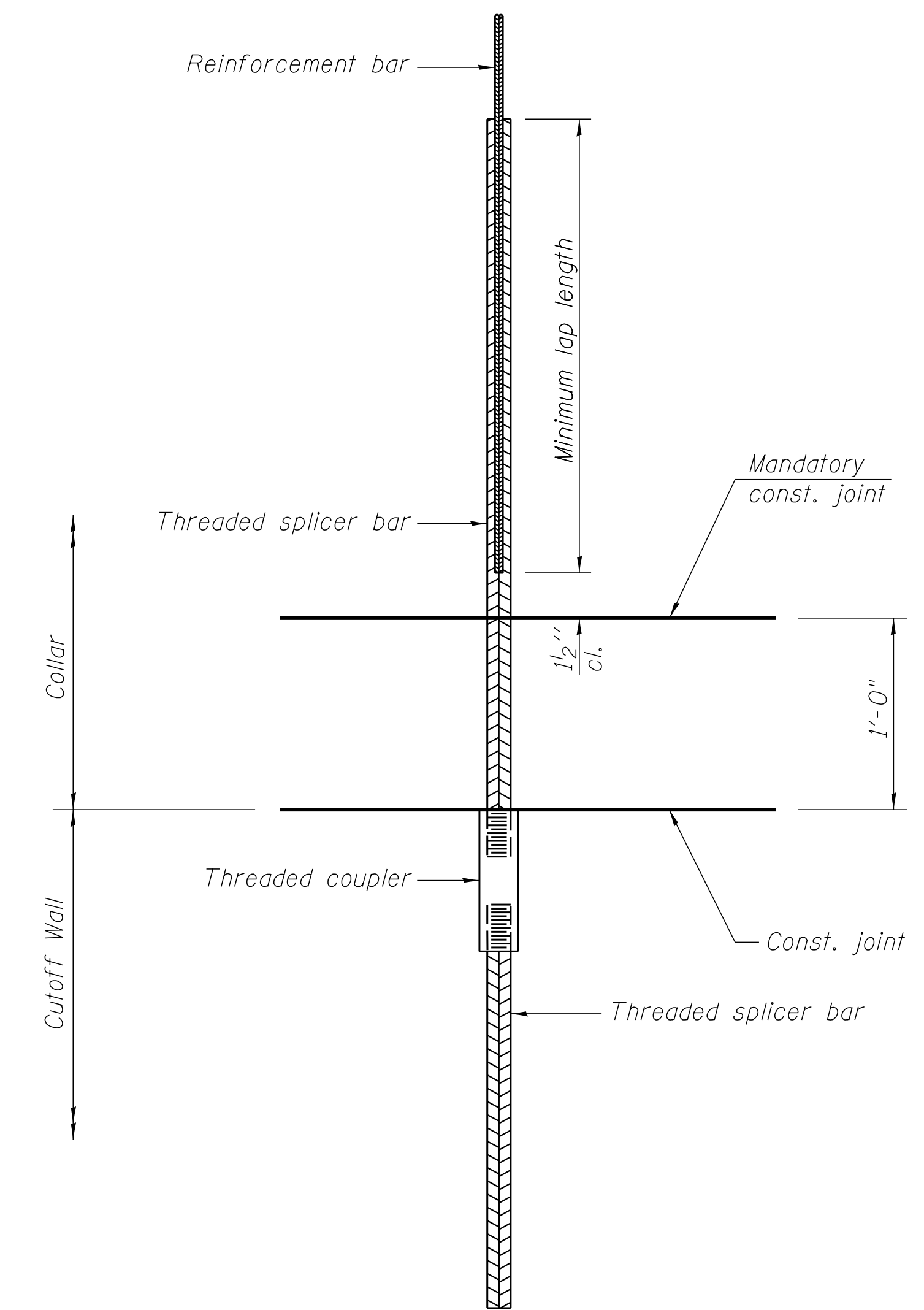
(Looking at Box Sections)

LIMITS OF MEMBRANE WATER-PROOFING FOR CULVERTS

Note: Membrane Waterproofing for Culverts shall cover top of the top slab, top one foot of side walls, and 6 inches up inside face of the headwalls.

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.



BAR SPLICER ASSEMBLY FOR BOX CULVERT END SECTION

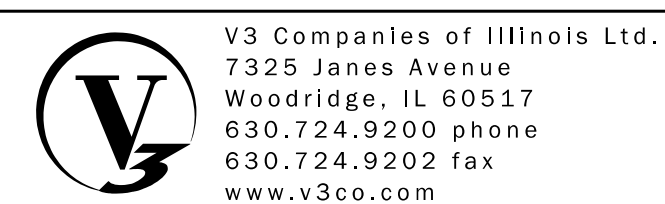
Bar size to be spliced	Minimum Lap Lengths					
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

Location	Bar size	No. assemblies required	Table for minimum lap length
* Cutoff Wall	5	10	1

* For one end section



USER NAME =	DESIGNED - CJB	REVISIONS
PLOT SCALE =	CHECKED - CCF	REVISIONS
PLOT DATE =	DRAWN - CCF	REVISIONS
	CHECKED - CJB	REVISIONS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT END SECTION DETAILS AND WATERPROOFING LIMITS
STRUCTURE NO. 050-2055**

SHEET NO. 5 OF 6 SHEETS

F.A.P. RTE. 786	SECTION (110) BR-2	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 32
			CONTRACT NO. 66B19	
ILLINOIS FED. AID PROJECT				



SOIL BORING LOG

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over Hog Run, 5.93 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION NE 1/4, SEC. 23, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

Table with columns for SOIL BORING LOG data including elevations, soil descriptions, and blow counts.

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, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over Hog Run, 5.93 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION NW 1/4, SEC. 24, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

Table with columns for SOIL BORING LOG data including elevations, soil descriptions, and blow counts.

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, form 137 (Rev. 8-99)

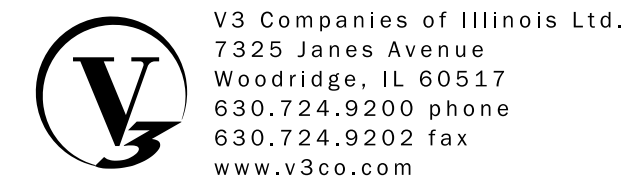


Table with columns for USER NAME, DESIGNED, CHECKED, DRAWN, PLOT SCALE, PLOT DATE, REVISED, and CHECKED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 050-2055

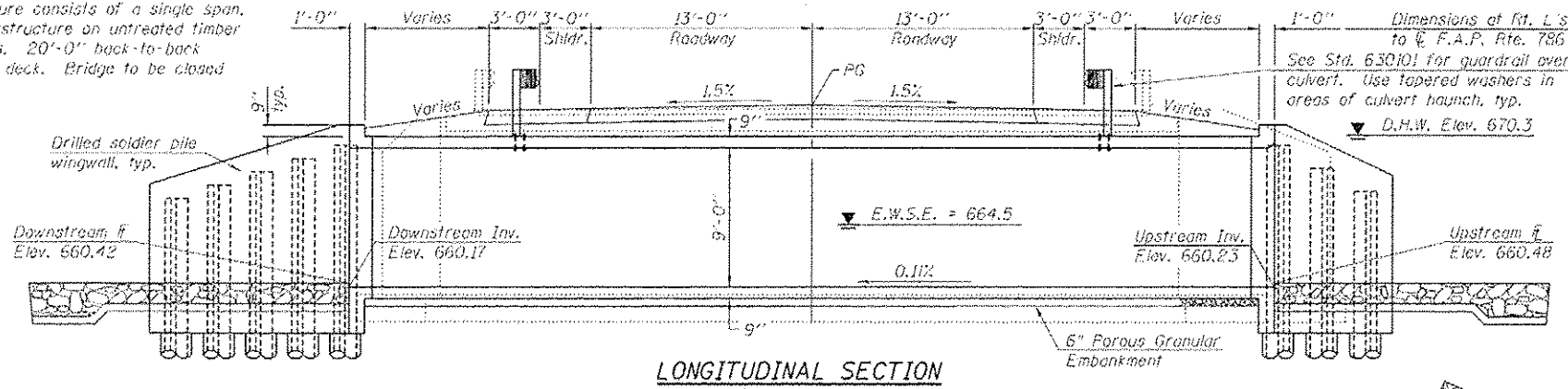
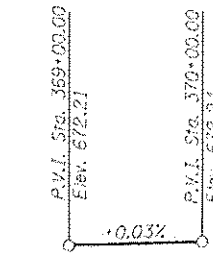
SHEET NO. 6 OF 6 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO., and ILLINOIS FED. AID PROJECT.

Benchmark: Chiseled "a" on southeast corner of headwall.
Sta. 369+17.89, 21.38' L.L., Elev. 672.43

Existing Structure: S.N. 050-0156 built in 1933 as S.B.I. Route 70A, Section 110-B. Existing structure consists of a single span, reinforced concrete deck superstructure on untreated timber pile supported closed abutments. 20'-0" back-to-back abutments, 43'-0" out-to-out deck. Bridge to be closed during construction.

No Salvage.



WATERWAY INFORMATION

Drainage Area = 3.1 sq. mi. Existing Low Grade Elev. 671.90 @ Sta. 369+25.63
Proposed Low Grade Elev. 672.03 @ Sta. 368+95.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater E.L.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	10	293	128	158	669.5	0.1	0.0	669.5	669.5
Base	50	433	156	162	670.3	0.3	0.2	670.5	670.5
Base	100	488	156	162	670.4	0.3	0.3	670.7	670.6
Overtopping									
Max. Calc.	500	619	156	162	670.5	0.6	0.5	671.1	671.0

Existing 10-year velocity = 2.3 ft./sec., Proposed 10-year velocity = 1.9 ft./sec.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. yd.	321
Filter Fabric	Sq. yd.	321
Removal of Existing Structures No. 2	Each	1
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 2	Each	2
Precast Concrete Box Culvert 9' x 9'	Foot	114.0
Membrane Waterproofing for Culverts	Sq. yd.	152.2

CULVERT CONSTRUCTION SEQUENCE

1. Remove existing structure.
2. Build cutoff wall.
3. Prepare bed.
4. Place precast box culvert sections.
5. Form and place concrete for portion of end sections to be cast onto precast box sections.
6. Drill soldier piles (May be completed prior to box placement).
7. Install timber lagging.
8. Place and compact backfill behind wall to top of timber lagging.
9. Place geocomposite wall drain.
10. Install shear stud connectors.
11. Place rebar and form wall face.
12. Cast concrete wingwall.
13. Remove temp. soldier pile and remaining timber outside wall limits.
14. Place remainder of backfill to proposed ground surface elevations on both sides of wall. (Backfill front of wall as much as possible before backfilling is completed.)

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition
ASTM C1577

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 35,000 psi (AASHTO M270, Grade 36)

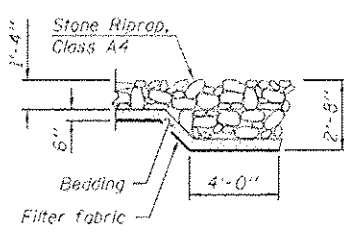
PRECAST UNITS
f'c = 5,000 psi
fy = 65,000 psi (Welded wire fabric)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

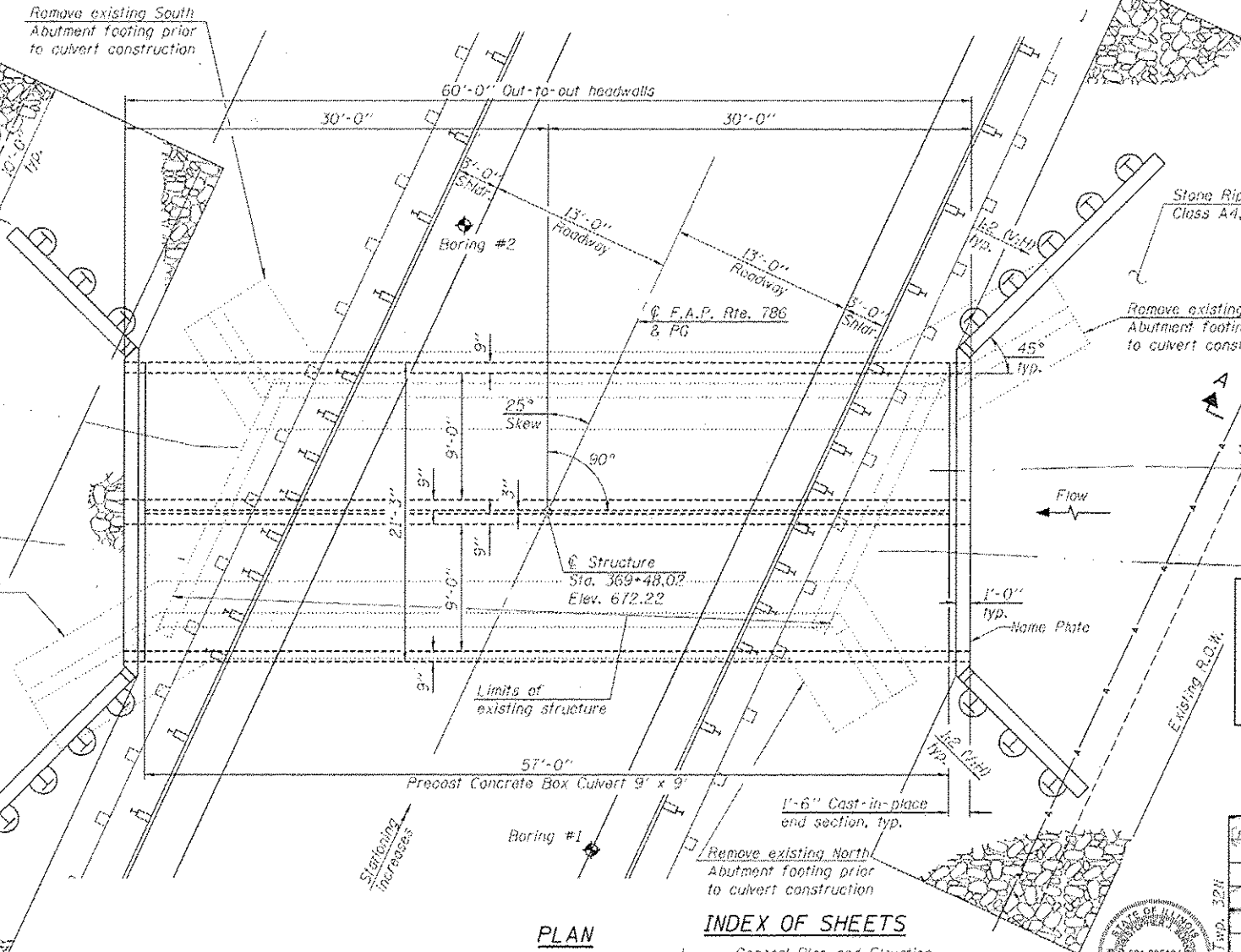
GENERAL PLAN & ELEVATION
IL. RTE. 170 OVER
UNNAMED CREEK
F.A.P. RTE. 786 - SEC. (110) BR-3
LASALLE COUNTY
STATION 369+48.02
STRUCTURE NO. 050-2056

PROFILE GRADE
(Along F.A.P. Rte. 786)



SECTION A-A

APPROVED
For Structural Adequacy Only
S. Carl Krueger
Engineer of Bridges & Structures



PLAN

DESIGN SCOUR ELEVATION TABLE

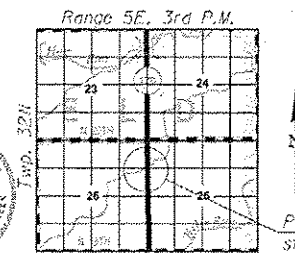
Design Scour Elevation (ft.)	Upstream	Downstream
	657.23	657.17

INDEX OF SHEETS

1. General Plan and Elevation
- 2.-5. Box Culvert End Section Details
6. Bar Splicer Assembly Details and Waterproofing Limits
7. Soil Boring Logs

NAME PLATE
See Std. 515001

STATION 369+48.02
BUILT 201 BY
STATE OF ILLINOIS
F.A.P. RTE. 786 SEC. 110BR-3
LOADING HL-93
STRUCTURE NO. 050-2056



LOCATION SKETCH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-3	LASALLE	69	34

CONTRACT NO. 66B19
ILLINOIS F&E, AIO PROJECT

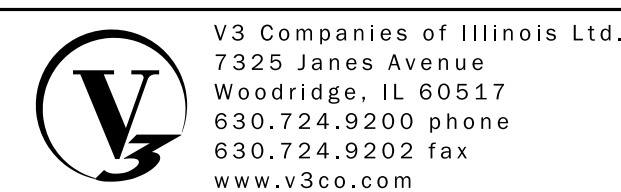
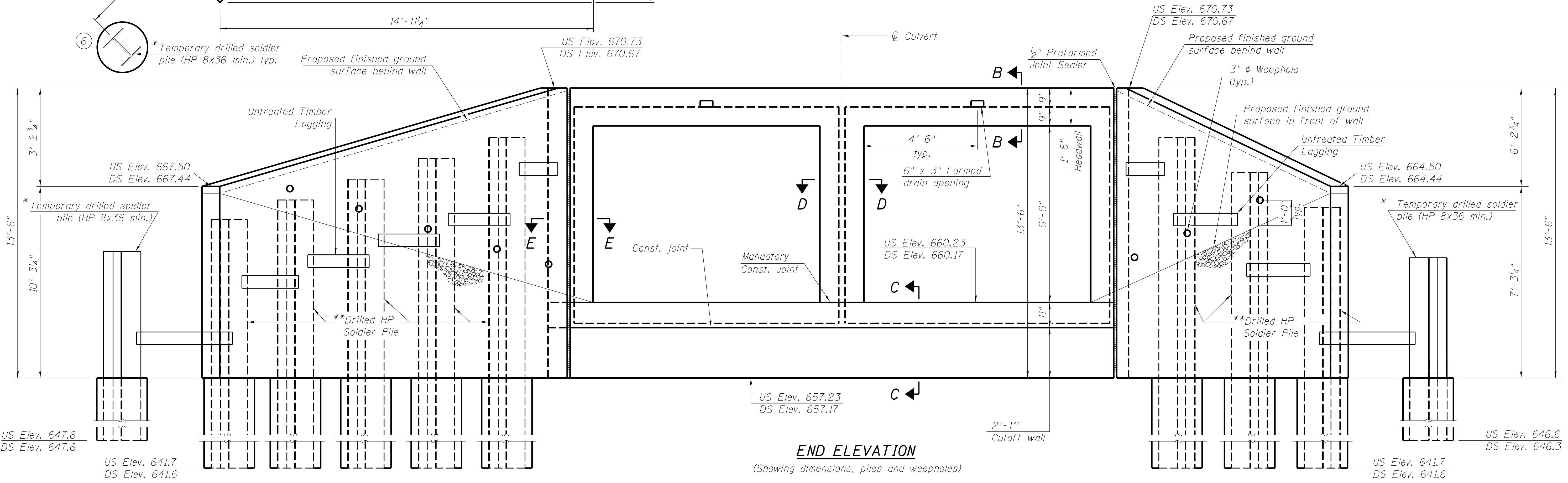
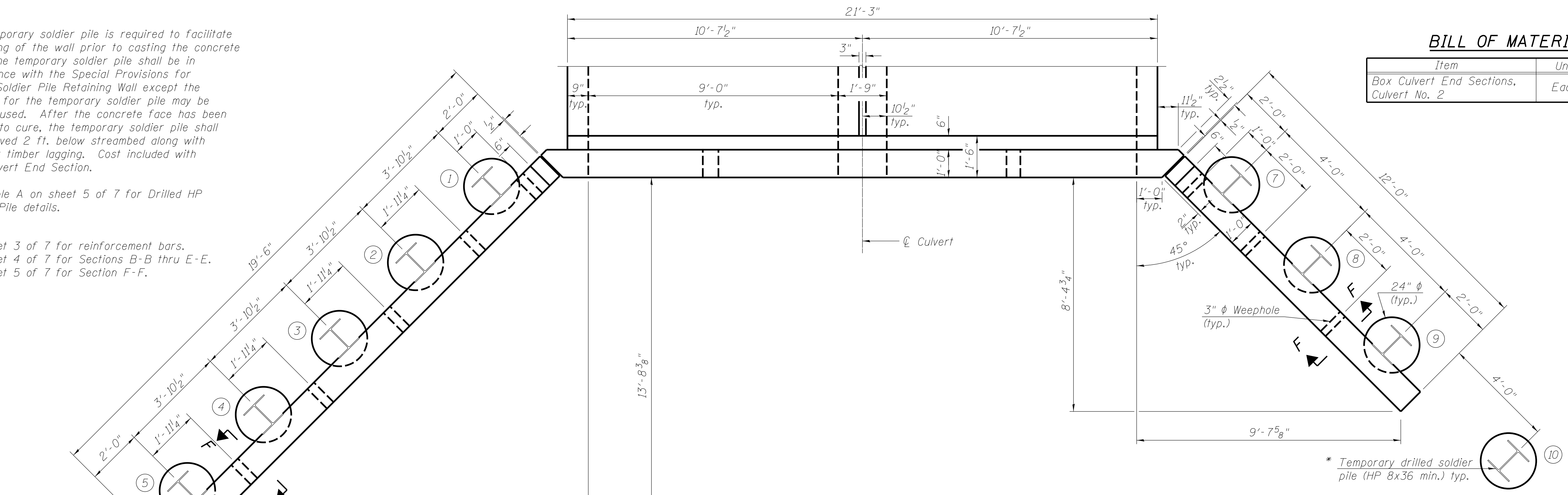
* The temporary soldier pile is required to facilitate backfilling of the wall prior to casting the concrete face. The temporary soldier pile shall be in accordance with the Special Provisions for Drilled Soldier Pile Retaining Wall except the material for the temporary soldier pile may be new or used. After the concrete face has been allowed to cure, the temporary soldier pile shall be removed 2 ft. below streambed along with adjacent timber lagging. Cost included with Box Culvert End Section.

** See Table A on sheet 5 of 7 for Drilled HP Soldier Pile details.

Note:
See sheet 3 of 7 for reinforcement bars.
See sheet 4 of 7 for Sections B-B thru E-E.
See sheet 5 of 7 for Section F-F.

BILL OF MATERIAL

Item	Unit	Total
Box Culvert End Sections, Culvert No. 2	Each	2



USER NAME =	DESIGNED - CJB	REVISED -
PLOT SCALE =	CHECKED - CCF	REVISED -
PLOT DATE =	DRAWN - CCF	REVISED -
	CHECKED - CJB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2056

SHEET NO. 2 OF 7 SHEETS

F.A.P. RTE. 786	SECTION (110) BR-3	COUNTY LASALLE	TOTAL SHEETS 69	SHEET NO. 35
CONTRACT NO. 66B19				

ILLINOIS FED. AID PROJECT

GENERAL NOTES

Layout of slope and structure may be varied to suit ground conditions in the field as directed by the Engineer.

The design fill height for this structure is maximum 2.27 feet and minimum 2.00 feet at edge of shoulder. The precast concrete box culvert sections shall conform to the requirements of ASTM C1577.

Areas of the precast box culvert in contact with cast-in-place concrete shall be sand blasted, cleaned, and wetted prior to placing concrete in the field according to Article 503.09(b) of the Standard Specifications.

In order to minimize excessive deflection and/or stresses in the soldier piles, compaction equipment used within 4 feet of the back face of the timber lagging shall be limited to lightweight mechanical tampers, rollers, or vibratory systems.

Build top of headwalls parallel to the grade lines.

All construction joints shall be bonded according to Article 503.09 of the Standard Specifications.

End Sections will be paid for at the contract unit price each for BOX CULVERT END SECTIONS, Culvert No. 2 as outlined in Section 540 of the Standard Specifications.

The box culvert end section shall be built in the field and a precast option is not allowed. Class SI concrete shall be used for the concrete cast in the field for the cutoff walls, portions of the end sections being cast onto the end of the precast box sections, and the concrete facing for the walls.

Concrete, rebar, and welded wire fabric quantities and lengths calculated for the end sections may vary based upon the precast box culverts supplied.

The ends of the precast box sections adjacent to the end sections shall be formed without the tongue and groove shapes specified in Article 8.1 of ASTM C1577.

The longitudinal reinforcement of the welded wire fabric extending from the precast boxes into the end sections shall have a minimum area of 0.20 in ²/ft. Substitution of reinforcement bars for welded wire fabric is not allowed.

The joints between precast box sections shall be sealed and all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place, and protected during the backfilling process.

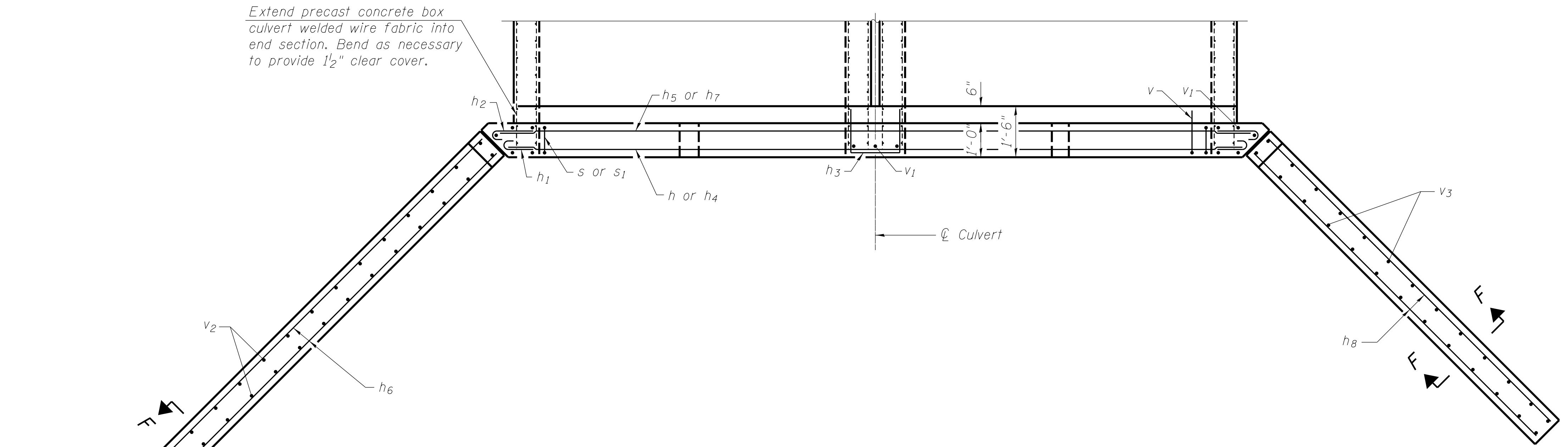
Contractor shall excavate behind existing abutments prior to removal of superstructure to balance front and back soil pressure.

Due to low fill, provide Membrane Waterproofing for Culverts over the top of the culvert. See Special Provisions.

Note:

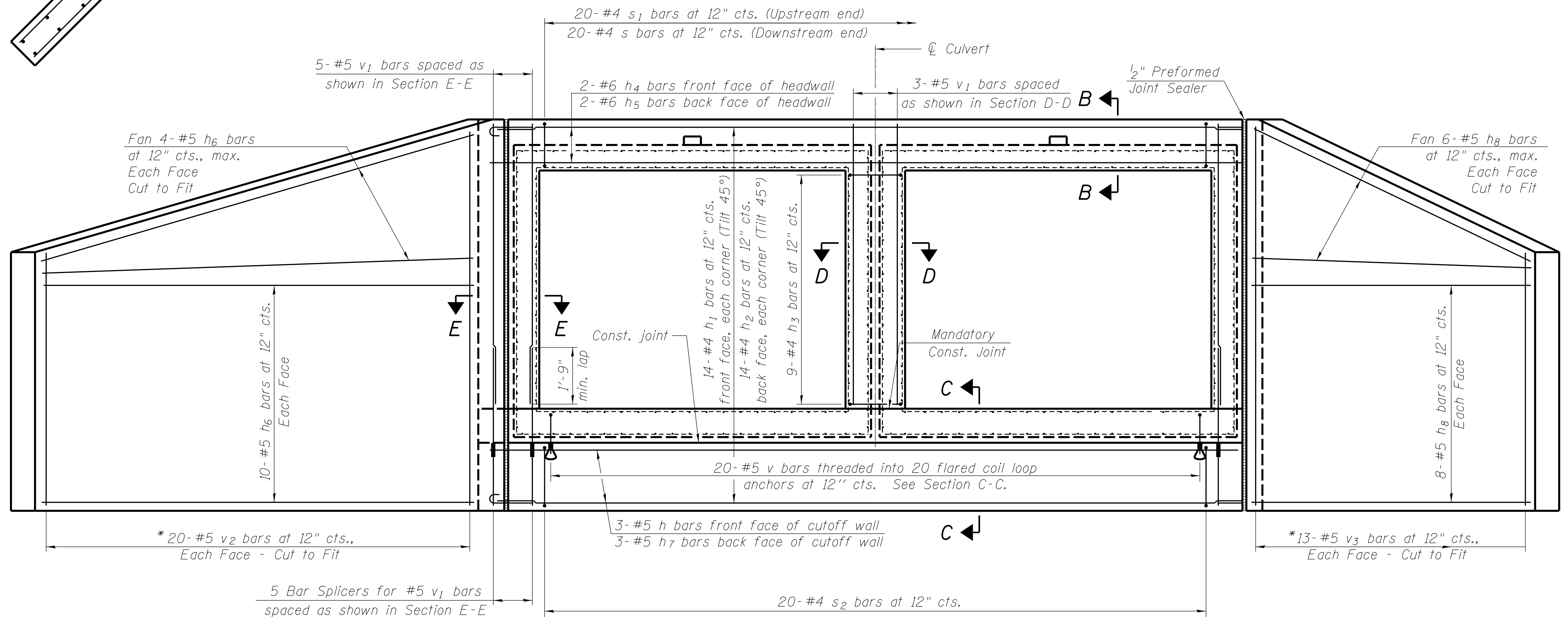
See sheet 2 of 7 for dimensions, piles and weepholes.
See sheet 4 of 7 for Sections B-B thru E-E.
See sheet 5 of 7 for Section F-F.

Extend precast concrete box culvert welded wire fabric into end section. Bend as necessary to provide 1/2" clear cover.



PLAN

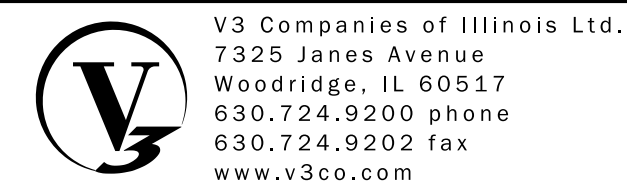
(Typ. Each End)
(Showing reinforcement. Piles not shown for clarity)



END ELEVATION

(Showing reinforcement. Piles not shown for clarity)

* See sheet 4 of 7 for Field Cutting Diagram..



USER NAME =	DESIGNED - CJB	REVISED -
PLOT SCALE =	CHECKED - CCF	REVISED -
PLOT DATE =	DRAWN - CCF	REVISED -
	CHECKED - CJB	REVISED -

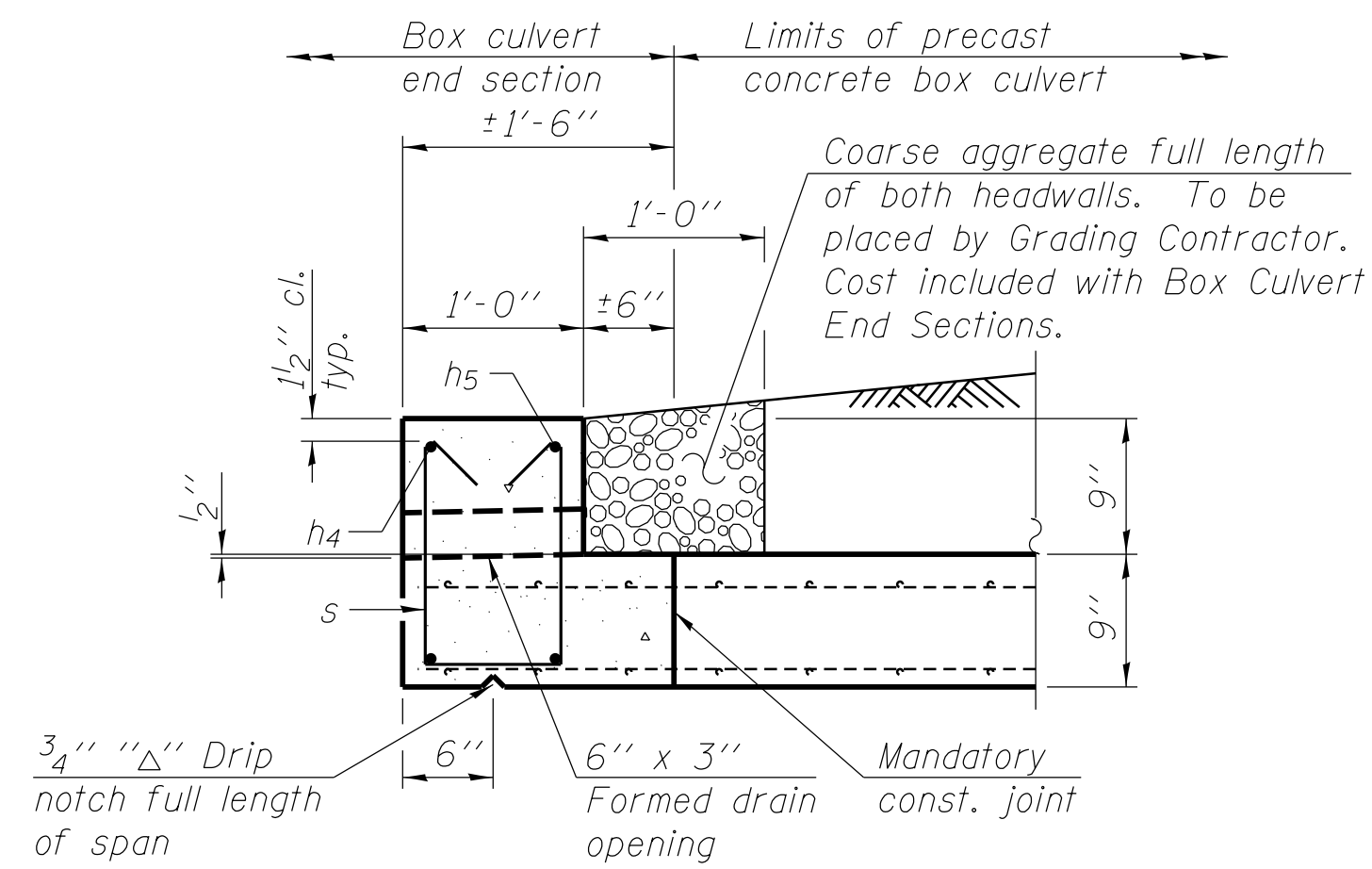
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2056**

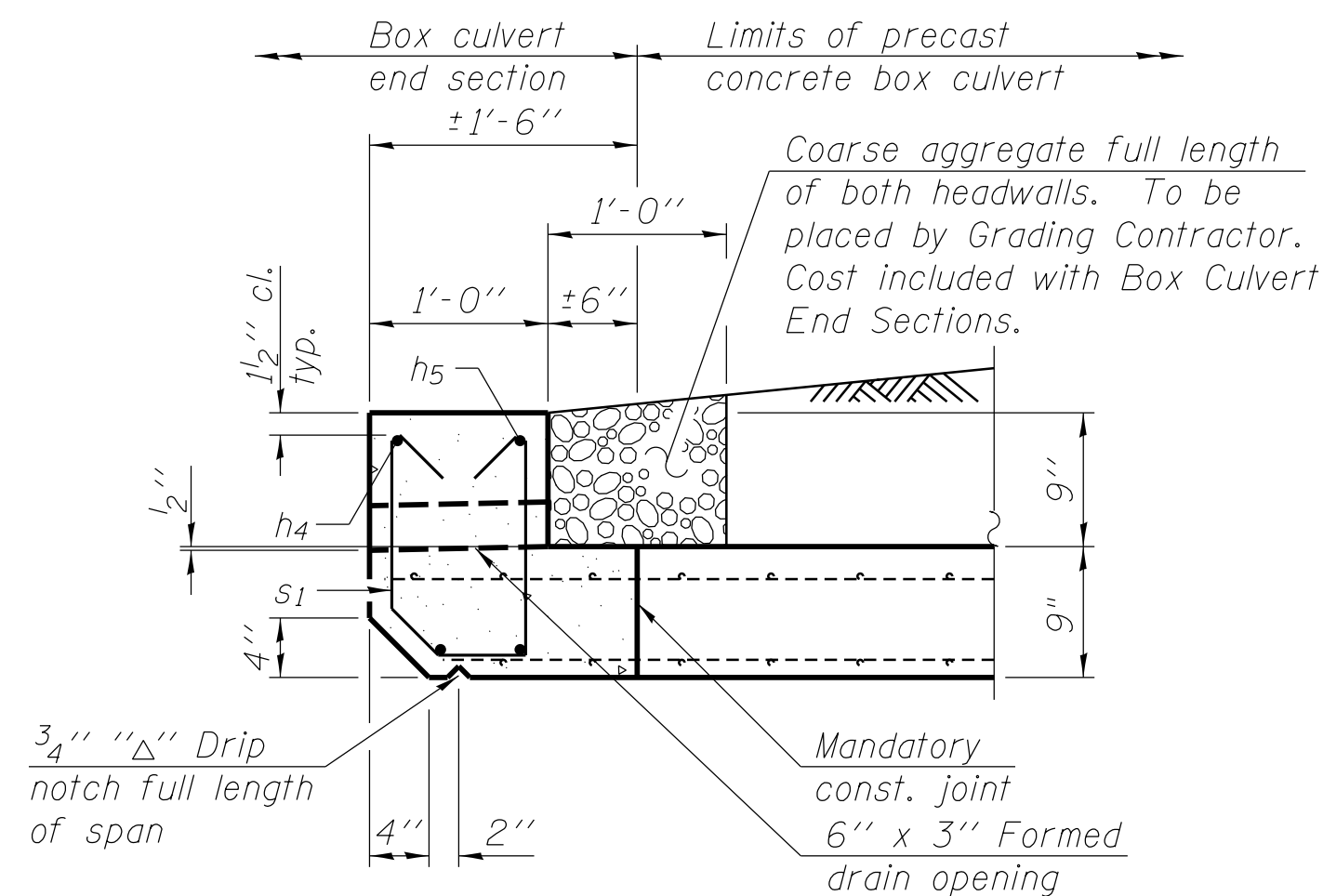
SHEET NO. 3 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-3	LASALLE	69	36
CONTRACT NO. 66B19				

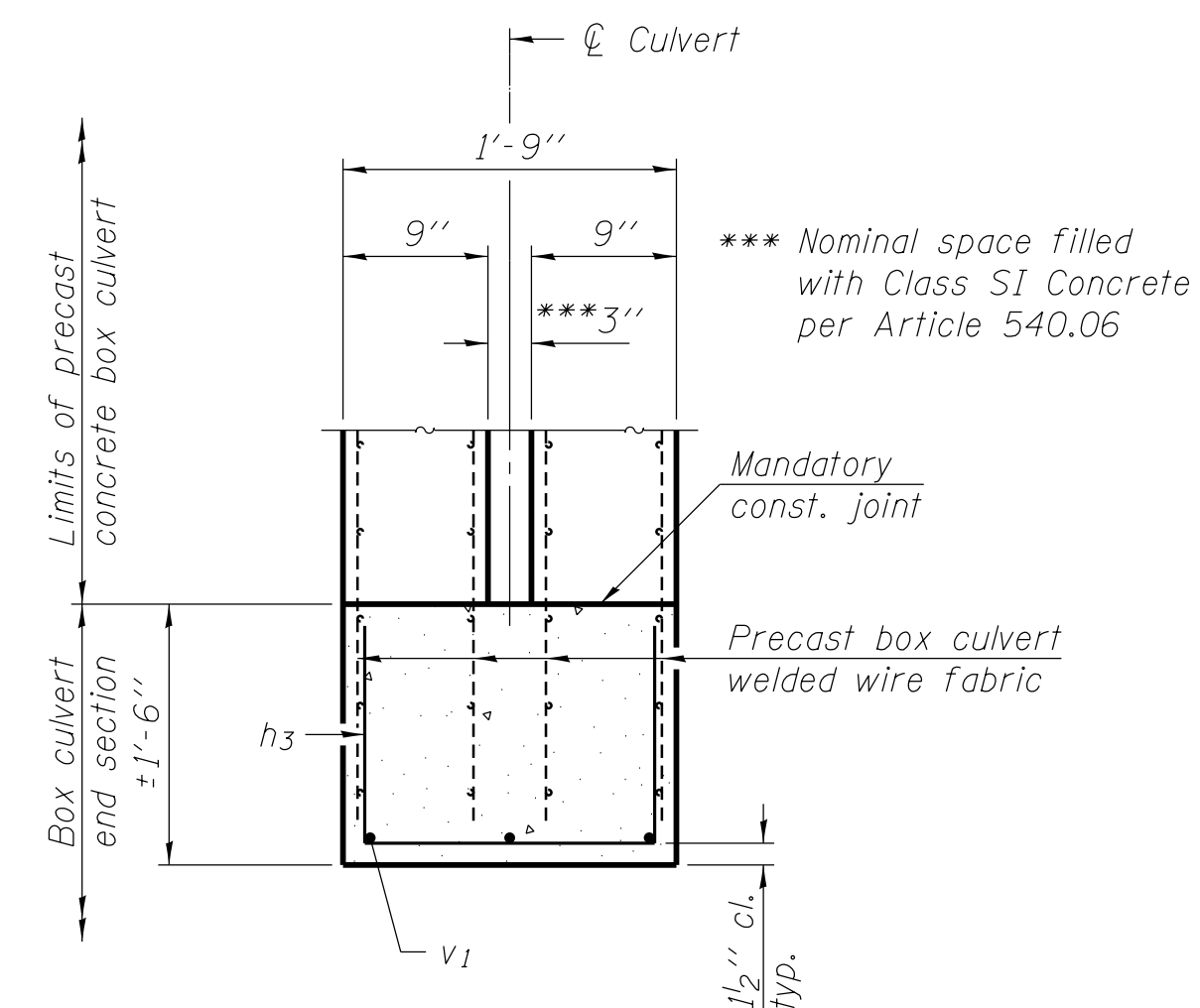
ILLINOIS FED. AID PROJECT



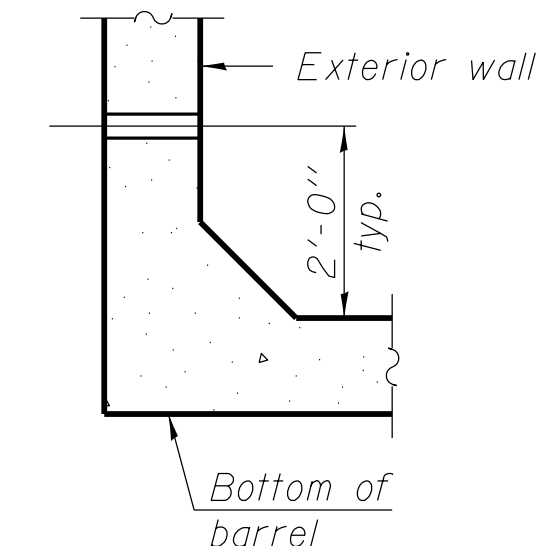
SECTION B-B
(Downstream Section)



SECTION B-B
(Upstream Section)

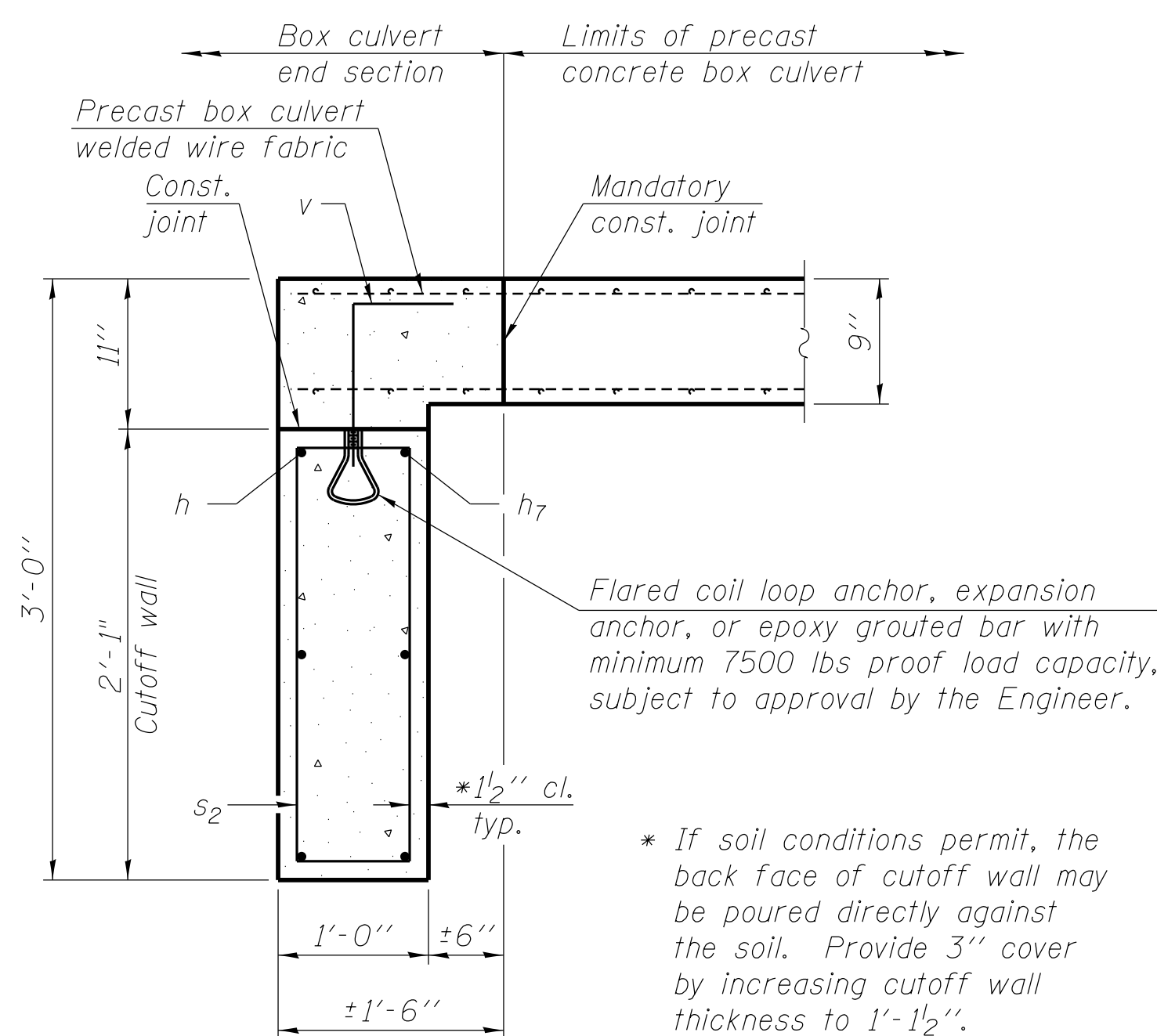


SECTION D-D
(Typ. Both Ends)

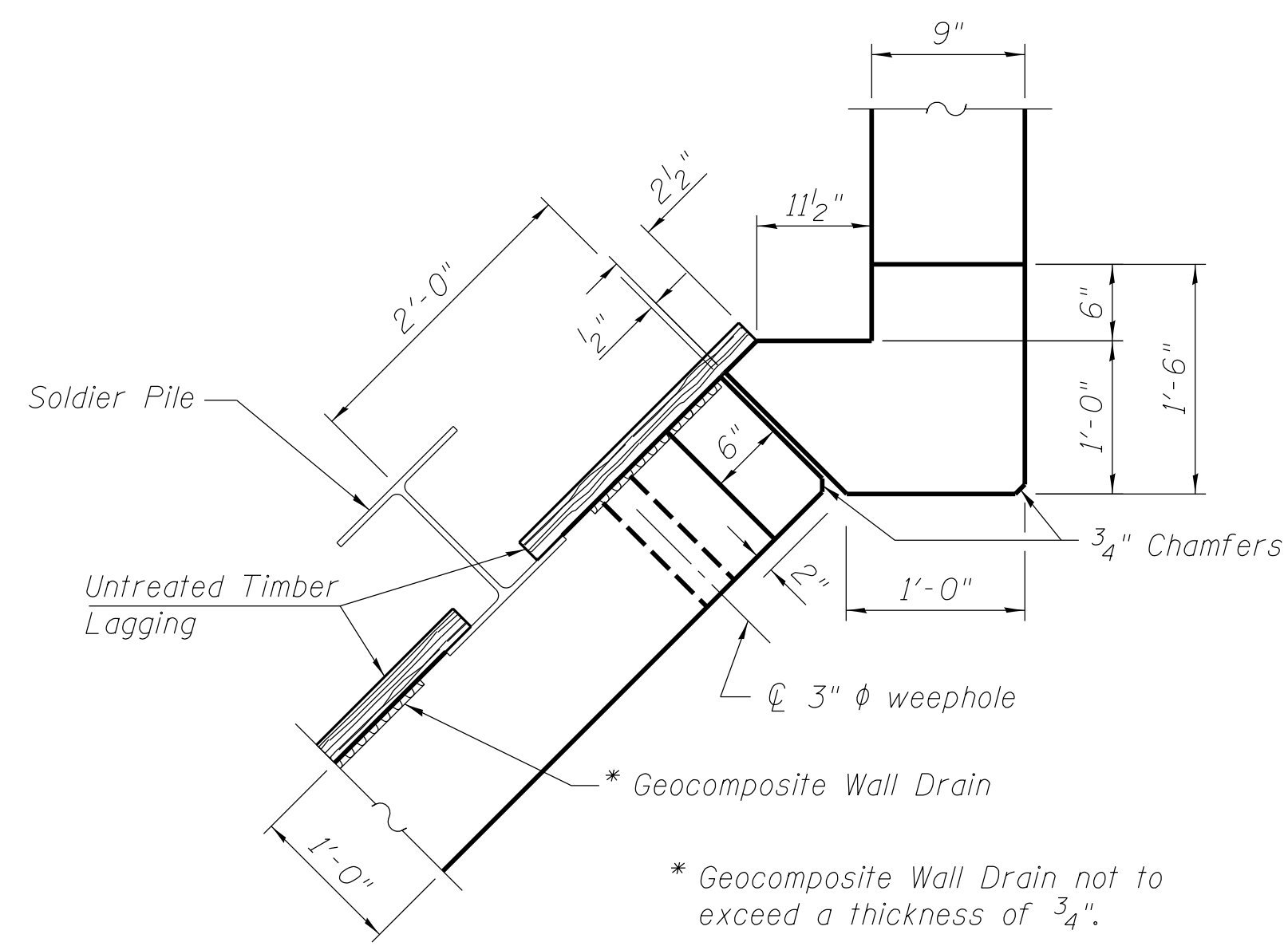


DRAIN DETAIL

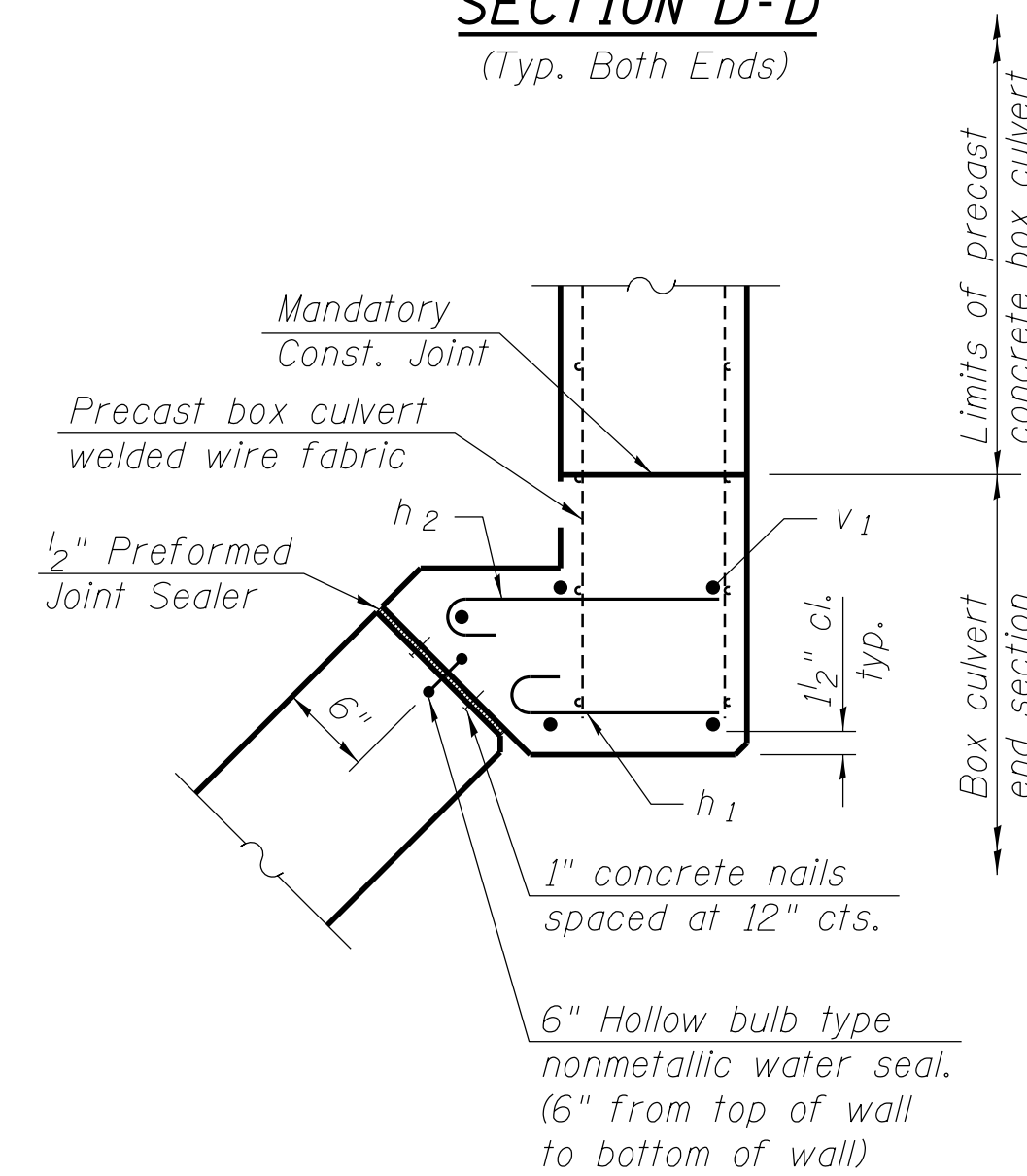
Provide 3" ϕ drain holes in exterior walls at $\pm 8'$ cts. See Article 503.11 of the Standard Specifications.



SECTION C-C



SECTION E-E
(Showing dimensions, wall drain, and weephole)



SECTION E-E
(Showing reinforcement and seal)

**ONE END SECTION
BILL OF MATERIAL**

(For information only)

Bar	No.	Size	Length	Shape
h	3	#5	21'-6"	—
h ₁	28	#4	1'-5"	—
h ₂	28	#4	1'-9"	—
h ₃	9	#4	4'-0"	—
h ₄	2	#6	21'-6"	—
h ₅	2	#6	22'-10"	—
h ₆	28	#5	19'-3"	—
h ₇	3	#5	22'-10"	—
h ₈	28	#5	11'-9"	—
s	20	#4	4'-0"	—
s ₁	20	#4	3'-10"	—
s ₂	20	#4	5'-11"	—
v	20	#5	1'-8"	—
v ₁	13	#5	10'-4"	—
v ₂	20	#5	23'-3"	—
v ₃	13	#5	20'-3"	—

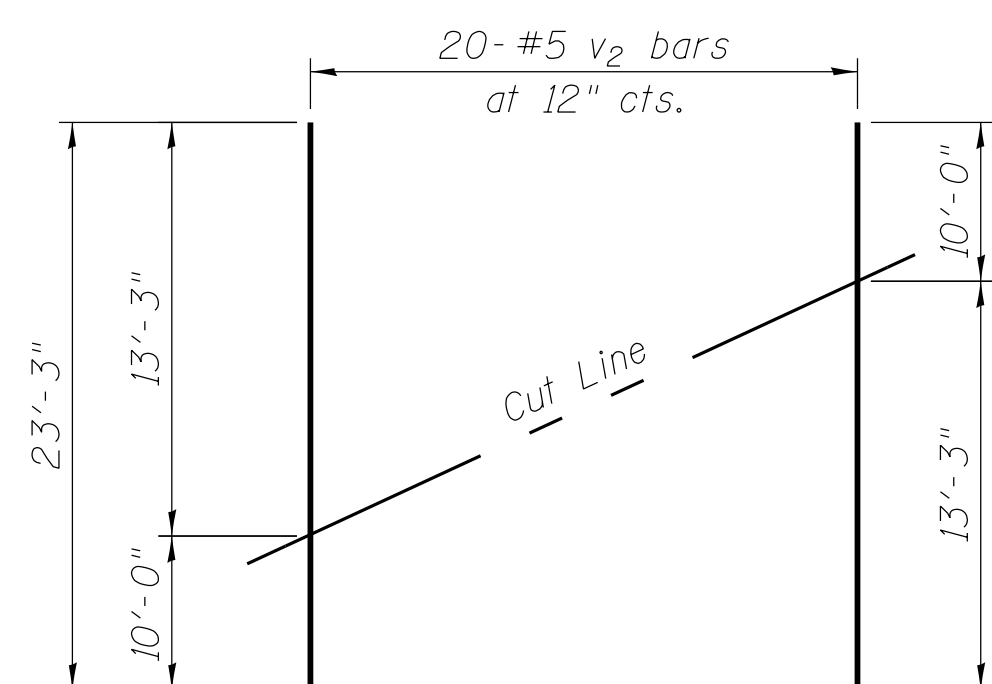
**

**

Concrete Structures	Cu. Yd.	13.2
Stud Shear Connectors	Each	91
Reinforcement Bars	Pound	2,330
Bar Splicers	Each	10
Furnishing Soldier Piles (HP Section)	Foot	248
Drilling and Setting Soldier Piles (in soil)	Cu. Ft.	456
Untreated Timber Lagging	Sq. Ft.	346
Concrete Box Culverts	Cu. Yd.	5.7
Geocomposite Wall Drain	Sq. Yd.	10

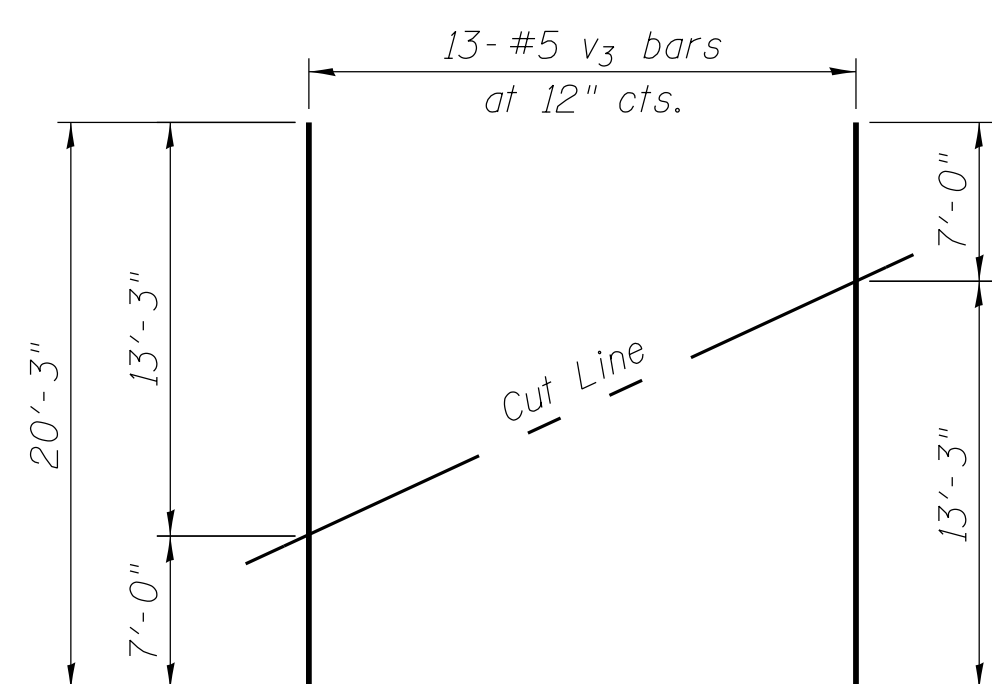
** Only s or s₁ bars are required for each end section.

The above pay items will not be measured for payment but shall be included in the contract unit price each for Box Culvert End Sections of the culvert number specified.



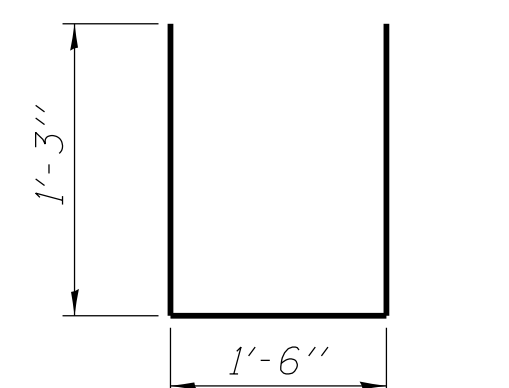
FIELD CUTTING DIAGRAM

Order v₂ bars full length. Cut to fit and use remainder of bar in opposite face.

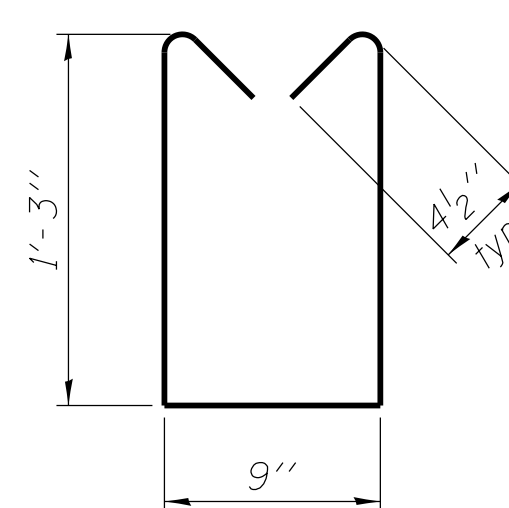


FIELD CUTTING DIAGRAM

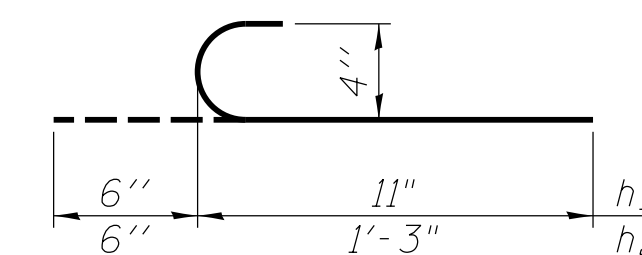
Order v₃ bars full length. Cut to fit and use remainder of bar in opposite face.



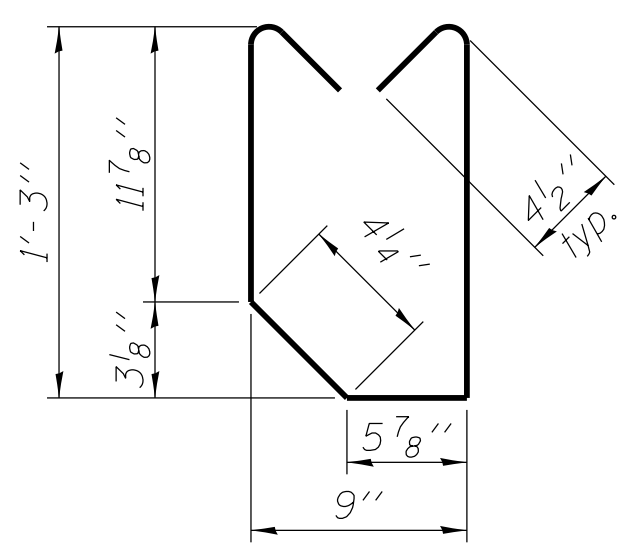
BAR h₃



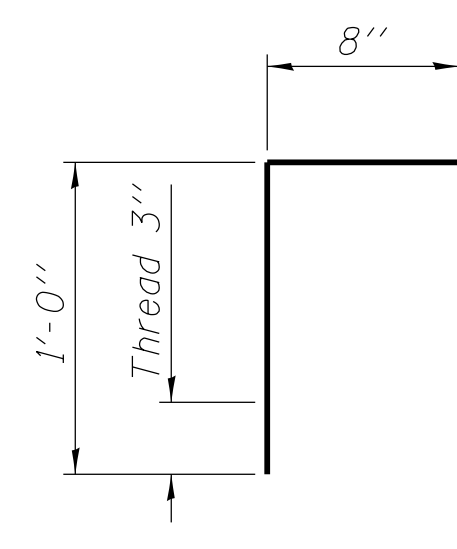
BAR s



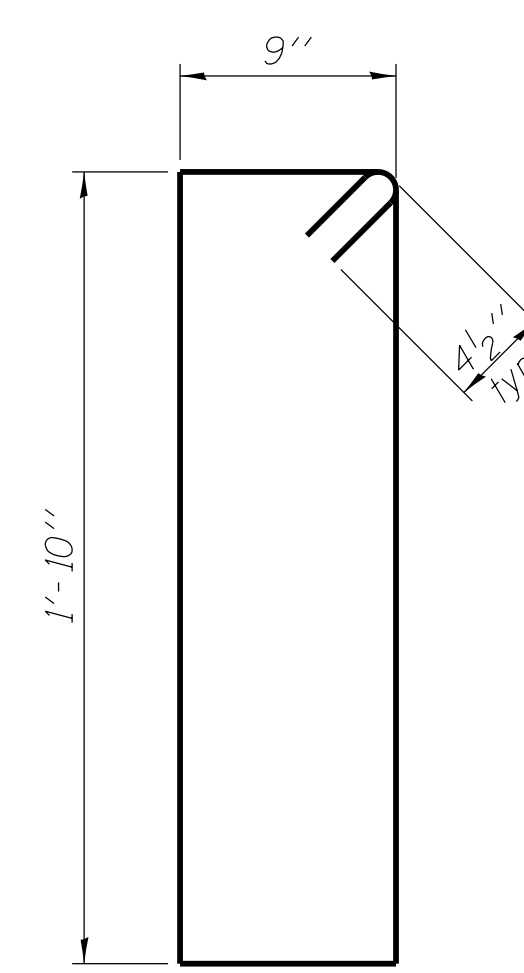
BARS h₁ and h₂



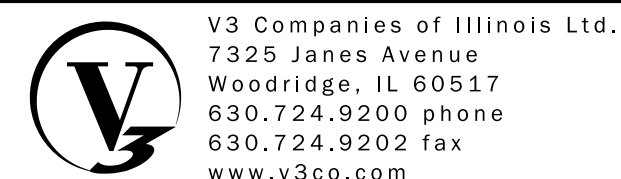
BAR s₁



BAR v



BAR s₂



V3 Companies of Illinois Ltd.
7325 James Avenue
Woodridge, IL 60517
630.724.9200 phone
630.724.9202 fax
www.v3co.com

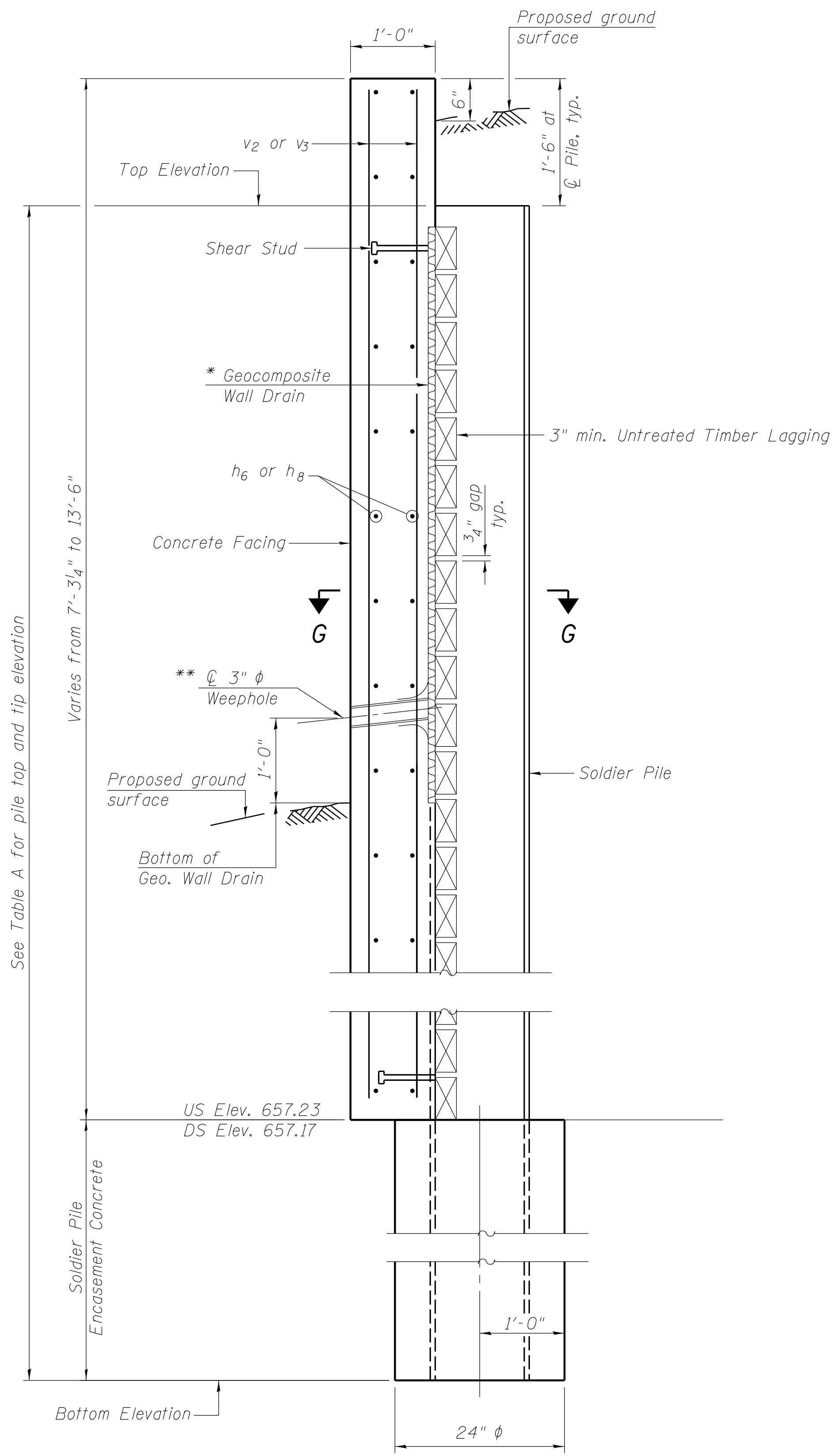
USER NAME =	DESIGNED -	REVISION
	CJB	—
CHECKED -	REVISION	
CCF	—	
PLOT SCALE =	DRAWN -	REVISION
	CCF	—
PLOT DATE =	CHECKED -	REVISION
	CJB	—

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

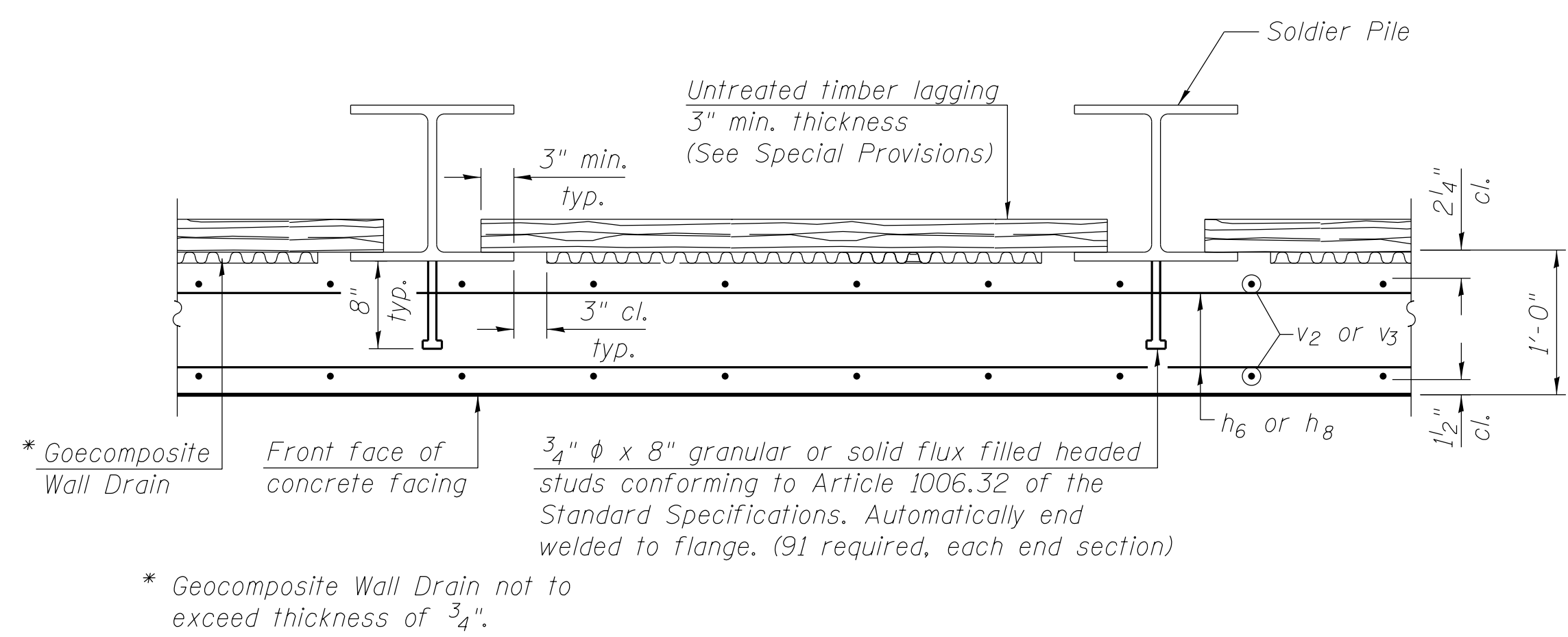
BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2056

SHEET NO. 4 OF 7 SHEETS

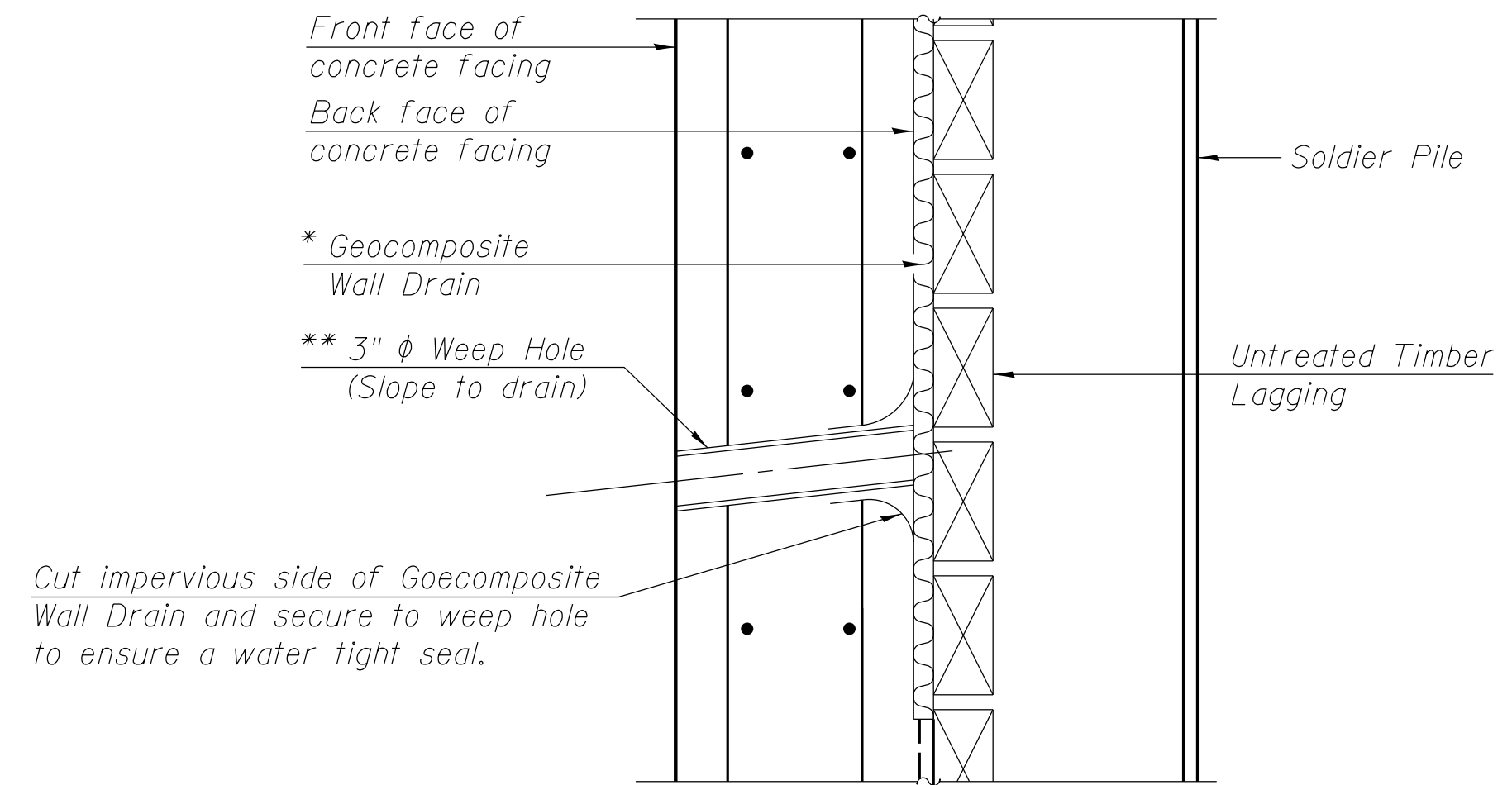
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-3	LASALLE	69	37
				CONTRACT NO. 66B19
ILLINOIS FED. AID PROJECT				



SECTION F-F

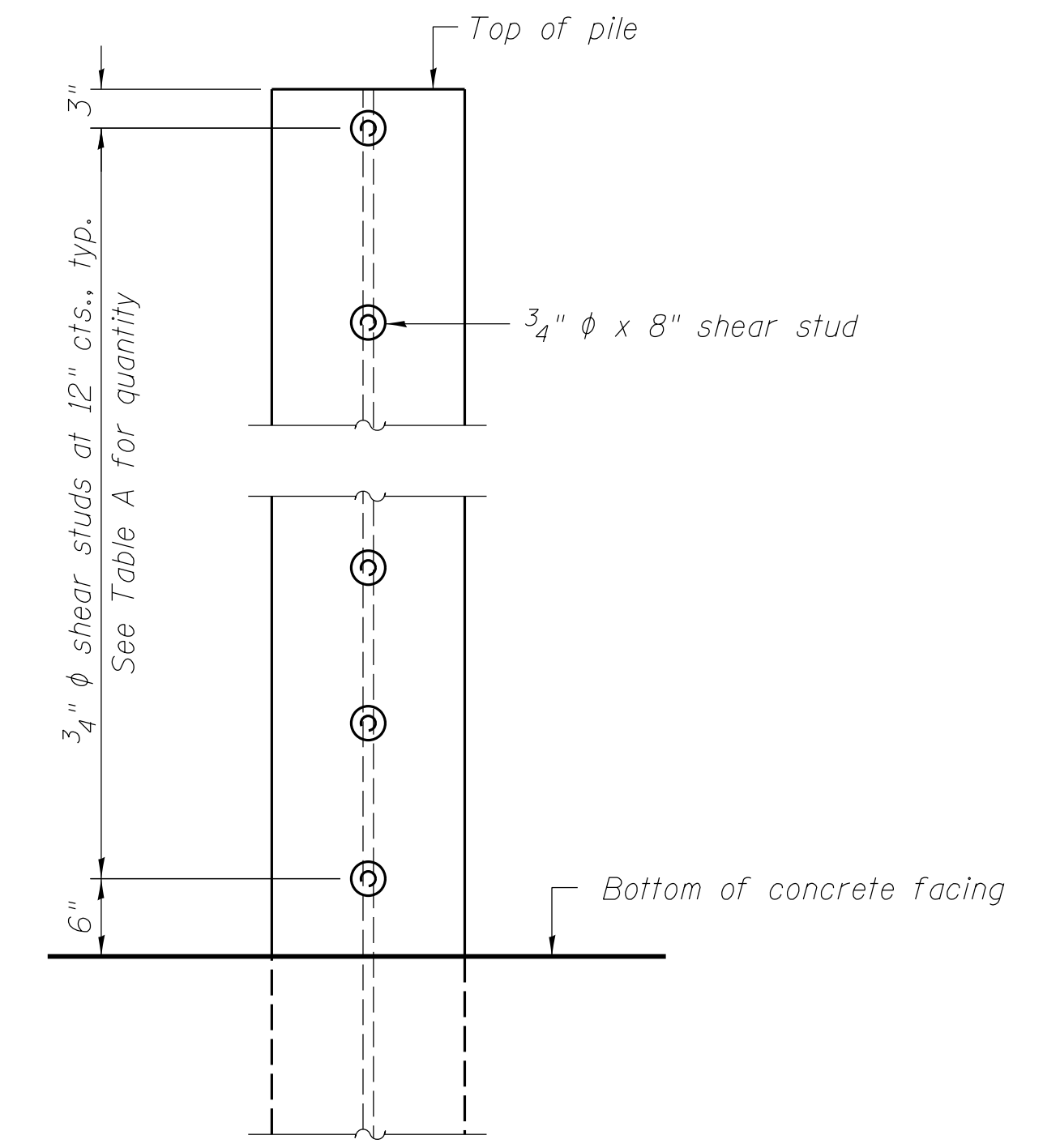


SECTION G-G



WEEP HOLE DRAIN DETAIL

Note:
The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.



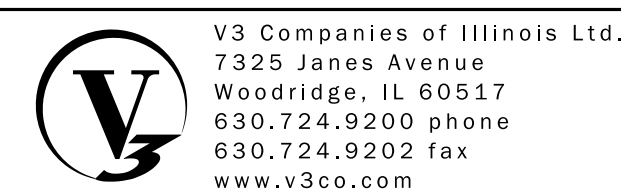
SHEAR STUD DETAIL
(Elevation of Pile Shown)

TABLE A
(Upstream)

Soldier Pile	Pile Size	Top Elevation (ft.)	Bottom Elevation (ft.)	Total Height (ft.)	Number of Shear Studs
1	HP 14 x 117	668.98	641.7	27.28	12
2	HP 14 x 117	668.32	641.7	26.62	12
3	HP 14 x 117	667.66	641.7	25.96	11
4	HP 14 x 117	667.00	641.7	25.30	11
5	HP 14 x 117	666.34	641.7	24.64	10
6	HP 8x36 (min.)	665.32	647.6	17.72	—
7	HP 14 x 117	668.98	641.7	27.28	12
8	HP 14 x 117	668.30	641.7	26.59	12
9	HP 14 x 117	667.62	641.7	25.92	11
10	HP 8x36 (min.)	666.60	646.6	20.20	—

TABLE A
(Downstream)

Soldier Pile	Pile Size	Top Elevation (ft.)	Bottom Elevation (ft.)	Total Height (ft.)	Number of Shear Studs
1	HP 14 x 117	668.92	641.6	27.31	12
2	HP 14 x 117	668.26	641.6	26.66	12
3	HP 14 x 117	667.60	641.6	26.00	11
4	HP 14 x 117	666.94	641.6	25.34	11
5	HP 14 x 117	666.28	641.6	24.68	10
6	HP 8x36 (min.)	665.26	647.6	17.66	—
7	HP 14 x 117	668.92	641.6	27.31	12
8	HP 14 x 117	668.24	641.6	26.64	11
9	HP 14 x 117	667.56	641.6	25.96	11
10	HP 8x36 (min.)	666.54	646.3	20.24	—



USER NAME =	DESIGNED - CJB	REVISED -
PLOT SCALE =	CHECKED - CCF	REVISED -
PLOT DATE =	DRAWN - CCF	REVISED -
	CHECKED - CJB	REVISED -

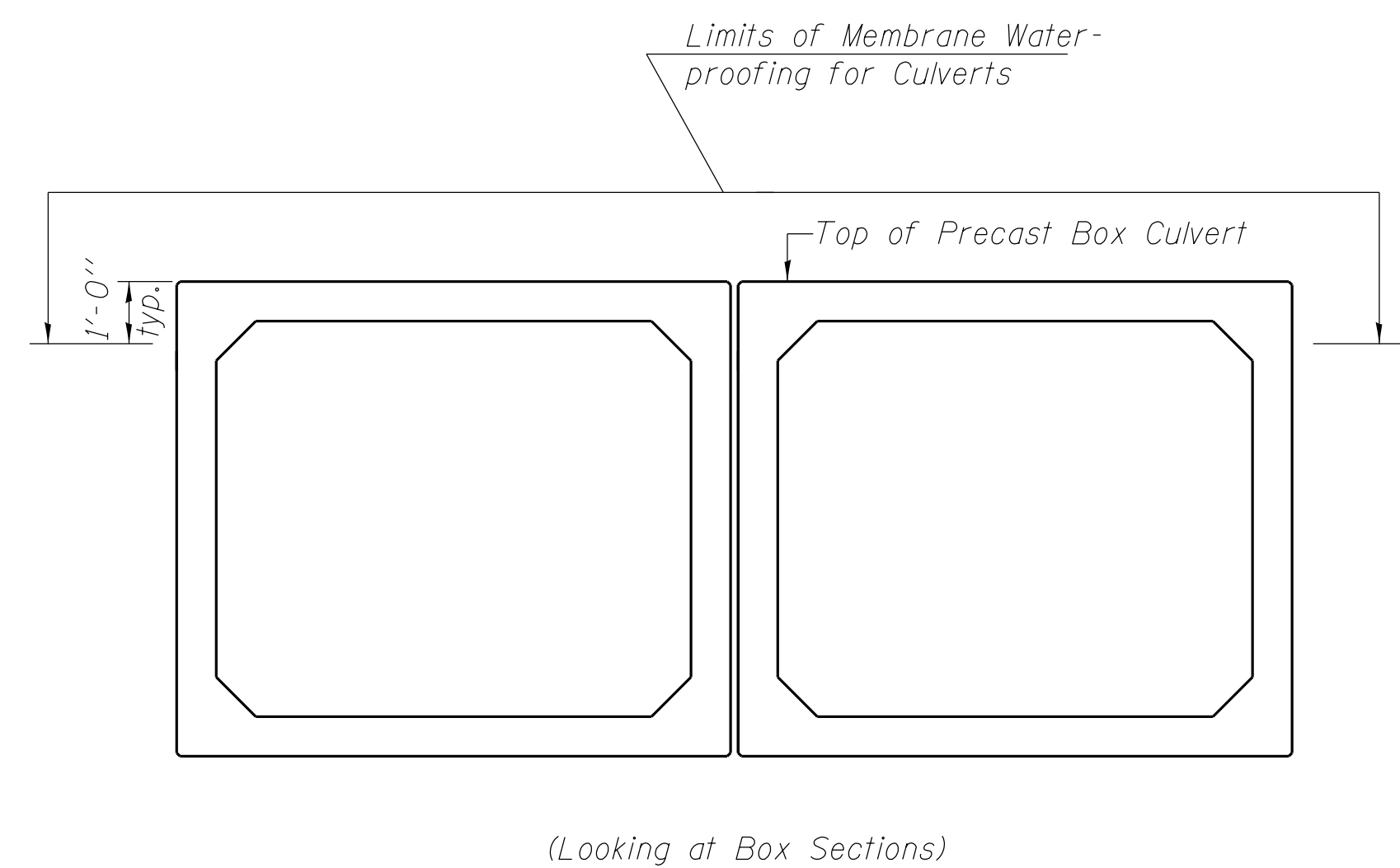
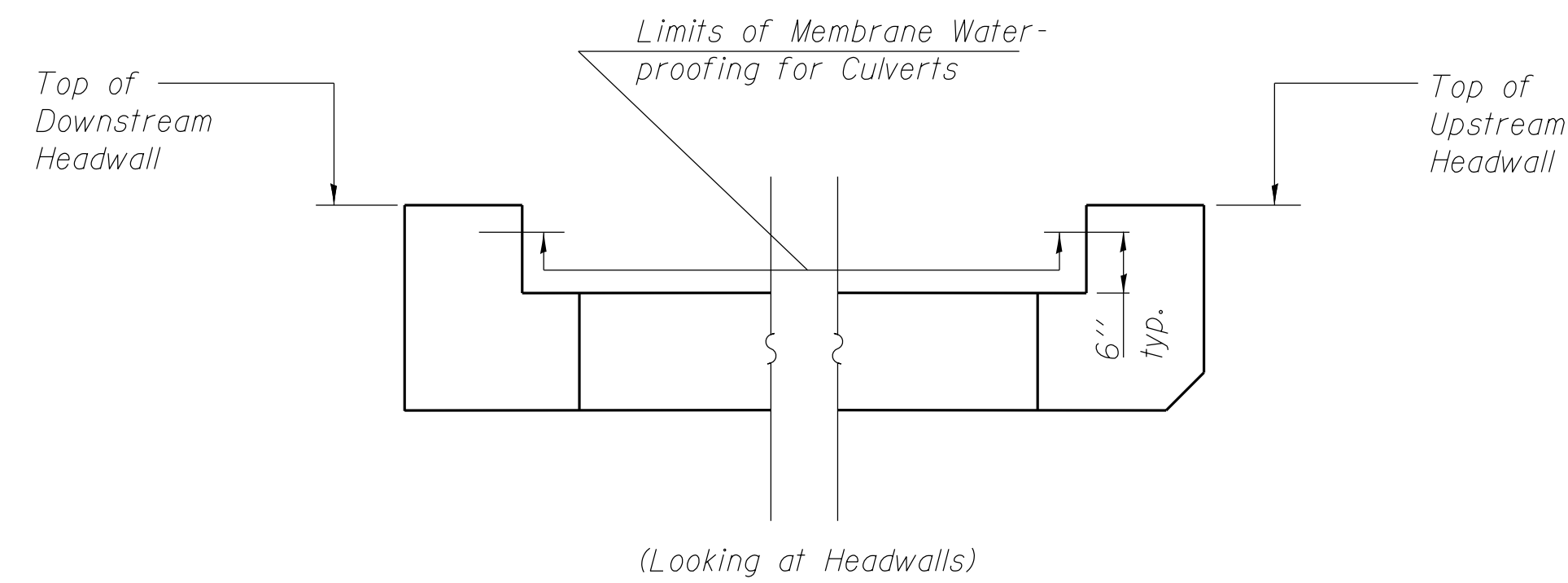
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 050-2056

SHEET NO. 5 OF 7 SHEETS

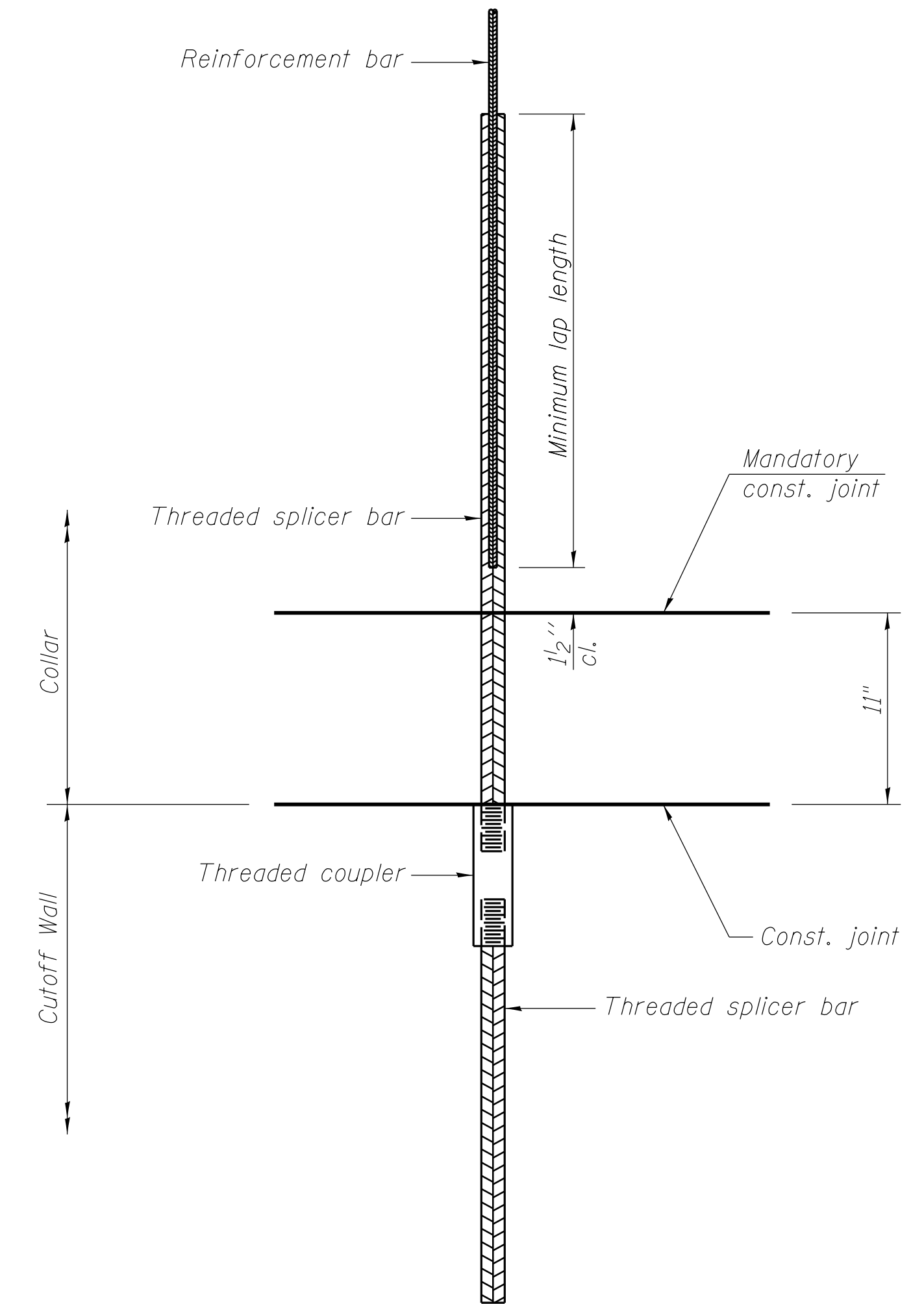
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-3	LASALLE	69	38
CONTRACT NO. 66B19				

ILLINOIS FED. AID PROJECT



**LIMITS OF MEMBRANE
WATERPROOFING
FOR CULVERTS**

Note: Membrane Waterproofing for Culverts shall cover top of the top slab, top one foot of side walls, and 6 inches up inside face of the headwalls.



BAR SPLICER ASSEMBLY FOR BOX CULVERT END SECTION

Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

Location	Bar size	No. assemblies required	Table for minimum lap length
* Cutoff Wall	5	10	1

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

* For one end section



SOIL BORING LOG

Date 6/5/12

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over a Stream, 6.98 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION NE 1/4, SEC. 26, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.	D E P T H				Soil Description	SPT (N)	U C S	M O I S
	(ft)	(ft)	(tsf)	(%)				
050-0156 (Exist.) Station 369+42 (Exist.)					Surface Water Elev. 660.75 ft Stream Bed Elev. 660.58 ft			
BORING NO. 1 (N.W. Quad.) Station 369+18 Offset 13.00ft RL Ground Surface Elev. 671.47 ft					Groundwater Elev.: First Encounter 654.5 ft Upon Completion 641.5 ft After Hrs.			
Augered Shoulder Stone, Black Silty Clay Loam Fill, Brown Sand & Gravel Fill with Large Gravel Pieces					Very Stiff Gray Clay Till with Layers of Clay & Minor Silt (continued)	3	4	3.2
						5	3	29.4
668.97	4							
Loose Brown Sand & Gravel Fill with Large Gravel Pieces & Silty Clay Loam Till Fill Layers	3		10.0			3	3	27.4
	3					3	3	P
646.97					Hard/Very Stiff Brownish Gray Silty Clay Loam Till	5	7	4.1
666.47	2					9	9	16.1
Stiff Black Silty Clay Loam Topsoil	1	1.5	39.0			2	2	27.8
	3	P				2	2	P
664.47					Very Stiff Brown & Gray Silty Clay Loam Till	1	4	3.7
Medium Brown Silty Clay Loam Till	1	0.8	26.4			5	8	20.4
	2	P				7	7	B
661.97					Hard Brown Silty Clay Loam Till	5	3	3.9
Hard Brown Silty Clay Loam Till	1		18.3			9	9	19.6
	3					4	4	15.4
659.47					Hard Gray Silty Clay Loam Till with Sand/Gravel Pockets at 16'	8	10	15.4
Hard Gray Silty Clay Loam Till with Sand/Gravel Pockets at 16'	6	4.3	15.1			9	10	S
	9	S				5	6	21.2
-1.5	6					4	5	3.6
	9	>4.5	10.8			5	9	5.2
	11	P				16	16	S
651.97					End of Boring	8	8	B
	5					7	7	4.6
	7	4.1	22.0			9	9	S
	9	B				9	9	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 T206)
BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Date 6/5/12

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over a Stream, 6.98 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION NW 1/4, SEC. 25, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.	D E P T H				Soil Description	SPT (N)	U C S	M O I S
	(ft)	(ft)	(tsf)	(%)				
050-0156 (Exist.) Station 369+42 (Exist.)					Surface Water Elev. 660.75 ft Stream Bed Elev. 660.66 ft			
BORING NO. 2 (S.E. Quad.) Station 369+64 Offset 14.00ft RL Ground Surface Elev. 671.61 ft					Groundwater Elev.: First Encounter 653.6 ft Upon Completion 641.6 ft After Hrs.			
Augered Shoulder Stone, Black Silty Clay Loam Fill and Brown Sand & Gravel Fill					Hard Gray Silty Clay Loam Till with Layers of Gray Silt at 16' - 17' (continued)	3	4	4.1
						6	6	S
669.11								
Stiff Black Silty Clay Loam Topsoil - Top 2' possible Fill	2		28.0			3	3	
	2	1.5				5	6	4.3
	2	P				6	6	S
647.11					Hard Brownish Gray Silty Clay Loam Till	4	6	4.4
Hard Brownish Gray Silty Clay Loam Till	2	1.5	27.8			8	8	S
	2	P				6	6	4.7
664.61					Very Stiff Brown & Gray Silty Clay Loam Till	3	6	4.7
Very Stiff Brown & Gray Silty Clay Loam Till	1		21.2			9	9	S
	2	3.6				3	3	
	3	B				4	4	3.4
642.11					Very Stiff Gray Clay Till	5	5	3.4
Very Stiff Gray Clay Till	3		20.7			6	6	B
	4	3.4				4	4	
	6	B				5	5	3.6
659.61					Hard Gray Silty Clay Loam Till with Layers of Gray Silt at 16' - 17'	4	8	4.7
Hard Gray Silty Clay Loam Till with Layers of Gray Silt at 16' - 17'	8	4.7	15.4			10	10	S
	10	S				5	5	3.6
-1.5	5					4	4	
	9	5.2	17.1			5	5	3.6
	16	S				5	5	B
635.11					End of Boring			
	9		17.9			7	7	4.6
	9	S				9	9	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 T206)
BBS, form 137 (Rev. 8-99)



USER NAME =	DESIGNED - CJB	REVISED -
PLOT SCALE =	CHECKED - CCF	REVISED -
PLOT DATE =	DRAWN - CCF	REVISED -
	CHECKED - CJB	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 050-2056

SHEET NO. 7 OF 7 SHEETS

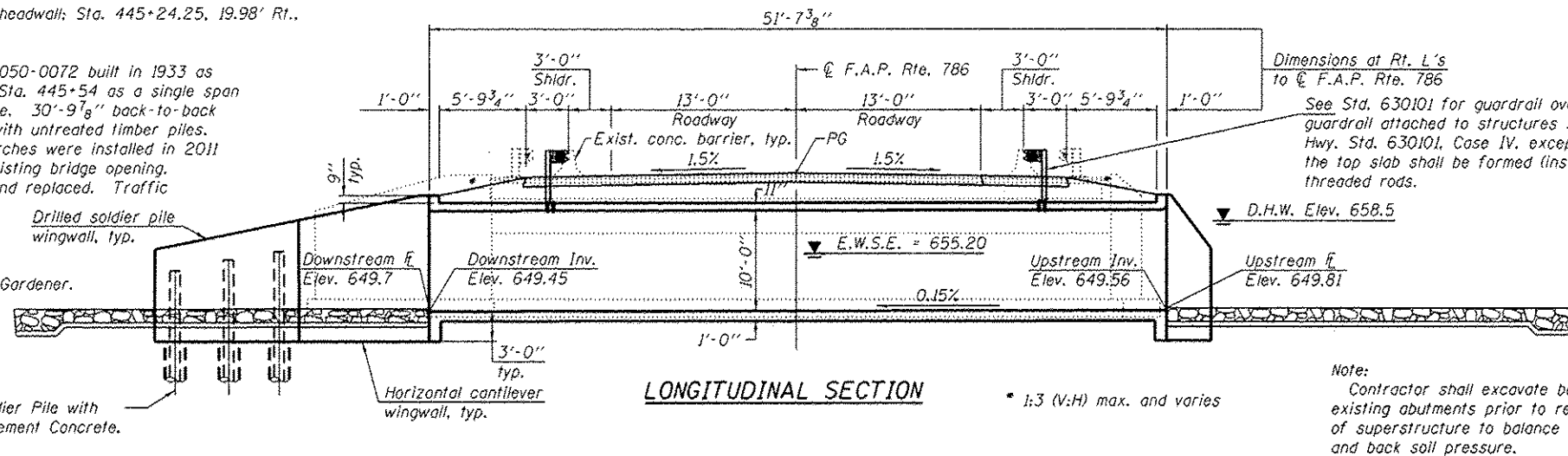
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110) BR-3	LASALLE	69	40
CONTRACT NO. 66B19				

ILLINOIS FED. AID PROJECT

Benchmark: Chiseled "a" on NW headwall; Sta. 445+24.25, 19.98' Rt., Elev. 663.465

Existing Structure: Structure No. 050-0072 built in 1933 as Route 70A, Section 110 & 110B at Sta. 445+54 as a single span R.C. slab, closed abutment structure, 30'-9 7/8" back-to-back abutments, supported on footings with untreated timber piles. Two 96" x 67" corrugated pipe arches were installed in 2011 and encased in CLSM within the existing bridge opening. Existing structure to be removed and replaced. Traffic is to be maintained utilizing detour closing the road at this structure.

Salvage existing concrete barrier. See Field Maintenance Engineer in Gardener. (815)-942-0351



Dimensions at Rt. L's to C.F.A.P. Rte. 786
See Std. 630101 for guardrail over culvert, typ. Steel plate beam guardrail attached to structures should be according to Hwy. Std. 630101, Case IV, except that the 1 1/2" ϕ holes in the top slab shall be formed (instead of cored) for the threaded rods.

Note: Contractor shall excavate behind existing abutments prior to removal of superstructure to balance front and back soil pressure.

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 Culvert Plan
- 3 Culvert Sections and Elevations
- 4 Soldier Pile Wingwall Details
- 5 Rail Post Spacing and Details
- 6 Boring Logs

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

FIELD UNITS

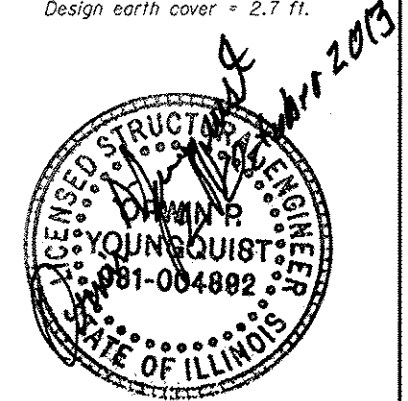
f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)
 f_y = 50,000 psi (M270 Grade 50)

LOADING HL-93

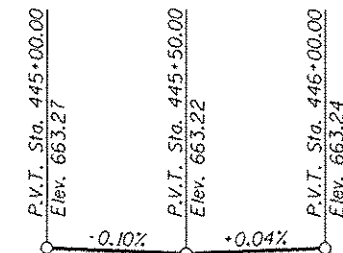
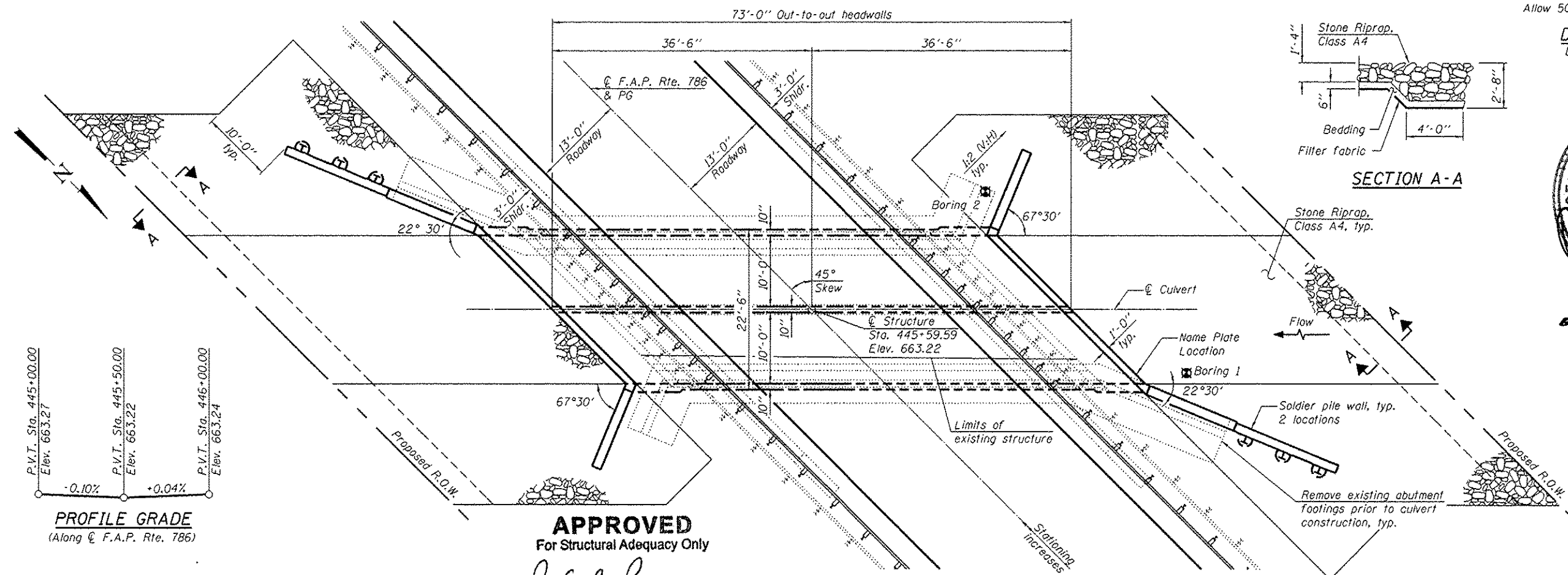
Allow 50#/sq. ft. for future wearing surface

DESIGN FILL HEIGHT

Design earth cover = 2.7 ft.



expires 11-30-2014



PROFILE GRADE
(Along C.F.A.P. Rte. 786)

APPROVED
For Structural Adequacy Only

J. Paul Lunge
Engineer of Bridges & Structures

PLAN

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E.	Prop.	Exist.	Prop.	
Design	10	512	122	159	657.5	0.0	0.0	657.5	657.5
Base	50	757	143	178	658.5	0.4	0.3	658.9	658.8
Overtopping	100	854	147	183	658.7	0.6	0.5	659.3	659.2
Max. Calc.	500	1080	157	191	659.1	1.0	0.9	660.2	660.1

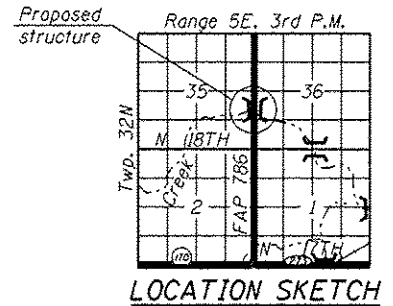
Existing 10-year velocity = 4.2 ft./sec.
Proposed 10-year velocity = 3.2 ft./sec.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	646.56	646.45

STATION 445+59.59
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 786 - SEC (110) BR-1
LOADING HL-93
STRUCTURE NO. 050-2057

NAME PLATE
See Std. 515001



GENERAL PLAN & ELEVATION

IL. RTE. 170 OVER
WAUPECAN CREEK
F.A.P. RTE. 786 - SEC. (110) BR-1
LASALLE COUNTY
STATION 445+59.59
STRUCTURE NO. 050-2057



USER NAME	DESIGNED	REVISION
oy	oy	oy
db	db	db
cm	cm	cm
jb	jb	jb

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 050-2057
SHEET NO. 1 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	41

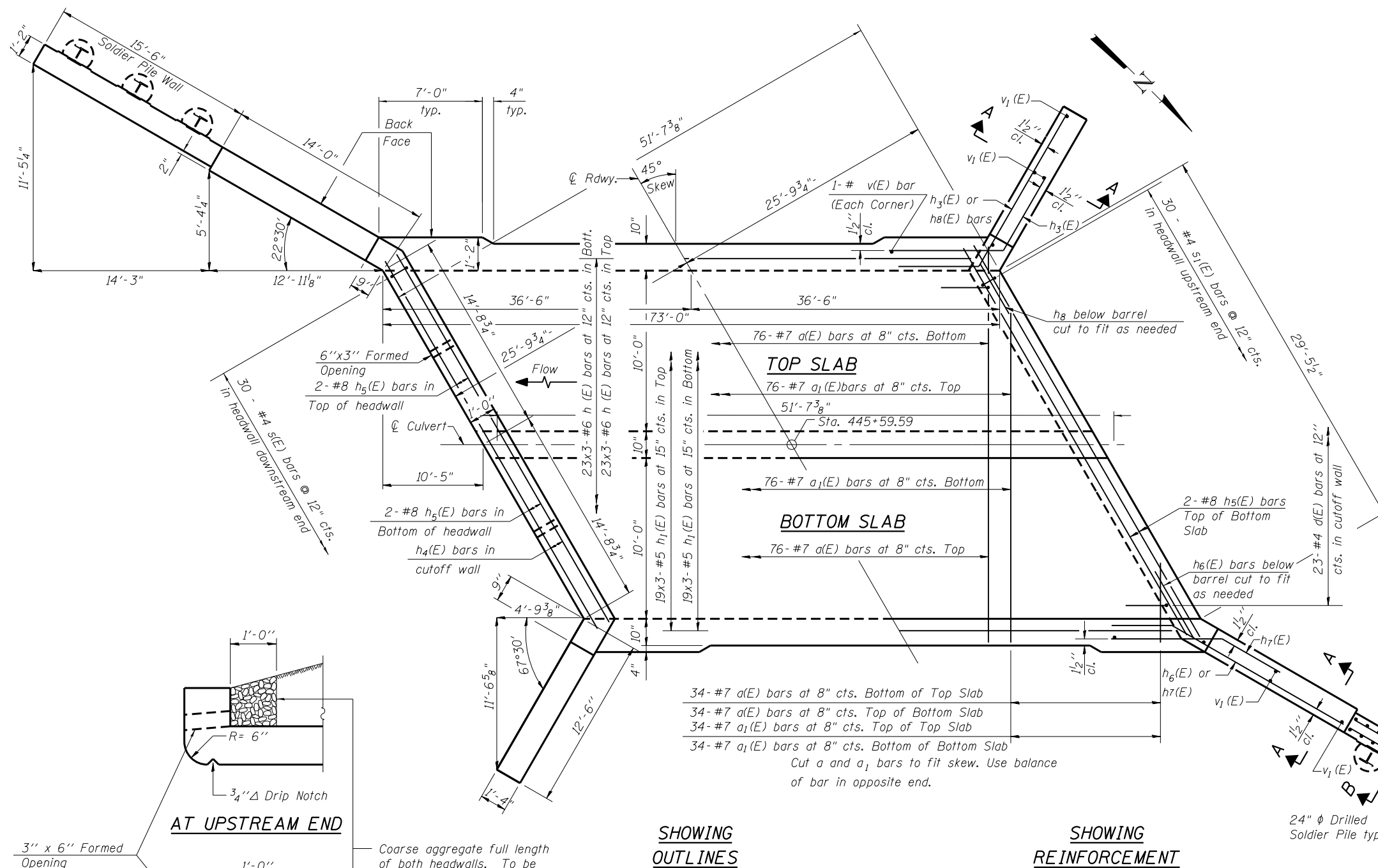
CONTRACT NO. 66B19
ILLINOIS FED. AID PROJECT

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	564
Filter Fabric	Sq. Yd.	564
Removal of Existing Structures No. 3	Each	1
Structure Excavation	Cu. Yd.	41.2
Concrete Structures	Cu. Yd.	14.6
Stud Shear Connectors	Each	54
Reinforcement Bars, Epoxy Coated	Pound	53,970
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	227.0
Geocomposite Wall Drain	Sq. Yd.	3.5
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	537
Untreated Timber Lagging	Sq. Ft.	177
Furnishing Soldier Piles (HP Section)	Foot	171

GENERAL NOTES

- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The top of the box culvert shall be waterproofed according to Art. 503.18 of the Std. Specs. Cost included with Concrete Box Culverts.
- Precast option is not allowed.



AT UPSTREAM END



AT DOWNSTREAM END



DRAIN DETAIL

Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.

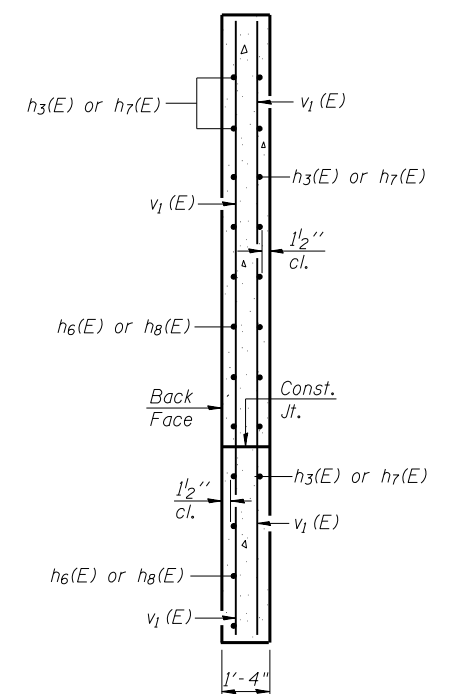
SHOWING OUTLINES

SHOWING REINFORCEMENT

PLAN

Notes:

For section B-B, see sheet 4 of 6.
For bar details, see sheet 3 of 6.
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.



SECTION A-A

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	CHECKED - DB	REVISED
PLOT SCALE =	DRAWN - CM	REVISED
PLOT DATE =	CHECKED - JB	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT PLAN
STRUCTURE NO. 050-2057

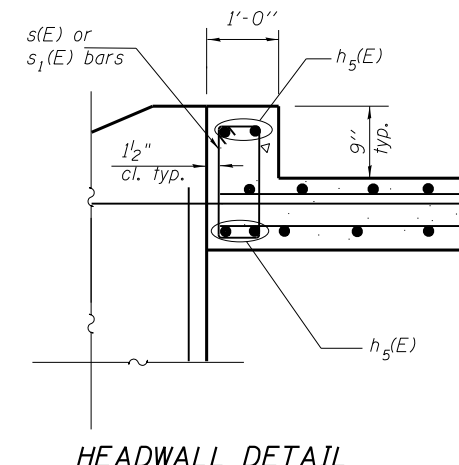
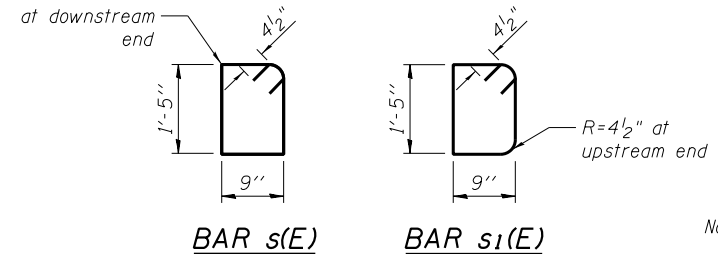
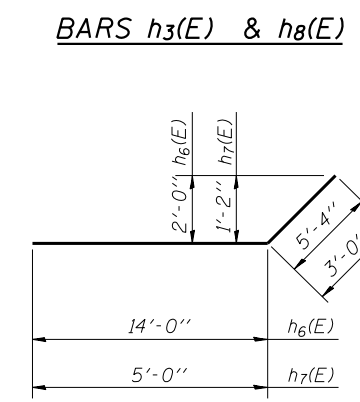
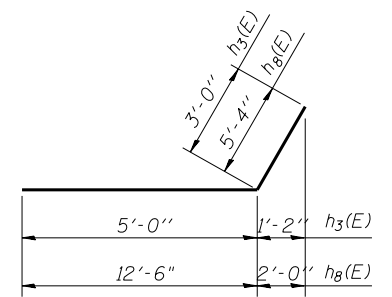
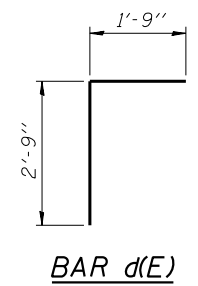
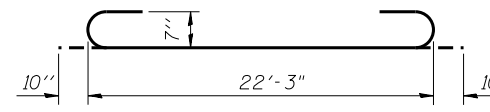
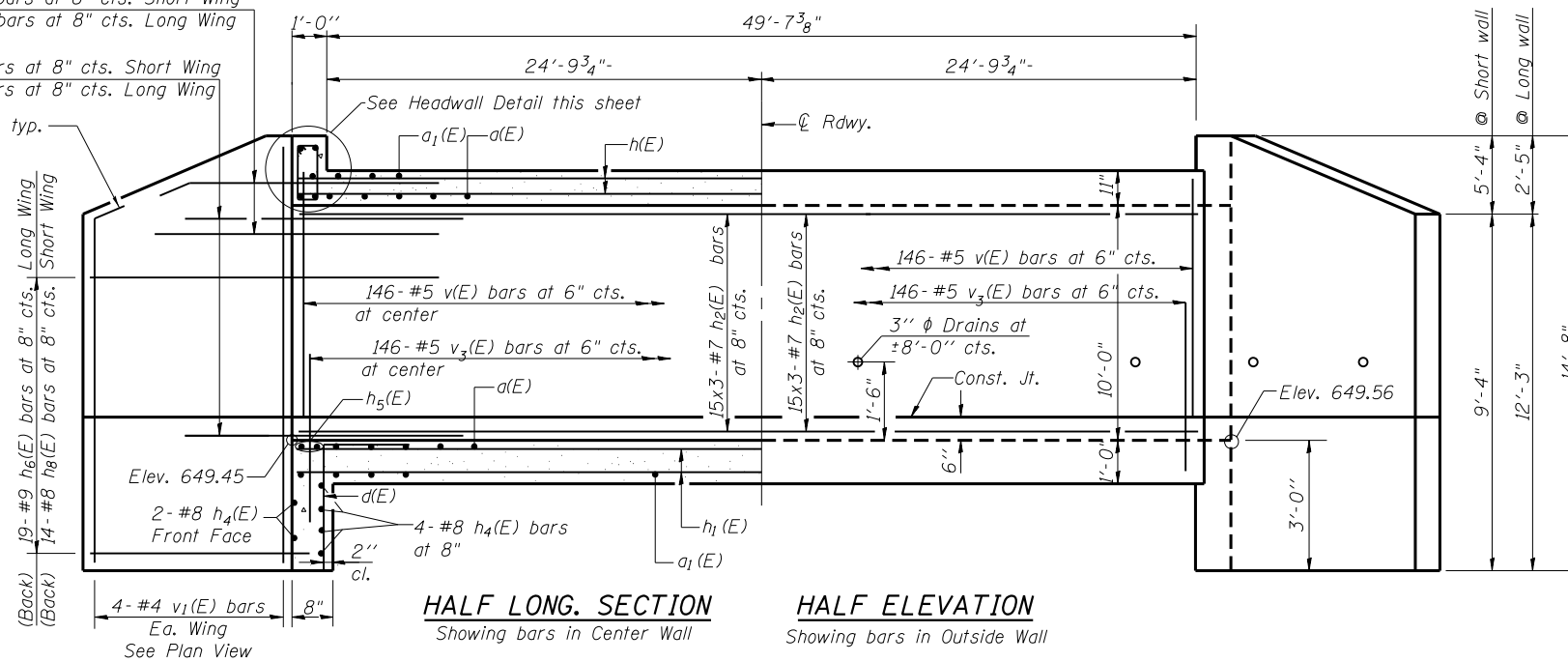
SHEET NO. 2 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	42
CONTRACT NO. 66B19				

ILLINOIS FED. AID PROJECT

(Back)
7- #8 h₃(E) bars at 8" cts. Short Wing
3- #9 h₇(E) bars at 8" cts. Long Wing

(Front)
16- #8 h₃(E) bars at 8" cts. Short Wing
16- #9 h₇(E) bars at 8" cts. Long Wing



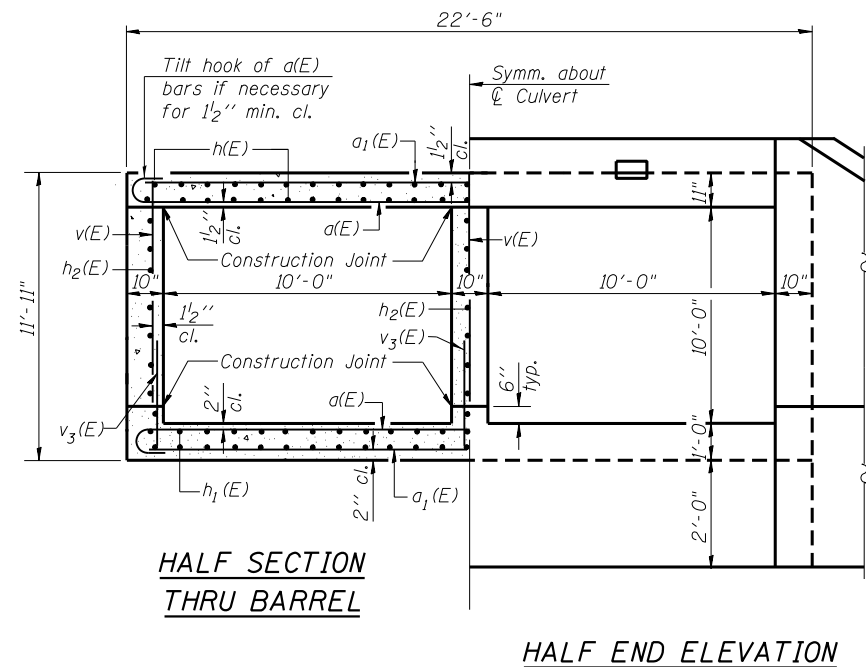
BILL OF MATERIAL - SHEETS 3 & 4 OF 6

Bar	No.	Size	Length	Shape
a(E)	220	#7	23'-11"	
a ₁ (E)	220	#7	22'-3"	
d(E)	46	#4	4'-6"	
h(E)	138	#6	26'-10"	
h ₁ (E)	114	#5	26'-5"	
h ₂ (E)	135	#7	27'-8"	
h ₃ (E)	46	#8	8'-0"	
h ₄ (E)	12	#8	29'-6"	
h ₅ (E)	12	#8	29'-6"	
h ₆ (E)	38	#9	19'-4"	
h ₇ (E)	38	#9	8'-0"	
h ₈ (E)	28	#8	17'-10"	
h ₉ (E)	56	#5	15'-3"	
v(E)	442	#5	10'-7"	
v ₁ (E)	16	#4	14'-4"	
v ₂ (E)	64	#5	12'-0"	
v ₃ (E)	442	#5	4'-6"	
s(E)	30	#4	5'-1'	
s ₁ (E)	30	#4	5'-0"	

* Structure Excavation	Cu. Yd.	41.2
Concrete Box Culverts	Cu. Yd.	227.0
Reinforcement Bars, Epoxy Coated	Pound	53,970
Concrete Structures	Cu. Yd.	14.6
Stud Shear Connectors	Each	54
Geocomposite Wall Drain	Sq. Yd.	3.5
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	537
Untreated Timber Lagging	Sq. Ft.	177
Furnishing Soldier Piles (HP Section)	Foot	171

* For Soldier Pile portion of wingwalls only.

Notes:
Bars indicated thus 12x4- #5 etc. indicates 12 lines of bars with 4 lengths per line.



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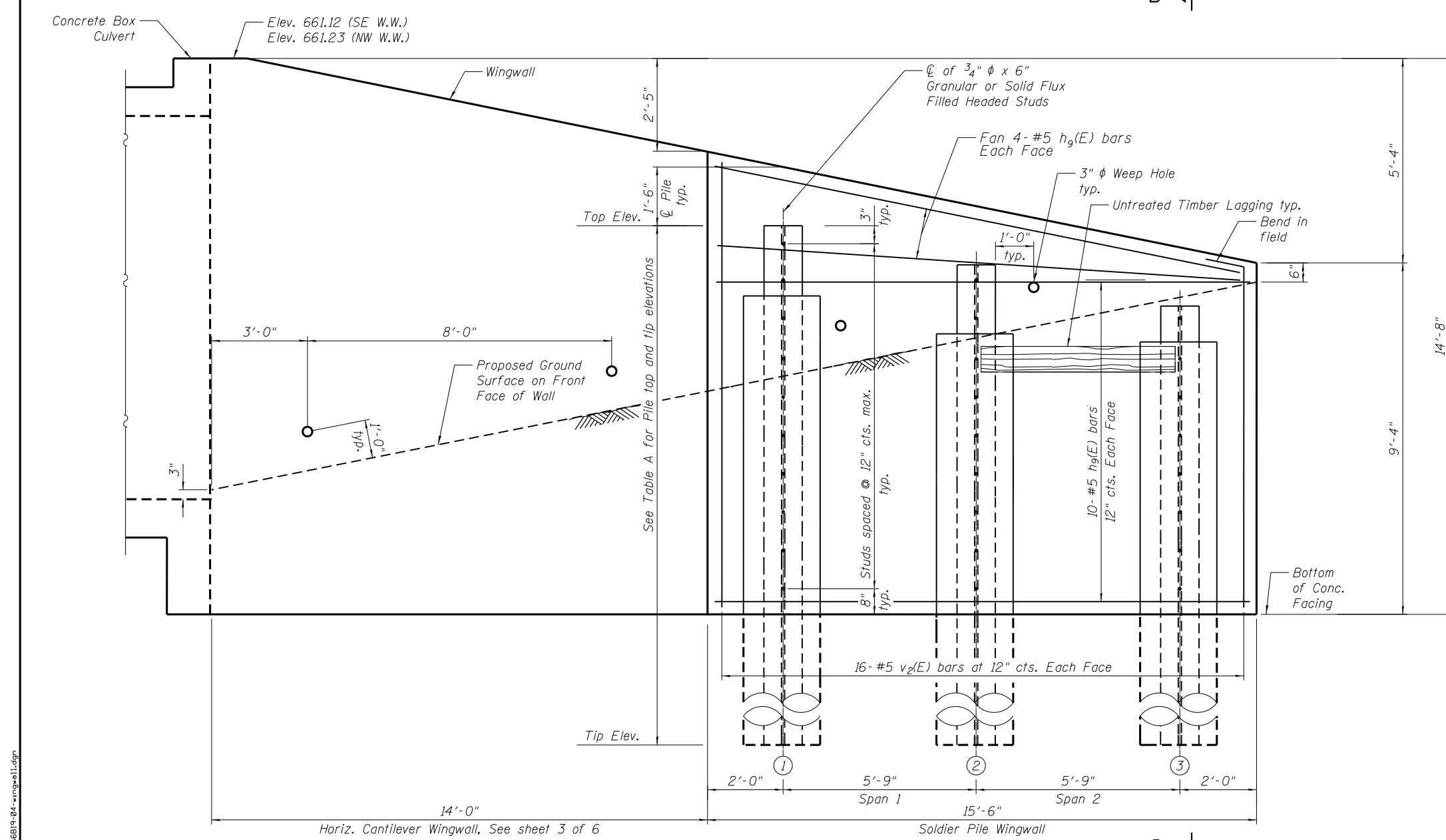
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT SECTIONS AND ELEVATIONS
STRUCTURE NO. 050-2057

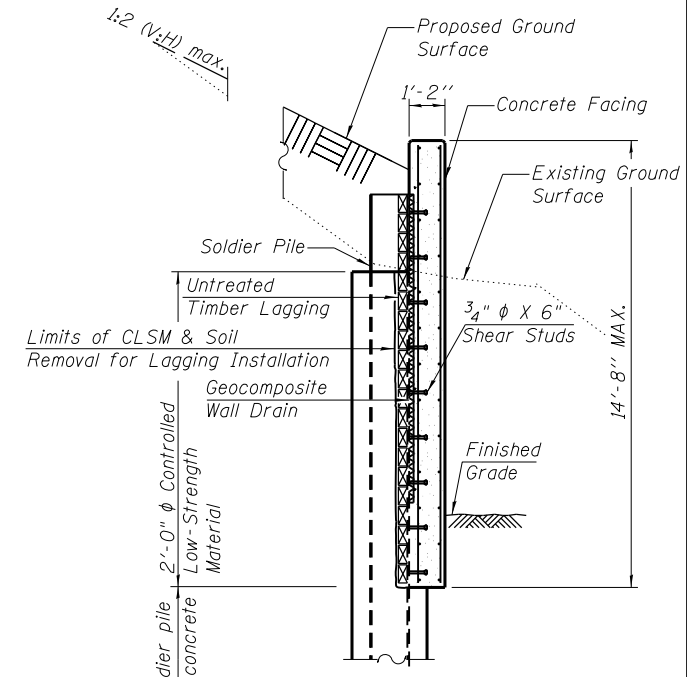
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	43
CONTRACT NO. 66B19				

SHEET NO. 3 OF 6 SHEETS

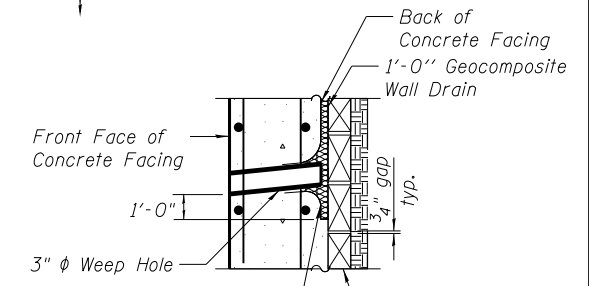
ILLINOIS FED. AID PROJECT



Notes:
 Concrete facing for soldier pile wingwalls is paid for as "Concrete structures".
 The embankment material shall be placed against the rear face of the timber lagging prior to placement of the concrete facing.
 In order to minimize excessive deflection and/or stresses in the soldier piles, compaction equipment used within 4 feet of the back face of the timber lagging shall be limited to lightweight mechanical tampers, rollers, or vibratory systems.
 The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
 Geocomposite wall drain shall not have a thickness greater than 5/8"



SECTION B-B THRU SOLDIER PILE WALL



WEEP HOLE DRAIN DETAIL

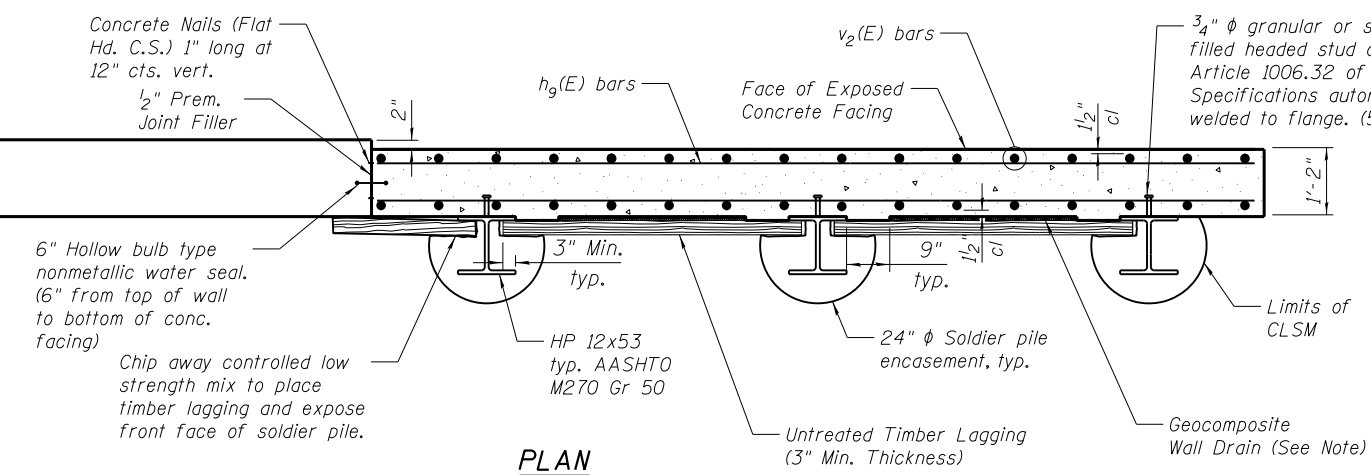
Cut impervious side of Geocomposite Wall Drain and secure to weep hole to ensure a water tight seal.
 Cost of the weep hole drain and the connection to the geocomposite wall drain are included with Concrete Structures.

TABLE A

Pile No.	Top Elev.	Tip Elev.	* Length (ft.)	No. Studs/Pile
SE 1	656.79	627.45	29.5	10
SE 2	655.73	627.45	28.5	9
SE 3	654.66	627.45	27.5	8
NW 1	656.90	627.45	29.5	10
NW 2	655.84	627.45	28.5	9
NW 3	654.77	627.45	27.5	8

* The length of HP12x53 have been rounded to the nearest 6".

ELEVATION
 (Back of Northwest and Southeast Wingwalls)



PLAN

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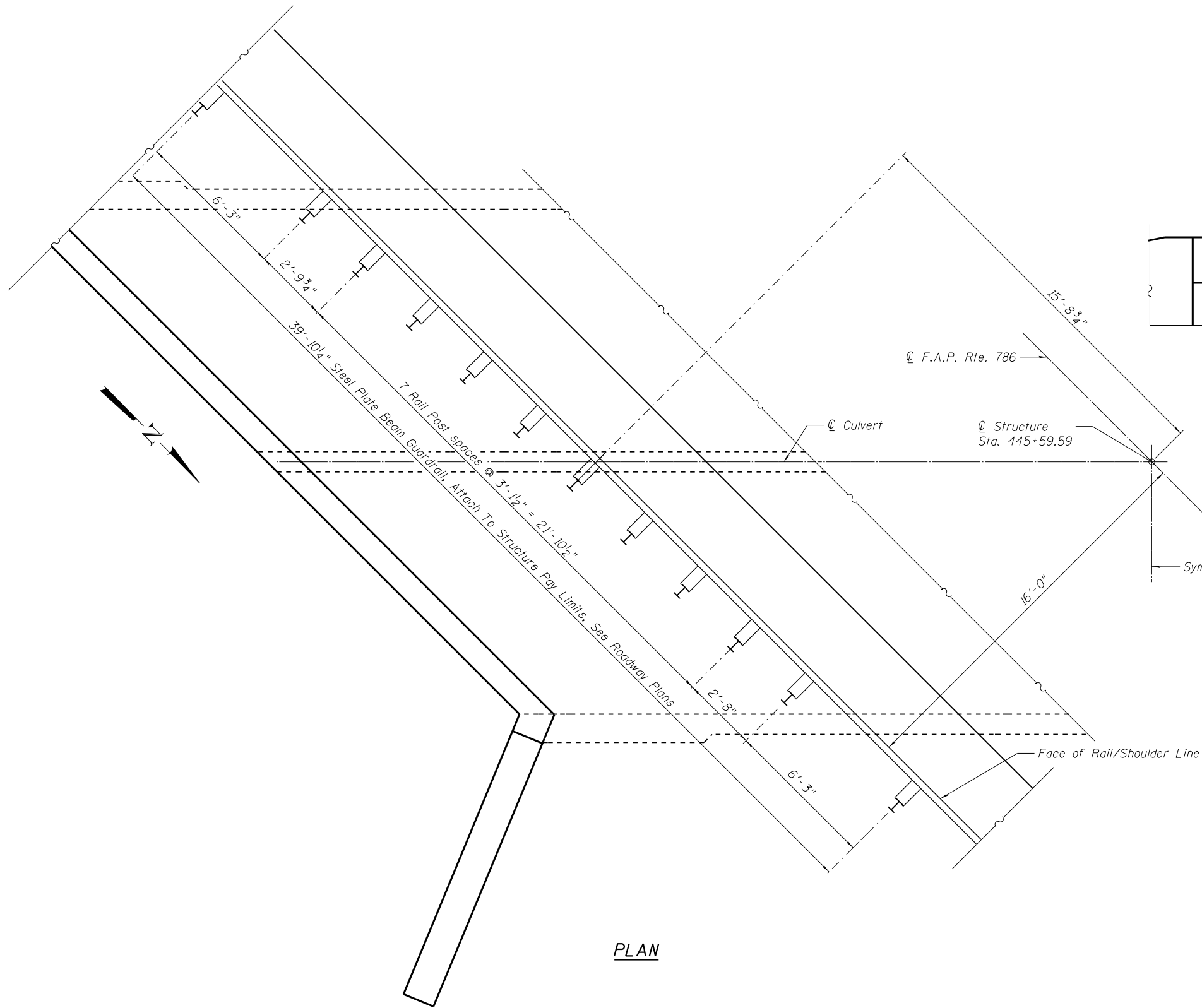
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PLOT DATE =	CHECKED - JB	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

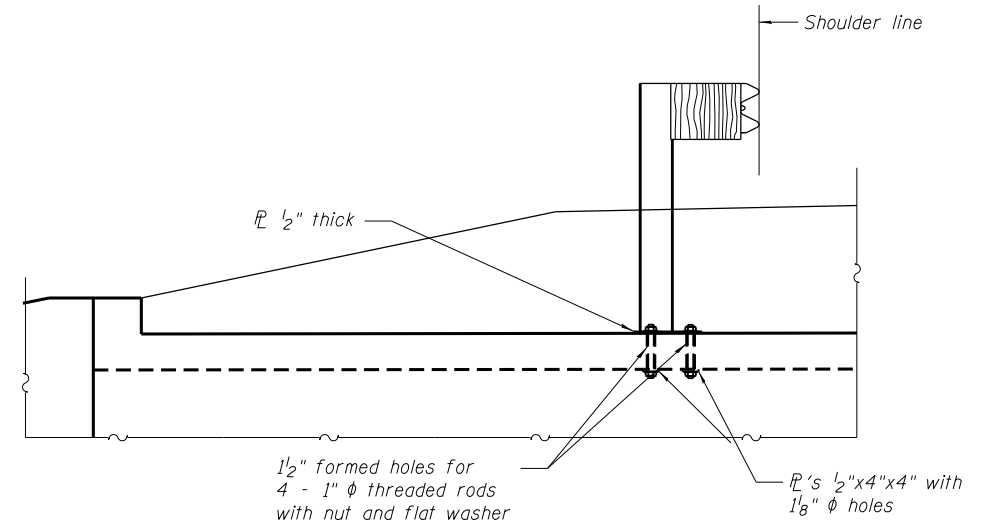
**SOLDIER PILE WALL DETAILS
 STRUCTURE NO. 050-2057**

SHEET NO. 4 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	44
CONTRACT NO. 66B19				
ILLINOIS FED. AID PROJECT				



PLAN



SECTION THRU BARREL

Notes:
 Form all holes at least 4" away from face of wall.
 Dimensions are based on bolt holes 17'-0 1/8" and 17'-7 1/8" from \varnothing Rdwy and 2 1/2" each side of \varnothing post. Contractor shall revise dimensions on this sheet for other bolt hole locations.

T:\Projects\11-208-007_MO_7_culvert_design\Drawings\CADD_Sheets\Final_CAD_drawings_2013-08-26\0366819-05-railpost.dgn



USER NAME =	DESIGNED - OY	REVISED
	CHECKED - DB	REVISED
PLOT SCALE =	DRAWN - CM	REVISED
PLOT DATE =	CHECKED - JB	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**RAIL POST SPACING AND DETAILS
 STRUCTURE NO. 050-2057**

SHEET NO. 5 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	45
CONTRACT NO. 66B19				

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over a Stream, 8.33 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION SE 1/4, SEC. 35, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O I S T
050-0072 (Exist.) 445+54 (Exist.)					651.75 ft 650.89 ft				
BORING NO. 1 (N.W. Quad.) Station 445+16 Offset 31.00ft Rt. Ground Surface Elev. 656.99 ft									
Augered Black Silty Clay Loam Topsoil Fill									3 4 3.0 21.1 5 B
654.49									
Stiff Black Silty Clay Loam Topsoil Fill		4							3 3 2.7 21.0 5 B
652.99		2	1.3	26.7					
Stiff Brown Silty Clay Loam Till		3	P						
-5									
		3							2 3 2.9 21.4 5 B
649.99		3	1.5	15.8					
Very Stiff Brown Silty Clay Loam/Silty Loam Till		5							3 4 2.6 21.6 3 B
647.49		3	2.3	16.5					
Very Stiff Gray Silty Clay Loam Till Very Monolithic & Uniform		4	B						3 3 3.0 22.0 4 B
-10									
		4							3 3 3.0 22.0 4 B
646.95		5	3.7	19.5					
		5	B						3 3 3.0 22.0 4 B
		3							3 4 3.2 19.8 4 B
		4	3.2	19.8					
-15									
		3							3 3 3.2 20.9 4 B
620.49		3	3.2	20.9					
		4	B						3 5 3.1 20.9 5 B
		5							
End of Boring									
		2							2 2 2.7 21.3 4 B
		2	2.7	21.3					
		4	B						
-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 T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE IL 170 (FAP 786) DESCRIPTION IL 170 over a Stream, 8.33 miles South of US 6 LOGGED BY Larry Myers

SECTION (110)BR-1,2,3 LOCATION SE 1/4, SEC. 35, TWP. 32N, RNG. 5E

COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O I S T
050-0072 (Exist.) 445+54 (Exist.)					651.75 ft 650.89 ft				
BORING NO. 2 (S.W. Quad.) Station 445+74 Offset 29.00ft Rt. Ground Surface Elev. 656.95 ft									
Augered Black Silty Clay Loam Topsoil Fill with Rip Rap @ Surface									3 4 3.1 23.0 5 B
654.45									
Stiff Black Silty Clay Loam Topsoil Fill		1							3 2 1.5 27.7 3 P
652.45									
Very Stiff Brown & Gray Silty Clay Loam Till		3							3 3 3.0 18.3 6 B
-5									
		1							3 3 3.1 24.0 4 B
646.95		3							
		3							3 4 4.0 19.0 5 B
		4	4.0	19.0					
		5	B						3 4 3.0 19.5 5 B
		3							
646.95									
Very Stiff Gray Silty Clay Loam Till		2							3 2 3.1 20.3 4 B
-10									
		2							3 2 3.1 20.3 4 B
		4	B						3 3 2.7 22.3 4 B
		2							
		3							3 3 2.9 20.0 4 B
		3	2.9	20.0					
		4	B						3 5 3.1 21.9 4 B
		3							
620.45									
End of Boring									
		3							3 3 3.1 21.1 5 B
		3	3.1	21.1					
		5	B						
-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 T206)

BBS, form 137 (Rev. 8-99)

I:\Projects\11-208-007_MO_7_Solvent_design\Drawings\CADD_Sheets\Final_CAD_Drawings_2013-08-26\0366819-06-brn-log.dgn



USER NAME =	DESIGNED - OY	REVISED
CHECKED - DB	REVISED	
PLOT SCALE =	DRAWN - CM	REVISED
PLOT DATE =	CHECKED - JB	REVISED

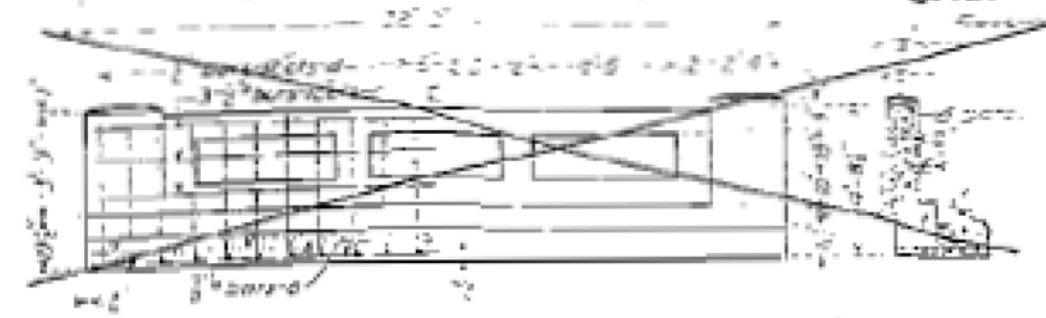
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 050-2057

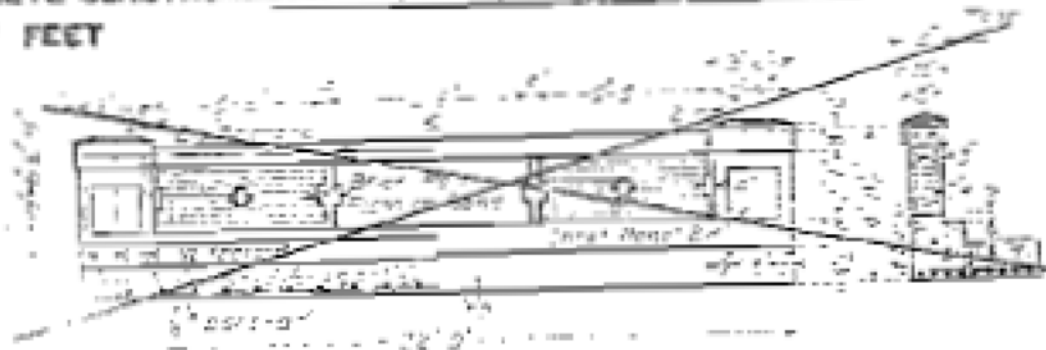
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	(110)BR-1	LASALLE	69	46
CONTRACT NO. 66B19				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
REINFORCED CONCRETE SLAB
SPAN - TWENTY FEET

ROAD DISTRICT NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
72	123	Lasalle	69	49



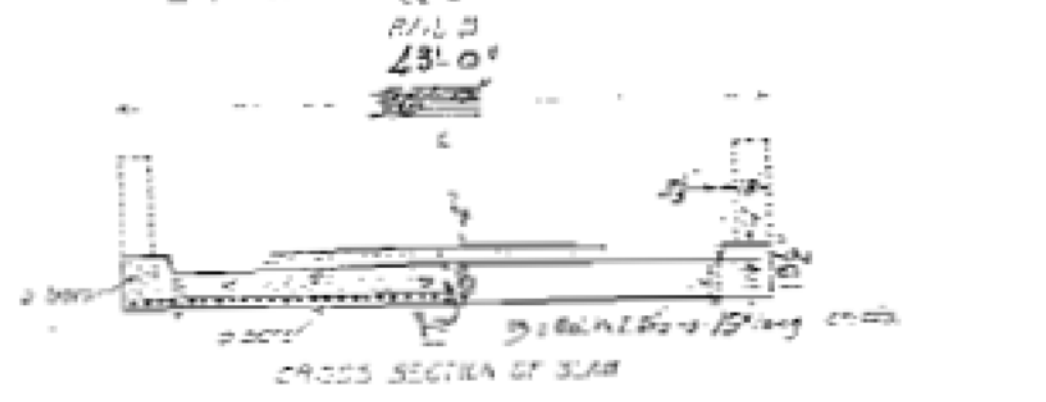
P&E A



P&E B
43'-0"



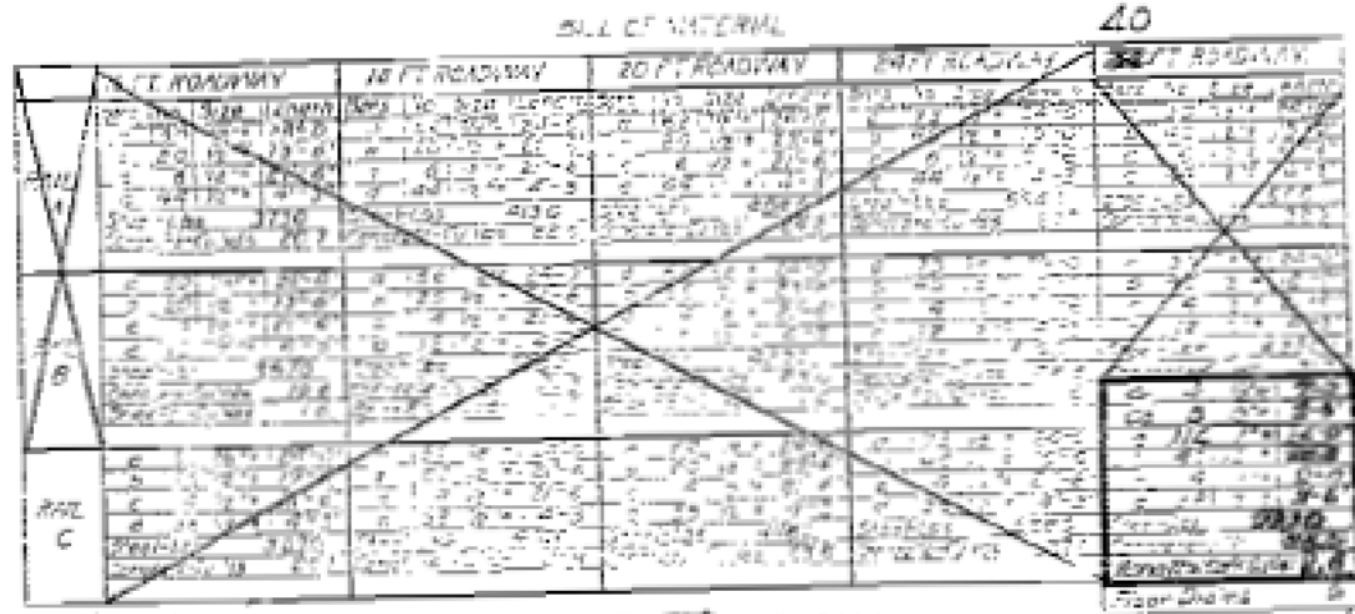
P&E C



CROSS SECTION OF SLAB



PLAN



GRID PLAN

40

class X concrete to be used through out
As reinforcing steel to be wired securely in place before pouring concrete.

USE P&E C 40 FT ROADWAY

40

SR 1 ROUTE 70A-SEC. 10 B
LASALLE COUNTY
STA 34+05

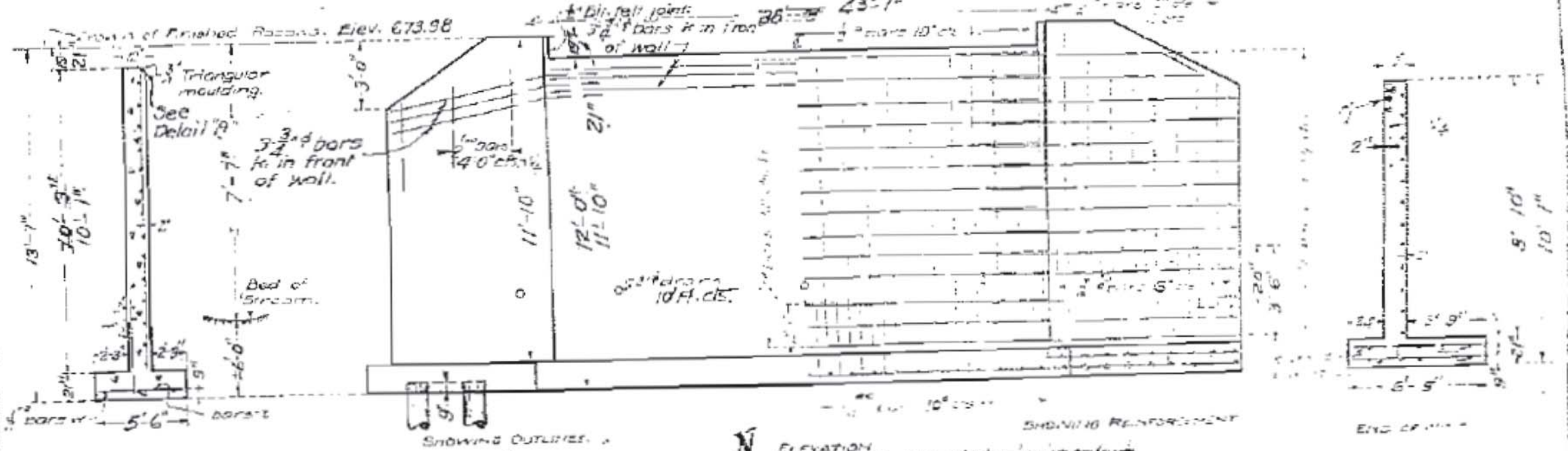
DESIGNED	DATE
DRAWN	DATE
CHECKED	DATE
DATE	DATE

9-13-52
H. J. Burch
[Signature]

B.M. #20 S & W. T. P. Lt. Sta. 313+65
 Elev 673.66
 Old Bridge: 16 Ft. I Beam Span, 14 Ft. Rdy
 To be removed by Bridge Contractor.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS
R.C. ABUTMENTS FOR SLAB BRIDGE
 HEIGHT OVER ALL 13 FEET 7 INCHES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
70A	110B	LA SALLE	20	23

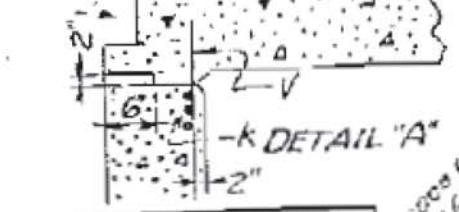


SECTION OF ABUTMENT

Class X concrete must be used throughout.

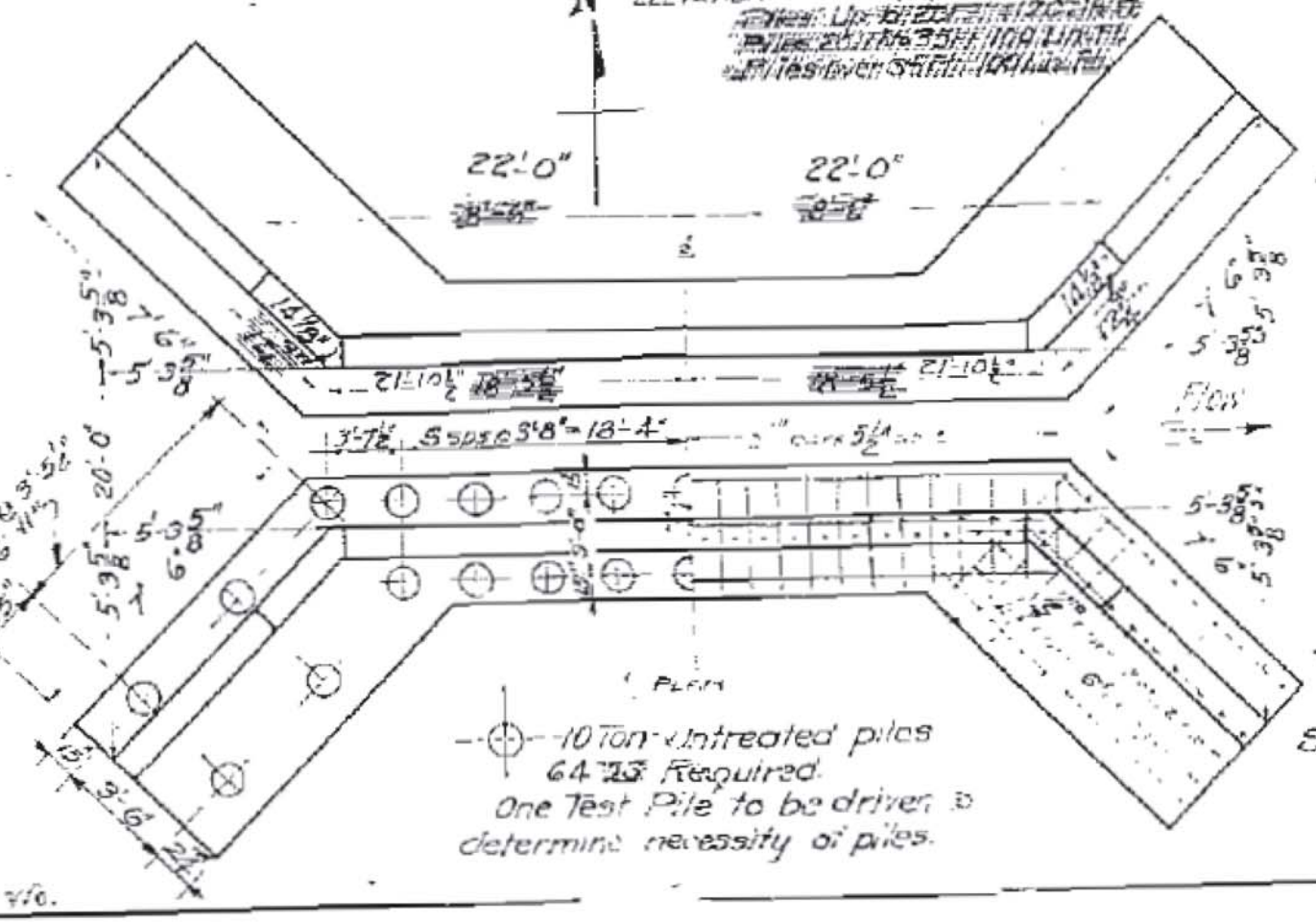
All reinforcing steel shall be accurately wired in place before concrete is poured.

4' x 5' Notch for Approach Pavement



DESIGNED	BY	DATE
DRAWN	BY	DATE
CHECKED	BY	DATE
APPROVED	BY	DATE

9-2-33
 H. F. [Signature]
 Rev. 11-1-36 - RWH



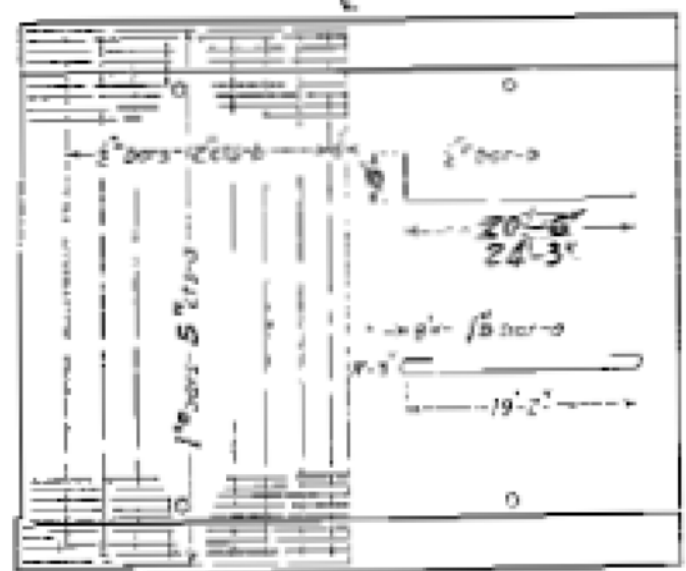
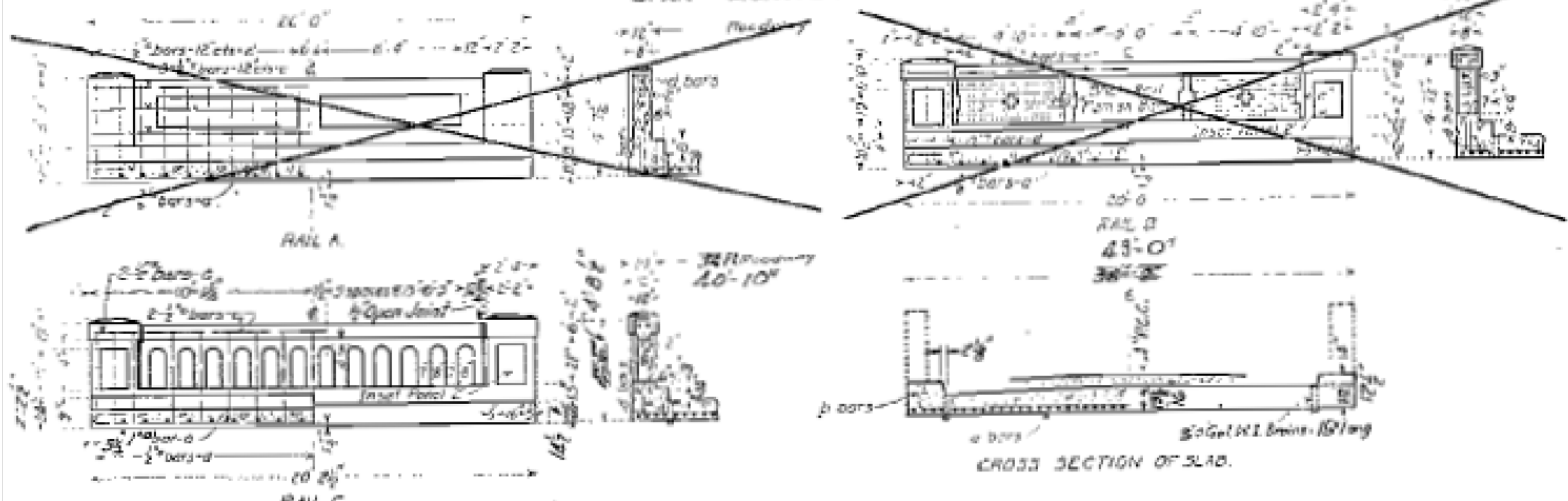
Unit Piling - Lin Ft.
 1280

LINE	FROM	TO	LENGTH
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3	2	3	8.6
4	3	4	7.0
5	4	5	3.5
6	5	6	9.0
7	6	7	8.0
8	7	8	5.0
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95	94	95	8.0
96	95	96	8.0
97	96	97	8.0
98	97	98	8.0
99	98	99	8.0
100	99	100	8.0

S. B. I. ROUTE 70A-SEC. 110B
 LA SALLE COUNTY
 STA 314+05

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
REINFORCED CONCRETE SLAB
SPAN - EIGHTEEN FEET ON \bar{C}

ROAD DIST. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.	Sheet No. 1 of 3 Sheets
704	110-B	LaSalle	50	49	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



BILL OF MATERIAL

	18 FT ROADWAY	24 FT ROADWAY	30 FT ROADWAY	36 FT ROADWAY	40 FT ROADWAY
RAIL A
RAIL B
RAIL C

DESIGNED -
DRAWN -
CHECKED -
DATE -

9-13-32
D. F. Burch
[Signature]



S.B.L. RT. 70-A SEC. 110-B
LA SALLE COUNTY
STATION 369+42

Existing I-Beam Bridge Span 12', Rdy 17'
 to be removed by Bridge Contractor.
 B.M. #35-5.21-67-11-51-370-84
 Elev. 676.67

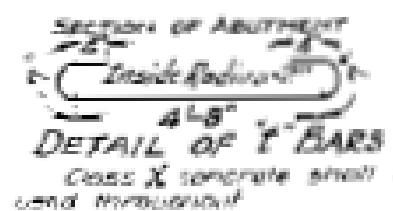
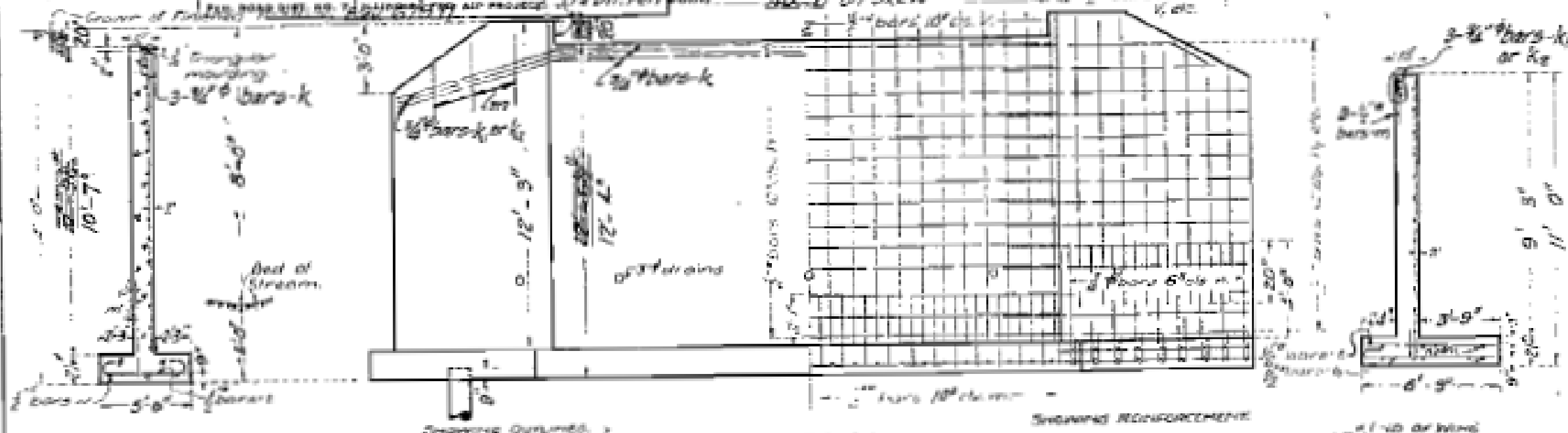
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS

Long Wing - 3V₁-4V₂-4V₂-9H₂-2H₂
 2H₂ - 11Z - 6H₂-3K₂
 Short Wing - 2V₁-2V₁-3V₁-9H₂-2H₂
 16L₂ - 6Z - 6H₂-3K₂

3 Sheets.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
70A	110B	LaSalle	50	49

REQUIREMENTS FOR SLAB BRIDGE
 HEIGHT OVER ALL 14 FEET



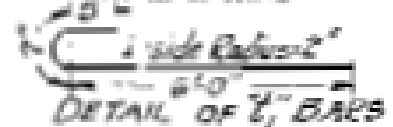
All reinforcing steel shall be securely wired in place before concrete is poured.



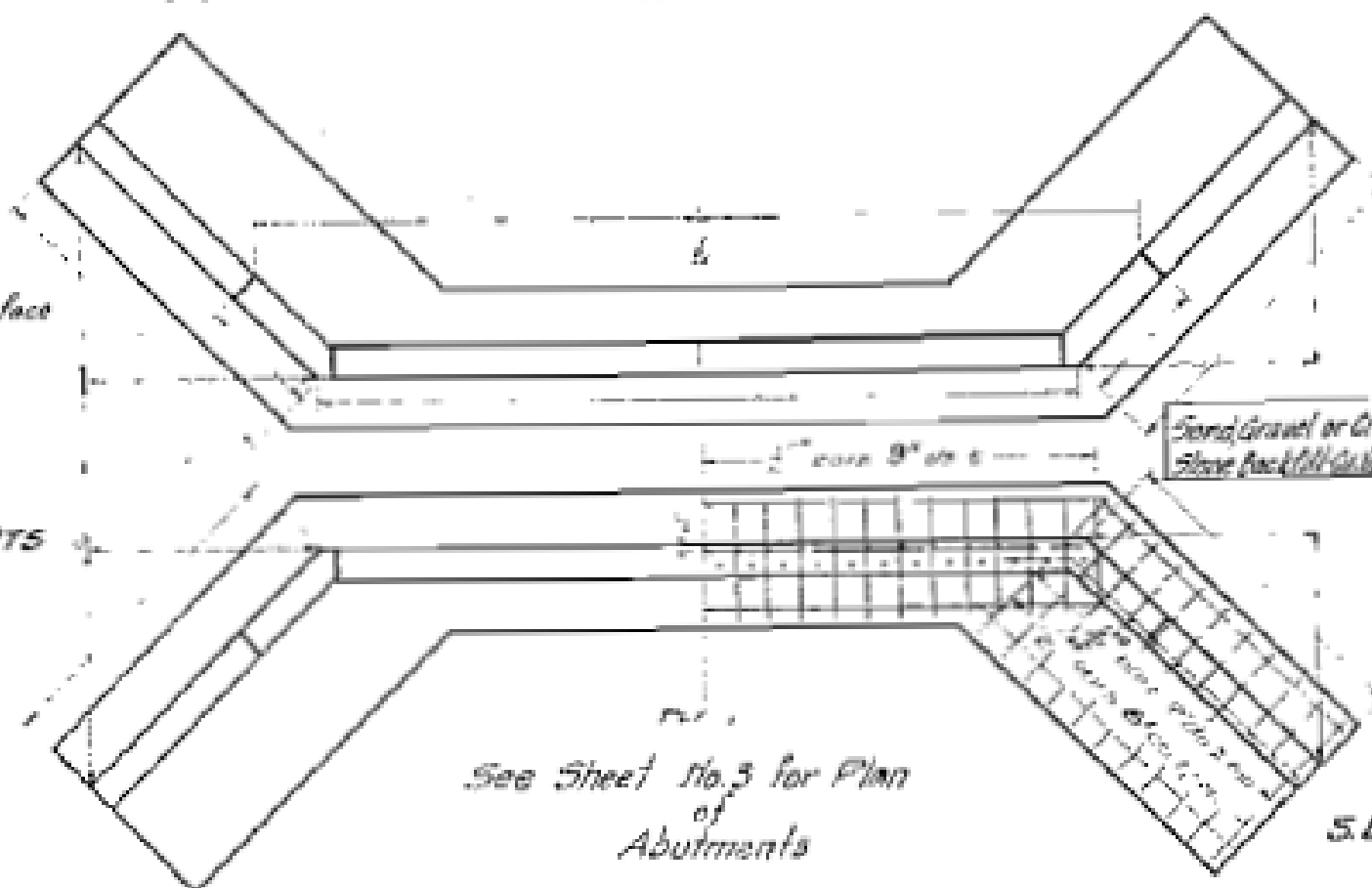
SECTION SHOWING SUPPORTS

NO.	DESCRIPTION	DATE
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2	DRAWN	11-1-51
3	CHECKED	11-1-51
4	DATE	11-1-51

9-3-32
 D. F. Church
 11-1-51
 Rev 11-2-54 - D.W.H. G.K.S.M.H.



NO.	SIZE	LENGTH
1	100	11'-9"
2	10	9'-9"
3	12	8'-6"
4	14	7'-0"
5	40	2'-6"
6	18	2'-6"
7	4	9'-0"
8	18	8'-6"
9	12	8'-6"
10	4	5'-6"
11	10	5'-6"
12	20	7'-0"
13	32	6'-6"
14	8	2'-6"
15	12	8'-6"
16	12	3'-0"
17	12	8'-0"
18	8	13'-6"
19	6	9'-6"



See Sheet No. 3 for Plan of Abutments

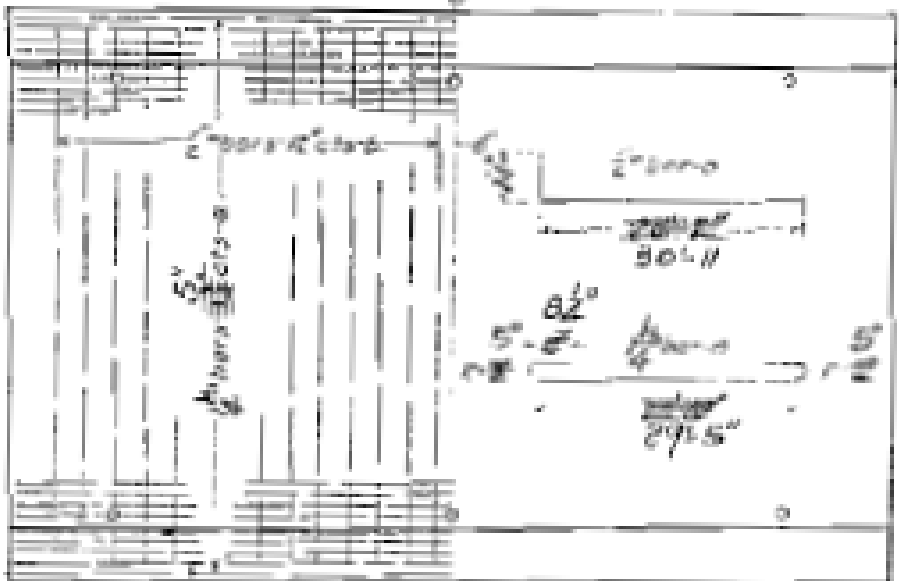
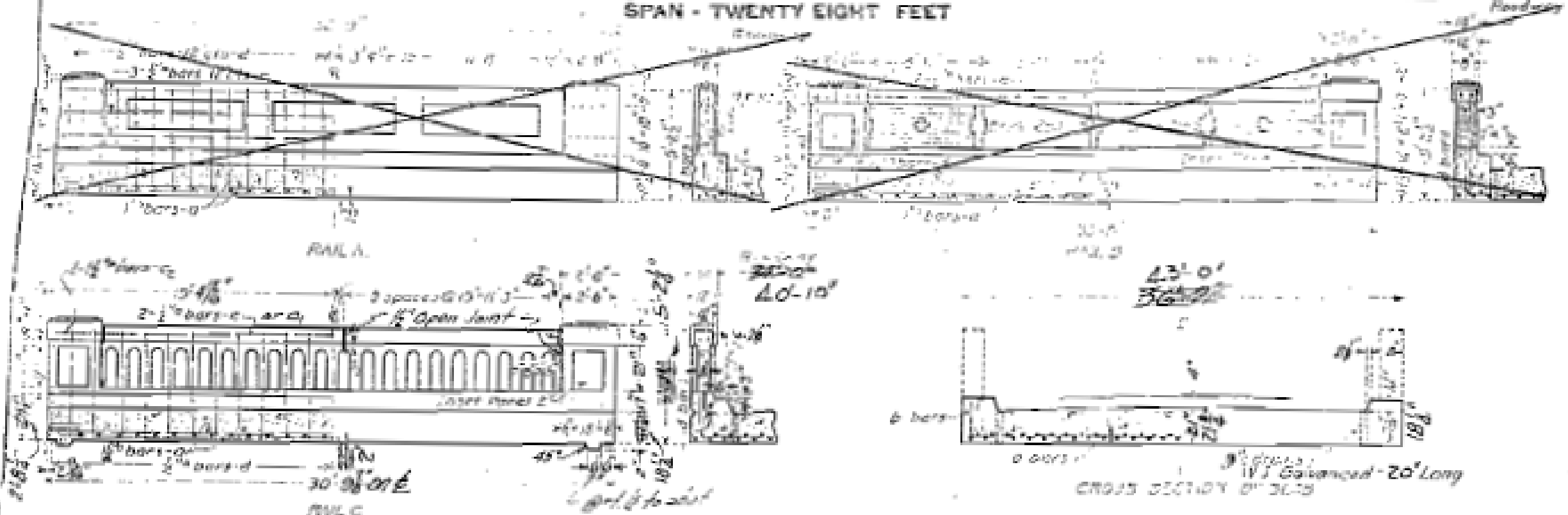
S.B. RT. 70-A SEC. 110-B
 LA SALLE COUNTY
 STATION 369+42

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DISTRICT NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
57A	9A	Lasalle	30	50
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

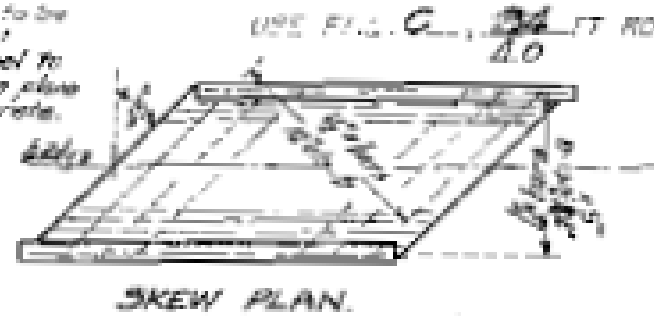
Sheet No. 50 of 30 Sheets

REINFORCED CONCRETE SLAB
SPAN - TWENTY EIGHT FEET



	18 FT. ROADWAY	20 FT. ROADWAY	22 FT. ROADWAY	24 FT. ROADWAY	26 FT. ROADWAY
Area (sq. ft.)	324	400	484	576	676
Volume (cu. ft.)	6156	7600	9284	10944	12736
Weight (lb.)	100716	126400	152988	179136	206944
Reinforcement (lb.)	10000	12000	14000	16000	18000
Concrete (cu. yd.)	227	280	339	399	462
Reinforcement (cu. yd.)	0.22	0.27	0.32	0.37	0.42

Class of concrete to be used throughout
All Reinforcing Steel to be wired accurately in place before pouring concrete.



381.9
351.5
315.0
275.0

USE FIG. C, 20 FT. ROADWAY

Floor Drains 6

381.9
351.5
315.0
275.0

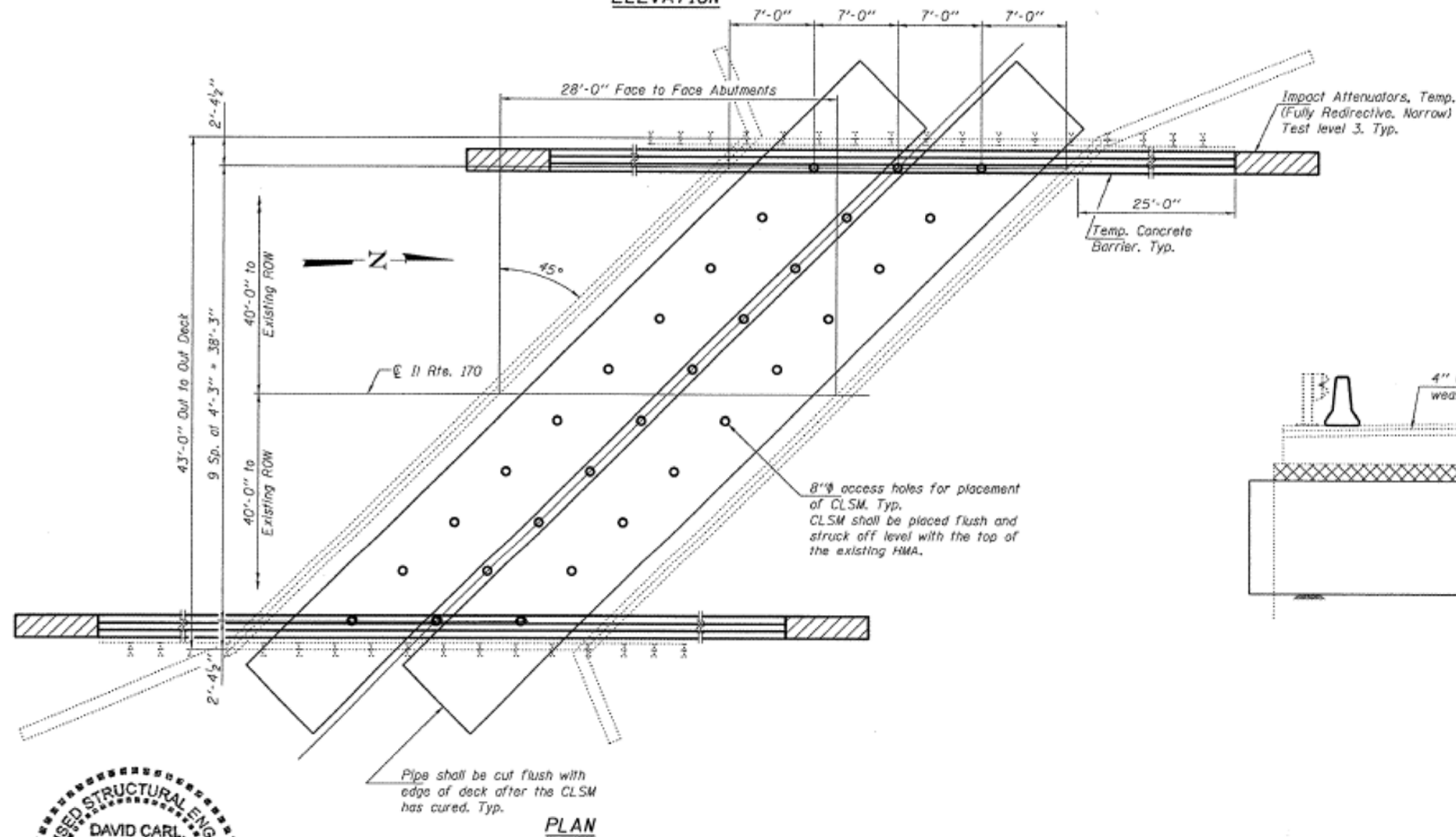
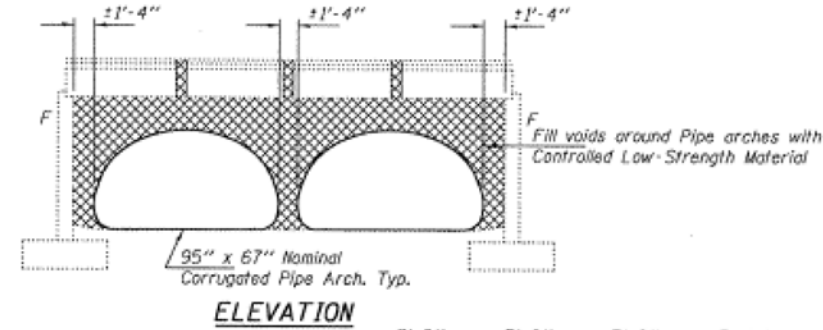
381.9
351.5
315.0
275.0

DESIGNED	BY	DATE
DRAWN	BY	DATE
CHECKED	BY	DATE
APPROVED	BY	DATE

9-13-32
D. J. Burch
7-1-33
D. J. Burch

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



SECTION THRU DECK

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Concrete Barrier (Install only)	Foot	156
Controlled Low-Strength Material	Cu. Yd.	228.0
Corrugated Structural Plate Pipe Arches 37 Sq. Ft.	Foot	142
Impact Attenuators, Temp. (Fully Redirective, Narrow) Test level 3	Each	4



Expires: November 30, 2012

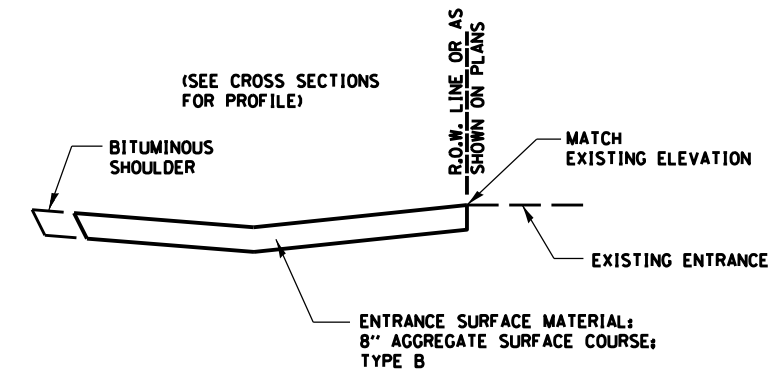
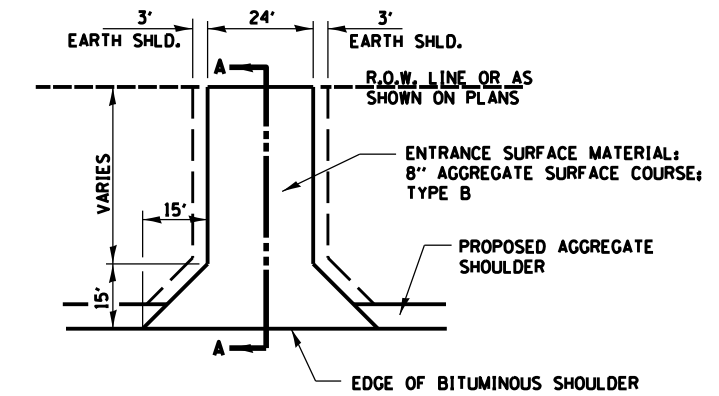
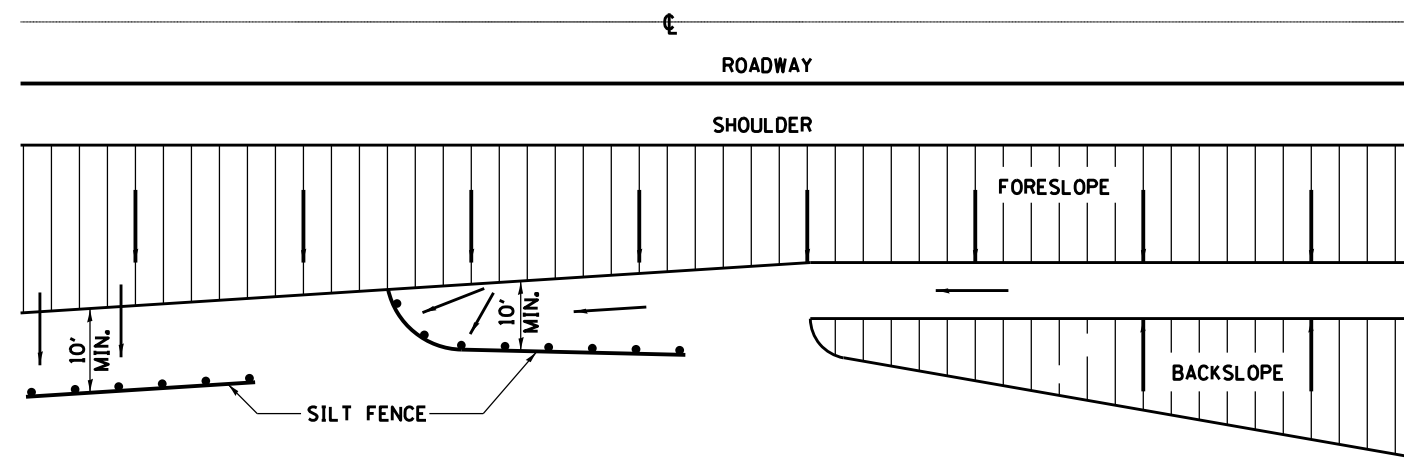
DESIGNED - [Signature]	EXAMINED - [Signature]	DATE - MARCH 23, 2011
CHECKED - [Signature]	PASSED - [Signature]	
DRAWN - [Signature]		
CHECKED - [Signature]		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

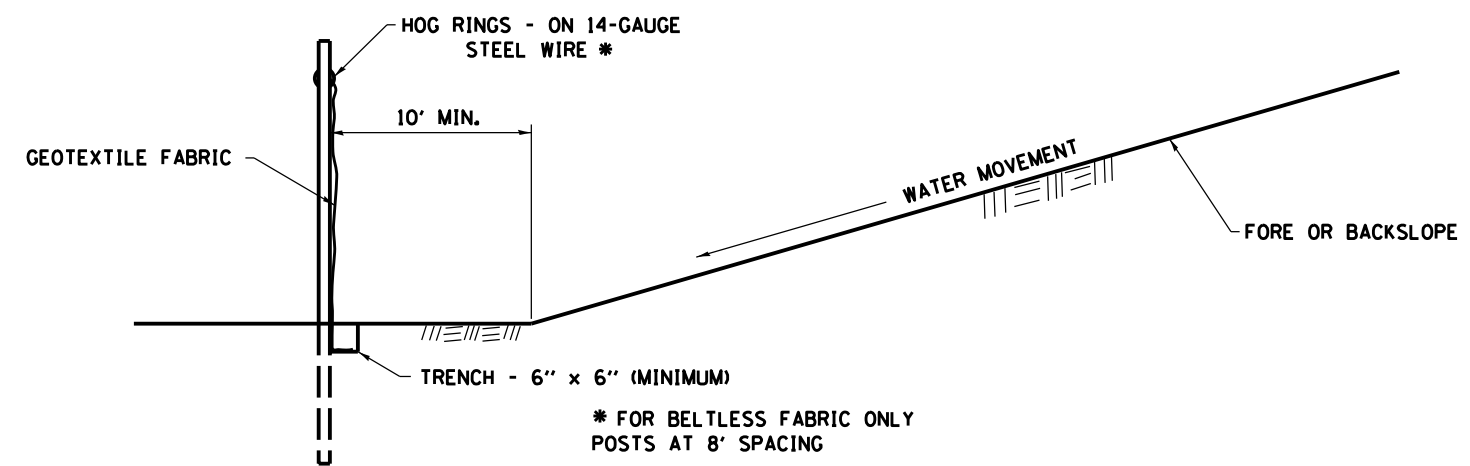
GENERAL PLAN & ELEVATION
SN 050-072

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
786	110-81	LaSALLE	5	5
CONTRACT NO. 66822			ILLINOIS FED. AID PROJECT	

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS SN 050-072 FOR INFORMATION ONLY	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#	#USER#	-	-			786	110BR-12.3	LASALLE	69	53
#MODELNAME#	PLOT SCALE	CHECKED	REVISED			CONTRACT NO. 66819			ILLINOIS FED. AID PROJECT	
	PLOT DATE	DATE	REVISED			SCALE:	SHEET	OF	SHEETS	STA. TO STA.

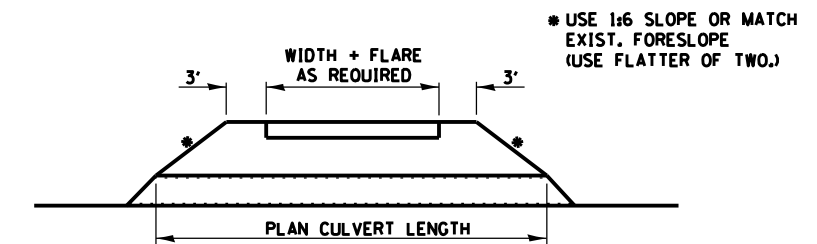


SECTION A-A



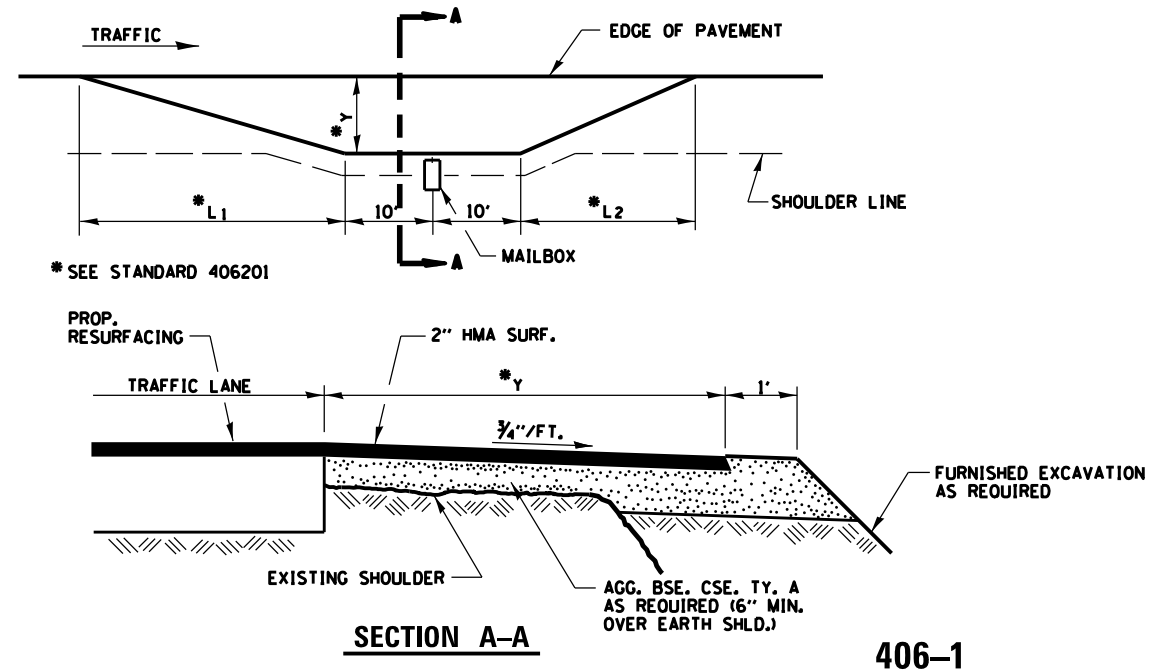
DETAILS OF SILT FENCE

**EROSION CONTROL DETAILS
FOR SILT FENCE**



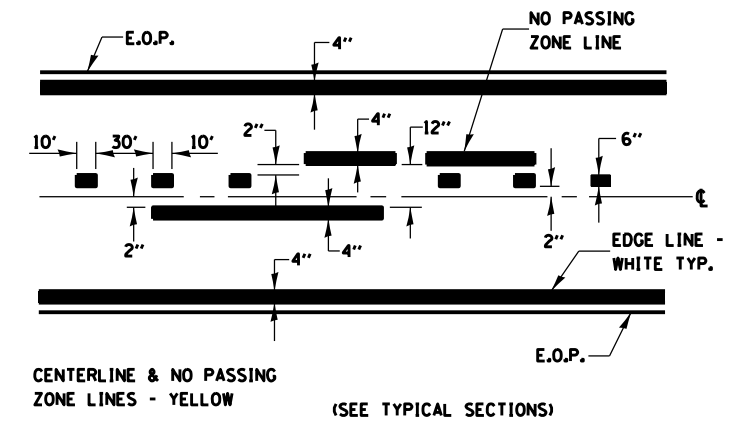
FIELD ENTRANCE DETAIL

FILE NAME =	USER NAME = \$USER*	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
\$FILEL\$		DRAWN - _____	REVISED - _____		SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____	786	1110BR-1.2.3	LASALLE	69	54
\$MODELNAME\$	PLOT SCALE = \$SCALE*	CHECKED - _____	REVISED - _____		CONTRACT NO. 66819							
	PLOT DATE = \$DATE*	DATE - _____	REVISED - _____		ILLINOIS FED. AID PROJECT							

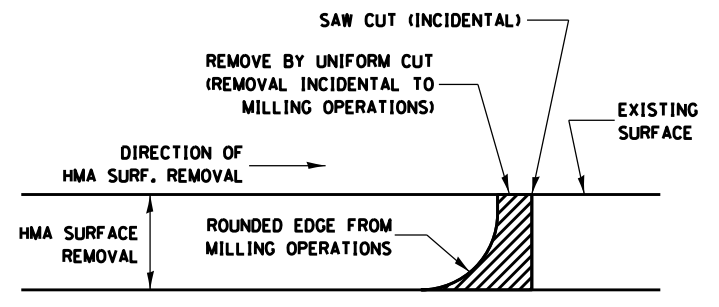


RURAL MAILBOX TURNOUT DETAILS

406-1

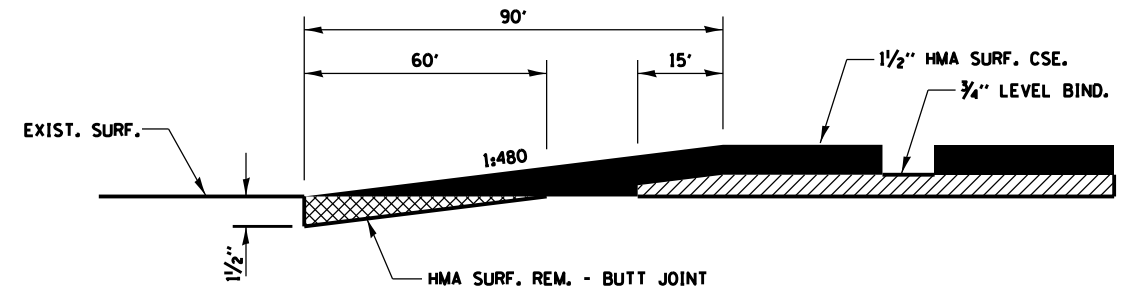


PAVEMENT MARKING



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

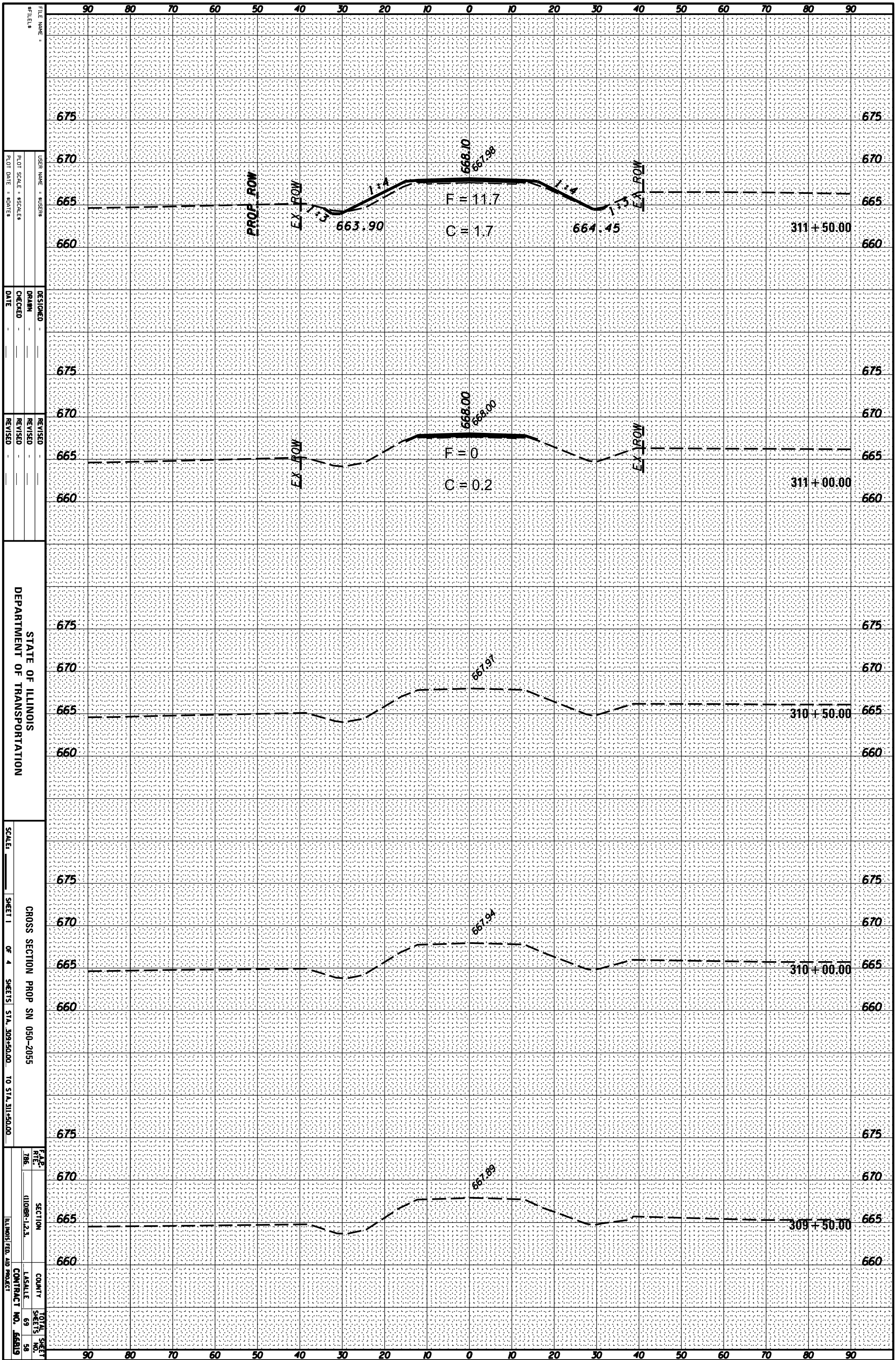
HMA DETAIL AT BUTT JOINTS



FILE NAME =	USER NAME = \$USER\$	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$		DRAWN - _____	REVISED - _____		786	1110BR-1.2.3	LASALLE	69	55		
\$MODELNAME\$	PLOT SCALE = \$SCALE\$	CHECKED - _____	REVISED - _____		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 66819		ILLINOIS FED. AID PROJECT		
	PLOT DATE = \$DATE\$	DATE - _____	REVISED - _____								

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME: _____
 USER NAME: SUSENS
 PLOT SCALE: 1"=40 FEET
 PLOT DATE: 8/20/15

DESIGNED: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____

REVISED: _____
 REVISED: _____
 REVISED: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: _____
 SHEET 1 OF 4 SHEETS STA. 309+50.00 TO STA. 311+50.00

CROSS SECTION PROP SN 050-2055

F&B: _____
 RFE: _____
 T&E: _____

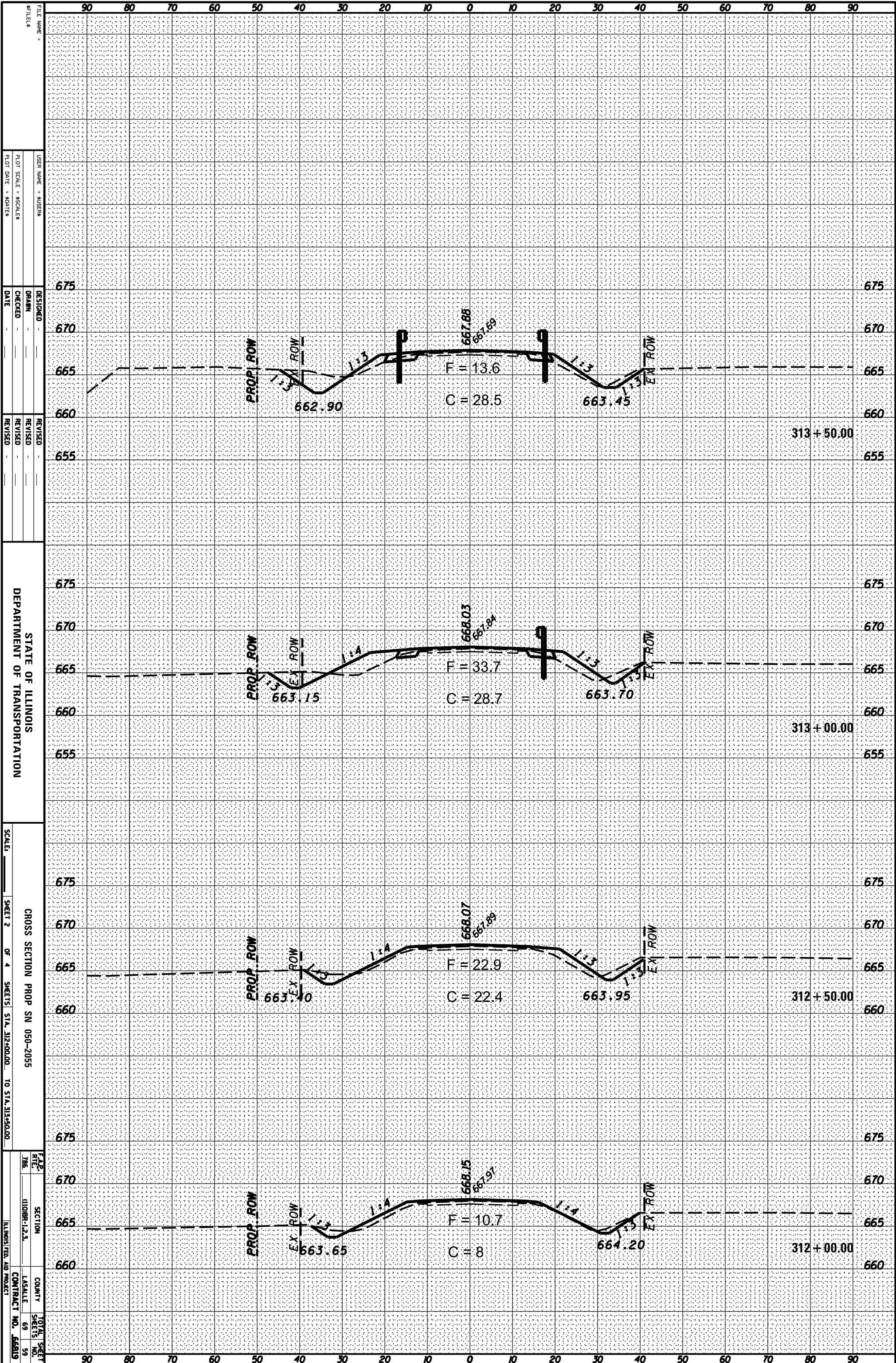
SECTION: ILLINOIS-123
 COUNTY: _____
 TOWNSHIP: _____
 CONTRACT NO. 66819

TOTAL SHEET NO. 69
 SHEET NO. 58

ILLINOIS FLD. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



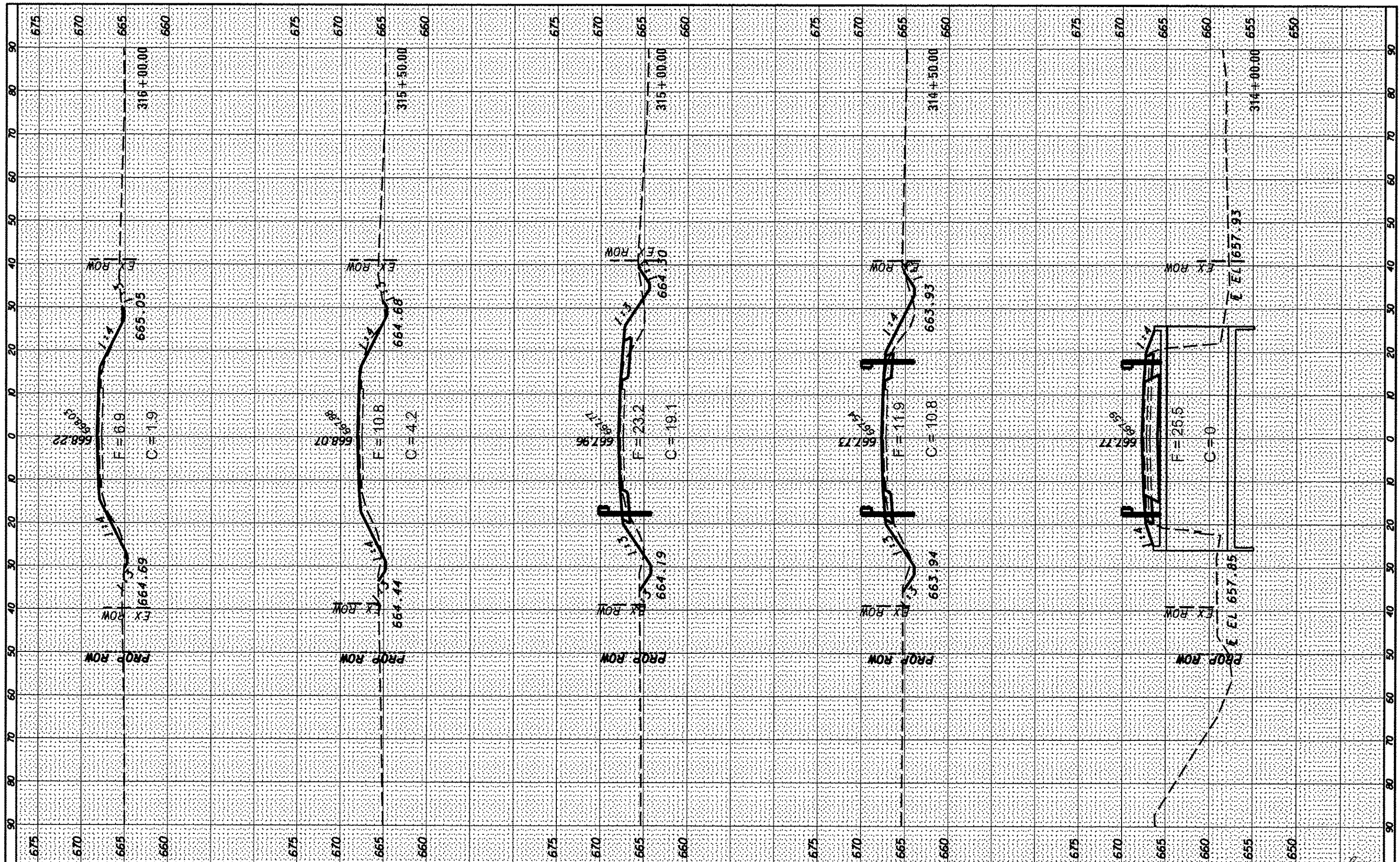
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION PROP SN 050-2055
SHEET 2 OF 4 SHEETS STA. 312+00.00 TO STA. 313+50.00

SECTION ILLINOIS-123
COUNTY LASALLE
TOTAL SHEETS 69 SHEETS NO. 59
CONTRACT NO. 66819
ILLINOIS FED. AID PROJECT

FINISH	SUPERSEDED	DATE
SHRIMP	PLATTED	
NOTE BOOK	AREAS	
	AREAS	
	CHECKED	

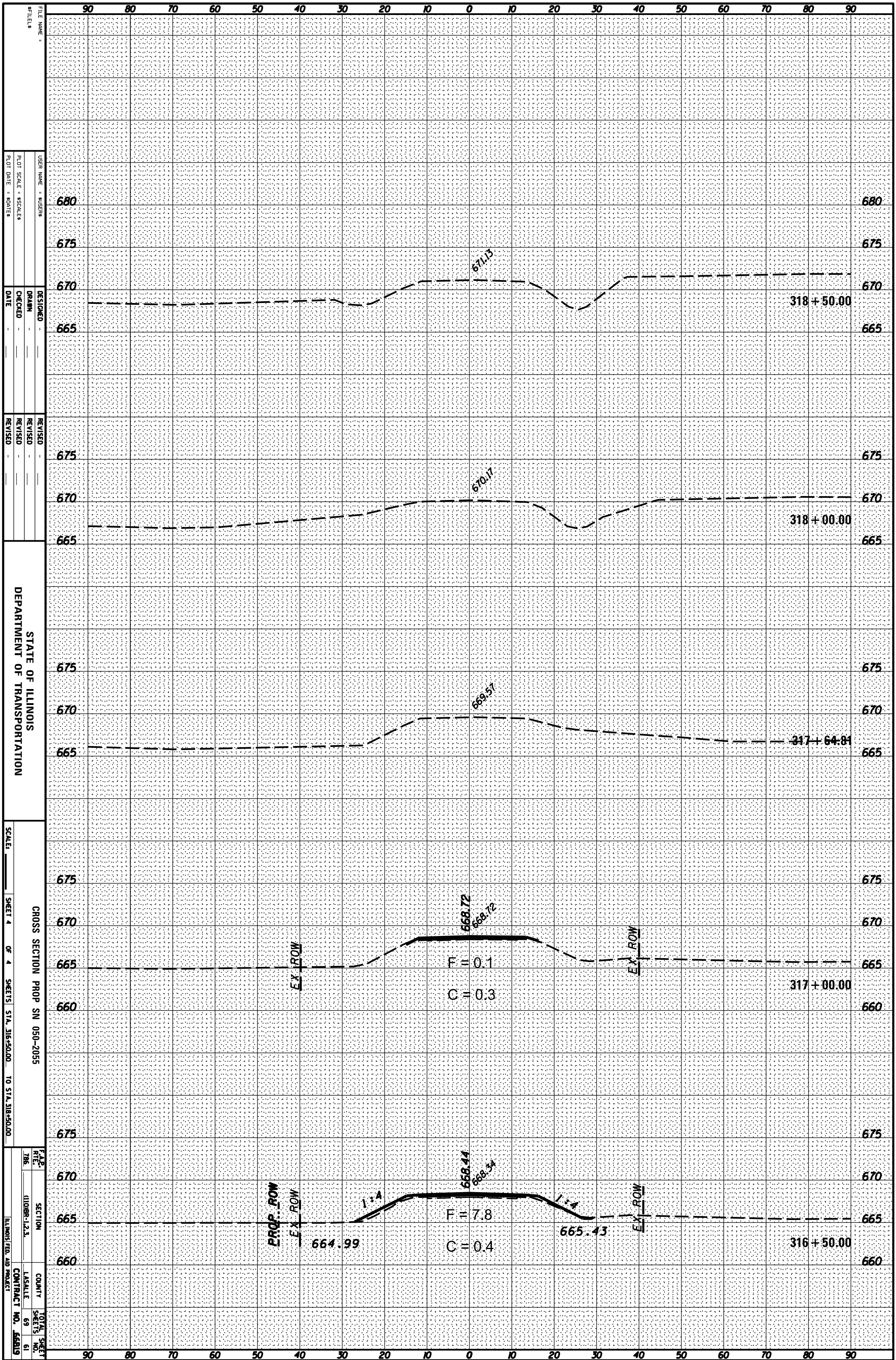
ORIGINAL	DATE
SURVEY	
NOTE BOOK	



FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		CROSS SECTION PROP SN 050-2055		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN	REVISED					786	110BR-1,2,3	LASALLE	69	60
		CHECKED	REVISED									CONTRACT NO. 66819
		DATE	REVISED									ILLINOIS FED. AID PROJECT
		PLOT SCALE				SCALE: _____						
		PLOT DATE				SHEET 3 OF 4 SHEETS						
						STA. 314+00.00 TO STA. 316+00.00						

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

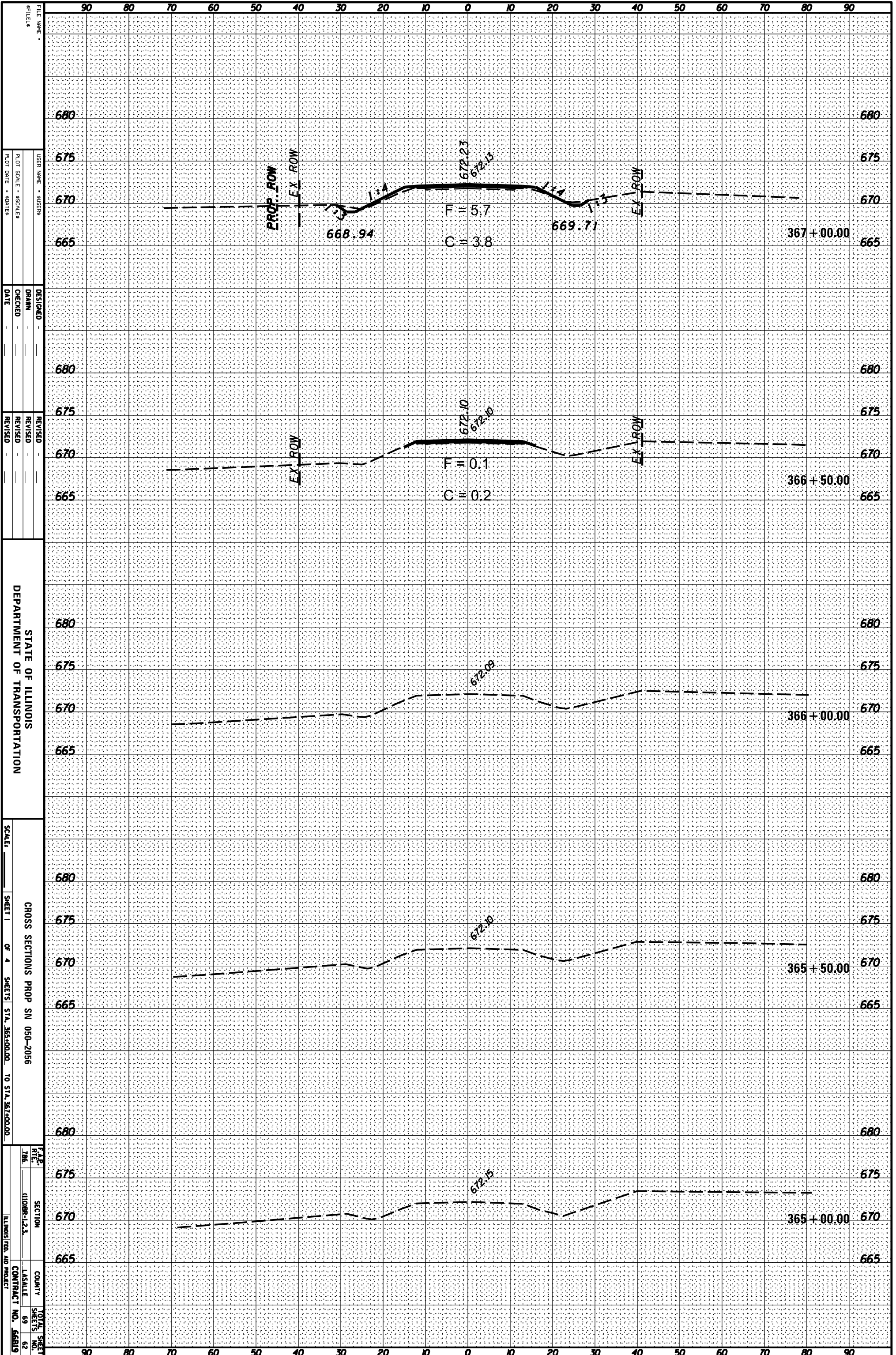
FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME: _____
 USER NAME: \$USERS
 PLOT SCALE: \$Scales
 PLOT DATE: \$DATE
 DESIGNED: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____
 REVISED: _____
 REVISED: _____
 REVISED: _____
 DEPARTMENT OF TRANSPORTATION
 SCALE: _____
 SHEET 4 OF 4 SHEETS STA. 316+50.00 TO STA. 318+50.00
 CROSS SECTION PROP SN 050-2055
 F&B: _____
 RTR: _____
 T&E: _____
 SECTION: _____
 COUNTY: _____
 LASALLE
 ILLINOIS FED. AID PROJECT
 TOTAL SHEET NO. 61
 CONTRACT NO. 66819

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME: _____
 USER NAME: S05888
 PLOT SCALE: 1"=40' SCALES
 PLOT DATE: 8/20/15

DESIGNED _____
 DRAWN _____
 CHECKED _____
 DATE _____

REVISOR _____
 REVISOR _____
 REVISOR _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS PROP SN 050-2056
 SCALE: 1"=40' SCALES
 SHEET 1 OF 4 SHEETS STA. 365+00.00 TO STA. 367+00.00

F&B
 RFE
 T&E

SECTION
 ILLINOIS-123

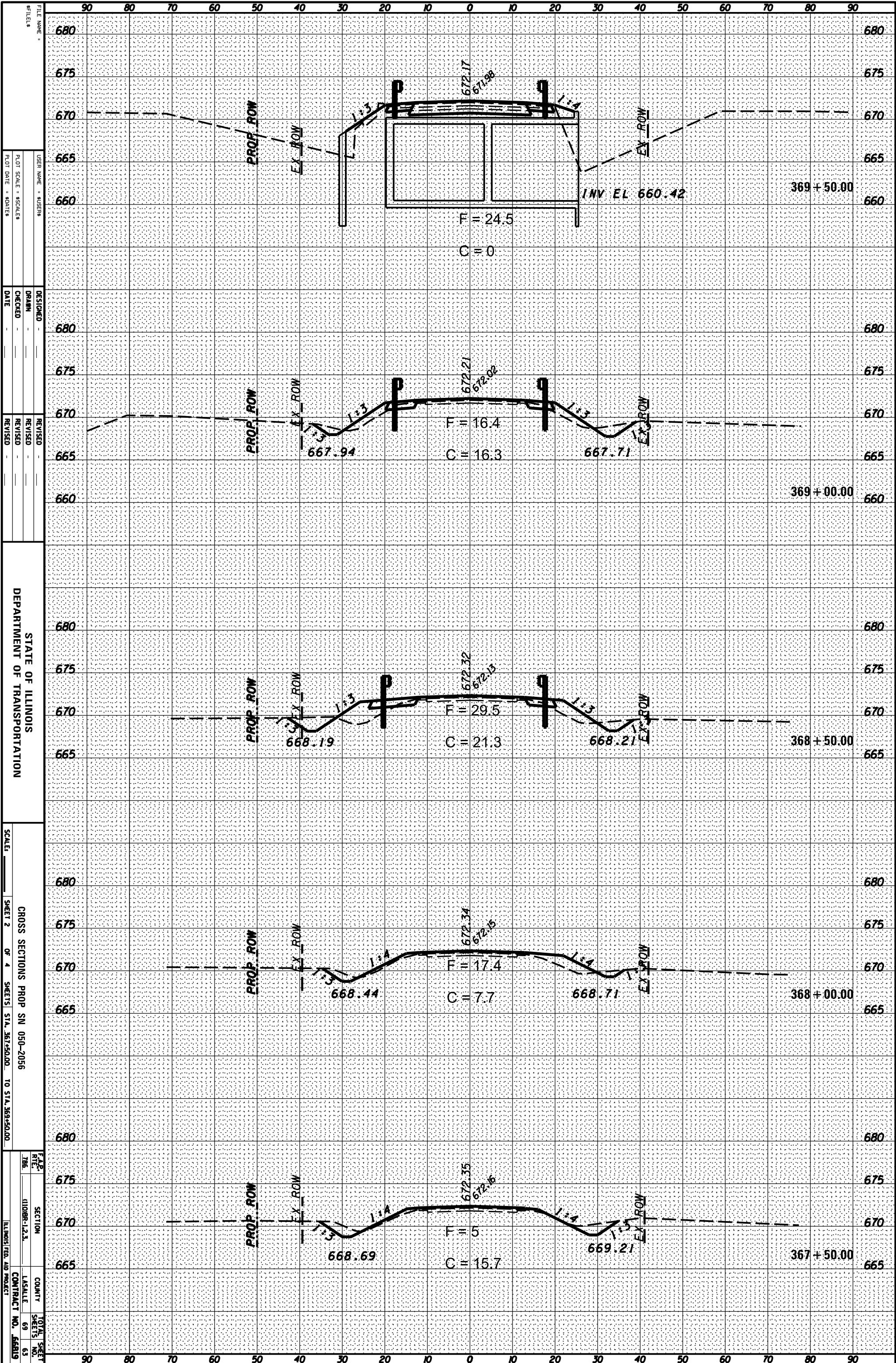
COUNTY
 LASALLE

TOTAL SHEET
 SHEETS NO.
 69 62

ILLINOIS FED. AID PROJECT
 CONTRACT NO. 66819

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



FILE NAME: _____
 USER NAME: SUSENS
 PLOT SCALE: 80 FEET
 PLOT DATE: 8/20/15

DESIGNED: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____

REVISOR: _____
 REVISION: _____
 DATE: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

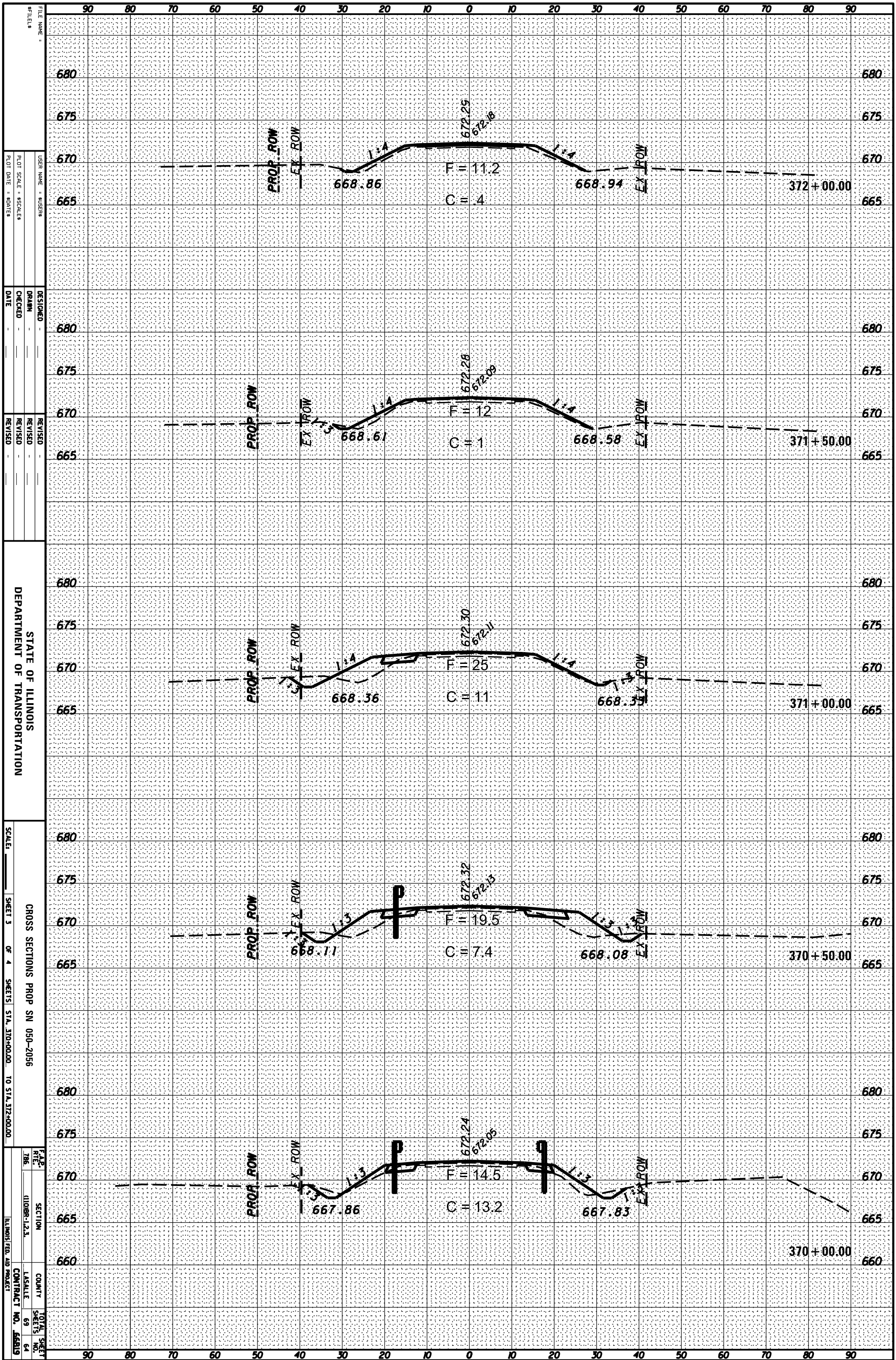
CROSS SECTIONS PROP SN 050-2056
 SHEET 2 OF 4 SHEETS STA. 367+50.00 TO STA. 369+50.00

F&E	SECTION	COUNTY	TOTAL SHEETS
RTS	ILLINOIS-123	LASALLE	69
			63

ILLINOIS FED. AID PROJECT CONTRACT NO. 66819

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

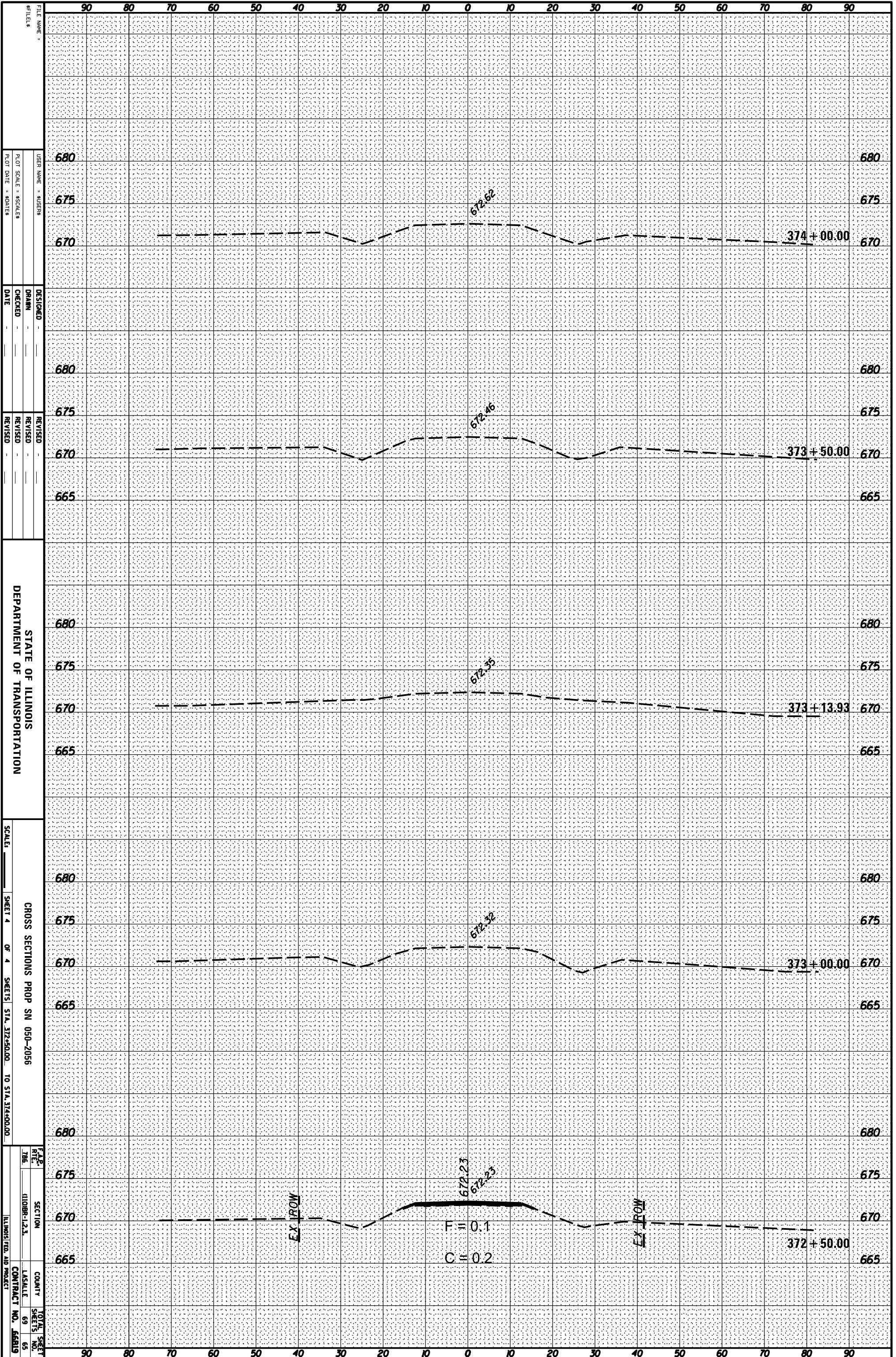
CROSS SECTIONS PROP SN 050-2056
SHEET 3 OF 4 SHEETS STA. 370+00.00 TO STA. 372+00.00

FILE NAME	DESIGNED	REVISOR
DATE	CHECKED	DATE
USER NAME: S05088	DRAWN	REVISOR
PLT SCALE: 80FTES	CHECKED	REVISOR
PLT DATE: 8/20/15	DATE	REVISOR

SECTION	COUNTY	TOTAL SHEET NO.
ILL08R-12.3	LASALLE	69
CONTRACT NO.	ILLINOIS FED. AID PROJECT	64
66819		

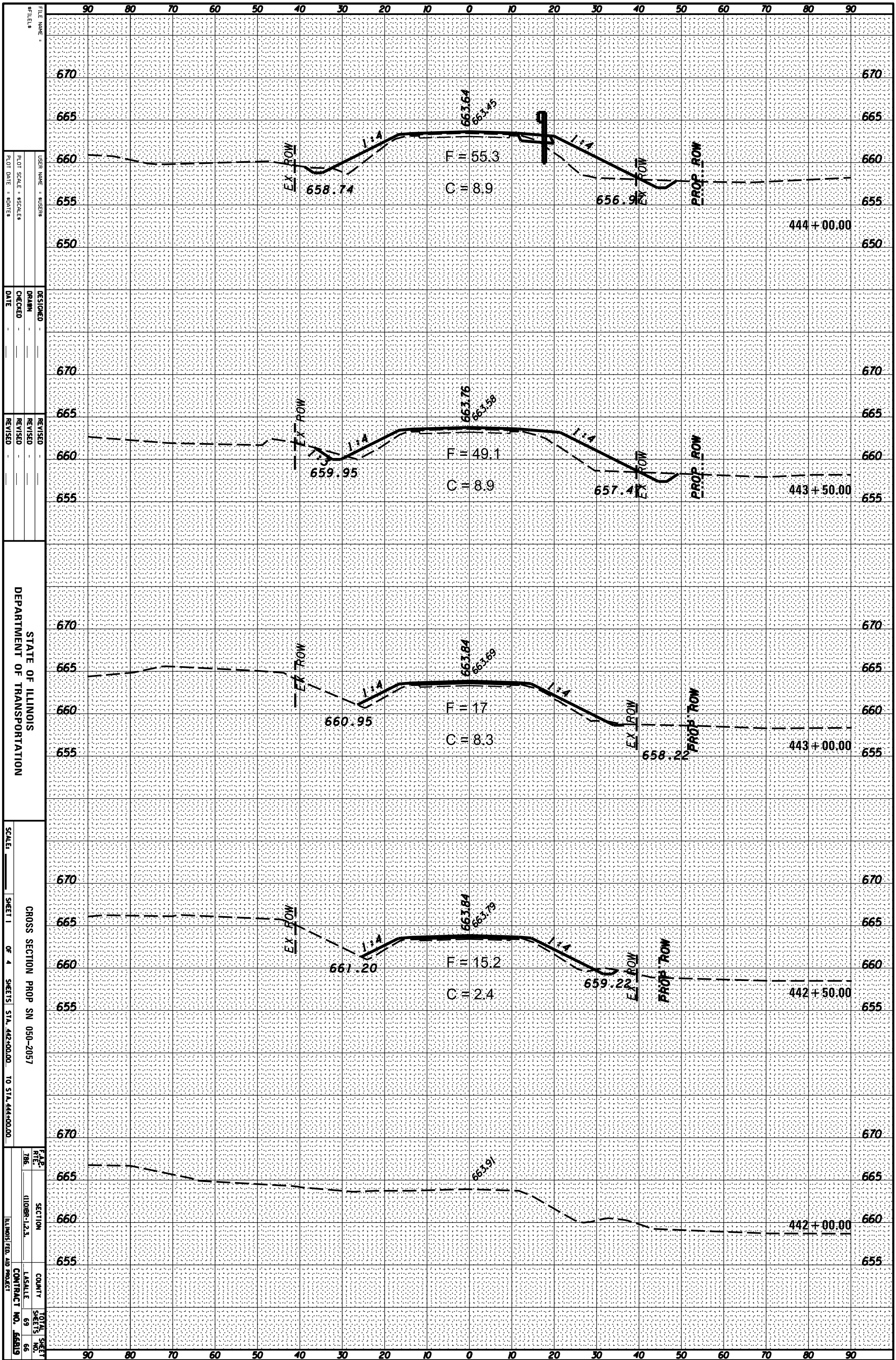
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



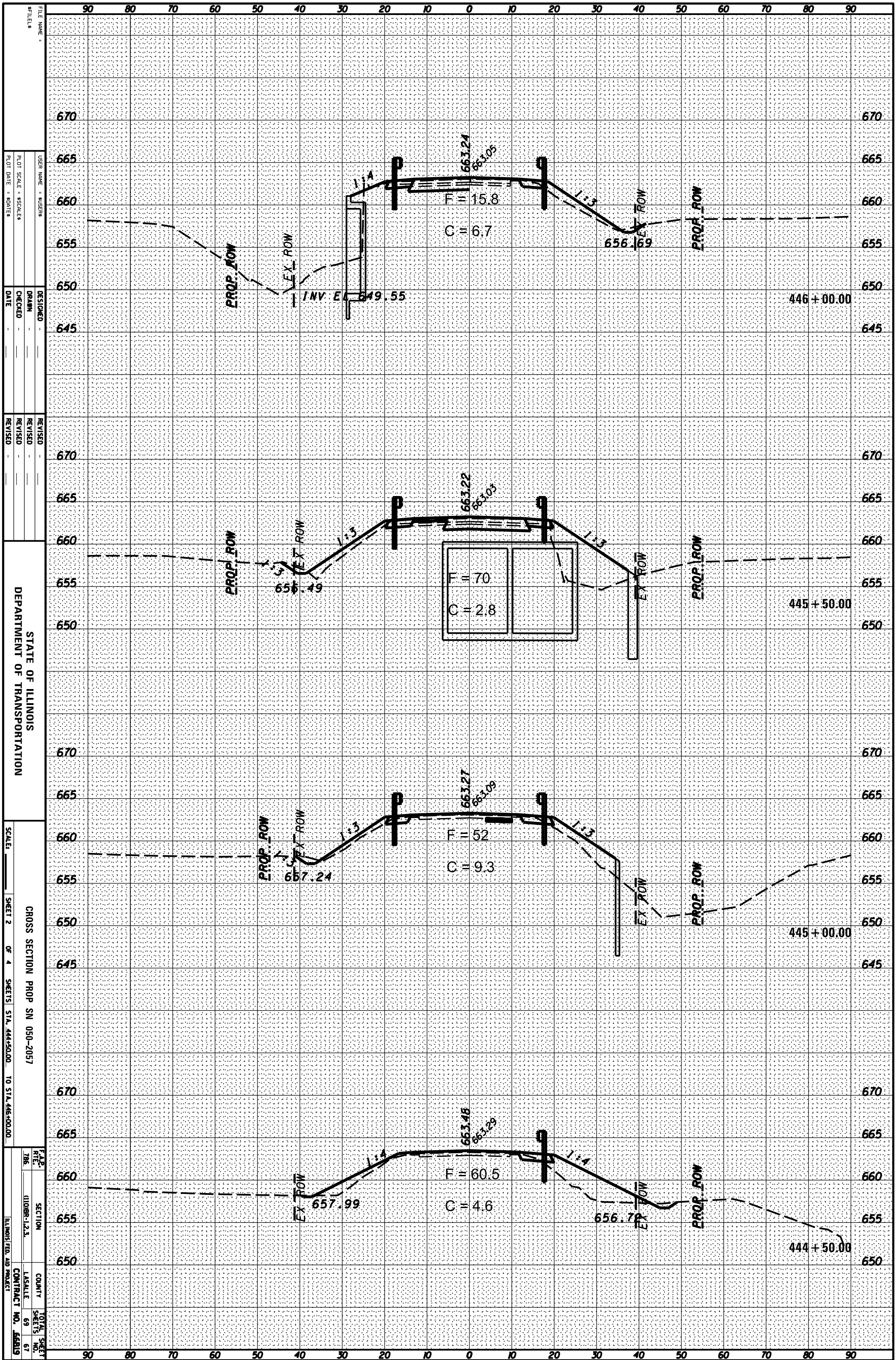
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION PROP SN 050-2057
SHEET 1 OF 4 SHEETS STA. 442+00.00 TO STA. 444+00.00

SECTION	COUNTY	TOTAL SHEETS
ILLINOIS-123	LASALLE	69
CONTRACT NO.	ILLINOIS FED. AID PROJECT	66
66819		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME: _____
 USER NAME: S05888
 PLOT SCALE: 80 FEET
 PLOT DATE: 8/20/15

DESIGNED: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____

REVISOR: _____
 REVISION: _____
 REVISION: _____
 REVISION: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: _____

SHEET 2 OF 4 SHEETS STA. 444+50.00 TO STA. 446+00.00

CROSS SECTION PROP SN 050-2057

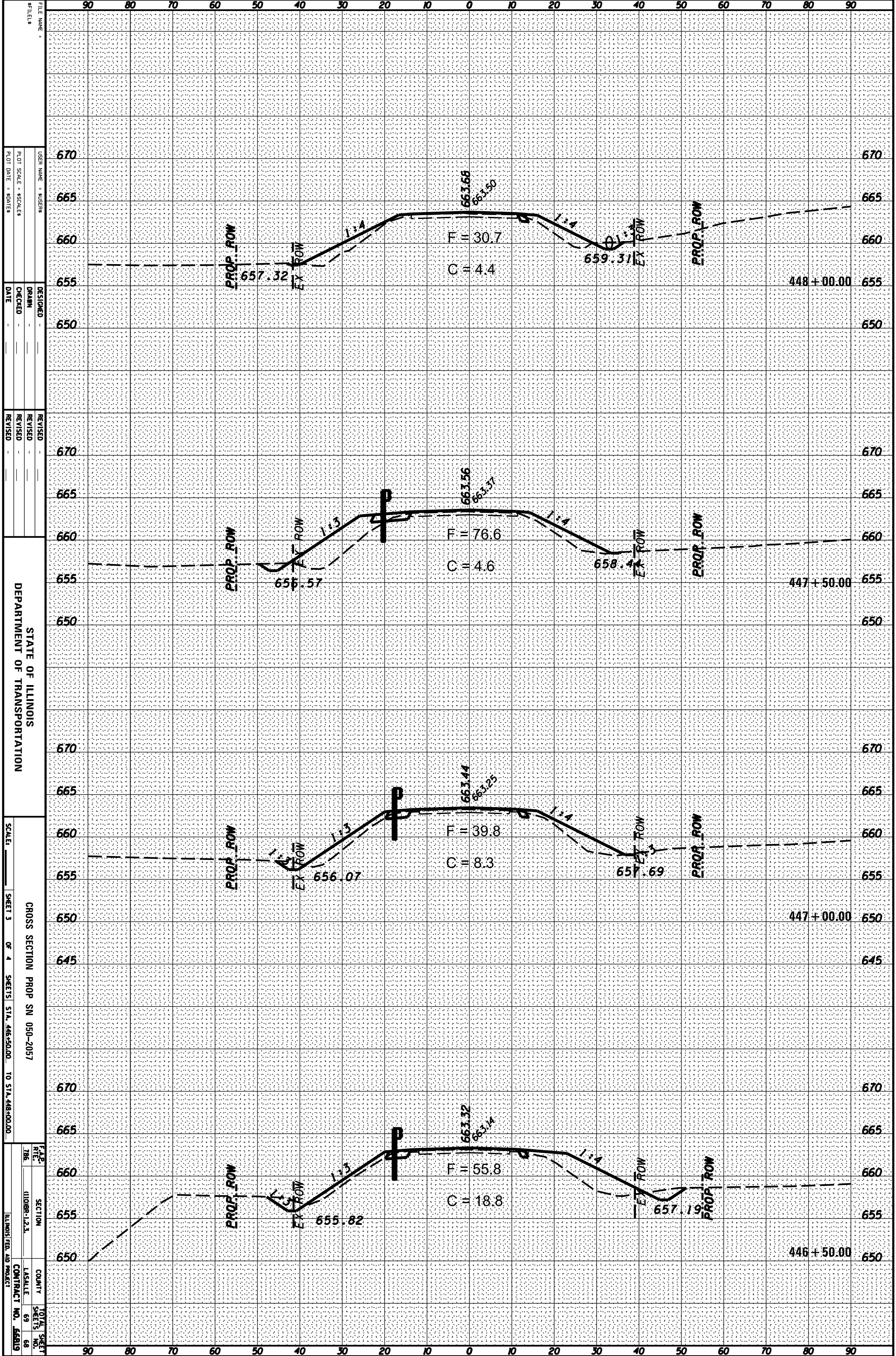
SECTION: ILLINOIS-123
 COUNTY: LASALLE
 CONTRACT NO. 66B19

TOTAL SHEETS: 69
 SHEET NO.: 67

ILLINOIS FED. AID PROJECT

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



FILE NAME: _____
 USER NAME: SUSENS
 PLOT SCALE: 80 FEET
 PLOT DATE: 8/20/15

DESIGNED: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____

REVISOR: _____
 REVISION: _____
 REVISION: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTION PROP SN 050-2057
 SHEET 3 OF 4 SHEETS STA. 446+50.00 TO STA. 448+00.00

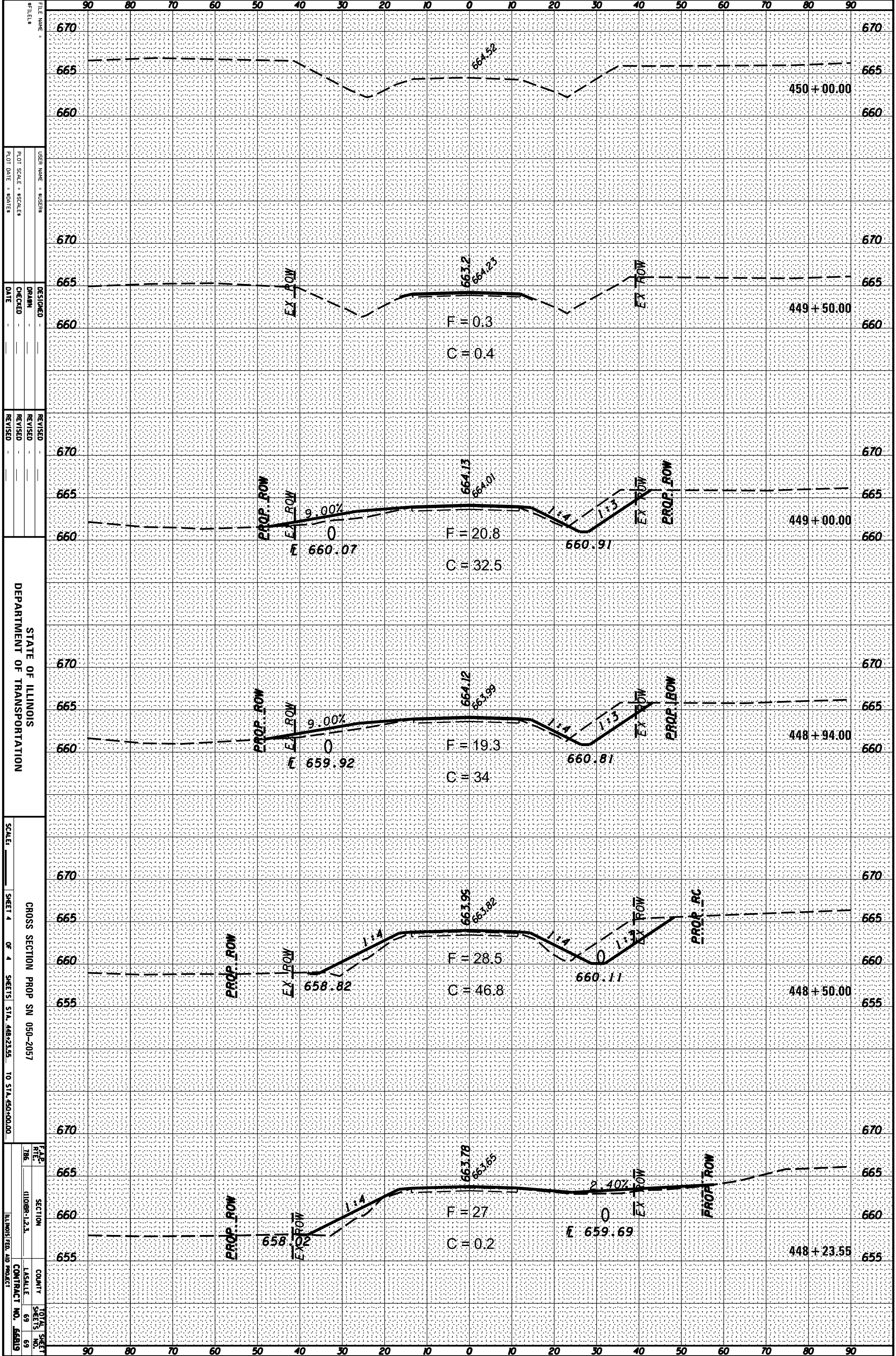
F&B: _____
 RFE: _____
 T&E: _____

SECTION: ILLINOIS-12.1
 COUNTY: LASALLE
 CONTRACT NO.: 66819

TOTAL SHEET NO.: 69
 SHEET NO.: 68

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



FILE NAME: *FILE1*

DESIGNED: DRANN

CHECKED: DATE

REVISOR: REVISOR

REVISOR: REVISOR

REVISOR: REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION PROP SN 050-2057

SHEET 4 OF 4 SHEETS STA. 448+23.55 TO STA. 450+00.00

SECTION ILLINOIS-123

COUNTY LASALLE

TOTAL SHEETS 69

CONTRACT NO. 66819