

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-1	DUPAGE	184	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.	60P41	

\* 181 + 3 = 184  
**D-91-014-10**

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

**PROPOSED HIGHWAY PLANS**

**FAP ROUTE 338: IL ROUTE 59**  
**SECTION 2011-035-1**

**PROJECT: ACNHF-0338(044)**

**PUMP STATION 47 REPLACEMENT**  
**DUPAGE COUNTY**  
**C-91-538-11**

THE PROJECT IS LOCATED IN THE CITY OF NAPERVILLE (PRIMARY) AND THE CITY OF AURORA

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**DESIGN DESIGNATION**

NA

**TRAFFIC DATA**

	ADT 2009/2030	SPEED DESIGN/POSTED
IL ROUTE 59		
LIBERTY TO N AURORA	49,700/79,000	45/40



LOCATION OF SECTION INDICATED THUS: - ■ -

	KNIGHT E/A, INC. Date: <u>3-21-12</u> <i>John C. Murillo</i> John C. Murillo Expires: <u>11-30-13</u> Sheet No.: <u>1-50, 157-181</u>		KNIGHT E/A, INC. Date: <u>3-21-12</u> <i>Roxanne M. Knapp</i> Roxanne M. Knapp Expires: <u>11-30-12</u> Sheet No.: <u>64-75</u>
--	--	--	--

	KNIGHT E/A, INC. Date: <u>3-21-12</u> <i>William P. Murphy</i> William P. Murphy Expires: <u>11-30-12</u> Sheet No.: <u>51-63, 76-109</u>
--	--

	McDONOUGH ASSOCIATES INC. Date: <u>3-21-12</u> <i>Andrew P. Ftacek, Jr.</i> Andrew P. Ftacek, Jr. Expires: <u>11-30-13</u> Sheet No.: <u>110-123</u>
--	---

	McDONOUGH ASSOCIATES INC. Date: <u>3-21-12</u> <i>Kamil M. Yenice</i> Kamil M. Yenice Expires: <u>11-30-13</u> Sheet No.: <u>124-156</u>
--	---

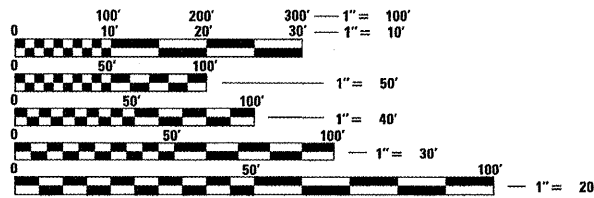
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED MARCH 21, 2012  
*Diane M. O'Keefe*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 2012  
*John D. Baumgall, P.E.*  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 11 2012  
*William R. Freyer*  
 acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

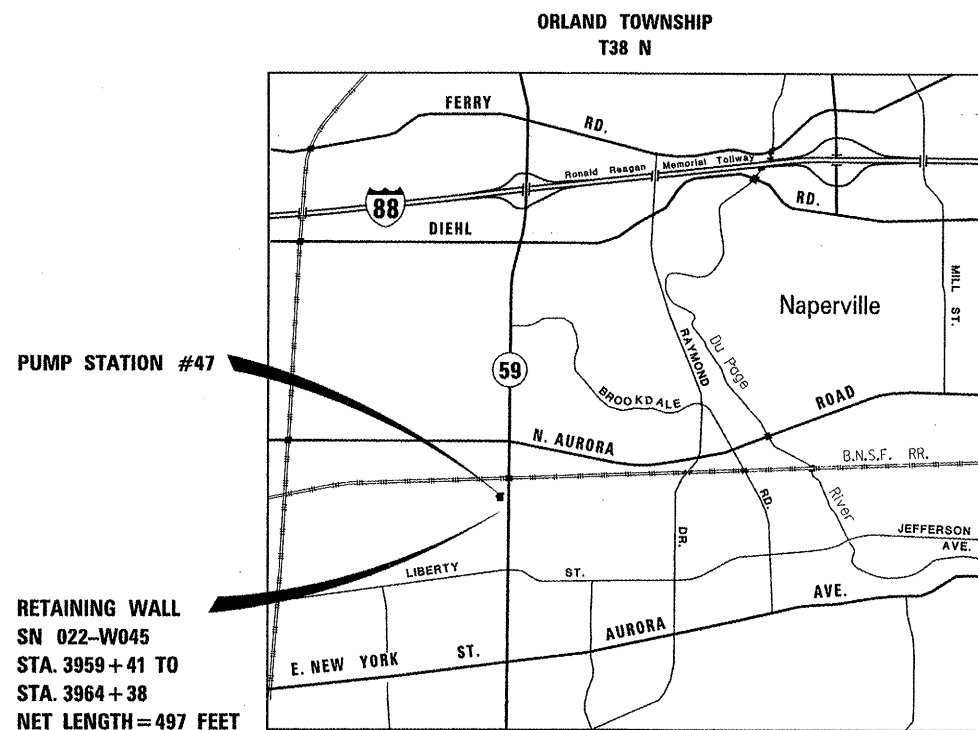


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER - RON ZENAROSA (847)705-4212  
 PROJECT MANAGER - BRIAN KUTTAB (847)705-4431

CONTRACT NO. 60P41



RETAINING WALL  
 SN 022-W045  
 STA. 3959 + 41 TO  
 STA. 3964 + 38  
 NET LENGTH = 497 FEET

LOCATION MAP

NET LENGTH OF PROJECT = 675 FEET

Plans Prepared By:

McDonough Associates Inc.  
 Engineers / Architects  
 180 North Stetson Avenue Chicago, Illinois 60601

**KNIGHT**  
 Engineers & Architects

221 North LaSalle Street  
 Suite 300  
 Chicago, IL 60601-1211  
 Phone: (312) 577-3300

INDEX OF SHEETS

SHEET	DESCRIPTION
1	COVER
2	INDEX OF SHEETS AND HIGHWAY STANDARDS
3	GENERAL NOTES AND COMMITMENTS
4-6	SUMMARY OF QUANTITIES
7-8	SCHEDULE OF QUANTITIES
9-10	ALIGNMENT, BENCHMARKS, AND TIES
11	SUGGESTED SEQUENCE OF CONSTRUCTION
12-18	MAINTENANCE OF TRAFFIC
19	DEMOLITION PLAN
20	DRAINAGE PLAN AND PROFILE - STAGE 1
21	TEMPORARY DRAINAGE CONNECTION THROUGH RETAINING WALL SN 022-W045
22	DRAINAGE PLAN AND PROFILE - STAGE 2
23	DRAINAGE PLAN AND PROFILE - STAGE 3
24	DRAINAGE PLAN - STAGE 3
25	FLOODED PAVEMENT ALARM SYSTEM
26	DRIVEWAY PLAN
27	DRIVEWAY GRADING PLAN AT PUMP STATION DOOR ACCESS
28	SECURITY FENCE AND PARKING AREA PLAN
29-30	SECURITY FENCE AND GATE DETAILS
31	LANDSCAPING PLAN
32	EROSION CONTROL PLAN
33-44	CROSS SECTIONS
45	SUE INVESTIGATION OF UNDERGROUND UTILITIES
46-47	PLAT OF HIGHWAYS
48	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
49	SIGNING FOR FLAGGING OPERATIONS (TC-18)
50	ARTERIAL ROAD INFORMATION SIGN (TC-22)
<u>RETAINING WALL SN 022-W045</u>	
51-63	STRUCTURAL PLANS
<u>PUMP STATION NO. 47</u>	
64-75	ARCHITECTURAL PLANS
76-109	STRUCTURAL PLANS
110-118	MECHANICAL PLANS
119-123	HEATING AND VENTILATION PLANS
124-156	INSTRUMENT AND CONTROL PLANS
157-181	ELECTRICAL PLANS

HIGHWAY STANDARDS

STANDARD NO.	TITLE
000001	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
280001	TEMPORARY EROSION CONTROL SYSTEMS
442201	CLASS C AND D PATCHES
602401	MANHOLE TYPE A
602406	MANHOLE TYPE A 6' (1.8 M) DIAMETER
602411	MANHOLE TYPE A 7' (2.1 M) DIAMETER
604001	FRAME AND LIDS TYPE 1
606201	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
635001	DELINEATORS
643001	SAND MODULE IMPACT ATTENUATORS
701101	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVMENT EDGE
701106	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS < 40 MPH
701601	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701901	TRAFFIC CONTROL DEVICES
704001	TEMPORARY CONCRETE BARRIER

USER NAME : #USER#	DESIGNED - <i>DMS</i>	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS AND IDOT HIGHWAY STANDARDS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN - <i>KEA</i>	CHECKED - <i>PJO</i>	REVISED			338/IL 59	2011-035-1	DUPAGE	181	2	
PLOT SCALE : #SCALE#	DATE - <i>03-22-2012</i>	REVISED			CONTRACT NO. 60P41					
PLOT DATE : #DATE#					ILLINOIS FED. AID PROJECT					
			SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.				

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 OR 811 FOR FIELD LOCATIONS, BURIED ELECTRIC LINES, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITIES OF AURORA AND NAPERVILLE.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL. ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) WEIGHTED SANDBAGS PER BARRICADE.
5. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED EACH LOCATION.
6. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS AND BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATIONS FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.
7. THE CONTRACTOR SHALL TAKE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. THIS CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
9. POLLUTION CONTROL: THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.
10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.
11. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE ALL ROAD SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING ALL STAGES OF CONSTRUCTION. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION, STANDARD 701601. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING:
  - A. SIGNS SHALL NOT BE REMOVED UNTIL NECESSITATED BY THE PROGRESS OF THE WORK.
  - B. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED. ALL SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.
  - C. ALL UNUSED SIGNS SHALL BE RETURNED TO APPROPRIATE GOVERNING BODY AS DIRECTED BY THE ENGINEER.
12. THE ENGINEER SHALL CONTACT THE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.
13. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

14. INVERT ELEVATIONS FOR EXISTING PIPES HAVE BEEN SHOWN ON THE PLANS WHEN SURVEY INFORMATION WAS AVAILABLE. THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS FOR EXISTING PIPES IN THE FIELD AT THE TIME OF CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
15. THE DRAINAGE STAGES OF CONSTRUCTION ARE FOR THE USE OF MAINTAINING TEMPORARY DRAINAGE ONLY AND MAY BE USED BY THE CONTRACTOR, THOUGH ALL TEMPORARY DRAINAGE WILL BE PROVIDED AT THE DISCRETION OF THE CONTRACTOR.
16. TREES SHOWN IN PLANS TO BE IN CONFLICT WITH PROPOSED WORK, SHALL BE REMOVED IN - TREE REMOVAL CONTRACT 60P43. THE CONTRACTOR SHOULD COORDINATE WITH THE ENGINEER SO NO CONFLICTING SCHEDULES OF WORK OCCUR. NO COMPENSATION WILL BE GIVEN FOR THE REMOVAL OF TREES, IN THIS CONTRACT.
17. ALL DRAINAGE ITEMS INCLUDING: PIPES, CULVERTS, AND MANHOLES; THAT ARE SET IN PLACE WITH NO CONNECTING END WILL BE BLOCKED WITH MASONRY BEFORE BACKFILL IS PLACE OVERTOP, SO AS TO PREVENT FILL FROM ENTERING.
18. TOPSOIL AND SEEDING ADJACENT TO PROPOSED WALLS ARE INTENDED TO REPLACE EXISTING VEGETATION DAMAGED DURING CONSTRUCTION. HOWEVER, EXISTING VEGETATION NOT DAMAGED MAY REMAIN IN PLACE. THIS WORK SHALL MEET THE APPROVAL OF THE ENGINEER.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING AND CLEANING STREETS OF ANY DEBRIS AND MATERIAL THAT HAS ACCUMULATED AS A RESULT OF THE CONSTRUCTION ACTIVITY. A MECHANICAL SWEEPER, MECHANICALLY DRIVEN AND HANDWORK WITH A SHOVEL AND BROOM SHALL BE UTILIZED TO PROVIDE A CLEAN STREET FOR THE MOTORING PUBLIC. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS AT Ndes
<b>DRIVEWAYS</b>	
HMA SURFACE COURSE, MIX D, N 50 (IL-9.5 mm); 2"	4% @ 50 Gyr.
HMA BASE COURSE (BINDER IL-19 mm); 4"	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. THE AC TYPE FOR POLYMERIZED MIXES SHALL BE "SBS / SBR PG 76-22" AND FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

**EROSION CONTROL GENERAL NOTES**

1. THE CONTRACTOR SHALL SUBMIT A WRITTEN CONSTRUCTION PLAN FOR THE PROPOSED STORM SEWER WORK TO THE ENGINEER FOR APPROVAL. THE CONSTRUCTION PLAN SHALL INCLUDE MEASURES TO PREVENT SEDIMENTATION FROM ENTERING THE STORM SEWER SYSTEM DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL NOT BEGIN ANY STORM SEWER WORK UNTIL THE ENGINEER HAS PROVIDED WRITTEN APPROVAL OF THE CONTRACTOR'S WORK PLAN. THE COST ASSOCIATED WITH DEVELOPING THE CONSTRUCTION PLAN WILL NOT BE PAID FOR SEPARATELY, BUT IS INCLUDED IN THE CONTRACT.
2. DURING CONSTRUCTION OPERATIONS, WHENEVER LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC., SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THE CONTRACTORS FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIAL CREATED AS A RESULT THERE OF.

**COMMITMENTS**

1. NONE THIS CONTRACT

USER NAME * #USER*	DESIGNED - <i>DWS</i>	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES AND COMMITMENTS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLLOT SCALE * #SCALE*	DRAWN - <i>KEA</i>	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	338/IL 59	2011-035-I	DUPAGE	181	3
PLLOT DATE * #DATE*	CHECKED - <i>PJO</i>	REVISED -						CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT			
	DATE - <i>03-22-2012</i>	REVISED -												

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
20200100	EARTH EXCAVATION	CU YD	701	701		
20800150	TRENCH BACKFILL	CU YD	989	989		
21101605	TOPSOIL FURNISH AND PLACE, 2"	SQ YD	1,253	1,253		
25000210	SEEDING, CLASS 2A	ACRE	0.26	0.26		
25100115	MULCH, METHOD 2	ACRE	0.26	0.26		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	26	26		
28000400	PERIMETER EROSION BARRIER	FOOT	1,104	1,104		
28000510	INLET FILTERS	EACH	5	5		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	943	943		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	704	704		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	60	60		
44201359	CLASS C PATCHES, TYPE IV, 10"	SQ YD	27	27		
48100500	AGGREGATE SHOULDERS, TYPE A, 6"	SQ YD	622	622		
50200100	STRUCTURE EXCAVATION	CU YD	416		416	

URBAN

\* SPECIALTY ITEM

USER NAME * #USER*	DESIGNED - DHS	REVISED - 04-06-2012	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - KEA	CHECKED - PJO	REVISED -		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	DUPAGE	181	4	
PLOT SCALE * #SCALE*	DATE - 03-22-2012	REVISED -		CONTRACT NO. 60P41							
PLOT DATE * #DATE*				ILLINOIS FED. AID PROJECT							

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
50300225	CONCRETE STRUCTURES	CU YD	900		283	617
50300285	FORM LINER TEXTURED SURFACE	SQ FT	4,263		4,263	
50300300	PROTECTIVE COAT	SQ YD	611		611	
50500505	STUD SHEAR CONNECTORS	EACH	1,548		1,548	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	96,760		25,810	70,950
50800515	BAR SPLICERS	EACH	12			12
50901750	PARAPET RAILING	FOOT	344		344	
5422C030	PIPE CULVERTS, CLASS C, TYPE 2, 30" (TEMPORARY)	FOOT	38	38		
5422C036	PIPE CULVERTS, CLASS C, TYPE 2, 36" (TEMPORARY)	FOOT	12	12		
5422C048	PIPE CULVERTS, CLASS C, TYPE 2, 48" (TEMPORARY)	FOOT	109	109		
550A0190	STORM SEWERS, CLASS A, TYPE 1, 48"	FOOT	40	40		
550A0450	STORM SEWERS, CLASS A, TYPE 2, 36"	FOOT	499	499		
550A0470	STORM SEWERS, CLASS A, TYPE 2, 42"	FOOT	16	16		
550A0480	STORM SEWERS, CLASS A, TYPE 2, 48"	FOOT	516	516		

URBAN

\* SPECIALTY ITEM

USER NAME * #USER*	DESIGNED - DMS	REVISED - 04-06-2012	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DESIGNED - KEA	REVISED -	338/IL 59					2011-035-1	DUPAGE	181	5	
PLOT SCALE * #SCALE*	CHECKED - PJO	REVISED -		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO. 60P41		ILLINOIS FED. AID PROJECT	
PLOT DATE * #DATE*	DATE - 03-22-2012	REVISED -									

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
550B0380	STORM SEWERS, CLASS B, TYPE 2, 18"	FOOT	7	7		
550B0430	STORM SEWERS, CLASS B, TYPE 2, 30"	FOOT	24	24		
550B0450	STORM SEWERS, CLASS B, TYPE 2, 36"	FOOT	29	29		
55100500	STORM SEWER REMOVAL, 12"	FOOT	10	10		
55100900	STORM SEWER REMOVAL, 18"	FOOT	10	10		
55101400	STORM SEWER REMOVAL, 30"	FOOT	566	566		
55101600	STORM SEWER REMOVAL, 36"	FOOT	647	647		
* 55201600	STORM SEWERS JACKED IN PLACE, 48"	FOOT	110	110		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	543		543	
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	129			129
60221100	MANHOLES, TYPE A, 5' -DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	5	5		
60223800	MANHOLES, TYPE A, 6' -DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60224445	MANHOLES, TYPE A, 7' -DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	5	5		
60224446	MANHOLES, TYPE A, 7' -DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		

\* SPECIALTY ITEM

URBAN

USER NAME = #USER#	DESIGNED - DHS	REVISED - 04-06-2012
	DRAWN - KEA	REVISED -
PLOT SCALE = #SCALE#	CHECKED - PJO	REVISED -
PLOT DATE = #DATE#	DATE - 03-22-2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	6
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
60500040	REMOVING MANHOLES	EACH	8	8		
60500105	FILLING MANHOLES	EACH	1	1		
60604400	COMBINATION CURB & GUTTER, TYPE B-6.18	FOOT	60	60		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20	20		
67100100	MOBILIZATION	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	400	400		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	750	750		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	600	600		
78200530	BARRIER WALL MARKERS, TYPE C	EACH	80	80		
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1			1
* X0301028	PUMP STATION SCADA EQUIPMENT	L SUM	1			1
X0322121	SHEET WATERPROOFING MEMBRANE SYSTEM	SQ YD	600			600
X0322719	TEMPORARY DRAINAGE CONNECTION	EACH	1			1
X0323002	TEMPORARY ELECTRICAL SERVICE CONNECTION	EACH	1			1

\* SPECIALTY ITEM

USER NAME * USER#	DESIGNED - DMS	REVISED - 04-06-2012	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLLOT SCALE * ESCALE#	DRAWN - KEA	REVISED -		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	338/IL 59	2011-035-I	DUPAGE	181	6A
PLLOT DATE * #DATE#	CHECKED - PJO	REVISED -					CONTRACT NO. 60P41					
	DATE - 03-22-2012	REVISED -					ILLINOIS FED. AID PROJECT					

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
* X0324455	DRILLING AND SETTING SOLDIER PILES ( IN SOIL )	CU FT	22,830		22,830	
X0325405	FILL EXISTING STORM SEWERS	CU YD	67	67		
X0326694	PLUG EXISTING STORM SEWERS	CU YD	0.5	0.5		
X0335700	PUMP STATION GENERAL WORK	L SUM	1			1
* X0783300	PUMP STATION ELECTRICAL WORK	L SUM	1			1
* X0783500	PUMP STATION MECHANICAL WORK	L SUM	1			1
X2020502	BRACED EXCAVATION	CU YD	2,730			2,730
X4402302	CURB REMOVAL ( PARTIAL )	FOOT	170	170		
X6028050	TEMPORARY MANHOLE	EACH	5	5		
* X6640308	CHAIN LINK GATES, ( SPECIAL )	EACH	3	3		
* X6640570	CHAIN LINK FENCE, 8' ( SPECIAL )	FOOT	143	143		
* X6640585	CHAIN LINK FENCE, ATTACHED TO STRUCTURE, SPECIAL	FOOT	105	105		
X7010216	TRAFFIC CONTROL AND PROTECTION ( SPECIAL )	L SUM	1	1		
Z0004522	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	SQ YD	356	356		

\* SPECIALTY ITEM

USER NAME : #USER#	DESIGNED - <i>DMS</i>	REVISED - <i>04-06-2012</i>
	DRAWN - <i>KEA</i>	REVISED -
PLOT SCALE : #SCALE#	CHECKED - <i>PJO</i>	REVISED -
PLOT DATE : #DATE#	DATE - <i>03-22-2012</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	68
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY AND DRAINAGE	RETAINING WALL SN 022-W045	PUMP STATION 47
				0004	0040	0040
				URBAN	URBAN	URBAN
* Z0007118	UNTREATED TIMBER LAGGING	SQ FT	4,881		4,881	
Z0007601	BUILDING REMOVAL NO. 1	L SUM	1			1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0026402	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	828		828	
Z0026404	FURNISHING SOLDIER PILES (W SECTION)	FOOT	3,041		3,041	
Z0030240	IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	50	50		
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	495		495	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
* <del>X0327394</del>	HEATING AND VENTILATION WORK	L SUM	1			1
<del>30300108</del>	AGGREGATE SUBGRADE <b>IMPROVEMENT 8"</b>	SQ YD	943	943		
* <del>X5051100</del>	BRIDGE CRANE	L SUM	1			1

\* SPECIALTY ITEM

USER NAME : BUSERS	DESIGNED - <i>DWS</i>	REVISED - 04-06-2012	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN - <i>KEA</i>	REVISED -		SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	338/IL 59	2011-035-1	DUPAGE	181	6C
PLOT SCALE : 1"=40'	CHECKED - <i>PJO</i>	REVISED -								CONTRACT NO. 60P41		
PLOT DATE : 10/1/12	DATE - 03-22-2012	REVISED -		ILLINOIS FED. AID PROJECT								

TOP SOIL FURNISH AND PLACE 2"			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
RESTORATION:			
3958+35	3959+00	LT	219
3959+32	3964+38	LT	1034
PROJECT TOTAL			1253

SEEDING, CLASS 2A		
FROM STA	TO STA	AREA (AC)
3958+35	3959+00	0.05
3959+32	3964+38	0.21
PROJECT TOTAL		0.26

MULCH METHOD 2			
FROM STA	TO STA	LT/RT	QUANTITY (AC)
RESTORATION:			
3958+35	3959+00	LT	0.05
3959+32	3964+38	LT	0.21
PROJECT TOTAL			0.26

TEMPORARY EROSION CONTROL SEEDING			
FROM STA	TO STA	AREA (AC)	QUANTITY (POUND)
3958+35	3959+00	0.05	5
3959+32	3964+38	0.21	21
PROJECT TOTAL			26

PERIMETER EROSION BARRIER				
FROM		TO		QUANTITY (FOOT)
STATION	O/S	STATION	O/S	
3958+35	35' LT	3958+53	54' LT	18
3959+33	54' LT	3964+21	38' LT	488
3958+41	68' LT	3960+03	100' LT	188
3960+24	90' LT	3964+27	132' LT	410
PROJECT TOTAL				1104

INLET FILTERS			
STATION	OFFSET	LT/RT	QUANTITY (EACH)
3960+41	47.3'	LT	1
3961+32	42.1'	LT	1
3962+22	36.6'	LT	1
3963+01	35.4'	LT	1
3963+81	35.1'	LT	1
PROJECT TOTAL			5

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
20+57	25+07		942.7
PROJECT TOTAL			942.7

CLASS C PATCHES, TYPE IV, 10"			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
3963+61	3964+21	LT	27
PROJECT TOTAL			27

DRIVEWAY PAVEMENT REMOVAL			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
3958+82	3963+92		704
PROJECT TOTAL			704

COMBINATION CURB AND GUTTER REMOVAL			
FROM STA	TO STA	LT/RT	QUANTITY (FOOT)
3963+60	3964+20	LT	60
PROJECT TOTAL			60

STORM SEWERS													
FROM STA	TO STA	PIPE NO.	LT/RT	QUANTITY (FT)								JACKED IN PLACE, 48"	TRENCH BACKFILL
				CLASS A, TYPE 1 48"	CLASS A, TYPE 2 36"	CLASS A, TYPE 2 42"	CLASS A, TYPE 2 48"	CLASS B, TYPE 2 18"	CLASS B, TYPE 2 30"	CLASS B, TYPE 2 36"			
STAGE 1													
3958+45	3958+73	102	LT									29	
3958+73	3962+96	103	LT				413						434
STAGE 2													
3964+08	3964+20	206	LT					7					3
3958+53	3958+76	201	LT						24				
3958+76	3963+05	202	LT		420								291
3963+05	3963+37	203	LT		36								34
3963+37	3963+59	203A	LT		19								19
3963+76	3964+08	205	LT		24								37
3963+76	3963+76	204	LT			16							27
STAGE 3													
3965+23	3965+67	303C	LT	40									
3962+96	3963+30	300	LT				34						47
3963+30	3963+60	301	LT				51						74
3963+60	3963+98	302	LT				11						16
3963+96	3964+05	303A	LT				7						7
3964+08	3965+23	303B	LT									110	
PROJECT TOTAL				40	499	16	516	7	24	29	110	989	

STORM SEWER REMOVAL						
FROM STA	TO STA	LT/RT	QUANTITY (FOOT)			
			12"	18"	30"	36"
STAGE 1						
3958+50	3961+21	LT			266	
3961+21	3963+92	LT			265	
3963+92	3964+29	LT			35	
3958+43	3958+45	LT				3
3958+45	3959+73	LT				126
3959+73	3962+53	LT				271
3962+53	3963+53	LT				97
3963+53	3963+52	LT				39
3963+52	3964+09	LT				57
3964+09	3964+10	LT				41
STAGE 2						
3963+68	3963+81	LT	10			
3964+08	3964+20	LT		10		
3964+08	3964+08	LT				8
STAGE 3						
3964+08	3964+08	LT				5
PROJECT TOTAL			10	10	566	647

PIPE CULVERT, CLASS C (TEMPORARY)						
FROM STA	TO STA	PIPE NO.	LT/RT	QUANTITY (FOOT)		
				TYPE 2 30"	TYPE 2 36"	TYPE 2 48"
3964+09	3964+23	107	LT	7		
3964+23	3964+25	108	LT	31		
3964+09	3964+10	109	LT		12	
3962+96	3963+04	104	LT			14
3963+04	3963+60	105	LT			52
3963+60	3964+09	106	LT			43
PROJECT TOTAL				38	12	109

AGGREGATE SHOULDERS TYPE A, 6"			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
21+28	25+27		622
PROJECT TOTAL			622

REMOVING MANHOLES			
STATION	OFFSET	LT/RT	QUANTITY (EACH)
STAGE 1			
3959+73	69.5'	LT	1
3961+21	69.5'	LT	1
3962+53	87.4'	LT	1
3963+92	70.1'	LT	1
3964+23	85.9'	LT	1
STAGE 2			
3963+81	35.1'	LT	1
STAGE 3			
3964+10	91.9'	LT	1
3965+64	69.4'	LT	1
PROJECT TOTAL			8

COMBINATION CURB & GUTTER, TYPE B-6.18			
FROM STA	TO STA	LT/RT	QUANTITY (FOOT)
3963+60	3964+20	LT	60
PROJECT TOTAL			60

TEMPORARY CONCRETE BARRIER			
FROM STA	TO STA	LT/RT	QUANTITY (FT)
3959+50	3967+00	LT	750
PROJECT TOTAL			750

USER NAME : *USER*	DESIGNED - <i>DMS</i>	REVISED -
	DRAWN - <i>KEA</i>	REVISED -
PLOT SCALE : *SCALE*	CHECKED - <i>PJO</i>	REVISED -
PLOT DATE : *DATE*	DATE - <i>03-22-2012</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES	
SCALE:	SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	7
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

MANHOLES										
MH NO.	STATION	OFFSET	LT/RT	QUANTITY (EACH)					FILL	TEMPORARY
				TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	TYPE A, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID	TYPE A, 7' DIAMETER, TYPE 1 FRAME, OPEN LID	TYPE A, 7' DIAMETER, TYPE 1 FRAME, CLOSED LID			
STAGE 1										
101	3958+45	62.5'	LT	1						
102	3958+73	83.5'	LT		1					
103	3962+96	73'	LT			1				
104	3963+04	92'	LT							1
105	3963+60	107.5'	LT							1
106	3964+09	107.5'	LT							1
107	3964+22	107.5'	LT							1
108	3964+25	70.4'	LT							1
STAGE 2										
200	3958+53	58.3'	LT	1						
201	3958+76	75.9'	LT	1						
202	3963+05	65'	LT	1						
203	3963+37	89.5'	LT	1						
204	3963+77	34.1'	LT			1				
205	3964+08	34'	LT			1				
STAGE 3										
301	3963+60	115'	LT			1				
302	3963+98	80.7'	LT			1				
300	3963+30	95.8'	LT				1			
303	3965+67	79'	LT				1			
	3964+08	60.4'	LT					1		
PROJECT TOTAL				5	1	5	2	1		5

TEMPORARY INFORMATION SIGNING					
STATION	LT/RT	SIGN DIM. (IN)	DESCRIPTION	QUANTITY	AREA (SQ FT)
3987+00	LT	45x68	ARTERIAL ROAD INFO.	1	25
3947+00	RT	45x68	ARTERIAL ROAD INFO.	1	25
PROJECT TOTAL				50	

PLUG EXISTING STORM SEWERS			
STATION	OFFSET	LT/RT	QUANTITY (EACH)
STAGE 2			
3963+68	35.1'	LT	1
PROJECT TOTAL			1

CHAIN LINK FENCE, ATTACHED TO STRUCTURE, SPECIAL				
FROM		TO		QUANTITY (FOOT)
STATION	O/S	STATION	O/S	
24+04	18' RT	25+08	25' RT	105
PROJECT TOTAL				105

CHAIN LINK GATES, (SPECIAL)				
STATION	OFFSET	LT/RT	QUANTITY (EACH)	
			8' X 12' SLIDE	8' X 10.5' SLIDE
24+16	4'	RT		2
25+00	24'	RT	1	
PROJECT TOTAL			3	

BARRIER WALL MARKERS, TYPE C			
FROM STA	TO STA	LT/RT	QUANTITY (EACH)
3959+50	3967+00	LT	60
Contingency Quantity For Repairs:			20
PROJECT TOTAL			80

CHAIN LINK FENCE, 8' (SPECIAL)				
FROM		TO		QUANTITY (FOOT)
STATION	O/S	STATION	O/S	
24+04	18' RT	24+11	9' RT	12
25+05	24' LT	25+07	24' RT	50
24+19	3' LT	24+94	24' LT	81
PROJECT TOTAL				143

FILL EXISTING STORM SEWERS			
FROM STA	TO STA	LT/RT	QUANTITY (CU YD)
STAGE 2			
3964+08	3964+08	LT	2
3964+08	3964+08	LT	3
3964+25	3965+64	LT	62
PROJECT TOTAL			67

AGGREGATE SUBGRADE 8"			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
20+57	25+07		943
PROJECT TOTAL			943

HOT-MIX ASPHALT DRIVEWAY PAVEMENT 6"			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
20+10	20+57		194
20+96	21+33		25
22+35	24+12	RT	137
PROJECT TOTAL			356

CURB REMOVAL (PARTIAL)			
FROM STA	TO STA	LT/RT	QUANTITY (FT)
3966+30	3968+00	LT	170
PROJECT TOTAL			170

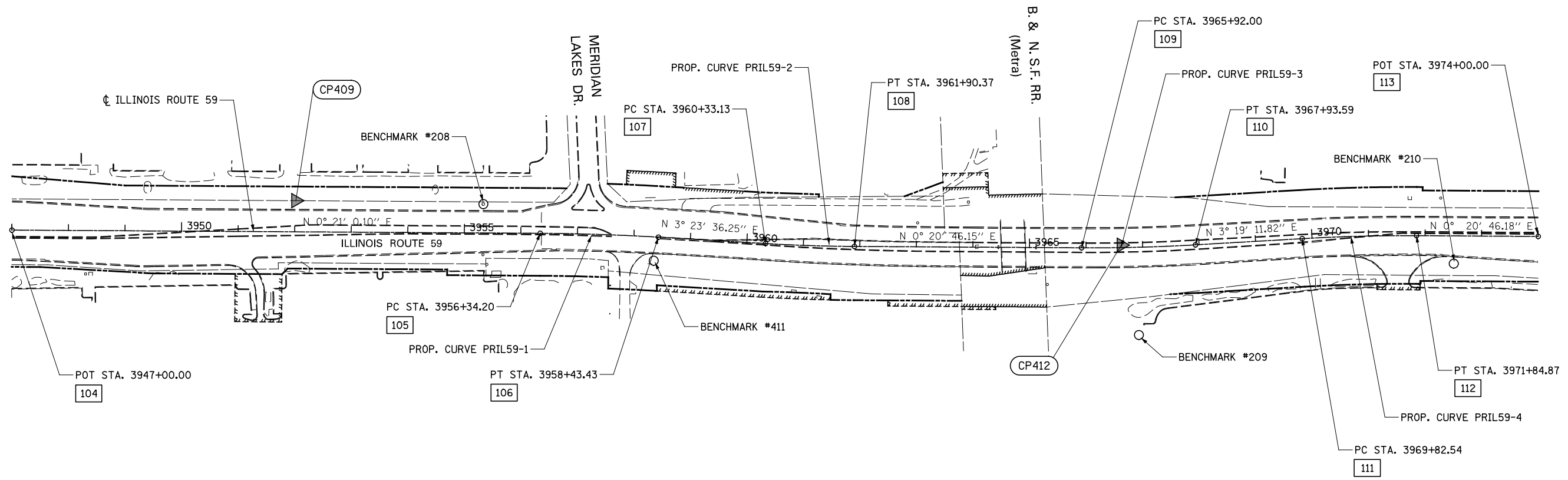
NOTE:  
THIS INCLUDES TEMPORARY GRADING OF FLAT AREA REQUIRED FOR THE INSTALLATION OF TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATOR.

IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 2		
STATION	LT/RT	QUANTITY (EACH)
3970+00	LT	1
PROJECT TOTAL		1

CONTROLLED LOW-STRENGTH MATERIAL			
FROM STA	TO STA	LT/RT	QUANTITY (SQ YD)
25+04	25+29	LT	129
PROJECT TOTAL			129

NOTE:  
CONTROLLED LOW-STRENGTH MATERIAL TO BE USED TO FILL WET WELL OF EXISTING PUMP STATION WHICH REMAINS BELOW ELEVATION 691.00

TEMPORARY DRAINAGE CONNECTION			
STATION	OFFSET	LT/RT	QUANTITY (EACH)
3964+08	53.3'	LT	1
PROJECT TOTAL			1



**ALIGNMENT DATA**

104	N 860095.91 E 19103.34	106	N 861239.18 E 19115.88	108	N 861585.69 E 19132.24	110	N 862188.79 E 19129.44	112	N 862579.66 E 19113.25
105	N 861030.08 E 19109.05	107	N 861428.54 E 19127.11	109	N 861987.31 E 19134.67	111	N 862377.43 E 19118.50	113	N 862794.78 E 19114.55

**BENCHMARKS**

**BM #208 3955+33, 51 LT**  
 SQUARE "□" CUT IN SOUTHEAST CORNER OF HIGH TENSION TOWER BASE, WEST SIDE OF IL ROUTE 59, IN FRONT OF SPRINT / BACK TO BED STORE (#1076 IL ROUTE 59) ELEV. 702.94

**BM #209 3966+94, 155 RT**  
 SQUARE "□" CUT IN BASE OF SOUTHERN MOST LIGHT POLE IN PARKING LOT AT #1778 IL ROUTE 59 ELEV. 701.63

**BM #411 3958+37, 42 RT**  
 CROSS "+" ON TOP NORTH END OF HEADWALL, 50' NORTH OF CENTERLINE OF PHOENIX CLOSURES DRIVEWAY, EAST SIDE OF IL ROUTE 59 ELEV. 696.41

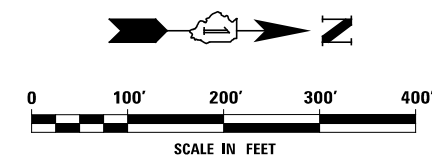
**BM #210 3972+51, 49 RT**  
 CROSS "+" FOUND WEST SIDE LIGHT POLE BASE, AT NORTH SIDE ENTRANCE OF DELTA SONIC CAR WASH ELEV. 703.95

PROP. CURVE PRIL59-1  
 PI STA. = 3957+38.84  
 $\Delta = 3^\circ 02' 36''$  (RT)  
 $D = 1^\circ 27' 16''$   
 $R = 3,939.05'$   
 $T = 104.64'$   
 $L = 209.23'$   
 $E = 1.39'$   
 P.C. STA. = 3956+34.20  
 P.T. STA. = 3958+43.43

PROP. CURVE PRIL59-2  
 PI STA. = 3961+11.77  
 $\Delta = 3^\circ 02' 50''$  (LT)  
 $D = 1^\circ 56' 16''$   
 $R = 2,956.67'$   
 $T = 78.64'$   
 $L = 157.25'$   
 $E = 1.05'$   
 P.C. STA. = 3960+33.13  
 P.T. STA. = 3961+90.37

PROP. CURVE PRIL59-3  
 PI STA. = 3966+92.83  
 $\Delta = 3^\circ 39' 58''$  (LT)  
 $D = 1^\circ 49' 07''$   
 $R = 3,150.48'$   
 $T = 100.83'$   
 $L = 201.59'$   
 $E = 1.61'$   
 P.C. STA. = 3965+92.00  
 P.T. STA. = 3967+93.59

PROP. CURVE PRIL59-4  
 PI STA. = 3970+83.74  
 $\Delta = 3^\circ 39' 58''$  (RT)  
 $D = 1^\circ 48' 43''$   
 $R = 3,162.19'$   
 $T = 101.20'$   
 $L = 202.33'$   
 $E = 1.62'$   
 P.C. STA. = 3969+82.54  
 P.T. STA. = 3971+84.87



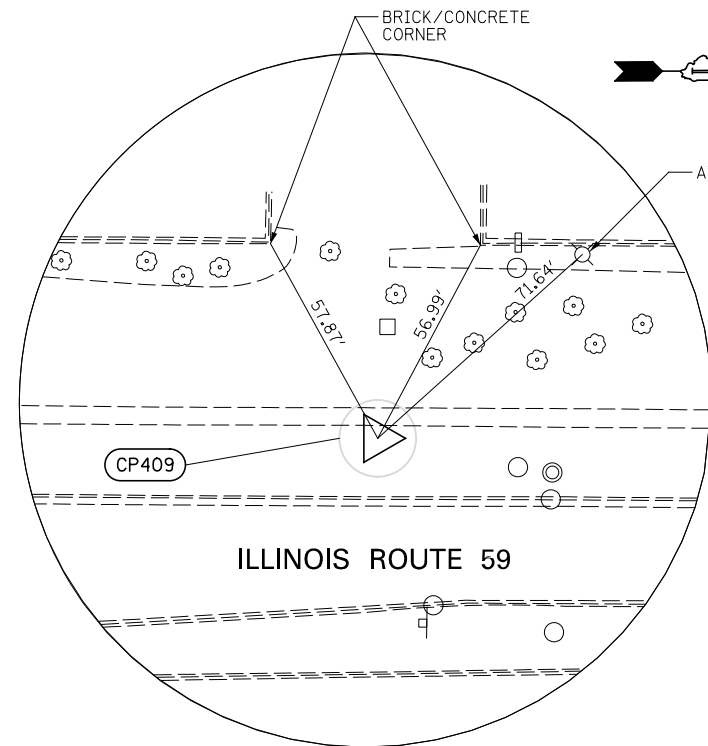
USER NAME = *USER*	DESIGNED - <i>DMS</i>	REVISED
	DRAWN - <i>KEA</i>	REVISED -
PLOT SCALE = *SCALE*	CHECKED - <i>PJO</i>	REVISED -
PLOT DATE = *DATE*	DATE - <i>03-22-2012</i>	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

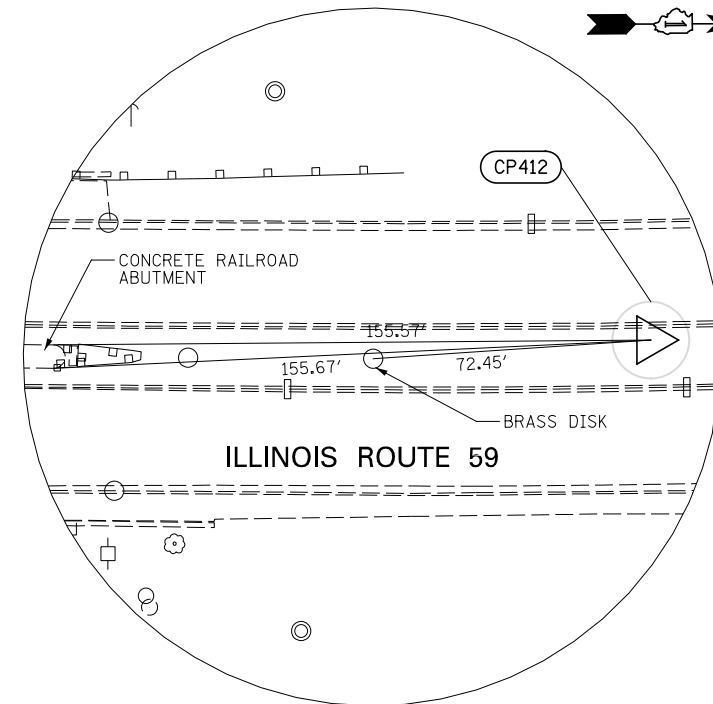
**ALIGNMENT, BENCHMARKS, AND TIES**

SCALE: AS SHOWN SHEET NO. 1 OF 2 SHEETS STA. 3947+00 TO STA. 3974+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	9
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



**CONTROL POINT 409**  
 3/4" IRON PIPE 3' EAST OF FACE WALK, 12'  
 WEST OF WEST BACK OF CURB OF RTE 59.  
 AT PROPERTY LINE BETWEEN RED LOBSTER  
 AND RADIOSHACK.  
 N 860598.0  
 E 19051.32  
 ELEV. = 703.79



**CONTROL POINT 412**  
 CROSS (+) CUT IN ISLAND ON RTE 59, 150'  
 NORTH OF CL NORTH OF RAILROAD BRIDGE  
 PIER, 3' EAST OF WEST BACK OF CURB OF  
 ISLAND.  
 N 862057.5  
 E 19129.89  
 ELEV. = 688.16

USER NAME = *USER*	DESIGNED - DMS	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENT, BENCHMARKS, AND TIES</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	DRAWN - KEA	REVISED -		SCALE:	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	338/IL 59	2011-035-I	DUPAGE	181	10
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -					CONTRACT NO. 60P41					
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -		ILLINOIS FED. AID PROJECT								

**SUGGESTED SEQUENCE OF CONSTRUCTION**

**RETAINING WALL SN 022-W045**

- CONSTRUCT SOLDIER PILE RETAINING WALL
- CONNECT PIPE UNDERDRAINS FOR STRUCTURES, 4" TO STORM SEWER SYSTEM

**PROPOSED PUMP STATION 47**

- SET BRACING AND EXCAVATE FOR PROPOSED PUMP STATION 47
- CONSTRUCT PROPOSED PUMP STATION 47 AND CONNECT TO DRAINAGE INFLOW AND OUTFLOW
- CONTRACTOR WILL TAKE OVER MAINTENANCE OF EXISTING PUMP STATION UNTIL PROPOSED PUMP STATION IS OPERATIONAL

**EXISTING PUMP STATION 47**

- PROVIDE TEMPORARY POWER TO EXISTING PUMP STATION
- SWITCH OVER DRAINAGE TO PROPOSED PUMP STATION 47
- REMOVE EXISTING PUMP STATION TO A MINIMUM ELEVATION OF 691.00 AND GREATER WHERE NECESSARY TO ALLOW FOR DRAINAGE INSTALLATION AND JACKING PIT
- DRILL CORE HOLES IN THE BOTTOM SLAB OF THE EXISTING PUMP STATION
- FILL REMAINING FOUNDATION OF EXISTING PUMP STATION WITH CONTROLLED LOW STRENGTH MATERIAL

**DRAINAGE**

- INSTALL TEMPORARY STORM SEWER TO COMBINE FLOW FROM EXISTING 30" GRAVITY LINE FROM THE NORTH AND EXISTING 36" PUMP STATION OUTFALL, TIE-IN TO EXISTING 36" STORM SEWER TO THE NORTH OF THE BOX CULVERT HEADWALL
- REMOVE OR FILL EXISTING STORM SEWER PIPES AND MANHOLES AS SHOWN ON THE PLANS
- INSTALL PERMANENT 36" STORM SEWER FROM PROPOSED PUMP STATION, TIE-IN TO EXISTING 30" STORM SEWER TO THE NORTH OF THE BOX CULVERT HEADWALL
- INSTALL PERMANENT STORM SEWER TO FLOW INTO PUMP STATION AND TIE-IN TO EXISTING STORM SEWER SYSTEM
- INSTALL PERMANENT 48" STORM SEWER, TIE-IN TO THE STORM SEWER TO THE NORTH (INSTALLED BY CONTRACT 60P42) AS WELL AS TO THE PERMANENT 48" STORM SEWER TO THE SOUTH WHICH WAS INSTALLED IN STAGE 1
- JACK AND BORE A 66" STEEL CASING PIPE UNDER THE RAILROAD TRACKS AND INSTALL 48" STORM SEWER
- REMOVE TEMPORARY STORM SEWER WHICH WAS INSTALLED IN STAGE 1

**DRIVEWAY**

- REMOVE EXISTING DRIVEWAY PAVEMENT
- INSTALL PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 8" OVER AGGREGATE SUBGRADE 8"
- INSTALL HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6" (SURFACE COURSE, MIX "C", N50, 2" WITH HOT-MIX ASPHALT BASE COURSE, 4") AT DRIVEWAY ENTRANCE AND AGAINST RETAINING WALL SN 022-W045.
- INSTALL AGGREGATE SHOULDERS, TYPE A, 6"
- INSTALL SECURITY FENCE AND GATES

**RESTORATION**

- TOPSOIL FURNISH AND PLACE 2"; SEEDING, CLASS 2A; MULCH, METHOD 2.

USER NAME = \$USER\$	DESIGNED - <i>DMS</i>	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUGGESTED SEQUENCE OF CONSTRUCTION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN - <i>KEA</i>	REVISED -			338/IL 59	2011-035-I	DUPAGE	181	11	
PLOT SCALE = \$SCALE\$	CHECKED - <i>PJO</i>	REVISED -			<b>CONTRACT NO. 60P41</b>					
PLOT DATE = \$DATE\$	DATE - <i>03-22-2012</i>	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

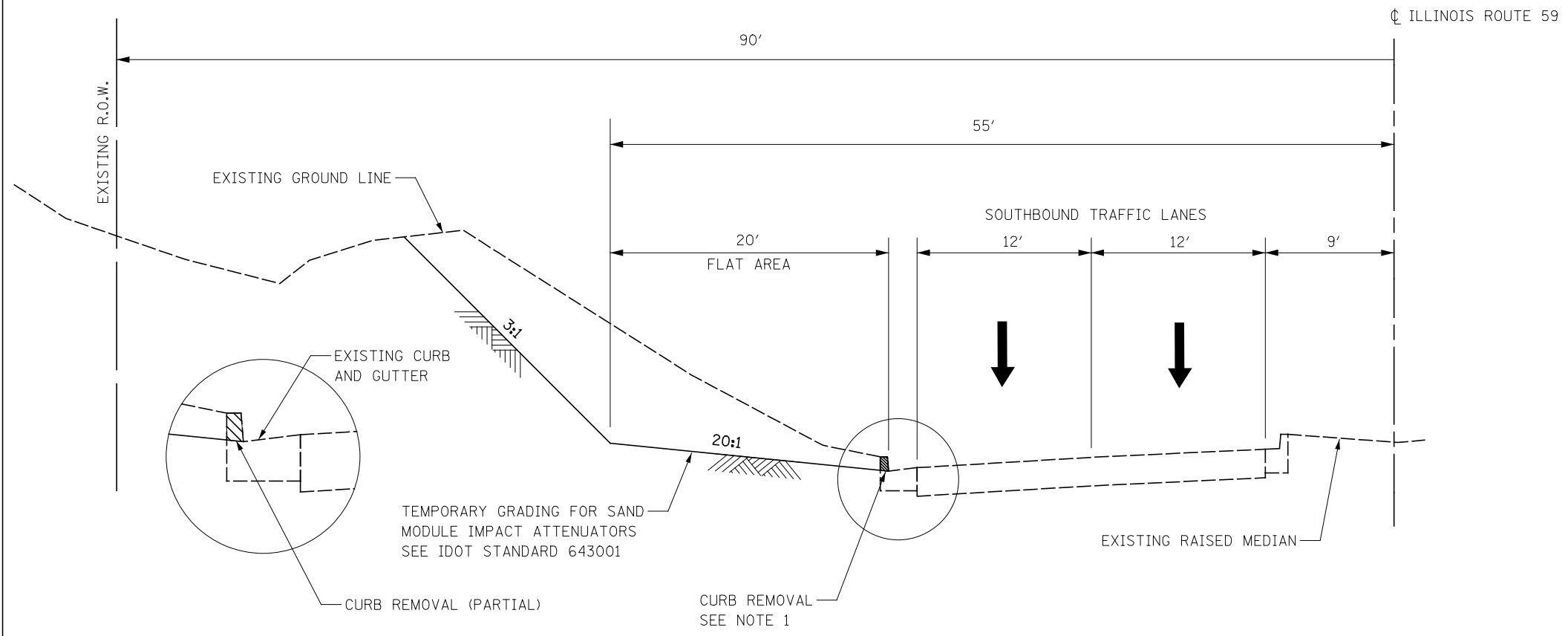
1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN THE EXISTING TRAFFIC LANES IN EACH DIRECTION ON ILLINOIS ROUTE 59 AND ALL SIDE ROADS.
2. THE CONTRACTOR SHALL PROVIDE ALL SIGNS, TYPE II BARRICADES OR CHANNELIZATION DRUMS NECESSARY FOR THE MAINTENANCE OF TRAFFIC, OR AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR SHALL INSTALL AND MAINTAIN PROPOSED AND TEMPORARY DRAINAGE SYSTEMS, AND EROSION CONTROL THROUGHOUT STAGE CONSTRUCTION DURING THE DURATION OF THE PROJECT.
4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL COMMERCIAL AND PRIVATE ENTRANCES. PAY ITEMS ARE INCLUDED IN THE PLANS FOR THIS ITEM. SEE IDOT DISTRICT 1 STANDARD TC-26 FOR TEMPORARY INFORMATION SIGNING REQUIREMENTS AT DRIVEWAYS.
5. ALL TYPE II BARRICADES AND CHANNELIZATION DRUMS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS.
6. ALL CONSTRUCTION WARNING SIGNS SHALL BE BLACK LEGEND ON ORANGE BACKGROUND.
7. ALL CONSTRUCTION WARNING SIGN DIMENSIONS SHALL BE 48" X 48".
8. ALL "ROAD CONSTRUCTION AHEAD" WARNING SIGNS (W20-1) SHALL BE EQUIPPED WITH HIGH INTENSITY FLASHING LIGHTS.

9. THE CONTRACTOR SHALL MAINTAIN DRIVEWAY, FIELD ENTRANCE, AND SIDE ROAD ACCESS AT ALL TIMES AT THE LOCATIONS SHOWN ON THE PLANS OR WHERE DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR TEMPORARY ACCESS (PRIVATE ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE), TEMPORARY ACCESS (FIELD ENTRANCE), AND TEMPORARY ACCESS (ROAD). EACH DRIVEWAY, FIELD ENTRANCE, AND SIDE ROAD SHALL ONLY BE MEASURED FOR PAYMENT ONCE.

10. ANY ADDITIONAL TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, DRUMS, VERTICAL PANELS, SIGNS, ETC. REQUIRED FOR THE MAINTENANCE OF TRAFFIC AT THE SIDE ROADS AND ENTRANCES SHALL BE INCLUDED IN THE LUMP SUM CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

11. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL OR COVER ALL TRENCHES AND OPEN EXCAVATION HOLES FOR PROPOSED STORM SEWER, DRAINAGE STRUCTURES, AND WATER MAINS IN ORDER TO PROVIDE A SAFE CONDITION FOR MOTORISTS AND THE PUBLIC DURING NON-WORKING HOURS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

	USER NAME = *USER*	DESIGNED - <i>DMS</i>	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - <i>KEA</i>	REVISED -			338/IL 59	2011-035-I	DUPAGE	181	12	
	PLOT SCALE = *SCALE*	CHECKED - <i>PJO</i>	REVISED -			<b>CONTRACT NO. 60P41</b>					
	PLOT DATE = *DATE*	DATE - <i>03-22-2012</i>	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.	TO
ILLINOIS FED. AID PROJECT											

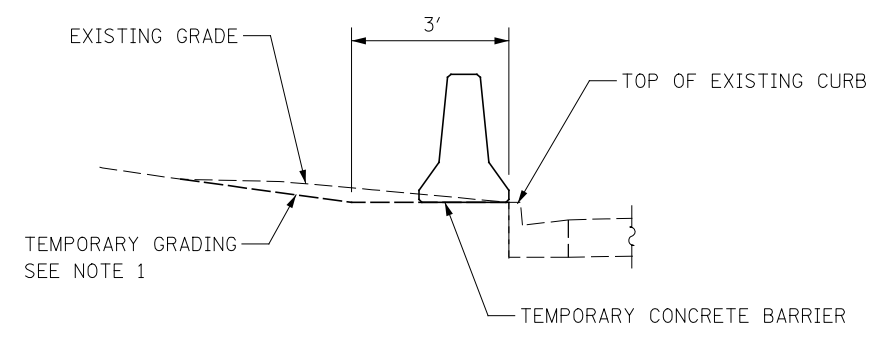


**NOTE**

1. GRADING OF THE FLAT AREA REQUIRED FOR THE PLACEMENT OF THE IMPACT ATTENUATOR AND TEMPORARY CONCRETE BARRIER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CURB REMOVAL (PARTIAL).
2. SEE IDOT STANDARD DETAIL 643001, SAND MODULE IMPACT ATTENUATORS.

**GRADING FOR IMPACT ATTENUATOR  
AND TEMPORARY CONCRETE BARRIER PLACEMENT  
STA. 3966+30 TO STA. 3968+00**

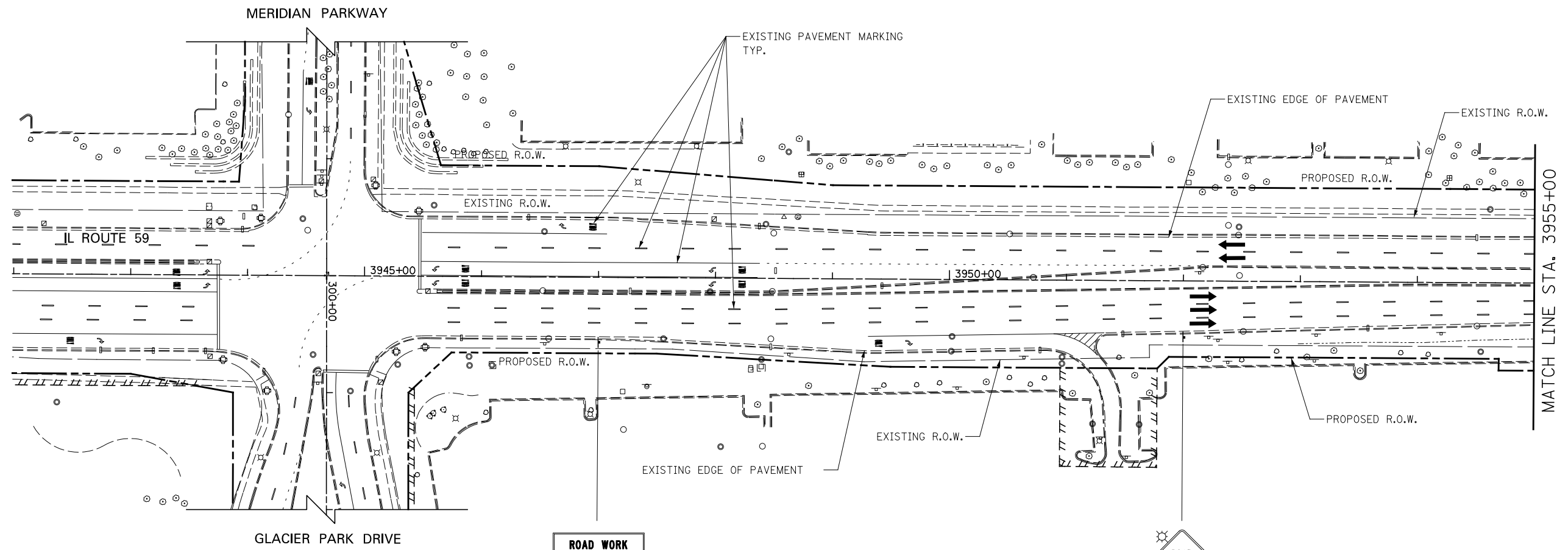
NOTE: TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS NOT SHOWN



**TEMPORARY CONCRETE BARRIER PLACEMENT  
STA. 3959+50 TO STA. 3966+30**

USER NAME = *USER* PLOT SCALE = *SCALE* PLOT DATE = *DATE*	DESIGNED - <i>DMS</i> DRAWN - <i>KEA</i> CHECKED - <i>PJO</i> DATE - <i>03-22-2012</i>	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC DETAILS</b>	F.A.P. RTE. 338/IL 59	SECTION 2011-035-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 13		
SCALE:      SHEET NO.      OF      SHEETS      STA.      TO STA.					CONTRACT NO. 60P41					ILLINOIS FED. AID PROJECT	













**ROAD WORK  
AHEAD  
EXPECT DELAYS**

SEE IDOT  
DISTRICT 1  
DETAIL TC-22



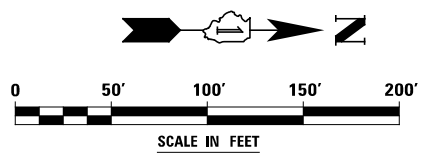
W20-1 (O)-48

**LEGEND**

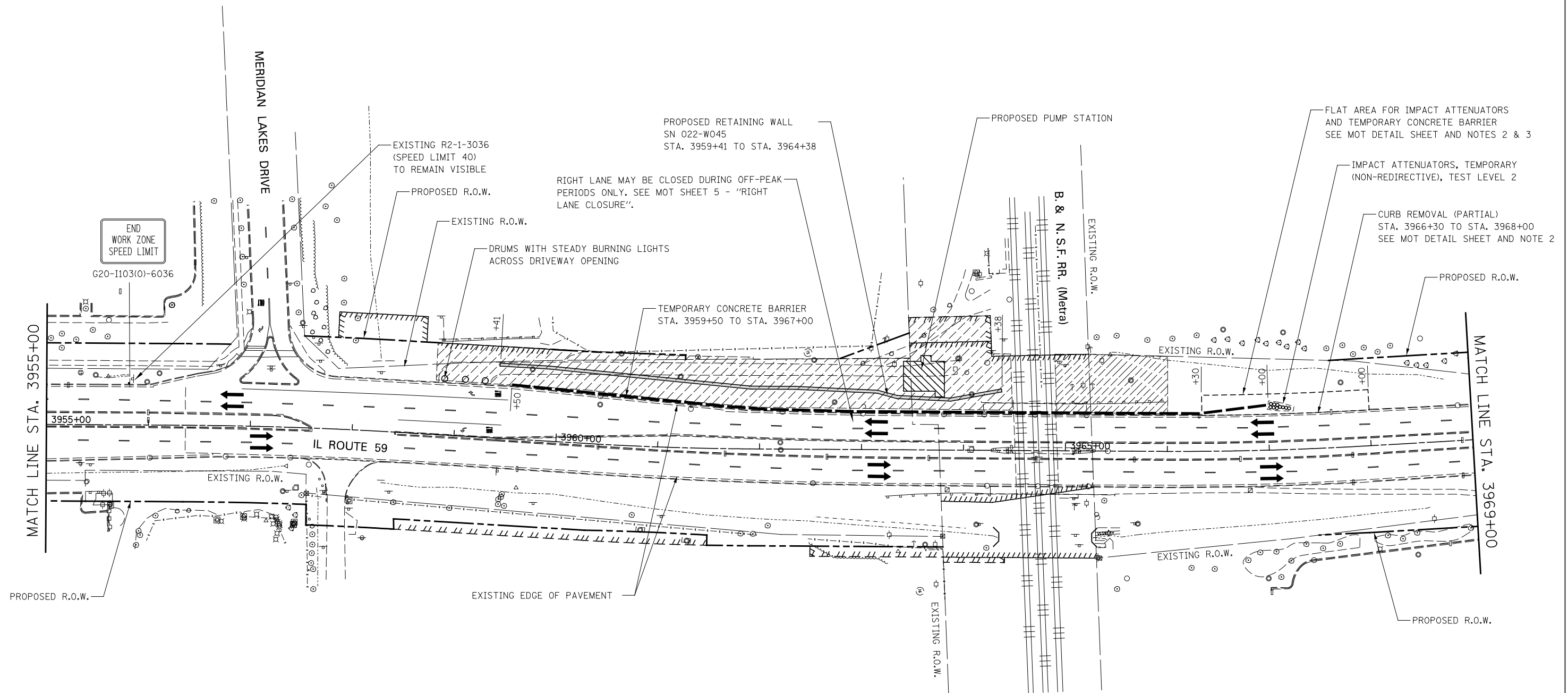
-  CONSTRUCTION WORK ZONE
-  DIRECTION OF TRAFFIC
-  TYPE II BARRICADES OR DRUMS
-  CHANNELIZATION DRUM
-  TEMPORARY CONCRETE BARRIER
-  SIGN LOCATION
-  TYPE III BARRICADE LOCATION
-  FLASHING YELLOW LIGHT

**NOTES**

1. EXISTING LANE CONFIGURATIONS ARE TO REMAIN IN OPERATION DURING THIS STAGE OF CONSTRUCTION.

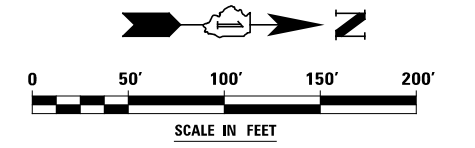


USER NAME = \$USER\$ PLOT SCALE = \$SCALE\$ PLOT DATE = \$DATE\$	DESIGNED - <i>MJM</i> DRAWN - <i>KEA</i> CHECKED - <i>PJO</i> DATE - <i>03-22-2012</i>	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC ILLINOIS ROUTE 59</b>	F.A.P. RTE. 338/IL 59 SECTION 2011-035-I COUNTY DUPAGE TOTAL SHEETS 181 SHEET NO. 14 CONTRACT NO. 60P41 ILLINOIS FED. AID PROJECT
			SCALE: AS SHOWN	SHEET NO. 1 OF 5 SHEETS	STA. 3943+00 TO STA. 3955+00

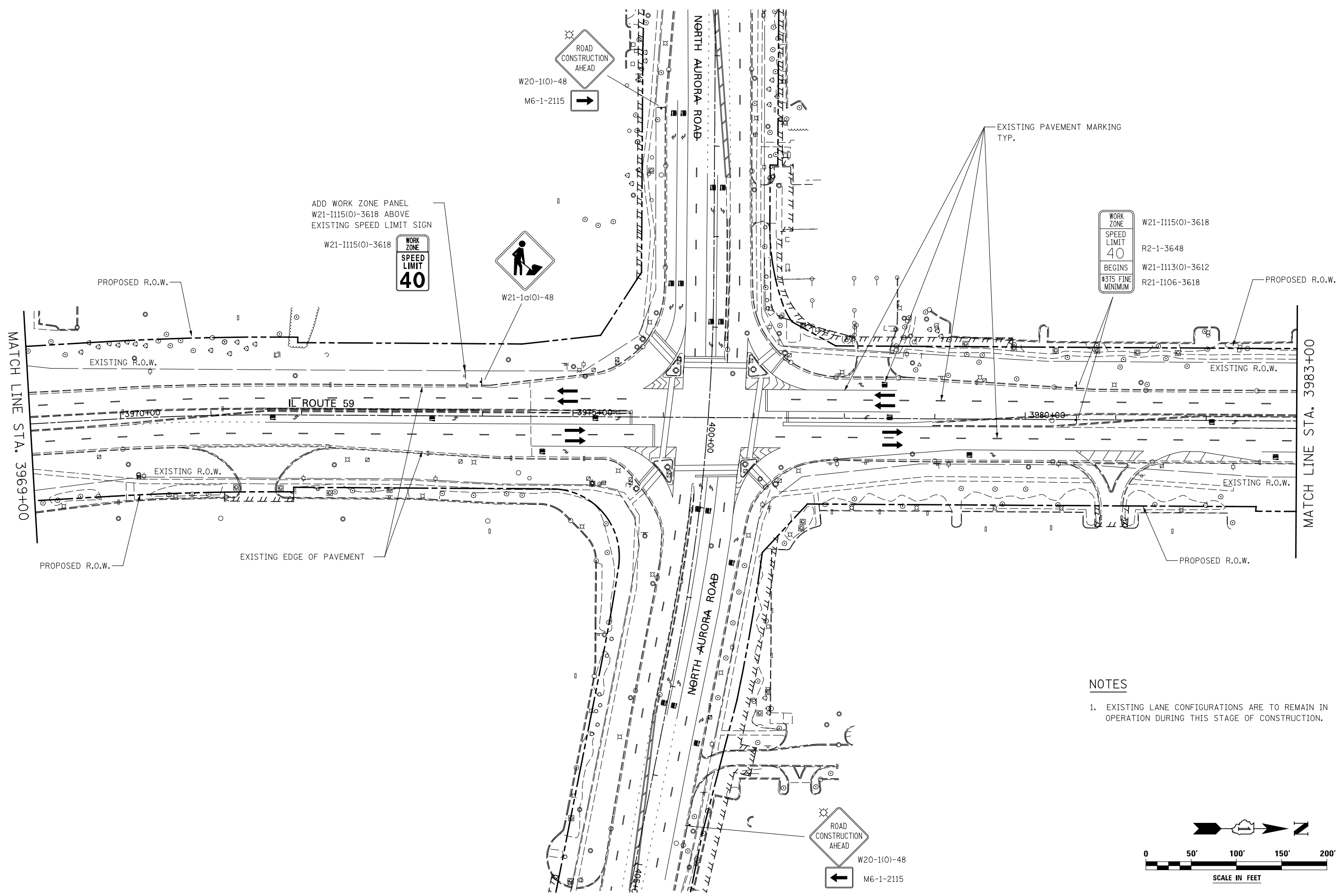


**NOTES**

- EXISTING LANE CONFIGURATIONS ARE TO REMAIN IN OPERATION DURING THIS STAGE OF CONSTRUCTION.
- GRADING OF THE FLAT AREA REQUIRED FOR THE PLACEMENT OF THE IMPACT ATTENUATOR AND TEMPORARY CONCRETE BARRIER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CURB REMOVAL (PARTIAL).
- SEE IDOT STANDARD DETAIL 643001, SAND MODULE IMPACT ATTENUATORS.



USER NAME = *USER* PLOT SCALE = *SCALE* PLOT DATE = *DATE*	DESIGNED - <i>MJM</i> DRAWN - <i>KEA</i> CHECKED - <i>PJO</i> DATE - <i>03-22-2012</i>	REVISED - REVISED - REVISED - REVISED -	<p align="center"><b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>MAINTENANCE OF TRAFFIC ILLINOIS ROUTE 59</b></p>	SCALE: AS SHOWN   SHEET NO. 2 OF 5 SHEETS   STA. 3955+00 TO STA. 3969+00	<table border="1"> <tr> <th>F.A.P. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>338/IL 59</td> <td>2011-035-I</td> <td>DUPAGE</td> <td>181</td> <td>15</td> </tr> <tr> <td align="center" colspan="5">CONTRACT NO. 60P41</td> </tr> </table>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	338/IL 59	2011-035-I	DUPAGE	181	15	CONTRACT NO. 60P41					ILLINOIS FED. AID PROJECT
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																		
338/IL 59	2011-035-I	DUPAGE	181	15																		
CONTRACT NO. 60P41																						



ADD WORK ZONE PANEL  
W21-1115(0)-3618 ABOVE  
EXISTING SPEED LIMIT SIGN

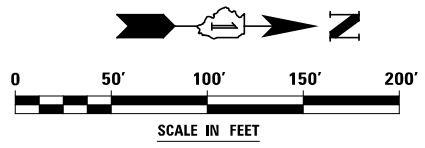
W21-1115(0)-3618  
WORK ZONE  
SPEED LIMIT  
40

WORK ZONE  
SPEED LIMIT  
40  
BEGINS  
#375 FINE MINIMUM

W21-1115(0)-3618  
R2-1-3648  
W21-1113(0)-3612  
R21-I106-3618

**NOTES**

- EXISTING LANE CONFIGURATIONS ARE TO REMAIN IN OPERATION DURING THIS STAGE OF CONSTRUCTION.



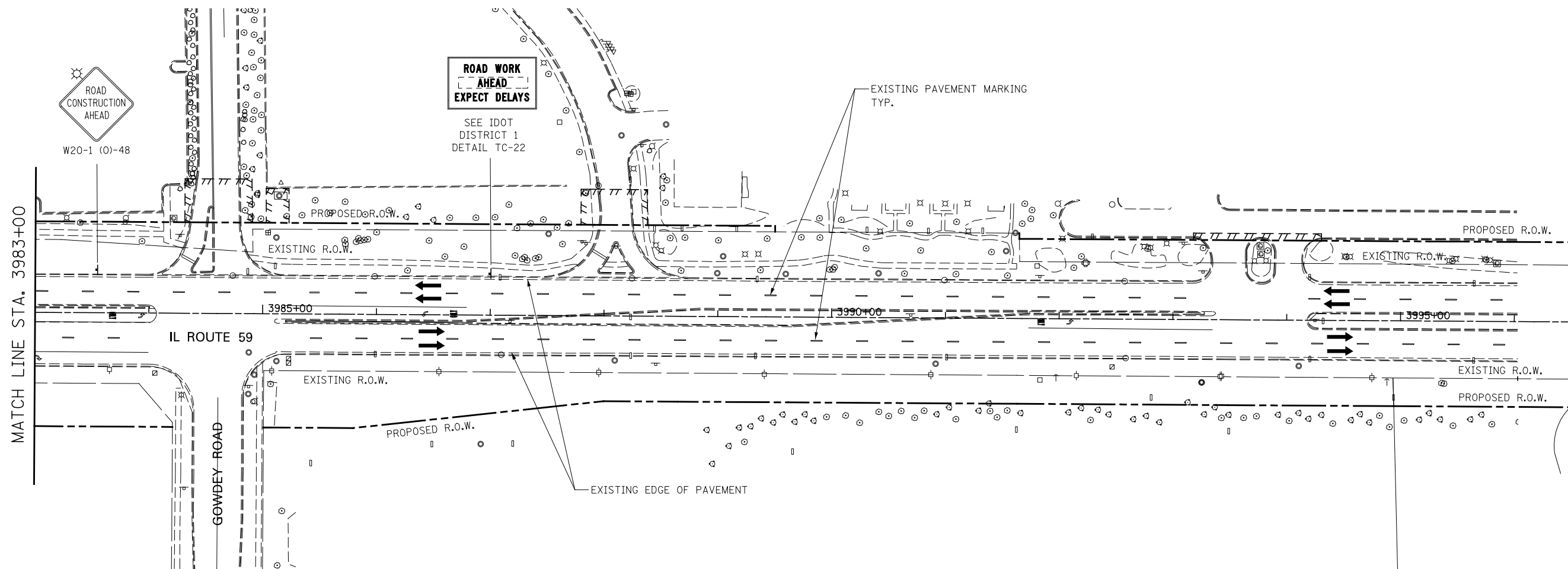
USER NAME = *USER*	DESIGNED - <i>MJM</i>	REVISED
	DRAWN - <i>KEA</i>	REVISED -
PLOT SCALE = *SCALE*	CHECKED - <i>PJO</i>	REVISED -
PLOT DATE = *DATE*	DATE - <i>03-22-2012</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC  
ILLINOIS ROUTE 59**

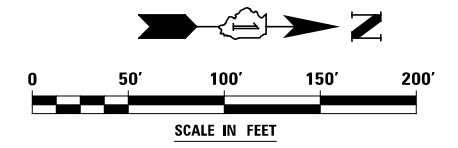
SCALE: AS SHOWN SHEET NO. 3 OF 5 SHEETS STA. 3969+00 TO STA. 3983+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	16
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

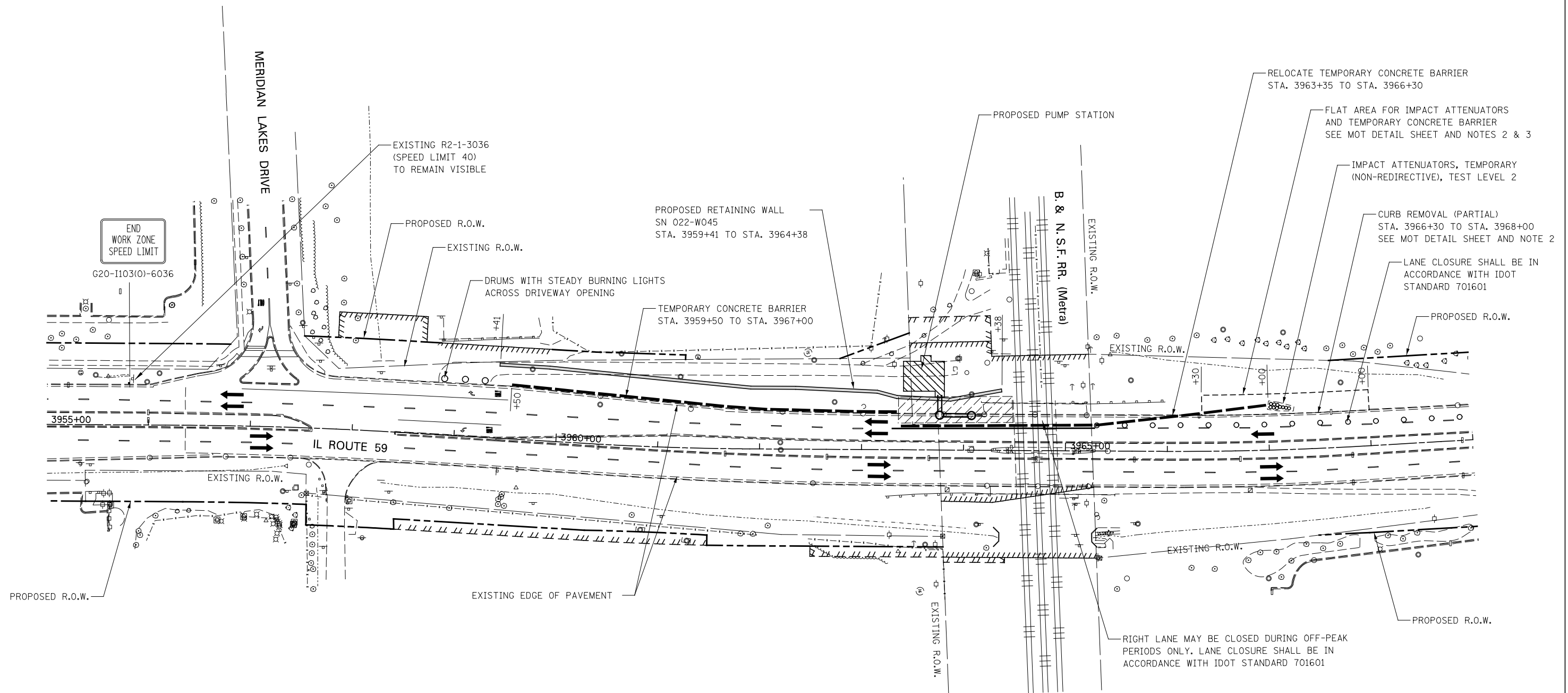


**NOTES**

1. EXISTING LANE CONFIGURATIONS ARE TO REMAIN IN OPERATION DURING THIS STAGE OF CONSTRUCTION.

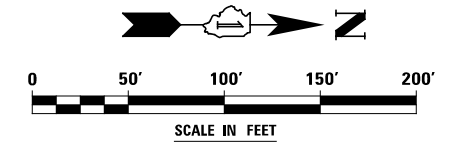


USER NAME = #USER* PLOT SCALE = #SCALE* PLOT DATE = #DATE*	DESIGNED - <i>MJM</i> DRAWN - <i>KEA</i>	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC ILLINOIS ROUTE 59</b>	F.A.P. RTE. 338/IL 59	SECTION 2011-035-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 17
	CHECKED - <i>PJO</i> DATE - <i>03-22-2012</i>	REVISED - REVISED -			CONTRACT NO. 60P41				
	SCALE: AS SHOWN    SHEET NO. 4 OF 5 SHEETS    STA. 3983+00 TO STA. 3996+50				ILLINOIS FED. AID PROJECT				



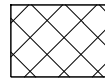
**NOTES**

1. EXISTING LANE CONFIGURATIONS ARE TO REMAIN IN OPERATION DURING THIS STAGE OF CONSTRUCTION.
2. GRADING OF THE FLAT AREA REQUIRED FOR THE PLACEMENT OF THE IMPACT ATTENUATOR AND TEMPORARY CONCRETE BARRIER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CURB REMOVAL (PARTIAL).
3. SEE IDOT STANDARD DETAIL 643001, SAND MODULE IMPACT ATTENUATORS.

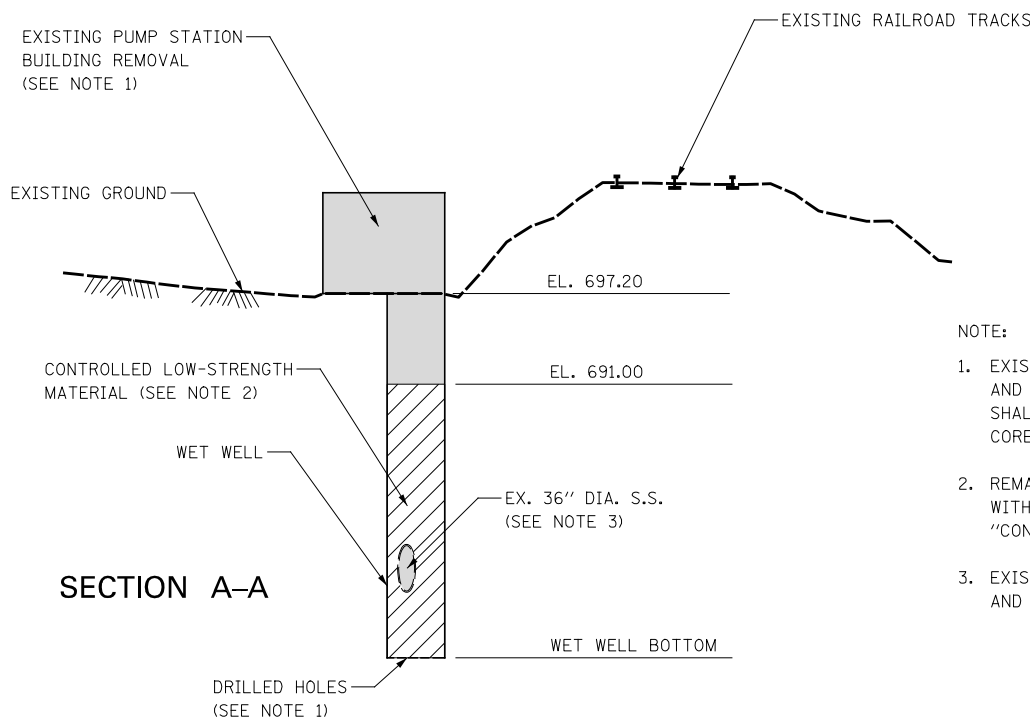
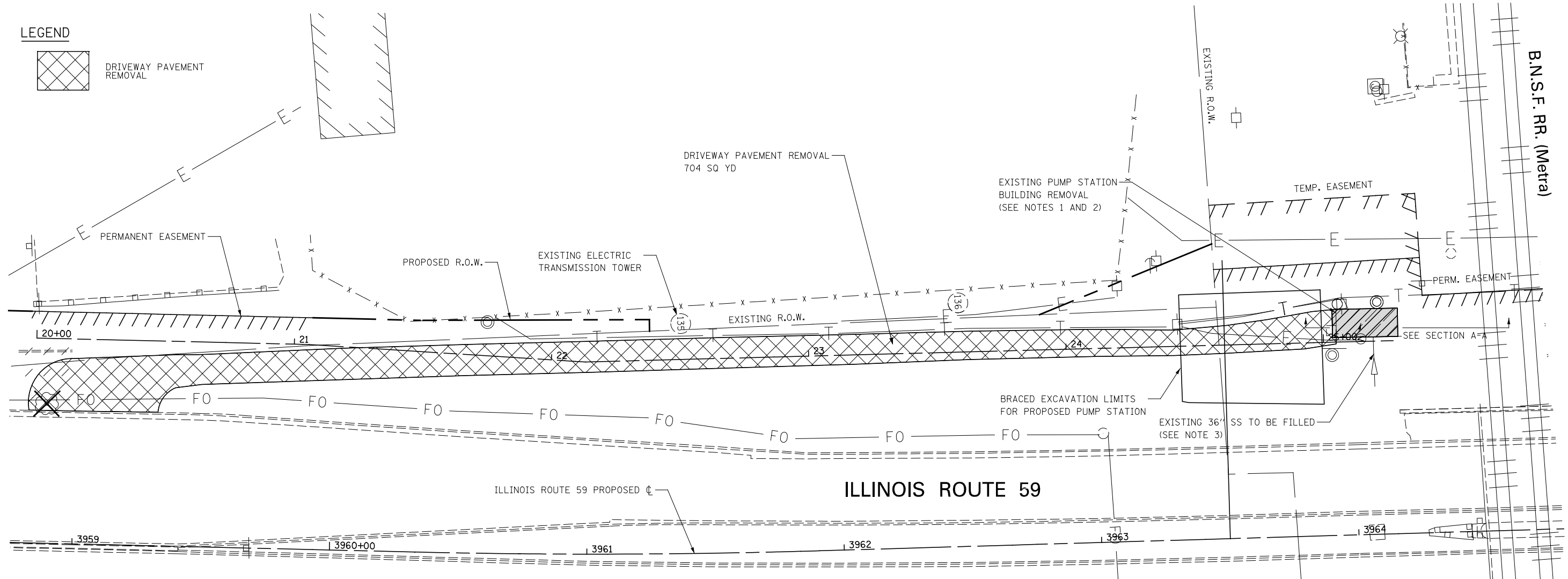


USER NAME = *USER* PLOT SCALE = *SCALE* PLOT DATE = *DATE*	DESIGNED - <i>MJM</i> DRAWN - <i>KEA</i> CHECKED - <i>PJO</i> DATE - <i>03-22-2012</i>	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC - RIGHT LANE CLOSURE ILLINOIS ROUTE 59</b>	F.A.P. RTE. 338/IL 59	SECTION 2011-035-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 18		
SCALE: AS SHOWN    SHEET NO. 5 OF 5 SHEETS    STA. 3955+00 TO STA. 3969+00					CONTRACT NO. 60P41					ILLINOIS FED. AID PROJECT	

**LEGEND**

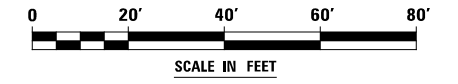
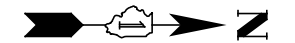


DRIVEWAY PAVEMENT REMOVAL



**NOTE:**

1. EXISTING BUILDING AND WET WELL STRUCTURE SHALL BE DEMOLISHED AND REMOVED TO AT LEAST ELEVATION 691.00. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE "BUILDING REMOVAL NO. 1". CORED HOLES IN SLAB WILL BE INCLUDED IN THIS PAY ITEM.
2. REMAINING BUILDING WET WELL BELOW ELEVATION 691.00 TO BE FILLED WITH CONTROLLED LOW-STRENGTH MATERIAL AND PAID AS "CONTROLLED LOW-STRENGTH MATERIAL" (PLAN QUANTITY 129 CU YD)
3. EXISTING 36" STORM SEWER TO BE FILLED WITH CONTROLLED LOW-STRENGTH MATERIAL AND PAID AS "FILL EXISTING STORM SEWERS". SEE DRAINAGE PLAN/PROFILE.



USER NAME = *USER*	DESIGNED - RTA	REVISED
DRAWN - KEA	REVISION	REVISED -
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DEMOLITION PLAN**

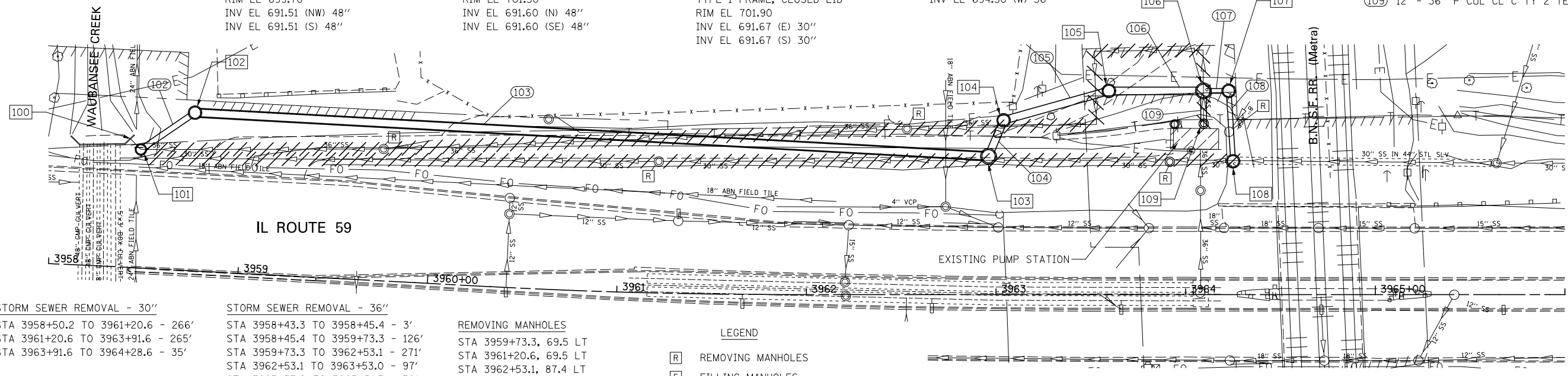
SCALE: AS SHOWN SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	19
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

- 100 STA 3958+39.5, 68.1 LT EXISTING HEADWALL INV EL 690.70 (N) 36"
- 101 STA 3958+45.4, 62.5 LT MANHOLE TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 696.00 INV EL 691.00 (N) 36" INV EL 691.00 (SW) 36"
- 102 STA 3958+72.9, 83.5 LT MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 697.00 INV EL 691.03 (N) 48" INV EL 691.03 (SE) 36"
- 103 STA 3962+96.1, 73.0 LT MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, OPEN LID RIM EL 699.70 INV EL 691.51 (NW) 48" INV EL 691.51 (S) 48"
- 104 STA 3963+04.0, 92.0 LT TEMP MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 698.90 INV EL 691.53 (NW) 48" INV EL 691.53 (SE) 48"
- 105 STA 3963+59.5, 107.5 LT TEMP MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 701.50 INV EL 691.60 (N) 48" INV EL 691.60 (SE) 48"
- 106 STA 3964+09.4, 107.5 LT TEMP MANHOLE TYPE A, 7' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 703.00 INV EL 691.66 (N) 30" INV EL 691.66 (E) 36" INV EL 691.66 (S) 48"
- 107 STA 3964+22.7, 107.5 LT TEMP MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 701.90 INV EL 691.67 (E) 30" INV EL 691.67 (S) 30"
- 108 STA 3964+25.0, 70.4 LT TEMP MANHOLE TYPE A, 6' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 699.00 INV EL 691.41 (N) 30" INV EL 691.72 (E) 30"
- 109 STA 3964+09.5, 90.2 LT EXISTING MANHOLE RIM EL 699.23 INV EL 694.30 (W) 36"
- 102 29' - 36" SS CLASS B, TYPE 2 @ 0.12%
- 103 413' - 48" SS CLASS A, TYPE 2 @ 0.12%
- 104 14' - 48" P CUL CL C TY 2 TEMP @ 0.13%
- 105 52' - 48" P CUL CL C TY 2 TEMP @ 0.13%
- 106 43' - 48" P CUL CL C TY 2 TEMP @ 0.13%
- 107 7' - 30" P CUL CL C TY 2 TEMP @ 0.13%
- 108 31' - 30" P CUL CL C TY 2 TEMP @ 0.13%
- 109 12' - 36" P CUL CL C TY 2 TEMP @ 0.13%



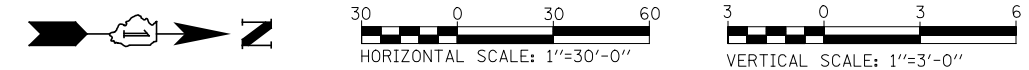
- STORM SEWER REMOVAL - 30"
  - STA 3958+50.2 TO 3961+20.6 - 266'
  - STA 3961+20.6 TO 3963+91.6 - 265'
  - STA 3963+91.6 TO 3964+28.6 - 35'
- STORM SEWER REMOVAL - 36"
  - STA 3958+43.3 TO 3958+45.4 - 3'
  - STA 3958+45.4 TO 3959+73.3 - 126'
  - STA 3959+73.3 TO 3962+53.1 - 271'
  - STA 3962+53.1 TO 3963+53.0 - 97'
  - STA 3963+53.0 TO 3963+51.7 - 39'
  - STA 3963+51.7 TO 3964+09.2 - 57'
  - STA 3964+09.2 TO 3964+09.5 - 41'
- REMOVING MANHOLES
  - STA 3959+73.3, 69.5 LT
  - STA 3961+20.6, 69.5 LT
  - STA 3962+53.1, 87.4 LT
  - STA 3963+91.6, 70.1 LT
  - STA 3964+22.9, 85.9 LT

**LEGEND**

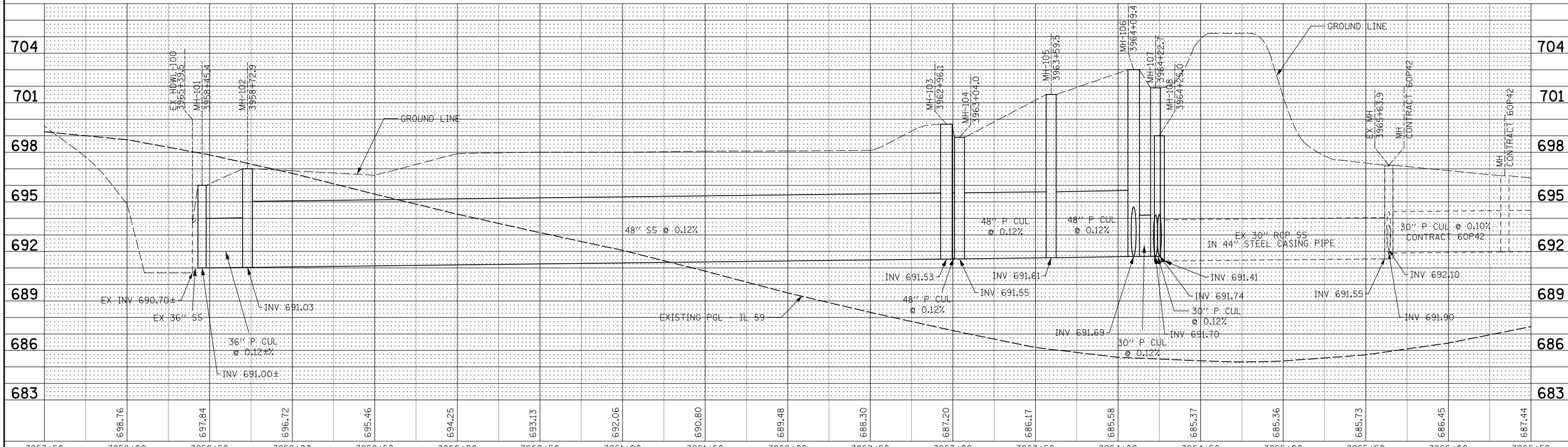
[R] REMOVING MANHOLES

[F] FILLING MANHOLES

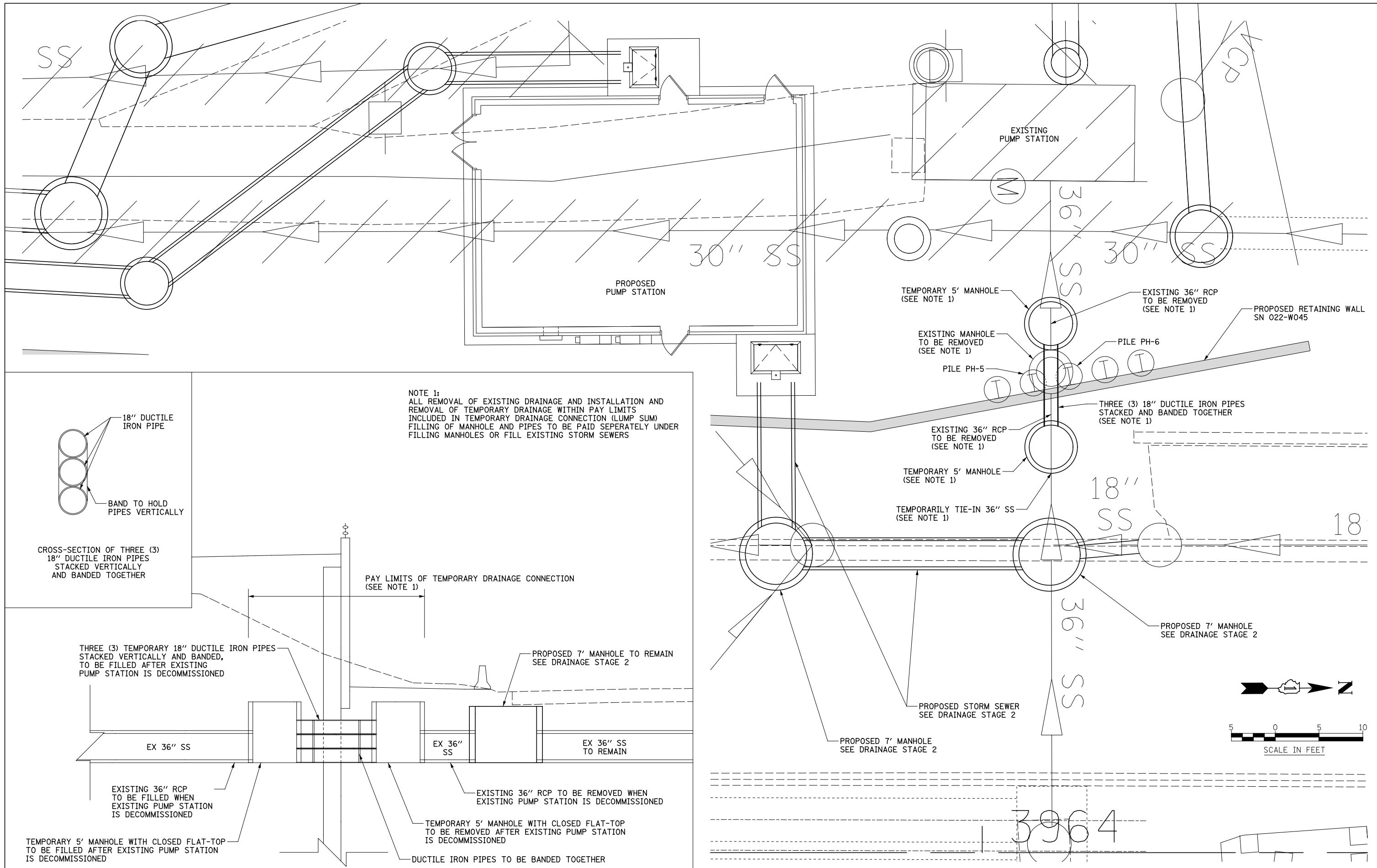
/// STORM SEWER REMOVAL



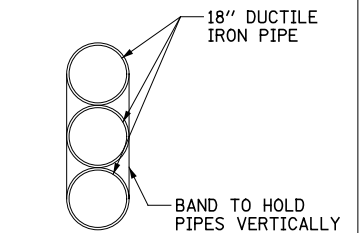
PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE	
	NOT AT THIS OFFICE	
	NO.	



FILE NAME =	USER NAME = *USER*	DESIGNED - DMS	REVISED -						
*FILE#		DRAWN - KEA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>					
		CHECKED - PJO	REVISED -						
		DATE - 12-14-11	REVISED -						
		<b>DRAINAGE PLAN / PROFILE - STAGE 1</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SCALE: AS SHOWN SHEET NO. OF SHEETS STA. 3958+00 TO STA. 3966+00			338/IL 59	2011-035-1	DUPAGE	181	20
					CONTRACT NO. 60P41				
					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTE 1:  
 ALL REMOVAL OF EXISTING DRAINAGE AND INSTALLATION AND REMOVAL OF TEMPORARY DRAINAGE WITHIN PAY LIMITS INCLUDED IN TEMPORARY DRAINAGE CONNECTION (LUMP SUM) FILLING OF MANHOLE AND PIPES TO BE PAID SEPARATELY UNDER FILLING MANHOLES OR FILL EXISTING STORM SEWERS



CROSS-SECTION OF THREE (3) 18" DUCTILE IRON PIPES STACKED VERTICALLY AND BANDED TOGETHER

THREE (3) TEMPORARY 18" DUCTILE IRON PIPES STACKED VERTICALLY AND BANDED, TO BE FILLED AFTER EXISTING PUMP STATION IS DECOMMISSIONED

PAY LIMITS OF TEMPORARY DRAINAGE CONNECTION (SEE NOTE 1)

PROPOSED 7' MANHOLE TO REMAIN SEE DRAINAGE STAGE 2

EX 36" SS

EX 36" SS

EX 36" SS TO REMAIN

EXISTING 36" RCP TO BE FILLED WHEN EXISTING PUMP STATION IS DECOMMISSIONED

EXISTING 36" RCP TO BE REMOVED WHEN EXISTING PUMP STATION IS DECOMMISSIONED

TEMPORARY 5' MANHOLE WITH CLOSED FLAT-TOP TO BE REMOVED AFTER EXISTING PUMP STATION IS DECOMMISSIONED

DUCTILE IRON PIPES TO BE BANDED TOGETHER

TEMPORARY 5' MANHOLE (SEE NOTE 1)

EXISTING MANHOLE TO BE REMOVED (SEE NOTE 1)

PILE PH-5

EXISTING 36" RCP TO BE REMOVED (SEE NOTE 1)

PROPOSED RETAINING WALL SN 022-W045

PILE PH-6

THREE (3) 18" DUCTILE IRON PIPES STACKED AND BANDED TOGETHER (SEE NOTE 1)

EXISTING 36" RCP TO BE REMOVED (SEE NOTE 1)

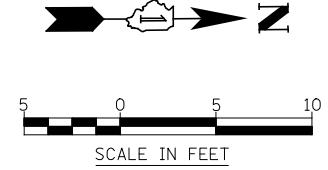
TEMPORARY 5' MANHOLE (SEE NOTE 1)

TEMPORARILY TIE-IN 36" SS (SEE NOTE 1)

PROPOSED STORM SEWER SEE DRAINAGE STAGE 2

PROPOSED 7' MANHOLE SEE DRAINAGE STAGE 2

PROPOSED 7' MANHOLE SEE DRAINAGE STAGE 2



USER NAME = \$USER\$	DESIGNED - DMS	REVISED
	DRAWN - KEA	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - PJO	REVISED -
PLOT DATE = \$DATE\$	DATE - 03-22-2012	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY DRAINAGE CONNECTION  
 THROUGH RETAINING WALL SN 022-W045

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	21
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



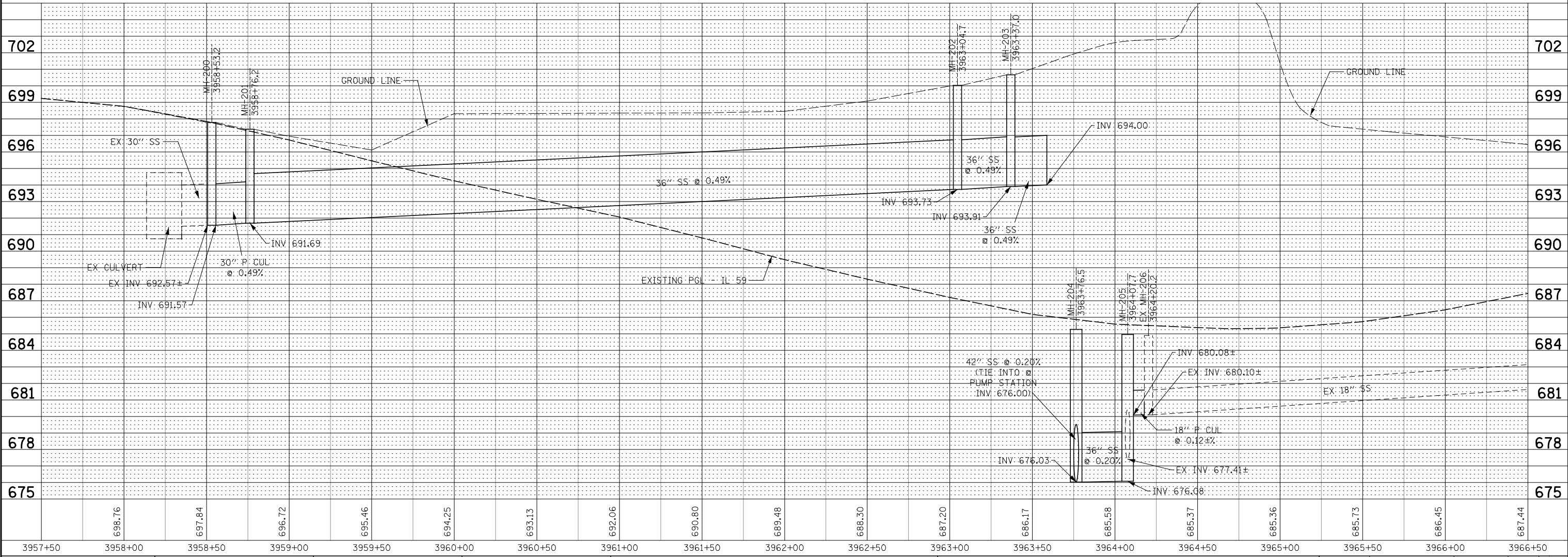
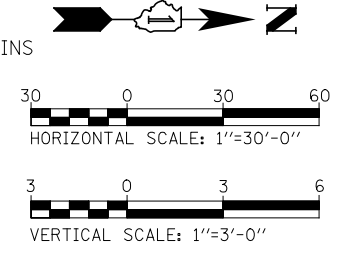
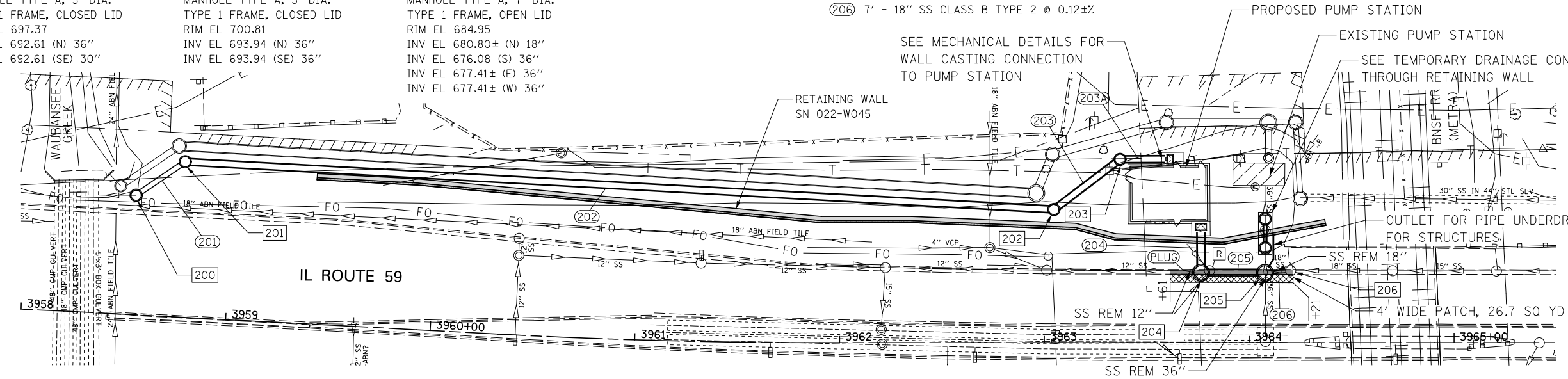
- 200 STA 3958+53.2, 58.3 LT MANHOLE TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 697.78 INV EL 692.54 (NW) 30" INV EL 692.54± (S) 30"
- 201 STA 3958+76.2, 75.9 LT MANHOLE TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 697.37 INV EL 692.61 (N) 36" INV EL 692.61 (SE) 30"
- 202 STA 3963+04.7, 65.0 LT MANHOLE TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 699.98 INV EL 693.84 (NW) 36" INV EL 693.84 (S) 36"
- 203 STA 3963+37.0, 89.5 LT MANHOLE TYPE A, 5' DIA. TYPE 1 FRAME, CLOSED LID RIM EL 700.81 INV EL 693.94 (N) 36" INV EL 693.94 (SE) 36"
- 204 STA 3963+76.5, 34.1 LT MANHOLE TYPE A, 7' DIA. TYPE 1 FRAME, OPEN LID RIM EL 685.26 INV EL 676.03 (N) 42" INV EL 676.03 (W) 36"
- 205 STA 3964+07.7, 34.0 LT MANHOLE TYPE A, 7' DIA. TYPE 1 FRAME, OPEN LID RIM EL 684.95 INV EL 680.80± (N) 18" INV EL 676.08 (S) 36" INV EL 677.41± (E) 36" INV EL 677.41± (W) 36"
- 206 STA 3964+20.2, 35.1 LT EXISTING MANHOLE RIM EL 684.90 INV EL 680.10 (N) 18" INV EL 680.10 (S) 18"

- 201 24' - 30" SS CLASS B TYPE 2 @ 0.29%
- 202 420' - 36" SS CLASS A TYPE 2 @ 0.29%
- 203 36' - 36" SS CLASS A TYPE 2 @ 0.29%
- 203A 19' - 36" SS CLASS A TYPE 2 @ 0.29%
- 204 16' - 42" SS CLASS A TYPE 2 @ 0.20%
- 205 24' - 36" SS CLASS A TYPE 2 @ 0.20%
- 206 7' - 18" SS CLASS B TYPE 2 @ 0.12±%

STORM SEWER REMOVAL - 36"  
 STA 3964+07.9 TO 3964+07.9 - 8'  
 STORM SEWER REMOVAL - 18"  
 STA 3964+07.9 TO 3964+20.2 - 10'  
 STORM SEWER REMOVAL - 12"  
 STA 3963+68.1 TO 3963+80.6 - 10'

PLUG EXISTING STORM SEWERS  
 STA 3963+68.1, 35.1 LT  
 REMOVING MANHOLES  
 STA 3963+80.6, 35.1 LT

- LEGEND
- [R] REMOVING MANHOLES
  - [F] FILLING MANHOLES
  - /// STORM SEWER REMOVAL
  - [X] CLASS C PATCHES, TYPE IV, 10 INCH
  - [■] COMB CURB GUTTER REM REPLACE WITH COMB CC&G TB6.18



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

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

FILE NAME =	USER NAME = #USER#	DESIGNED - DMS	REVISED -	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILEL*		DRAWN - KEA	REVISED -	338/IL 59	2011-035-I	DUPAGE	181	22
		CHECKED - PJO	REVISED -	CONTRACT NO. 60P41				
		DATE - 12-14-11	REVISED -	ILLINOIS FED. AID PROJECT				

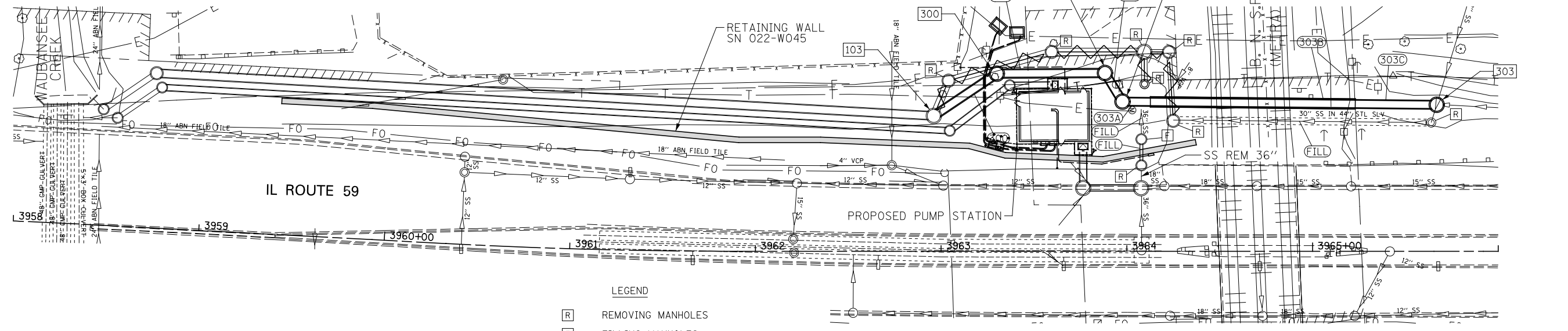
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN / PROFILE - STAGE 2

SCALE: AS SHOWN SHEET NO. OF SHEETS STA. 3958+00 TO STA. 3965+50

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO. _____		
	CHECKED		
	FILE NAME		
	NO. _____		

- |   |  |  |   |   |  |  |
|---|--|--|---|---|--|--|
| <p><b>103</b> STA 3962+96.1, 73.0 LT<br/>MANHOLE TYPE A, 7' DIA.<br/>(INSTALLED IN STAGE 1)<br/>RIM EL 699.67<br/>INV EL 691.53 (NW) 48"<br/>INV EL 691.53 (S) 48"</p> <p><b>300</b> STA 3963+30.0, 95.8 LT<br/>MANHOLE TYPE A, 7' DIA.<br/>TYPE 1 FRAME, CLOSED LID<br/>RIM EL 699.94<br/>INV EL 691.57 (N) 48"<br/>INV EL 691.57 (SE) 48"</p> | <p><b>301</b> STA 3963+59.5, 115.0 LT<br/>MANHOLE TYPE A, 7' DIA.<br/>TYPE 1 FRAME, OPEN LID<br/>RIM EL 700.30<br/>INV EL 691.63 (NE) 48"<br/>INV EL 691.63 (S) 48"</p> <p><b>302</b> STA 3963+97.7, 80.7 LT<br/>MANHOLE TYPE A, 7' DIA.<br/>TYPE 1 FRAME, OPEN LID<br/>RIM EL 700.10<br/>INV EL 691.64 (N) 48"<br/>INV EL 691.64 (SW) 48"</p> | <p><b>303</b> STA 3965+66.9, 79.0 LT<br/>MANHOLE TYPE A, 7' DIA.<br/>TYPE 1 FRAME, CLOSED LID<br/>RIM EL 697.00<br/>INV EL 691.83 (S) 48"<br/>INV EL 691.83 (N) 48"<br/>INV EL 692.13± (W) 12"</p> | <p><b>300</b> 34' - 48" SS CLASS A, TYPE 2 @ 0.12%</p> <p><b>301</b> 51' - 48" SS CLASS A, TYPE 2 @ 0.12%</p> <p><b>302</b> 11' - 48" SS CLASS A, TYPE 2 @ 0.12%</p> <p><b>303A</b> 7' - 48" SS CLASS A, TYPE 2 @ 0.12%</p> <p><b>303B</b> 110' @ 0.12% - STORM SEWERS JKD 48</p> <p><b>303C</b> 40' - 48" SS CLASS A, TYPE 1 @ 0.12%</p> | <p><b>REMOVING MANHOLES</b><br/>STA 3964+09.5, 90.2 LT<br/>STA 3965+63.9, 69.4 LT</p> <p><b>TEMP MANHOLE REMOVAL (INCLUDED IN TEMP INSTALLATION)</b><br/>STA 3963+04.0, 92.0 LT<br/>STA 3963+59.5, 107.5 LT<br/>STA 3964+07.9, 46.3 LT<br/>STA 3964+09.4, 107.5 LT<br/>STA 3964+22.7, 107.5 LT<br/>STA 3964+25.0, 70.4 LT</p> | <p><b>FILLING MANHOLES</b><br/>STA 3964+07.8, 60.4 LT</p> <p><b>FILL EXISTING STORM SEWERS</b><br/>STA 3964+07.7 TO 3964+07.8 - 2 CU YD<br/>STA 3964+07.8 TO 3964+07.8 - 3 CU YD<br/>STA 3964+25.0 TO 3965+63.9 - 62 CU YD</p> <p><b>STORM SEWER REMOVAL - 36"</b><br/>STA 3964+07.9 TO 3964+07.9 - 5'</p> | <p><b>TEMP PIPE CULVERT REMOVAL (INCLUDED IN TEMP INSTALLATION)</b><br/>STA 3962+96.1 TO 3963+04.0 - 14'<br/>STA 3963+04.0 TO 3963+59.5 - 52'<br/>STA 3963+59.5 TO 3964+09.4 - 43'<br/>STA 3964+09.4 TO 3964+09.5 - 12'<br/>STA 3964+09.4 TO 3964+22.7 - 7'<br/>STA 3964+22.7 TO 3964+25.0 - 31'</p> |
|---|--|--|---|---|--|--|

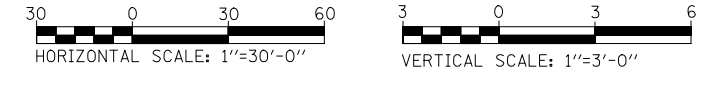


**LEGEND**

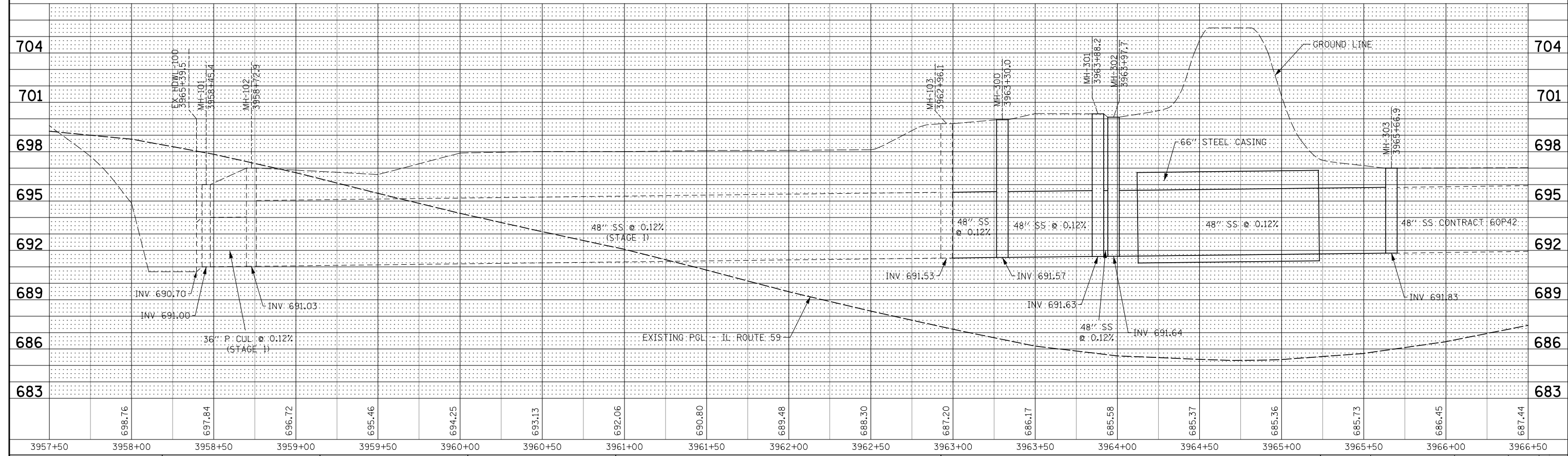
**R** REMOVING MANHOLES

**F** FILLING MANHOLES

**TEMP PIPE CULVERT REMOVAL (INCLUDED IN TEMP INSTALLATION)**



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NO. _____		
	STRUCTURE		
	NOT AT THIS CHORD		

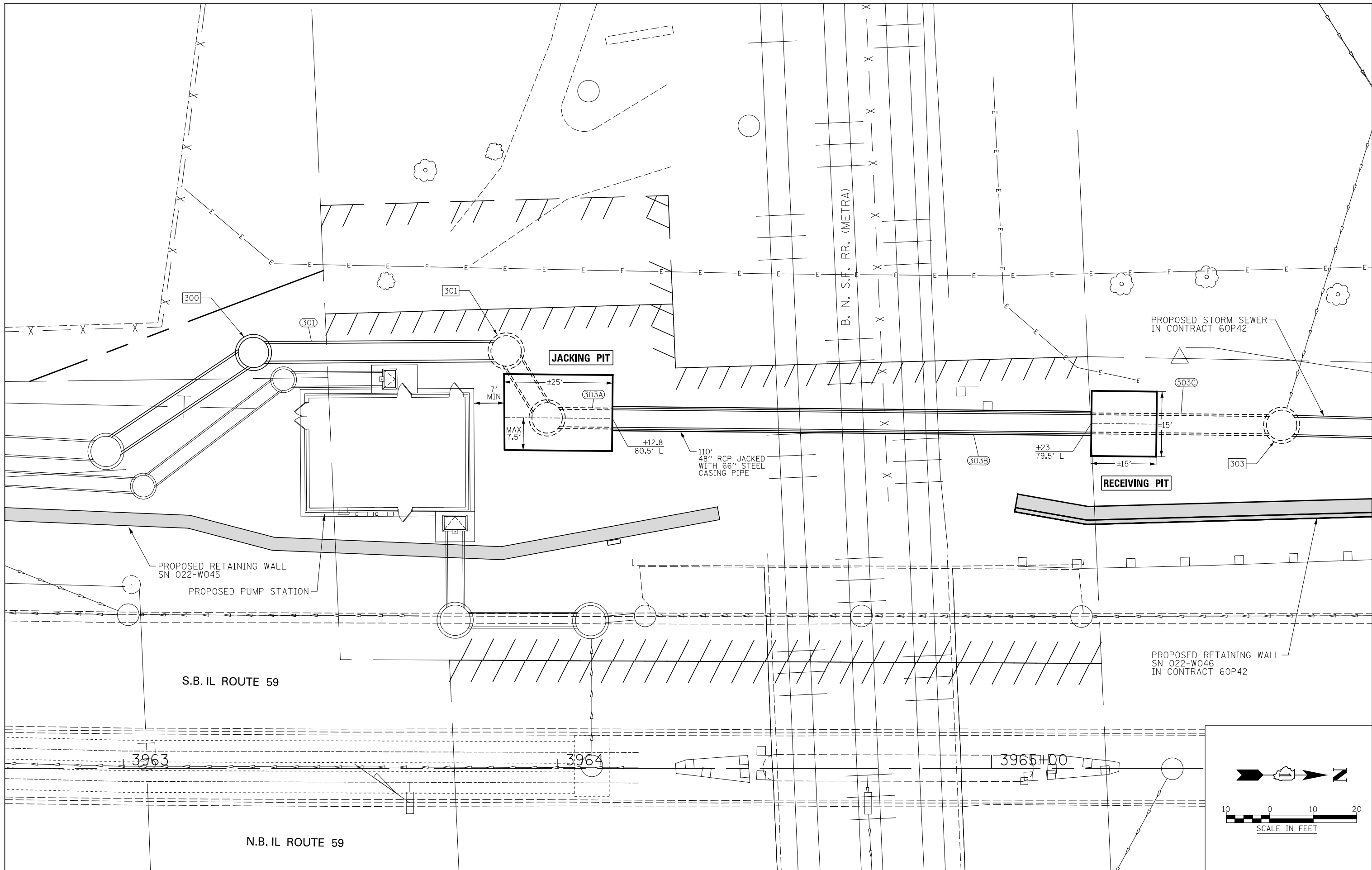


FILE NAME =	USER NAME = *USER*	DESIGNED - DMS	REVISED -	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILEL*		DRAWN - KEA	REVISED -	338/IL 59	2011-035-I	DUPAGE	181	23
	PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -	CONTRACT NO. 60P41				
	PLOT DATE = *DATE*	DATE - 12-14-11	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN / PROFILE - STAGE 3**

SCALE: AS SHOWN SHEET NO. OF SHEETS STA. 3958+00 TO STA. 3966+00



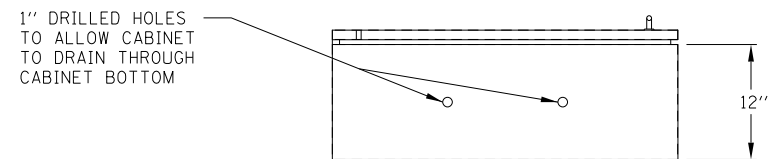
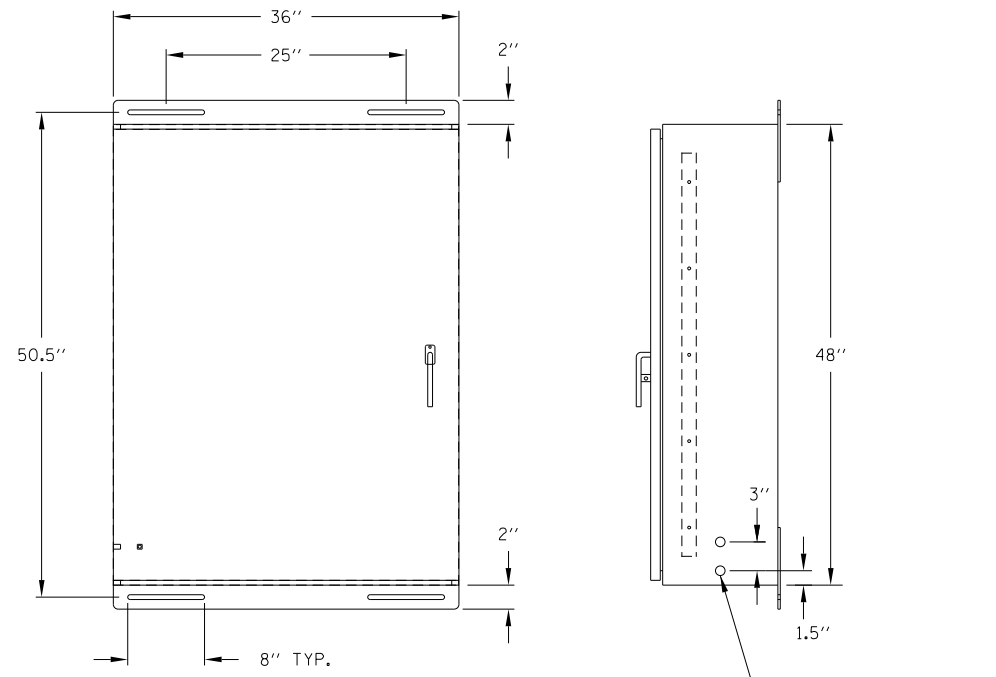
USER NAME = *USER*	DESIGNED - NAV	REVISED -
	DRAWN - KEA	REVISED -
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

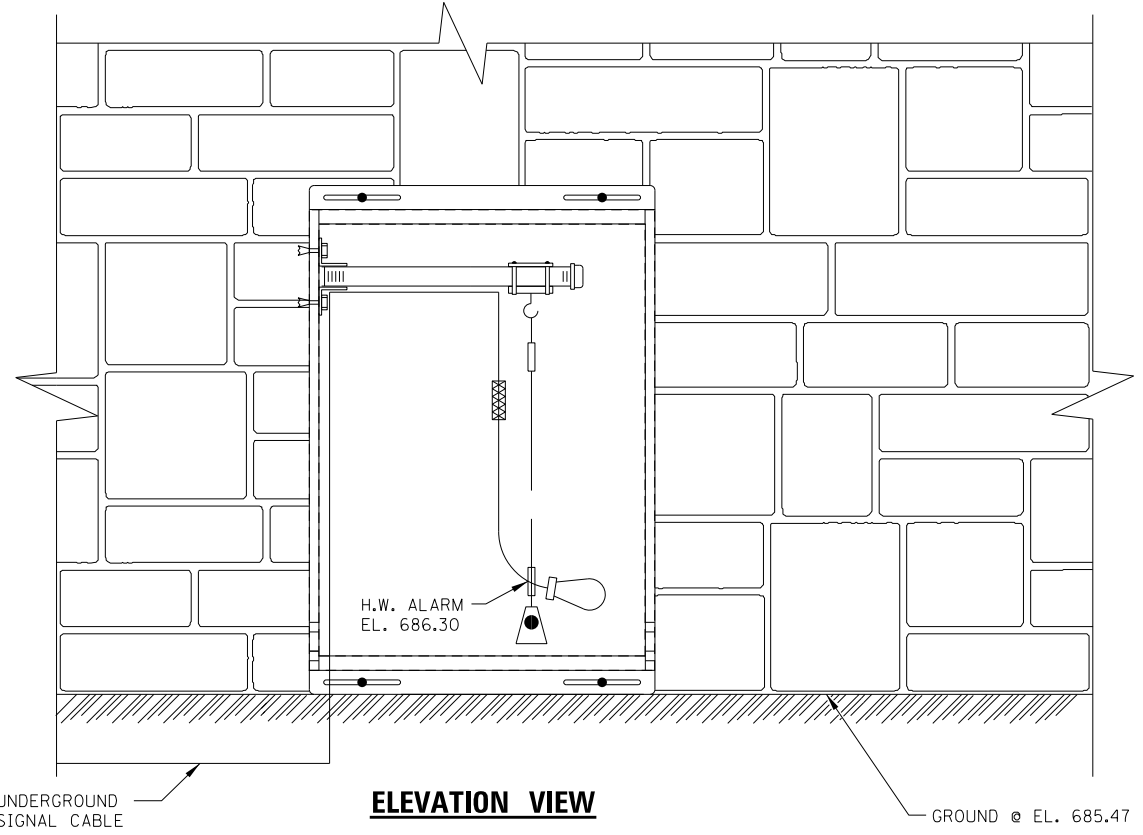
**DRAINAGE PLAN - STAGE 3**

SCALE: AS SHOWN    SHEET NO.    OF    SHEETS    STA. 3962+73    TO    STA. 3965+88

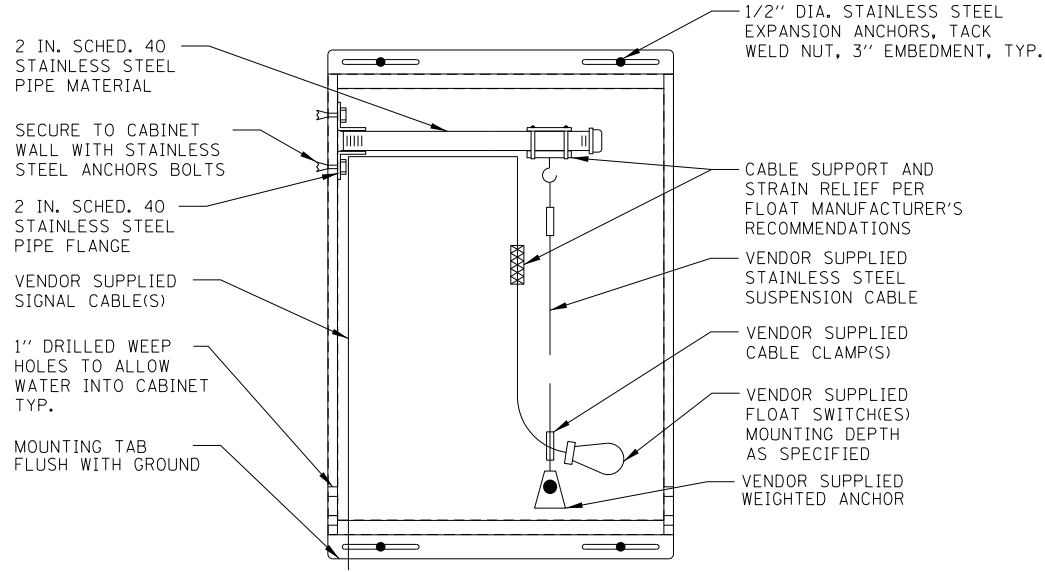
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	24
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



**CABINET DETAIL**



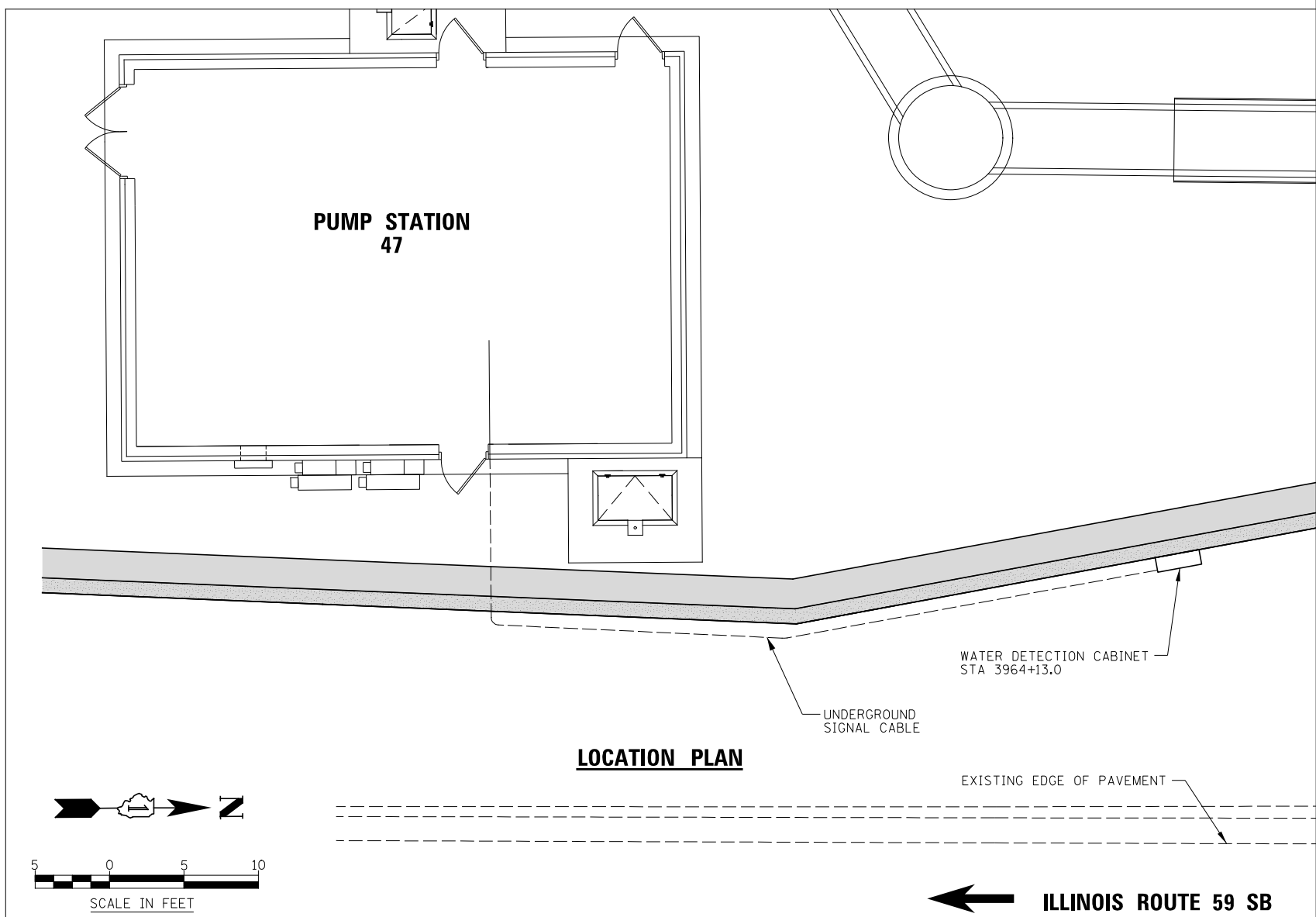
**ELEVATION VIEW**



**INSIDE CABINET DETAIL**

**GENERAL NOTES**

CABINET AND INTERNAL SCADA EQUIPMENT WILL BE INCLUDED AND PAID FOR AS "PUMP STATION SCADA EQUIPMENT."



**LOCATION PLAN**

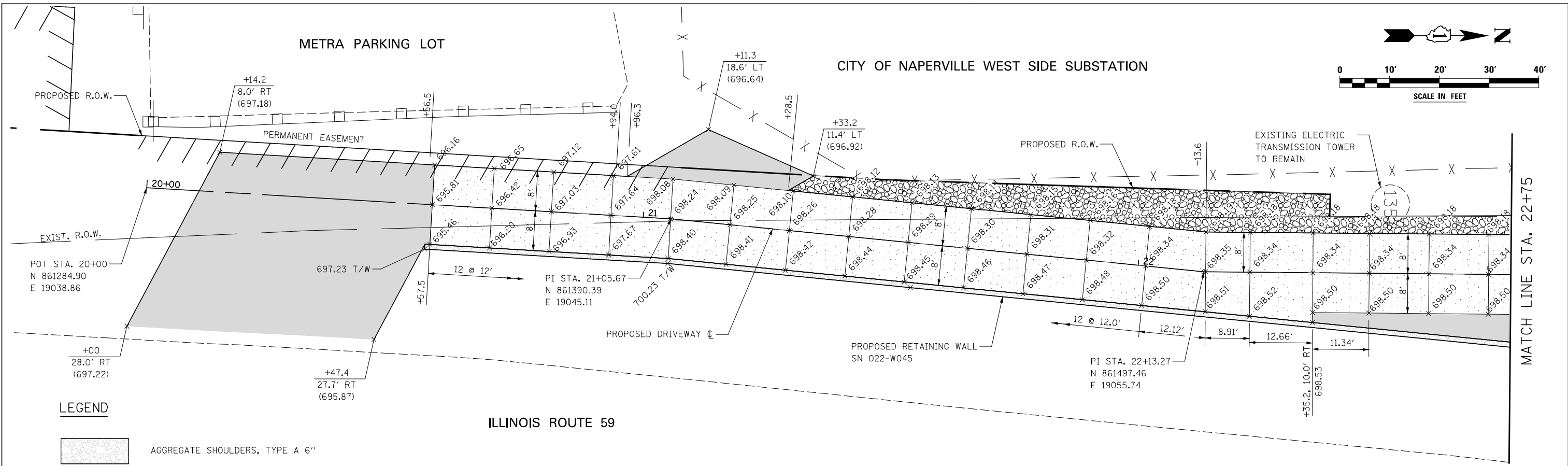
USER NAME = #USER#	DESIGNED - NAV	REVISED -
PLOT SCALE = #SCALE#	DRAWN - KEA	REVISED -
PLOT DATE = #DATE#	CHECKED - PJO	REVISED -
	DATE - 03-22-2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION




FLOODED PAVEMENT ALARM SYSTEM

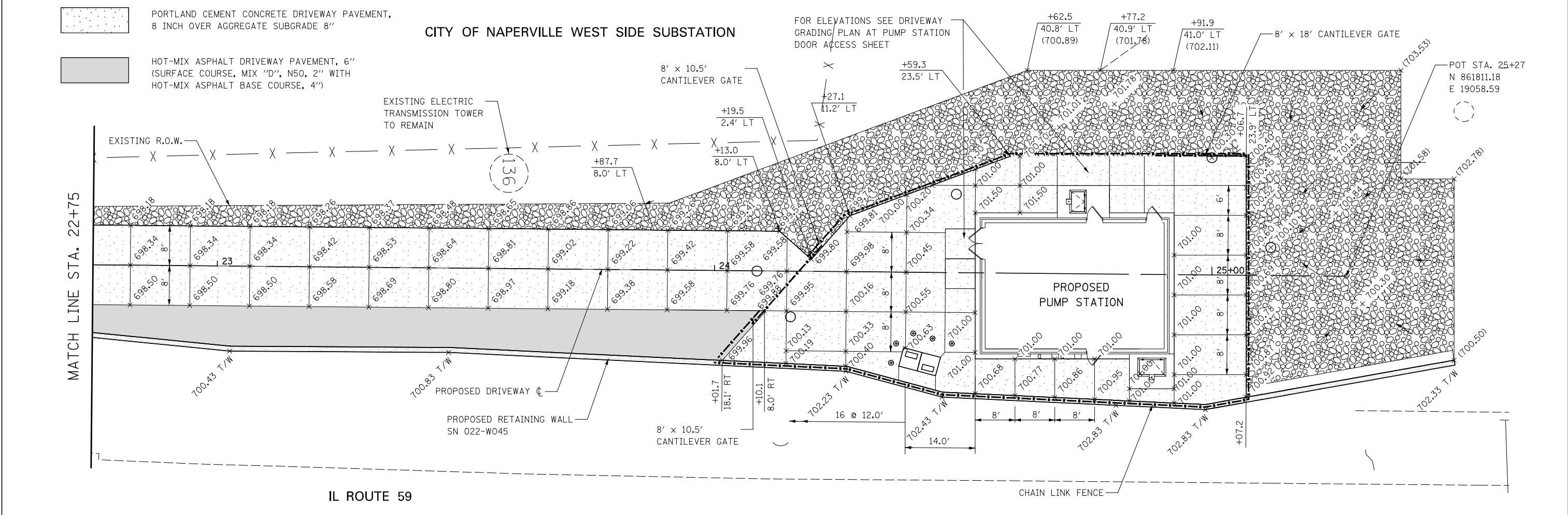
SCALE: AS SHOWN SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	25
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



**LEGEND**

-  AGGREGATE SHOULDERS, TYPE A 6"
-  PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH OVER AGGREGATE SUBGRADE 8"
-  HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6" (SURFACE COURSE, MIX "D", N50, 2" WITH HOT-MIX ASPHALT BASE COURSE, 4")

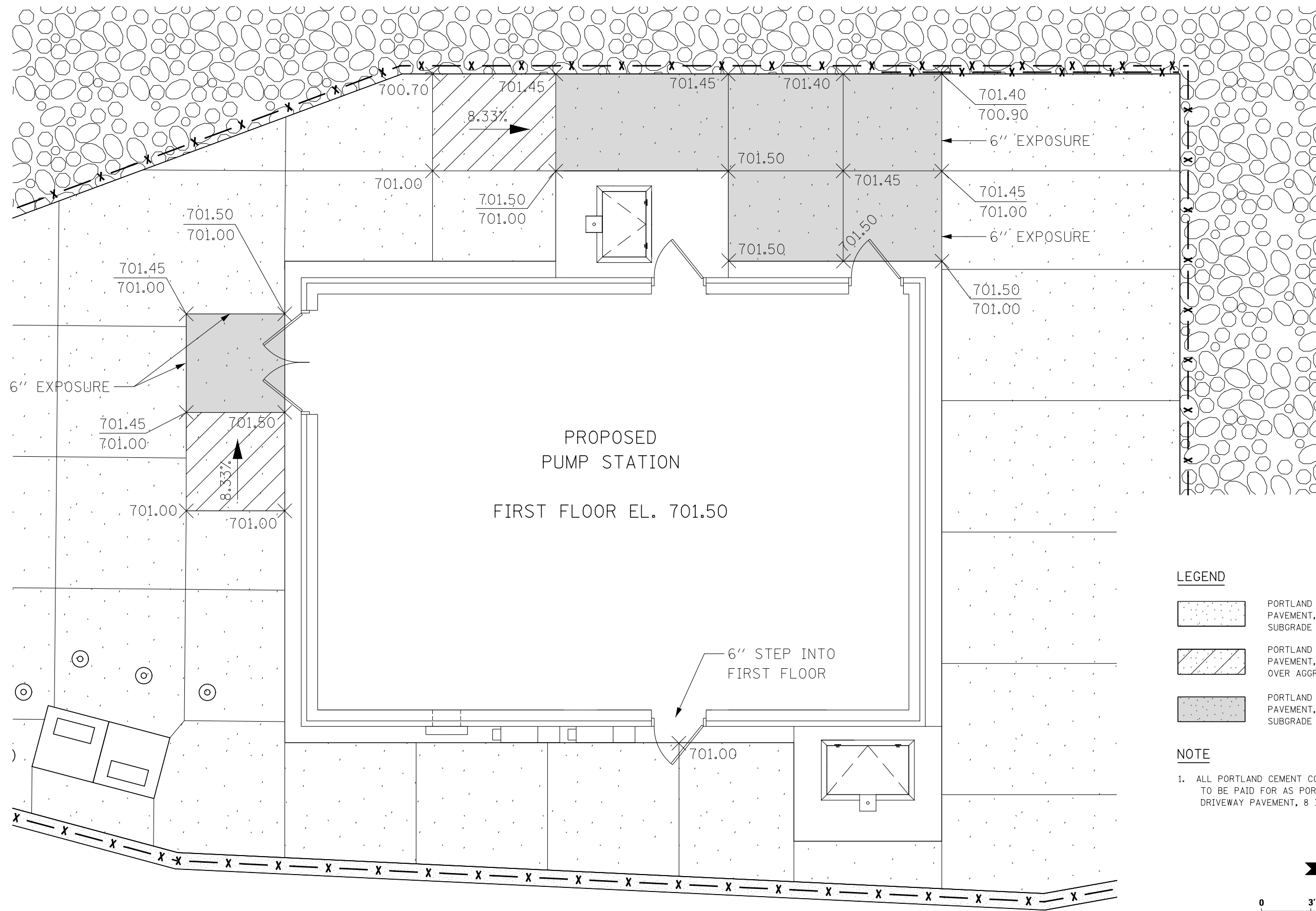


USER NAME - *USER*	DESIGNED - RTA	REVISED
DRAWN - KEA	CHECKED - PJO	REVISED -
PLOT SCALE - *SCALE*	DATE - 03-22-2012	REVISED -
PLOT DATE - *DATE*		


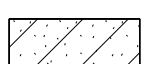

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DRIVEWAY PLAN</b>				
SCALE: AS SHOWN	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	26
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

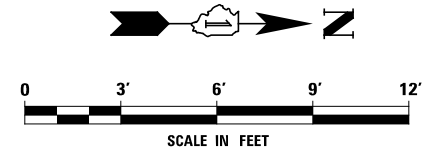


**LEGEND**

-  PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH OVER AGGREGATE SUBGRADE 8"
-  PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, VARIES 8 INCH TO 14 INCH OVER AGGREGATE SUBGRADE 8"
-  PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 14 INCH OVER AGGREGATE SUBGRADE 8"

**NOTE**

1. ALL PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT TO BE PAID FOR AS PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH



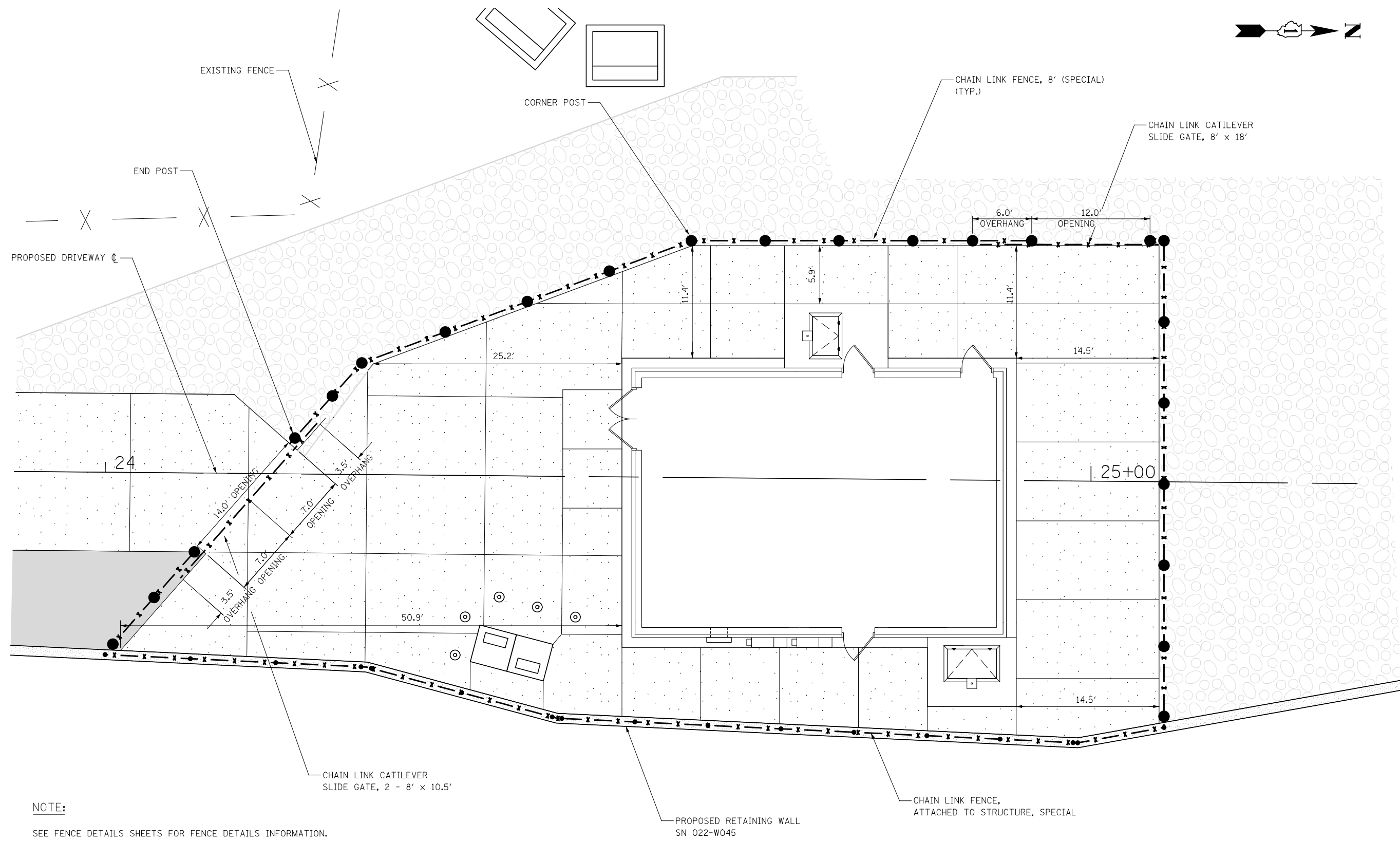
USER NAME = *USER*	DESIGNED - RTA	REVISED
	DRAWN - KEA	REVISED -
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY GRADING PLAN AT  
PUMP STATION DOOR ACCESS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	27
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



**NOTE:**

SEE FENCE DETAILS SHEETS FOR FENCE DETAILS INFORMATION.

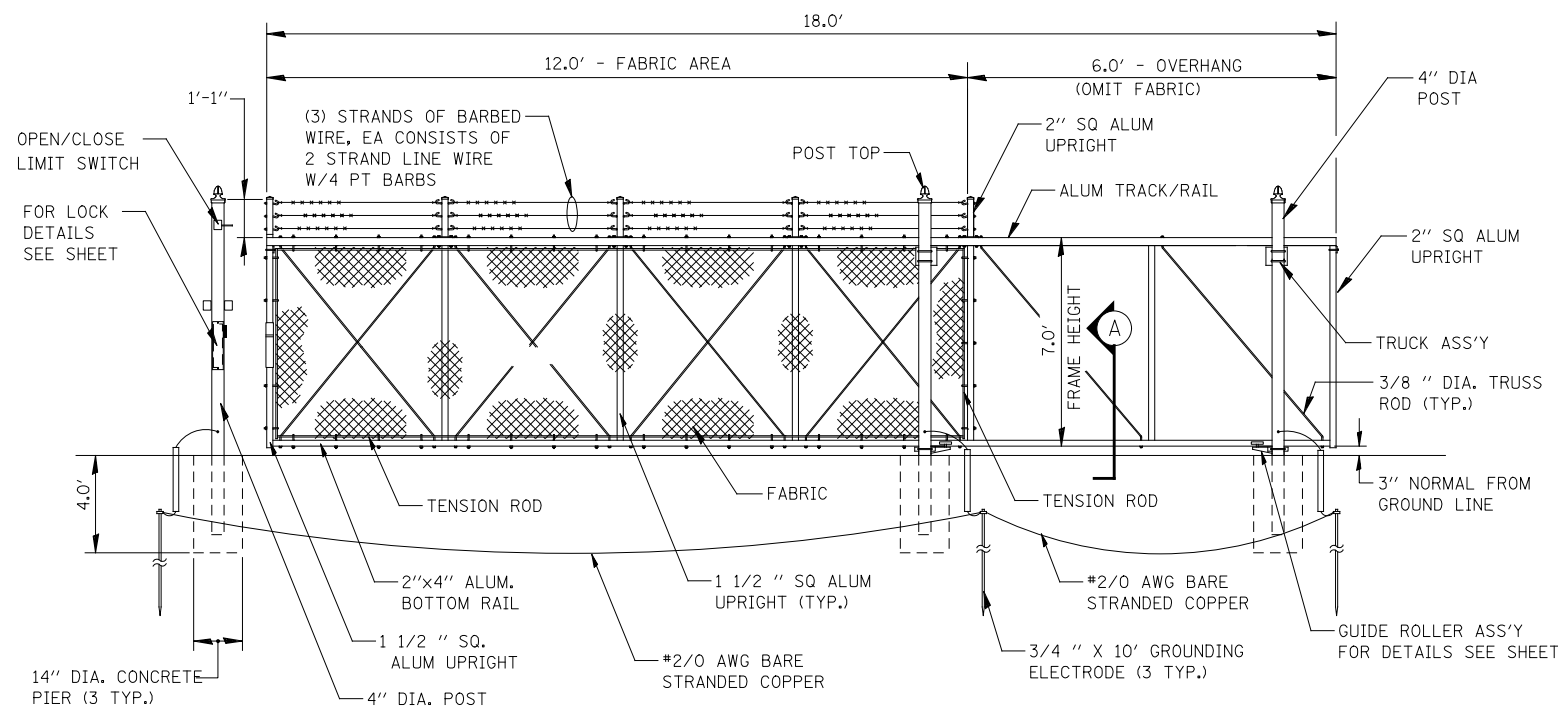
CHAIN LINK CATILEVER  
SLIDE GATE, 2 - 8' x 10.5'

PROPOSED RETAINING WALL  
SN 022-W045

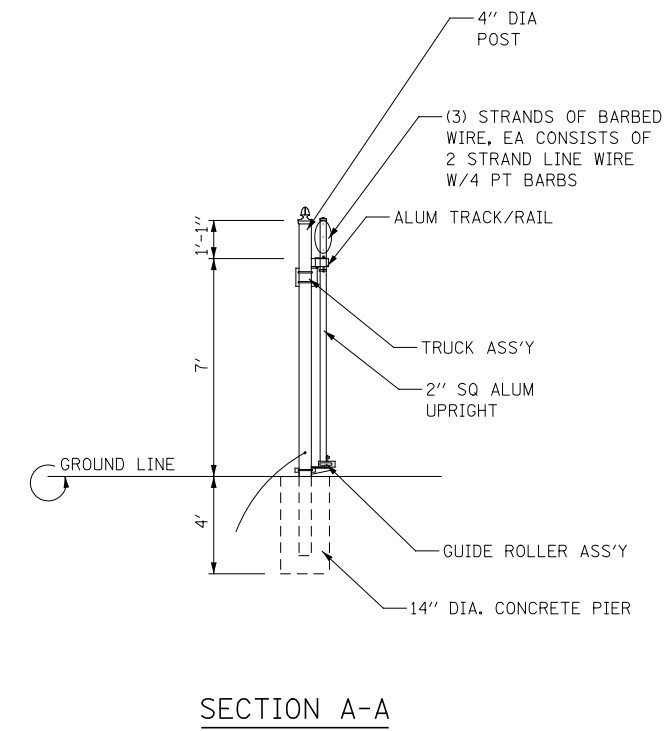
CHAIN LINK FENCE,  
ATTACHED TO STRUCTURE, SPECIAL



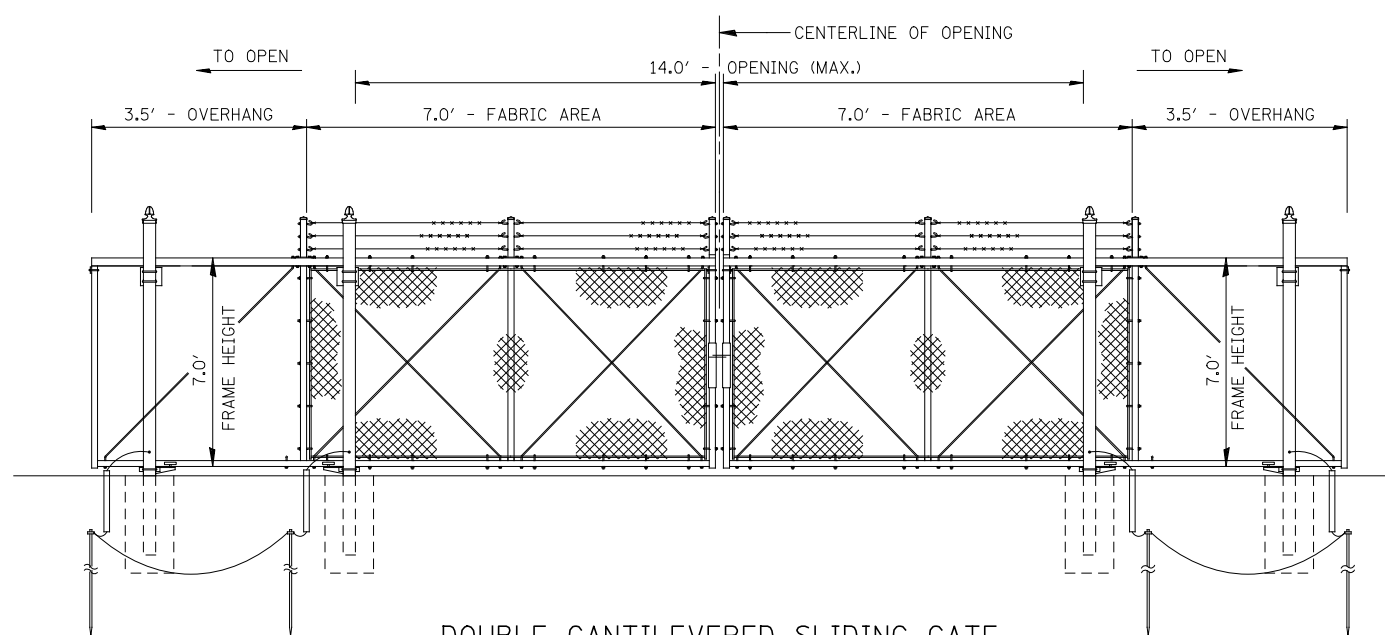
USER NAME - *USER*	DESIGNED - <i>DMS</i>	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SECURITY FENCE AND PARKING AREA PLAN</b>				F.A.P. RTE. 338/IL 59	SECTION 2011-035-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 28
PLOT SCALE - *SCALE*	CHECKED - <i>PJO</i>	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60P41			
PLOT DATE - *DATE*	DATE - 03-22-2012	REVISED -		ILLINOIS FED. AID PROJECT								



**SINGLE CANTILEVERED SLIDING GATE**  
(NOT TO SCALE)



**SECTION A-A**



**DOUBLE CANTILEVERED SLIDING GATE**  
(NOT TO SCALE)  
SEE ABOVE FOR DETAILS

USER NAME = *USER*	DESIGNED - RTA	REVISED
	DRAWN - KEA	REVISED -
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SECURITY FENCE AND GATE DETAILS**

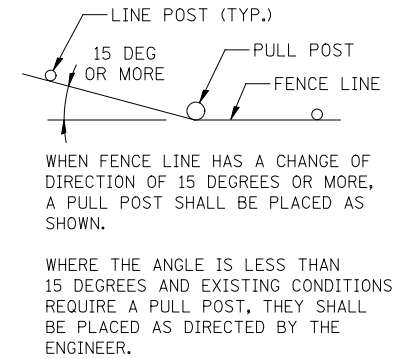
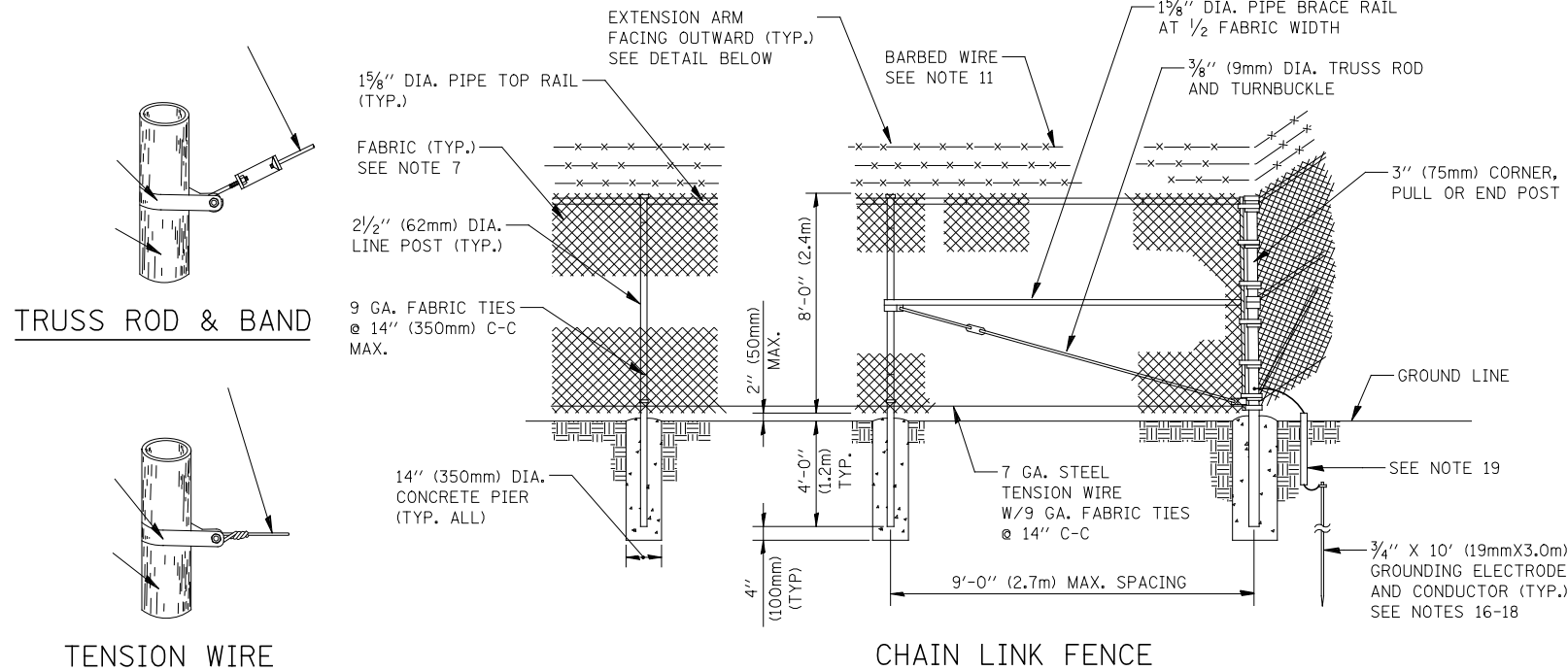
SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	29
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

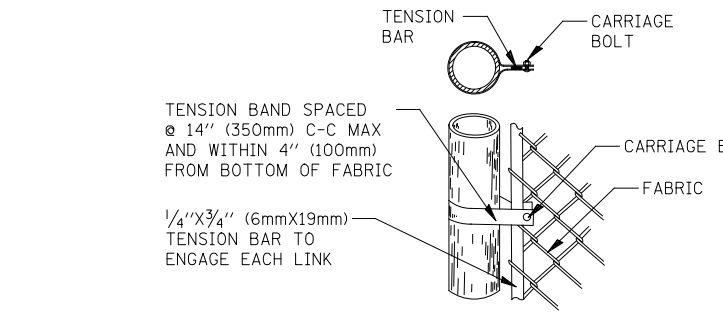


**NOTES:**

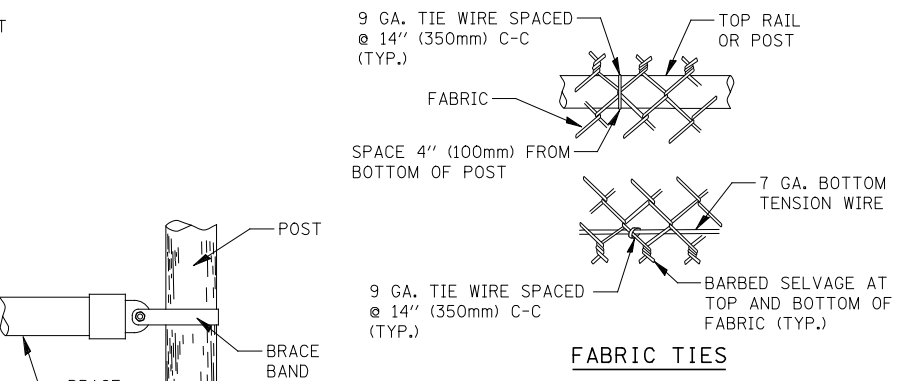
- ALL POSTS, RAILS, AND WALK GATE FRAMES ARE SCHEDULE 40 GALVANIZED STEEL PIPE. SEE NOTES 2 AND 3. ALL POSTS HAVE SLOTS, LUGS, BANDS, CLIPS OR OTHER APPROVED NON-SLIPPING DEVICE FOR ATTACHING WIRE.
- ROUND SHAPED POST CROSS SECTIONS ARE SHOWN. OTHER CROSS SECTIONS OF EQUAL OR LARGER WEIGHT MAY BE USED.
- ANY PROPOSED SUBSTITUTIONS FOR FENCING MATERIALS SHALL BE CERTIFIED TO COMPLY IDOT SPECIFICATIONS, SECTION 664.
- TERMINAL POSTS (END, CORNER AND PULL) ARE 3" DIA. SCHEDULE 40 STEEL PIPE. MAXIMUM SPACING FOR INTERMEDIATE POSTS IS 9'-0".
- TOP RAILS & BRACE RAILS ARE 1 1/8" DIA. GALVANIZED STEEL PIPE.
- ALL POSTS, BRACES, PARTS AND WIRE ARE GALVANIZED AFTER CUTTING OR FORMING.
- FABRIC IS TO BE WOVEN 9 GA. ALUMINUM-COATED WIRE IN A 2"X2" MESH, CONFORMING TO IDOT SPECIFICATIONS, SECTION 664. FENCE FABRIC SHALL BE ATTACHED TO EXTERIOR SIDE OF POSTS.
- ALL END AND CORNER EXTENSION ARMS ARE HEAVY MALLEABLE IRON. ALL INTERMEDIATE EXTENSION ARMS ARE MADE OF PRESSED GALVANIZED STEEL. EACH ARM CARRIES THREE (3) BARBED WIRES, SECURELY FASTENED.
- ALL FITTINGS ARE MALLEABLE WROUGHT IRON OR GALVANIZED PRESSED STEEL.
- EXTENSION ARMS ON EACH POST ARE INSTALLED WITH OVERHANG ON THE EXTERIOR SIDE OF FENCE.
- INSTALL THREE (3) STRANDS OF BARBED WIRE CONSISTING OF TWO (2) TWISTED STRANDS OF 12 GA. ALUMINIUM-COATED STEEL WIRE WITH 4 POINT BARBS APPROXIMATELY 4" APART, CONFORMING TO IDOT SPECIFICATIONS, SECTION 664.
- WALK GATE FRAME IS MADE OF 2" DIA. GALVANIZED TUBULAR STEEL COMPLETE WITH PIVOT TYPE HINGES, CATCH, AND STOPS.
- CHAIN LINK FABRIC TO BE SECURELY FASTENED TO TERMINAL POSTS WITH 1/4" X 3/4" TENSION BAR AND 11 GA. PRESSED STEEL TENSION BANDS SPACED APPROX. 14" APART. FABRIC IS TO BE FASTENED TO THE LINE POST, TOP RAIL, BRACE RAIL, AND TENSION WIRE WITH 9 GA. STEEL TIE WIRES SPACED APPROX. 14" C-C.
- BOTTOM OF FENCING MATERIAL IS TO BE INSTALLED AT A MAXIMUM OF 2" ABOVE THE FINISHED GRADE, EXCEPT AT GATES WHICH MAY REQUIRE A GREATER CLEARANCE.
- GROUND EACH WALK GATE AND AUTOMATIC GATE POST WITH NO. 6 BARE COPPER GROUND WIRE, BY EXOTHERMIC WELDING PROCESS, TO 3/4" X 10' LONG GROUNDING ELECTRODE. CONNECTION TO POSTS IS BY EXOTHERMIC WELDING PROCESS OR MECHANICALLY CLAMPING AN ADEQUATE LENGTH OF COPPER BRAID BETWEEN GATE POST AND GATE SECTION. PIPE GROUNDING CLAMPS BURNDY TYPE GG, GAR, MEET CLAMP SPECIFICATIONS.
- A 3/4" X 10' LONG GROUNDING ELECTRODE IS INSTALLED AND CONNECTED TO FENCE POST AT EACH CORNER OF PLOT FENCING AS DESCRIBED IN NOTE 15.
- A 3/4" X 10' LONG GROUNDING ELECTRODE IS INSTALLED AND CONNECTED, AS DESCRIBED IN NOTE 15, TO THE NEAREST FENCE POST WHERE THE FENCE IS CROSSED BY OVERHEAD POWER FEEDERS.
- MAXIMUM DISTANCE BETWEEN GROUNDING ELECTRODES ALONG FENCELINE IS 150'. WHERE ADDITIONAL ELECTRODES ARE REQUIRED, INSTALL AND CONNECT AS DESCRIBED IN NOTE 15. FOR FENCE RUNS OF MORE THAN 150' BUT LESS THAN 300', INSTALL ELECTRODE AT MID-POINT OF RUN.
- 1/2" DIA. X 15" LONG RIGID PVC CONDUIT FOR MECHANICAL PROTECTION OF GROUNDING CONDUCTORS WHERE THEY EXTEND 3" ABOVE GRADE, AND IS INSTALLED ADJACENT TO THE FENCELINE AND CONCRETE PIER.
- CONCRETE IS THOROUGHLY COMPACTED BY THE HAND-TAMP METHOD, AND FINISHED IN A DOME INSIDE A FULL DEPTH FIBER FORM, NO MUSHROOMING IS PERMITTED.



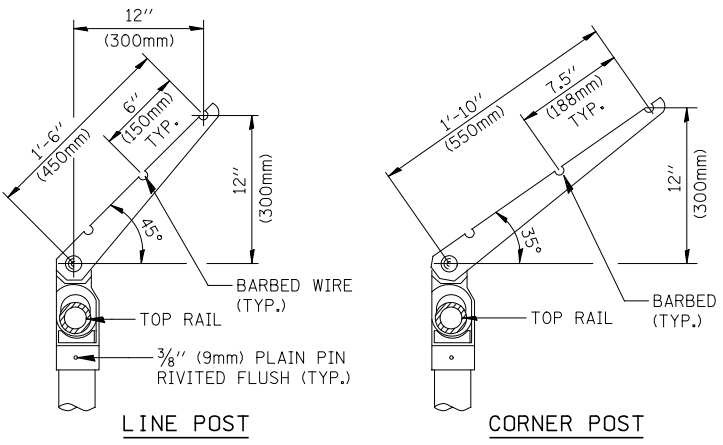
**INSTALLATION AT CORNERS**



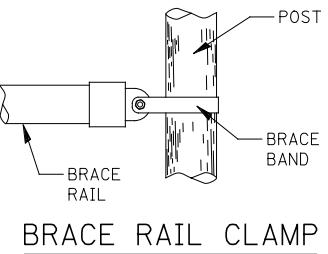
**TERMINAL OR GATE POST DETAIL**



**FABRIC TIES  
LINE POST, TOP OR BRACE RAIL ATTACHMENTS**



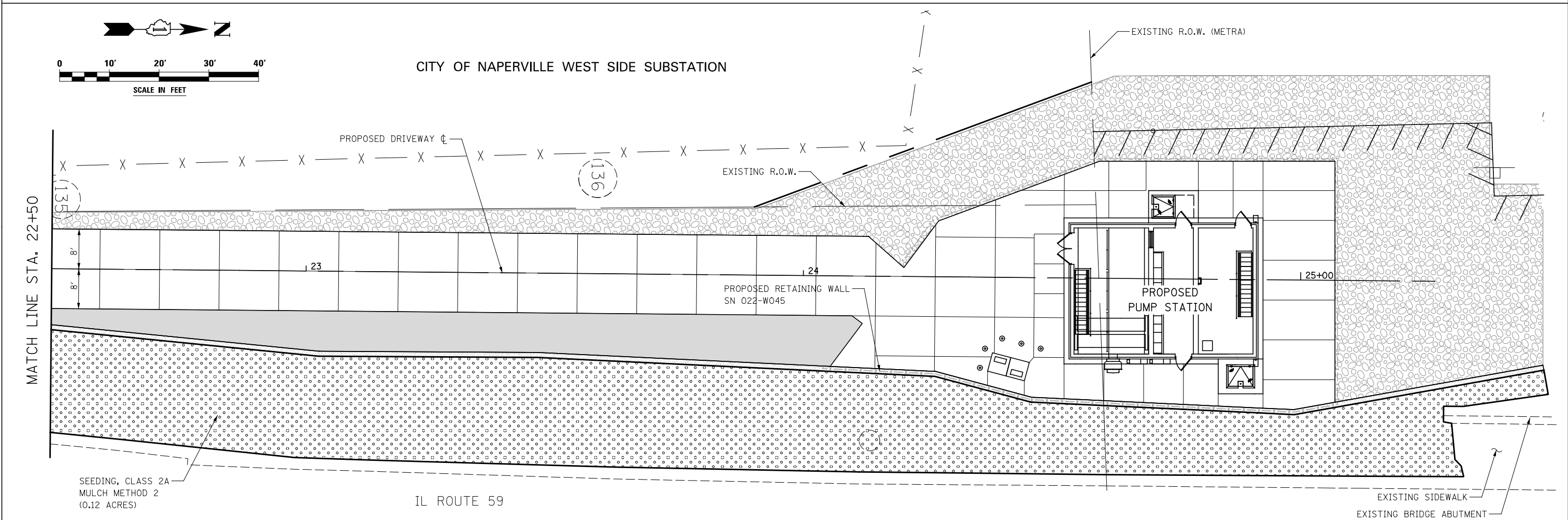
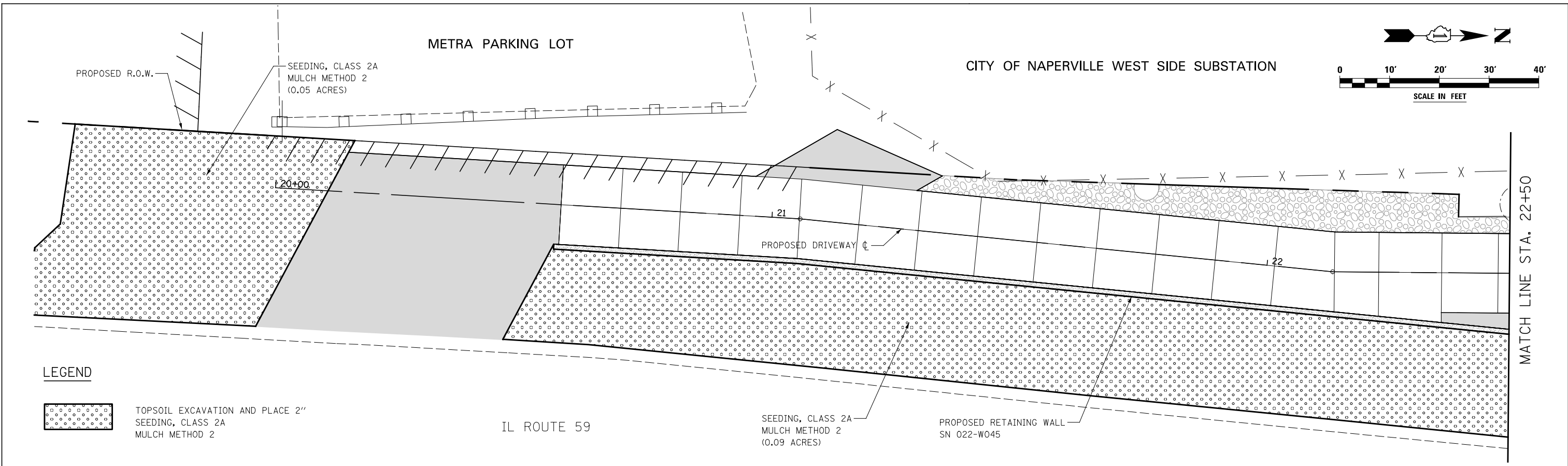
**EXTENSION ARM DETAILS**



**BRACE RAIL CLAMP**

**NOTE:**  
ALL DETAILS SHOWN ON THIS SHEET ARE NOT TO SCALE.

USER NAME : *USER*	DESIGNED - RTA	REVISED	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SECURITY FENCE AND GATE DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE : *SCALE*	DRAWN - KEA	REVISED -					338/IL 59	2011-035-I	DUPAGE	181	30
PLOT DATE : *DATE*	CHECKED - PJO	REVISED -		SCALE: SHEET NO. 2 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 60P41				
	DATE - 03-22-2012	REVISED -		ILLINOIS FED. AID PROJECT							



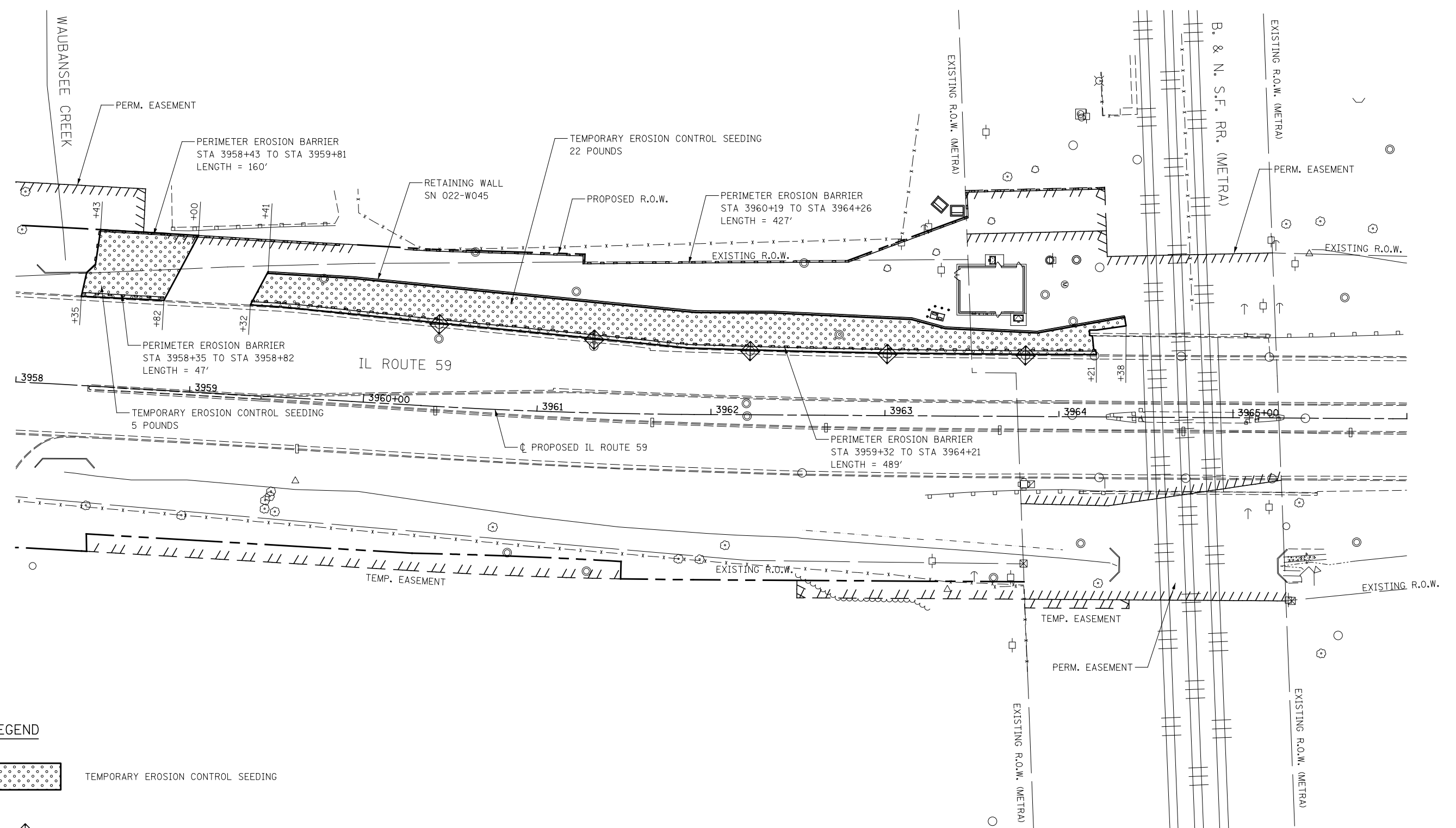
USER NAME = *USER*	DESIGNED - NAV	REVISED -
	DRAWN - KEA	REVISED -
PLOT SCALE = *SCALE*	CHECKED - PJO	REVISED -
PLOT DATE = *DATE*	DATE - 03-22-2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

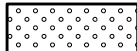



**LANDSCAPING PLAN**

SCALE: AS SHOWN | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	31
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

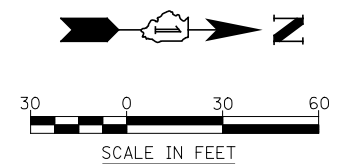


**LEGEND**

-  TEMPORARY EROSION CONTROL SEEDING
-  INLET FILTERS
-  TEMPORARY DITCH CHECK
-  PERIMETER EROSION BARRIER

**NOTES**

1. SEE SUGGESTED SEQUENCE OF CONSTRUCTION SHEET FOR CONSTRUCTION ACTIVITY INFORMATION.



USER NAME = \$USER\$	DESIGNED - <i>DMS</i>	REVISED
	DRAWN - <i>KEA</i>	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - <i>PJO</i>	REVISED -
PLOT DATE = \$DATE\$	DATE - <i>03-22-2012</i>	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

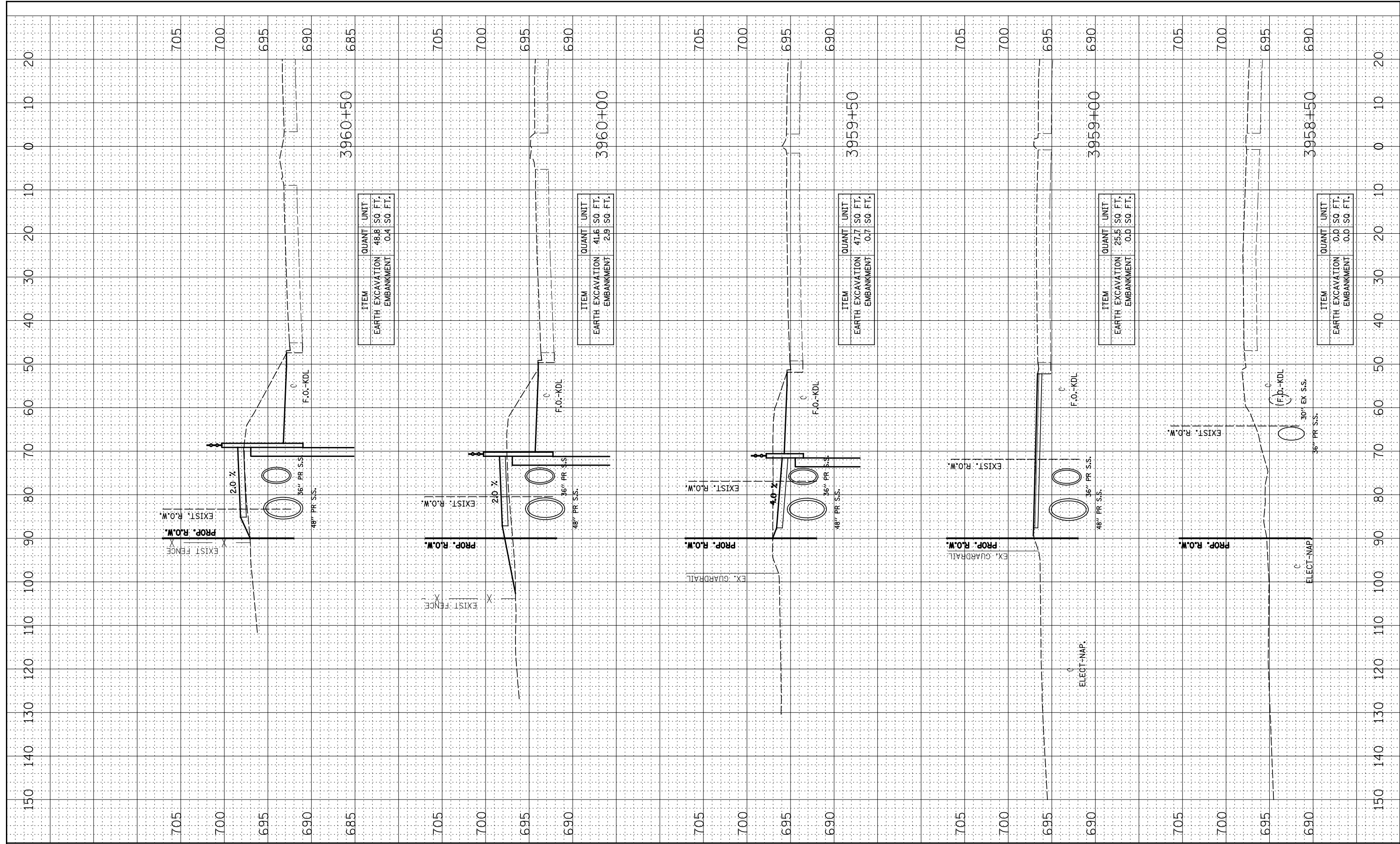
**EROSION CONTROL PLAN**

SCALE: SHEET NO. OF SHEETS STA. 3958+00 TO STA. 3966+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	32
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

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

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



ITEM	QUANT	UNIT
EARTH EXCAVATION	48.8	SQ. FT.
EMBANKMENT	0.4	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	41.6	SQ. FT.
EMBANKMENT	2.9	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	47.7	SQ. FT.
EMBANKMENT	0.7	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	25.5	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	0.0	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*  
DESIGNED - RTA  
DRAWN - KEA  
CHECKED - PJO  
DATE - 2-17-12

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FINAL CONDITION CROSS-SECTIONS

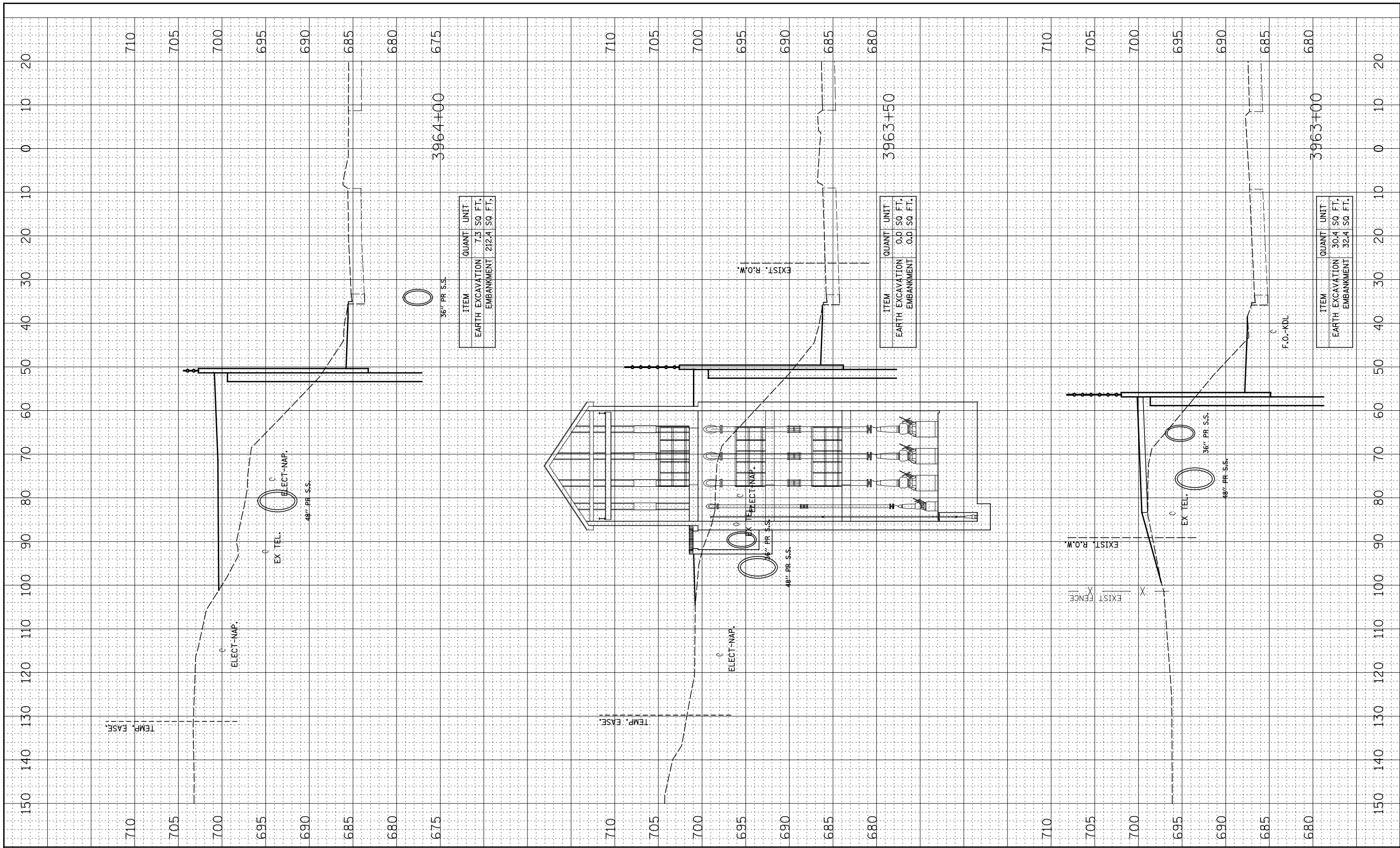
SCALE: SHEET NO. 1 OF 4 SHEETS STA. 3958+50 TO STA. 3960+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-036-I	DUPAGE	181	33
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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

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



ITEM	QUANT	UNIT
EARTH EXCAVATION	7.3	SQ. FT.
EMBANKMENT	212.4	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	0.0	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	30.4	SQ. FT.
EMBANKMENT	32.4	SQ. FT.

FILE NAME =	USER NAME = #USER#
*FILEL*	

PLOT SCALE = #SCALE#	DESIGNED - RTA	REvised -
PLOT DATE = #DATE#	DRAWN - KEA	REvised -
	CHECKED - PJO	REvised -
	DATE - 2-17-12	REvised -

DESIGNED - RTA	REvised -
DRAWN - KEA	REvised -
CHECKED - PJO	REvised -
DATE - 2-17-12	REvised -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

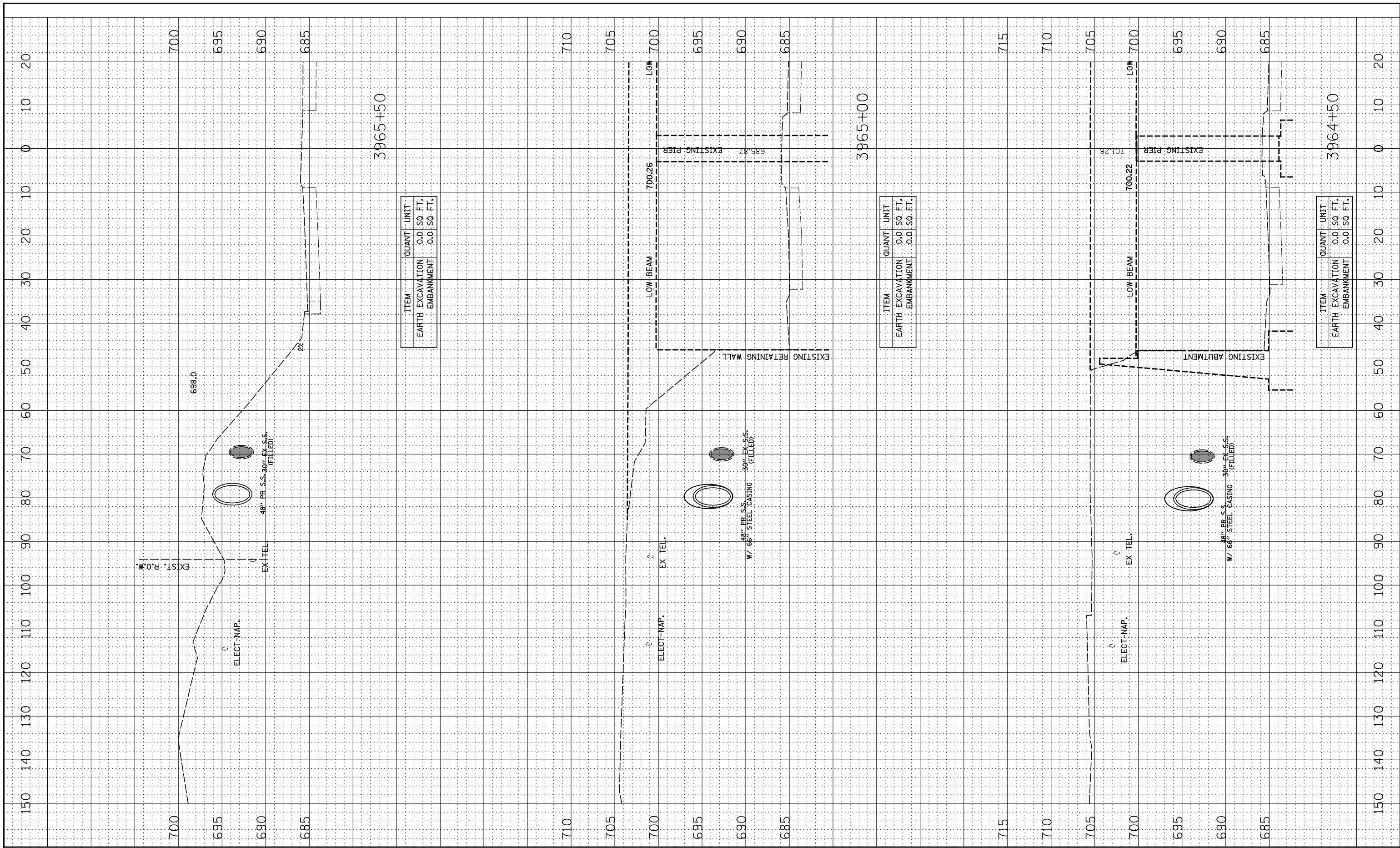
**FINAL CONDITION CROSS-SECTIONS**

SCALE: SHEET NO. 3 OF 4 SHEETS STA. 3963+00 TO STA. 3964+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-036-I	DUPAGE	181	35
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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



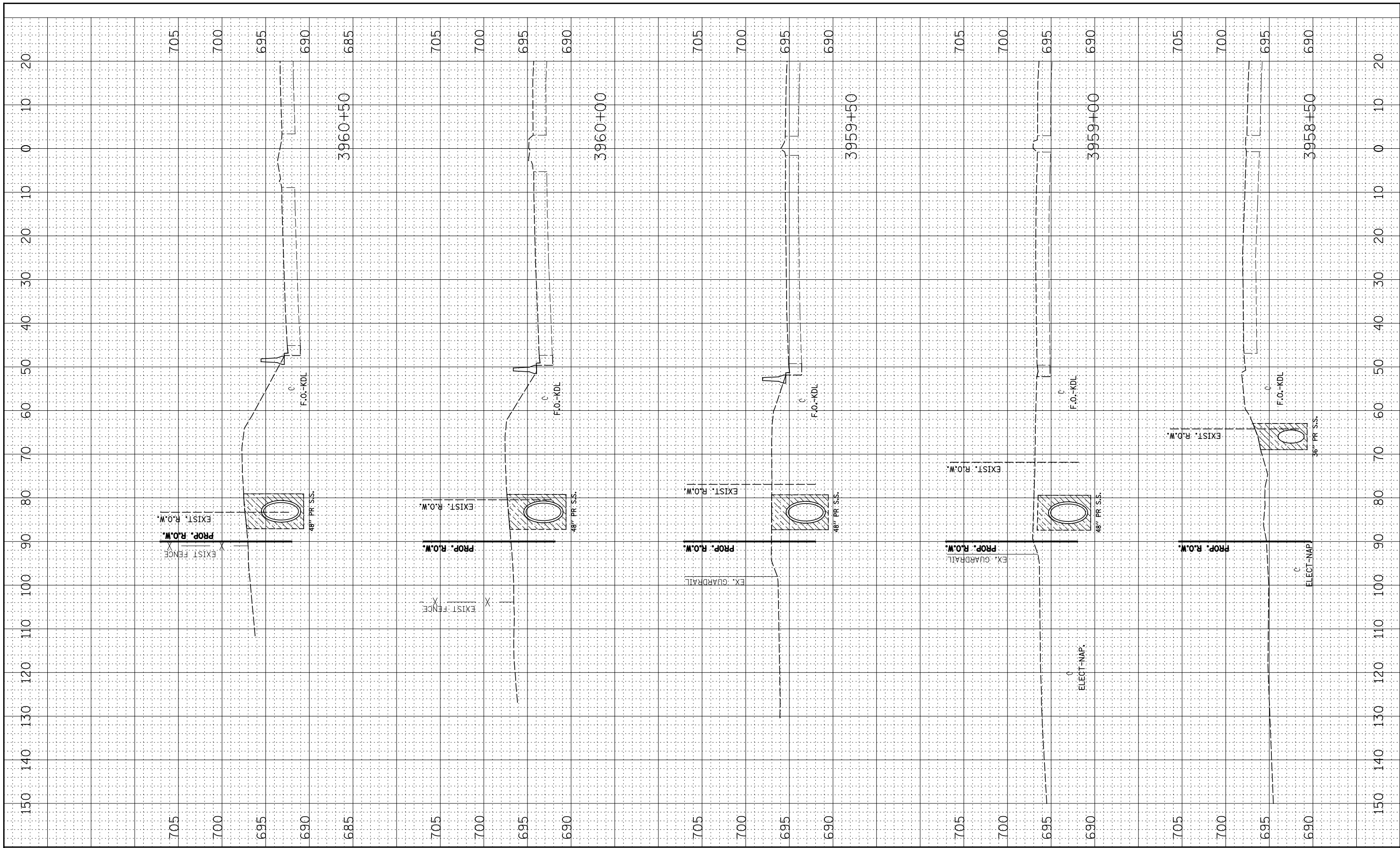
ITEM	QUANT	UNIT
EARTH EXCAVATION	0.0	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	0.0	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

ITEM	QUANT	UNIT
EARTH EXCAVATION	0.0	SQ. FT.
EMBANKMENT	0.0	SQ. FT.

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*  
DESIGNED - RTA  
DRAWN - KEA  
CHECKED - PJO  
DATE - 2-17-12

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRAINAGE STAGE 1 - CROSS-SECTIONS

SCALE: SHEET NO. 1 OF 4 SHEETS STA. 3958+50 TO STA. 3960+50

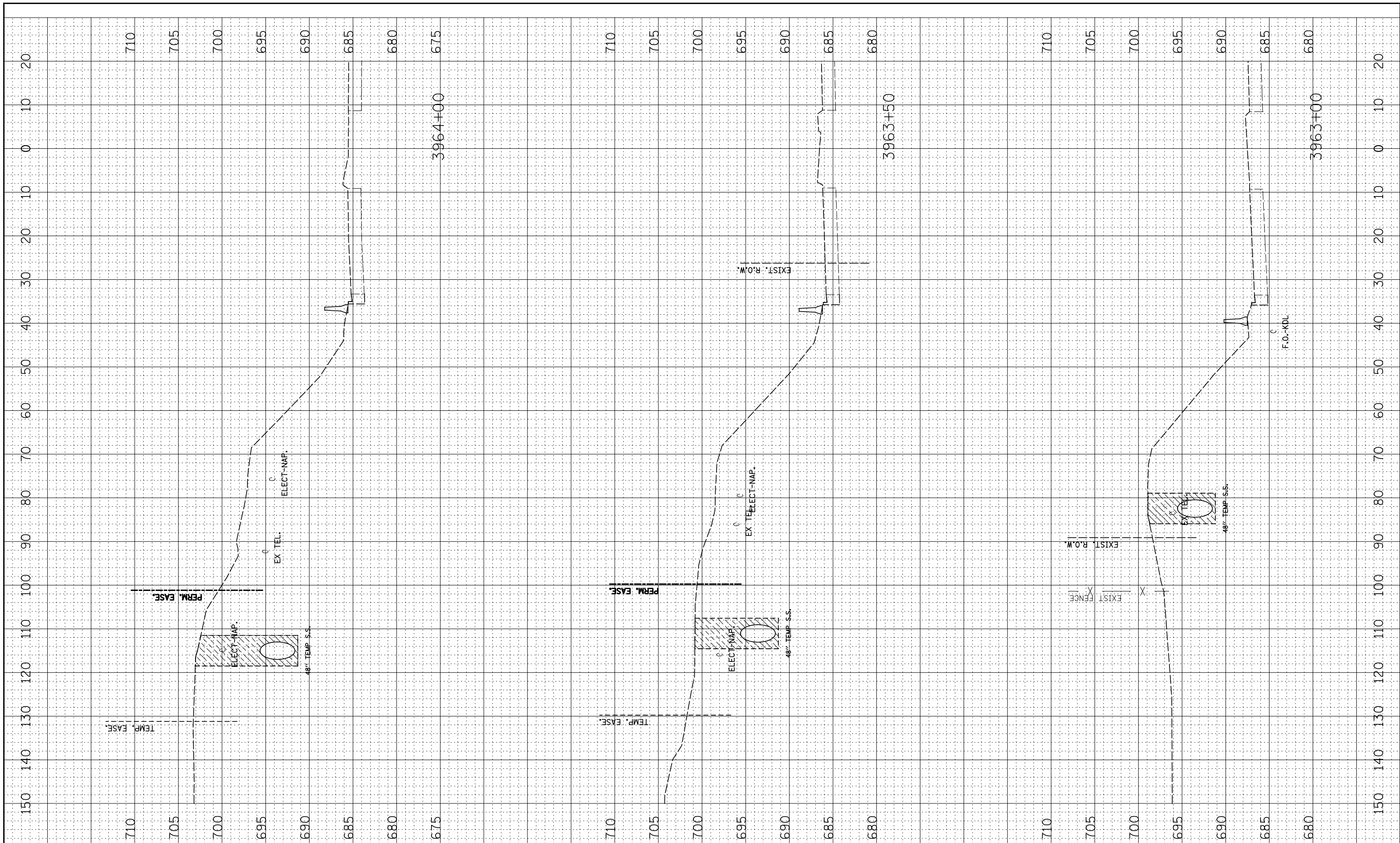
F.A.P. RTE. 338/IL 59	SECTION 2011-036-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 37
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				





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

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



FILE NAME =  
 \*FILEL\*

USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = \*DATE\*

DESIGNED - RTA  
 DRAWN - KEA  
 CHECKED - PJO  
 DATE - 2-17-12

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

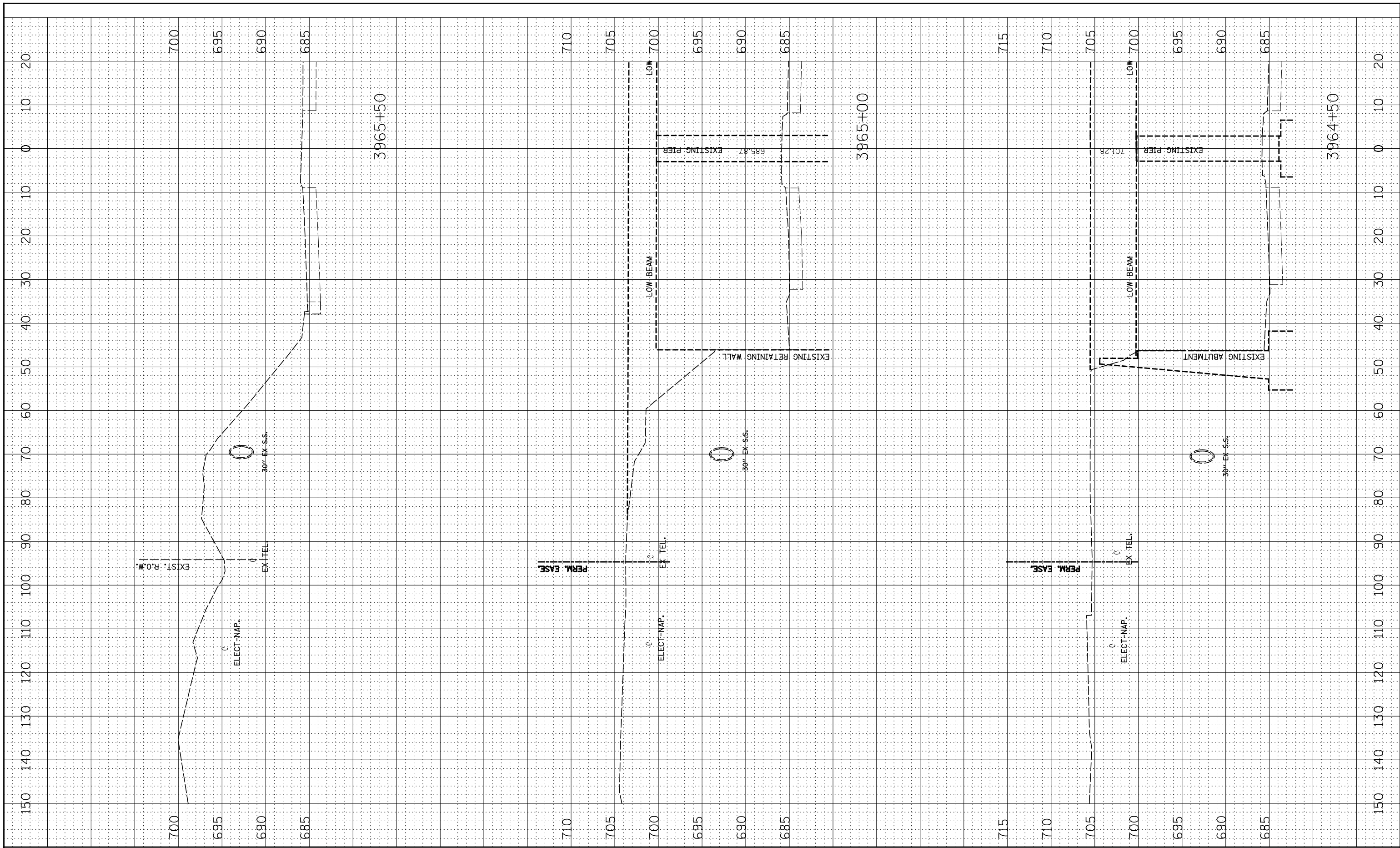
DRAINAGE STAGE 1 - CROSS-SECTIONS

SCALE: SHEET NO. 3 OF 4 SHEETS STA. 3963+00 TO STA. 3964+00

F.A.P. RTE. 338/IL 59	SECTION 2011-036-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 39
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*  
PLOT SCALE = \*SCALE\*  
PLOT DATE = \*DATE\*

DESIGNED - RTA  
DRAWN - KEA  
CHECKED - PJO  
DATE - 2-17-12

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

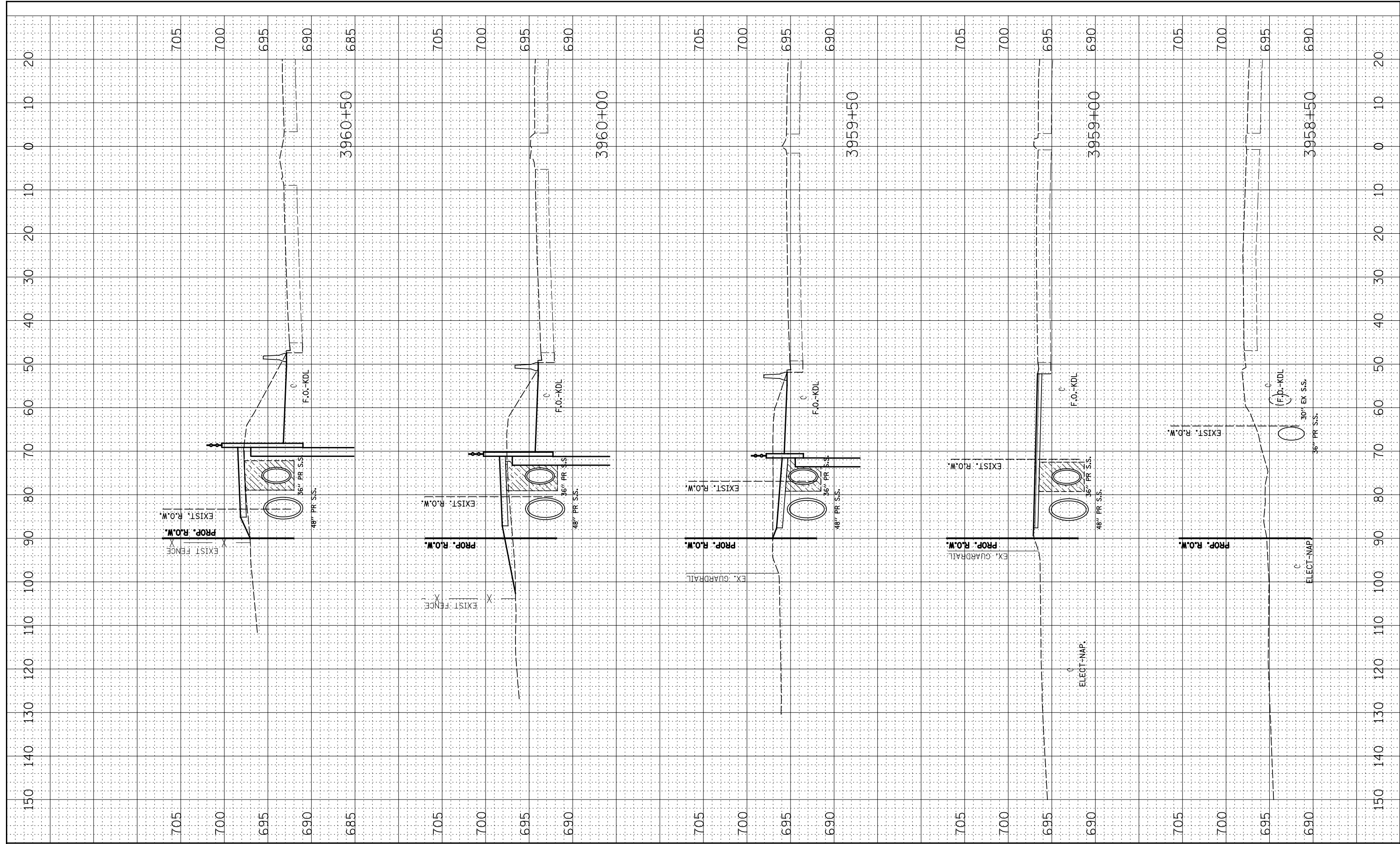
DRAINAGE STAGE 1 - CROSS-SECTIONS

SCALE: SHEET NO. 4 OF 4 SHEETS STA. 3964+50 TO STA. 3965+50

F.A.P. RTE. 338/IL 59	SECTION 2011-036-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 40
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*  
DESIGNED - RTA  
DRAWN - KEA  
CHECKED - PJO  
DATE - 2-17-12

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

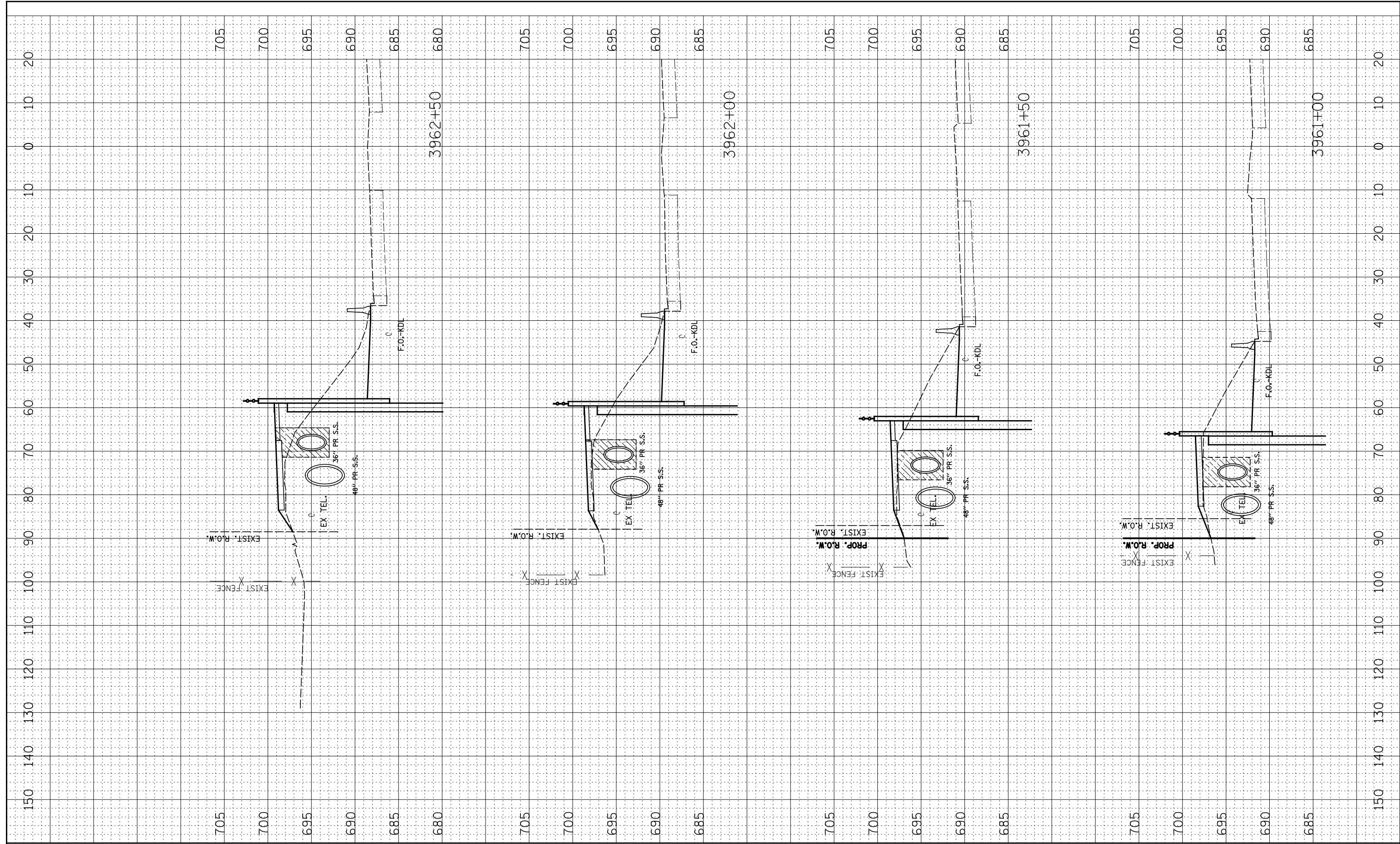
DRAINAGE STAGE 2 - CROSS-SECTIONS

SCALE: SHEET NO. 1 OF 4 SHEETS STA. 3958+50 TO STA. 3960+50

F.A.P. RTE. 338/IL 59	SECTION 2011-036-I	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 41
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P41	

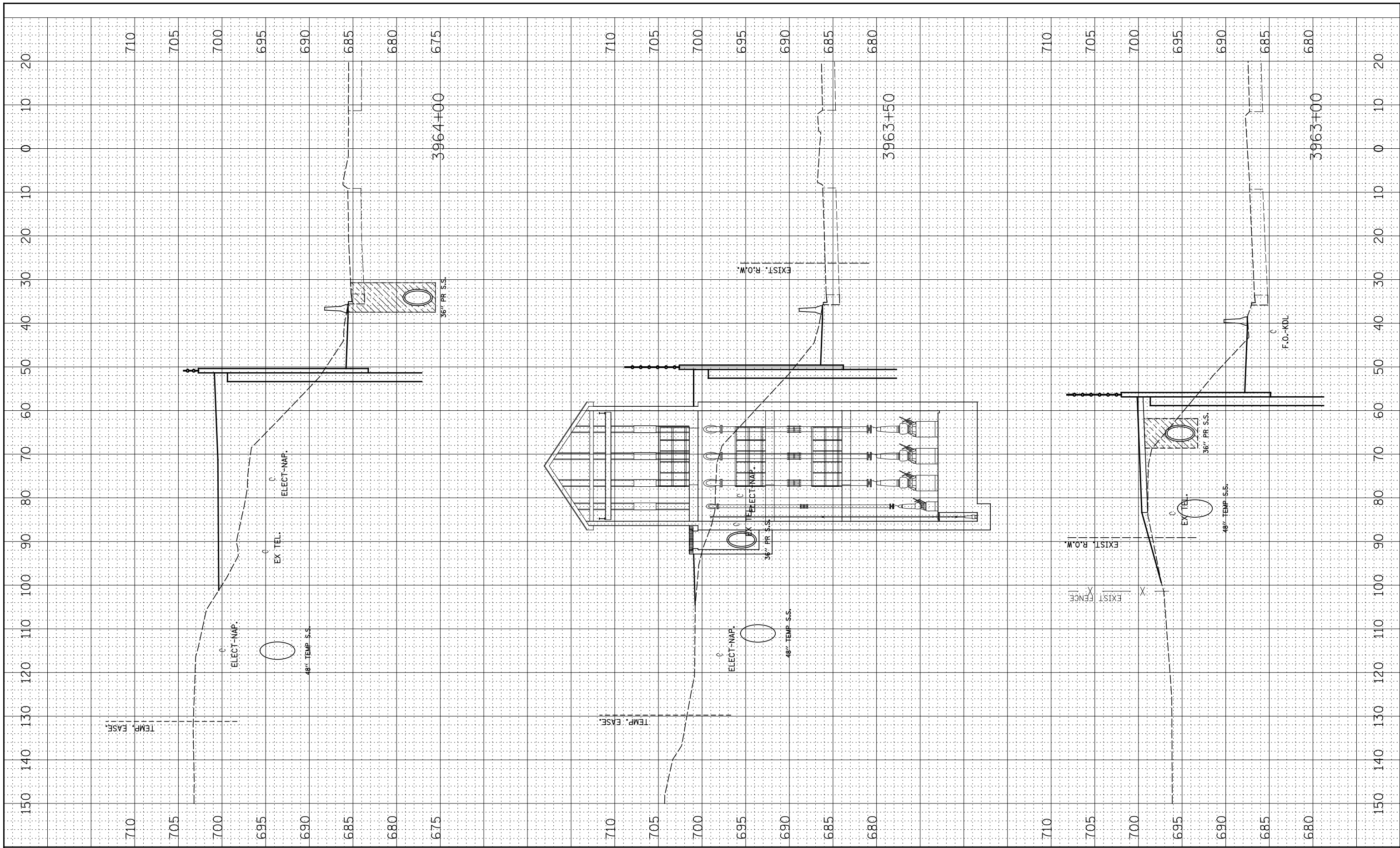
FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	AREAS CHECKED	

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



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

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



FILE NAME =  
\*FILEL\*

USER NAME = \*USER\*  
PLOT SCALE = \*SCALE\*  
PLOT DATE = \*DATE\*

DESIGNED - RTA  
DRAWN - KEA  
CHECKED - PJO  
DATE - 2-17-12

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

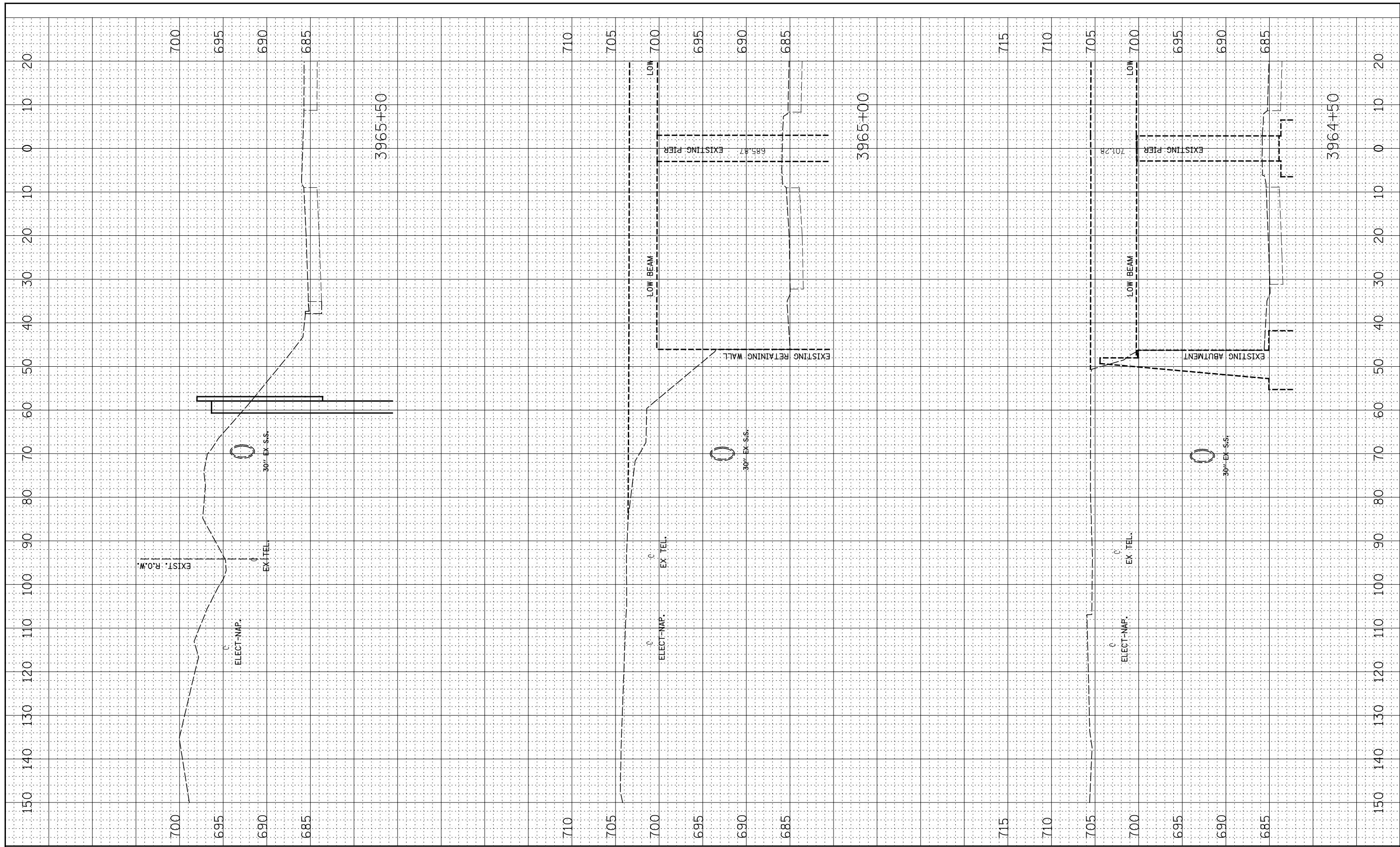
DRAINAGE STAGE 2 - CROSS-SECTIONS

SCALE: SHEET NO. 3 OF 4 SHEETS STA. 3963+00 TO STA. 3964+00

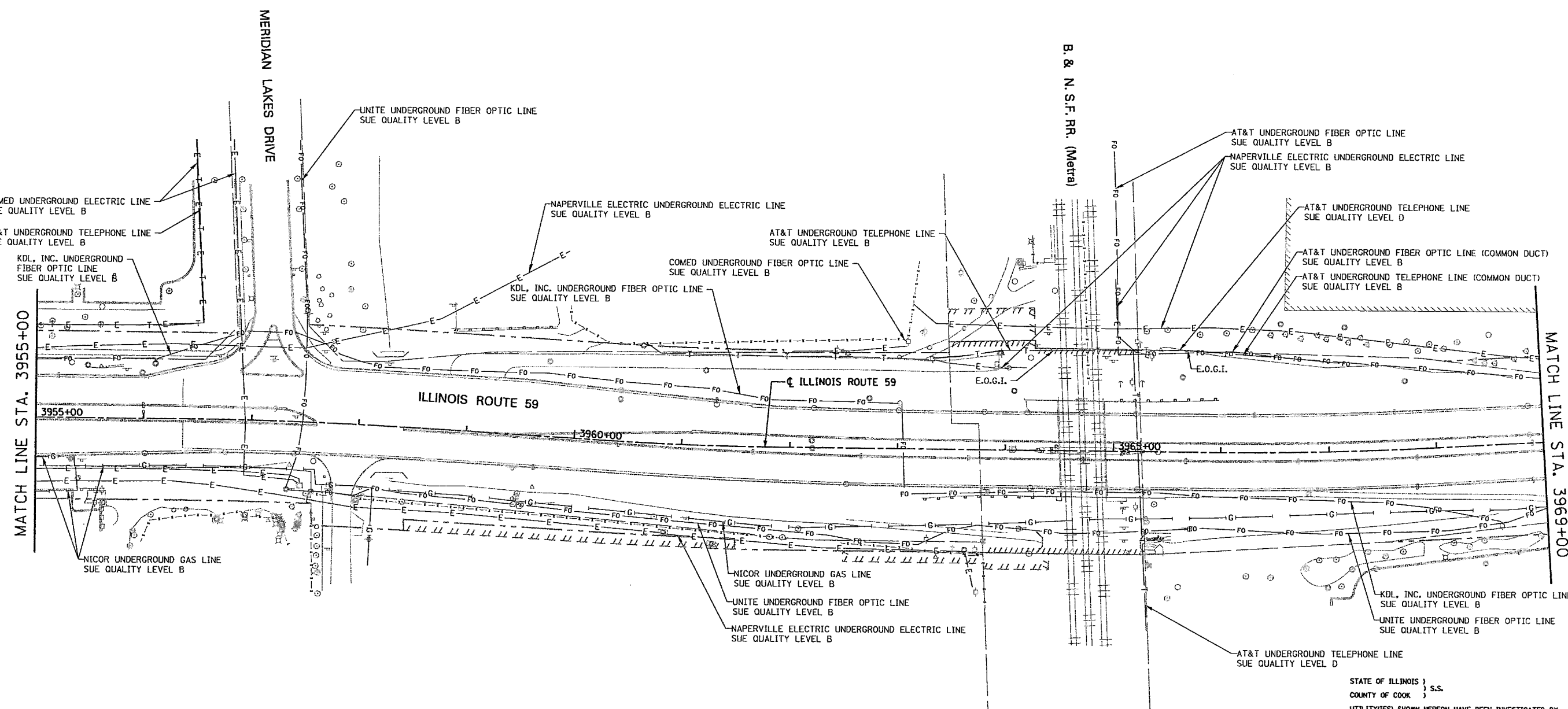
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-036-I	DUPAGE	181	43
CONTRACT NO. 60P41				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME =	USER NAME = *USER*	DESIGNED - RTA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	DRAINAGE STAGE 2 - CROSS-SECTIONS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
*FILEL*		DRAWN - KEA	REVISED -		SCALE:	SHEET NO. 4 OF 4 SHEETS	STA. 3964+50 TO STA. 3965+50	338/IL 59	2011-036-I	DUPAGE	181	44
		CHECKED - PJO	REVISED -					CONTRACT NO. 60P41				
		DATE - 2-17-12	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



STATE OF ILLINOIS )  
COUNTY OF COOK ) S.S.

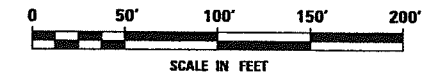
UTILITIES SHOWN HEREON HAVE BEEN INVESTIGATED BY ASE IN ACCORDANCE WITH SUE INDUSTRY STANDARDS QUALITY LEVEL B (QLB). ALL OTHER INFORMATION SHOWN HAS BEEN PROVIDED BY OTHERS.

FIELD WORK WAS PERFORMED BETWEEN THE 28TH DAY OF OCTOBER, A.D., 2010 AND THE 8TH DAY OF MAY, A.D., 2011 AND BETWEEN THE 16TH DAY OF JANUARY, A.D., 2012 AND THE 19TH DAY OF JANUARY, A.D., 2012.

IN WITNESS WHEREOF, I HAVE HERETO SET MY HAND AND SEAL THIS 24TH DAY OF JANUARY, A.D., 2012. CHICAGO, IL.

*Steven M. Rienks*  
STEVEN M. RIENKS - ILLINOIS PROFESSIONAL ENGINEER  
ENGINEER NUMBER 62-044619  
MY LICENSE EXPIRES 11/30/2013

- LEGEND**
- T — EXISTING UNDERGROUND TELEPHONE
  - W — EXISTING UNDERGROUND WATER
  - E — EXISTING UNDERGROUND ELECTRIC
  - G — EXISTING UNDERGROUND GAS
  - CTV — EXISTING UNDERGROUND CABLE TV
  - FO — EXISTING UNDERGROUND FIBER OPTIC
  - S — EXISTING UNDERGROUND SANITARY SEWER
  - EOGI END OF SURFACE GEOPHYSICAL INFORMATION



**AMERICAN**  
SURVEYING & ENGINEERING, P.C.  
SURVEYORS • ENGINEERS  
GEODESISTS • MAPPING SCIENTISTS

Chicago 312-277-2000 / Fax 312-277-2002  
Illiana 815-288-6231 / Fax 815-288-6277  
Aurora 630-897-4105 / Fax 630-897-4121  
Illinois Professional Design Firm No. 184-003182

6799-sh-t-SUE-06.dgn

USER NAME = #USER*	DESIGNED T.SANDERSON	REVISED - 1/24/2012
PLOT SCALE = 50.00' / IN.	DRAWN B.TRAVER	REVISED -
PLOT DATE = 1/24/2012	CHECKED S.RIENKS	REVISED -
	DATE 5/13/2011	REVISED -

DESIGNED T.SANDERSON	REVISED - 1/24/2012
DRAWN B.TRAVER	REVISED -
CHECKED S.RIENKS	REVISED -
DATE 5/13/2011	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUE INVESTIGATION OF UNDERGROUND UTILITIES  
NEW YORK STREET TO FERRY ROAD**

SCALE: AS SHOWN SHEET NO. 6 OF 27 SHEETS STA. 3955+00 TO STA. 3969+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	-112 & 113- WRS-5-	DUPAGE	27	6
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

CONTRACT 60P41 SHEET 45 OF 181



PART OF THE NE 1/4 SECTION 16, T38N, R9E OF THE 3rd PM, NAPERVILLE TOWNSHIP, DUPAGE COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREV. DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY	
1HJ0061TE	BNSF RAILWAY ALSO KNOWN AS BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY	*9.785		*9.785		0.046		07-16-502-002		
1HJ0061PE						0.302		07-16-502-002		
1HJ0064PE	BNSF RAILWAY COMPANY	9.068		9.068		0.039		07-16-502-003		
1HJ0065A	CITY OF NAPERVILLE	3.675	A=0.525	3.131	0.505			07-16-202-004		
1HJ0065B			B=0.019							
1HJ0067A	CLPF RAILWAY PLAZA L.P., A DELAWARE LIMITED PARTNERSHIP	20.816	A=0.251	20.176				07-16-201-022		
1HJ0067B			B=0.389							
1HJ0067TE									0.119	DRIVEWAY RECONSTRUCTION

\* PER TAX MAP

CURVE DATA  
PROPOSED CENTERLINE CONSTRUCTION  
CURVE NO. PRIL59-2

Δ = 03°02'50"  
D = 01°56'16"  
R = 2956.67'  
L = 157.25'  
T = 78.64'  
E = 1.05'

(2126) PC STA. 3960+33.13  
N. 861,428.5441 E. 19,127.1124  
(2129) PI STA. 3961+11.77  
N. 861,507.0489 E. 19,131.7673  
(2128) PT STA. 3961+90.38  
N. 861,585.6901 E. 19,132.2425

CURVE DATA  
PROPOSED CENTERLINE CONSTRUCTION  
CURVE NO. PRIL59-3

Δ = 03°39'58"  
D = 01°49'07"  
R = 3150.48'  
L = 201.59'  
T = 100.83'  
E = 1.61'

(2130) PC STA. 3965+92.01  
N. 861,987.3102 E. 19,134.6689  
(2133) PI STA. 3966+92.84  
N. 862,088.1355 E. 19,135.2781  
(2132) PT STA. 3967+93.59  
N. 862,188.7935 E. 19,129.4390

COORDINATE TABLE

NO.	STATION	OFFSET	NORTH	EAST
1552	3959+91.61	90.00 LT	861392.4249	19034.8126
140	3959+92.65	79.35 LT	861392.8287	19045.5013
10718	3960+28.79	89.14 LT	861429.4882	19037.8719
10717	3961+25.00	86.51 LT	861522.7574	19044.6462
10716	3961+25.00	90.98 LT	861522.8832	19040.1808
15391	3962+78.50	89.13 LT	861674.3659	19043.6483
5171	3963+45.44	129.63 LT	861741.5332	19003.5516
15392	3963+46.08	114.66 LT	861742.1012	19018.5427
5172	3963+46.54	104.66 LT	861742.4797	19028.5326
10058	3963+50.04	25.06 LT	861745.4964	19108.1497
10041	3964+26.82	101.94 LT	861822.7427	19031.7328
5169	3964+25.52	131.92 LT	861822.6239	19001.7455
5170	3964+26.60	106.94 LT	861822.5563	19026.7363
5173	3964+27.24	92.20 LT	861823.1061	19041.4705
375	3965+22.18	94.82 LT	861918.0580	19039.4240
5174	3965+25.34	24.16 LT	861920.7925	19110.1042
9387	3967+62.20	85.70 LT	862153.3349	19045.5044
1570	3968+09.69	80.00 LT	862200.2314	19048.6410

LEGEND

SECTION CORNER (9 10 16 15)

QUARTER SECTION CORNER (16 15)

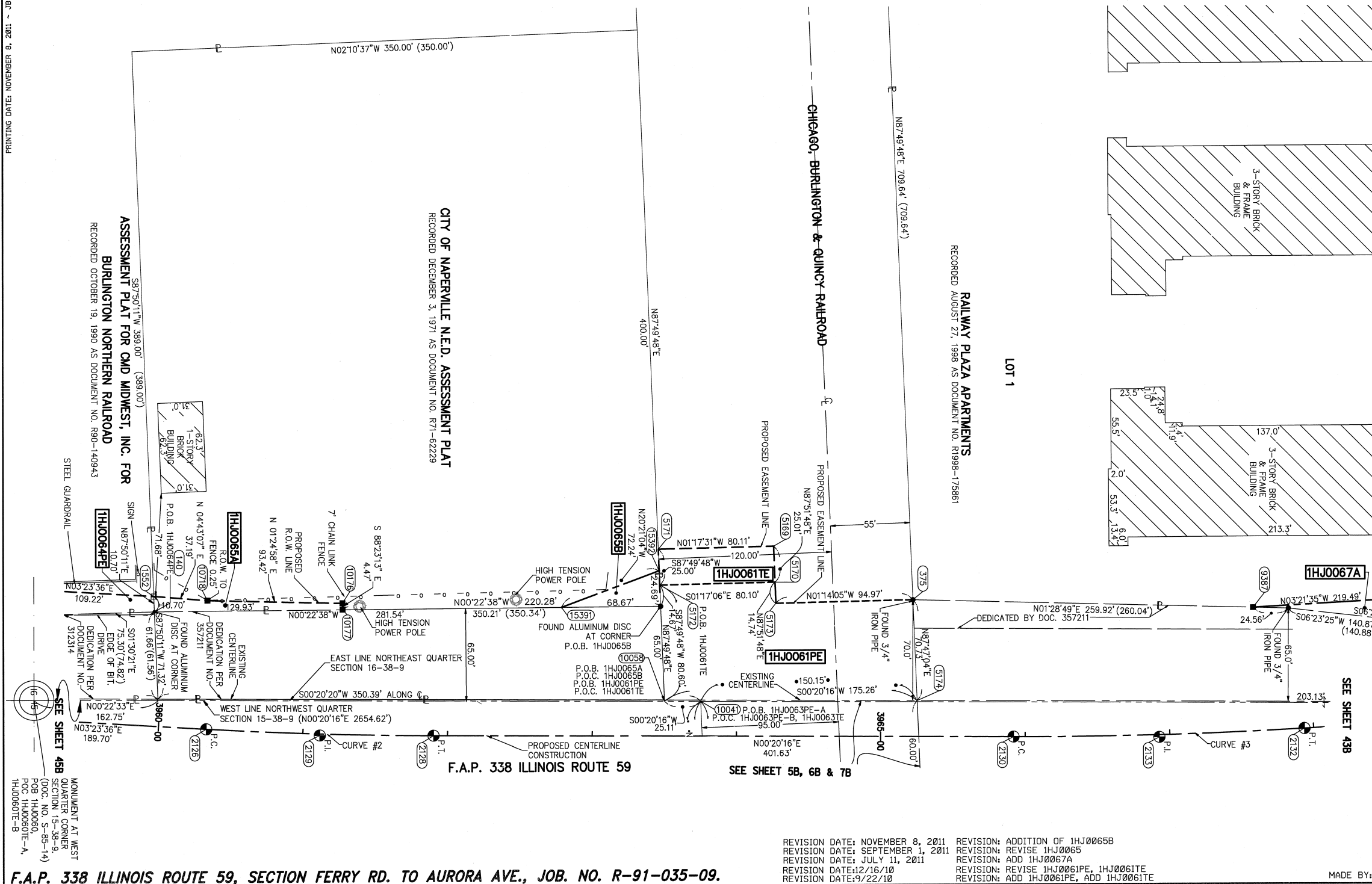
BEARINGS ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, N.A.D. 83 (2007)

SECTION LINE  
QUARTER SECTION LINE  
QUARTER, QUARTER SECTION LINE  
PLATTED LOT LINE  
PROPERTY (DEED) LINE  
APL  
APPARENT PROPERTY LINE  
EXISTING CENTERLINE  
PROPOSED CENTERLINE  
EXISTING RIGHT OF WAY LINE  
PROPOSED RIGHT OF WAY LINE  
PROPOSED EASEMENT  
EXISTING ACCESS CONTROL LINE  
PROPOSED ACCESS CONTROL LINE  
RECORD DATA

EXISTING BUILDING  
CHAIN LINK FENCE  
WOOD FENCE  
FENCE LINE

IRON PIPE OR ROD FOUND  
CUT CROSS FOUND OR SET  
TI THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.  
T2 SET 5/8 INCH REBAR FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP AND BEARING SURVEYORS PROFESSIONAL NUMBER.  
BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.  
BT2 BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. BT3 IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.  
STAKING OF PROPOSED RIGHT OF WAY.  
SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS PROFESSIONAL NUMBER.  
STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.  
BURIED 5/8 INCH REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.  
PERMANENT SURVEY MARKER. IDOT STD. 2135 (TO BE SET BY OTHERS)  
RIGHT OF WAY STAKING PROPOSED TO BE SET.

SCALE: 1" = 40'



STATE OF ILLINOIS )  
COUNTY OF DUPAGE )

THIS IS TO CERTIFY THAT WE, MIDWEST TECHNICAL CONSULTANTS, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002917, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTION 15, TOWNSHIP 38 NORTH, RANGE 9 EAST, AND SECTION 16, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, DUPAGE COUNTY, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS SURVEY CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT NAPERVILLE, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2011 A.D.

RUSSELL W. OLSEN  
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-002718  
LICENSE EXPIRES NOVEMBER 30, 2012  
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Midwest Technical Consultants, Inc.  
1805 N. MILL STREET, SUITE L  
Naperville, ILLINOIS 60563  
(630)505-0101

NOTES:  
1) ALL COORDINATES SHOWN HEREON ARE PROJECT. ALL DISTANCES SHOWN HEREON ARE GROUND.  
2) BEARINGS SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83, (2007).  
3) THE COMBINATION FACTOR USED FOR THIS PROJECT = 0.99994777.  
4) COORDINATE CONVERSION  
NAD83 (2007) STATE PLANE COORDINATES TO PROJECT COORDINATES:  
A) DIVIDE THE STATE PLANE NAD83 GRID COORDINATES BY THE COMBINATION FACTOR.  
B) SUBTRACT 1,000,000.00 FROM THESE NORTHINGS AND EASTINGS.  
PROJECT COORDINATES TO NAD83 (2007) STATE PLANE COORDINATES:  
A) ADD 1,000,000.00 TO THE PROJECT NORTHINGS AND EASTINGS.  
B) MULTIPLY THESE COORDINATES BY THE COMBINATION FACTOR.  
5) THE NGS MONUMENT HELD FOR THIS PROJECT IS IS FIRST ORDER P.I.D. AA3730.

RECEIVED  
NOV 08 2011  
PLATS & LEGALS

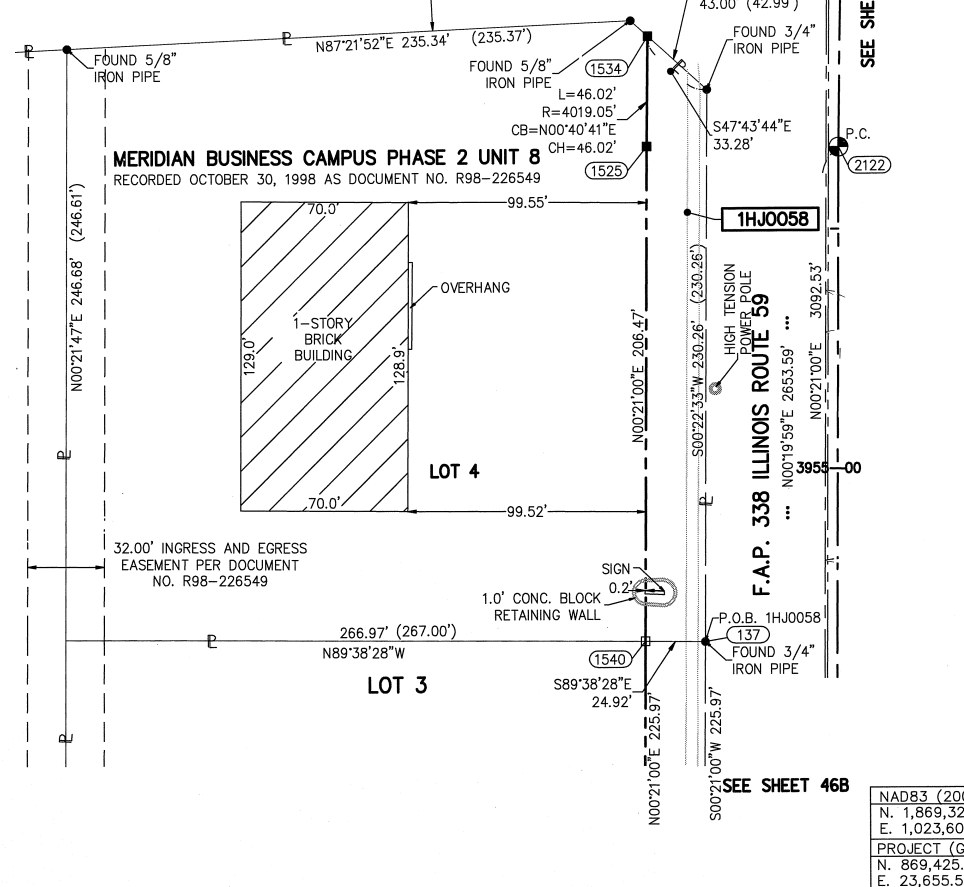
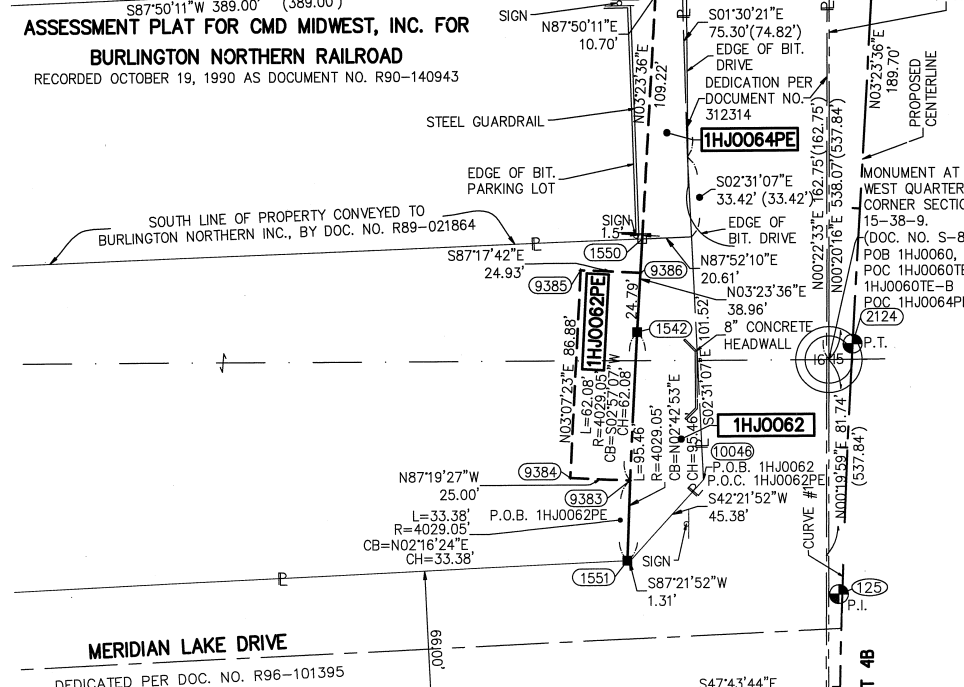
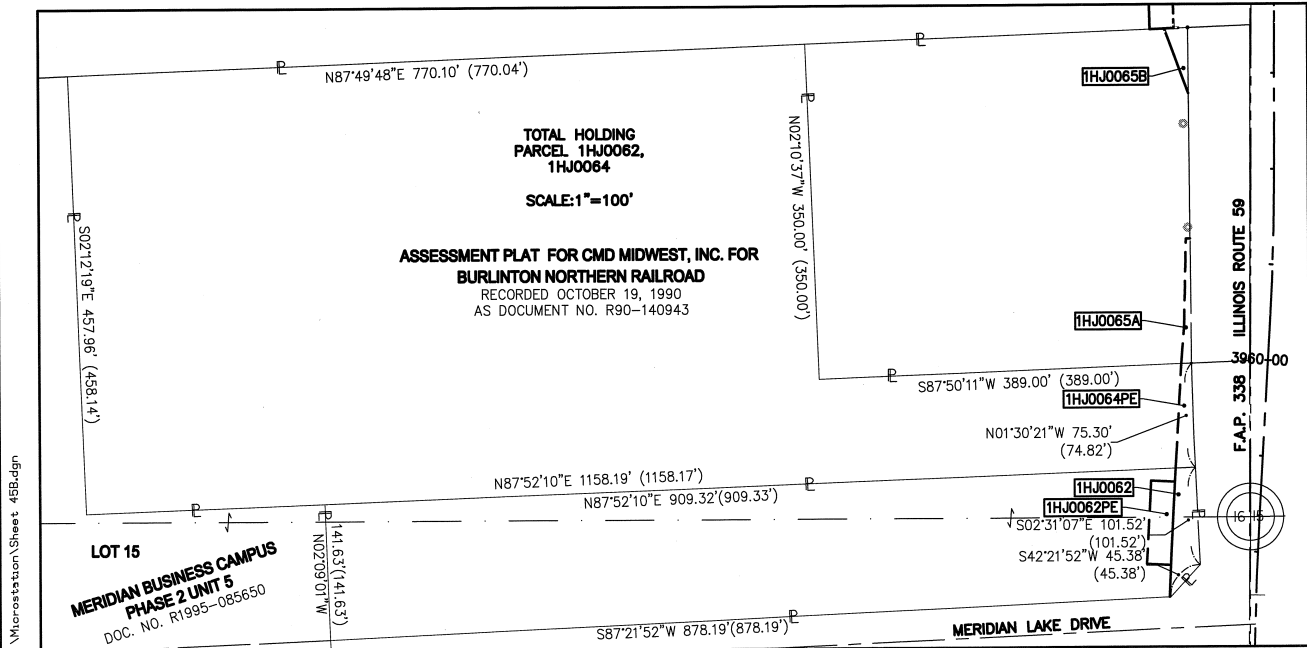
PLAT OF HIGHWAYS  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.P. 338 ILLINOIS ROUTE 59  
SECTION FERRY RD. TO AURORA AVE. DUPAGE COUNTY  
PROJECT: ROUTE 59 JOB NO. R-91-035-09  
STATION 3959+50 TO STATION 3968+00  
SCALE: 1" = 40' SHEET 44B OF 47

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

MADE BY: JB

PART OF THE EAST 1/2 SECTION 16, T38N, R9E OF THE 3rd PM, NAPERVILLE TOWNSHIP, DUPAGE COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDING ACRES	PART TAKEN ACRES	REMAINDER ACRES	PREV. DED. ACRES	EASEMENT ACRES	EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
1HJ0058	GREATBANC TRUST COMPANY AS TRUSTEE U/T/A MAY 11, 2000	1.5434	0.138	1.405				07-16-400-023	
1HJ0062	THE CITY OF AURORA	2.862	0.072	2.790		0.050	STORM SEWER EASEMENT	07-16-403-001	
1HJ0062PE								07-16-202-010	
1HJ0064PE	BNSF RAILWAY COMPANY, ALSO KNOWN AS THE BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY	9.068		9.068		0.039		07-16-502-003	
1HJ0065A	CITY OF NAPERVILLE	3.675	A=0.525	3.131	0.505			07-16-202-004	
1HJ0065B			B=0.019						



**LEGEND**

SECTION CORNER (9 10 16 15)

QUARTER SECTION CORNER (9 10)

SECTION LINE  
QUARTER SECTION LINE  
QUARTER SECTION LINE  
PLATTED LOT LINE  
PROPERTY (DEED) LINE

APL APPARENT PROPERTY LINE  
CENTERLINE  
EXISTING RIGHT OF WAY LINE  
PROPOSED RIGHT OF WAY LINE  
PROPOSED EASEMENT  
EXISTING ACCESS CONTROL LINE  
PROPOSED ACCESS CONTROL LINE  
RECORD DATA

EXISTING BUILDING  
CHAIN LINK FENCE  
WOOD FENCE  
FENCE LINE

IRON PIPE OR ROD FOUND  
CUT CROSS FOUND OR SET

SET 5/8" x 30" REBAR  
PK FOUND PK NAIL  
OPK SET PK NAIL

TI THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.  
T2 SET 5/8" INCH REBAR FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP AND BEARING SURVEYORS PROFESSIONAL NUMBER.  
T3

BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.  
BT2 BURIED 5/8" INCH REBAR 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE.  
BT3 IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.

STAKING OF PROPOSED RIGHT OF WAY.  
SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS PROFESSIONAL NUMBER.

STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.  
BURIED 5/8" INCH REBAR 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS PROFESSIONAL NUMBER.

PERMANENT SURVEY MARKER. IDOT STD. 2135 (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS )  
COUNTY OF DUPAGE ) SS

THIS IS TO CERTIFY THAT WE, MIDWEST TECHNICAL CONSULTANTS, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002917, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTION 15, TOWNSHIP 38 NORTH, RANGE 9 EAST, AND SECTION 16, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, DUPAGE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS SURVEY CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT NAPERVILLE, ILLINOIS THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2011 A.D.

RUSSELL W. OLSEN  
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-002718  
LICENSE EXPIRES NOVEMBER 30, 2012  
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

**Midwest Technical Consultants, Inc.**  
1805 N. MILL STREET, SUITE L  
NAPERVILLE, ILLINOIS 60563  
(630)505-0101

NOTES:  
1) ALL COORDINATES SHOWN HEREON ARE PROJECT. ALL DISTANCES SHOWN HEREON ARE GROUND.  
2) BEARINGS SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83, (2007).  
3) THE COMBINATION FACTOR USED FOR THIS PROJECT = 0.99994777.  
4) COORDINATE CONVERSION  
NAD83 (2007) STATE PLANE COORDINATES TO PROJECT COORDINATES:  
A) DIVIDE THE STATE PLANE NAD83 GRID COORDINATES BY THE COMBINATION FACTOR.  
B) SUBTRACT 1,000,000.00 FROM THESE NORTHINGS AND EASTINGS.  
PROJECT COORDINATES TO NAD83 (2007) STATE PLANE COORDINATES:  
A) ADD 1,000,000.00 TO THE PROJECT NORTHINGS AND EASTINGS.  
B) MULTIPLY THESE COORDINATES BY THE COMBINATION FACTOR.  
5) THE NGS MONUMENT HELD FOR THIS PROJECT IS IS FIRST ORDER P.I.D. AA3730.

**CURVE DATA**  
PROPOSED CENTERLINE CONSTRUCTION  
CURVE NO. PR159-1

Δ = 03°02'36"  
D = 0127'16"  
R = 3939.05'  
L = 209.23'  
T = 104.64'  
E = 1.39'

(2122) PC STA. 3956+34.20  
N. 861,030.0840 E. 19,109.0508

(2125) PI STA. 3957+38.84  
N. 861,134.7215 E. 19,109.6901

(2124) PT STA. 3958+43.43  
N. 861,239.1774 E. 19,115.8838

**COORDINATE TABLE**

NO.	STATION	OFFSET	NORTH	EAST
137	3954+27.73	55.08 LT	860823.9517	19052.7144
1540	3954+27.73	80.00 LT	860824.1078	19027.7910
1525	3956+34.20	80.00 LT	861030.5727	19029.0523
1534	3956+79.31	80.00 LT	861076.5908	19029.5970
1551	3957+50.10	90.00 LT	861149.1536	19021.5206
9383	3957+82.74	90.00 LT	861182.5095	19022.8447
9384	3957+82.81	115.00 LT	861183.6766	18997.8718
10046	3957+84.29	59.47 LT	861182.7454	19053.4100
1542	3958+43.43	90.00 LT	861244.5046	19028.0416
9385	3958+67.92	114.93 LT	861270.4259	19002.6049
9386	3958+68.22	90.00 LT	861269.2493	19027.5089
1550	3958+82.40	90.00 LT	861283.4010	19028.3480
1552	3959+91.61	90.00 LT	861392.4249	19034.8126
140	3959+92.65	79.35 LT	861392.8287	19045.5013
1548	3960+33.13	90.00 LT	861433.8713	19037.2702
140	3954+27.73	55.08 LT	860823.9517	19052.7144
10718	3960+28.79	89.14 LT	861429.4882	19037.8719

F.A.P. 338 ILLINOIS ROUTE 59, SECTION FERRY RD. TO AURORA AVE., JOB. NO. R-91-035-09.

REVISION DATE: NOVEMBER 8, 2011 REVISION: ADD 1HJ0065B  
REVISION DATE: SEPTEMBER 1, 2011 REVISION: REVISE 1HJ0065  
REVISION DATE: JULY 8, 2011 REVISION: ADD 1HJ0062PE

MADE BY: JB

**PLAT OF HIGHWAYS**  
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**F.A.P. 338 ILLINOIS ROUTE 59**

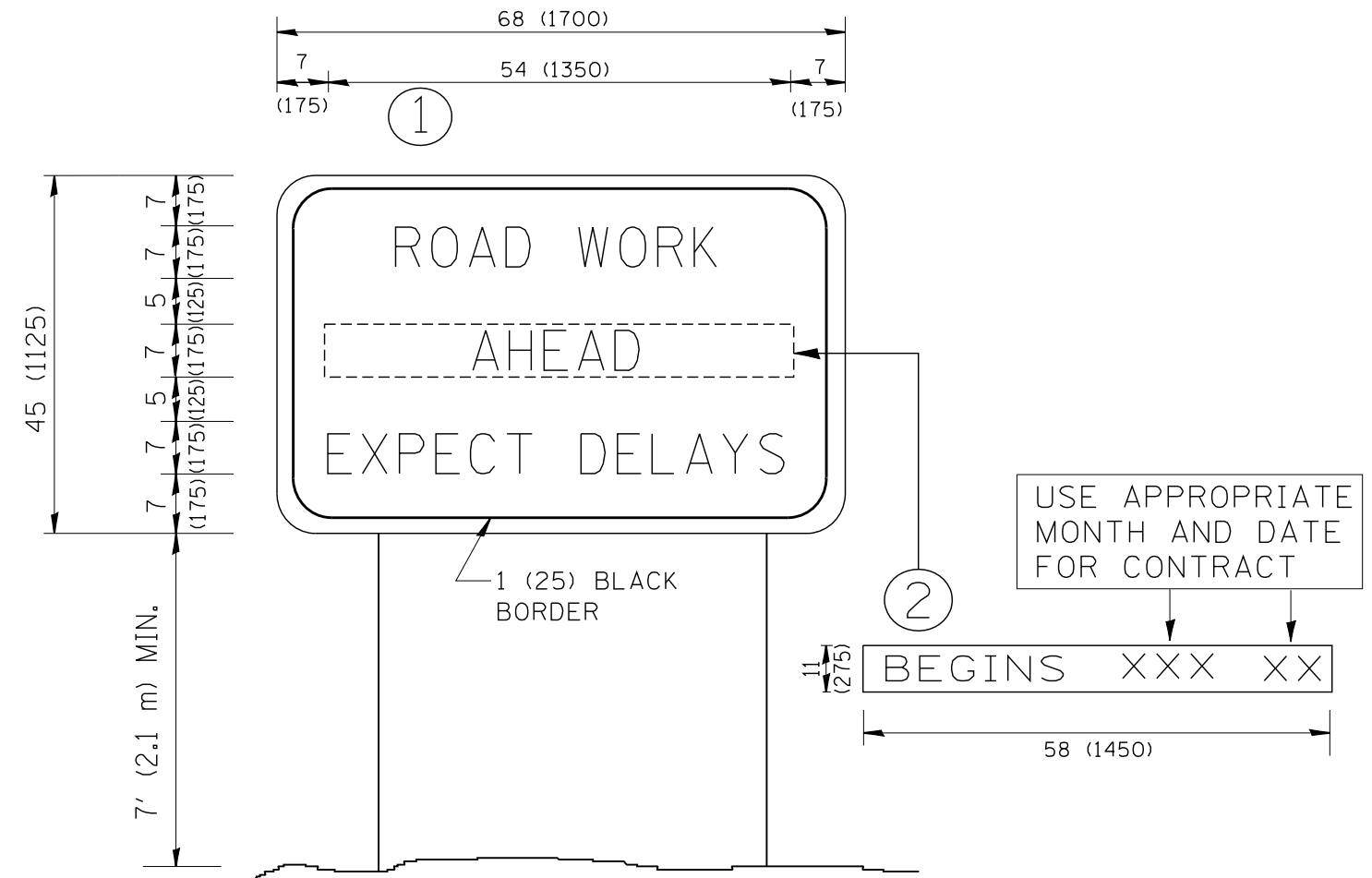
SECTION FERRY RD. TO AURORA AVE. DUPAGE COUNTY  
PROJECT: ROUTE 59 JOB NO. R-91-035-09  
STATION 3954+00 TO STATION 3960+33.13  
SCALE: 1" = 40' SHEET 45B OF 47

BUREAU OF LAND ACQUISITION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

RECEIVED  
NOV 08 2011  
PLATS & LEGALS

NAD83 (2007) S.P.  
N. 1,869,327.5048  
E. 1,023,602.1293  
PROJECT (GROUND)  
N. 869,425.1449  
E. 23,655.5948

CONTRACT 60P41 SHEET 47 OF 181



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS 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 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

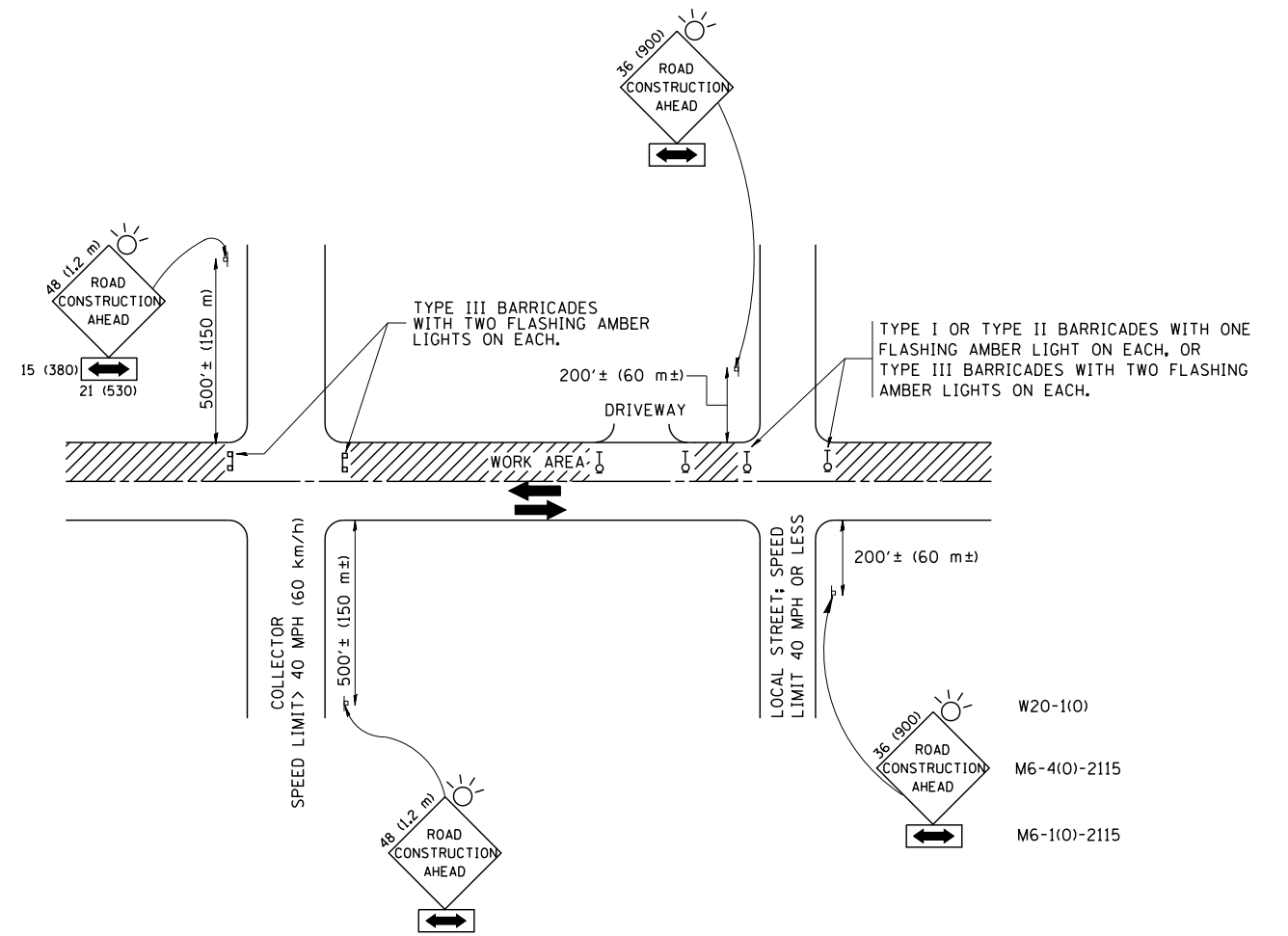
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		DESIGNED - CHECKED -	REVISED - REVISED -
		DESIGNED - DATE -	REVISED - REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2011-035-I	DUPAGE	181	48
TC-22			CONTRACT NO. 60P41	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
  1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
  3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
 

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

  - C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
  - D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gegl10nbt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

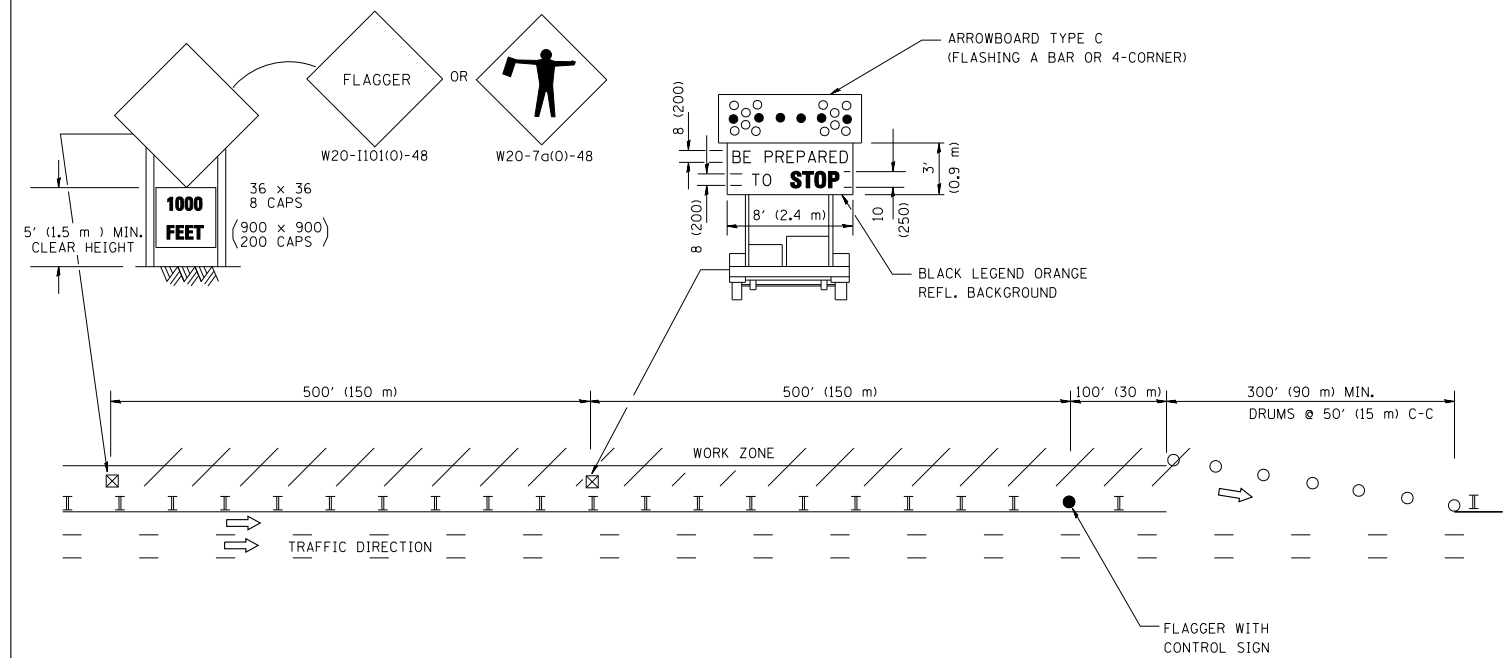
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

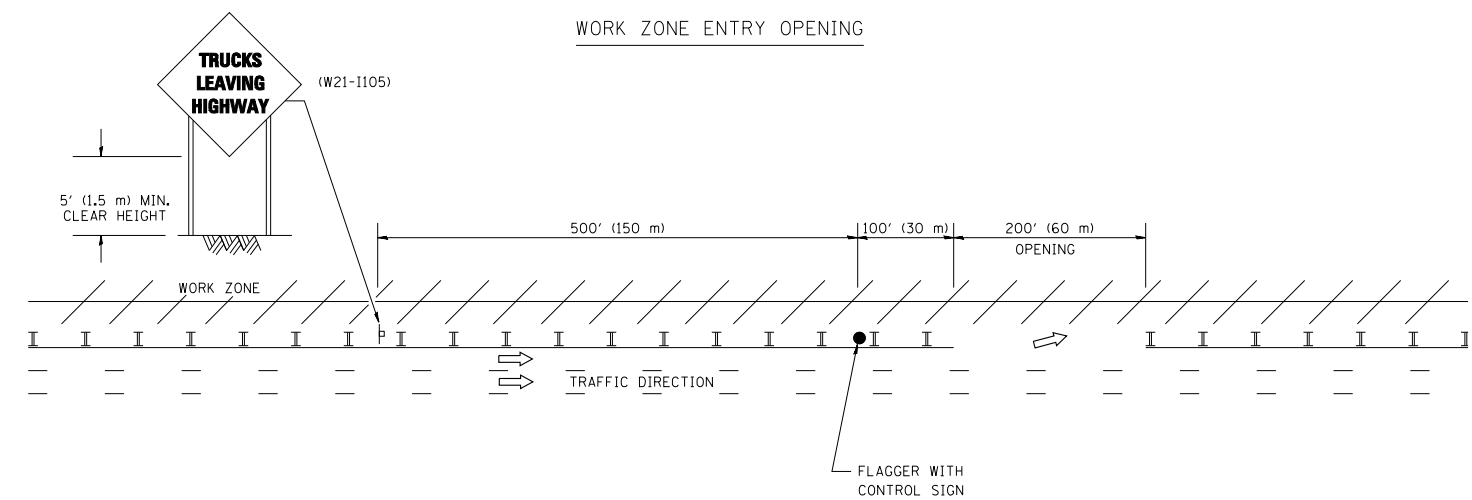
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2011-035-I		181	49
<b>TC-10</b>			<b>CONTRACT NO. 60P41</b>	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\diststd\22x34\1c18.dgn	USER NAME = leuso	DESIGNED -	REVISED - J.A.F. 04-03
		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2010	DATE -	REVISED - S.P.B. 12-09

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

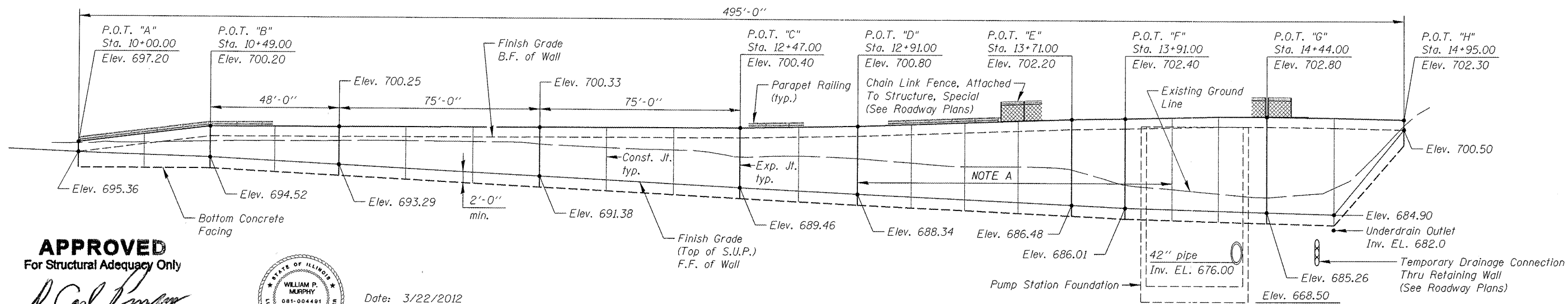
SIGNING FOR FLAGGING OPERATIONS  
AT WORK ZONE OPENINGS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	2011-035-I	DUPAGE	181	50
TC-18			CONTRACT NO. 60P41	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

Bench Mark: BM #208 3955+33, 51 LT  
 Square "□" cut in southeast corner of high tension tower base, west side of IL Route 59,  
 in front of Sprint / Back To Bed store (#1076 IL Route 59) Elev. 702.94

Existing Structure: None.



**APPROVED**  
 For Structural Adequacy Only  
 [Signature]  
 Engineer of Bridges & Structures

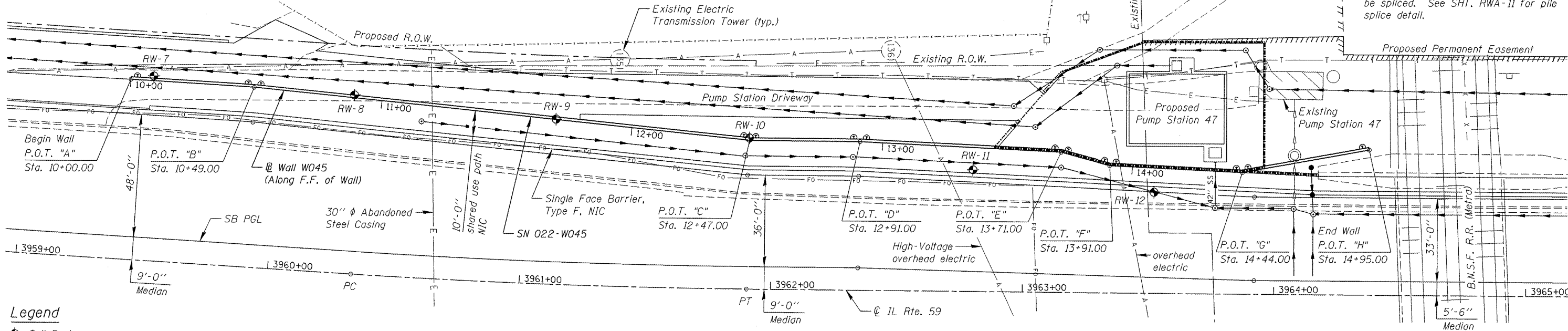


Date: 3/22/2012

for drawings RWA-01 thru RWA-13

Expires 11-30-2012

**ELEVATION**



**Legend**

- ◆ Soil Borings
- F.F. Front Face
- B.F. Back Face
- NIC Not In Contract
- S.U.P. Shared Use Path

**CURVE DATA**

IL Rte. 59  
 Curve PRIL59-2  
 $\Delta = 3^\circ 02' 50''$  (LT)  
 $D = 1^\circ 56' 16''$   
 $R = 2,956.67'$   
 $T = 78.64'$   
 $L = 157.25'$   
 $E = 1.05'$   
 $SE = \text{Normal Crown}$   
 $PC \text{ STA. } 3960+33.13$   
 $PT \text{ STA. } 3961+90.37$   
 $PI \text{ STA. } 3961+11.77$

Wall W045  
 (Offsets from IL Rte. 59 to F.F. of wall)  
 POT "A"  
 Sta. 10+00.00 - Wall W045 =  
 Sta. 3959+41.00, 70.60' Lt. - IL Rte. 59  
 POT "B"  
 Sta. 10+49.00 - Wall W045 =  
 Sta. 3959+90.00, 70.60' Lt. - IL Rte. 59  
 POT "C"  
 Sta. 12+47.00 - Wall W045 =  
 Sta. 3961+91.03, 58.60' Lt. - IL Rte. 59  
 POT "D"  
 Sta. 12+91.00 - Wall W045 =  
 Sta. 3962+35.03, 58.60' Lt. - IL Rte. 59

POT "E"  
 Sta. 13+71.00 - Wall W045 =  
 Sta. 3963+14.97, 55.30' Lt. - IL Rte. 59  
 POT "F"  
 Sta. 13+91.00 - Wall W045 =  
 Sta. 3963+34.31, 50.20' Lt. - IL Rte. 59  
 POT "G"  
 Sta. 14+44.00 - Wall W045 =  
 Sta. 3963+87.27, 48.00' Lt. - IL Rte. 59  
 POT "H"  
 Sta. 14+95.00 - Wall W045 =  
 Sta. 3964+37.42, 57.30' Lt. - IL Rte. 59

**Notes:**

- SN 022-W045 will be built in conjunction with the Proposed Pump Station 47.
- Retaining wall piles near the pump station will be used as part of the Braced Excavation for the pump station.
- Remainder of the wall near the pump station will be constructed after the pump station foundation is constructed and backfilled.
- See Roadway Drainage Plans for Drainage Structure Locations.
- See Roadway Plans for Back Face of Wall Elevations and Chain Link Fence details.

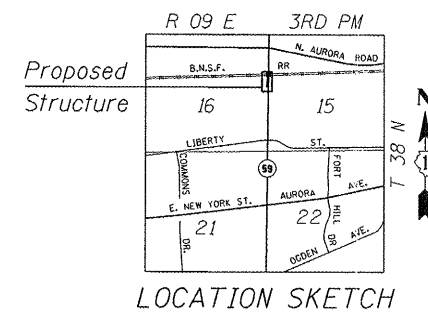
**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi (reinforcement)}$   
 $f_y = 50,000 \text{ psi (AASHTO M270 Gr. 50)}$



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION**  
**ILLINOIS ROUTE 59**  
 F.A.P. RTE. 338 SEC. 2011-035-1  
 DUPAGE COUNTY  
 STATION 3959+41 TO 3964+38  
 STRUCTURE NO. 022-W045

**KNIGHT**  
 Engineers & Architects

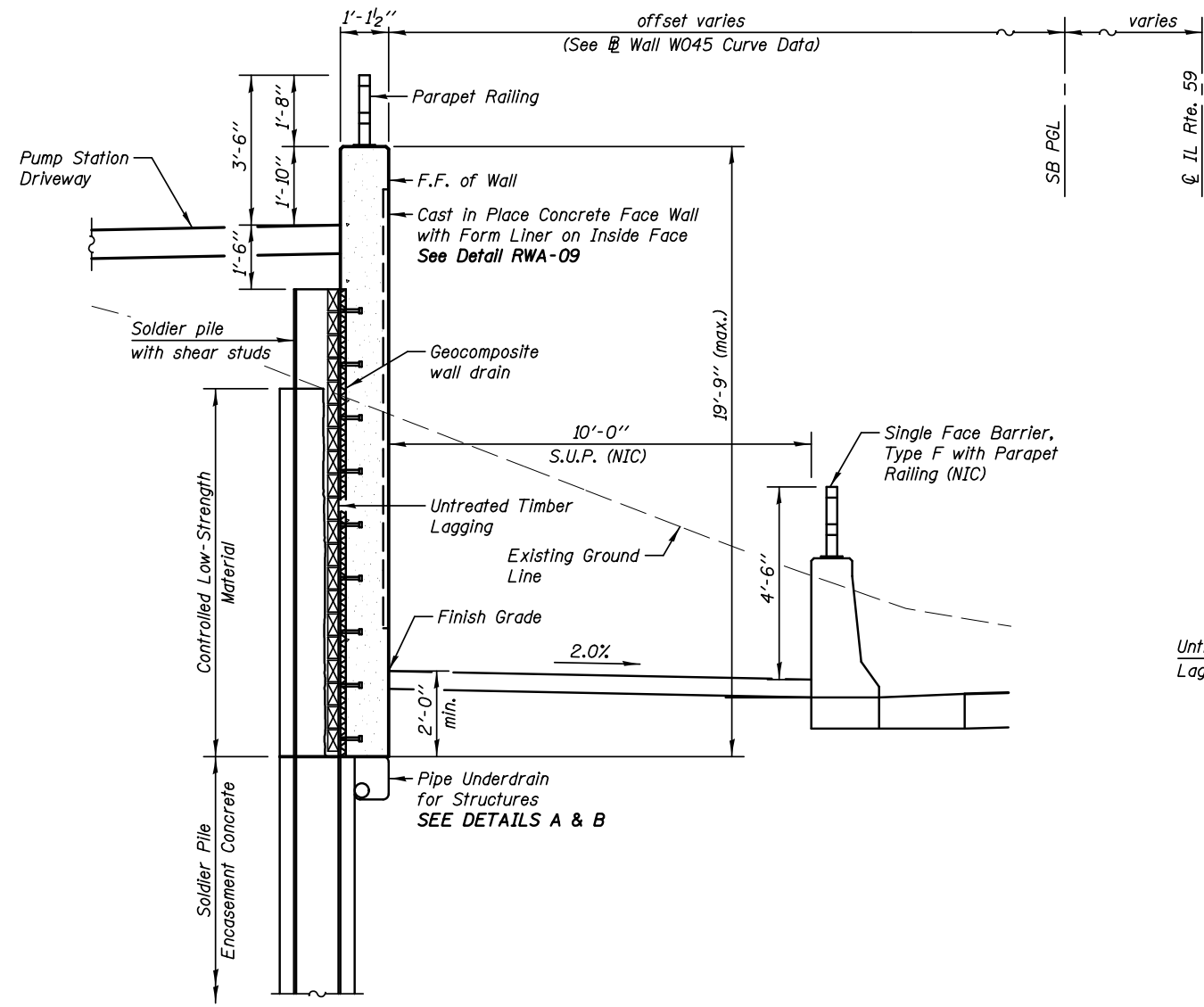
DESIGNED - TB	REVISIONS
CHECKED - WPM	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

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

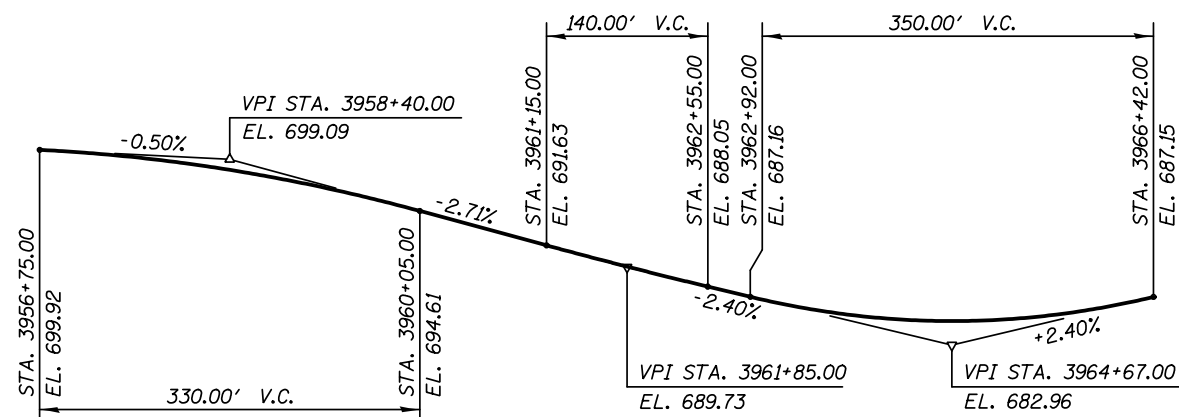
**GENERAL PLAN & ELEVATION**  
**STRUCTURE NUMBER 022-W045**

SHEET NO. RWA-01 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-1	DUPAGE	181	51
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	



**TYPICAL WALL SECTION**  
(For Details See Shf. RWA-08)



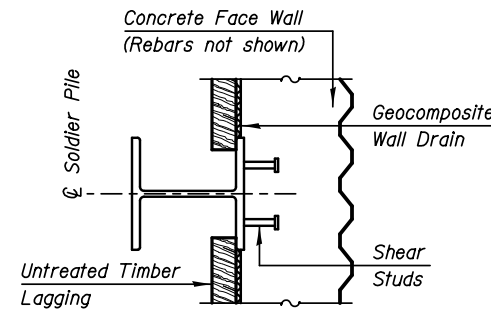
**PROFILE GRADE - IL RTE. 59**

**GENERAL NOTES**

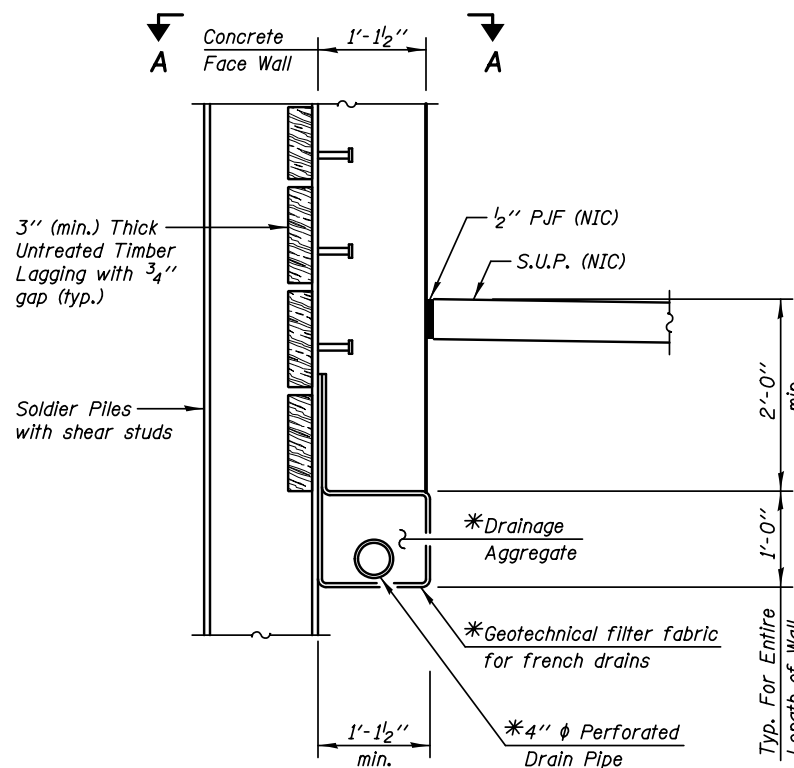
All structural steel shall conform to the requirements of AASHTO M 270 Grade 50 except as noted on plans.

Reinforcement bars designated (E) shall be epoxy coated.

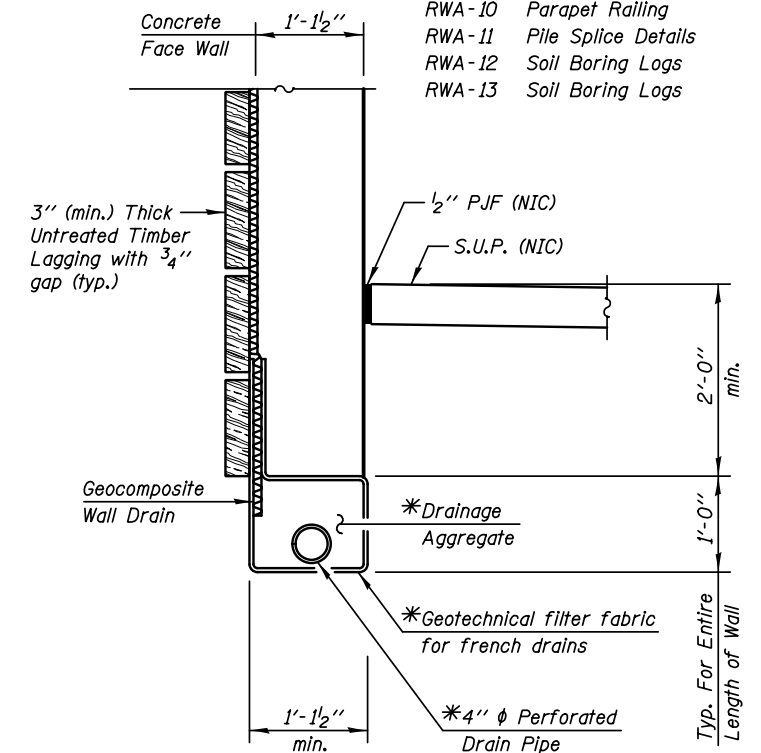
The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.



**SECTION A-A - PLAN**



**DETAIL A**  
(At Soldier Piles)



**DETAIL B**  
(Between Soldier Piles)

**UNDERDRAIN DETAIL**

\*Cost Included with "Pipe Underdrains for Structures"

**LEGEND**

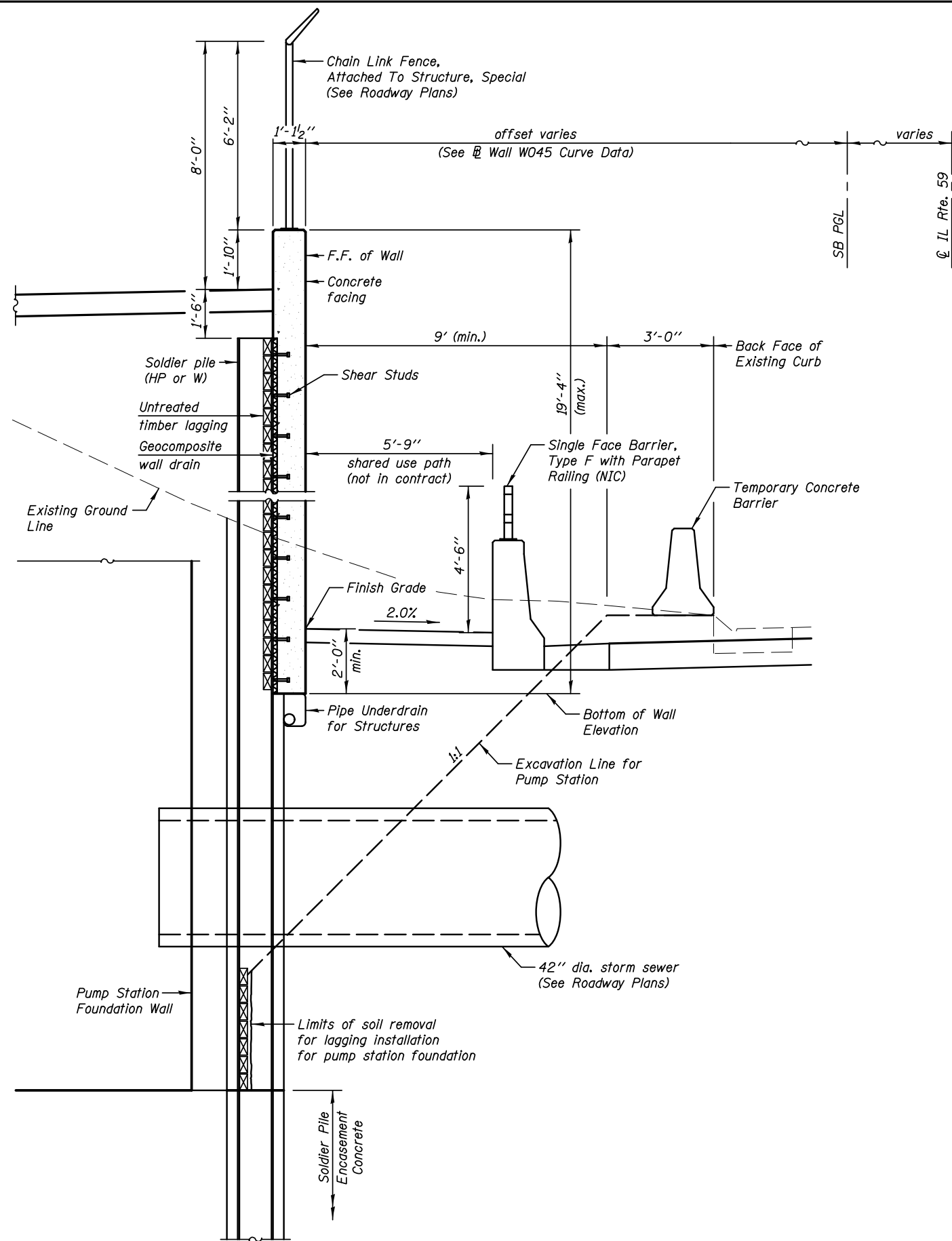
NIC Not In Contract  
S.U.P. Shared Use Path

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	416.0
Concrete Structures	Cu. Yd.	283.0
Form Liner Textured Surface	Sq. Ft.	4263.0
Protective Coat	Sq. Yd.	611.0
Stud Shear Connectors	Each	1548
Reinforcement Bars, Epoxy Coated	Pound	25810
Parapet Railing	Foot	344.0
Geocomposite Wall Drain	Sq. Yd.	543.0
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	22830.0
Untreated Timber Lagging	Sq. Ft.	4881.0
Furnishing Soldier Piles (HP Section)	Foot	828.0
Furnishing Soldier Piles (W Section)	Foot	3041.0
Pipe Underdrains for Structures 4"	Foot	495.0

**INDEX OF DRAWINGS**

SHT NO.	TITLE
RWA-01	General Plan and Elevation
RWA-02	Total Bill of Material & Miscellaneous Details
RWA-03	Wall Details For Pump Station Excavation
RWA-04	Plan & Elevation - Panels A, B & C
RWA-05	Plan & Elevation - Panels D & E
RWA-06	Plan & Elevation - Panels F & G
RWA-07	Plan & Elevation - Panels H & J
RWA-08	Wall Sections and Details
RWA-09	Architectural Finish and Joint Details
RWA-10	Parapet Railing
RWA-11	Pile Splice Details
RWA-12	Soil Boring Logs
RWA-13	Soil Boring Logs



**WALL SECTION AT PUMP STATION**

**SUGGESTED SEQUENCE OF CONSTRUCTION**

- Portions of Retaining Wall 022-W045 will be used as the east wall of the Braced Excavation for Pump Station 47. See Sheet SA-02 for Braced Excavation Limits.
- Drill and set soldier piles in Panels G, H and J, as required.
- Install Braced Excavation for the Pump Station.
- Excavate for the pump station foundation.
- Install the timber lagging for the Braced Excavation as shown in the Wall Section Detail on this sheet.
- Complete the excavation for the Pump Station Foundation.
- Construct pump station foundation.
- Backfill pump station foundation per the Specifications.
- When the backfill reaches the Bottom of Wall Elevation, install the timber lagging for Retaining Wall 022-W045.
- Backfill remainder of the pump station foundation.
- Construct the wall.

**KNIGHT**  
Engineers & Architects

SCALE	NONE
DATE	3/22/2012

DESIGNED	TB
CHECKED	WPM
DRAWN	TB
CHECKED	WPM

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL DETAILS FOR PUMP STATION EXCAVATION  
STRUCTURE NUMBER 022-W045**

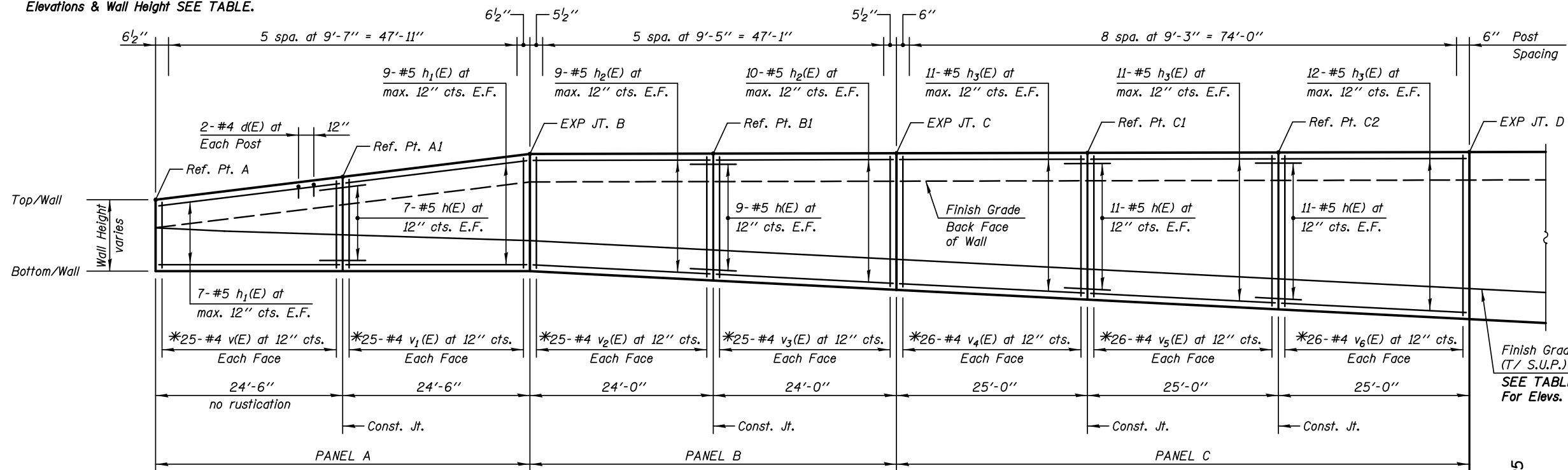
SHEET NO. RWA-03 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	53
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT



Note:  
For Top/Wall Elevations, Bottom/Wall  
Elevations & Wall Height SEE TABLE.

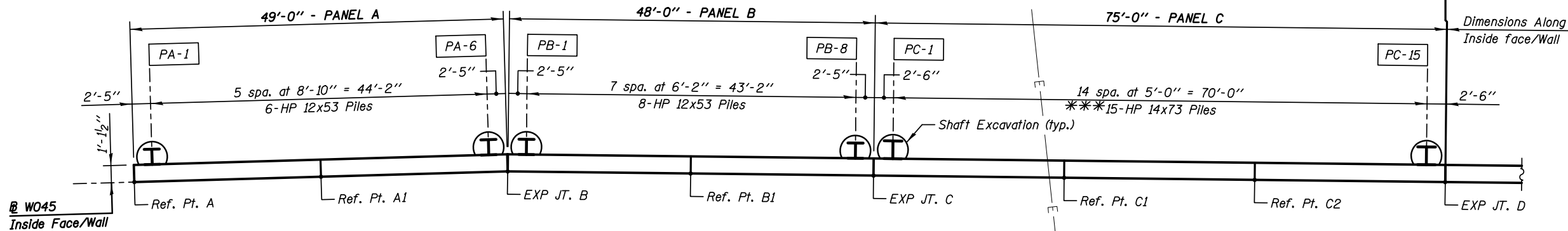


**ELEVATION - EAST FACE**  
(Looking West)

**PILE DATA:**

Pile No.	Top Elev.	Bottom Elev.	Length Ft.	No of Studs
PA-1	694.02	671.02	23.00	4
PA-2	694.56	670.56	24.00	6
PA-3	695.10	671.10	24.00	6
PA-4	695.64	670.64	25.00	6
PA-5	696.18	671.18	25.00	8
PA-6	696.72	670.72	26.00	8
PB-1	696.87	670.87	26.00	8
PB-2	696.88	670.88	26.00	8
PB-3	696.88	670.88	26.00	8
PB-4	696.89	670.89	26.00	8
PB-5	696.89	669.89	27.00	10
PB-6	696.90	669.90	27.00	10
PB-7	696.91	669.91	27.00	10
PB-8	696.92	669.92	27.00	10
PC-1	696.92	669.92	27.00	10
PC-2	696.93	669.93	27.00	10
PC-3	696.93	668.93	28.00	10
PC-4	696.93	668.93	28.00	10
PC-5	696.94	668.94	28.00	10
PC-6	696.94	668.94	28.00	10
PC-7	696.95	667.95	29.00	12
PC-8	696.96	667.96	29.00	12
PC-9	696.96	666.96	30.00	12
PC-10	696.97	666.97	30.00	12
PC-11	696.97	665.97	31.00	12
PC-12	696.98	665.98	31.00	12
PC-13	696.99	665.99	31.00	12
PC-14	696.99	665.99	31.00	12
PC-15	697.00	666.00	31.00	12

MATCH LINE  
STA. 11+72.00  
SEE SHT. RWA-05



**PLAN**  
(PANELS A, B & C)

**LEGEND**

E.F. Each Face  
S.U.P. Shared Use Path

**Min Bar Laps**

#5 Bars = 2'-5" (Horiz. Top Bars)

**SHAFT SIZES**

Pile Size	Shaft Excavation Size
HP12	2'-0"
HP14	2'-0"
W24	3'-0"

**Notes:**

All Dimensions are along Inside Face of Wall.

Reinforcement Bars designated (E) shall be Epoxy Coated.

For Typical Sections & Bill of Material, SEE SHT. RWA-08.

\*See Bar Cutting Diagram SHT. RWA-08.

\*\*Bottom of Form Liner Elevations are 1'-0" (1.0') higher than Finish Grade Elevations.

\*\*\*Furnish one (1) additional 30.0' pile. Should the abandoned steel casing conflict with one of the drilled shafts, use the additional pile and respace the piles around the steel casing, as directed by the Engineer. Do not exceed the pile spacing shown. Do not locate a pile less than 1.0' from a construction joint.

**WALL JOINT LOCATIONS, HEIGHTS & ELEVATIONS**

Location Ref. Points	Station on @ W045	Wall Height	Top/Wall Elevation	Bottom/Wall Elevation	Finish Grade Elev.	Bott/Liner Elev. **
Begin Wall - A	10+00.00	4'-9"	697.20	692.45	695.36	696.36
C.J. - A1	10+24.50	6'-3"	698.70	692.45	694.90	695.90
Exp. Jt. - B	10+49.00	7'-9"	700.20	692.45	694.52	695.52
C.J. - B1	10+73.00	8'-4"	700.22	691.89	693.91	694.91
Exp. Jt. - C	10+97.00	9'-0"	700.25	691.25	693.29	694.29
C.J. - C1	11+22.00	9'-8"	700.27	690.60	692.65	693.65
C.J. - C2	11+47.00	10'-4"	700.30	689.97	692.02	693.02
Exp. Jt. - D	11+72.00	11'-0"	700.33	689.33	691.38	692.38

**KNIGHT**  
Engineers & Architects

DESIGNED - TB	REVISIONS
CHECKED - WPM	REVISIONS
SCALE - NONE	REVISIONS
DATE - 3/22/2012	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

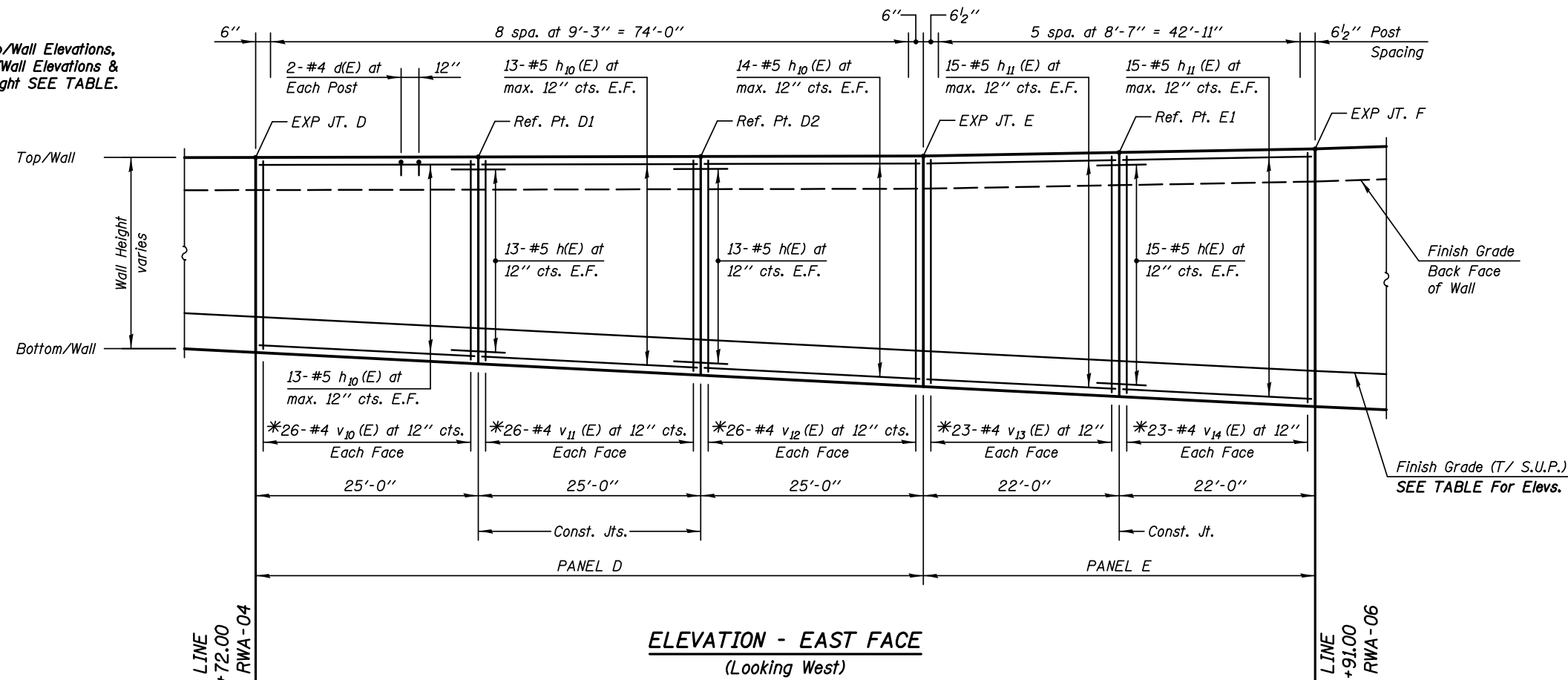
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION - PANELS A, B & C  
STRUCTURE NUMBER 022-W045

SHEET NO. RWA-04 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	54
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

Note:  
For Top/Wall Elevations,  
Bottom/Wall Elevations &  
Wall Height SEE TABLE.



**PILE DATA:**

Pile No.	Top Elev.	Bottom Elev.	Length Ft.	No of Studs
PD-1	697.00	662.00	35.00	12
PD-2	697.01	662.01	35.00	12
PD-3	697.01	661.01	36.00	14
PD-4	697.01	661.01	36.00	14
PD-5	697.02	661.02	36.00	14
PD-6	697.02	661.02	36.00	14
PD-7	697.03	660.03	37.00	14
PD-8	697.04	660.04	37.00	14
PD-9	697.04	659.04	38.00	14
PD-10	697.05	659.05	38.00	14
PD-11	697.05	658.05	39.00	14
PD-12	697.06	658.06	39.00	14
PD-13	697.06	658.06	39.00	14
PD-14	697.06	657.06	40.00	14
PD-15	697.07	657.07	40.00	16
PE-1	697.10	659.10	38.00	16
PE-2	697.15	658.15	39.00	16
PE-3	697.20	658.20	39.00	16
PE-4	697.25	657.25	40.00	16
PE-5	697.30	657.30	40.00	16
PE-6	697.35	656.35	41.00	16
PE-7	697.40	656.40	41.00	16
PE-8	697.45	656.45	41.00	18

**LEGEND**

E.F. Each Face  
S.U.P. Shared Use Path

**Min Bar Laps**

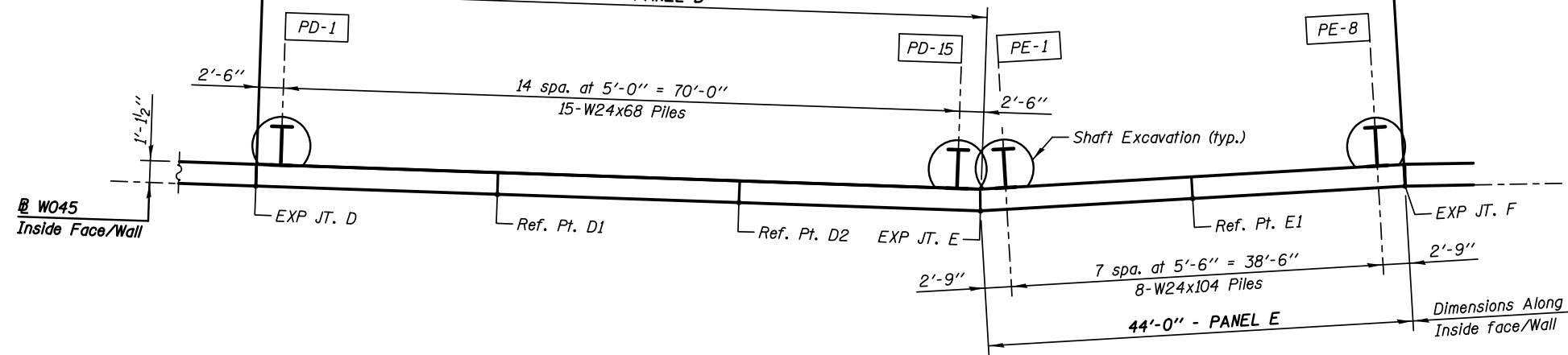
#5 Bars = 2'-5" (Horiz. Top Bars)

**Notes:**

All Dimensions are along Inside Face of Wall.  
Reinforcement Bars designated (E) shall be Epoxy Coated.

For Typical Sections & Bill of Material, SEE SHT. RWA-08.

\*See Bar Cutting Diagram SHT. RWA-08.  
\*\*Bottom of Form Liner Elevations are 1'-0" (1.0') higher than Finish Grade Elevations.



**PLAN**  
(PANELS D & E)

**SHAFT SIZES**

Pile Size	Shaft Excavation Size
HP12	2'-0"
HP14	2'-0"
W24	3'-0"

**WALL JOINT LOCATIONS, HEIGHTS & ELEVATIONS**

Location Ref. Points	Station on @ W045	Wall Height	Top/Wall Elevation	Bottom/Wall Elevation	Finish Grade Elev.	Bottom/Liner Elev. **
Exp. Jt. - D	11+72.00	11'-0"	700.33	689.33	691.38	692.38
C.J. - D1	11+97.00	11'-8"	700.35	688.68	690.74	691.74
C.J. - D2	12+22.00	12'-4"	700.38	688.05	690.10	691.10
Exp. Jt. - E	12+47.00	13'-0"	700.40	687.40	689.46	690.46
C.J. - E1	12+69.00	13'-9"	700.60	686.85	688.90	689.90
Exp. Jt. - F	12+91.00	14'-6"	700.80	686.30	688.34	689.34

**KNIGHT**  
Engineers & Architects

DESIGNED - TB	REVISIONS
CHECKED - WPM	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS
SCALE - NONE	
DATE - 3/22/2012	

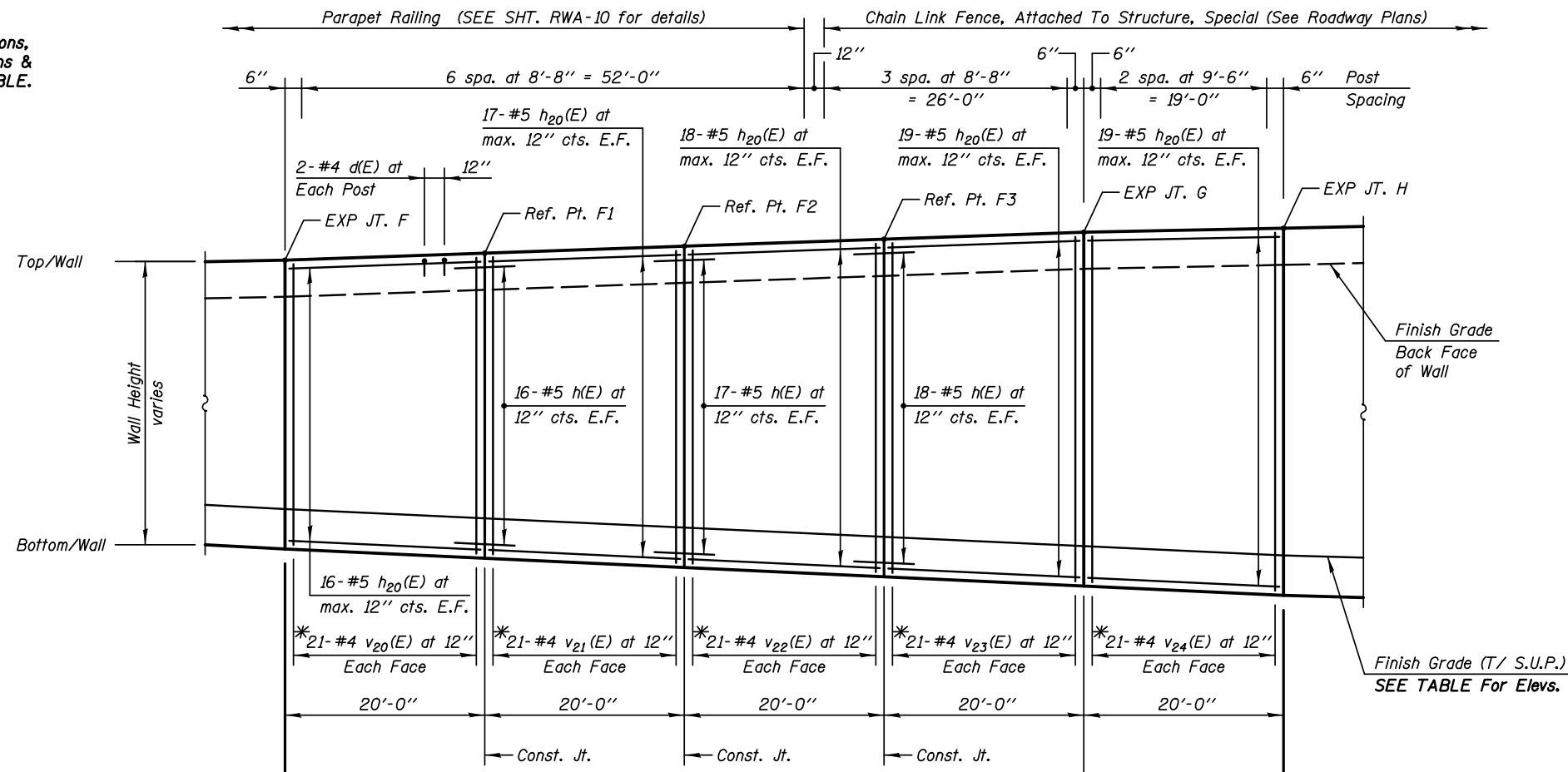
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION - PANELS D & E  
STRUCTURE NUMBER 022-W045

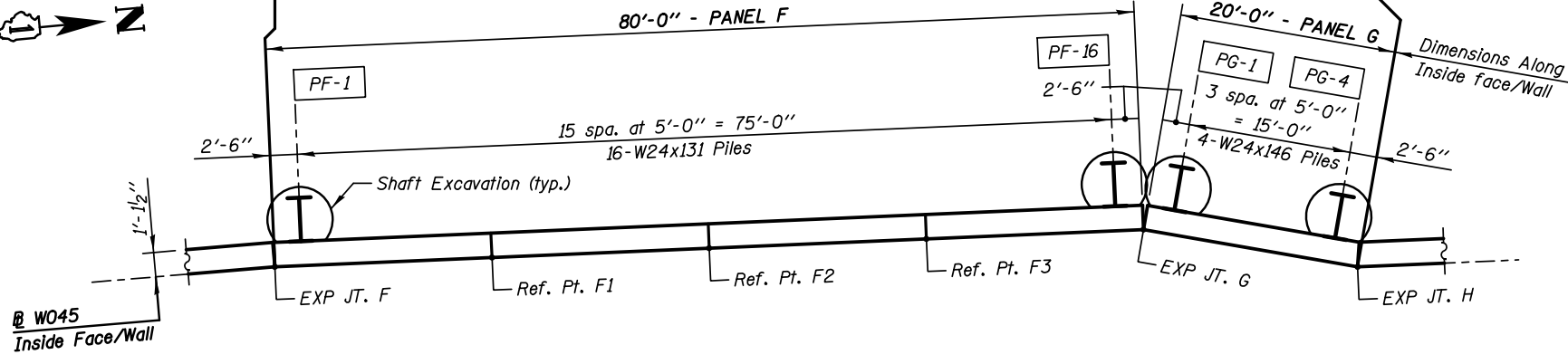
SHEET NO. RWA-05 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	55
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

Note:  
For Top/Wall Elevations,  
Bottom/Wall Elevations &  
Wall Height SEE TABLE.



**ELEVATION - EAST FACE**  
(Looking West)



**PLAN**  
(PANELS F & G)

**SHAFT SIZES**

Pile Size	Shaft Excavation Size
HP12	2'-0"
HP14	2'-0"
W24	3'-0"

**WALL JOINT LOCATIONS, HEIGHTS & ELEVATIONS**

Location Ref. Points	Station on @ W045	Wall Height	Top/Wall Elevation	Bottom/Wall Elevation	Finish Grade Elev.	Bott/Liner Elev. **
Exp. Jt. - F	12+91.00	14'-6"	700.80	686.30	688.34	689.34
C.J. - F1	13+11.00	15'-4"	701.15	685.82	687.88	688.88
C.J. - F2	13+31.00	16'-1"	701.50	685.42	687.41	688.41
C.J. - F3	13+51.00	16'-11"	701.85	684.93	686.95	687.95
Exp. Jt. - G	13+71.00	17'-9"	702.20	684.45	686.48	687.48
Exp. Jt. - H	13+91.00	18'-5"	702.40	683.98	686.01	687.01

**PILE DATA:**

Pile No.	Top Elev.	Bottom Elev.	Length Ft.	No of Studs
PF-1	697.51	655.51	42.00	18
PF-2	697.60	655.60	42.00	18
PF-3	697.69	654.69	43.00	18
PF-4	697.78	654.78	43.00	18
PF-5	697.86	653.86	44.00	18
PF-6	697.95	652.95	45.00	18
PF-7	698.04	653.04	45.00	18
PF-8	698.13	652.13	46.00	20
PF-9	698.21	652.21	46.00	20
PF-10	698.30	651.30	47.00	20
PF-11	698.39	651.39	47.00	20
PF-12	698.48	650.48	48.00	20
PF-13	698.56	650.56	48.00	20
PF-14	698.65	649.65	49.00	20
PF-15	698.74	649.74	49.00	22
PF-16	698.83	648.83	50.00	22
PG-1	698.90	646.90	52.00	22
PG-2	698.95	646.95	52.00	22
PG-3	699.00	647.00	52.00	22
PG-4	699.05	646.05	53.00	22

**LEGEND**

E.F. Each Face  
S.U.P. Shared Use Path

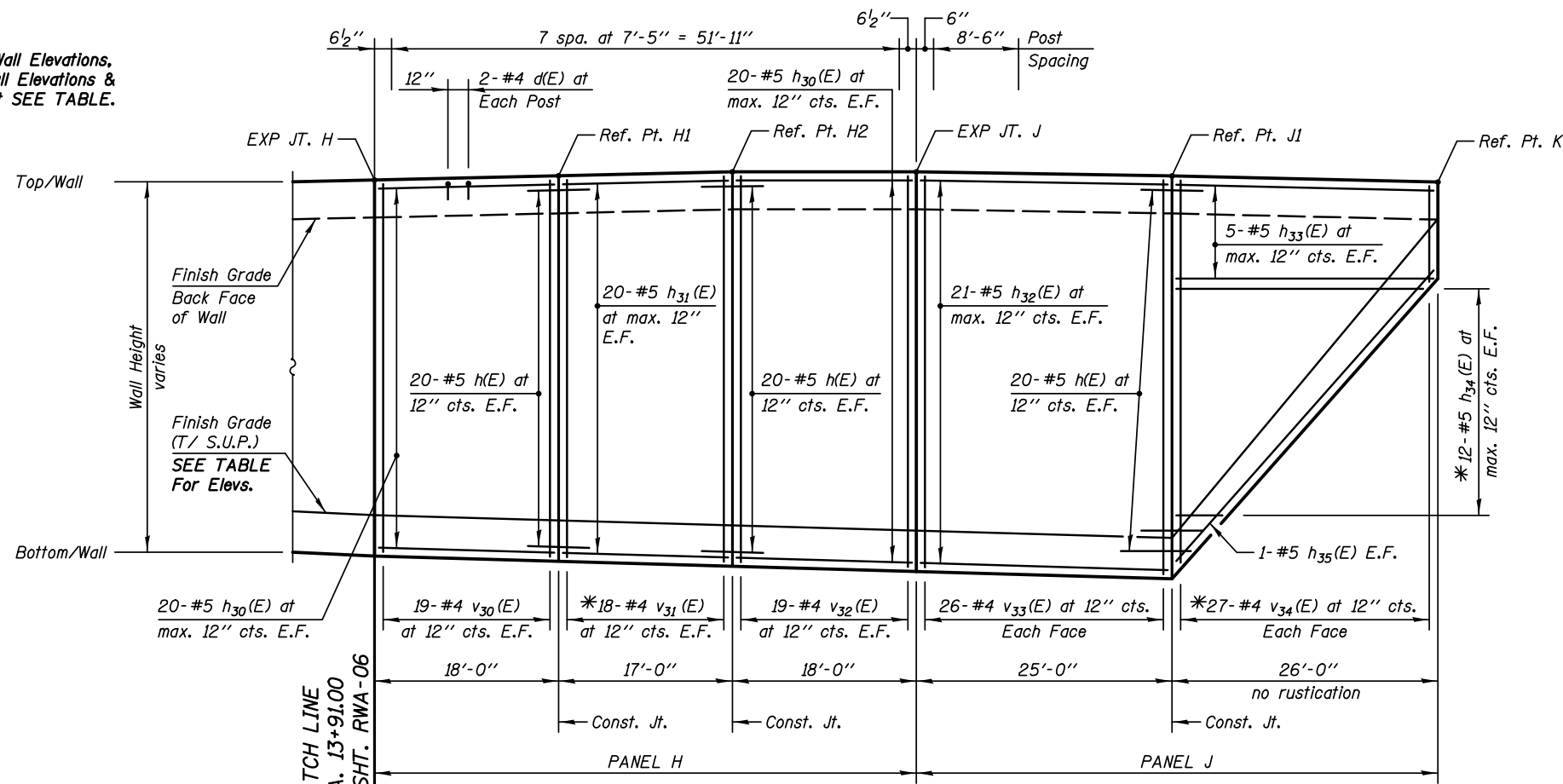
**Min Bar Laps**

#5 Bars = 2'-5" (Horiz. Top Bars)

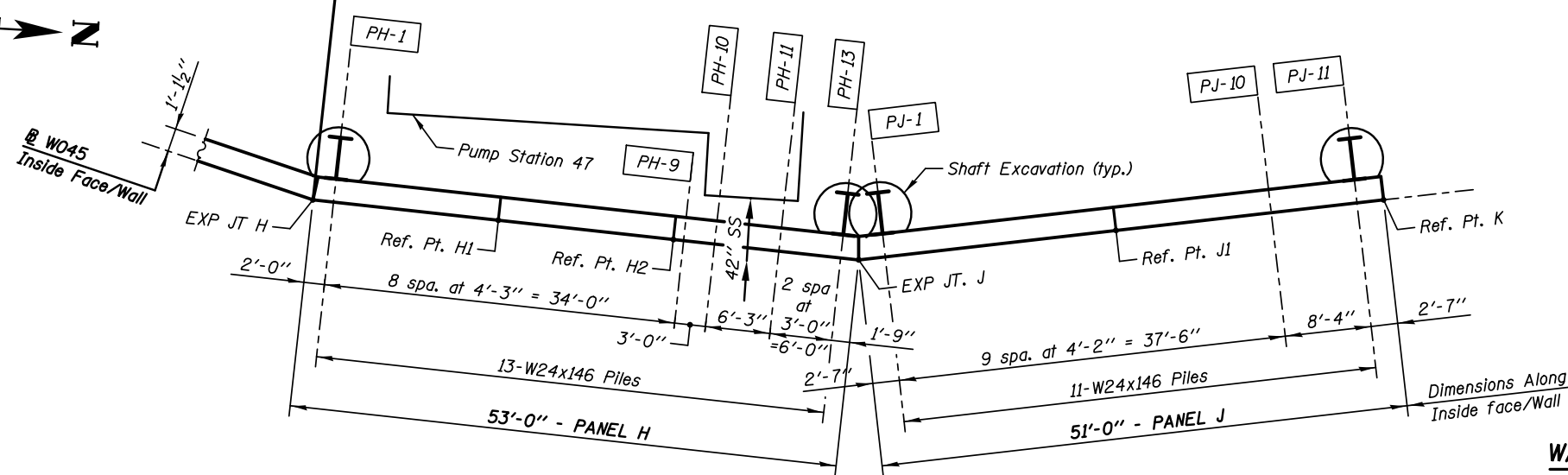
**Notes:**

- All Dimensions are along Inside Face of Wall.
- Reinforcement Bars designated (E) shall be Epoxy Coated.
- For Typical Sections & Bill of Material, SEE SHT. RWA-08.
- \*See Bar Cutting Diagram SHT. RWA-08.
- \*\*Bottom of Form Liner Elevations are 1'-0" (1.0') higher than Finish Grade Elevations.

Note:  
For Top/Wall Elevations,  
Bottom/Wall Elevations &  
Wall Height SEE TABLE.



**ELEVATION - EAST FACE**  
(Looking West)



**PLAN**  
(PANELS H & J)

**SHAFT SIZES**

Pile Size	Shaft Excavation Size
HP12	2'-0"
HP14	2'-0"
W24	3'-0"

**WALL JOINT LOCATIONS, HEIGHTS & ELEVATIONS**

Location Ref. Points	Station on @ W045	Wall Height	Top/Wall Elevation	Bottom/Wall Elevation	Finish Grade Elev.	Bottom/Liner Elev. **
Exp. Jt. - H	13+91.00	18'-5"	702.40	683.98	686.01	687.01
C.J. - H1	14+09.00	18'-10"	702.60	683.77	685.76	686.76
C.J. - H2	14+26.00	19'-4"	702.80	683.47	685.51	686.51
Exp. Jt. - J	14+44.00	19'-7"	702.80	683.22	685.26	686.26
C.J. - J1	14+69.00	19'-9"	702.60	682.85	684.90	685.90
End Wall - K	14+95.00	4'-9"	702.30	697.55	700.50	701.50

**PILE DATA:**

Pile No.	Top Elev.	Bottom Elev.	Length Ft.	No of Studs
PH-1	699.09	646.09	53.00	22
PH-2	699.14	646.14	53.00	22
PH-3	699.19	646.19	53.00	22
PH-4	699.23	646.23	53.00	22
PH-5	699.28	646.28	53.00	24
PH-6	699.33	646.33	53.00	24
PH-7	699.38	646.38	53.00	24
PH-8	699.43	646.43	53.00	24
PH-9	699.47	645.47	54.00	24
PH-10	699.47	645.47	54.00	24
PH-11	699.47	645.47	54.00	24
PH-12	699.47	645.47	54.00	24
PH-13	699.47	645.47	54.00	24
PJ-1	699.45	645.45	54.00	24
PJ-2	699.42	645.42	54.00	24
PJ-3	699.38	645.38	54.00	24
PJ-4	699.35	645.35	54.00	24
PJ-5	699.32	645.32	54.00	24
PJ-6	699.28	645.28	54.00	24
PJ-7	699.24	648.24	51.00	22
PJ-8	699.19	653.19	46.00	20
PJ-9	699.14	658.14	41.00	16
PJ-10	699.10	663.10	36.00	12
PJ-11	699.00	673.00	26.00	6

**LEGEND**

E.F. Each Face  
S.U.P. Shared Use Path

**Min Bar Laps**

#5 Bars = 2'-5" (Horiz. Top Bars)

**Notes:**

All Dimensions are along Inside Face of Wall.

Reinforcement Bars designated (E) shall be Epoxy Coated.

For Typical Sections & Bill of Material, SEE SHT. RWA-08.

42" Storm Sewer to be installed after soldier piles. See Drainage Plans for additional details.

\*See Bar Cutting Diagram SHT. RWA-08.

\*\*Bottom of Form Liner Elevations are 1'-0" (1.0') higher than Finish Grade Elevations.

**KNIGHT**  
Engineers & Architects

DESIGNED - TB	REVISIONS
CHECKED - WPM	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

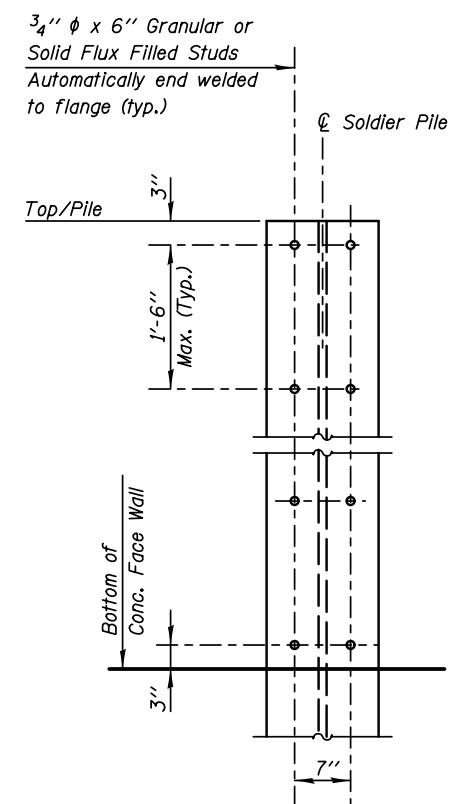
PLAN & ELEVATION - PANELS H & J  
STRUCTURE NUMBER 022-W045

SHEET NO. RWA-07 OF 13 SHEETS

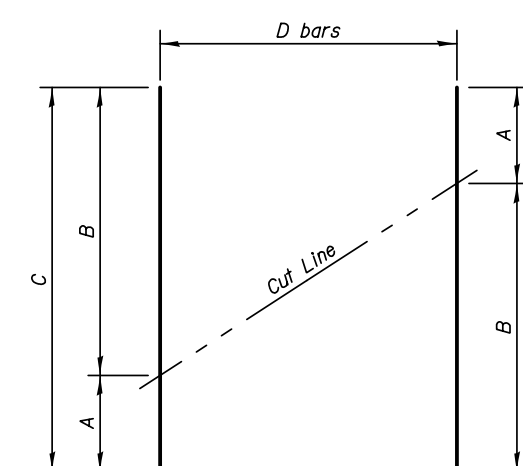
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	57
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
d(E)	120	#4	2'-3"	□
h(E)	380	#5	6'-0"	—
h1(E)	32	#5	24'-2"	—
h2(E)	38	#5	23'-8"	—
h3(E)	68	#5	24'-8"	—
h10(E)	80	#5	24'-8"	—
h11(E)	60	#5	21'-8"	—
h20(E)	178	#5	19'-8"	—
h30(E)	80	#5	17'-8"	—
h31(E)	40	#5	16'-8"	—
h32(E)	42	#5	24'-8"	—
h33(E)	10	#5	25'-8"	—
h34(E)	12	#5	29'-8"	—
h35(E)	2	#5	29'-3"	—
v(E)	25	#4	10'-4"	—
v1(E)	25	#4	13'-4"	—
v2(E)	25	#4	15'-5"	—
v3(E)	25	#4	16'-8"	—
v4(E)	26	#4	18'-0"	—
v5(E)	26	#4	19'-4"	—
v6(E)	26	#4	20'-8"	—
v10(E)	26	#4	22'-0"	—
v11(E)	26	#4	23'-4"	—
v12(E)	26	#4	24'-8"	—
v13(E)	23	#4	26'-1"	—
v14(E)	23	#4	27'-7"	—
v20(E)	21	#4	29'-2"	—
v21(E)	21	#4	30'-9"	—
v22(E)	21	#4	32'-4"	—
v23(E)	21	#4	34'-0"	—
v24(E)	21	#4	35'-6"	—
v30(E)	38	#4	18'-1"	—
v31(E)	18	#4	37'-6"	—
v32(E)	38	#4	19'-0"	—
v33(E)	52	#4	19'-3"	—
v34(E)	27	#4	23'-10"	—
Structure Excavation			Cu. Yd.	416.0
Concrete Structures			Cu. Yd.	283.0
Form Liner Textured Surface			Sq. Ft.	4263.0
Protective Coat			Sq. Yd.	611.0
Stud Shear Connectors			Each	1548
Reinforcement Bars, Epoxy Coated			Pound	25810
Drilling and Setting Soldier Piles (In Soil)			Cu. Ft.	22830.0
Furnishing Soldier Piles (HP12x53)			Foot	359.0
Furnishing Soldier Piles (HP14x73)			Foot	469.0
Furnishing Soldier Piles (W24x68)			Foot	561.0
Furnishing Soldier Piles (W24x104)			Foot	319.0
Furnishing Soldier Piles (W24x131)			Foot	734.0
Furnishing Soldier Piles (W24x146)			Foot	1427.0

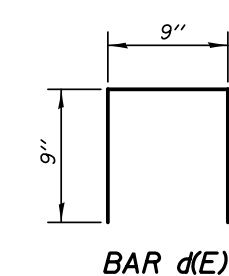


**STUD SHEAR CONNECTORS LAYOUT**

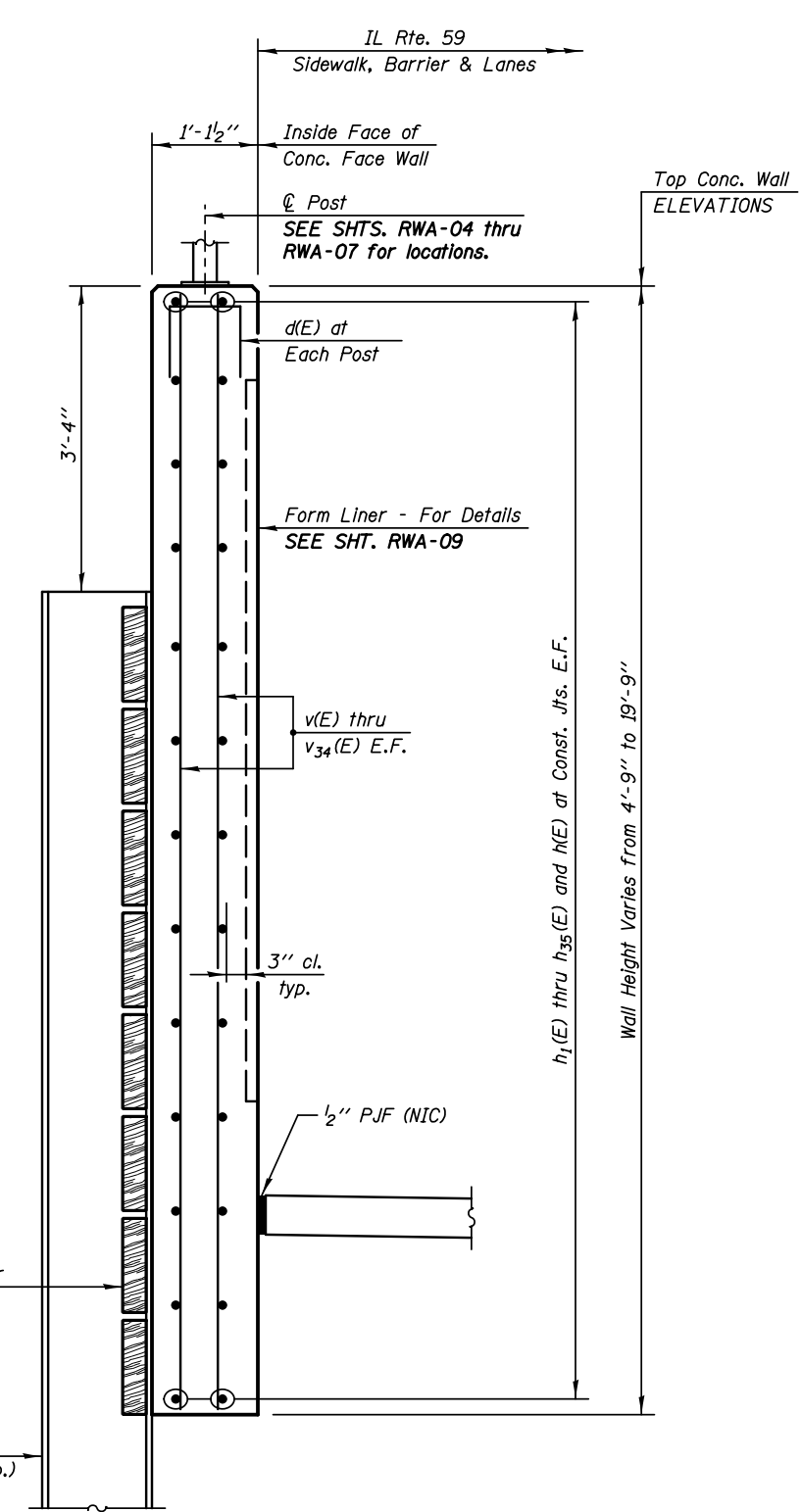


**BAR CUTTING DIAGRAM**  
Order bars full length. Cut as shown and use remainder of bars in opposite face.

BAR	A	B	C	D
v(E)	4'-5"	5'-11"	10'-4"	25
v1(E)	5'-11"	7'-5"	13'-4"	25
v2(E)	7'-5"	8'-0"	15'-5"	25
v3(E)	8'-0"	8'-8"	16'-8"	25
v4(E)	8'-8"	9'-4"	18'-0"	26
v5(E)	9'-4"	10'-0"	19'-4"	26
v6(E)	10'-0"	10'-8"	20'-8"	26
v10(E)	10'-8"	11'-4"	22'-0"	26
v11(E)	11'-4"	12'-0"	23'-4"	26
v12(E)	12'-0"	12'-8"	24'-8"	26
v13(E)	12'-8"	13'-5"	26'-1"	23
v14(E)	13'-5"	14'-2"	27'-7"	23
v20(E)	14'-2"	15'-0"	29'-2"	21
v21(E)	15'-0"	15'-9"	30'-9"	21
v22(E)	15'-9"	16'-7"	32'-4"	21
v23(E)	16'-7"	17'-5"	34'-0"	21
v24(E)	17'-5"	18'-1"	35'-6"	21
v31(E)	18'-6"	19'-0"	37'-6"	18
v34(E)	19'-5"	4'-5"	23'-10"	27
h34(E)	25'-8"	4'-0"	29'-8"	12

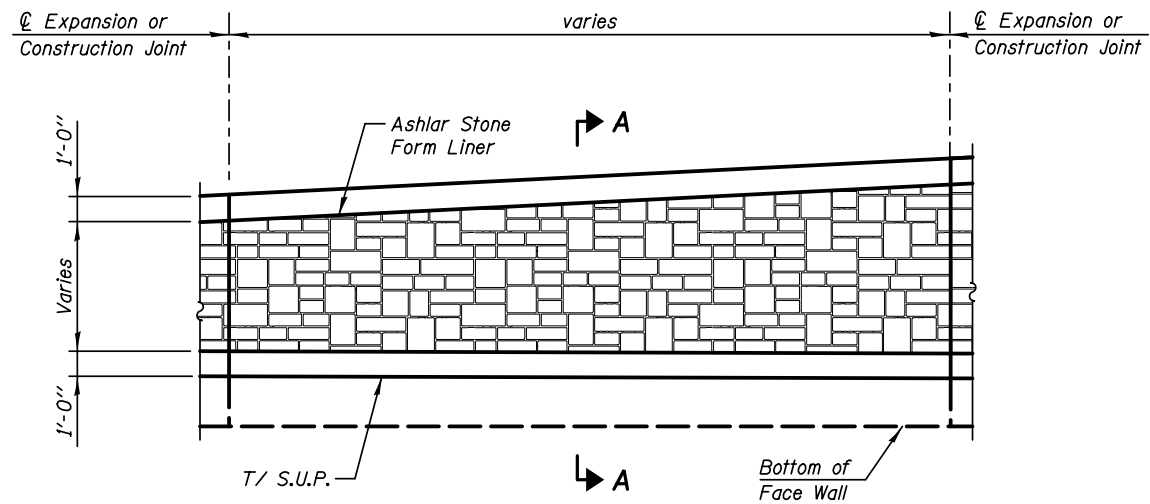


**BAR d(E)**

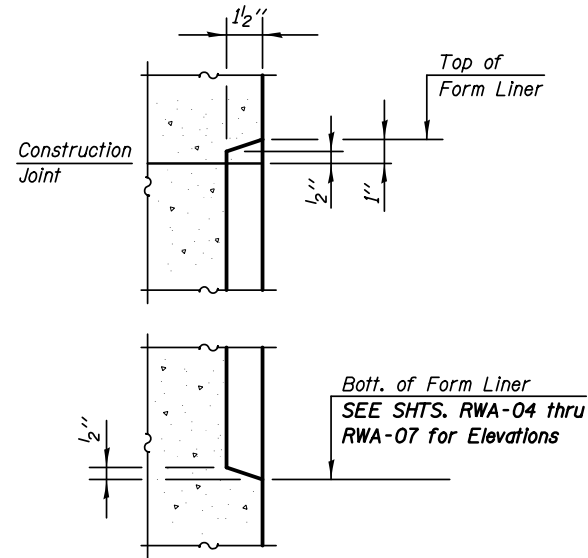


**TYPICAL WALL SECTION**

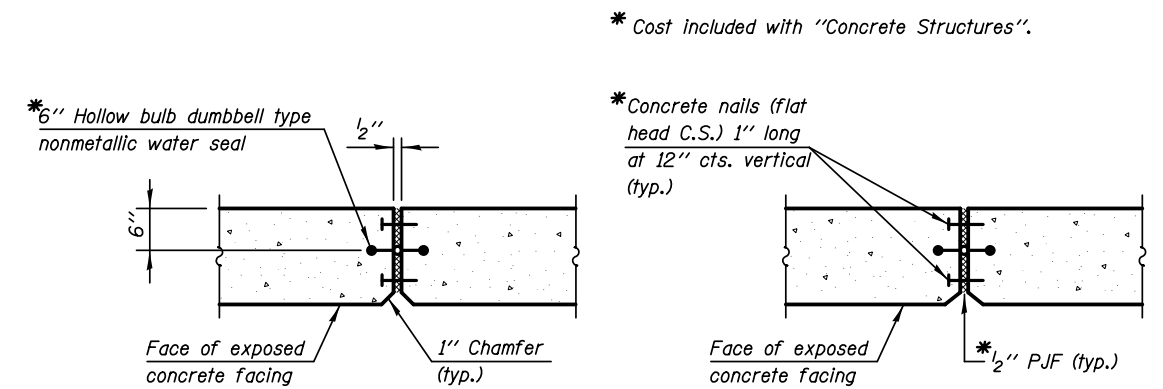
**LEGEND:**  
E.F. Each Face  
NIC Not In Contract



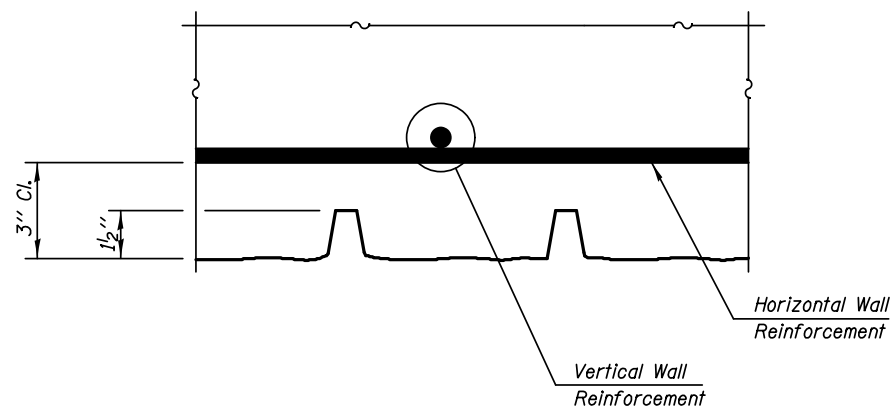
**INSIDE ELEVATION - FORM LINER**



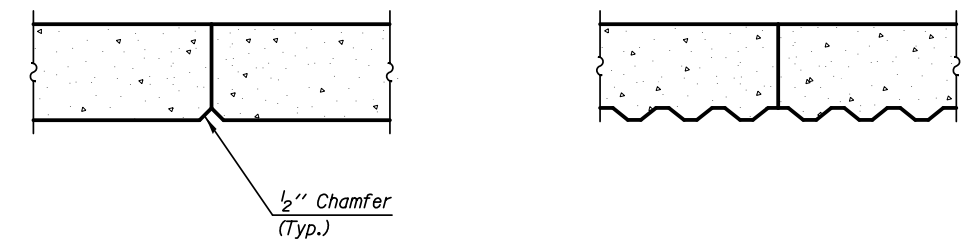
**SECTION A-A**



**WALL EXPANSION JOINT DETAIL**



**PLAN - FORM LINER**

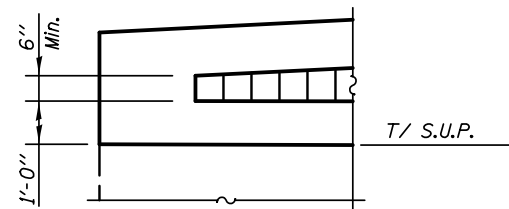


**WALL CONSTRUCTION JOINT DETAIL**

**NOTE:**  
SEE SHTS. RWA-04 thru RWA-07  
for Bottom of Form Liner Elevations

WALL #	
STATION	ELEVATION
00+00.00	El. 00.00

WALL #	
STATION	ELEVATION
00+00.00	El. 00.00



**END FORM LINER DETAIL**

**LEGEND**  
S.U.P. Shared Use Path

**KNIGHT**  
Engineers & Architects

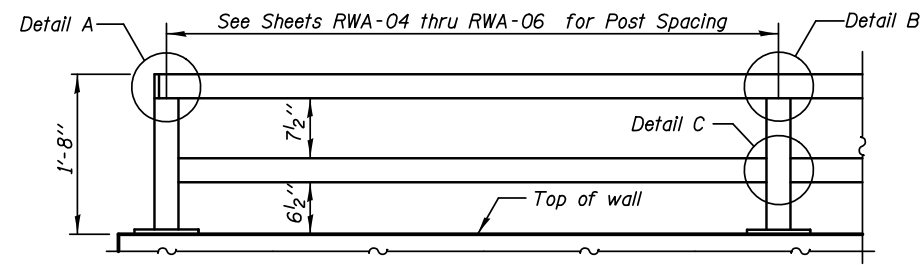
DESIGNED - TB	REVISED - 4/2/2012
CHECKED - WPM	REVISED -
DRAWN - TB	REVISED -
CHECKED - WPM	REVISED -

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

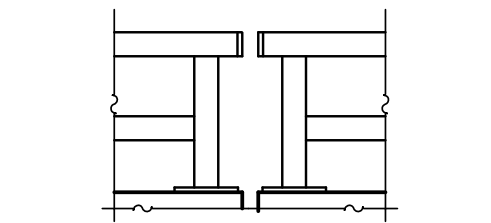
**ARCHITECTURAL FINISH AND JOINT DETAILS**  
**STRUCTURE NUMBER 022-W045**

SHEET NO. RWA-09 OF 13 SHEETS

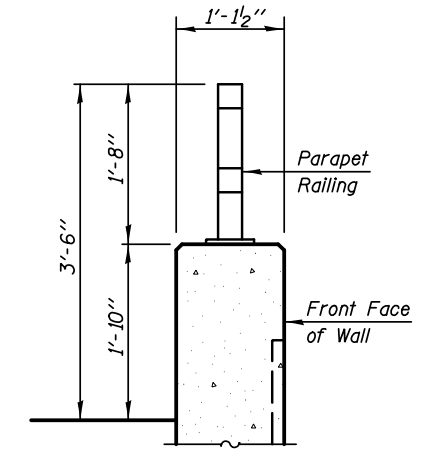
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	59
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	



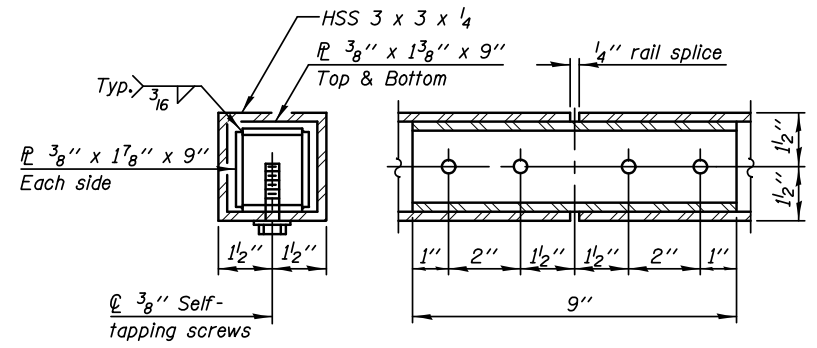
**PARAPET RAILING  
ELEVATION**



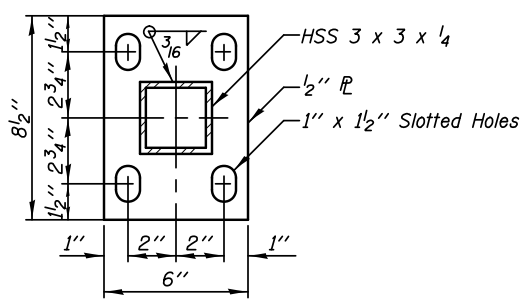
**PARAPET RAILING  
ELEVATION AT EXPANSION JOINT**



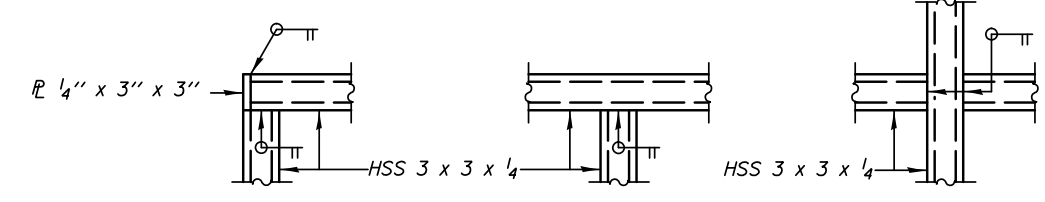
**SECTION THRU WALL**



**RAIL SPLICE**



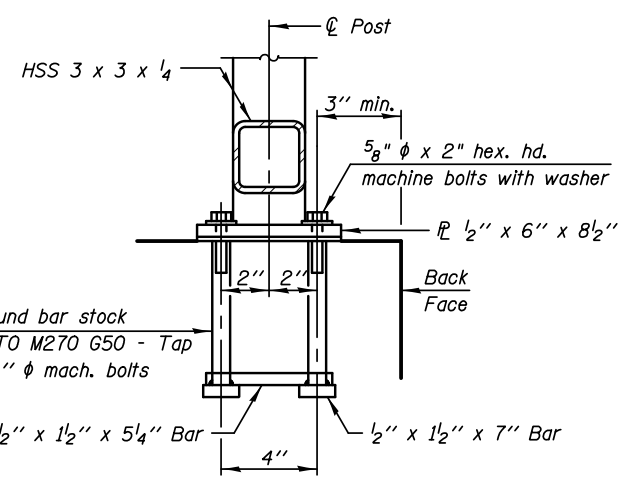
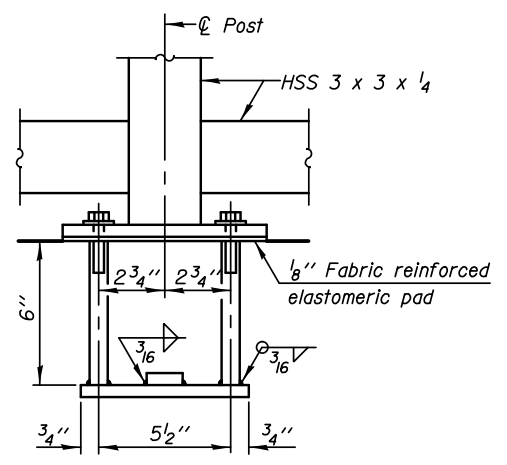
**BASE PLATE**



**DETAIL A**

**DETAIL B**

**DETAIL C**



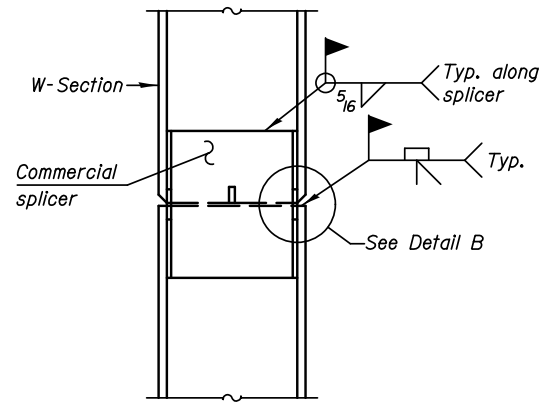
**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8"  $\phi$  anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

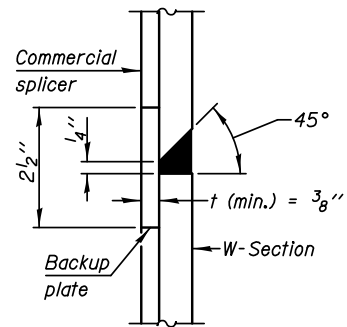
**Notes:**  
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**BILL OF MATERIAL**

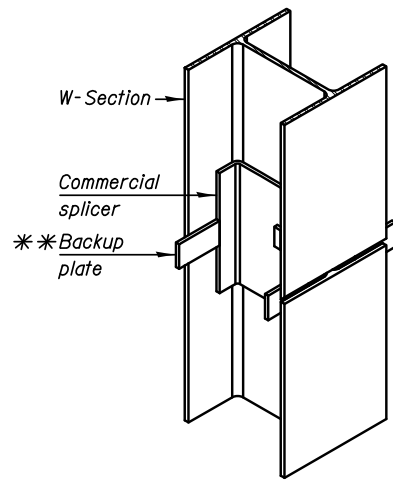
Item	Unit	Quantity
Parapet Railing	Foot	344.0



**ELEVATION**

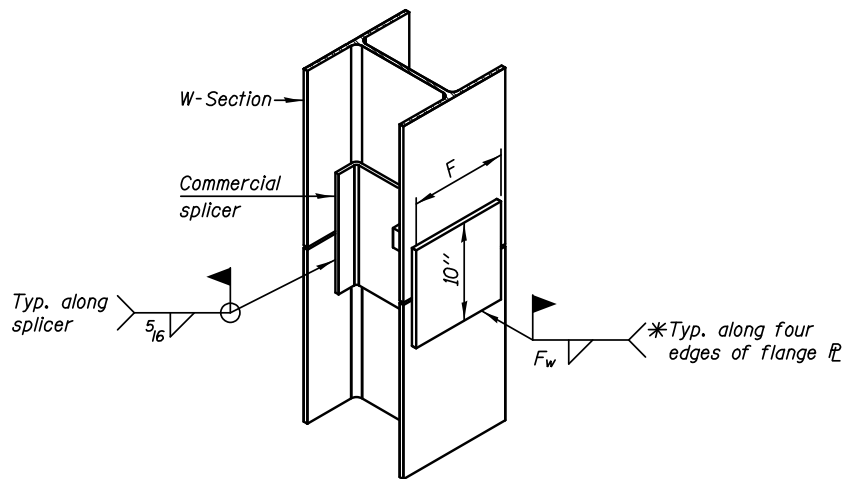


**DETAIL B**



**ISOMETRIC VIEW**

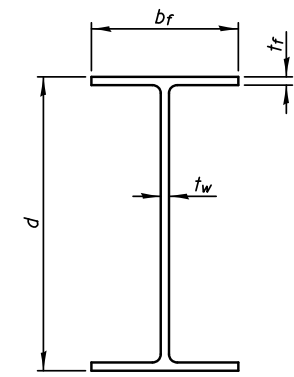
**WELDED COMMERCIAL SPLICE**



**ISOMETRIC VIEW**

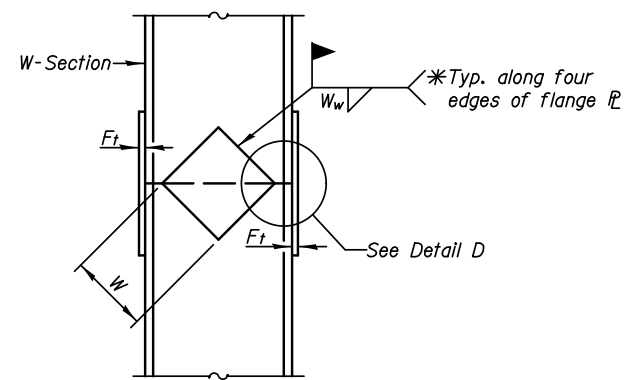
**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

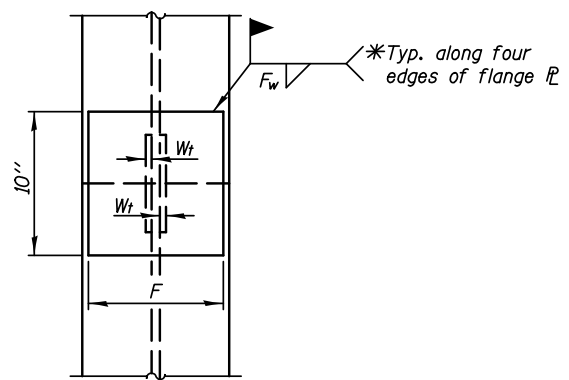


**STEEL PILE**

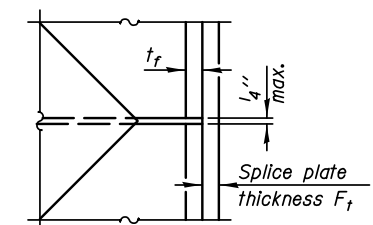
Designation	Depth d	Flange width bf	Flange thickness tf	Web thickness tw	Encasement diameter A
W24x131	24 1/2"	12 7/8"	1 5/16"	5/16"	36"
x146	24 3/4"	12 7/8"	1 1/16"	5/16"	36"



**ELEVATION**



**END VIEW**



**DETAIL D**

Designation	F	Ft	Fw	W	Wt	Ww
W24x131	11"	1 1/4"	1 1/8"	15"	1/2"	3/8"
x146	11"	1 3/8"	1 1/4"	15"	1/2"	3/8"

**WELDED PLATE FIELD SPLICE**

**Notes:**  
The steel W-Section shall be according to AASHTO M270 Grade 50.



Geo Services Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Arden Court, Naperville, IL 60565 (630) 353-2266		DATE 1/5/2011				LOGGED BY RJ	
ROUTE II, Route 59 (FAP 338)		DESCRIPTION Illinois Route 59-Aurora Avenue/New York Street To Ferry Road				GSI JOB No. 09173	
SECTION (112 & 113) WRS-5		LOCATION SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township				COUNTY DuPage	
DRILLING METHOD Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. 022-W045	
Station: 3959+41 to 3964+17		Surface Water Elev. n/a				Stream Bed Elev. n/a	
BORING NO. RW-07		Groundwater Elevation:				First Encounter Dry	
Station: 3959+50 IL RTE-59		Upon Completion Dry				After Hrs. Dry	
Offset: 72.5' Left		Ground Surface Elev. 697.4					
DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)	DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)
0	AS	-	1	0	AS	-	1
9			92	9			105
5				3			
4	2.75B	25		4	1.2B	22	
693.4			112	2			108
5				3			
6	4.1B	16		11	1.6B	21	
CLAY-gray-stiff to very stiff (A-6)				25			
4			119	7			
4				8			
6	6.4B	15		8	2.25P	18	
CLAY-brown & gray-hard (A-6)				4			102
8				4			
10				6			
12			17	6	2.4B	23	
686.9				30			
4			116				
5							
9	2.3B	16					
CLAY-gray-stiff to very stiff (A-6)							
2			115	5			104
4				6			
15	2.5B	16		35	2.2B	23	
682.4							
3			117				
4							
7	3.0B	15					
CLAY-gray-stiff to very stiff (A-6)							
2			110				
4							
7							
20	2.2B	20					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer, (ST)-Shelby Tube Sample, (VS)-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

Geo Services Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Arden Court, Naperville, IL 60565 (630) 353-2266		DATE 1/5/2011				LOGGED BY RJ	
ROUTE II, Route 59 (FAP 338)		DESCRIPTION Illinois Route 59-Aurora Avenue/New York Street To Ferry Road				GSI JOB No. 09173	
SECTION (112 & 113) WRS-5		LOCATION SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township				COUNTY DuPage	
DRILLING METHOD Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. 022-W045	
Station: 3959+41 to 3964+17		Surface Water Elev. n/a				Stream Bed Elev. n/a	
BORING NO. RW-08		Groundwater Elevation:				First Encounter 686.6	
Station: 3960+30 IL RTE-59		Upon Completion 687.6				After Hrs. Dry	
Offset: 70.0' Left		Ground Surface Elev. 697.6					
DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)	DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)
0	AS	-	17	0	AS	-	17
3				3			107
6				5			
7	4.5P	12		7	1.5B	21	
CLAY LOAM-dark brown & gray-stiff to hard (A-6) Fill				3			107
3				2			109
4				3			
5	1.3B	20		5	1.3B	20	
692.1				25			
6				3			113
6				5			
6	3.0P	15		7	2.2B	18	
CLAY-brown & gray-very stiff (A-6)				669.6			
4			118				
4				18			
4				8			
10	3.4B	16		8	4.5P	20	
686.6				30			
3							
6							
7	3.0P	17					
684.6							
4				8			118
8				10			
15	NP	16		13	3.4B	16	
682.1				35			
3							
6							
7	NP	10					
679.6							
2							
5							
8	2.8B	19					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer, (ST)-Shelby Tube Sample, (VS)-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

Geo Services Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Arden Court, Naperville, IL 60565 (630) 353-2266		DATE 1/5/2011				LOGGED BY RJ	
ROUTE II, Route 59 (FAP 338)		DESCRIPTION Illinois Route 59-Aurora Avenue/New York Street To Ferry Road				GSI JOB No. 09173	
SECTION (112 & 113) WRS-5		LOCATION SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township				COUNTY DuPage	
DRILLING METHOD Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. 022-W045	
Station: 3959+41 to 3964+17		Surface Water Elev. n/a				Stream Bed Elev. n/a	
BORING NO. RW-09		Groundwater Elevation:				First Encounter 669.1	
Station: 3961+12 IL RTE-59		Upon Completion 669.6				After Hrs. Dry	
Offset: 65.0' Left		Ground Surface Elev. 697.1					
DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)	DEPTH (ft)	LOG (ft)	UCS (tsf)	MOIST (%)
0	AS	-	14	0	AS	-	14
4			117	4			113
5				6			
6	3.0B	15		9	2.75B	17	
CLAY LOAM-brown & gray-stiff to very stiff (A-6) Fill				3			116
3				4			114
3				5			
6	1.3B	17		5	3.6B	18	
691.1				25			
3			117	3			108
4				5			
6	5.8B	16		8	1.9B	21	
CLAY-brown & gray-very stiff to hard (A-6)				669.1			
3							
5							
10	3.0P	17					
10			17				
30							
684.1							
3			116				
5							
8	3.1B	17					
684.1							
4			115				
50/3							
15	2.25B	16		35	NP	11	
682.1							
5			116				
5							
10	4.5B	17					
CLAY-gray-stiff to very stiff (A-6)							
4			114				
7							
20	2.5B	16					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer, (ST)-Shelby Tube Sample, (VS)-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

Geo Services Inc. Geotechnical, Environmental & Civil Engineering 805 Arden Court, Suite 204 Naperville, Illinois 60565 (630) 353-2266		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>Il. Route 59 (FAP 338)</u>		DESCRIPTION <u>Illinois Route 59-Aurora Avenue/New York Street To Ferry Road</u>				DATE <u>1/5/2011</u>			
SECTION <u>(112 &amp; 113) WRS-5</u>		LOCATION <u>SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township</u>				LOGGED BY <u>RJ</u>			
COUNTY <u>DuPage</u>		DRILLING METHOD <u>Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>022-W045</u>		Surface Water Elev. <u>n/a</u>				D E P T H S Qu T			
Station: <u>3959+41 to 3964+17</u>		Stream Bed Elev. <u>n/a</u>				B L O C S M O I S T			
BORING NO. <u>RW-10</u>		Groundwater Elevation:				D E P T H S Qu T			
Station: <u>3961+91 IL RTE-59</u>		First Encounter <u>667.0</u> ▼				D E P T H S Qu T			
Offset: <u>59.5' Left</u>		Upon Completion <u>668.0</u> ▼				B L O C S M O I S T			
Ground Surface Elev. <u>695.0</u>		After _____ Hrs. _____				D E P T H S Qu T			
SANDY TOPSOIL (Fill) <u>694.0</u>		SILTY CLAY-gray (A-4/A-6) <u>674.5</u>				D E P T H S Qu T			
AS - 31						D E P T H S Qu T			
7 113						B L O C S M O I S T			
7 11B 11		CLAY-gray-stiff to very stiff (A-6)				D E P T H S Qu T			
CLAY LOAM with Stone-dark brown & gray-stiff (A-6) Fill		7 3.0B 17				B L O C S M O I S T			
3 108						D E P T H S Qu T			
3 108						B L O C S M O I S T			
-5 5 - 16		689.5				D E P T H S Qu T			
SAND & GRAVEL-brown-medium dense (A-1)		5 108				B L O C S M O I S T			
2 NP 4		686.5				D E P T H S Qu T			
SILTY CLAY LOAM-gray-loose (A-4)		11 108				B L O C S M O I S T			
1 21		684.5				D E P T H S Qu T			
-10 6 - 21		SAND, GRAVEL & FRACTURED ROCK-gray-dense to very dense (A-1)				D E P T H S Qu T			
3 15		-30 18 NP 14				B L O C S M O I S T			
5 118						D E P T H S Qu T			
8 118						B L O C S M O I S T			
-15 8 4.6B 15		680.0 - 35				D E P T H S Qu T			
CLAY-gray-very stiff to hard (A-6)		50/5"				B L O C S M O I S T			
3 113						D E P T H S Qu T			
6 113						B L O C S M O I S T			
9 2.6B 17						D E P T H S Qu T			
677.0						B L O C S M O I S T			
SILTY CLAY-gray-medium dense (A-4/A-6)		-40				D E P T H S Qu T			
4 13						B L O C S M O I S T			
6 13						D E P T H S Qu T			
-20 6 - 13						B L O C S M O I S T			

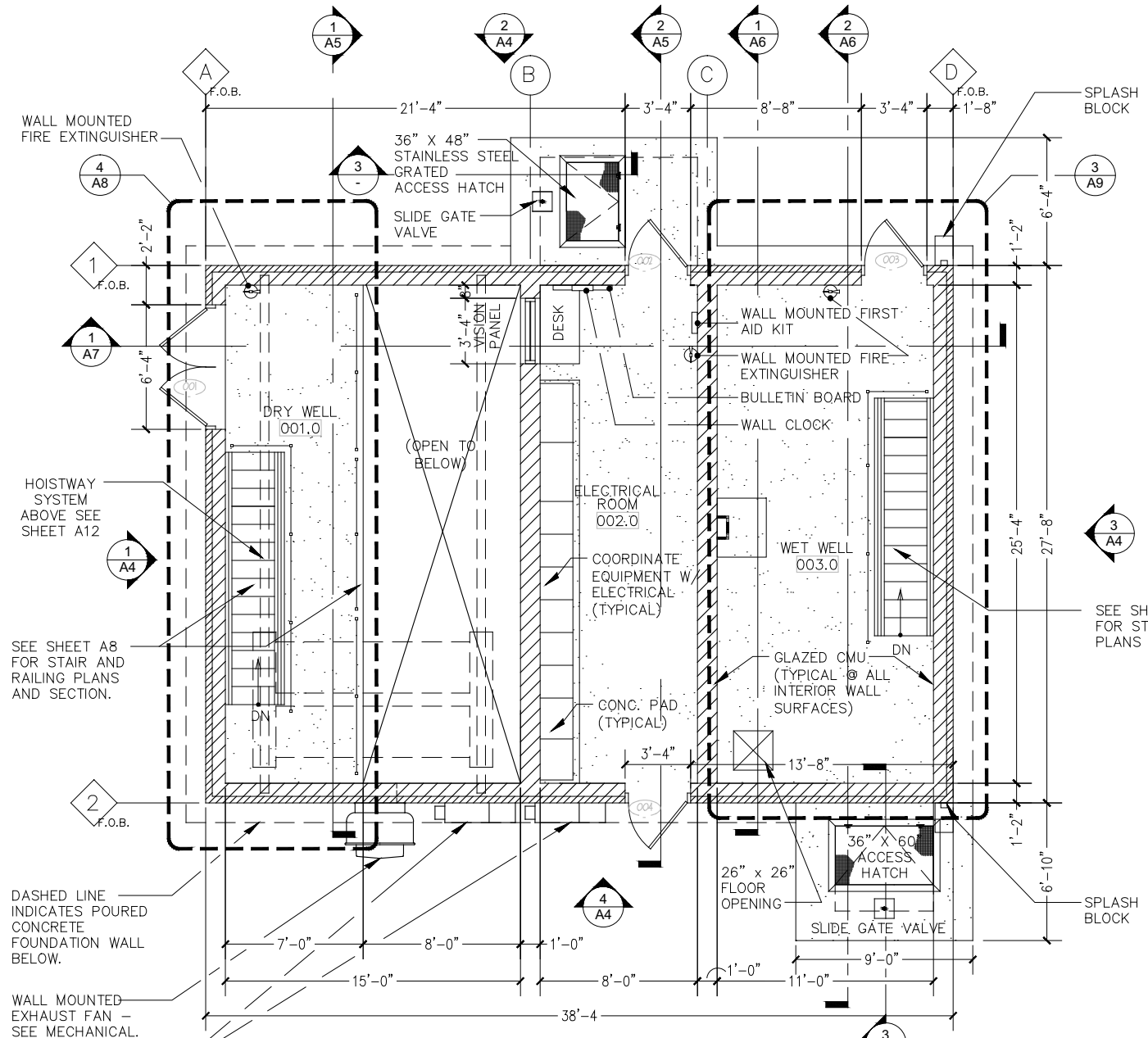
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery

Geo Services Inc. Geotechnical, Environmental & Civil Engineering 805 Arden Court, Suite 204 Naperville, Illinois 60565 (630) 353-2266		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>Il. Route 59 (FAP 338)</u>		DESCRIPTION <u>Illinois Route 59-Aurora Avenue/New York Street To Ferry Road</u>				DATE <u>1/6/2011</u>			
SECTION <u>(112 &amp; 113) WRS-5</u>		LOCATION <u>SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township</u>				LOGGED BY <u>RJ</u>			
COUNTY <u>DuPage</u>		DRILLING METHOD <u>Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>022-W045</u>		Surface Water Elev. <u>n/a</u>				D E P T H S Qu T			
Station: <u>3959+41 to 3964+17</u>		Stream Bed Elev. <u>n/a</u>				B L O C S M O I S T			
BORING NO. <u>RW-11</u>		Groundwater Elevation:				D E P T H S Qu T			
Station: <u>3962+80 IL RTE-59</u>		First Encounter <u>668.7</u> ▼				D E P T H S Qu T			
Offset: <u>48.0' Left</u>		Upon Completion <u>664.2</u> ▼				B L O C S M O I S T			
Ground Surface Elev. <u>689.7</u>		After _____ Hrs. _____				D E P T H S Qu T			
TOPSOIL-black <u>689.2</u>		CLAY-gray-very stiff (A-6) <u>668.7</u>				D E P T H S Qu T			
AS - 24						D E P T H S Qu T			
12 118						B L O C S M O I S T			
13 118						D E P T H S Qu T			
8 NP 3		SAND-gray-medium dense (A-3)				D E P T H S Qu T			
SAND & GRAVEL-brown-medium dense (A-1)		8 NP 20				B L O C S M O I S T			
686.7		666.7				D E P T H S Qu T			
CLAY-brown & gray-very stiff (A-6)		16 108				B L O C S M O I S T			
5 108						D E P T H S Qu T			
8 108						B L O C S M O I S T			
-5 8 3.5P 16		684.2				D E P T H S Qu T			
SANDY LOAM with Fractured Rock-gray-medium dense to very dense (A-2)		6 108				B L O C S M O I S T			
4 117		664.2				D E P T H S Qu T			
7 117						B L O C S M O I S T			
8 3.0B 17						D E P T H S Qu T			
3 117						B L O C S M O I S T			
8 2.2B 16						D E P T H S Qu T			
-10 8 2.2B 16		684.2				D E P T H S Qu T			
CLAY-gray-very stiff (A-6)		-30 11 - 10				B L O C S M O I S T			
4 118						D E P T H S Qu T			
7 118						B L O C S M O I S T			
8 2.7B 19						D E P T H S Qu T			
3 115						B L O C S M O I S T			
4 115						D E P T H S Qu T			
-15 6 2.75B 17		654.7 - 35				D E P T H S Qu T			
CLAY-gray-stiff to very stiff (A-6)		50/4"				B L O C S M O I S T			
3 108						D E P T H S Qu T			
5 108						B L O C S M O I S T			
7 2.0B 21						D E P T H S Qu T			
3 118						B L O C S M O I S T			
4 118						D E P T H S Qu T			
-20 6 2.2B 18						B L O C S M O I S T			

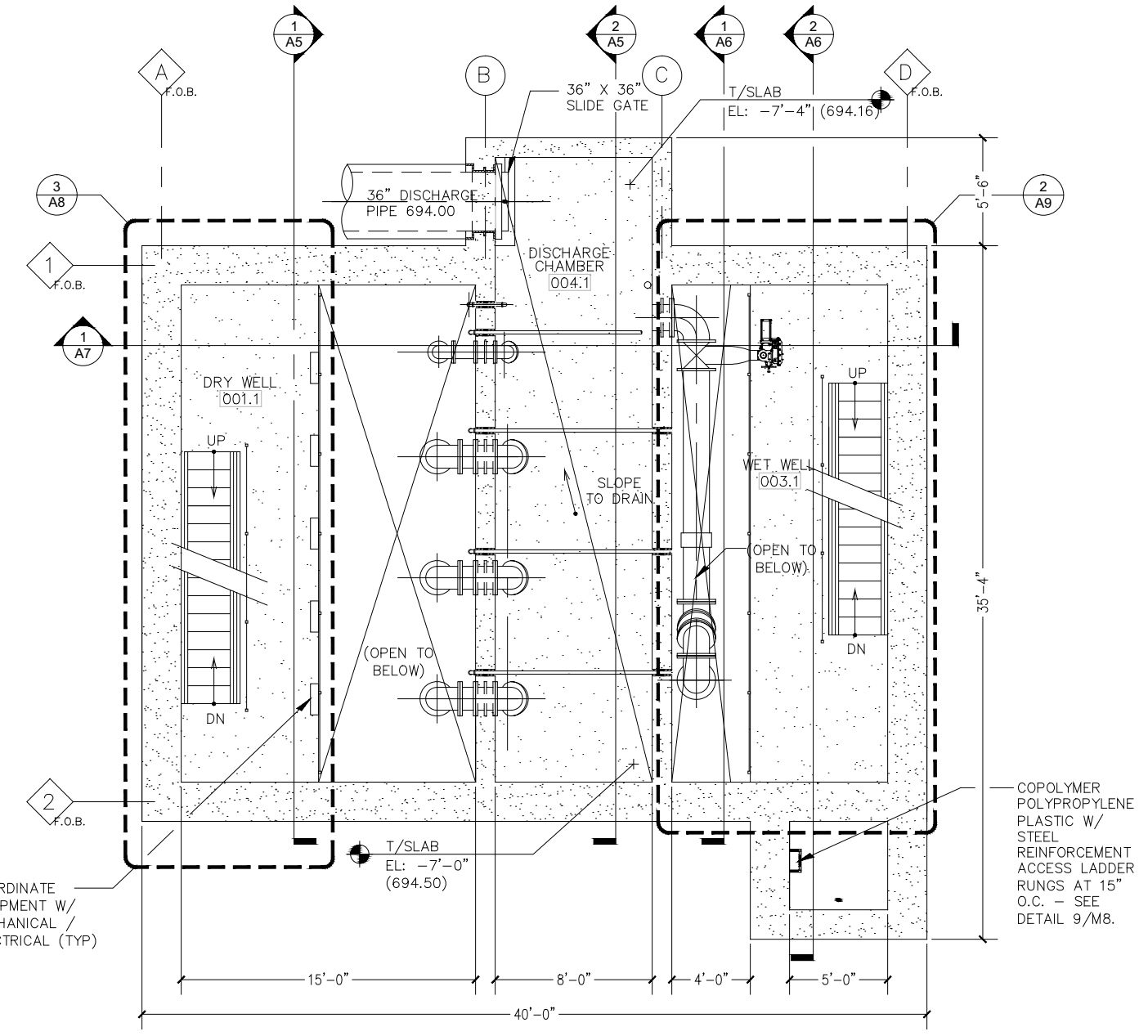
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery

Geo Services Inc. Geotechnical, Environmental & Civil Engineering 805 Arden Court, Suite 204 Naperville, Illinois 60565 (630) 353-2266		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>Il. Route 59 (FAP 338)</u>		DESCRIPTION <u>Illinois Route 59-Aurora Avenue/New York Street To Ferry Road</u>				DATE <u>1/6/2011</u>			
SECTION <u>(112 &amp; 113) WRS-5</u>		LOCATION <u>SEC. 3, 9-10, 15-16, 21-22 TWP. 38N, RNG. 9E, Naperville Township</u>				LOGGED BY <u>RJ</u>			
COUNTY <u>DuPage</u>		DRILLING METHOD <u>Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>022-W045</u>		Surface Water Elev. <u>n/a</u>				D E P T H S Qu T			
Station: <u>3959+41 to 3964+17</u>		Stream Bed Elev. <u>n/a</u>				B L O C S M O I S T			
BORING NO. <u>RW-12</u>		Groundwater Elevation:				D E P T H S Qu T			
Station: <u>3963+52 IL RTE-59</u>		First Encounter <u>663.1</u> ▼				D E P T H S Qu T			
Offset: <u>40.0' Left</u>		Upon Completion <u>674.6</u> ▼				B L O C S M O I S T			
Ground Surface Elev. <u>686.6</u>		After _____ Hrs. _____				D E P T H S Qu T			
TOPSOIL-black <u>686.1</u>		CLAY-gray-stiff to very stiff (A-6) <u>663.1</u>				D E P T H S Qu T			
AS - 20						D E P T H S Qu T			
12 118						B L O C S M O I S T			
12 118						D E P T H S Qu T			
5 NP 5		SAND-gray-medium dense (A-1)				D E P T H S Qu T			
SAND & GRAVEL-brown-medium dense (A-1)		5 NP 23				B L O C S M O I S T			
686.6		663.1				D E P T H S Qu T			
CLAY LOAM-gray-hard (A-6)		3 108				B L O C S M O I S T			
6 108						D E P T H S Qu T			
9 4.5P 14		681.1				D E P T H S Qu T			
-5 9 4.5P 14						B L O C S M O I S T			
SANDY LOAM with Fractured Rock-gray-very dense (A-2)		45 108				D E P T H S Qu T			
8 108						B L O C S M O I S T			
8 4.5P 13						D E P T H S Qu T			
678.6						B L O C S M O I S T			
SILTY CLAY LOAM-gray-very stiff (A-4/A-6)		16 108				D E P T H S Qu T			
5 108						B L O C S M O I S T			
8 3.25P 14		676.1				D E P T H S Qu T			
-10 8 3.25P 14						B L O C S M O I S T			
3 113						D E P T H S Qu T			
6 113						B L O C S M O I S T			
9 3.5B 18		653.6				D E P T H S Qu T			
CLAY-gray-stiff to very stiff (A-6)		50/4"				B L O C S M O I S T			
3 118						D E P T H S Qu T			
4 118						B L O C S M O I S T			
-15 7 2.8B 17		651.6 - 35				D E P T H S Qu T			
CLAY-gray-stiff to very stiff (A-6)		50/4"				B L O C S M O I S T			
4 108						D E P T H S Qu T			
5 108						B L O C S M O I S T			
8 1.9B 21						D E P T H S Qu T			
4 111						B L O C S M O I S T			
5 111						D E P T H S Qu T			
-20 7 2.6B 19						B L O C S M O I S T			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%) NR-No Recovery

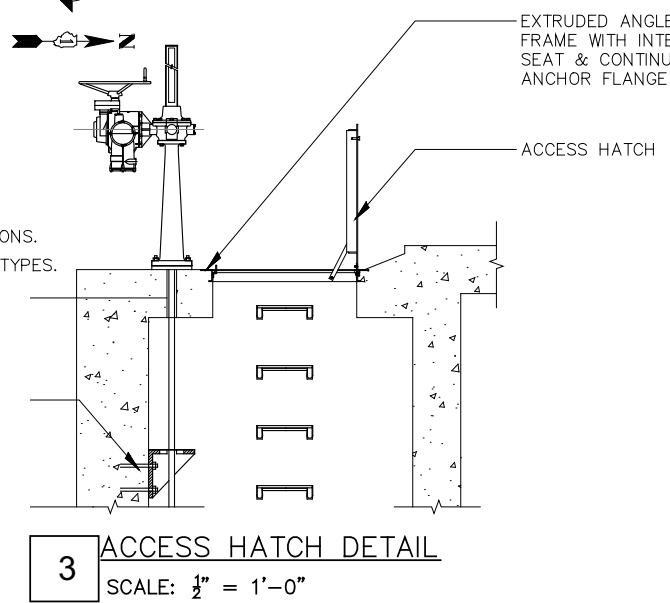


**1** GROUND FLOOR PLAN - EL: 701.50  
SCALE: 1/4" = 1'-0"

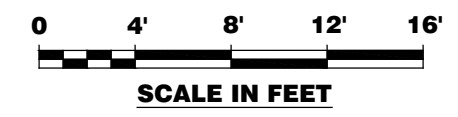


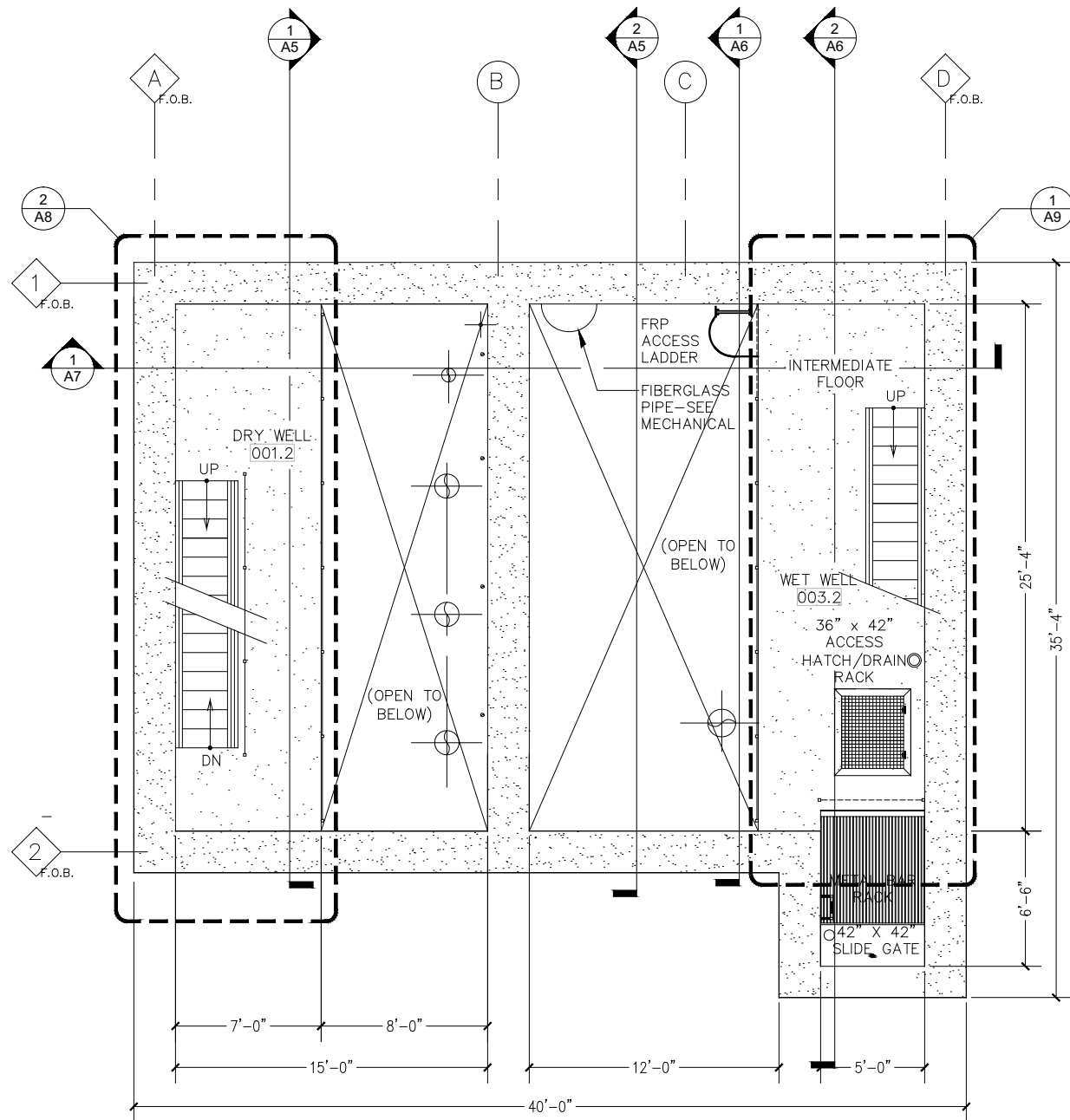
**2** INTERMEDIATE FLOOR PLAN (-1) - EL: 692.75  
- DISCHARGE EL: 694.00 HP  
SCALE: 1/4" = 1'-0"

- NOTES:
- SEE SHEET A3 FOR CLERESTORY WINDOW AND LOUVER LOCATIONS AND DIMENSIONS.
  - SEE SHEET E5 FOR REFLECTED CEILING PLANS & LIGHT FIXTURE LOCATIONS & TYPES.

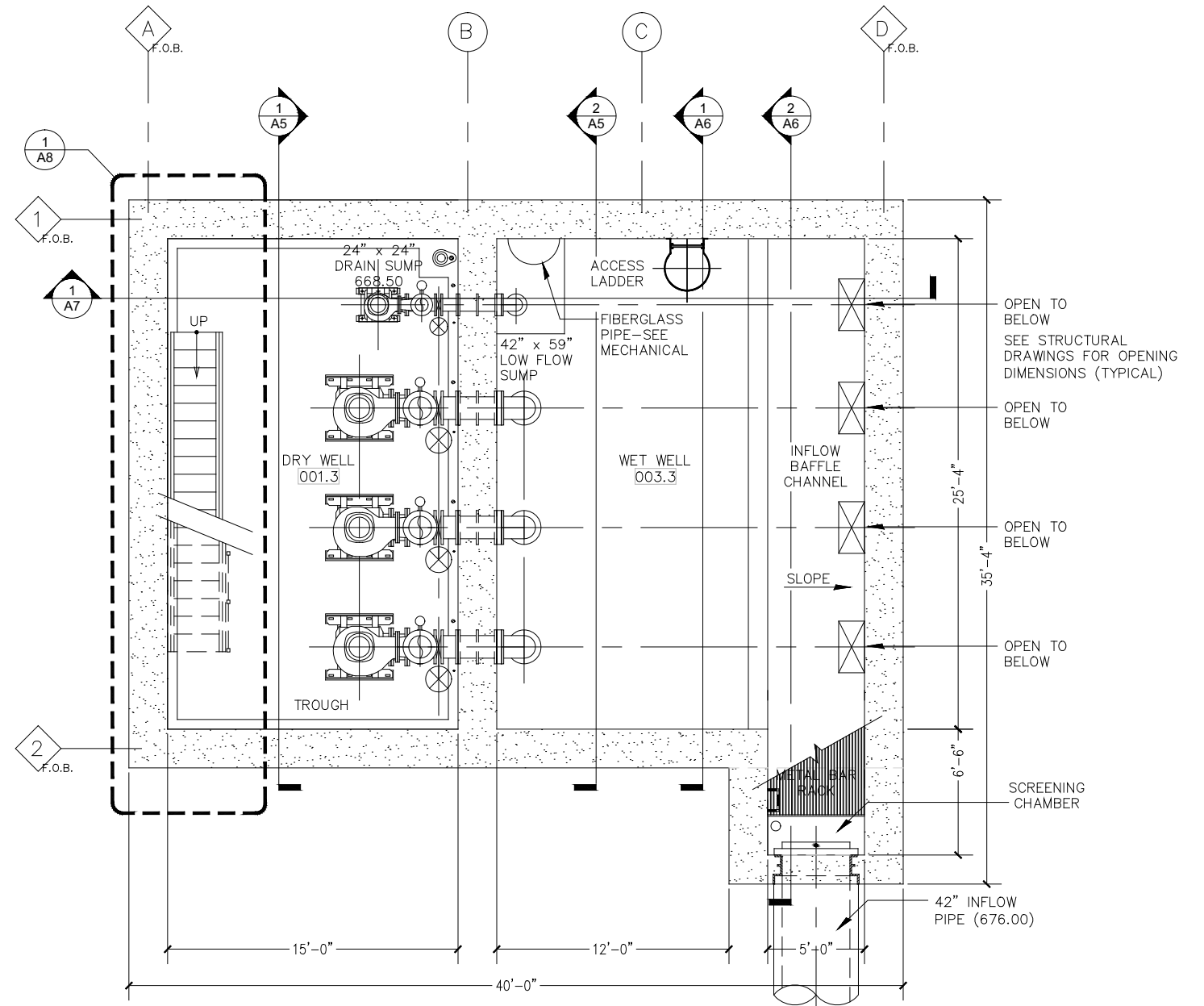


**3** ACCESS HATCH DETAIL  
SCALE: 1/2" = 1'-0"

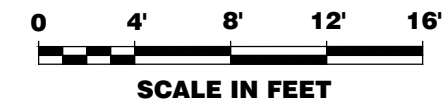




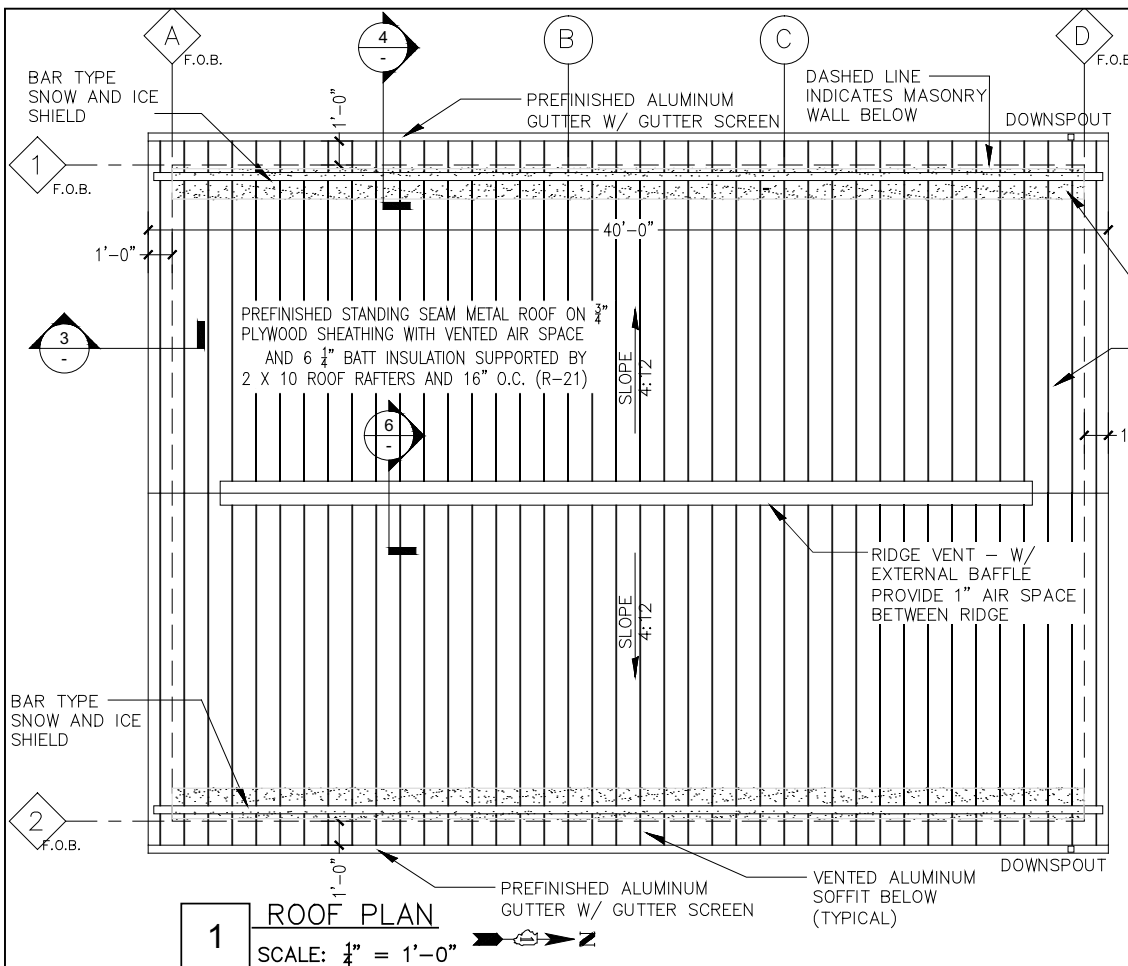
**1** INTERMEDIATE FLOOR PLAN (-2) - EL: 684.00  
SCALE: 1/4" = 1'-0"



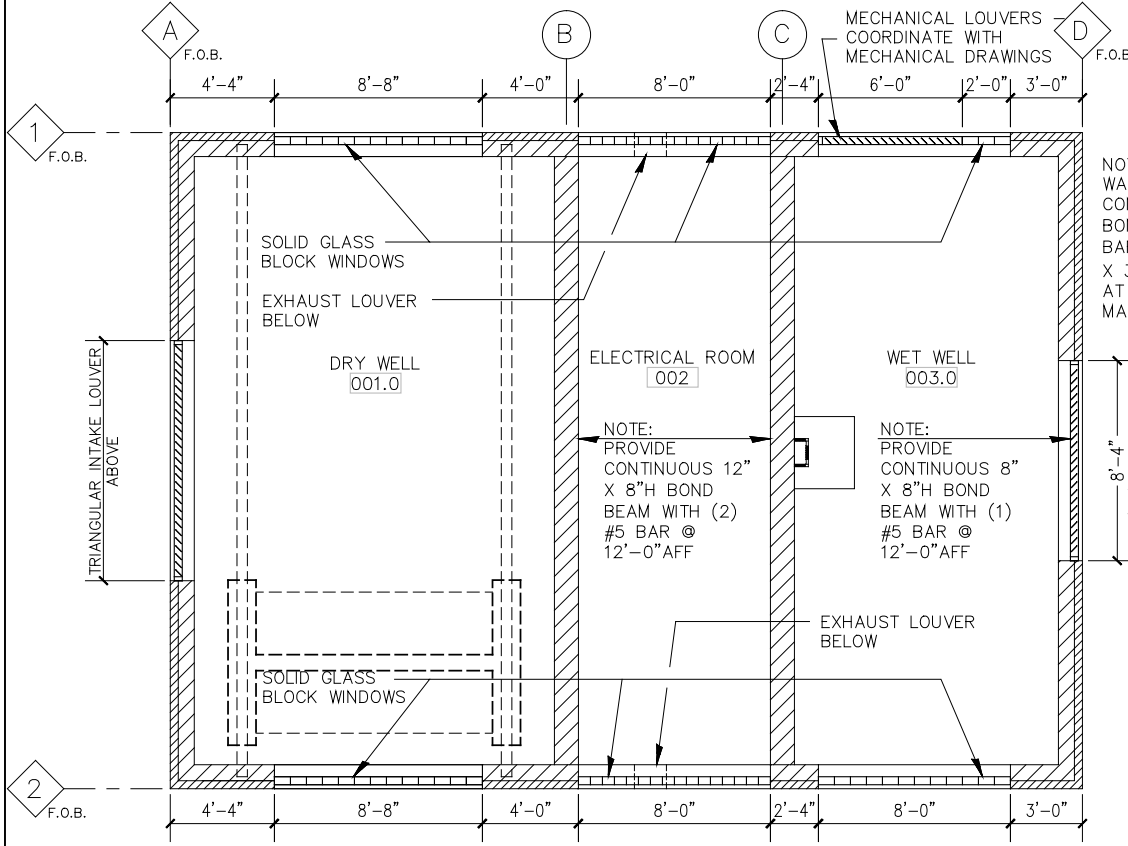
**2** WELL LEVEL FLOOR PLAN (-3) - DRY EL: 673.00  
- WET EL: 671.50  
SCALE: 1/4" = 1'-0"



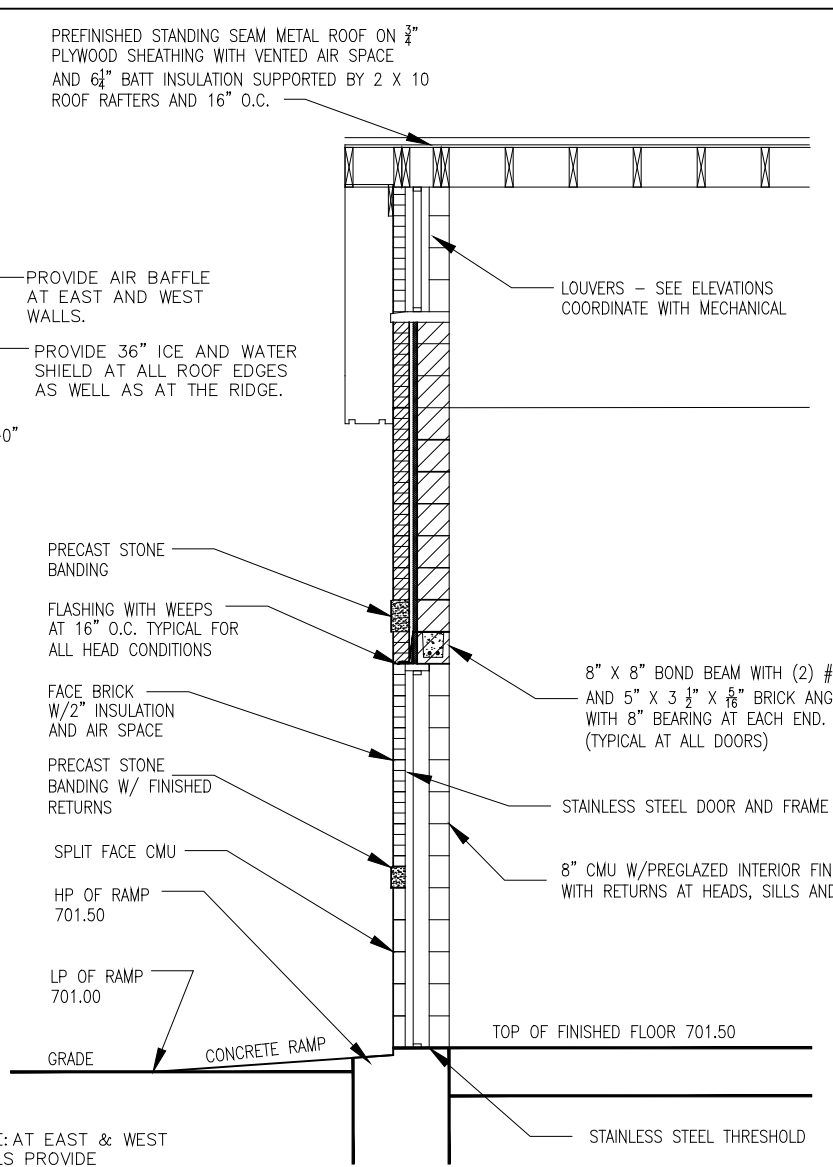
A2



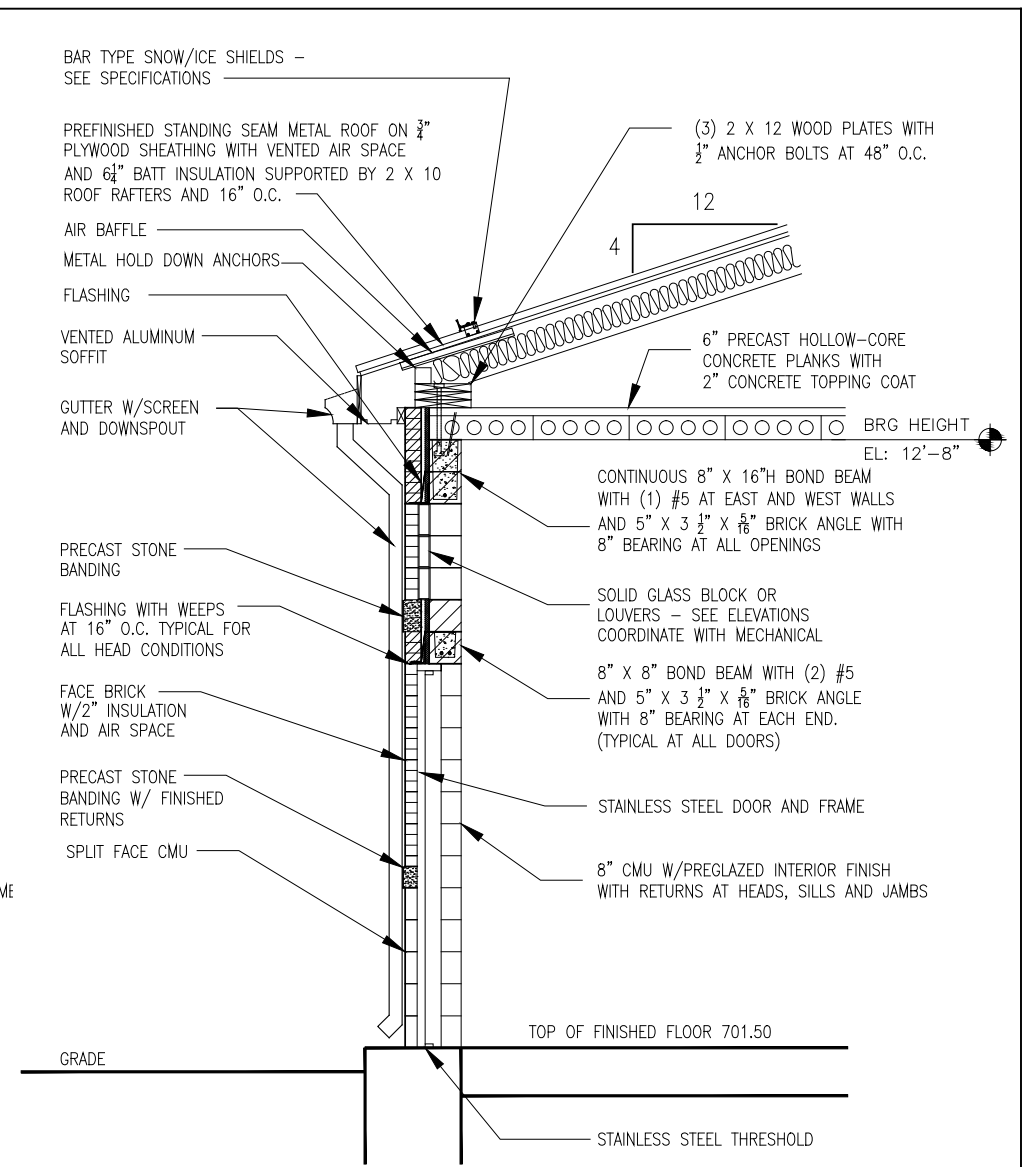
**1 ROOF PLAN**  
SCALE: 1/4" = 1'-0"



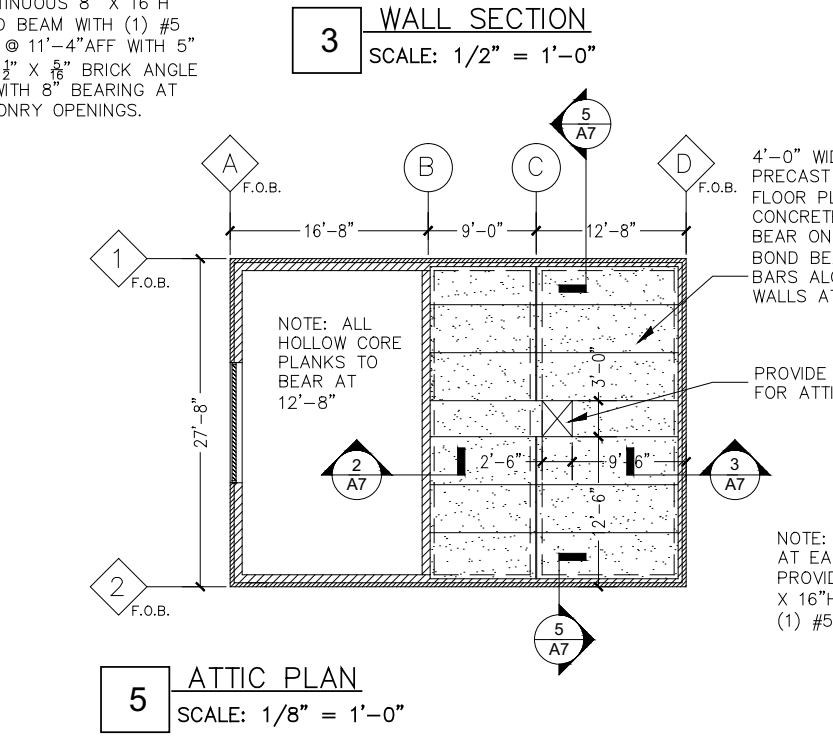
**2 CLERESTORY PLAN**  
SCALE: 1/4" = 1'-0"



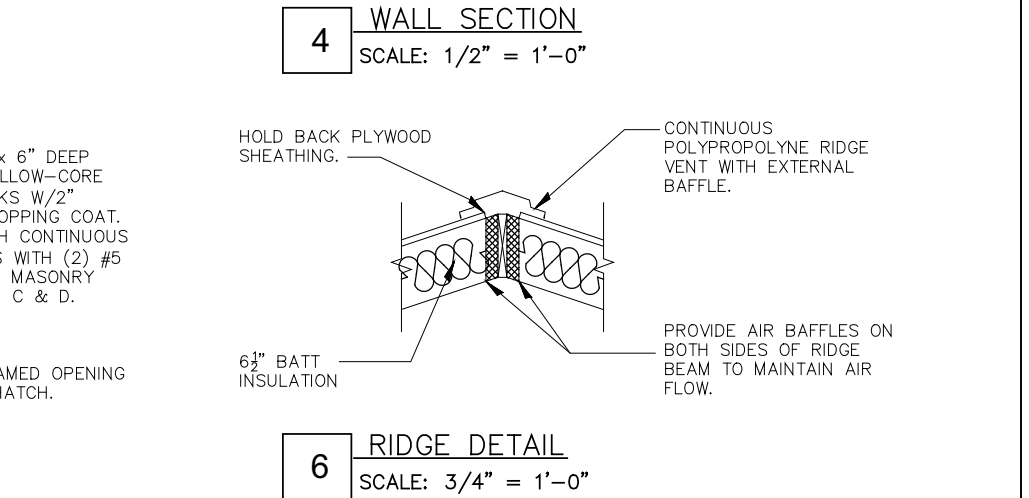
**3 WALL SECTION**  
SCALE: 1/2" = 1'-0"



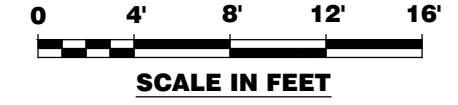
**4 WALL SECTION**  
SCALE: 1/2" = 1'-0"



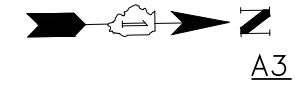
**5 ATTIC PLAN**  
SCALE: 1/8" = 1'-0"



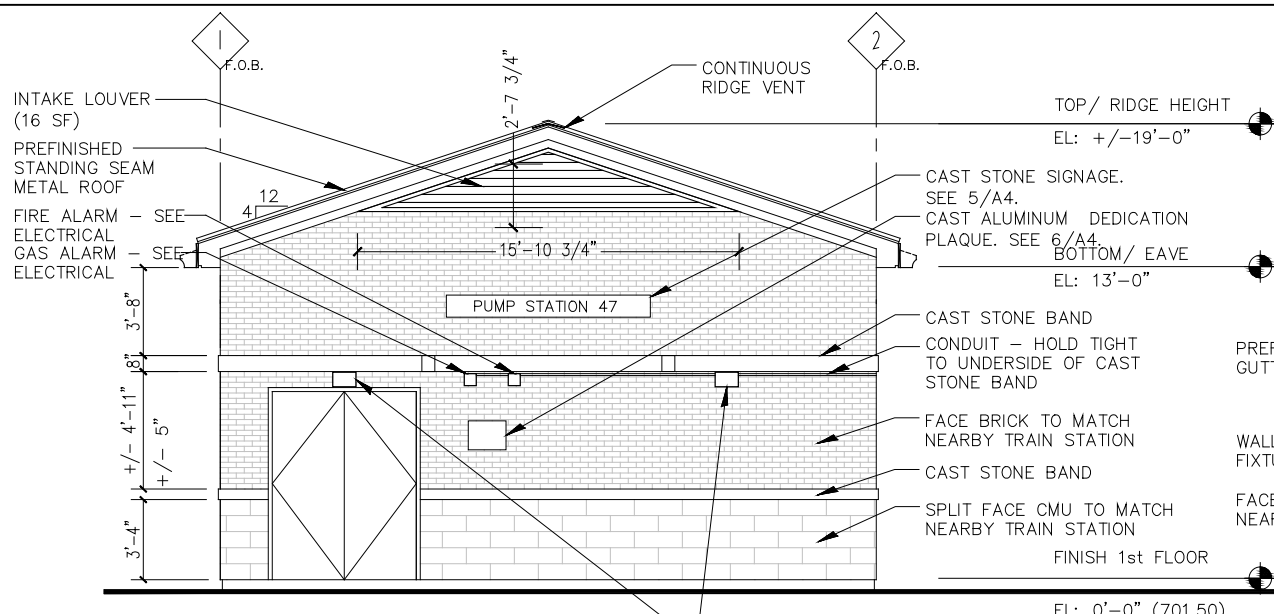
**6 RIDGE DETAIL**  
SCALE: 3/4" = 1'-0"



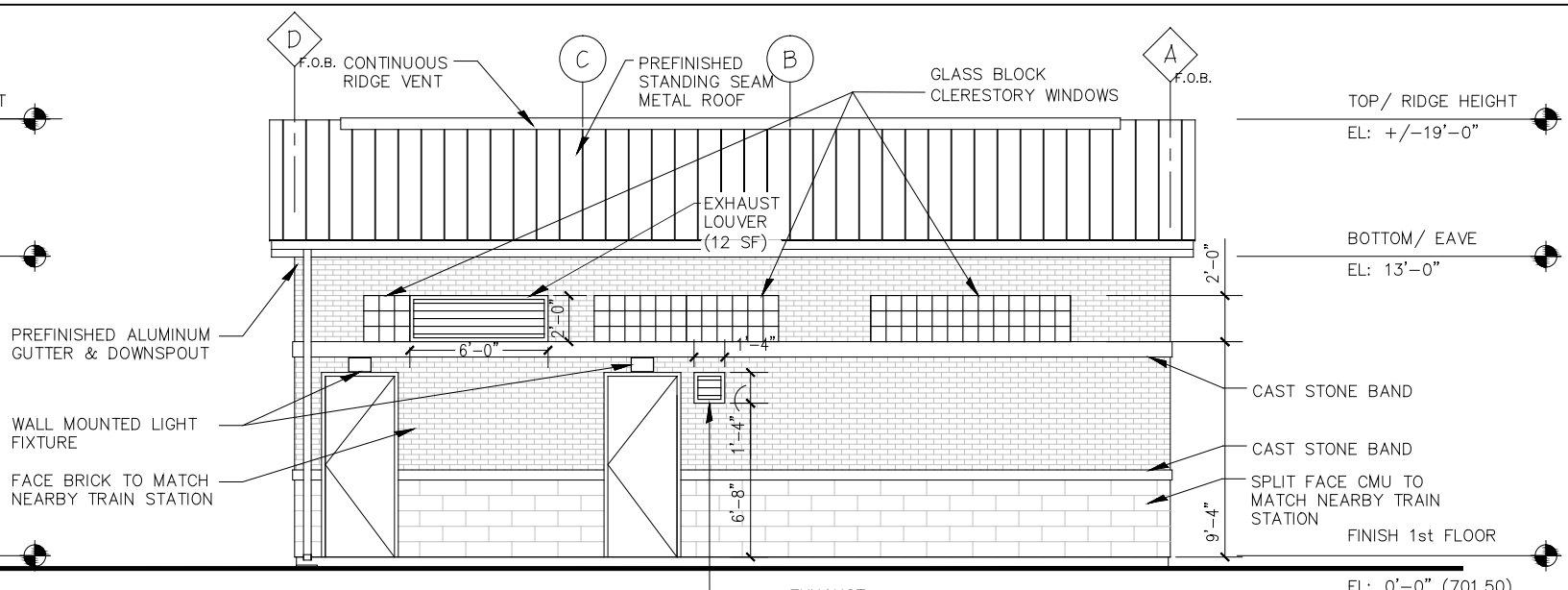
SCALE IN FEET



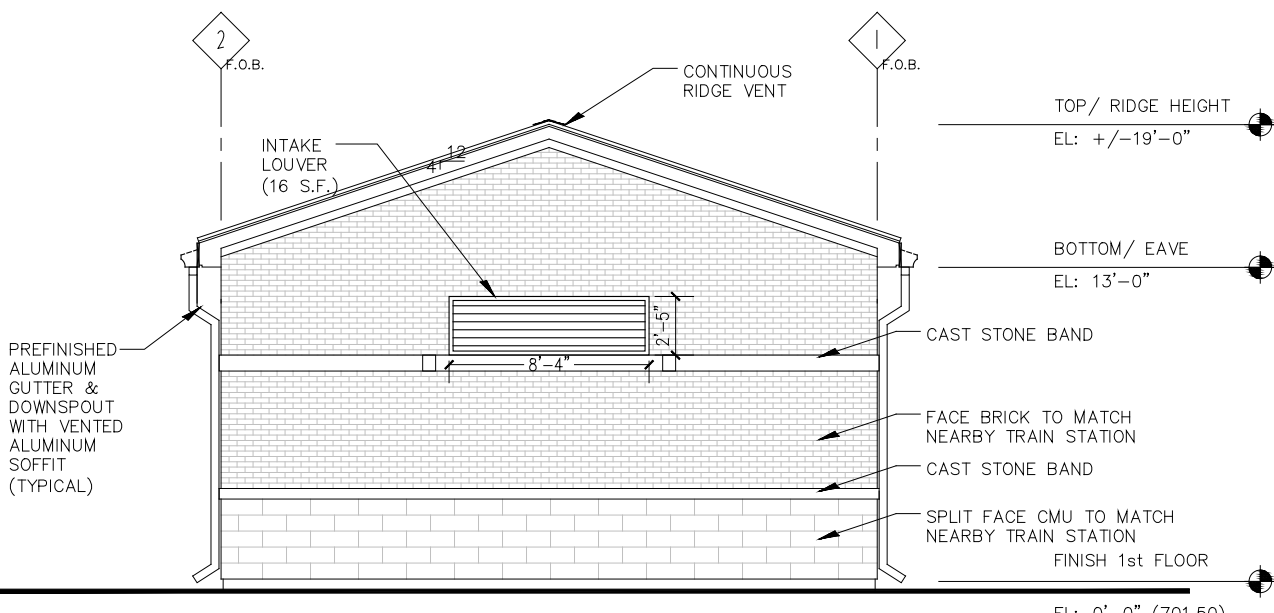
A3



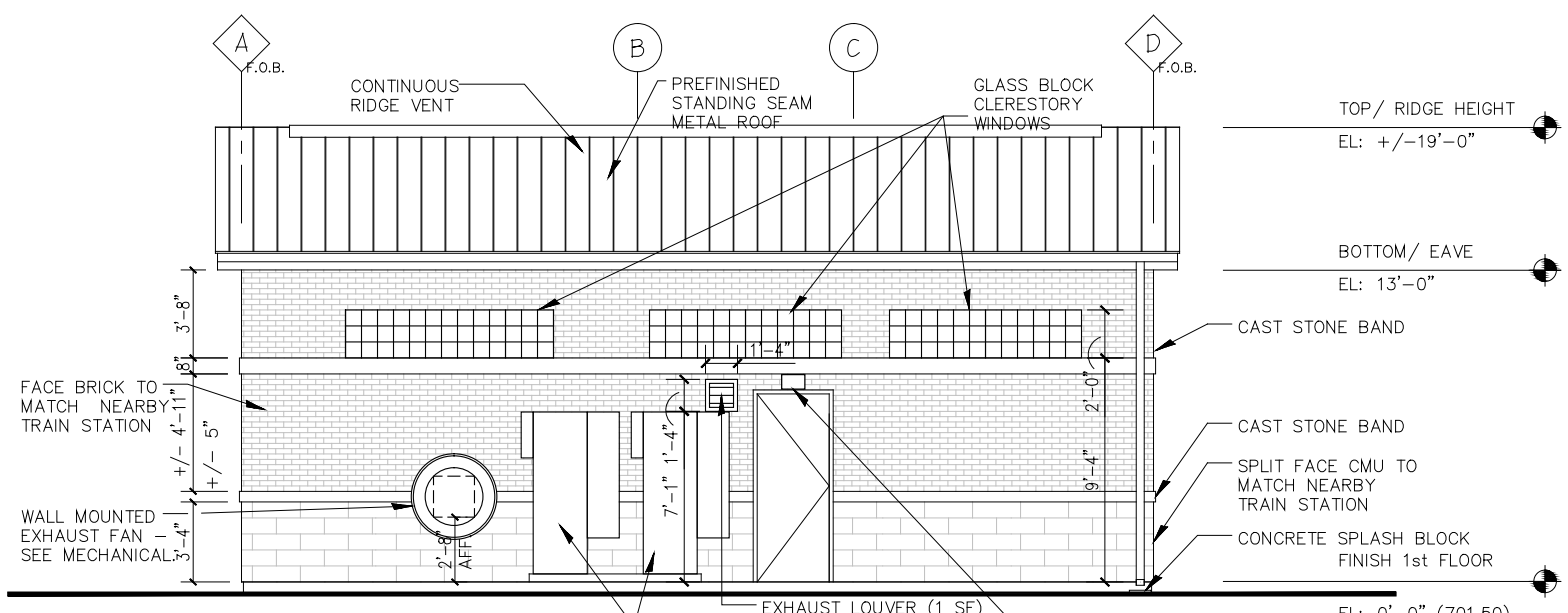
**1 SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



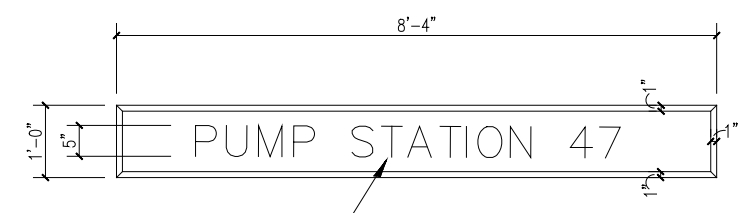
**2 WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



**3 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"

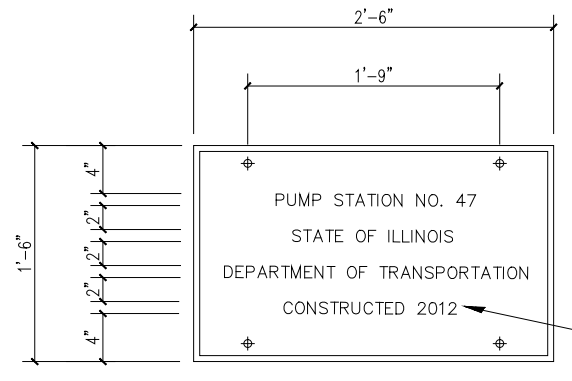


**4 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



CAST STONE SIGNAGE PANEL WITH ENGRAVED LETTERS AND NUMBERS CONFIRM FONT WITH OWNER PRIOR TO FABRICATION.

**5 CAST STONE SIGNAGE**  
SCALE: 3/4" = 1'-0"

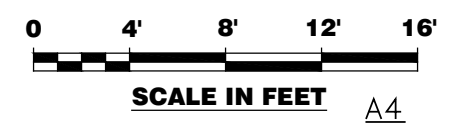


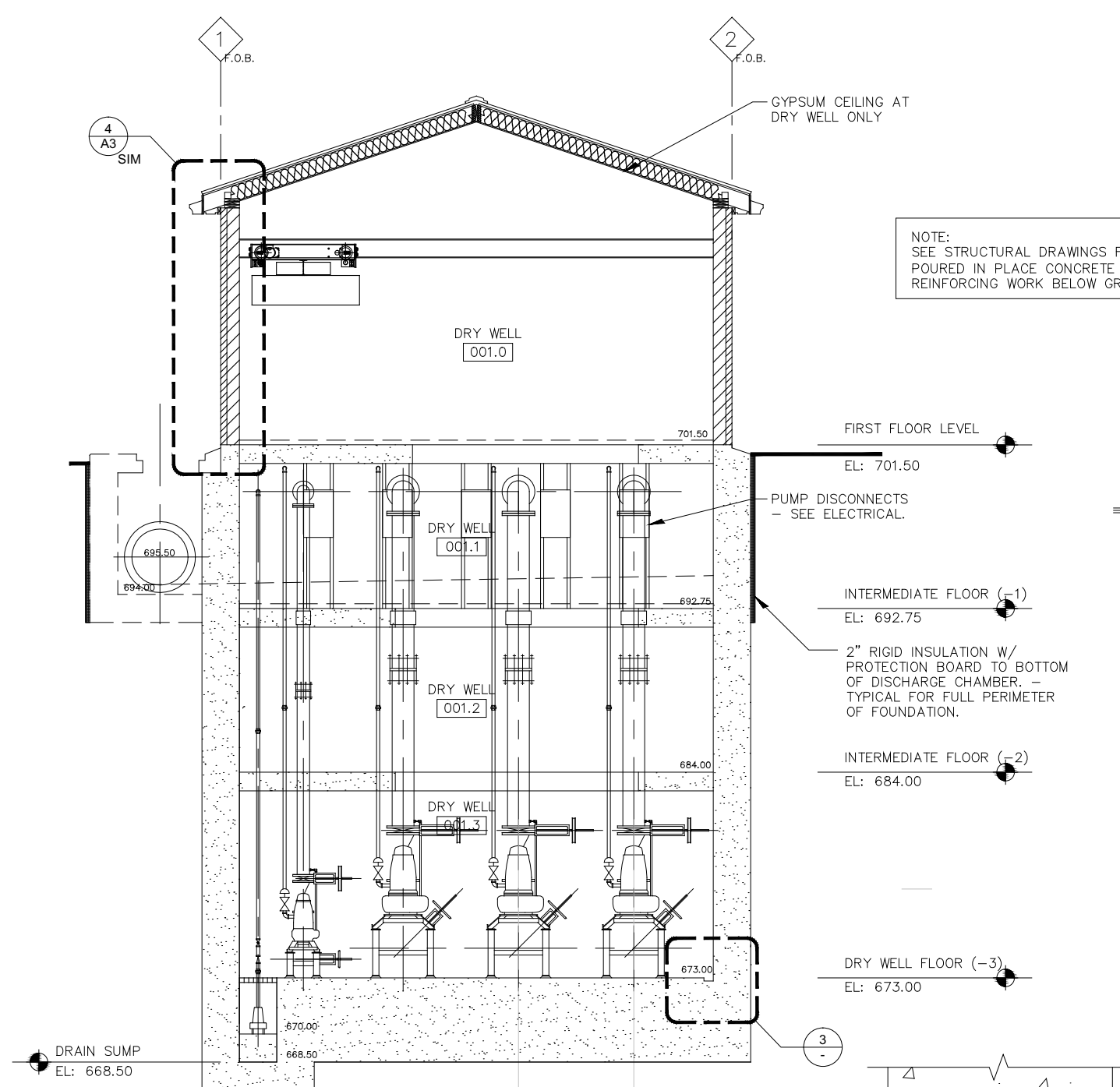
NOTE: VERIFY MOUNTING LOCATION AND HEIGHT WITH THE OWNER.

COORDINATE FINAL YEAR WITH THE OWNER

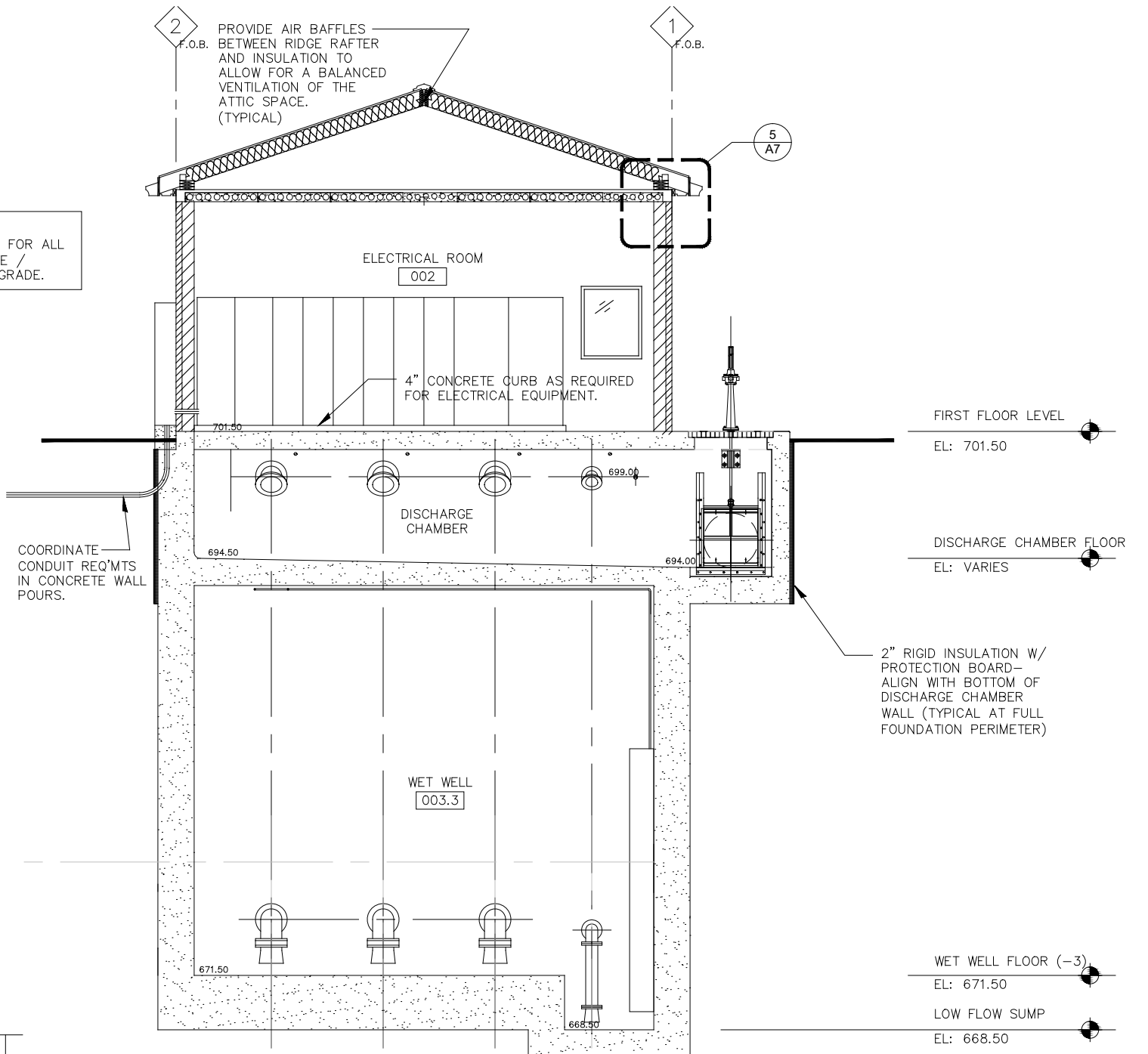
**6 STATION IDENTIFICATION PLATE**  
SCALE: 1 1/2" = 1'-0"

NOTE: COORDINATE ALL MECHANICAL LOUVER DIMENSIONS W/ MECHANICAL PLANS. DECORATIVE LOUVERS WILL NOT ALWAYS MATCH FUNCTIONAL LOUVER. CONFIRM THAT FREE AREA REQUIREMENTS ARE BEING MET.

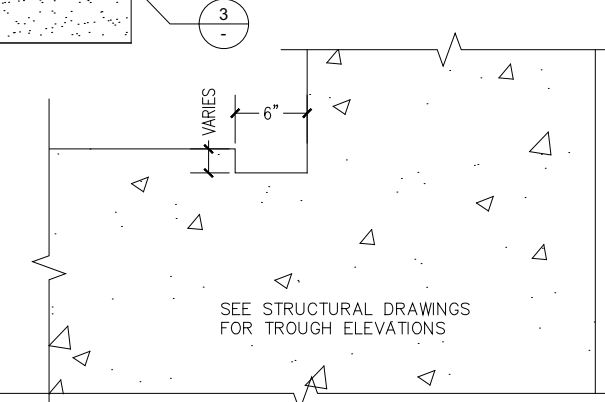




**1** BUILDING SECTION  
SCALE: 1/4" = 1'-0"



**2** BUILDING SECTION  
SCALE: 1/4" = 1'-0"



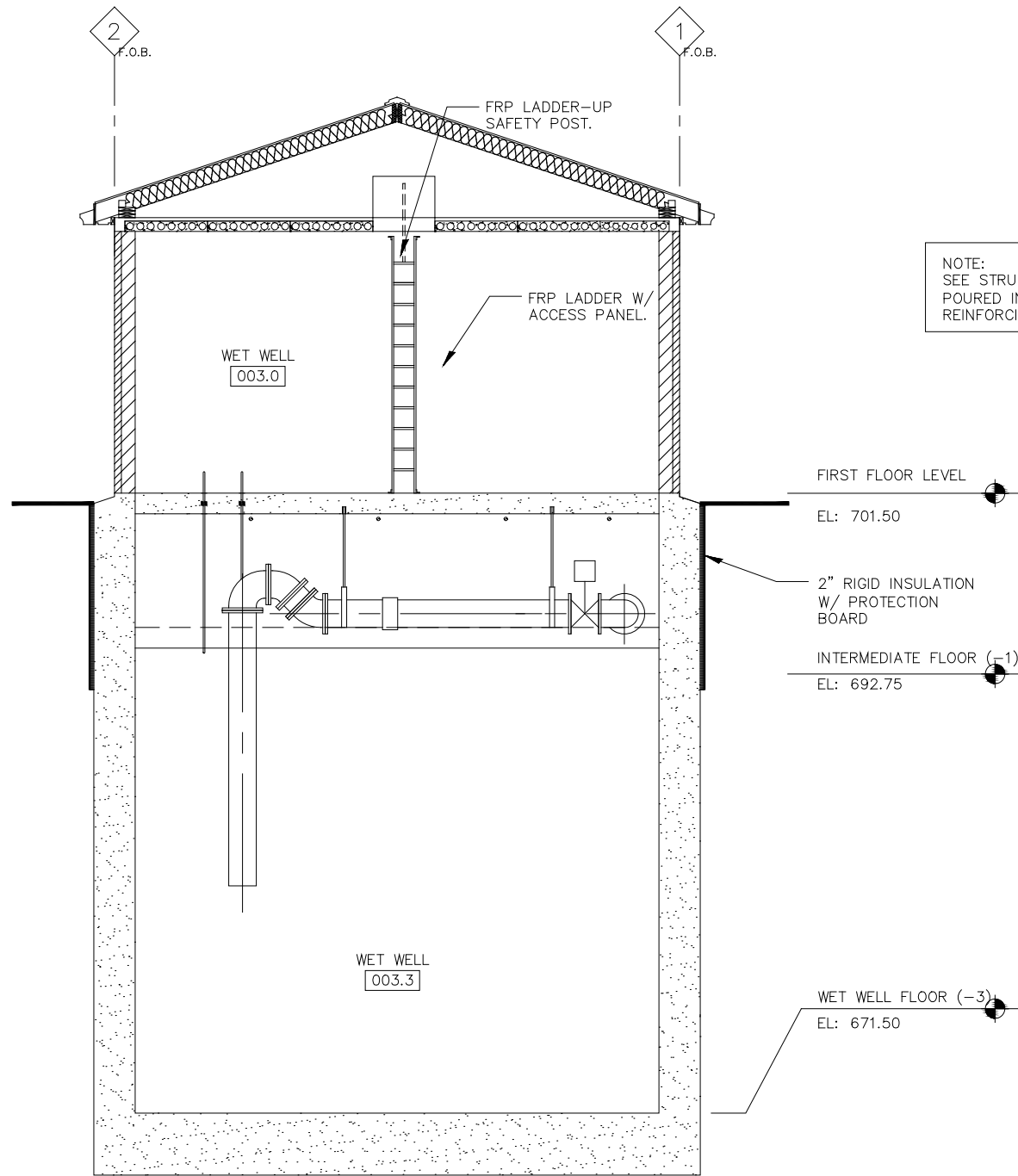
**3** TROUGH DETAIL  
SCALE: 1 1/2" = 1'-0"

NOTE:  
SEE STRUCTURAL DRAWINGS FOR ALL  
POURED IN PLACE CONCRETE /  
REINFORCING WORK BELOW GRADE.

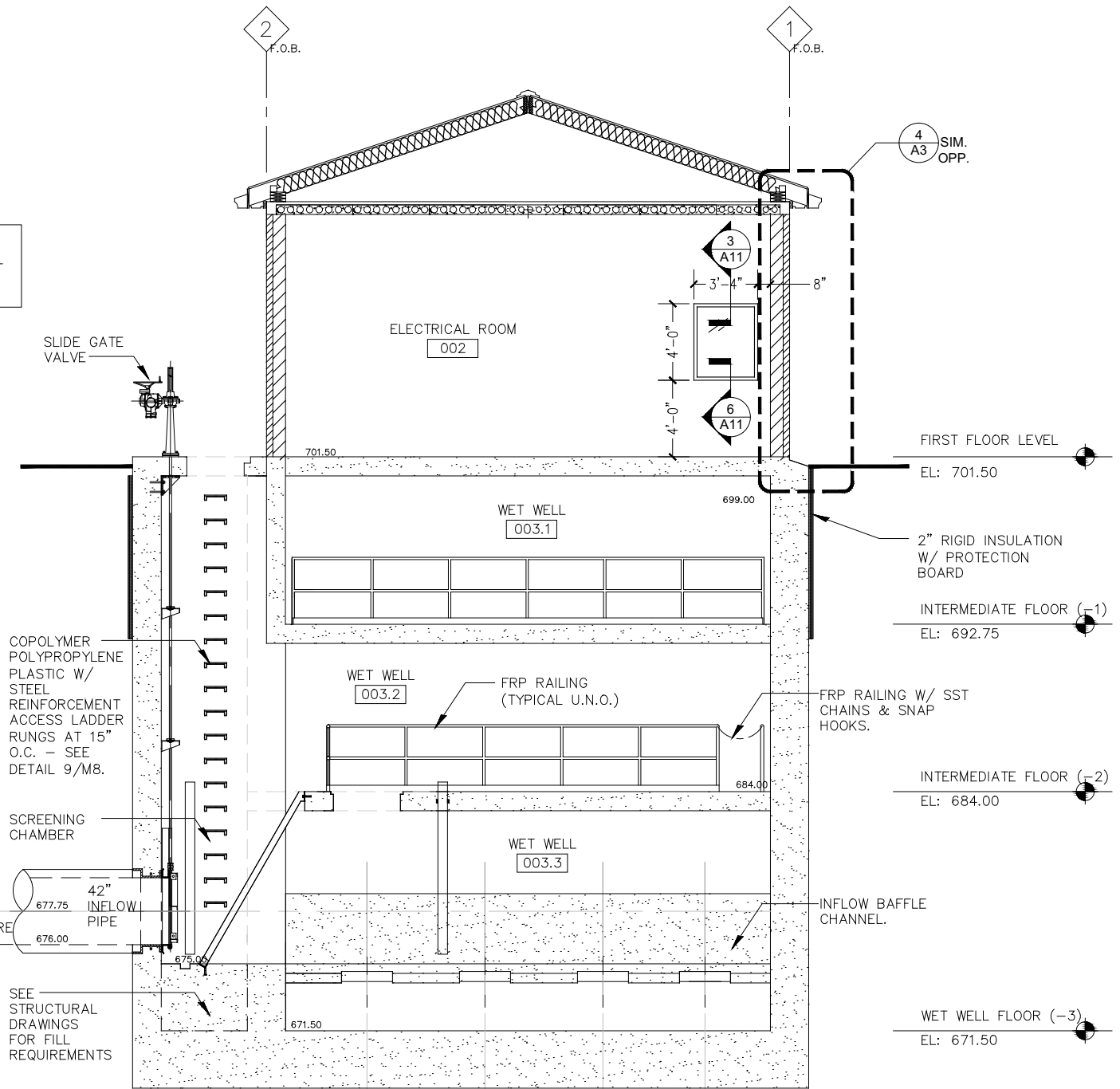


A5

<b>KNIGHT</b> Engineers & Architects	DESIGNED RMK	REVISED --	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>BUILDING SECTIONS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED RMK	REVISED --			338/IL 59	2011-035-1	DUPAGE	181	68	
	DRAWN NMP	REVISED --			CONTRACT NO. 60P41					
	CHECKED RMK	REVISED --			ILLINOIS FED. AID PROJECT					
SCALE --	DATE 03-22-2012			SHEET NO. A5	OF 12 SHEETS					



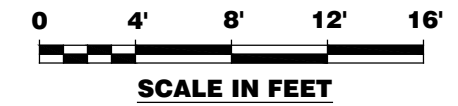
NOTE:  
SEE STRUCTURAL DRAWINGS FOR ALL  
POURED IN PLACE CONCRETE /  
REINFORCING WORK BELOW GRADE.



**1** BUILDING SECTION  
SCALE: 1/4" = 1'-0"

**2** BUILDING SECTION  
SCALE: 1/4" = 1'-0"

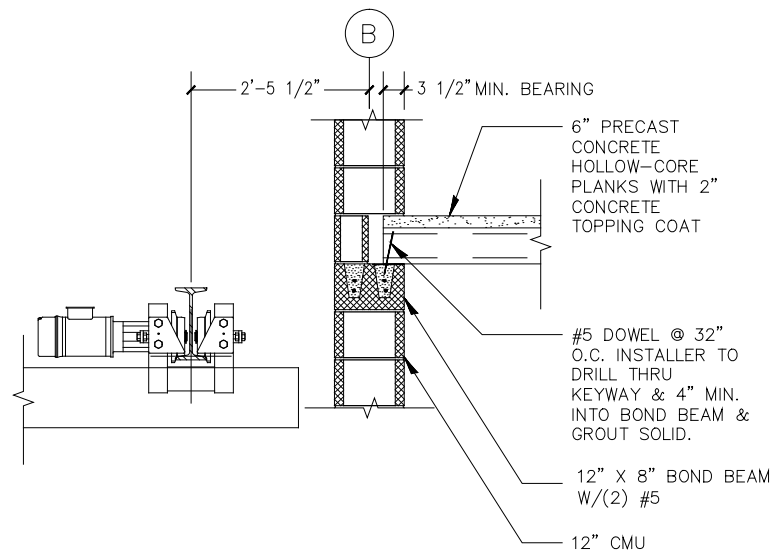
NOTE:  
SEE STRUCTURAL DRAWINGS FOR ALL  
CONCRETE / REINFORCING WORK  
BELOW GRADE.



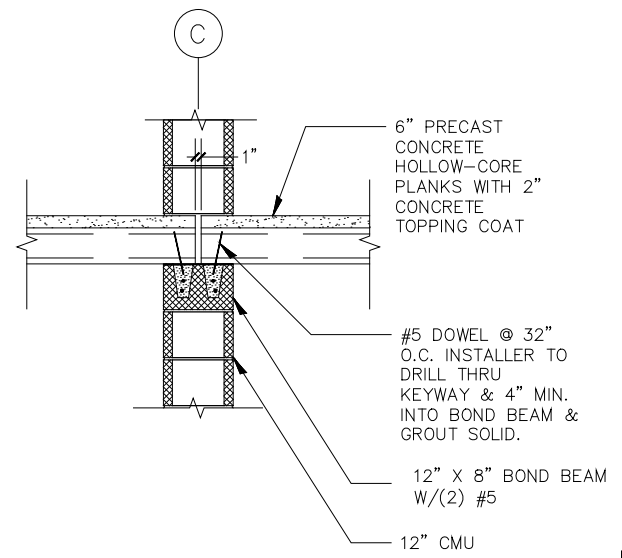
A6

<b>KNIGHT</b> Engineers & Architects	DESIGNED RMK	REVISED --	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>BUILDING SECTIONS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED RMK	REVISED --			338/IL 59	2011-035-1	DUPAGE	181	69
	SCALE --	REVISED --			CONTRACT NO. 60P41				
DATE 03-22-2012	CHECKED RMK	REVISED --	SHEET NO. A6 OF 12 SHEETS			ILLINOIS FED. AID PROJECT			

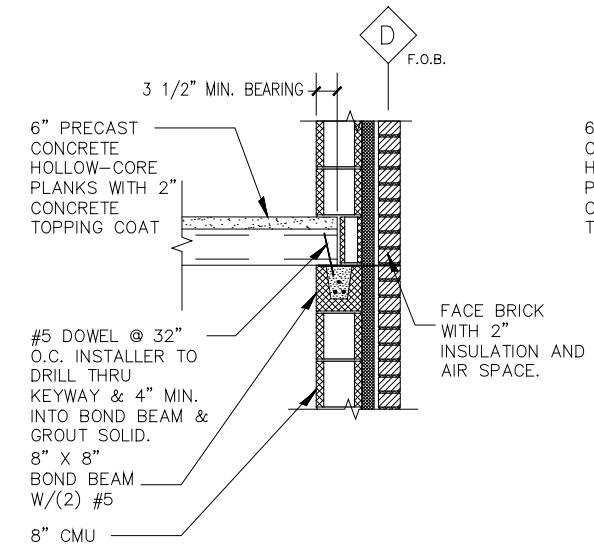




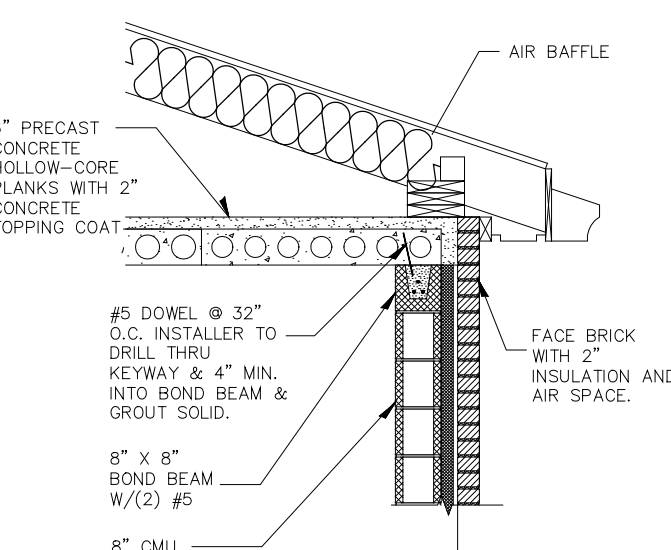
**2 BUILDING SECTION**  
SCALE: 3/4" = 1'-0"



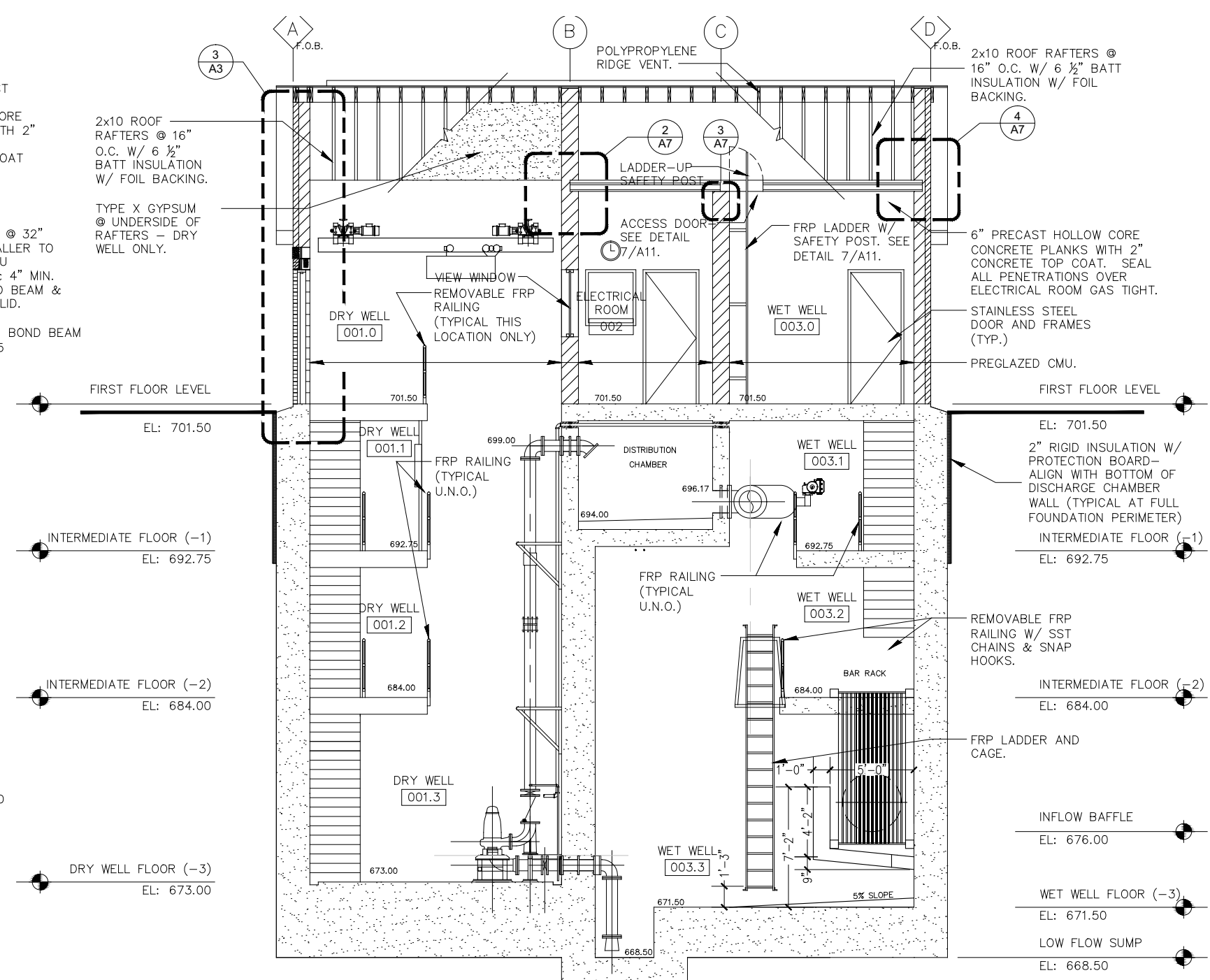
**3 BUILDING SECTION**  
SCALE: 3/4" = 1'-0"



**4 BUILDING SECTION**  
SCALE: 3/4" = 1'-0"



**5 BUILDING SECTION**  
SCALE: 3/4" = 1'-0"



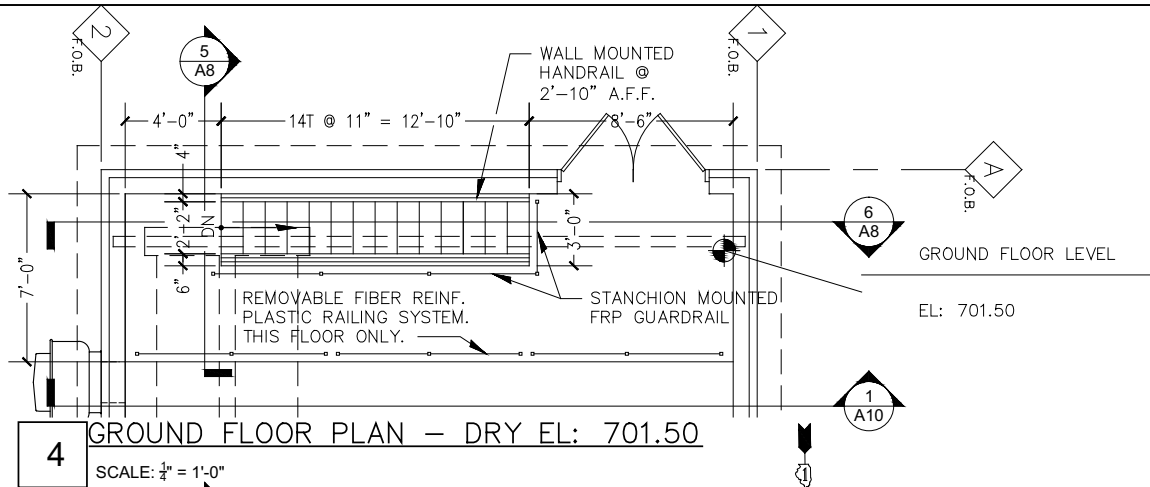
**1 BUILDING SECTION**  
SCALE: 1/4" = 1'-0"

NOTE:  
SEE STRUCTURAL DRAWINGS FOR ALL  
POURED IN PLACE CONCRETE /  
REINFORCING WORK BELOW GRADE.

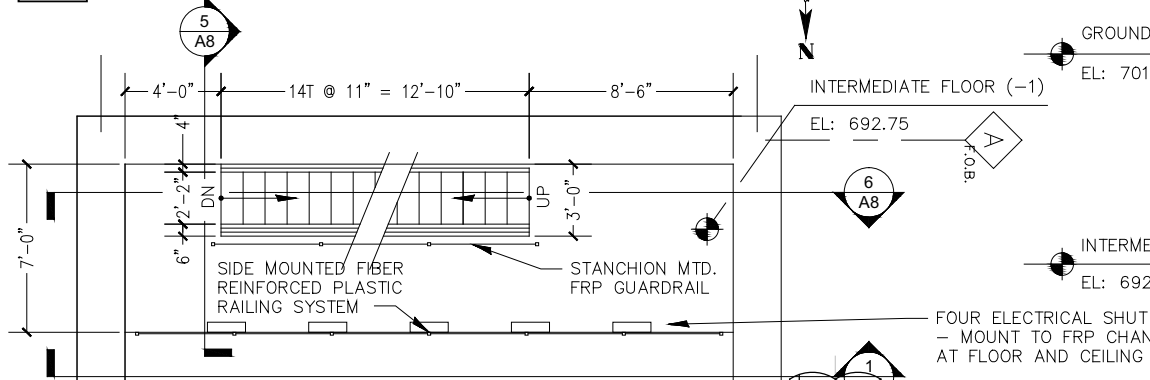


A7

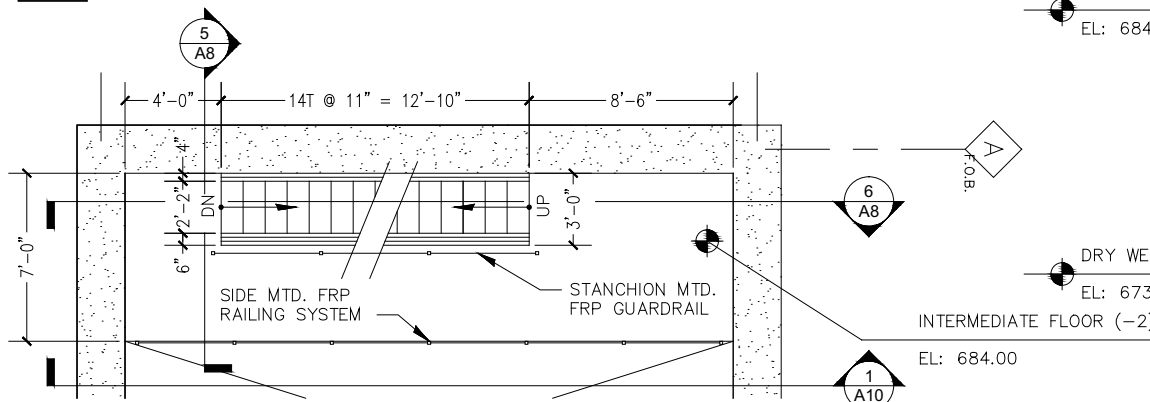
	DESIGNED	RMK	REVISED	—	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>BUILDING SECTIONS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED	RMK	REVISED	—			338/IL 59	2011-035-1	DUPAGE	181	70	
	DRAWN	NMP	REVISED	—			CONTRACT NO. 60P41					
	DATE	03-22-2012	CHECKED	RMK			REVISED	—	ILLINOIS FED. AID PROJECT			



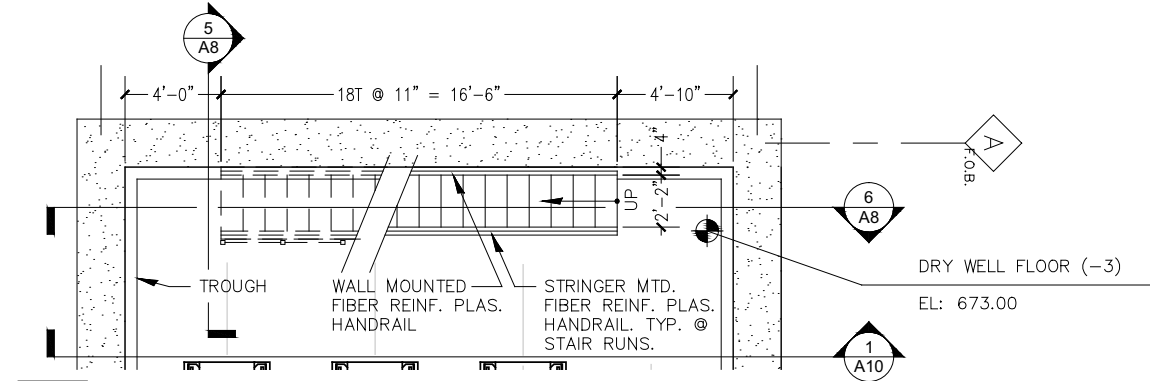
**4 GROUND FLOOR PLAN – DRY EL: 701.50**  
SCALE: 3/4" = 1'-0"



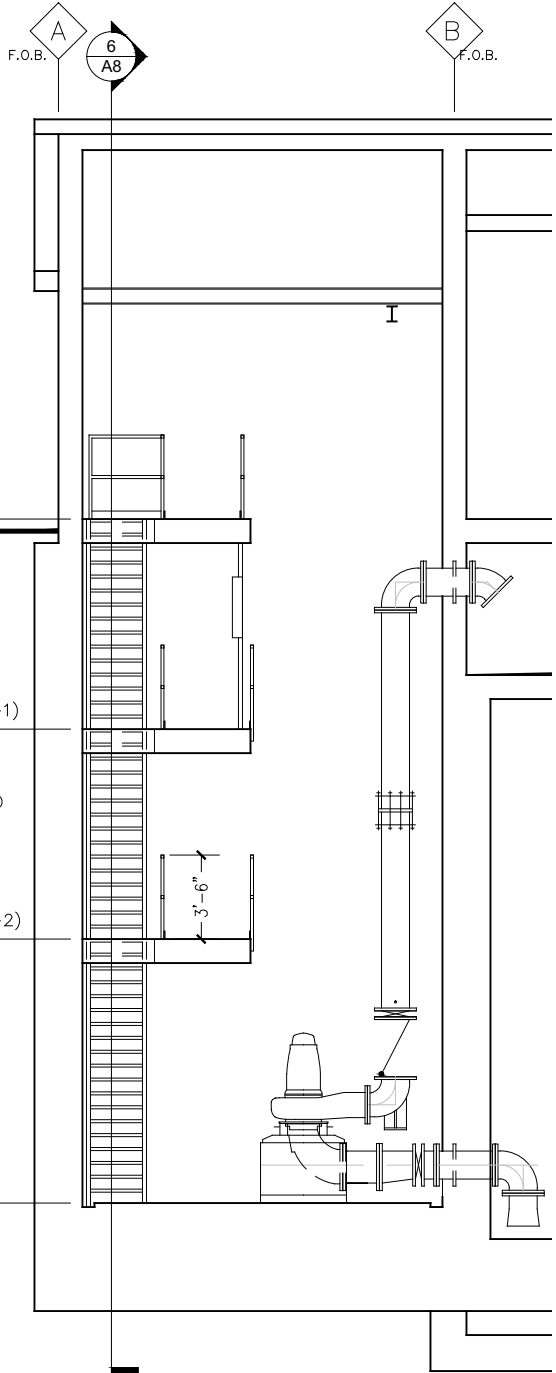
**3 INTERMEDIATE FLOOR PLAN (-1) – DRY EL: 692.75**  
SCALE: 3/4" = 1'-0"



**2 INTERMEDIATE FLOOR PLAN (-2) – DRY EL: 684.00**  
SCALE: 3/4" = 1'-0"

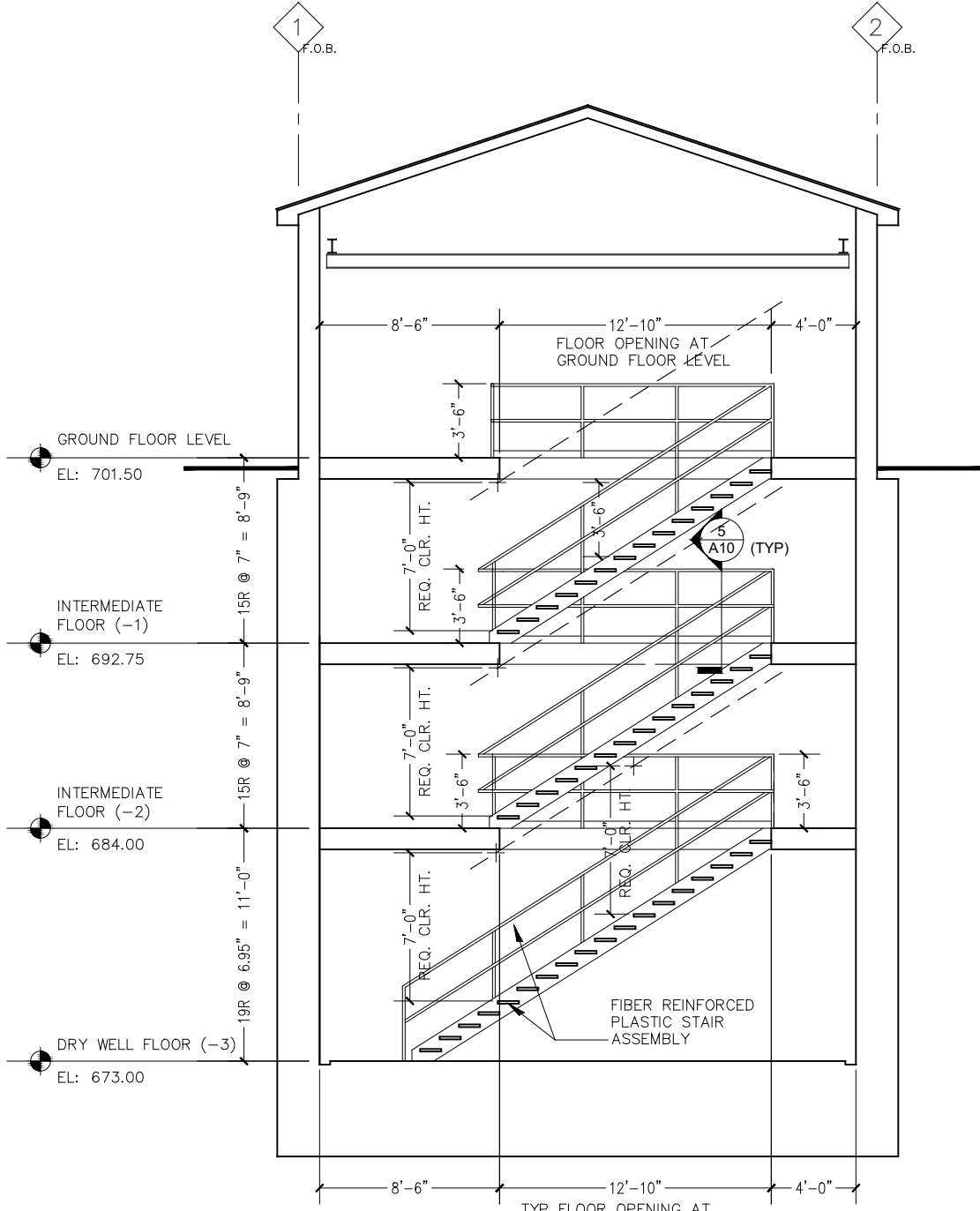


**1 WELL LEVEL FLOOR PLAN (-3) – DRY EL: 673.00**  
SCALE: 3/4" = 1'-0"



**5 STAIR SECTION**  
SCALE: 1/4" = 1'-0"

NOTE:  
ALL FRP HANDRAILS & TREADS TO BE SAFETY YELLOW U.N.O.



**6 STAIR SECTION**  
SCALE: 1/4" = 1'-0"

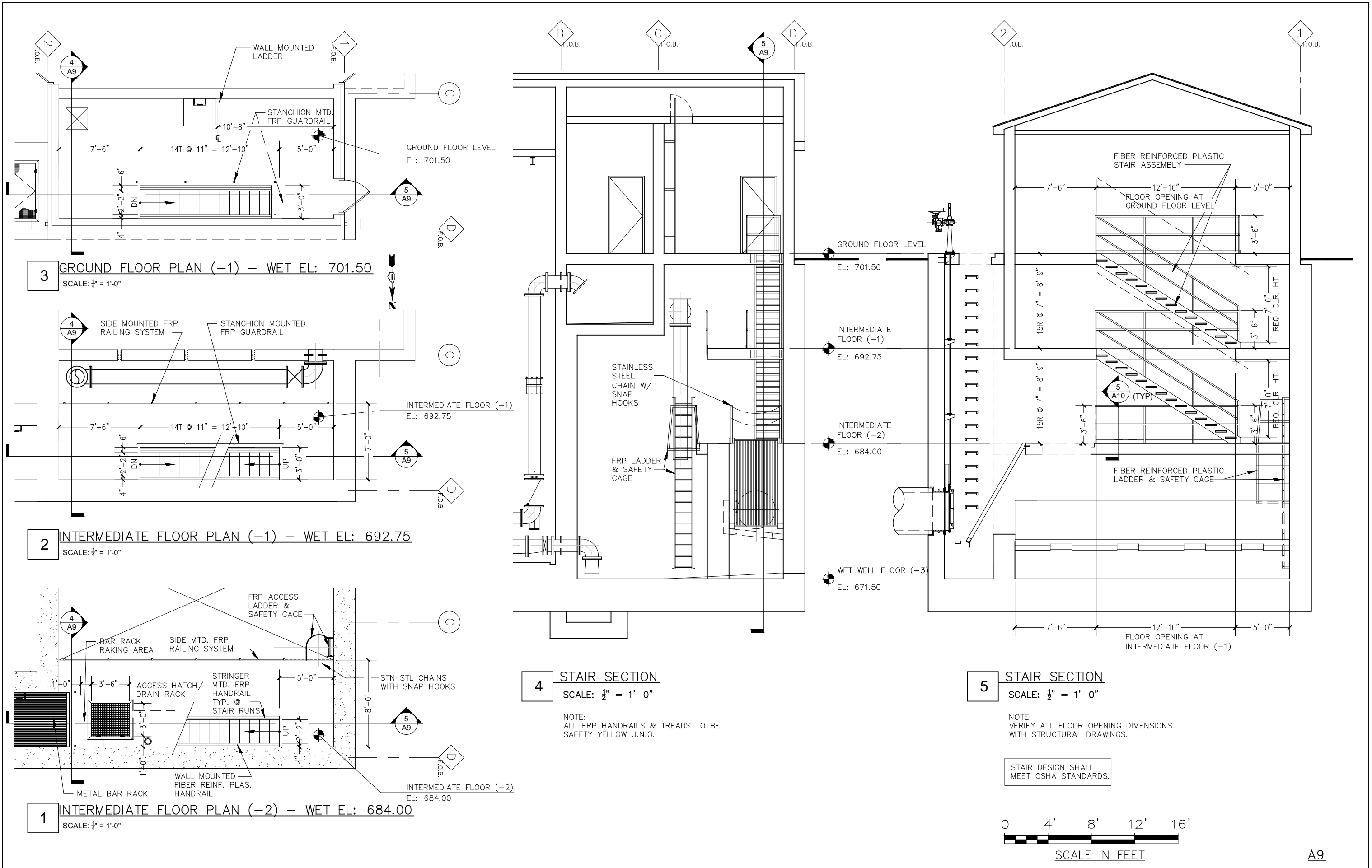
NOTE:  
VERIFY ALL FLOOR OPENING DIMENSIONS WITH STRUCTURAL DRAWINGS.

STAIR DESIGN SHALL MEET OSHA STANDARDS.



A8

	DESIGNED	RMK	REVISED	—	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>ARCHITECTURAL STAIR PLANS, SECTIONS &amp; DETAILS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED	RMK	REVISED	—			338/IL 59	2011-035-1	DUPAGE	181	71	
	DRAWN	NMP	REVISED	—			CONTRACT NO. 60P41					
	DATE	03-22-2012	CHECKED	RMK			REVISED	—	ILLINOIS FED. AID PROJECT			



**3 GROUND FLOOR PLAN (-1) - WET EL: 701.50**  
SCALE: 1/4" = 1'-0"

**2 INTERMEDIATE FLOOR PLAN (-1) - WET EL: 692.75**  
SCALE: 1/4" = 1'-0"

**1 INTERMEDIATE FLOOR PLAN (-2) - WET EL: 684.00**  
SCALE: 1/4" = 1'-0"

**4 STAIR SECTION**  
SCALE: 1/2" = 1'-0"

NOTE:  
ALL FRP HANDRAILS & TREADS TO BE  
SAFETY YELLOW U.N.O.

**5 STAIR SECTION**  
SCALE: 1/2" = 1'-0"

NOTE:  
VERIFY ALL FLOOR OPENING DIMENSIONS  
WITH STRUCTURAL DRAWINGS.

STAIR DESIGN SHALL  
MEET OSHA STANDARDS.



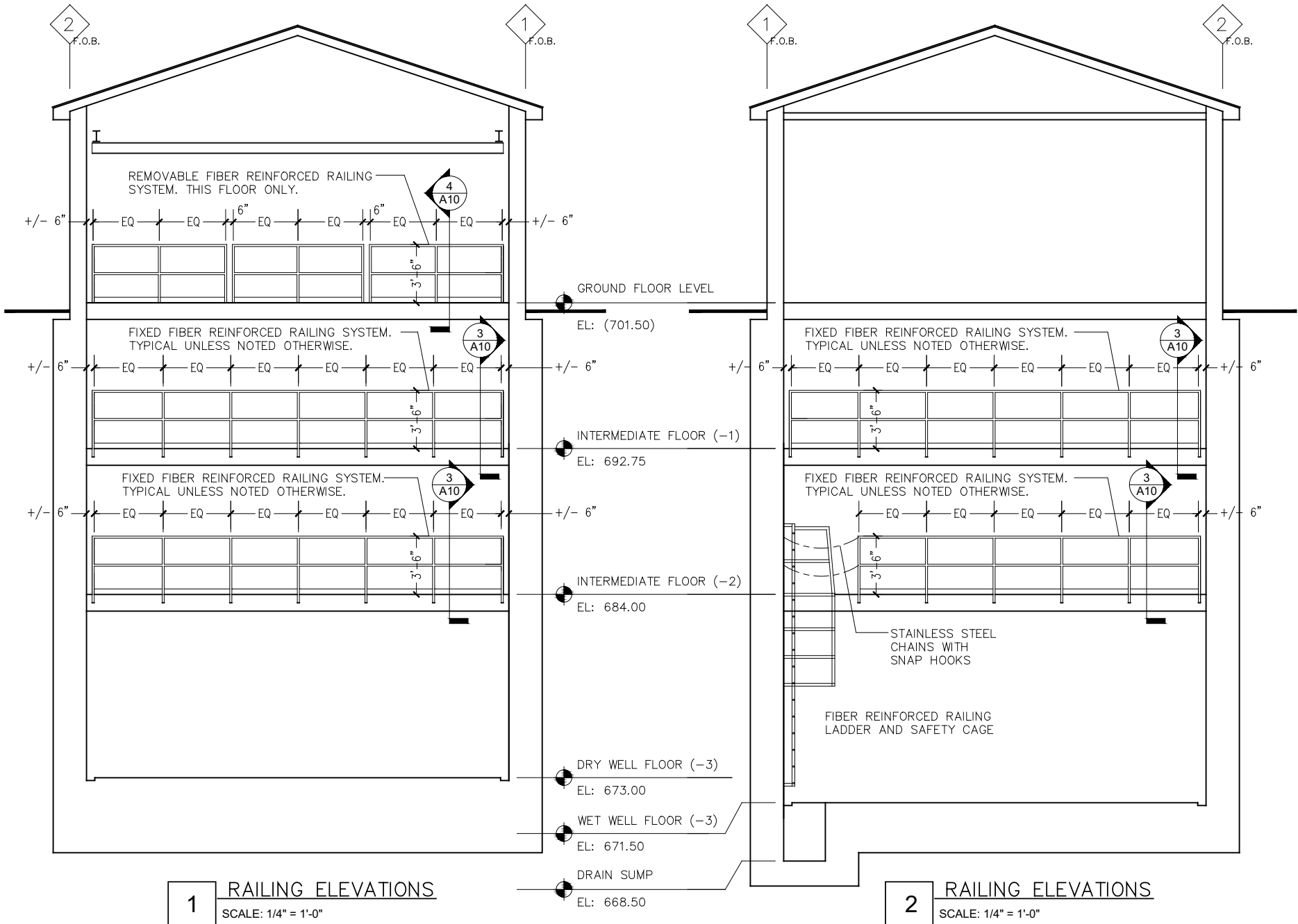
	DESIGNED RMK	REVISED --
	CHECKED RMK	REVISED --
	DRAWN NMP	REVISED --
	CHECKED RMK	REVISED --
SCALE --		
DATE 03-22-2012		

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

**ARCHITECTURAL STAIR PLANS, SECTIONS & DETAILS**  
**PUMP STATION 47**  
SHEET NO. A9 OF 12 SHEETS

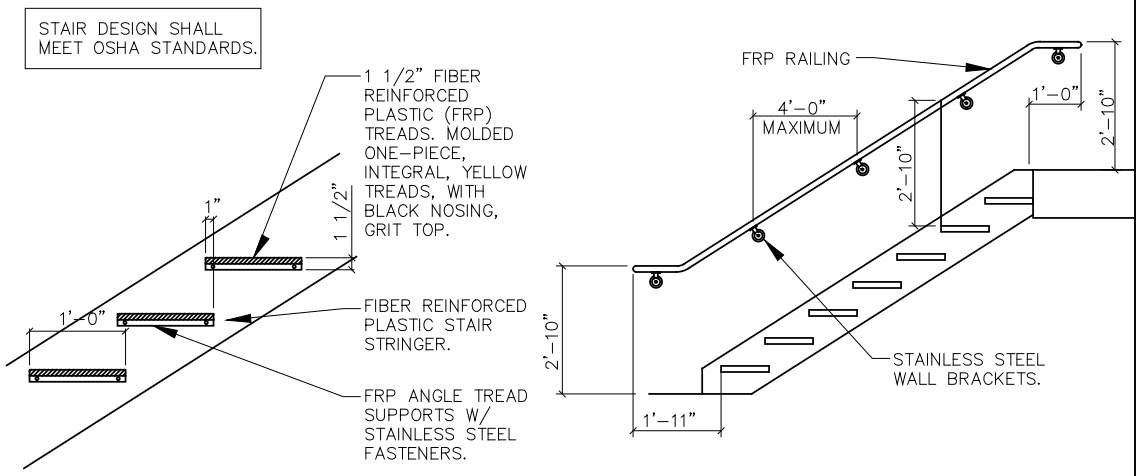
F.A.P. RTE. 338/IL 59	SECTION 2011-035-1	COUNTY DUPAGE	TOTAL SHEETS 181	SHEET NO. 72
CONTRACT NO. 60P41				ILLINOIS FED. AID PROJECT

A9



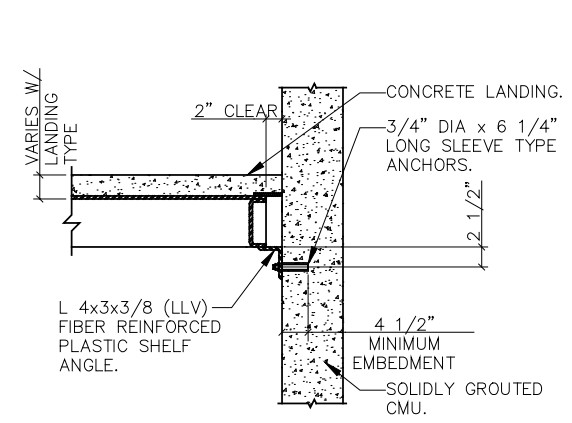
**1 RAILING ELEVATIONS**  
SCALE: 1/4" = 1'-0"

**2 RAILING ELEVATIONS**  
SCALE: 1/4" = 1'-0"

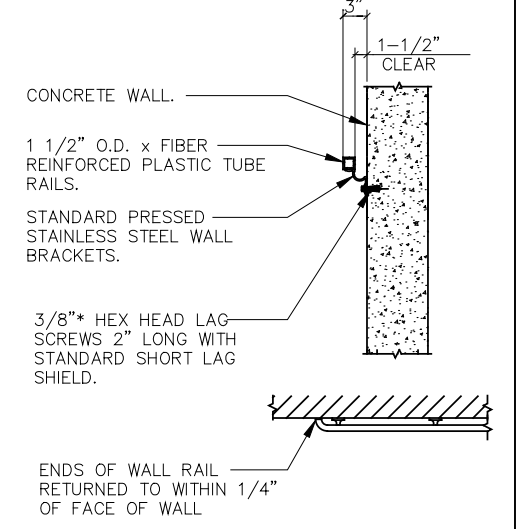


**7 STAIR SECTION**  
SCALE: 1" = 1'-0"

**6 HANDRAIL AT WALL**  
SCALE: NTS

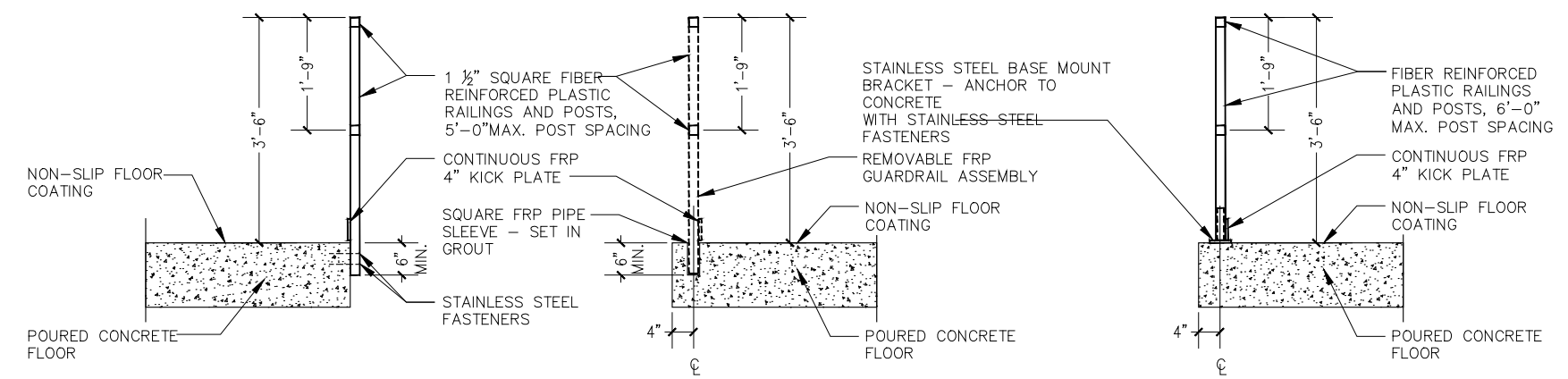


**9 SUPPORT SECTION**  
SCALE: 1" = 1'-0"



**8 HANDRAIL DETAILS**  
SCALE: NTS

NOTE:  
ALL FRP HANDRAILS & TREADS TO BE SAFETY YELLOW U.N.O.



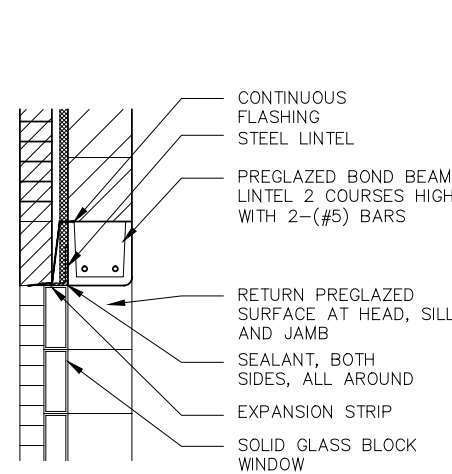
**3 RAILING DETAIL**  
SCALE: 3/4" = 1'-0"

**4 RAILING DETAIL**  
SCALE: 3/4" = 1'-0"

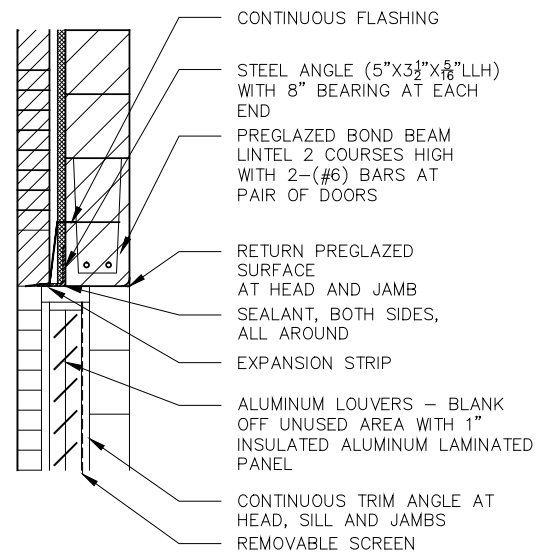
**5 RAILING DETAIL**  
SCALE: 3/4" = 1'-0"



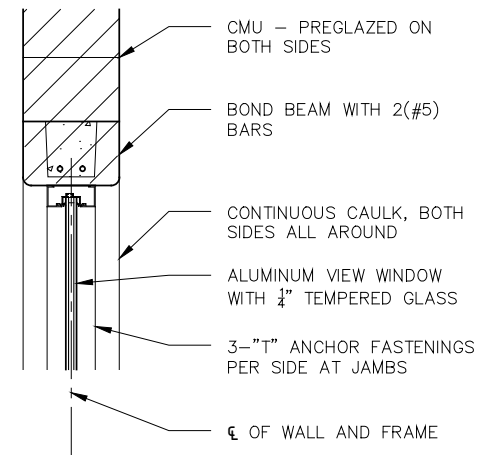
A10



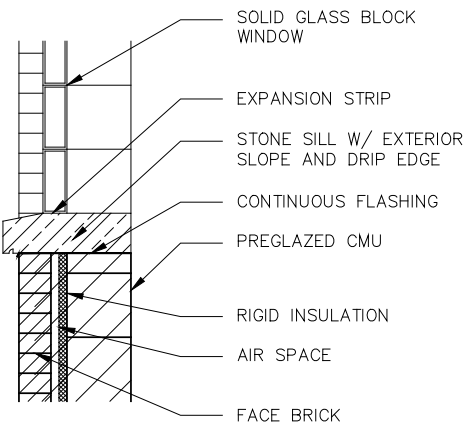
**1 HEAD DETAIL**  
SCALE: 1" = 1'-0"



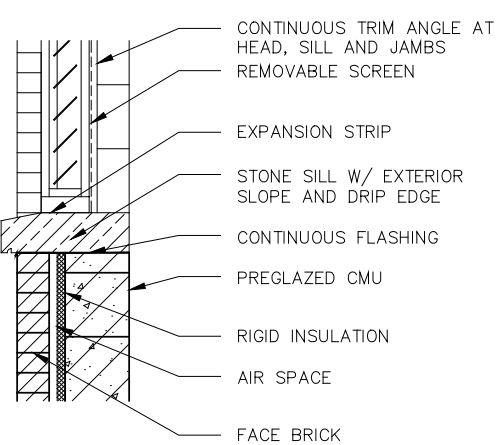
**2 HEAD DETAIL**  
SCALE: 1" = 1'-0"



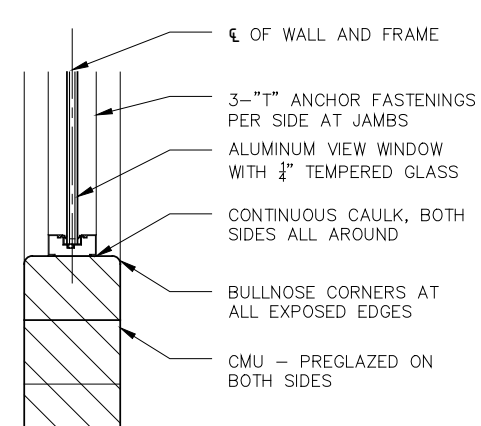
**3 HEAD DETAIL**  
SCALE: 1" = 1'-0"



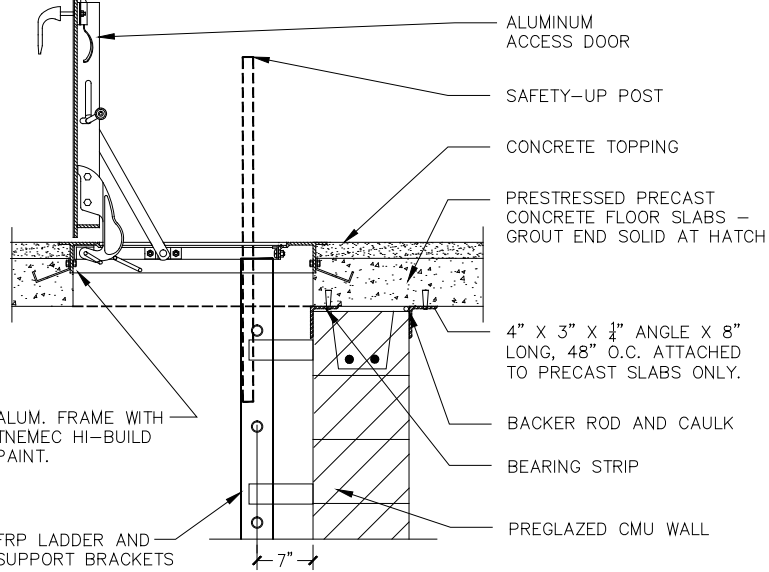
**4 SILL DETAIL**  
SCALE: 1" = 1'-0"



**5 SILL DETAIL**  
SCALE: 1" = 1'-0"



**6 SILL DETAIL**  
SCALE: 1" = 1'-0"



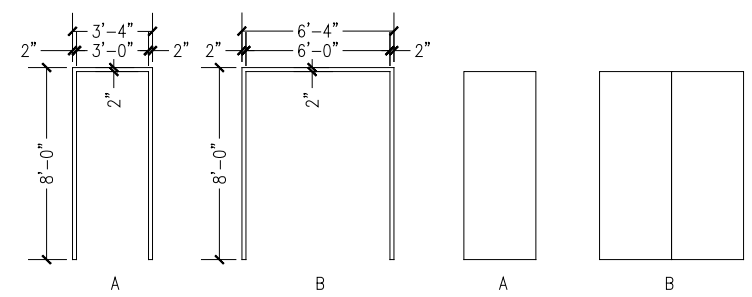
**7 ACCESS HATCH DETAIL**  
SCALE: 1" = 1'-0"

**DOOR SCHEDULE**

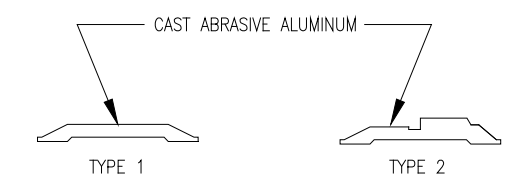
DOOR NO.	DOOR SIZE	ELEVATION	THRESHOLD TYPE	DETAILS		UL LABEL	MATERIAL	HARDWARE ITEM	REMARKS
				HEAD	JAMB				
001	2 @ 3'-0" X 7'-10" X 1 3/4"	B	1	--	--	--	ST STEEL	1	180 DEG HINGES
002	3'-0" X 7'-10" X 1 3/4"	A	2	--	--	--	ST STEEL	2	
003	3'-0" X 7'-10" X 1 3/4"	A	2	--	--	--	ST STEEL	2	
004	3'-0" X 7'-10" X 1 3/4"	A	2	--	--	--	ST STEEL	2	

**ROOM FINISH SCHEDULE**

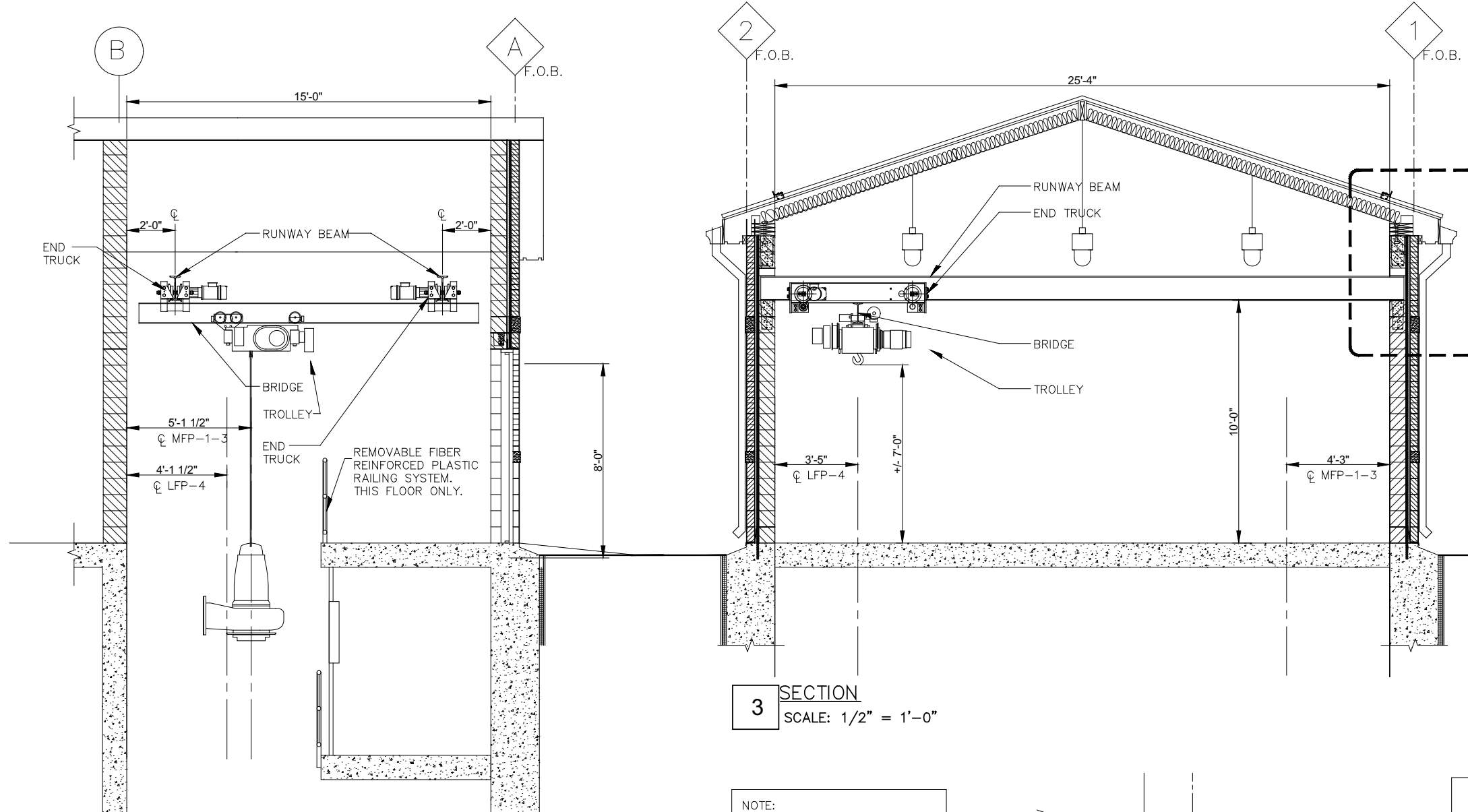
ROOM NO.	ROOM NAME	BASE		FLOOR		WALLS		CEILING		REMARKS
		MATERIALS	FINISH	MATERIALS	FINISH	MATERIALS	FINISH	MATERIALS	FINISH	
001.0	DRY WELL	N/A	-	CONC	PT-1	CMU	GLAZED	GYP BD	PT-2	
002.0	ELECTRICAL ROOM	N/A	-	CONC	PT-1	CMU	GLAZED	CONC	-	
003.0	WET WELL	N/A	-	CONC	PT-1	CMU	GLAZED	CONC	-	
001.1	DRY WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
004.1	DISCHARGE CHAMBER	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
003.1	WET WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
001.2	DRY WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
003.2	WET WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
001.3	DRY WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	
003.3	WET WELL	N/A	-	CONC	PT-1	CONC	SEALED	CONC	-	



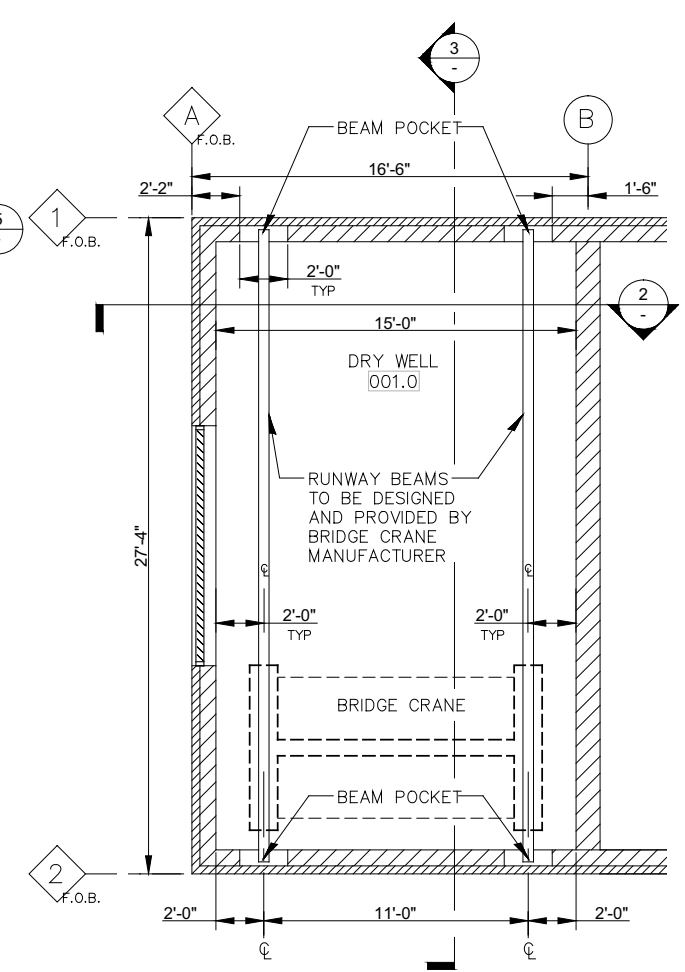
**10 DOOR AND FRAME TYPES**  
NOT TO SCALE



**11 THRESHOLD TYPES**  
NOT TO SCALE



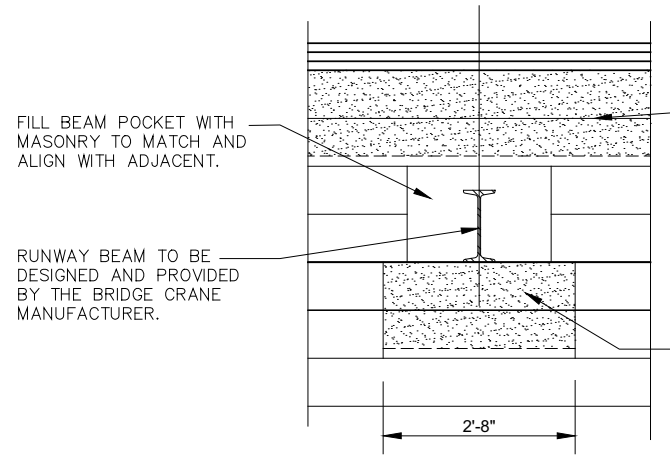
**3 SECTION**  
SCALE: 1/2" = 1'-0"



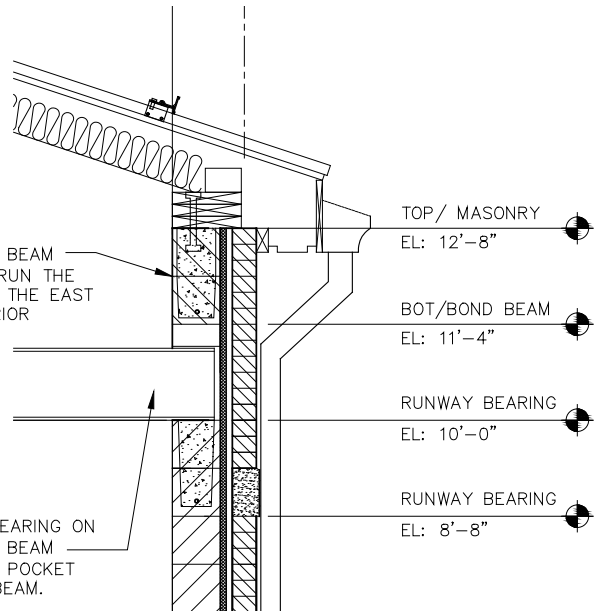
**1 BRIDGE CRANE PLAN**  
SCALE: 1/4" = 1'-0"

NOTE:  
ALL STRUCTURAL STEEL TO BE  
DESIGNED AND FURNISHED BY  
BRIDGE CRANE MANUFACTURER.

**2 SECTION**  
SCALE: 1/2" = 1'-0"



**4 ELEVATION OF RUNWAY BEARING POCKET**  
SCALE: 3/4" = 1'-0"



**5 DETAIL**  
SCALE: 3/4" = 1'-0"

	HOIST	TROLLEY	BRIDGE
TYPE UNIT	SINGLE REEVED	FIXED AXLE	FIXED AXLE
CAPACITY TONS	2 TON	2 TON	2 TON
FULL LOAD SPEED FPM	14 FPM	30 FPM	65 FPM
MOTOR H.P. & R.P.M.	2 HP	0.5 HP	0.5 HP (X2)
MOTOR RATING & INSULATION	30 MIN. CLASS 'F'	30 MIN. CLASS 'F'	30 MIN. CLASS 'F'
MOTOR TYPE	TENN	TENN	TENN
CONTROL	SINGLE SPEED	SINGLE SPEED	SINGLE SPEED
MAXIMUM WHEEL LOAD	-	-	3000# PER PAIR OF WHEELS
CURRENT: 480-3-60		RUNWAY RAIL OR BEAM: UNKNOWN	

NOTE:  
BRIDGE CRANE TO BE SPARK RESISTANT COMPLYING WITH CLASS 1,  
DIVISION 2, GROUP D ELECTRICAL REQUIREMENTS.

A12

**GENERAL STRUCTURAL NOTES**

**A. GENERAL**

- Contractor shall visit and become familiar with the project site and local conditions and verify all data pertaining to the site and its relationship to this work.
- Contractor shall coordinate and verify all dimensions and elevations with architectural, mechanical, electrical and civil drawings. Where discrepancies occur, it is the contractor's responsibility to notify the architect prior to construction. Contractor shall verify the location of anchor bolts, plates, cast-in-place angles, location and sizes of openings, embedments and other miscellaneous items prior to placement of concrete.
- All sections, details and notes shown on the drawings are intended to be typical and shall be construed to apply at any similar situation elsewhere on the job, except where a different detail is shown. Prepare working drawings to show the application of typical sections and details for similar situations.

**B. DESIGN CODES**

- International Building Code (IBC), 2006.
- ACI 350-06

**C. CONSTRUCTION CODES**

- Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012 and Supplemental Specifications and Recurring Special Provisions, Adopted January 1, 2012.

**D. DESIGN LOADS**

- Design Live Loads
 

1st Floor	150 psf
Other Floors	100 psf
Stairs	100 psf
Roof	25 psf
- Roof Snow Load
 

Flat Roof Snow Load	18 psf
Snow Exposure Factor	1.0
Snow Load Importance Factor	1.0
Thermal Factor	1.0
- Ground Snow Load 25 psf
- Wind Load
 

Basic Wind Speed	90 mph
Wind Importance Factor	1.0
Wind Exposure	B
Main Wind Force Resisting System	22 psf
- Earth Pressure
 

Equivalent Fluid Pressure	
Above Water Table	55 psf
Below Water Table	65 psf
Environmental Durability Factor, $S_d$	1.69
- Seismic Design Data
 

Seismic Importance Factor	1.0
Seismic Use Group	1
$S_s$	0.193%g
$S_1$	0.064%g
Site Class	C
Site Coefficient, $F_a$	1.2
Site Coefficient, $F_v$	1.7
Spectral Response Coefficient, $S_{ps}$	0.154
Spectral Response Coefficient, $S_{D1}$	0.073
Design Category	B
Basic Seismic Force Resisting System	Bearing Wall System
Design Base Shear	5.9 K
Seismic Response Coeff, $C_s$	0.103
Response Modification Factor	2
Analysis Procedure	Simplified Design Procedure

**E. FOUNDATIONS**

- The soils and foundation engineering report is for informational purposes only and shall not be considered part of the contract documents, furthermore, no warranty is made by the owner with regard to the completeness and accuracy of the subsurface investigation data, soil test data or statements and interpretations given in the Geotechnical Investigation Report prepared by Geo Services, Inc. on May 13, 2011.
- Water levels indicated on the boring logs may be subject to seasonal and/or annual variations. A dewatering system of sufficient capacity shall be walled and operated to maintain the construction area free of water at all times.
- The bearing value of the soil was determined by field exploration and laboratory analysis. The foundation design is based on a net allowable bearing pressure of 3500 psf.
- All footing excavations shall be inspected, prior to concrete placement, by a soils engineer to verify suitable bearing material of capacity as specified.
- Notify the Engineer when additional excavation is required to reach suitable bearing material.
- The soils engineer shall certify in writing that all foundations were placed on soil with the bearing value as specified.
- Within the excavation area of the foundations, all vegetation, topsoil, previously placed fill and unsuitable soils shall be removed, all footings shall bear on virgin soil or properly placed and compacted engineered fill.
- Do not place backfill against substructure walls until floor slabs supporting top and bottom of the walls have attained a compressive strength of 3000 psi as indicated by cylinder testing. Place backfill evenly against each side of substructures to produce equal and opposite lateral pressures, the difference in elevation not to exceed 1-FT.

**F. CONCRETE**

- Concrete work shall be in accordance with the Illinois Department of Transportation Standard Specifications Section 503.
- All cast-in-place concrete shall be  $f'c = 3,500$  psi at 14 days as shown in the drawings and in accordance with the Illinois Department of Transportation Standard Specifications, unless noted otherwise.
- Reinforcement bars designated (E) shall be epoxy coated.
- Reinforcement bar bending dimensions are out to out.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths per line.
- Reinforcement bending details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 315, latest edition.
- Reinforcement bar splices shall be in accordance with the following table unless shown otherwise on the drawings.

Size	CLASS "B" SPLICE		CLASS "C" SPLICE	
	Top Bars	Other Bars	Top Bars	Other Bars
#4	2'-3"	2'-0"	2'-11"	2'-7"
#5	2'-10"	2'-6"	3'-8"	3'-3"
#6	3'-4"	3'-0"	4'-5"	3'-10"
#7	4'-6"	3'-11"	5'-10"	5'-2"
#8	5'-10"	5'-2"	7'-8"	6'-9"
#9	7'-5"	6'-7"	9'-8"	8'-7"
#10	9'-5"	8'-4"	12'-4"	10'-10"
#11	11'-7"	10'-2"	15'-1"	13'-4"

- Unless otherwise shown on the drawings, rebar clearances shall be as follows:
 

Cast against earth	3"
Exposed to earth or weather	2"
All other locations	1 1/2"
- All exposed concrete edges shall have a 3/4" x 45° chamfer, except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of one foot below finished ground level.
- Dowel holes shall be drilled 1/4" larger than the diameter of the dowels. Depth of embedment shall be as shown on the drawings.

**G. CONSTRUCTION**

- Contractor shall follow written dimensions only and not scale dimensions from the contract plans for construction purposes.
- No construction joints except those shown on the plans will be allowed unless approved by the Engineer.
- It shall be the Contractor's responsibility to verify the location of all utilities prior to starting construction. Contact J.U.L.I.E., 1-800-892-0123 and the department.

**ABBREVIATIONS**

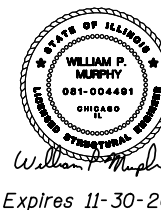
B.F.	back face
CL	centerline
cts.	centers
cl.	clearance
Ø	diameter
E.F.	each face
elev.	elevation
exist.	existing
F.F.	front face
I.F.	inside face
jt.	joint
max.	maximum
min.	minimum
no.	number
O.F.	outside face
P/JF	performed joint filler
prop.	proposed
typ.	typical
req'd.	required
spa.	spaces

**SYMBOLS**

- waterstop

**INDEX OF DRAWINGS**

SHT NO.	TITLE
SA-01	General Notes
SA-02	Structural Plan - EL 673.00 / 671.50
SA-03	Structural Plan - EL 684.00
SA-04	Structural Plan - EL 692.75
SA-05	Structural Plan - EL 694.50
SA-06	Structural Plan - EL 701.50
SA-07	Structural Sections
SA-08	Structural Sections
SA-09	Structural Sections
SA-10	Structural Sections
SA-11	Structural Sections
SA-12	Structural Sections
SA-13	Reinforcement Details - Key Plan
SA-14	Reinforcement Details - Floor Slab EL 673.00 / 671.50
SA-15	Reinforcement Details - Floor Slab EL 684.00
SA-16	Reinforcement Details - Floor Slab EL 692.75
SA-17	Reinforcement Details - Floor Slab EL 694.50
SA-18	Reinforcement Details - Floor Slab EL 701.50
SA-19	Reinforcement Details - Sections
SA-20	Reinforcement Details - Sections
SA-21	Reinforcement Details - Sections
SA-22	Reinforcement Details - Sections
SA-23	Reinforcement Details - Sections
SA-24	Reinforcement Details - Sections
SA-25	Reinforcement Details - Elevations
SA-26	Reinforcement Details - Elevations
SA-27	Reinforcement Details - Elevations
SA-28	Reinforcement Details - Elevations
SA-29	Reinforcement Details - Elevations
SA-30	Reinforcement Details - Elevations
SA-31	Reinforcement Details - Elevations
SA-32	Structural Details
SA-33	Structural Details
SA-34	Soil Boring Logs



Date: 3/22/2012

for drawings SA-01 thru SA-34

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Structures	Cu. Yd.	617.0
Reinforcement Bars, Epoxy Coated	Pound	70950
Bar Splicers	Each	12
Sheet Waterproofing Membrane System	Sq. Yd.	600.0
Braced Excavation	Cu. Yd.	2730.0



DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
SCALE - NONE	REVISIONS
DATE - 3/22/2012	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

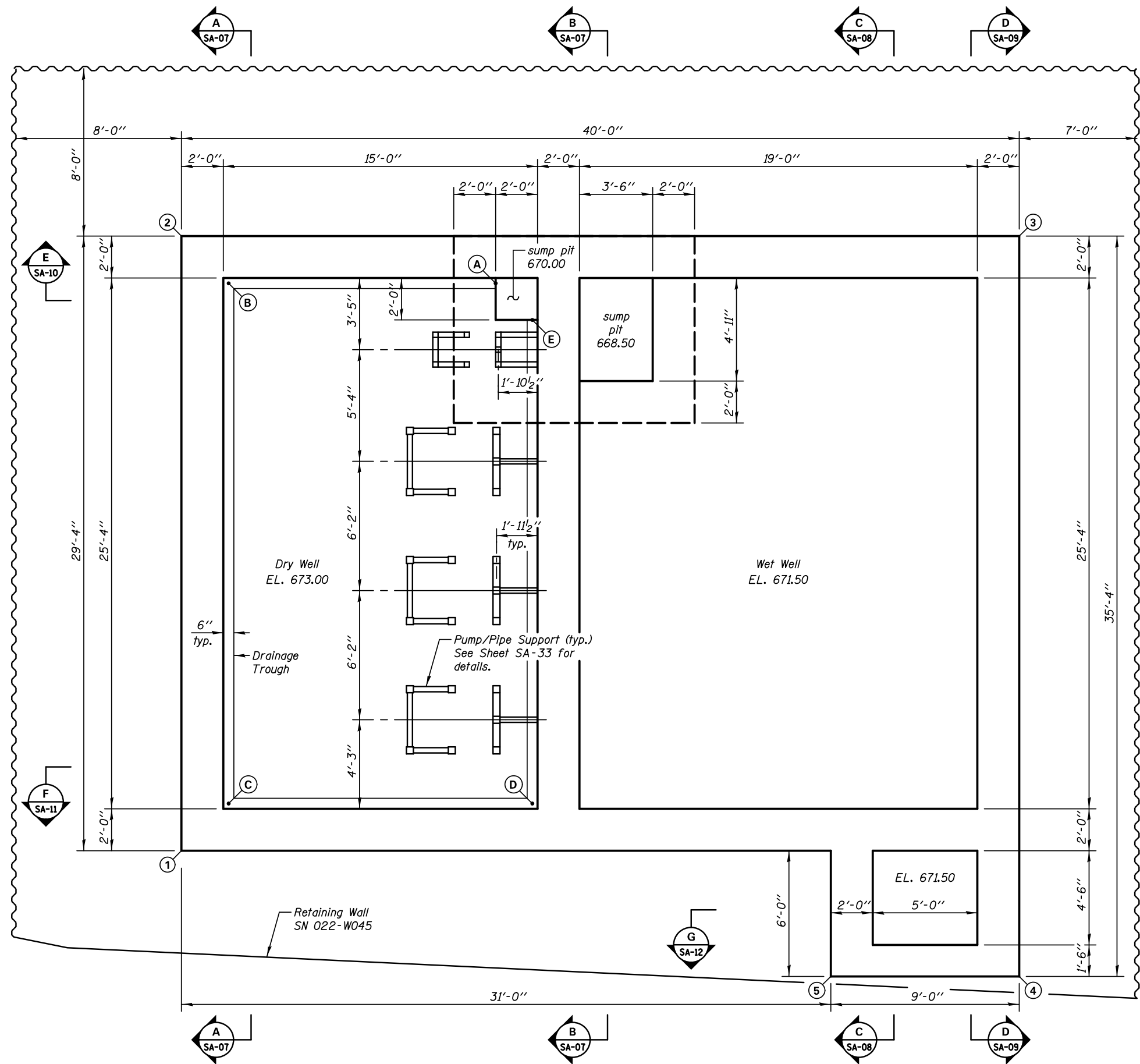
GENERAL NOTES  
PUMP STATION 47

SHEET NO. SA-01 OF 34 SHEETS

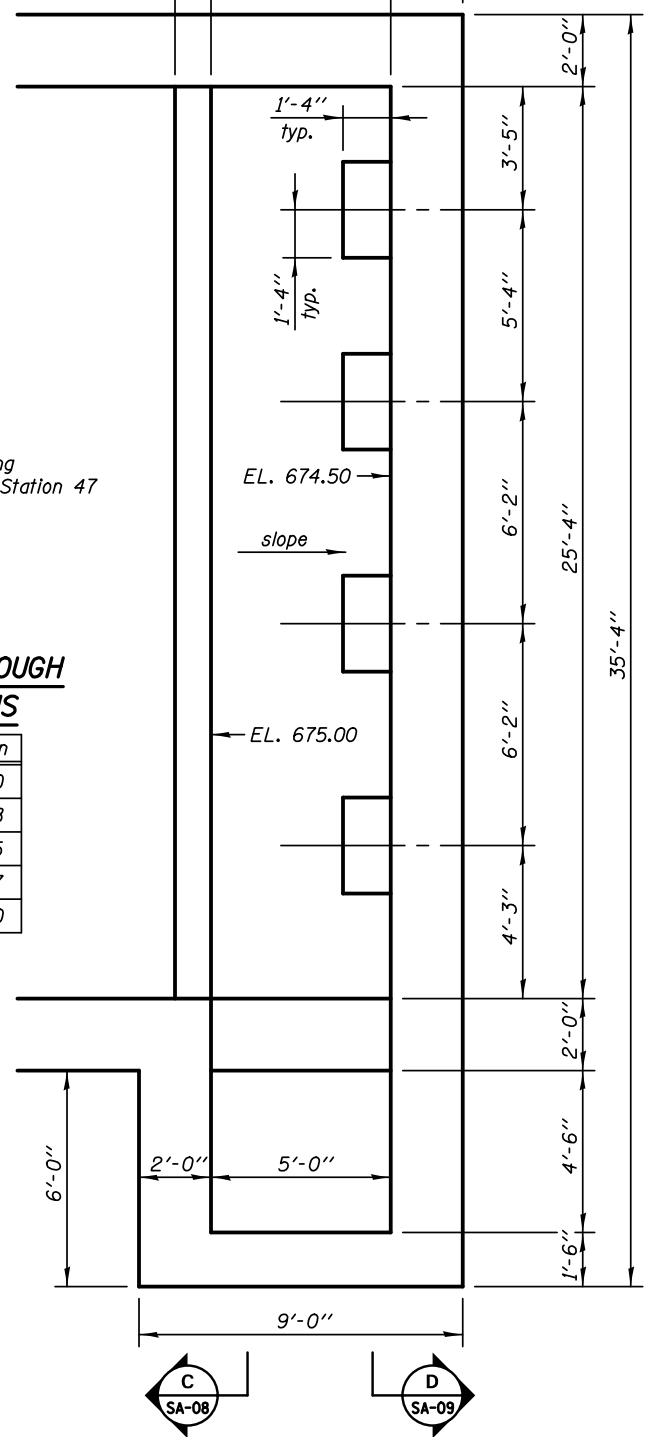
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	76
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

**BUILDING LOCATION**

Point	Coordinates	
	North	East
①	861736.60	19075.20
②	861736.60	19045.87
③	861776.60	19045.87
④	861776.60	19081.20
⑤	861767.60	19081.20



**PLAN - EL 673.00 / 671.50**

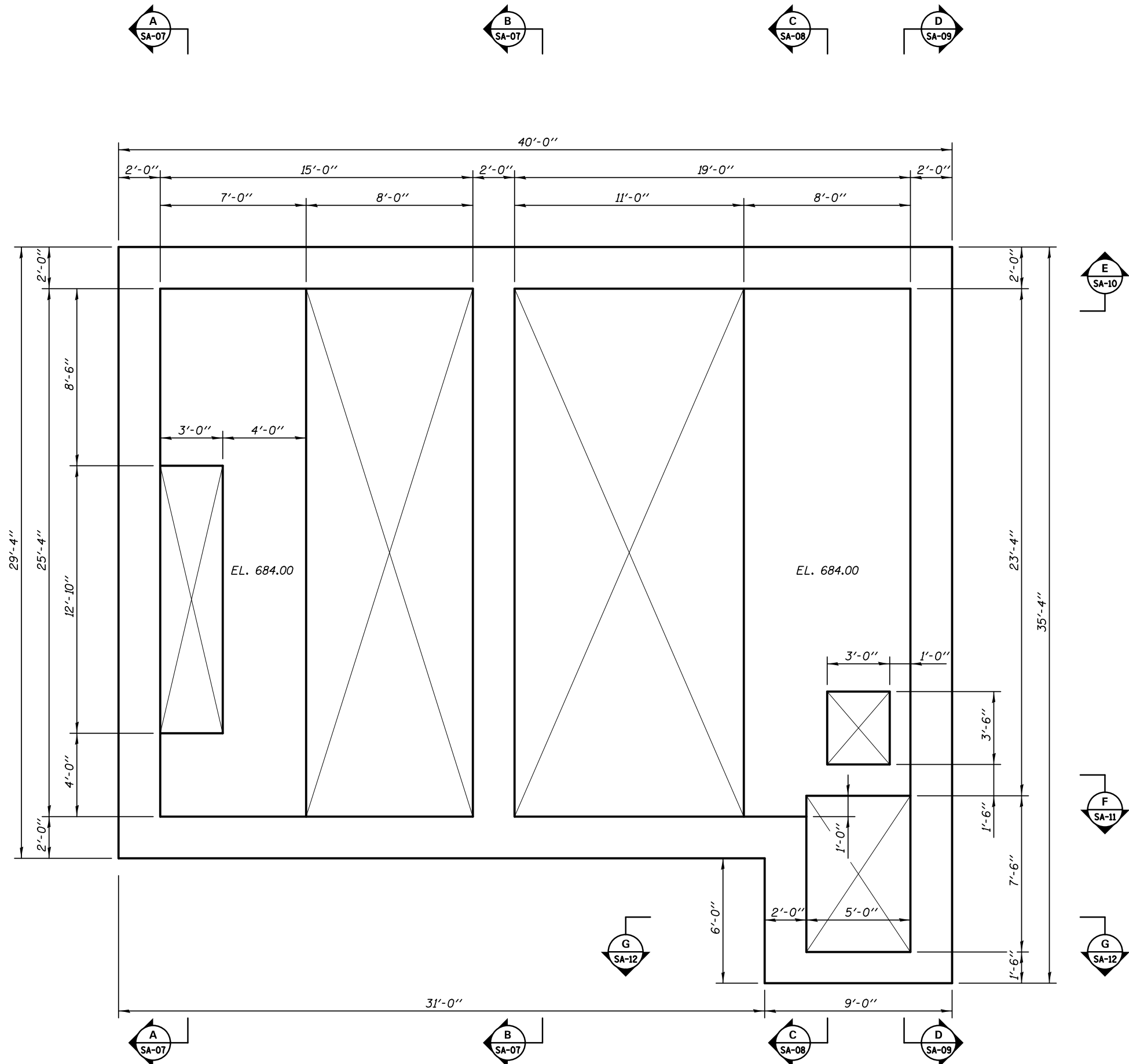


**PARTIAL PLAN - INFLOW BAFFLE**

**DRAINAGE TROUGH ELEVATIONS**

Point	Elevation
(A)	672.50
(B)	672.58
(C)	672.75
(D)	672.67
(E)	672.50





PLAN - EL 684.00



**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISD -
CHECKED - TB	REVISD -
DRAWN - TB	REVISD -
CHECKED - WPM	REVISD -
SCALE - NONE	
DATE - 3/22/2012	

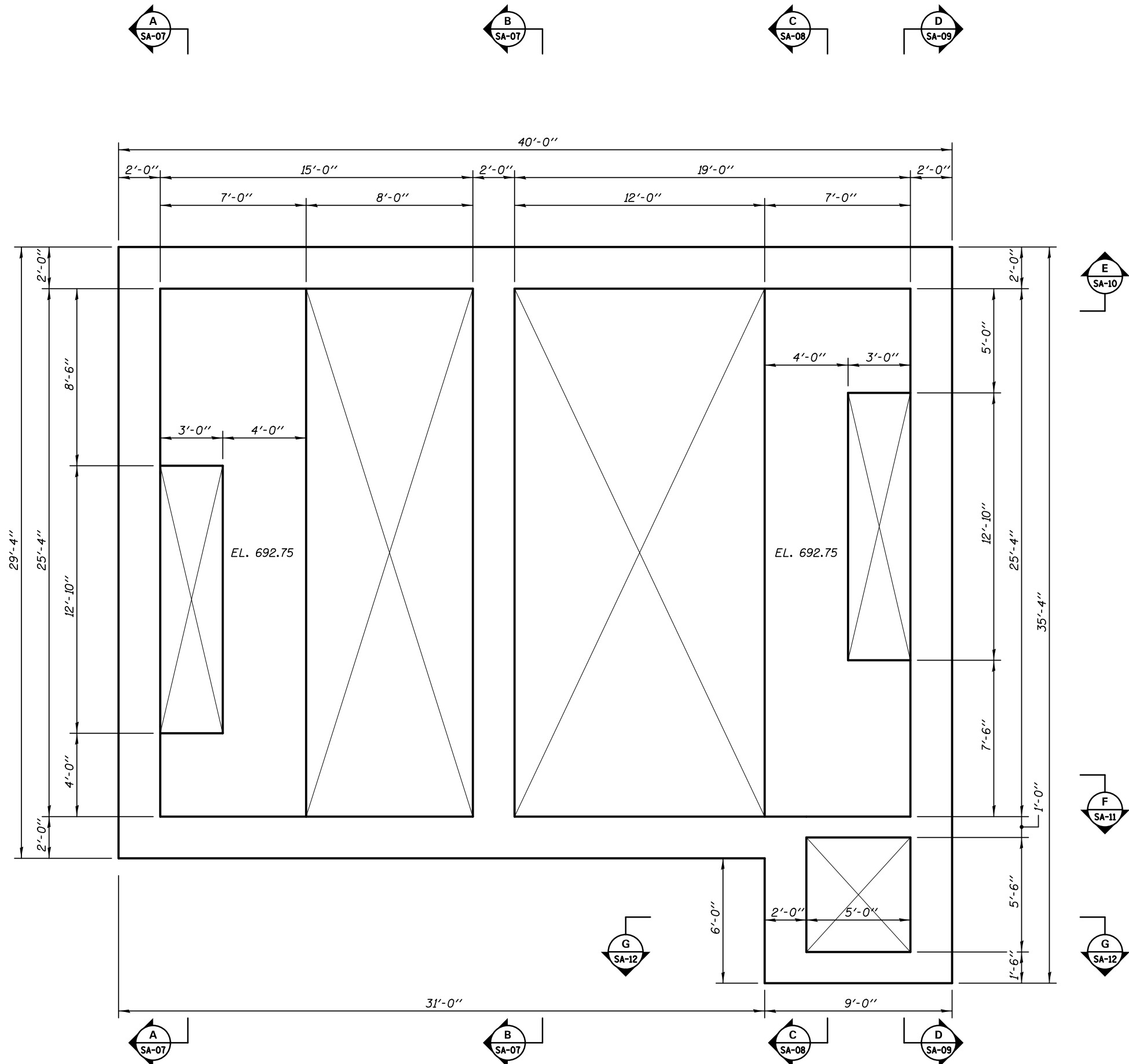
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURAL PLAN - EL 684.00  
PUMP STATION 47

SHEET NO. SA-03 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	78
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT



PLAN - EL 692.75



**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISD -
CHECKED - TB	REVISD -
DRAWN - TB	REVISD -
CHECKED - WPM	REVISD -
SCALE - NONE	
DATE - 3/22/2012	

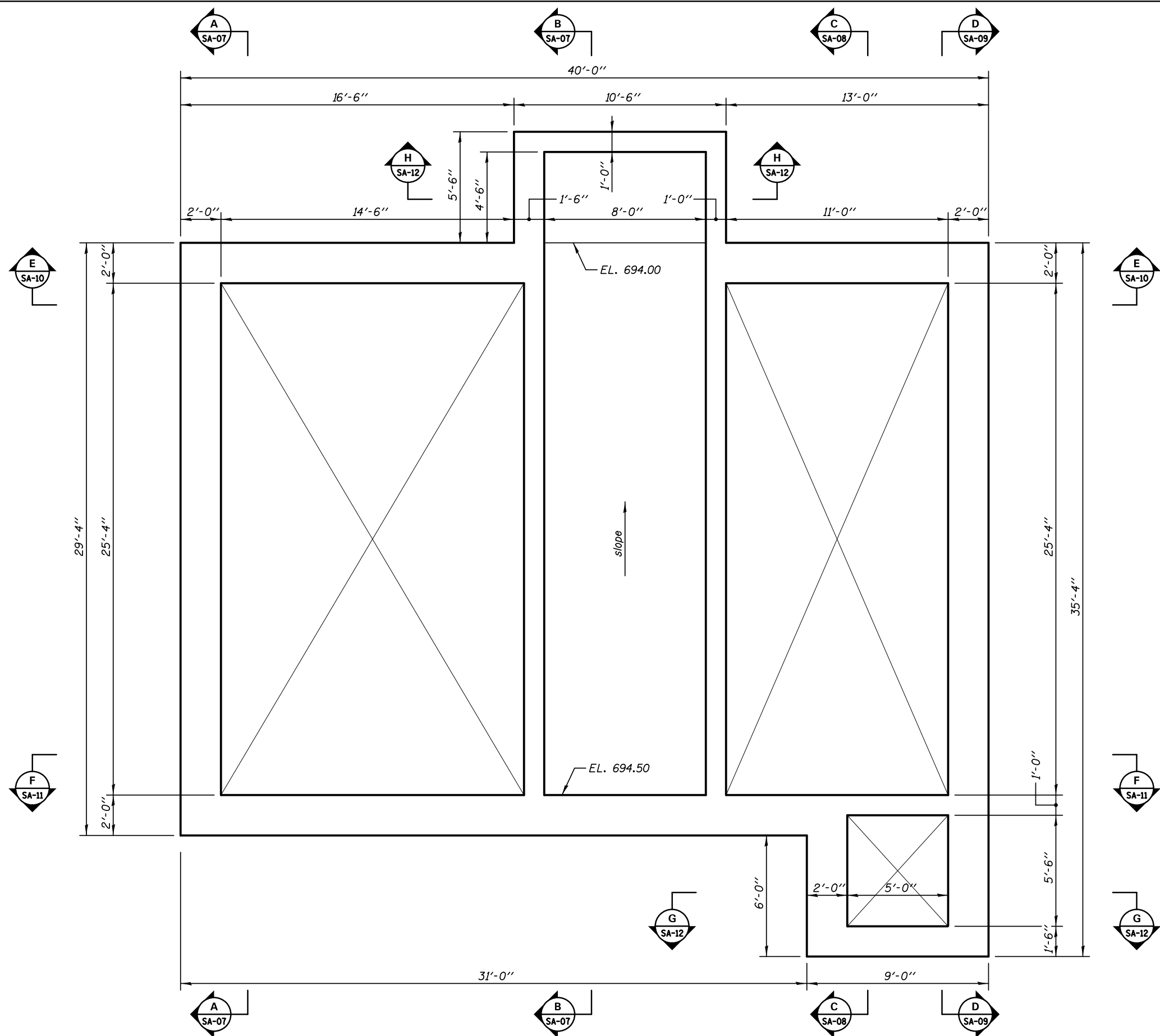
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURAL PLAN - EL 692.75  
PUMP STATION 47

SHEET NO. SA-04 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	79
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT



PLAN - EL 694.50



**KNIGHT**  
Engineers & Architects

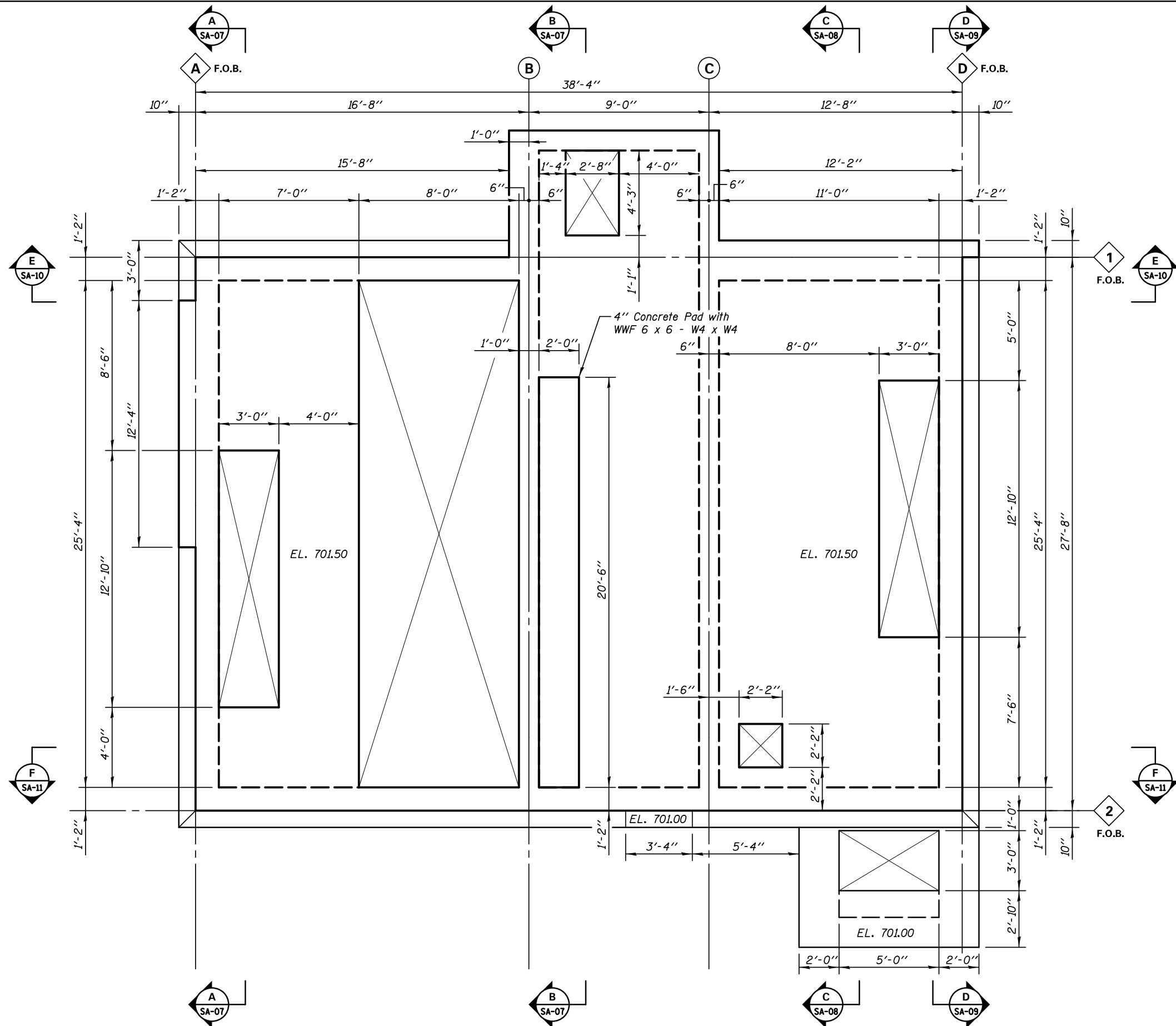
DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS
SCALE - NONE	
DATE - 3/22/2012	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURAL PLAN - EL 694.50  
PUMP STATION 47

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	80
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

SHEET NO. SA-05 OF 34 SHEETS



PLAN - EL 701.50



**KNIGHT**  
Engineers & Architects

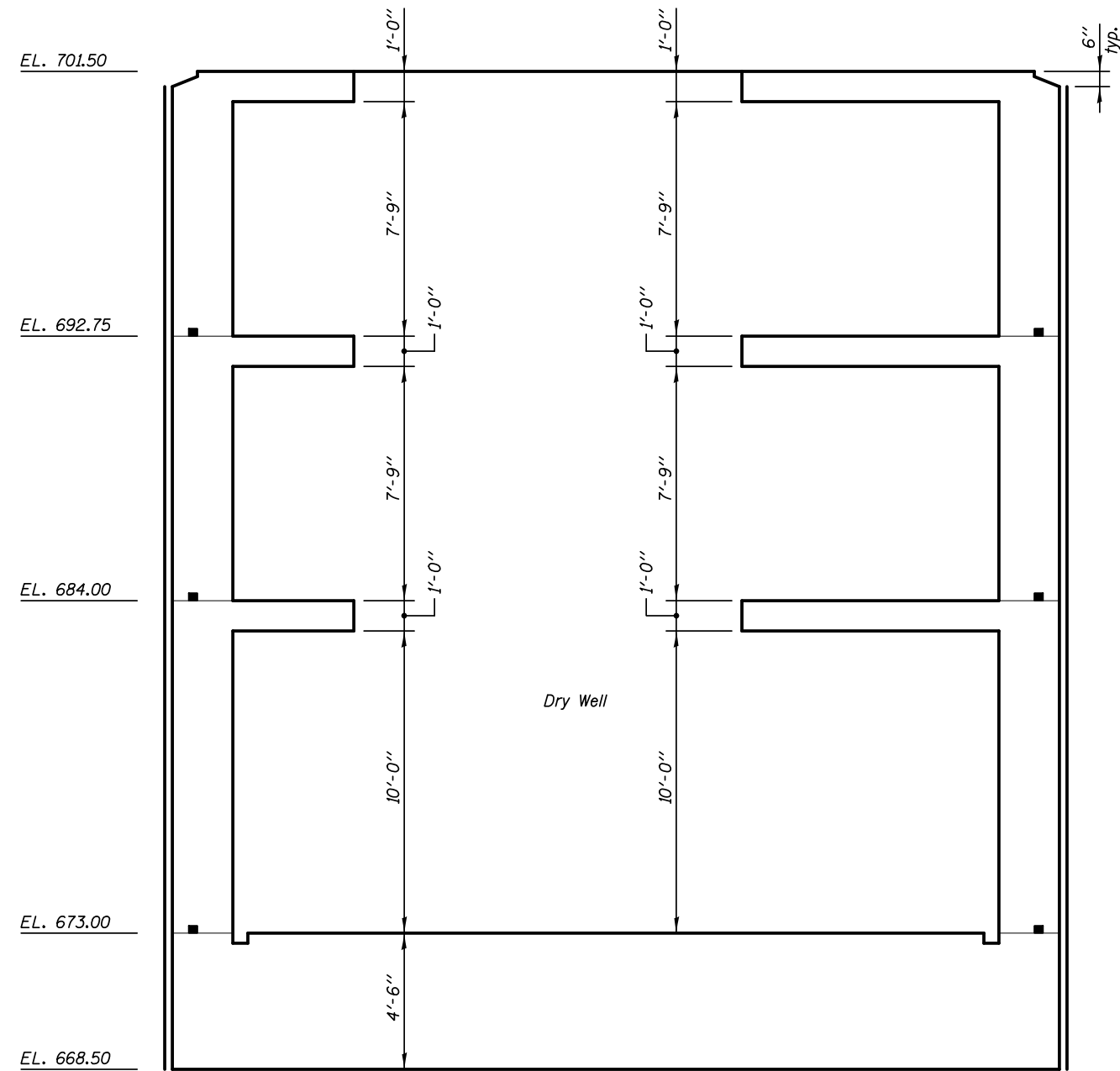
DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS
DATE - 3/22/2012	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

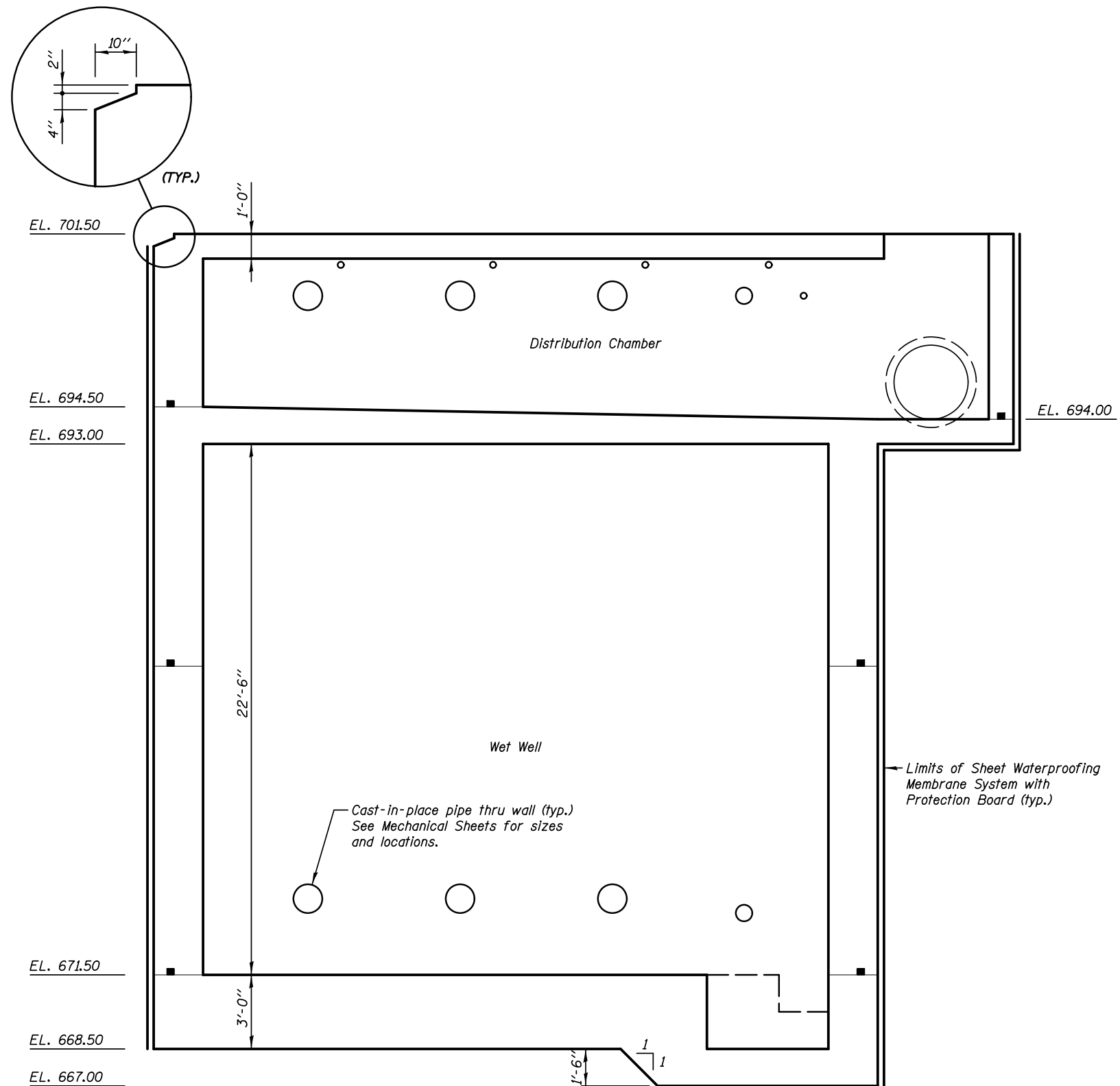
STRUCTURAL PLAN - EL 701.50  
PUMP STATION 47

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	81
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

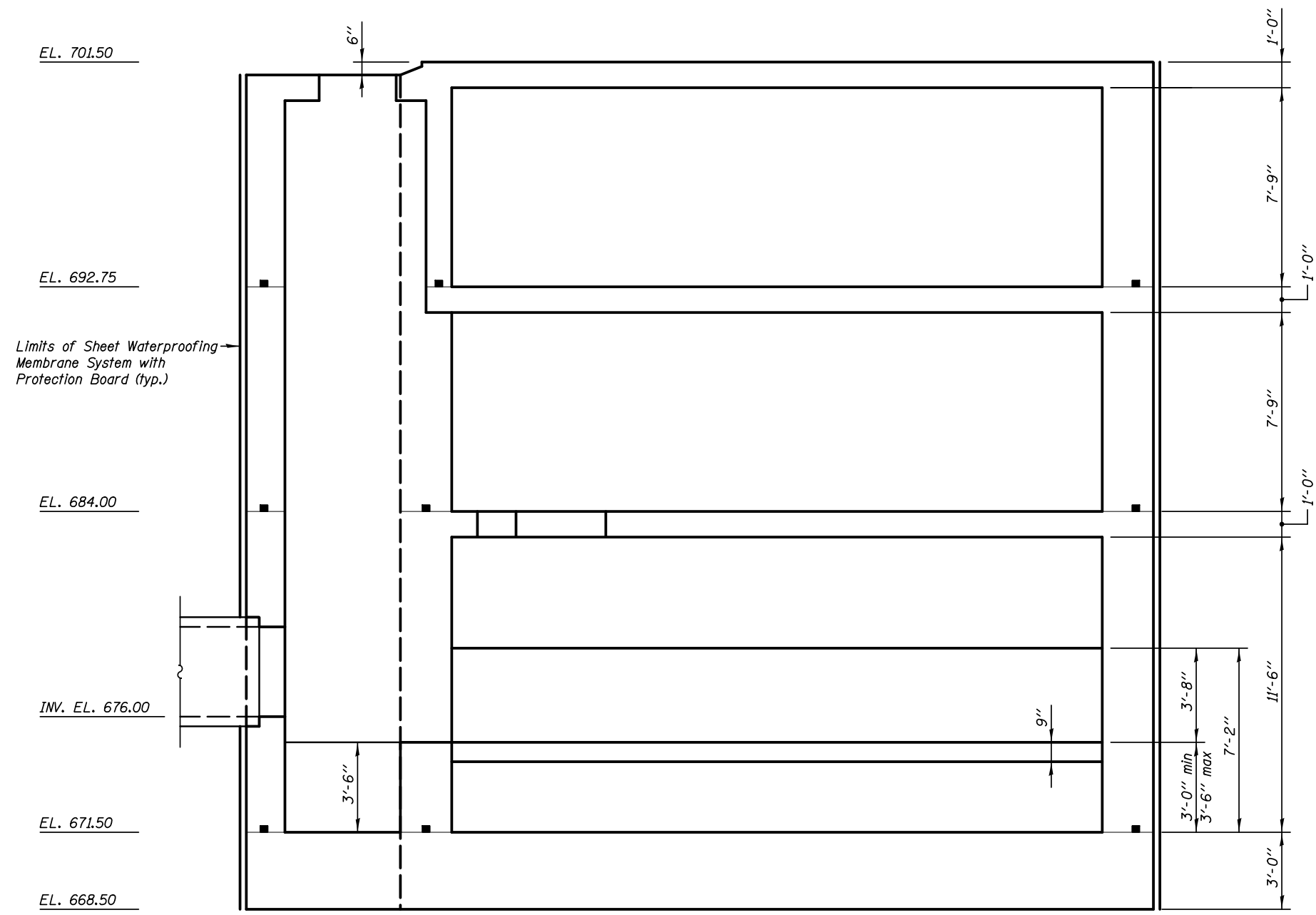
SHEET NO. SA-06 OF 34 SHEETS



**SECTION A-A**

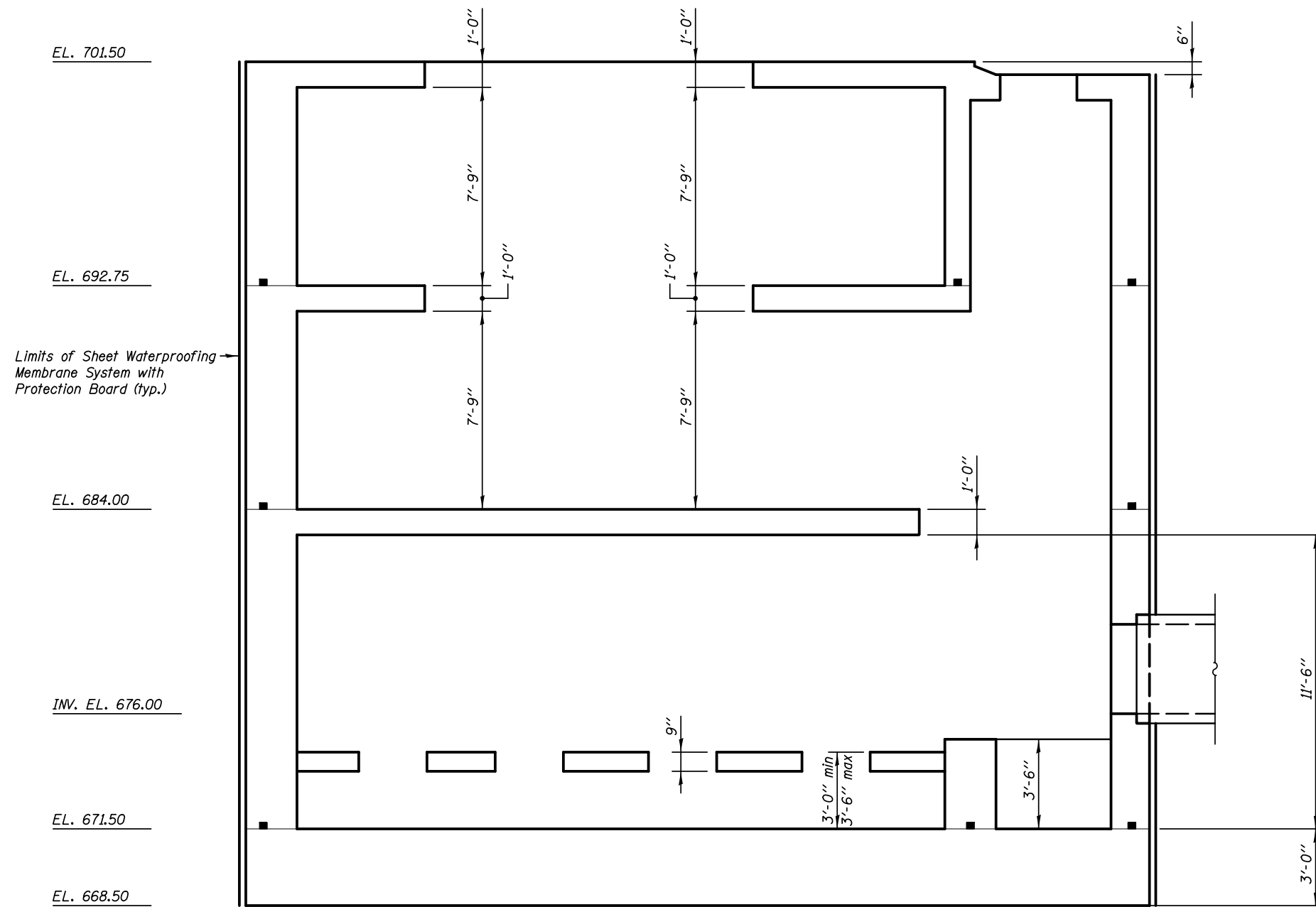


**SECTION B-B**



**SECTION C-C**

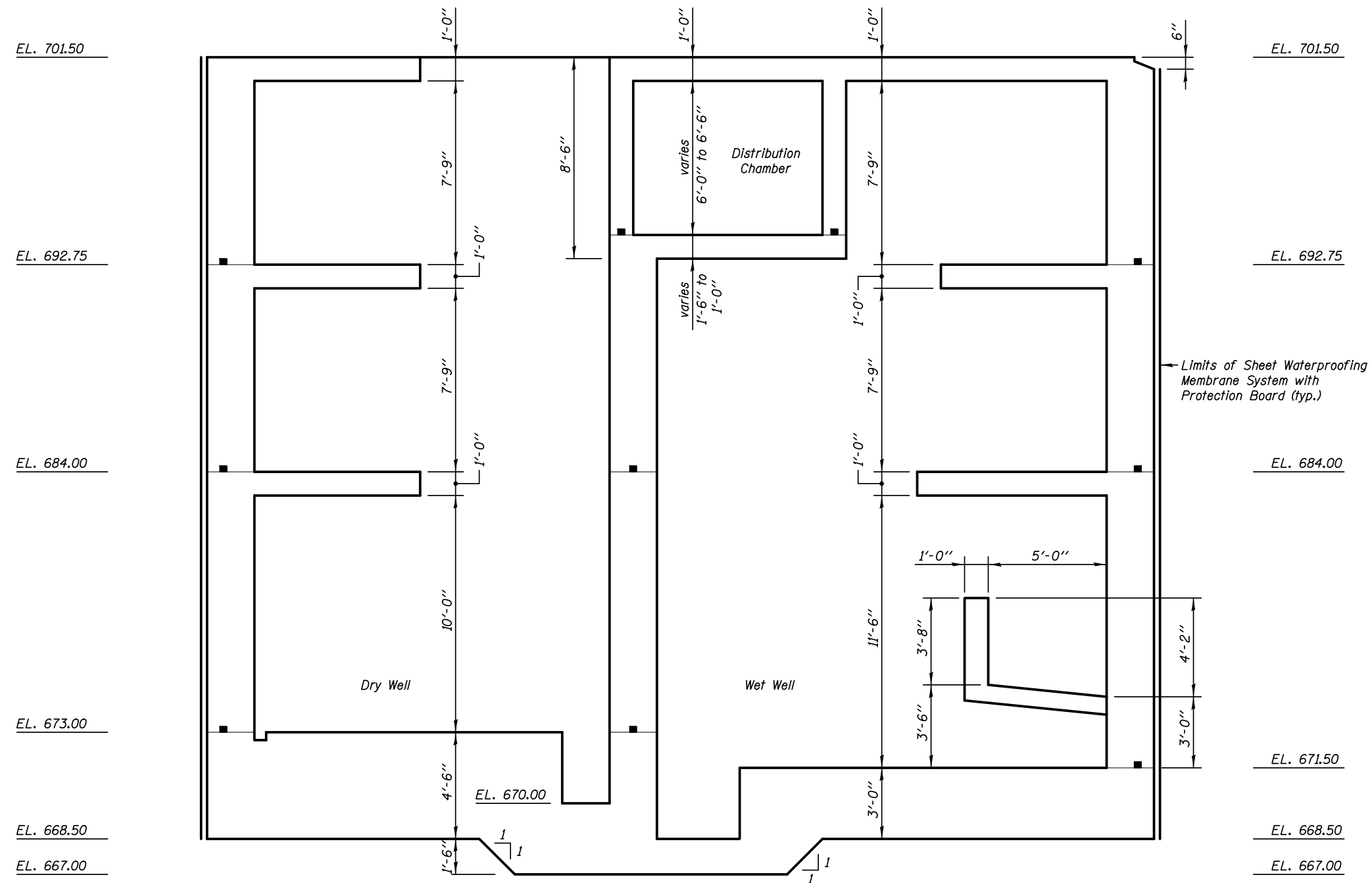
<b>KNIGHT</b> Engineers & Architects	DESIGNED - WPM	REVISD -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>STRUCTURAL SECTIONS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - TB	REVISD -			338/IL 59	2011-035-I	DUPAGE	181	83
SCALE - NONE	DRAWN - TB	REVISD -	SHEET NO. SA-08 OF 34 SHEETS		CONTRACT NO. 60P41				
DATE - 3/22/2012	CHECKED - WPM	REVISD -			ILLINOIS FED. AID PROJECT				



**SECTION D-D**

DESIGNED - WPM	REVISED -
CHECKED - TB	REVISED -
DRAWN - TB	REVISED -
CHECKED - WPM	REVISED -
SCALE - NONE	
DATE - 3/22/2012	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	84
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

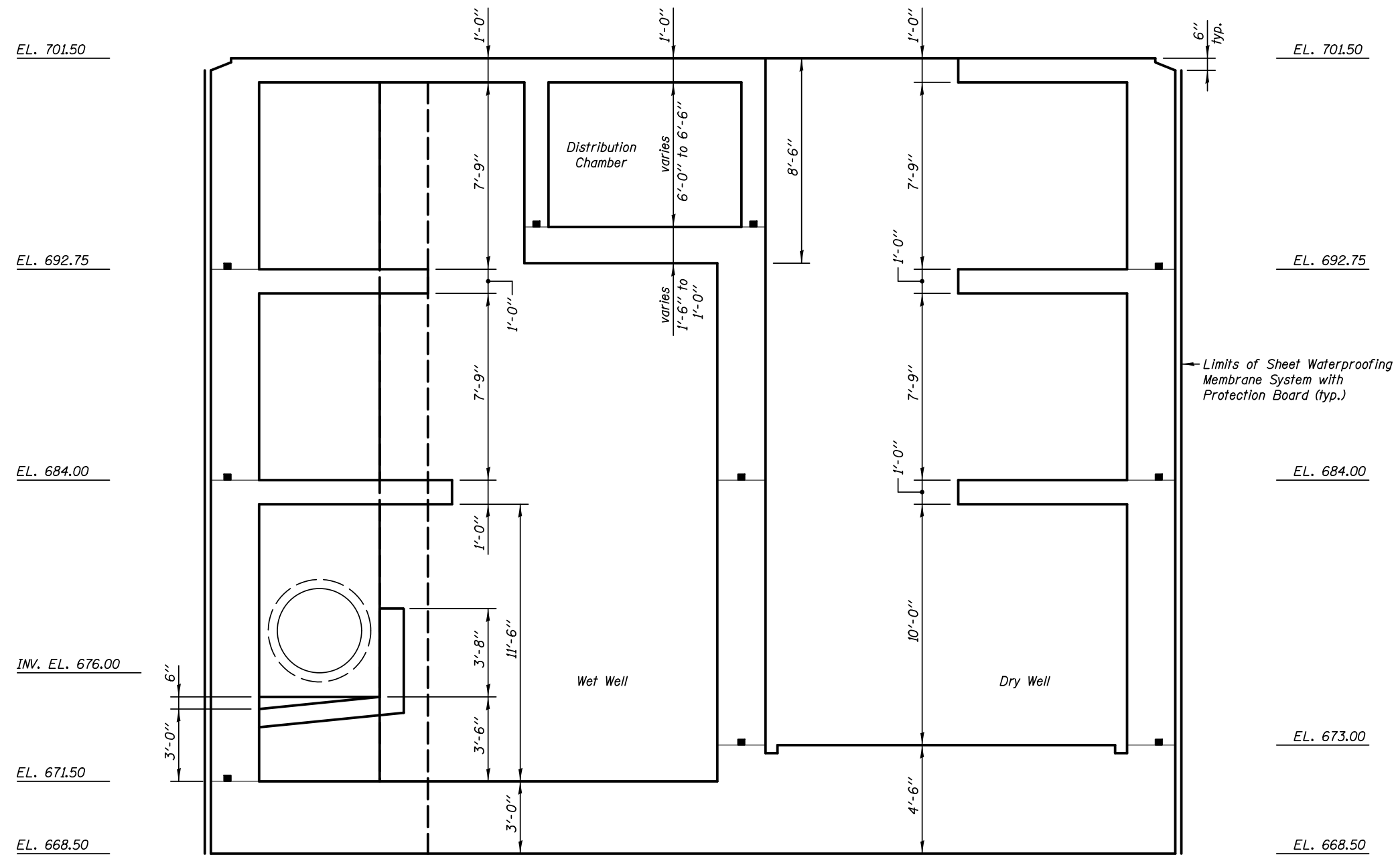


**SECTION E-E**

DESIGNED - WPM	REVISÉ -
CHECKED - TB	REVISÉ -
DRAWN - TB	REVISÉ -
CHECKED - WPM	REVISÉ -
SCALE - NONE	
DATE - 3/22/2012	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	85
CONTRACT NO. 60P41				

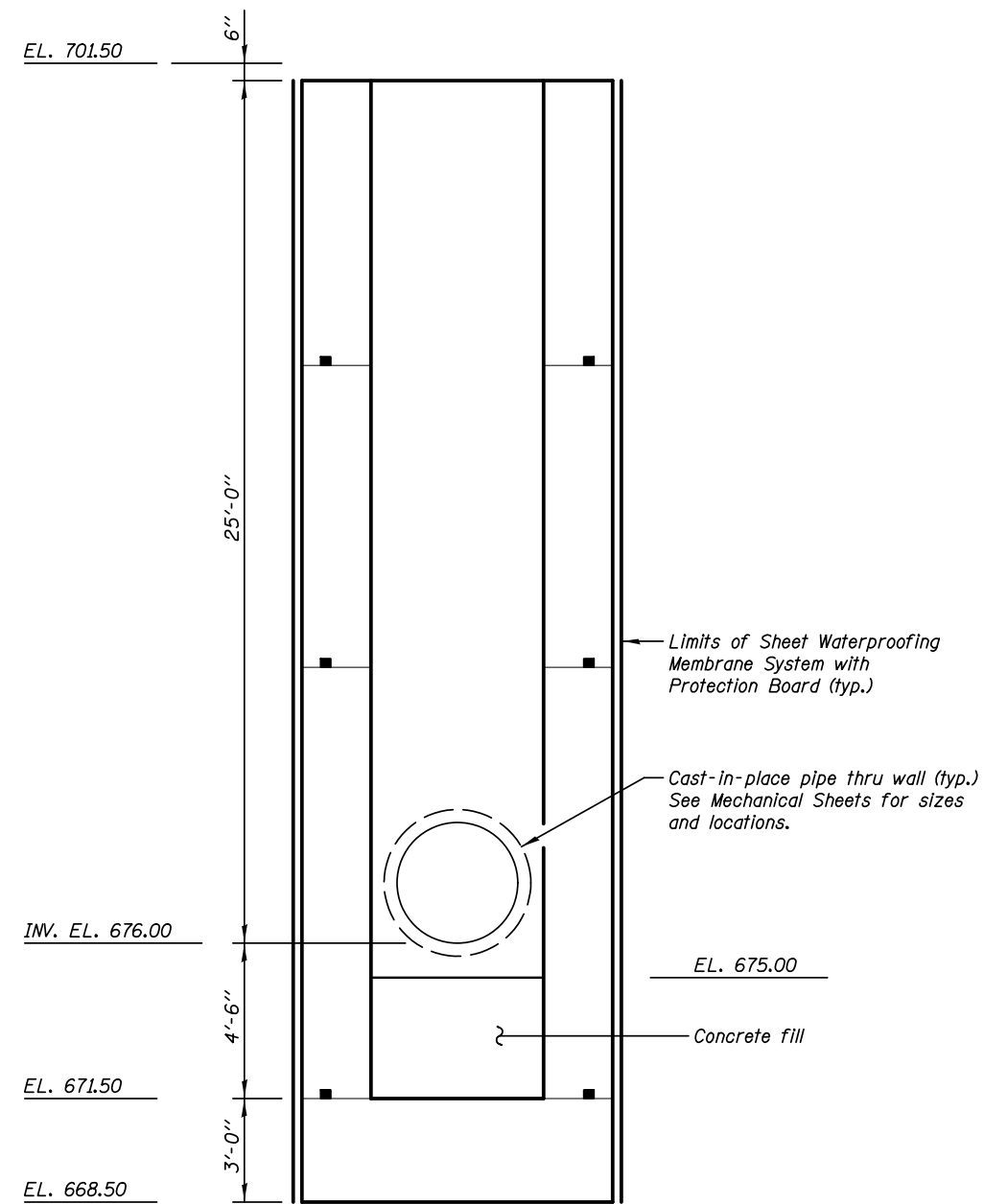




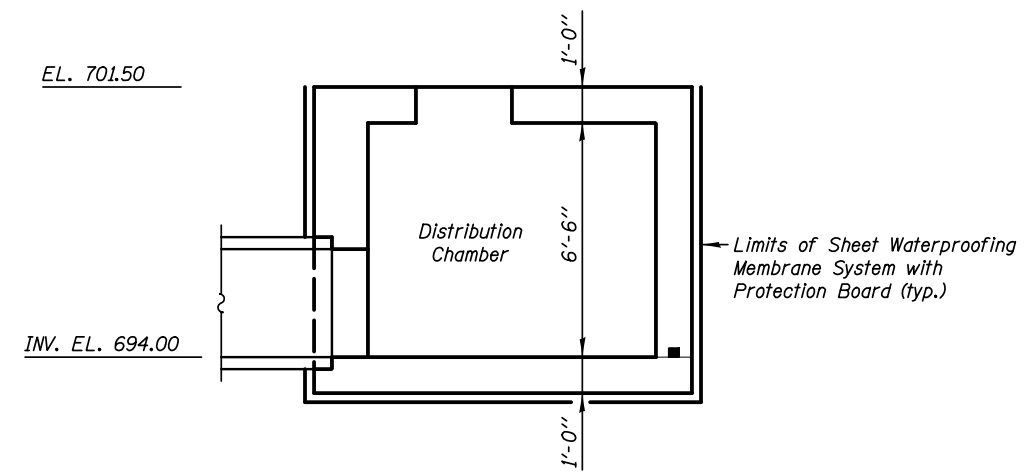
**SECTION F-F**

DESIGNED - WPM	REVISED -
CHECKED - TB	REVISED -
DRAWN - TB	REVISED -
CHECKED - WPM	REVISED -
SCALE - NONE	
DATE - 3/22/2012	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	86
<b>CONTRACT NO. 60P41</b>				

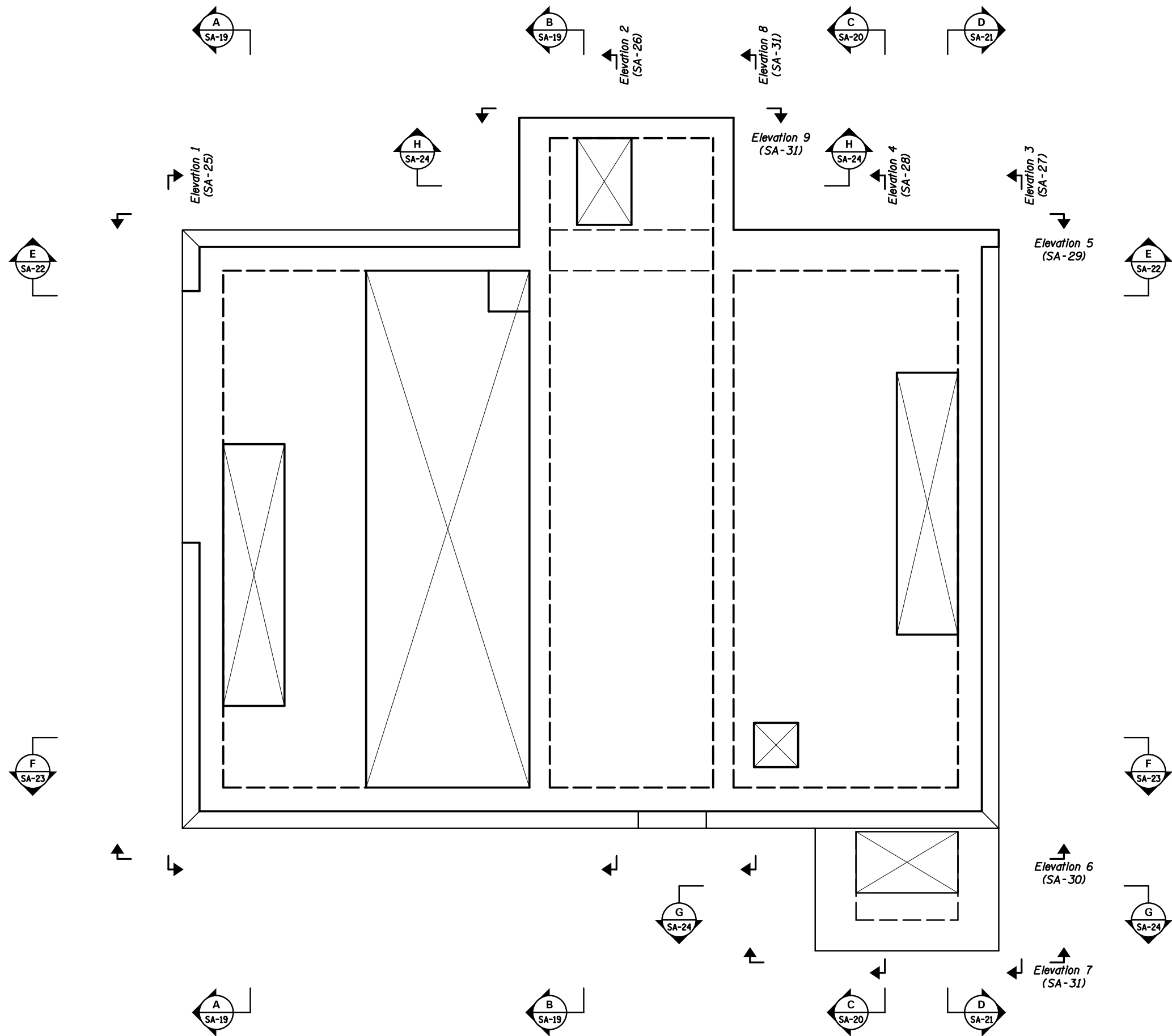


**SECTION G-G**



**SECTION H-H**

<b>KNIGHT</b> Engineers & Architects	DESIGNED - WPM	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>STRUCTURAL SECTIONS</b> <b>PUMP STATION 47</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - TB	REVISED -			338/IL 59	2011-035-I	DUPAGE	181	87
	SCALE - NONE	REVISED -			CONTRACT NO. 60P41				
DATE - 3/22/2012	CHECKED - WPM	REVISED -	SHEET NO. SA-12 OF 34 SHEETS		ILLINOIS FED. AID PROJECT				



**REINFORCEMENT KEY PLAN**

**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISD -
CHECKED - TB	REVISD -
DRAWN - TB	REVISD -
CHECKED - WPM	REVISD -
SCALE - NONE	
DATE - 3/22/2012	

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

**REINFORCEMENT DETAILS - KEY PLAN**  
**PUMP STATION 47**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	88
CONTRACT NO. 60P41				

SHEET NO. SA-13 OF 34 SHEETS

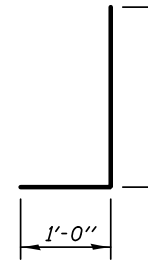
ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

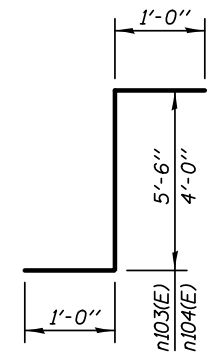
BAR	NO.	SIZE	LENGTH	SHAPE
n100(E)	302	#6	20'-0"	L
n101(E)	12	#6	7'-0"	L
n102(E)	39	#6	21'-6"	L
n103(E)	4	#6	7'-6"	L
n104(E)	9	#6	6'-0"	L
t100(E)	60	#9	18'-8"	L
t101(E)	2	#9	14'-8"	L
t102(E)	2	#9	1'-8"	L
t103(E)	52	#8	27'-0"	L
t104(E)	10	#8	17'-2"	L
t105(E)	12	#8	8'-8"	L
t106(E)	10	#6	11'-2"	L
w100(E)	38	#9	29'-0"	L
w101(E)	2	#9	25'-0"	L
w102(E)	2	#9	1'-8"	L
w103(E)	36	#8	29'-0"	L
w104(E)	6	#8	22'-1"	L
w105(E)	6	#8	1'-8"	L
w106(E)	20	#8	14'-0"	L
w107(E)	12	#6	8'-7"	L
Reinforcement Bars, Epoxy Coated			LB	27160

**A DIMENSIONS**

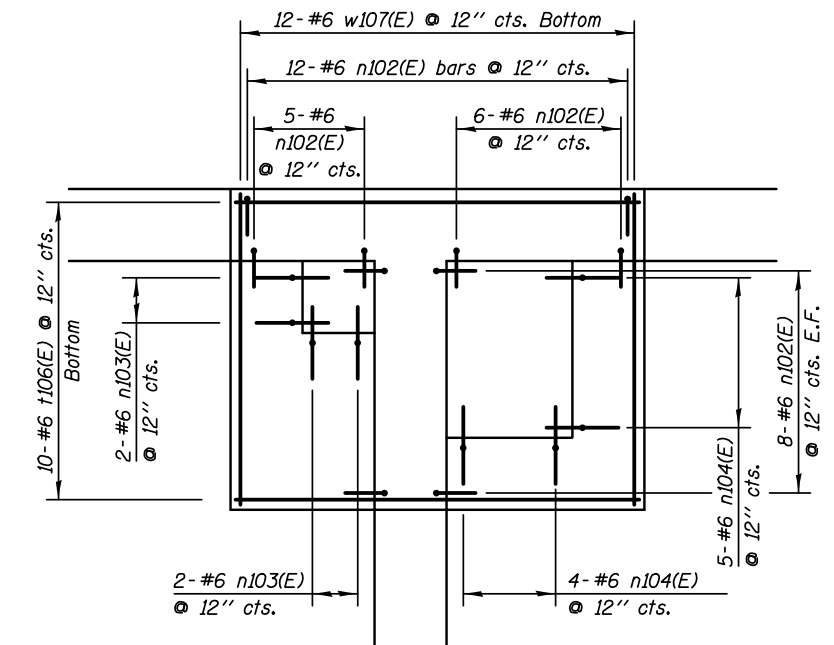
BAR	A
n100(E)	19'-0"
n101(E)	6'-0"
n102(E)	20'-6"



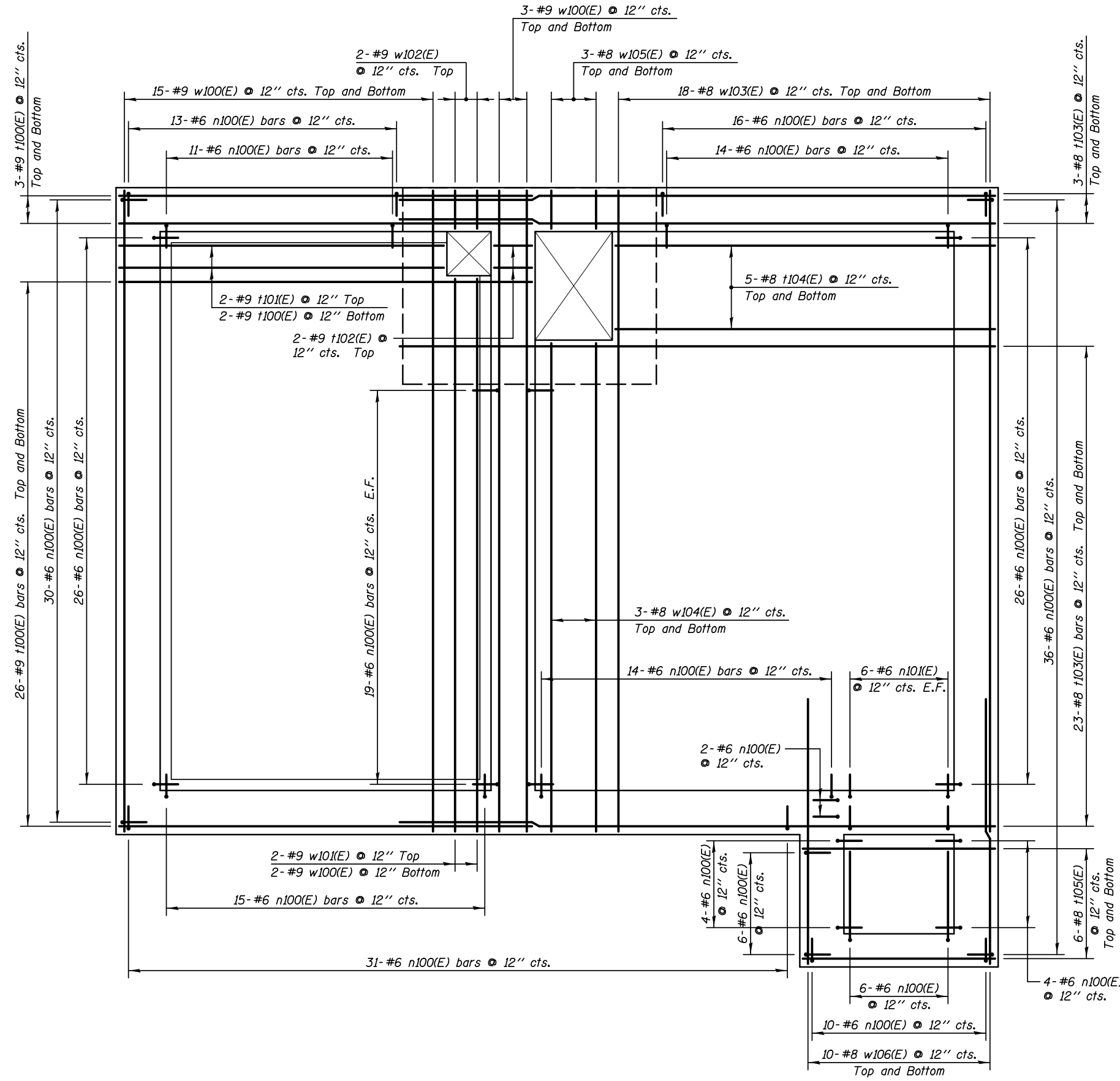
**BARS n100(E), n101(E) & n102(E)**



**BARS n103(E) & n104(E)**



**REINFORCEMENT PARTIAL PLAN - EL. 668.50**



**REINFORCEMENT PLAN - EL 673.00 / 671.50**

**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
SCALE - NONE	REVISIONS
DATE - 3/22/2012	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REINFORCEMENT DETAILS - FLOOR SLAB EL 673.00 / 671.50  
PUMP STATION 47**

SHEET NO. SA-14 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	89
CONTRACT NO. 60P41			ILLINOIS FED. AID PROJECT	

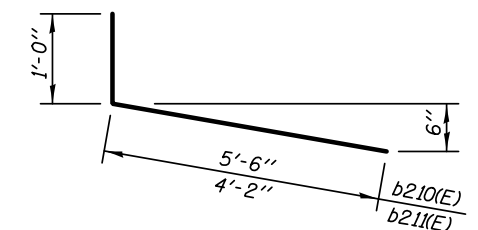
**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a200(E)	8	#4	11'-2"	
a201(E)	8	#4	10'-2"	
a202(E)	10	#4	18'-6"	
a203(E)	8	#4	6'-8"	
a204(E)	8	#4	5'-8"	
a205(E)	8	#4	27'-0"	
a206(E)	8	#4	26'-0"	
a207(E)	3	#4	22'-0"	
a208(E)	3	#4	21'-0"	
a209(E)	4	#4	8'-0"	
a210(E)	4	#4	7'-0"	
a211(E)	12	#4	2'-0"	
a212(E)	5	#4	25'-0"	
b200(E)	14	#4	9'-8"	
b201(E)	14	#4	8'-8"	
b202(E)	32	#4	3'-8"	
b203(E)	23	#4	10'-8"	
b204(E)	23	#4	9'-8"	
b205(E)	2	#4	2'-8"	
b210(E)	19	#4	6'-6"	
b211(E)	8	#4	5'-2"	
d200(E)	29	#4	2'-0"	
Reinforcement Bars, Epoxy Coated			LB	1530

**A DIMENSIONS**

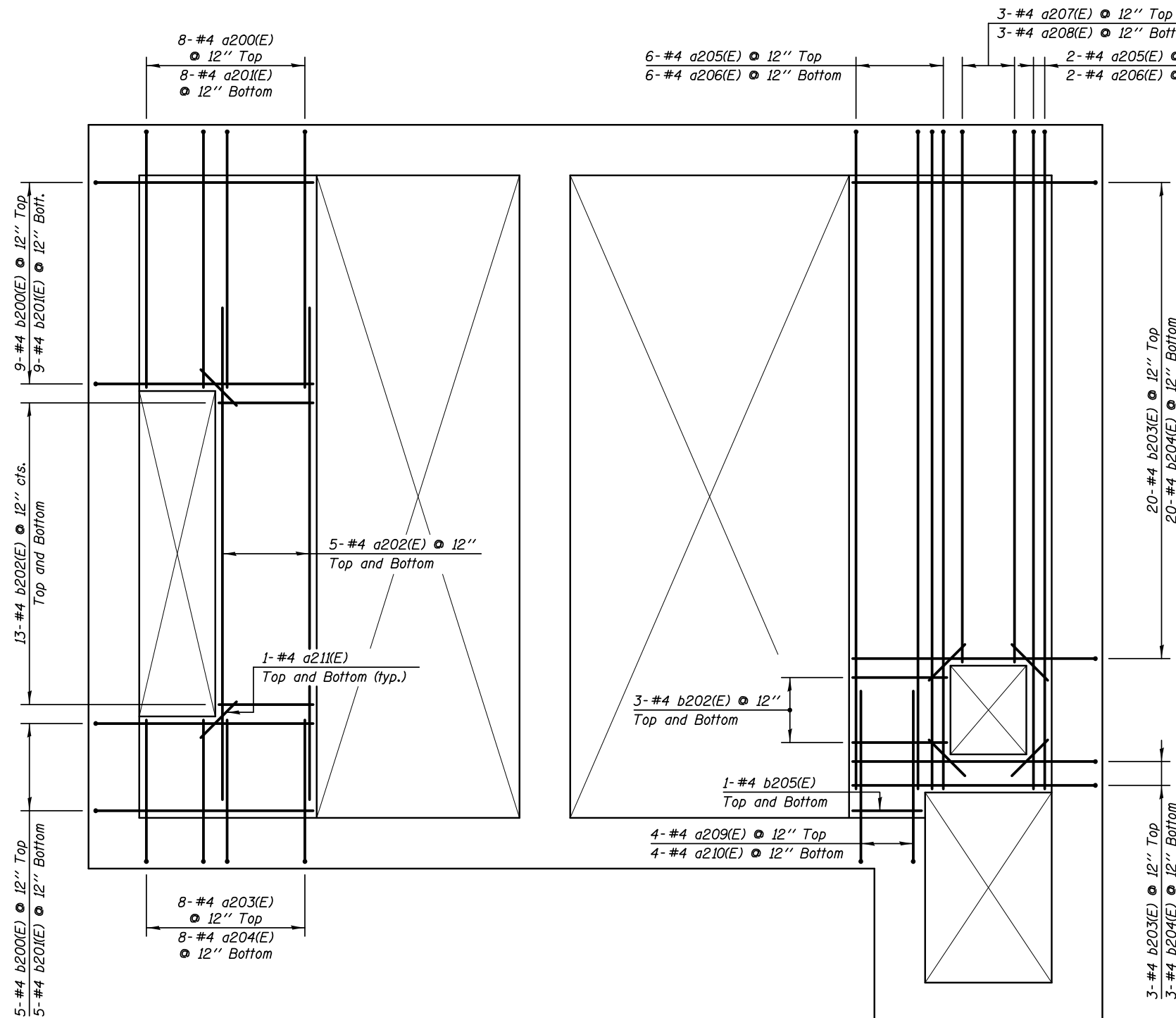
BAR	A
a200(E)	10'-2"
a203(E)	5'-8"
a205(E)	25'-0"
a207(E)	20'-6"
a209(E)	7'-0"
b200(E)	8'-8"
b203(E)	9'-8"

**BARS a200(E), a203(E), a205(E), a207(E), a209(E), b200(E) & b203(E)**



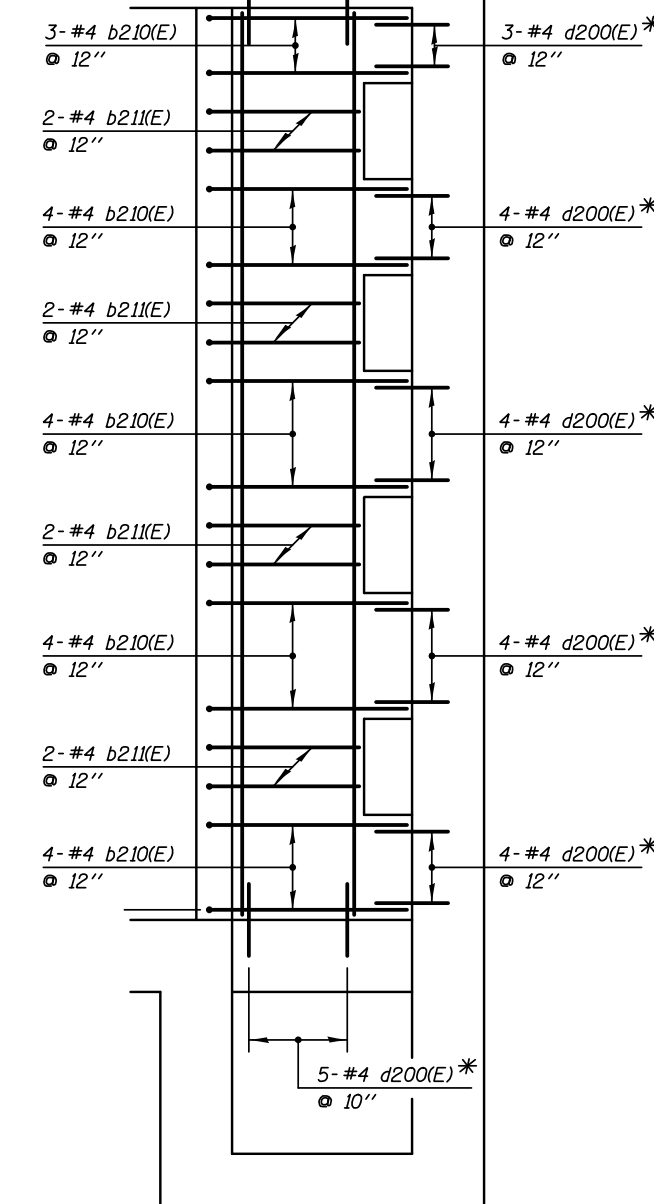
**BARS b210(E) & b211(E)**

\*Drill and set into foundation wall according to Article 509.06 of the Standard Specifications. Min embedment shall be 1'-0". Cost included in the cost of "Concrete Structures".



**REINFORCEMENT PLAN - EL 684.00**

**REINFORCEMENT PLAN - INFLOW BAFFLE**



**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REINFORCEMENT DETAILS - FLOOR SLAB EL 684.00  
PUMP STATION 47**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	90
CONTRACT NO. 60P41				

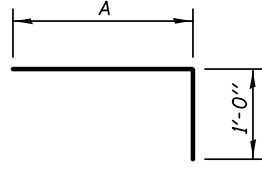
SHEET NO. SA-15 OF 34 SHEETS

ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

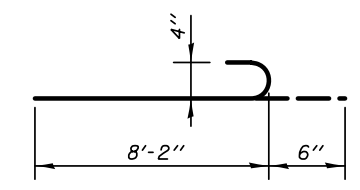
BAR	NO.	SIZE	LENGTH	SHAPE
a300(E)	8	#4	11'-2"	
a301(E)	8	#4	10'-2"	
a302(E)	20	#4	18'-6"	
a303(E)	8	#4	6'-8"	
a304(E)	8	#4	5'-8"	
a305(E)	8	#4	7'-8"	
a306(E)	8	#4	6'-8"	
a307(E)	5	#4	8'-8"	
a308(E)	5	#4	8'-2"	
a309(E)	3	#4	10'-4"	
a310(E)	3	#4	9'-4"	
a311(E)	8	#4	2'-0"	
b300(E)	28	#4	9'-8"	
b301(E)	30	#4	8'-8"	
b302(E)	52	#4	3'-8"	
Reinforcement Bars, Epoxy Coated			LB	1100

**A DIMENSIONS**

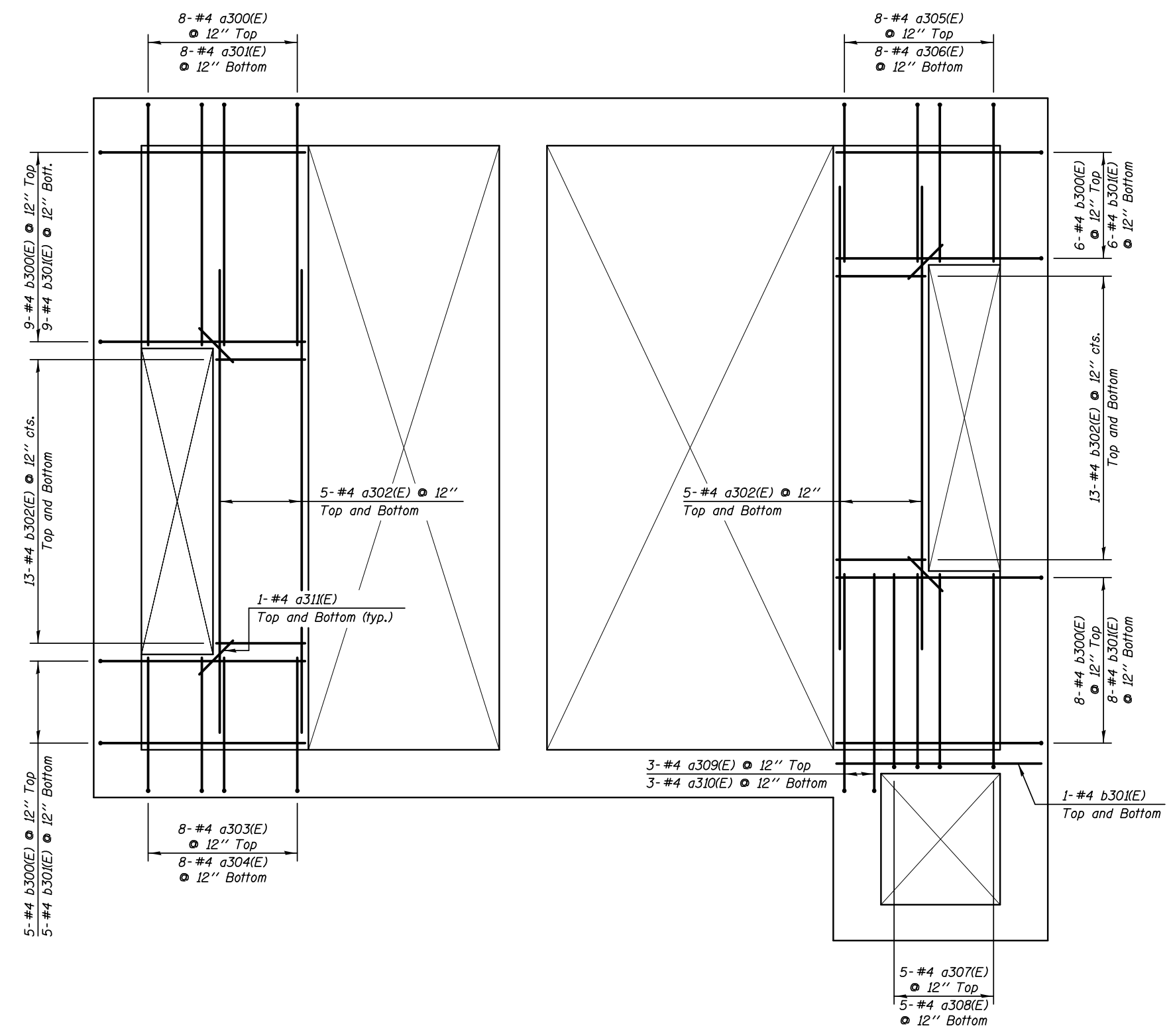


BAR	A
a300(E)	10'-2"
a303(E)	5'-8"
a305(E)	6'-8"
a309(E)	9'-4"
b300(E)	8'-8"

**BARS a300(E), a303(E), a305(E), a309(E) & b300(E)**

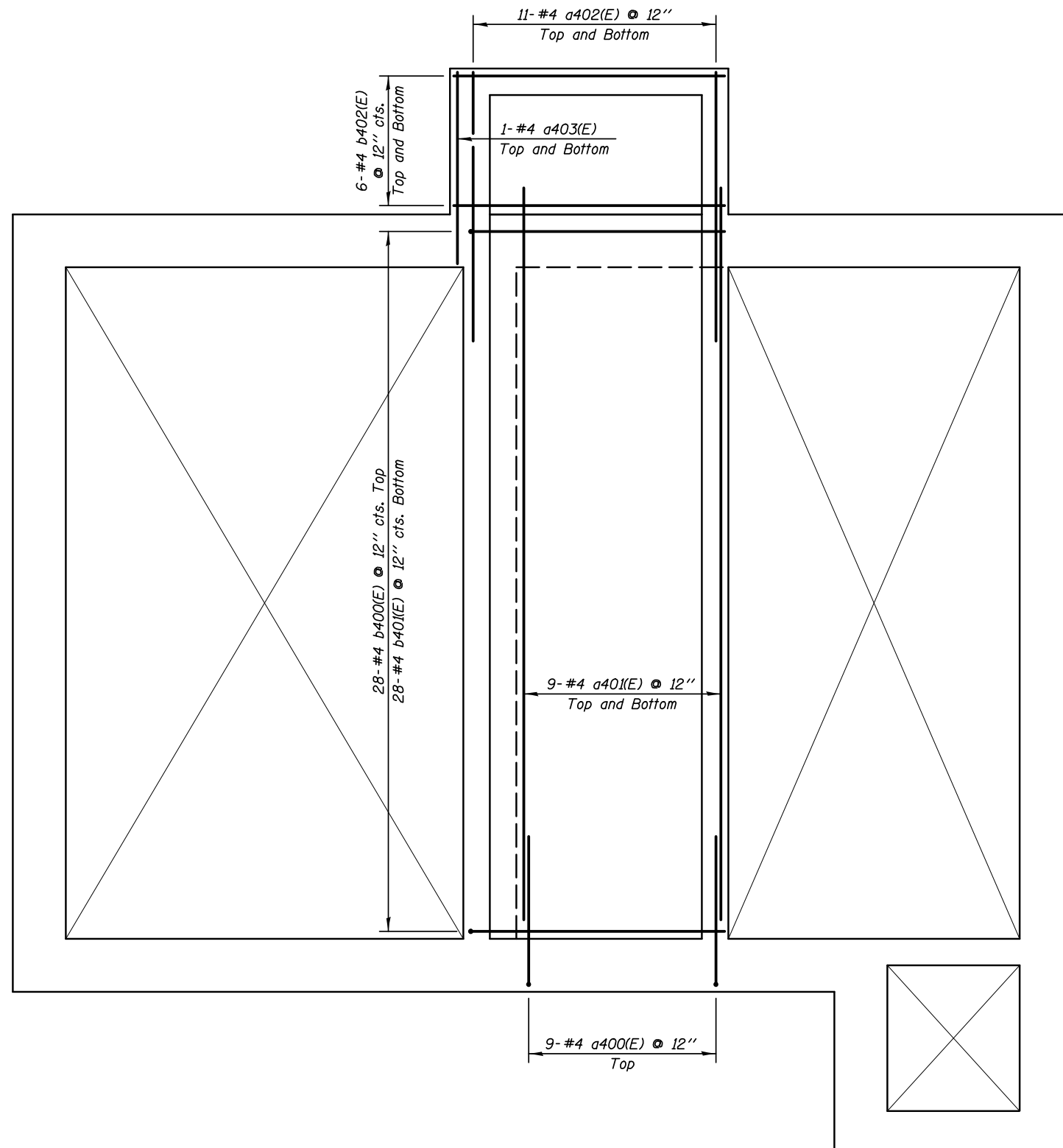


**BAR a307(E)**



**REINFORCEMENT PLAN - EL 692.75**



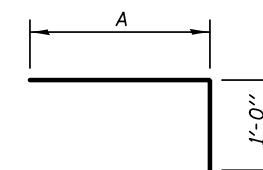


**REINFORCEMENT PLAN - EL 694.50**

**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a400(E)	9	#4	7'-0"	└─┘
a401(E)	18	#4	27'-0"	───
a402(E)	22	#4	10'-0"	───
a403(E)	2	#4	7'-2"	───
b400(E)	28	#4	10'-8"	└─┘
b401(E)	28	#4	9'-8"	───
b402(E)	12	#4	10'-2"	───
Reinforcement Bars, Epoxy Coated			LB	990

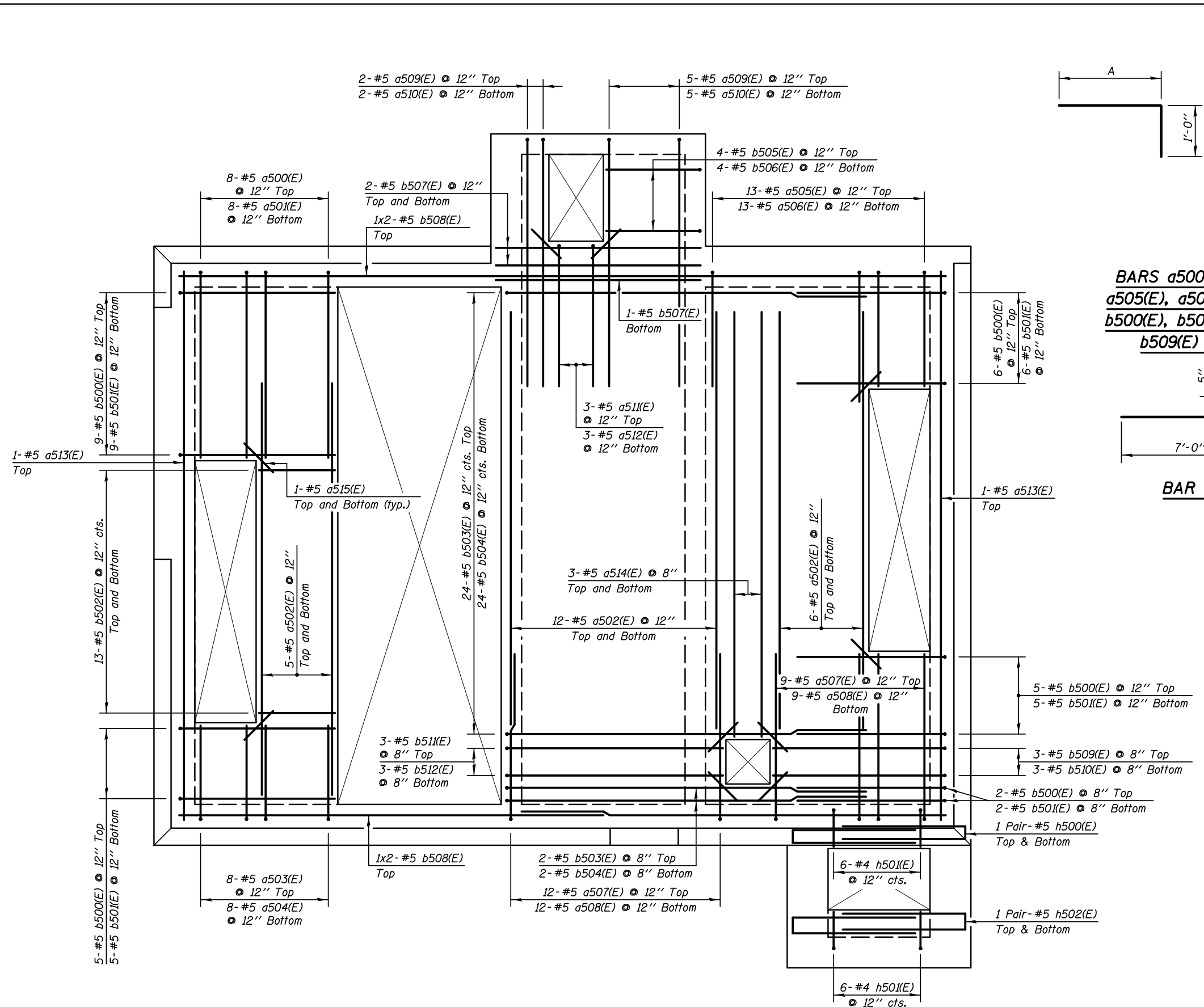
**A DIMENSIONS**



BAR	A
a400(E)	6'-0"
b400(E)	9'-8"

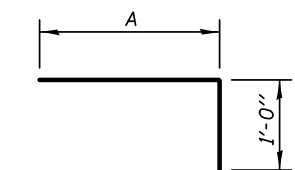
**BARS a400(E) & b400(E)**



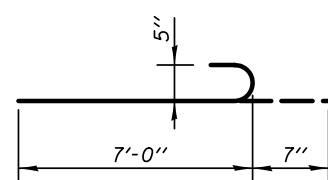


**A DIMENSIONS**

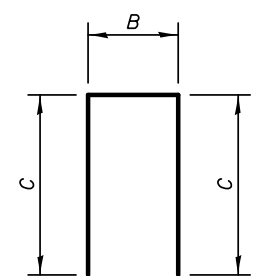
BAR	A
a500(E)	9'-2"
a503(E)	4'-8"
a505(E)	5'-8"
a507(E)	8'-2"
a509(E)	12'-2"
b500(E)	7'-8"
b503(E)	17'-8"
b505(E)	4'-8"
b509(E)	8'-6"
b511(E)	10'-8"



**BARS a500(E), a503(E), a505(E), a507(E), a509(E), b500(E), b503(E), b505(E), b509(E) & b511(E)**



**BAR a511(E)**



**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a500(E)	8	#5	10'-2"	L
a501(E)	8	#5	10'-2"	L
a502(E)	46	#5	19'-9"	L
a503(E)	8	#5	5'-8"	L
a504(E)	8	#5	5'-8"	L
a505(E)	13	#5	6'-8"	L
a506(E)	13	#5	6'-8"	L
a507(E)	21	#5	9'-2"	L
a508(E)	21	#5	9'-2"	L
a509(E)	7	#5	13'-2"	L
a510(E)	7	#5	12'-2"	L
a511(E)	3	#5	7'-7"	L
a512(E)	3	#5	7'-0"	L
a513(E)	2	#5	27'-0"	L
a514(E)	6	#5	20'-9"	L
a515(E)	20	#5	2'-0"	L
b500(E)	27	#5	8'-8"	L
b501(E)	27	#5	8'-8"	L
b502(E)	26	#5	3'-8"	L
b503(E)	26	#5	18'-8"	L
b504(E)	26	#5	17'-8"	L
b505(E)	4	#5	5'-8"	L
b506(E)	4	#5	4'-8"	L
b507(E)	5	#5	10'-2"	L
b508(E)	4	#5	21'-0"	L
b509(E)	3	#5	9'-6"	L
b510(E)	3	#5	9'-6"	L
b511(E)	3	#5	11'-8"	L
b512(E)	3	#5	10'-8"	L
h500(E)	4	#5	12'-10"	L
h501(E)	12	#4	4'-4"	L
h502(E)	4	#5	13'-0"	L
Reinforcement Bars, Epoxy Coated			LB	4290

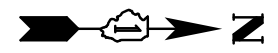
**B & C DIMENSIONS**

BAR	B	C
h500(E)	10"	6'-0"
h501(E)	8"	1'-10"
h502(E)	1'-0"	6'-0"

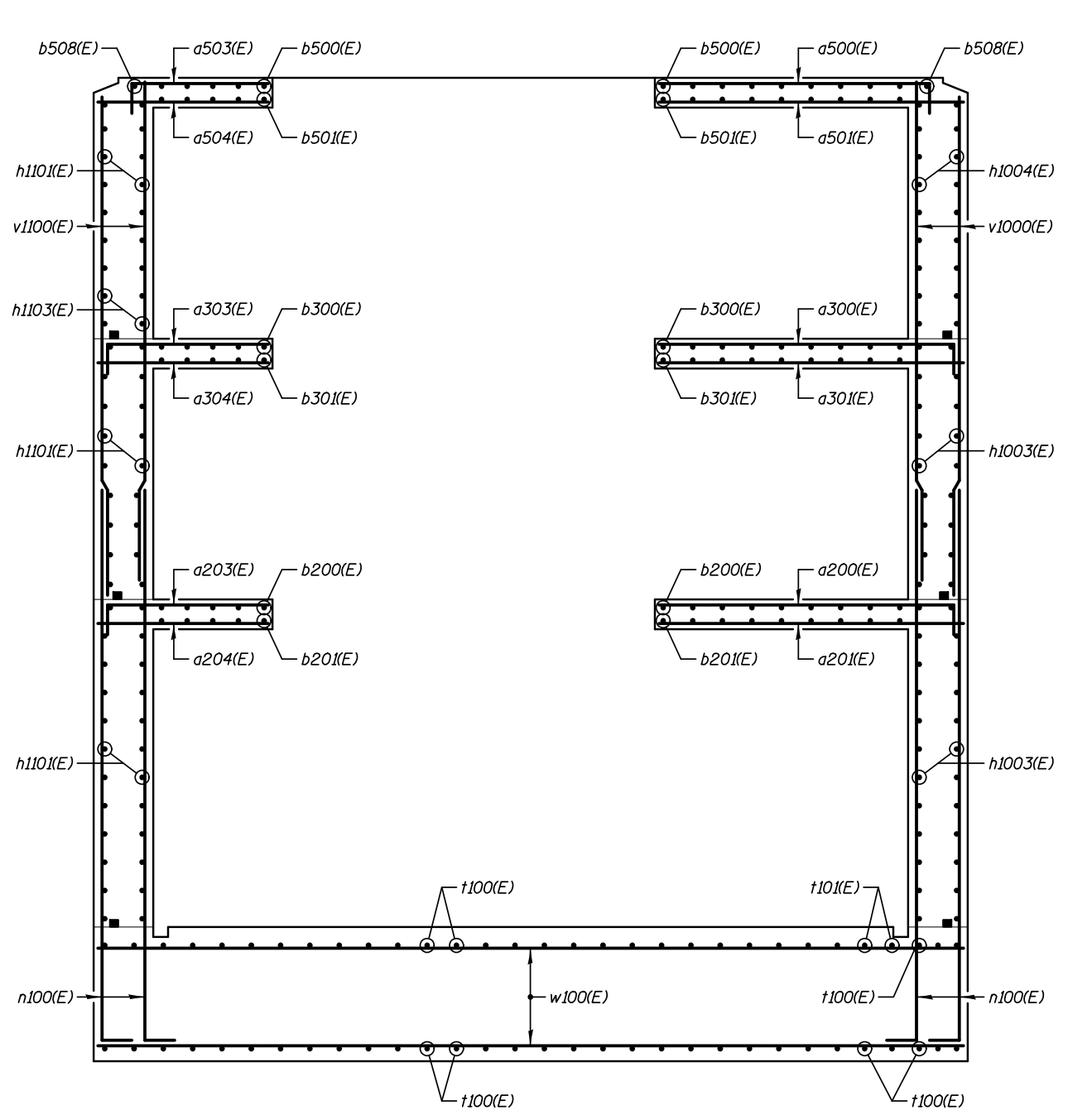
**BARS h500(E), h501(E) & h502(E)**

**REINFORCEMENT PLAN - EL 701.50**

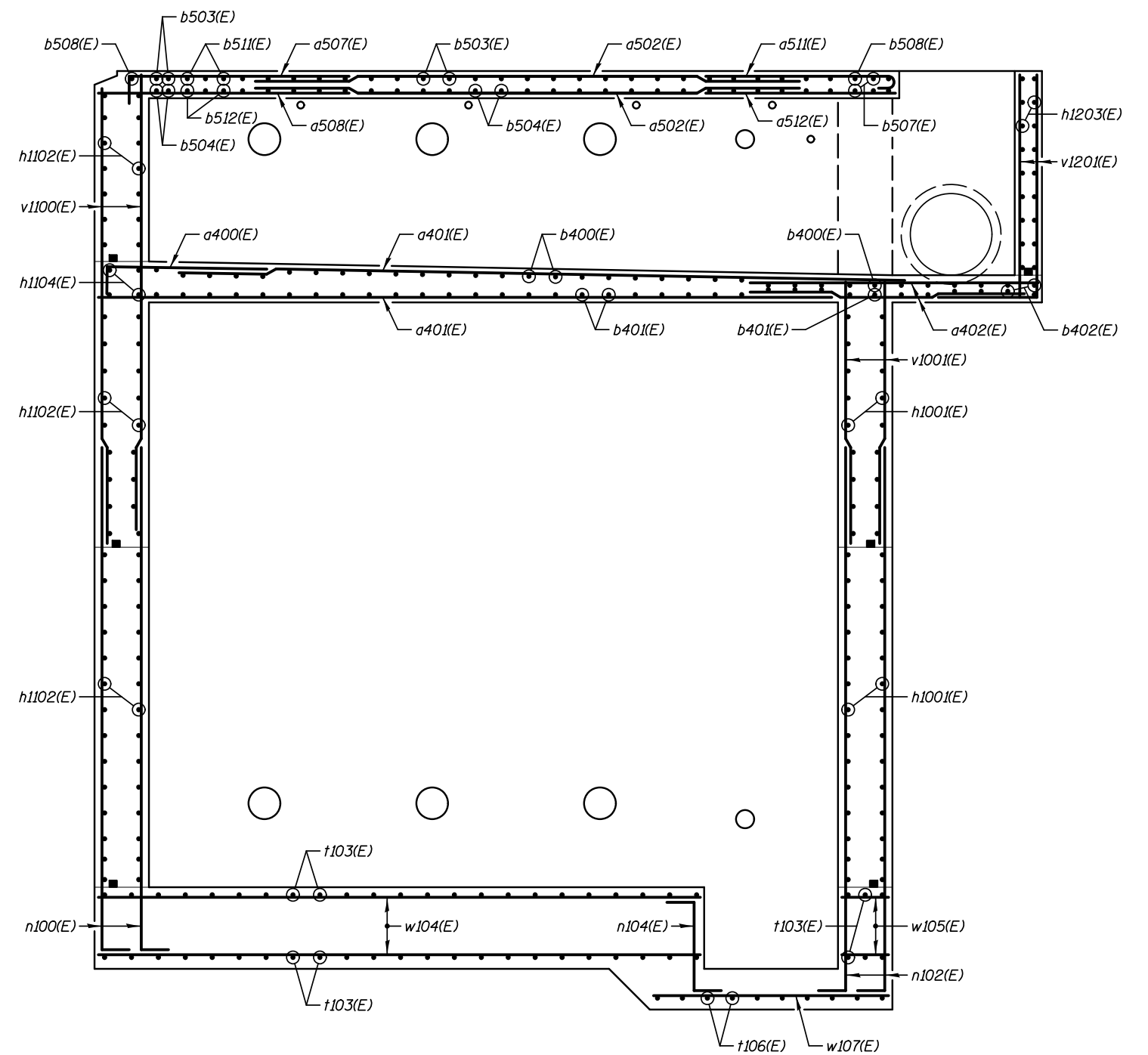
**Notes:**  
Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.







**SECTION A-A**



**SECTION B-B**

**KNIGHT**  
Engineers & Architects

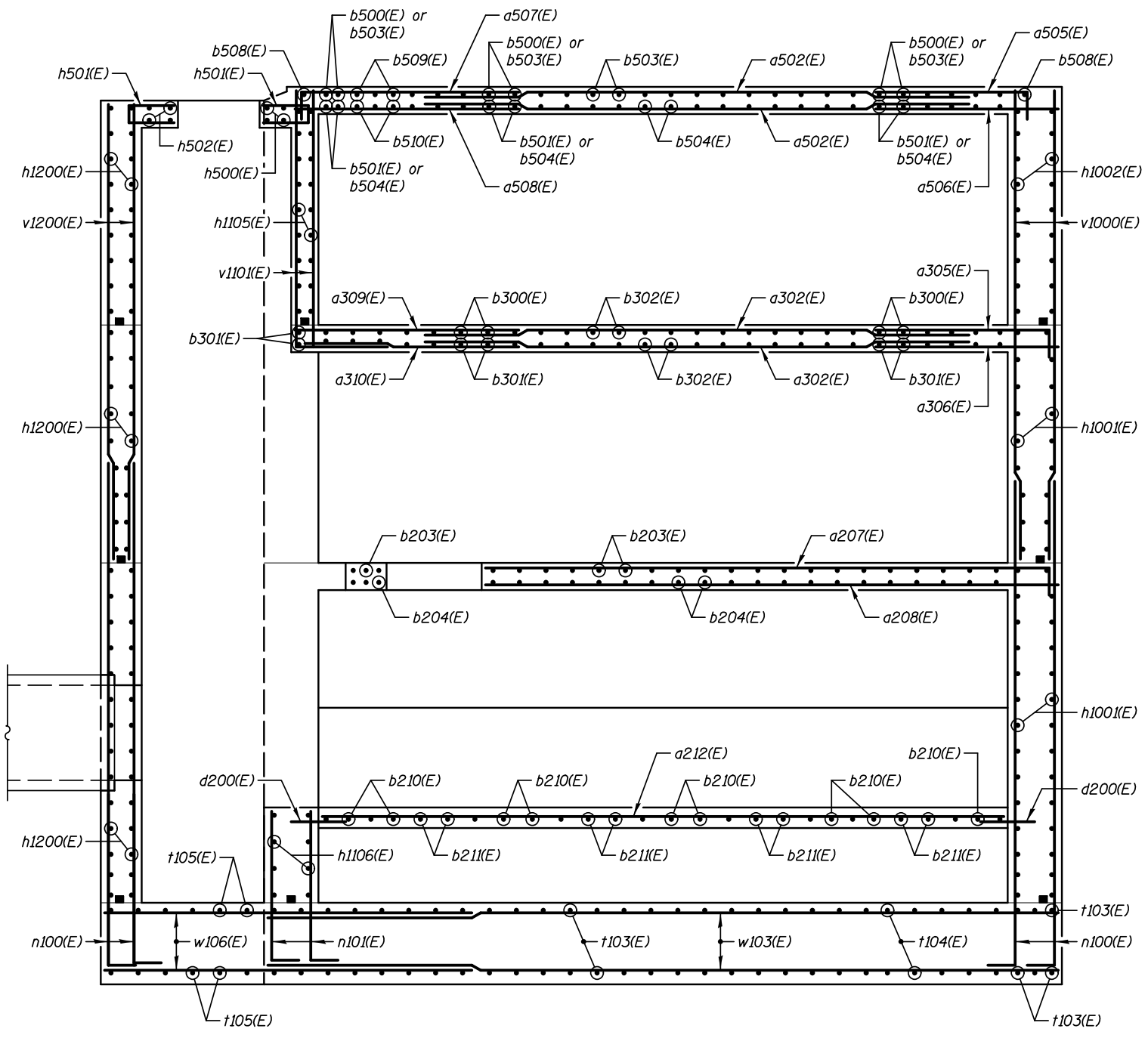
DESIGNED - WPM	REVISD -
CHECKED - TB	REVISD -
DRAWN - TB	REVISD -
CHECKED - WPM	REVISD -
SCALE - NONE	
DATE - 3/22/2012	

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

**REINFORCEMENT DETAILS - SECTIONS**  
**PUMP STATION 47**

SHEET NO. SA-19 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	94
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				



**SECTION C-C**

**KNIGHT**  
Engineers & Architects

SCALE - NONE  
DATE - 3/22/2012

DESIGNED - WPM  
CHECKED - TB  
DRAWN - TB  
CHECKED - WPM

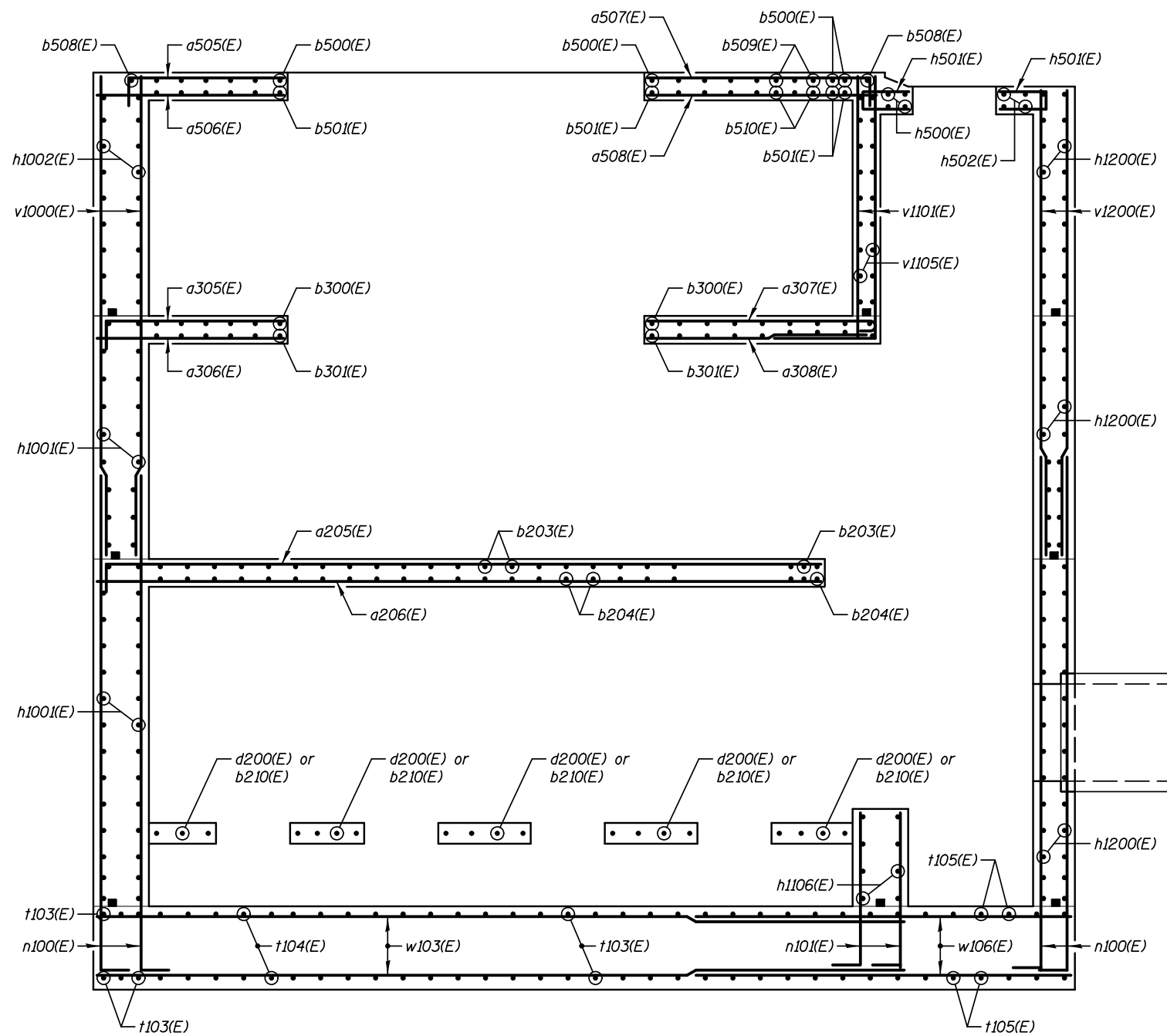
REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REINFORCEMENT DETAILS - SECTIONS  
PUMP STATION 47**

SHEET NO. SA-20 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	95
<b>CONTRACT NO. 60P41</b>				
ILLINOIS FED. AID PROJECT				



**SECTION D-D**

**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISED -
CHECKED - TB	REVISED -
DRAWN - TB	REVISED -
CHECKED - WPM	REVISED -

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

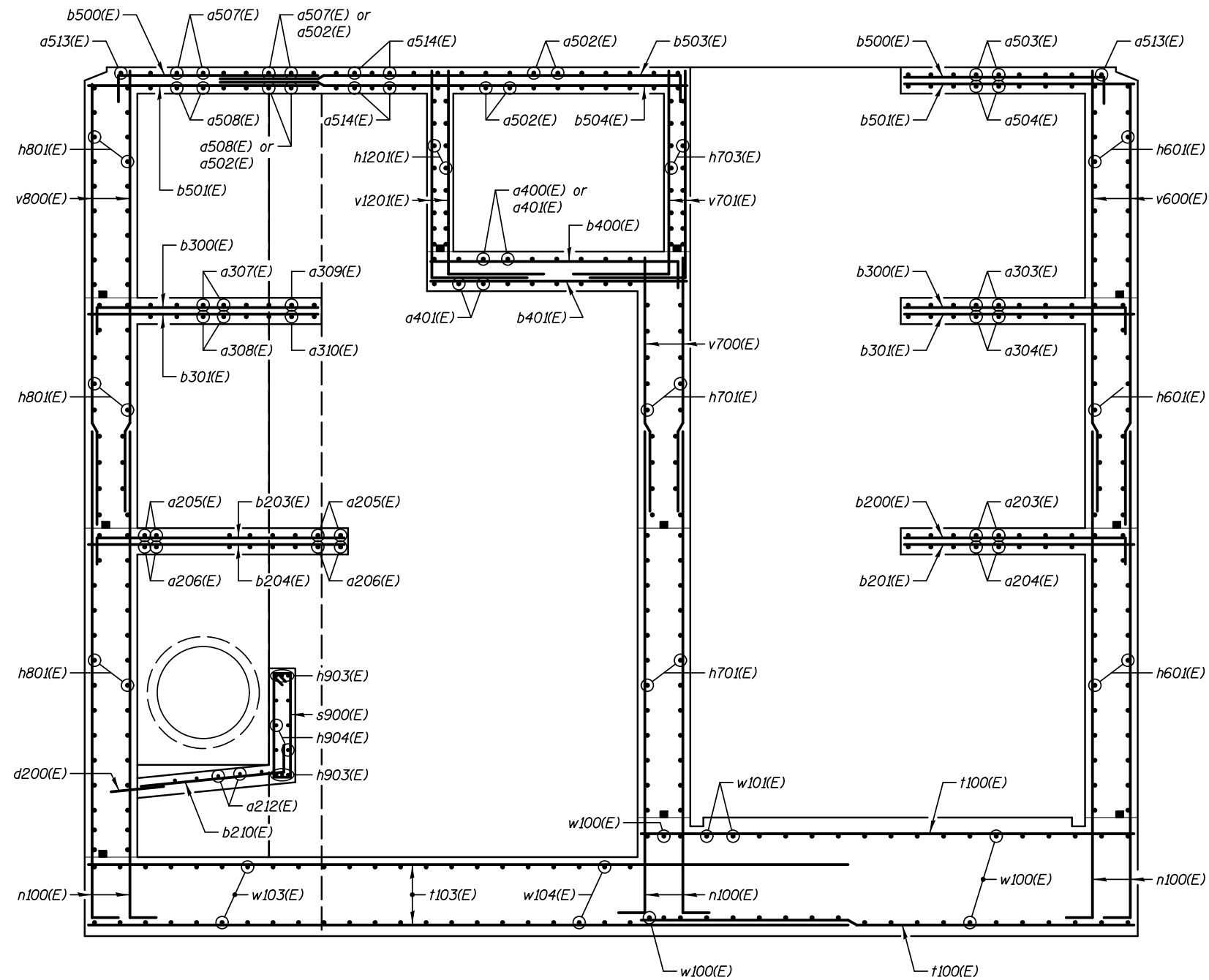
**REINFORCEMENT DETAILS - SECTIONS**  
**PUMP STATION 47**

SHEET NO. SA-21 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	96
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT





**SECTION F-F**

**KNIGHT**  
Engineers & Architects

SCALE - NONE  
DATE - 3/22/2012

DESIGNED - WPM  
CHECKED - TB  
DRAWN - TB  
CHECKED - WPM

REVISED -  
REVISED -  
REVISED -  
REVISED -

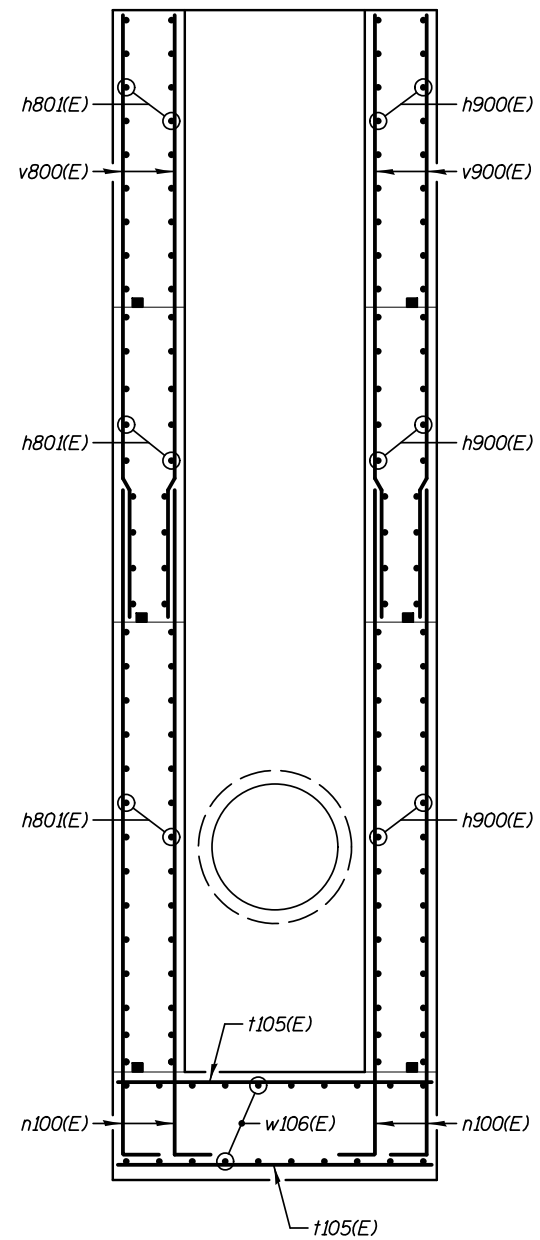
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REINFORCEMENT DETAILS - SECTIONS  
PUMP STATION 47**

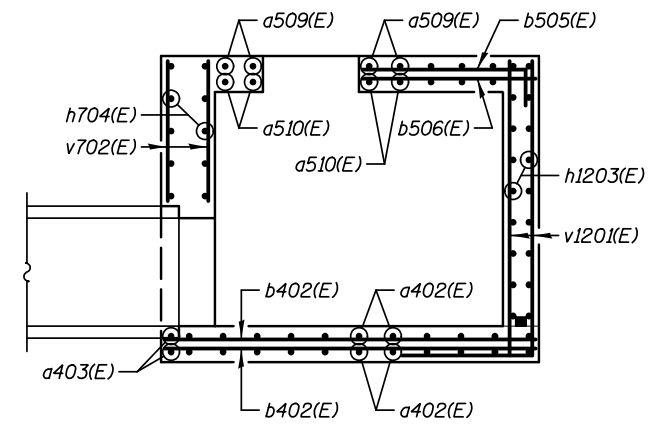
SHEET NO. SA-23 OF 34 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	98
CONTRACT NO. 60P41				

ILLINOIS FED. AID PROJECT



**SECTION G-G**



**SECTION H-H**

**KNIGHT**  
Engineers & Architects





DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS
SCALE - NONE	
DATE - 3/22/2012	

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

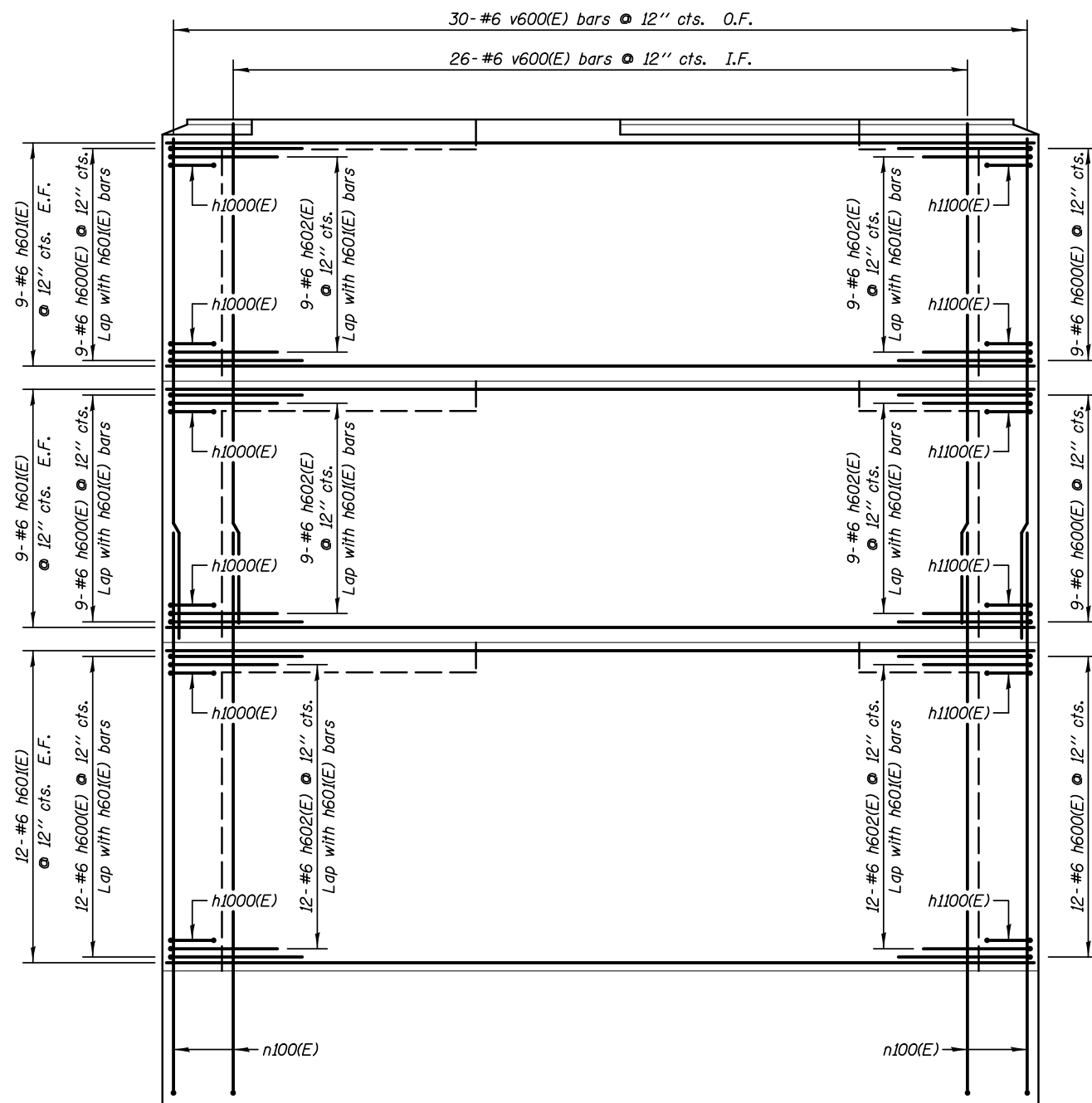
**REINFORCEMENT DETAILS - SECTIONS**  
**PUMP STATION 47**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338/IL 59	2011-035-I	DUPAGE	181	99
CONTRACT NO. 60P41				
ILLINOIS FED. AID PROJECT				

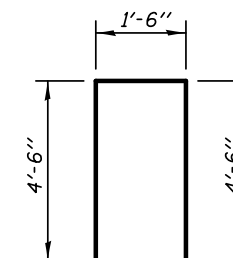
**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h600(E)	60	#6	10'-6"	
h601(E)	60	#6	29'-0"	
h602(E)	60	#6	5'-6"	
v600(E)	56	#6	16'-9"	
Reinforcement Bars, Epoxy Coated				LB 5470

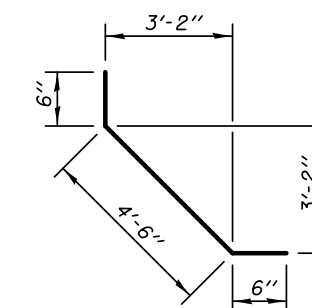
Work this sheet with sheet SA-32.



**ELEVATION 1**



**BAR h600(E)**



**BAR h602(E)**