

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**FAU ROUTE 3578 IL ROUTE 7 (SOUTHWEST HIGHWAY)
SECTION: 1327B
BRIDGE REPLACEMENT
ROADWAY RECONSTRUCTION AND RETAINING WALL
OVER US ROUTE 45 (LAGRANGE RD./96TH AVE.)
PROJECT: BRM-3578(007)
COOK COUNTY
C-91-111-04**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION:

1320 (20) MINOR ARTERIAL 1.99 (FD-20)

TRAFFIC DATA:

	2003	2020
ADT IL. RTE. 7	12,700	14,000
POSTED SPEED LIMIT IL. RTE. 7	45 MPH	
DESIGN SPEED LIMIT IL. RTE. 7	45 MPH	

D-91-111-04

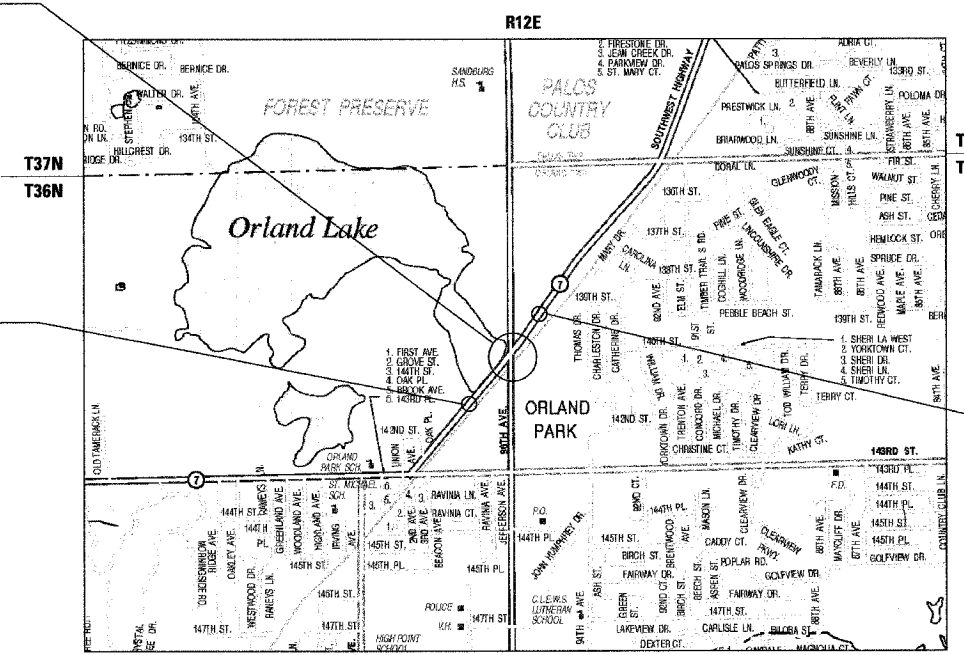


LOCATION OF SECTION INDICATED THIS: -

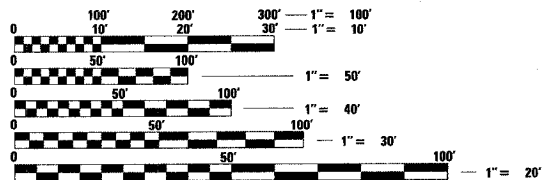
**PROJECT LOCATED IN
THE VILLAGE OF ORLAND PARK**

BRIDGE OVER US RTE 45
STA. 1516 + 85.79
REMOVAL AND REPLACEMENT
EXISTING STRUCTURE NO.016-0465
PROPOSED STRUCTURE NO.016-2847

IL. ROUTE 7
PROJECT BEGINS
STA. 1503 + 19.73



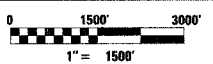
IL. ROUTE 7
PROJECT ENDS
STA. 1528 + 17.76



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

LOCATION MAP



Craig A. Lukowicz
CRAIG A. LUKOWICZ
ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-041788
MY LICENSE EXPIRES ON 11-30-07.



DATE 12/4/05

GROSS LENGTH OF PROJECT = 2498.03 FT = 0.473 MILES
NET LENGTH OF PROJECT = 2498.03 FT = 0.473 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Dec 12 20 05
District Engineer
May 12 20 06
Engineer of Design and Environment
May 12 20 06
Director, Division of Highways

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

IDOT CONSULTANT PROJECT MANAGER: MS. KIM HARVEY 847-705-4055 (DISTRICT 1)

CONTRACT NO. 62712

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	2
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

INDEX OF SHEETS

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9	SCHEDULES OF QUANTITIES
10	ALIGNMENT, TIES, AND BENCHMARKS
11-13	PLAN AND PROFILE
14-16	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
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19-22	DRAINAGE AND UTILITIES
23-25	PLAT OF HIGHWAYS
26	PAVEMENT MARKING, SIGNING, AND LANDSCAPING PLANS
27-28	SOIL PROFILES
29-85	BRIDGE PLANS AND RETAINING WALL PLANS
86	MWRD DETAIL
87-96	DISTRICT DETAILS
97-108	CROSS SECTIONS
	HIGHWAY STANDARDS

STATE STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001	AREAS OF REINFORCEMENT REBARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420401-05	BRIDGE APPROACH PAVEMENT
482001	BITUMINOUS SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
503001-02	CONCRETE PARAPET SLIP-FORMING OPTION
515001-02	NAME PLATE FOR BRIDGES
542301	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311	GRATING FOR CONCRETE FLARED END SECTION (FOR 600 mm (24") THRU 1300 mm (54") PIPE)
601001	SUB-SURFACE DRAINS
601101	CONCRETE HEADWALL FOR PIPE DRAIN
602001	CATCH BASIN TYPE A
602011	CATCH BASIN TYPE C
602301-02	INLET - TYPE A
602401-01	MANHOLE TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND LIDS TYPE 1
604091-01	FRAME AND GRATE TYPE 24
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006	OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-15.60 (B-6.24)
630001-06	STEEL PLATE BEAM GUARDRAIL
630201-03	PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
631031-05	TRAFFIC BARRIER TERMINAL, TYPE 6
635001	DELINEATORS
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
666001	RIGHT OF WAY MARKERS
667101	PERMANENT SURVEY MARKERS
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701106-01	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 m (15') AWAY,
701421-01	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701606-04	URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIUM
702001-06	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER
720001	SIGN PANEL MOUNTING DETAILS
720006	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001	APPLICATIONS OF TYPE A AND B METAL POSTS (FOR SIGNS AND MARKERS)
780001-01	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- 10 FT. TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB & GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS & GUTTERS AND MEDIAN IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF ORLAND PARK AND OTHER AGENCIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 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).
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- THE RESIDENT ENGINEER SHALL CONTACT AREA TRAFFIC FIELD ENGINEER TECHNICIAN MS. PATRICE HARRIS AT 708-597-9800, A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS OR SIGNING.
- ON STATE STANDARDS 482001 AND 483001 AGGREGATE SUBGRADE 300 MM (12") SHALL BE USED AS THE IMPROVED SUBGRADE. THE ADDITIONAL THICKNESS OF AGGREGATE SUBGRADE UNDER THE SHOULDER SHALL BE INCLUDED IN THE COST PER SQUARE METER (SQ. YARD) OF "AGGREGATE SUBGRADE 300 MM (12)".
- WHERE SECTION, SUBSECTION SUBDIVISION OR PROPERTY MONUMENTS ARE REMOVED, THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- REMOVAL OF TEMPORARY PIPE CULVERTS AND TEMPORARY CATCH BASINS SHALL BE INCLUDED TO THEIR RESPECTIVE PAY ITEMS.
- CONTACT STEVE LIPKIE OF THE ROADSIDE DEVELOPMENT UNIT 48 HOURS PRIOR TO SELECTIVE CLEARING AT (847)705-4171
- BEFORE ORDERING STORM SEWERS, CATCH BASINS, PIPE CULVERTS, PIPE DRAINS AND MANHOLES, THE CONTRACTOR SHALL CONTACT THE ENGINEER AS TO THE EXACT LENGTH AND QUANTITY REQUIRED.
- THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.
- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
- THE REMOVAL OF EXISTING ENTRANCE CULVERTS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.44 GAL/SQ YD (2.0 L/SQ. M).
- THE CONTRACTOR TO UTILIZE THE ARTICLE 107.11 OF THE IDOT STANDARD SPECIFICATIONS AND GET THE RIGHT OF ENTRY PERMIT, RAILROAD FLAGGERS, ETC. FOR THE ADJACENT METRA PROPERTY.
- THE EARTH EXCAVATION AND FURNISHED EXCAVATION QUANTITIES ARE PROVIDED ASSUMING THAT THE VILLAGE OF ORLAND PARK WILL FILL IN THE AREA AS SHOWN IN THE CROSS SECTIONS. ANY ADDITIONAL QUANTITIES REQUIRED RESULTING FROM THIS FILL WILL BE THE VILLAGE OF ORLAND PARK'S RESPONSIBILITY.
- ONE WEEK BEFORE DETOUR IS IMPLEMENTED, THE CONTRACTOR MUST CALL THE IDOT DISTRICT 1 TRAFFIC SIGNAL ENGINEER AT 847-705-4424. SIGNAL TIMINGS MAY NEED TO BE ADJUSTED TO ACCOMMODATE THE NEW TRAFFIC PATTERNS/VOLUMES.
- THERE IS A LIVE ELECTRIC CONDUIT BEHIND THE WEST BRIDGE ABUTMENT. THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF ORLAND PARK PRIOR TO WORKING AT THE CONDUIT.

COMMITMENTS:

- ALL WETLANDS IDENTIFIED BY THE INHS ADJACENT TO THE EXISTING AND PROPOSED RIGHT-OF-WAY, EXCEPT WETLAND SITE 6 ARE TO BE PROTECTED FROM INTRUSION AND SEDIMENTATION. PROTECTIVE FENCING AND SILT FENCING WILL BE INSTALLED TO RESTRICT ENTRY BY PERSONNEL, EQUIPMENT, AND SUPPLIES. THE LOCATION OF THE WETLAND SITES SHALL BE SHOWN ON THE CONSTRUCTION DOCUMENTS.

PLT DATE = 02/09/06
 FILE NAME = Proposed_Plane Cover\101.dgn
 PLOT SCALE = #SCALE#
 REFERENCE = #REF#

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.U. ROUTE 3576 (IL. ROUTE 7)
NAME	DATE	
		IL. ROUTE 7 INDEX SHEET, STATE STANDARDS, GENERAL NOTES, AND COMMITMENTS

SCALE: VERT. _____
 HORIZ. _____
 DATE: MAR. 10, 2006

DRAWN BY BCD
 CHECKED BY SLR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	3
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES		UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE								
				80% FED 20% STATE			100% VILLAGE OF ORLAND PARK		35% FED 9% STATE 56% VILLAGE			
				ROADWAY 1000-2A	BRIDGE AT US RTE 45 X271-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X271-2A	ROADWAY 1000-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X231-2A		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	24	24								
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	24	24								
20101000	TEMPORARY FENCE	FOOT	1750	1750								
20200100	EARTH EXCAVATION	CU YD	5953	5287				666				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	3186	1384	1802							
20400800	FURNISHED EXCAVATION	CU YD	25279	18718				6561				
20700220	POROUS GRANULAR EMBANKMENT	CU YD	151		151							
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	2713		2632		81					
20800150	TRENCH BACKFILL	CU YD	627.4	229.0				398.4				
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	16500	16500								
* 21101815	COMPOST FURNISH AND PLACE, 4"	SQ YD	7920	7920								
21301072	EXPLORATION TRENCH 72" DEPTH	FOOT	150	150								
* 25000210	SEEDING CLASS 2A	ACRE	1.5	1.5								
* 25000310	SEEDING CLASS 4	ACRE	1.7	1.7								
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	155	155								
* 25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	155	155								
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	155	155								
* 25100630	EROSION CONTROL BLANKET	SQ YD	32125	32125								
* 25200110	SODDING, SALT TOLERANT	SQ YD	1575	1575								
* 25200200	SUPPLEMENTAL WATERING	UNIT	35	35								
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	330	330								

SUMMARY OF QUANTITIES		UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE								
				80% FED 20% STATE			100% VILLAGE OF ORLAND PARK		35% FED 9% STATE 56% VILLAGE			
				ROADWAY 1000-2A	BRIDGE AT US RTE 45 X271-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X271-2A	ROADWAY 1000-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X231-2A		
28000300	TEMPORARY DITCH CHECKS	EACH	21	21								
28000400	PERIMETER EROSION BARRIER	FOOT	4950	4950								
28000510	INLET FILTERS	EACH	33	30				3				
28100105	STONE RIPRAP, CLASS A3	SQ YD	211	211								
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	650	650								
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	3.5	2.9				0.6				
40600300	AGGREGATE (PRIME COAT)	TON	16.0	13.0				3.0				
40600895	CONSTRUCTING TEST STRIP	EACH	1	1								
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	58	58								
42001300	PROTECTIVE COAT	SQ YD	2092	2092								
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	260	260								
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8"	SQ YD	255	255								
44000100	PAVEMENT REMOVAL	SQ YD	2025	2025								
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	380	380								
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	190	190								
44000700	APPROACH SLAB REMOVAL	SQ YD	180	180								
44001700	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	560	560								
44100100	PAVEMENT REPLACEMENT	SQ YD	200	200								
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	3464	2231				1233				
48101500	AGGREGATE SHOULDERS, TYPE B, 6"	SQ YD	135	135								
48202400	BITUMINOUS SHOULDER SUPERPAVE 6"	SQ YD	381	381								

PLOT DATE = 03/09/06
 FILE NAME = MAIL 7\Proposed\Plans\Cover\500.dgn
 PLOT SCALE = #SCALE#
 REFERENCE = #REF#

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
 SUMMARY OF QUANTITIES

SCALE: VERT. DRAWN BY BCD
 HORIZ. CHECKED BY SLR
 DATE: MAR. 10, 2006

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	4
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES	UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE									
			80% FED 20% STATE			100% VILLAGE OF ORLAND PARK		35% FED 9% STATE 56% VILLAGE				
			ROADWAY 1000-2A	BRIDGE AT US RTE 45 X271-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X271-2A	ROADWAY 1000-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X231-2A			
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1									
50105220	PIPE CULVERT REMOVAL	FOOT	147	147								
50200100	STRUCTURE EXCAVATION	CU YD	7019		4232	1867				920		
50300150	NEOPRENE EXPANSION JOINT, 2"	FOOT	120		120							
50300225	CONCRETE STRUCTURES	CU YD	1759.7		1309.4	409.8	40.5					
50300255	CONCRETE SUPERSTRUCTURE	CU YD	317.7	2.5	315.2							
50300260	BRIDGE DECK GROOVING	SQ YD	628		628							
50300300	PROTECTIVE COAT	SQ YD	1285	277	1008							
50300440	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	14		6.2		7.8					
50500405	FURNISHING & ERECTING STRUCTURAL STEEL	POUND	390		390							
50500305	ERECTING STRUCTURAL STEEL	L SUM	1		0.44		0.56					
50500505	STUD SHEAR CONNECTORS	EACH	2800		2800							
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	273,310		216,271	50,350	6689					
50900105	ALUMINUM RAILING, TYPE L	FOOT	1328		291	1037						
51205200	TEMPORARY SHEET PILING	SQ FT	2298		2298							
51500100	NAME PLATES	EACH	1		1							
54200430	PIPE CULVERTS, TYPE 1 RCCP 15"	FOOT	113	113								
5421A012	PIPE CULVERTS, CLASS A, TYPE 1 12" (TEMPORARY)	FOOT	136	136								
5421A015	PIPE CULVERTS, CLASS A, TYPE 1 15" (TEMPORARY)	FOOT	28	28								
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	9	9								
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	6	6								

SUMMARY OF QUANTITIES	UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE									
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54213699	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 54"	EACH	1	1								
54247200	GRATING FOR CONCRETE FLARED END SECTIONS 54"	EACH	1	1								
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	194	194								
55019600	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	28	28								
55021600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 12"	FOOT	398	198					200			
55022700	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 54"	FOOT	77	77								
55023700	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	44	44								
55023800	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	22	22								
Δ 55039700	STORM SEWERS TO BE CLEANED	FOOT	380	380								
58700200	BRIDGE SEAT SEALER	SQ FT	348		348							
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	744		722		22					
60100905	PIPE DRAINS 4"	FOOT	12		12							
60109510	PIPE UNDERDRAINS, FABRIC LINED TRENCH 4"	FOOT	316	171					145			
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	1356		321	1035						
60200105	CATCH BASINS, TYPE A, 4 FT DIAMETER, TYPE 1 FRAME OPEN LID	EACH	3	3								
60201340	CATCH BASINS, TYPE A, 4 FT DIAMETER, TYPE 24 FRAME AND GRATE	EACH	10	8					2			
60205205	CATCH BASINS, TYPE A, 5 FT DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1								
60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE	EACH	9	8					1			

PLOT DATE = 03/09/06
 PLOT NAME = Proposed Plans Cover\500.dgn
 PLOT SCALE = AS CALLED
 REFERENCE = REF

Δ NON-PARTICIPATING ITEM
 * SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

 IL. ROUTE 7
 SUMMARY OF QUANTITIES

 SCALE: VERT.
 HORIZ.
 DATE: MAR. 10, 2006

 DRAWN BY BCD
 CHECKED BY SLR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	5
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES	UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE						35% FED. STATE 56% VILLAGE
			80% FED 20% STATE			100% VILLAGE OF ORLAND PARK			
			ROADWAY 1000-2A	BRIDGE AT US RTE 45 X271-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X271-2A	ROADWAY 1000-2A	RET. WALL Y007	
60234200	INLETS, TYPE A, TYPE 1 FRAME OPEN LID	EACH	1	1					
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	3	3					
60500050	REMOVING CATCH BASINS	EACH	5	5					
60500060	REMOVING INLETS	EACH	1				1		
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	6.5	6.5					
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	4714	4714					
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1037.5	1037.5					
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	3					
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	7	7					
63200310	GUARDRAIL REMOVAL	FOOT	2811	2811					
63500105	DELINEATORS	EACH	12	12					
67100100	MOBILIZATION	L SUM	1	1					
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1					
70101900	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	L SUM	1	1					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	213	213					
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	8000	8000					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4000	4000					
70400100	TEMPORARY CONCRETE BARRIER	FOOT	215	215					
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	215	215					
70400300	TEMPORARY CONCRETE BARRIER TERMINAL SECTION	EACH	2	2					
* 72000100	SIGN PANEL - TYPE 1	SQ FT	62	59			3		

SUMMARY OF QUANTITIES	UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE						35% FED. STATE 56% VILLAGE
			80% FED 20% STATE			100% VILLAGE OF ORLAND PARK			
			ROADWAY 1000-2A	BRIDGE AT US RTE 45 X271-2A	RET. WALL Y007	BRIDGE AT US RTE 45 X271-2A	ROADWAY 1000-2A	RET. WALL Y007	
* 72900100	METAL POST - TYPE A	FOOT	13					13	
* 72900200	METAL POST - TYPE B	FOOT	94.5	94.5					
73000100	WOOD SIGN SUPPORT	FOOT	101	101					
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	72.8					72.8	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6700	2963				3737	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	300					300	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	170					170	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26	26					
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	540	540					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	158	103				55	
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6	6					
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS	EACH	52	52					
* 78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	12	12					
* 78200450	MONODIRECTIONAL GUARD RAIL REFLECTORS	EACH	24	24					
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	7	7					
78300100	PAVEMENT MARKING REMOVAL	SQ FT	765	765					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	104	104					
* A2002374	TREE, BETULA NIGRA (RIVER BIRCH), 10' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	3	3					
* A2016614	TREE, QUERCUS ELLIPSOIDALIS (HILL'S OAK) 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3	3					

PLOT DATE = 03/07/06
 PLOT SCALE = 1"=500'
 PLOT REFERENCE = REF#

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
 SUMMARY OF QUANTITIES

SCALE: VERT. _____
 HORIZ. _____
 DATE: MAR. 10, 2006

DRAWN BY BCD
 CHECKED BY SLR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	6
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES		UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE						Y060 100% MWRD
				80% FED 20% STATE			100% VILLAGE OF ORLAND PARK			
				ROADWAY 1000-2A	BRIDGE AT US RTE 45 XZ71-2A	RET. WALL Y007	BRIDGE AT US RTE 45 XZ71-2A	ROADWAY 1000-2A	RET. WALL Y007	
*C2005336	SHRUB, PRUNUS AMERICANA (AMERICAN PLUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	200	200						
*C3005924	SHRUB, RHUS GLABRA (SMOOTH SUMAC), 2' HEIGHT, BARE ROOT	EACH	350	350						
*K1005465	SELECTIVE MOWING STAKES	EACH	2	2						
X0321193	TEMPORARY CATCH BASINS	EACH	4	4						
*X0321556	SANITARY MANHOLES TO BE ADJUSTED	EACH	3	1					2	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4						
*X0322323	WEED CONTROL, TEASEL	GALLON	1	1						
*X0322859	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	8	8						
X0323080	DRAINAGE SCUPPER, DS-12	EACH	5	5						
X0323236	TEMPORARY INLET	EACH	1	1						
X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	33	33						
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	1033	1033						
X0712400	TEMPORARY PAVEMENT	SQ YD	230	230						
X3550500	BITUMINOUS BASE COURSE SUPERPAVE, 8"	SQ YD	180	180						
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	3	3						
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	21	21						
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	889	743				146		
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	4984	4167				817		
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	12	12						
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	2	2						
XX003503	FLARED END SECTION REMOVAL	EACH	5	5						

Δ NON-PARTICIPATING
 * SPECIALTY ITEMS
 □ SFTY-3N

PLOT DATE = 03/09/06
 PLOT USER = J:\proposed\Plana\Urban\SOO.dgn
 PLOT SCALE = #SCALE#
 REFERENCE = #REF#

SUMMARY OF QUANTITIES		UNIT	URBAN TOTAL QTY.	CONSTRUCTION TYPE CODE						35% FED 56% STATE 56% VILLAGE
				80% FED 20% STATE			100% VILLAGE OF ORLAND PARK			
				ROADWAY 1000-2A	BRIDGE AT US RTE 45 XZ71-2A	RET. WALL Y007	BRIDGE AT US RTE 45 XZ71-2A	ROADWAY 1000-2A	RET. WALL Y007	
XX004056	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	12,940		190	8542			4208	
XX005277	STORM SEWER, PVC SDR 26, 8"	FOOT	27	27						
XX146400	STORM SEWER REMOVAL	FOOT	166	166						
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	9698	8436				1262		
Z0002600	BAR SPLICERS	EACH	120	120						
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1						
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5						
Z0018800	DRAINAGE SYSTEM	L SUM	1	1						
□ Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 3	EACH	1	1						
□ Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE) TEST LEVEL 3	EACH	1	1						
Z0047300	PROTECTIVE SHIELD	SQ YD	442	442						
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1						
Z0064800	SELECTIVE CLEARING	UNIT	45	45						
28200200	FILTER FABRIC	SQ YD	211	211						
X0325373	STONE COLUMNS 2'-6" DIA.	FOOT	3861		2587			1274		
X0325374	STONE COLUMNS 3'-0" DIA.	FOOT	5033		3372			1661		
** Z0076600	TRAINEEES	Hour	1500	1500						

** Y060

REVISIONS	
NAME	DATE

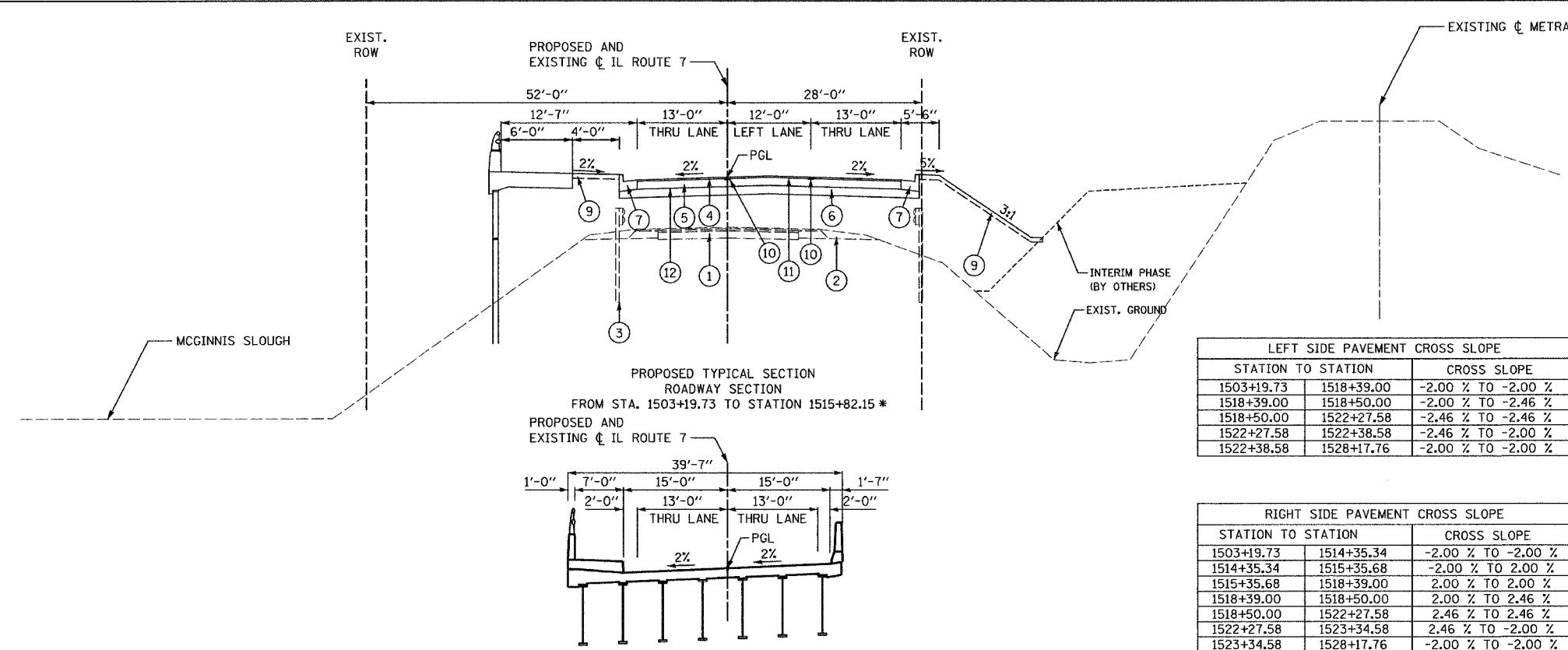
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
 SUMMARY OF QUANTITIES

SCALE: VERT. _____
 HORIZ. _____
 DATE: MAR. 10, 2006
 DRAWN BY BCD
 CHECKED BY SLR

Rev.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	8
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



LEFT SIDE PAVEMENT CROSS SLOPE

STATION TO STATION	CROSS SLOPE
1503+19.73	1518+39.00 -2.00 % TO -2.00 %
1518+39.00	1518+50.00 -2.00 % TO -2.46 %
1518+50.00	1522+27.58 -2.46 % TO -2.46 %
1522+27.58	1522+38.58 -2.46 % TO -2.00 %
1522+38.58	1528+17.76 -2.00 % TO -2.00 %

RIGHT SIDE PAVEMENT CROSS SLOPE

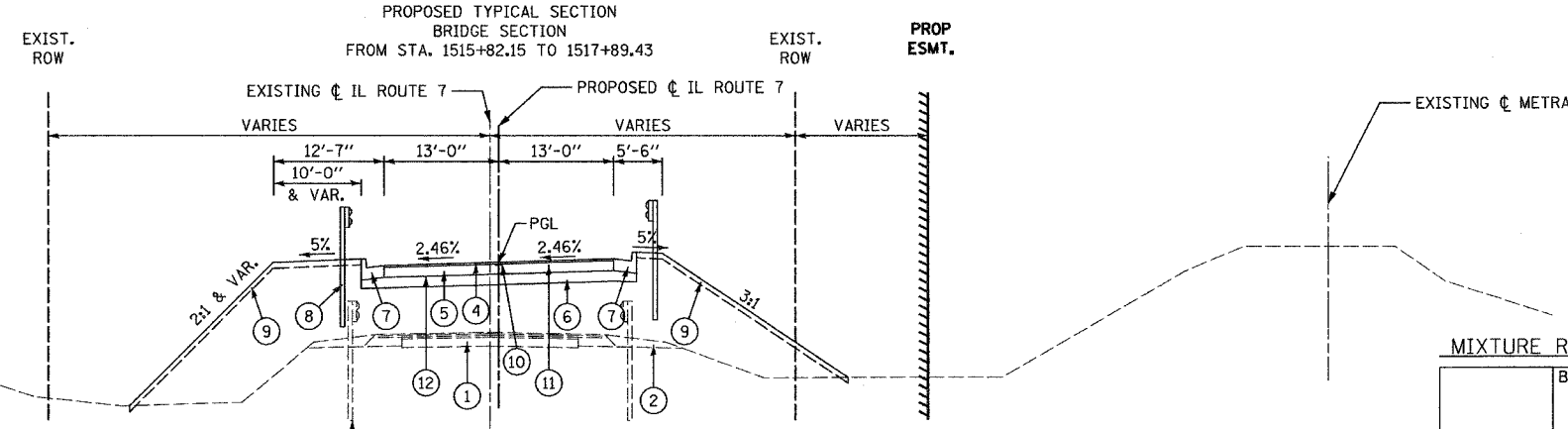
STATION TO STATION	CROSS SLOPE
1503+19.73	1514+35.34 -2.00 % TO -2.00 %
1514+35.34	1515+35.68 -2.00 % TO 2.00 %
1515+35.68	1518+39.00 2.00 % TO 2.00 %
1518+39.00	1518+50.00 2.00 % TO 2.46 %
1518+50.00	1522+27.58 2.46 % TO 2.46 %
1522+27.58	1523+34.58 2.46 % TO -2.00 %
1523+34.58	1528+17.76 -2.00 % TO -2.00 %

STRUCTURAL DESIGN TRAFFIC: Year 2016
 PV = 12,587 SU = 864 MU = 261
 ROAD/STREET CLASSIFICATION: Class 2
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 P = 50% S = 50% M = 50%
 TRAFFIC FACTOR: Actual TF = 1.99 AC Type = 10
 Minimum TF = 3.81
 AC GRADE: Binder = PG 64-22 Surface = PG 64-22
 SUBGRADE SUPPORT RATING:
 SSR = 2.00 (Sta. 1503+19.73 to 1528+17.76)
 SSR = 2.00 (Sta. 1503+19.73 to 1528+17.76)

STRUCTURAL PAVEMENT DESIGN INFORMATION BLOCK

LEGEND:

- ① EXISTING 9"-7"-9" PAVEMENT TO BE REMOVED
- ② EXISTING AGGREGATE SHOULDER, TYPE B TO BE REMOVED (PAID FOR AS EARTH EXCAVATION)
- ③ EXISTING GUARDRAIL TO BE REMOVED
- ④ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 2"
- ⑤ PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 1 1/4"
- ⑥ PROPOSED AGGREGATE SUBGRADE 12"
- ⑦ PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑧ PROPOSED STEEL PLATE BEAM GUARD RAIL, TYPE A
- ⑨ PROPOSED TOPSOIL FURNISH AND PLACE, 4" AND SODDING, SALT TOLERANT OR SEEDING, CLASS 2A
- ⑩ PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ⑪ PROPOSED BITUMINOUS MATERIALS (PRIME COAT)
- ⑫ PROPOSED AGGREGATE (PRIME COAT)



MIXTURE REQUIREMENTS

	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	BITUMINOUS SHOULDERS SUPERPAVE 6"	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	BITUMINOUS BASE COURSE, SUPERPAVE, 8"
AC TYPE :	PG 64-22	PG 64-22	PG 58-22	PG 64-22	PG 58-22
VOIDS :	4% @70 GYR	4% @70 GYR	2% @ 30 GYR	4% @50 GYR	2% @50 GYR
MAX RAP % :	10%	15%	50%	15%	50%

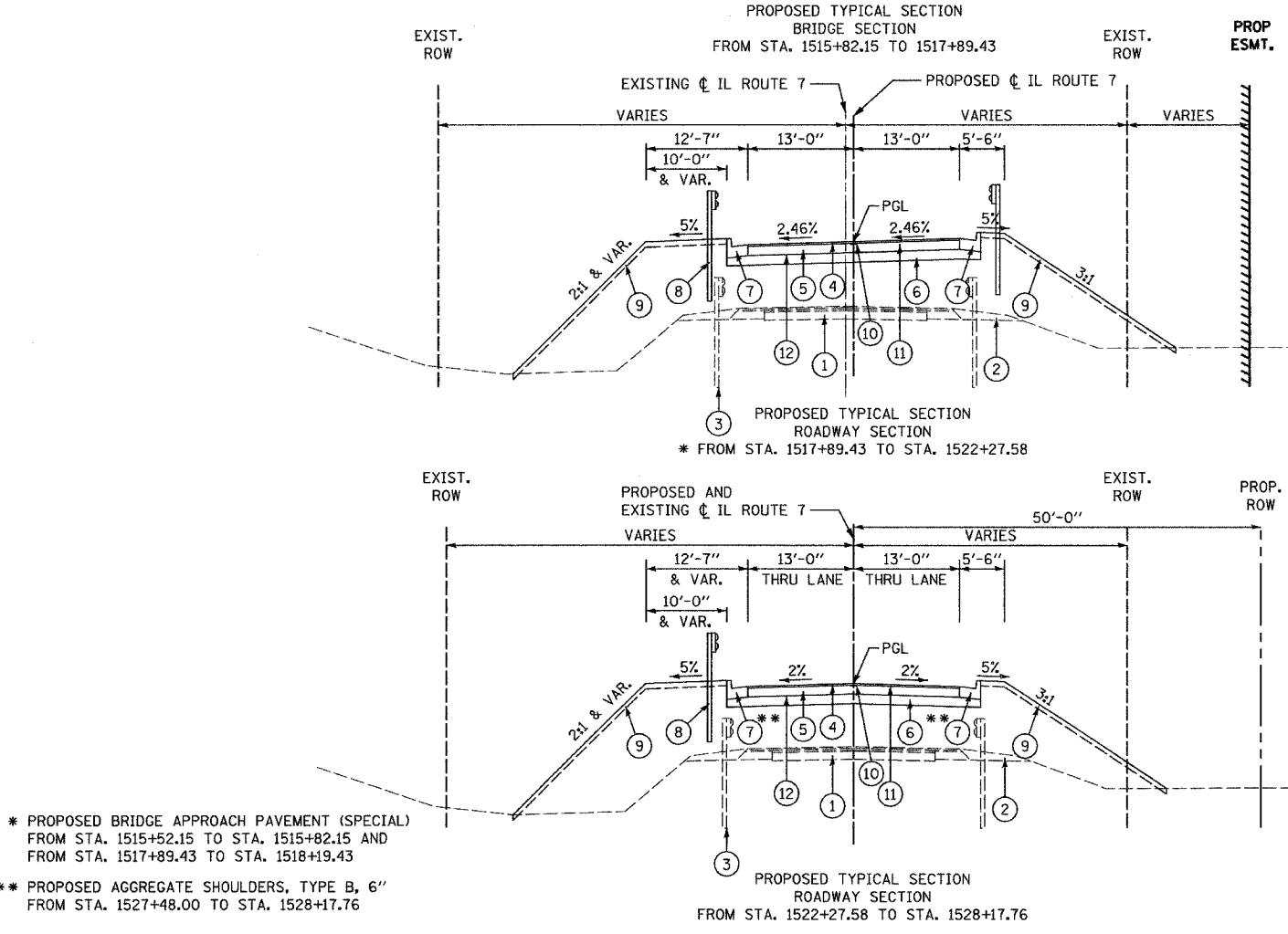
MIXTURE REQUIREMENTS FOR TEMPORARY PAVEMENT

MIXTURE USE(S)	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D N50	BITUMINOUS BASE COURSE, SUPERPAVE
THICKNESS:	2"	8"
AC TYPE :	PG 64-22	PG 58-22
VOIDS:	4% @ 50 GYR.	2% @ 50 GYR.
MAX RAP %:	15%	50%

THE CONTRACTOR SHALL HAVE THE OPTION OF USING PCC PAVEMENT 8" OR BITUMINOUS PAVEMENT 10" FOR TEMPORARY PAVEMENT AS SPECIFIED IN THE SPECIAL PROVISION AND THE MIXTURE REQUIREMENT TABLE ABOVE.

THE TEMPORARY PAVEMENT IS SHOWN ON THE MOT TYPICAL SECTION SHEET.

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS MIXTURE IS 112 LB/50 YD/IN.



* PROPOSED BRIDGE APPROACH PAVEMENT (SPECIAL) FROM STA. 1515+52.15 TO STA. 1515+82.15 AND FROM STA. 1517+89.43 TO STA. 1518+19.43
 ** PROPOSED AGGREGATE SHOULDERS, TYPE B, 6" FROM STA. 1527+48.00 TO STA. 1528+17.76

PROPOSED TYPICAL SECTION ROADWAY SECTION FROM STA. 1522+27.58 TO STA. 1528+17.76

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
 PROPOSED TYPICAL SECTION

SCALE: VERT. HORIZ.
 DATE: MAR. 10, 2006
 DRAWN BY BCD
 CHECKED BY SLR

PLOT DATE = 3/6/2006
 FILE NAME = M:\IL 7\Proposed\Plans\Ttypical\Sections\PT15.dgn
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 PLOT SCALE = 1"=40'
 REFERENCE = 0

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	9
STA. 1503+19.73 TO STA.1528+17.76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

STATION	OFFSET	DIAMETER (IN)	QUANTITY (UNITS)
1523+82.1	32.9' LT	12	12
1524+53.7	39.7' LT	12	12
IDOT TOTAL			24

STATION	OFFSET	DIAMETER (IN)	QUANTITY (UNITS)
1522+84.8	40.4' LT	24	24
IDOT TOTAL			24

LOCATION	REMOVAL (FT)	REMOVAL AND REPLACEMENT (FT)
1524+19.19	190	
US RTE 45		560
IDOT TOTAL	190	560

LOCATION STATION-STATION	BIT. MATERIALS (PRIME COAT) (TON)		AGGREGATE (PRIME COAT) (TON)		AGGREGATE SUBGRADE, 12" (SQ. YD.)		BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70 (TON)		BITUMINOUS CONC. SURFACE COURSE SUPERPAVE MIX. "D", N70 (TON)		
	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	ORLAND PARK	
1503+19.73 1515+00.00	1.5	0.6	7.2	3.0	4350	1262	2206	817	393	146	
1515+00.00 1522+00.00	0.6		2.2		1809		806		144		
1522+00.00 1528+17.76	0.8		3.6		2277		1155		206		
SUBTOTAL		2.9	0.6	13.0	3.0	8436	1262	4167	817	743	146
TOTAL		3.5		16.0		9698		4984		889	

STATION TO STATION	OFFSET	QUANTITY (FOOT)
1504+04.00 TO 1506+82.00	RT	278
1505+00.00 TO 1509+36.00	LT	436
1510+87.00 TO 1515+75.00	LT	488
1511+62.00 TO 1515+59.00	RT	397
1516+46.00 TO 1521+15.00	RT	469
1517+33.00 TO 1520+41.00	LT	308
US RTE 45	LT	227
US RTE 45	RT	208
IDOT TOTAL		2811

STATION TO STATION	QUANTITY (SQ. YD.)
1503+19.73 TO 1505+00.00	525
1517+02.00 TO 1518+20.00	350
1525+00.00 TO 1528+17.76	920
TEMP. PAVEMENT US RTE 45	230
IDOT TOTAL	2025

LOCATION STATION-STATION	QUANTITY (FOOT)
1510+00.00	66
1524+84.07	61
1527+00.09	13
1527+86.37	7
IDOT TOTAL	147

STATION	OFFSET
1509+89	37' RT
1510+05	36' LT
1517+47	38' LT
1524+53	33' RT
1525+15	30' RT

STATION TO STATION	QUANTITY (SQ. YD.)
1515+62 TO 1515+92	90
1516+72 TO 1517+02	90
IDOT TOTAL	180

LOCATION	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8" (SQ. YD.)	BITUMINOUS BASE COURSE, SUPERPAVE 8" (SQ. YD.)	BITUMINOUS CONC. SURFACE COURSE SUPERPAVE MIX. "C", N50 (TON)
1524+19.19 LT	255		
1524+84.07 RT		147	17
1527+00.09 RT		33	4
IDOT TOTAL	255	180	21

LOCATION STA. - STA.	QUANTITY (SQ. YD.)
US RTE 45 STAGE 3	230
IDOT TOTAL	230

LOCATION STA. - STA.	THERMOPLASTIC						EPOXY
	LETTERS & SYMBOLS (SQ. FT)	LINE 4 IN (FT)	LINE 6 IN (FT)	LINE 12 IN (FT)	LINE 24 IN (FT)	LINE 4 IN (FT)	
	ORLAND PARK	IDOT	ORLAND PARK	ORLAND PARK	ORLAND PARK	IDOT	IDOT
1503+19.73 TO 1515+00.00	72.8	303	3737	300	170		
1515+00.00 TO 1528+17.76		1416					540
1523+91.50 TO 1524+16.50							26
US RTE. 45		1244					
SUBTOTAL		72.8	2963	3737	300	170	540
TOTAL		72.8	6700	300	170	26	540

LOCATION STATION TO STATION	TEMPORARY EROSION CONTROL SEEDING (POUND)	TEMPORARY DITCH CHECK (EACH)	PERIMETER EROSION BARRIER (FOOT)	STONE RIPRAP, CLASS A3 (SQ. YD.)	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING (EACH)	TEMPORARY FENCE (FOOT)	INLET FILTER (EACH)
1503+19.73 TO 1515+00.00	95	13	2540	87	13	1350	13
1515+00.00 TO 1528+17.76	235	8	2410	124	5	400	5
US RTE 45					15		15
IDOT TOTAL	330	21	4950	211	33	1750	33

LOCATION STATION TO STATION	TYPE
	B-6.24 (FT)
1504+00.00 1515+00.00	2362
1515+00.00 1515+52.50	105
1517+19.50 1522+00.00	961
1522+00.00 1527+48.00	1096
1524+19.19 DRIVEWAY	190
IDOT TOTAL	4714

STATION	EARTH EXCAVATION		EMBANKMENT		ADJ. EXCAVATION 15%		EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)		UNSUITABLE	
	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	ORLAND PARK	IDOT	
	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	
1503+19.73 1511+00.00	423	0	2568	6449	360	0	-2208	-6449	244	
1511+00.00 1522+00.00	4448	599	16606	679	3781	510	-12825	-169	826	
1522+00.00 1528+17.76	416	67	4039	0	354	57	-3685	57	314	
SUBTOTAL		5287	666	23213	7128	4495	567	-18718	-6561	
TOTAL		5953		30341		5062		-25279		1384

	IDOT	ORLAND PARK	TOTAL
EARTH EXCAVATION	5287	666	5953
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	1384	0	1384
FURNISHED EXCAVATION	18718	6561	25279
WASTE EXCAVATION	0	0	0

* THE THICKNESS OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS IS 6"
 ** QUANTITY INCLUDES EMBANKMENT TO BE EXCAVATED FOR EAST BRIDGE SPAN.

LOCATION STATION-STATION	RAISED REFLECTIVE PAVEMENT MARKER (EACH)		TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER (EACH)	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (EACH)	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE) (EACH)
	IDOT	ORLAND PARK	IDOT	IDOT	IDOT
1503+19.73 TO 1515+00.00	15	55			
1515+00.00 TO 1528+17.76	36				6
US RTE 45	40			40	
US RTE 45 STAGE 3			40	40	
US RTE 45 STAGE 4			40	40	
SUBTOTAL		91	55		6
TOTAL		146		80	120

LOCATION STATION-STATION	QUANTITY (SQ. YD.)
US RTE 45 STAGE 1	200
IDOT TOTAL	200

LOCATION STA. - STA.	YELLOW DOUBLE LINE (FT)	WHITE EDGE LINE (FT)	WHITE SKIP DASH LINE (FT)
US RTE 45 STAGE 3	1004	502	240
US RTE 45 STAGE 4	1004	1004	240
SUBTOTAL		2008	480
IDOT TOTAL		3994	

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.U. ROUTE 3576 (IL. ROUTE 7)
NAME	DATE	
		IL. ROUTE 7 SCHEDULE OF QUANTITIES

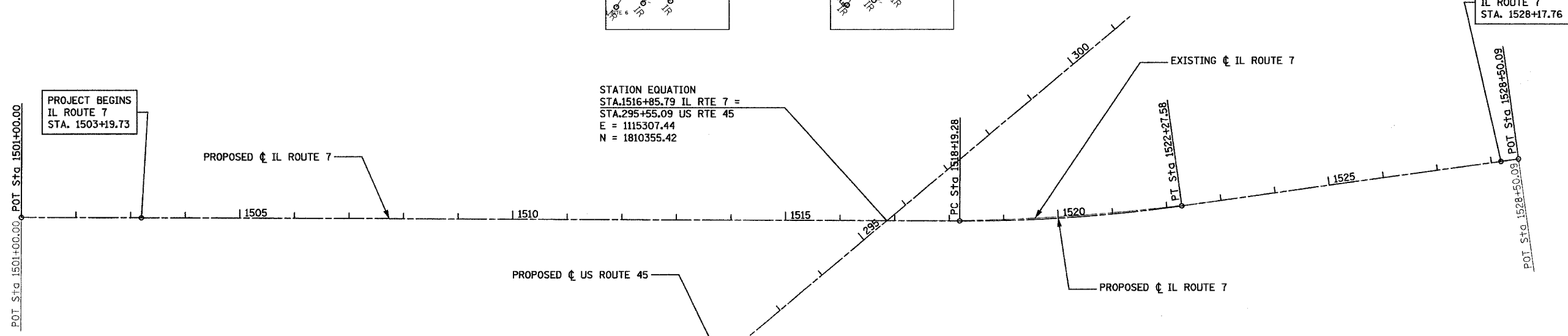
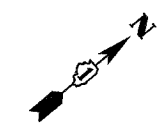
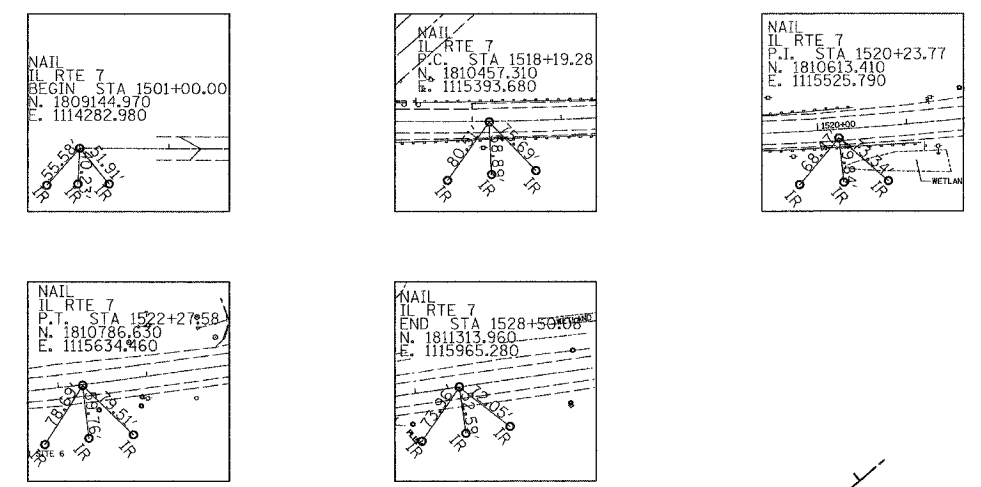
SCALE: VERT. _____
 HORIZ. _____
 DATE: MAR. 10, 2006

DRAWN BY BCD
 CHECKED BY SLR

PLOT DATE = 3/9/2006
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	10
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

- BM1
RAILROAD SPIKE SET IN THE FIRST POWER POLE NORTH OF THE AMERITECH CELLULAR TOWER ON THE SOUTH SIDE OF ROUTE 7
ELEVATION = 678.92
- BM2
RAILROAD SPIKE SET IN GUARDRAIL POST AT THE NORTH END OF GUARDRAIL ALONG THE SOUTH SIDE OF ROUTE 7
ELEVATION = 703.46
- BM3
CUT CROSS ON TOP OF CURB AT NORTHEAST ENTRANCE TO LANDSCAPING NURSERY ON THE NORTH SIDE OF ROUTE 7 (STA. 1524+32, 43' LEFT)
ELEVATION = 678.78
- BM4
SQUARE CUT ON TOP OF THE EASTERLY CONCRETE WALL OF THE OUTFALL STRUCTURE TO MCGINNIS SLOUGH, 0.7' NORTH OF THE SOUTHWEST INSIDE CORNER OF THE WALL, ON THE WEST SIDE OF LAGRANGE ROAD (ROUTE 45), APPROXIMATELY 150' NORTH OF THE ROUTE 7 BRIDGE OVER ROUTE 45.
ELEVATION = 678.43



PROP. CURVE SWHWY-1 PI STA. = 1520+23.77 $\Delta = 8^\circ 08' 26''$ (LT) D = $1^\circ 59' 38''$ R = 2,873.70' T = 204.49' L = 408.30' E = 7.27' $e = 2.46\%$ T.R. = 48.00' S.E. RUN = 59.00' P.C. STA = 1518+19.28 P.T. STA = 1522+27.58	EXIST. CURVE XSWHWY-1 PI STA. = 1520+23.77 $\Delta = 8^\circ 08' 26''$ (LT) D = $1^\circ 27' 20''$ R = 3,936.58' T = 280.13' L = 559.31' E = 9.95' e = ----- T.R. = ----- S.E. RUN = ----- P.C. STA. = 1517+43.64 P.T. STA. = 1523+02.95
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PROP. CURVE SWHWY-1	NORTH COORDINATE	EAST COORDINATE
PI STA. = 1520+23.77	1,810,613.41	1,115,525.79
$\Delta = 8^\circ 08' 26''$ (LT)		
D = $1^\circ 59' 38''$		
R = 2,873.70'		
T = 204.49'		
L = 408.30'		
E = 7.27'		
$e = 2.46\%$		
T.R. = 48.00'		
S.E. RUN = 59.00'		
P.C. STA = 1518+19.28	1,810,457.31	1,115,393.68
P.T. STA = 1522+27.58	1,810,786.63	1,115,634.46

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL ROUTE 7
 ALIGNMENT, TIES AND BENCHMARKS
 STA. 1503+19.73 TO STA. 28+17.76

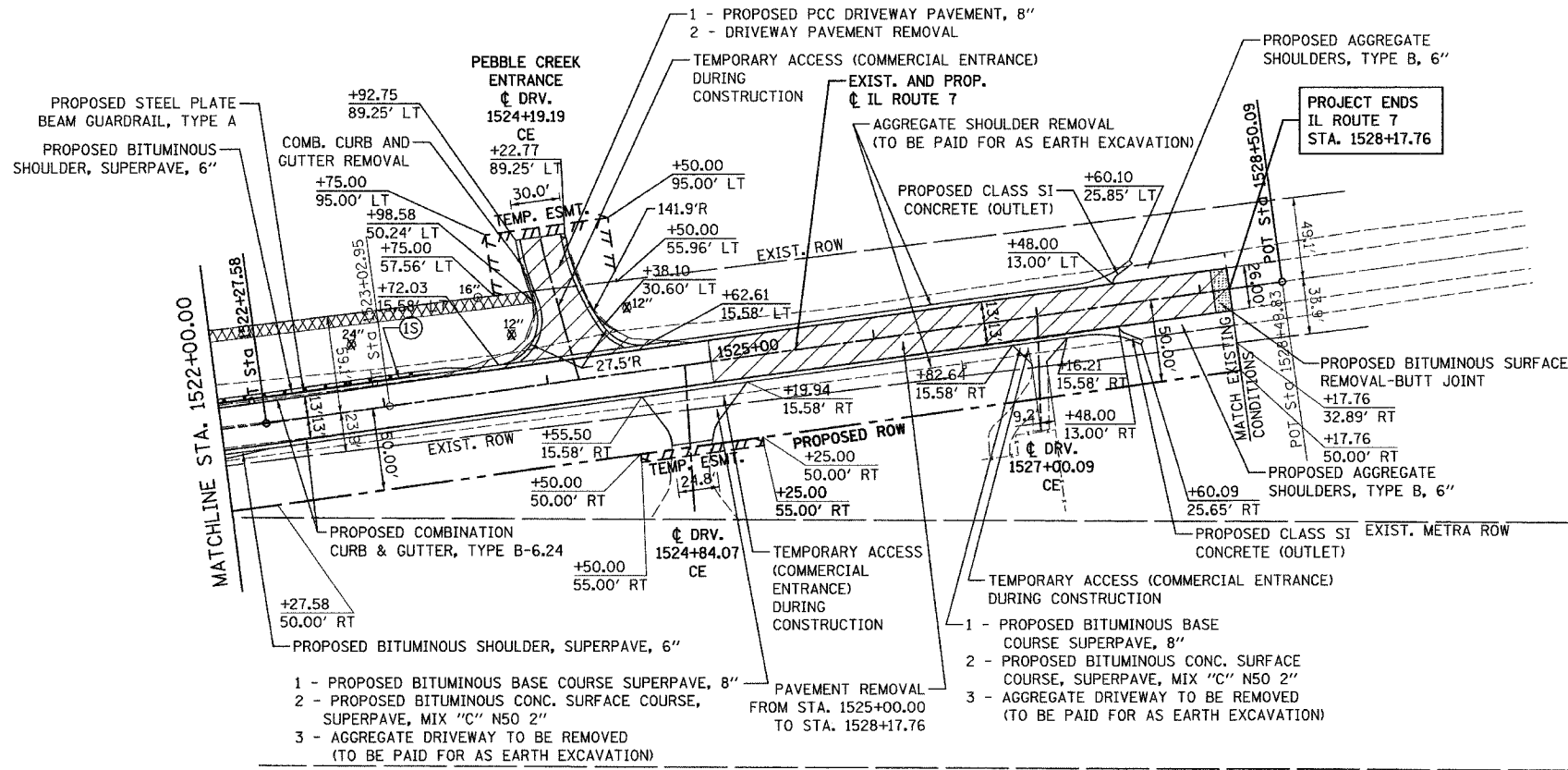
SCALE: VERT. 1" = 100'
 DATE: MAR. 10, 2006

DRAWN BY BCD
 CHECKED BY SLR

PLOT DATE = 3/8/2006
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 REFERENCE = AREFA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	13
STA. 1522+00.00		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTE:
FROM STA. 1505+00 TO STA. 1505+85
AND FROM STA. 1524+00 TO STA. 1525+00,
EXCLUDING THE EXISTING BRIDGE,
THE EXIST. PAVEMENT SHALL NOT BE
REMOVED BUT BROKEN INTO PIECES NOT
TO EXCEED 3 SQ. FT. IN SURFACE AREA
AS PER ARTICLE 205.03 OF THE STANDARD
SPECIFICATIONS.

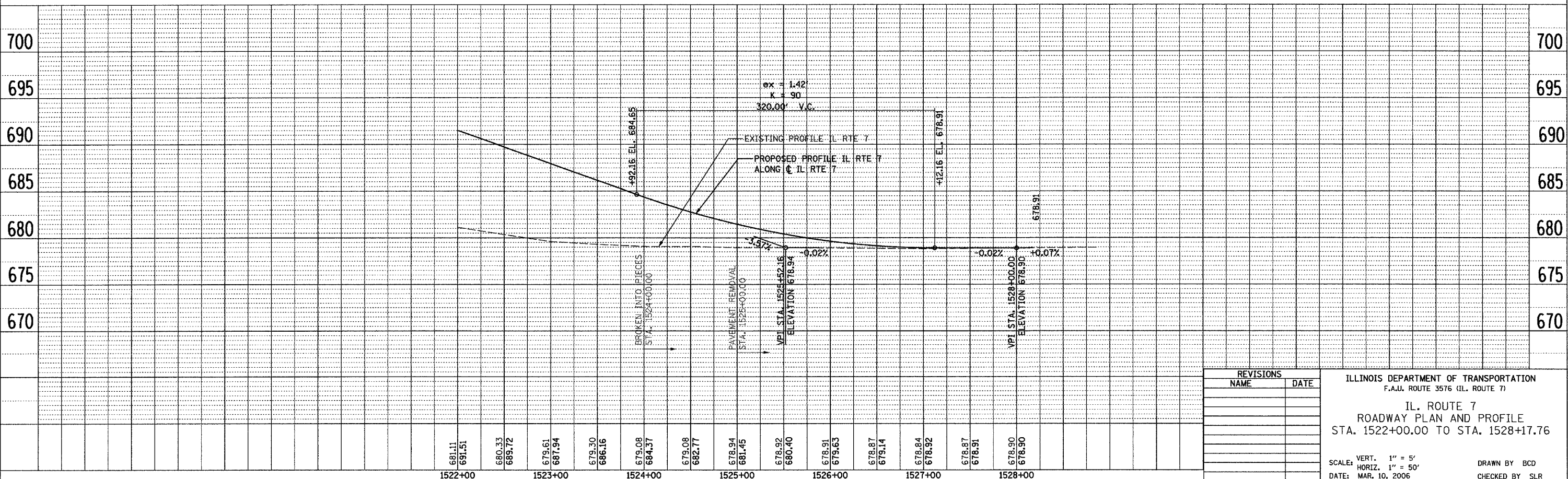


STATION TO STATION	CROSS SLOPE
1503+19.73	1518+39.00 -2.00 % TO -2.00 %
1518+39.00	1518+50.00 -2.00 % TO -2.46 %
1518+50.00	1522+27.58 -2.46 % TO -2.46 %
1522+27.58	1522+38.58 -2.46 % TO -2.00 %
1522+38.58	1528+17.76 -2.00 % TO -2.00 %

STATION TO STATION	CROSS SLOPE
1503+19.73	1514+35.34 -2.00 % TO -2.00 %
1514+35.34	1515+35.68 -2.00 % TO 2.00 %
1515+35.68	1518+39.00 2.00 % TO 2.00 %
1518+39.00	1518+50.00 2.00 % TO 2.46 %
1518+50.00	1522+27.58 2.46 % TO 2.46 %
1522+27.58	1523+34.58 2.46 % TO -2.00 %
1523+34.58	1528+17.76 -2.00 % TO -2.00 %

- LEGEND:
- (S) TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)
 - (6) TRAFFIC BARRIER TERMINAL TYPE 6
 - XXXX SELECTIVE CLEARING
 - /// PAVEMENT REMOVAL

- 1 - PROPOSED BITUMINOUS BASE COURSE SUPERPAVE, 8"
- 2 - PROPOSED BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "C" N50 2"
- 3 - AGGREGATE DRIVEWAY TO BE REMOVED (TO BE PAID FOR AS EARTH EXCAVATION)



REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
ROADWAY PLAN AND PROFILE
STA. 1522+00.00 TO STA. 1528+17.76

SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'
DATE: MAR. 10, 2006
DRAWN BY BCD
CHECKED BY SLR

PLAN	DATE	BY

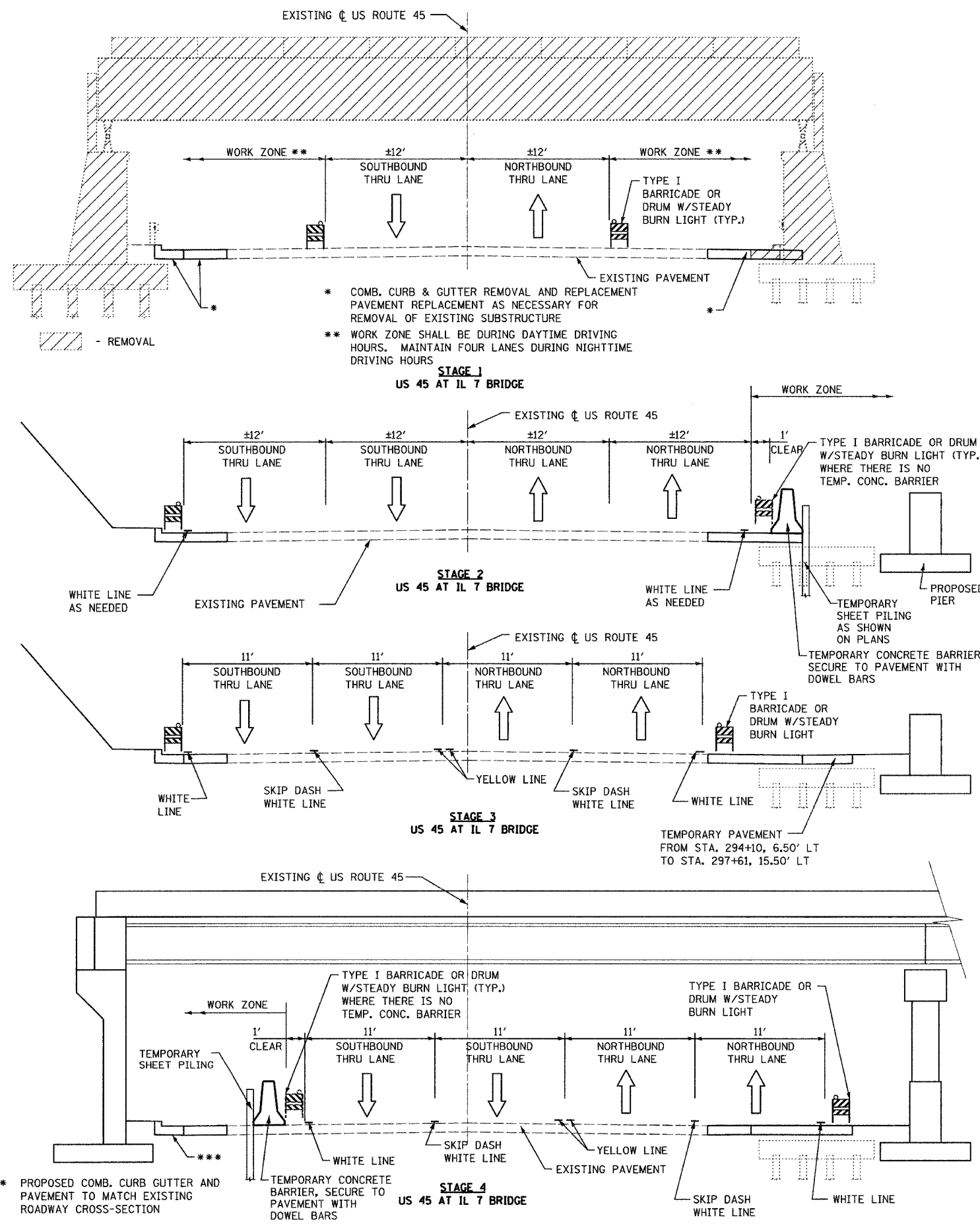
PROFILE	DATE	BY

PLOT DATE = 3/6/2006
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SCALE = 1" = 50'
REFERENCE = #REF#

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	14
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

US ROUTE 45 (LA GRANGE ROAD) STAGE CONSTRUCTION GENERAL NOTES

- ALL OF THE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED. EXISTING STOP AND STOP AHEAD SIGNS ALONG US RTE. 45 SHALL BE RELOCATED TO CONTROL SIDE STREET OR ENTRANCE TRAFFIC FOR THE VARIOUS STAGES OF CONSTRUCTION. THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT.
- A MINIMUM OF TWO LANES (11 FEET) IN EACH DIRECTION OF US ROUTE 45 SHALL BE KEPT OPEN TO THROUGH TRAFFIC AT ALL TIMES EXCEPT AS NOTED IN PLANS. IF ONE LANE IN EACH DIRECTIONS MUST BE CLOSED AT ANY TIME DUE TO CONSTRUCTION, IT SHALL BE DURING NON-PEAK TRAFFIC TIMES BETWEEN 9:00 A.M. & 3:00 P.M. MONDAY TO FRIDAY. THESE CLOSURES MUST BE APPROVED BY THE ENGINEER.
- TAPER LENGTH FOR TRAFFIC CONTROL DEVICES IS DEFINED BY:
 $L = WS$
 WHERE EQUATION IS FOR SPEED LIMIT OF 45 MPH OR MORE. THE TERM IS DEFINED AS FOLLOWS:
 L = TAPER LENGTH IN FEET
 W = WIDTH OF OFFSET IN FEET
 S = POSTED SPEED IN MPH.
- THE FOLLOWING TEMPORARY PAVEMENT MARKINGS SHALL BE PROVIDED AT ALL THE FOLLOWING LOCATIONS IN EACH OF THE VARIOUS STAGES OF CONSTRUCTION:
 4" WHITE EDGE LINE - EACH EDGE (YELLOW FOR INSIDE EDGE) (TAPE, TYPE 3)
 4" WHITE SKIP DASH (30 FT SKIP - 10 FT DASH) - BETWEEN LANES (TAPE, TYPE 3)
 4" DOUBLE YELLOW - MEDIANS AND BETWEEN OPPOSING LANES (TAPE, TYPE 3)
- TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE PROJECT IN ACCORDANCE WITH THE DISTRICT ONE C.A.D.D. DETAIL FOR "RAISED REFLECTIVE PAVEMENT MARKERS" OR AS DIRECTED BY THE ENGINEER.
- TEMPORARY PAVEMENT IS REQUIRED TO MAINTAIN THE REQUIRED TRAFFIC LANES ON US ROUTE 45 AS SHOWN ON THE STAGING PLANS. TEMPORARY PAVEMENT, AT THE OPTION OF THE CONTRACTOR, IS TO CONSIST OF EITHER 8" PCC BASE COURSE OR 2" BITUMINOUS SURFACE COURSE, MIX D, WITH 8" BITUMINOUS BASE COURSE. AN ESTIMATED QUANTITY OF 230 SQUARE YARDS HAS BEEN INCLUDED.
- PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE USED AND ITS PLACEMENT SHALL BE DIRECTED BY THE ENGINEER AND IT SHALL BE PAID FOR AS "CHANGEABLE MESSAGE SIGN".
- THE CONTRACTOR WILL GIVE AT LEAST 48 HOURS PRIOR NOTICE TO THE VILLAGE ENGINEER (ORLAND PARK) BEFORE CLOSING ANY SIDE STREETS DURING CONSTRUCTION.
- TYPE III BARRICADES SHALL BE USED ON ALL SPECIFIED STREETS FOR ROAD CLOSURES.
- THE CONTRACTOR SHALL PROVIDE 48 HOUR WRITTEN NOTICE TO THE ENGINEER, PROPERTIES OWNER AND VILLAGE OF ANY DRIVEWAY CLOSURES. APPROXIMATE DIRECTIONAL SIGNAGE SHALL BE PROVIDED SO THAT PATRONS OF THESE AFFECTED BUSINESSES CAN ACCESS THE PROPERTIES BY OTHER ROUTES. THIS ACTIVITY SHALL BE COORDINATED WITH THE RESIDENT ENGINEER FOR THE PROJECT. COST OF SIGNS INCLUDED WITH TEMPORARY ACCESS.
- ARROW BOARDS SHALL HAVE SOLAR POWER CAPABILITY.
- THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE CONSTRUCTION SIGNING. SIGNS SHALL BE ERRECTED ONE WEEK IN ADVANCE OF THE START OF THE CONSTRUCTION. SIGNS SHALL BE TAKEN DOWN AS SOON AS THEY ARE NO LONGER APPLICABLE ON A CONTINUOUS BASIS AND RE-ERECTED AS APPROPRIATE. EXAMPLES OF SIGNS ARE AS FOLLOWS:
 TEMPORARY LANE CLOSURE
 EXAMPLE:
 "PERIODIC LANE CLOSURES BEGIN...
 EXPECT DELAYS"
 MAJOR PAVING OPERATIONS OR BEAM ERECTION WHERE LANES WILL BE CLOSED OR RESTRICTED ON A SHORT TERM BASIS.
 EXAMPLE:
 "PAVEMENT POUR...
 EXPECT DELAYS"
 SEE DETAIL FOR "TEMPORARY INFORMATION SIGNING" IN PLANS. THESE SIGNS SHALL BE PAID AS TEMPORARY INFORMATION SIGNING.
 THE CONTRACTOR SHALL UTILIZE DAYTIME LANE CLOSURES FOR THE CONSTRUCTION OF THE TEMPORARY CATCH BASINS AND TEMPORARY STORM SEWER.
- FOR MIXURE REQUIREMENT OF TEMPORARY PAVEMENT SEE SHEET 8 OF 108.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO THE COMMERCIAL ENTRANCES AT STA. 1524+19.19 LT, 1524+84.07 RT, AND 1527+00.09 RT THROUGHOUT CONSTRUCTION AS DIRECTED BY THE ENGINEER.



PLOT DATE = 5/6/2006
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 REFERENCE = #REF#

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
 US 45 SUGGESTED STAGES OF
 CONSTRUCTION AND TRAFFIC CONTROL
 TYPICAL SECTION

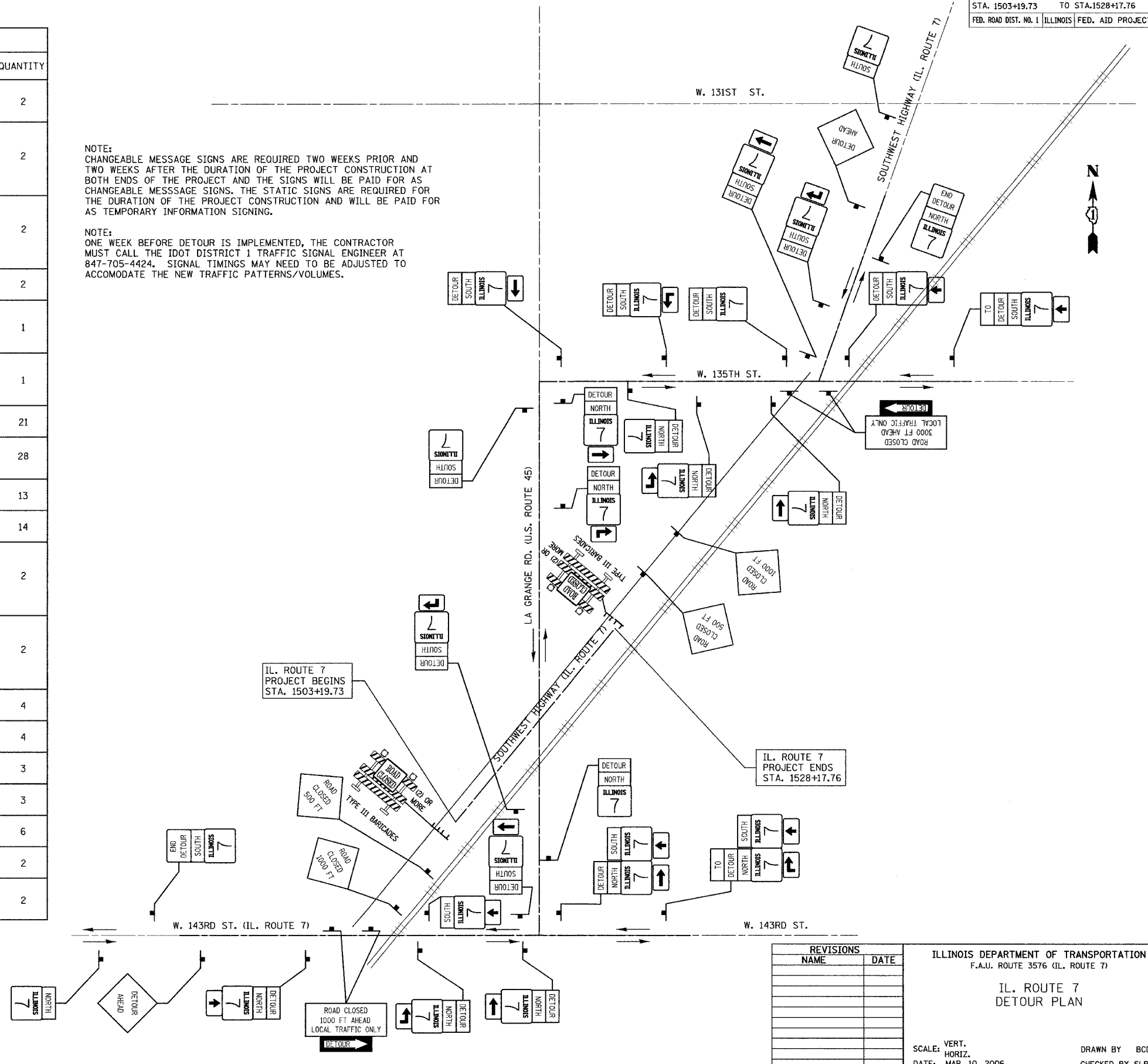
SCALE: VERT. DRAWN BY GM
 HORIZ. CHECKED BY SLR
 DATE MAR. 10, 2006

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	16
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

DETOUR SCHEDULE						
SIGN	MUCTD DESIGNATION	SIZE	AREA	SIGN PANEL TYPE	COLOR	QUANTITY
	R11-2	48" X 30"	10 SQ. FT.	2	WHITE	2
	W20-3	36" X 36"	9 SQ. FT.	1	ORANGE	2
	W20-3	36" X 36"	9 SQ. FT.	1	ORANGE	2
	M4-10 R	48" X 18"	6 SQ. FT.	1	ORANGE	2
	R11-3a	60" X 30"	12.5 SQ. FT.	2	WHITE	1
	R11-3a	60" X 30"	12.5 SQ. FT.	2	WHITE	1
	M4-8	24" X 12"	2 SQ. FT.	1	WHITE	21
	M1-1100A	24" X 22"	3.67 SQ. FT.	1	WHITE	28
	M3-1	24" X 12"	2 SQ. FT.	1	WHITE	13
	M3-3	24" X 12"	2 SQ. FT.	1	WHITE	14
	W20-2	36" X 36"	9 SQ. FT.	1	ORANGE	2
	W20-2	36" X 36"	9 SQ. FT.	1	ORANGE	2
	M6-1 R	21" X 15"	2.18 SQ. FT.	1	WHITE	4
	M5-1 R	21" X 15"	2.18 SQ. FT.	1	WHITE	4
	M6-1 L	21" X 15"	2.18 SQ. FT.	1	WHITE	3
	M5-1 L	21" X 15"	2.18 SQ. FT.	1	WHITE	3
	M6-3	21" X 15"	2.18 SQ. FT.	1	WHITE	6
	M4-8b	24" X 12"	2 SQ. FT.	1	ORANGE	2
	M4-8a	24" X 18"	3 SQ. FT.	1	ORANGE	2

NOTE:
CHANGEABLE MESSAGE SIGNS ARE REQUIRED TWO WEEKS PRIOR AND TWO WEEKS AFTER THE DURATION OF THE PROJECT CONSTRUCTION AT BOTH ENDS OF THE PROJECT AND THE SIGNS WILL BE PAID FOR AS CHANGEABLE MESSAGE SIGNS. THE STATIC SIGNS ARE REQUIRED FOR THE DURATION OF THE PROJECT CONSTRUCTION AND WILL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

NOTE:
ONE WEEK BEFORE DETOUR IS IMPLEMENTED, THE CONTRACTOR MUST CALL THE IDOT DISTRICT 1 TRAFFIC SIGNAL ENGINEER AT 847-705-4424. SIGNAL TIMINGS MAY NEED TO BE ADJUSTED TO ACCOMMODATE THE NEW TRAFFIC PATTERNS/VOLUMES.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. ROUTE 3576 (IL. ROUTE 7)

**IL. ROUTE 7
DETOUR PLAN**

SCALE: VERT. DRAWN BY BCD
 HORIZ. CHECKED BY SLR
 DATE: MAR. 10, 2006








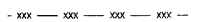
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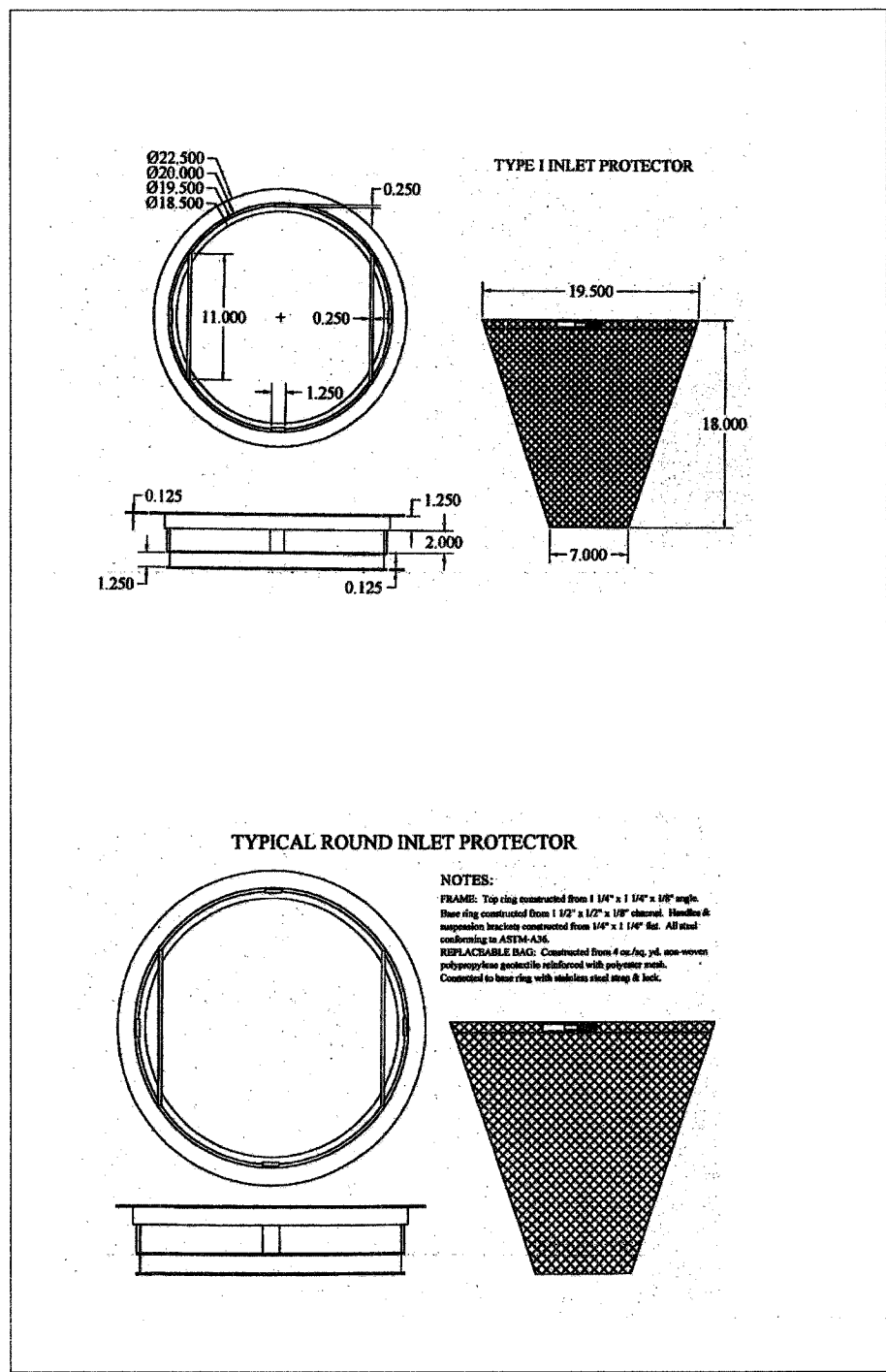
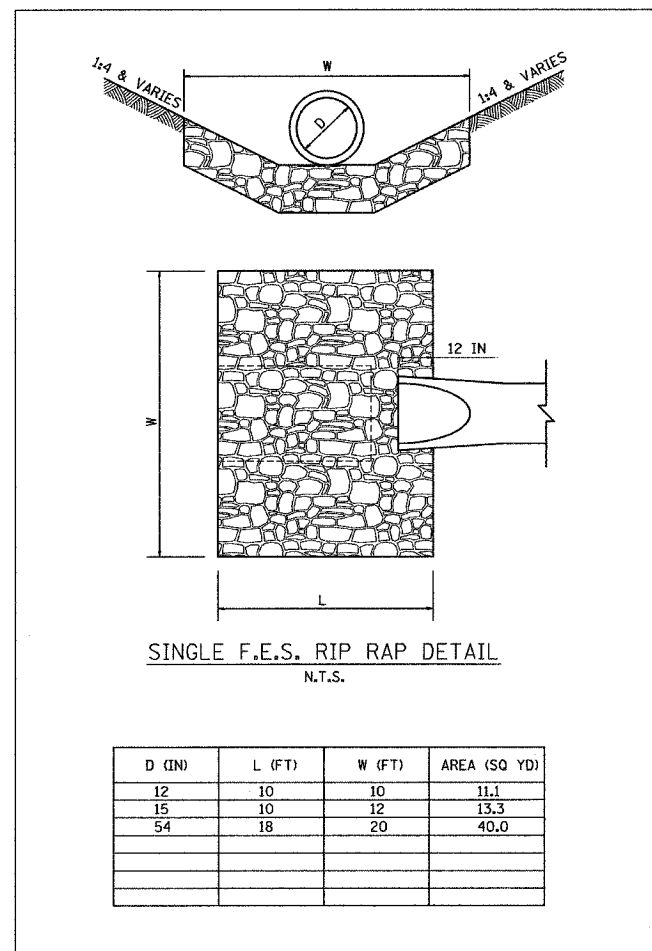
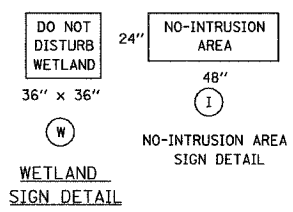
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	17
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTES:

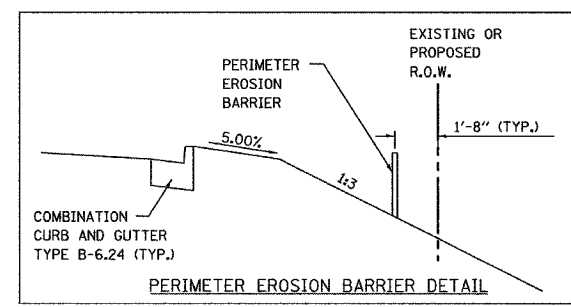
1. THE MCGINNIS SLOUGH NATURAL AREA AND ALL OTHER WETLANDS ARE NO-INTRUSION AREAS, EXCEPT WETLAND SITE 6, AND TEMPORARY FENCING SHALL BE PLACED AT THE CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION. THE FENCE SHALL BE KEPT THERE THROUGHOUT THE DURATION OF THE CONSTRUCTION SUCH THAT THERE IS NO INTRUSION INTO THE MCGINNIS SLOUGH NATURAL AREA.
2. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.
3. LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF THE GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.
4. SEE DRAINAGE PLANS FOR LOCATIONS OF EXISTING UTILITIES AND PROPOSED STORM SEWER.
5. CONTACT MR. RICK WANNER AT 847-405 4172 FOR THE LOCATION AND THE USE OF THE "DO NOT DISTURB WETLAND" SIGNS. PICKUP, INSTALLATION, MAINTENANCE, REMOVAL AND RETURN OF THE SIGNS ARE INCLUDED IN THE COST OF PERIMETER EROSION BARRIER.
6. AN ESTIMATED QUANTITY OF FOUR (4) TEMPORARY CATCH BASINS ARE PROVIDED.

SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION LEGEND:

-  TEMPORARY DITCH CHECKS
-  SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER
-  PERIMETER EROSION BARRIER
-  SWALE
-  RIPRAP
-  DITCH FLOW
-  TEMPORARY EROSION CONTROL SEEDING WITH EROSION CONTROL BLANKET
-  TEMPORARY FENCE



NOTES:
 FRAME: Top ring constructed from 1 1/4" x 1 1/4" x 1/8" angle.
 Base ring constructed from 1 1/2" x 1/2" x 1/8" channel. Handles & suspension brackets constructed from 1/4" x 1 1/4" flat. All steel conforming to ASTM-A36.
 REPLACEABLE BAG: Constructed from 4 oz./sq. yd. non-woven polypropylene geotextile reinforced with polyester mesh. Constructed to bear ring with stainless steel stay & bolt.

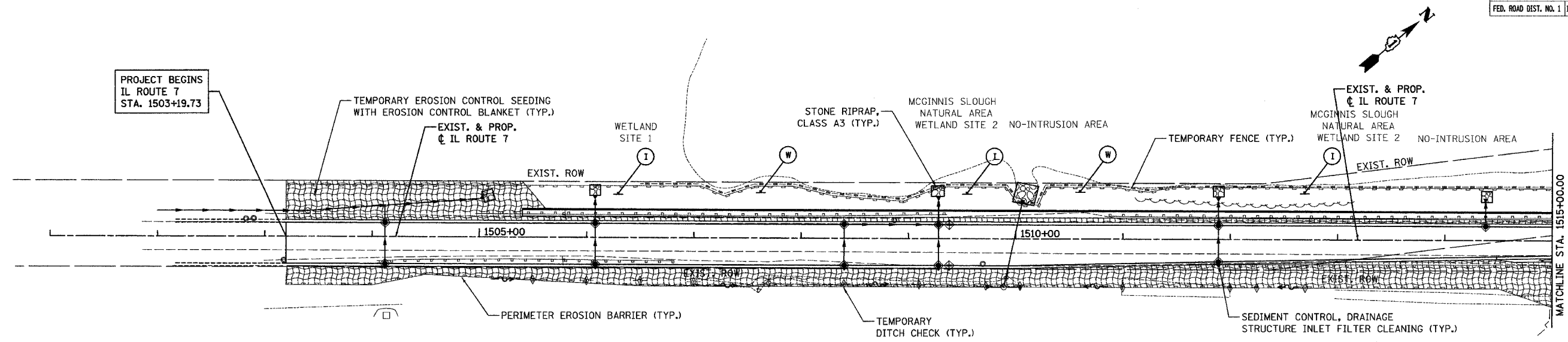


DETAIL FOR SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER CLEANING

REVISIONS	
NAME	DATE

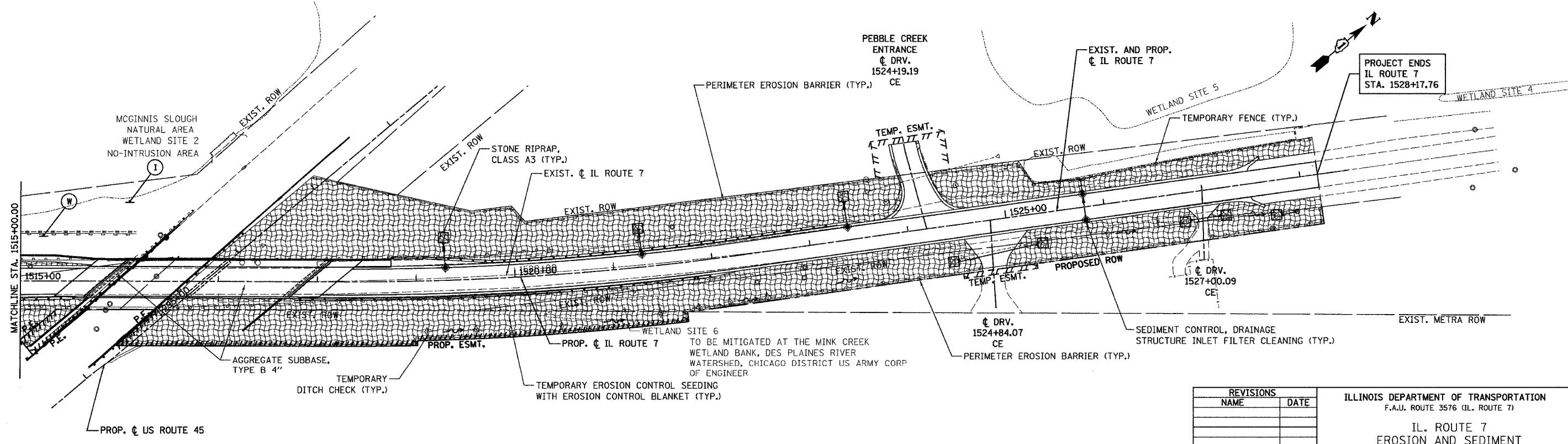
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. ROUTE 3576 (IL. ROUTE 7)
 IL. ROUTE 7
 EROSION AND SEDIMENT
 CONTROL DETAILS
 AND NOTES
 SCALE: VERT. DRAWN BY BCD
 HORIZ. CHECKED BY SLR
 DATE: MAR. 10, 2006

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	18
STA. 1503+19.73 TO STA. 1528+17.76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. THE SOIL AND WATER CONSERVATION DISTRICT IS RESPONSIBLE FOR CONDUCTING SITE VISITS AND VERIFYING THAT THE PRACTICES ARE WORKING PROPERLY AND DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE SWCD THE CONTRACTOR WILL IMPLEMENT THE PRACTICES IN A TIMELY MANNER.
2. THE WILL/SOUTH COOK SOIL AND WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO FINAL INSPECTION.
3. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
EROSION AND SEDIMENT
CONTROL DETAILS
STA. 1503+19.73 TO STA. 1528+17.76

SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'

DATE: MAR. 10, 2006

DRAWN BY BCD
CHECKED BY SLR

PLOT DATE = 3/9/2006
FILE NAME = W:\IL 7\Proposed\Plans\Plan\Prof\Jua\ESCD.dgn
PLOT SCALE = 1/8" = 1'-0"
REFERENCE = REF#

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	22
STA. 1503+19.73 TO STA. 1528+17.76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

STRUCTURE TABLE STA. 1503+19.73 TO STA. 1511+00.00												
STR. NO.	STATION	OFFSET (FT)	STRUCTURE TYPE/SIZE				F&G	INVERTS				RIM ELEV.
			MH	CB	IN	OTHERS		(N)	(S)	(E)	(W)	
1	1504+12.00	25' RT		C			24	692.76	-	-	-	697.14
2	1504+12.00	13' LT		A4			24	691.98	692.04	-	-	697.14
3	1506+08.00	25' RT		C			24	690.22	-	-	-	694.96
4	1506+08.00	13' LT		A4			24	685.27	689.86	-	-	694.96
5	1506+08.00	35' LT				PRC FES 12 IN		-	685.13	-	-	-
6	1508+40.00	25' RT		C			24	688.84	-	-	-	692.34
7	1508+40.00	13' LT		A4			24	-	688.48	688.48	-	692.34
8	1909+28.00	25' RT		A4			24	688.00	-	688.00	-	692.06
9	1509+28.00	13' LT		A5			24	678.47	687.64	687.64	687.64	692.06
10	1509+28.00	35' LT				PRC FES 15 IN		-	678.33	-	-	-
11	1509+38.00	25' RT			A		24	-	-	-	688.07	692.06
12	1509+38.00	13' LT			A		24	-	-	-	687.71	692.06
13A	1509+77.00	45' RT				PRC FES 12 IN		-	-	686.85	-	-
13B	1510+02.00	45' RT				PRC FES 12 IN		-	-	-	686.86	-
13	1509+89.00	45' RT	A6			(BY OTHERS) **	1 OL	675.80	-	686.74	686.74	691.91
14	1510+05.00	31' LT				PRC FES 54 IN		-	675.06	-	-	-

** TO BE DONE BY OTHERS ASSUMING THAT IT WOULD BE CONSTRUCTED PRIOR TO THIS CONTRACT

STRUCTURE TABLE STA. 1503+19.73 TO STA. 1511+00.00										
PIPE NO.	PIPE LOCATION		DESCRIPTION	DIA. (IN)	L (FT)	S (%)	TRENCH BACKFILL (CU YD)	****		
	FROM STR.	TO STR.								
S1	1	2	SS 2 RCP CL 3 12	12	38.00	2.00	13.0	-		
S2	2	PIPE	SS 2 RCP CL 3 12	12	16.00	1.00	5.6	-		
S3	3	4	SS 2 RCP CL 3 12	12	38.00	1.00	13.0	-		
S4	4	5	SS 2 RCP CL 3 12	12	22.00	1.00	28.0	1.8		
S6	6	7	SS 2 RCP CL 3 12	12	38.00	1.00	8.2	-		
S7	7	9	SS 2 RCP CL 3 12	12	88.00	1.00	23.5	-		
S8	8	9	SS 2 RCP CL 3 12	12	38.00	1.00	10.2	-		
S9	9	10	SS 3 RCP CL 4 15	15	22.00	1.00	43.9	1.9		
S11	11	8	SS 2 RCP CL 3 12	12	10.00	1.00	2.4	-		
S12	12	9	SS 2 RCP CL 3 12	12	10.00	1.00	2.7	-		
S13A	13A	13	SS 1 RCP CL 4 12	12	10.00	1.14	-	-		
S13B	13B	13	SS 1 RCP CL 4 12	12	10.00	1.19	-	-		
S13	13	14	SS 2 RCP CL 3 54	54	77.00	2.00	287.6	3.4		

**** ADDITIONAL TRENCH BACKFILL REQUIRED IN AREAS OF STONE COLUMNS, SEE RETAINING WALL PLANS.

PIPE UNDERDRAINS, FABRIC LINED TRENCH 4" TABLE	
STATION	LENGTH
1504+12	38
1506+08	38
1508+40	38
1509+28	38
1511+88	34
1514+38	26
1519+30	26
1521+30	26
1523+30	26
1525+80	26

STRUCTURE TABLE STA. 1511+00.00 TO STA. 1522+00.00												
STR. NO.	STATION	OFFSET (FT)	STRUCTURE TYPE/SIZE				F&G	INVERTS				RIM ELEV.
			MH	CB	IN	OTHERS		(N)	(S)	(E)	(W)	
15	1511+88.00	20.8' RT		C			24	689.29	-	-	-	694.17
16	1511+88.00	13' LT		A4			24	679.88	688.97	-	-	694.17
17	1511+88.00	35' LT				PRC FES 12 IN		-	679.74	-	-	-
18	1514+38.00	13' LT		C			24	686.52	-	-	-	699.70
19	1514+38.00	35' LT				PRC FES 12 IN		-	686.38	-	-	-
20	1519+30.00	13' LT		C			24	692.00	-	-	-	699.49
21	1519+30.00	35' LT				PRC FES 12 IN		-	691.86	-	-	-
22	1521+30.00	13' LT		C			24	686.26	-	-	-	693.75
23	1521+30.00	35' LT				PRC FES 12 IN		-	686.12	-	-	-

STRUCTURE TABLE STA. 1511+00.00 TO STA. 1522+00.00										
PIPE NO.	PIPE LOCATION		DESCRIPTION	DIA. (IN)	L (FT)	S (%)	TRENCH BACKFILL (CU YD)	****		
	FROM STR.	TO STR.								
S15	15	16	SS 2 RCP CL 3 12	12	34.00	1.00	12.0	-		
S16	16	17	SS 3 RCP CL 4 12	12	22.00	1.00	44.3	1.7		
S18	18	19	SS 3 RCP CL 4 12	12	22.00	1.00	40.4	1.7		
S20	20	21	SS 2 RCP CL 3 12	12	22.00	1.00	20.3	-		
S22	22	23	SS 2 RCP CL 3 12	12	22.00	1.00	20.3	-		

**** ADDITIONAL TRENCH BACKFILL REQUIRED IN AREAS OF STONE COLUMNS, SEE RETAINING WALL PLANS.

PROPOSED STRUCTURE TABLE US ROUTE 45							
PIPE NO.	PIPE LOCATION		DESCRIPTION	DIA. (IN)	L (FT)	S (%)	TRENCH BACKFILL (CU YD)
	FROM STR.	TO STR.					
SL1	L1	L2	SS 1 RCP CL 4 12	12	56.0	*	4
SL2	L2	L3	SS 1 RCP CL 4 12	12	75.0	*	4
SL3	L3	L4	SS 1 RCP CL 4 12	12	5.0	*	1
SL4	L4	L5	SS 1 RCP CL 4 15	15	28.0	*	4
SL5	L5	L6	EXIST SS TO REMAIN	EXIST	105.6	*	-

STRUCTURE TABLE STA. 1522+00.00 TO STA. 1528+17.76												
STR. NO.	STATION	OFFSET (FT)	STRUCTURE TYPE/SIZE				F&G	INVERTS				RIM ELEV.
			MH	CB	IN	OTHERS		(N)	(S)	(E)	(W)	
24	1523+30.00	13' LT		C			24	678.58	-	-	-	686.61
25	1523+30.00	44' LT				PRC FES 12 IN		-	678.35	-	-	-
26	1524+50.00	37' RT				PRC FES 15 IN		-	-	-	677.72	-
27	1525+25.00	30.8' RT				PRC FES 15 IN		-	-	677.40	-	-
28	1525+80.00	13' RT		C			24	676.37	-	-	-	679.64
29	1525+80.00	13' LT		A4		WITH FLAT SLAB TOP	24	676.13	676.13	-	-	679.64
30	1525+80.00	24.4' LT				PRC FES 12 IN		-	676.10	-	-	-
31	1526+88.00	28' RT				PRC FES 15 IN		-	-	-	676.11	-
32	1527+12.00	27.7' RT				PRC FES 15 IN		-	-	675.99	-	-
33	1527+80.00	35' RT				PRC FES 15 IN		-	-	-	675.30	-
34	1527+92.75	34.08' RT	A			EXISTING MANHOLE TO REMAIN		-	-	675.05	-	677.95

STRUCTURE TABLE STA. 1522+00.00 TO STA. 1528+17.76										
PIPE NO.	PIPE LOCATION		DESCRIPTION	DIA. (IN)	L (FT)	S (%)	TRENCH BACKFILL (CU YD)	****		
	FROM STR.	TO STR.								
S24	24	25	SS 2 RCP CL 3 12	12	22.00	1.00	22.0	-		
S26	26	27	PIPE CUL CL A TY 1	15	76.00	0.50	11.8	-		
S28	28	29	SS 1 RCP CL 4 12	12	26.00	1.00	4.5	-		
S29	29	30	SS 1 RCP CL 4 12	12	12.00	1.00	2.1	-		
S31	31	32	PIPE CUL CL A TY 1	15	24.00	1.00	1.1	-		
S33	33	34	PIPE CUL CL A TY 1	15	13.00	3.50	-	-		

TEMPORARY STRUCTURE TABLE US ROUTE 45							
PIPE NO.	PIPE LOCATION		DESCRIPTION	DIA. (IN)	L (FT)	S (%)	TRENCH BACKFILL (CU YD)
	FROM STR.	TO STR.					
ST1	T1	T2	PIPE CUL, TY 1 12 (TEMPORARY)	12	56.0	*	4
ST2	T2	T3	PIPE CUL, TY 1 12 (TEMPORARY)	12	75.0	*	4
ST3	T3	T4	PIPE CUL, TY 1 12 (TEMPORARY)	12	5.0	*	1
ST4	T4	T5	PIPE CUL, TY 1 15 (TEMPORARY)	15	28.0	*	4
ST5	T5	T6	EXIST. SS TO REMAIN	EXIST	105.6	*	-

* MAINTAIN EXISTING INVERTS

PROPOSED STRUCTURE TABLE US ROUTE 45												
STR. NO.	STATION	OFFSET (FT)	STRUCTURE TYPE/SIZE				F&G	INVERTS				RIM ELEV.
			MH	CB	IN	OTHERS		(N)	(S)	(E)	(W)	
L1	293+90.66	54.10' LT			A		24	MANTAIN EXIST INVERTS				677.10
L2	294+47.17	55.79' LT		A4			24	MANTAIN EXIST INVERTS				677.31
L3	295+21.77	57.65' LT		A4			24	***				676.44
L4	295+26.33	58.04' LT		A4			24	MANTAIN EXIST INVERTS				676.95
L5	295+54.07	58.63' LT		A4			24	MANTAIN EXIST INVERTS				677.13
L6	296+59.58	62.39' LT				EXIST. CB TO REMAIN		EXIST	EXIST	EXIST	EXIST.	

*** MAINTAIN EXISTING INVERTS FOR REINFORCED CONCRETE PIPES. NEW INVERT = 674.44 FOR PVC SDR 26 PIPE 8"

TEMPORARY STRUCTURE TABLE US ROUTE 45												
STR. NO.	STATION	OFFSET (FT)	STRUCTURE TYPE/SIZE				F&G	INVERTS				RIM ELEV.
			MH	CB	IN	OTHERS		(N)	(S)	(E)	(W)	
T1	293+90.66	49.75' LT			A		1 OL	MANTAIN EXIST INVERTS				677.22
T2	294+47.17	49.75' LT		A4			1 OL	MANTAIN EXIST INVERTS				677.43
T3	295+21.77	49.75' LT		A4			1 OL	MANTAIN EXIST INVERTS				676.56
T4	295+56.33	49.75' LT		A4			1 OL	MANTAIN EXIST INVERTS				677.07
T5	295+54.07	58.63' LT				EXIST CB TO REMAIN		MANTAIN EXIST INVERTS				677.13
T6	296+59.58	62.39' LT				EXIST MH TO REMAIN		MANTAIN EXIST INVERTS				EXIST

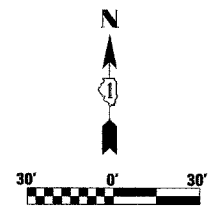
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.U. ROUTE 3576 (IL. ROUTE 7) IL. ROUTE 7 DRAINAGE TABLES SCALE: VERT. HORIZ. DATE: MAR. 10, 2006	DRAWN BY BCD CHECKED BY SLR
NAME	DATE		

NOTE
THE CONTRACTOR SHALL KEEP RECORDS OF THE RIM AND INVERTS ELEVATIONS OF THE EXISTING DRAINAGE STRUCTURES TO BE REMOVED ALONG US ROUTE 45. THE SAME INVERTS AND RIM ELEVATIONS ARE TO BE USED FOR THE PROPOSED DRAINAGE STRUCTURES ALONG US ROUTE 45.

PART OF THE W. 1/2, SEC. 3, T36N, R12 EAST OF THE 3rd PM, COOK COUNTY, ILLINOIS

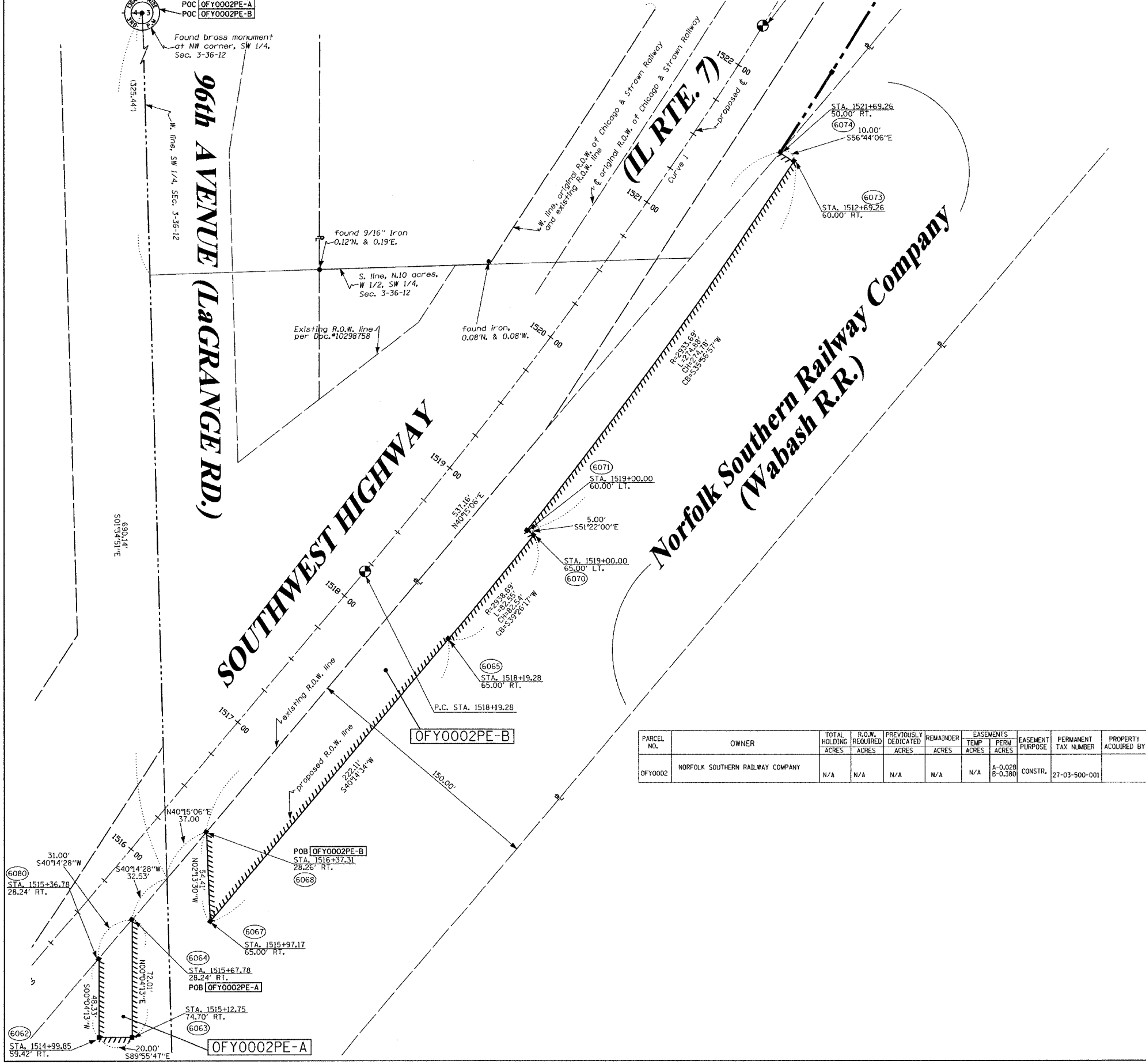
CONTRACT NUMBER: 62712				
F.A.U.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	13278	COOK	108	23
STATION 1515+97 TO STATION 1521+69		ILLINOIS FED. AID PROJECT		

BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83.



LEGEND

	EXISTING CENTERLINE
	PROPOSED CENTERLINE
	EXISTING RIGHT OF WAY LINE
	PROPOSED RIGHT OF WAY LINE
	PROPOSED EASEMENT LINE
	SECTION LINE
	QUARTER SECTION LINE
	QUARTER QUARTER SECTION LINE
	PROPERTY (DEED) LINE
	APPL APPARENT PROPERTY LINE
	MEASURED DIMENSION
	COMPUTED DIMENSION
	RECORDED DIMENSION
	FOUND IRON PIPE OR IRON ROD
	SET 3/8 INCH IRON ROD
	PERMANENT SURVEY MONUMENT
	L.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
	CUT CROSS FOUND OR SET
	SAME OWNERSHIP
	EXISTING TELEPHONE SPLICE BOX
	EXISTING STREET LIGHT
	EXISTING MAIL BOX
	EXISTING WELL HEAD
	STAKING OF PROPOSED RIGHT OF WAY, SET 3/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
	STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, SET 3/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.



PARCEL NO.	OWNER	TOTAL HOLDING ACRES	R.O.W. REQUIRED ACRES	PREVIOUSLY DEDICATED ACRES	REMAINDER ACRES	EASEMENTS TEMP ACRES	PERM ACRES	EASEMENT PURPOSE	PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
OFY0002	NORFOLK SOUTHERN RAILWAY COMPANY	N/A	N/A	N/A	N/A	N/A	A-0.028 B-0.380	CONSTR.	27-03-500-001	

CURVE 1
P.I. STA= 1520+23.77
Δ= 08°08'26"
D= 01°59'38"
R= 2873.69'
T= 204.49'
L= 408.29'
E= 7.27'
P.C. STA= 1518+19.28
P.T. STA= 1522+27.57

STATE OF ILLINOIS)
) SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 3, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK 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, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS THIS _____ DAY OF _____ A.D.

RONALD F. HODGEN P.L.S. NO. 2630
MY LICENSE EXPIRES 11-30-2006

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/C.I.S. Consultants
2174 ONEIDA STREET 2630 SOUTH WASHINGTON STREET SUITE 170
JOLIET, ILLINOIS 60435 HAWKERSVILLE, ILLINOIS 60655
PH (815) 744-6600 FAX (815) 744-0101 PH (630) 650-1700 FAX (630) 420-1741

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
SOUTHWEST HIGHWAY (IL RTE. 7)

COOK COUNTY
JOB NO. R-90-006-03
STATION 1515+97 TO STATION 1521+69

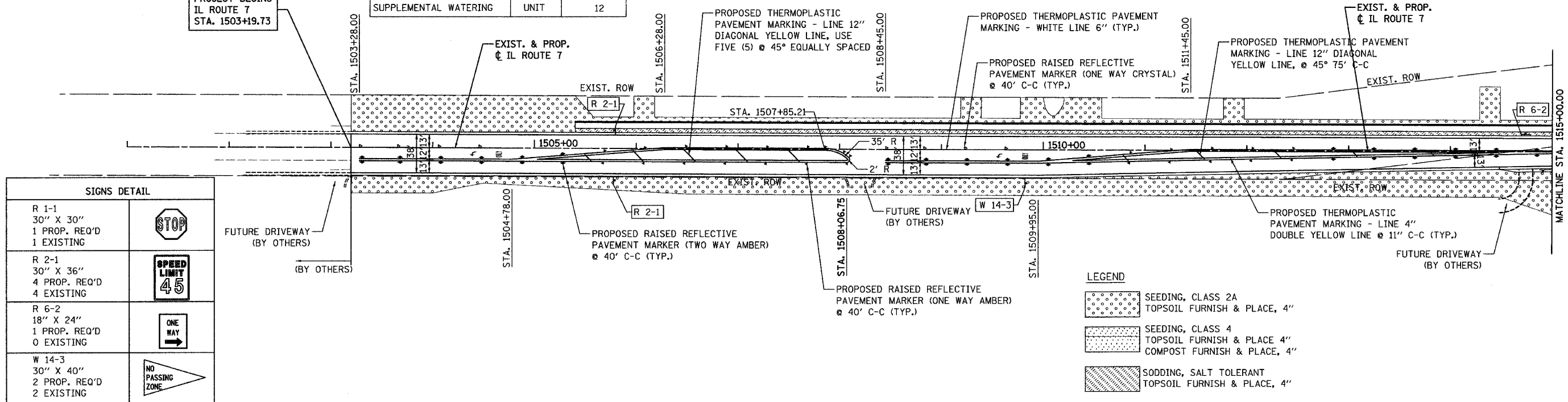
SCALE: 1"=30' SHEET 2 OF 4

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT
SCHAMBURG, ILLINOIS 60196

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	26
STA. 1503+19.73 TO STA. 1528+17.76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

STA. 1503+19.73 TO STA. 1515+00.00		
ITEM	UNIT	QUANTITY
SEEDING, CLASS 2A	ACRE	1.0
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5310
EROSION CONTROL BLANKET	SQ YD	9570
SODDING, SALT TOLERANT	SQ YD	495
SUPPLEMENTAL WATERING	UNIT	12

PROJECT BEGINS
IL ROUTE 7
STA. 1503+19.73

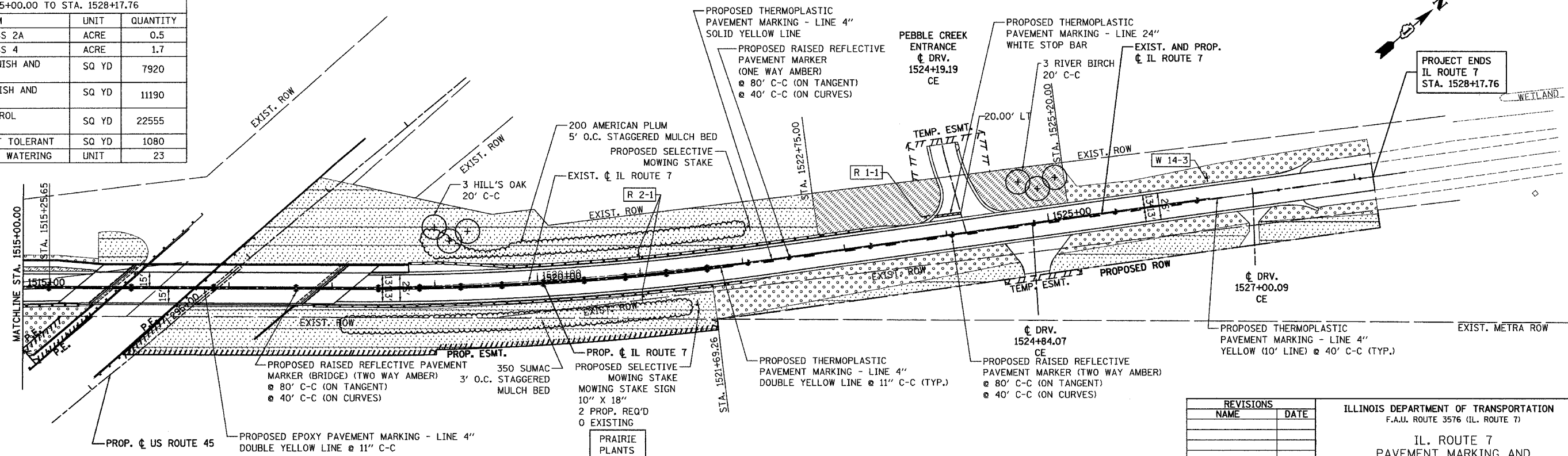


SIGNS DETAIL	
R 1-1 30" X 30" 1 PROP. REQ'D 1 EXISTING	
R 2-1 30" X 36" 4 PROP. REQ'D 4 EXISTING	
R 6-2 18" X 24" 1 PROP. REQ'D 0 EXISTING	
W 14-3 30" X 40" 2 PROP. REQ'D 2 EXISTING	

LEGEND	
	SEEDING, CLASS 2A TOPSOIL FURNISH & PLACE, 4"
	SEEDING, CLASS 4 TOPSOIL FURNISH & PLACE 4" COMPOST FURNISH & PLACE, 4"
	SODDING, SALT TOLERANT TOPSOIL FURNISH & PLACE, 4"

STA. 1515+00.00 TO STA. 1528+17.76		
ITEM	UNIT	QUANTITY
SEEDING, CLASS 2A	ACRE	0.5
SEEDING, CLASS 4	ACRE	1.7
COMPOST FURNISH AND PLACE, 4"	SQ YD	7920
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	11190
EROSION CONTROL BLANKET	SQ YD	22555
SODDING, SALT TOLERANT	SQ YD	1080
SUPPLEMENTAL WATERING	UNIT	23

PROJECT ENDS
IL ROUTE 7
STA. 1528+17.76



ITEM	SEEDING	SODDING	QUANTITY
NITROGEN FERTILIZER NUTRIENT	90 LB/ACRE X 1.50 ACRE = 135 POUND	60 LB/ACRE X 0.33 ACRE = 20 POUND	155 POUND
PHOSPHOROUS FERTILIZER NUTRIENT	90 LB/ACRE X 1.50 ACRE = 135 POUND	60 LB/ACRE X 0.33 ACRE = 20 POUND	155 POUND
POTASSIUM FERTILIZER NUTRIENT	90 LB/ACRE X 1.50 ACRE = 135 POUND	60 LB/ACRE X 0.33 ACRE = 20 POUND	155 POUND

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
PAVEMENT MARKING AND
LANDSCAPING DETAILS
STA. 1503+19.73 TO STA. 1528+17.76

SCALE: VERT. 1" = 50'
HORIZ. 1" = 50'
DATE: MAR. 10, 2006

DRAWN BY BCD
CHECKED BY SLR

PLOT DATE: 03/10/2006
FILE NAME: \\VLL\T\Projects\1503+19.73\1503+19.73.dgn
PLOT SCALE: 1" = 50'
REFERENCE:

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	27
STA. 1503+19.73		TO STA. 1514+00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

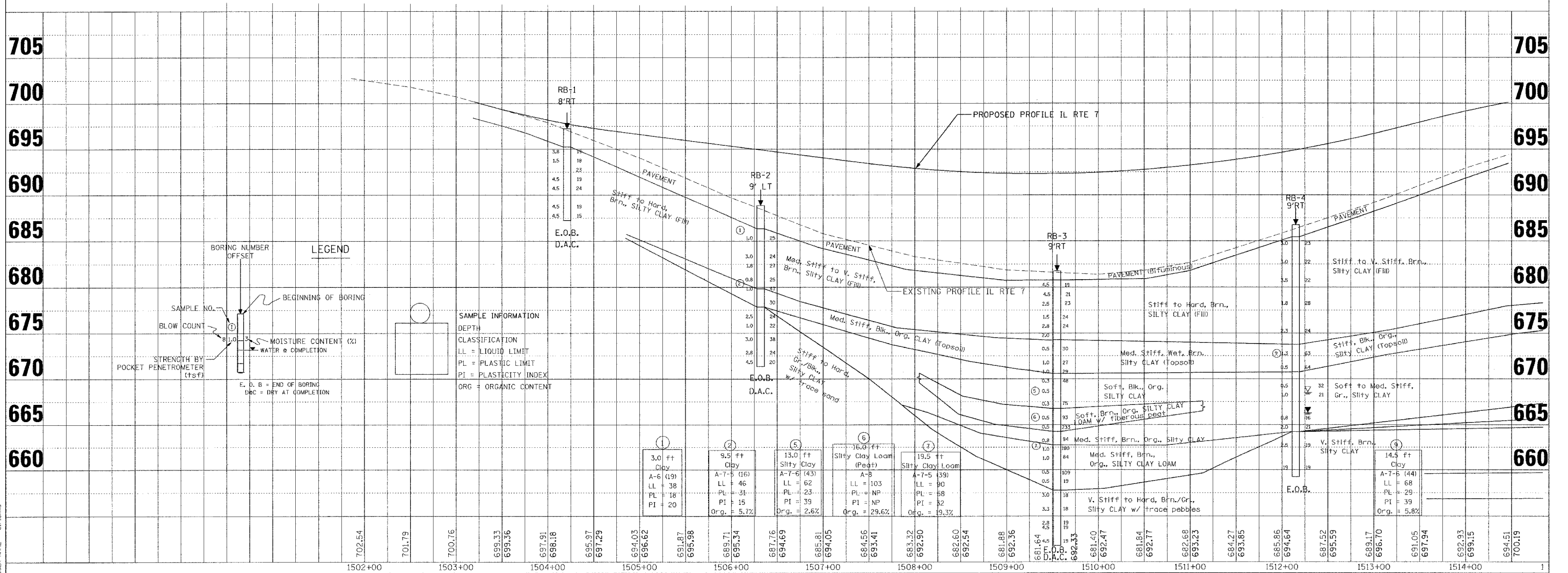
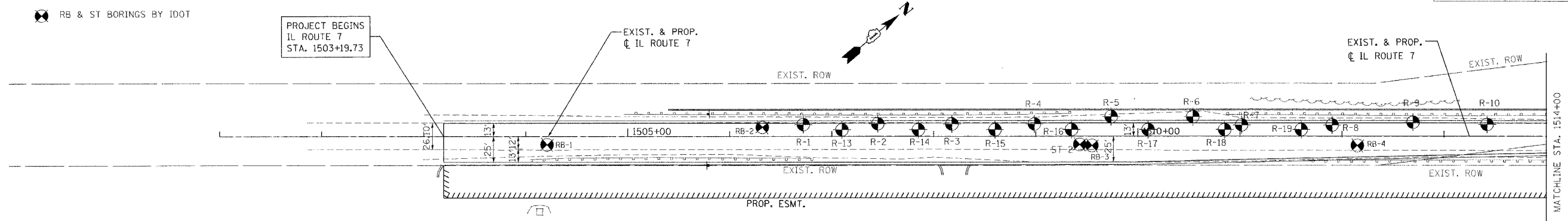
LEGEND

- R, BR & SS BORINGS BY GEO SERVICES
- RB & ST BORINGS BY IDOT

PROJECT BEGINS
IL ROUTE 7
STA. 1503+19.73

EXIST. & PROP.
CL IL ROUTE 7

EXIST. & PROP.
CL IL ROUTE 7



PLOT DATE = 12/13/2005
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 USER = j...

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	29
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
35 SHEETS

Bench Mark: Top of Brass Disk in West Curb of US Rte. 45 (LaGrange Rd.) Approximately 675' North of the Centerline of IL Rte. 7 (Southwest Highway). Elev. 689.07.

Existing Structure: S.N. 016-0465, Original Construction date 1930. Rehabilitated in 1970, 1995, and 1999. The structure consists of a single-span steel, through girder bridge supported on closed concrete abutments with assumed pile foundations. The structure length is 83'-0" back to back of abutments and the width is 50'-0". Remove the existing structure and replace it with a 2 span structure.

Salvage: None

Staging: Traffic on IL 7 to be detoured during construction. Four lanes of traffic to be maintained on US 45 during construction. Construct pier footing and collision wall prior to west abutment construction. See maintenance of traffic plans.

Remove existing piles, See Sht. 2 of 35
Temp. Sheet Piling & Temp. Barrier

** 4" Aggregate, See Rdwy. Plans

30'-0" Bridge Approach Pavement (Special) Std. 420401 Modified Sidewalk N. Side Barrier S. Side Typ. Each End See Sht. 35 of 35
McGinnis Slough (No-Intrusion Area)
Northwest Wingwall
Existing & Proposed Gr. Elev. 695.0
Northwest Retaining Wall SN 016-W970
* With stone columns, See Ret. Wall Plans.

Existing R.O.W.
1515+00
C&G B-6.24 (Typ.)
13'-0" min.

Future Metra Parking Lot
8'-0" (+) Sidewalk
Top of Wall Elev. 681.0
12'-0" (+) Lane
12'-0" (+) Lane
12'-0" (+) Lane

Existing R.O.W.
Sta. 293+78.41
62.53' LT (Base of Wall)
Future Retaining Wall
12'-0" (+) Lane
12'-0" (+) Lane
12'-0" (+) Lane

Existing Railroad Bridge Wingwall
1'-5" Concrete Barrier
Temp. Soil Retention System

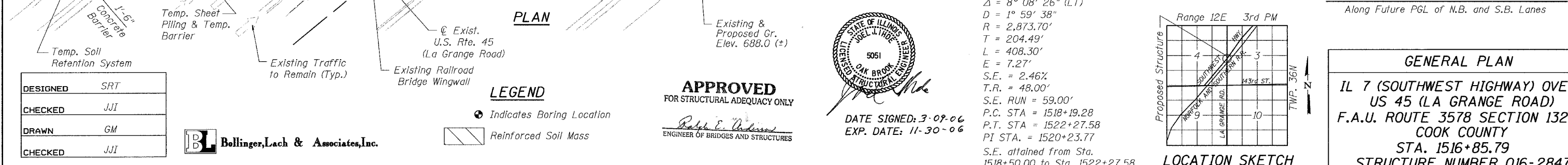
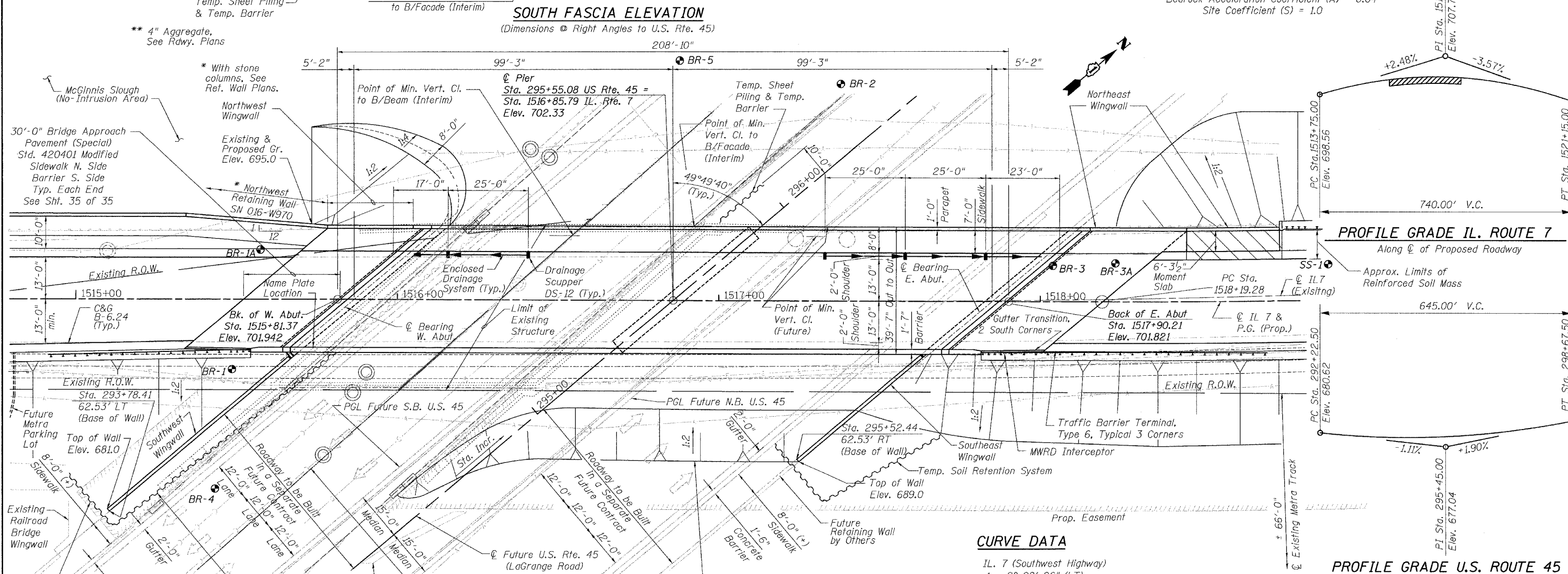
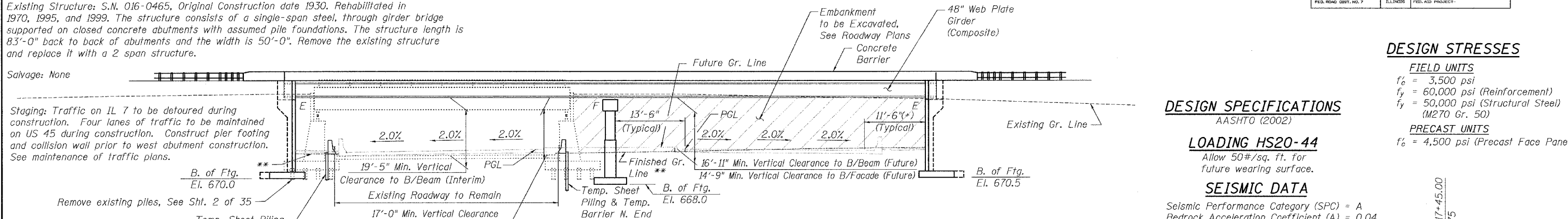
Temp. Sheet Piling & Temp. Barrier
Existing Traffic to Remain (Typ.)

Existing Railroad Bridge Wingwall
Temp. Sheet Piling & Temp. Barrier

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

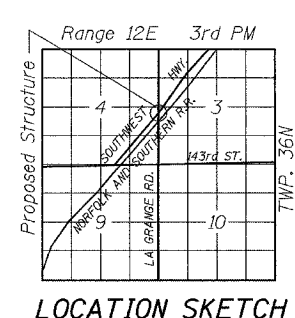
Bollinger, Lach & Associates, Inc.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CURVE DATA

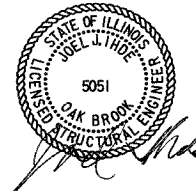
IL. 7 (Southwest Highway)
Δ = 8° 08' 26" (LT)
D = 1° 59' 38"
R = 2,873.70'
T = 204.49'
L = 408.30'
E = 7.27'
S.E. = 2.46%
T.R. = 48.00'
S.E. RUN = 59.00'
P.C. STA = 1518+19.28
P.T. STA = 1522+27.58
PI STA. = 1520+23.77
S.E. attained from Sta. 1518+50.00 to Sta. 1522+27.58



GENERAL PLAN

IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



DATE SIGNED: 3-09-06
EXP. DATE: 11-30-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	30
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
35 SHEETS

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$ " diameter, open holes $\frac{15}{16}$ " diameter, unless otherwise noted.

Calculated weight of Structural Steel = 250,500 Pounds for AASTHO M270 Gr. 50 (Furnished by others)
18,700 Pounds for AASTHO M270 Gr. 36 (Furnished by others)
210 Pounds for ASTM 307 (Included in this contract)
180 Pounds for ASTM A325 (Included in this contract)

Field welding of construction accessories will not be permitted to beams or girders.

Anchor bolts shall be set before bolting diaphragms over supports.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50. (Furnished by others)

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material except fill plates. (Furnished by others)

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two $\frac{1}{8}$ " adjusting shim shall be provided for each bearing and placed as detailed. (Furnished by others)

The concrete for bridge floors finished according to Article 503.17 of the Standard Specifications, shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The finishing machine, when required, shall be set parallel to the skew for striking off and screeding the concrete.

Bridge Seat Sealer shall be applied to the seat area of the abutments.

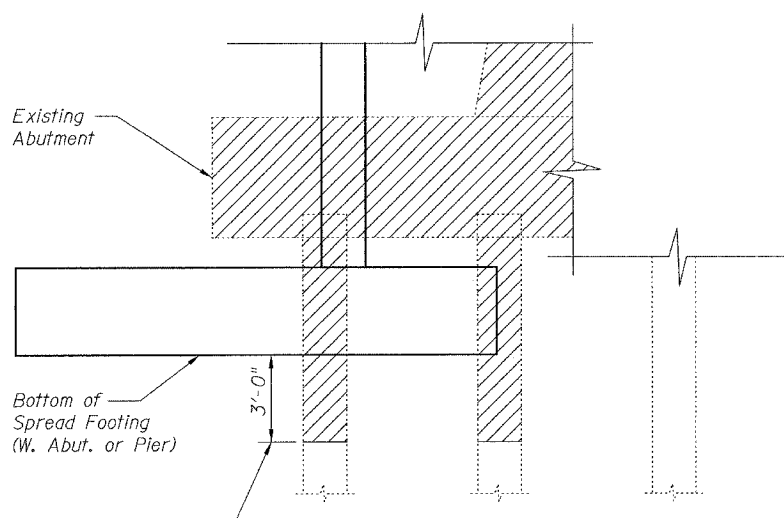
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All construction joints shall be bonded.

The Inorganic zinc rich primer/Acrylic/Acrylic Paint System shall be used for shop, and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be reddish brown, Munsell No 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".

Bridge designed for an additional superimposed dead load from a future decorative north facade, applied along the north edge of deck.

The Protective Shield quantity is for the limits of the existing superstructure. $\text{C} \text{ Brg. to } \text{C} \text{ Brg.} = 79'-6"$.
Out to Out deck = 50'-0".



STATION 1516+85.79
BUILT BY
STATE OF ILLINOIS
FAU RT. 3578 SEC. 1327B
LOADING HS20
STR. NO. 016-2847

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL *

ITEM	UNIT	SUPER	SUB	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	-	1802	1802
Porous Granular Embankment	Cu. Yd.	-	151	151
Porous Granular Embankment (Special)	Cu. Yd.	-	2713	2713
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	4232	4232
Concrete Structures	Cu. Yd.	-	1349.9	1349.9
Concrete Superstructure	Cu. Yd.	301.6	13.6	315.2
Bridge Deck Grooving	Sq. Yd.	628	-	628
Erecting Elastomeric Bearing Assembly, Type I	Each	-	-	14
Neoprene Expansion Joint, 2"	Foot	-	-	120
Protective Coat	Sq. Yd.	1008	-	1008
Erecting Structural Steel	L. Sum	-	-	1
Furnishing & Erecting Structural Steel	Pound	-	-	390
Stud Shear Connectors	Each	2800	-	2800
Reinforcement Bars, Epoxy Coated	Pound	59,800	163,160	222,960
Aluminum Railing, Type L	Foot	202	89	291
Temporary Sheet Piling	Sq. Ft.	-	-	2298
Name Plates	Each	-	-	1
Bar Splicers	Each	-	120	120
Bridge Seat Sealer	Sq. Ft.	-	348	348
Geocomposite Wall Drain	Sq. Yd.	-	744	744
Drainage Scupper, DS-12	Each	5	-	5
Temporary Soil Retention System	Sq. Ft.	-	-	1033
Drainage System	L. Sum	-	-	1
Protective Shield	Sq. Yd.	-	-	442
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	-	190
Pipe Underdrains for Structures 4"	Foot	-	321	321
Pipe Drains 4"	Foot	-	12	12

* Does not include Approach Pavement Details, See Sht. 35 of 35
** Field painting is included with item
*** Quantity is for Anchor Bolts

EXISTING PILE REMOVAL

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	General Plan
2	Index of Sheets, General Notes & Summary of Quantities
3	Temporary Sheet Piling
4	Top of Slab Elevations
5	Top of Slab Elevations
6	Top of Slab Elevations
7	Superstructure Plan
8	Superstructure Cross Sections
9	Superstructure Details
10	Drainage System & Bar List
11	Continuous Seal Type Neoprene Joint Detail
12	Drainage Scupper, DS-12
13	Aluminum Railing, Type L
14	Structural Steel Framing Plan
15	Structural Steel Details
16	Girder Details
17	Bearings
18	Anchor Bolts
19	West Abutment Footing & Top Plan
20	West Abutment Elevation & Section
21	West Abutment Details
22	East Abutment Footing & Top Plan
23	East Abutment Elevation & Section
24	East Abutment Details
25	East Abutment MSE Wingwall
26	Abutment Details
27	Southwest Wingwall
28	Southeast Wingwall
29	Pier
30	Bar Splicer Assembly Details
31	Soil Boring Logs BR-1 & BR-2
32	Soil Boring Logs BR-2 & BR-3
33	Soil Boring Logs BR-3, BR-4 & BR-5
34	Soil Boring Log SS-1
35	Approach Pavement Details

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

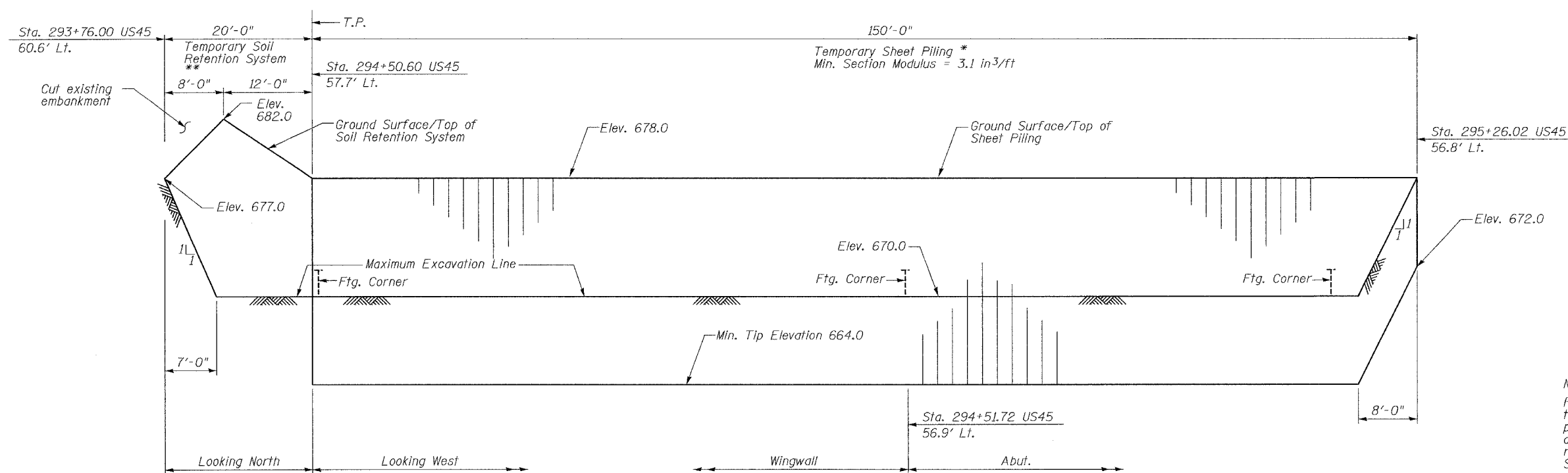
B Bollinger, Lach & Associates, Inc.

INDEX OF SHEETS, GENERAL NOTES AND TOTAL BILL OF MATERIAL

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	31
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

SHEET NO. 3
35 SHEETS



DEVELOPED ELEVATION - WEST ABUTMENT & SOUTHWEST WINGWALL ***

Notes:
Portions of the temporary sheet piling shown on the plans along the west abutment and wingwall may be eliminated if remaining portions of existing footings are adequate to support the excavation, as approved by the Engineer. The contractor shall verify the sheeting requirements prior to ordering materials, cost included with Temporary Sheet Piling.

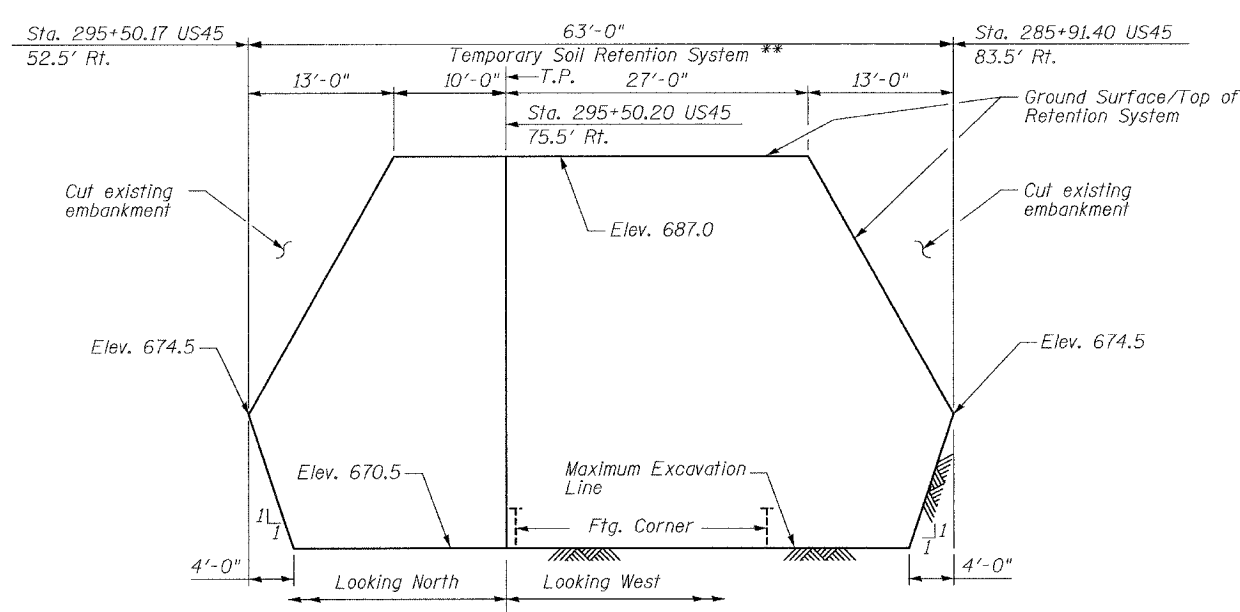
A portion of the existing East Abutment shall be left in place to retain earth during pier construction so that sheet piling is only required as shown.

* If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

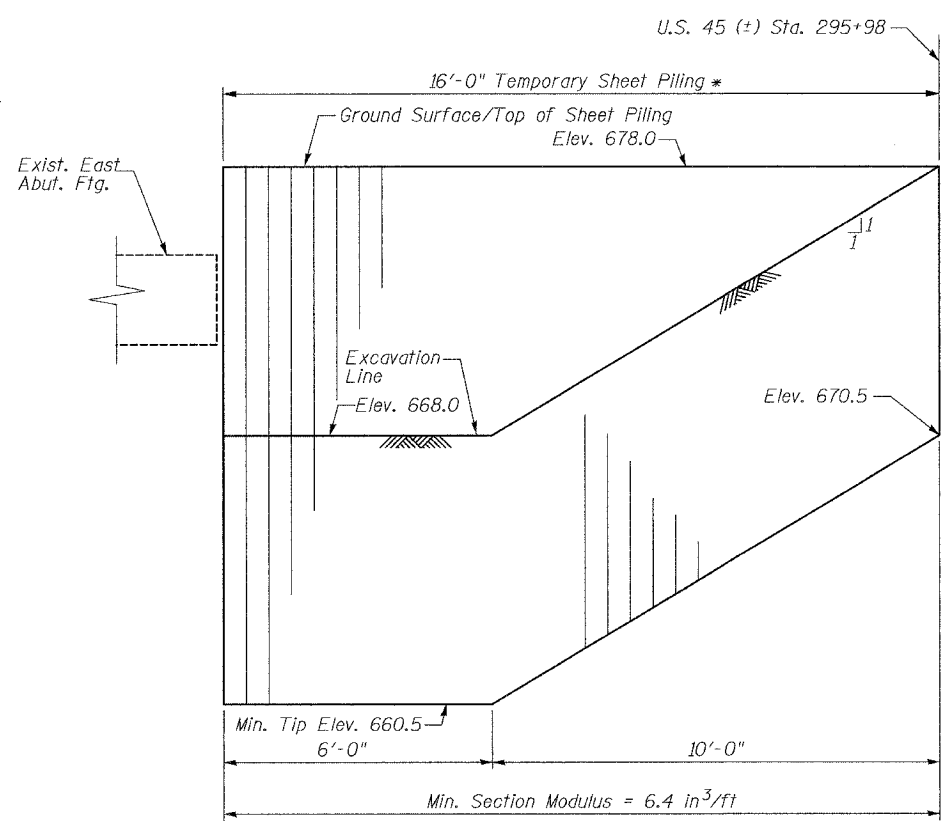
** A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Design of Temporary Soil Retention Systems shall meet the requirements of the Railroad.

*** Horizontal location (plan view) are set 2'-0" off the corners of the footings.



DEVELOPED ELEVATION - SOUTHEAST WINGWALL ***



ELEVATION - NORTH END OF PIER (Looking West)

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Sheet Piling	Sq. Ft.	2298
Temporary Soil Retention System	Sq. Ft.	1033

LEGEND
T.P. Turning Point

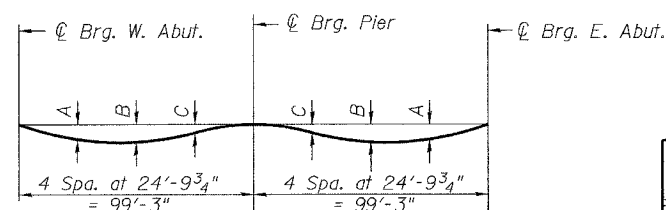
DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

TEMPORARY SHEET PILING
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAU 3578	SECTION 1327 B	COUNTY COOK	JOB NO. 108	SHEET NO. 32	SHEET NO. 4 35 SHEETS
FED. ROAD DIST. NO. 7		ELLIPSES		FED. AID PROJECT	



DEAD LOAD DEFLECTION DIAGRAM

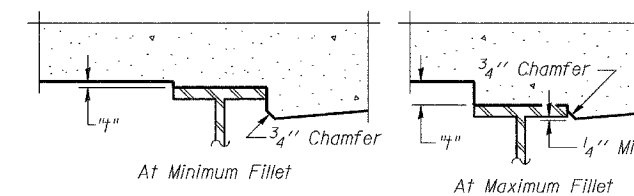
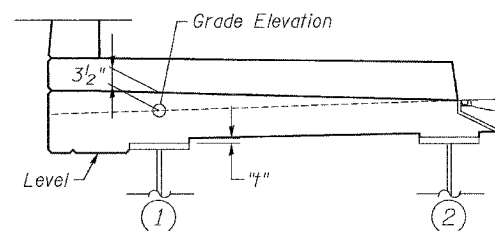
(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 5 and 6 of 35.

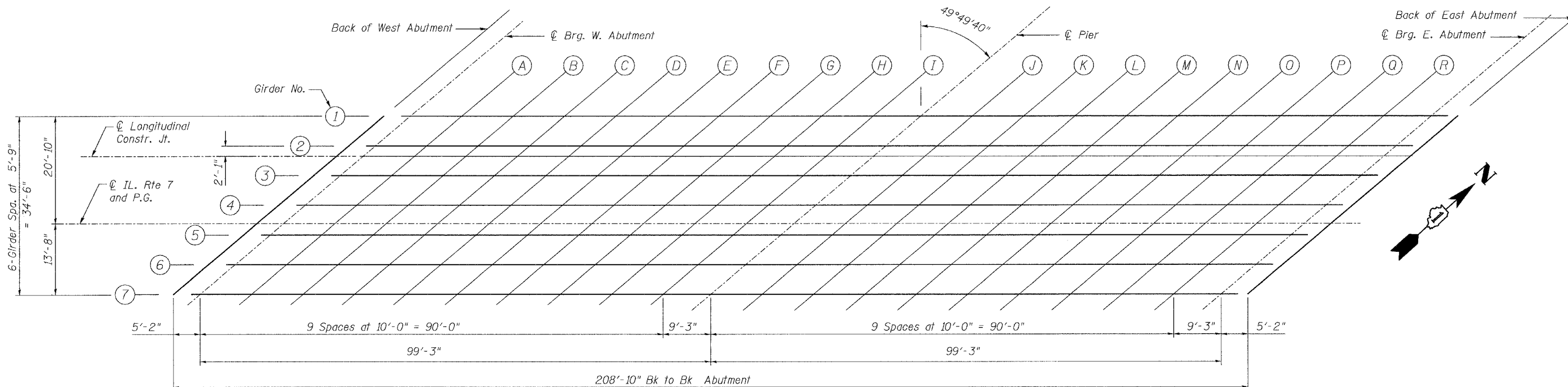
GIRDER NO.	DEFLECTION (in)		
	A	B	C
1	1 1/4	1 1/2	5/8
2 thru 7	3/4	7/8	3/8

TABLE OF DEAD LOAD DEFLECTIONS



To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 5 and 6 of 35, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS



PLAN

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

E-S 10-22-04

Bollinger, Lach & Associates, Inc.

TOP OF SLAB ELEVATIONS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	33
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1516+06.047	-20.833	701.697	701.697
CL BRG. W. ABUT	1516+11.213	-20.833	701.726	701.726
A	1516+21.213	-20.833	701.778	701.826
B	1516+31.213	-20.833	701.820	701.910
C	1516+41.213	-20.833	701.855	701.972
D	1516+51.213	-20.833	701.882	702.010
E	1516+61.213	-20.833	701.900	702.022
F	1516+71.213	-20.833	701.911	702.012
G	1516+81.213	-20.833	701.913	701.982
H	1516+91.213	-20.833	701.907	701.942
I	1517+01.213	-20.833	701.892	701.901
CL PIER	1517+10.467	-20.833	701.872	701.872
J	1517+20.467	-20.833	701.842	701.852
K	1517+30.467	-20.833	701.804	701.842
L	1517+40.467	-20.833	701.757	701.829
M	1517+50.467	-20.833	701.703	701.805
N	1517+60.467	-20.833	701.640	701.763
O	1517+70.467	-20.833	701.569	701.697
P	1517+80.467	-20.833	701.490	701.605
Q	1517+90.467	-20.833	701.402	701.489
R	1518+00.467	-20.833	701.307	701.352
CL BRG. E. ABUT	1518+09.720	-20.833	701.211	701.211
BK. E. ABUT.	1518+14.887	-20.833	701.155	701.155

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+99.236	-15.083	701.769	701.769
CL BRG. W. ABUT	1516+04.403	-15.083	701.802	701.802
A	1516+14.403	-15.083	701.859	701.888
B	1516+24.403	-15.083	701.907	701.961
C	1516+34.403	-15.083	701.947	702.017
D	1516+44.403	-15.083	701.980	702.056
E	1516+54.403	-15.083	702.004	702.076
F	1516+64.403	-15.083	702.020	702.079
G	1516+74.403	-15.083	702.027	702.068
H	1516+84.403	-15.083	702.027	702.047
I	1516+94.403	-15.083	702.018	702.022
CL PIER	1517+03.656	-15.083	702.003	702.003
J	1517+13.656	-15.083	701.978	701.983
K	1517+23.656	-15.083	701.945	701.967
L	1517+33.656	-15.083	701.905	701.947
M	1517+43.656	-15.083	701.856	701.916
N	1517+53.656	-15.083	701.798	701.871
O	1517+63.656	-15.083	701.733	701.809
P	1517+73.656	-15.083	701.659	701.728
Q	1517+83.656	-15.083	701.578	701.630
R	1517+93.656	-15.083	701.488	701.515
CL BRG. E. ABUT	1518+02.909	-15.083	701.397	701.397
BK. E. ABUT.	1518+08.076	-15.083	701.344	701.344

LONGITUDINAL CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+96.769	-13.000	701.795	701.795
CL BRG. W. ABUT	1516+01.935	-13.000	701.828	701.828
A	1516+11.935	-13.000	701.887	701.916
B	1516+21.935	-13.000	701.938	701.991
C	1516+31.935	-13.000	701.980	702.050
D	1516+41.935	-13.000	702.014	702.090
E	1516+51.935	-13.000	702.040	702.112
F	1516+61.935	-13.000	702.058	702.117
G	1516+71.935	-13.000	702.068	702.108
H	1516+81.935	-13.000	702.069	702.089
I	1516+91.935	-13.000	702.062	702.067
CL PIER	1517+01.189	-13.000	702.049	702.049
J	1517+11.189	-13.000	702.027	702.032
K	1517+21.189	-13.000	701.996	702.018
L	1517+31.189	-13.000	701.957	701.999
M	1517+41.189	-13.000	701.910	701.971
N	1517+51.189	-13.000	701.855	701.928
O	1517+61.189	-13.000	701.792	701.868
P	1517+71.189	-13.000	701.720	701.789
Q	1517+81.189	-13.000	701.640	701.692
R	1517+91.189	-13.000	701.552	701.580
CL BRG. E. ABUT	1518+00.442	-13.000	701.464	701.464
BK. E. ABUT.	1518+05.609	-13.000	701.411	701.411

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+92.425	-9.333	701.838	701.838
CL BRG. W. ABUT	1515+97.592	-9.333	701.874	701.874
A	1516+07.592	-9.333	701.936	701.965
B	1516+17.592	-9.333	701.990	702.044
C	1516+27.592	-9.333	702.036	702.106
D	1516+37.592	-9.333	702.074	702.150
E	1516+47.592	-9.333	702.103	702.175
F	1516+57.592	-9.333	702.125	702.184
G	1516+67.592	-9.333	702.138	702.178
H	1516+77.592	-9.333	702.143	702.163
I	1516+87.592	-9.333	702.140	702.144
CL PIER	1516+96.845	-9.333	702.130	702.130
J	1517+06.845	-9.333	702.111	702.116
K	1517+16.845	-9.333	702.084	702.105
L	1517+26.845	-9.333	702.048	702.090
M	1517+36.845	-9.333	702.005	702.065
N	1517+46.845	-9.333	701.953	702.026
O	1517+56.845	-9.333	701.893	701.969
P	1517+66.845	-9.333	701.825	701.894
Q	1517+76.845	-9.333	701.749	701.801
R	1517+86.845	-9.333	701.665	701.692
CL BRG. E. ABUT	1517+96.098	-9.333	701.580	701.580
BK. E. ABUT.	1518+01.265	-9.333	701.529	701.529

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+85.614	-3.583	701.903	701.903
CL BRG. W. ABUT	1515+90.781	-3.583	701.941	701.941
A	1516+00.781	-3.583	702.009	702.039
B	1516+10.781	-3.583	702.069	702.123
C	1516+20.781	-3.583	702.120	702.190
D	1516+30.781	-3.583	702.164	702.240
E	1516+40.781	-3.583	702.199	702.271
F	1516+50.781	-3.583	702.226	702.285
G	1516+60.781	-3.583	702.245	702.285
H	1516+70.781	-3.583	702.255	702.275
I	1516+80.781	-3.583	702.258	702.262
CL PIER	1516+90.034	-3.583	702.253	702.253
J	1517+00.034	-3.583	702.239	702.245
K	1517+10.034	-3.583	702.218	702.240
L	1517+20.034	-3.583	702.188	702.230
M	1517+30.034	-3.583	702.150	702.211
N	1517+40.034	-3.583	702.104	702.177
O	1517+50.034	-3.583	702.050	702.126
P	1517+60.034	-3.583	701.988	702.057
Q	1517+70.034	-3.583	701.917	701.969
R	1517+80.034	-3.583	701.838	701.866
CL BRG. E. ABUT	1517+89.287	-3.583	701.758	701.758
BK. E. ABUT.	1517+94.454	-3.583	701.710	701.710

PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+81.370	0.000	701.942	701.942
CL BRG. W. ABUT	1515+86.537	0.000	701.982	701.982
A	1515+96.537	0.000	702.053	702.082
B	1516+06.537	0.000	702.116	702.170
C	1516+16.537	0.000	702.171	702.241
D	1516+26.537	0.000	702.218	702.294
E	1516+36.537	0.000	702.257	702.329
F	1516+46.537	0.000	702.287	702.346
G	1516+56.537	0.000	702.309	702.350
H	1516+66.537	0.000	702.323	702.344
I	1516+76.537	0.000	702.329	702.334
CL PIER	1516+85.790	0.000	702.328	702.328
J	1516+95.790	0.000	702.318	702.323
K	1517+05.790	0.000	702.300	702.321
L	1517+15.790	0.000	702.273	702.315
M	1517+25.790	0.000	702.239	702.300
N	1517+35.790	0.000	702.196	702.269
O	1517+45.790	0.000	702.146	702.222
P	1517+55.790	0.000	702.087	702.156
Q	1517+65.790	0.000	702.020	702.072
R	1517+75.790	0.000	701.944	701.972
CL BRG. E. ABUT	1517+85.043	0.000	701.867	701.867
BK. E. ABUT.	1517+90.210	0.000	701.821	701.821

DESIGNED JJT
CHECKED SRT
DRAWN GM
CHECKED SRT

 **Bollinger, Lach & Associates, Inc.**

TOP OF SLAB ELEVATIONS
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	34
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 6
35 SHEETS

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+78.803	2.167	701.964	701.964
CL BRG. W. ABUT	1515+83.970	2.167	702.005	702.005
A	1515+93.970	2.167	702.079	702.108
B	1516+03.970	2.167	702.144	702.198
C	1516+13.970	2.167	702.201	702.271
D	1516+23.970	2.167	702.250	702.326
E	1516+33.970	2.167	702.291	702.363
F	1516+43.970	2.167	702.323	702.383
G	1516+53.970	2.167	702.348	702.388
H	1516+63.970	2.167	702.364	702.384
I	1516+73.970	2.167	702.372	702.376
CL PIER	1516+83.223	2.167	702.372	702.372
J	1516+93.223	2.167	702.364	702.370
K	1517+03.223	2.167	702.348	702.370
L	1517+13.223	2.167	702.324	702.366
M	1517+23.223	2.167	702.292	702.353
N	1517+33.223	2.167	702.252	702.324
O	1517+43.223	2.167	702.203	702.279
P	1517+53.223	2.167	702.146	702.215
Q	1517+63.223	2.167	702.081	702.133
R	1517+73.223	2.167	702.008	702.035
CL BRG. E. ABUT	1517+82.476	2.167	701.933	701.933
BK. E. ABUT.	1517+87.643	2.167	701.888	701.888

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+71.992	7.917	702.022	702.022
CL BRG. W. ABUT	1515+77.159	7.917	702.066	702.066
A	1515+87.159	7.917	702.145	702.174
B	1515+97.159	7.917	702.216	702.269
C	1516+07.159	7.917	702.278	702.348
D	1516+17.159	7.917	702.333	702.409
E	1516+27.159	7.917	702.379	702.451
F	1516+37.159	7.917	702.417	702.476
G	1516+47.159	7.917	702.447	702.488
H	1516+57.159	7.917	702.469	702.489
I	1516+67.159	7.917	702.482	702.487
CL PIER	1516+76.412	7.917	702.488	702.488
J	1516+86.412	7.917	702.486	702.491
K	1516+96.412	7.917	702.475	702.497
L	1517+06.412	7.917	702.457	702.499
M	1517+16.412	7.917	702.430	702.490
N	1517+26.412	7.917	702.395	702.468
O	1517+36.412	7.917	702.352	702.428
P	1517+46.412	7.917	702.301	702.370
Q	1517+56.412	7.917	702.241	702.293
R	1517+66.412	7.917	702.174	702.201
CL BRG. E. ABUT	1517+75.666	7.917	702.104	702.104
BK. E. ABUT.	1517+80.832	7.917	702.062	702.062

BEAM #7

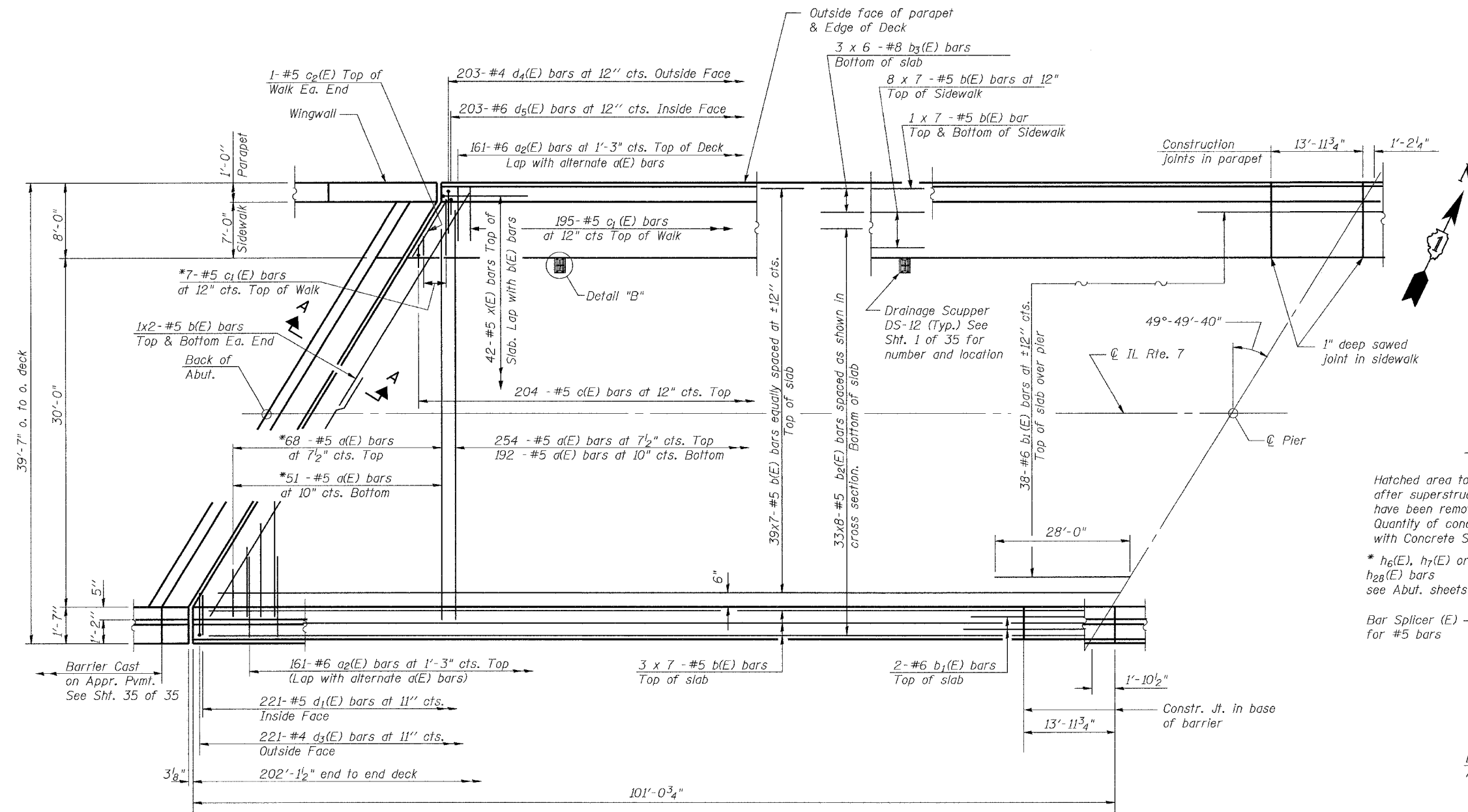
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+65.181	13.667	702.075	702.075
CL BRG. W. ABUT	1515+70.348	13.667	702.122	702.122
A	1515+80.348	13.667	702.207	702.236
B	1515+90.348	13.667	702.283	702.337
C	1516+00.348	13.667	702.351	702.421
D	1516+10.348	13.667	702.412	702.488
E	1516+20.348	13.667	702.463	702.536
F	1516+30.348	13.667	702.507	702.566
G	1516+40.348	13.667	702.543	702.583
H	1516+50.348	13.667	702.570	702.590
I	1516+60.348	13.667	702.589	702.593
CL PIER	1516+69.601	13.667	702.600	702.600
J	1516+79.601	13.667	702.603	702.608
K	1516+89.601	13.667	702.598	702.620
L	1516+99.601	13.667	702.585	702.627
M	1517+09.601	13.667	702.564	702.624
N	1517+19.601	13.667	702.535	702.607
O	1517+29.601	13.667	702.497	702.573
P	1517+39.601	13.667	702.451	702.520
Q	1517+49.601	13.667	702.398	702.450
R	1517+59.601	13.667	702.336	702.363
CL BRG. E. ABUT	1517+68.855	13.667	702.271	702.271
BK. E. ABUT.	1517+74.021	13.667	702.232	702.232

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

 **Bollinger, Lach & Associates, Inc.**

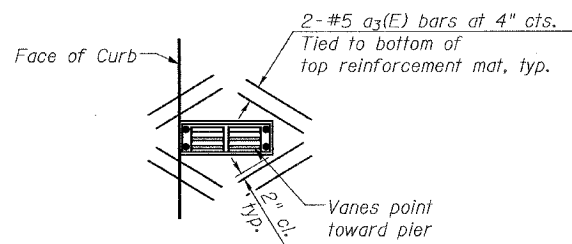
TOP OF SLAB ELEVATIONS
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	35
FED. ROAD DIST. NO. 7		BILLINGS	FED. AID PROJECT	



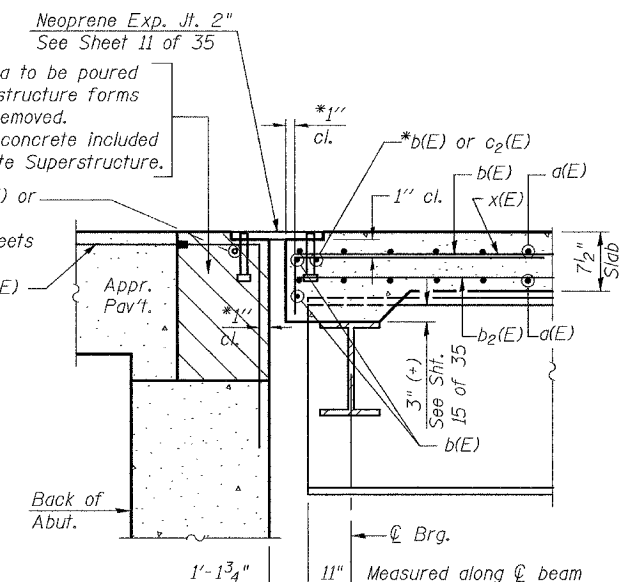
HALF PLAN

* Order a(E) & c1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



Notes:
Cut longitudinal reinforcement to clear drainage scuppers.

DETAIL "B" PLAN



SECTION A-A

* Place b(E), c2(E), h6(E), h7(E) and h28(E) bars in back of anchor bolt as shown if required to maintain 1\"/>

Notes:
See Sheet 10 of 35 for drainage system and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 39 x 7-#5 etc. indicates 39 lines of bars with 7 lengths per line.
See Sheet 8 of 35 for deck section.
See Sheet 9 of 35 for parapet reinforcement.
Minimum lap #5 bar = 1'-8\"/>

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

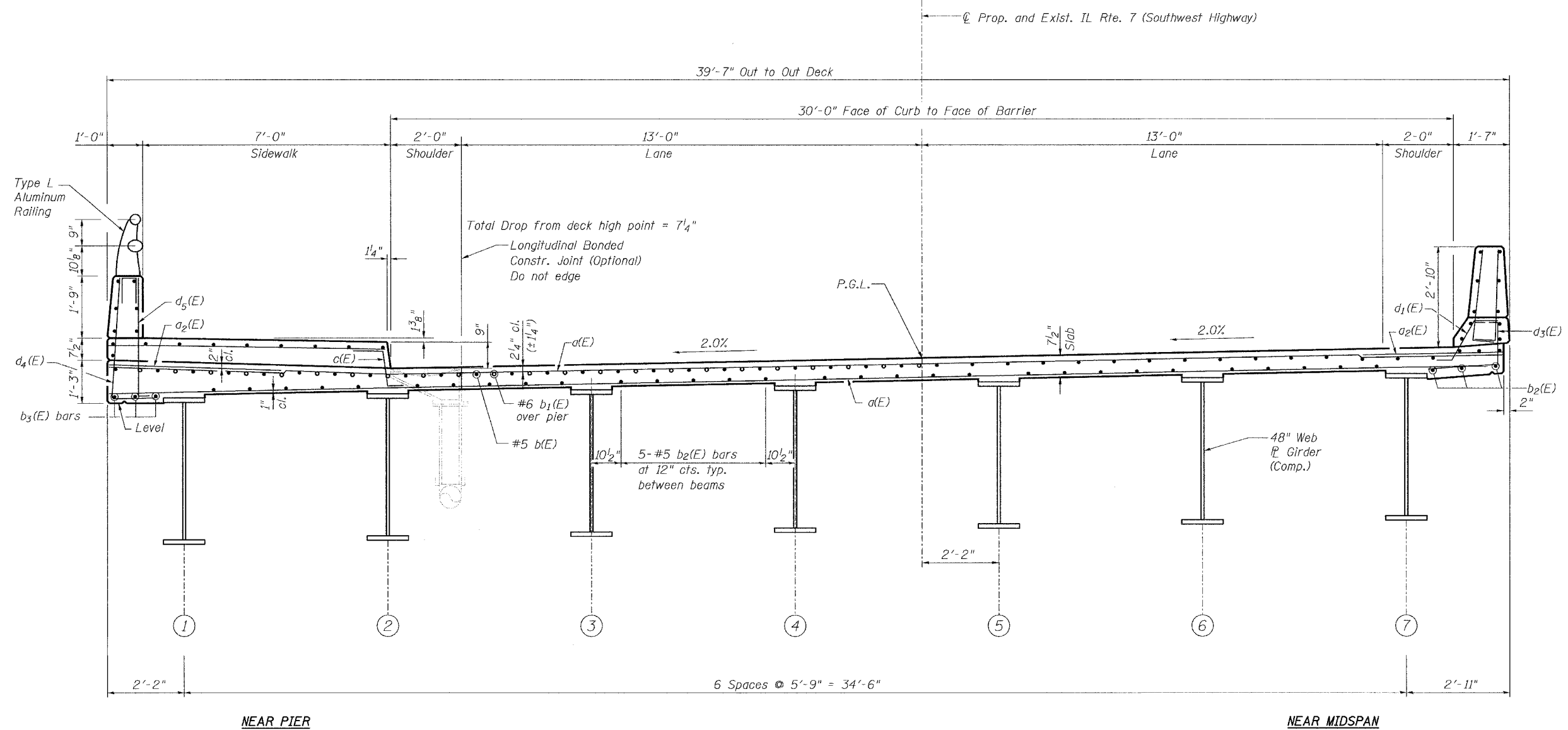
B Bollinger, Lach & Associates, Inc.

S-2-L(>30°) 10-22-04

SUPERSTRUCTURE PLAN
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAU 3578	SECTION 1327 B	COUNTY COOK	TOTAL SHEETS 108	SHEET NO. 36	SHEET NO. 8 35 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	



Notes:
Reinforcement bars designated (E) shall be epoxy coated.
See Sheet 10 of 35 for drainage system and Bill of Material.
See Sheet 9 of 35 for parapet, barrier & sidewalk reinforcement.

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

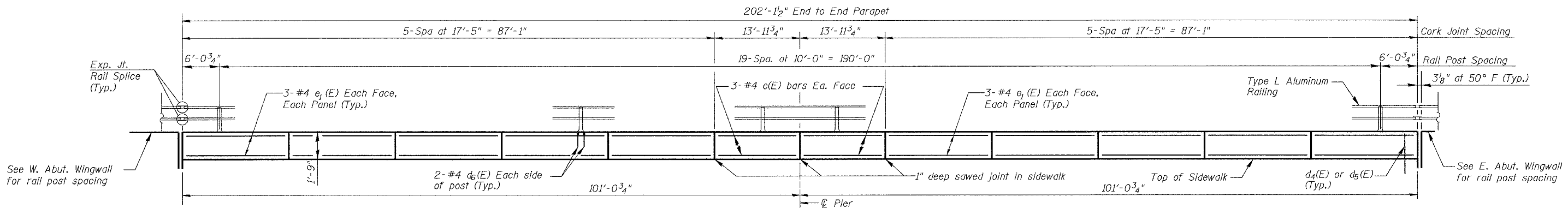
BL Bollinger, Lach & Associates, Inc.

SUPERSTRUCTURE CROSS SECTION
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

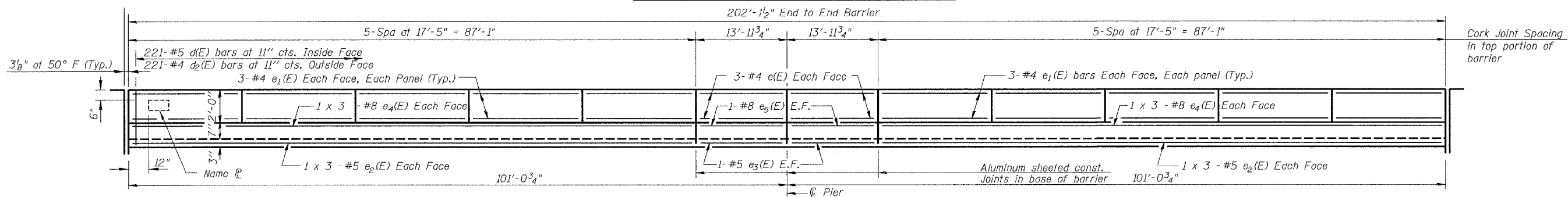
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAU 3578	SECTION 1327B	COUNTY COOK	DATE 108	SHEET 37
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT-

SHEET NO. 9
35 SHEETS

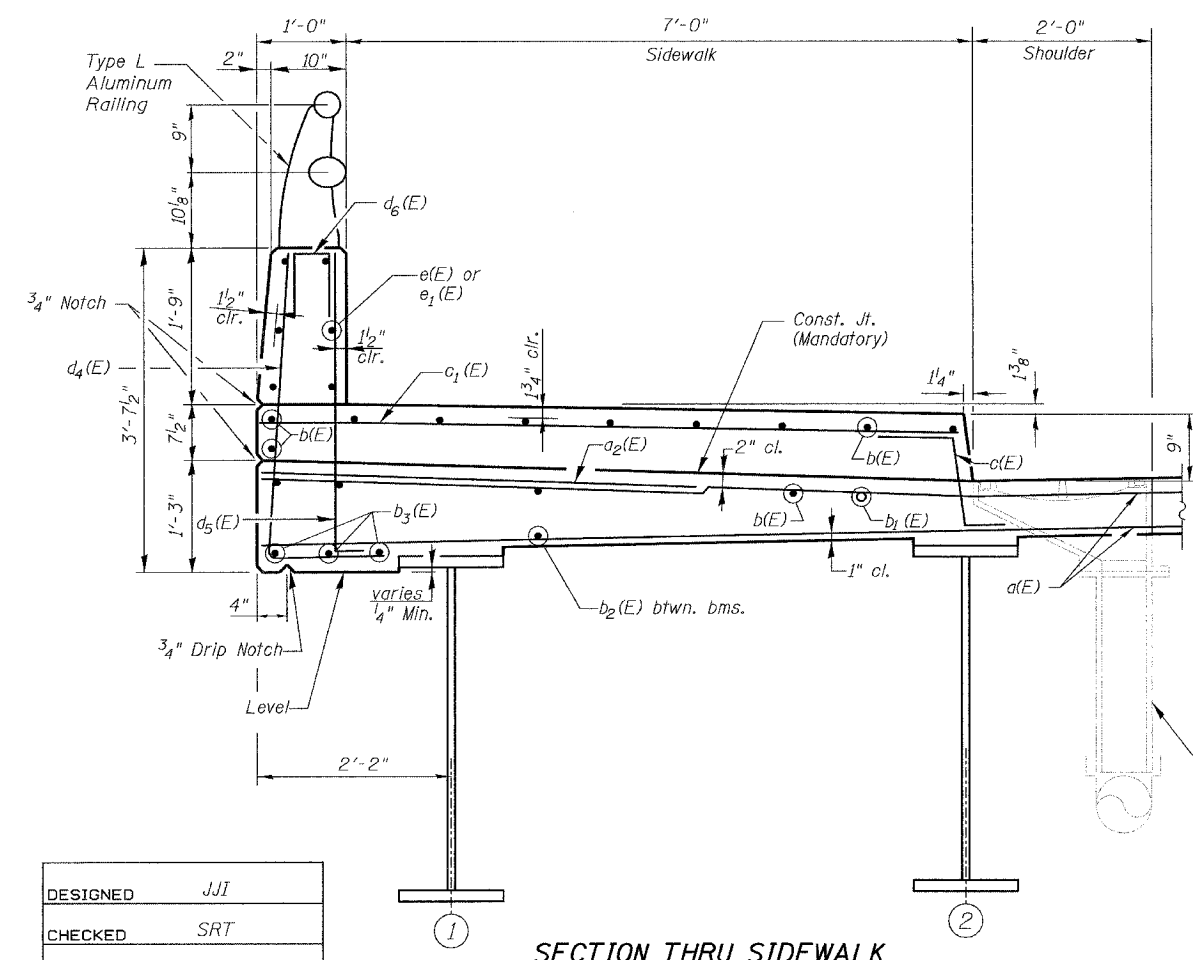


INSIDE ELEVATION OF NORTH PARAPET

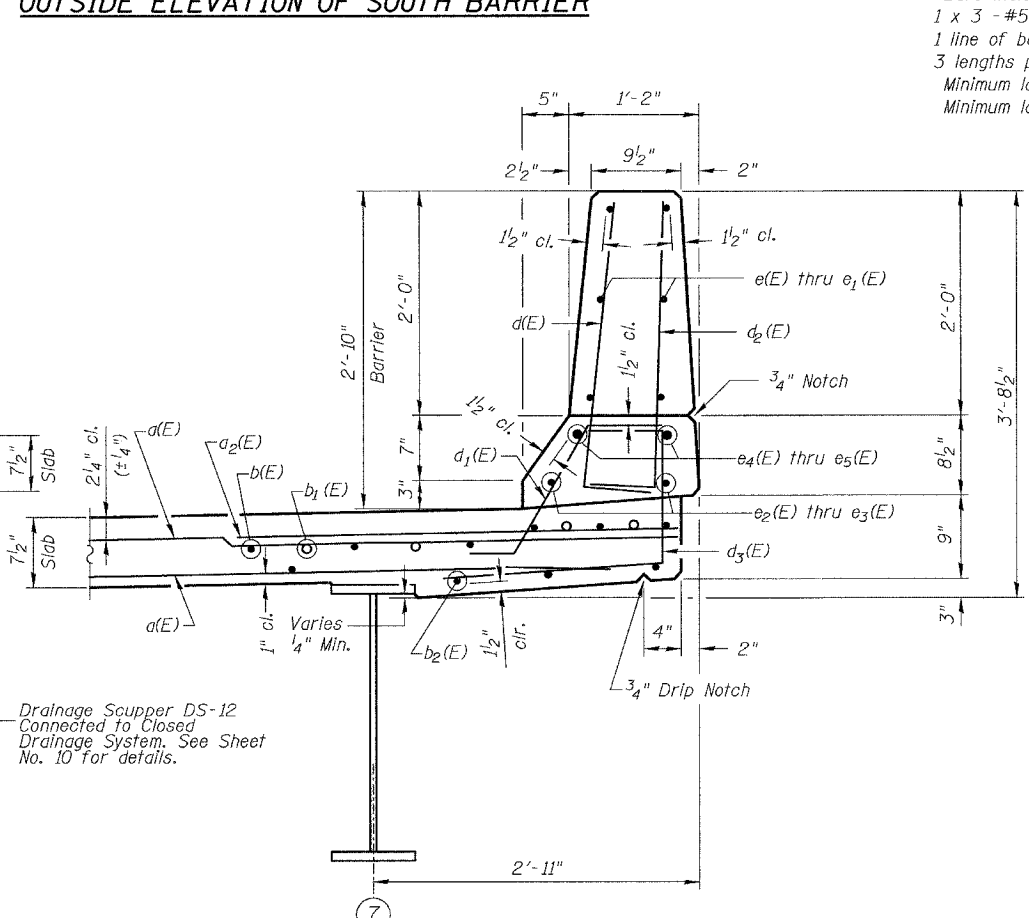


OUTSIDE ELEVATION OF SOUTH BARRIER

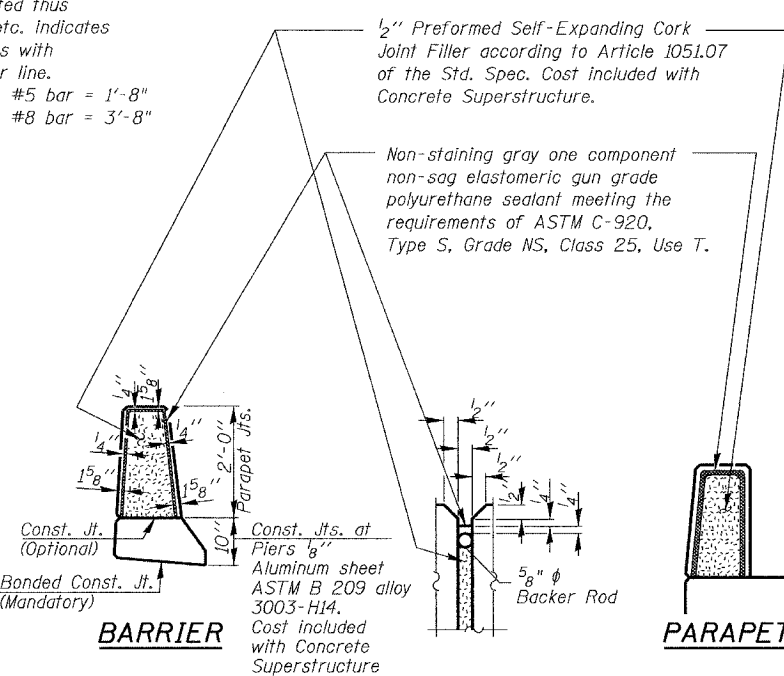
Notes:
Bars indicated thus
1 x 3 - #5 etc. indicates
1 line of bars with
3 lengths per line.
Minimum lap #5 bar = 1'-8"
Minimum lap #8 bar = 3'-8"



SECTION THRU SIDEWALK



SECTION THRU BARRIER



PARAPET & BARRIER JOINT DETAIL

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SUPERSTRUCTURE DETAILS
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

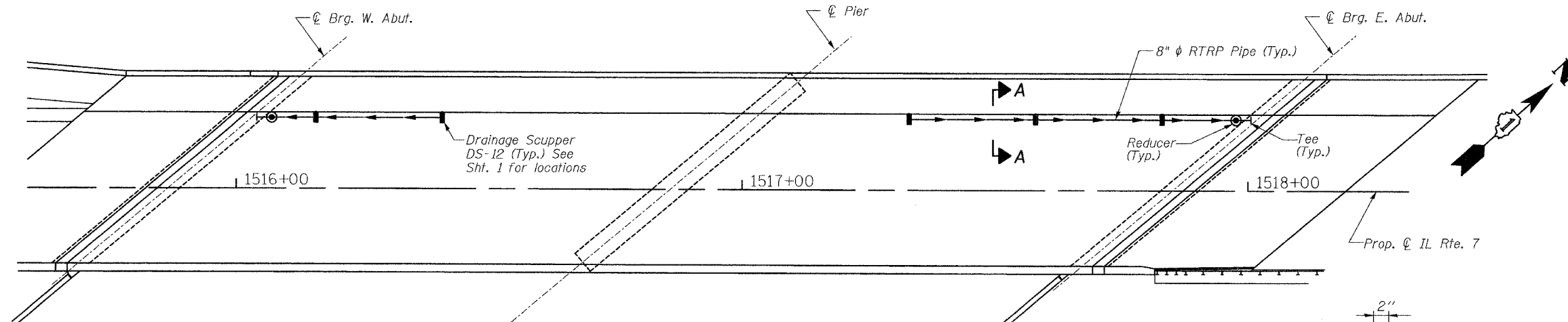
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	38
FED. ROAD DIST. NO. 7	S.LINER	FED. AID PROJECT-		

SHEET NO. 10
35 SHEETS

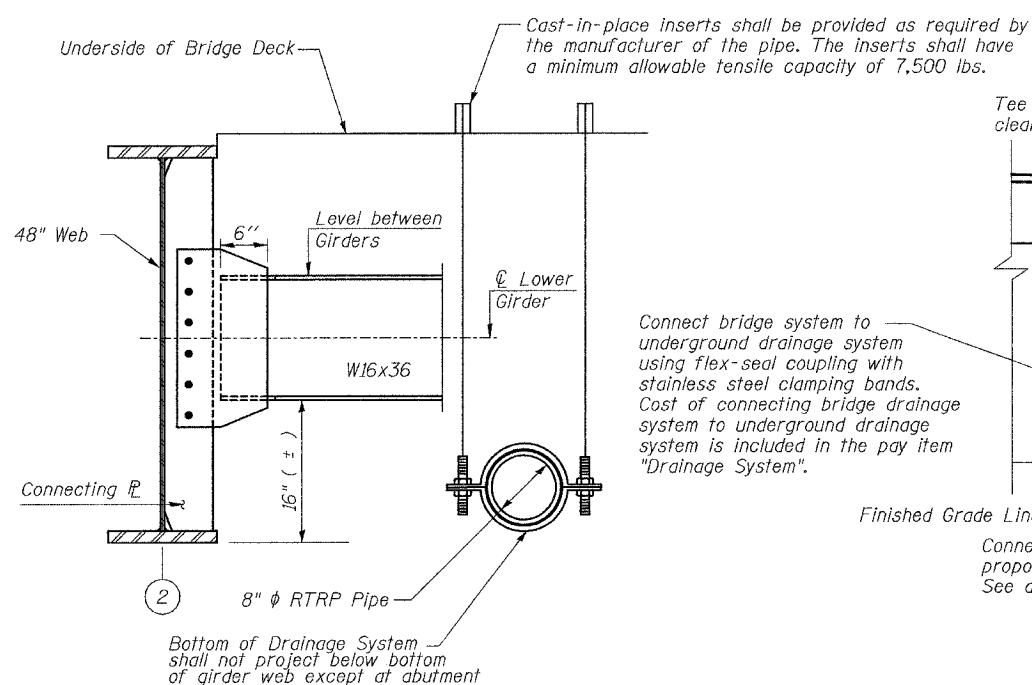
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	565	#5	39'-2"	—
a ₂ (E)	322	#6	4'-6"	—
a ₃ (E)	40	#5	2'-0"	—
b(E)	372	#5	30'-4"	—
b ₁ (E)	40	#6	56'-0"	—
b ₂ (E)	264	#5	26'-9"	—
b ₃ (E)	18	#8	36'-9"	—
c(E)	204	#5	2'-5"	┌
c ₁ (E)	202	#5	7'-8"	—
c ₂ (E)	2	#5	10'-9"	—
d(E)	221	#5	3'-0"	┌
d ₁ (E)	221	#5	2'-5"	┌
d ₂ (E)	221	#4	3'-0"	┌
d ₃ (E)	221	#4	3'-7"	┌
d ₄ (E)	203	#4	4'-8"	┌
d ₅ (E)	203	#6	4'-3"	┌
d ₆ (E)	40	#4	2'-0"	┌
e(E)	24	#4	13'-8"	—
e ₁ (E)	120	#4	17'-1"	—
e ₂ (E)	12	#5	30'-1"	—
e ₃ (E)	4	#5	13'-8"	—
e ₄ (E)	12	#8	31'-5"	—
e ₅ (E)	4	#8	13'-8"	—
x(E)	84	#5	4'-1"	┌
Reinforcement Bars, Epoxy Coated		Pound	59,800	
Concrete Superstructure		Cu. Yd.	301.6	
Aluminum Railing, Type L		Foot	202	

Reinforcement bars designated (E) shall be epoxy coated.

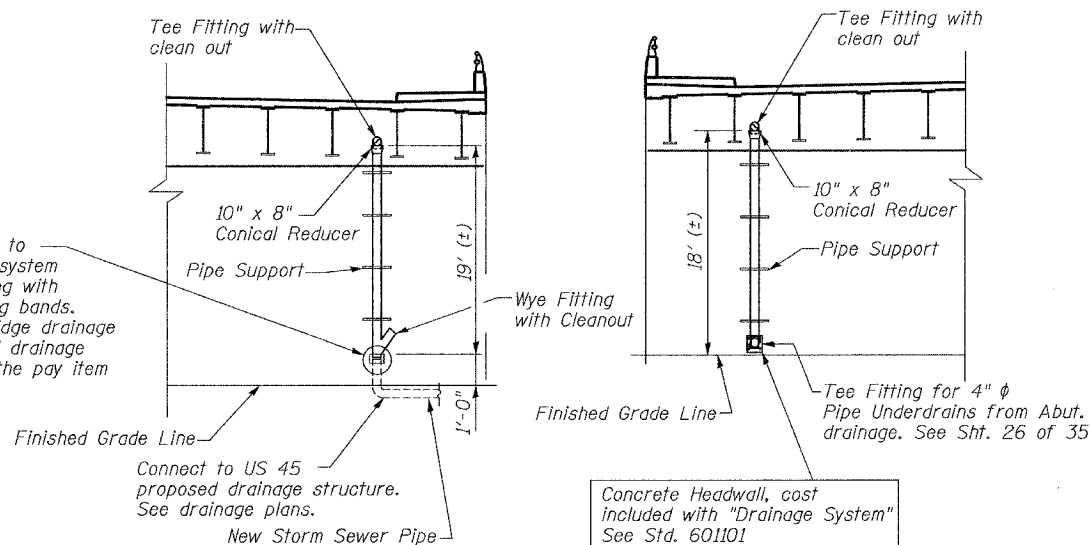


PLAN



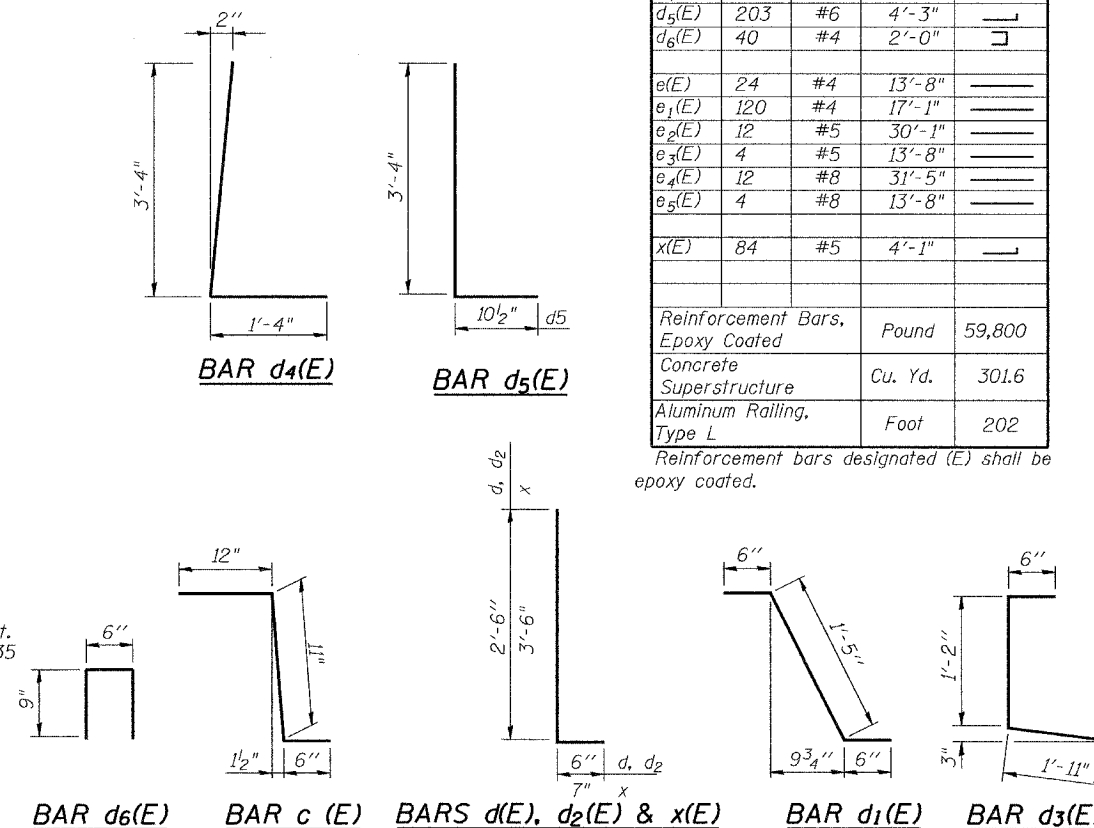
SECTION A-A

Connect bridge system to underground drainage system using flex-seal coupling with stainless steel clamping bands. Cost of connecting bridge drainage system to underground drainage system is included in the pay item "Drainage System".



**WEST ABUTMENT
(Looking Southwest)**

**EAST ABUTMENT
(Looking Upstation, Northeast)**



DRAINAGE SYSTEM

Notes:
The color of the pipe and fittings shall be gray, as approved by the Engineer. See Special Provision "Drainage System".

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

DRAINAGE SYSTEM & BAR LIST

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	39
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 11
35 SHEETS

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	1 3/4" Min.
4"	3"	2 1/2" Min.

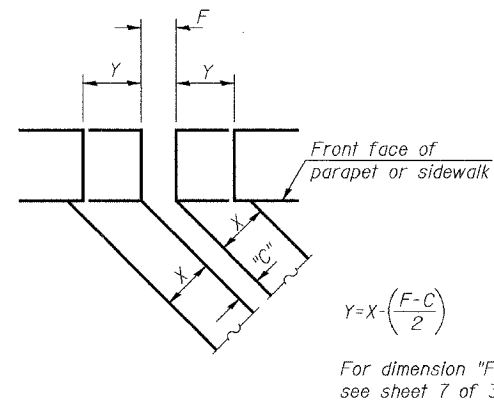
INSTALLATION NOTES

- Install continuous seal in roadway, parapet, curb, and sidewalk.
- Install anchor blocks as indicated.

Note A:
Maximum spacing of anchor bolts shall be 12" centers.

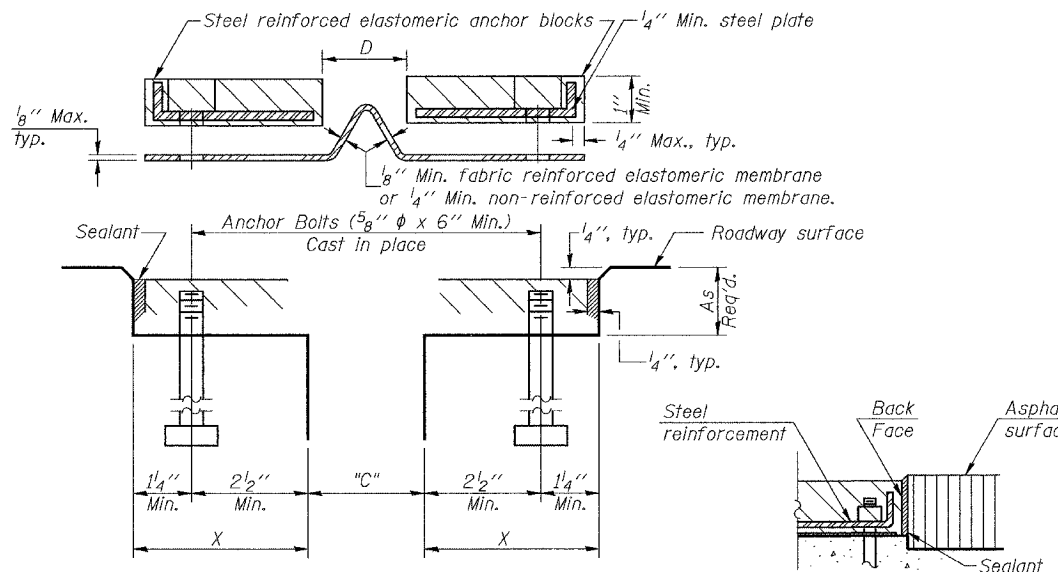
SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT SKETCH

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

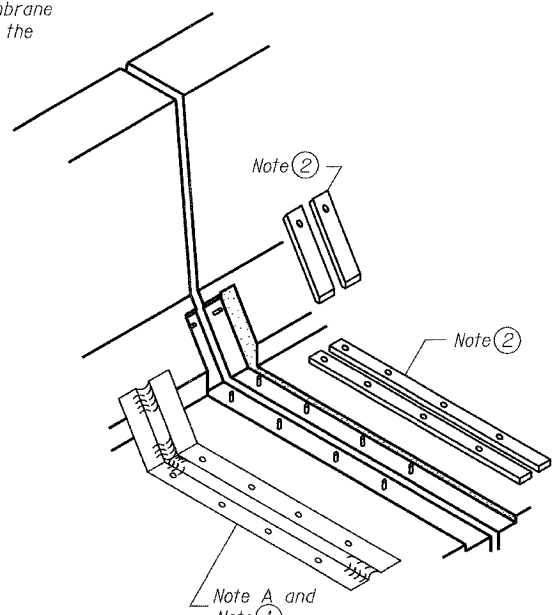


CROSS SECTION

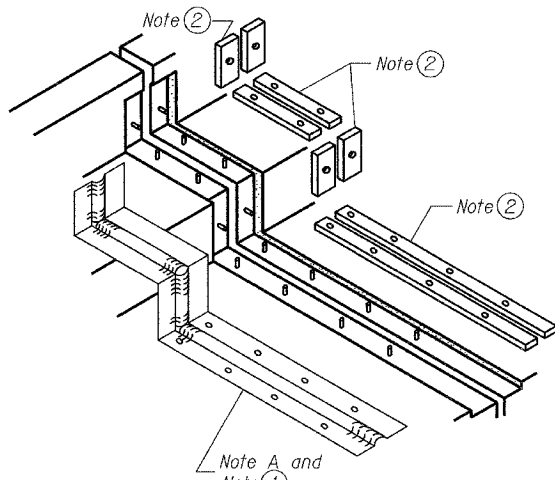
ANCHOR BLOCK WITH ASPHALT SURFACE

GENERAL NOTES

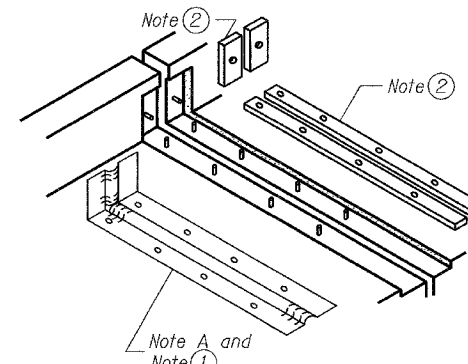
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F. The parapet and roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted.



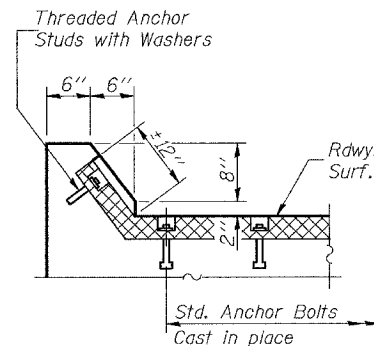
AT PARAPET



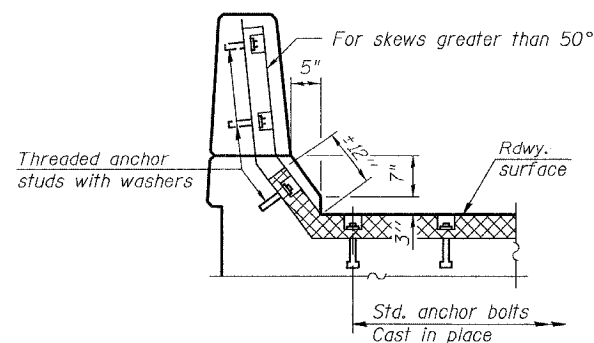
AT SIDEWALK OR MEDIAN



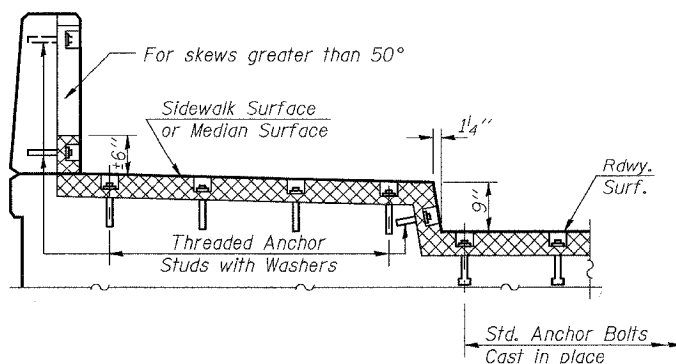
AT WALL



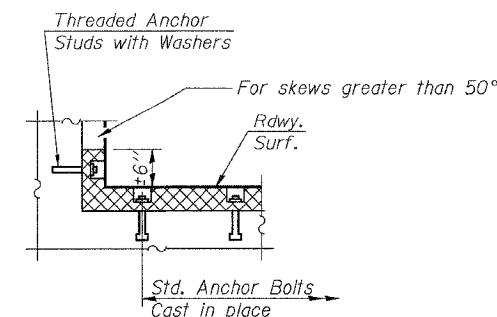
AT CURB



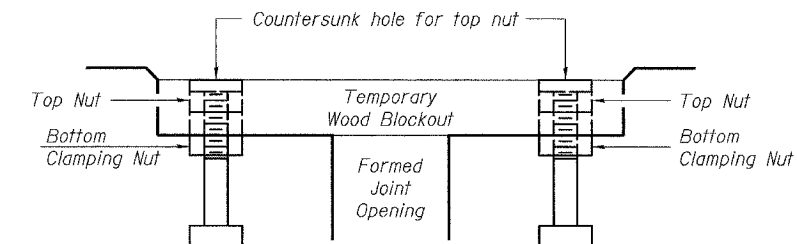
AT PARAPET



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



AT WALL



RECOMMENDED BLOCKOUT DETAIL

Note:
Stud needs to be threaded lower to allow for use of clamping nut.

Anchor studs should be stainless

DESIGNED -
CHECKED -
DRAWN GM
CHECKED SRT
EJ-CS

B Bollinger, Lach & Associates, Inc.

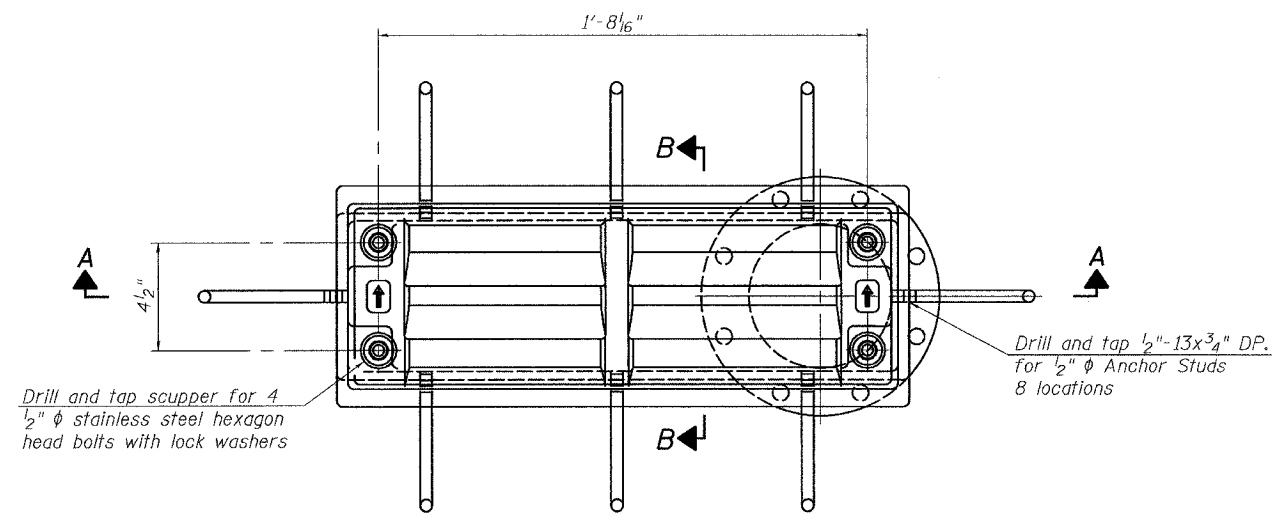
10-22-04

CONTINUOUS SEAL TYPE NEOPRENE JOINT DETAIL
IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

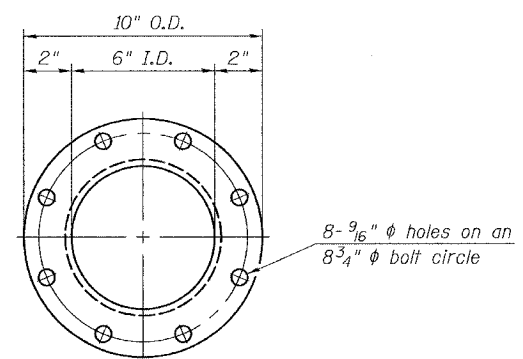
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	40
FED. ROAD DIST. NO. 7		SHEETS		FED. AID PROJECT

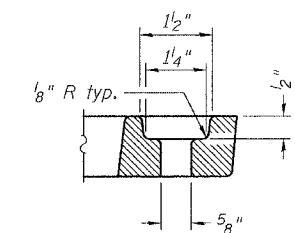
SHEET NO. 12
35 SHEETS



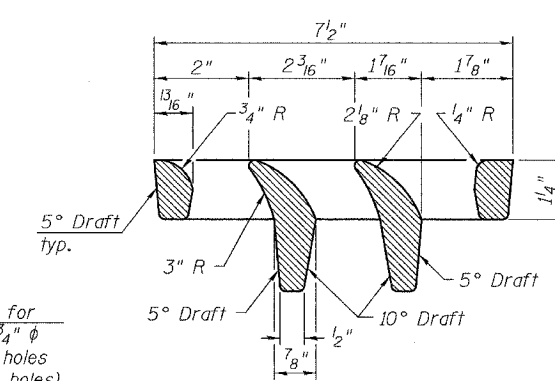
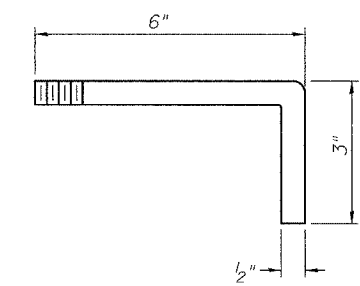
PLAN



BOLT HOLE DETAIL

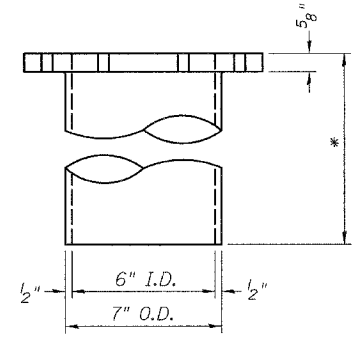


ANCHOR STUD DETAIL

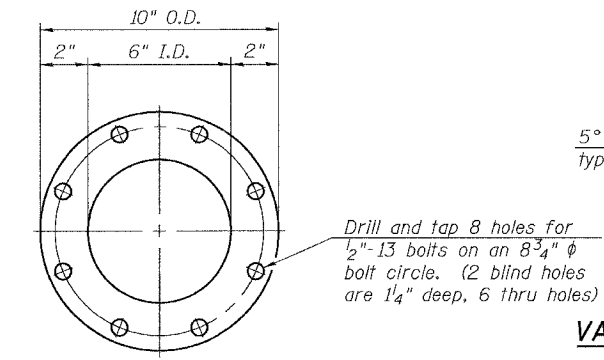


VANE GRATE DETAIL

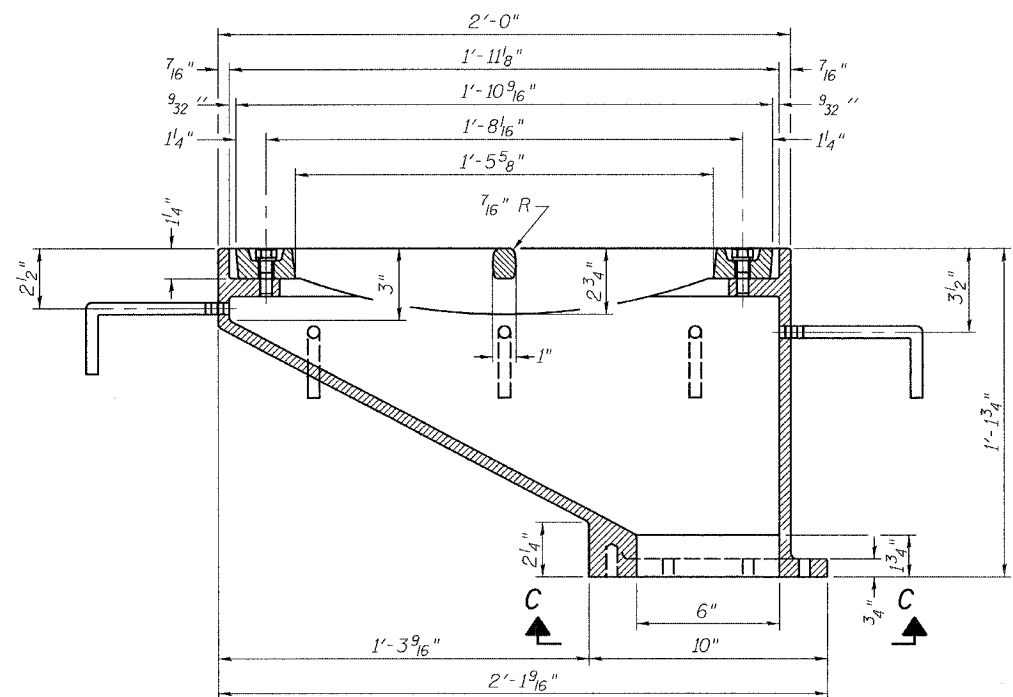
* Contractor to coordinate the length with the details for the drainage system.



DOWNSPOUT

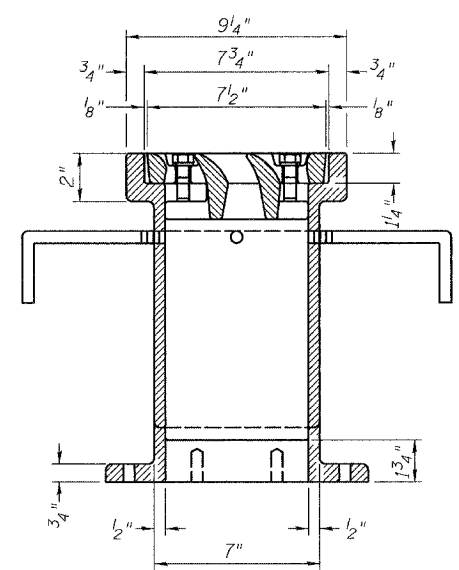


VIEW C-C



SECTION A-A

See sheet 8 of 35 for scupper location relative to curb.



SECTION B-B

Notes:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	5

DRAINAGE SCUPPER, DS-12

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

DESIGNED -
CHECKED -
DRAWN GM
CHECKED SRT

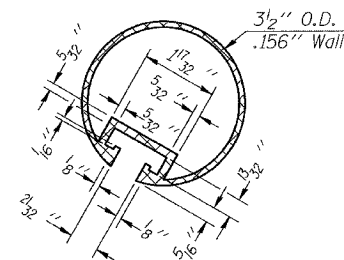
B Bollinger, Lach & Associates, Inc.

8/1/2000

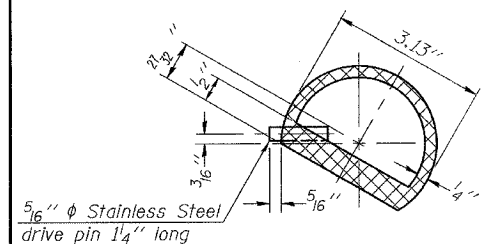
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	41
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

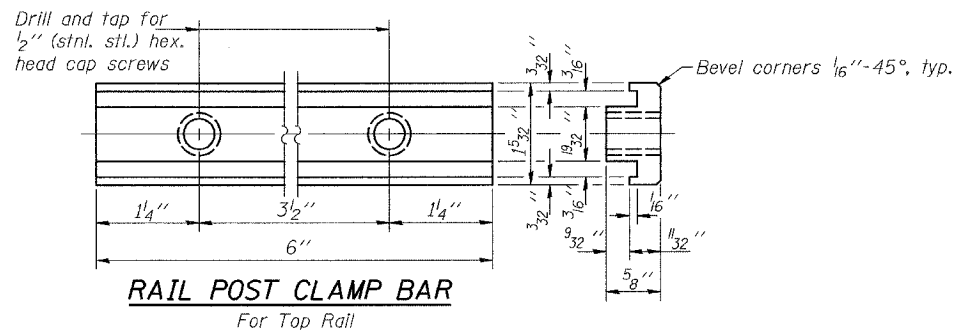
SHEET NO. 13
35 SHEETS



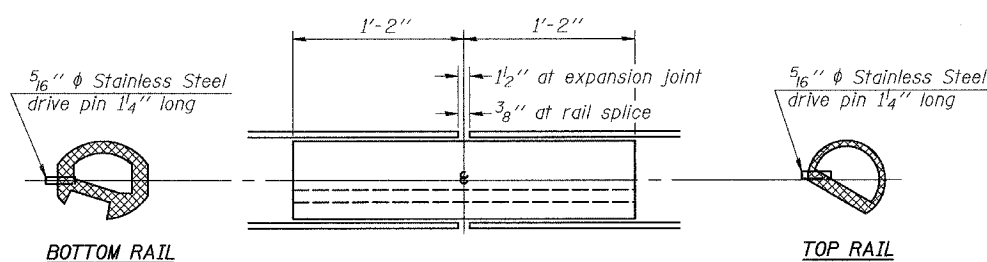
SECTION THRU TOP RAIL



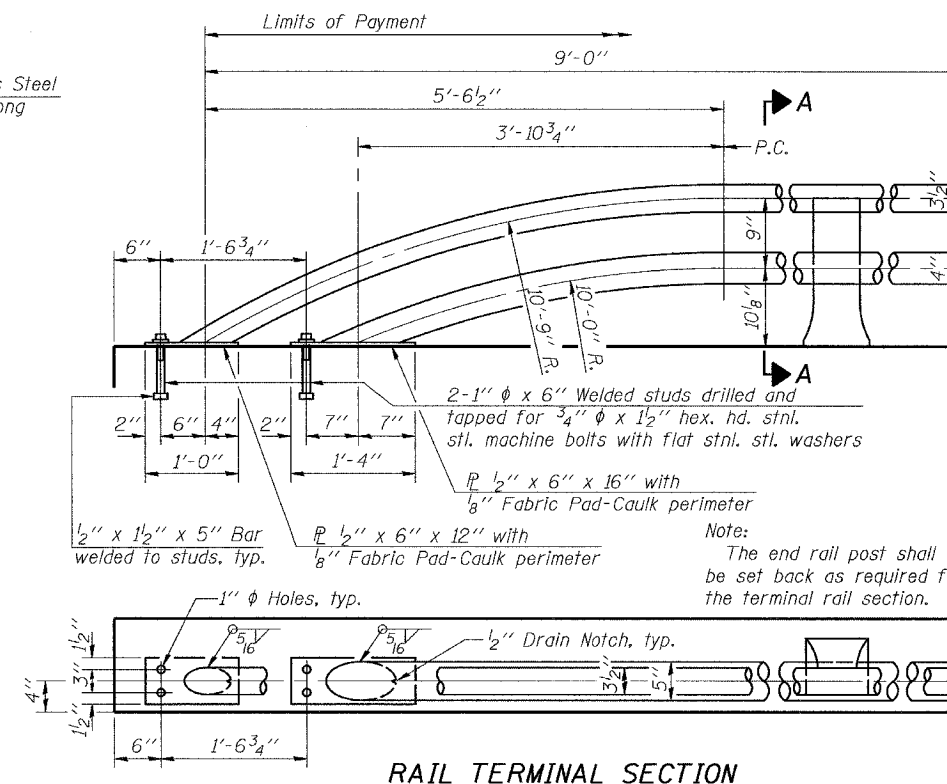
SECTION THRU SPLICE
For Top Rail



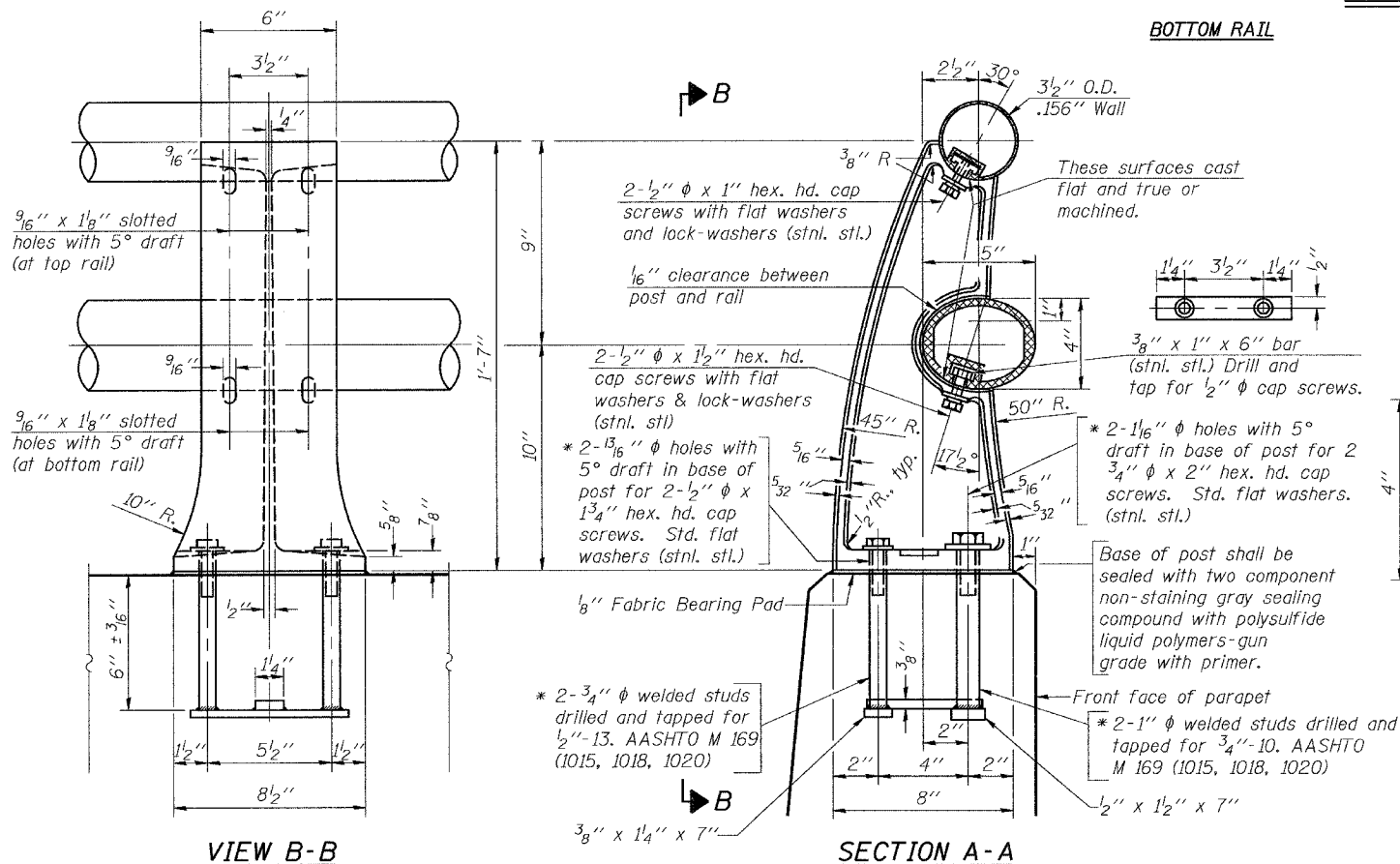
RAIL POST CLAMP BAR
For Top Rail



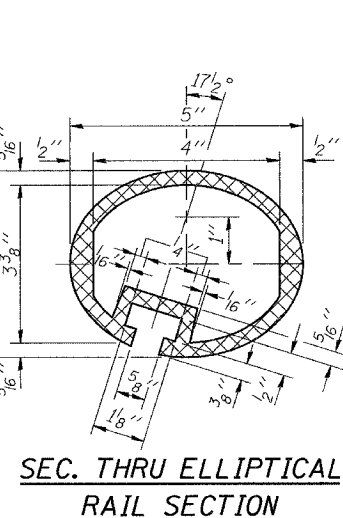
RAIL SPLICE



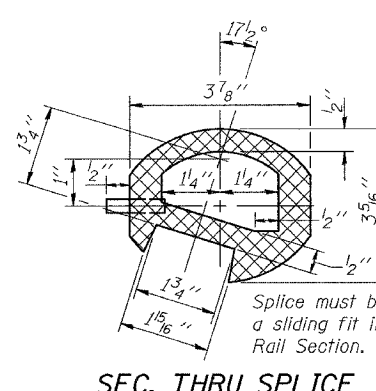
RAIL TERMINAL SECTION



RAIL POST DETAILS



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

Notes:
All Posts shall be normal to parapet.
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the Posts.
Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for ALUMINUM RAILING, TYPE L.
Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	291

TYPE L ALUMINUM RAILING

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

DESIGNED -
CHECKED -
DRAWN GM
CHECKED SRT

Bollinger, Lach & Associates, Inc.

R-20 10-22-04

* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting stainless steel anchor rods of the same diameter and grade as the specified cap screws. Embedment shall be according to the manufacturer's specifications.

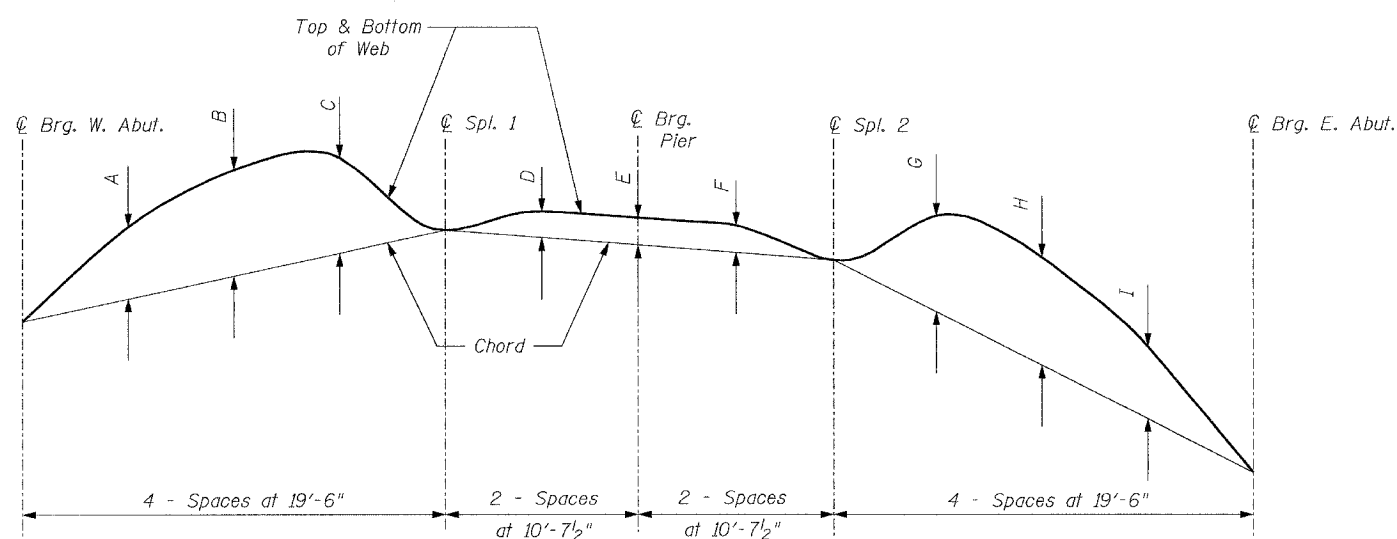
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	44
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 16
35 SHEETS

TOP OF WEB ELEVATIONS

(For Fabrication Only)

GIRDER NO.	℄ BRG. W. ABUT.	℄ SPLICE 1	℄ BRG. PIER	℄ SPLICE 2	℄ BRG. E. ABUT.
1	700.976	701.076	701.059	700.965	700.461
2	701.052	701.188	701.190	701.101	700.647
3	701.124	701.301	701.317	701.238	700.830
4	701.191	701.412	701.440	701.373	701.008
5	701.255	701.520	701.560	701.504	701.183
6	701.316	701.623	701.675	701.632	701.354
7	701.372	701.725	701.787	701.757	701.521



CAMBER DIAGRAM

Girder	A	B	C	D	E	F	G	H	I
1	1 ¹³ / ₁₆ "	2 ¹ / ₁₆ "	2 ¹ / ₂ "	1 ¹ / ₂ "	7 ¹ / ₁₆ "	1 ¹ / ₂ "	2 ¹ / ₂ "	2 ¹ / ₁₆ "	1 ¹³ / ₁₆ "
2-7	1 ⁵ / ₈ "	2 ³ / ₈ "	2 ¹ / ₄ "	9 ¹ / ₁₆ "	9 ¹ / ₁₆ "	9 ¹ / ₁₆ "	2 ¹ / ₄ "	2 ³ / ₈ "	1 ⁵ / ₈ "

CAMBER TABLE

	GIRDER MOMENT TABLE			
	GIRDER 1		INTERIOR GIRDER	
	0.4 Sp. 1	Pier	0.4 Sp. 1	Pier
Is (in ⁴)	17,131	30,344	17,131	30,344
Ic (n) (in ⁴)	48,774	-	42,955	-
Ic (3n) (in ⁴)	37,979	-	30,808	-
Ss (in ³)	741	1190	741	1190
Sc(n) (in ³)	1114	-	1050	-
Sc(3n) (in ³)	1003	-	946	-
Z (in ³)	-	-	-	-
℄ (K/ft.)	0.98	2.18	0.75	1.24
M℄ (K)	594	2666	455	1615
s℄ (K/ft.)	* 1.20	-	0.49	-
Ms℄ (K)	917	-	365	-
M℄ (K)	658	500	653	522
M (Imp) (K)	145	110	144	115
℄ ₃ (M℄+I) (K)	1338	1017	1328	1062
Ma (K)	3704	4788	2792	3480
Mu (K)	4122	-	4079	-
fs℄ non-comp(k.s.i.)	9.6	26.9	7.4	16.3
fs℄ (comp) (k.s.i.)	11.0	-	4.6	-
fs [℄] ₃ (℄+I) (k.s.i.)	14.4	10.3	15.2	10.7
fs (Overload) (k.s.i.)	35.0	37.2	27.2	27.0
fs (Total) (k.s.i.)	-	48.4	-	35.1
VR (K)	95.7	-	95.9	-

*Bridge designed for an additional s℄ of 1.27 K/Ft from a future decorative north facade, applied along the north edge of deck. Girder 1 designed for 0.7 K/Ft of this load.

	REACTION TABLE			
	GIRDER 1		INTERIOR GIRDER	
	Abut.	Pier	Abut.	Pier
R℄ (K)	81.3	270.1	45.2	155.6
R℄ (K)	33.2	53.6	33.2	53.9
Imp. (K)	7.3	11.8	7.3	11.9
R (Total) (K)	121.8	335.5	85.7	221.4

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic and Sc are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic (3n) and Sc (3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

VR is the maximum Live Load + Impact shear range in span.

Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.

Ma (Applied Moment)=1.3[M℄ + Ms℄ + ℄₃(M℄ + I)].

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to M℄ + Ms℄ + ℄₃(M℄ + I).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[M℄ + Ms℄ + ℄₃(M℄ + I)].

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

FOR ERECTION ONLY.

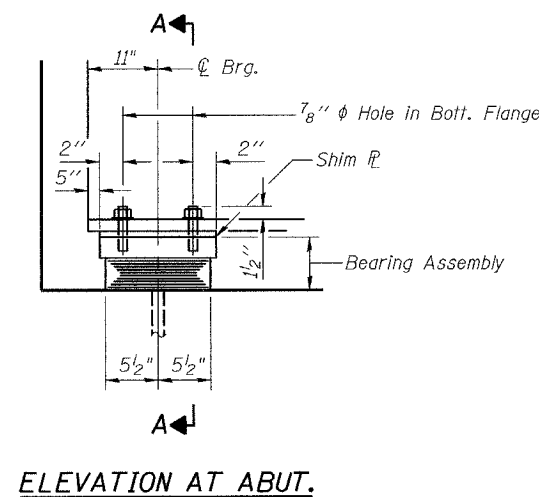
GIRDER DETAILS
 IL 7 (SOUTHWEST HIGHWAY) OVER
 US 45 (LA GRANGE ROAD)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1516+85.79
 STRUCTURE NUMBER 016-2847

I-2-G

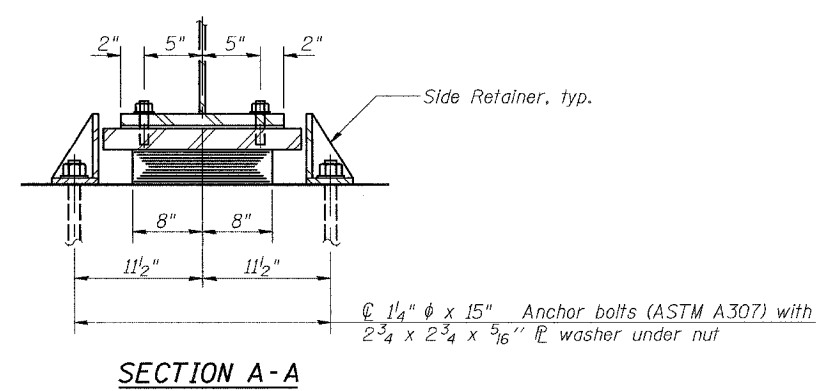
10-22-04

ROUTE NO. FAU 3578	SECTION 1327 B	COUNTY COOK	TOTAL SHEETS 108	SHEET NO. 45	SHEET NO. 17 35 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

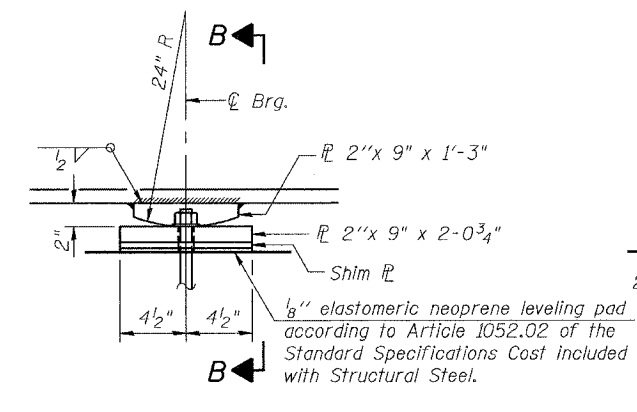
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



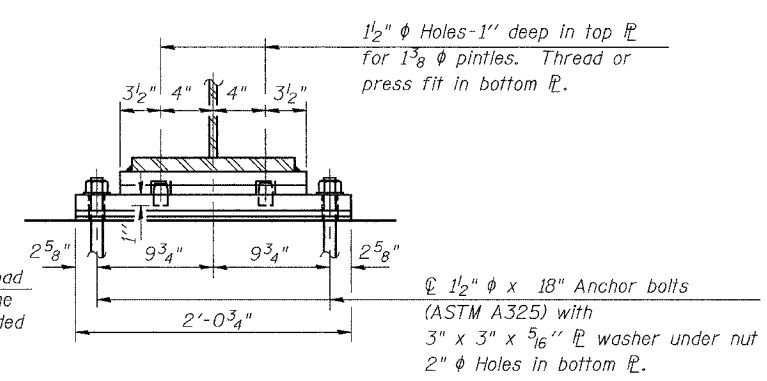
ELEVATION AT ABUT.



SECTION A-A



ELEVATION AT PIER

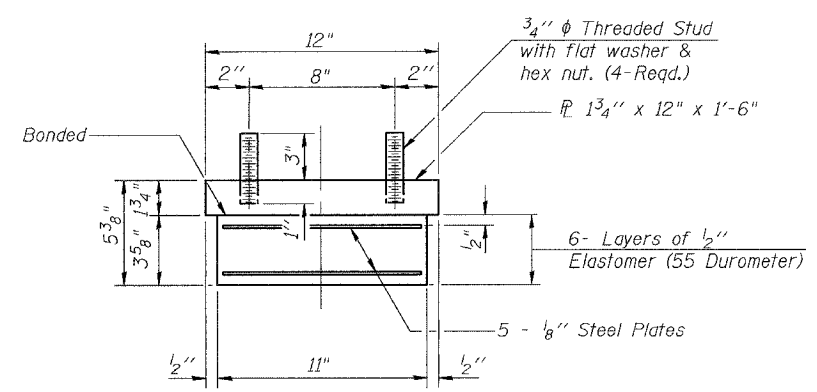


SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

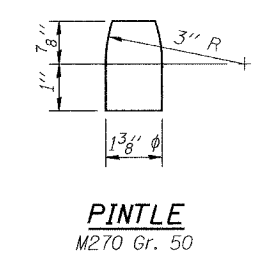
Notes:
Anchor bolts at fixed bearings may be built into the masonry.
See sheet 18 for Anchor Bolt installation.
Structural steel for bearing plates shall conform to the requirements of AASTHO M270 Gr. 50.

FIXED BEARING



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

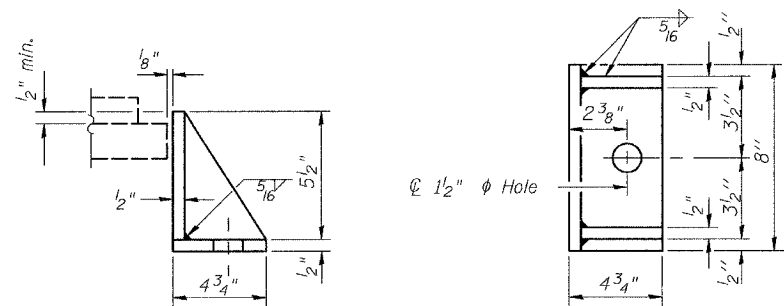


PINTLE
M270 Gr. 50

SHIM PLATES

Location	Girder						
	1	2	3	4	5	6	7
West Abutment	-	-	-	-	-	-	1/16"
Pier 1	-	-	-	-	-	-	-
East Abutment	-	-	-	-	-	-	-

Weight included with Structural Steel



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
Weight included with Structural Steel.

ANCHOR BOLTS
ARE INCLUDED IN THIS CONTRACT,
REMAINDER IS FOR ERECTION ONLY.

BILL OF MATERIAL

Item	Unit	Total
Erecting Elastomeric Bearing Assembly Type I	Each	14

BEARINGS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

I-2-E1 10-22-04

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	46
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 18
35 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

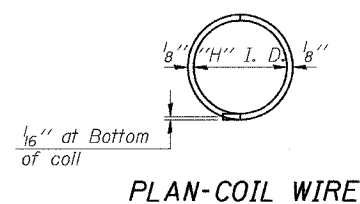
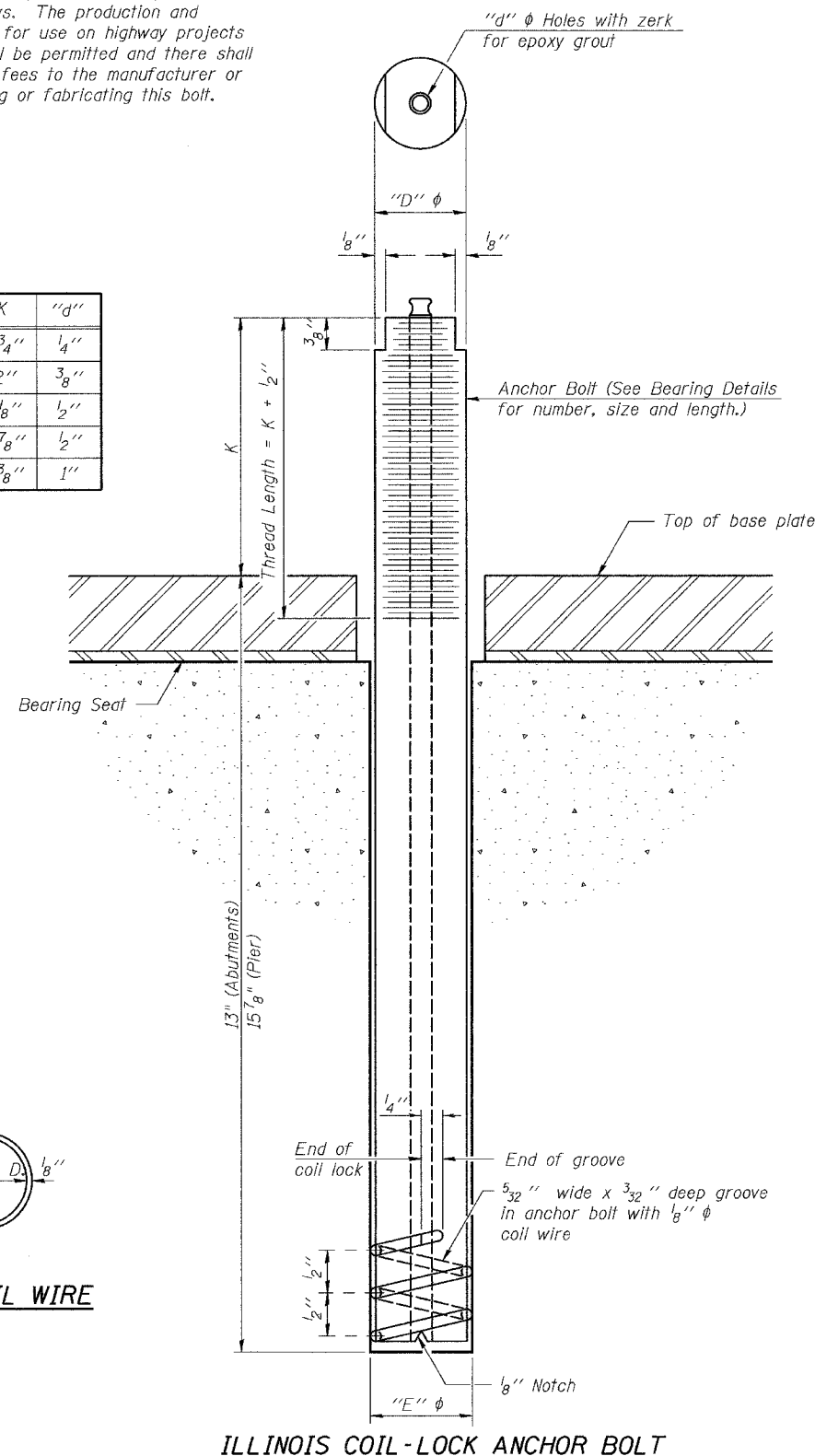
The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type	
	ASTM A307	ASTM A325
W. Abut	14-1 1/4" φ X 15"	
Pier		14-1 1/2" φ X 18"
E. Abut	14-1 1/4" φ X 15"	

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT

DESIGNED	
CHECKED	
DRAWN	MD
CHECKED	JJI
ABB-1	

B Bollinger, Lach & Associates, Inc.
10-22-04

ANCHOR BOLTS

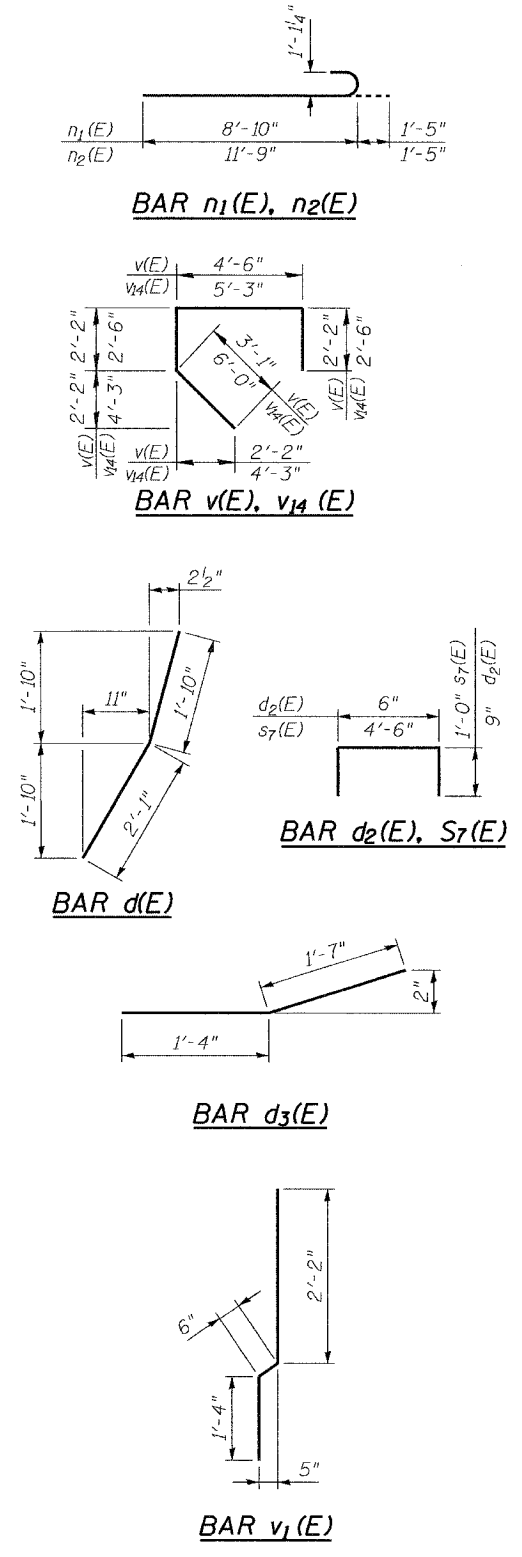
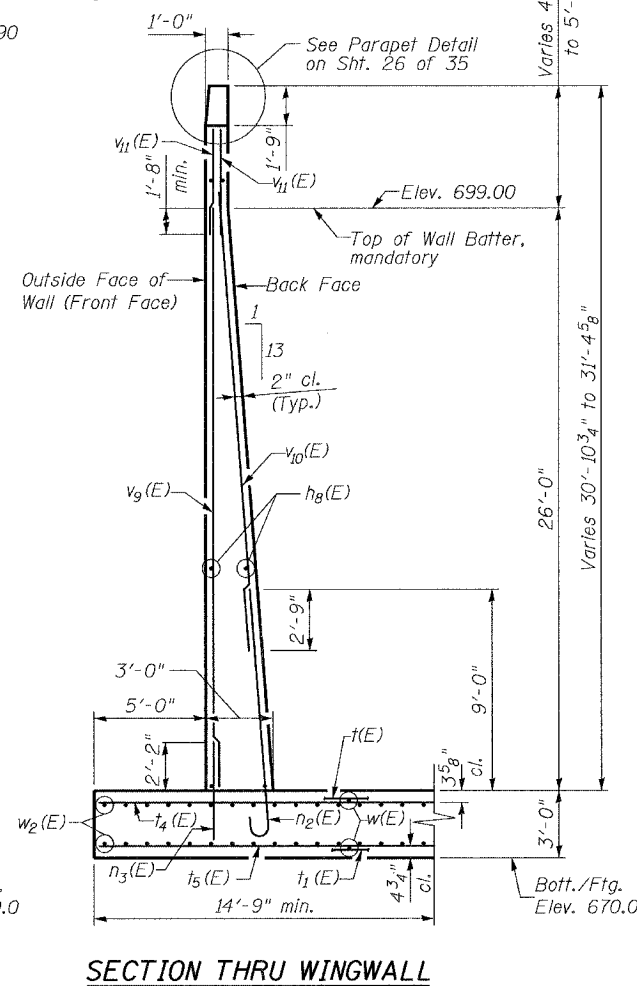
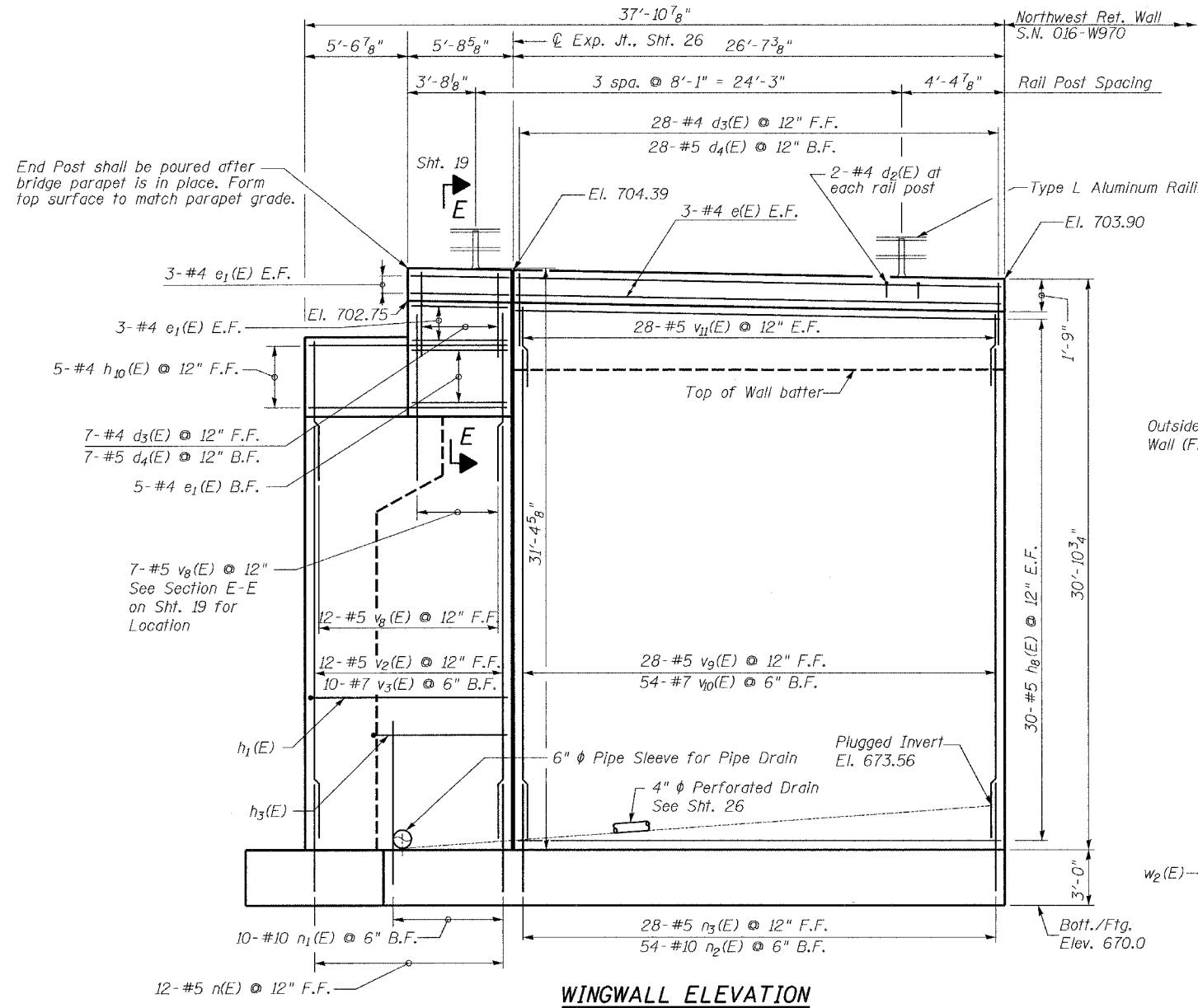
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	49
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 21
35 SHEETS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	3	#5	3'-11"	
d ₁ (E)	3	#4	3'-8"	
d ₂ (E)	8	#4	2'-0"	
d ₃ (E)	35	#4	2'-11"	
d ₄ (E)	35	#5	3'-9"	
e(E)	6	#4	26'-4"	
e ₁ (E)	17	#4	5'-5"	
e ₄ (E)	8	#4	2'-0"	
h(E)	56	#5	33'-4"	
h ₁ (E)	24	#5	13'-3"	
h ₂ (E)	46	#5	29'-11"	
h ₃ (E)	24	#5	6'-6"	
h ₄ (E)	5	#5	18'-9"	
h ₅ (E)	16	#5	30'-10"	
h ₆ (E)	8	#6	31'-0"	
h ₈ (E)	60	#5	26'-4"	
h ₁₀ (E)	5	#4	10'-10"	
h ₁₁ (E)	4	#6	4'-2"	
h ₁₂ (E)	12	#4	3'-6"	
h ₁₃ (E)	7	#5	3'-10"	
h ₁₄ (E)	4	#5	4'-0"	
h ₁₆ (E)	14	#6	4'-5"	
h ₁₇ (E)	2	#6	10'-7"	
n(E)	77	#5	5'-3"	
n ₁ (E)	124	#10	10'-3"	
n ₂ (E)	54	#10	13'-2"	
n ₃ (E)	28	#5	4'-11"	
s ₇ (E)	20	#5	6'-6"	
t(E)	104	#8	21'-9"	
t ₁ (E)	52	#9	21'-9"	
t ₂ (E)	13	#8	32'-9"	
t ₃ (E)	7	#9	32'-9"	
t ₄ (E)	34	#9	36'-6"	
t ₅ (E)	59	#7	14'-6"	
v(E)	64	#5	12'-11"	
v ₁ (E)	60	#4	4'-0"	
v ₂ (E)	77	#5	23'-3"	
v ₃ (E)	124	#7	21'-1"	
v ₄ (E)	60	#4	4'-10"	
v ₅ (E)	60	#4	6'-10"	
v ₆ (E)	60	#5	2'-3"	
v ₈ (E)	19	#5	8'-4"	
v ₉ (E)	28	#5	26'-0"	
v ₁₀ (E)	54	#7	19'-9"	
v ₁₁ (E)	56	#5	5'-4"	
v ₁₂ (E)	6	#5	4'-2"	
v ₁₃ (E)	6	#5	3'-4"	
v ₁₄ (E)	2	#5	16'-3"	
w(E)	46	#5	30'-0"	
w ₁ (E)	46	#5	36'-8"	
w ₂ (E)	32	#5	33'-4"	
Concrete Structures	Cu. Yd.		406.7	
Reinforcement Bars, Epoxy Coated	Pound		49,990	
Structure Excavation	Cu. Yd.		880	
Removal and Disposal of Unsuitable Material	Cu. Yd.		775	
Bar Splicers	Each		60	
Pipe Underdrains for Structures 4"	Foot		98	
Pipe Drains 4"	Foot		12	
Geocomposite Wall Drain	Sq. Yd.		279	
Porous Granular Embankment (Special)	Cu. Yd.		896	
Bridge Seat Sealer	Sq. Ft.		178	
Concrete Superstructure	Cu. Yd.		6.4	



Notes:
 Reinforcement bars designated (E) shall be epoxy coated.
 All edges shall have standard 3/4" chamfer except as noted.
 See Sheet 26 of 35 for Pipe Underdrain Detail.
 Limits of Removal and Disposal of Unsuitable Material are from Elev. 670.0 to 680.0, horizontal limits are the same as Structure Excavation.

Legend
 B.F. = Back Face
 F.F. = Front Face
 E.F. = Each Face

A	B	C	D	E	F
13-t ₂ (E)	21'-6"	11'-3"	16'-7"	16'-2"	32'-9"
7-t ₃ (E)	21'-6"	11'-3"	16'-8"	16'-1"	32'-9"
34-t ₄ (E)	22'-0"	14'-6"	18'-4"	18'-2"	36'-6"

DESIGNED	SRT
CHECKED	JJI
DRAWN	MD
CHECKED	JJI

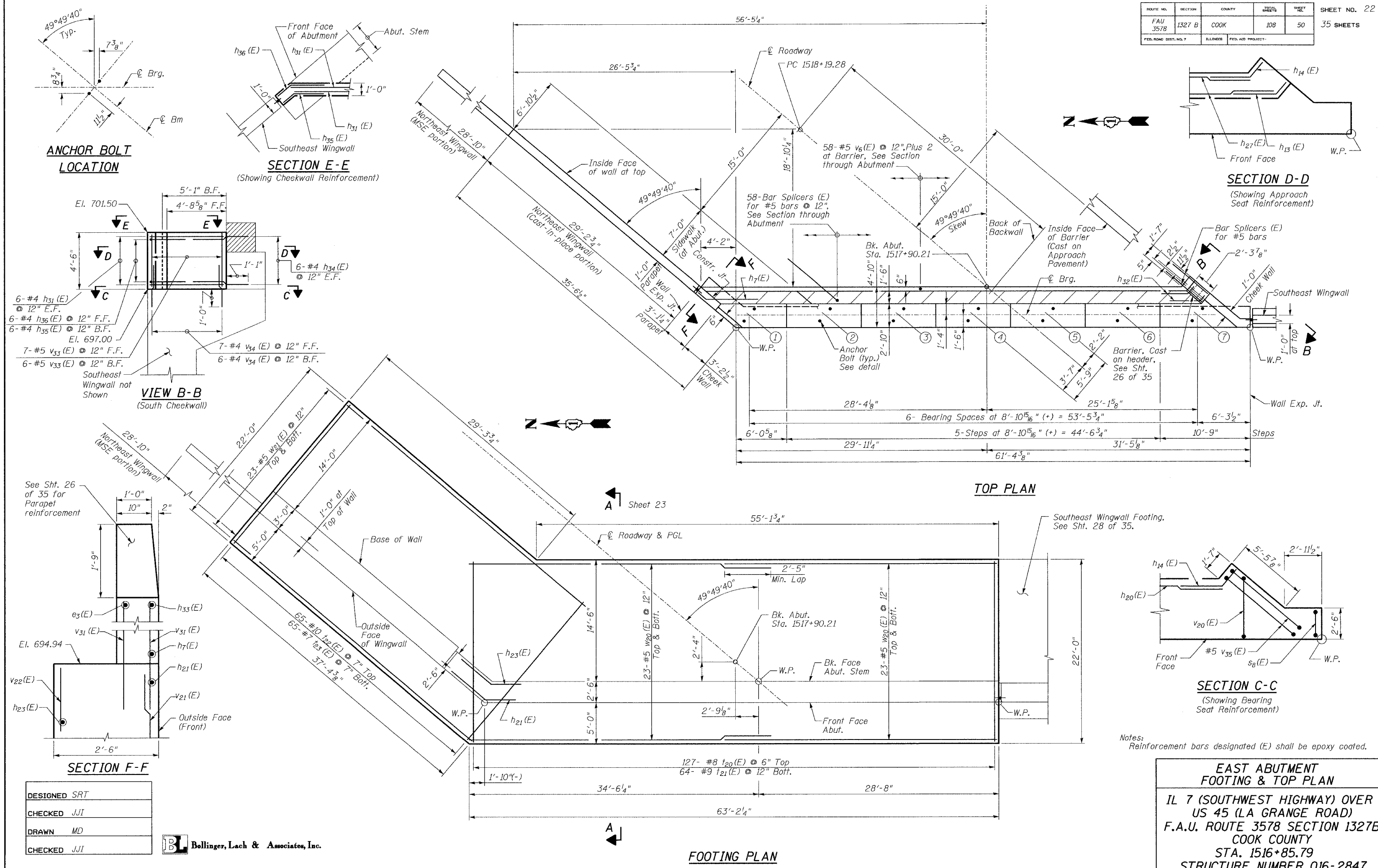
B Bollinger, Lach & Associates, Inc.

A, B & C DIMENSIONS

Bar	A	B	C
h ₁₁	2'-10"	1'-4"	9"
h ₁₃	2'-5"	1'-5"	1'-0"
h ₁₄	2'-5"	1'-3"	1'-7"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	50
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 22
35 SHEETS



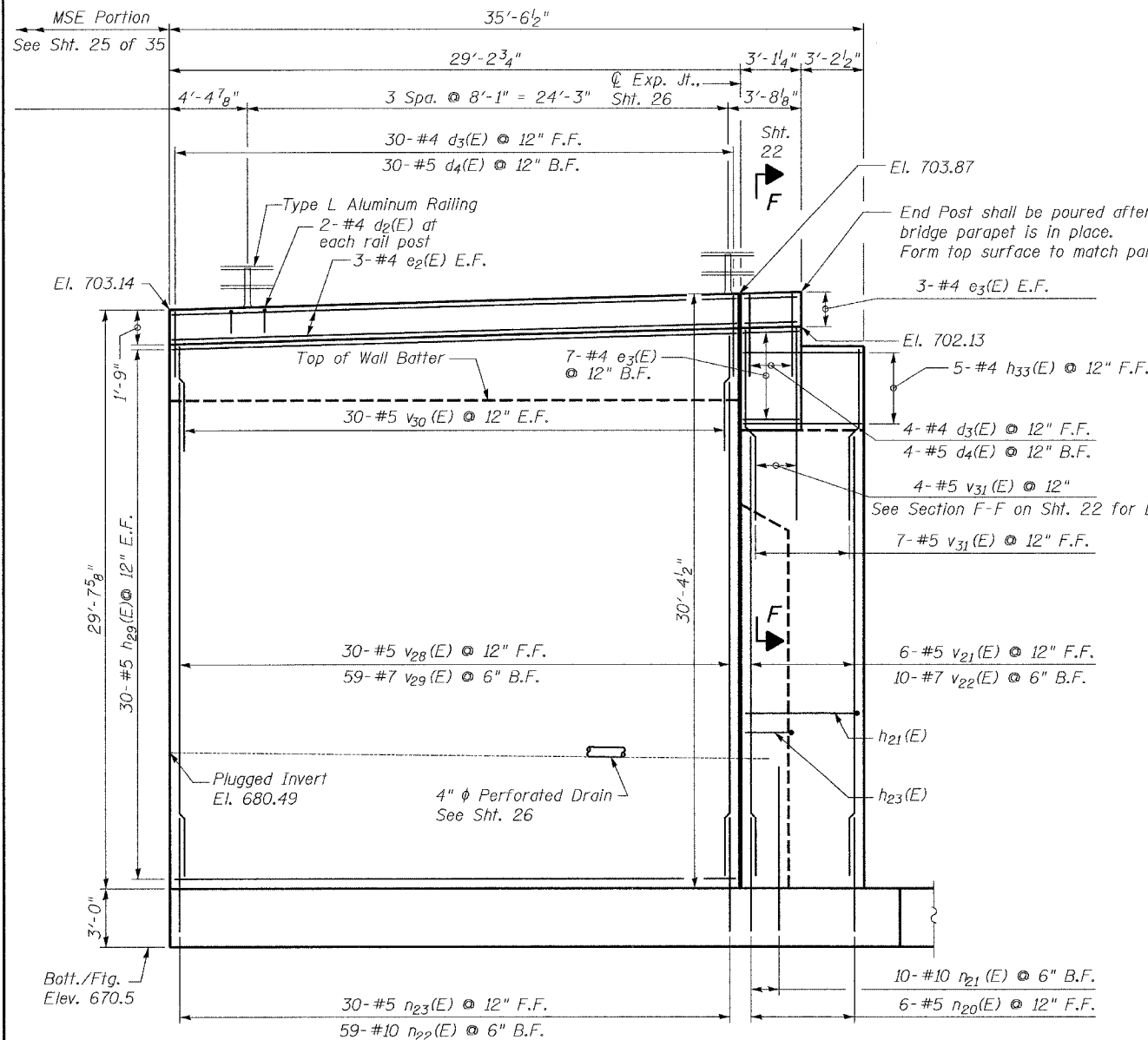
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DRAWN	MD
CHECKED	JJI

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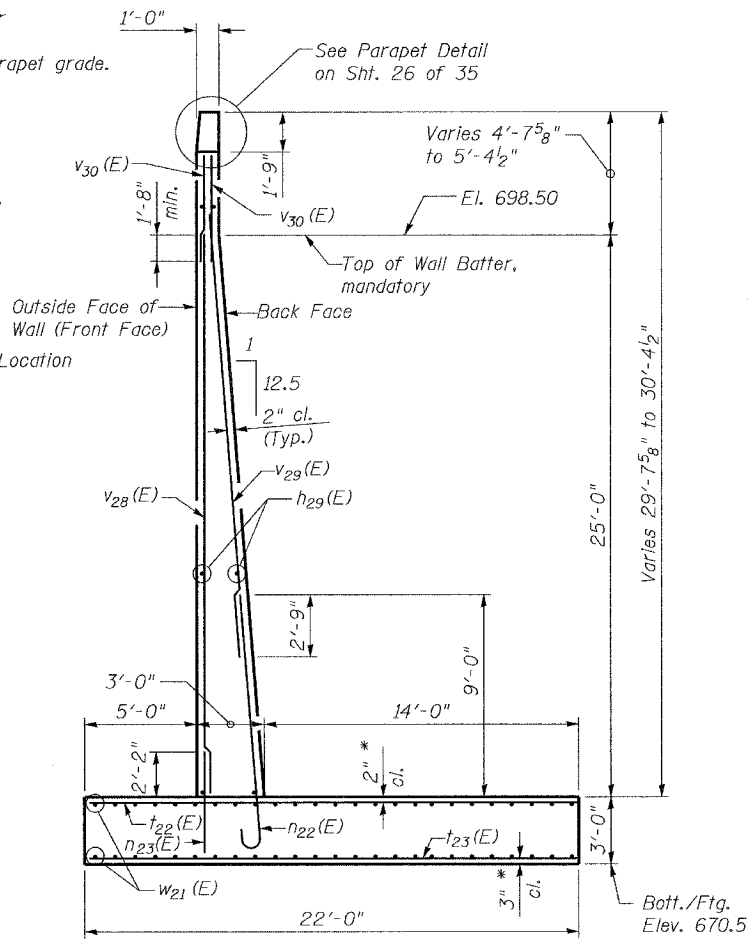
EAST ABUTMENT FOOTING & TOP PLAN
 IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1516+85.79
 STRUCTURE NUMBER 016-2847

Notes:
 Reinforcement bars designated (E) shall be epoxy coated.

ROUTE NO.	SECTION	COUNTY	JOB SHEETS	SHEET NO.	SHEET NO.
FAU 3578	1327 B	COOK	108	52	35 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	



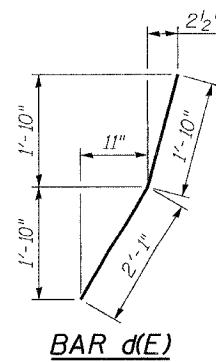
WINGWALL ELEVATION



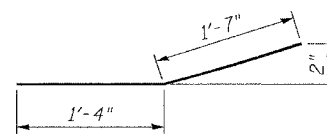
SECTION THRU WINGWALL

Notes:
 Reinforcement bars designated (E) shall be epoxy coated.
 All edges shall have standard 3/4" chamfer except as noted.
 See Sheet 26 of 35 for Pipe Underdrain Detail
 Limits of Removal and Disposal of Unsuitable Material are from Elev. 670.5 to 674.5, horizontal limits are the same as Structure Excavation.

Legend
 B.F. = Back Face
 F.F. = Front Face
 E.F. = Each Face



BAR d(E)

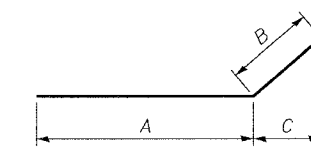


BAR d3(E)

BARS h13(E), thru h16(E), h21(E), h23(E)

A, B & C DIMENSIONS

Bar	A	B	C
h7	2'-10"	1'-0"	0'-8"
h13	2'-5"	1'-5"	1'-0"
h14	2'-5"	1'-7"	1'-3"
h16	2'-10"	2'-10"	0'-0"
h21	6'-0"	2'-2"	1'-8"
h23	3'-7"	2'-2"	1'-8"
h35	4'-9"	1'-0"	0'-8"
h36	4'-5"	1'-0"	0'-8"



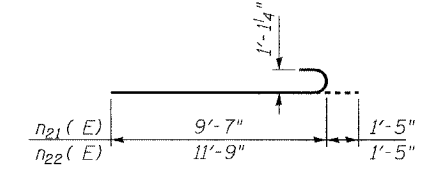
DESIGNED	SRT
CHECKED	JJI
DRAWN	MD
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

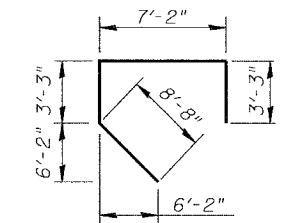
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	3	#5	3'-11"	
d1(E)	3	#4	3'-8"	
d2(E)	8	#4	2'-0"	
d3(E)	34	#4	2'-11"	
d4(E)	34	#5	3'-9"	
e2(E)	6	#4	28'-11"	
e3(E)	13	#4	2'-9"	
e4(E)	8	#4	2'-0"	
h6(E)	2	#6	10'-7"	
h7(E)	14	#6	3'-10"	
h13(E)	4	#5	3'-10"	
h14(E)	8	#5	4'-0"	
h20(E)	98	#5	31'-10"	
h21(E)	23	#5	8'-5"	
h23(E)	23	#5	5'-9"	
h24(E)	5	#5	46'-2"	
h25(E)	5	#5	28'-4"	
h26(E)	5	#5	10'-6"	
h27(E)	16	#5	31'-11"	
h28(E)	4	#6	32'-0"	
h29(E)	60	#5	28'-11"	
h31(E)	12	#4	4'-5"	
h32(E)	4	#6	4'-1"	
h33(E)	5	#4	6'-0"	
h34(E)	12	#4	3'-0"	
h35(E)	6	#4	5'-9"	
h36(E)	6	#4	3'-9"	
n20(E)	68	#5	6'-0"	
n21(E)	134	#10	11'-0"	
n22(E)	59	#10	13'-2"	
n23(E)	30	#5	4'-11"	
s7(E)	46	#5	6'-6"	
s8(E)	4	#5	4'-2"	
t20(E)	127	#8	21'-9"	
t21(E)	64	#9	21'-9"	
t22(E)	65	#10	21'-9"	
t23(E)	65	#7	21'-9"	
v6(E)	60	#5	2'-3"	
v20(E)	57	#5	8'-10"	
v21(E)	68	#5	22'-5"	
v22(E)	134	#7	20'-1"	
v23(E)	57	#5	6'-3"	
v24(E)	60	#4	4'-0"	
v25(E)	60	#4	7'-0"	
v26(E)	60	#4	5'-3"	
v28(E)	30	#5	18'-9"	
v29(E)	59	#7	19'-10"	
v30(E)	60	#5	5'-4"	
v31(E)	11	#5	6'-0"	
v33(E)	13	#5	4'-3"	
v34(E)	13	#4	2'-8"	
v35(E)	2	#5	22'-4"	
w20(E)	92	#5	32'-10"	
w21(E)	46	#5	37'-3"	

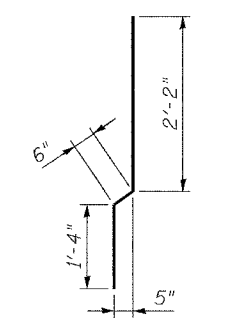
Concrete Structures	Cu. Yd.	460.5
Reinforcement Bars, Epoxy Coated	Pound	56,160
Structure Excavation	Cu. Yd.	1767
Removal and Disposal of Unsuitable Material	Cu. Yd.	375
Bar Splicers	Each	60
Pipe Underdrains for Structures 4"	Foot	98
Geocomposite Wall Drain	Sq. Yd.	209
Porous Granular Embankment (Special)	Cu. Yd.	1476
Bridge Seat Sealer	Sq. Ft.	170
Concrete Superstructure	Cu. Yd.	7.2



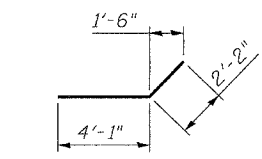
BAR n21(E), n22(E)



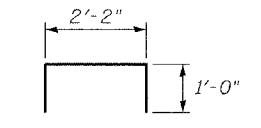
BAR v35(E)



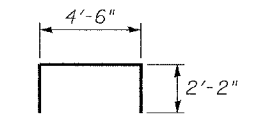
BAR v24(E)



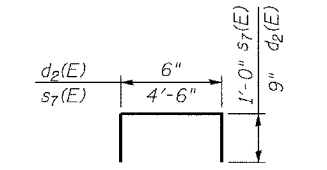
BAR v23(E)



BAR s8(E)



BAR v20(E)

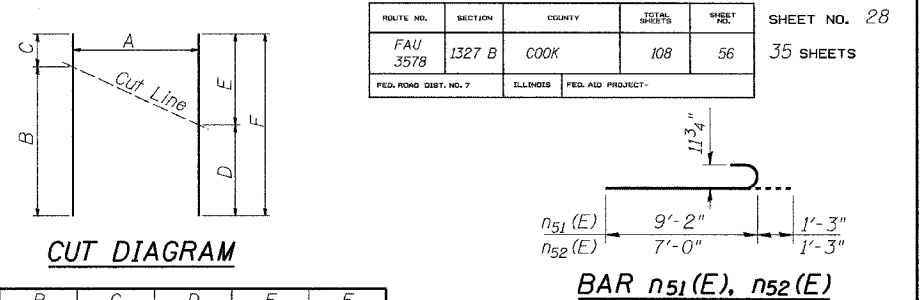
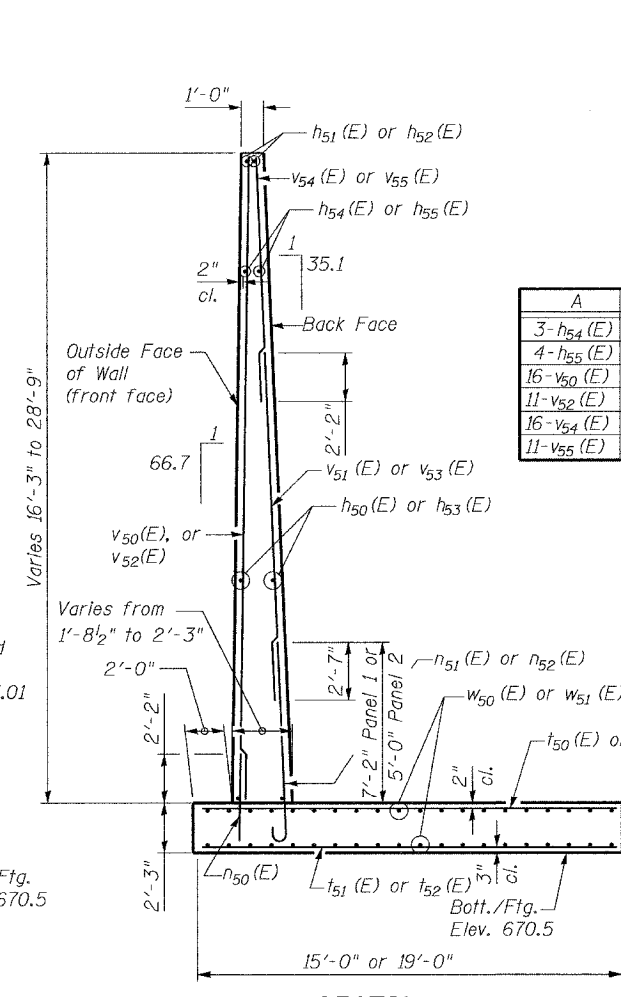
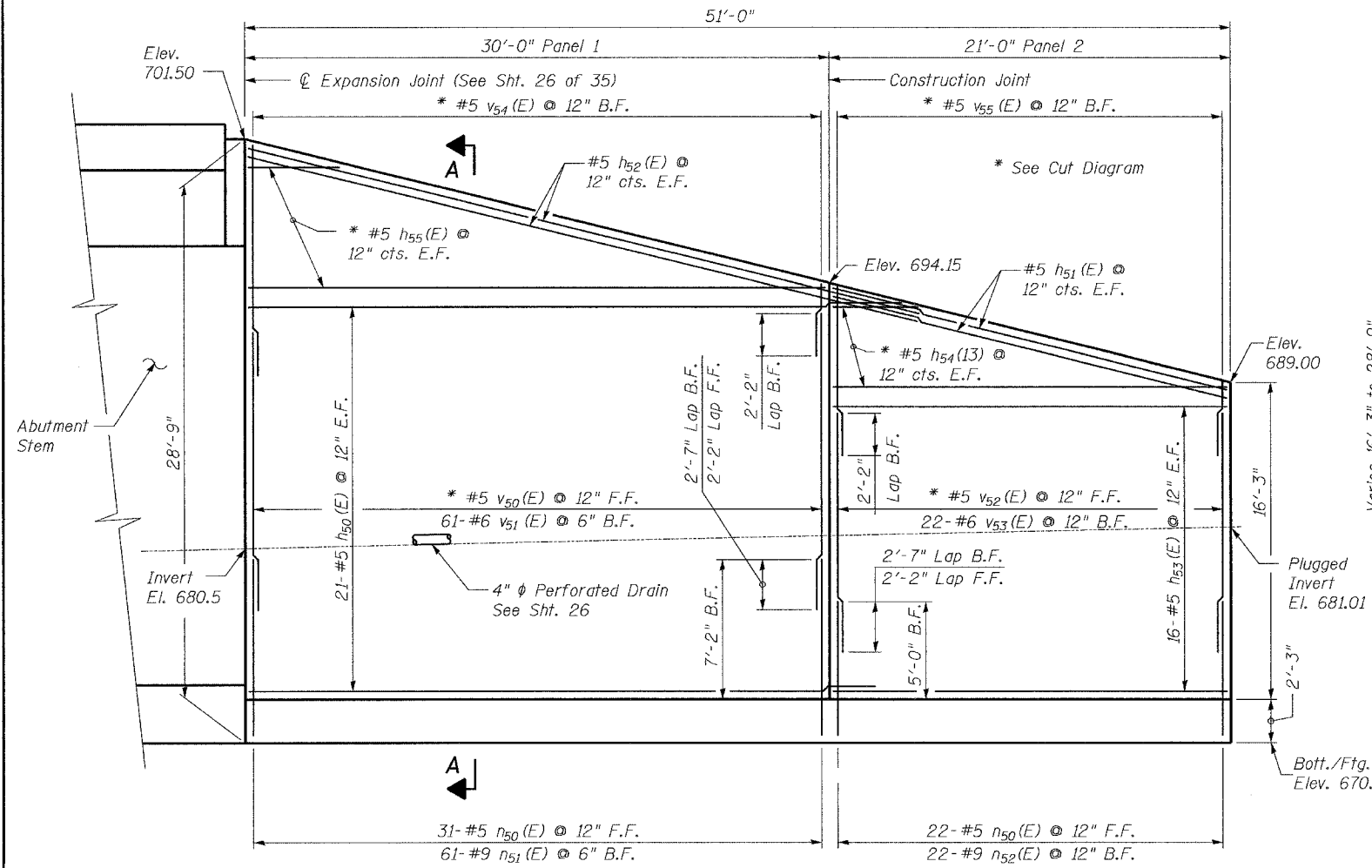


BAR d2(E), S7(E)

EAST ABUTMENT DETAILS
 IL 7 (SOUTHWEST HIGHWAY) OVER
 US 45 (LA GRANGE ROAD)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1516+85.79
 STRUCTURE NUMBER 016-2847

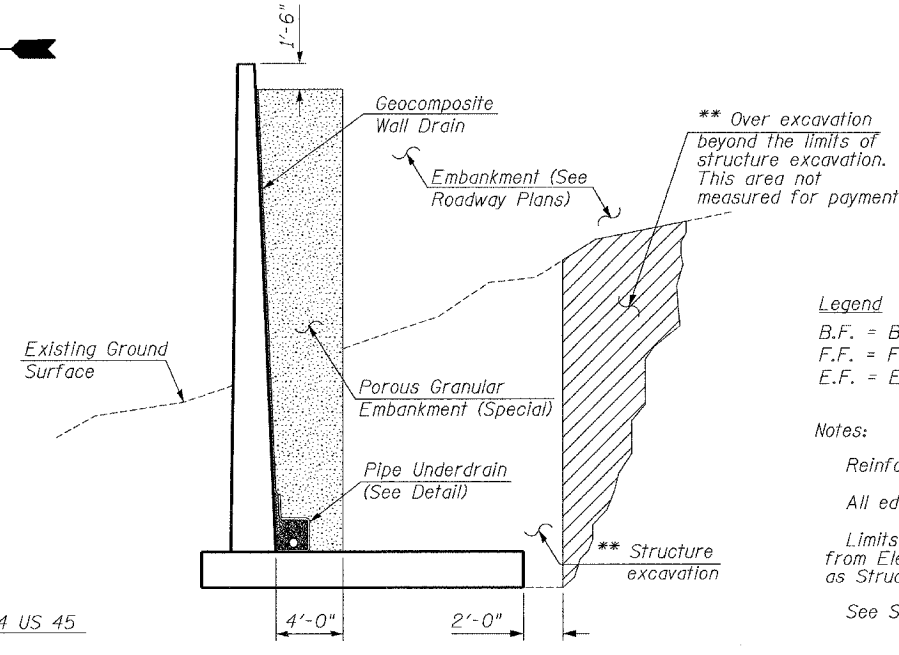
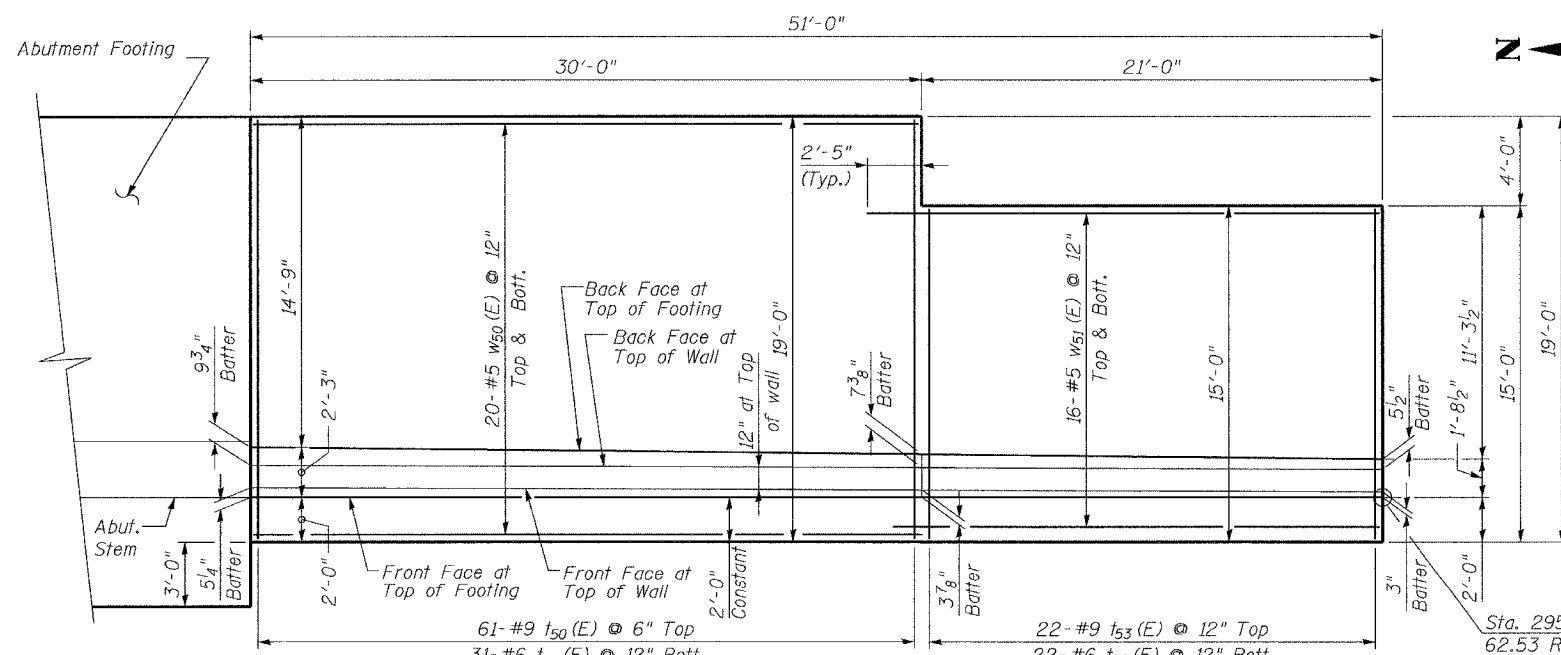
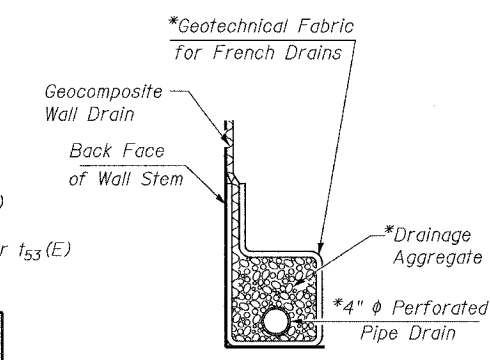
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	56
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

SHEET NO. 28
35 SHEETS



BILL OF MATERIAL

Bar No.	Size	Length	Shape
$h_{50}(E)$	42 #5	32'-3"	
$h_{51}(E)$	4 #5	21'-4"	
$h_{52}(E)$	4 #5	30'-1"	
$h_{53}(E)$	32 #5	20'-8"	
$h_{54}(E)$	6 #5	22'-10"	
$h_{55}(E)$	8 #5	31'-11"	
$n_{50}(E)$	53 #5	4'-2"	
$n_{51}(E)$	61 #9	10'-5"	
$n_{52}(E)$	22 #9	8'-3"	
$t_{50}(E)$	61 #9	18'-9"	
$t_{51}(E)$	31 #6	18'-9"	
$t_{52}(E)$	22 #6	14'-9"	
$t_{53}(E)$	22 #9	14'-9"	
$v_{50}(E)$	16 #5	49'-10"	
$v_{51}(E)$	61 #6	15'-5"	
$v_{52}(E)$	11 #5	37'-1"	
$v_{53}(E)$	22 #6	12'-6"	
$v_{54}(E)$	16 #5	14'-0"	
$v_{55}(E)$	11 #5	11'-8"	
$w_{50}(E)$	40 #5	29'-9"	
$w_{51}(E)$	32 #5	23'-3"	



Concrete Structures	Cu. Yd.	142.3
Reinforcement Bars, Epoxy Coated	Pound	17,170
Structure Excavation	Cu. Yd.	733
Pipe Underdrains for Structures 4"	Foot	51
Geocomposite Wall Drain	Sq. Yd.	117
Removal and Disposal of Unsuitable Material Porous Granular Embankment (Special)	Cu. Yd.	119
	Cu. Yd.	155

Legend

B.F. = Back Face
F.F. = Front Face
E.F. = Each Face

Notes:

Reinforcement bars designated (E) shall be epoxy coated.

All edges shall have standard $\frac{3}{4}$ " chamfer except as noted.

Limits of Removal and Disposal of Unsuitable Material are from Elev. 670.5 to 673.5, horizontal limits are the same as Structural Excavation.

See Sht. 27 of 35 for Wall Construction Joint.

DESIGNED	SRT
CHECKED	JJI
DRAWN	MD
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

SOUTHEAST WINGWALL FOOTING PLAN

SOUTH WINGWALLS EXCAVATION AND BACKFILL DETAIL

SOUTHEAST WINGWALL

IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)

F.A.U. ROUTE 3578 SECTION 1327B

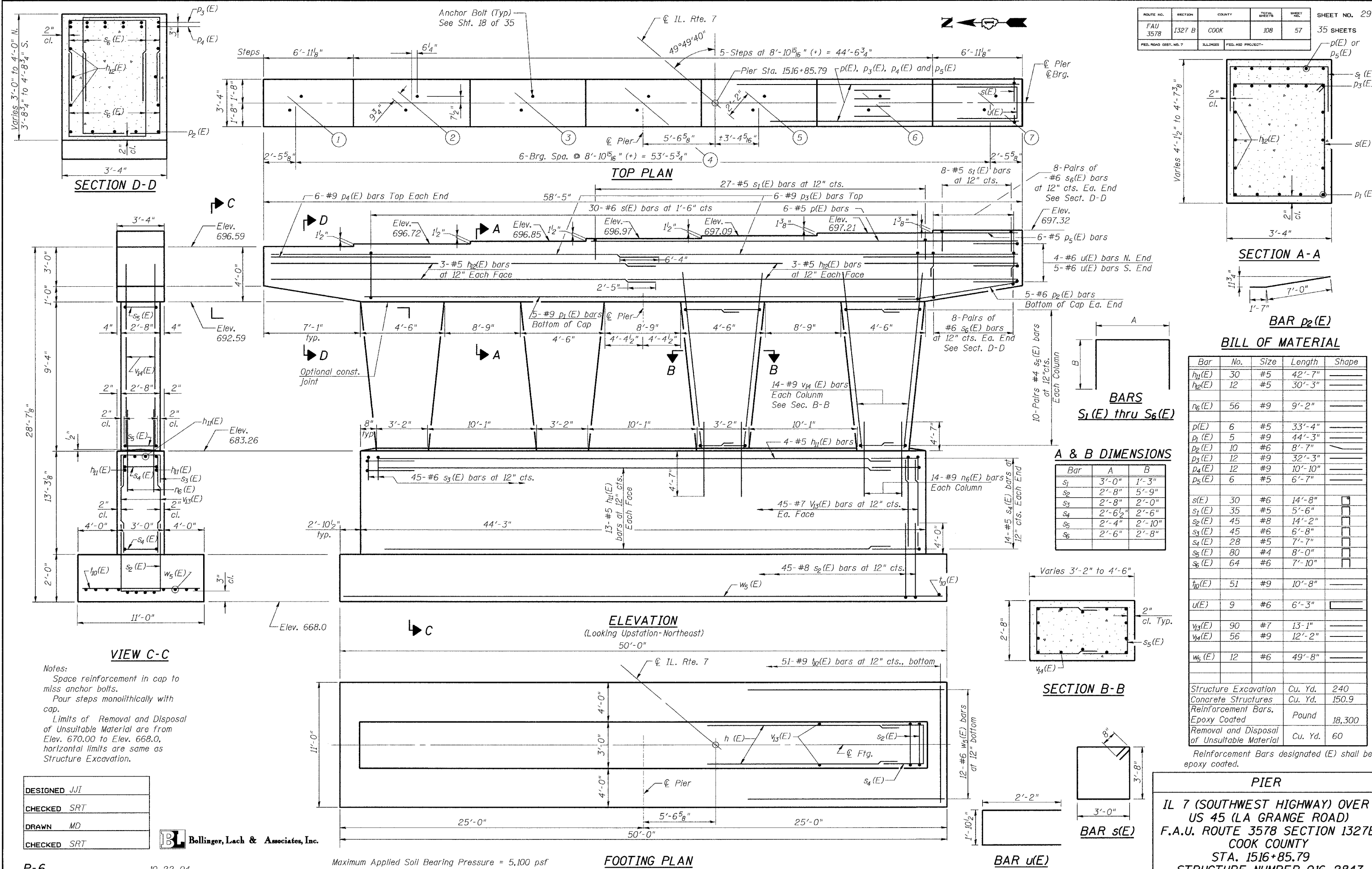
COOK COUNTY

STA. 1516+85.79

STRUCTURE NUMBER 016-2847

ROUTE NO. FAU 3578	SECTION 1327 B	COUNTY COOK	TOTAL SHEETS 108	SHEET NO. 57
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 29
35 SHEETS



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	30	#5	42'-7"	
h2(E)	12	#5	30'-3"	
n6(E)	56	#9	9'-2"	
p(E)	6	#5	33'-4"	
p1(E)	5	#9	44'-3"	
p2(E)	10	#6	8'-7"	
p3(E)	12	#9	32'-3"	
p4(E)	12	#9	10'-10"	
p5(E)	6	#5	6'-7"	
s(E)	30	#6	14'-8"	
s1(E)	35	#5	5'-6"	
s2(E)	45	#8	14'-2"	
s3(E)	45	#6	6'-8"	
s4(E)	28	#5	7'-7"	
s5(E)	80	#4	8'-0"	
s6(E)	64	#6	7'-10"	
t0(E)	51	#9	10'-8"	
u(E)	9	#6	6'-3"	
v13(E)	90	#7	13'-1"	
v14(E)	56	#9	12'-2"	
w5(E)	12	#6	49'-8"	

Structure Excavation	Cu. Yd.	240
Concrete Structures	Cu. Yd.	150.9
Reinforcement Bars, Epoxy Coated	Pound	18,300
Removal and Disposal of Unsuitable Material	Cu. Yd.	60

Reinforcement Bars designated (E) shall be epoxy coated.

PIER

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Limits of Removal and Disposal of Unsuitable Material are from Elev. 670.00 to Elev. 668.0, horizontal limits are same as Structure Excavation.

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

P-6 10-22-04

Maximum Applied Soil Bearing Pressure = 5,100 psf

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	58
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

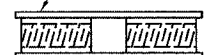
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

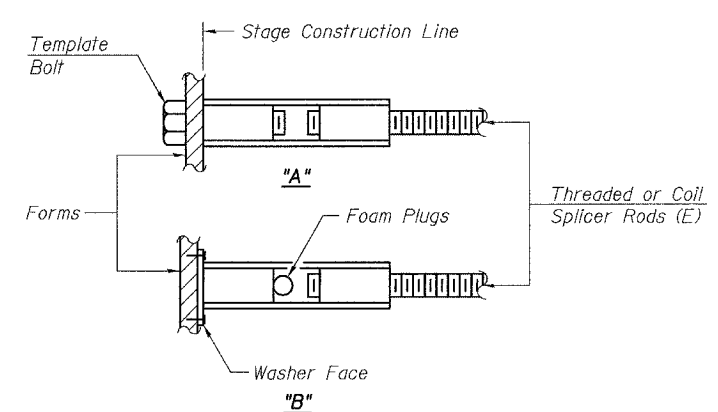
Wire Connector



WELDED SECTIONS

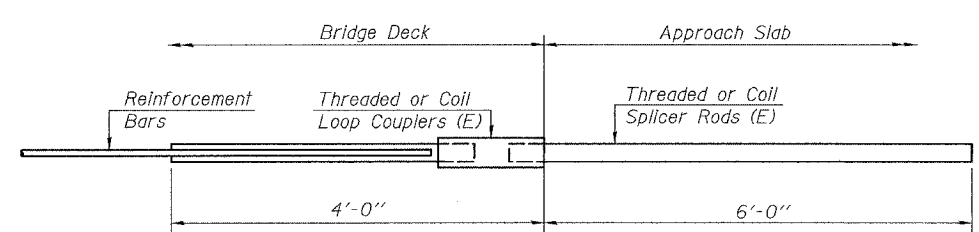
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



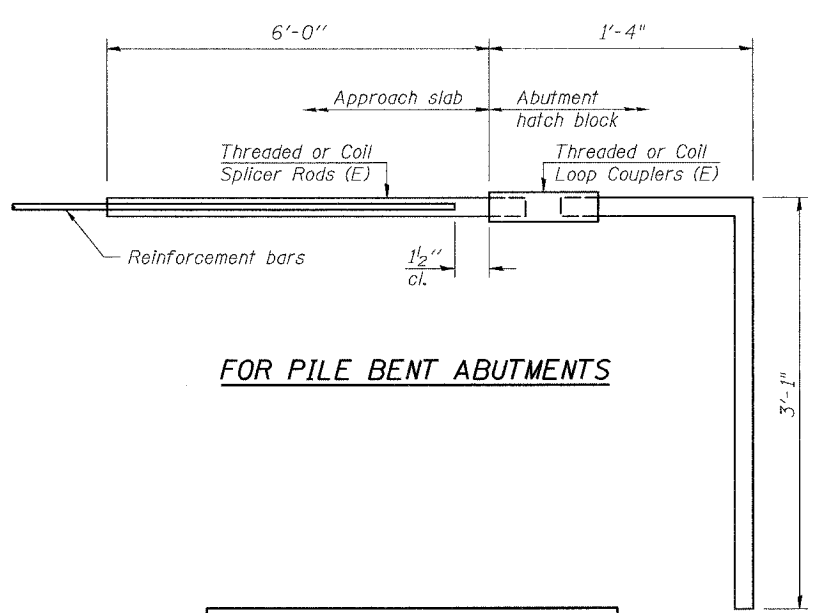
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



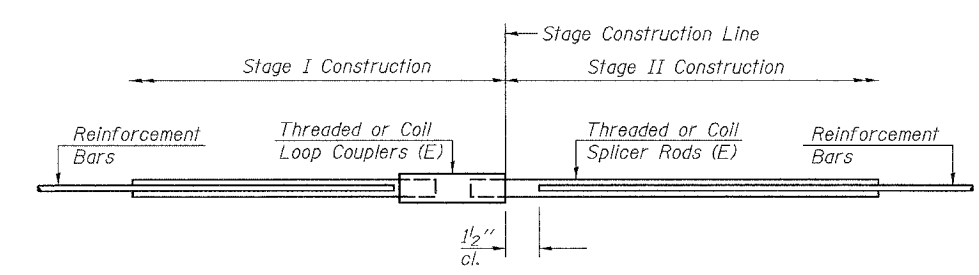
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 9.2 kips - tension	
No. Required =	



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 9.2 kips - tension	
No. Required = 120	



STANDARD

Bar Size	No. Assemblies Required	Location

BAR SPLICER ASSEMBLY DETAILS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

BSD-1 10-22-04

ROUTE NO.	SECTION	COUNTY	JOB NO.	SHEET NO.	SHEET NO. 33 35 SHEETS
FAU 3578	1327B	COOK	108	61	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT-	

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
202 Naperville, Illinois 60563 (815) 351-2828

PAGE 2 of 2
DATE Sept. 29, 2004
LOGGED BY TOB
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Bridge Foundation
TWNSHP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Automatic

STRUCT. NO. E 016-0465/P 016-2847
Station _____
BORING NO. BR-3 & BR-3A
Northing 1810452.1
Easting 1115373.2
Ground Surface Elev. 694.2

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION
				CLAY-gray-very stiff to hard (A-6)					SANDY LOAM-gray-dense to very dense (A-2)
2					18				
8					33				
-45	5	3.5P	17	629.2	-65	40	NP	10	
									SILTY CLAY-gray-hard (A-6)
7					22				
11					28				
-50	12	2.0P	19	644.2	-70	35	4.5P	22	
									SILTY CLAY-gray-hard (A-6)
8					50				
9					52/3"				
-55	13	4.8B	12	639.2	-75			NR	
									No recovery from -73.5' to -75.0'. Possible cobble or boulder.
16					42				
22					27				
-60	18	NP	13	614.2	-80	37	4.5P	13	
									End Of Boring @ -80.0' Hollow Stem Augers to -10.0' Rotary Drilling to Completion CME-75 Automatic Hammer

Drillers Note: Refusal @ -43.0', unknown obstruction. Boring offset to BR-3A location and blind drilled to 43.5'.

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
202 Naperville, Illinois 60563 (815) 351-2828

PAGE 1 of 1
DATE 10/25/2004
LOGGED BY TOB
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNSHP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD Rotary HAMMER TYPE Automatic

STRUCT. NO. _____
Station _____
BORING NO. BR-4
Northing 1810208.4
Easting 1115257.9
Ground Surface Elev. 677.1

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION
				2.0" ASPHALT, 10.0" CRUSHED STONE					
					17				
					6	NP	8		
									CLAY-gray-stiff to hard (A-6)
					9				
					2				
					5				
					-5	2	1.5P	21	
									CLAY-brown & gray-stiff to hard (A-6)
					3				
					4				
					6	4.4B	16		
					4				
					7				
					-10	11	6.2B	15	
									CLAY-gray-stiff to hard (A-6)
					4				
					6				
					10	4.0B	19		
					4				
					5				
					-15	7	2.5P	16	
					3				
					5				
					6	2.7B	20		
					4				
					5				
					-20	7	2.7B	20	
									End Of Boring @ -25.0' Hollow Stem Augers CME-75 Automatic Hammer

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
202 Naperville, Illinois 60563 (815) 351-2828

PAGE 1 of 1
DATE 10/25/2004
LOGGED BY TOB
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNSHP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD Rotary HAMMER TYPE Automatic

STRUCT. NO. _____
Station _____
BORING NO. BR-5
Northing 1810404.3
Easting 1115249.6
Ground Surface Elev. 677.0

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION
				2.0" ASPHALT, 10.0" CRUSHED STONE					
					2				
					4				
					7	3.0B	15		
									CLAY-gray-stiff to very stiff (A-6)
					3				
					5				
					-25	8	3.5B	16	
									CLAY LOAM-brown-hard (A-4/A-6) Fill
					6	4.5+P	9		
									CLAY to CLAY LOAM-gray-stiff to very stiff (A-6)
					4				
					3				
					-5	4	0.9B	23	
									CLAY-brown & gray spotted black-medium stiff to stiff (A-6) Fill, Wet
					1				
					3				
					3	1.0P	29		
									End Of Boring @ -25.0' Hollow Stem Augers CME-75 Automatic Hammer
					2				
					3				
					-10	3	2.5P	18	
									CLAY-brown & gray-stiff (A-6)
					4				
					6				
					9	3.7B	15		
					6				
					8				
					-15	10	3.5B	20	
									CLAY-gray-stiff to very stiff (A-6)
					5				
					5				
					8	2.5P	17		
					4				
					5				
					-20	6	2.5P	17	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample
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 (%)

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample
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 (%)

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample
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 (%)

DESIGNED	-
CHECKED	-
DRAWN	GM
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS BR-3, BR-4 & BR-5
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	64
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 1
22 SHEETS

Bench Mark: Top of Brass Disk in West Curb of US Rte. 45 (La Grange Rd.) Approximately 675' North of the Centerline of IL Rte. 7 (Southwest Highway). Elev. 689.07.

Existing Structure: None

Staging: Construct stone columns that will be within the limits of excavation for the West Abutment prior to starting abutment construction. Coordinate MSE wall construction with roadway embankment construction.

Sta. 1515+78.21 Elev. 691.75
See Slip Joint Detail, Sheet 9

Proposed Northwest Wingwall, See Bridge Plans

Proposed U.S. Route 45 (La Grange Rd.)

Proposed Bridge S.N. 016-2847

30'-0" Bridge Appr. Pavement (Special)

Proposed Northwest Wingwall (Prop. S.N. 016-2847)

Begin Wall Sta. 1515+78.21 Lt. 22'-0"

Begin Wall Sta. 1515+78.21 Elev. 700.51

Turning Point Sta. 1515+34.14 Elev. 700.06

Sta. 1515+00.00 Elev. 699.61

Sta. 1511+00.00 Elev. 691.82

Sta. 1513+00.00 Elev. 695.29

Sta. 1513+00.00 Elev. 687.00

Sta. 1515+00.00 Elev. 691.30

Sta. 1515+34.14 Elev. 693.14

PGE (Special) Backfill

B. of Ftg. El. 670.0

Existing U.S. Route 45 (La Grange Rd.)

Proposed Southwest Wingwall (Prop. S.N. 016-2847)

BR-1

BR-1A 44'-2 5/8"

R-12

R-11

R-10

R-9

R-8

R-7

R-6

R-5

R-4

R-3

R-2

R-1

R-13

R-14

R-15

R-16

R-17

R-18

R-19

Proposed Metra Parking Lot

B-6.24 Curb & Gutter (Typ.)

Underground Electric

EXIST. ROW

45:1 Taper

EXIST. ROW

McGinnis Slough (No-Intrusion Area)

10'-0" Inside face of parapet to back of curb

Existing & Proposed U.S. Route 7

994'-1 5/8"

Front Face MSE Wall Panels

Wetland Limits (Typ.)

Storm Sewer (By others)

End Wall Sta. 1505+40.00 Lt. 25'-7"

Underground Telephone Line to be relocated

6'-0" Sidewalk (Moment Slab)

Approximate Limits of Reinforced Soil Mass

EXIST. ROW

EXIST. ROW

ELEVATION
(Front Face)

Drainage structure to be installed after stone column installation is complete. Provide additional Pipe Bedding under drainage structure. See Drainage Plans. (Typical for all drainage structures)

54" RCP

3'-6" min. (Typ.)

C.I.P. Panel (Typ.) See Sht 9 of 22

12" RCP (Typ.)

1'-9" (Typ.)

Top of Parapet

Top of Moment Slab at face of Parapet

1'-9" (Typ.)

Type L Aluminum Railing

Sta. 1509+00.00 Elev. 690.95

Sta. 1507+00.00 Elev. 692.64

Sta. 1509+95.68 Begin Taper

New Storm Sewer (Typ.)

New Inlet (Typ.)

Sta. 1505+40.00 Elev. 694.53

End Wall Sta. 1505+40.00 Elev. 694.53

Sta. 1507+00.00 Elev. 684.40

Sta. 1509+00.00 Elev. 680.50

Sta. 1511+00.00 Elev. 682.00

Existing & Finished Grade Line at Front Face of wall

Top of Exposed panel line

1'-9" (Typ.)

Top of Parapet

1'-9" (Typ.)

Top of Moment Slab at face of Parapet

1'-9" (Typ.)

Top of Parapet

1'-9" (Typ.)

Top of Moment Slab at face of Parapet

1'-9" (Typ.)

Top of Parapet

1'-9" (Typ.)

Top of Parapet

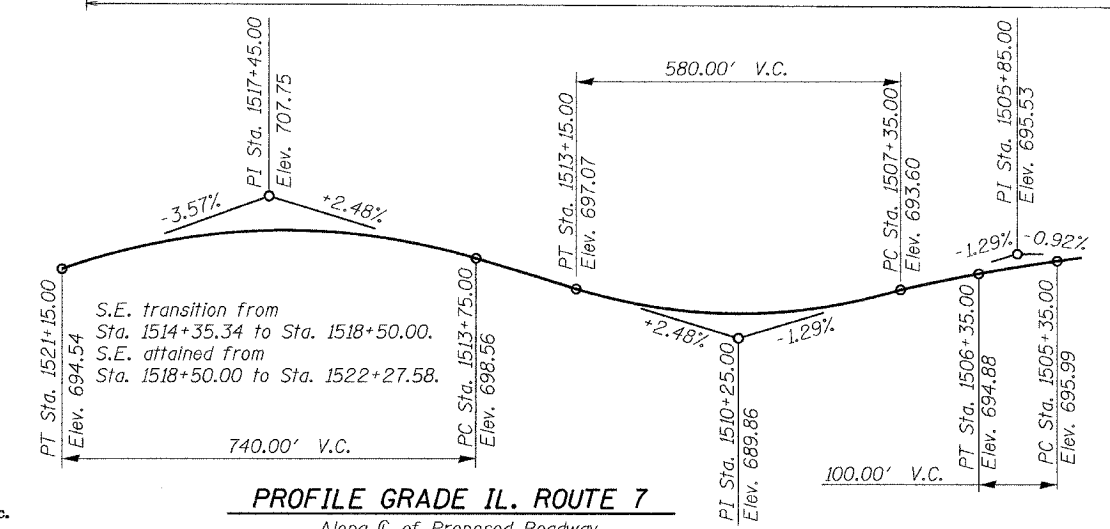
1'-9" (Typ.)

LEGEND:

- - Indicates Soil Boring
- ▨ - Reinforced soil mass
- ▤ - MSE Wall Panels

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.



PLAN

DESIGN SPECIFICATIONS
AASHTO (2002)

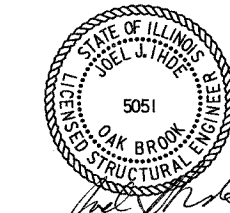
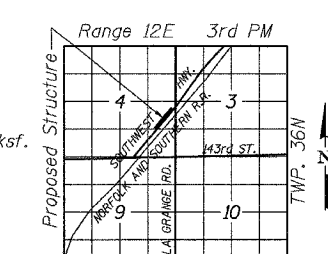
DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

PRECAST UNITS
f_c = 4,500 psi (Precast Face Panels)
Allowable Soil Bearing Pressure = 3.0 ksf.

MSE WALL LOADING

Equivalent Lateral Soil Pressure = 42 pcf (min.)
Live Load Surcharge = 2' height of soil



APPROVED FOR STRUCTURAL ADEQUACY ONLY
DATE SIGNED: 3-09-06
EXP. DATE: 11-30-06

Paul E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

Note: Stations and O/S are given to the inside face of the parapet. Lengths are measured along the inside face of the parapet.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	65
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2
22 SHEETS

GENERAL NOTES

See Special Provisions for Mechanically Stabilized Earth Retaining Wall and Stone Columns for design and construction requirements.

Reinforcement bars shall conform to the requirements of AASTHO M31 or M322 Grade 60.

All construction joints shall be bonded.

Concrete surfaces exposed to view in the completed wall shall be given a normal finish according to Article 503.16.

Cost of Slip Joint included in the pay item "Mechanically Stabilized Earth Retaining Wall".

Spacing of stone columns located within the limits of the reinforced soil mass shall be adjusted to account for the width of the reinforced soil mass as designed by the Supplier and approved by the Engineer.

Drainage layer/working platform shall be installed after the installation of the stone columns is complete. Contractor shall keep the drainage layer/working platform free from contamination to maintain drainage.

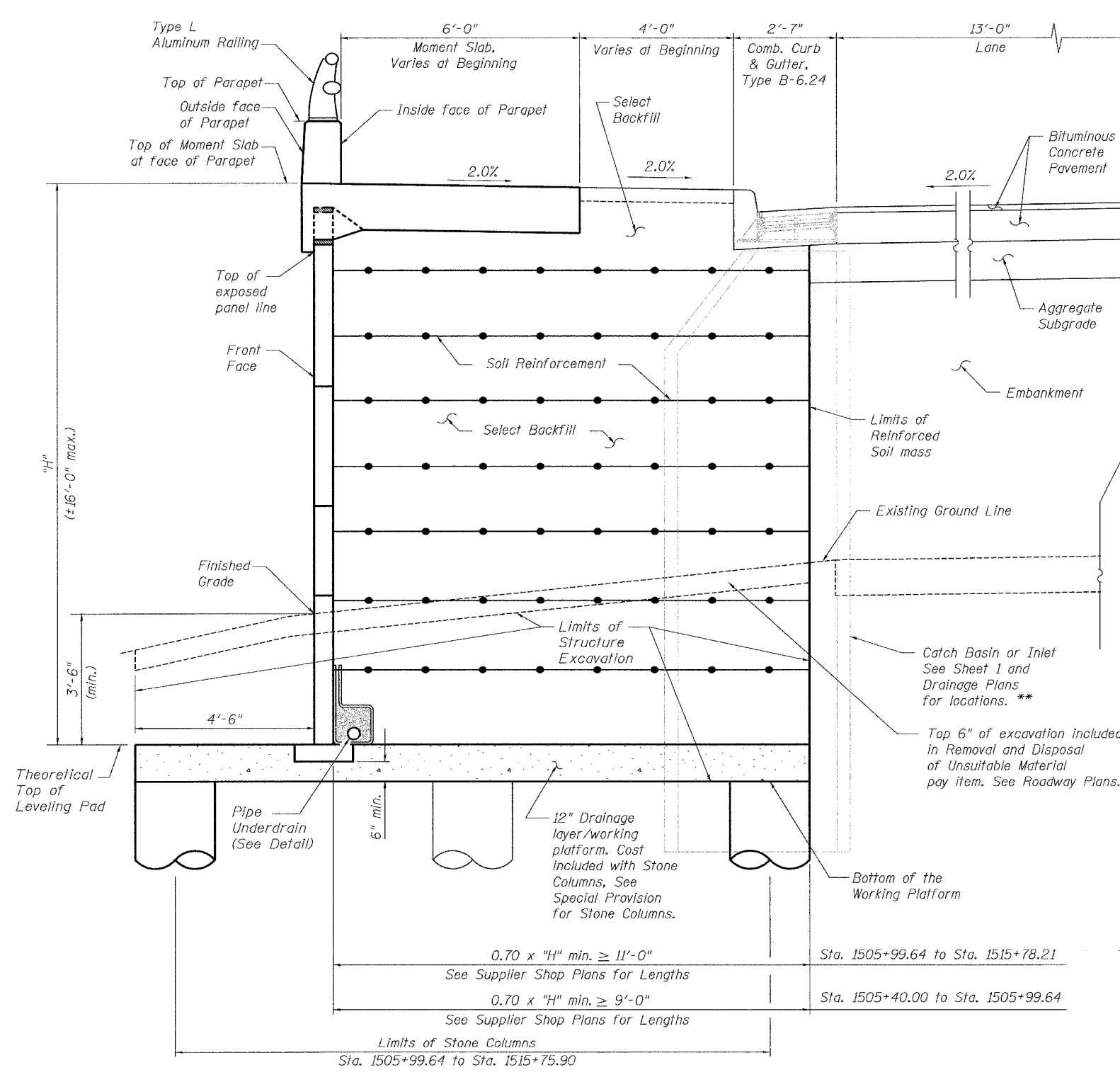
Work on MSE Retaining Wall shall be done in conjunction with Northeast MSE wingwall. See Bridge Plans.

TOTAL BILL OF MATERIAL

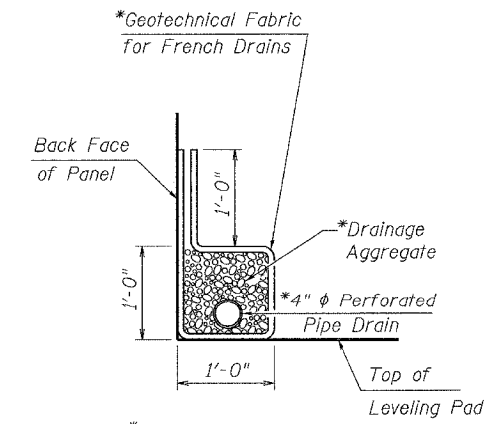
ITEM	UNIT	TOTAL
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	12,750
Structure Excavation	Cu. Yd.	2787
Concrete Structures	Cu. Yd.	409.8
Reinforcement Bars, Epoxy Coated	Pound	50,350
Aluminum Railing, Type L	Foot	1037
Stone Columns 2'-6" Dia.	Foot	3861
Stone Columns 3'-0" Dia.	Foot	5033
Pipe Underdrains for Structures 4"	Foot	1035

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	General Plan & Elevation
2	Index of Sheets, Typical Section, Total Bill of Material
3	MSE Wall Plan & Elevation Sta. 1515+78.21 to Sta. 1513+00.00
4	MSE Wall Plan & Elevation Sta. 1513+00.00 to Sta. 1510+00.00
5	MSE Wall Plan & Elevation Sta. 1510+00.00 to Sta. 1507+00.00
6	MSE Wall Plan & Elevation Sta. 1507+00.00 to Sta. 1505+40.00
7	Parapet & Sidewalk Plan & Elevation Sta. 1515+78.21 to Sta. 1510+00.00
8	Parapet & Sidewalk Plan & Elevation Sta. 1510+00.00 to Sta. 1505+40.00
9	Details
10	Type L Aluminum Railing
11	Soil Boring Logs R-1 & R-2
12	Soil Boring Logs R-2 & R-3
13	Soil Boring Logs R-4 & R-5
14	Soil Boring Logs R-5 & R-6
15	Soil Boring Logs R-7 & R-8
16	Soil Boring Logs R-8 & R-9
17	Soil Boring Logs R-10 & R-11
18	Soil Boring Logs R-11 & R-12
19	Soil Boring Logs R-13, R-14 & R-15
20	Soil Boring Logs R-16, R-17 & R-18
21	Soil Boring Logs R-19 & BR-1
22	Soil Boring Log ST-2



** Where soil reinforcement layers must be partially or fully severed in the location of obstructions, the wall supplier shall design the surrounding reinforcement layers to carry the additional load which would have been carried by the severed reinforcements.



PIPE UNDERDRAIN DETAIL

TYPICAL SECTION
(Looking Upstation)

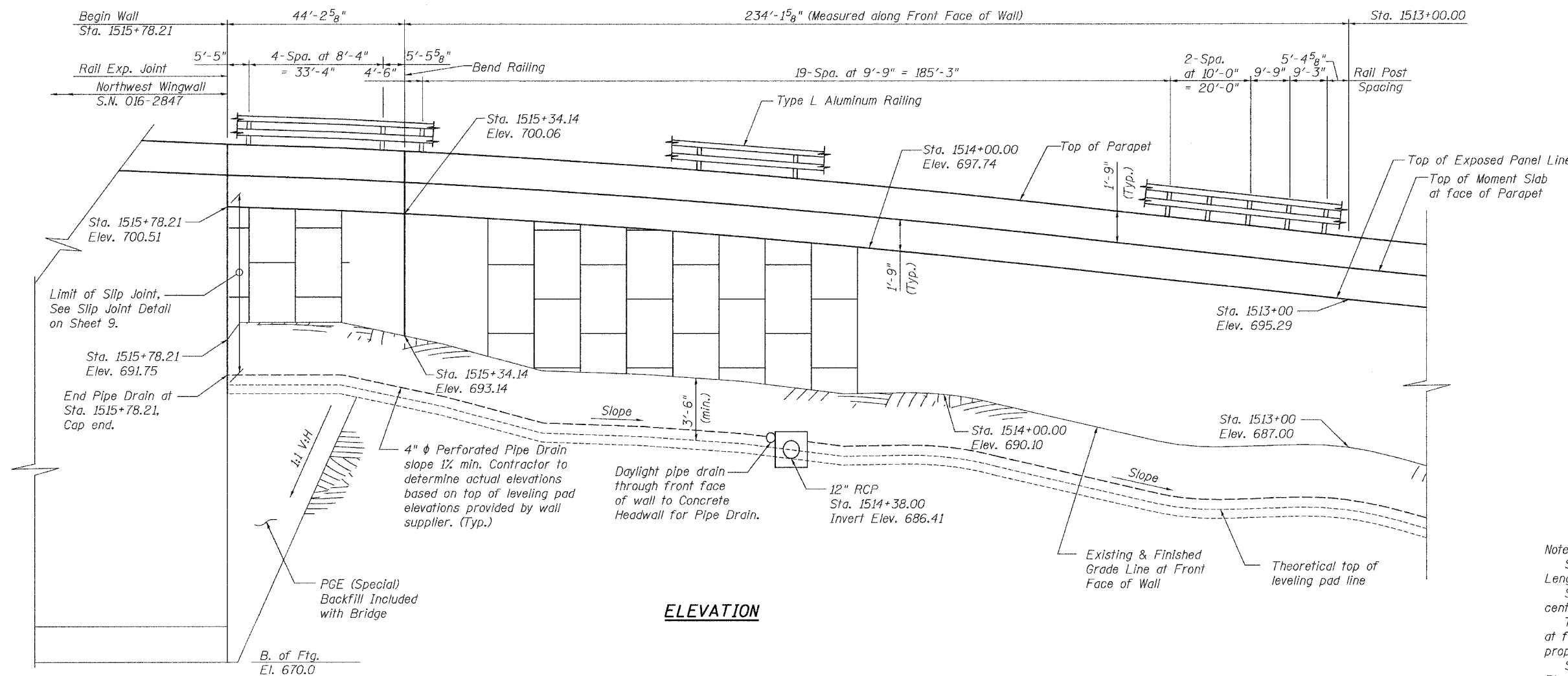
DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

INDEX OF SHEETS, TYPICAL SECTION & TOTAL BILL OF MATERIAL
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

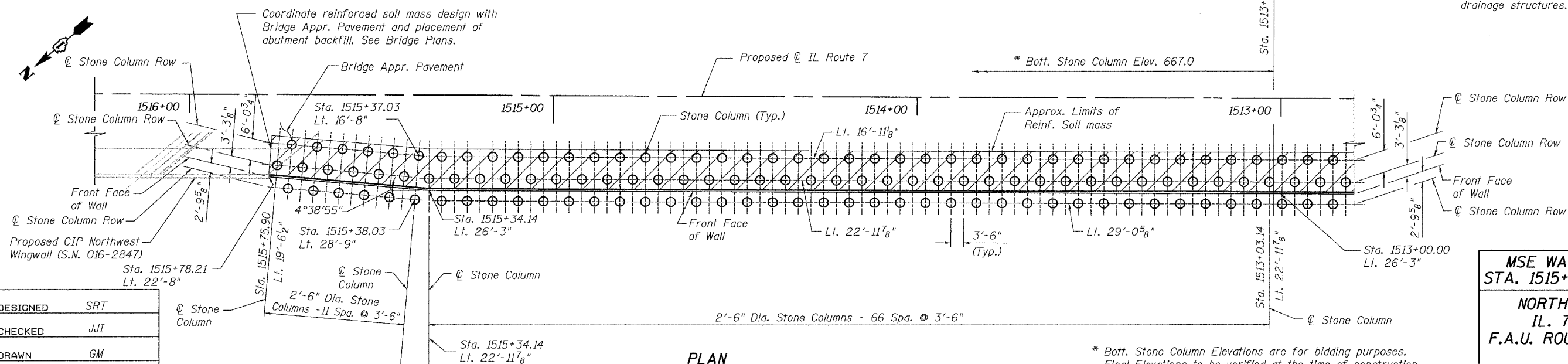
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	66
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
22 SHEETS



ELEVATION

Notes:
 Sta. & offsets are given to the front face of wall. Lengths are measured along the front face.
 Sta. & offsets given for Stone Columns are to the center of the Stone Column.
 Top of Exposed Panel Line, Top of Moment Slab at face of Parapet, and Top of Parapet follow the proposed profile grade of IL Route 7.
 See Sheet 7 of 22 for Parapet and Sidewalk Plan and Elevation.
 Stone Column offset from front face of wall may vary by wall supplier. Coordinate Stone Column Layout with wall supplier.
 Locate Concrete Headwall free of proposed drainage structures. See Drainage Plans.



PLAN

* Bott. Stone Column Elevations are for bidding purposes. Final Elevations to be verified at the time of construction. Stone Columns shall be predrilled to elevation 675.0.

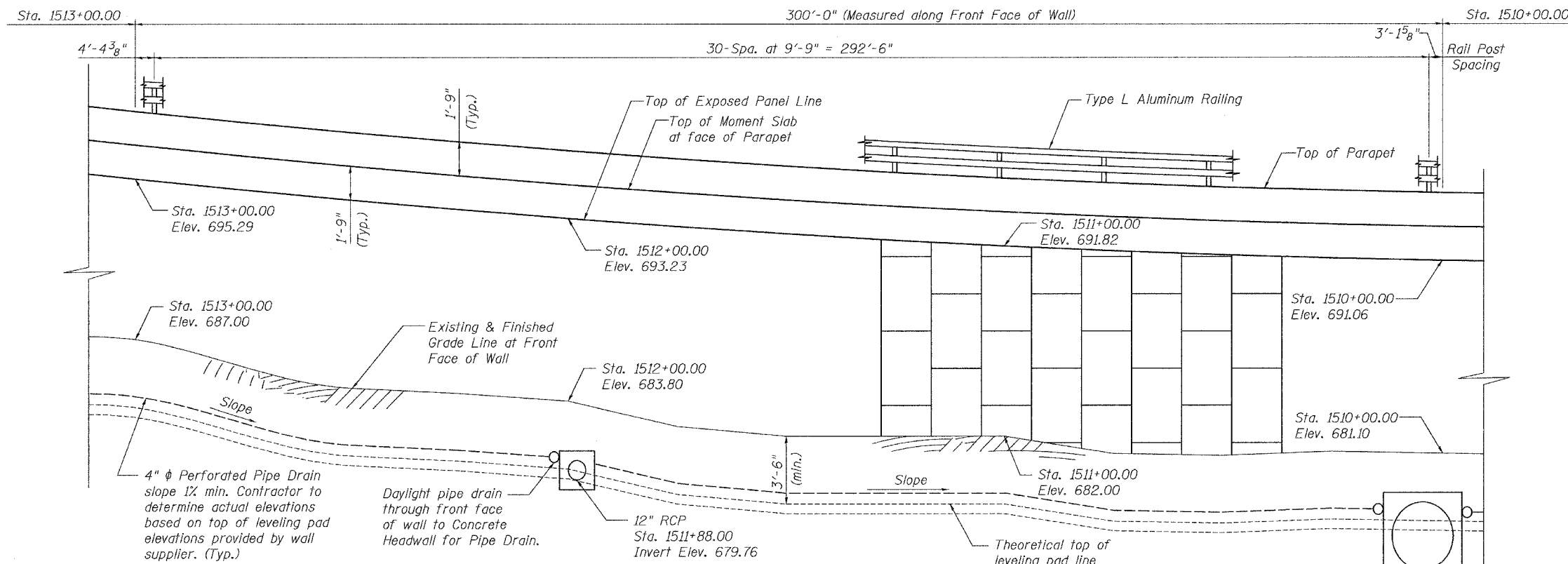
**MSE WALL PLAN & ELEVATION
 STA. 1515+78.21 TO STA. 1513+00.00**

**NORTHWEST RETAINING WALL
 IL. 7 (Southwest Highway)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1505+40.00 to STA. 1515+78.21
 STRUCTURE NUMBER 016-W970**

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

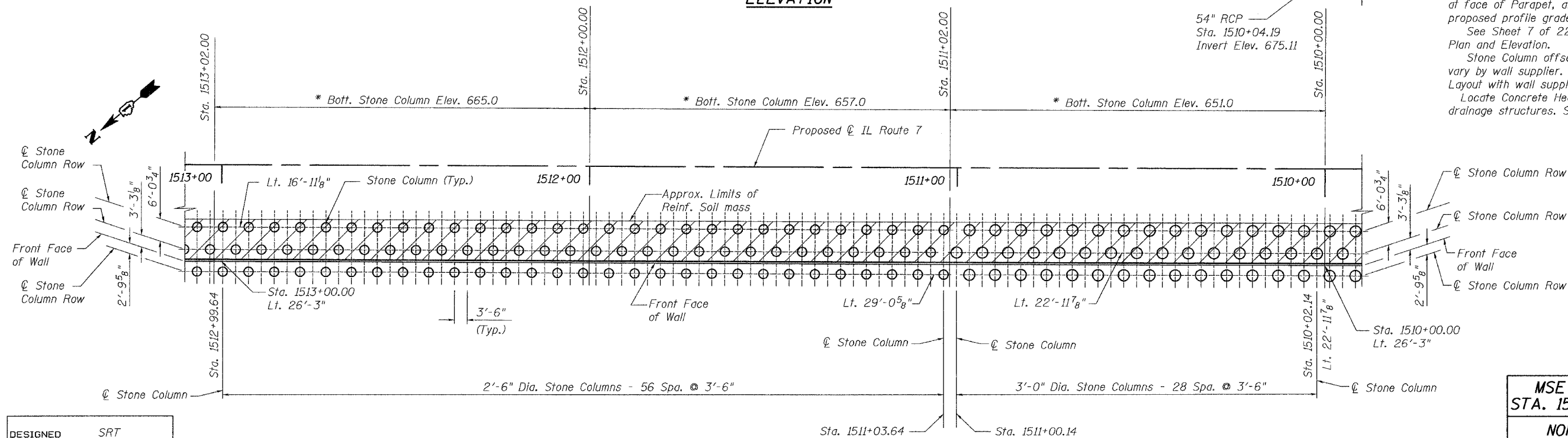
Bollinger, Lach & Associates, Inc.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	67
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		



ELEVATION

Notes:
 Sta. & offsets are given to the front face of wall, Lengths are measured along the front face.
 Sta. & offsets given for Stone Columns are to the center of the Stone Column.
 Top of Exposed Panel Line, Top of Moment Slab at face of Parapet, and Top of Parapet follow the proposed profile grade of IL Route 7.
 See Sheet 7 of 22 for Parapet and Sidewalk Plan and Elevation.
 Stone Column offset from front face of wall may vary by wall supplier. Coordinate Stone Column Layout with wall supplier.
 Locate Concrete Headwall free of proposed drainage structures. See Drainage Plans.



PLAN

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

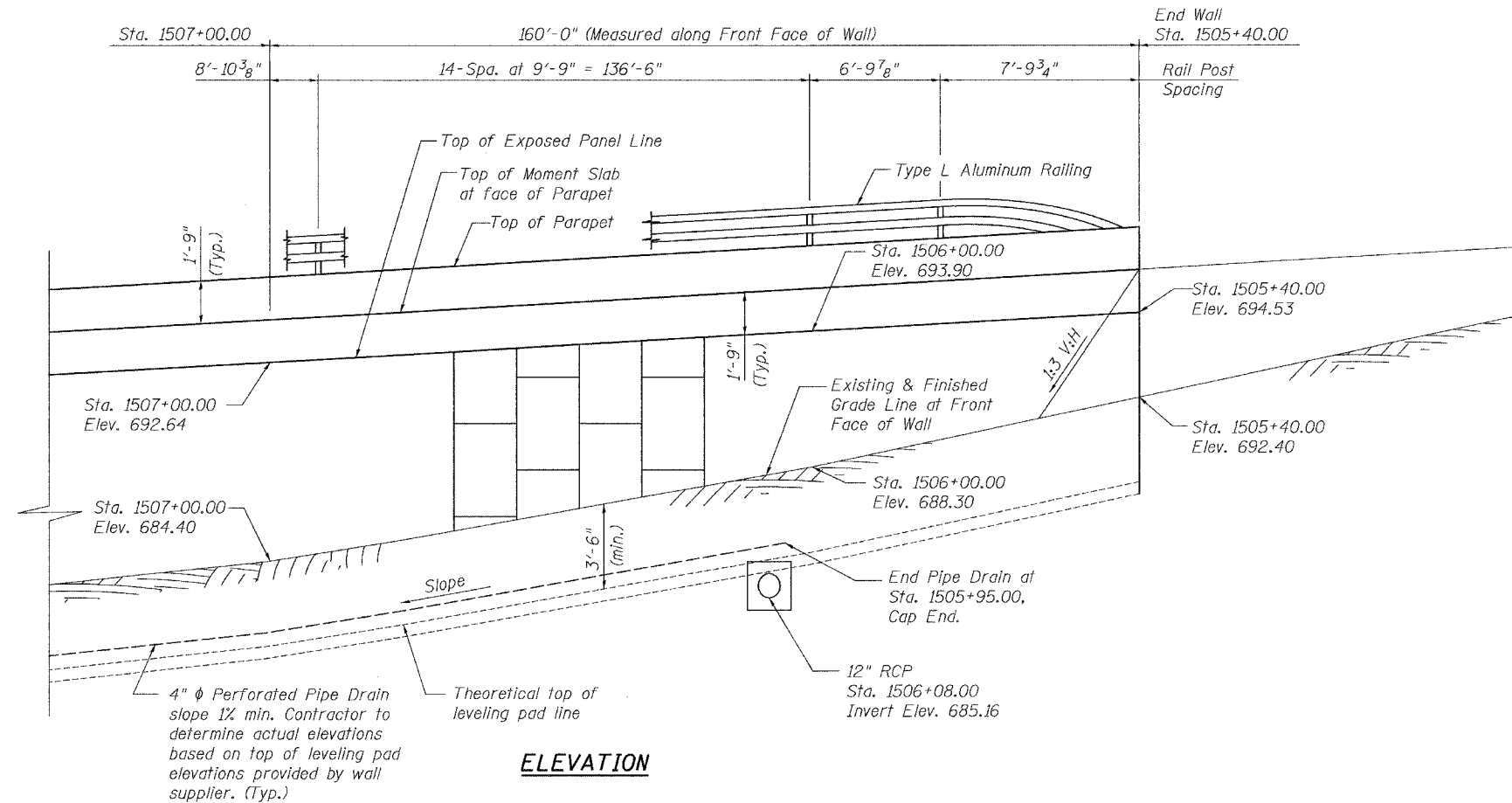
* Bott. Stone Column Elevations are for bidding purposes. Final Elevations to be verified at the time of construction. Stone Columns shall be predrilled to elevation 675.0.

**MSE WALL PLAN & ELEVATION
 STA. 1513+00.00 TO STA. 1510+00.00**

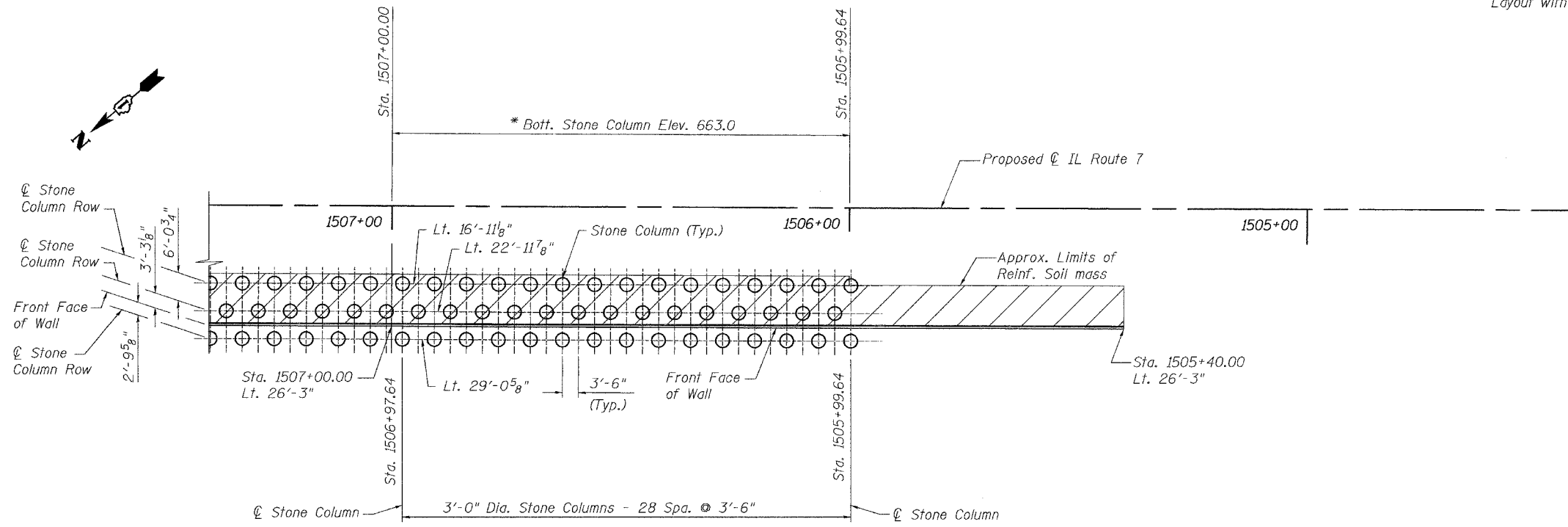
**NORTHWEST RETAINING WALL
 IL. 7 (Southwest Highway)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1505+40.00 TO STA. 1515+78.21
 STRUCTURE NUMBER 016-W970**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	69
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
22 SHEETS



Notes:
 Sta. & offsets are given to the front face of wall. Lengths are measured along the front face.
 Sta. & offsets given for Stone Columns are to the center of the Stone Column.
 Top of Exposed Panel Line, Top of Moment Slab at face of Parapet, and Top of Parapet follow the proposed profile grade of IL Route 7.
 See Sheet 8 of 22 for Parapet and Sidewalk Plan and Elevation.
 Stone Column offset from front face of wall may vary by wall supplier. Coordinate Stone Column Layout with wall supplier.



* Bott. Stone Column Elevations are for bidding purposes. Final Elevations to be verified at the time of construction. Stone Columns shall be predrilled to elevation 675.0.

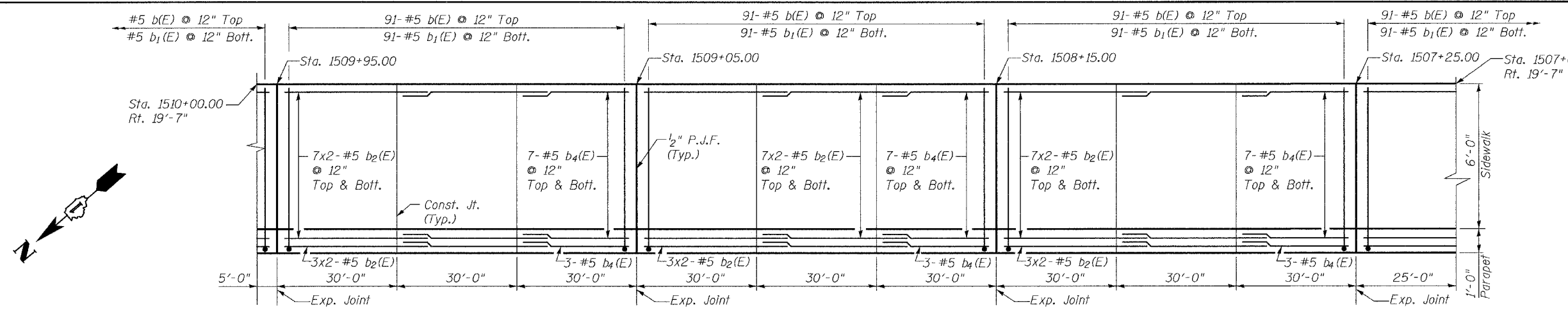
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CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

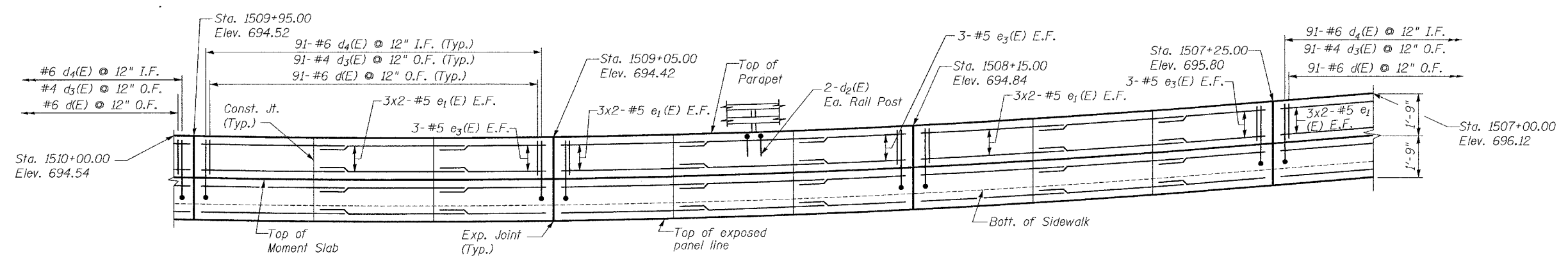
**MSE WALL PLAN & ELEVATION
 STA. 1507+00.00 TO STA. 1505+40.00
 NORTHWEST RETAINING WALL
 IL. 7 (Southwest Highway)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1505+40.00 to STA. 1515+78.21
 STRUCTURE NUMBER 016-W970**

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO.
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FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

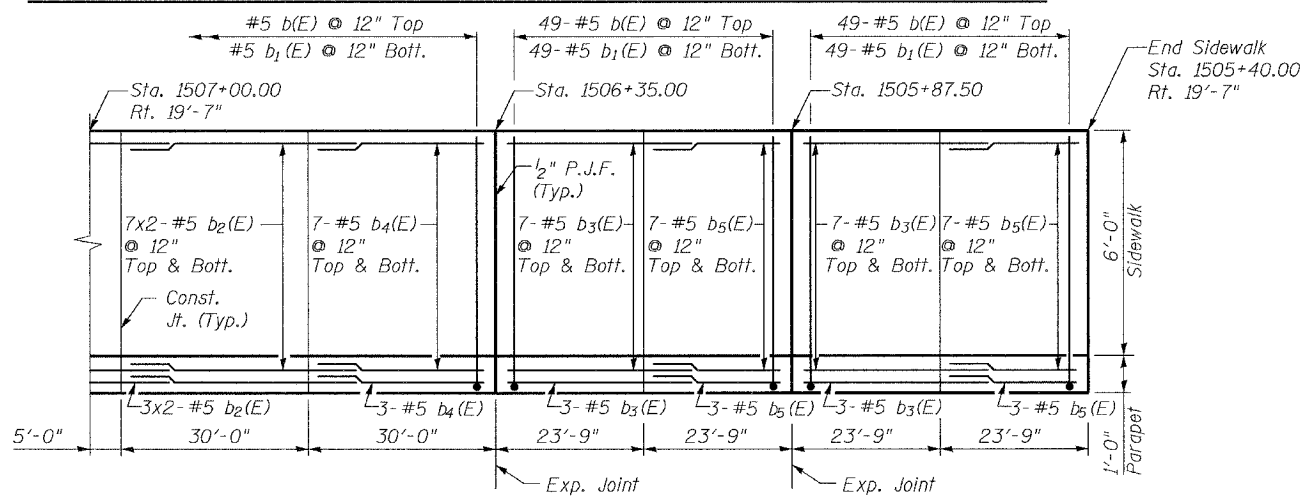
22 SHEETS



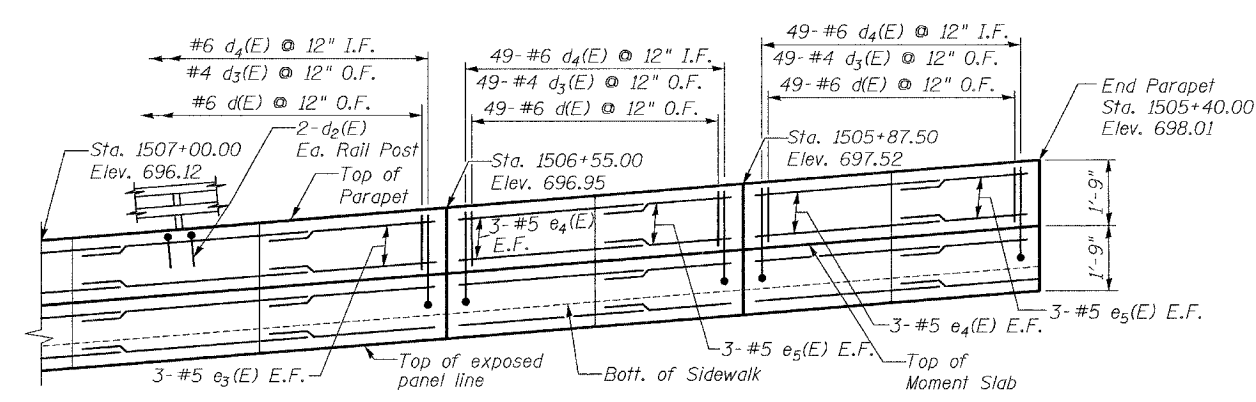
PLAN OF SIDEWALK/PARAPET STA. 1510+00.00 to STA. 1507+00.00



ELEVATION OF SIDEWALK/PARAPET STA. 1510+00.00 to STA. 1507+00.00



PLAN OF SIDEWALK/PARAPET STA. 1507+00.00 to STA. 1505+40.00



ELEVATION OF SIDEWALK/PARAPET STA. 1507+00.00 to STA. 1505+40.00

Notes:
 See Sheet 9 of 22 for wall details and Bill of Material.
 Reinforcement bars designated (E) shall be epoxy coated.
 See Sheet 9 of 22 for section thru Parapet and sidewalk.
 See Wall Plan and Elevation for Aluminum Railing post spacing.

LEGEND:
 I.F. = Inside Face
 O.F. = Outside Face
 E.F. = Each Face

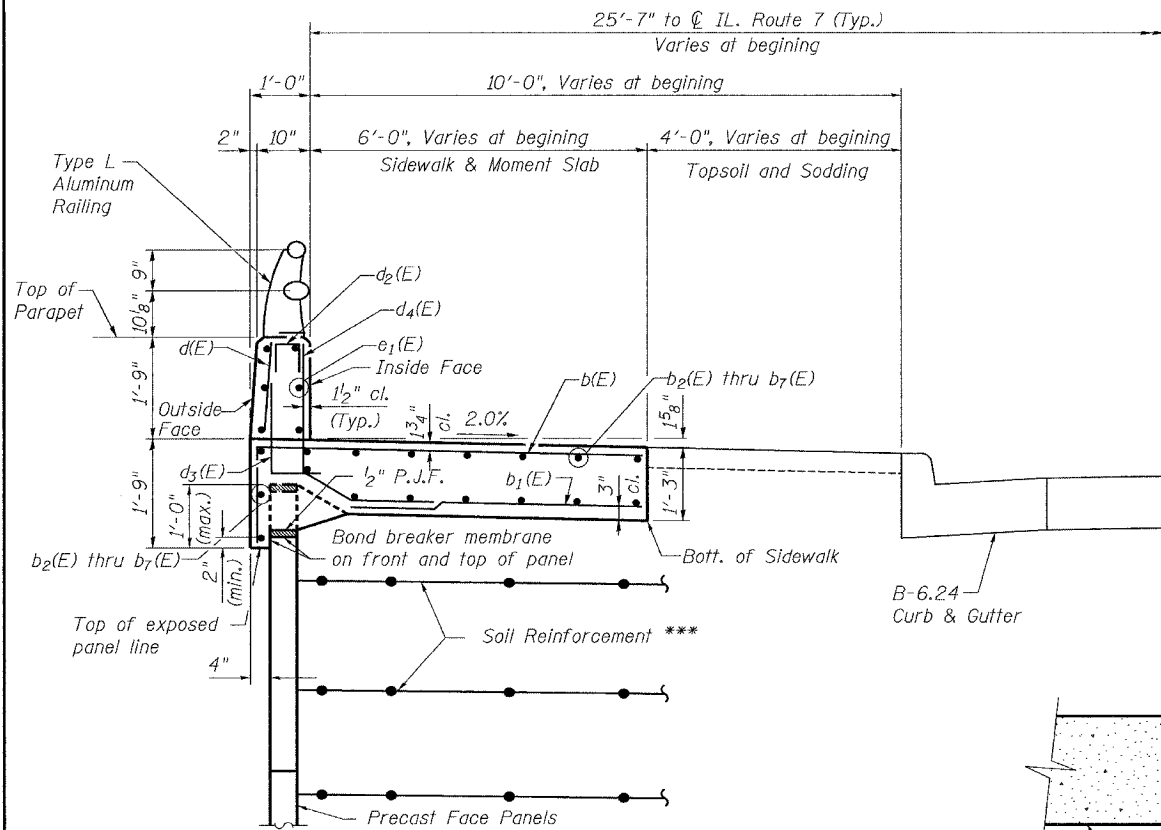
DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

PARAPET & SIDEWALK PLAN & ELEVATION
STA. 1510+00.00 TO STA. 1505+40.00
 NORTHWEST RETAINING WALL
 IL. 7 (Southwest Highway)
 F.A.U. ROUTE 3578 SECTION 1327B
 COOK COUNTY
 STA. 1505+40.00 to STA. 1515+78.21
 STRUCTURE NUMBER 016-W970

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

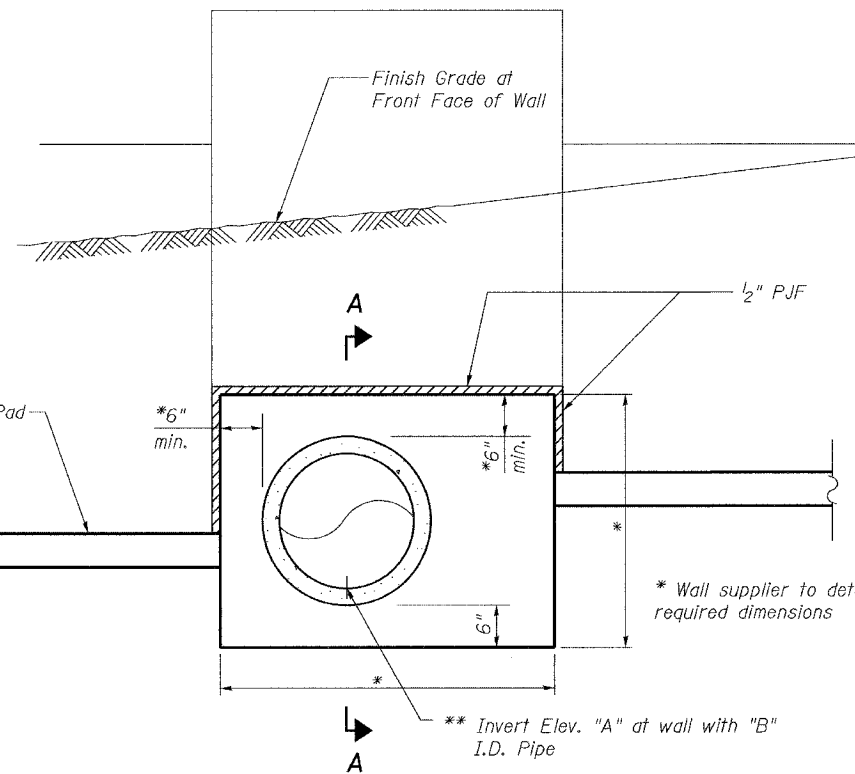
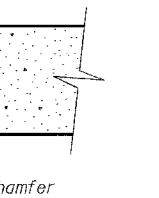
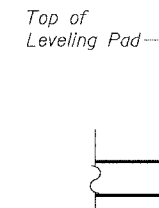
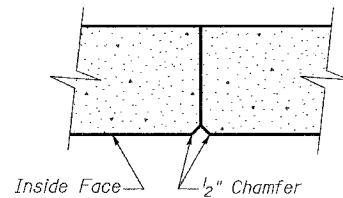
ROUTE NO. FAU 3578	SECTION 1327B	COUNTY COOK	SHEET 108	SHEET 72	SHEET NO. 9 22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



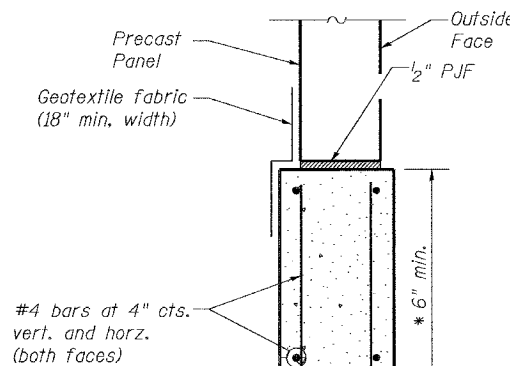
SECTION THROUGH PARAPET & MOMENT SLAB
(Looking Upstation)

*** The M.S.E. Wall Supplier's internal stability design shall account for the moment slab's bearing pressure surcharge of 0.24 k.s.f. and horizontal sliding force of 0.5 kips/ft. of wall.

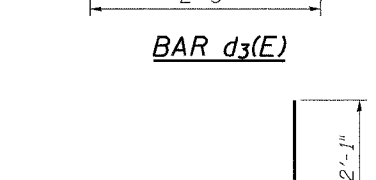
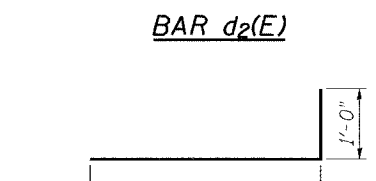
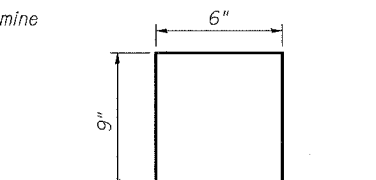
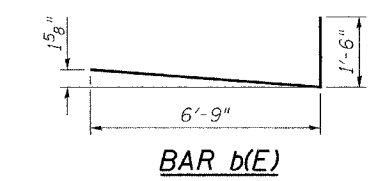
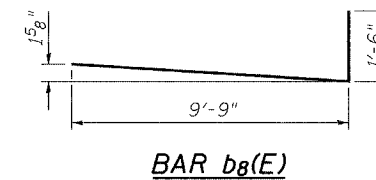
PARAPET CONSTRUCTION JOINT



PIPE PENETRATION DETAIL
(Elevation View)



SECTION A-A



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b(E)	1007	#5	8'-3"	
b1(E)	1007	#5	4'-8"	
b2(E)	340	#5	32'-5"	
b3(E)	34	#5	26'-2"	
b4(E)	153	#5	29'-8"	
b5(E)	34	#5	23'-5"	
b6(E)	17	#5	28'-9"	
b7(E)	34	#5	23'-4"	
b8(E)	45	#5	11'-3"	
b9(E)	45	#5	7'-8"	
d(E)	1052	#4	1'-7"	
d2(E)	214	#4	2'-0"	
d3(E)	1052	#4	3'-3"	
d4(E)	1052	#6	5'-5"	
e1(E)	120	#4	31'-11"	
e3(E)	54	#4	29'-8"	
e4(E)	12	#4	25'-8"	
e5(E)	12	#4	23'-5"	
e6(E)	6	#4	28'-9"	
e7(E)	12	#4	23'-0"	
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		12,750	
Structure Excavation	Cu. Yd.		2787	
Concrete Structures	Cu. Yd.		409.8	
Reinforcement Bars, Epoxy Coated	Pound		50,350	
Aluminum Railing, Type L	Foot		1037	
Stone Columns 2'-6" Dia.	Foot		3861	
Stone Columns 3'-0" Dia.	Foot		5033	
Pipe Underdrains for Structures 4"	Foot		1035	

All Reinforcement bars shall be epoxy coated.

PIPE PENETRATION TABLE

Sta.	A	B
1514+38.00	686.41	12"
1511+88.00	679.76	12"
1510+04.19	675.11	54"
1509+28.00	678.87	12"
1506+08.00	685.16	12"

Cost of Pipe Penetration details are included in the pay item "Mechanically Stabilized Earth Retaining Wall".

DETAILS

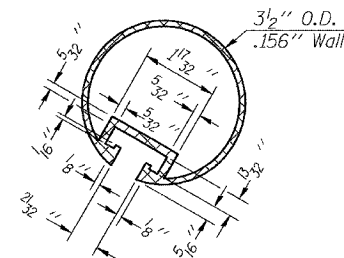
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

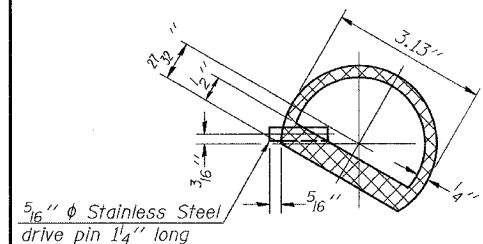
Bollinger, Lach & Associates, Inc.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

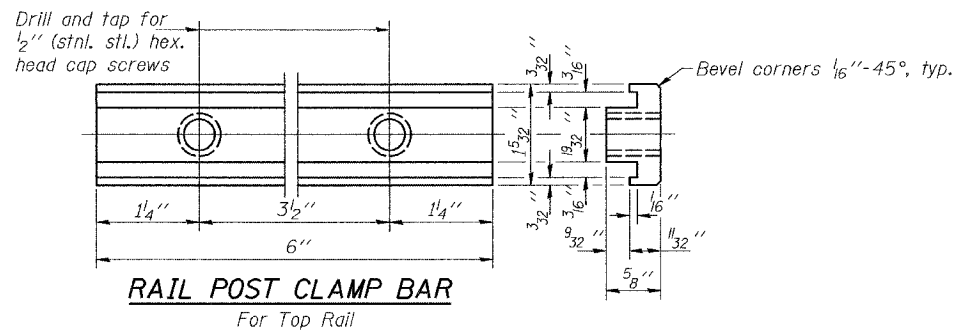
ROUTE NO. FAU 3578	SECTION 1327B	COUNTY COOK	TOTAL SHEETS 108	SHEET NO. 73	SHEET NO. 10 22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



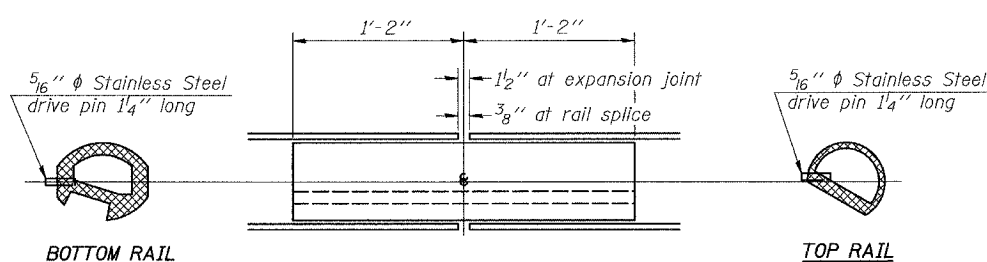
SECTION THRU TOP RAIL



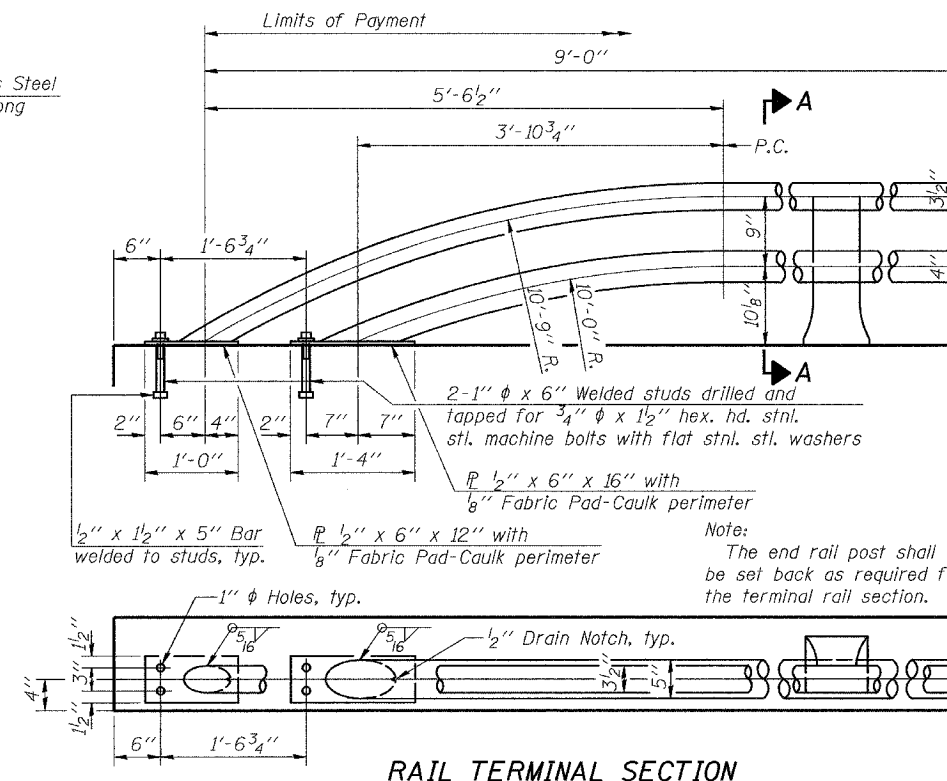
SECTION THRU SPLICE
For Top Rail



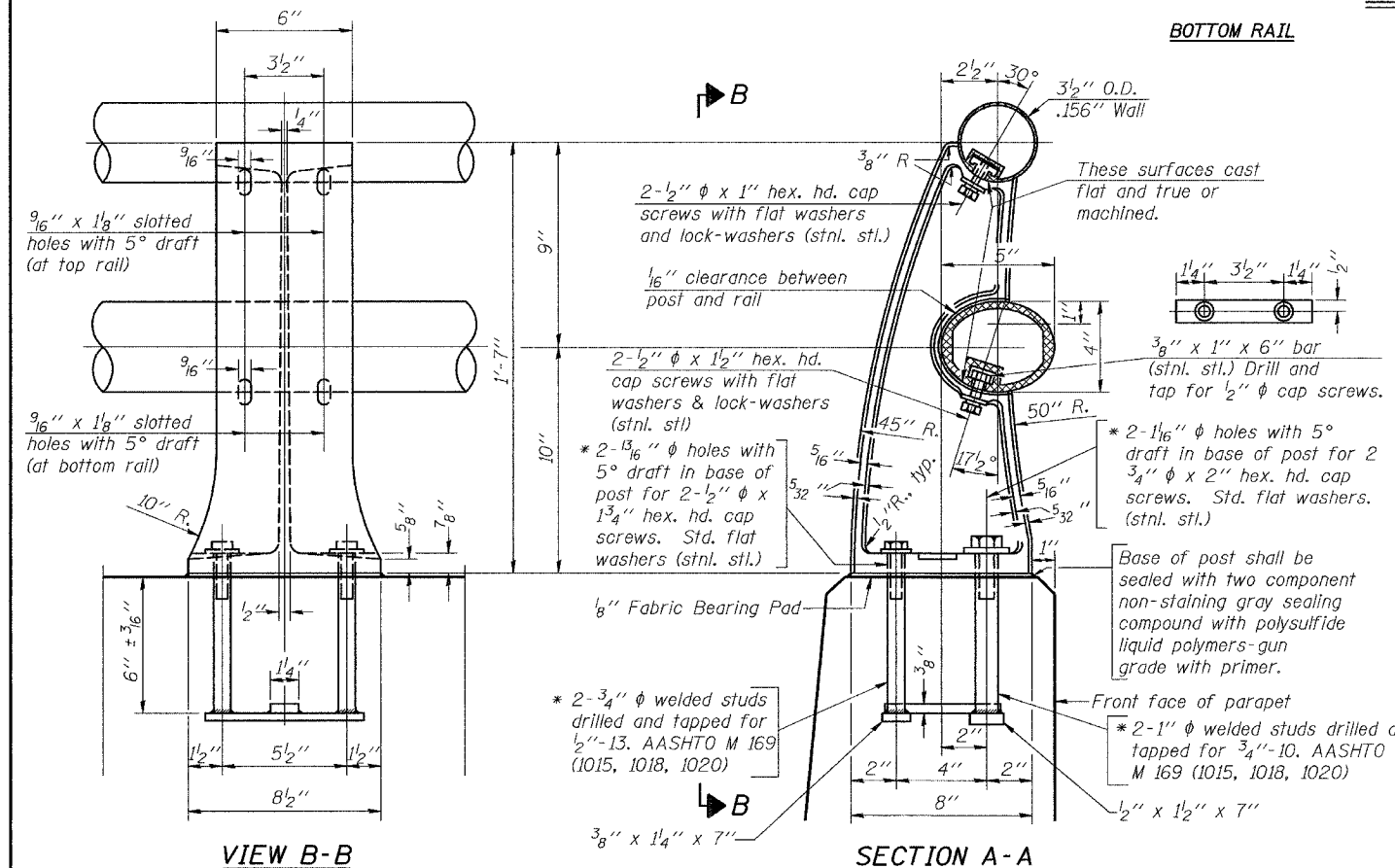
RAIL POST CLAMP BAR
For Top Rail



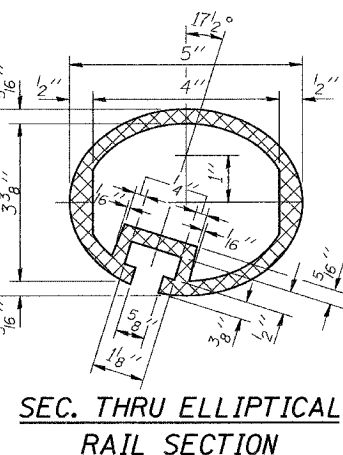
RAIL SPLICE



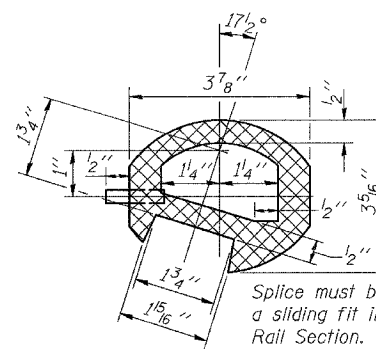
RAIL TERMINAL SECTION



RAIL POST DETAILS



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

Notes:
All Posts shall be normal to parapet.
All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
All joints in rail shall be spliced per detail.
Provide 1-1/8 inch and 2-1/16 inch Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for ALUMINUM RAILING, TYPE L.
Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	1037

TYPE L ALUMINUM RAILING

NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

DESIGNED	
CHECKED	
DRAWN	GM
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

R-20 10-22-04

* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting stainless steel anchor rods of the same diameter and grade as the specified cap screws. Embedment shall be according to the manufacturer's specifications.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	76	22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2836

SOIL BORING LOG

PAGE 1 of 2
DATE September 30, 2004
LOGGED BY Patrick
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 4.0" Hollow Stem Augers HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-4
Northing 1809762.4, Sta. 1508+98.63
Easting 1114789.7, offset 12.04' LT.
Ground Surface Elev. 681.7

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				6.0" ASPHALT, 9.0" CRUSHED STONE	0			
9				ORGANIC CLAY with fibrous peat-dark brown & gray-(A-8)	0			
4	3.0P	15		ORGANIC CLAY-dark gray to black (A-8)	0			
6				CLAY-gray-very stiff to hard (A-6)	1	0.25P	58	
5				ORGANIC CLAY-dark brown (A-8)	0			
4					3			
2	2.5P	24			15	2.5P	13	
5					19			
4					25	NP	12	
4	2.5P	23			25			
5								
3		99						
3					7			
5	1.0B	26			12			
10					14	NR	NR	
5					50			
2					70	NP	35	
2								
3	0.25P	57						
2								
2					5			
2	0.25P	62			6			
15					8	1.5P	11	
2					55			
0					75	NP	21	
1								
2	0.25P	96						
0								
0								
20	0.25P	180						

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2836

SOIL BORING LOG

PAGE 2 of 2
DATE September 30, 2004
LOGGED BY Patrick
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 4.0" Hollow Stem Augers HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-4
Northing 1809762.4, Sta. 1508+98.63
Easting 1114789.7, offset 12.04' LT.
Ground Surface Elev. 681.7

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				CLAY-gray-very stiff to hard (A-6)	0			
0				SILTY CLAY LOAM-brown & gray-medium dense to dense (A-4)	0			
0					6			
3					22			
15					25	NP	12	
19	2.5P	13						
25								
30								
45								
50								
55								
60								
63								
65								
68								
70								
75								
80								

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2836

SOIL BORING LOG

PAGE 1 of 2
DATE August 30- 9/14, 2004
LOGGED BY AD
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-5
Northing 1809824.4, Sta. 1509+73.80
Easting 1114832.8, Offset 19.29' LT.
Ground Surface Elev. 681.1

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				CRUSHED STONE-loose (Fill)	0			
9				CLAY-brown & gray-medium stiff to stiff (A-6) Fill, Wet	0			
7					2			
8	NP	5			2			
8					2	0.25P	66	
3								
3		94						
3								
5	1.25B	30						
5								
3								
5	1.1B	25						
5								
3								
4								
10	0.75P	22						
2								
2								
3	0.5B	28						
3								
3								
15	0.5P	26						
3								
2								
3	0.7B	27						
2								
2								
20	0.9B	27						

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

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

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

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-4 & R-5
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	78
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
22 SHEETS

PAGE 1 of 2
DATE August 10, 2004
LOGGED BY RJ
GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Safety

STRUCT. NO. 016-W970
Station _____
BORING NO. **R-7**
Northing 1809916.7, Sta. 1511+01.63
Easting 1114921.6, Offset 11.07' LT.
Ground Surface Elev. **682.1**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)
0				6.0" ASPHALT, 6.0" CRUSHED STONE	0			
4		103		ORGANIC CLAY with fibrous peat-black (A-8)	2			
4				CLAY-brown & gray-stiff to very stiff (A-6) Fill	2			
7	1.8B	21		ORGANIC CLAY-dark gray (A-8)	2	0.5P	64	
3		106			1		109	
5				CLAY-gray-soft (A-6)	2			
6	2.5B	22			3	0.4B	20	
2		91			3			
2				CLAY-brown & gray-medium stiff to stiff (A-6) Fill, Wet	4	NP	19	
4	0.9B	27			6			
2		98			3		114	
2				CLAY LOAM-brown & gray-medium dense (A-4)	5			
10	0.7B	25			5	1.8B	18	
3				CLAY-gray-stiff to very stiff (A-6)				
3								
5	1.75B	22						
2					4			
3					4			
15	1.5P	24			7	3.5P	20	
2		143			5			
4				CLAY LOAM-brown-soft (A-6)	5			
5	0.4B	23			6	NP	21	
1				ORGANIC CLAY with fibrous peat-black (A-8)				
1					5			
20				SANDY LOAM-gray-medium dense (A-2-4)	6	NP	21	

PAGE 2 of 2
DATE August 10, 2004
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GSI JOB No. 0444

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Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Safety

STRUCT. NO. 016-W970
Station _____
BORING NO. **R-7**
Northing 1809916.7, Sta. 1511+01.63
Easting 1114921.6, Offset 11.07' LT.
Ground Surface Elev. **682.1**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)
0				6.0" ASPHALT, 6.0" CRUSHED STONE	0			
8				ORGANIC CLAY-dark gray (A-8)	2			107
8				CLAY LOAM-gray-very soft (A-6)	2			
9	2.5P	21			3	0.1B	23	
3				CLAY-gray-hard (A-6)	3			114
5					3			
5				CLAY-gray-soft (A-6)	5			
5	2.0P	24			6	0.2B	19	
3								
4				CLAY LOAM-brown & gray-medium stiff to stiff (A-6)	6			118
3	1.0P	24			6	0.7B	17	
2				CLAY LOAM-gray-medium stiff to stiff (A-6)	4			109
3					6			
10	0.75P	25		CLAY-brown & gray-medium stiff (A-6) Fill, Wet	7	1.4B	19	
2								
1					1			104
2					5			
15	0.5P	26			8	0.9B	22	
1								
1				CLAY LOAM-brown-soft (A-6)	1			
2	0.25P	28			2			
1				ORGANIC CLAY-dark gray (A-8)	1			
1					78			
20	0.1B	43		Sand seam @ -39.0'	6			
1					8			
20					40	1.75P	16	

PAGE 1 of 2
DATE September 27, 2004
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805 Amherst Court, Suite 204
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(630) 355-2836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Safety

STRUCT. NO. 016-W970
Station _____
BORING NO. **R-8**
Northing 1909984.4, Sta. 1511+90.22
Easting 1114978.7, Offset 11.25' LT.
Ground Surface Elev. **685.4**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)
0				6.0" ASPHALT, 6.0" CRUSHED STONE	0			
8				ORGANIC CLAY-dark gray (A-8)	2			107
8				CLAY LOAM-gray-very soft (A-6)	2			
9	2.5P	21			3	0.1B	23	
3				CLAY-gray-hard (A-6)	3			114
5					3			
5				CLAY-gray-soft (A-6)	5			
5	2.0P	24			6	0.2B	19	
3								
4				CLAY LOAM-brown & gray-medium stiff to stiff (A-6)	6			118
3	1.0P	24			6	0.7B	17	
2				CLAY LOAM-gray-medium stiff to stiff (A-6)	4			109
3					6			
10	0.75P	25		CLAY-brown & gray-medium stiff (A-6) Fill, Wet	7	1.4B	19	
2								
1					1			104
2					5			
15	0.5P	26			8	0.9B	22	
1								
1				CLAY LOAM-brown-soft (A-6)	1			
2	0.25P	28			2			
1				ORGANIC CLAY-dark gray (A-8)	1			
1					78			
20	0.1B	43		Sand seam @ -39.0'	6			
1					8			
20					40	1.75P	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

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

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

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-7 & R-8
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	80	22 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838

SOIL BORING LOG

PAGE 1 of 2
DATE September 29, 2004
LOGGED BY Patrick
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNShp Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 4.0" Hollow Stem Augers HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-10
Northing 1810100.6, Sta. 1513+42.13
Easting 1115076.5, Offset 11.63' LT.
Ground Surface Elev. 690.6

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
689.6				6.0" ASPHALT, 6.0" CRUSHED STONE	689.6			
10				CLAY-dark brown & gray-medium stiff (A-7) Wet	2			115
4				CLAY LOAM-brown & gray spotted black-very stiff (A-6) Fill	5			
4	2.5P	21			5	1.9B	17	
687.1								
4				CLAY-gray-stiff to hard (A-6)	2			114
3					3			
-5	2	0.5P	27	CLAY-brown & gray-soft to medium stiff (A-6) Fill, Wet	-25	6	1.9B	17
2					2			108
2					4			
4	0.5P	24			7	4.6B	19	
2					2			111
2					6			
-10	3	1.5P	24		-30	9	3.1B	19
679.6								
3			109	CLAY-brown & gray-hard (A-6) Fill				
5								
5	4.25B	19						
677.1								
3			99	CLAY-brown & gray-soft to medium stiff (A-6) Fill, Wet	5			116
2					8			
-15	3	0.9B	26		-35	10	2.7B	17
1			104					
3								
4	0.9B	23						
672.1								
2			83	CLAY-dark brown & gray-medium stiff (A-7) Wet	4			125
3					7			
-20	3	0.5B	38		-40	9	2.8B	13

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

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805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838

SOIL BORING LOG

PAGE 2 of 2
DATE September 29, 2004
LOGGED BY Patrick
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNShp Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 4.0" Hollow Stem Augers HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-10
Northing 1810100.6, Sta. 1513+42.13
Easting 1115076.5, Offset 11.63' LT.
Ground Surface Elev. 690.6

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
646.6				CLAY-gray-stiff to hard (A-6)	646.6	7	126	
4				CLAY-gray-very stiff (A-6)				
627.1								
4				SAND-gray-medium dense (A-3)	4			
3					4			
-5	3	1.1B	24		-5	3	1.1B	24
687.4								
2				SILTY LOAM-gray-loose to medium dense (A-4)				
1								
3	0.5P	27		CLAY-gray-very stiff (A-6)	3			124
2					7			
-10	2				-50	11	3.5B	13
677.4								
1								
3					2			
1					2			
1	0.5P	26			-70	7	NP	24
674.9								
2								
1								
1	0.5P	30			-15	1	0.5P	30
677.4								
3			105	CLAY-brown & gray-very stiff (A-6) Fill				
4								
3	2.7B	23						
674.9								
1			101	CLAY-brown & gray-soft (A-6) Fill, Wet				
2								
-20	3	0.4B	25		-40	8	2.1B	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

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805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838

SOIL BORING LOG

PAGE 1 of 2
DATE September 20, 2004
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GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNShp Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station
BORING NO. R-11
Northing 1810160.1, Sta. 1514+18.34
Easting 1115124.2, Offset 13.74' LT.
Ground Surface Elev. 693.4

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
692.4				TOPSOIL with Stone (Fill)	692.4			
4				CLAY-brown & gray-soft (A-6) Fill, Wet	1			87
6	3.5P	21		CLAY-dark gray-soft (A-7) Wet	1			
669.9					2	0.4B	34	
3			102		1			104
3					3			
-5	3	1.1B	24		-25	4	0.9B	23
687.4								
2				CLAY-brown & gray-medium stiff to stiff (A-6)				
1					3			112
3	0.5P	27			3			
664.9					4	1.8B	19	
3				CLAY-brown & gray spotted black-medium stiff (A-6) Fill, Wet	3			111
1					4			
-10	2				-30	6	2.3B	22
677.4								
2								
1								
1	0.5P	26		CLAY-gray-stiff to very stiff (A-6)				
674.9								
2								
1								
1	0.5P	30			-35	7	2.1B	20
677.4								
3			105	CLAY-brown & gray-very stiff (A-6) Fill				
4								
3	2.7B	23						
674.9								
1			101	CLAY-brown & gray-soft (A-6) Fill, Wet				
2								
-20	3	0.4B	25		-40	8	2.1B	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

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-10 & R-11
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	81
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 18
22 SHEETS

PAGE 2 of 2
DATE September 20, 2004
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Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-7836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Automatic

STRUCT. NO. 016-W970
Station _____

BORING NO. **R-11**
Northing 1810160.1, Sta. 1514+18.34
Easting 1115124.2, Offset 13.74' LT.
Ground Surface Elev. **693.4**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
				Surface Water Elev. <i>n/a</i>				
				Stream Bed Elev. <i>n/a</i>				
				Groundwater Elevation:				
				First Encounter <i>n/a</i>				
				Upon Completion <i>n/a</i>				
				After _____ Hrs.				
4		134		CLAY-gray-stiff to very stiff (A-6)	11			
9					11			
-45	16	1.6B	9		-65	11	3.7B	11
5		119			9			128
7					15			
-50	9	1.8B	16		-70	22	3.7B	12
6		126			18			
6					15			
-55	8	2.5B	12	Silty LOAM-gray-very dense (A-4)	-75	22	NP	33
8					15			
14					24			
-60	24		15		-80	32	NP	21

End Of Boring @ -80.0'
Hollow Stem Augers to -10.0'
Rotary Drilling to Completion
CME-75 Automatic Hammer

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

PAGE 1 of 2
DATE September 20, 2004
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GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-7836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" Hollow Stem Augers HAMMER TYPE Safety

STRUCT. NO. 016-W970
Station _____

BORING NO. **R-12**
Northing 1810219.0, Sta. 1514+95.15
Easting 1115173.6, Offset 14.03' LT.
Ground Surface Elev. **695.5**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
				Surface Water Elev. <i>n/a</i>				
				Stream Bed Elev. <i>n/a</i>				
				Groundwater Elevation:				
				First Encounter 655.5				
				Upon Completion <i>Dry</i>				
				After _____ Hrs.				
5			106	CRUSHED STONE	2			96
7					4			
8	3.0B	22		CLAY-brown & gray-medium stiff to stiff (A-6) Fill, Wet	7	0.9B	28	
1					2			79
2					5			
-5	4	1.25P	17	ORGANIC CLAY-black (A-8)	-25	5	0.4B	42
1			102		2			117
2					4			
6	0.9B	24		CLAY-brown & gray-medium stiff to stiff (A-6) Fill, Wet	5	2.0P	16	
2			98		3			
3					6			
-10	4	0.9B	27	CLAY-gray-very stiff (A-6)	-30	8	2.0P	18
1			102		5			110
4					10			
4	0.5B	24			15	3.5B	20	
1			102		6			123
4					10			
-15	6	0.5B	25		-35	15	3.5B	20
5			108		5			102
7					10			
11	1.9B	21			21			
4			99		30			
8					40	21	2.0P	24
-20	10	1.5P	26		-40	21	2.0P	24

End Of Boring @ -70.0'
Hollow Stem Augers
D-120 Safety Hammer

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

PAGE 2 of 2
DATE September 20, 2004
LOGGED BY RJ
GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-7836

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TOWNSHIP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" Hollow Stem Augers HAMMER TYPE Safety

STRUCT. NO. 016-W970
Station _____

BORING NO. **R-12**
Northing 1810219.0, Sta. 1514+95.15
Easting 1115173.6, Offset 14.03' LT.
Ground Surface Elev. **695.5**

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
				Surface Water Elev. <i>n/a</i>				
				Stream Bed Elev. <i>n/a</i>				
				Groundwater Elevation:				
				First Encounter 655.5				
				Upon Completion <i>Dry</i>				
				After _____ Hrs.				
				CLAY-gray-very stiff (A-6)				
4			134		12			
9					12			
-45	16	1.6B	9		-65	13	1.5P	13
10					15			
15					22	0.5P	19	
5			119		5			
7					13			
-50	9	1.8B	16		-50	16	0.5P	14
6			126		5			
6					13			
-55	8	2.5B	12		-75	23	1.5P	24
8					20			
14					625.5	-70	2.3	1.5P
-60	24		15					
6			126		6			123
6					15			
-55	8	2.5B	12		-55	18	1.8B	14
8					21			
14					30			
-60	24		15		-60	30	2.5P	9

End Of Boring @ -70.0'
Hollow Stem Augers
D-120 Safety Hammer

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

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-11 & R-12
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	83
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 20
22 SHEETS

PAGE 1 of 1
DATE December 3, 2004
LOGGED BY TOB
GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-2838

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland Park LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.5" Hollow Stem Augers HAMMER TYPE CME-75 Automatic

STRUCT. NO. 016-W970
Station XX
BORING NO. **R-16**
Station 1809786.5, Sta. 1509+34.95
Offset 1114817.4, Offset 6.52' LT
Ground Surface Elev. **681.7**

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				6.0" ASPHALT, 6.0" CRUSHED STONE	0			
4				ORGANIC CLAY with fibrous peat -dark brown to black (A-8)	1			62
6				CLAY-brown & gray-stiff to hard (A-6) Fill	2	0.2B		62
6.58.7	4.25P	19						
1			100					
3								
-5	3	1.25B	23	CLAY-gray-stiff to very stiff (A-6)	-25	ST	1.25P	19
675.7								
1			99					
1				Vane Shear @ -27.0' Su (Peak) >3625psf			>3625	VS (psf) 22
2	0.8B							
1				CLAY-brown & gray-medium stiff to stiff (A-6) Fill, Wet	2			108
1					3			
-10	1	1.5P	25		-30	5	1.8B	21
1			97					
1								
2	0.9B							
1			68					
1								
-15	2	0.5B	50		-35	7	2.7B	18
1			33	ORGANIC CLAY with fibrous peat -dark brown to black (A-8)				
1								
1	0.2B		140					
4				End Of Boring @ -40.0' Hollow Stem Augers CME-75 Automatic Hammer	4			112
6					6			
-20	ST	1.0P	140		-40	12	1.8B	13
641.7								

PAGE 1 of 1
DATE December 4, 2004
LOGGED BY TOB
GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-2838

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland Park LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.5" Hollow Stem Augers HAMMER TYPE CME-75 Automatic

STRUCT. NO. 016-W970
Station XX
BORING NO. **R-17**
Station 1809843.8, Sta. 1510+10.02
Offset 1114865.9, Offset 6.51' LT
Ground Surface Elev. **681.7**

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				CRUSHED STONE	0			
5			95		2			98
6					4			
6	2.2B	22		CLAY-brown & gray-stiff to very stiff (A-6) Fill	4	1.6B		25
2			98					
3				CLAY-brown & gray-stiff to very stiff (A-6) Fill, Wet	-25	ST	1.5P	25
-5	3	2.1B	24					
655.7								
1					2			68
2				ORGANIC CLAY-dark gray to black-(A-7/A-8)	3			
2	2.0P	24			4	1.1B		49
653.7								
1			96					
2				CLAY-gray-very stiff to hard (A-6)	-30	ST	2.0P	23
-10	3	1.25B	25					
4								
7								
6	1.25P	23						
4								
8								
10								
-35	8	3.5B	19		-35	8	3.5B	19
2			80					
3								
4	2.7B	23						
3								
5				End Of Boring @ -40.0' Hollow Stem Augers CME-75 Automatic Hammer	5			115
-20	7	2.2B	24		-40	12	6.2B	16
641.7								

PAGE 1 of 1
DATE December 4, 2004
LOGGED BY TOB
GSI JOB No. 0444

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204
Naperville, Illinois 60565
(630) 351-2838

SOIL BORING LOG

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNESHIP Orland Park LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.5" Hollow Stem Augers HAMMER TYPE CME-75 Automatic

STRUCT. NO. 016-W970
Station XX
BORING NO. **R-18**
Station 1809901.0, Sta. 1510+85.01
Offset 1114914.4, Offset 6.45' LT
Ground Surface Elev. **682.3**

DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
0				TOPSOIL-dark brown to black (Fill)	0			
681.3					2			95
2				CLAY-brown- & gray-stiff to very stiff (A-6) Fill, Wet	4			
4					4	2.7B	21	
661.3								
1				ORGANIC CLAY-black-stiff (A-8)				ST 0.75P 88
2								
2				Vane Shear @ -25.0' Su (Peak) =1150psf	-25	VS	(psf) 87	
-5	3	1.9B	23					
655.7								
2								
3				Vane Shear @ -27.0' Su (Peak) >1750psf				>1750
3	1.0B		26					VS (psf) 36
654.3								
2				CLAY-gray-stiff to very stiff (A-6)	2			
3					3			
-10	ST	3.0P	20		-30	3	1.0B	20
2								
3								
3	2.5P	27						
2								
3								
-15	3	3.1B	21		-35	10	2.5B	19
1			80					
4								
4	1.6B	27						
1								
8				End Of Boring @ -40.0' Hollow Stem Augers CME-75 Automatic Hammer	8			115
10								
-20	2	1.3B	27		-40	9	2.2B	17
642.3								

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

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

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

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-16, R-17 & R-18
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	84	22 SHEETS

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204 Naperville, Illinois 60565 (630) 351-2366

SOIL BORING LOG

PAGE 1 of 1
DATE December 4, 2004
LOGGED BY TOB
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Retaining Wall
TWNShP Orland Park LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.5" Hollow Stem Augers HAMMER TYPE CME-75 Automatic

STRUCT. NO. 016-W970
Station XX
BORING NO. R-19
Station 1809958.3, Sta. 1511+60.02
Offset 1114962.8, Offset 6.52'L.T.
Ground Surface Elev. 684.5

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
0				6.0" ASPHALT, 6.0" CRUSHED STONE	0			
2		100		CLAY-brown & gray-stiff to very stiff (A-6) Fill	0			
3					1		975	
4	1.8B	25			VS (pcf) 153			
					661.5			
1				CLAYEY SAND & GRAVEL-gray (A-2-6)	-25	ST	NP	14
2					2			103
3	2.0P	18			5			
4	1.8B	23		6	2.7B	24		
2		98		CLAY-gray-very stiff (A-6)	3			111
3					6			
4	2.0P	26			8	3.1B	18	
2				ORGANIC CLAY-dark gray to black (A-8)	3			105
3		72			5			
4	1.0B	43		7	3.1B	19		
2				ORGANIC CLAY-dark brown to black (A-8)	9			112
3	0.5P	67			11			
4	0.5P	70		10	3.4B	15		

End Of Boring @ -40.0'
Hollow Stem Augers
CME-75 Automatic Hammer

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204 Naperville, Illinois 60565 (630) 351-2366

SOIL BORING LOG

PAGE 1 of 2
DATE August 10, 2004
LOGGED BY RJ
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Bridge Foundation
TWNShP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Safety

STRUCT. NO. E 016-0465/P 016-2847
Station
BORING NO. BR-1 & BR-1A
Station 1810236.3, Sta. 1515+46.73
Easting 1115233, Offset 20.12' RT.
Ground Surface Elev. 696.2

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
0				4" ASPHALT, 6" CRUSHED STONE	0			
6				CLAY-brown & gray-medium stiff to very stiff-(A-6) Fill, Wet	6			
3					2			
4	1.5P	25			6	1.0P	39	
					3		98	
3				ORGANIC CLAY-black (A-7) Wet	3			98
4	1.1B	27			4			
5	2.25P	24			5	2.25P	24	
1				CLAY-gray-very stiff (A-6)	4			112
2					6			
3		100			9	3.0B	19	
2				CLAY-gray-very stiff (A-6)	4			113
3		95			7			
4	.9B	28			10	3.4B	18	
1				ORGANIC CLAY-black (A-7) Wet	6			110
2					8			
3				ORGANIC CLAY-black (A-7) Wet	11			110
4	1.7B	32			12	2.5B	20	
5	1.0P	35			12	2.5B	20	

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amber Court, Suite 204 Naperville, Illinois 60565 (630) 351-2366

SOIL BORING LOG

PAGE 2 of 2
DATE August 10, 2004
LOGGED BY RJ
GSI JOB No. 0444

ROUTE IL Route 7 DESCRIPTION Bridge Foundation
TWNShP Orland LOCATION Township 36 N Range 12 E Orland Park, IL
COUNTY Cook DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE Safety

STRUCT. NO. E 016-0465/P 016-2847
Station
BORING NO. BR-1 & BR-1A
Station 1810236.3, Sta. 1515+46.73
Easting 1115233, Offset 20.12' RT.
Ground Surface Elev. 696.2

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOIST (%)
6				CLAY-gray-very stiff (A-6)	6			
13					13			
14	NP	13			14	NP	13	
6				SANDY LOAM-gray-medium dense (A-2-6)	6			
13					13			
14	NP	13			14	NP	13	
7				CLAY-gray-very stiff (A-6)	7			128
9					9			
11	3.7B	12			11	3.7B	12	
7				CLAY-gray-very stiff (A-6)	7			128
9					9			
11	3.7B	12			11	3.7B	12	
7				CLAY-gray-very stiff (A-6)	7			128
9					9			
11	3.7B	12			11	3.7B	12	
50/b	NP	20		End Of Boring @ -54.0' Apparent obstruction @ -54.0' Casing unable to penetrate @ -54.0' Hollow Stem Augers to -10.0' Rotary Drilling to Completion D-120 Safety Hammer	50/b	NP	20	
55					55			
55					55			
50/b	NP	20		Offset Boring to W and S to BR-1A Blind Drilled to 53.5' and Encountered Obstruction-Terminated	50/b	NP	20	
55					55			
55					55			

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

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

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

Note: Soil Boring BR-1A is an offset continuation of BR-1, see log.

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

B Bollinger, Lach & Associates, Inc.

SOIL BORING LOGS R-19 & BR-1
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327B	COOK	108	85
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

SHELBY TUBE TEST DATA

Page 1 of 2

Prepared by Kurt Schmuck Checked by _____

COUNTY Cook STATION 1509+43 BORING ST-2 LAB PROJ. NO. 05015
 ROUTE FAU-3578 SECTION 1327 B OFFSET 8 ft. Rt. JOB NO. _____
 STRUCTURE NO. 016-2847 DATE 7/19/2005 GROUND SURFACE ELEVATION 681.77

Specimen Number	Depth (ft)	Q _u (tsf)	Moisture (%)	Wet Unit Wt. (pcf)	Triaxial Data				Description
					c (psf)	Φ (°)	c' (psf)	Φ' (°)	
	0.00								0 to 7.5 feet not sampled
	↓								↓
	↓								↓
	7.50								↓
1-1	8.00	0.59	27.8	121.2					Gray-brown SiC w/ Silt pockets & lenses
1-2	8.62	0.50	24.5	124.4					Same
1-3	9.25								No Recovery
1-4	9.50								↓
2-1	10.00	UUTx	28.9	124.3	440	0.4	420	4.5	Lt. gray SiC w/ Silt pockets & lenses – water bearing pockets
2-2	10.62	CONS	26.8	125.2					Lt. gray SiC w/ Silt & Clay pockets – water bearing pockets
2-3	11.25	0.59	29.2	118.7					Same, top ¼, to black SiC
2-4	11.50								No Recovery
3-1	12.12	0.53	45.8	107.0					Black SiC w/ organic SiL pockets
3-2	12.75	UUTx	68.1	93.9	840	1.8	450	25.8	Black SiC w/ large organic SiL pockets
3-3	13.38	CONS	56.4	99.2					Black SiC – somewhat crumbly
3-4	13.50								No Recovery
4-1	14.12	0.21	52.1	103.4					Dark gray SiC w/ SiL pockets – crumbly – slickensided area
4-2	14.75	CONS	53.9	102.9					Dark gray SiC w/ black SiL pockets – secondary structure
4-3	15.38	UUTx	77.6	92.6	460	0.0	460	0.0	Dark gray & black SiC – somewhat crumbly – peat pockets lower ½
4-4	15.50								No Recovery
5-1	16.12	0.29	84.3	92.1					Dark gray, organic SiCL w/ peaty pockets
5-2	16.75	0.55	93.5	89.2					Dark gray, organic SiC w/ peaty pockets
5-3	17.38	UUTx	204.5	74.2	880	0.0	880	0.0	Tan organic Silt – very peaty & fibrous
5-4	17.50								No Recovery

Revised 12/2/03

Soil1004A

SHELBY TUBE TEST DATA

Page 2 of 2

Prepared by Kurt Schmuck Checked by _____

COUNTY Cook STATION 1509+43 BORING ST-2 LAB PROJ. NO. 05015
 ROUTE FAU-3578 SECTION 1327 B OFFSET 8 ft. Rt. JOB NO. _____
 STRUCTURE NO. 016-2847 DATE 7/19/2005 GROUND SURFACE ELEVATION 681.77

Specimen Number	Depth (ft)	Q _u (tsf)	Moisture (%)	Wet Unit Wt. (pcf)	Triaxial Data				Description
					c (psf)	Φ (°)	c' (psf)	Φ' (°)	
6-1	18.12	CONS	82.1	91.7					Lt. brown organic SiL w/ peaty pockets – fibrous
6-2	18.75	CONS	95.2	88.4					Greenish-gray organic SiCL w/ isolated peat pockets – lower ¼ peaty
6-3	19.38								No Recovery
6-4	19.50								↓
7-1	20.12	1.21	139.0	80.8					Greenish – gray organic SiL
7-2	20.75	UUTx	85.0	91.6	1040	0.0	1040	0.0	Same
7-3	21.38	CONS	68.2	97.6					Same
7-4	21.50								No Recovery
8-1	22.12	UUTx	44.7	108.9	640	0.0	640	0.0	Gray fine sand, to gray SiC, to gray SiC w/ SiL pockets & wood chips
8-2	22.75	CONS	59.6	99.1					Gray organic SiC w/ small woodchips top ¼
8-3	23.38	0.69	34.4	116.1					Gray SiC w/ SiL pockets
8-4	23.50								No Recovery
9-1	24.12	0.07	51.5	114.3					Gray SiC w/ large SaL pockets & lenses
9-2	24.75	0.63	27.5	124.2					Gray SiL w/ SiC lenses
9-3	25.38	0.79	21.9	129.5					Gray Clayey SiL w/ small stones
9-4	25.50								No Recovery

Revised 12/2/03

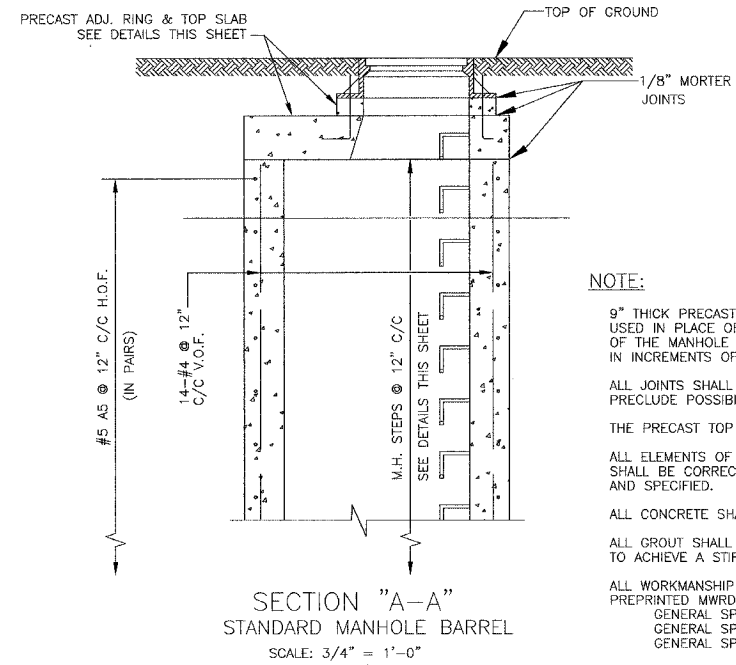
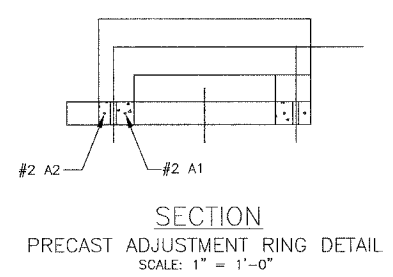
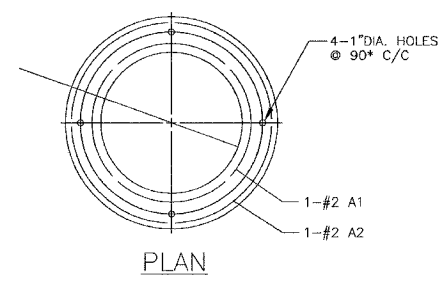
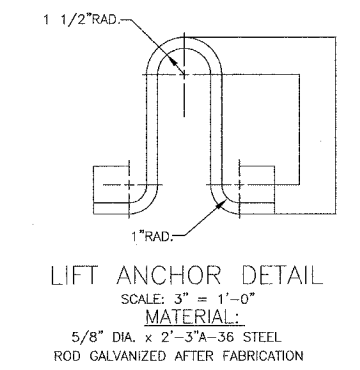
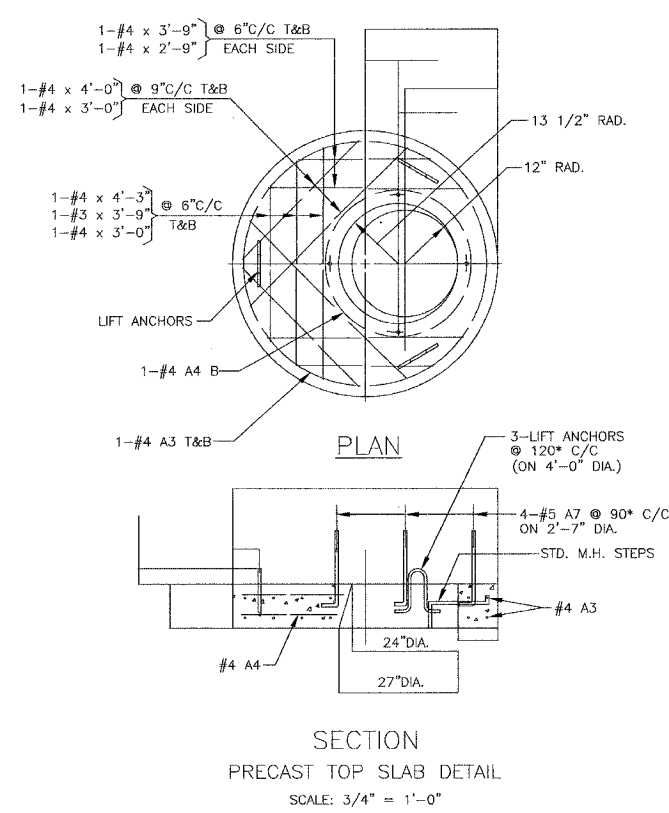
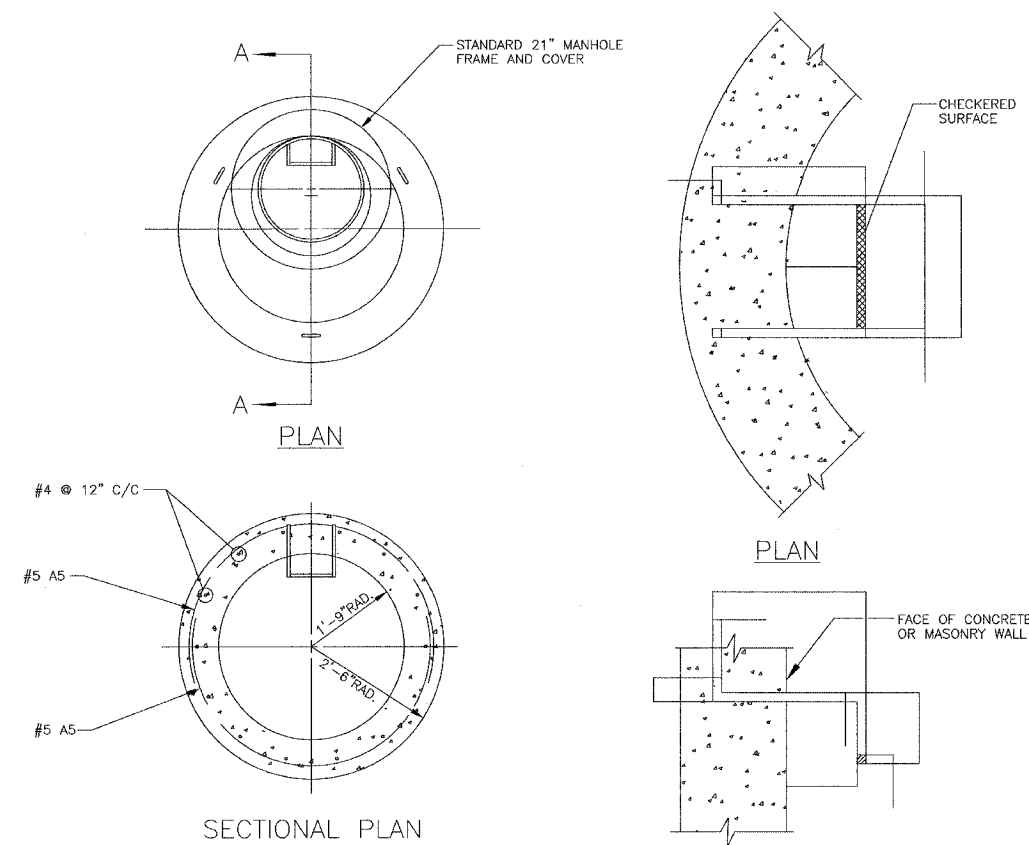
Soil1004A

DESIGNED	-
CHECKED	-
DRAWN	MD
CHECKED	SRT

 **Bollinger, Lach & Associates, Inc.**

SOIL BORING LOG ST-2
NORTHWEST RETAINING WALL
IL. 7 (Southwest Highway)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1505+40.00 to STA. 1515+78.21
STRUCTURE NUMBER 016-W970

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	86
STA. 1503+19.73		TO STA. 1528+17.76		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



ELEVATION MANHOLE STEPS

SCALE: 2" = 1'-0"

MATERIAL:
DUCTILE IRON GRADE 65-45-12 FULLY ANNEALED CONFORMING TO ASTM SPECIFICATIONS

MARK	SIZE	LENGTH	TYPE	A	B	R
A1	#2	7'-6"	②	-	-	13 1/2"
A2	#2	9'-6"	②	-	-	17"
A3	#4	15'-0"	②	-	-	27 1/2"
A4	#4	9'-3"	②	-	-	16 1/2"
A5	#5	8'-9"	③	8'-9"	-	27 1/2"
A7	#5	2'-0"	①	6"	1'-6"	-

NOTE:

9" THICK PRECAST CONCRETE RINGS WITH CAST IN PLACE RUNGS MAY BE USED IN PLACE OF CAST IN PLACE CONCRETE WHEN EXTENDING THE HEIGHT OF THE MANHOLE BARREL. ALL EXTENSION SHALL BE IN ONE PIECE AND IN INCREMENTS OF 12".

ALL JOINTS SHALL BE CLEANED, SQUARED AND GROUTED IN A MANNER TO PRECLUDE POSSIBILITY OF LEAKS AT JOINT.

THE PRECAST TOP SLAB SHALL BE REMOVED AND REPLACED AS REQUIRED.

ALL ELEMENTS OF THE MANHOLE DISTURBED OR DAMAGED DURING ALTERATION SHALL BE CORRECTED OR REPLACED TO MEET THE STANDARD HEREIN SHOWN AND SPECIFIED.

ALL CONCRETE SHALL BE CLASS "R".

ALL GROUT SHALL BE 1 PART CEMENT TO 3 PARTS SAND WITH MINIMUM WATER TO ACHIEVE A STIFF PLASTIC CONSISTANCY WITH ZERO SLUMP.

ALL WORKMANSHIP AND MATERIALS NOT SPECIFIED SHALL BE AS PER STANDARD PREPRINTED MWRDGC SPECIFICATIONS TITLED:
GENERAL SPECIFICATIONS - CONSTRUCTION CONTRACTS
GENERAL SPECIFICATIONS - SEWERS
GENERAL SPECIFICATIONS - CONCRETE

PROCEDURE:

A) TO RAISE ELEVATION 0" TO 8" MAX., ADD 4" THICK ADJUSTMENT RINGS AS DETAILED. INCREMENTS OF LESS THAN 4" SHALL BE OBTAINED BY HAND PACKING A DRY CEMENT GROUT OVER 100% OF THE BEARING AREA.

B) TO RAISE ELEVATION OVER 8" AND LESS THAN 12", REMOVE THE 4" ADJUSTMENT RING AND EXTEND THE 9" THICK MANHOLE BARREL 12" WITH CAST IN PLACE CONCRETE REINFORCED AS DETAILED AND WITH LADDER RUNG AS DETAILED. TOP OF EXISTING CONCRETE TO BE CLEANED AND ROUGHENED AND NEW CONCRETE PLACED IN A MANNER TO INSURE BONDING AND NO LEAKAGE. FOR INCREMENTS BETWEEN 8" AND 12" PLACE GROUT FILLER AS IN (A) ABOVE.

C) TO RAISE ELEVATION 12" AND ABOVE, ADD TO 9" THICK MANHOLE BARREL ONLY IN INCREMENTS OF 12" WITH RUNGS AT 12" O.C. AS DESCRIBED IN (B). FOR INCREMENTS BETWEEN 12" ADD OR REMOVE 4" ADJUSTMENT RINGS AND GROUT FILLER AS DESCRIBED IN (A) AND (B).

D) TO LOWER ELEVATION 0" TO 4", REMOVE 4" THICK ADJUSTMENT RING AND FILL INCREMENTS OF 0" TO 4" WITH GROUT AS DESCRIBED IN (A).

E) TO LOWER ELEVATION MORE THAN 4", REMOVE 9" THICK MANHOLE BARREL ONLY IN INCREMENTS OF 12" AND ADD OR REMOVE 4" THICK ADJUSTMENT RINGS AND GROUT AS REQUIRED AND AS DESCRIBED IN (A) AND (B).

Rev.	Description	Appr.	Date

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: [Date]

SCALE: [Scale]

DRAWING CODE: [Code]

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: [Date]

SCALE: [Scale]

DRAWING CODE: [Code]

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: [Date]

SCALE: [Scale]

DRAWING CODE: [Code]

STANDARD NO. 8-120

PROCEDURE FOR ADJUSTING ELEVATION OF EXISTING 42" DIA. STANDARD MANHOLES

SHEET NUMBER: X-X

PAGE NUMBER: XX

REVISIONS	
NAME	DATE

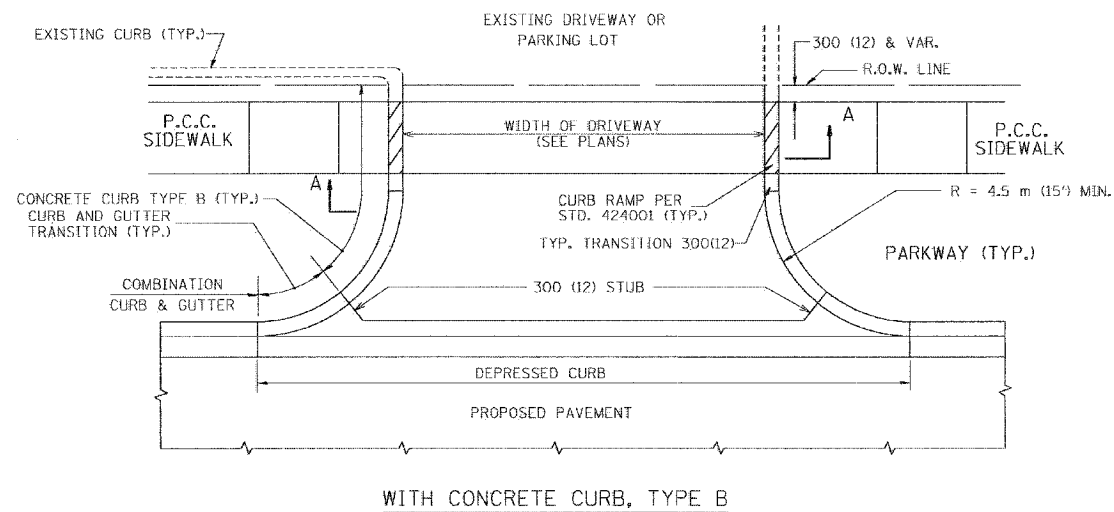
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. ROUTE 3576 (IL. ROUTE 7)

IL. ROUTE 7
MWRD DETAILS

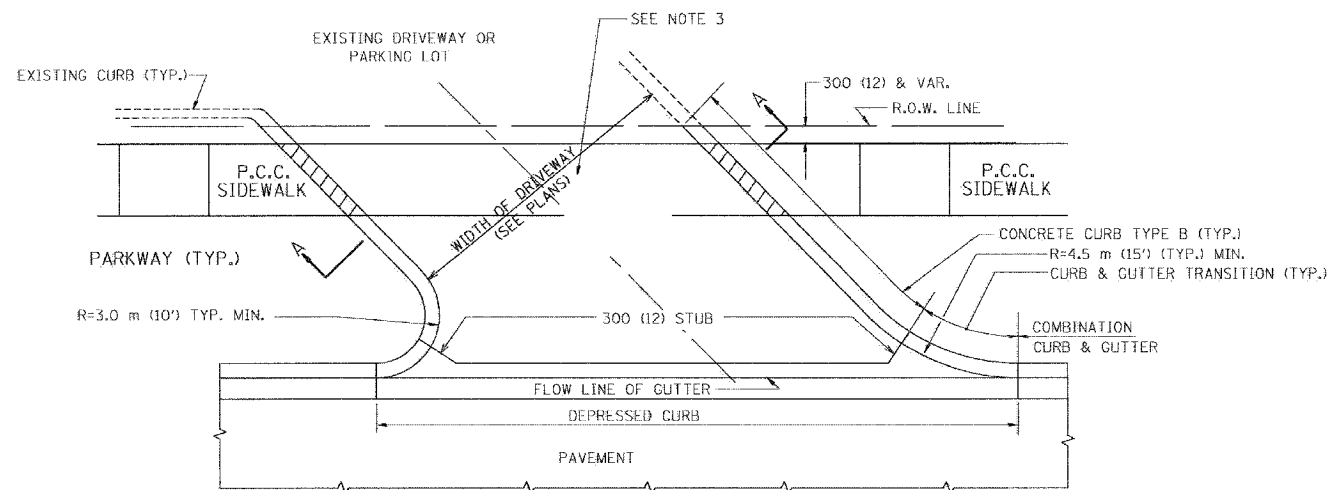
SCALE: VERT. [Scale]
HORIZ. [Scale]
DATE: MAR. 10, 2006

DRAWN BY BCD
CHECKED BY SLR

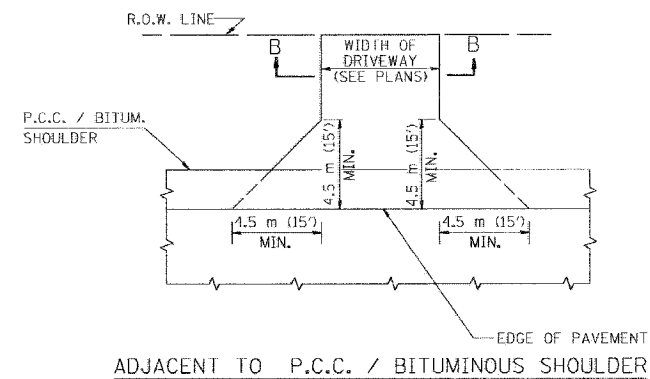
F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	87
STA. _____		TO STA. _____		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



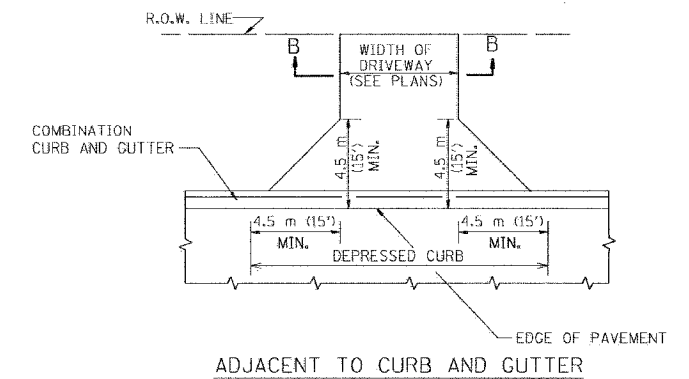
WITH CONCRETE CURB, TYPE B



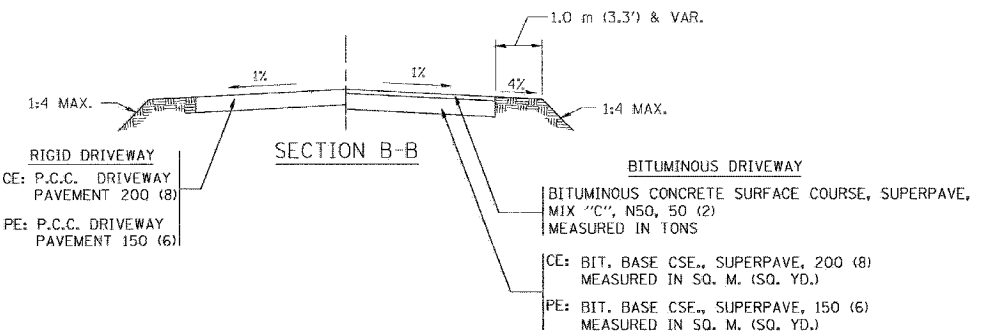
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / BITUMINOUS SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE
 MIX "C", N50, 50 (2)
 MEASURED IN TONS
 AGGREGATE BASE CSE., TYPE A 200 (8)
 MEASURED IN SQ. M. (SQ. YD.)

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

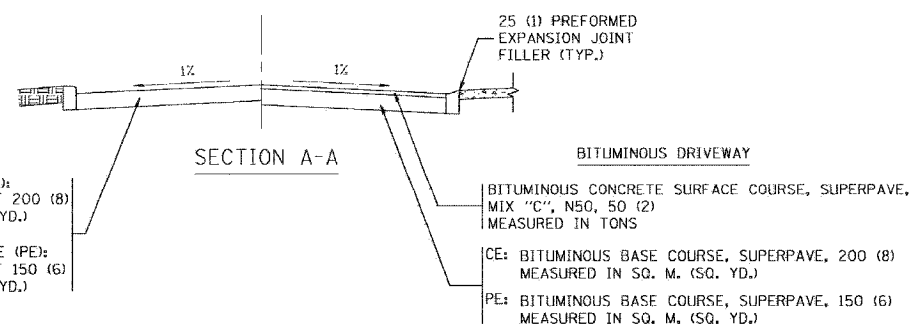
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 1.2 METERS (4 FEET) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

25 (1) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



RIGID DRIVEWAY
 COMMERCIAL ENTRANCE (CE):
 P.C.C. DRIVEWAY PAVEMENT 200 (8)
 MEASURED IN SQ. M. (SQ. YD.)
 NON-COMMERCIAL ENTRANCE (PE):
 P.C.C. DRIVEWAY PAVEMENT 150 (6)
 MEASURED IN SQ. M. (SQ. YD.)

BITUMINOUS DRIVEWAY
 BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE,
 MIX "C", N50, 50 (2)
 MEASURED IN TONS
 CE: BITUMINOUS BASE COURSE, SUPERPAVE, 200 (8)
 MEASURED IN SQ. M. (SQ. YD.)
 PE: BITUMINOUS BASE COURSE, SUPERPAVE, 150 (6)
 MEASURED IN SQ. M. (SQ. YD.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

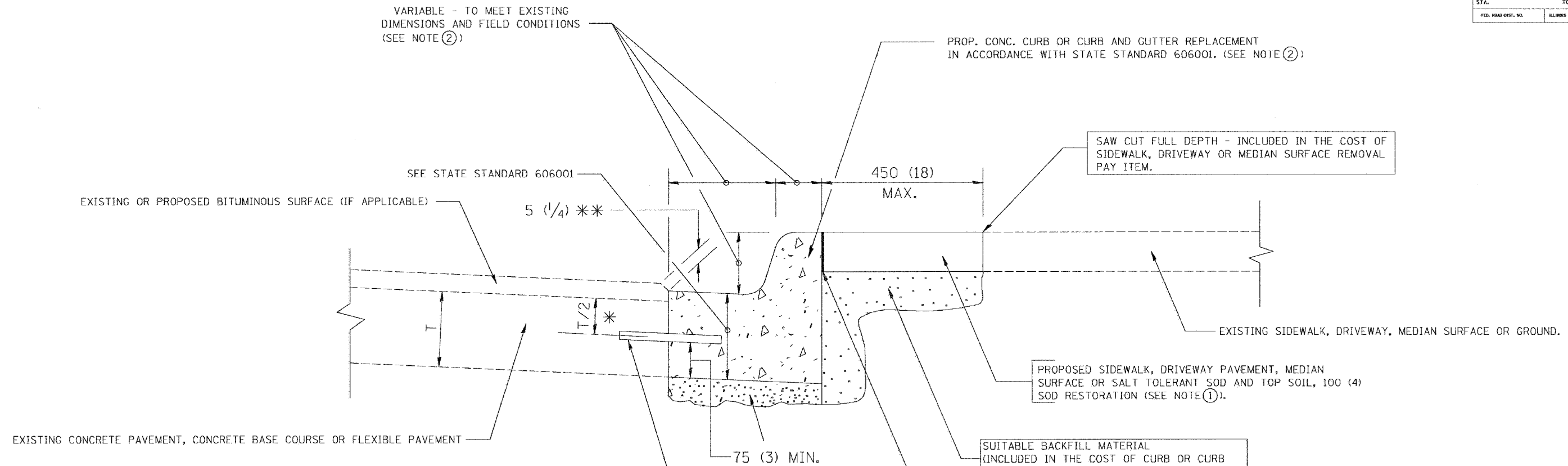
ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
 DISTANCE BETWEEN R.O.W. AND
 FACE OF CURB / EDGE OF
 SHOULDER >= 4.5 m (15')

REVISIONS	
NAME	DATE
P. LOFLEUR	04-15-03
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01

SCALE: NONE
 DATE PLOTTED: 04/17/2003
 DRAWN BY: SG
 CHECKED BY: JFP

F. A.U. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	89
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

SEE STATE STANDARD 606001

EXISTING OR PROPOSED BITUMINOUS SURFACE (IF APPLICABLE)

5 1/4 ***

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

75 (3) MIN.

PROB. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 100 (4) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 20 (3/4) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 100 (4) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 100 (4) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED NO. 20 (NO. 6) EPOXY COATED TIE BARS 600 (24) LONG AT 600 (24) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR "CURB REMOVE AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
SALT TOLERANT SOD AND TOP SOIL, 100 (4) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
⑤ THE COST OF BITUMINOUS SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

* 75 (3) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
* * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS	
NAME	DATE
M. DE YONG	05/28/91
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01

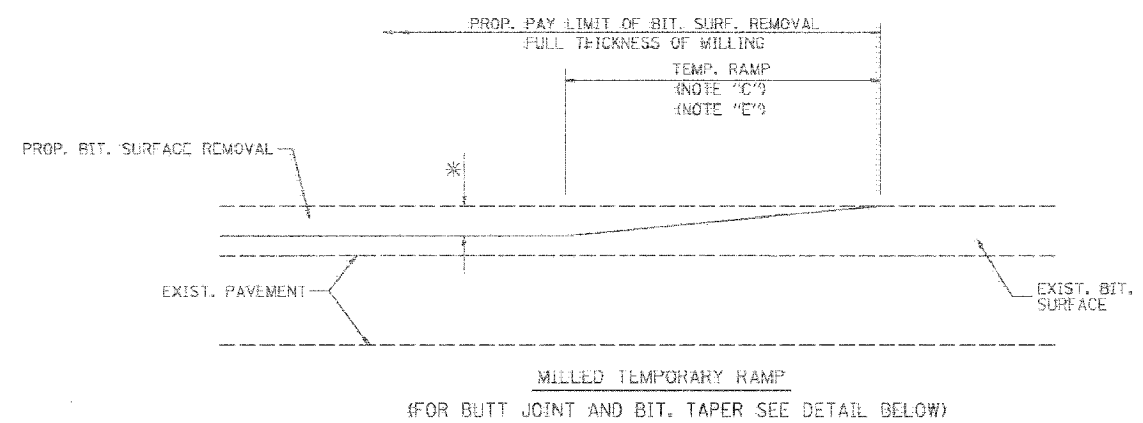
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

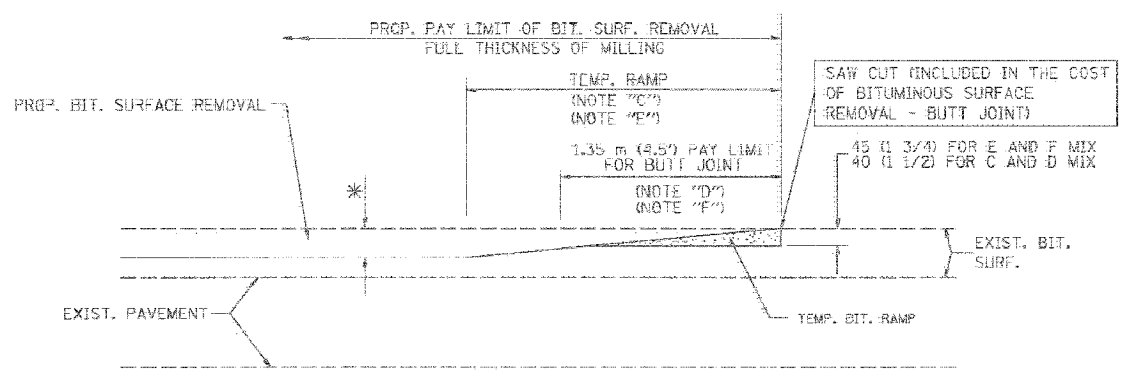
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: NONE
DATE: **DATE**
DRAWN BY:
CHECKED BY:

P. & M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5578	1327B	COOK	108	90
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



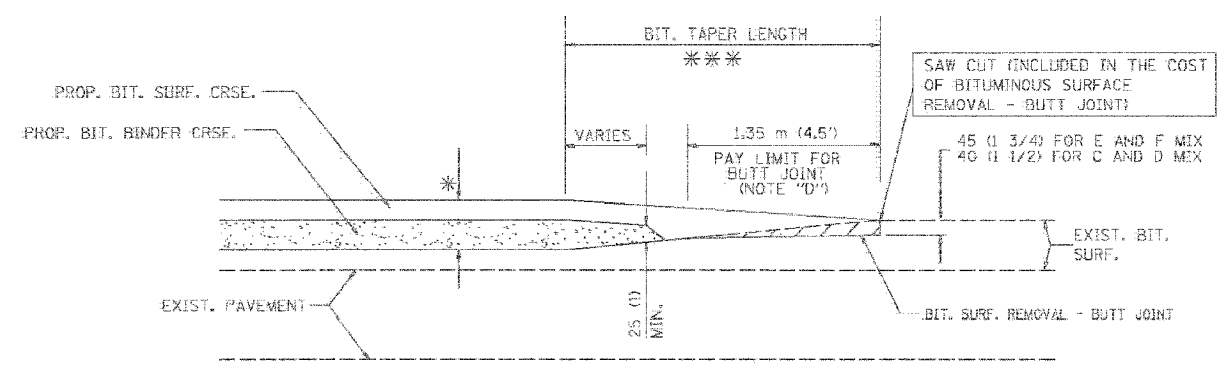
OPTION 1



BITUMINOUS CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

OPTION 2

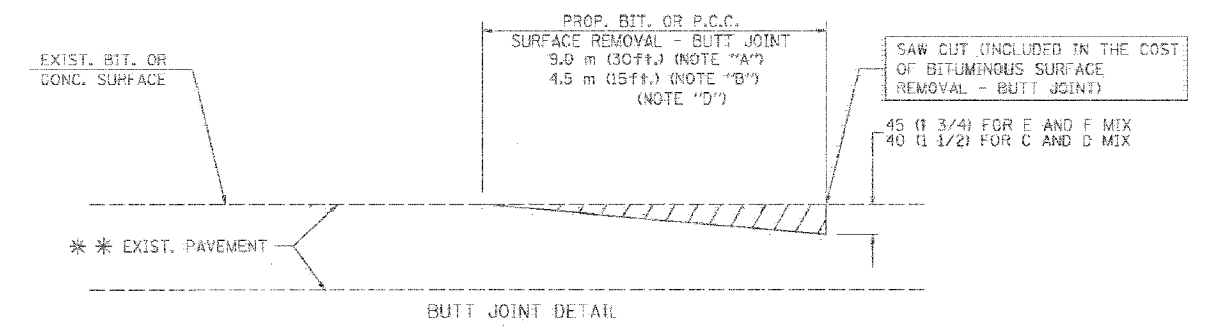
TYPICAL TEMPORARY RAMP



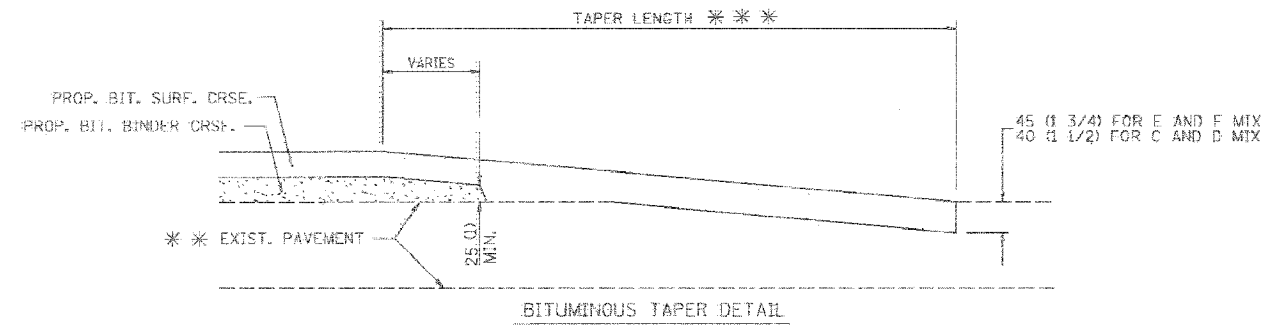
BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING

DATE TIME: 000-SPEC-VHDD32



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

*** PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 FT.) PER INCH OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
 - G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:
THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. COMEZ	04/06/01

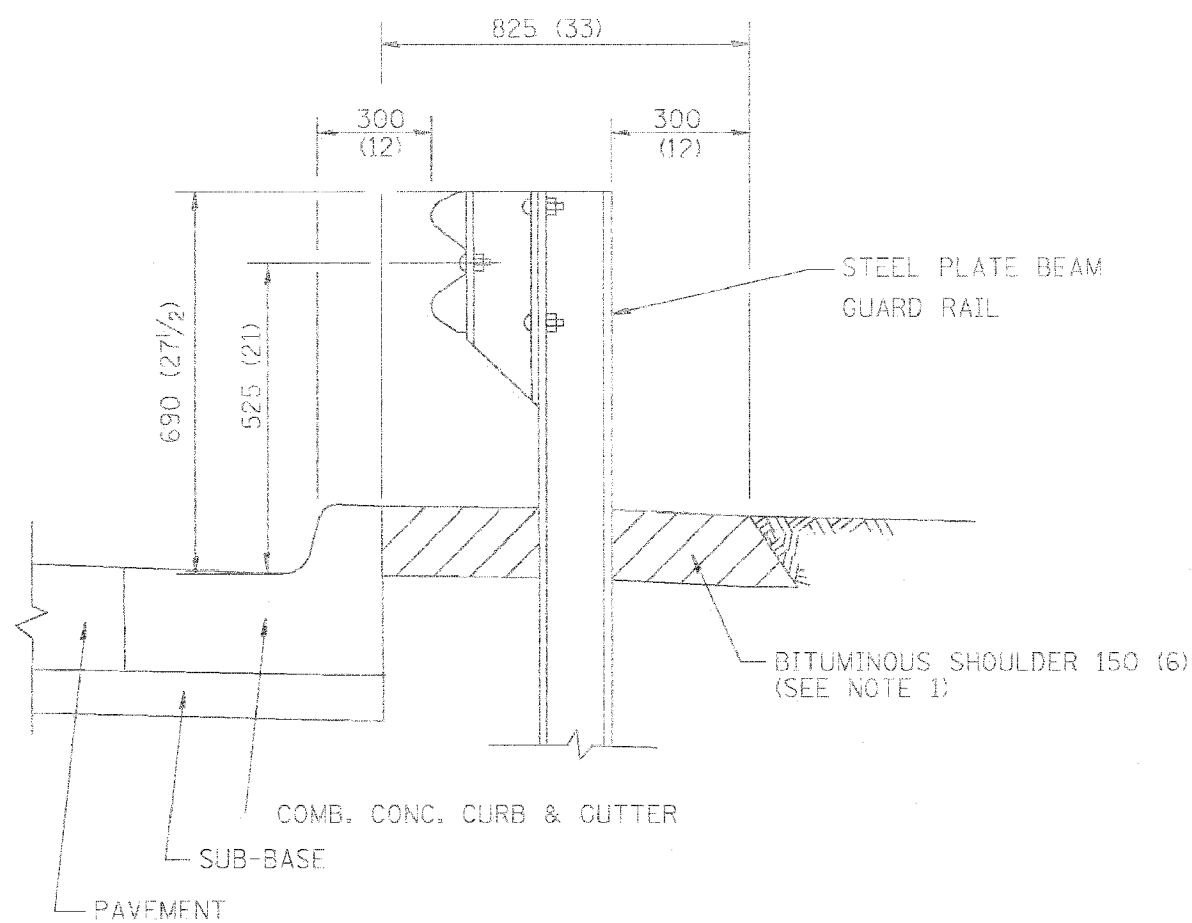
ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE
DATE PLOTTED: 10/18/2002

DRAWN BY
CHECKED BY
BD400-05 (VT-BD32)
REVISION DATE: 04/06/01

F. & M. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	91
STA.		TO STA.		
FED. AID PROJ. NO.	ALLIANCE	FED. AID PROJECT		

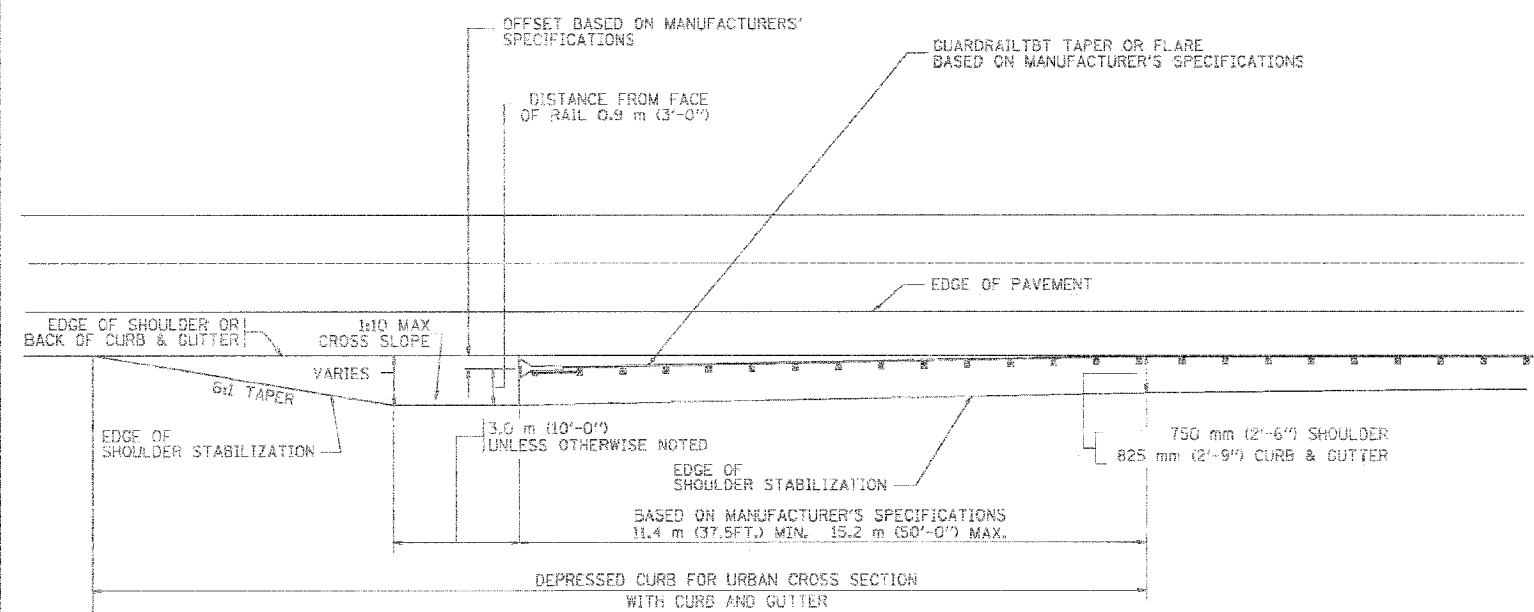


- NOTES: 1. THE BITUMINOUS SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: BITUMINOUS SHOULDER 150 (6) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER m² (sq. yd.) AS "BITUMINOUS SHOULDER 150 (6)."

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER [FOR ROADWAY SPEED 60 kmh (35 MPH) TO 70 kmh (45 MPH)]



STABILIZATION AT TBT TY. 1 SPL.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

STABILIZATION AT TBT TY 1 SPL.

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	05/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00

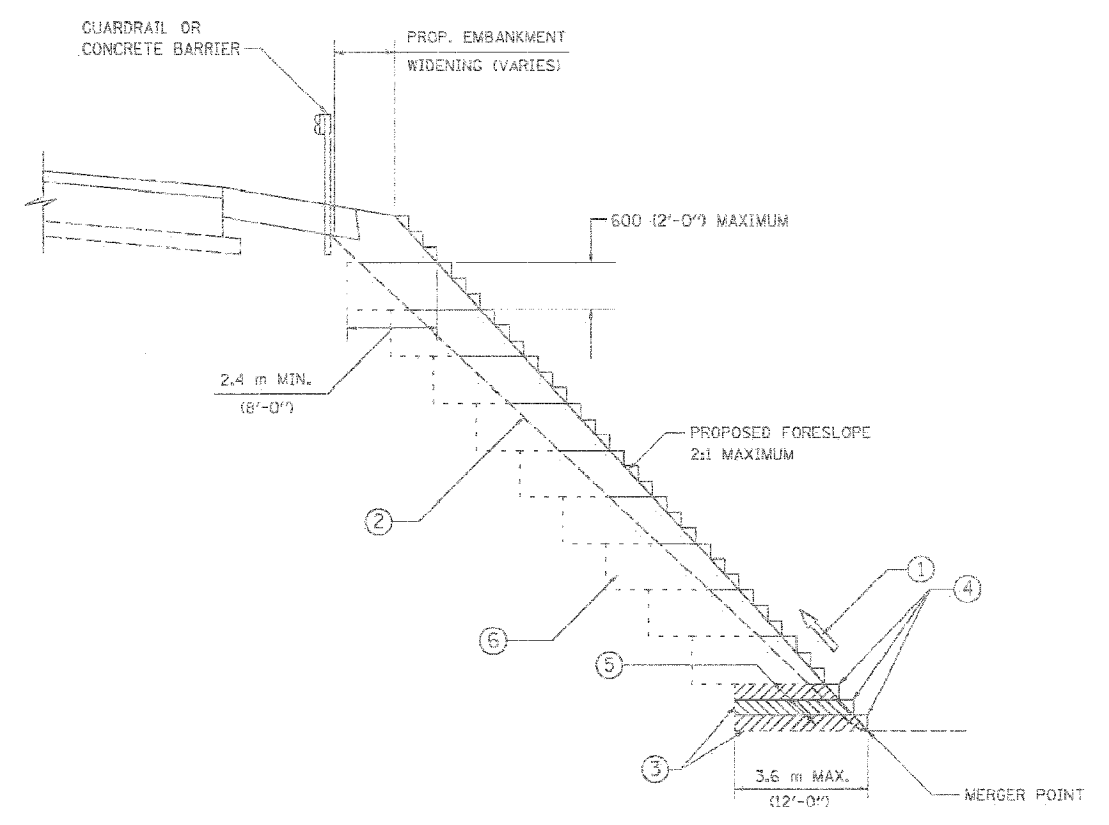
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CHECKED BY DATE 10/18/2002

DATE TIME
DGN SPEC
V-BUS

DD600-10 (SD 34)
REVISION DATE: 08/28/00

P. A. M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	92
STA.		TO STA.		
PER. TO S. DIST. S.	ALLOWED	PER. AND PROJECT		



TYPICAL BENCHING DETAIL
FOR EMBANKMENT

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 200 (8-INCH) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION (SPECIAL)". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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

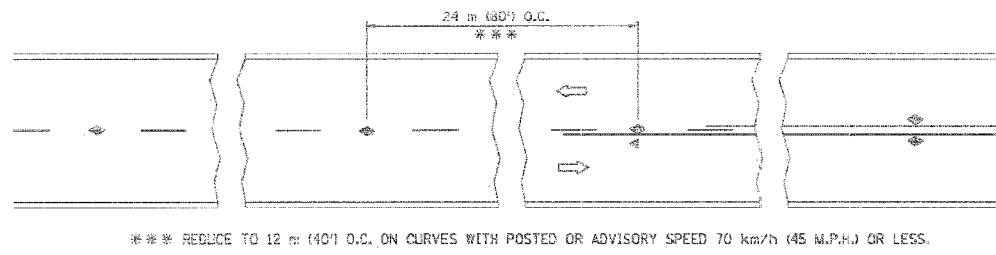
ILLINOIS DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT
WIDENING

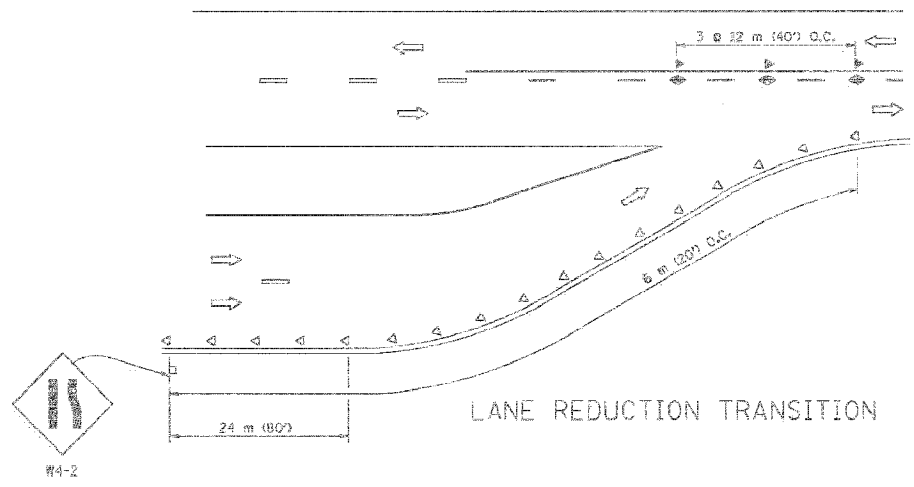
REVISIONS	
NAME	DATE

SCALE: NONE
DATE: 10/18/2002
DRAWN BY: CADD
CHECKED BY: S.E.B.
BD-51
REVISION DATE:

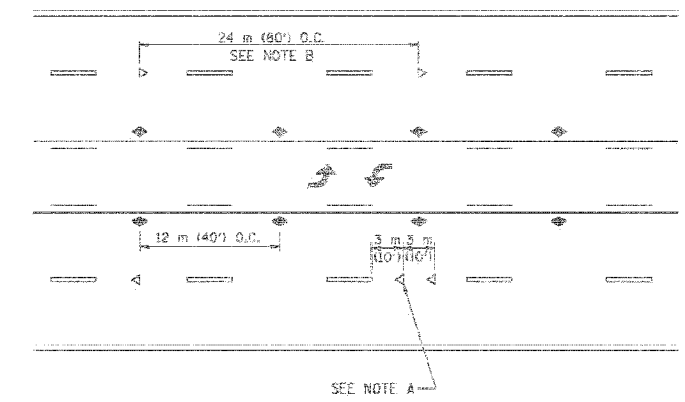
C. S. & M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	93
STA.		TO STA.		
FED. ROAD DIST. NO.	ALIGNMENT	FED. AID PROJECT		



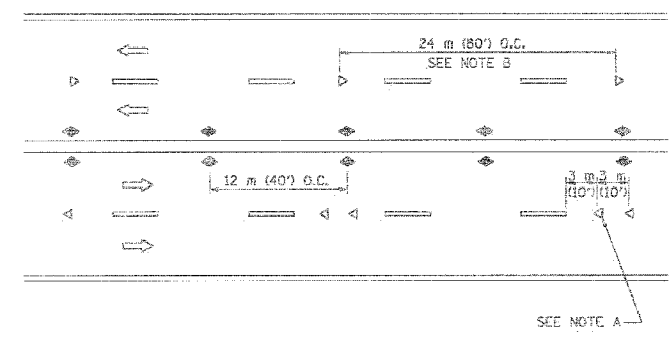
TWO-LANE/TWO-WAY



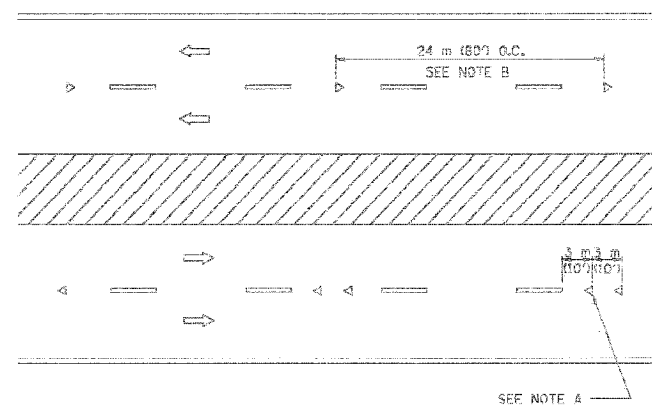
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

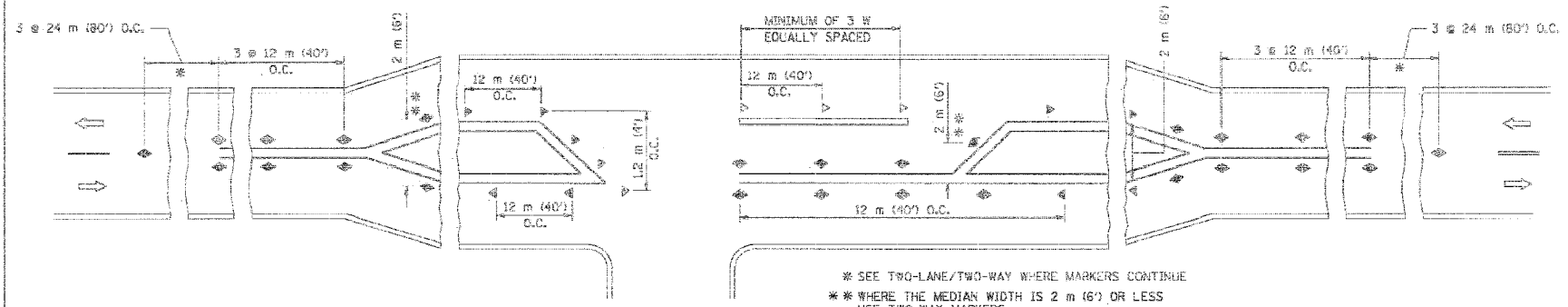
- YELLOW STRIPE
- WHITE STRIPE
- ◄ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◄ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 2 m (6') OR LESS USE TWO-WAY MARKERS.

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

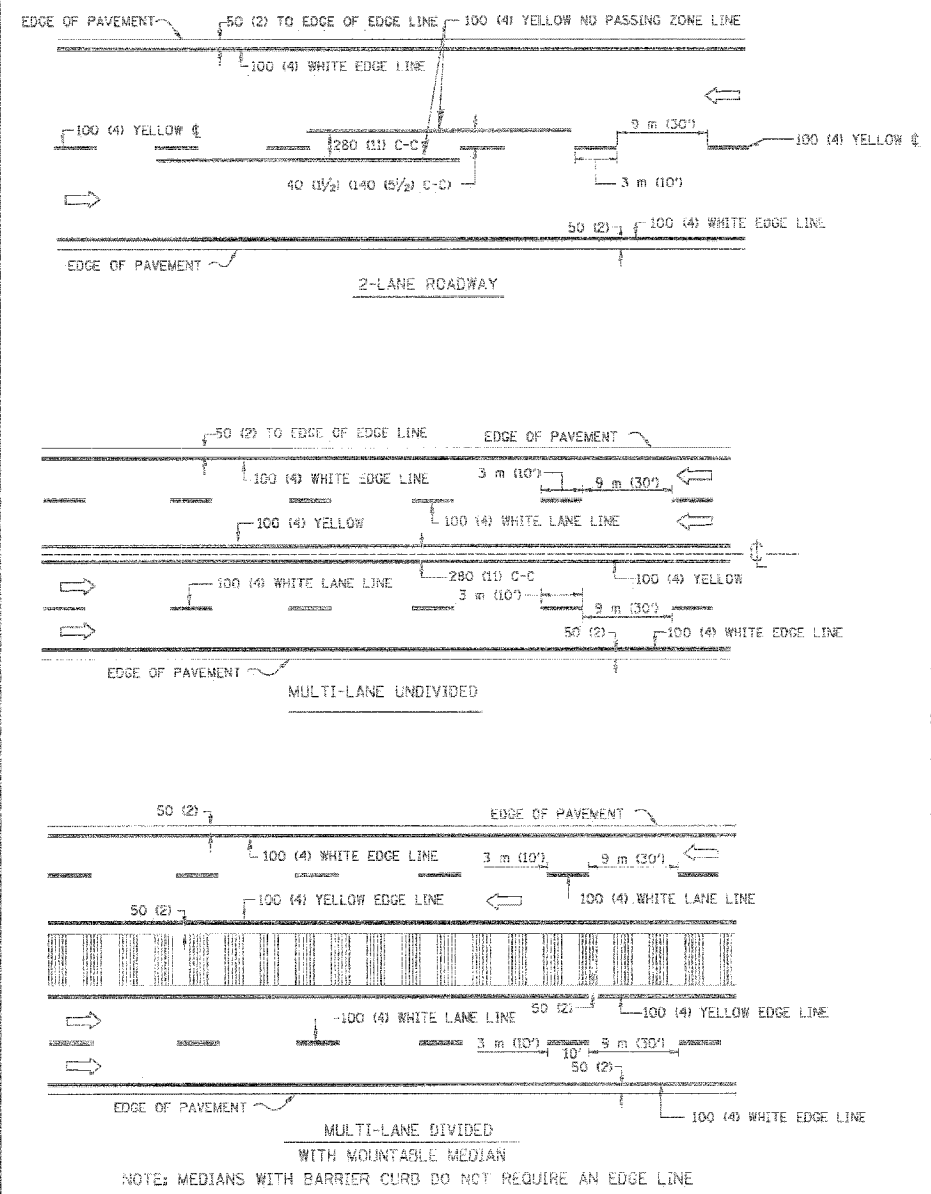
ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS
 (SNOW-PLOW RESISTANT)

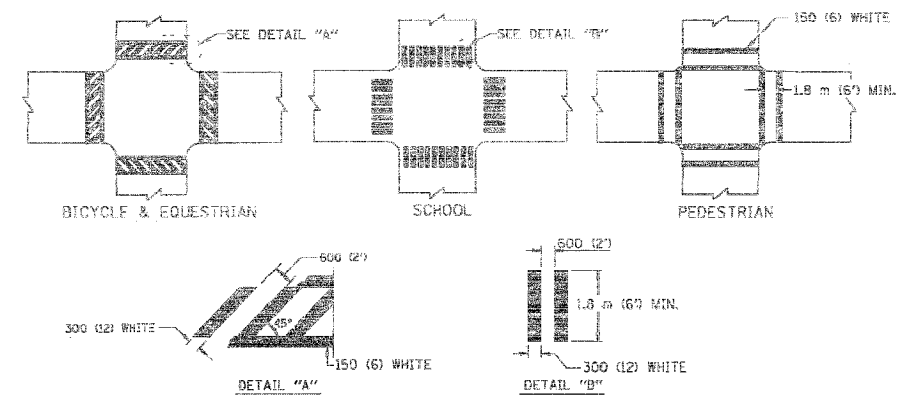
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

SCALE: NONE
 DATE: 10/18/2002
 DRAWN BY: CADD
 CHECKED BY: TC-11

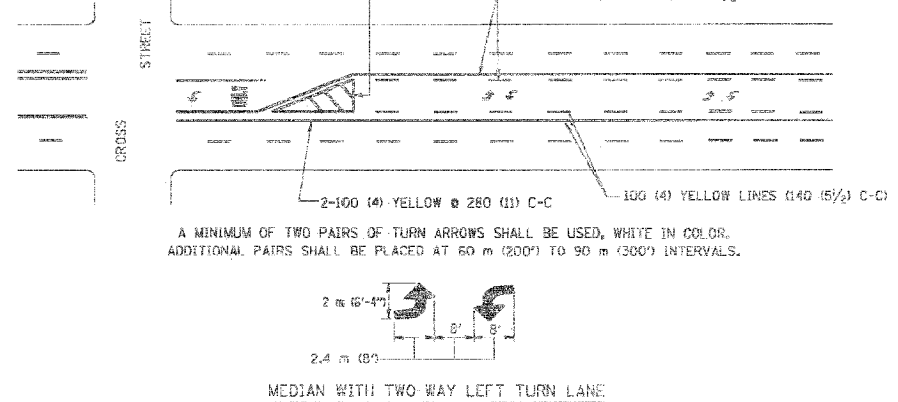
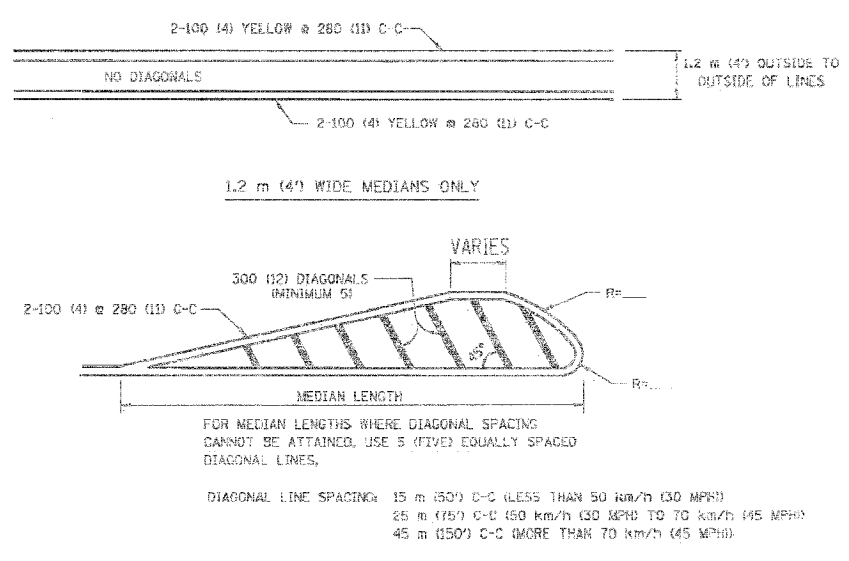
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1527B	COOK	108	94
STA.	TO STA.	FED. ROAD DIST. NO.	STATE PROJECT



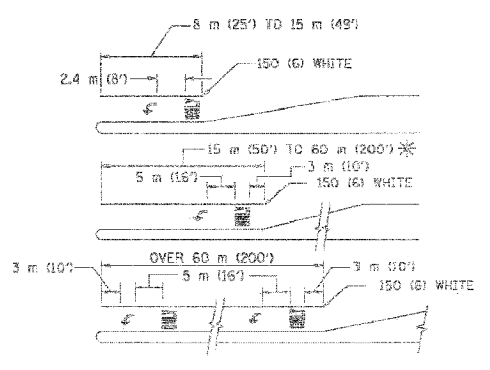
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



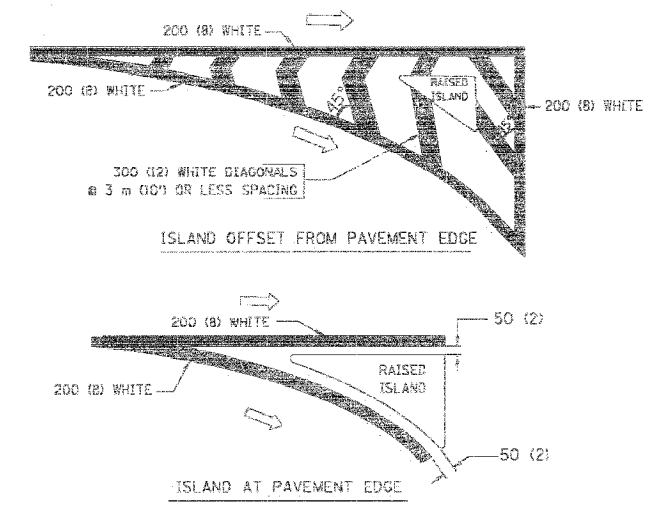
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) AREA = 1.9 m² (20.8 SQ. FT.)
* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINES; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.8 m (6') IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW TWO WAY TRAFFIC WHITE ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GOPE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD T80001 AREA OF: "R"=0.32m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD T80001.

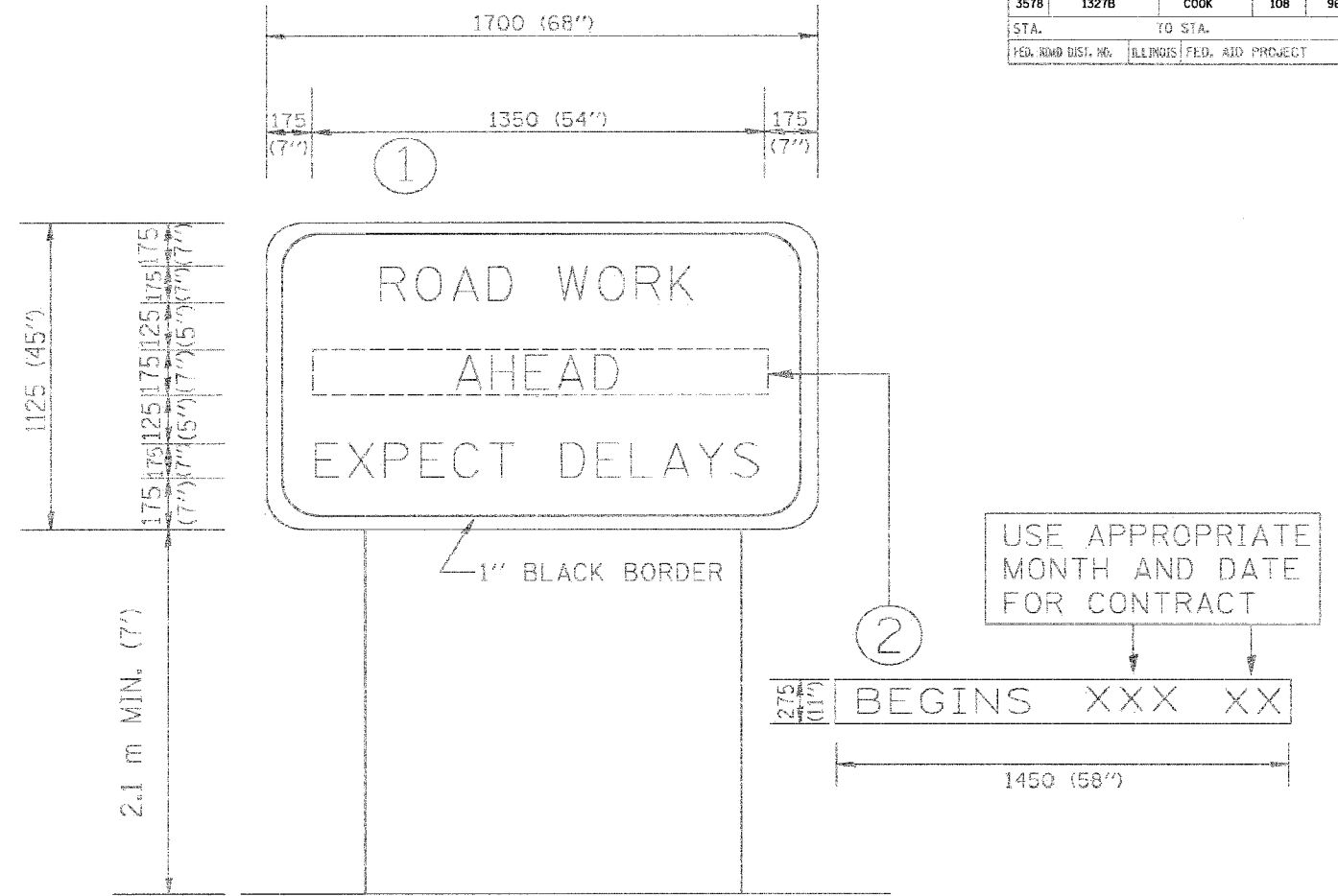
All dimensions are in millimeters (inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

SCALE: NONE DRAWN BY CADD
DATE 10/18/2002 CHECKED BY
TC-13 REVISION DATE: 01/06/00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	96
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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 2.3 SQ. M. (25.70 SQ. FT.)

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

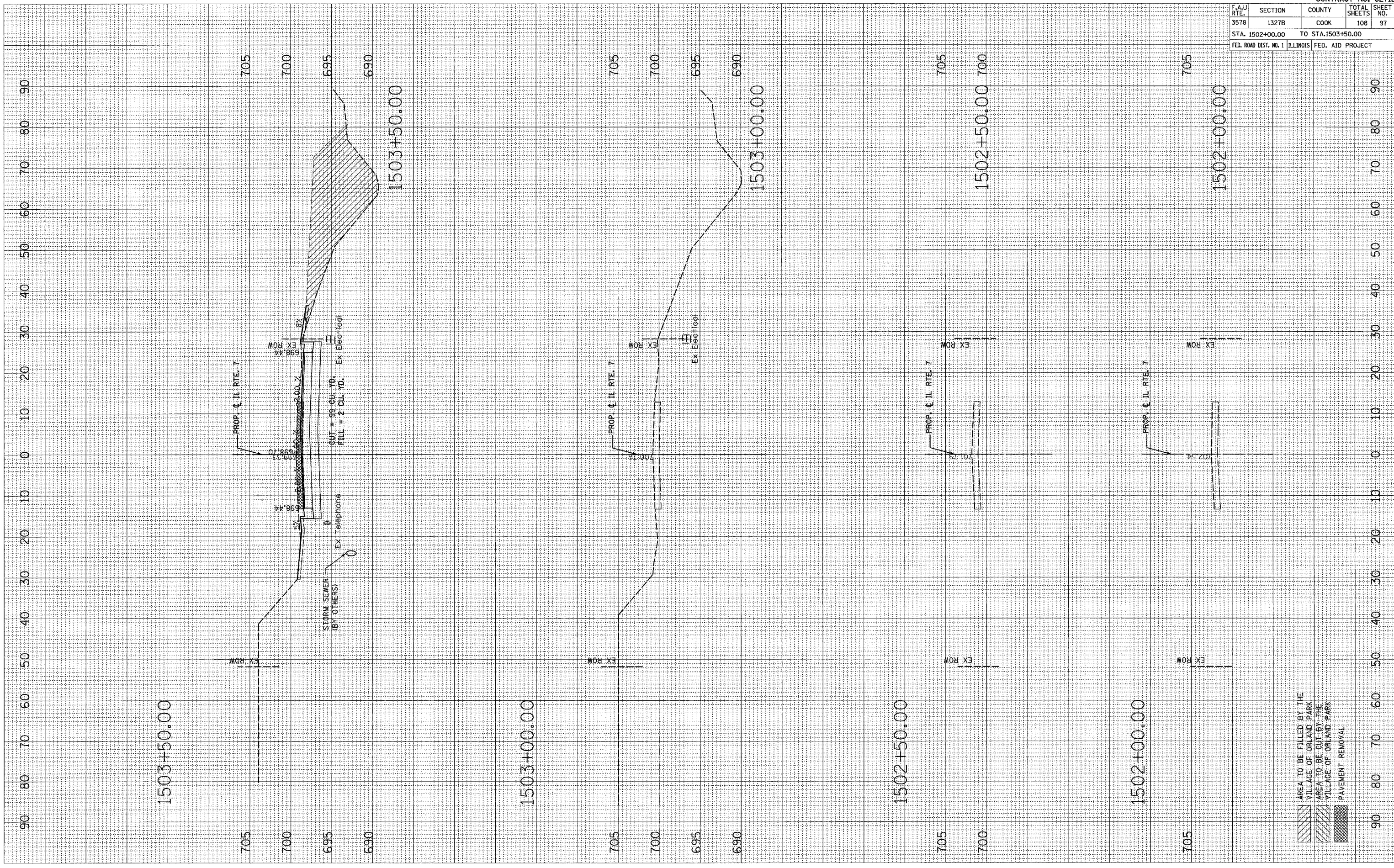
REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY INFORMATION SIGNING
 SCALE: DATE 10/18/2002
 DRAWN BY: BUR. OF DESIGN
 CHECKED BY:

PLOT DATE = 2/6/2006
 PLOT SCALE = 800:1
 REFERENCE = REF#

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

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



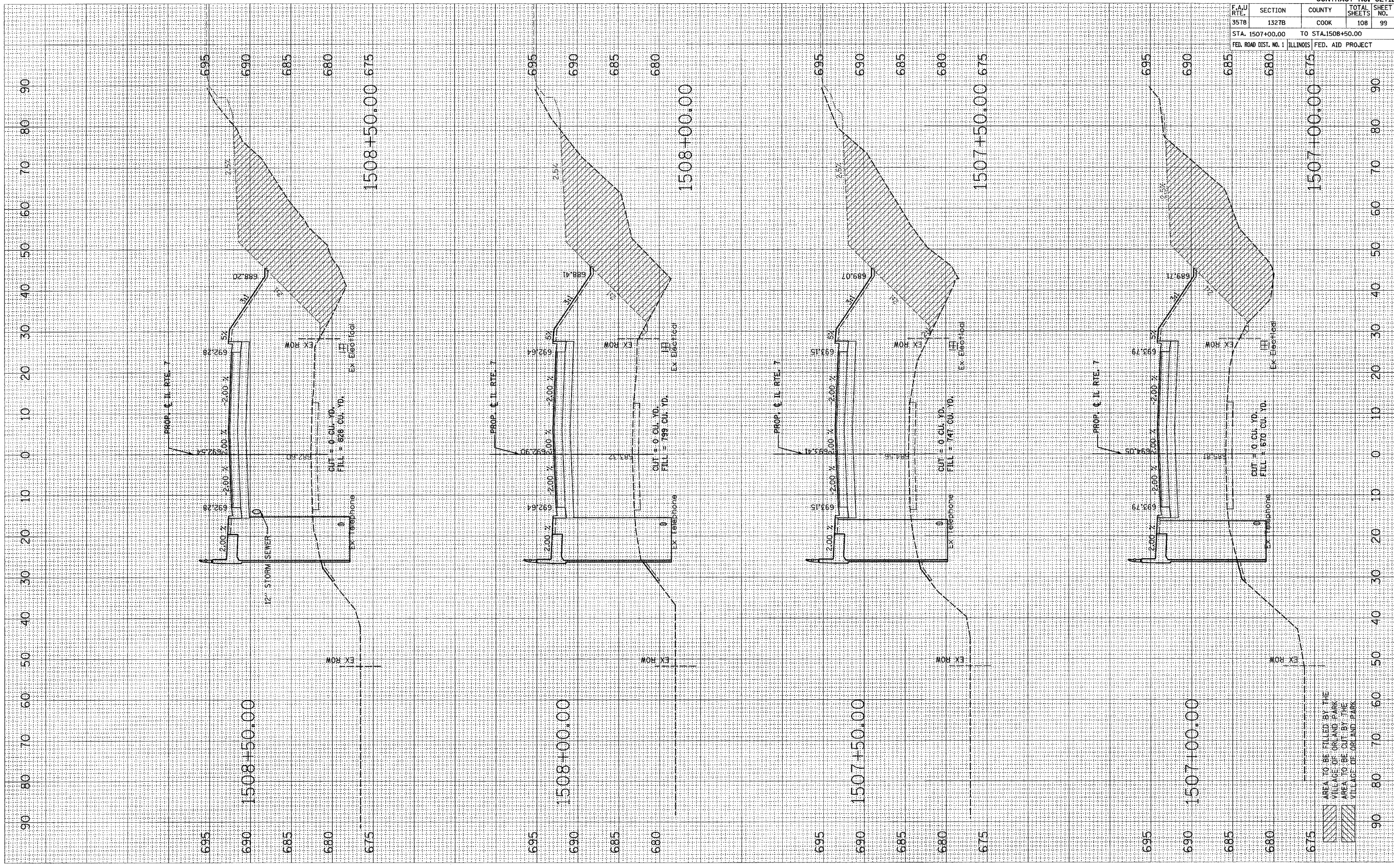
CONTRACT NO. 62712				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	97
STA. 1502+00.00 TO STA.1503+50.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

- AREA TO BE FILLED BY THE VILLAGE OF ORLAND PARK
- AREA TO BE CUT BY THE VILLAGE OF ORLAND PARK
- PAVEMENT REMOVAL

PLOT DATE = 2/8/2006
 FILE NAME = H:\CUL 7\Proposed Plans\Geopak\1508\1508.dwg
 PLOT SCALE = 1" = 40'
 REFERENCE = REF#

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED BY DATE
 REVISIONS BY DATE
 AREAS CHECKED

FINAL SURVEYED BY DATE
 SURVEY PLOTTED BY DATE
 REVISIONS BY DATE
 AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	99

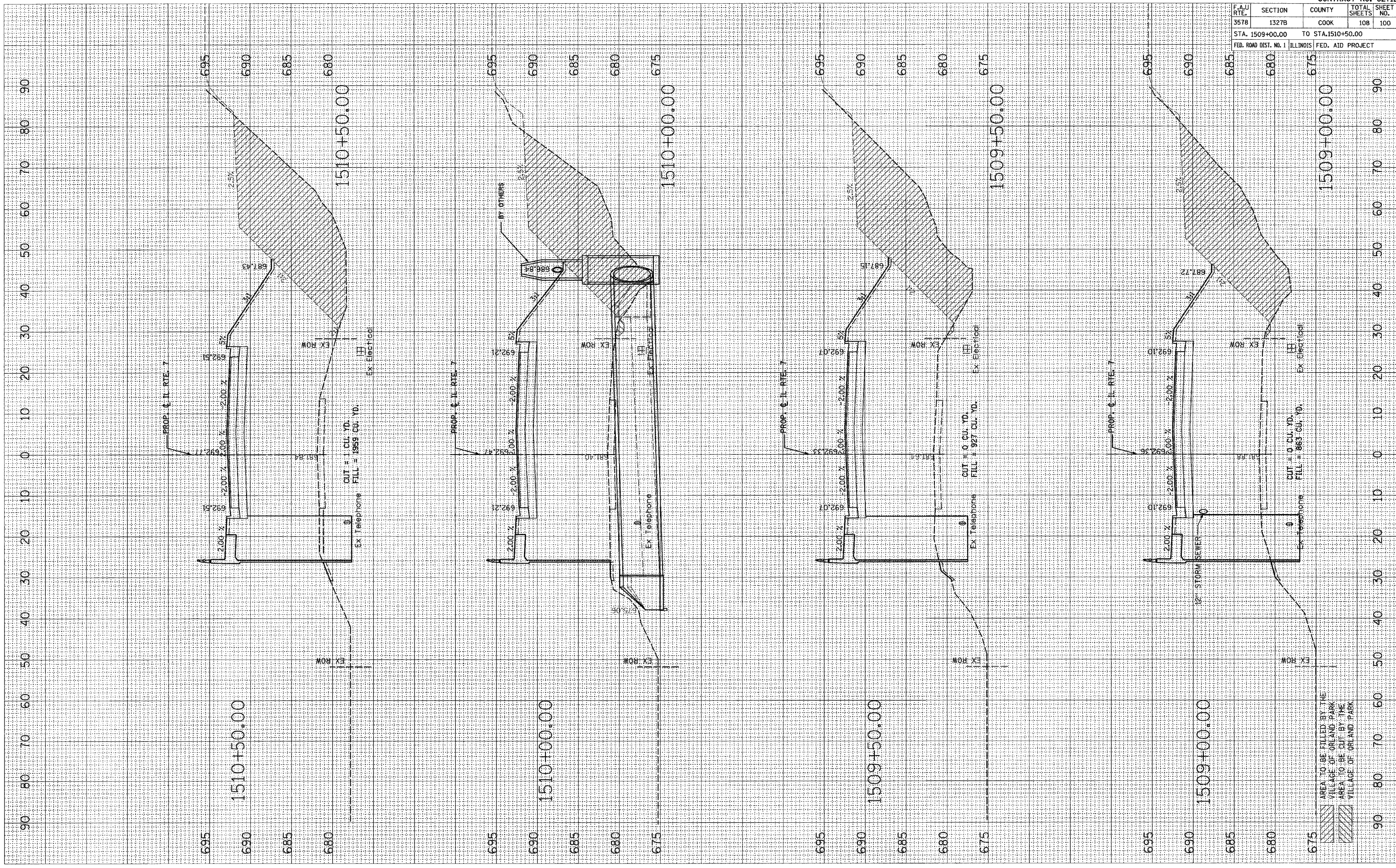
STA. 1507+00.00 TO STA. 1508+50.00
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

AREA TO BE FILLED BY THE VILLAGE OF ORLAND PARK
 AREA TO BE CUT BY THE VILLAGE OF ORLAND PARK

PLOT DATE = 2/6/2006
 PLOT SCALE = AS SHOWN
 REFERENCE = SHEET A

ORIGINAL SURVEYED
 SURVEY PLOTTED
 PLATE NO. _____
 BY _____ DATE _____
 AREAS CHECKED

FINAL SURVEYED
 SURVEY PLOTTED
 PLATE NO. _____
 BY _____ DATE _____
 AREAS CHECKED



AREA TO BE FILLED BY THE
 VILLAGE OF ORLAND PARK
 AREA TO BE CUT BY THE
 VILLAGE OF ORLAND PARK

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	100

STA. 1509+00.00 TO STA. 1510+50.00
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

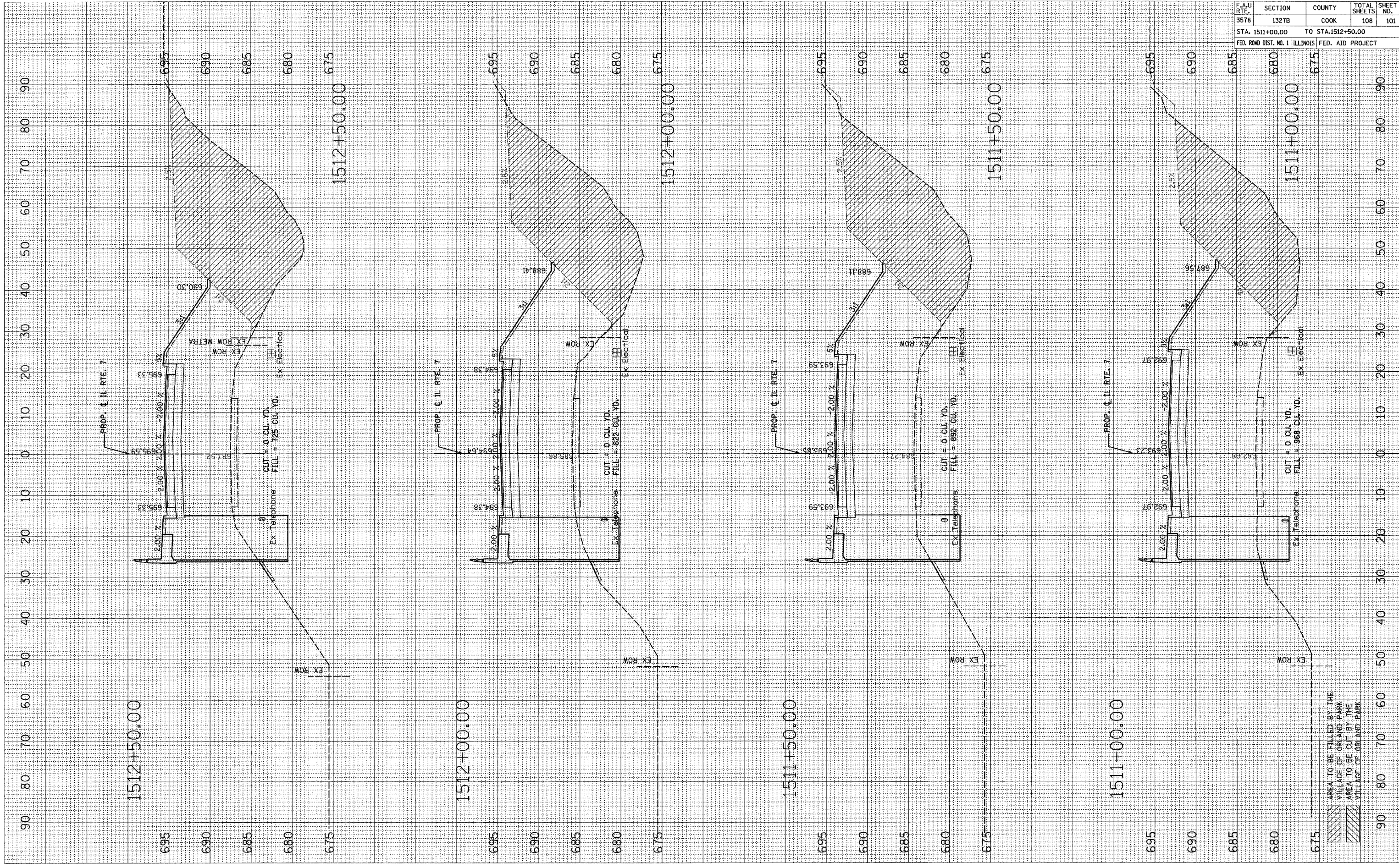
CONTRACT NO. 62712

PLOT DATE = 3/9/2006
 PLOT SCALE = 1"=40'
 REFERENCE = SHEET

ORIGINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED DATE
 BY: _____
 AREAS CHECKED

FINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED DATE
 BY: _____
 AREAS CHECKED

DATE



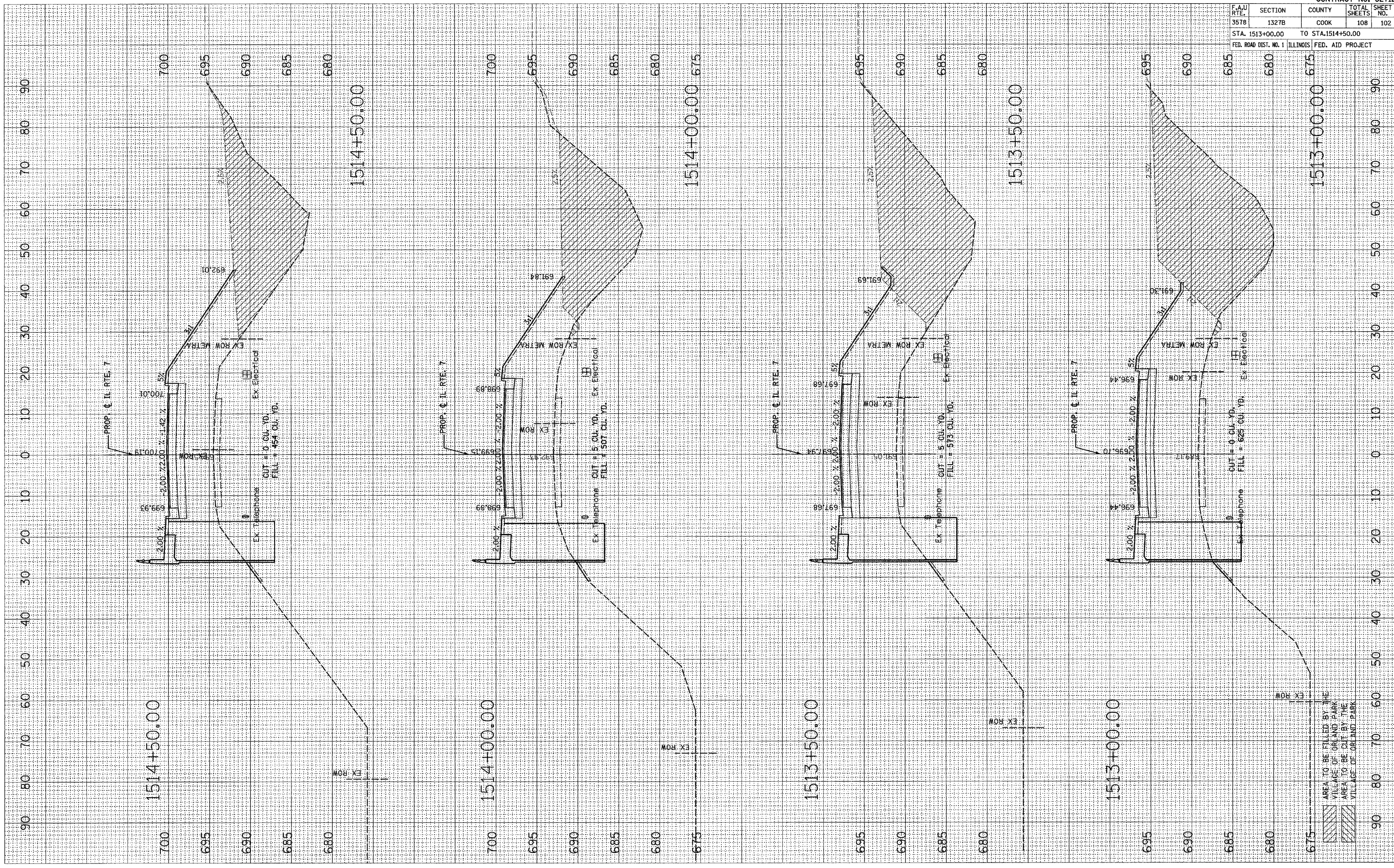
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	101
STA. 1511+00.00 TO STA. 1512+50.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

AREA TO BE FILLED BY THE VILLAGE OF ORLAND PARK
 AREA TO BE CUT BY THE VILLAGE OF ORLAND PARK

PLOT DATE = 3/8/2006
 FILE NAME = H:\CADD\7\Proposed-Plan\A\Geopak\1513\1513.dwg
 PLOT SCALE = 1" = 40'
 REFERENCE =

ORIGINAL SURVEYED BY DATE
 SURVEYED BY DATE
 PLOTTED BY DATE
 LATE BY DATE
 NO. AREAS CHECKED

FINAL SURVEYED BY DATE
 SURVEYED BY DATE
 PLOTTED BY DATE
 LATE BY DATE
 NO. AREAS CHECKED



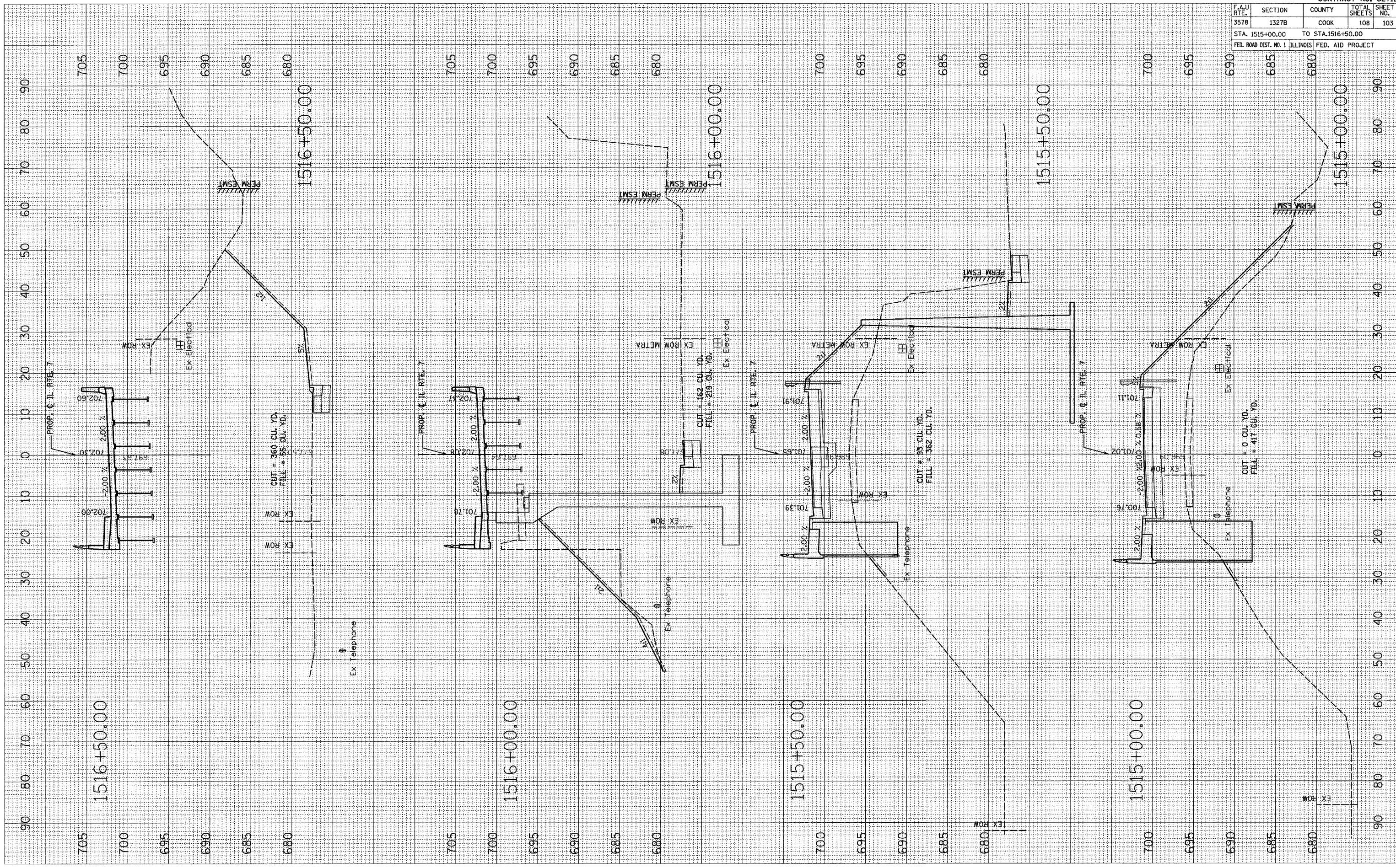
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	102
STA. 1513+00.00		TO STA. 1514+50.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

AREA TO BE FILLED BY THE VILLAGE OF ORLAND PARK
 AREA TO BE CUT BY THE VILLAGE OF ORLAND PARK

PLOT DATE = 2/9/2006
 PLOT SCALE = 1" = 40' HORIZ.
 PLOT SCALE = 1" = 8' VERT.
 REFERENCE = SHEET #

ORIGINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED BY DATE
 NO. AREAS CHECKED

FINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED BY DATE
 NO. AREAS CHECKED



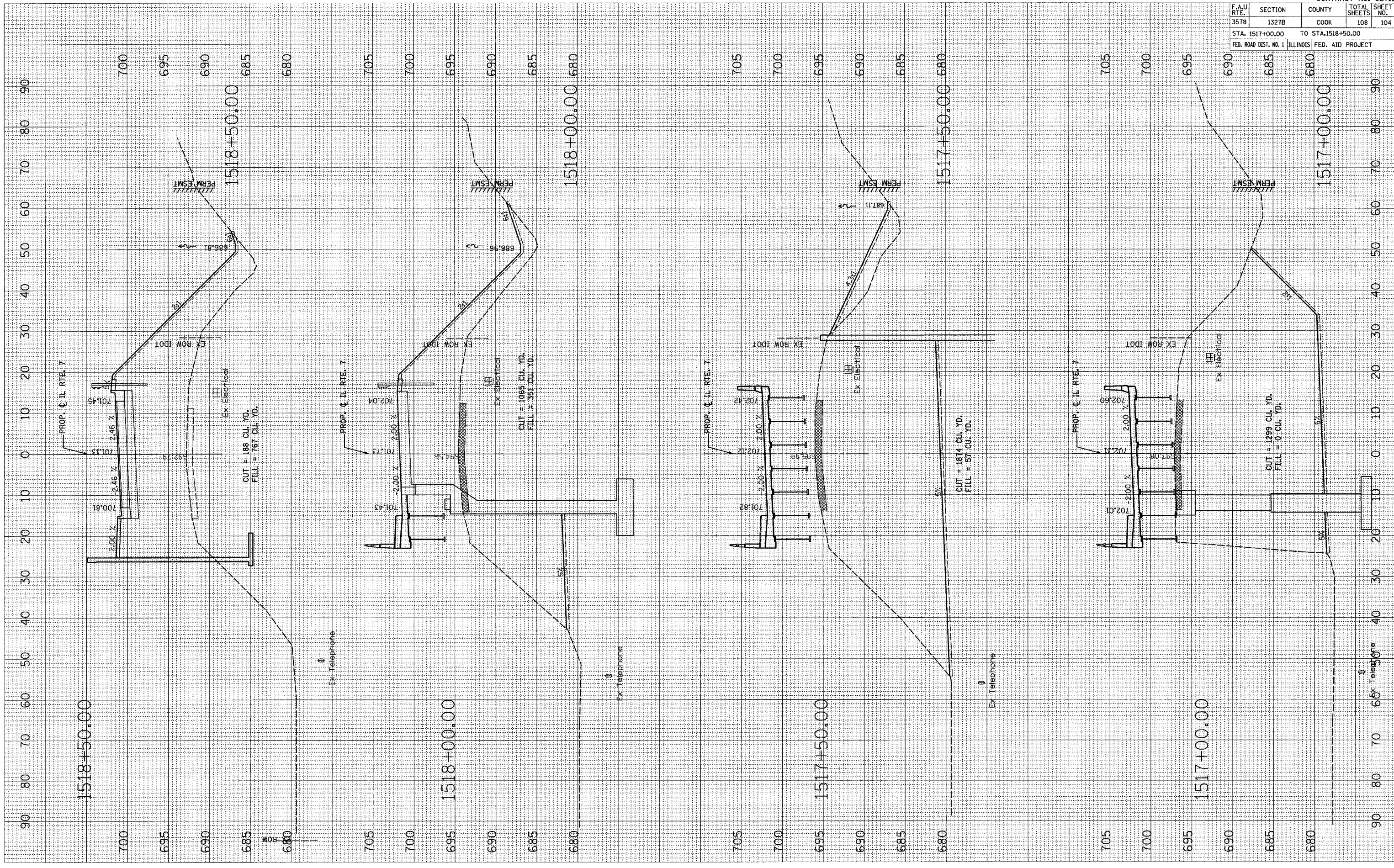
CONTRACT NO. 62712				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	103
STA. 1515+00.00		TO STA. 1516+50.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLOT DATE = 2/6/2008
 PLOT SCALE = 1" = 40'
 PLOT SHEET REFERENCE = SHEET

ORIGINAL SURVEYED BY: DATE:
 SURVEY PLOTTED BY: DATE:
 PLATE LATE BY: DATE:
 AREAS CHECKED NO.:

FINAL SURVEYED BY: DATE:
 PLOTTED BY: DATE:
 NOTE BOOK NO.:

CONTRACT NO. 62712				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	104
STA. 1517+00.00		TO STA. 1518+50.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



1518+50.00

1518+00.00

1517+50.00

1517+00.00

1518+50.00

1518+00.00

1517+50.00

1517+00.00

PROP. C.L. RTE. 7
 2.00' ±
 2.46' ±
 2.46' ±
 2.00' ±
 701.45
 701.43
 700.81
 692.75
 686.81
 EX ROW IDOT
 EX Electrical
 CUT = 188 CU. YD.
 FILL = 767 CU. YD.

PROP. C.L. RTE. 7
 2.00' ±
 2.00' ±
 2.00' ±
 2.00' ±
 702.04
 701.75
 701.43
 94.56
 686.96
 EX ROW IDOT
 EX Electrical
 CUT = 1085 CU. YD.
 FILL = 351 CU. YD.

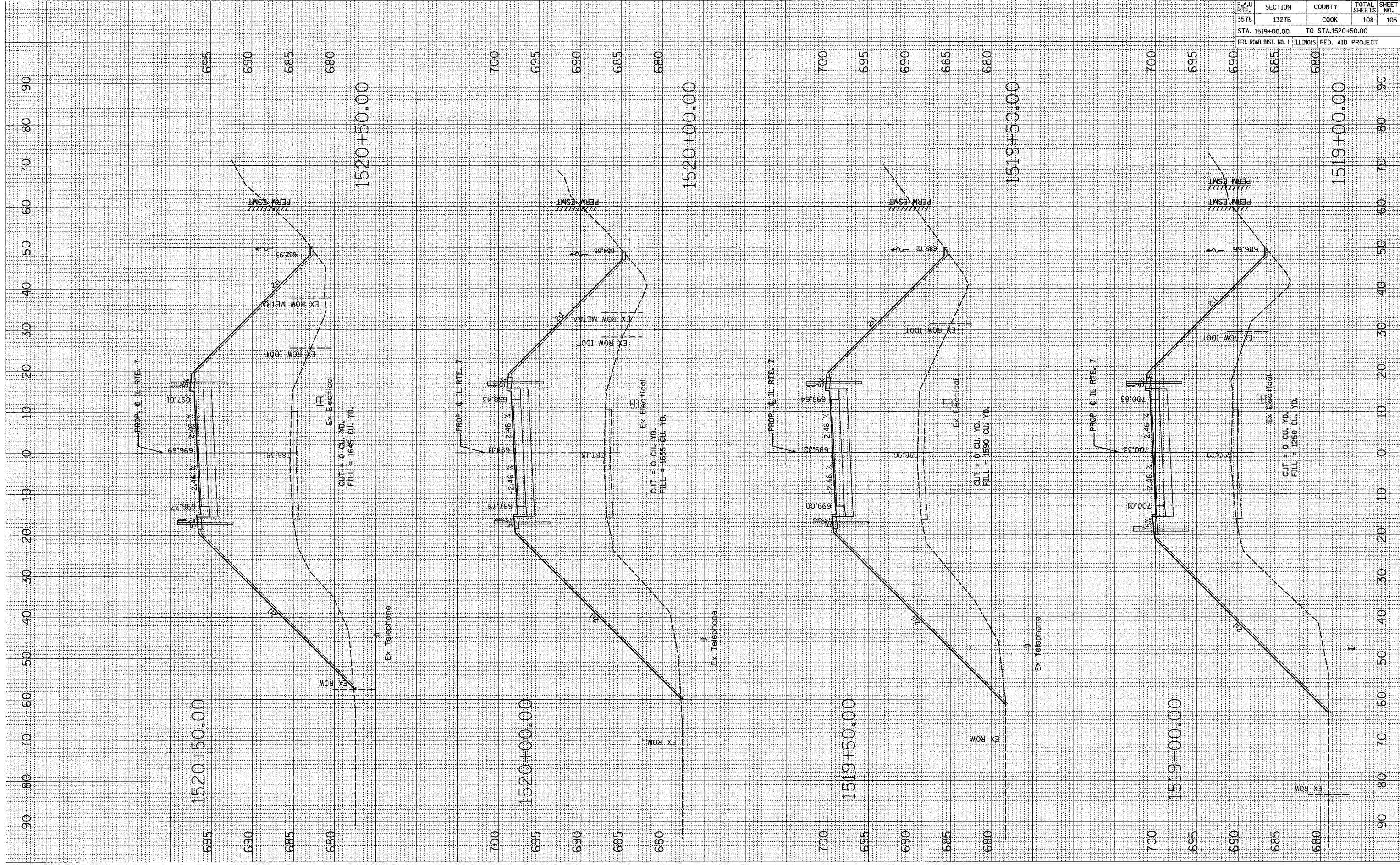
PROP. C.L. RTE. 7
 2.00' ±
 2.00' ±
 2.00' ±
 2.00' ±
 702.12
 702.12
 701.82
 695.99
 687.11
 EX ROW IDOT
 EX Electrical
 CUT = 1874 CU. YD.
 FILL = 57 CU. YD.

PROP. C.L. RTE. 7
 2.00' ±
 2.00' ±
 2.00' ±
 2.00' ±
 702.50
 702.50
 702.01
 97.08
 687.11
 EX ROW IDOT
 EX Electrical
 CUT = 1299 CU. YD.
 FILL = 0 CU. YD.

PLOT DATE = 3/9/2005
 PLOT SCALE = 1"=40'
 REFERENCE = REF#

ORIGINAL SURVEY
 SURVEYED PLOTTED
 DATE
 BY
 AREAS CHECKED

FINAL SURVEY
 SURVEYED PLOTTED
 TEMPLATE
 NOTE BOOK
 AREAS CHECKED
 NO.



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	105

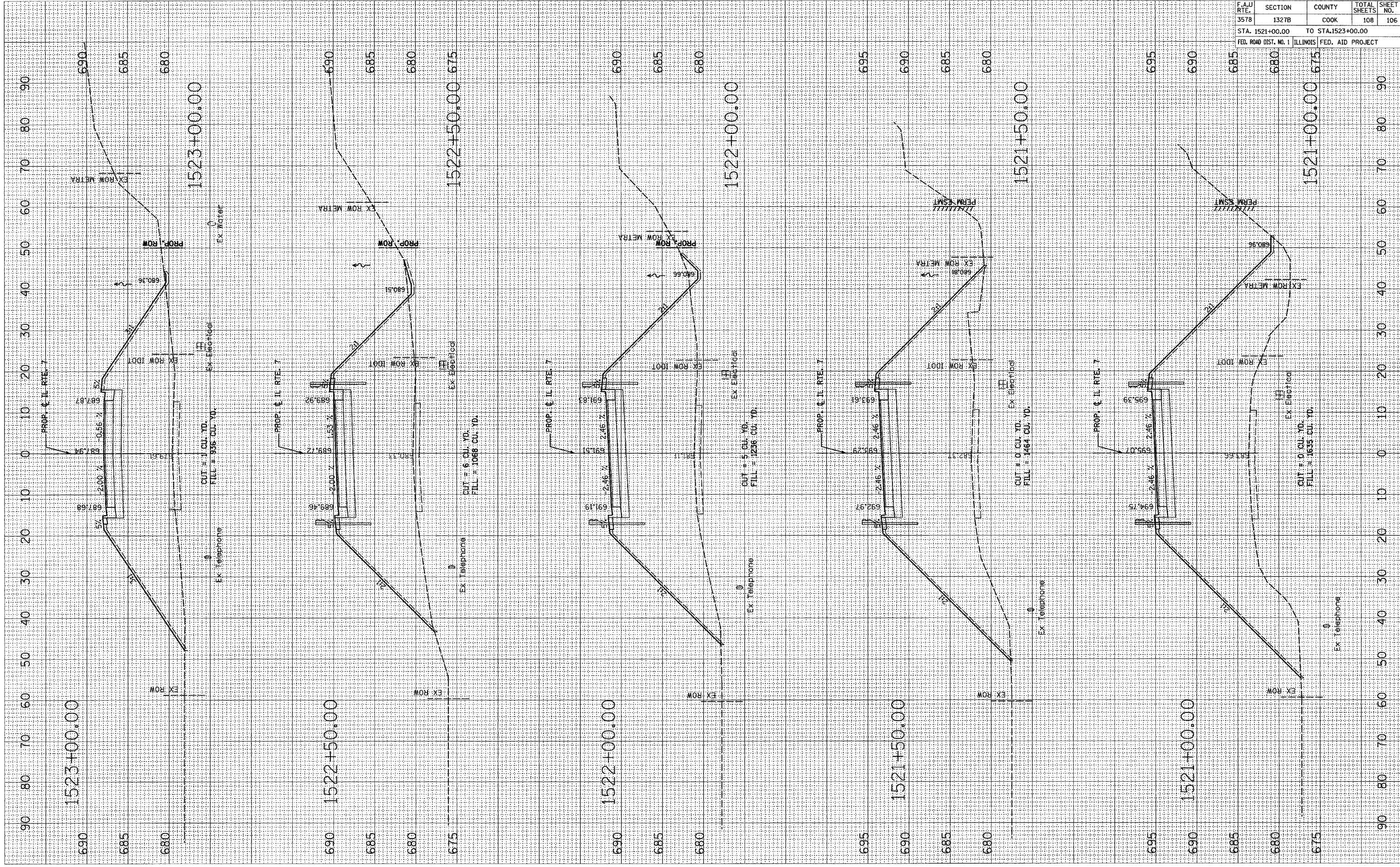
STA. 1519+00.00 TO STA. 1520+50.00
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CONTRACT NO. 62712

PLOT DATE = 3/9/2006
 PLOT TIME = 10:54 AM
 PLOT SCALE = 1"=40'
 REFERENCE = 4987*

ORIGINAL SURVEY
 SURVEY PLOTTED
 DATE
 BY
 NO.

FINAL SURVEY
 SURVEY PLOTTED
 DATE
 BY
 NO.



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	106
STA. 1521+00.00		TO STA. 1523+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

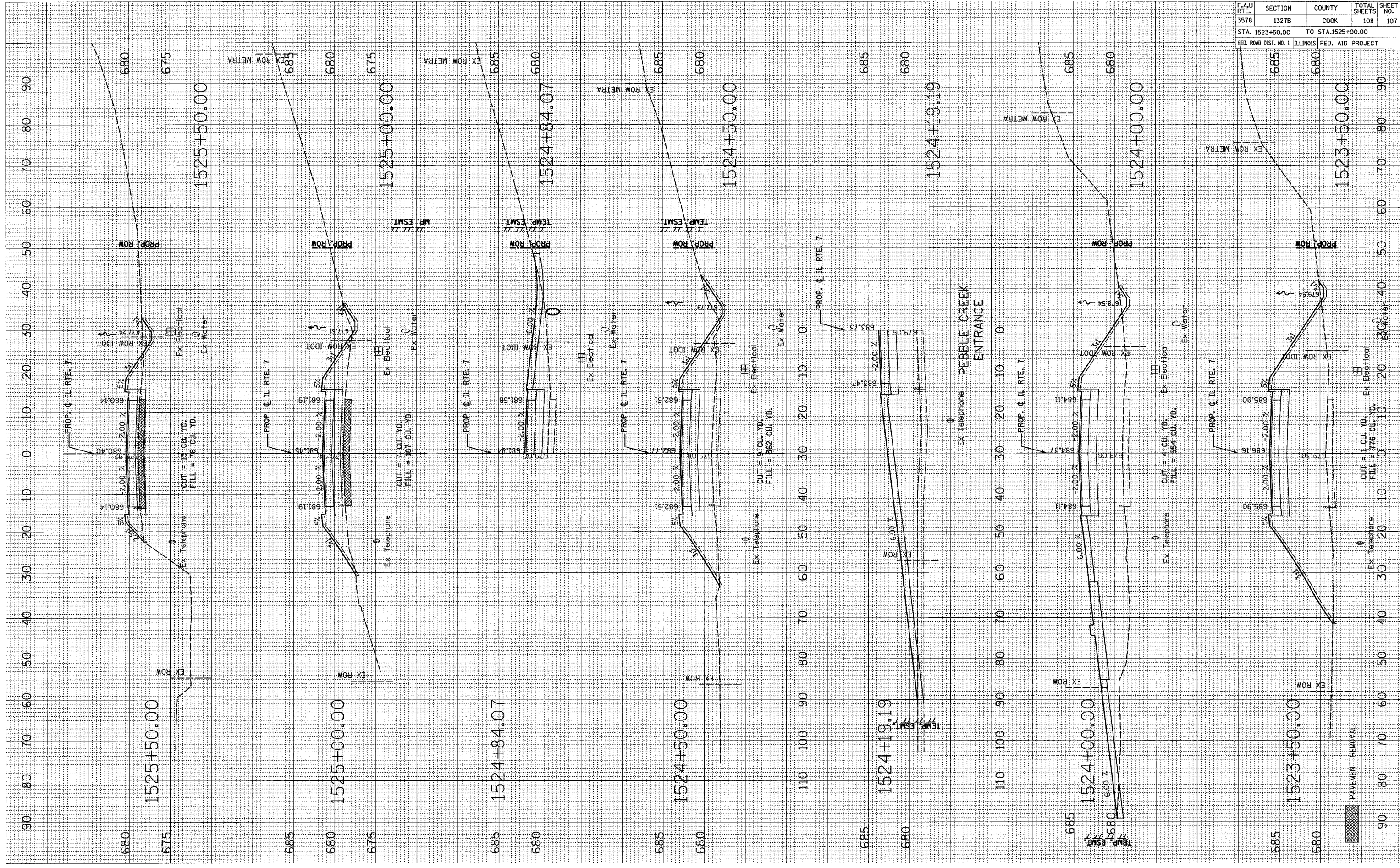
CONTRACT NO. 62712

PLOT DATE: 3/9/2006
 PLOT SCALE: 1"=40'
 REFERENCE: A REF#

ORIGINAL SURVEY PLOTTED LATE AREAS CHECKED

FINAL SURVEY PLOTTED LATE AREAS CHECKED

BY: _____ DATE: _____



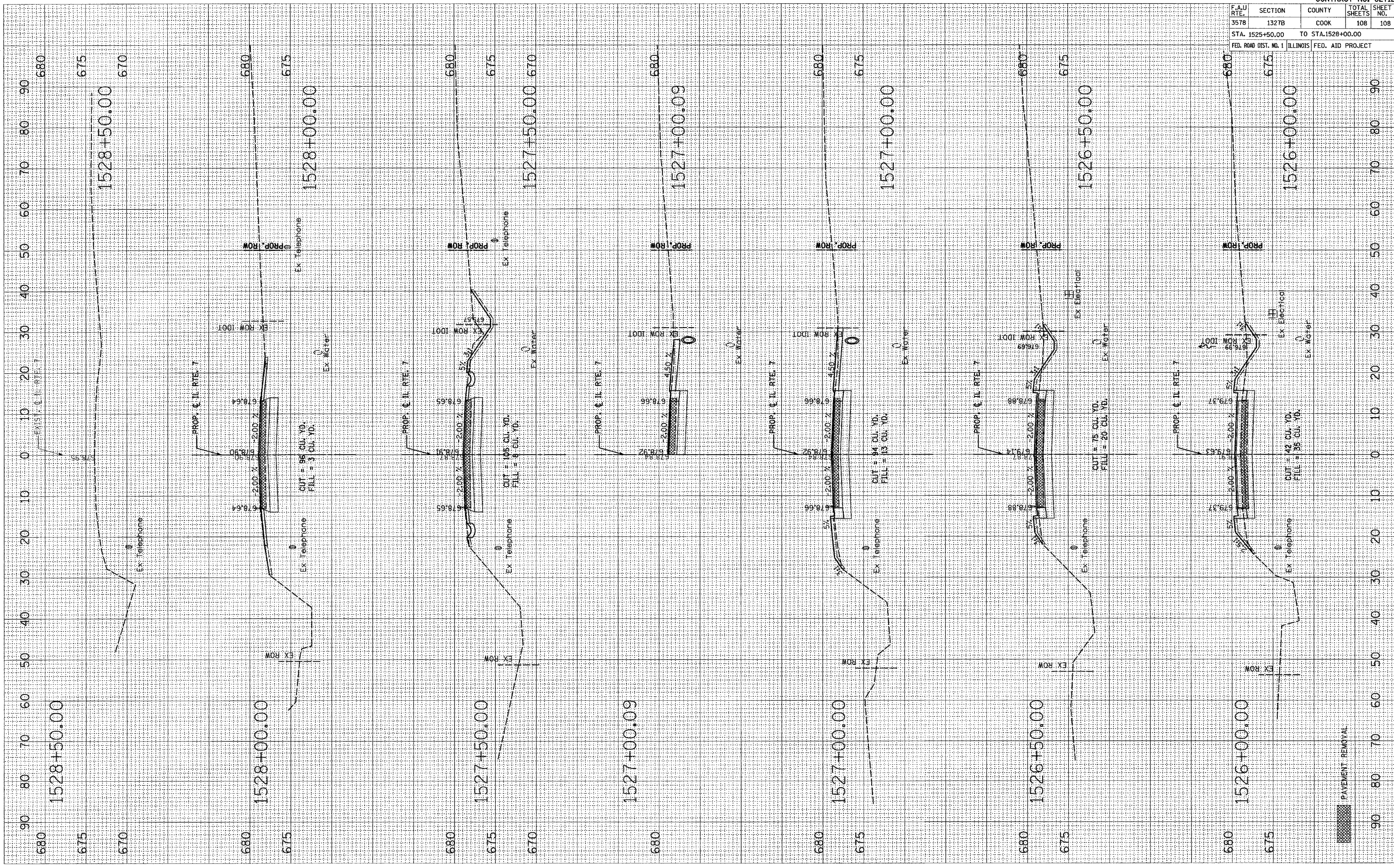
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327B	COOK	108	107
STA. 1523+50.00		TO STA. 1525+00.00		
ILLINOIS FED. AID PROJECT				

PAVEMENT REMOVAL

PLOT DATE = 2/9/2005
 PROJECT = Proposed Pkwy, Geopark
 PLOT SCALE = HORIZONTAL
 REFERENCE = SHEET

ORIGINAL SURVEYED
 SURVEY PLOTTED
 DATE
 BY
 AREAS CHECKED

FINAL SURVEYED
 SURVEY PLOTTED
 DATE
 BY
 AREAS CHECKED



CONTRACT NO. 62712				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
357B	1327B	COOK	108	108
STA. 1525+50.00 TO STA. 1528+00.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PAVEMENT REMOVAL