# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

## PROPOSED HIGHWAY PLANS

F.A.P. 846: IL ROUTE 53

AT RIVER ROAD

SECTION: 4-N-3
INTERSECTION IMPROVEMENT

PROJECT: HSIP-0846 (O22)

WILL COUNTY

C-91-696-10

#### IL ROUTE 53 **PROJECT ENDS** R 9 E R 10 E STA. 520 + 7834 -BLODGETT Z RIVER ROAD 33 **PROJECT BEGINS** LORENZO STA. 194 + 04 SYMERTON RIVER ROAD Z PROJECT ENDS 33 WILMINGTON STA. 200 + 00Z BRAIDWOOD RITCHIE IL ROUTE 53 **PROJECT BEGINS** WILMINGTON AND FLORENCE TOWNSHIP STA. 474 + 36

IL ROUTE 53:
GROSS AND NET LENGTH OF PROJECT = 4642 FEET = 0.89 MILES

RIVER ROAD:
GROSS AND NET LENGTH OF PROJECT = 596 FEET = 0.11 MILES

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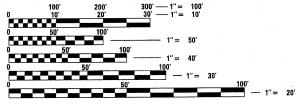
TRAFFIC DATA:

IL ROUTE 53: 2009 ADT = 6,700 - 8,900 SPEED LIMIT = 55 MPH

PROJECT LOCATED IN THE

CITY OF WILMINGTON

RIVER ROAD: 2009 ADT = 4,250 SPEED LIMIT = 55 MPH



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

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

PROJECT ENGINEER: JENPAI CHANG (847) 705–4432 PROJECT MANAGER: KEN ENG (847) 705–4247

CONTRACT NO. 60L42

#### D-91-696-10



DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED AUGUST 22, 20 11

Dim M. O'Kel

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

COTOLOGY 14 20 11

SCOTT E. STIFFE A

COTOLOGY 14 20 11

ACTURE OF DESIGN AND ENVIRONMENT

COTOLOGY 14 20 11

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

STATE OF ILLINOIS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Christine M. Road on

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#### STATE STANDARDS:

000001-06	STANDARD SYMBOLS, ABBREVIATION AND PATTERNS
280001 <i>-05</i>	TEMPORARY EROSION CONTROL SYSTEMS
424001 <b>- 05</b>	CURB RAMPS FOR SIDEWALKS
442201 <i>- 03</i>	CLASS C AND D PATCHES
482011 - <b>03</b>	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
601001 - 04	SUB-SURFACE DRAINS
604001 <i>-03</i>	FRAME AND LIDS, TYPE 1
701001 - 02	OFF-ROAD OPERATION 2L, 2W, MORE THAN 15' AWAY
701006 <i>-03</i>	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 2' FROM PAVEMENT EDGE
701011 - <i>O</i> Z	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201 <b>- 04</b>	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701206 <i>-03</i>	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS > 45 MPH
701301 <b>-04</b>	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306 <i>-03</i>	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311 <b>- 03</b>	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701326 - <i>0</i> 4	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701336 <b>- 06</b>	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH
780001- <i>0</i> 2	TYPICAL PAVEMENT MARKINGS
701901-01 701502-04 701701-07	TRAFFIC CONTROL DEVICES

#### GENERAL NOTES:

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE WILL COUNTY DEPARTMENT OF HIGHWAYS, AND THE CITY OF WILMINGTON.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN CONSTRUCTING SIDEWALK RAMPS FOR THE HANDICAPPED (STATE STANDARD 424001), USE TYPE B RAMPS UNLESS OTHERWISE SPECIFIED.

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE FINGINFER

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE ENGINEER SHALL CONTACT MR. LAWRENCE HILL, AREA TRAFFIC FIELD ENGINEER, AT (815) 485-6475 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH 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 THEIR LOCATION.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE AND THE BUREAU OF CONSTRUCTION.

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

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

WHEN CONSTRUCTION OPERATIONS ON TWO-LANE ROADS OPEN TO TRAFFIC RESULT IN THE REMOVAL OR COVERING OF ANY PAVEMENT STRIPING INDICATING PASSING RESTRICTIONS, "NO PASSING ZONES NOT STRIPED NEXT MILES" SIGNS SHALL BE USED. THE CONTRACTOR SHALL PLACE THE SIGNS AT THE BEGINNING OF THE UNSTRIPED AREA, JUST BEYOND EACH MAJOR INTERSECTION WITHIN THE UNSTRIPED AREA, AND AT SUCH OTHER LOCATIONS AS THE ENGINEER MAY DIRECT TO ENSURE A MINIMUM SPACING OF FIVE MILES. THE SIGNS SHALL BE PLACED JUST PRIOR TO REMOVAL OR COVERING OF THE STRIPE AND SHALL REMAIN IN PLACE UNTIL FULL NO PASSING ZONE STRIPING HAS BEEN RESTORED. THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

SCALE:

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL MAILBOXES WITHIN THE SITE. RELOCATION OF MAILBOXES, IF REQUIRED, WILL NOT BE ELIGIBLE FOR PAYMENT.

THE CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

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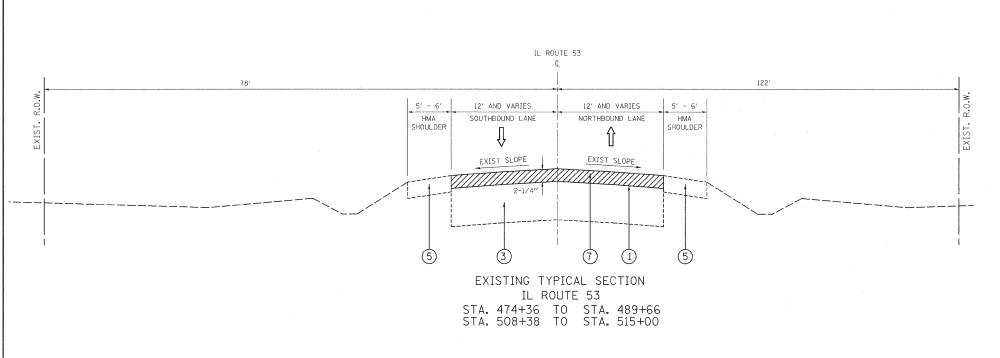
### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

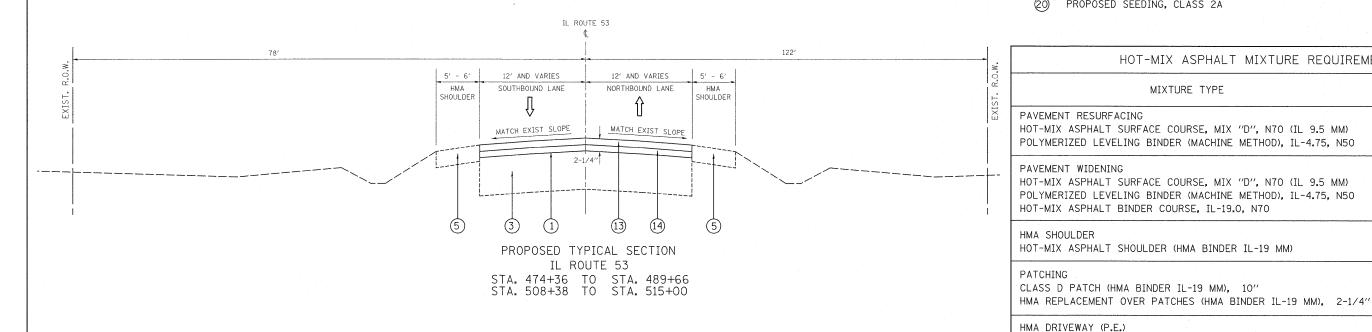
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INDEX	ΩF	SHEETS	STATE	STANDAR	ana ann	GEN	FRΔI	NOTES	846	4-N-3	WILL	68	2
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	.	SHEET NO.	OF .	SHEETS	STA.	7	TO S	STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		

-	SUMMARY OF QUANTITIES		URBAN	De sou		ONSTRUCT	ION TYPE	EMERGENCY			SUMMARY OF QUANTITIES	-	URBAN	D2.53		MULTI-USE	ION TYPE (	EMERGENGY	T -
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 90:/. FED. 10:/. STATE 15:38		PATH	TRAFFIC SIGNAL 901. FED 51. STATE 51. COUNTY LOJE 0021	VEHICLE PREEMPTION 100%. CITY 07PO 0021		CODE NO	ITEM	UNIT	TOTAL QUANTITIES	901.FED- 101.STATE 0004	ROADWAY 901. FED. 101. STATE 0005	PATH /00/ COUNTY 0028	TRAFFIC SIGNAL 901 FEO. 51.STATE 51.COUNTY 0021		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	122	122						42001300	PROTECTIVE COAT	SO YD	104	100		4			
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	30	30						42300400	PORTLAND CEMENT CONCRETE DRIVEWAY	SO YD	60	60					
20101200	TREE ROOT PRUNING	EACH	5	5		r				42400200	PAVEMENT, 8 INCH	50 51	200			200			
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	5	5						42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH DETECTABLE WARNINGS	SO FT	200			85			
20200100	EARTH EXCAVATION	CU YD	3667	3667	,					42400800	PAVEMENT REMOVAL	SO YD	85 150	150		85			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE	CU YD	3315	3315		-				44000100	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	17500	7900	9600				
20800150	TRENCH BACKFILL	CU YD	10	10	-					44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	675	675					
21001000	GEOTECHNICAL FABRIC FOR GROUND	SO YD	7825	7825	.*	·				44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	150	150					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	25, 890	25,890						44002209	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 2 1/4"	SO YD	1030	475	555				
21400100	GRADING AND SHAPING DITCHES	FOOT	4460	4460						44003100	MEDIAN REMOVAL	SO FT	540	540					
25000210	SEEDING, CLASS 2A	ACRE	5.3	5.3						44004250	PAVED SHOULDER REMOVAL	SO YD	3105	3105					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	475	475						44201765	CLASS D PATCHES, TYPE II. 10 INCH	SO YD	220	100	120				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	475	475				200		44201769	CLASS D PATCHES, TYPE III. 10 INCH	SO YD	310	140	170				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	475	475						44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	365	175	190				
5100630	EROSION CONTROL BLANKET	SO YD	25 890	25 890						48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	4150	4150					
5200200	SUPPLEMENTAL WATERING	UNIT	1	1						50105220	PIPE CULVERT REMOVAL	FOOT	160	160					
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	530	530						54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	6	6					
28000305	TEMPORARY DITCH CHECKS	FOOT	22	22						54240220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	161	161					
28000400	PERIMETER EROSION BARRIER	FOOT	4925	4925						60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1 11 11	11					
28000500	INLET AND PIPE PROTECTION	EACH	-12-	<del>-12-</del>						60107600	PIPE UNDERDRAINS 4"	FOOT	550	550					
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	665	665						60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	180	180					
35102000 35501308	AGGREGATE BASE COURSE, TYPE B 8" HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	950 175	75 175		875				60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	120	120					
35501308	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	480	480					<sub>*</sub>	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1125	1125					
35501330	HOT-MIX ASPHALT BASE COURSE, 11 1/2"	SO YD	3150	3150					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	22	13	8	1			'*	66900530	SOIL DISPOSAL ANALYSIS	EACH	8	8			4.3		
40600300	AGGREGATE (PRIME COAT)	TON	91	49	40	2				67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					-
40600400	MIXTURE FOR CRACKS, JOINTS,	TON	27	12	15					67100100	MOBILIZATION	L SUM	1	1					
40600895	CONSTRUCTING TEST STRIP	EACH	3	2		. 1				- 7 <del>0100450</del>	TRAFFIC CONTROL AND PROTECTION,- STANDARD 701201	-L-SUM-	+		-1-				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	65	65						<del>-70100455</del> -	TRAFFIC CONTROL AND PROTECTION:	-L SUM-	-		-1-				
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	130	60	70					<del>-70100460</del>		-L SUM-	-1-		-				
10603335	HOT-MIX ASPHALT SURFACE COURSE,	TON	185	85		100				70100600		-L-SUM-	-1-		<b>-</b>				
0603340	MIX "D", N50  HOT-MIX ASPHALT SURFACE COURSE.	TON	1745	935	810					70103815		CAL DA	5	5			* SPE	CIALTY I	TEMS
	MIX "D", N70																		
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		CHECKED - DATE -		REVISED REVISED					ENT OF TRA		TION SUMMAR  SCALE: SHEET NO. OF	Y OF QUAN	<u> </u>	TO STA.		ROAD DIST. NO. 1		CONTRACT	NO.

TOMORE TOMORE  TOMORE TOMORE  TOMORE	PORARY PAVEMENT MARKING INE 6"  PORARY PAVEMENT MARKING INE 8"  PORARY PAVEMENT MARKING INE 12"  PORARY PAVEMENT MARKING INE 24"	UNIT  CAL MO FOOT SO FT FOOT FOOT FOOT	TOTAL OUANTITIES  2 2125 327.6 21295 1575 30		0005 515	MULTI-USE PATH 1001 COUNTY 0028	TRAFFIC SIGNAL 907: FED. 61: STATE 51: COUNTY 0021	EMERGENGY VEHICLE PREEMPTION 1001. C174		CODE NO *81900200	SUMMARY OF QUANTITIES  ITEM  TRENCH AND BACKFILL FOR ELECTRICAL WORK	UNIT	TOTAL QUANTITIES 3197		10110707	0028	5% STATE	EMERGENGY VEHICLE PREEMPTION /001. CITY  0021	
70106800 CHANGE 70300100 SHORT 70300210 TEMPOR LETTER 70300220 TEMPOR - LINE 70300250 TEMPOR - LINE 70300260 TEMPOR - LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING PORARY PAVEMENT MARKING PORARY PAVEMENT MARKING PORARY PAVEMENT MARKING INE 4" PORARY PAVEMENT MARKING INE 6" PORARY PAVEMENT MARKING INE 8" PORARY PAVEMENT MARKING INE 12" PORARY PAVEMENT MARKING INE 12"	CAL MO FOOT SO FT FOOT FOOT	QUANTITIES  2 2125 327.6 21295 1575	10/.STATE 0004 2 1610 291. 2	0005 515 36.4	COUNTY	51. STATE 51. COUNTY	100% C174					QUANTITIES	10/STATE	101.STATE	0028	5% STATE 5% COUNTY 0021	CITY	
70300100 SHORT  70300210 TEMPOR LETTER  70300220 TEMPOR - LINE  70300240 TEMPOR - LINE  70300250 TEMPOR - LINE  70300260 TEMPOR - LINE  70300280 TEMPOR - LINE  70301000 WORK Z  * 72000100 SIGN P  * 78000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE  * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING FORARY PAVEMENT MARKING	FOOT FOOT	2125 327. 6 21295 1575	2 1610 291. 2 11560	515 36.4	3320	3021	0021		* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3197	0004	0003			0021	
70300210 TEMPOR LETTER  70300220 TEMPOR - LINE  70300240 TEMPOR - LINE  70300250 TEMPOR - LINE  70300260 TEMPOR - LINE  70300280 TEMPOR - LINE  70301000 WORK Z  * 72000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING FORARY PAVEMENT MARKING INE 4"  PORARY PAVEMENT MARKING INE 6"  PORARY PAVEMENT MARKING INE 8"  PORARY PAVEMENT MARKING INE 12"  PORARY PAVEMENT MARKING INE 12"	SO FT FOOT FOOT	327. 6 21295 1575	1610 291. 2 11560	36. 4								1	1	. I			1	
70300210 TEMPOR LETTER  70300220 TEMPOR - LINE  70300240 TEMPOR - LINE  70300250 TEMPOR - LINE  70300260 TEMPOR - LINE  70300280 TEMPOR - LINE  70301000 WORK Z  * 72000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING FORARY PAVEMENT MARKING INE 4"  PORARY PAVEMENT MARKING INE 6"  PORARY PAVEMENT MARKING INE 8"  PORARY PAVEMENT MARKING INE 12"  PORARY PAVEMENT MARKING INE 12"	F00T	327. 6 21295 1575	291. 2 11560	36. 4	,				* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1			.*	1		1
TEMPOR - LINE  70300240 TEMPOR - LINE  70300250 TEMPOR - LINE  70300250 TEMPOR - LINE  70300260 TEMPOR - LINE  70300280 TEMPOR - LINE  70301000 WORK Z  * 72000100 SIGN P  * 78000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING	F00T	21295	11560						.	INSTALLATION								
- LINE 70300240 TEMPOR - LINE 70300250 TEMPOR - LINE 70300260 TEMPOR - LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING INE 6"  PORARY PAVEMENT MARKING INE 8"  PORARY PAVEMENT MARKING INE 12"  PORARY PAVEMENT MARKING INE 12"	FOOT	1575		9735					* 85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1				1		
- LINE 70300250 TEMPOR - LINE 70300260 TEMPOR - LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING INE 8"  PORARY PAVEMENT MARKING INE 12"  PORARY PAVEMENT MARKING INE 24"	FOOT		1465						<b>*</b> 85700300		EACH	1				1		
- LINE 70300260 TEMPOR - LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	INE 8"  PORARY PAVEMENT MARKING  INE 12"  PORARY PAVEMENT MARKING  INE 24"		30		110					* 86000100	MASTER CONTROLLER	EACH	1				1		
70300260 TEMPOR - LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	PORARY PAVEMENT MARKING INE 12" PORARY PAVEMENT MARKING INE 24"	FOOT		30						* 86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	2				2		
- LINE 70300280 TEMPOR - LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	NE 12" PORARY PAVEMENT MARKING INE 24"	FOOT								* 86400100	TRANSCEIVER - FIBER OPTIC	EACH	2				2		1
- LINE 70301000 WORK Z * 72000100 SIGN P * 78000100 THERMO - LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	NE 24"	1	275	275			-			<b>*</b> 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL	FOOT	865				865		
* 72000100 SIGN P  * 78000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE		FOOT	100	100						<b>*</b> 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL	FOOT	1525				900	625	
* 78000100 THERMO - LETT  * 78000200 THERMO - LINE  * 78000400 THERMO - LINE	ZONE PAVEMENT MARKING REMOVAL	SO FT	715	540	175						NO. 14 3C								
- LETT * 78000200 THERMO - LINE * 78000400 THERMO - LINE	N PANEL - TYPE 1	SO FT	21				21			* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1855				1855		
+ 78000400 THERMO - LINE	RMOPLASTIC PAVEMENT MARKING TTERS AND SYMBOLS	SO FT	327.6	291. 2	36.4					* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	575				575		
- LINE	RMOPLASTIC PAVEMENT MARKING INE 4"	FOOT	21295	11560	9735	-				* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1585				1585		,
	RMOPLASTIC PAVEMENT MARKING NE 6"	FOOT	1575	1465	110					* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	80				80		
* 78000500 THERMO - LINE	RMOPLASTIC PAVEMENT MARKING INE 8"	FOOT	30	30						* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2				2		
	RMOPLASTIC PAVEMENT MARKING	FOOT	275	275						* 87700210	STEEL MAST ARM ASSEMBLY AND POLE. 34 FT	EACH	1				1		
	RMOPLASTIC PAVEMENT MARKING	FOOT	100	100						<b>*</b> 87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT	. EACH	1				1		
	NE 24"	1001	100	100						<b>*</b> 87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT	. EACH	1		* . *		1		
* 78100100 RAISED	SED REFLECTIVE PAVEMENT MARKER	EACH	230	145	85			11.0		<b>*</b> 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8				8		
78300200 RAISED REMOVA	SED REFLECTIVE PAVEMENT MARKER	EACH	200	125	75			,		<b>*</b> 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4				4		
**	/ICE INSTALLATION - POLE MOUNTED	EACH	1				1			* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39				39		
	DUIT IN TRENCH, 2" DIA., GALVANIZED	FOOT	2855				2855			* 87900200	DRILL EXISTING HANDHOLE	EACH	1				1		
	OUIT IN TRENCH, 2 1/2" DIA.,	FOOT	52				52			* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5				5		in de la companya di salah di Majarah di salah di s
* 81000800 CONDUI	VANIZED STEEL DUIT IN TRENCH, 3" DIA., GALVANIZED	FOOT	64				64			* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3				3		
•	DUIT IN TRENCH, 4" DIA., GALVANIZED	FOOT	228				228			* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3				3		
STEEL CONDUIT		FOOT	202				202			* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION,	EACH	5				5		
* 81018500 CONDUI	DUIT PUSHED, 2" DIA., GALVANIZED	FUUT	292				292			* 88030210	MAST-ARM MOUNTED  SIGNAL HEAD, LED, 2-FACE, 3-SECTION,	EACH	1				1		
* 81018900 CONDUI STEEL	OUIT PUSHED, 4" DIA., GALVANIZED	FOOT	327				327				BRACKET MOUNTED						•		
* 81400200 HEAVY-	YY-DUTY HANDHOLE	EACH	9		l l		9	-									* SPEC	CIALTY IT	EMS
* 81400300 DOUBLE		EACH	2				2			•			1	1 1	1				
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or first with a first and a specked (CW/AOCIONS) I.A.	USER NAME = beckertom	DESIGNED - DRAWN -		REVISED REVISED	~~~~~		_		TATE OF I	ILLINOIS	IL ROUTE	53 AT RIVER	ROAD		F.A.P. RTE. 846	SECTI		COUNTY T	Rev. TOTAL SHEET SHEETS NO. 68 4

	SUMMARY OF QUANTITIES		URBAN		Ċ	ONSTRUCTI	ON TYPE (				S	UMMARY OF QUAN	TITIES					C	ONSTRUCT:	ION TYPE		
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 90%FED- 10%STATE	ROADWAY 90%.FED- 10%.STATE	MULTI-USE PATH 1001. COUNTY	TRAFFIC SIGNAL 90:1.FED. 5:1.STATE 5:1.COUNTY			CODE NO		ITEM			UNIT	TOTAL QUANTITIES	ROADWAY	ROADWAY	MULTI-USE PATH	TRAFFIC SIGNAL	EMERGENGY VEHICLE PREEMPTION	
		· ·		0004	0005	0028	0021	0021									0004	0005	0028	0021	0021	
* 88030220	SIGNAL HEAD, LED. 2-FACE, 5-SECTION. BRACKET MOUNTED	EACH	1				1															
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4				4					Y										
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10				10										2					
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	12				12															
<b>*</b> 88600100	DETECTOR LOOP, TYPE I	FOOT	811				811															
* 88700200	LIGHT DETECTOR	EACH	2		* .			2			, i											
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	- 1					1														
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	4				4															
* 89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1			-	1															
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	. 1				1				-											
¥ A2002920	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	12	12																		
*B2001666	TREE, CRATAEGUS CRUSGALLI INERMIS (THORN LESS COCKSPUR HAWTHORN), 6' HEIGHT, SHRUB FORM, BALLED AND BURLAPPED	EACH	9	9																		
<b>*</b> коо29634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	2	2								•										
* <b>8</b> 7300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	3125				3125			*												
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1																		
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	3	3																		
X4024000	TEMPORARY ACCESS (FIELD ENTRANCE)	EACH	1	1																		
X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	875	470	405																	
X7010216	TRAFFIC CONTROL AND PROTECTION. (SPECIAL)	L SUM	1	0.75	0.25		-															
* 871 <b>0</b> 0020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	3160				3160							- a <sub>n</sub>				#				
<b>*</b> 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6, 1C	FOOT	1080				1080															
* X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	625		·			625														
Z0001050	AGGREGATE SUBGRADE 12"	SO YD	7825	7825												- N						
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1 1												-						
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	77. 1	77.1																		
* Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1				1					ŀ										
Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	1250	1250										t we e						* SPE	CIALTY I	TEMS
·												·		<u> </u>								
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#### HOT-MIX ASPHALT MIXTURE NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS.

#### THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

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1 13 2011	PLOT DATE = 9/8/2011	DATE ~	REVISED -	

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

SCALE:

#### SECTION IL ROUTE 53 AT RIVER ROAD 4-N-3 **EXISTING AND PROPOSED TYPICAL SECTIONS** SHEET NO. OF SHEETS STA.

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM)

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM), 2"

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM), 2"

HOT-MIX ASPAHLT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM), 2"

HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 MM), 6"

HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 MM), 8"

HMA DRIVEWAY (C.E.)

HMA FIELD ENTRANCE

HMA MULTI-PURPOSE PATH

#### COUNTY TOTAL SHEE NO. WILL CONTRACT NO. 60L42 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

AIR VOIDS

@ Ndes

4% @ 70 GYR.

4% @ 50 GYR.

4% @ 70 GYR. 4% @ 50 GYR.

4% @ 70 GYR.

2% @ 50 GYR.

4% @ 70 GYR. 4% @ 70 GYR.

4% @ 50 GYR.

4% @ 50 GYR.

4% @ 50 GYR.

4% © 50 GYR.

4% @ 50 GYR.

4% @ 50 GYR.

#### 1) EXISTING HMA SURFACE AFTER MILLING (O" AND VARIES)

- (2) EXISTING HMA SURFACE AFTER MILLING (9-1/2" AND VARIES)
- 3 EXISTING P.C.C. PAVEMENT, 10"

LEGEND:

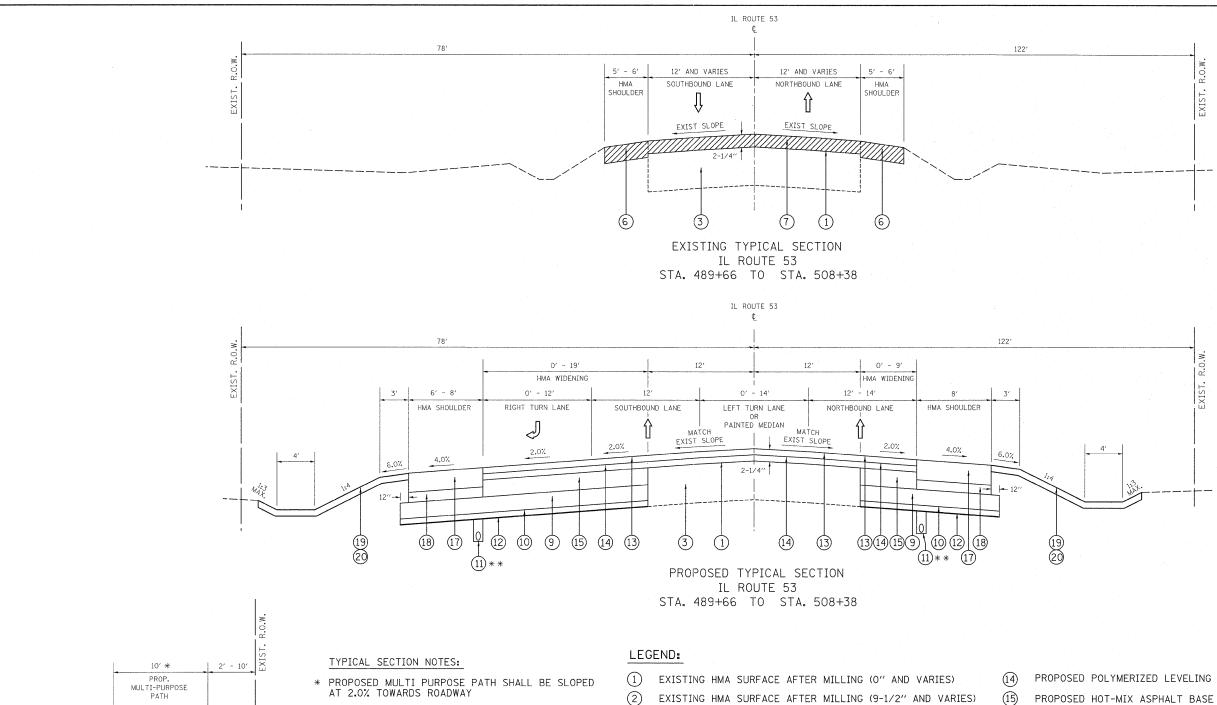
- (4) EXISTING AGGREGATE BASE, 6"
- (5) EXISTING HMA SHOULDER TO REMAIN IN PLACE
- (6) EXISTING HMA SHOULDER TO BE REMOVED
- (7) PROPOSED HMA SURFACE REMOVAL, 2-1/4"
- PROPOSED AGGREGATE BASE COURSE, TYPE B, 8"
- (9) PROPOSED AGGREGATE SUBGRADE, 12"
- 10 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE, 6"
- (11) PROPOSED PIPE UNDERDRAINS, 4" (SEE TYPICAL SECTION NOTES)
- (12) PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2"
- (14) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"

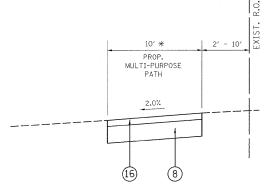
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

- (15) PROPOSED HOT-MIX ASPHALT BASE COURSE, 11-1/2"
- (16) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- (17) PROPOSED HOT-MIX ASPHALT SHOULDER, 8" (2 LIFTS)

MIXTURE TYPE

- (18) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 5-3/4"
- (19) PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- PROPOSED SEEDING, CLASS 2A





PROPOSED TYPICAL SECTION PROPOSED MULTI-USE PATH IL ROUTE 53

STA. 495+30 RT TO STA. 499+60 RT STA. 497+00 LT TO STA. 499+60 LT

\*\* PROPOSED PIPE UNDERDRAINS SHALL BE PLACED LONGITUDINALLY AT THE FOLLOWING LOCATIONS AS DETERMINED BY THE ENGINEER:

FROM: STA. 491+00 LT TO STA. 491+50 LT STA. 491+00 RT TO STA. 491+50 RT STA. 494+50 LT TO STA. 495+00 LT STA. 494+50 RT TO STA. 495+00 RT STA. 498+00 LT TO STA. 498+50 LT STA. 498+00 RT TO STA. 498+50 RT STA. 502+50 RT TO STA. 503+00 RT STA. 503+50 LT TO STA. 504+00 LT

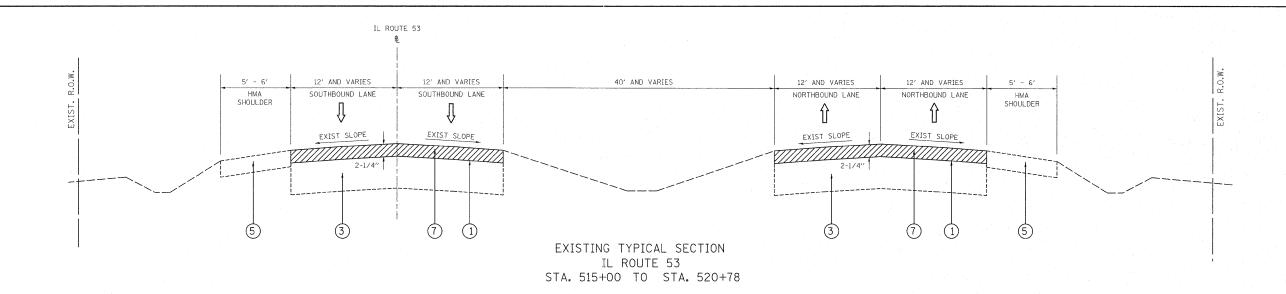
\*\*\* PROPOSED PIPE UNDERDRAINS SHALL BE PLACED LONGITUDINALLY AT THE FOLLOWING LOCATIONS AS DETERMINED BY THE ENGINEER:

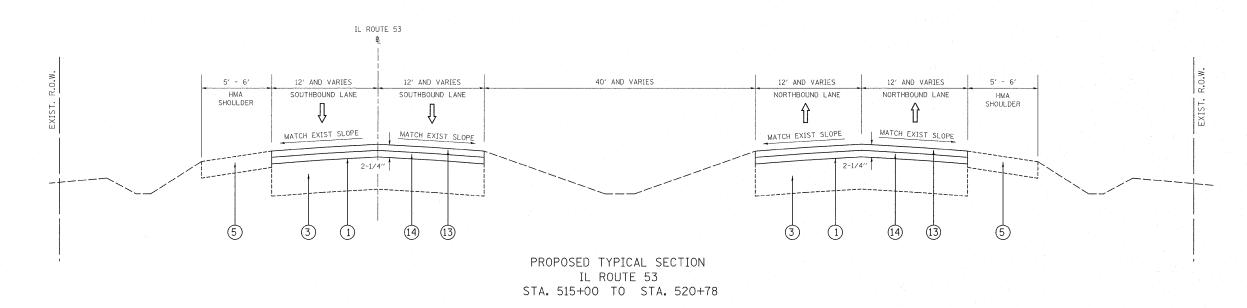
> STA. 195+00 RT TO STA. 195+50 RT STA. 198+00 RT TO STA. 198+50 RT STA. 198+00 LT TO STA. 195+50 LT

- 3 EXISTING P.C.C. PAVEMENT, 10"
- (4) EXISTING AGGREGATE BASE, 6"
- (5) EXISTING HMA SHOULDER TO REMAIN IN PLACE
- (6) EXISTING HMA SHOULDER TO BE REMOVED
- (7) PROPOSED HMA SURFACE REMOVAL, 2-1/4"
- (8) PROPOSED AGGREGATE BASE COURSE, TYPE B, 8"
- (9) PROPOSED AGGREGATE SUBGRADE, 12"
- (10) PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE, 6"
- $\widehat{(11)}$ PROPOSED PIPE UNDERDRAINS, 4" (SEE TYPICAL SECTION NOTES)
- (12) PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2"

- PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- PROPOSED HOT-MIX ASPHALT BASE COURSE, 11-1/2"
- (16) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- (17) PROPOSED HOT-MIX ASPHALT SHOULDER, 8" (2 LIFTS)
- (18) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 5-3/4"
- (19) PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- PROPOSED SEEDING, CLASS 2A

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -			IL ROUTE 53 AT RIVER ROAD	F.A.P.	SECTION	COUNTY	TOTAL SHEET
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115 2011	PLOT DATE = 9/8/2011	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD D	IST. NO. 1   ILLINOIS FED. A	ID PROJECT	



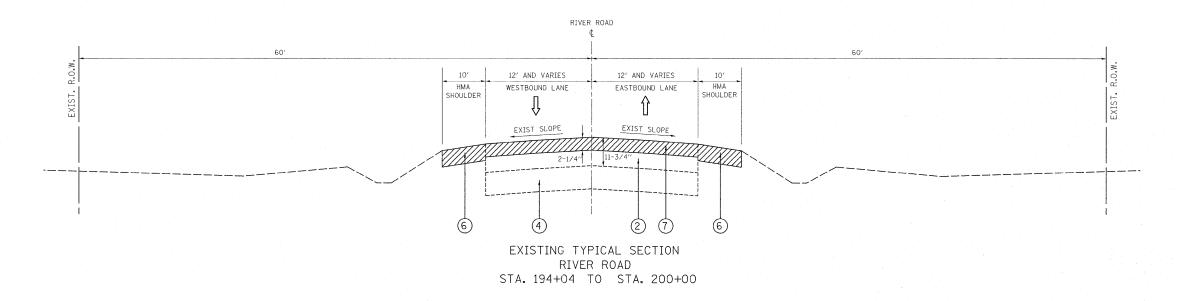


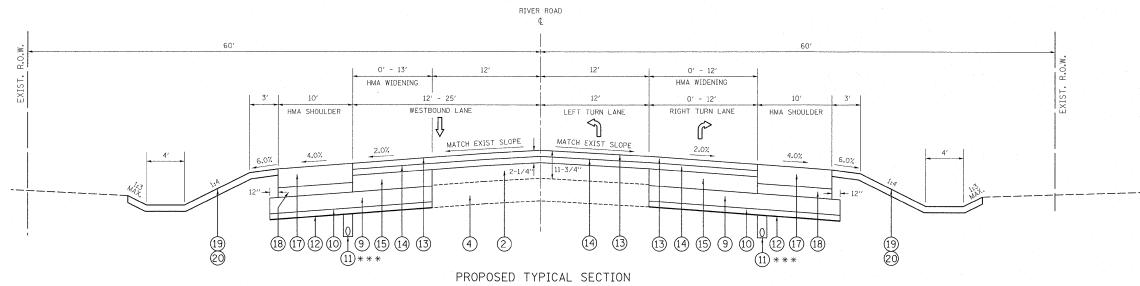
#### LEGEND:

- 1 EXISTING HMA SURFACE AFTER MILLING (O" AND VARIES)
- 2 EXISTING HMA SURFACE AFTER MILLING (9-1/2" AND VARIES)
- (3) EXISTING P.C.C. PAVEMENT, 10"
- 4 EXISTING AGGREGATE BASE, 6"
- (5) EXISTING HMA SHOULDER TO REMAIN IN PLACE
- 6 EXISTING HMA SHOULDER TO BE REMOVED
- 7
- PROPOSED HMA SURFACE REMOVAL, 2-1/4" 8 PROPOSED AGGREGATE BASE COURSE, TYPE B, 8"
- 9 PROPOSED AGGREGATE SUBGRADE, 12"
- PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE, 6"

- PROPOSED PIPE UNDERDRAINS, 4" (SEE TYPICAL SECTION NOTES)
- 12 PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2"
- 14) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (15) PROPOSED HOT-MIX ASPHALT BASE COURSE, 11-1/2"
- (16) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- (17) PROPOSED HOT-MIX ASPHALT SHOULDER, 8" (2 LIFTS)
- (18) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 5-3/4"
- (19) PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- PROPOSED SEEDING, CLASS 2A

FILE NAME =	USER NAME = beckertcm	DESIGNED -	REVISED -			IL ROUTE 53 AT RIVER ROAD	i i	F.A.P. SECTION	COUNTY T	TOTAL SHEET
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9-13-2011	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		EXISTING AND PROPOSED TYPICAL SECTIONS	-		CONTRACT N	NO. 60L42
1-15 2511	PLOT DATE = 9/8/2011	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO S	TA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. A	l	





PROPOSED TYPICAL SECTION
RIVER ROAD
STA. 194+04 TO STA. 200+00

#### TYPICAL SECTION NOTES:

- \* PROPOSED MULTI PURPOSE PATH SHALL BE SLOPED AT 2.0% TOWARDS ROADWAY
- \*\* PROPOSED PIPE UNDERDRAINS SHALL BE PLACED LONGITUDINALLY AT THE FOLLOWING LOCATIONS AS DETERMINED BY THE ENGINEER:

FROM: STA. 491+00 LT TO STA. 491+50 LT STA. 491+00 RT TO STA. 491+50 RT STA. 494+50 LT TO STA. 495+00 LT STA. 494+50 RT TO STA. 495+00 RT STA. 498+00 LT TO STA. 498+50 LT STA. 498+00 RT TO STA. 498+50 RT STA. 502+50 RT TO STA. 503+00 RT STA. 503+50 LT TO STA. 504+00 LT

\*\*\* PROPOSED PIPE UNDERDRAINS SHALL BE PLACED LONGITUDINALLY AT THE FOLLOWING LOCATIONS AS DETERMINED BY THE ENGINEER:

FROM: STA. 195+00 RT TO STA. 195+50 RT STA. 198+00 RT TO STA. 198+50 RT STA. 198+00 LT TO STA. 195+50 LT

#### LEGEND:

- (1) EXISTING HMA SURFACE AFTER MILLING (O" AND VARIES)
- 2) EXISTING HMA SURFACE AFTER MILLING (9-1/2" AND VARIES)
- 3 EXISTING P.C.C. PAVEMENT, 10"
- 4 EXISTING AGGREGATE BASE, 6"
- (5) EXISTING HMA SHOULDER TO REMAIN IN PLACE
- 6 EXISTING HMA SHOULDER TO BE REMOVED
- 7 PROPOSED HMA SURFACE REMOVAL, 2-1/4"
- (8) PROPOSED AGGREGATE BASE COURSE, TYPE B, 8"
- 9 PROPOSED AGGREGATE SUBGRADE, 12"
- (10) PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE, 6"

- (11) PROPOSED PIPE UNDERDRAINS, 4" (SEE TYPICAL SECTION NOTES)
- (12) PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- 13) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1-1/2"
- (14) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (15) PROPOSED HOT-MIX ASPHALT BASE COURSE, 11-1/2"
- (16) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- 17) PROPOSED HOT-MIX ASPHALT SHOULDER, 8" (2 LIFTS)
- (18) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 5-3/4"
- 19 PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- (20) PROPOSED SEEDING, CLASS 2A

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -			IL ROUTE 53 AT RIVER ROAD	F.A.P. SECTION COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\dØ150277\P1	2009-sht-xssht-1153-Design.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS			846 4-N-3 WILL 68 9
9-13-2011	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		EXISTING AND PROPOSED TYPICAL SECTIONS	CONTRACT NO. 60L42
1 13 2011	PLOT DATE = 9/8/2011	DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT

	TREE	REMOVAL S	CHEDULE (IL R	OUTE 53)	
LOCATION	OFFSET		DESCRIPTION	1	
LOCATION	OFFSET	DIAMETER	6 TO 15 UNITS	OVER 15 UNITS	REASON FOR REMOVAL
STATION	FEET	INCHES	6 10 15 UNI 15	OVER 15 UNITS	
STA. 500+23.88	25.83	30		30	PAVEMENT WIDENING
STA. 501+37.71	28.12	5 <b>©</b> 6′′	30		PAVEMENT WIDENING
STA. 501+37.76	28.37	5@9"	45		PAVEMENT WIDENING
STA. 501+86.63	28.30	14	14		PAVEMENT WIDENING
STA. 501+89.11	29.11	14	14		PAVEMENT WIDENING
STA. 501+94.46	31.12	7	7		PAVEMENT WIDENING
STA. 501+94.87	28.45	12	12		PAVEMENT WIDENING
		TOTAL	122	30	

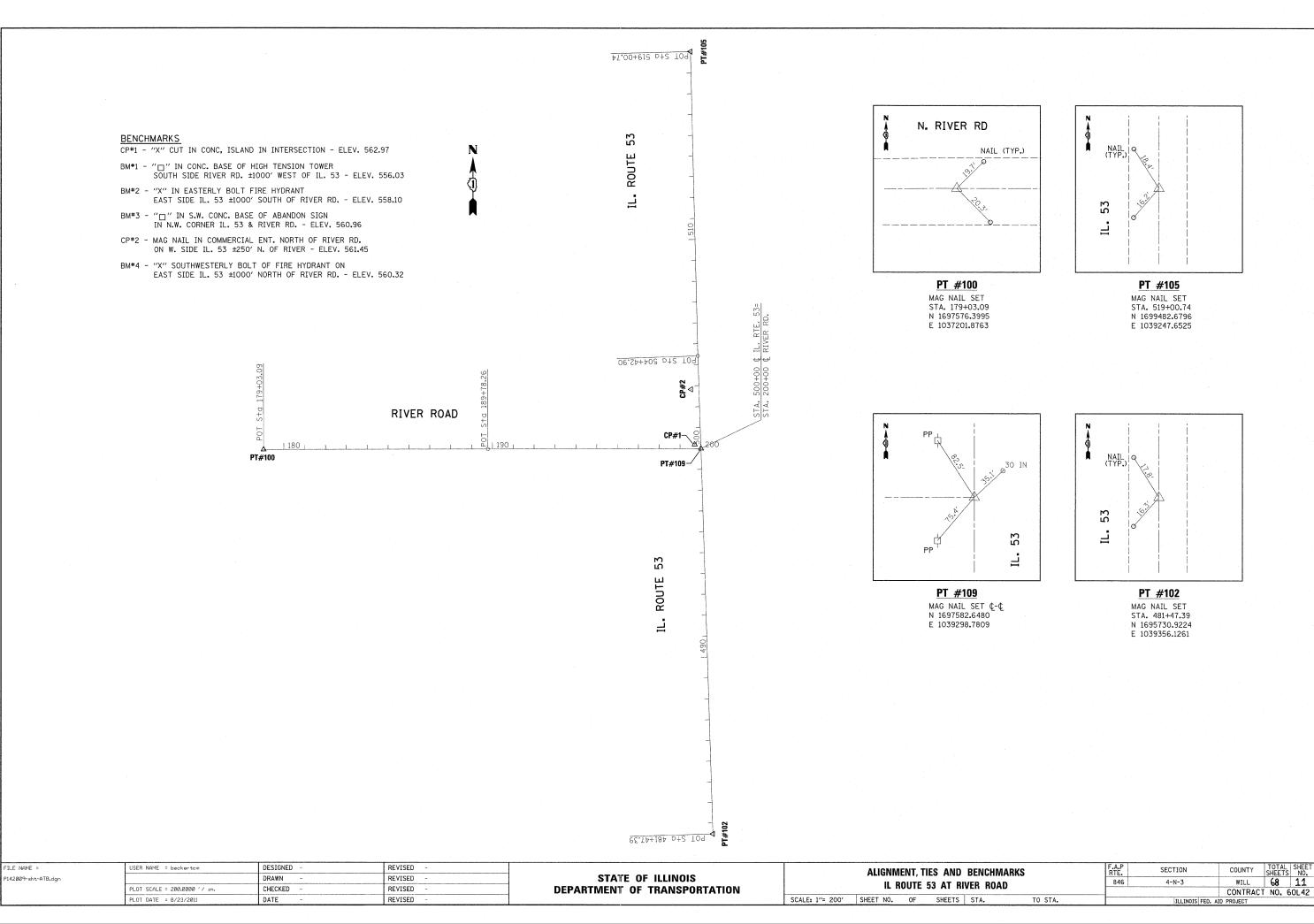
#### EARTHWORK SCHEDULE LEGEND:

- 1 LOCATION FROM PLAN
- 2 QUANTITY OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FROM CROSS SECTIONS
- 3 QUANTITY OF EARTH EXCAVATION (CUT) FROM CROSS SECTIONS
- 4 QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR A SHRINKAGE FACTOR OF 15%
- 5 QUANTITY OF EMBANKMENT (FILL) FROM CROSS SECTIONS
- 6 QUANTITY OF POROUS GRANULAR EMBANKMENT, SUBGRADE FROM CROSS SECTIONS
- (7) ADJUSTED EARTH EXCAVATION (CUT) MINUS EMBANKMENT (FILL) (COLUMN 4 MINUS COLUMN 5)
  - (+) = QUANTITY OF EARTH TO BE WASTED
  - (-) = QUANTITY OF FURNISHED EXCAVATION NEEDED

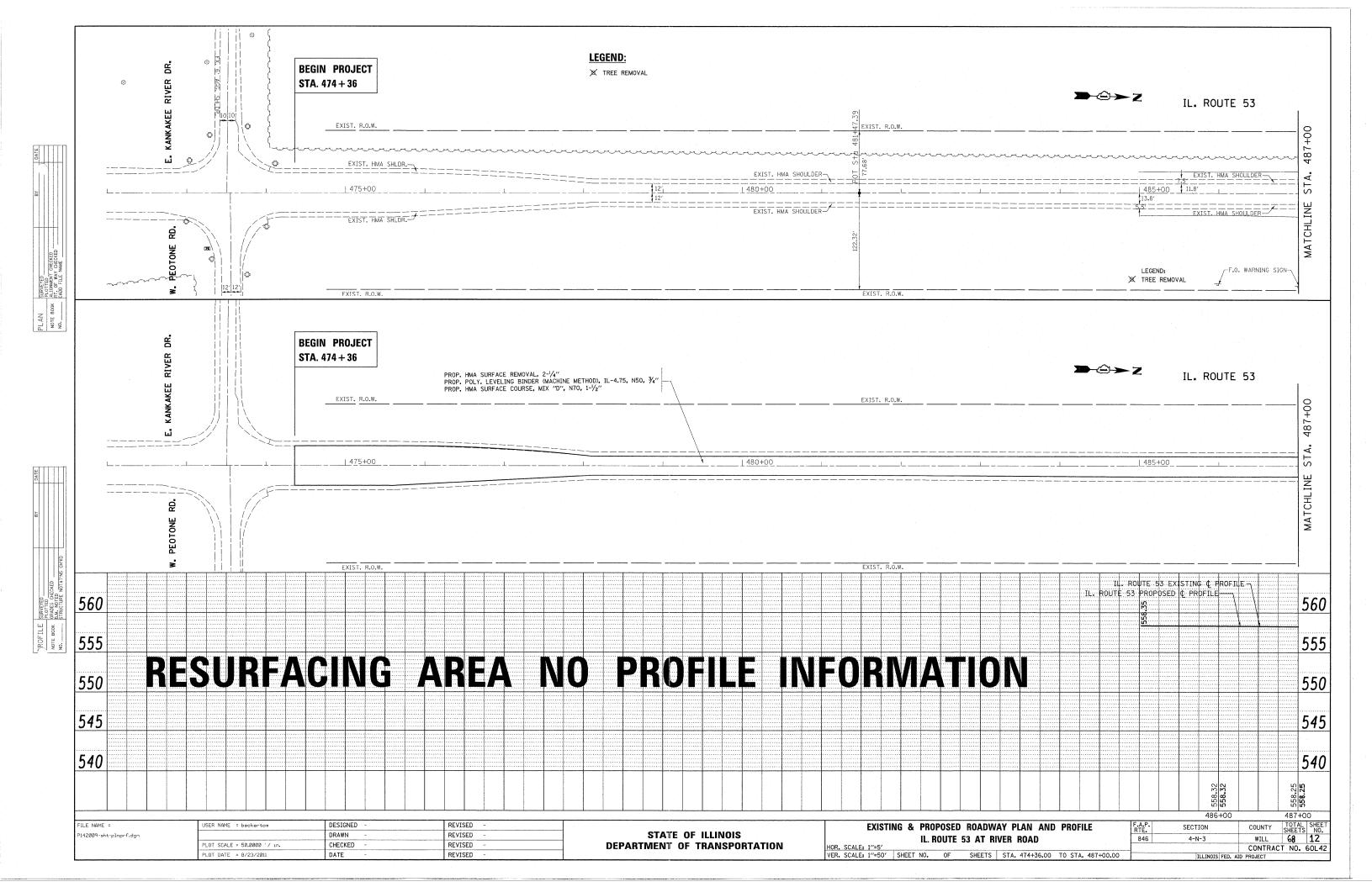
		EARTHWORK SCHE	DULE (RIVER ROAD	))		
LOCATION	UNSUITABLE MATERIAL	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	POROUS GRANULAR EMBANKMENT, SUBGRADE	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
1)	(2)	3	4	5	6	7
STATION	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD
STA. 193+00 TO STA. 194+00	93	23	20	50	50	-30
STA. 194+00 TO STA. 194+04	5	3	3	: 3.	3	+0
STA. 194+04 TO STA. 195+00	139	118	101	61	73	+40
STA. 195+00 TO STA. 196+00	167	145	124	67	97	+57
STA. 196+00 TO STA. 196+80	116	97	83	67	107	+16
STA. 196+80 TO STA. 197+00	22	21	18	22	34	-4
STA. 197+00 TO STA. 198+00	150	136	116	123	189	-7
STA. 198+00 TO STA. 198+50	82	80	68	38	66	+30
STA. 198+50 TO STA. 199+00	84	94	80	27	47	+53
TOTAL	858	717	613	458	666	+155

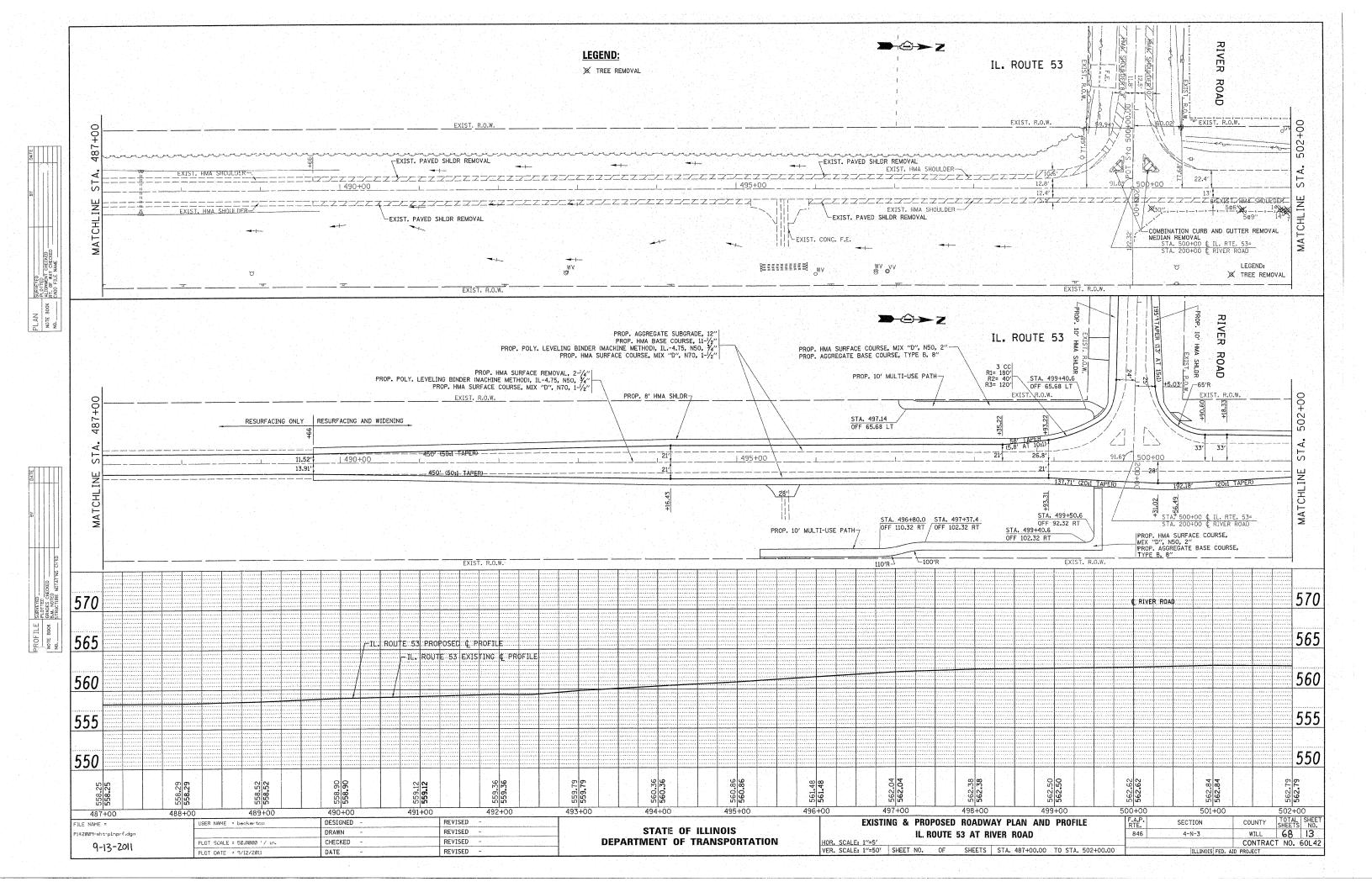
		EARTHWORK SCH	EDULE (IL ROUTE	53)		
LOCATION	UNSUITABLE MATERIAL	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	POROUS GRANULAR EMBANKMENT, SUBGRADE	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
1	2	3	4	(5)	6	7
STATION	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD
STA. 490+00 TO STA. 491+00	113	141	120	34	38	+86
STA. 491+00 TO STA. 492+00	113	186	159	10	45	+149
STA. 492+00 TO STA. 493+00	113	204	174	8	52	+166
STA. 493+00 TO STA. 494+00	126	212	181	8	60	+173
STA. 494+00 TO STA. 495+00	130	208	177	10	65	+167
STA. 495+00 TO STA. 495+55	79	117	100	7	37	+93
STA. 495+55 TO STA. 496+00	78	82	70	20	30	+50
STA. 496+00 TO STA. 497+00	191	145	124	76	67	+48
STA. 497+00 TO STA. 498+00	193	145	124	60	67	+64
STA. 498+00 TO STA. 499+00	195	188	160	34	73	+126
STA. 499+00 TO STA. 500+00	150	212	181	13	62	+168
STA. 500+00 TO STA. 501+00	150	232	198	10	60	+188
STA. 501+00 TO STA. 502+00	184	215	183	25	69	+158
STA. 502+00 TO STA. 503+00	112	117	100	23	45	+77
STA. 503+00 TO STA. 504+00	93	115	98	12	39	+86
STA. 504+00 TO STA. 504+20	22	28	24	2	. 9	+22
STA. 504+20 TO STA. 505+00	76	109	93	8	30	+85
STA. 505+00 TO STA. 506+00	106	119	102	21	39	+81
STA. 506+00 TO STA. 507+00	99	82	70	32	38	+38
STA. 507+00 TO STA. 508+00	95	69	59	54	36	+5
STA. 508+00 TO STA. 508+38	39	24	21	28	13	-7
TOTAL	2457	2950	2518	495	974	+2023

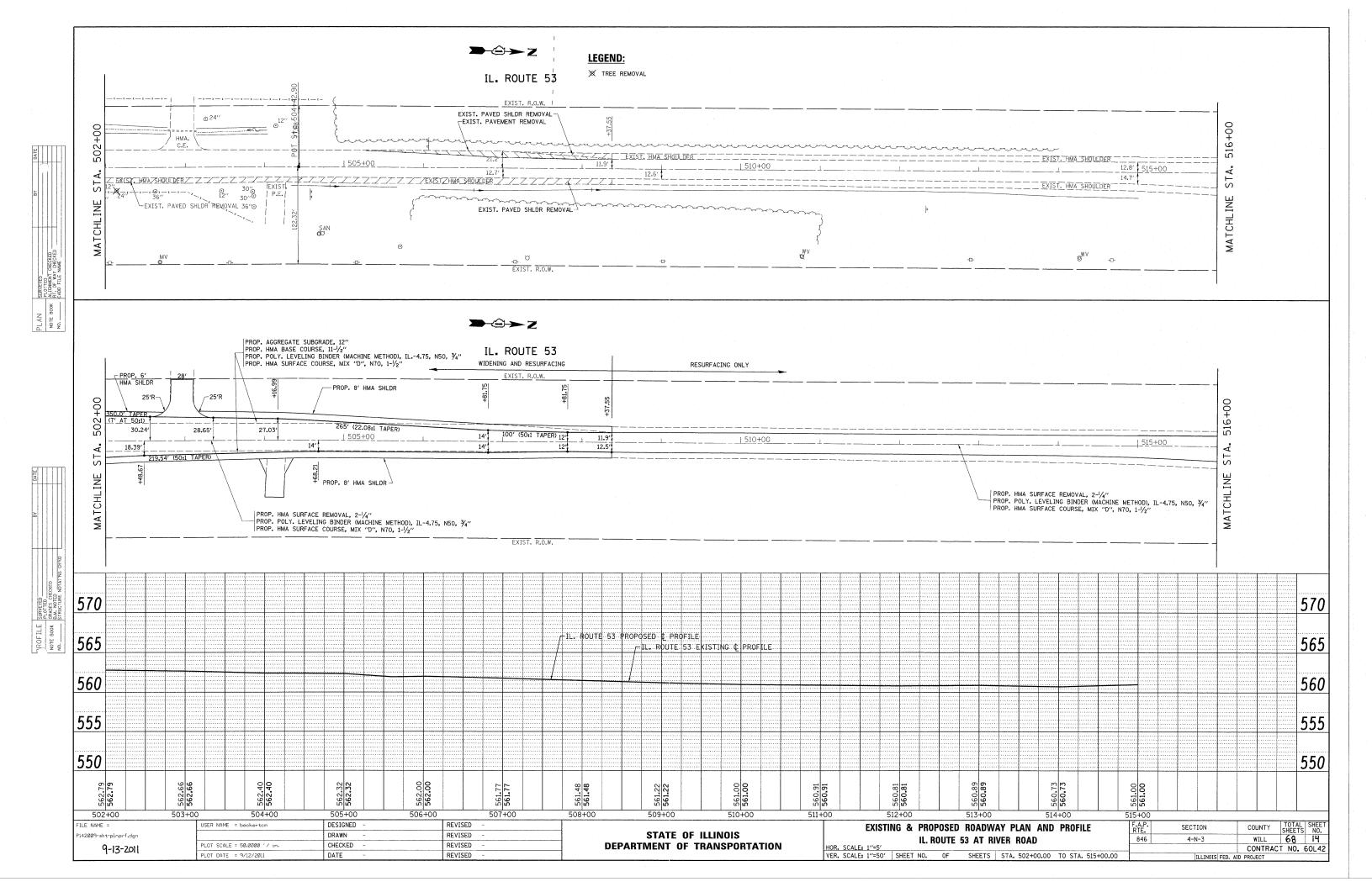
FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -			ı	ROUT	TF 53	AT RI	VER ROAD		F.A.P.	SECTION	COUNTY	TOTAL	L SHEET
c:\pw_work\pwidot\beckertcm\dØ15Ø277\P1	009-sht-xssht-1153-Design.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS								846	4-N-3	WILL	68	10
1	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			SCHEL	DOFF O	ir uu	ANTITIES				CONTRAC		60L42
	PLOT DATE = 8/26/2011	DATE -	REVISED -		SCALE:	SHEET NO	O. OF	F SHE	EETS	STA.	TO STA.	FED. ROAD DIS	T. NO. 1 ILLINOIS	FED. AID PROJECT		

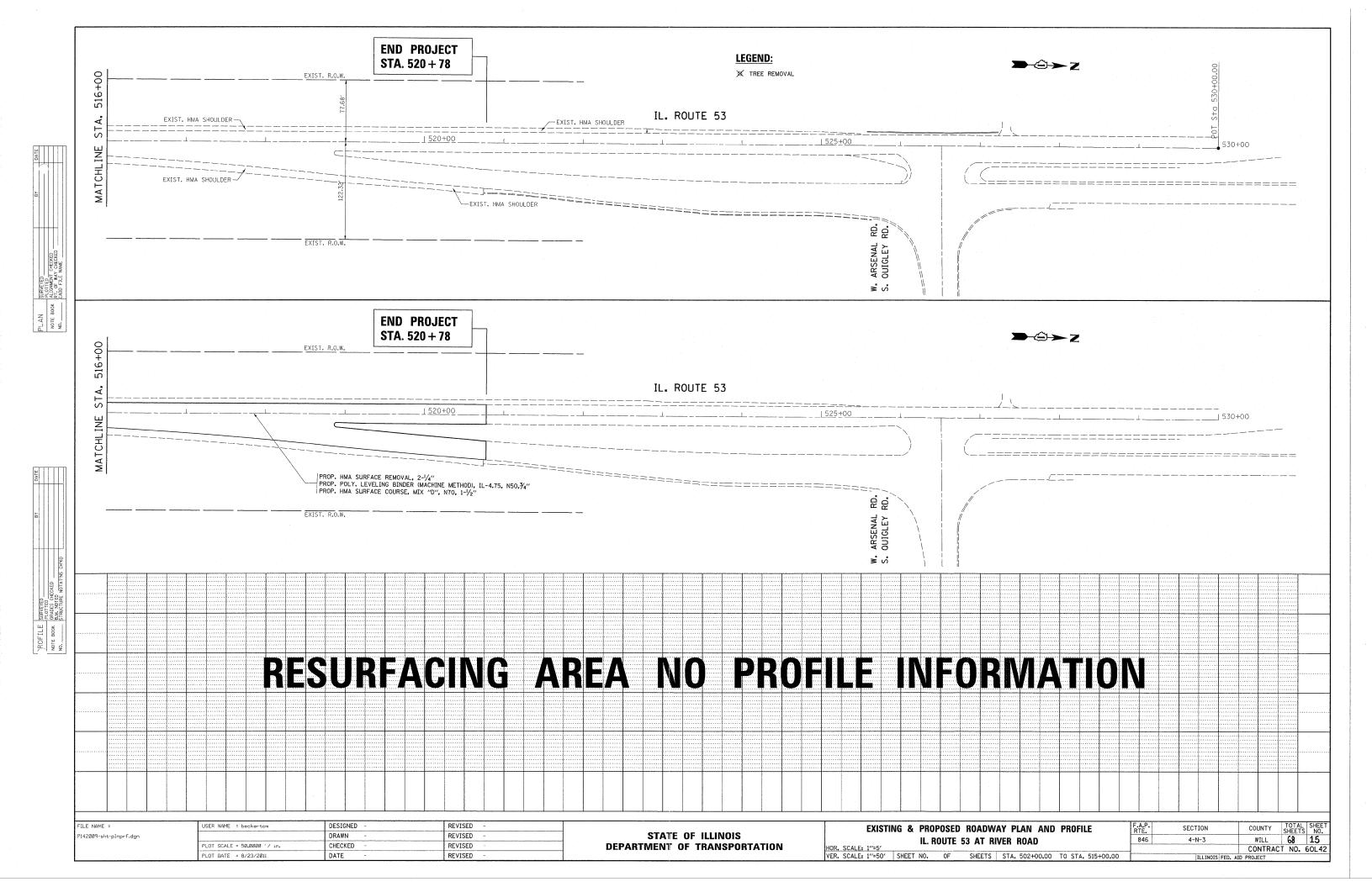


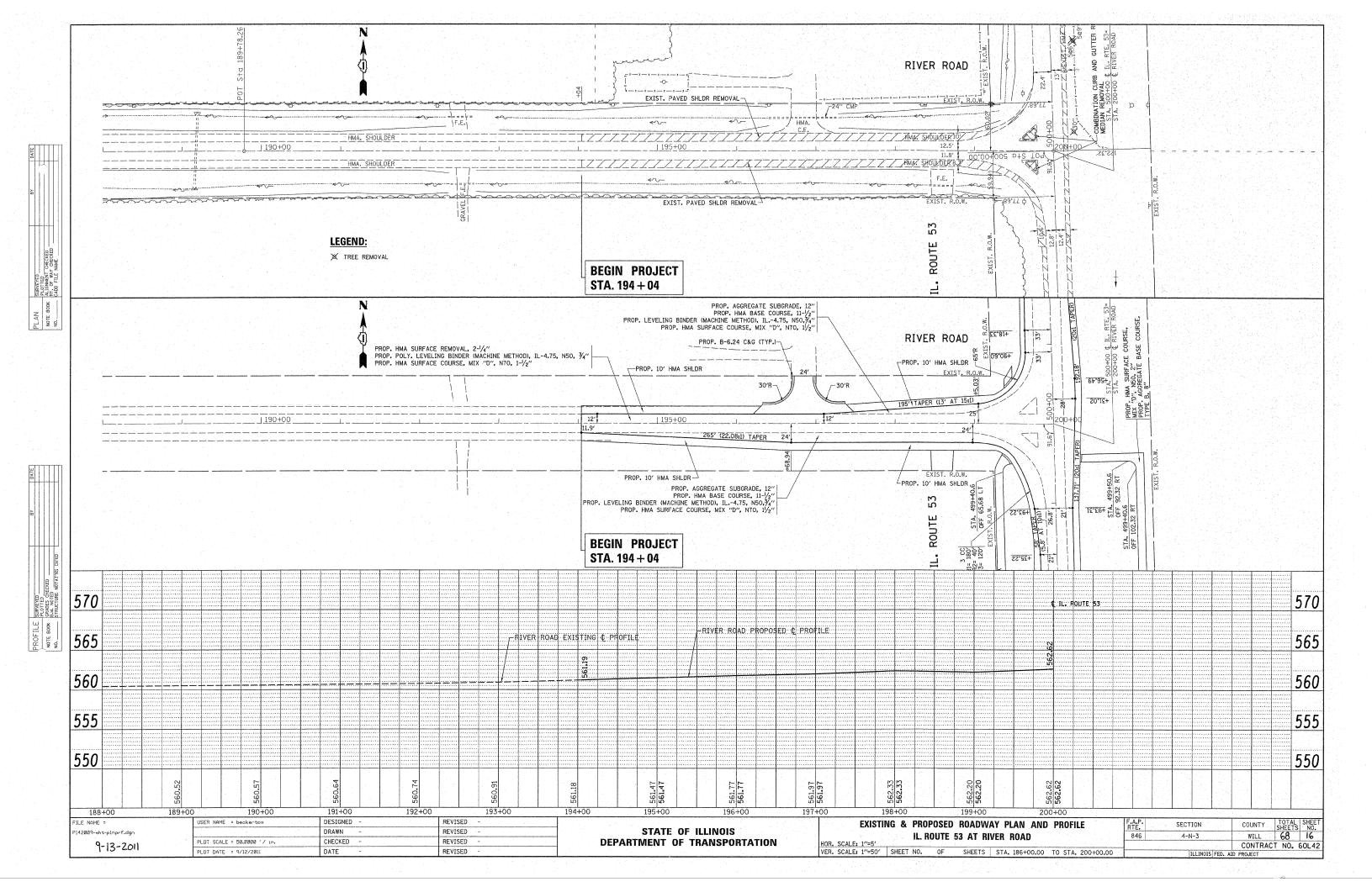
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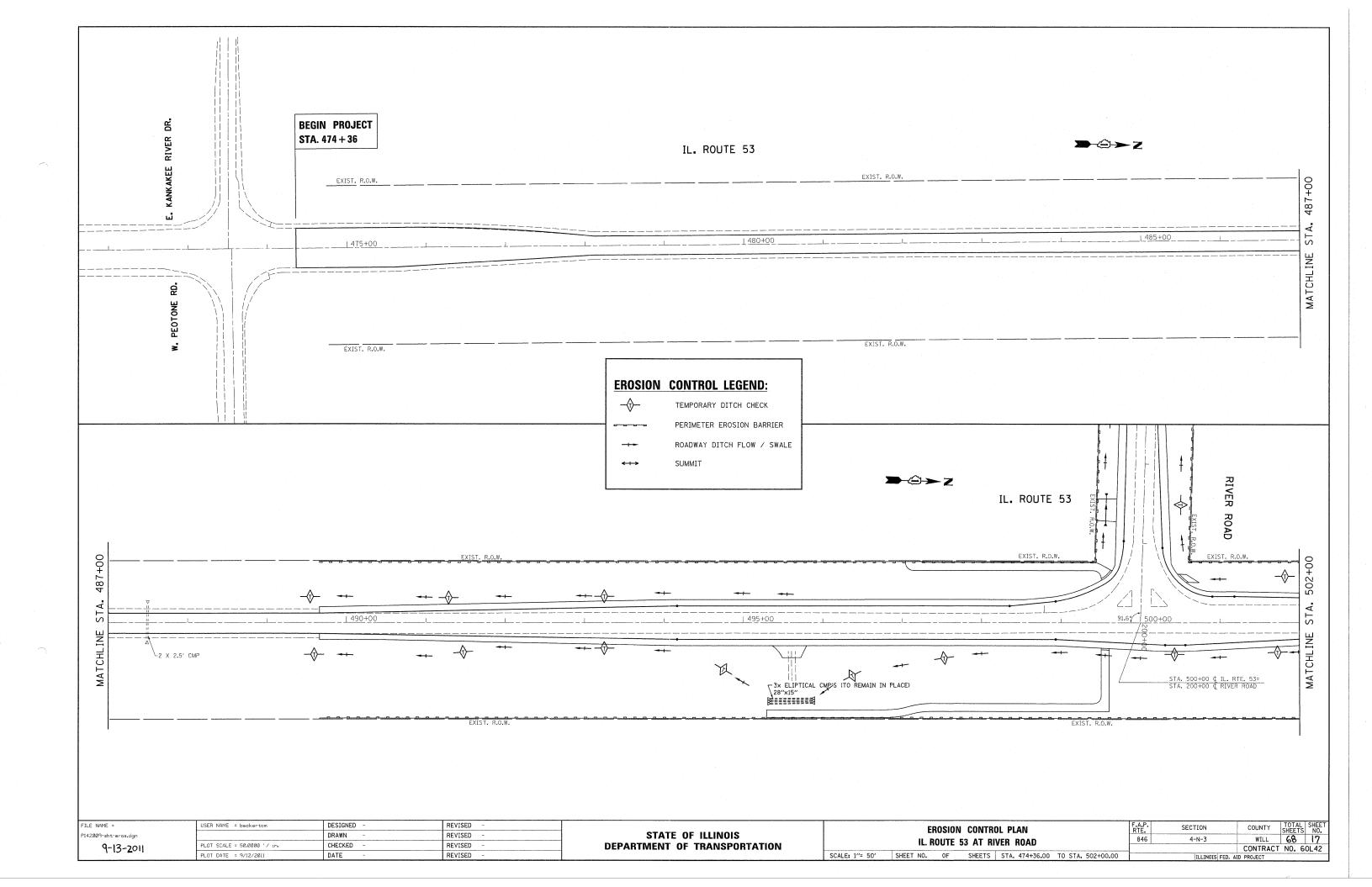


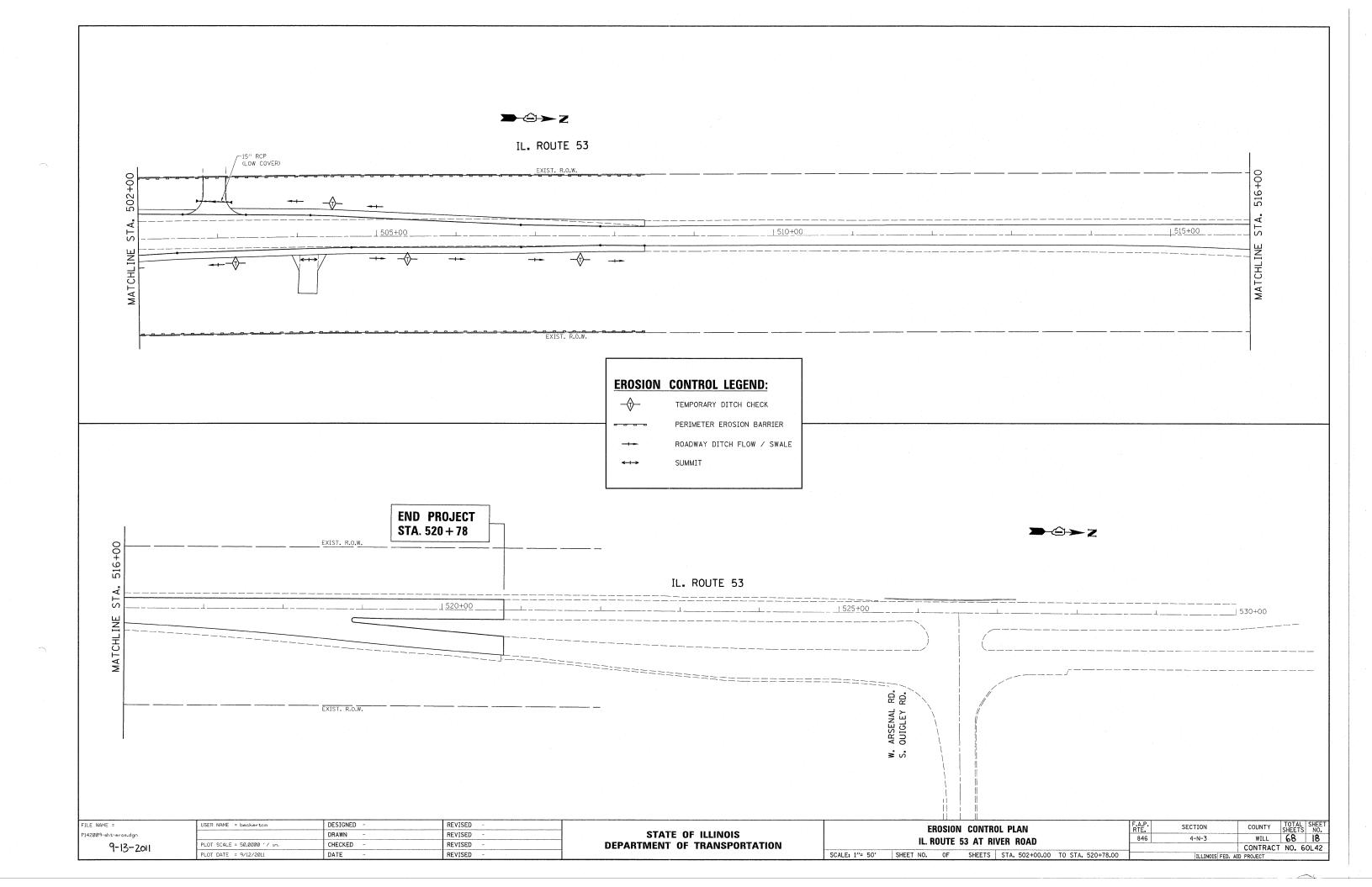


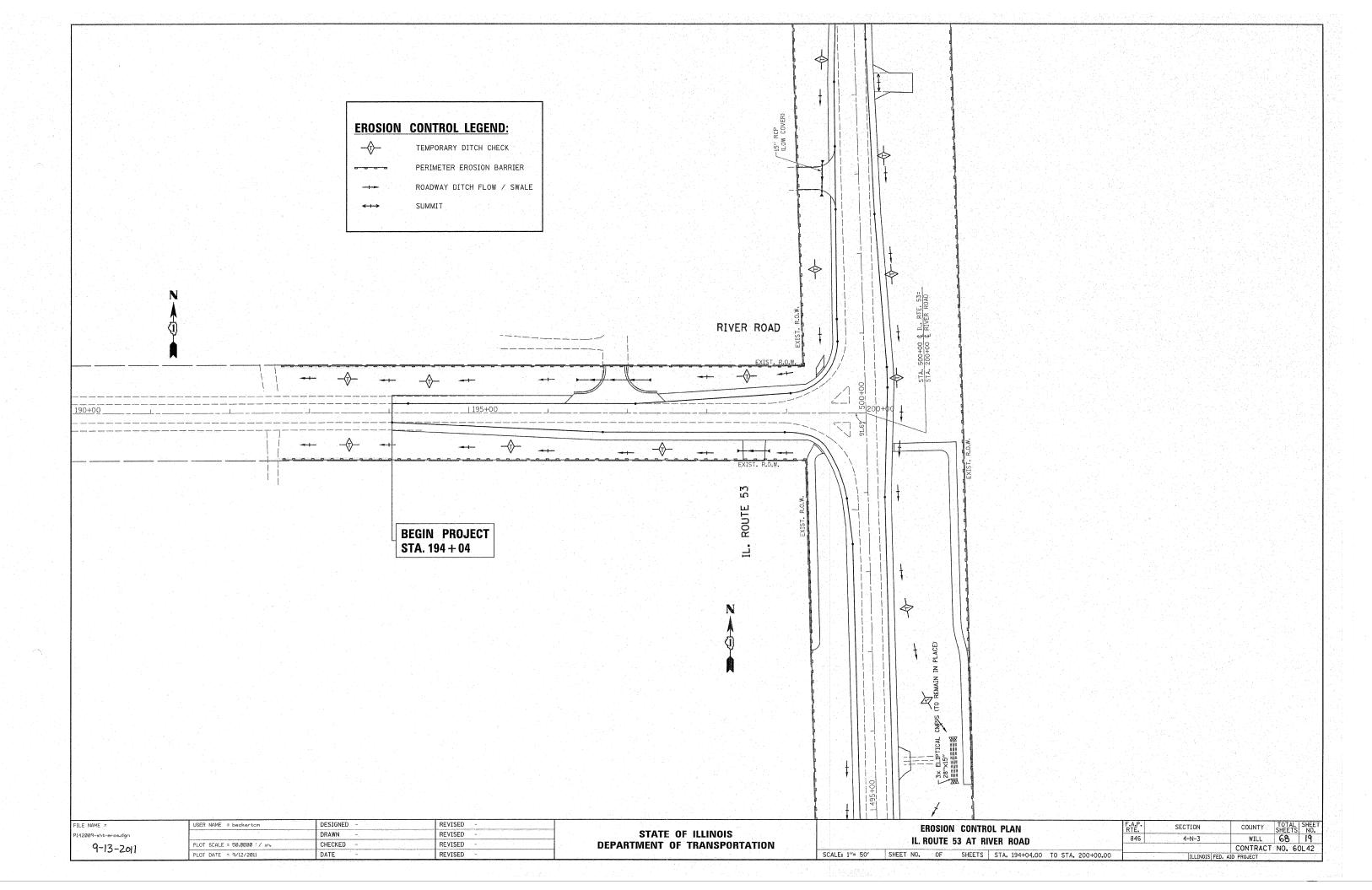


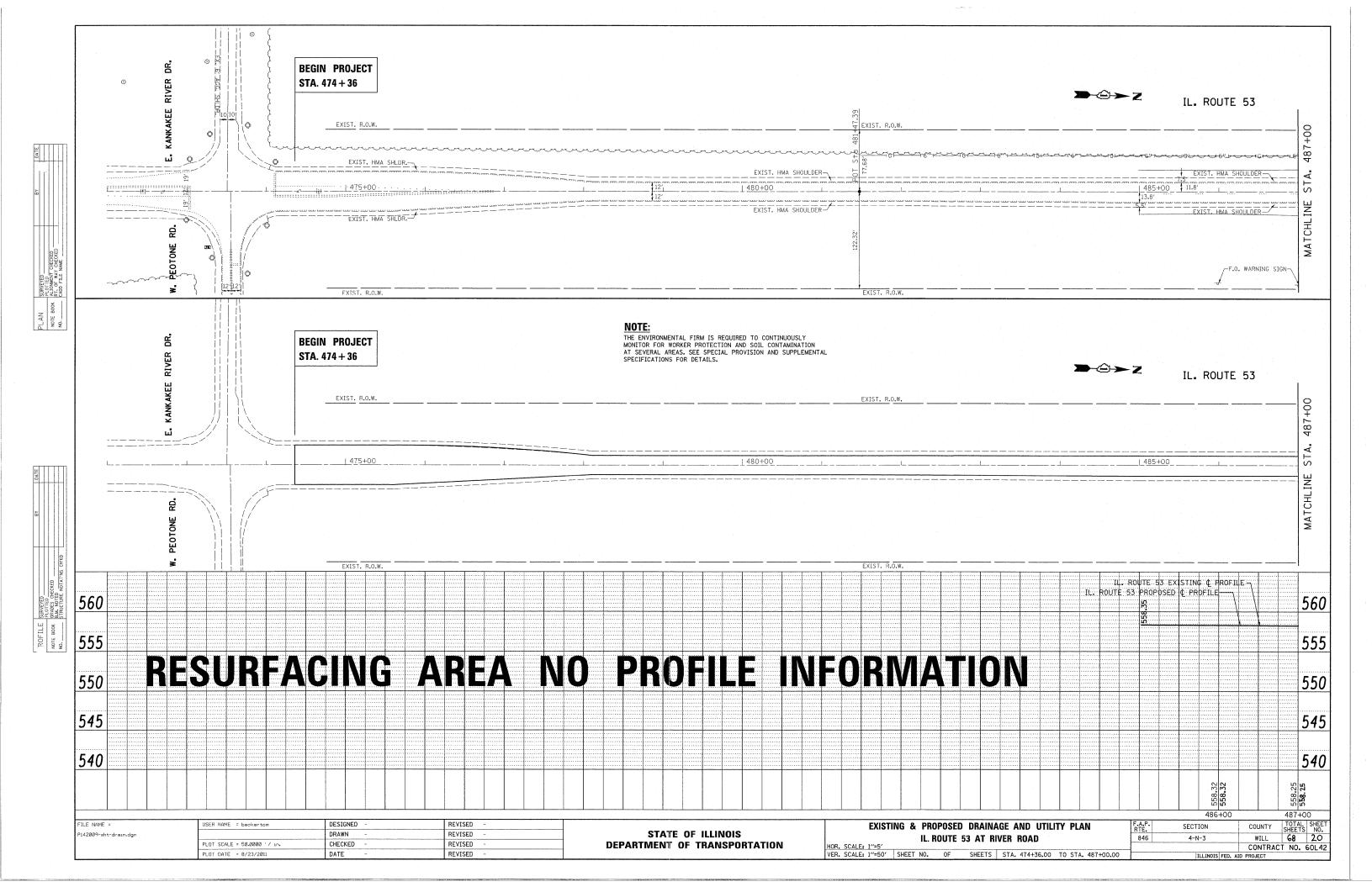


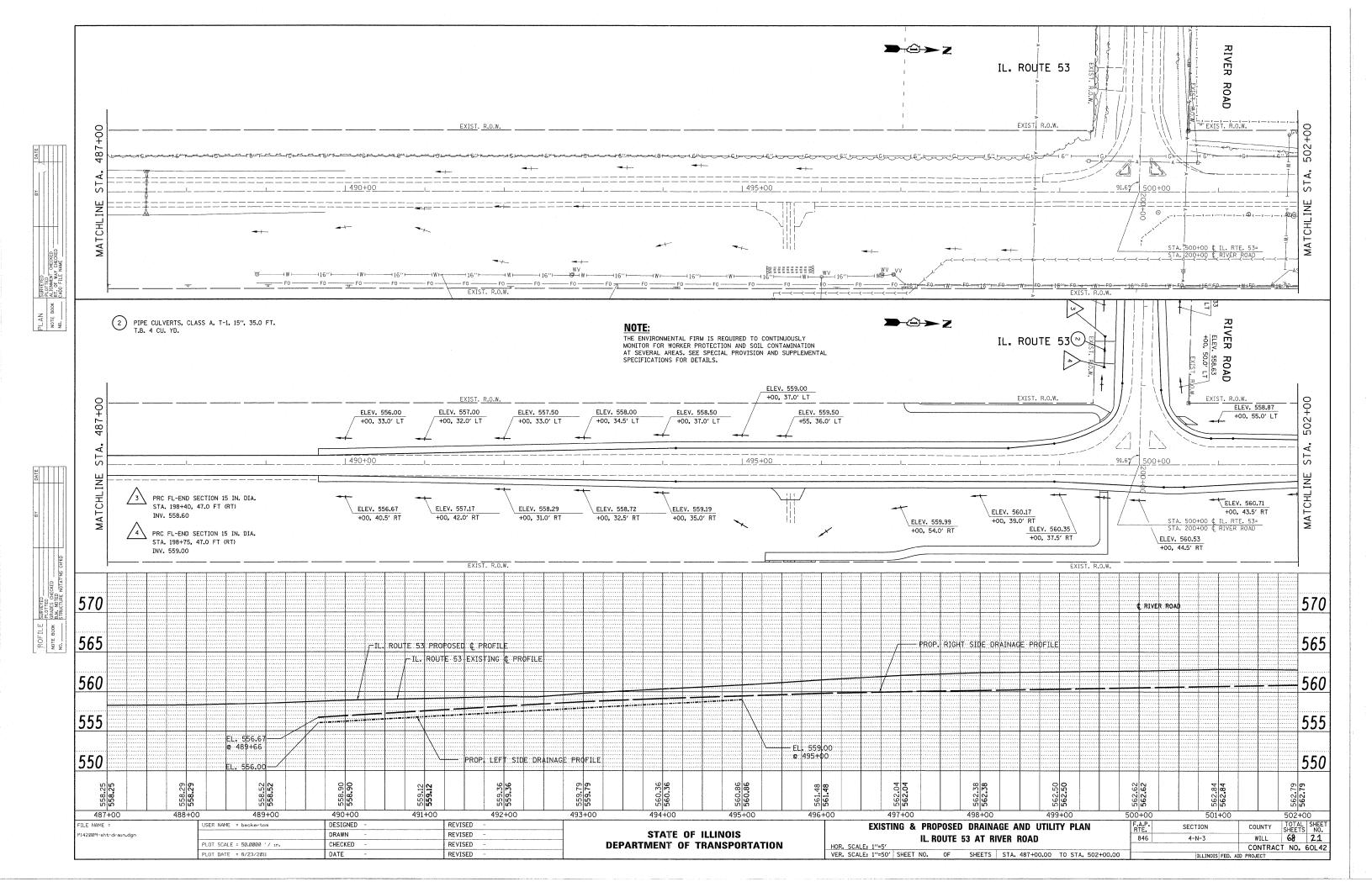


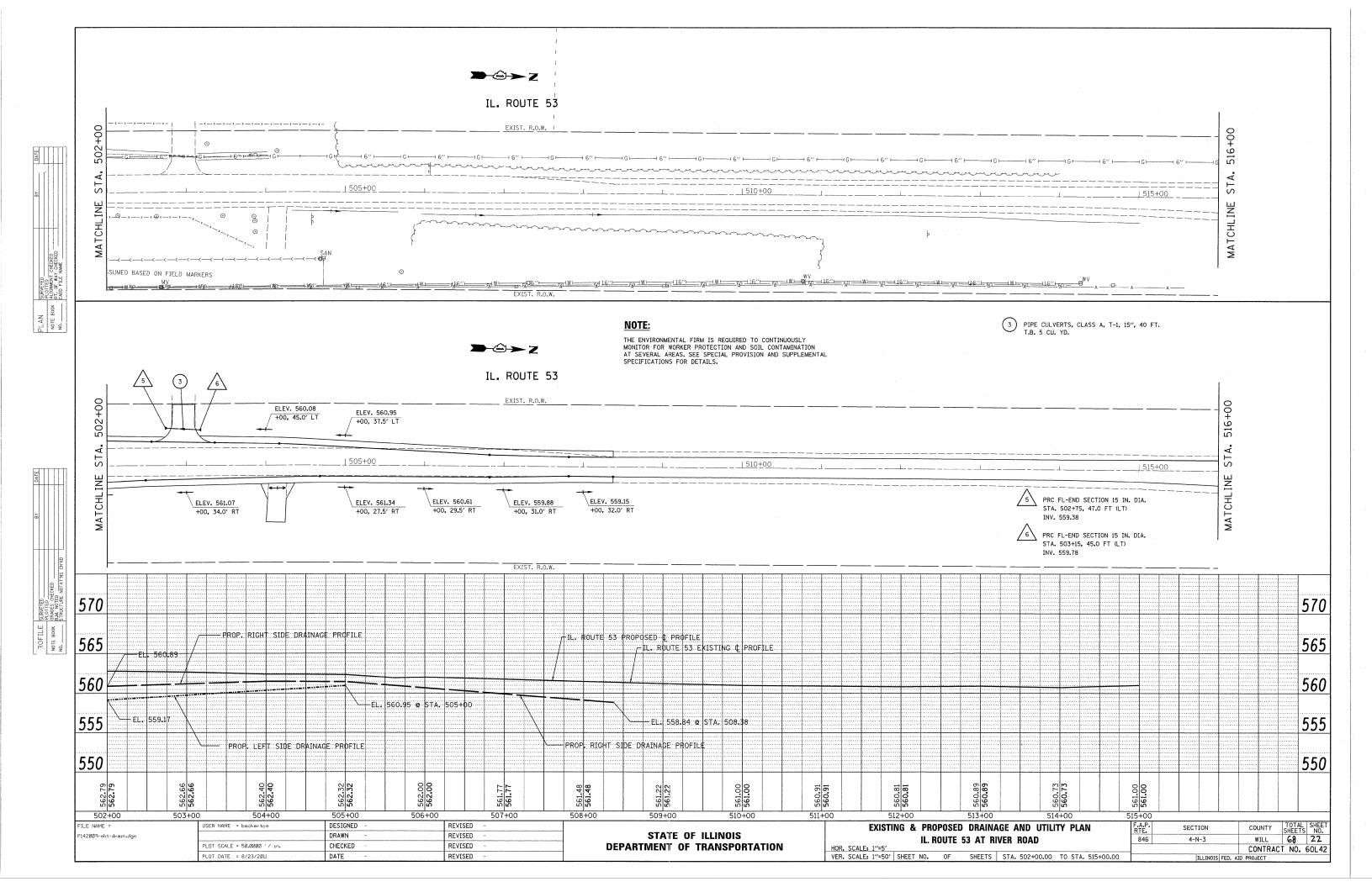


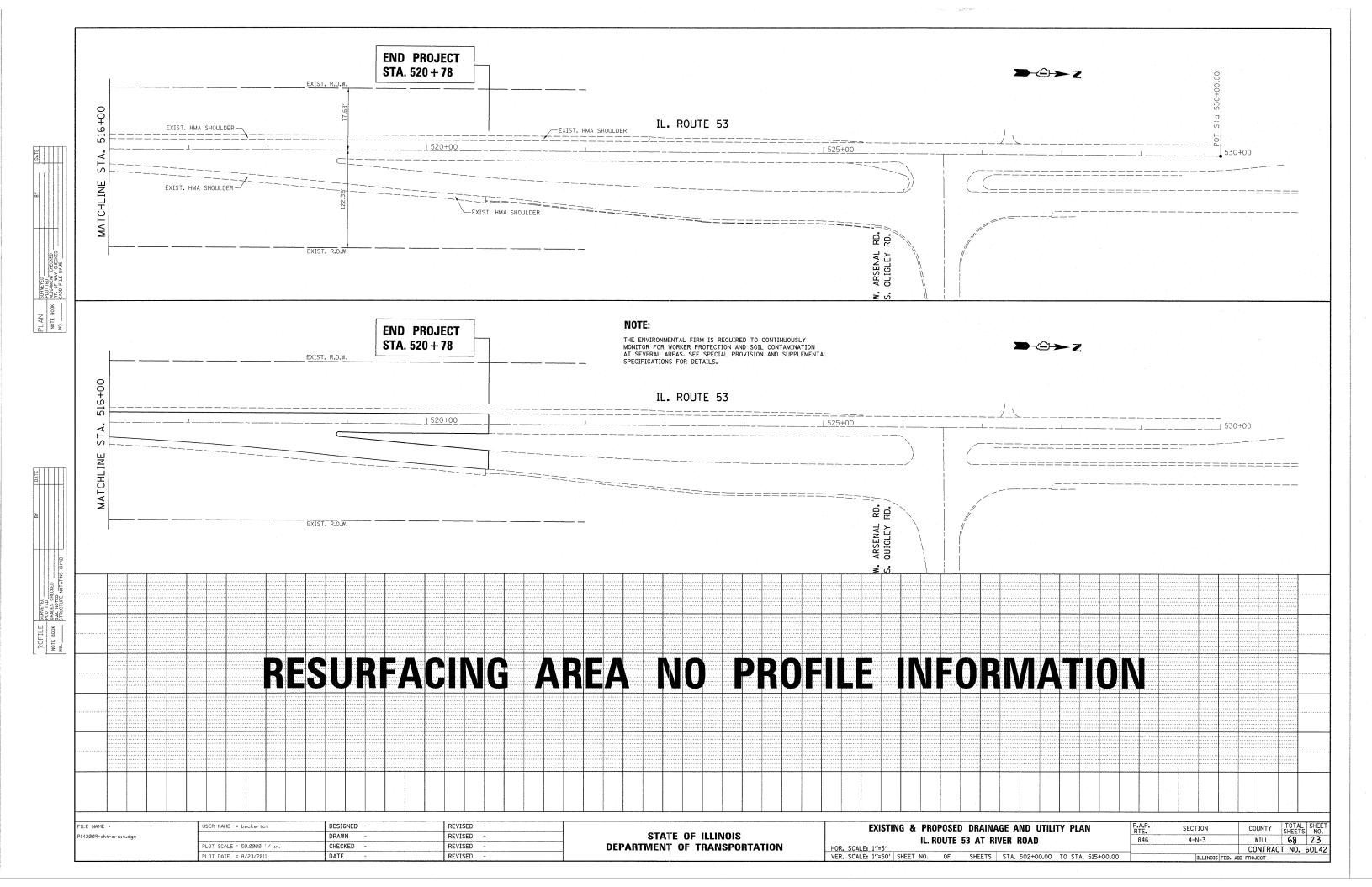


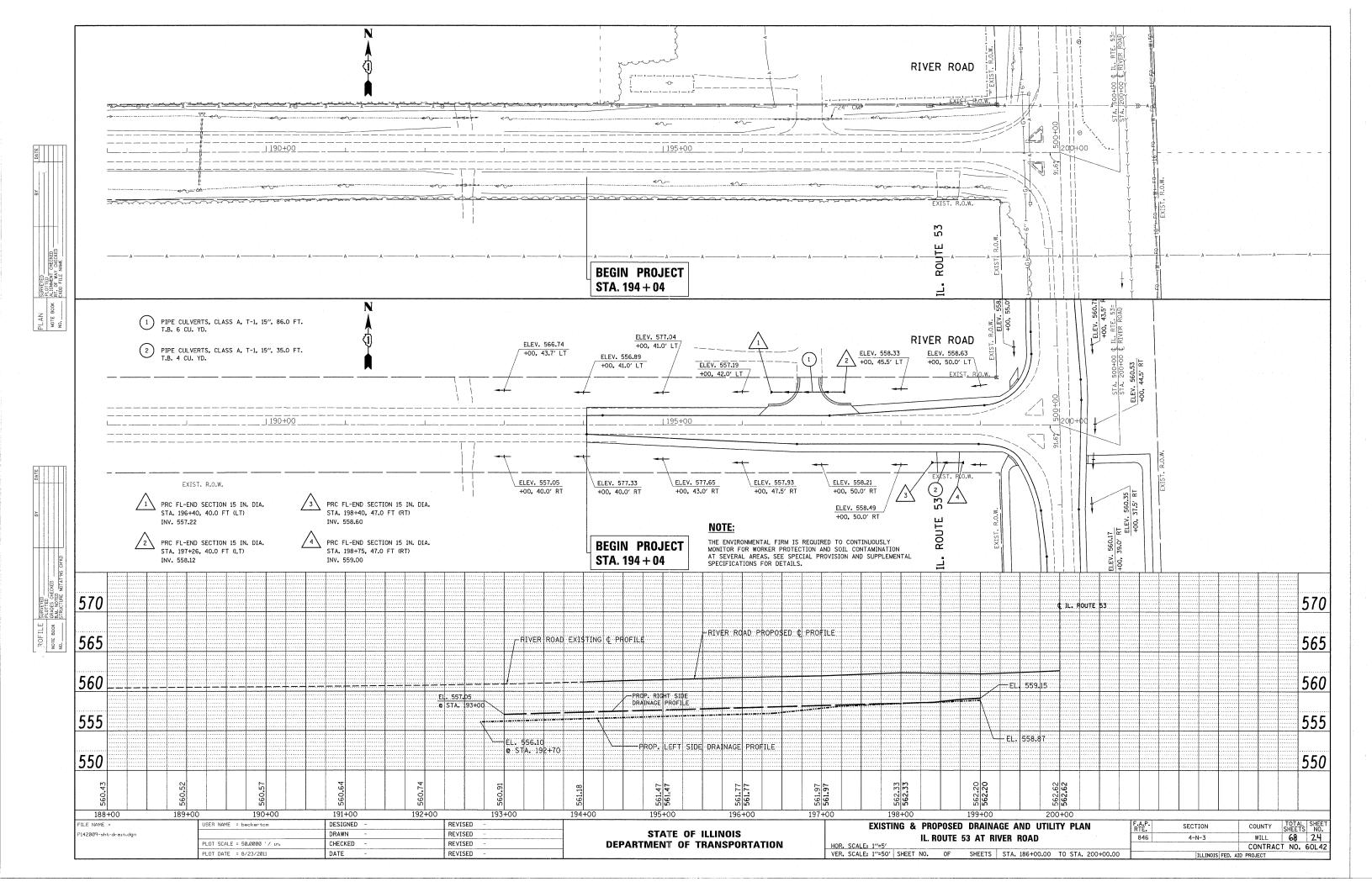


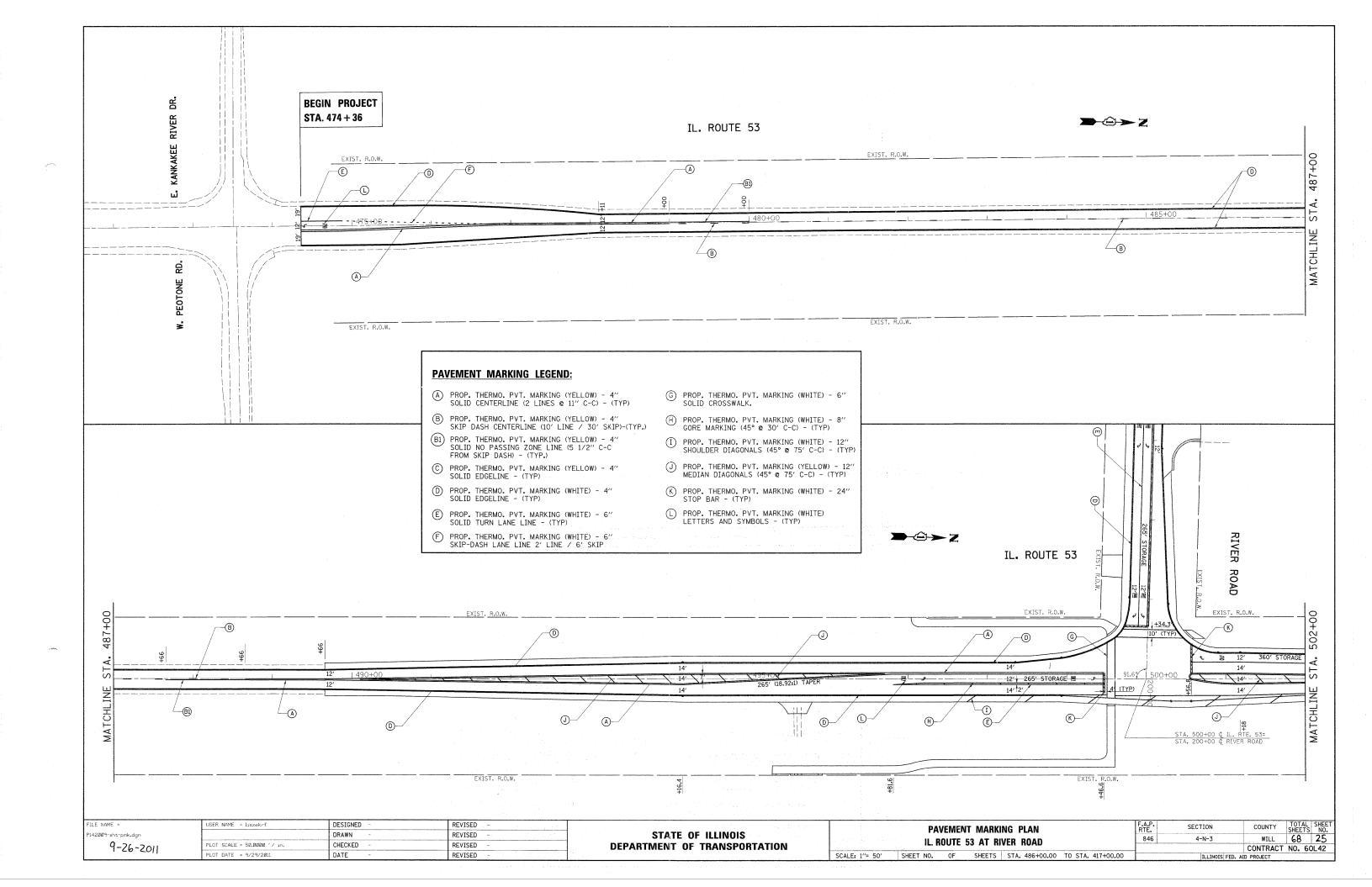


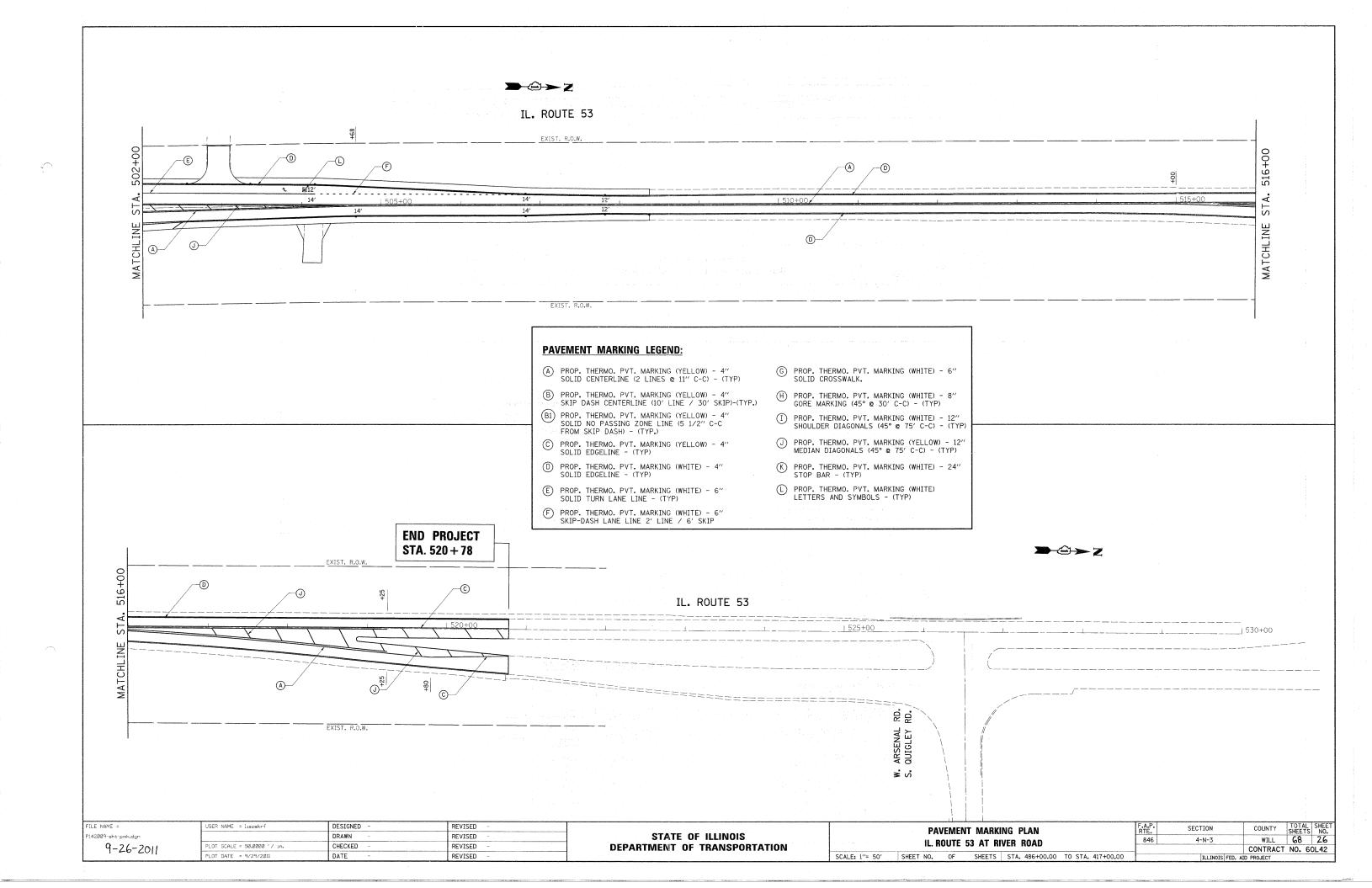


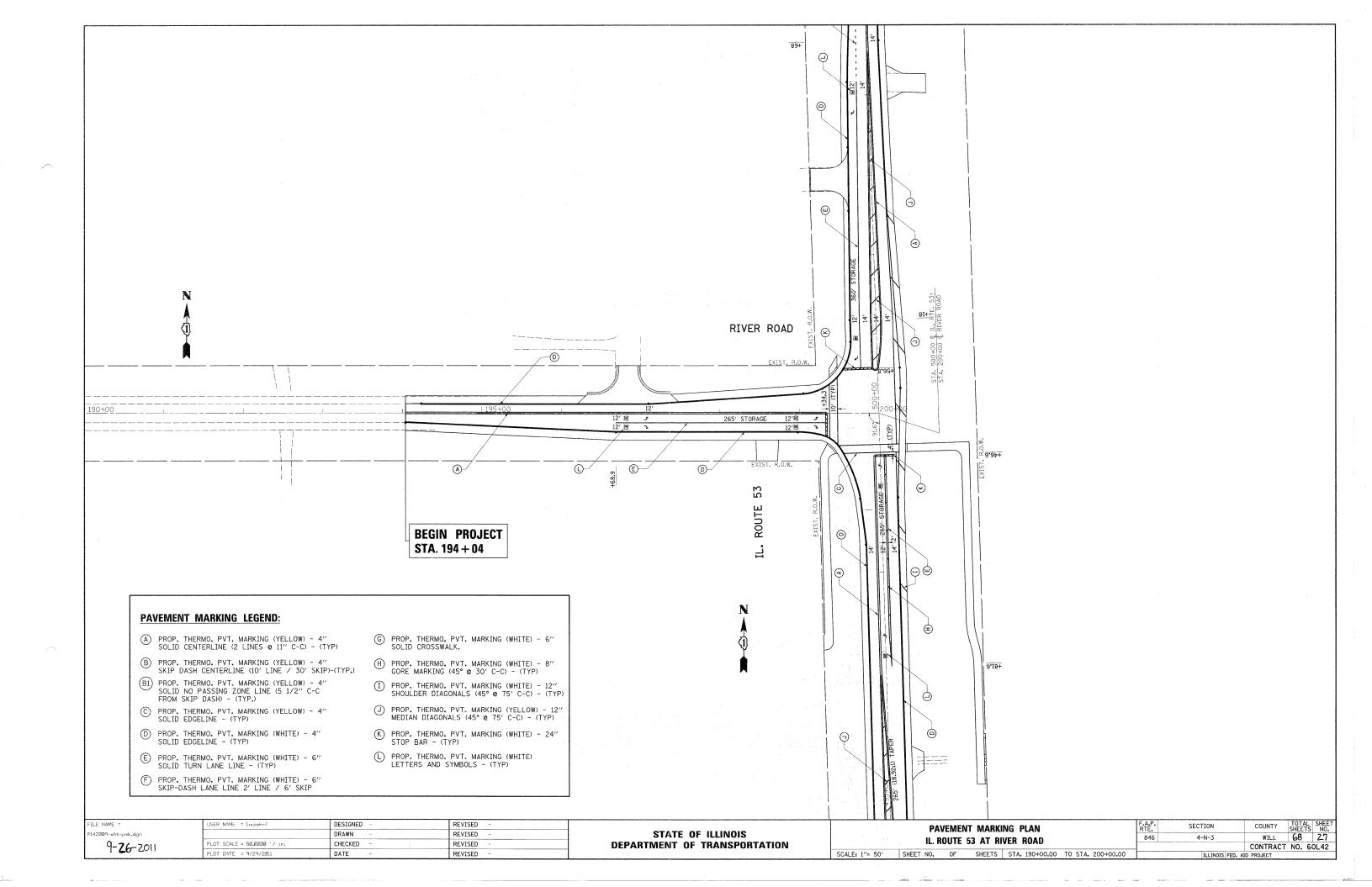


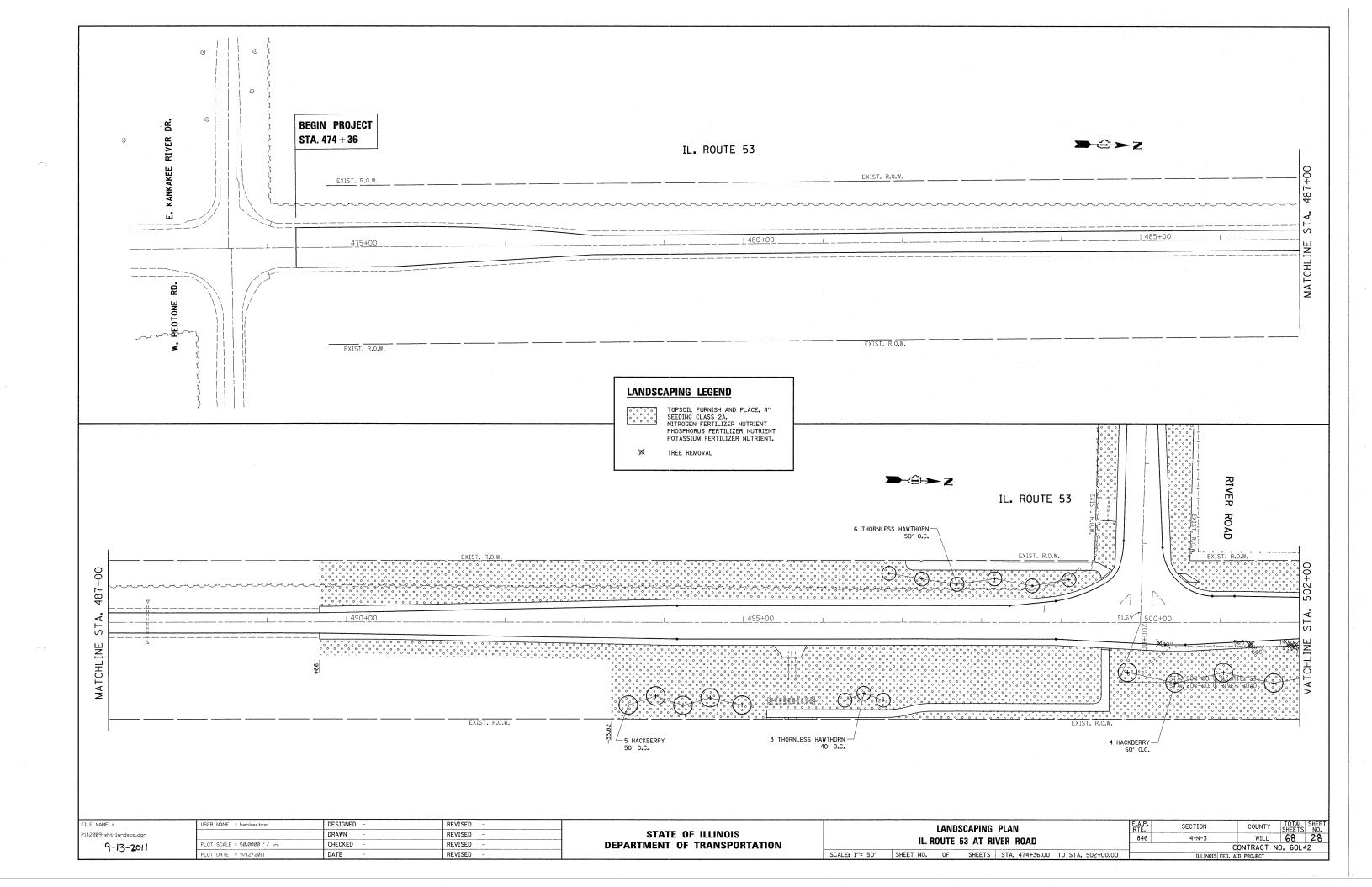


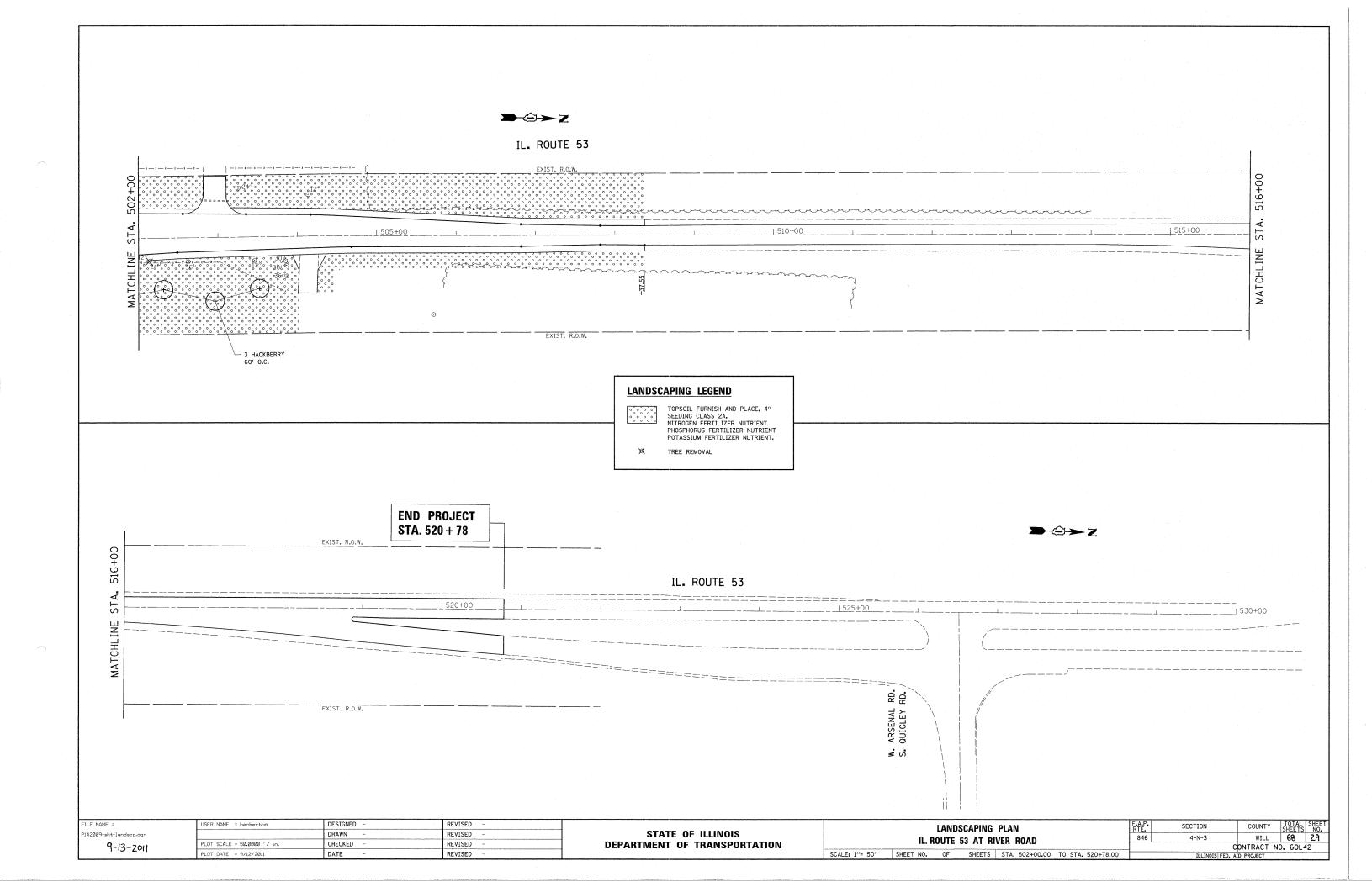


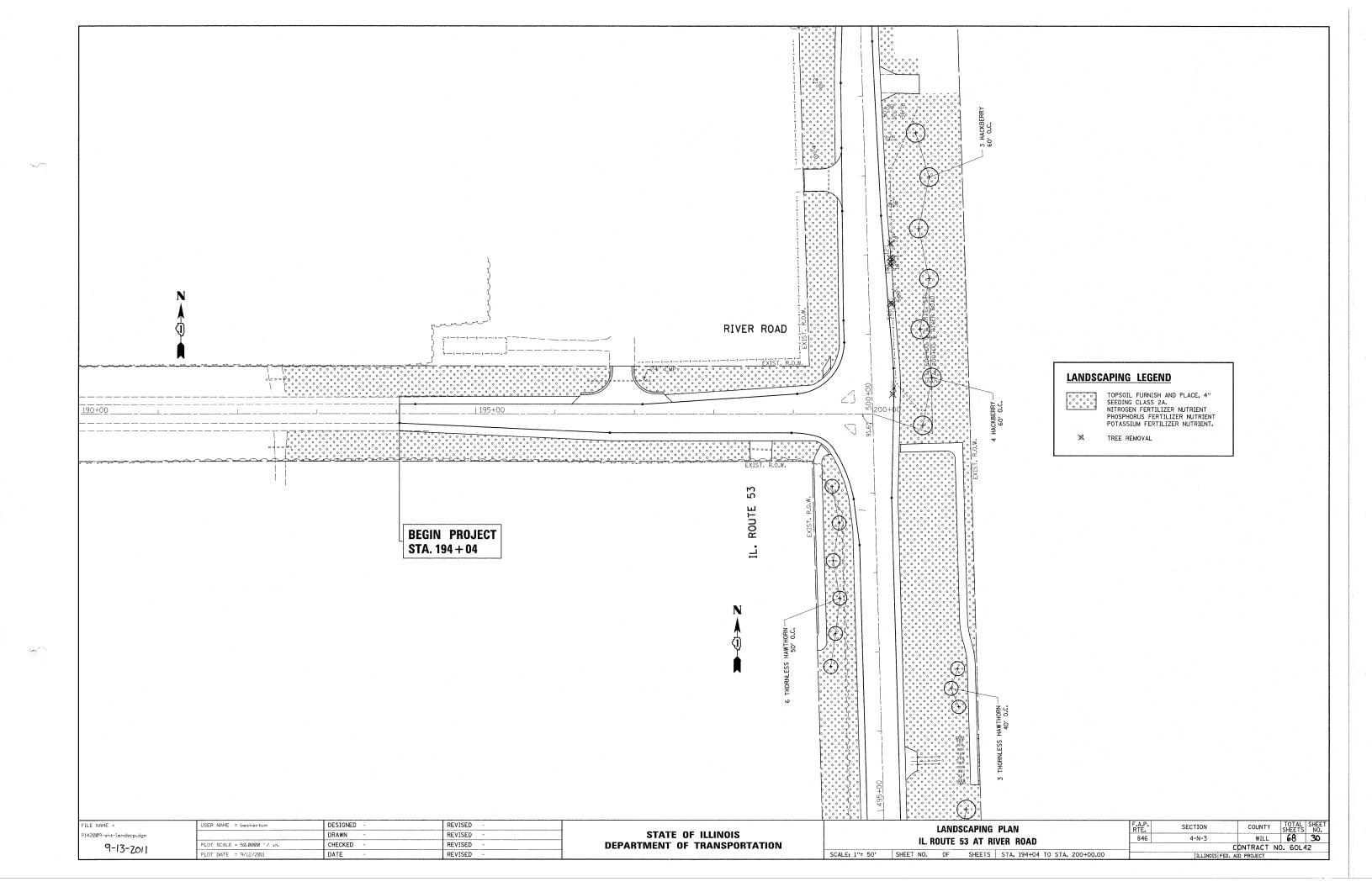








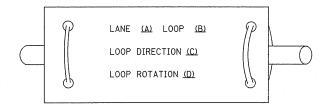




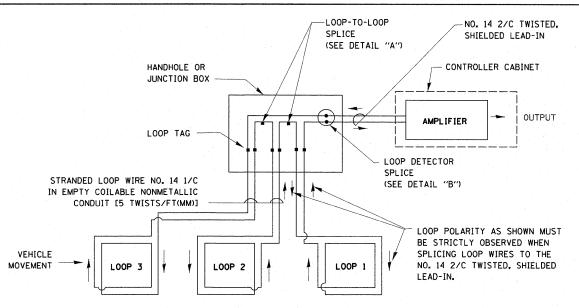
#### LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG

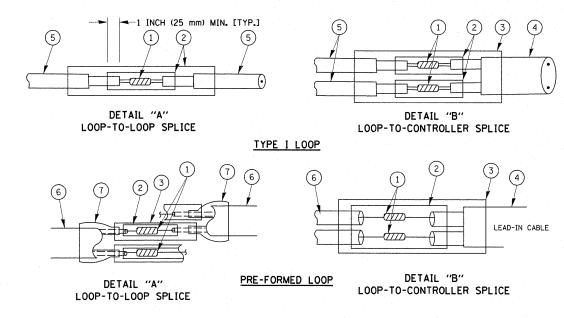


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



#### LOOP DETECTOR SPLICE

- $\ensuremath{\,^{\frown}}$  Western union splice soldered with rosin core flux. All exposed surfaces of the solder shall be smooth.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

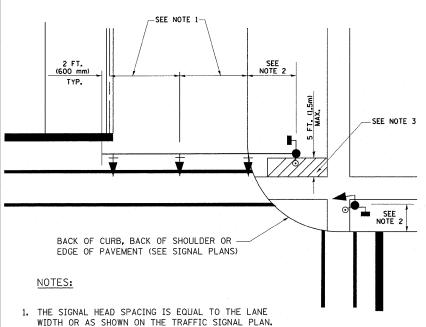
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	c:\pw_work\pwidot\beckertcm\d0150277\Di	tStd.dgn	DRAWN -	-	ВСК	REVISED		
		PLOT SCALE = 50.00000 '/ in.	CHECKED -	-	DAD	REVISED		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DISTRICT OF	VE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	STANDARD TRAFFIC SIGNAL	DESIGN	DETAILS	846	4-11-3	WILL	68	31
			DETAILO		TS-05	CONTRACT	NO. 60	DL42
SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

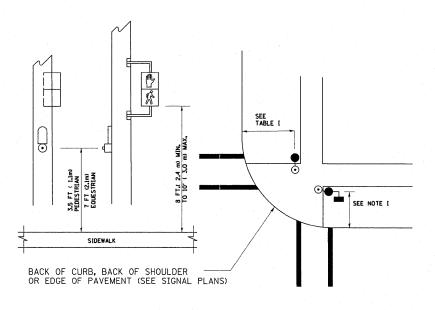
#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



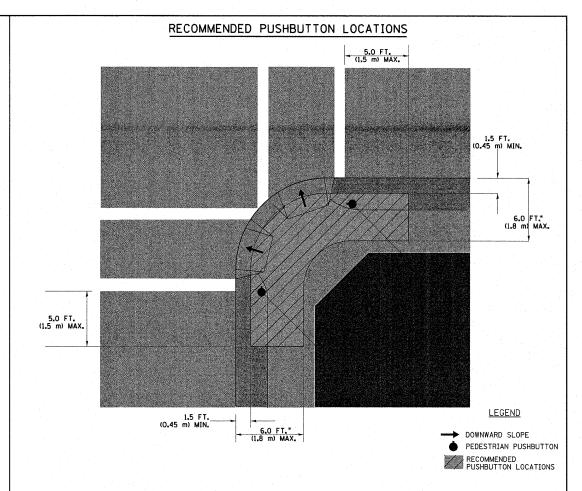
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

# PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

#### NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5,0 m) AND A MAXIMUM OF 18 FT. (5,5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION
  OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

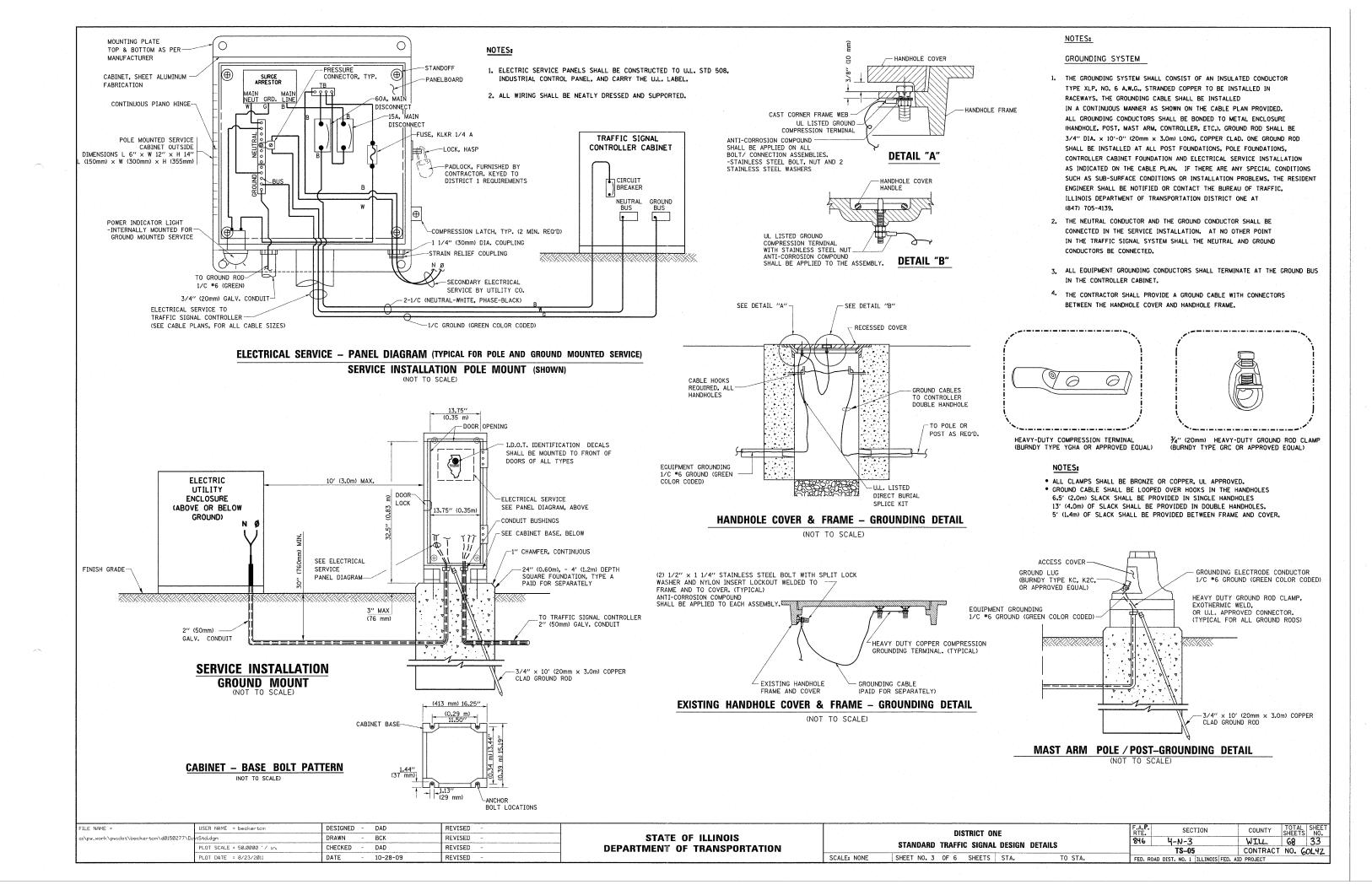
#### TRAFFIC SIGNAL EQUIPMENT OFFSET

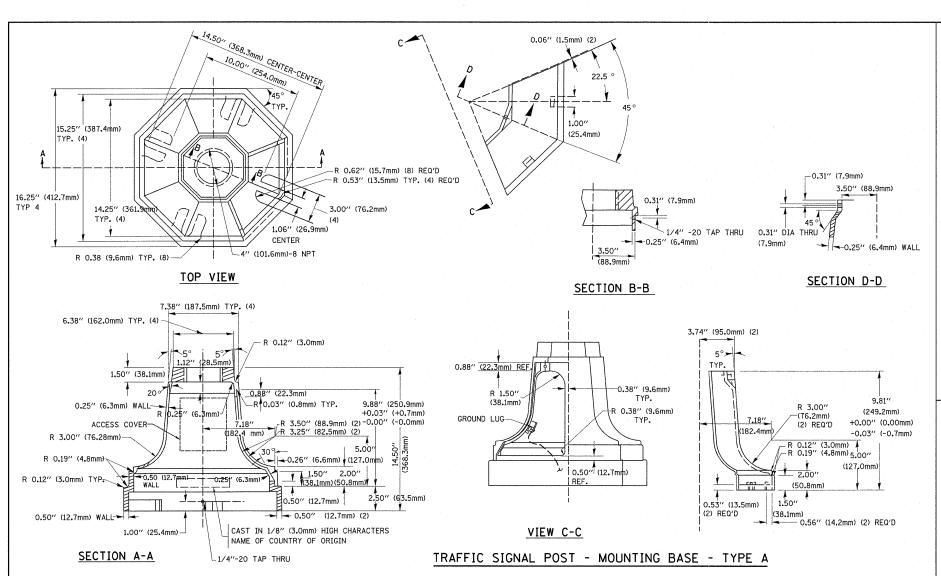
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

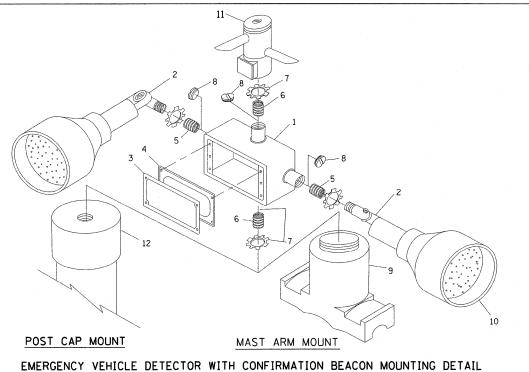
#### NOTES

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

ı	FILE NAME =	USER NAME = beckertom	DESIGNED - DAD	REVISED -		DISTRICT ONE	F.A.P. SECTION COUNTY TOTAL SHEET NO.
	c:\pw_work\pwidot\beckertcm\dØ15Ø277\Di	tStd.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	846 4-N-3 WILL 68 32
		PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		TS-05 CONTRACT NO. 60L42
		PLOT DATE = 8/23/2011	DATE - 10-28-09	REVISED -		SCALE: NONE   SHEET NO. 2 OF 6 SHEETS   STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT







DESIGNED -

DRAWN

CHECKED

Std.dgn

PLOT SCALE = 50.0000 '/ 1

PLOT DATE = 8/23/2011

DAD

BCK

DAD

10-28-09

REVISED

REVISED

REVISED

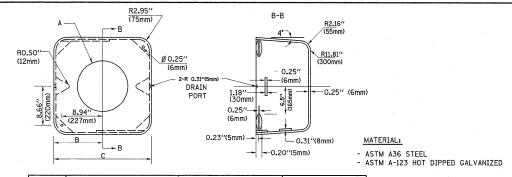
REVISED

ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV, 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
. 3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4''(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

#### NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS \*2 AND \*11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
  ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
  ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM \*9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ½"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

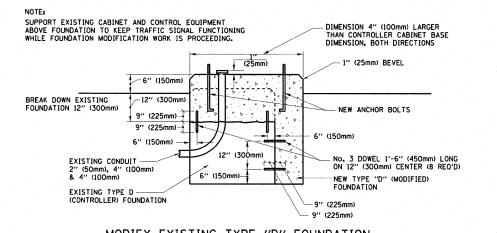


Α -	В	С	HEIGHT	WEIGHT	
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)	
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)	
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)	
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)	

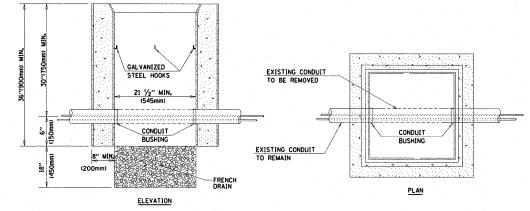
#### SHROUD

#### NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
  THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



#### MODIFY EXISTING TYPE "D" FOUNDATION

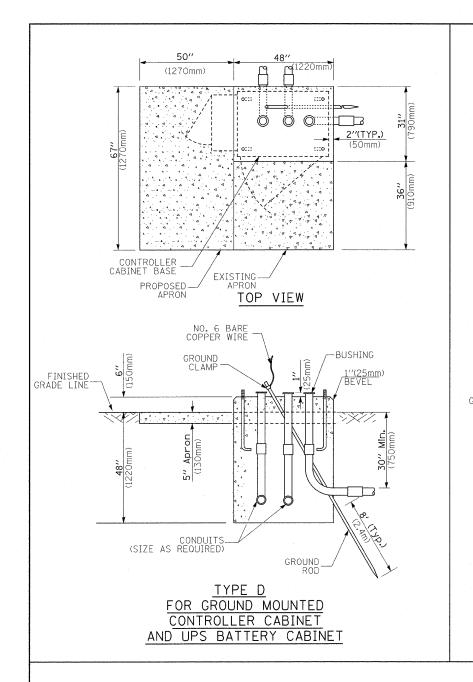


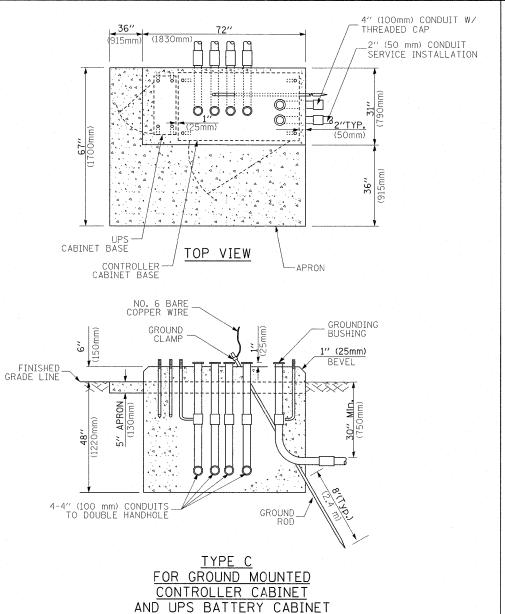
#### NOTES:

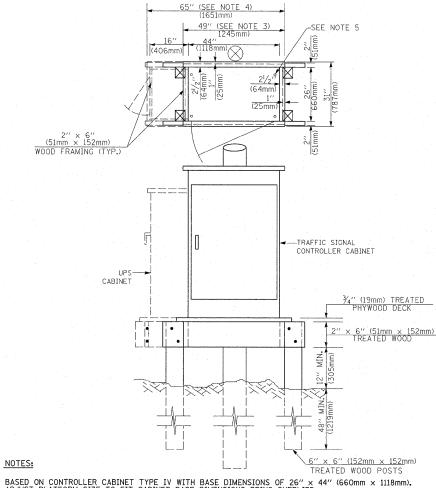
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	846 4-N-3	WILL 68 34
	TS-05	CONTRACT NO. 60L42
E: NONE   SHEET NO. 4 OF 6 SHEETS   STA. TO STA. [	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID	PROJECT







- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).
   ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

## TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+1
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

#### VERTICAL CABLE LENGTH

FOUNDATION	DEPTH		
TYPE A - Signal Post	4'-0" (1.2m)		
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)		
TYPE D - CONTROLLER	4'-0" (1.2m)		
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)		

#### DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

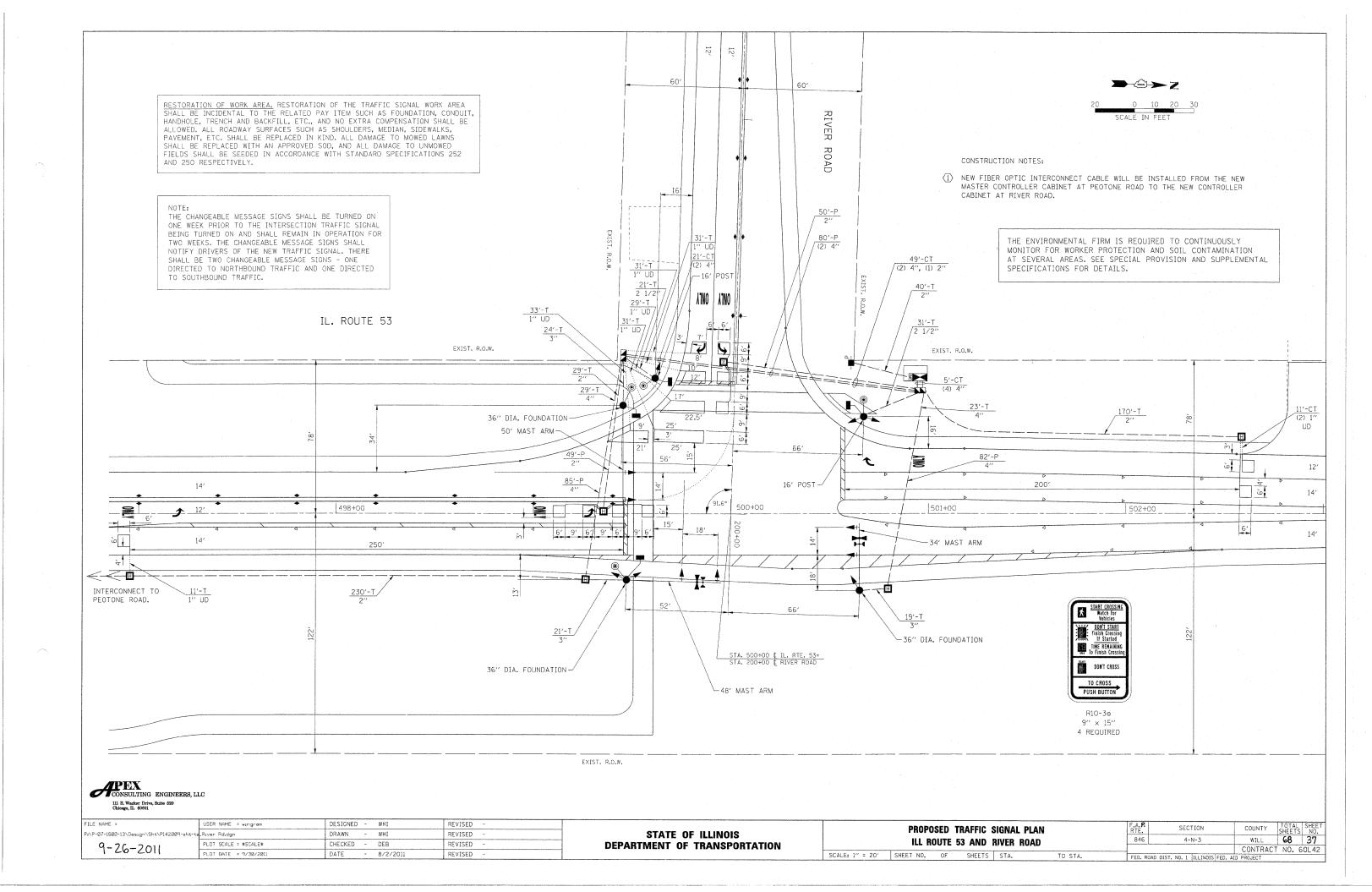
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm)
- 4. For mast arm assemblies with dual arms refer to state standard 878001.

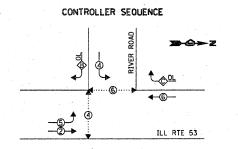
#### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = beckertom	DESIGNED - DAG	REVISED -		DISTRICT ONE	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\dØ150277\Dis	tStd.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		846 4-N-3	WILL 68 35
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRACT NO. 60L42
	PLOT DATE = 8/23/2011	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 6 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	

## TRAFFIC SIGNAL LEGEND

PLOT	SCALE = 50.0000 '/ in.  DATE = 8/23/2011	CHECKE		REVISED -	DEI		ARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL DESIGN DETAILS  SCALE: NONE		846	4-N-3 TS-05 D DIST. NO. 1   ILLINOIS FE	WILL 68 CONTRACT NO.
_E NAME = USER \pw_work\pwidot\beckertcm\d0150277\DistStd.d	NAME = beckertcm In	DESIGNE DRAWN	ED - DAG/BCK - BCK	REVISED -		STATE	OF ILLINOIS	3		DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY TOTA
WIRELESS ACCESS POINT					NO. 6 SOLID COPPER (GREEN)	-			(1)			·	
IRELESS DETECTOR SENSOR	9	2		W	GROUND CABLE IN CONDUIT			~		CROSSBUCK			*
AN, TILT, ZOOM CAMERA	R (V			_	CABLE NO. 14, UNLESS NOTED CALL DETECTOR LOOP CABLE TO	THERWISE,		5		CROSSING GATE		X <del>0</del> X>	XOX
N THE ZOOM CAMEDA	R	जीत जीव	PIX	<u> </u>	DENOTES NUMBER OF CONDUCTO	RS FIECTPIC	[EKK]	ERR	RR	FLASHING SIGNAL		$\times$	X-X
DEO DETECTION ZONE					RADIO REPEATER		R ERR		<u> </u>	RAILROAD CANTILEVER MAST ARM		<u>₹0</u> ₹ - ₹ ₹	X <del>ex</del> ×
DEO DETECTION CAMERA	R	7p	(V)	<b>:</b>	RADIO INTERCONNECT		## <del>*</del>			RAILROAD CONTROL CABINET			
CROWAVE VEHICLE SENSOR	R	M)	M	<b>M</b>	PEDESTRIAN SIGNAL HEAD, INTE SYMBOL, WITH COUNTDOWN TIME			(*) (*) (*)	₽ C			EXISTING	PROPOSED
REFORMED DETECTOR LOOP			P	Р	INTERNATIONAL SYMBOL, SOLID			<b>(6</b> )		RAILROAD	2 INIR(	)F2	
ETECTOR LOOP, TYPE I			ii		12" (300mm) PEDESTRIAN SIGNA	L HEAD			<b>P</b>	DAUDOAD	CVNADA	) I C	
NO RIGHT TURN"		¥i			12" (300mm) PEDESTRIAN SIGNA INTERNATIONAL SYMBOL, OUTLIN					PREFORMED SAMPLING (SYSTEM) DETECTOR		PSI	PS
LUMINATED SIGN	R.	<b>3</b>	8		WALK/DON'T WALK SYMBOL			OW W		(SYSTEM) DETECTOR		PIS	PIS
LUMINATED SIGN NO LEFT TURN"	R	D	9	•	12" (300mm) PEDESTRIAN SIGNA	L HEAD			(TET)	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETE PREFORMED INTERSECTION AND SAMPLING	UTOR		
CCESSIBLE PEDESTRIAN PUSHBUT	ON DETECTOR	APS	@APS					G + Y + G - P - P - P - P - P - P - P - P - P -	<b>∢</b> G	EXISTING PREFORMED INTERSECTION LOOP DETECTOR		ÎPPÎ.	
EDESTRIAN PUSHBUTTON DETECTO		9	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	<b>©</b>	"P" INDICATES PROGRAMMED HE				G ◆Y	EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETE	CTOR	P	
EDESTRIAN SIGNAL HEAD	H 7		-0		SIGNAL FACE WITH BACKPLATE.			R Y	R	SAMPLING (SYSTEM) DETECTOR			S
DENOTES SOLAR POWER)	042	,								(SYSTEM) DETECTOR		IS	IS
ASHER INSTALLATION	R	>''F''  -  >''F''	O-□''F''	• <b>-</b> "F"	SISTAL I ACE				<del>«</del> Υ <del>«</del> G	TO BE REMOVED  INTERSECTION & SAMPLING		e -	
GNAL HEAD WITH BACKPLATE	R	>> >''P''	+D →D''p''	+ <b>▶</b> - <b>▶</b> "P"	SIGNAL FACE				Y	SIGNAL POST AND FOUNDATION	RMF		
JMBERS INDICATE THE CONSTRUC GNAL HEAD WITH BACKPLATE	TION STAGE)	R >						(R)	R	AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF O-X		
GNAL HEAD GNAL HEAD CONSTRUCTION STAG	—[:		حـا-	<b>→</b> 2	12" (300mm) RED WITH 8" (200 YELLOW AND GREEN TRAFFIC SI			R		FOUNDATION TO BE REMOVED  STEEL COMBINATION MAST ARM ASSEMBLY			
IY WIRE	>F	₹	> >	<del>-</del>	12" (300mm) TRAFFIC SIGNAL S	ECTION		(R)	R	ALUMINUM MAST ARM POLE AND	RMF		
TTER) 45 FOOT (13,7m) MINIMUM					ABANDON ITEM		Α			STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	ORMF		
IGNAL POST  EMPORARY WOOD POLE (CLASS 5		o ⊗ *	$\circ$	•	RELOCATE ITEM		RL			FOUNDATION TO BE REMOVED			
SSEMBLY AND POLE WITH PTZ CA			PM		INTERSECTION ITEM REMOVE ITEM		R	1	ΙP	CONTROLLER CABINET AND	RCF		
STEEL COMBINATION MAST ARM	R	<del></del>	Q	•	SYSTEM ITEM			S	\$	GROUND ROD AT (C) CONTROLLER,  (H) HANDHOLE, (P) POST, (M) MAST ARM,  OR (S) SERVICE		C	c <sub>il</sub>  →
TEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINA	R	:	O-X	• ×	COILABLE NONMETALLIC CONDUI	T (EMPTY)			CNC	NOTED ON PLANS)			
ALUMINUM MAST ARM ASSEMBLY A	0		0		COMMON TRENCH				CT	FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE			——————————————————————————————————————
P) POLE OR (G) GROUND MOUNT TEEL MAST ARM ASSEMBLY AND	·		0	•	TEMPORARY SPAN WIRE, TETHER AND CABLE	WIRE,	R	·		NO. 62.5/125, MM12F SM12F		-(24F)-	—24F)—
ELEPHONE CONNECTION	. R		P	P	GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			The state of the s		NO. 62.5/125, MM12F  FIBER OPTIC CABLE		— <u>12</u> F—	
ERVICE INSTALLATION, P) POLE OR (G) GROUND MOUNT	[		P	<b>■</b> P	JUNCTION BOX		R		0	NO. 18 3 PAIR TWISTED, SHIELDED  FIBER OPTIC CABLE			
NINTERRUPTIBLE POWER SUPPLY	UP	R	EUPS	UPS	DOUBLE HANDHOLE		R			COPPER INTERCONNECT CABLE,		<del>-</del> 6)	-6-
ASTER CONTROLLER ASTER MASTER CONTROLLER			EMMC)	MC MMC	HEAVY DUTY HANDHOLE		R		H	VENDOR CABLE FOR CAMERA			
OMMUNICATIONS CABINET	CO	c <sup>n</sup>	E C C	CC	HANDHOLE		R 🖂			CORATAL CABLL			<del></del>
AILROAD CONTROL CABINET				R►€R	CONFIRMATION BEACON		R <sub>0</sub> —(]	<b>~</b> □	· •(	COAXIAL CABLE		a	<u> </u>
ONTROLLER CABINET		≅R		$\blacksquare$	EMERGENCY VEHICLE LIGHT DET	ECTOR	R ≪	$\bowtie$	₩ '	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			1
<u>TEM</u>			EXISTING	PROPOSED	ITEM		REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED





#### LEGEND

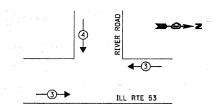
**←**-⊡--SINGLE ENTRY PHASE 4-⊙--DUAL ENTRY PHASE

PEDESTRIAN PHASE **∢**..⊙..▶ NUMBER REFERS TO ASSOCIATED PHASE

#### PHASE DESIGNATION DIAGRAM

OVERLAP PERMISSIVE PROTECTED PHASE PHASE

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGEN	CY VEHICLE	PREEMPTOR
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	+	1

TRAFF ELECTRI	TOTAL				
TYPE	NO. LAMPS	WAT INCAND	WATTAGE		
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW:	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	12		12	0.10	14.40
PED. SIGNAL	4		29	1.00	116.00
CONTROLLER	1		100	1.00	100.00
ILLUM, SIGN	-		25	0.05	
FLASHER				0.05	
ENERGY COSTS	TO.			TOTAL =	452.40

#### ILLINOIS DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAY/DISTRICT 1 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: JAMES GLOVER PHONE: (815) 724-50

PHONE: COMPANY: COMMONWEAL THE EDISON

> USER NAME = wingram DESIGNED - WHI REVISED -REVISED -PLOT SCALE = \$SCALE\$ CHECKED - DEB REVISED -PLOT DATE = 8/2/2011 DATE 8/2/2011 REVISED -

TRACER CABLE

QUANTITY

865 1525 1855

FOOT FOOT

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ITEM

SIGN PANEL - TYPE 1

CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
HEAVY-DUTY HANDHOLE
DOUBLE HANDHOLE

DOUBLE HANDHOLE
TRENCH AND BACKFILL FOR ELECTRICAL WORK

STEEL MAST ARM ASSEMBLY AND POLE, 34 FT. STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.

TRENCH AND BACKFILL FOR ELECTRICAL WORK
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
TRANSCEIVER - FIBER OPTIC
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C

ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 TC ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 TO PAIR ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C TRAFFIC SIGNAL POST. GALVANIZED STEEL 16 FT.

ILL ROUTE 53 AT RIVER ROAD SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY PREEMPTION SEQUENCE SCALE: N.T.S. SHEET NO. OF SHEETS STA.

CONSULTING ENGINEERS, LLC COUNTY TOTAL SHEETS NO.
WILL 68 38
CONTRACT NO. 60142 SECTION

846

ROAD 32 2 (2) RIVER A A C X 20 3\*20 ILL RTE. 53 INTERCONNECT TO

**> ≥ > Z** 

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADMAY SUFFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS.

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

# CABLE PLAN

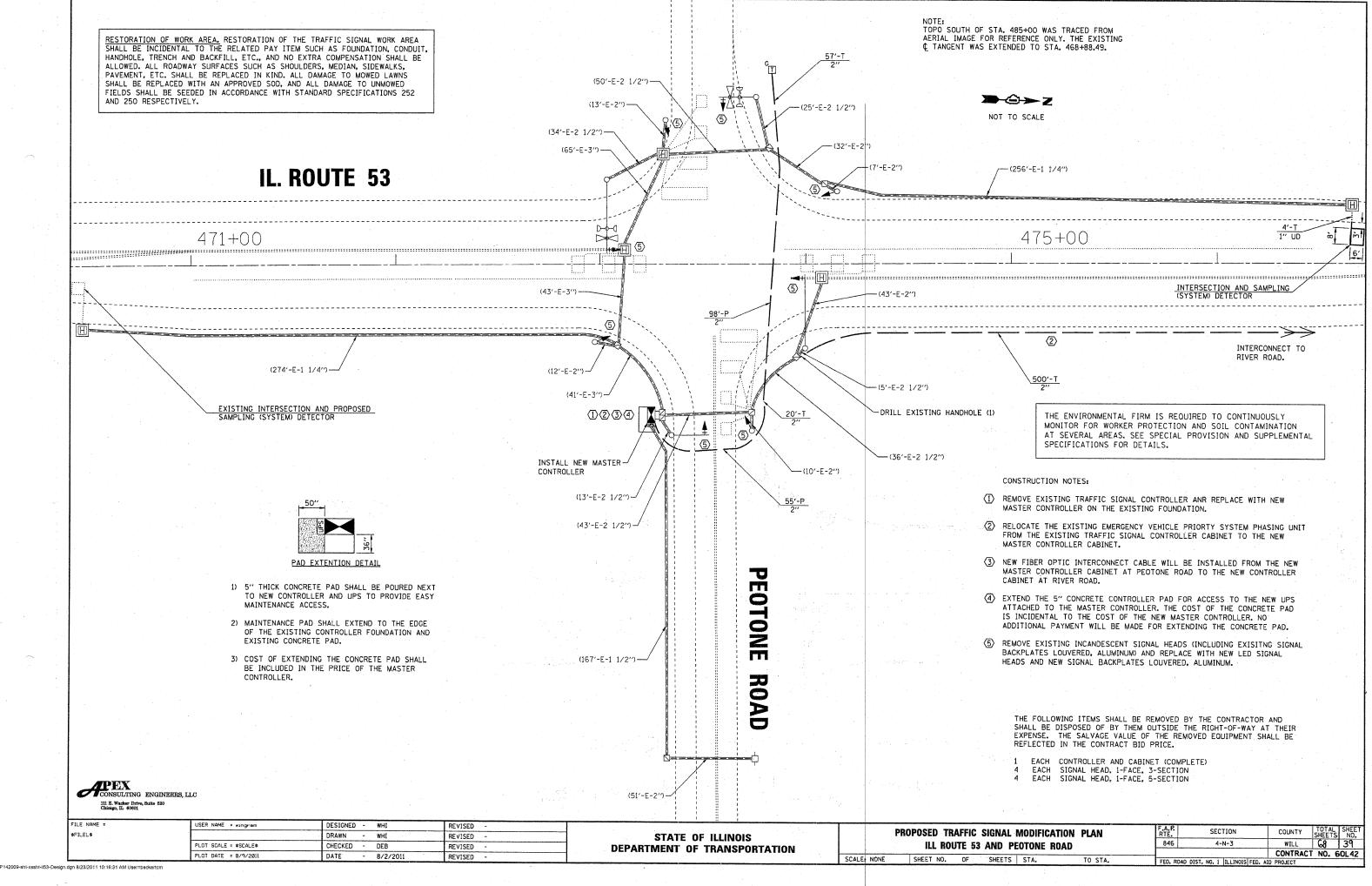
#### SCHEDULE OF QUANTITIES

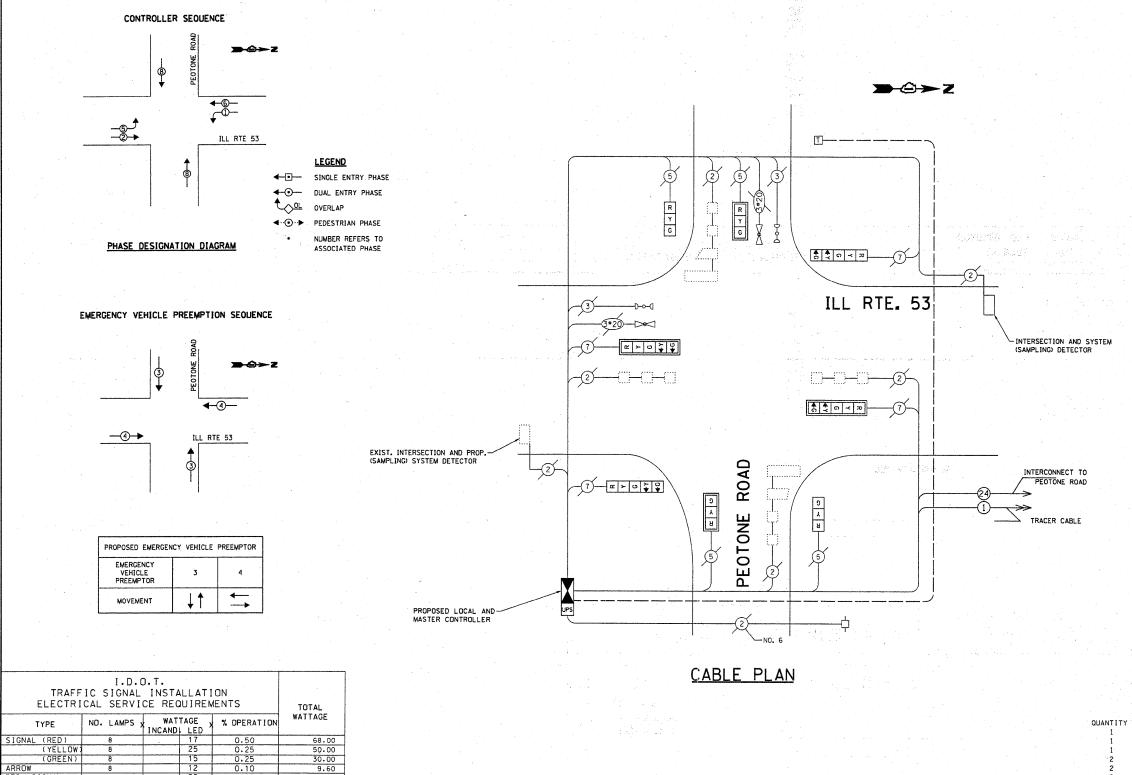
		QUANTITY UNIT	ITEM
		1 EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
		8 FOOT	CONCRETE FOUNDATION. TYPE A
		4 F00T	CONCRETE FOUNDATION, TYPE C
		39 F00T	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
		3 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
		1 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
		1 EACH	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED
		3 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
		1 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
	and the state of the state of	1 EACH	SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED
		4 EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED
* 1	ang material para sa sa sa ang ang ang	L.F. F.	WITH COUNTDOWN TIMER
		6 EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
		6 EACH	INDUCTIVE LOOP DETECTOR
	and the second of the second of	776 FOOT	DETECTOR LOOP, TYPE I
	14.00	€ 2 EACH	LIGHT DETECTOR
		¥ 1 EACH	LIGHT DETECTOR AMPLIFIER
		4 EACH	PEDESTRIAN PUSH-BUTTON
		1 EACH	SERVICE INSTALLATION, POLE MOUNT
		1 EACH	UNINTERRUPTIBLE POWER SUPPLY
		1080 FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 10
		625 FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED
			TELEVISION OF THE COMPANY NO. 20 S. C. THISTED, SHIELDED

\* 100% COST TO THE CITY OF WILMINGTON

FILE NAME =

\$FILEL\$





RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROMOWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS.

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET
1	EACH	MASTER CONTROLLER
1	EACH	TRANSCEIVER - FIBER OPTIC
. 2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6	EACH	INDUCTIVE LOOP DETECTOR
35	FOOT	DETECTOR LOOP, TYPE I
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM.
		PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY

PEX
CONSULTING ENGINEERS, LLC
LL & Weeker Drive, Suite 520

FILE NAME = \*FILEL\*

LLUM. SIGN

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

COMPANY: COMMONWEALTH EDISON

ENERGY SUPPLY CONTACT: JAMES GLOVER PHONE: (815) 724-505

100.00

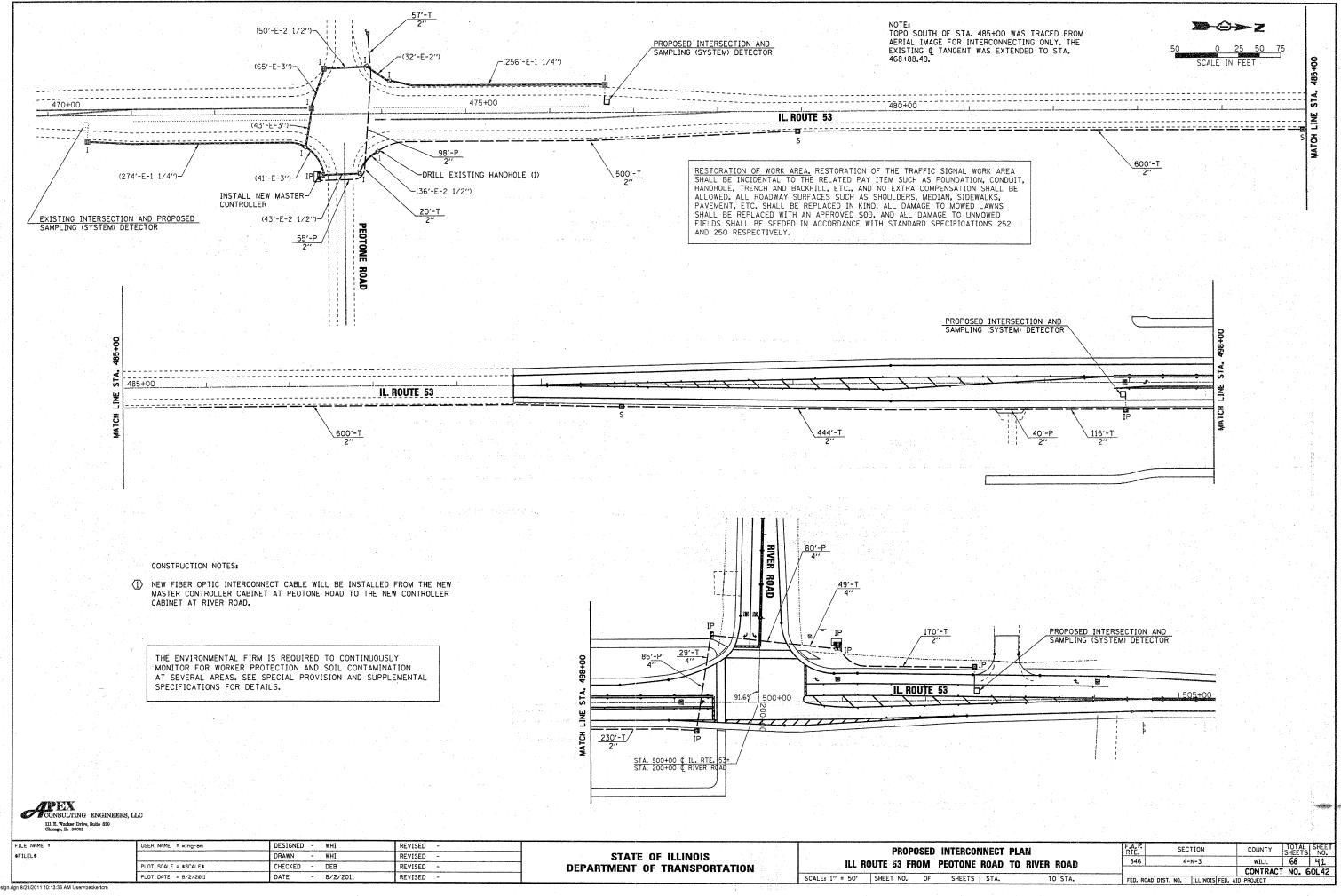
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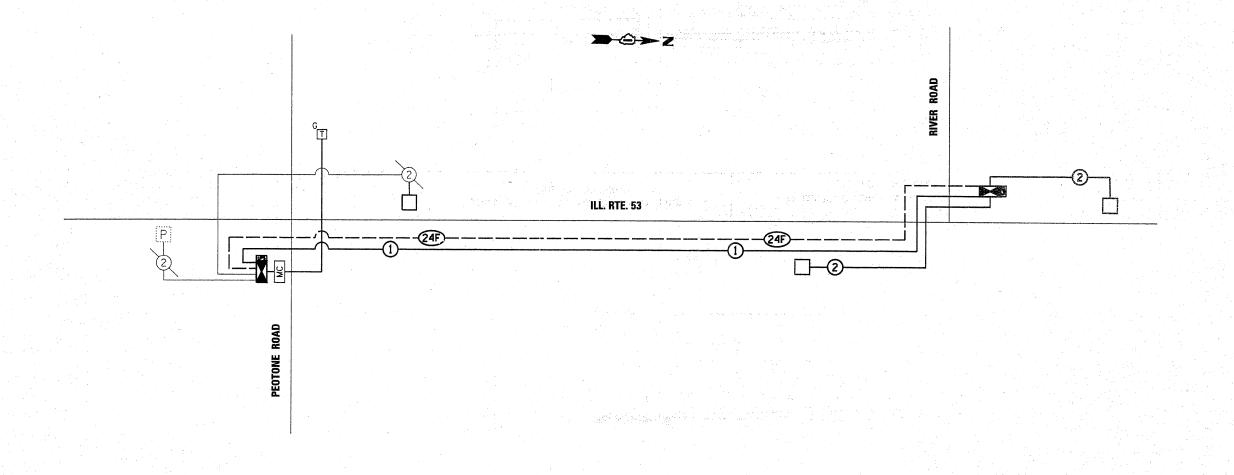
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY PREEMPTION SEQUENCE

SCALEI N.T.S. SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOISIFED. AID PROJECT

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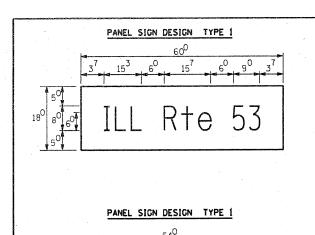
SCHEDULE OF QUANTITIES

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

4.					
P	ITEM	الإنجا أفضيها	19.00	UNIT	TOTAL
CONDUIT IN TH	RENCH, 2" DIA., G	ALVANIZED STEEL		FOOT	2337
CONDUIT PUSHE	D. 2" DIA., GALV	ANIZED STEEL		FOOT	153
HEAVY-DUTY HA	ANDHOLE		The second	EACH	3
	ACKFILL FOR ELECT			FOOT	2337
MAINTENANCE (	OF EXISTING TRAFF	IC SIGNAL INSTAL	LLATION	EACH	1
DRILL EXISTIN				EACH	1
	E IN CONDUIT, TR			FOOT	3125
FIBER OPTIC	CABLE IN CONDUIT.	NO. 62.5/125.	MM12F SM12F	FOOT	3160
OPTIMIZE TRAF	FIC SIGNAL SYSTE	M		EACH	1

CONSULTING ENGINEERS, ILC
111 E. Wacker Driva, Suits 520
Chicago, D. 60801

FILE NAME =	USER NAME = wingram	DESIGNED - WHI	REVISED -		INTERCOLUEN CONTROL   F.A.R.   CONTROL   TOTAL   SHEET
\$FILEL\$		DRAWN - WHI	REVISED -	STATE OF ILLINOIS	INTERCONNECT SCHEMATIC FRE. SECTION COUNTY SHEET'S NO.
	PLOT SCALE = \$SCALE\$	CHECKED - DEB	REVISED -	DEPARTMENT OF TRANSPORTATION	ILL ROUTE 53 FROM PEOTONE ROAD TO RIVER ROAD 846 4-N-3 WILL 68 42
	PLOT DATE = 8/2/2011	DATE - 8/2/2011	REVISED -	21. All Hiller of Hillian Children	SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA. FED BOAD DIST NO.
					SCALES N.1.3.   SHEET NO. OF SHEETS   STA. TO STA.   FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT



River

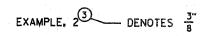
# SUPPORTING CHANNELS VAR.

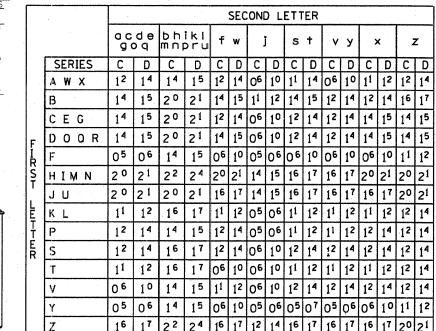
в С

2" 14"

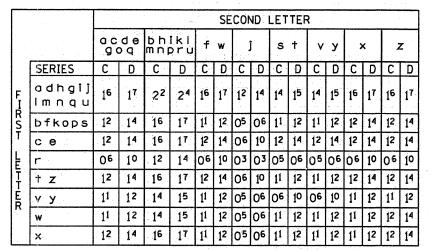
18"

Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"





Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"



Number To Number Spacing Chart 8 Inch Series "C & D"

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	E R	7			12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
		8			16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

#### UPPER AND LOWER CASE LETTER WIDTHS

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С	32	40	43	53	С	35	41
D	32	40	43	53	d	35	42
E	30	35	40	47	е	35	42
F	30	35	40	47	f	23	26
G	32	40	43	53	Q	35	42
н	32	40	43	53	h	35	42
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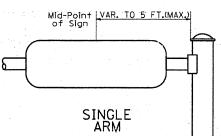
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NU <sub>MBER</sub>	С	D	С	٥
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2	32	40	43	53
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- 6	32	40	4 3	53
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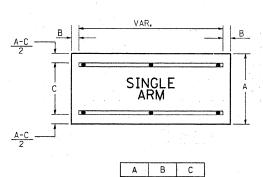
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# CONSULTING ENGINEERS, LLC 111 E. Wacker Drive, Suite 520 Chicago, IL 50601

VAR.			
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# SUPPORTING CHANNELS



	Α	В	С
	18"	2"	12"
- '	30"	2"	22"

DUAL ARM SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM Shall be used. See Note \*5.

# GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2"-6" x 6"-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND

CICERO. IL

- TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY. 2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- 3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED
- 4. ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
- 5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
- \* A.K.T. CORPORATION SCHAUMBURG, IL

Secure Sign to Mast Arm

- \* AMERICAN FABRICATION CO. CHICAGO HEIGHTS. IL \* TUCKER COMPANY, INC. \* WESTERN TRAFFIC CONTROL INC.
- WAUWATOSA, WI PARTS LISTING
- PART \*HPN053 (MED. CHANNEL) SIGN CHANNEL SIGN SCREWS 1/4" × 14 × 1" H.W.H. #3

SELF TAPPING WITH NEOPRENE WASHER PART \*HPNO34 (UNIVERSAL) BRACKETS

CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND

COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

USER NAME = wingrom DESIGNED - WHI REVISED -DRAWN - WHI REVISED -PLOT SCALE = 1:20 CHECKED - DEB REVISED PLOT DATE = 8/2/2011 - 8/2/2011 REVISED

Sq. M. each

7.50 Sq. Ft. each

Design Series D

1 Required

\_ Sq. M. each

6.75 Sq. Ft. each

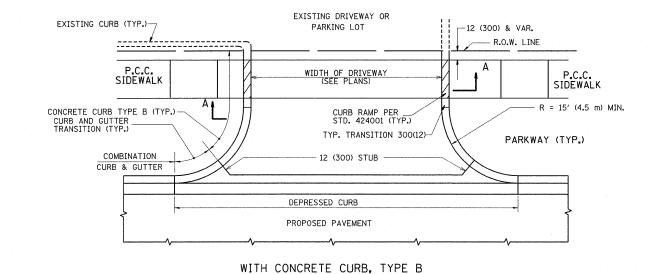
2 Required Design Series D

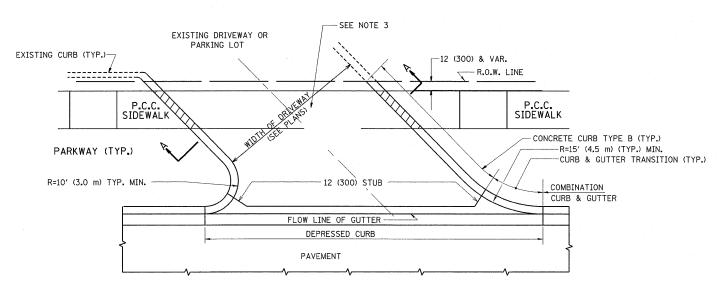
> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

MAST ARM MOUNTED STREET NAME SIGNS  SCALE: NTS SHEET NO. OF SHEETS STA. TO STA.	846 4-N-3	WILL 69 43
MAST ARM MOUNTED STREET NAME SIGNS	RTE. SECTION	COUNTY TOTAL SHEET NO.

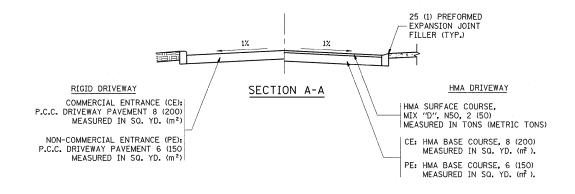
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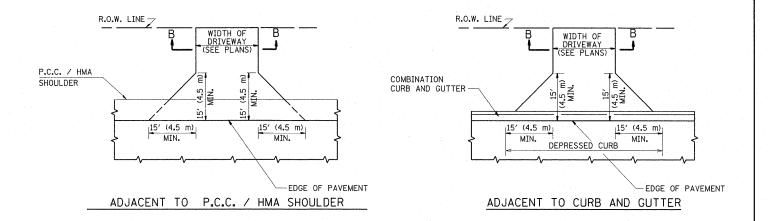
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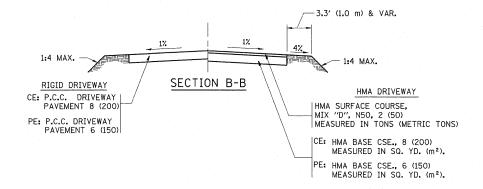












#### RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

#### 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 4 FEET (1.2 METERS) 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 OUESTIONS 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.

1 (25) 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.

FILE NAME =	USER NAME = beckertom	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
c:\pw_work\pwidot\beckertcm\dØ150277\Dis	tStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07
9-13-2011	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED - R. BORO 06-11-08
115 2011	PLOT DATE = 9/8/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

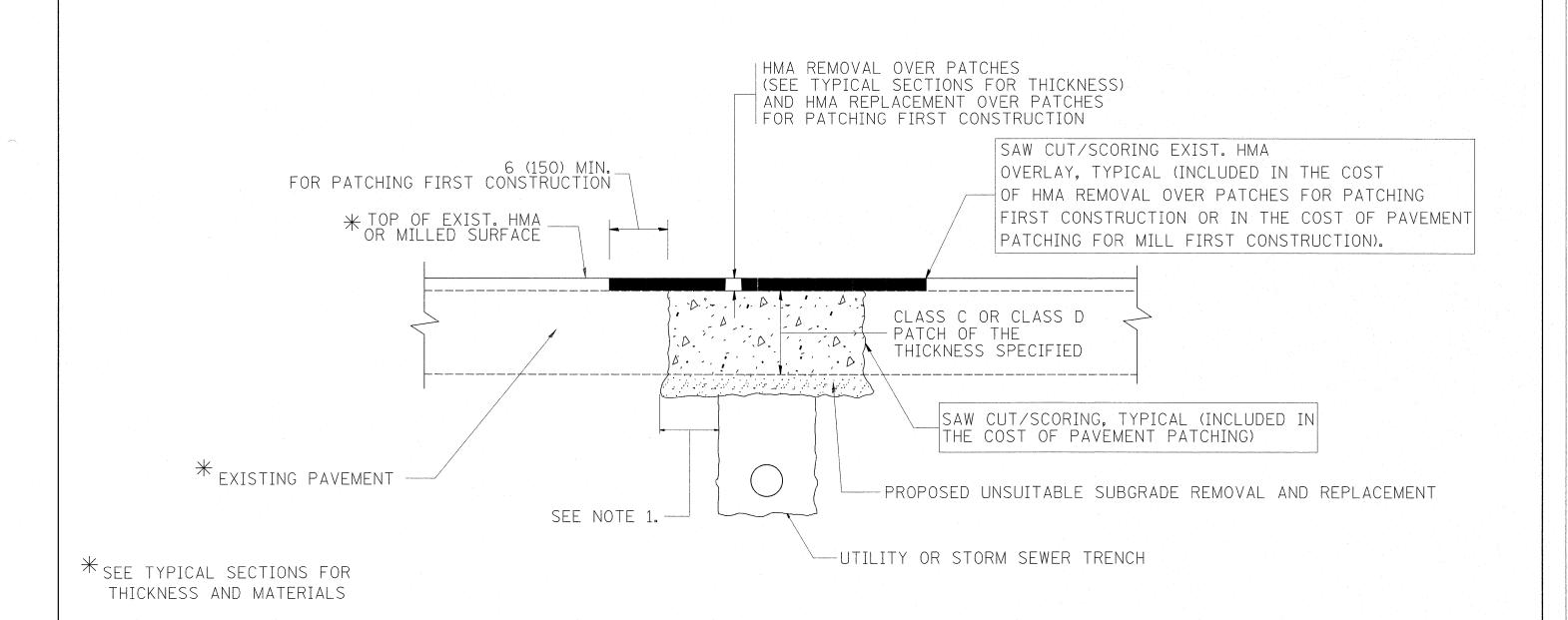
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.

AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

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

F.A.F RTE.	2.		SE	CTION			COUNTY	TOTAL	SHEET NO.
846	e	4	- N	-3			WILL	68	44
	BD	0156-	-07	(BD-01)			CONTRACT	NO. 60	DL42
FED.	ROAD	DIST.	NO. 1	ILLINOIS	FED.	AID	PROJECT		



# NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

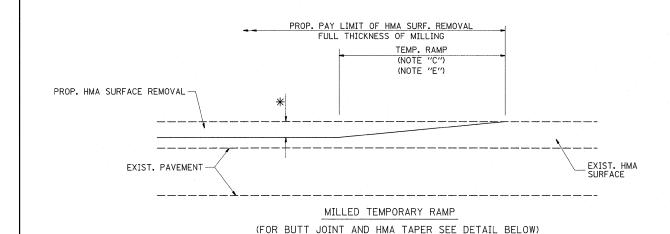
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

## SEQUENCE OF CONSTRUCTION (MILLING FIRST)

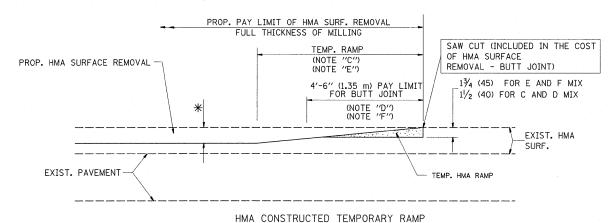
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = beckertcm	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckerto	tem\d0150277\D1stStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		846 4-N-3	WILL 68 45
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60L42
•	PLOT DATE = 8/23/2011	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT



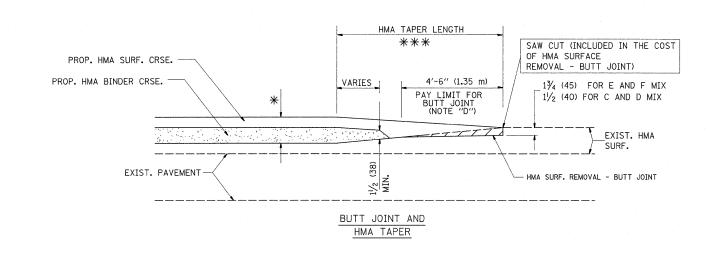
### OPTION 1



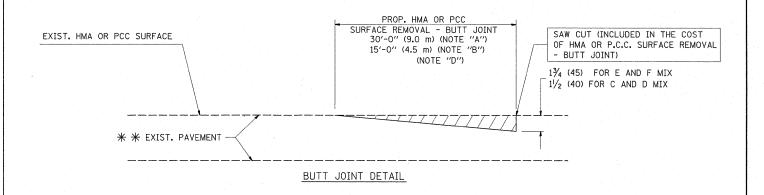
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

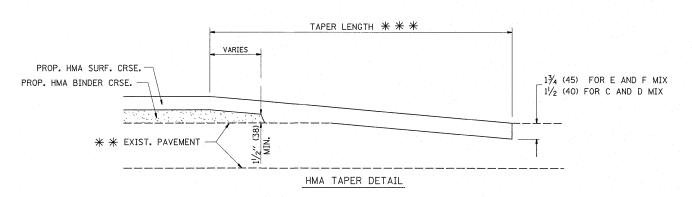
## OPTION 2

## TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

# # PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

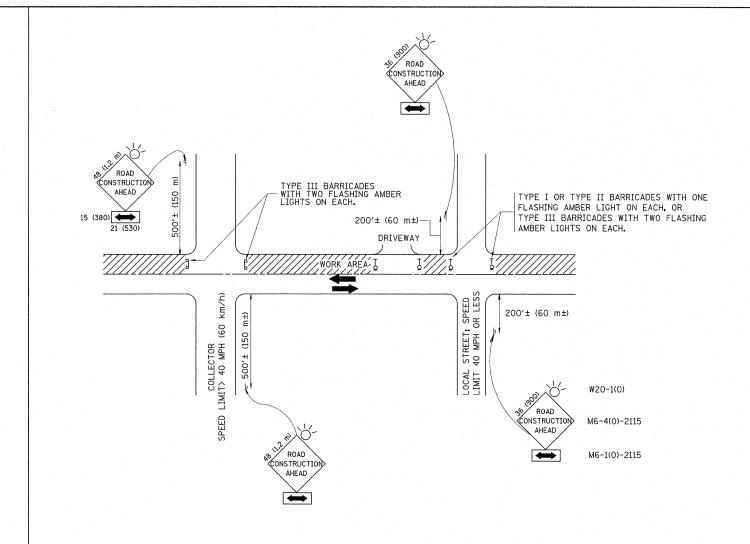
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

#### BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

FILE NAME =	USER NAME = beckertcm	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94			BUTT JOINT AND		F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertom\d0150277\D:	stStd.dgn	DRAWN	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS				846 4-N-3	WILL 68 46
	PLOT SCALE = 50.00000 '/ in-	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION		HMA TAPER DETAILS		BD400-05 BD32	CONTRACT NO. 60L42
	PLOT DATE = 8/23/2011	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED.	
January 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									



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

### NOTES:

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

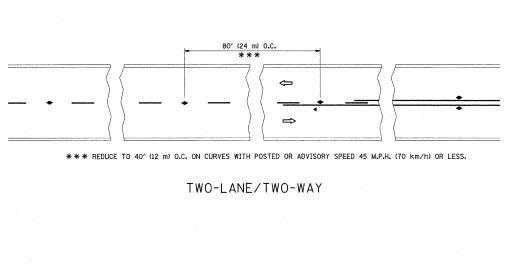
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

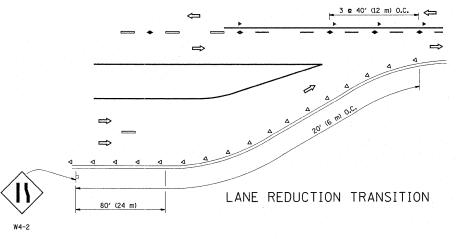
All dimensions are in millimeters (inches) unless otherwise shown.

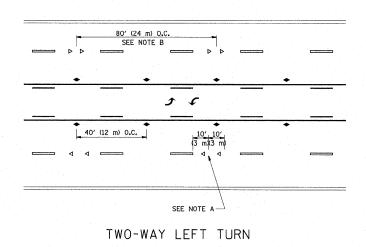
FILE NAME =	USER NAME = beckertom	DESIGNED	-	LHA	REVISED	- J	J. OBERLE :	10-18-95
c:\pw_work\pwidot\beckertcm\d0150277\Di	tStd.dgn	DRAWN			REVISED	- A	A. HOUSEH	03-06-96
	PLOT SCALE = 50.0000 '/ in.	CHECKED	-		REVISED	- <i>t</i>	A. HOUSEH	10-15-96
	PLOT DATE = 8/23/2011	DATE	-	06-89	REVISED	-T.	RAMMACHER	₹ 01-06-00

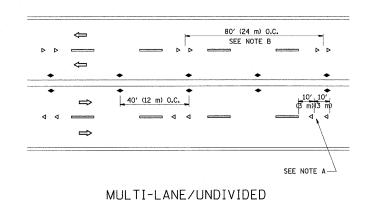
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

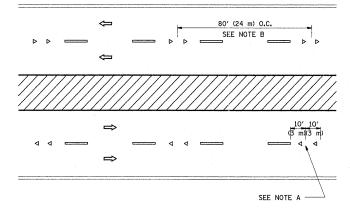
	TRAFF	C	CON	TROL	AND	PROTEC	TION FOR
	SIDE ROA	ADS	S, INT	TERS	ECTION	IS, AND	DRIVEWAYS
SCALE: NONE	SHEET NO.	1	OF	1 5	SHEETS	STA.	T0











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 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

## LANE MARKER NOTES

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

## SYMBOLS

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

#### DESIGN NOTES

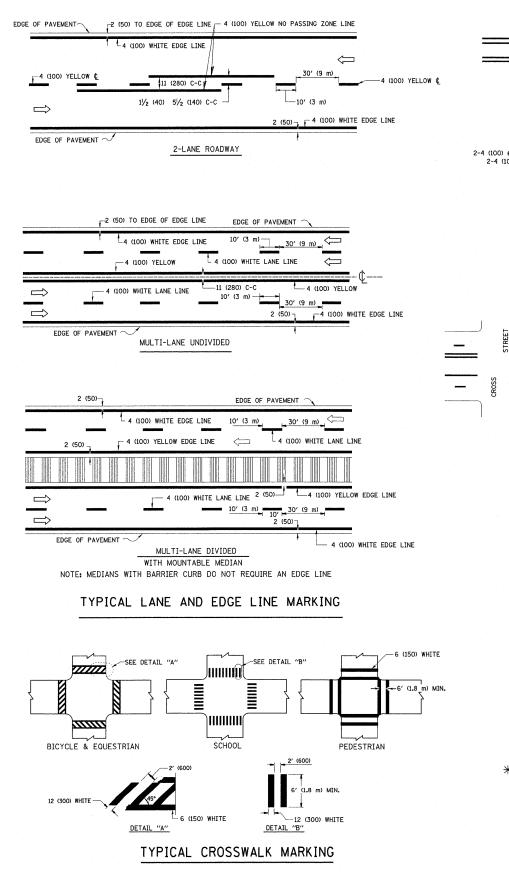
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD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

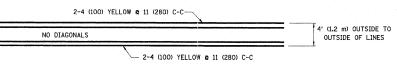
# 

LEFT TURN

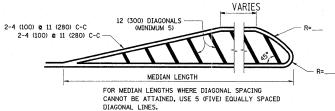
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P. SECTION COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\dØ150277\Dis	tStd.dgn	DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS		846 4-N-3 WILL 68 48
	PLOT SCALE = 50.0000 '/ in-	CHECKED ~	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	TC-11 CONTRACT NO. GOLHZ
	PLOT DATE = 8/23/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT



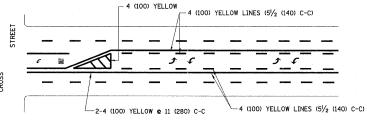


#### 4' (1.2 m) WIDE MEDIANS ONLY

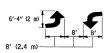


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

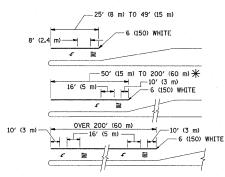


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

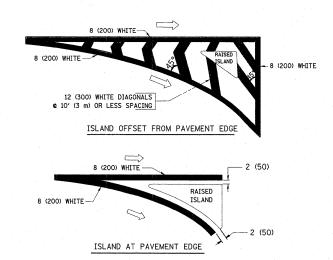


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) 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	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>0</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 <b>2</b> 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE EN SKIP-DASH LINE EN SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 <b>e</b> 6 (150) 12 (300) <b>e</b> 45° 12 (300) <b>e</b> 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (0VER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>c</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

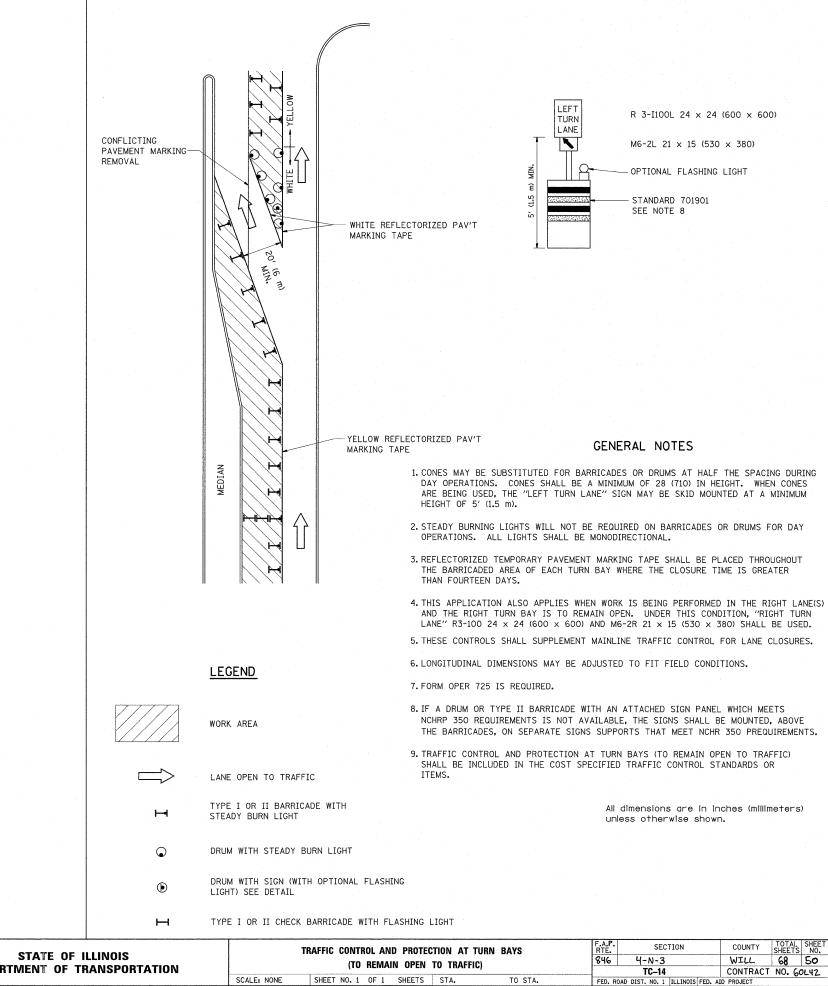
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = beckertcm	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
c:\pw_work\pwidot\beckertcm\d0150277\Di	tStd.dgn	DRAWN ~	REVISED -C. JUCIUS 09-09-09
·	PLOT SCALE = 50.0000 '/ in.	CHECKED ~	REVISED -
	PLOT DATE = 8/23/2011	DATE - 03-19-90	REVISED -

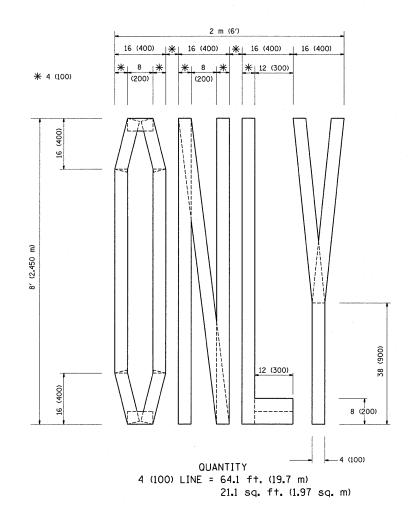
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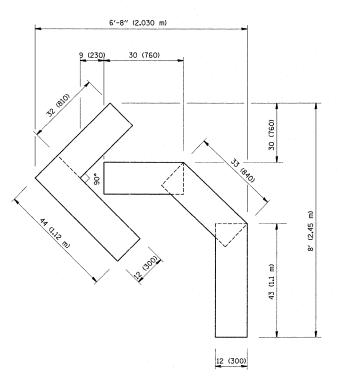
DISTRICT ONE					F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.					
TYPICAL PAVEMENT MARKINGS						846	4-N-3	WILL	68	49				
								TC-13	CONTRACT	NO. 6	0442			
 SCALE: NONE	SHEET	NO. 1	OF	1 5	HEETS	STA.		TO STA.		FED. ROA	D DIST. NO. 1   ILLINOIS FED. AI	ID PROJECT		



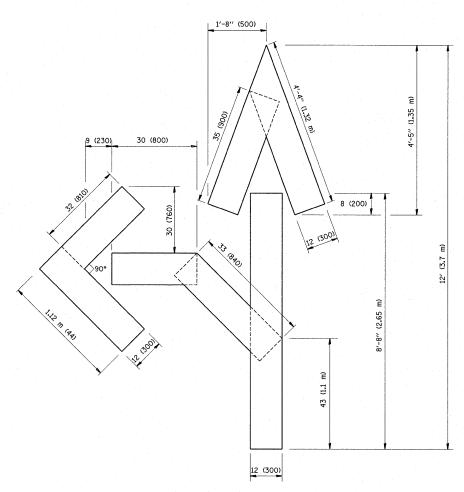
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c:\pw_work\pwidot\beckertcm\d0150277\Di	tStd.dgn	REVISED	-	A. HOUSEH 11-07-95	REVISED	-		
	PLOT SCALE = 50.0000 '/ in.	REVISED	-	A. HOUSEH 10-12-96	REVISED			
	PLOT DATE = 8/23/2011	REVISED	-T.	RAMMACHER 01-06-00	REVISED	-		

**DEPARTMENT OF TRANSPORTATION** 





QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



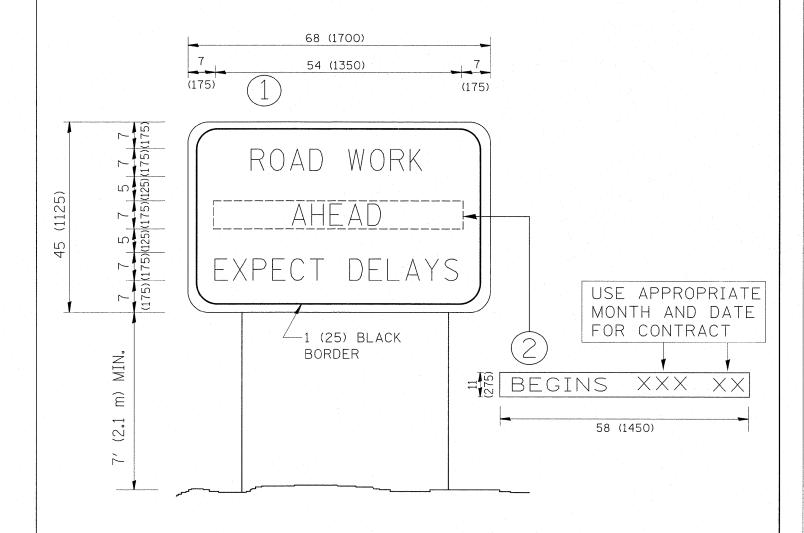
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED	-T. RAMMACHER 06-05-96
c:\pw_work\pwidot\beckertcm\dØ150277\Di	tStd.dgn	DRAWN -	REVISED	-T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	-T. RAMMACHER 03-02-98
	PLOT DATE = 8/23/2011	DATE - 09-18-94	REVISED	-E. GOMEZ 08-28-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	PAVEMENT MARKING LETTERS AND SYMBOLS			SECTION	COUNTY	TOTAL	SHEET NO.
		846	4-N-3	WILL	68	51	
	FOR TRAFFIC STAGING		TC-16		CONTRACT NO. GOL42		
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		D PROJECT		

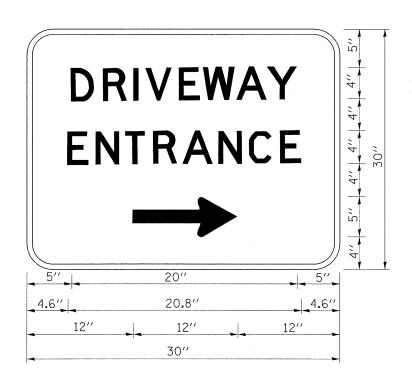


# NOTES:

- 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 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD		F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\d0150277\Di	tStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			846 4-N-3	WILL 68 52
	PLOT SCALE = 50.0000 1/ in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		TC-22	CONTRACT NO. 60L42
	PLOT DATE = 8/23/2011	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOI	S FED. AID PROJECT



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

## NOTES:

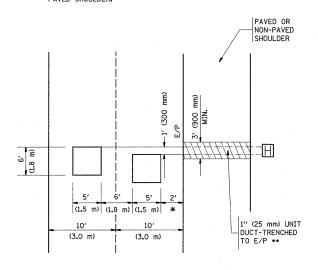
- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME = c:\pw_work\pwidot\beckertcm\d0150277\Di	USER NAME = beckertom	DESIGNED - DRAWN -	REVISED - C. JUCIUS 02-15-07 REVISED -	STATE OF ILLINOIS
	PLOT SCALE = 50.0000 '/ in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION
	PLOT DATE = 8/23/2011	DATE -	REVISED -	

	DRIVEWAY ENTRANCE SIGNING				F.A.P. SECTION		COUNTY	TOTAL	TOTAL SHEE SHEETS NO.	
					846	4-N-3	WILL	68	53	
						TC-26	CONTRACT	NO. 6	OLYZ	
- 1	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FFD. RO	AD DIST. NO. 1 THEINOIS FED.	ATD PROJECT			

## LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



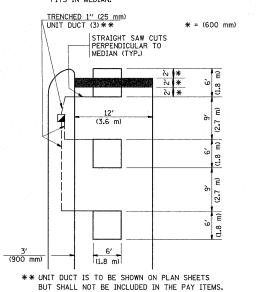
\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

# LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

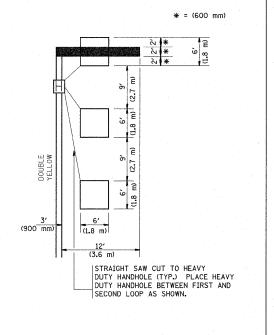


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

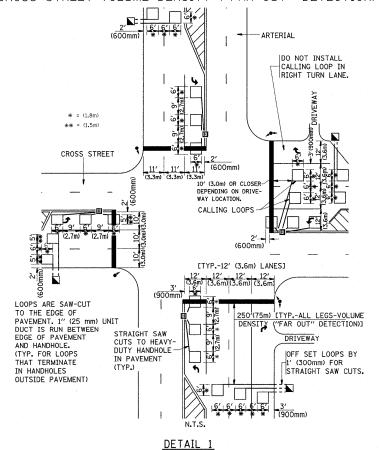
(PROTECTED / PERMITTED LEFT TURN PHASING)

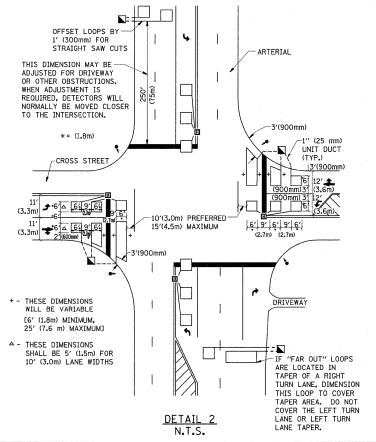


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)





#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (1.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON  $\underline{\text{ALL}}$  SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

#### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1
TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION

DETAILS FOR ROADWAY RESURFACING

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

