11-9-12 LETTING ITEM 066

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

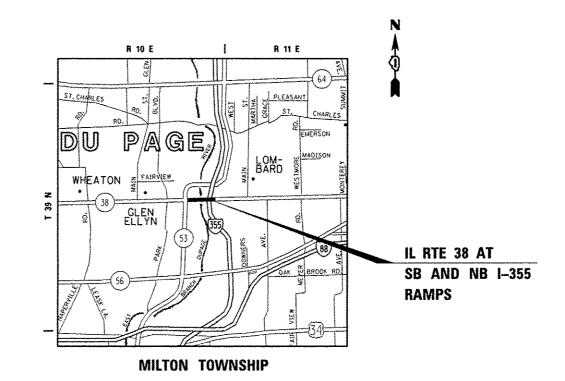
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 347: IL RTE 38 (ROOSEVELT RD)
AT SB AND NB I-355 RAMPS
SECTION CY-TS-1 (12)
PROJECT: ACHSIP-0347(029)
TRAFFIC SIGNAL MODERNIZATION

DUPAGE COUNTY

C-91-441-12



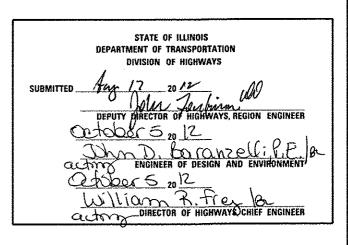
D-91-441-12

CY-TS-1 (12)

DUPACE 32 1

ILLINOIS CONTRACT NO. 60179





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATIONS:

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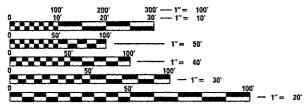
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IL RTE 38 - OTHER PRINCIPAL ARTERIAL 2009 ADT: 47,000 POSTED SPEED LIMIT: 45 MPH

THE PROJECT IS LOCATED IN
THE VILLAGE OF GLEN ELLYN, LOMBARD
AND UNINCORPORATED DUPAGE COUNTY.



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: LUKASZ POCIECHA /PETER BLUMBERG PROJECT MANAGER: SUDUD MAHMOUD (847) 708–4420

CONTRACT NO. 60T79

INDEX OF SHEETS

SHEET NO.	DESCRIPTION	STO. NO.	TITLE
1	COVER SHEET	000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES	001001-02	AREAS OF REINFORCEMENT BARS
3 - 7	SUMMARY OF QUANTITIES	001006	DECIMAL OF AN INCH AND OF A FOOT
8 - 13	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)	701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
14 - 15	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN IL RTE 38 (ROOSEVELT RD) AT 1-355 SB RAMPS "A" AND "C"	701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
16	TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM	701421-04	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH
10	AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 38 (ROOSEVELT RD) AT I-355 SB RAMPS "A" AND "C"	701426-04	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS >= 45 MPH
17 - 18	TRAFFIC SIGNAL MODERNIZATION PLAN	701456-02	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
11 10	IL RTE 38 (ROOSEVELT RD) AT 1-355 SB RAMPS "A" AND "C"	701601-07	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
19	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
	IL RTE 38 (ROOSEVELT RD) AT 1-355 SB RAMPS "A" AND "C"	701901-02	TRAFFIC CONTROL DEVICES
20 - 21	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN IL RTE 38 (ROOSEVELT RD) AT 1-355 NB RAMPS "B" AND "O"	720001-01	SIGN PANEL MOUNTING DETAILS
22	TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM	720006-03	SIGN PANEL ERECTION DETAILS
	AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RTE 38 (ROOSEVELT RD) AT 1-355 NB RAMPS "B" AND "D"	805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
23 - 24	TRAFFIC SIGNAL MODERNIZATION PLAN	814001-02	HANDHOLES
23 - 24	IL RTE 38 (ROOSEVELT RD) AT 1-355 NB RAMPS "B" AND "D"	814006-02	DOUBLE HANDHOLES
25	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
	IL RTE 38 (ROOSEVELT RD) AT 1-355 NB RAMPS "B" AND "D"	862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
26	TEMPORARY INTERCONNECT PLAN	873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
27	TEMPORARY INTERCONNECT SCHEMATIC	877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
28 - 29	INTERCONNECT PLANS	878001-09	CONCRETE FOUNDATION DETAILS
30	INTERCONNECT SCHEMATIC	880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
31	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
32	ARTERIAL ROAD INFORMATION SIGN (TC-22)	886001-01	DETECTOR LOOP INSTALLATIONS

HIGHWAY STANDARDS

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 CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.

IT SHALL BE THE CONTRACTOR'S RESPONISBLITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFING THE MAST ARMS LENGTHS.

THE EXACT LOCATION OF ALL UTILITES SHALL BE FIELD VERIFIED BY THE CONTRACTOR THE EXACT LOCATION OF ALL UTILITES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

ALL TRAFFIC SIGNAL BACKPLATES SHALL HAVE RETROREFLECTIVE SHEETING APPLIED TO THE OUTSIDE PERIMETER OF THE FACE OF THE BACKPLATE.

file name *	USER NAME + pociechel	DESIGNED - LP / PB	REVISED -
c:\pw.wo-k\pwido1\pociechal\d8366285\0i	4ll2-sht-IS.dgn	DRAWN - LP / PB	REVISED -
	PLOT SCALE = 108,0080 '/ in.	CHECKED - SM	REVISED -
	PLOT DATE : 8/13/2012	DATE - 07/26/12	REVISED -

STATE	Of	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	thingy of	OURTE WOULD CONTROL OF THE CONTROL NOTICE	F.A.P RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	INDEX OF	SHEETS, HIGHWAY STANDARDS & GENERAL NOTES	347	CY-TS-1 (12)	DUPAGE	32	2
ı			-1		CONTRACT	NO. 6	0179
ı	SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FEO. A	ID PROJECT		

			[CONSTRUCTION CODE			
			1	IL 38 AT I-355 SB RAMPS 90% FED	IL 38 AT I-355 NB RAMPS	90% FED	100% VIII ACT OF
				10% STATE	90% FED 10% STATE	10% STATE	100% VILLAGE OF GLEN ELLYN
CODE			TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	EVP
NO.	ITEM	TINU	QUANTITY	0021	0021	0021	0021
			QUARTE TO	URBAN	URBAN	URBAN	URBAN
	·						
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2	2	2	
	MOBILIZATION	L SUM	4	0. 4	0.4	0. 2	
70100310	TRAFFIC CONTROL AND PROTECTION. STANDARD 701421	L SUM	**************************************	0.4	0.4	0. 2	
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	44	0, 4	0.4	0. 2	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.4	0.4	0. 2	·
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.4	0.4	0. 2	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	2	2	2	
	CHANGEAGE WESSAGE STON	CAL NO			2	6	
72000100	SIGN PANEL - TYPE 1	SQ FT	62.5	31. 25	31, 25		
20000076			700	100			
78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	362	182	180		
78300100	PAVEMENT MARKING REMOVAL	SO FT	750	375	375		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	4	4		
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	2	1	1		
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	3, 123	787	2, 336		
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	437	320	117		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FILE NAME .

USER NAME + pociechal

PLOT DATE = 8/13/2012

c:\pv.wo-k\pvidat\pociechal\d8386285\DI 4112-aht-TS.dgn PLOT SCALE + 188.0688 * / in.

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DRAWN - LP / PB
CHECKED - SM
DATE - 07/26/12

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REVISED -

SECTION

CY-TS-1 (12)

SUMMARY OF QUANTITIES

(SHEET 1 OF 5)

TO STA.

SCALE; NONE SHEET NO. OF SHEETS STA.

CODE NO. 81028220 UNDERGROUND CONDUIT, GALV 81028240 UNDERGROUND CONDUIT, GALV 81400100 HANDHOLE 81400200 HEAVY-DUTY HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT		FOOT FOOT EACH EACH	TOTAL OUANTITY 293 1.230 9	IL 38 AT I-355 SB RAMPS 90% FED 10% STATE TRAFFIC SIGNALS 0021 URBAN 148 646	90% FED 10% STATE TRAFFIC SIGNALS 0021 URBAN 145	90% FED 10% STATE INTERCONNECT 0021 URBAN	100% VILLAGE O GLEN ELLYN EVP 0021 URBAN
81028220 UNDERGROUND CONDUIT, GALV 81028240 UNDERGROUND CONDUIT, GALV 81400100 HANDHOLE 81400300 DOUBLE HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT	ANIZED STEEL, 3" DIA. ANIZED STEEL, 4" DIA.	FOOT FOOT EACH	293 1,230	10% STATE TRAFFIC SIGNALS 0021 URBAN 148 646	10% STATE TRAFFIC SIGNALS 0021 URBAN 145	10% STATE INTERCONNECT 0021	GLEN ELLYN EVP 0021
NO. 81028220 UNDERGROUND CONDUIT, GALV 81028240 UNDERGROUND CONDUIT, GALV 81400100 HANDHOLE 81400200 HEAVY-DUTY HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT	ANIZED STEEL, 3" DIA. ANIZED STEEL, 4" DIA.	FOOT FOOT EACH	293 1,230	0021 URBAN 148 646	0021 URBAN 145	0021	0021
B1028220 UNDERGROUND CONDUIT, GALV B1028240 UNDERGROUND CONDUIT, GALV B1400100 HANDHOLE B1400200 HEAVY-DUTY HANDHOLE B1400300 DOUBLE HANDHOLE B5000200 MAINTENANCE OF EXISTING T B6400100 TRANSCEIVER - FIBER OPTIC B7300925 ELECTRIC CABLE IN CONDUIT	ANIZED STEEL, 3" DIA. ANIZED STEEL, 4" DIA.	FOOT FOOT EACH	293 1,230	148 148 646	URBAN 145 584		· · · · · · · · · · · · · · · · · · ·
B1028240 UNDERGROUND CONDUIT. GALV B1400100 HANDHOLE B1400200 HEAVY-DUTY HANDHOLE B5000200 MAINTENANCE OF EXISTING T B6400100 TRANSCEIVER - FIBER OPTIC B7300925 ELECTRIC CABLE IN CONDUIT	ANIZED STEEL, 4" DIA.	FOOT EACH EACH	1.230	148 646 4	145 584	URBAN	URBAN
B1028240 UNDERGROUND CONDUIT. GALV B1400100 HANDHOLE B1400200 HEAVY-DUTY HANDHOLE B5000200 MAINTENANCE OF EXISTING T B6400100 TRANSCEIVER - FIBER OPTIC B7300925 ELECTRIC CABLE IN CONDUIT	ANIZED STEEL, 4" DIA.	FOOT EACH EACH	1.230	646	584		
B1400100 HANDHOLE B1400200 HEAVY-DUTY HANDHOLE B1400300 DOUBLE HANDHOLE B5000200 MAINTENANCE OF EXISTING T B6400100 TRANSCEIVER - FIBER OPTIC B7300925 ELECTRIC CABLE IN CONDUIT		EACH	9	4			
81400200 HEAVY-DUTY HANDHOLE 81400300 DOUBLE HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT		EACH			5		
81400200 HEAVY-DUTY HANDHOLE 81400300 DOUBLE HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT		EACH			5		
81400300 DOUBLE HANDHOLE 85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT			6	3			i e
85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT		EACH			3		
85000200 MAINTENANCE OF EXISTING T 86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT		EACH					
86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT			6	4	2		
86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT							
86400100 TRANSCEIVER - FIBER OPTIC 87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT	RAFFIC SIGNAL INSTALLATION	EACH	1			1	
87300925 ELECTRIC CABLE IN CONDUIT 87301225 ELECTRIC CABLE IN CONDUIT				_			
87301225 ELECTRIC CABLE IN CONDUIT		EACH	2	1	1		
87301225 ELECTRIC CABLE IN CONDUIT	. TRACER, NO. 14 1C	FOOT	632			632	
87301245 FIECTRIC CARLE IN CONDUIT	. SIGNAL NO. 14 3C	FOOT	1,523				1,523
	SIGNAL NO. 14 SC	FOOT	7, 955	4.031	3, 924		
OTSOLE 15 CELESTATO CADEL 15 CONDUIT	, 310the no. 14 30		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1, 032	J, JE1		
87301255 ELECTRIC CABLE IN CONDUIT	. SIGNAL NO. 14 7C	F00T	924	742	182		
87301305 ELECTRIC CABLE IN CONDUIT	, LEAD-IN, NO. 14 1 PAIR	FOOT	10, 796	4, 558	6, 238		
87301790 ELECTRIC CABLE IN CONDUIT	. SERVICE. NO. 2 2 C	FOOT	642		642		
87301805 ELECTRIC CABLE IN CONDUIT	, SERVICE, NO. 6 2 C	FOOT	70	70			<u> </u>
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ci\pv.work\pxidat\pociachal\d0326285\0j	4H2~shz~TS.dgn	DRAWN - LP / PB	REVISED -	STATE OF ILLINOIS	(SHEET 2 OF 5)	347 CY-TS-1 (12) DUPAGE 32 4
	PLOT SCOLE = 100,0000 1/ in.	CHECKED - SM	REVISED -	DEPARTMENT OF TRANSPORTATION	(autti 7 n. a)	CONTRACT NO. 60179
	PLOT DATE : 8/13/2012	DATE - 07/26/12	REVISED -		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT

				CONSTRUCTION CODE IL 38 AT I-355 SB RAMPS IL 38 AT I-355 NB RAMPS			· · · · · · · · · · · · · · · · · · ·
				90% FED	90% FED	90% FED	100% VILLAGE OF
		 	1	10% STATE	10% STATE	10% STATE INTERCONNECT	GLEN ELLYN
CODE	ITEM	UNIT	TOTAL	TRAFFIC SIGNALS 0021	TRAFFIC SIGNALS 0021	0021	EVP 0021
NO.	1 + CW(DIVI	QUANTITY	URBAN	URBAN	URBAN	URBAN
				UNDAN	UNDAIN	UNDAR	URDAN
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 IC	FOOT	2, 177	777	1,400		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2	1	1		
07500500	TRUCKIO CIONIA POCT. CALVANIZED CIEGA 45 CT	5400				**** · · · · · · · · · · · · · · · · ·	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2	1	1		
87700160	STEEL MAST ARM ASSEMBLY AND POLE. 24 FT.	EACH	2	1	1		
			A Paramanana de la companya de la co				
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2	1	e d		
B7700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2	1 .	1		
87800100	CONCRETE FOUNDATION. TYPE A	FOOT	16	8	8		
07000150	CONCRETE FOUNDATION. TYPE C	FOOT	0	4	4		
87800150	CONCRETE FOUNDATION, TIPE C	1001	8	4			
87800400	CONCRETE FOUNDATION. TYPE E 30-INCH DIAMETER	FOOT	47	23. 5	23. 5		
87800415	CONCRETE FOUNDATION. TYPE E 36-INCH DIAMETER	FOOT	22	11	11		
37800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	30	15	15		
87900200	DRILL EXISTING HANDHOLE	EACH	6	3	3		
	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	24	12	12		
	SIGNAL NEWD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	CAUN	24	1.4	1.6		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6	3	3		

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	FILE NAME >	USER NAME * pociechal	DESIGNED -	LP / P8	REVISED -	Γ
1	cr\pw_kork\pwidgt\pociechal\d0386285\01	4112-oht-TS.dgn	DRAWN -	LP / PB	REVISED -	l
		PLOT SCALE = 180,0888 1/ in.	CHECKED -	SN	REVISED -	l
1		PLOT DATE = 8/13/2012	DATE -	07/26/12	REVISED -	ı

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	SU	MMAI	RY OF QUANTITIES	3
		(SI	IEET 3 OF 5)	
SCALE: NONE	SHEET NO.	OF	SHEETS STA.	TO STA.

AP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	CY-TS-1 (12)	DUPAGE	32	5
		CONTRACT	NO. E	0179
	ILLINOIS FED.	AID PROJECT		

					CONSTRUCT	ION CODE	*
				1L 38 AT 1-355 SB RAMPS 90% FED	IL 38 AT I-355 NB RAMPS 90% FED	90% FED	100% VILLAGE OF
			•	10% STATE	10% STATE	10% STATE	GLEN ELLYN
CODE			TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	EVP
NO.	ITEM	UNIT	QUANTITY	0021	0021	0021	0021
,,,,,,			QOANT ITT	URBAN	URBAN	URBAN	URBAN
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2	1	1		·
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2	1	1		
88500100	INDUCTIVE LOOP DETECTOR	EACH	32	15	17		
88600100	DETECTOR LOOP. TYPE I	FOOT	1,849	846	1,003		
-							
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1	1		
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM. DETECTOR UNIT	EACH	6				6 .
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM. PHASING UNIT	EACH	2			· · · · · · · · · · · · · · · · · · ·	2
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	1, 224			1, 224	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1	1		***************************************
89502376	REBUILD EXISTING HANDHOLE	EACH	2	1	1		
89502380	REMOVE EXISTING HANDHOLE	EACH	23	11	12		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	18	9	9		
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,523				1,523
x8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1			
	* SPECIALTY ITEMS	E-10-10-10-10-10-10-10-10-10-10-10-10-10-					

FILE NAME +	USER HAME . poctechal	DESIGNED - LP / PB	REVISED -		l
ct\pw.work\pwidot\pociechal\d8386285\814	4112-sha-TS,dgn	DRAWN - LP / PB	REVISED -	STATE OF ILLINOIS	
	PLOT SCALE + 108,0000 1/ 10.	CHECKED - SM	REVISED -	DEPARTMENT OF TRANSPORTATION	
	PLOT BATE : 8/13/2812	DATE - 07/26/12	REVISED -		SCALE

	SU	MMAI	RY OF QU	ANTITIES	S
		(Sł	IEET 4 OF	5)	
SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO ST

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	CY-TS-1 (12)	DUPAGE	. 32	6
		CONTRAC	T NO. E	0179
	ILLINOIS FED. A	D PROJECT		

			1	CONSTRUCTION CODE			
			-	IL 38 AT I-355 SB RAMPS 90% FED	1L 38 AT 1-355 NB RAMPS 90% FED	90% FED	100% VILLAGE OF
			***************************************	10% STATE	10% STATE	10% STATE	GLEN ELLYN
2005		T	TOTAL	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	EVP
CODE	ITEM	UNIT	TOTAL QUANTITY	0021	0021	0021	0021
NO.			QUANTIT	URBAN	URBAN	URBAN	URBAN
8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1		1		
· ·						· · · · · · · · · · · · · · · · · · ·	
K8600105	MASTER CONTROLLER (SPECIAL)	EACH	1		1		
(8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2	1	T.		
40.71.000.4		5007	670			630	
.8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	632			632	
(8820010	TRAFFIC SIGNAL BACKPLATE. SPECIAL	EACH	26	13	13		
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20030850	TEMPORARY INFORMATION SIGNING	SO FT	102.8	51.4	51.4		
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7703222	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS. 48 FT. AND 22 FT.	EACH	2	1	1		
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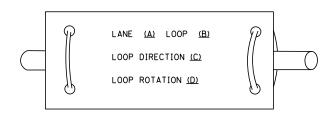
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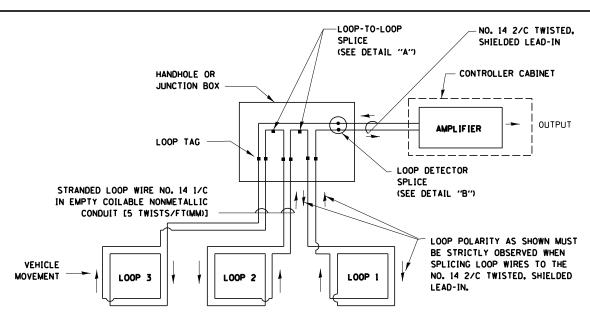
LOOP DETECTOR NOTES

- 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 I SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

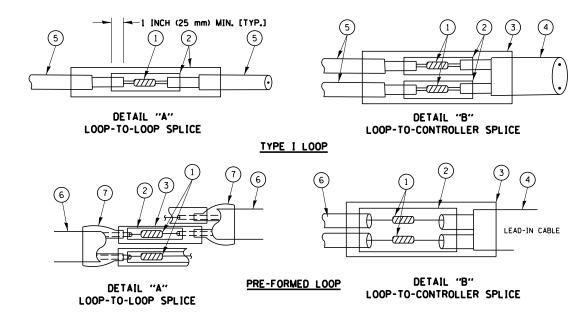


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP "1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

- $\hfill \hfill \hfill$
- (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 STATE OF THE STA

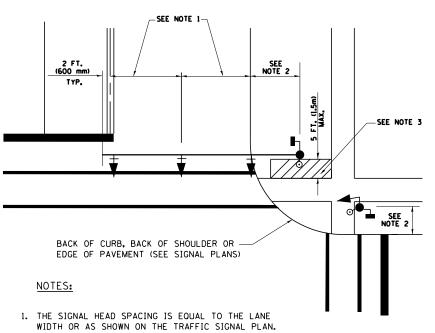
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STATI	E OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

DISTRICT ONE					F.A.P. RTE.	SECTION	COUNTY	TOTAL	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS						CY-TS-1 (12)	DUPAGE	32	8
	STANDAND INAL	IIC SIGNA	DESIGN	DETAILS		TS-05	CONTRACT	NO. (60179
SCALE: NONE	SHEET NO. 1 OF 6	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

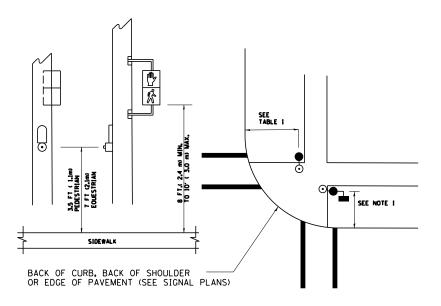
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



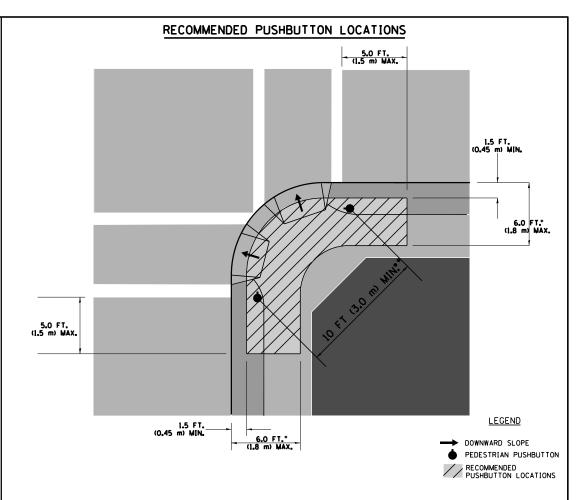
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO 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.

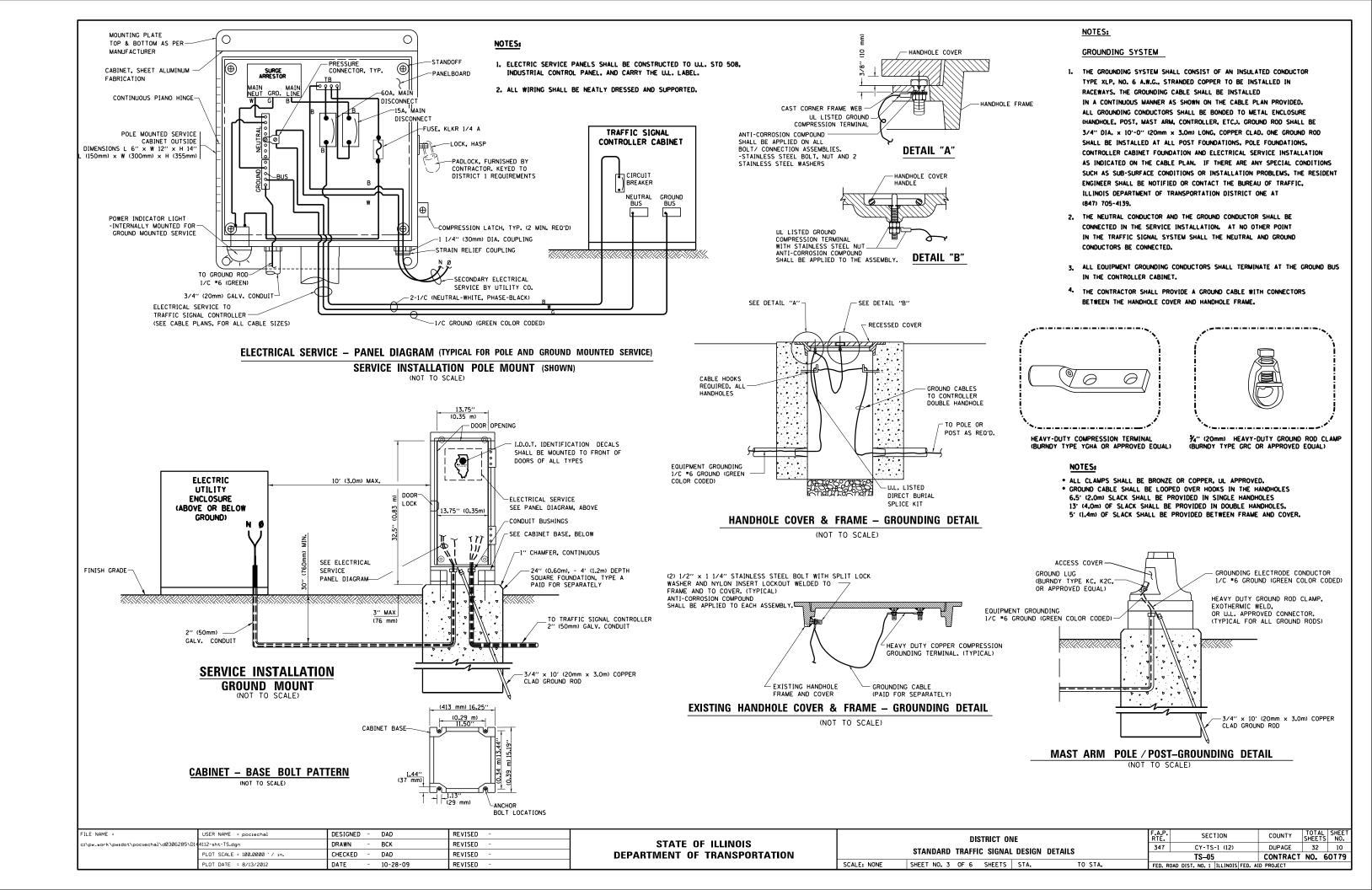
TRAFFIC SIGNAL EQUIPMENT OFFSET

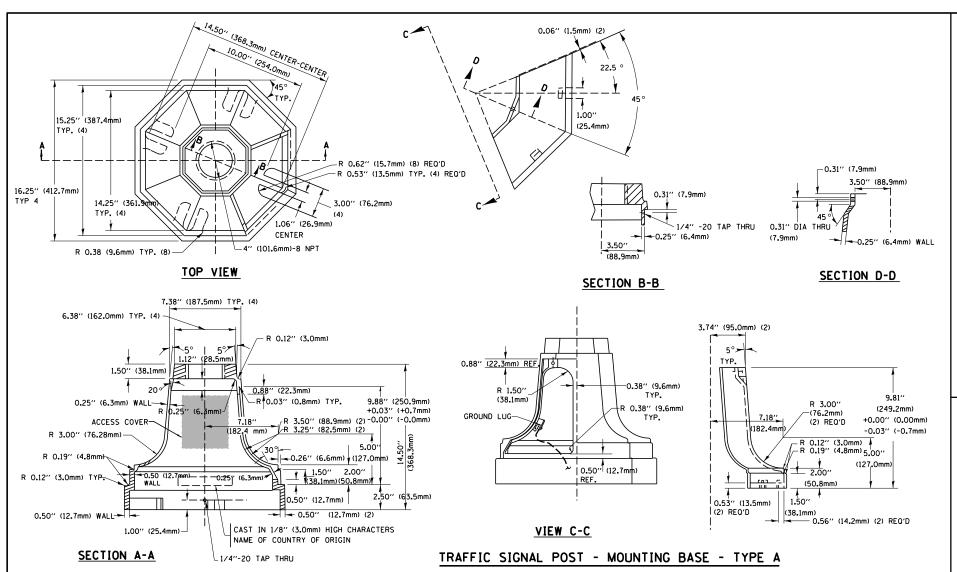
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

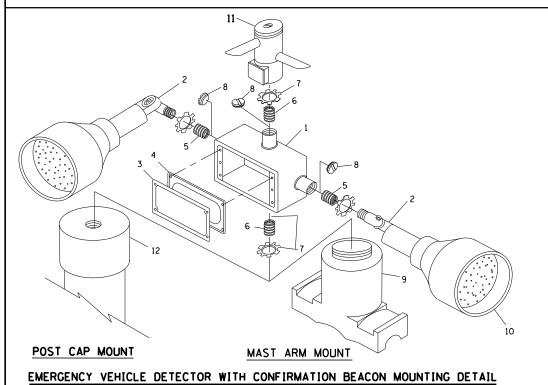
NOTES:

- 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.

DESIGNED - DAD REVISED SECTION COUNTY DISTRICT ONE STATE OF ILLINOIS ::\pw_work\pwidot\pociechal\d0306285\[112-sht-TS.dan DRAWN BCK REVISED 347 CY-TS-1 (12) DUPAGE 32 9 STANDARD TRAFFIC SIGNAL DESIGN DETAILS CHECKED DAD REVISED **DEPARTMENT OF TRANSPORTATION** TS-05 CONTRACT NO. 60179 SCALE: NONE SHEET NO. 2 OF 6 SHEETS STA. PLOT DATE = 8/13/2012 10-28-09 REVISED FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT







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	¾′′(19 mm) CLOSE NIPPLE
7	¾′′(19 mm) LOCKNUT
8	¾''(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 34"(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.

RO.50" (12mm) RO.50" (12mm) RO.25" (6mm) RO.25" (6mm)

В-В

A	В	С	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)

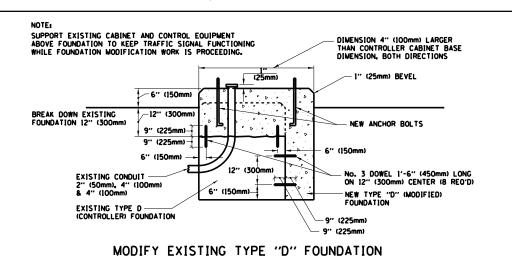
SHROUD

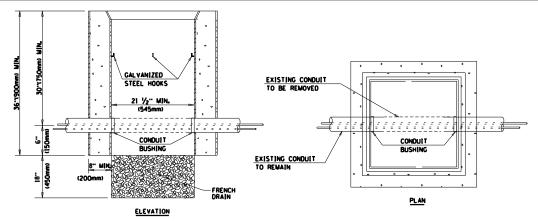
NOTES:

- 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.

(75mm)

3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



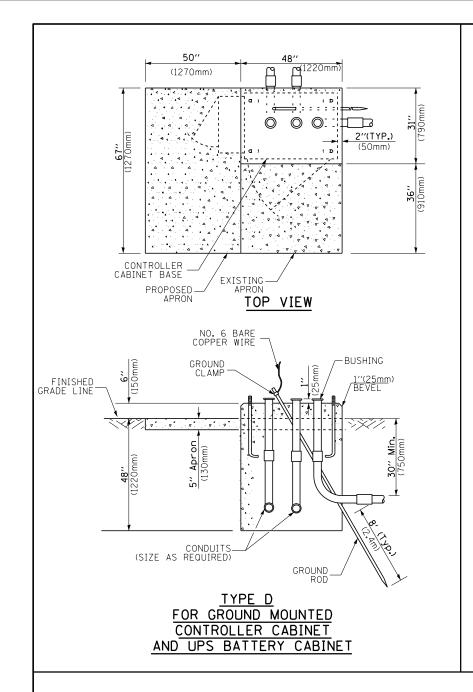


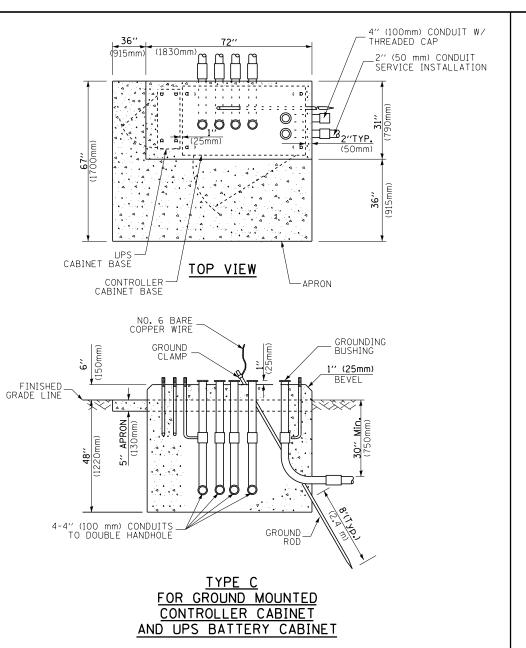
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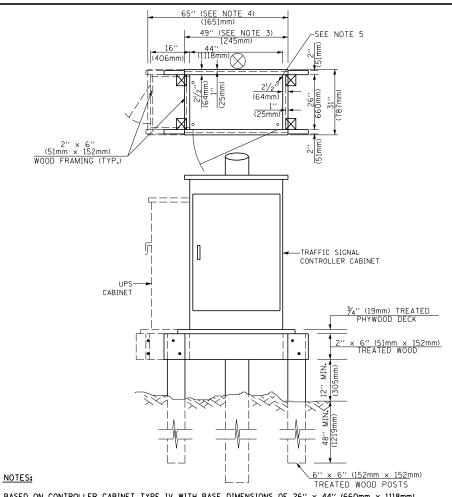
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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	PLOT DATE = 8/13/2012	DATE - 10-28-09	REVISED -		SCALE: NON	NE 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+L
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 - SOUARE	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)

NOTES:

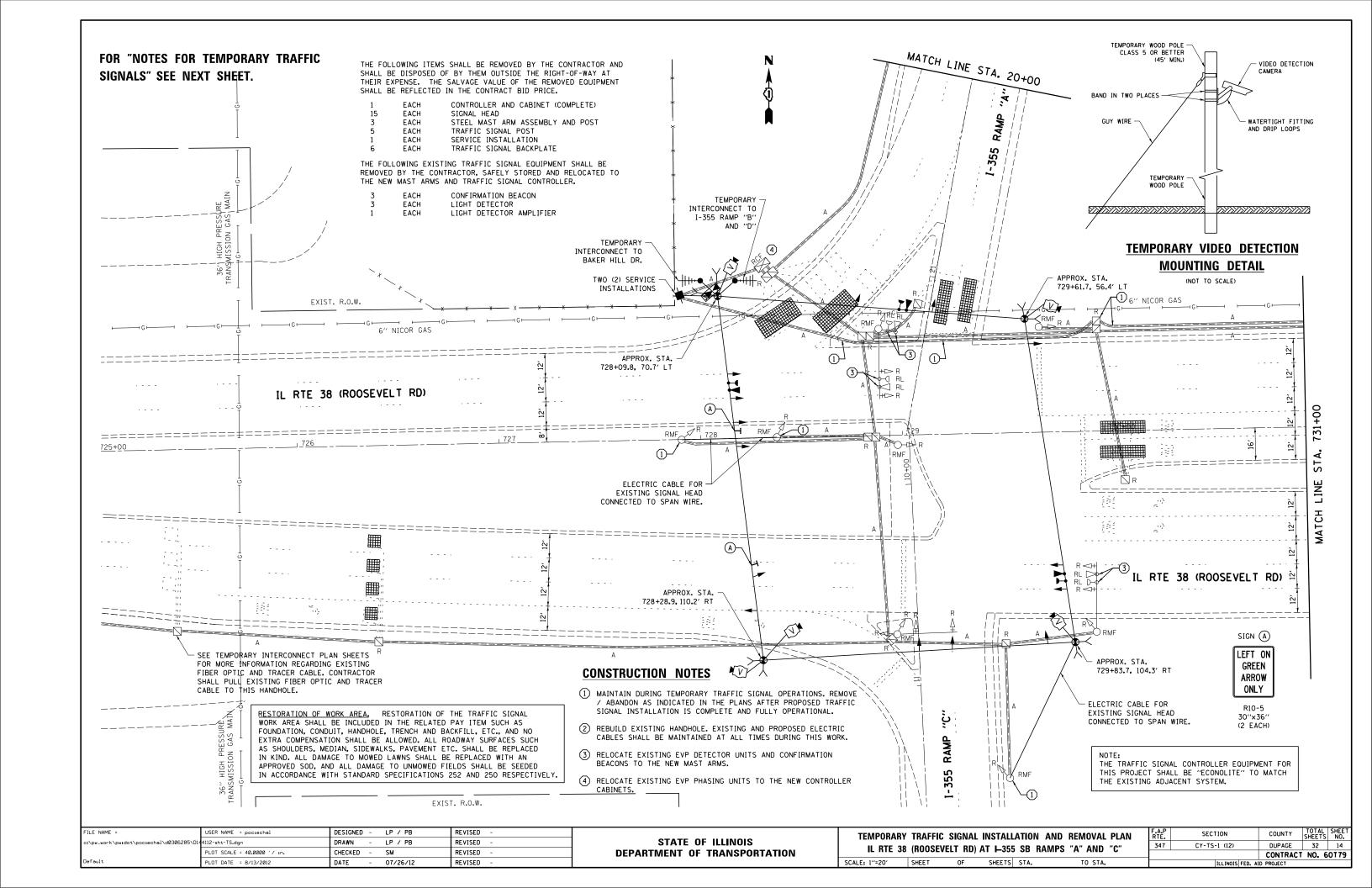
- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer 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 diameter foundations.
- 4. For most arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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	PLOT DATE = 8/13/2012	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA. TO STA.	FED. ROA		D. AID PROJECT	

TRAFFIC SIGNAL LEGEND

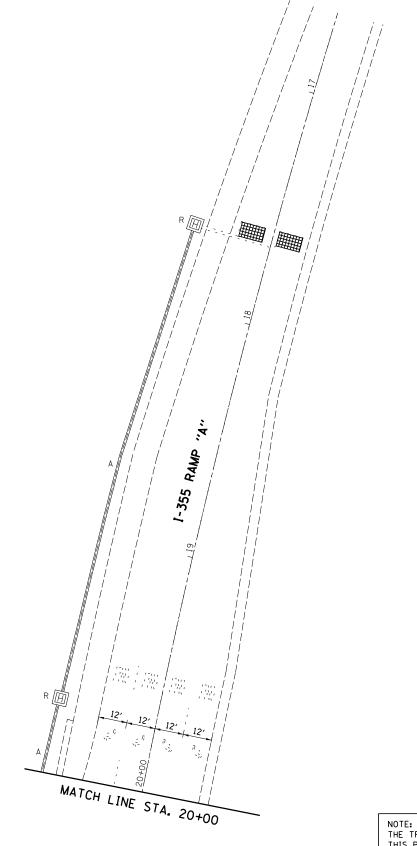
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AND CONTROL OF THE PROPERTY OF	RAILROAD CONTROL CABINET			₽►₹	CONFIRMATION E	BEACON	R ₀ -()	○ —()		No. 14 176, BREESS NOTED OTHERWISE		,	
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Section Sect	MASTER CONTROLLER			MC	HANDHOLE				N			\sim	
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THE CASE AND SERVICE OF THE CONTROL	TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R [T	P	P	IN TRENCH (T)	OR PUSHED (P)				FIBER OPTIC CABLE		,	− (24F)−−
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THE STATE OF THE S	TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R	\otimes	•			KL.			STEFL MAST ARM POLE AND	RMF		
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SIGNAL FACE ATT SECRETAR 150 ATT SECRETA	SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION)			→ ²									
SIGNAL FOOD PROBLEM FOR THE STORM FACE SIGNAL FACE SIGN	SIGNAL HEAD WITH BACKPLATE	+6	R → +□	+-				R	⊢	FOUNDATION TO BE REMOVED	- / .		
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IZ" (JOORMON) PEDESTRIAN SIONAL HEAD INTERNATIONAL SYMBOL, OUTLINED PEFFORMED DETECTOR LOOP PEFFORMED SAMPLING (SYSTEM) DETECTOR PREFORMED SAMP	ILLUMINATED SIGN "NO LEFT TURN"	R		lacksquare	12" (300mm) PE	DESTRIAN SIGNAL HEAD		('P''	"p"		OR		love!
INTERNATIONAL SYMBOL, OUTLINED INTERNATIONAL SYMBOL, OUTLINED	ILLUMINATED SIGN	R								(SYSTEM) DETECTOR			
REFORMED DETECTOR LOOP IZ										PREFORMED SAMPLING (SYSTEM) DETECTOR		Į _{PS} į	PS
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PAN, TILT, ZOOM CAMERA RADIO REPEATER RADIO	VIDEO DETECTION CAMERA	R [V			RADIO INTERCON	INECT	## * O	##••		RAILROAD CONTROL CABINET			
PAN, TILT, ZOOM CAMERA RADIO REPEATER RADIO	VIDEO DETECTION ZONE				DANIO DEDEATE	5	R EDD	EDD	DD	RAILROAD CANTILEVER MAST ARM		$X \circ \overline{X} = \overline{X} \cdot X$	X CX X
VIRELESS DETECTOR SENSOR WIRELESS ACCESS POINT CROSSING GATE CR	PAN TILT ZOOM CAMERA	R	MTG MT	्रिगो ड			ENK	ENN	_ nn	FLASHING SIGNAL		$\boxtimes \Theta \boxtimes$	X ⊖ X
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) CROSSBUCK STAPL OF ILLINOIS STANDARD TRAFFIC SIGNAL DESIGN DETAILS STANDARD TRAFFIC SIGNAL DESIGN DETAILS STANDARD TRAFFIC SIGNAL DESIGN DETAILS		_			CABLE NO. 14, I	JNLESS NOTED OTHERWISE,				CROSSING GATE		202 >	***
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DRAWN - BCK REVISED - STANDARD TRAFFIC SIGNAL DESIGN DETAILS STANDARD TRAFFIC SIGNAL DESIGN DETAILS STANDARD TRAFFIC SIGNAL DESIGN DETAILS 347 CY-TS-1 (12) DUPAGE 32					<u>-</u>		OF 1112200			DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY TOTAL S
					-								DUPAGE 32 CONTRACT NO. 601



NOTES FOR TEMPORARY TRAFFIC SIGNALS

- 1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- 2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- 3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED 12"
 DIAMETER, HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN
 OR AS DIRECTED BY THE ENGINEER, PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER, COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- 4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- 5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- 6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- 7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
- 8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
- 9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
- 10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY 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.



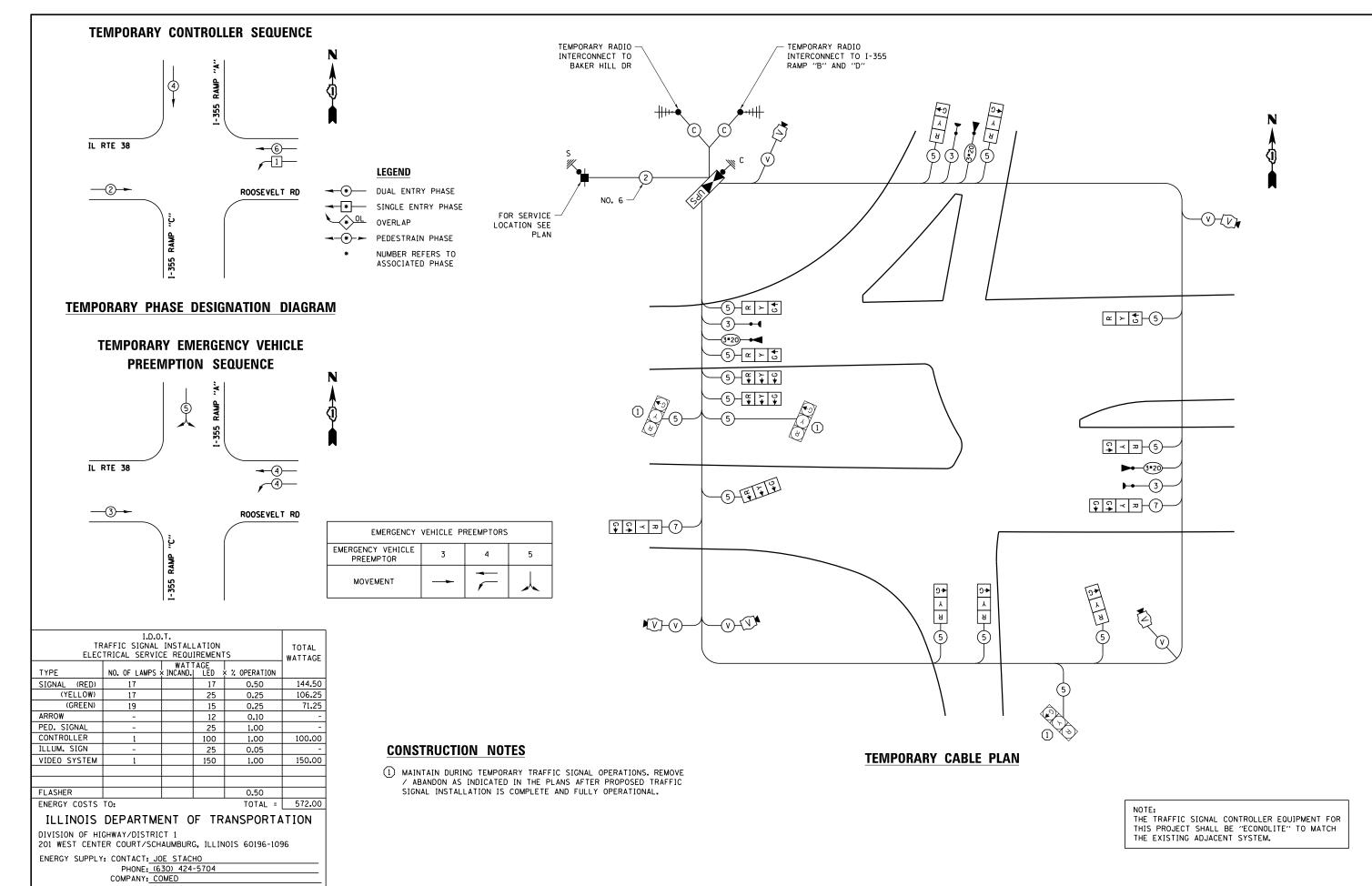
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

USER NAME = pociechal DESIGNED - LP / PB REVISED :\pw_work\pwidot\pociechal\d0306285\D 112-sht-TS.dan DRAWN LP / PB REVISED CHECKED SM REVISED PLOT DATE = 8/13/2012 DATE 07/26/12 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

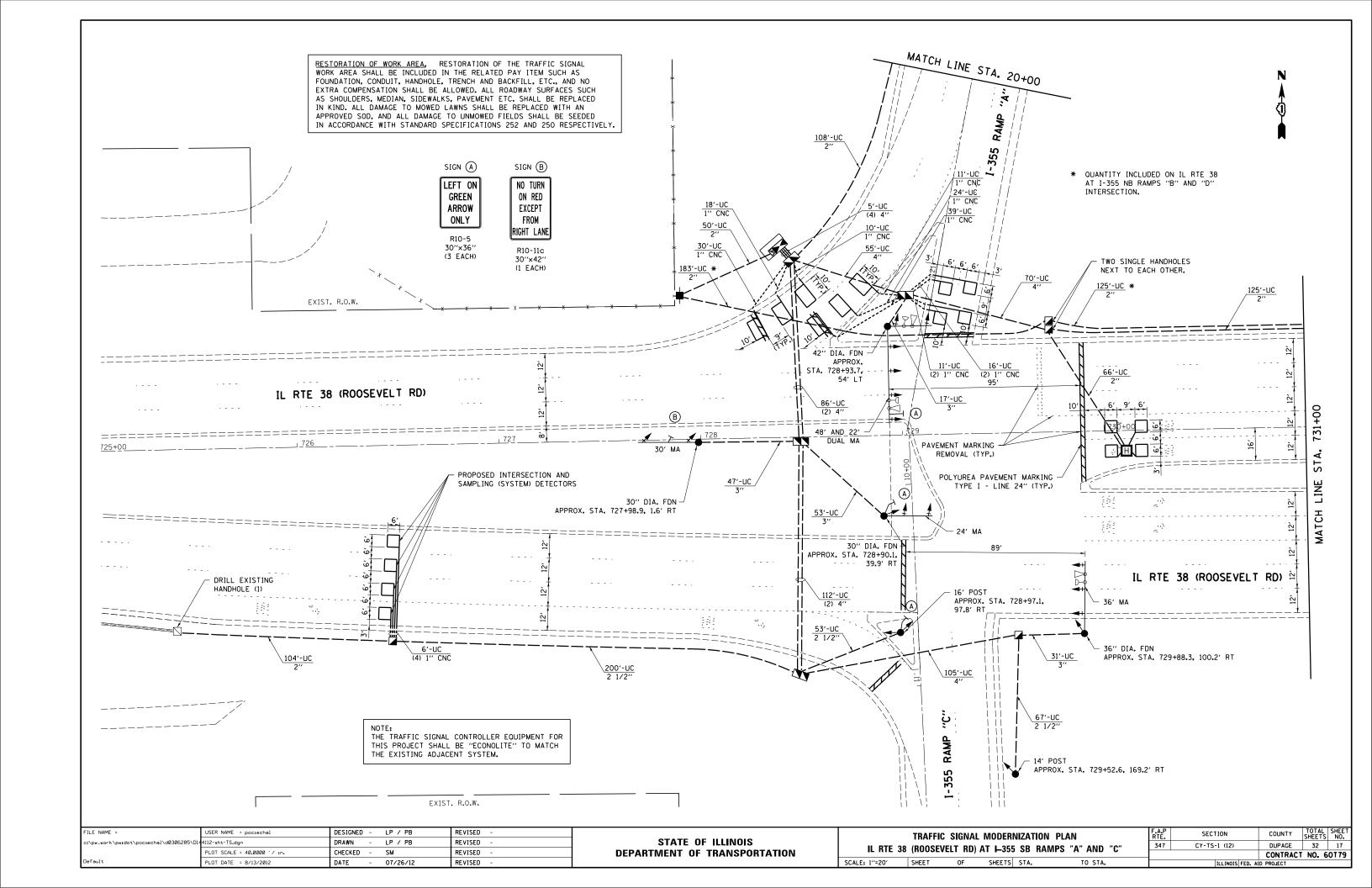
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN IL RTE 38 (ROOSEVELT RD) AT 1-355 SB RAMPS "A" AND "C" SCALE: 1"=20" SHEET SHEETS STA.

SECTION COUNTY 347 CY-TS-1 (12) DUPAGE 32 15 CONTRACT NO. 60179



COUNTY TOTAL SHEETS NO.

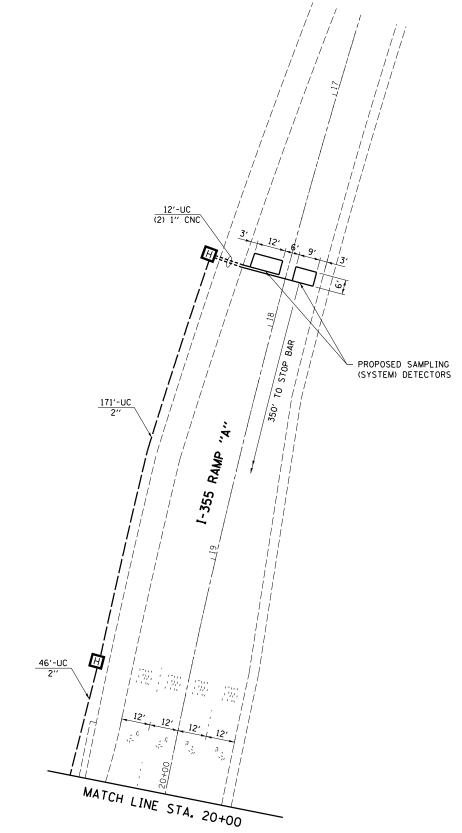
DUPAGE 32 16 DESIGNED - LP / PB REVISED TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM SECTION STATE OF ILLINOIS AND EMERGENCY VEHICLE PREEMPTION SEQUENCE :\pw_work\pwidot\pociechal\d0306285\[112-sht-TS.dan DRAWN LP / PB REVISED CY-TS-1 (12) 347 IL RTE 38 (ROOSEVELT RD) AT I-355 SB RAMPS "A" AND "C" LOT SCALE = 40.0000 '/ in. CHECKED SM REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60179 PLOT DATE = 8/13/2012 SCALE: NTS SHEET SHEETS STA. DATE 07/26/12 REVISED OF

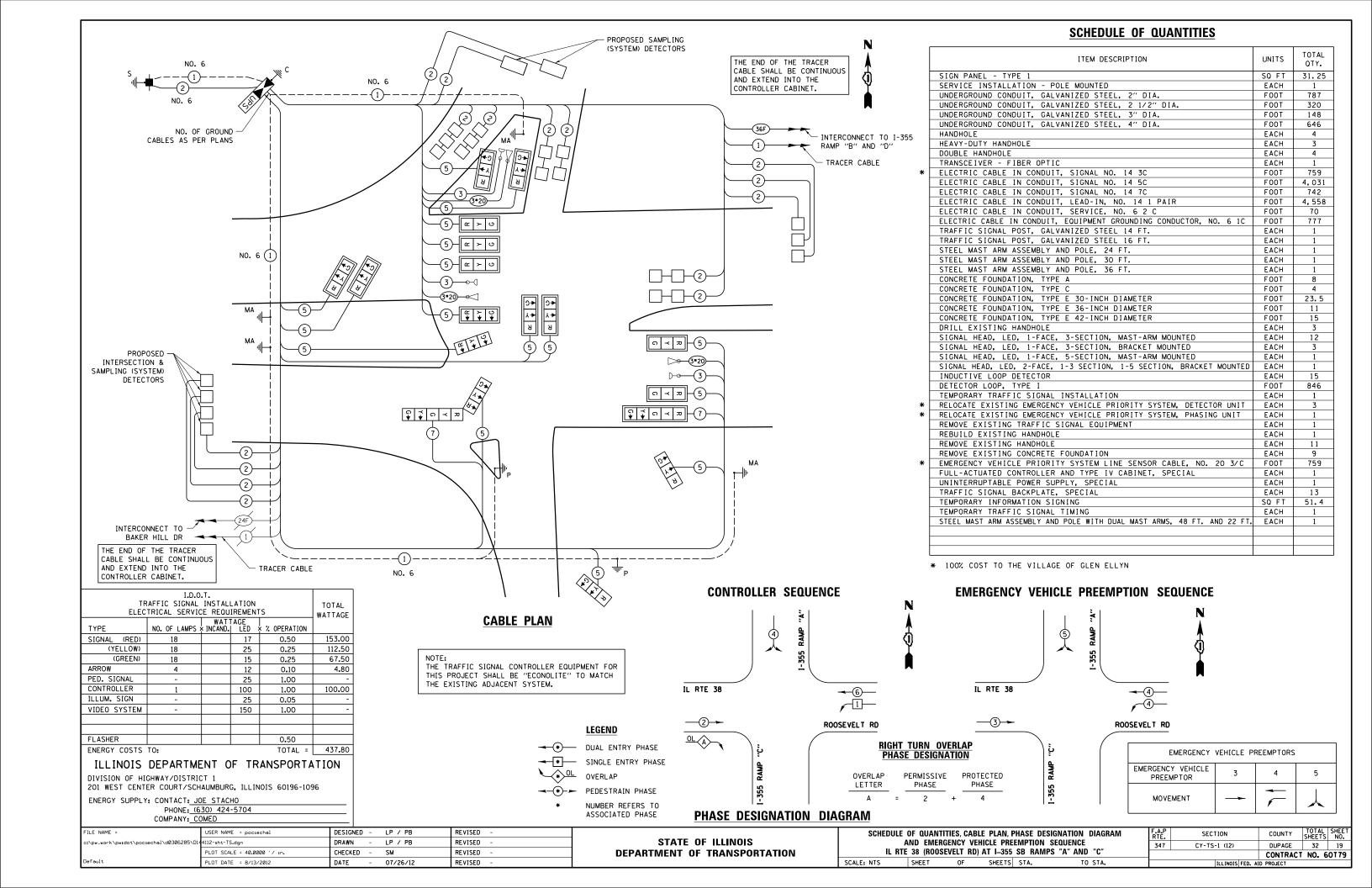


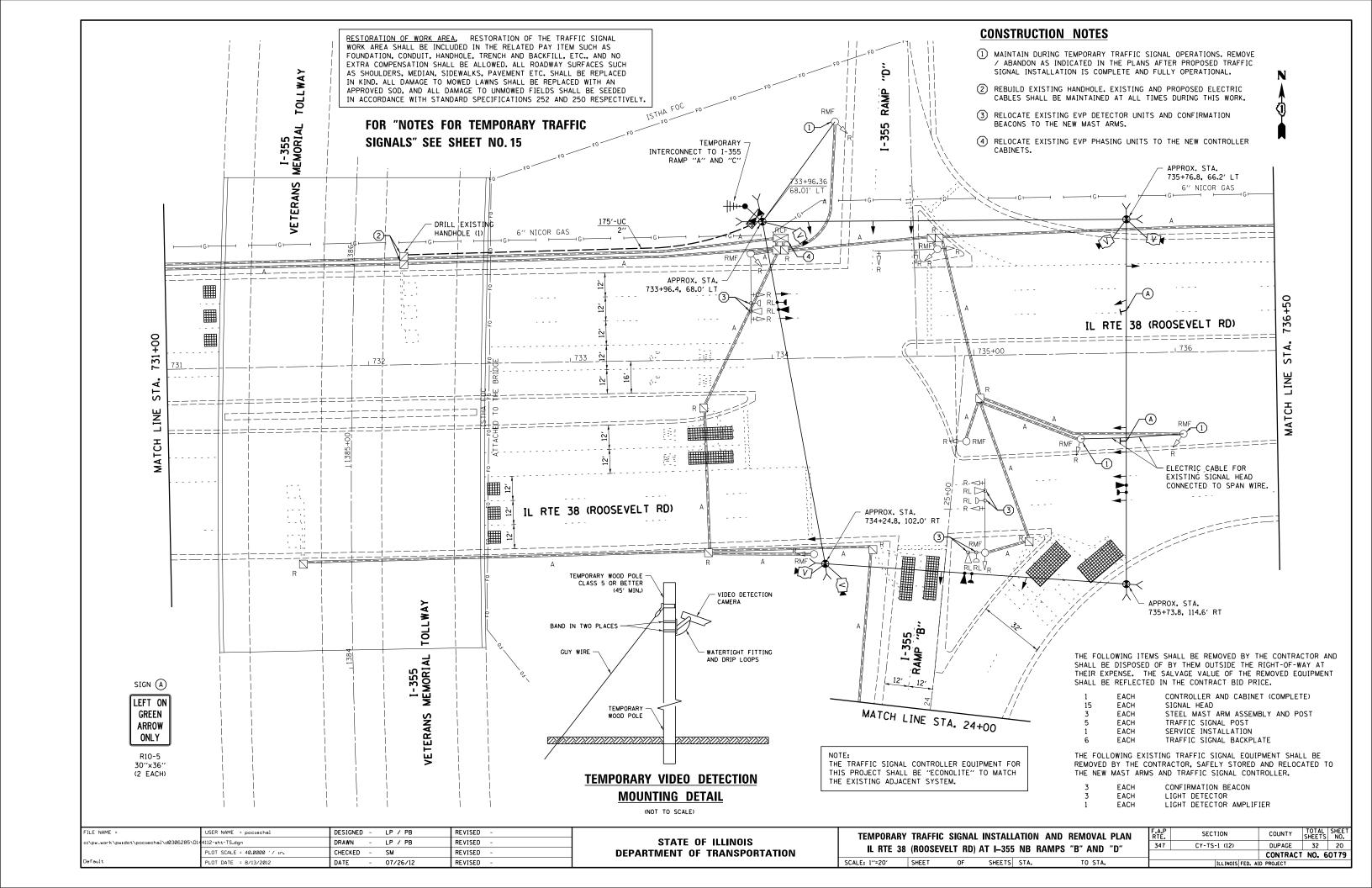
MATCH LINE STA. 20+00 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM. COUNTY TOTAL SHEET NO.

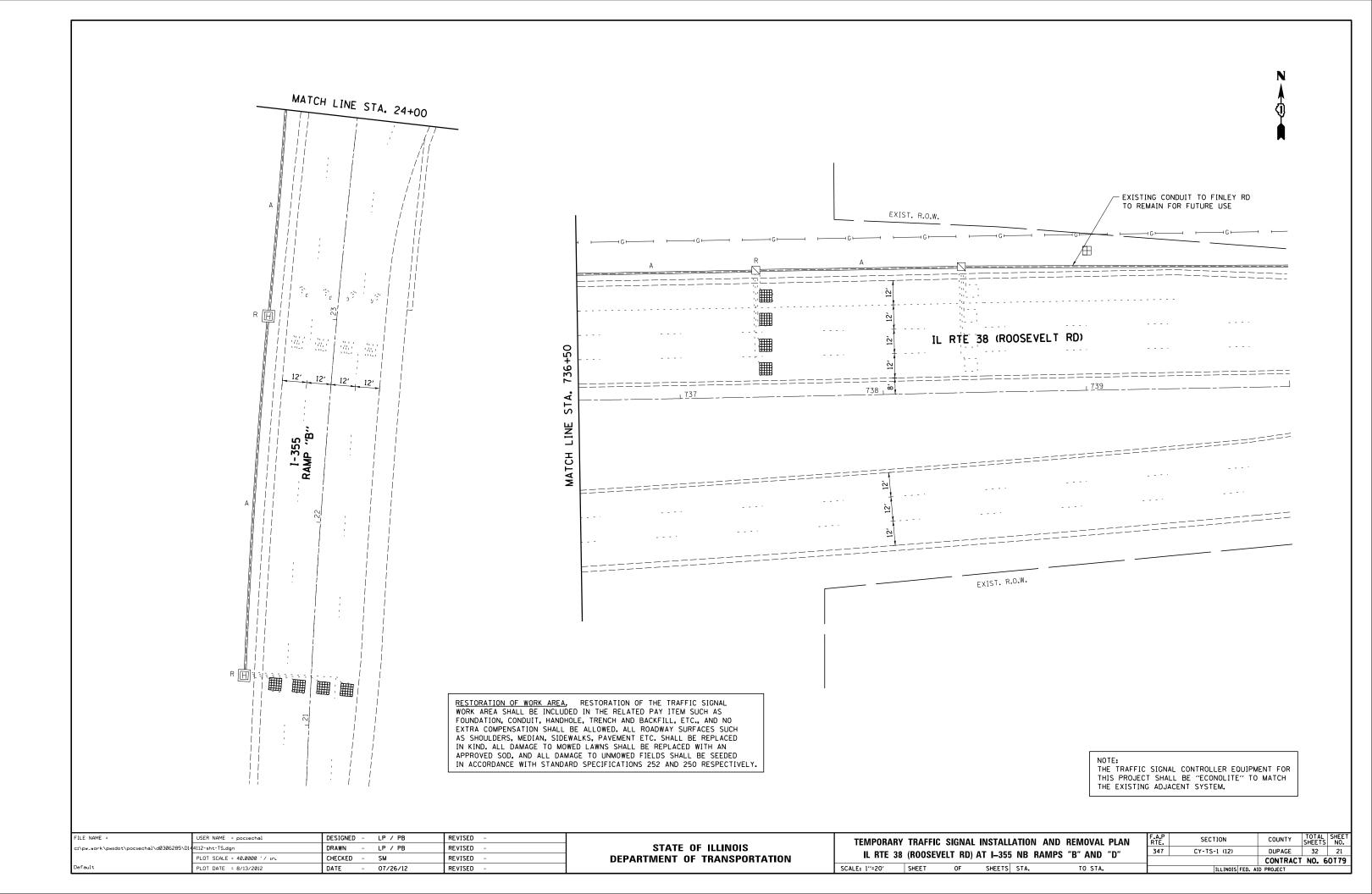
DUPAGE 32 18 DESIGNED - LP / PB REVISED SECTION TRAFFIC SIGNAL MODERNIZATION PLAN STATE OF ILLINOIS 4112-sht-TS.dan DRAWN - LP / PB REVISED 347 CY-TS-1 (12) IL RTE 38 (ROOSEVELT RD) AT 1-355 SB RAMPS "A" AND "C" PLOT SCALE = 40.0000 '/ in. CHECKED -SM REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60179 PLOT DATE = 8/13/2012 DATE 07/26/12 REVISED SCALE: 1"=20" SHEET SHEETS STA.

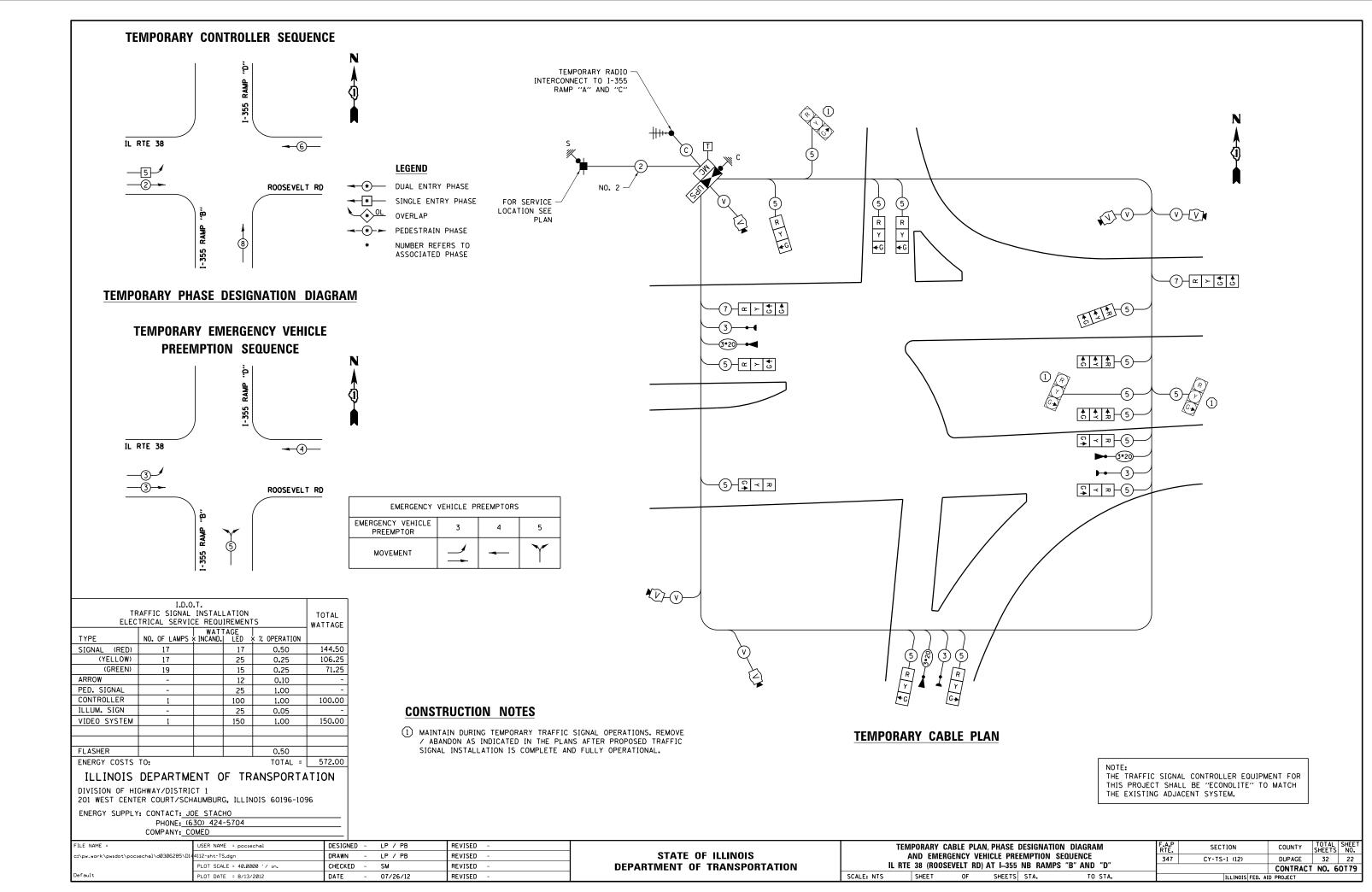
RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL 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.

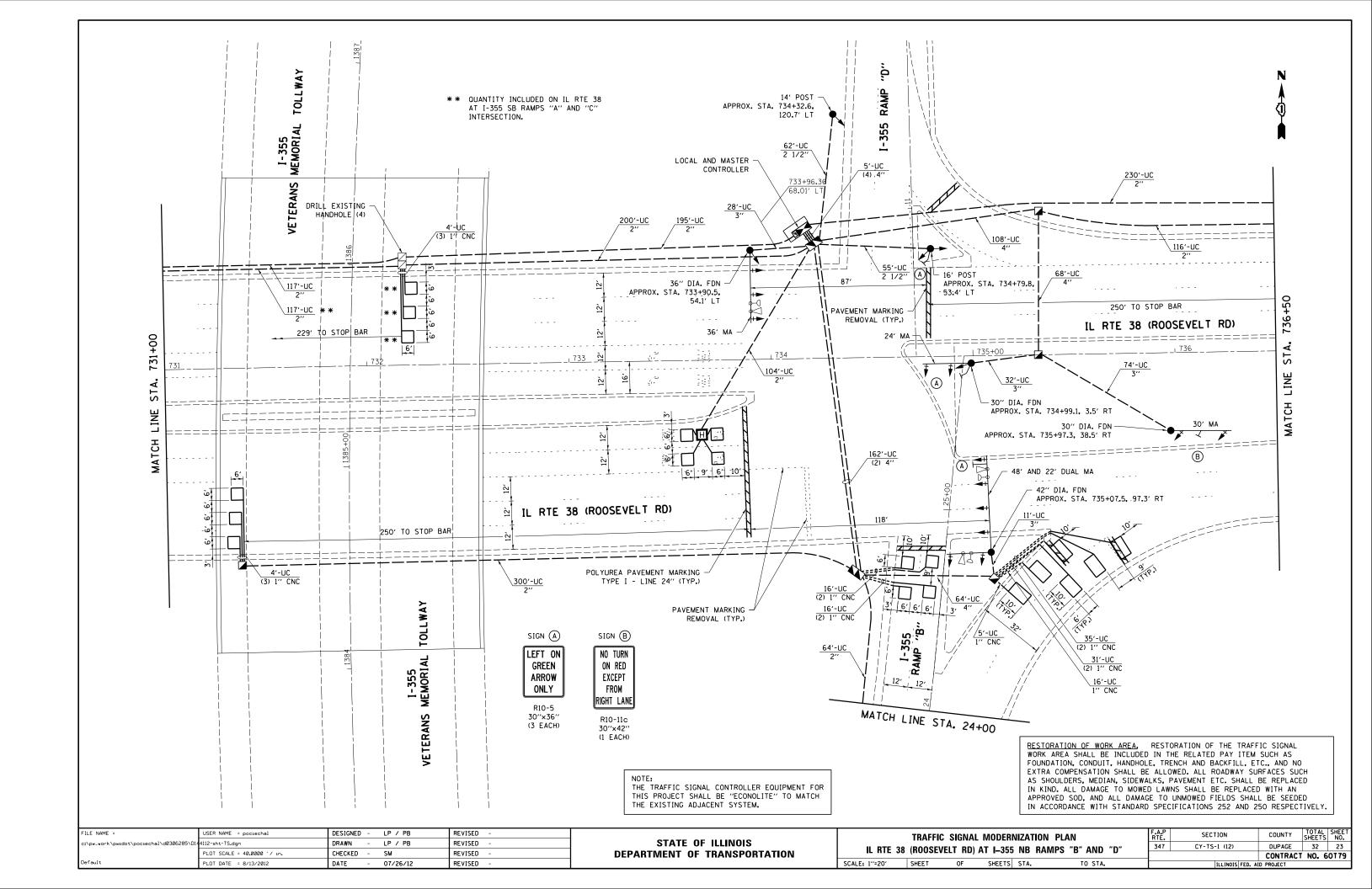


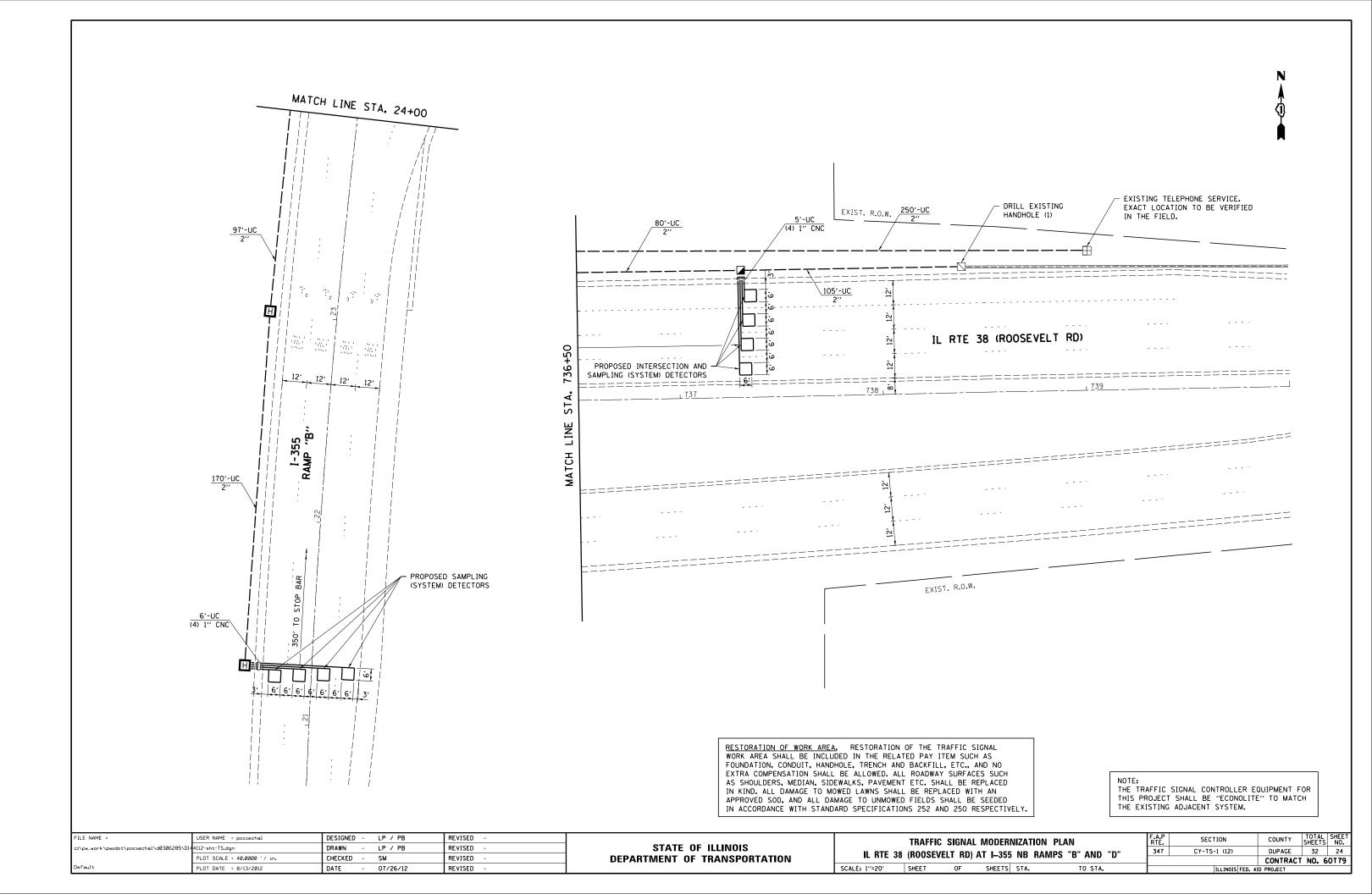


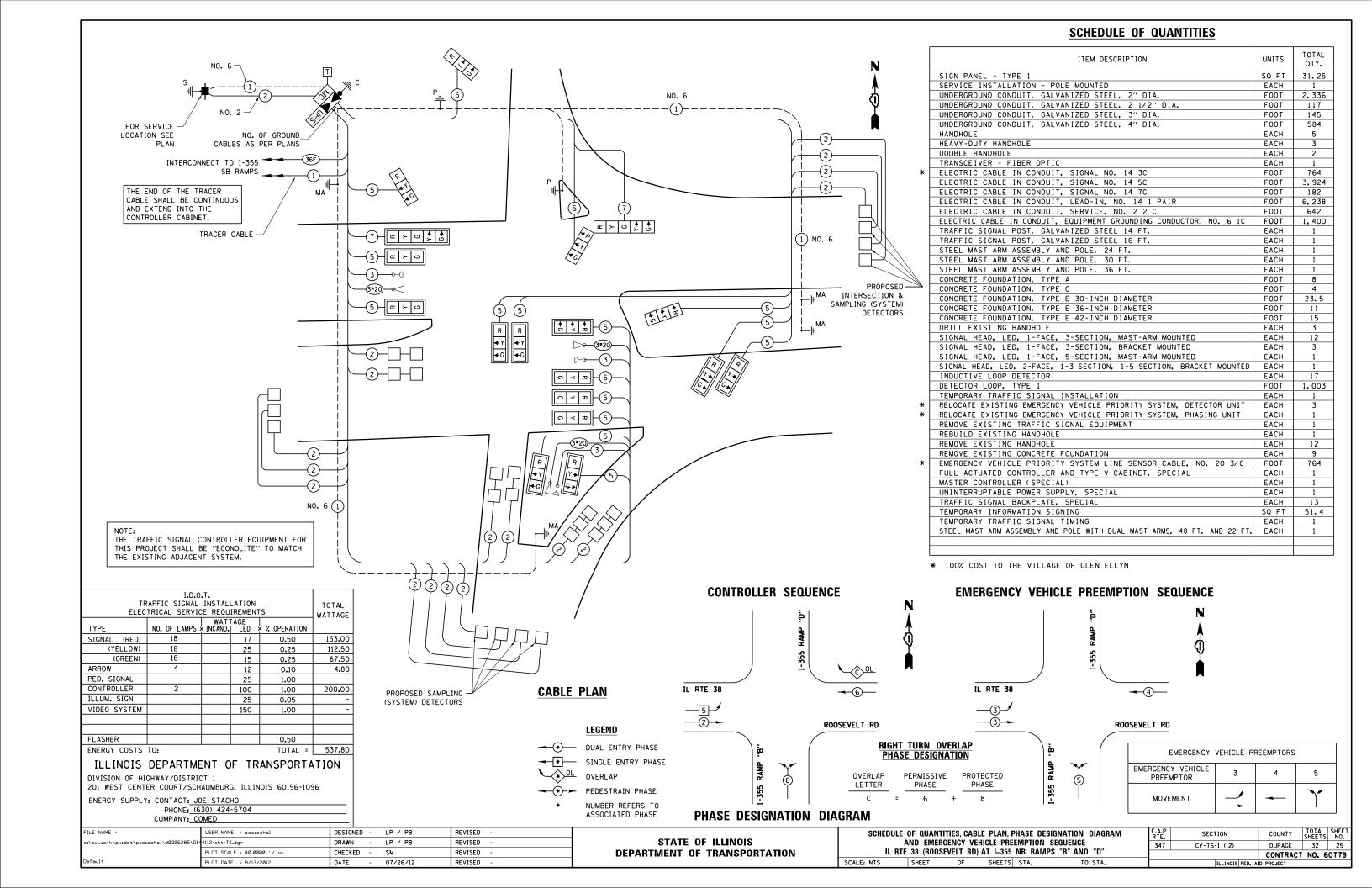


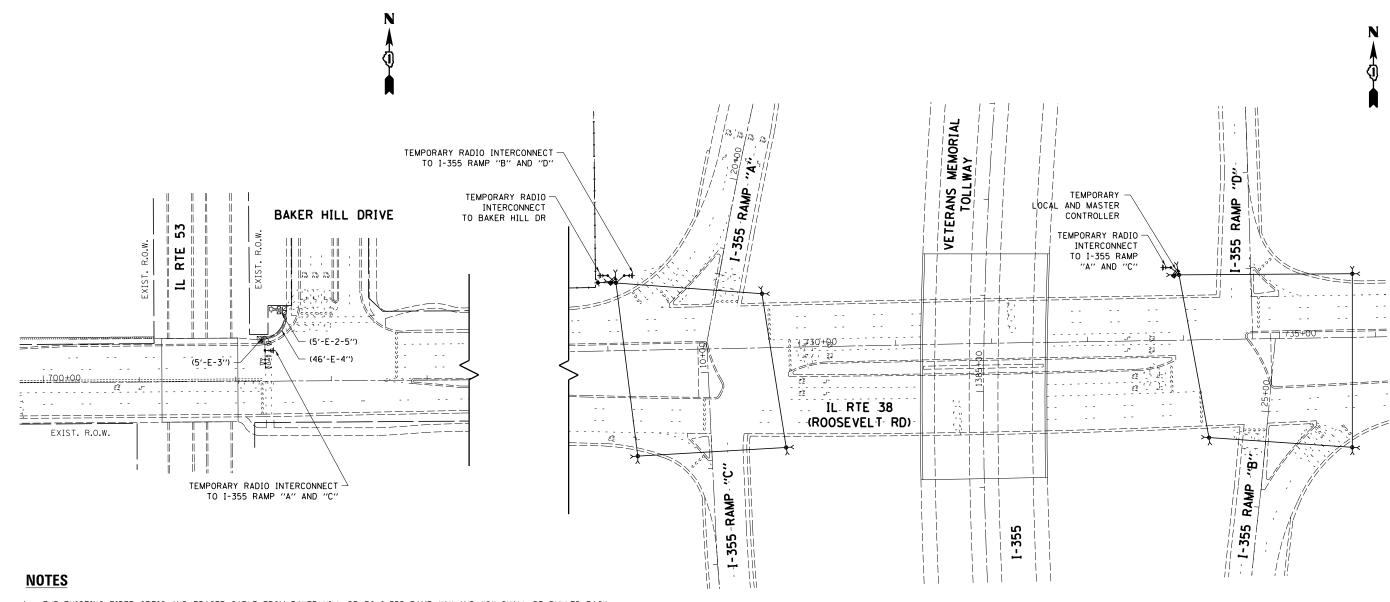












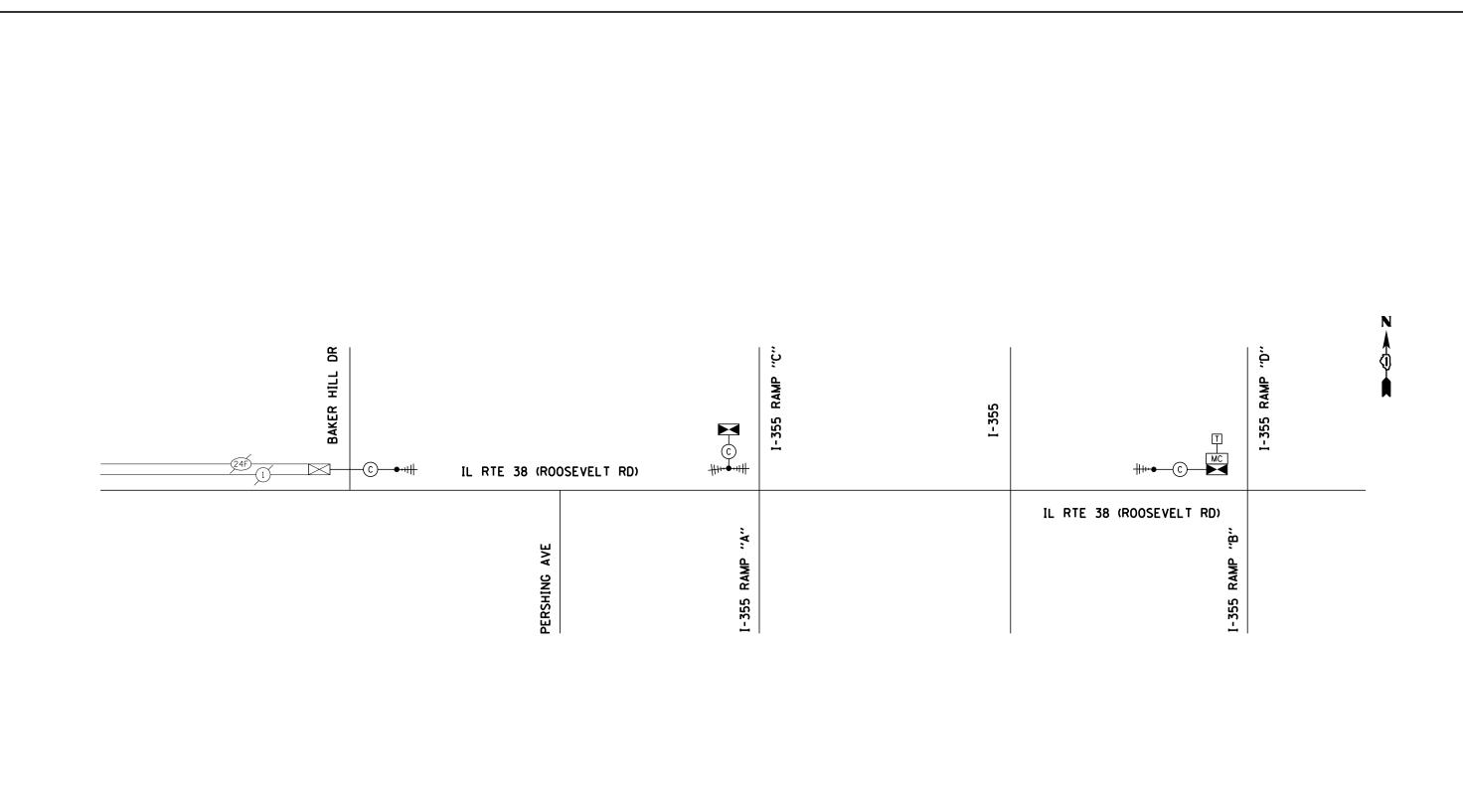
- 1. THE EXISTING FIBER OPTIC AND TRACER CABLE FROM BAKER HILL DR TO I-355 RAMP "A" AND "C" SHALL BE PULLED BACK TO THE FAR OUT HANDHOLE ON THE WEST LEG ALONG IL RTE 38 (APPROX. STA. 725+40) AND STORED IN IT FOR REUSE ON THE PROPOSED INTERCONNECT. THIS WORK WILL BE PAID FOR AS REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT.
- 2. THE FIBER OPTIC AND TRACER CABLE SHALL BE STORED AND PROTECTED DURING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE AND WILL BE REQUIRED TO REPLACE ANY DAMAGED CABLE AT NO ADDITIONAL COST TO THE CONTRACT.
- 3. TEMPORARY RADIO INTERCONNECT ANTENNA AT THE INTERSECTION OF IL RTE 38 AND BAKER HILL DR SHALL BE INSTALLED ON THE MAST ARM ASSEMBLY AND POLE AS SHOWN. THE CABLE FROM THE ANTENNA SHALL BE INSTALLED IN THE EXISTING CONDUITS BETWEEN THE ANTENNA AND THE EXISTING CONTROLLER. THE ANTENNA AND ALL CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARM SHALL BE PLUGGED. THIS WORK SHALL BE INCLUDED IN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY 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.

NOTE:

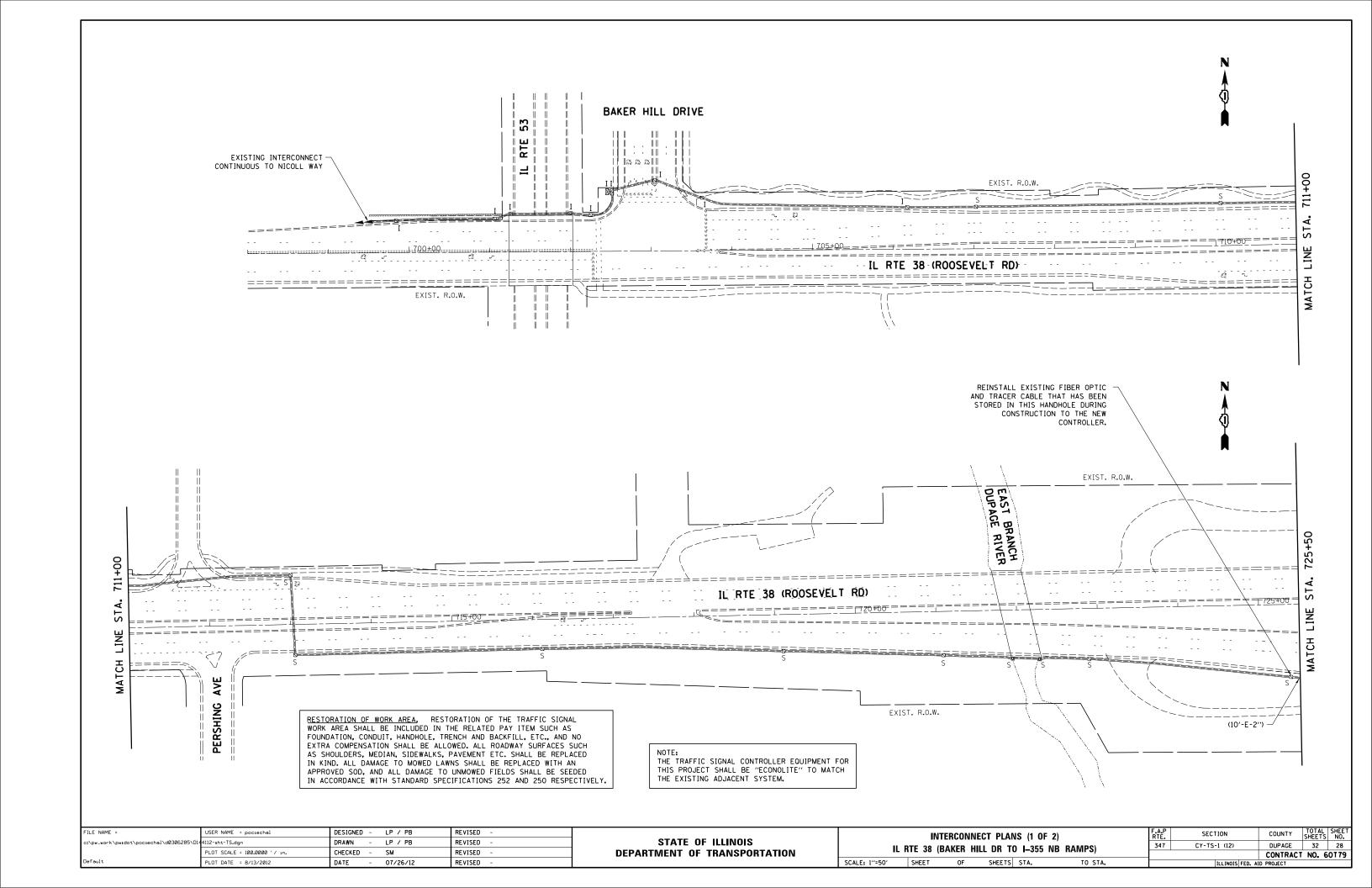
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

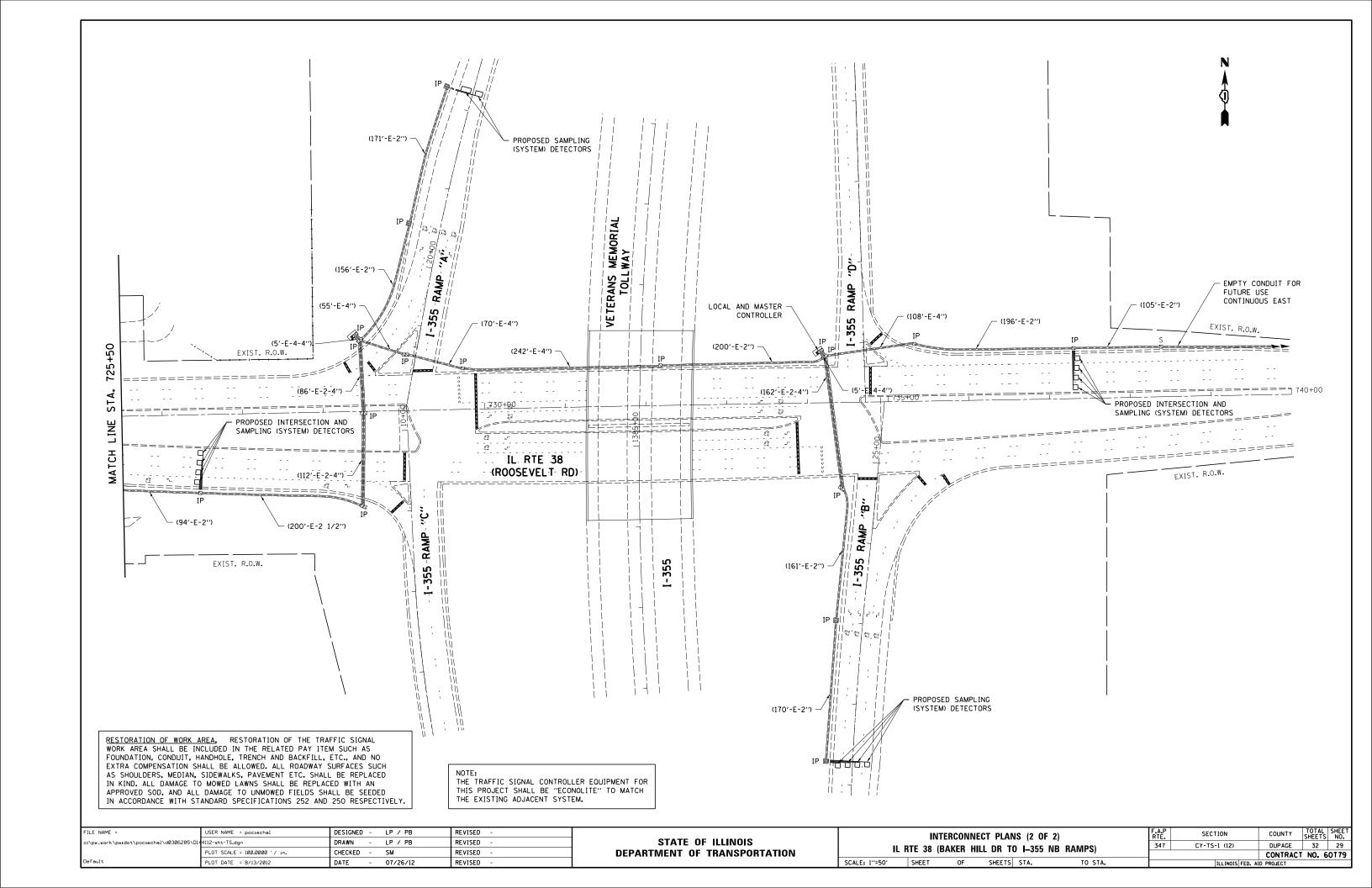
FI	ILE NAME =	USER NAME = pociechal	DESIGNED - LP / PB	REVISED -		TEMPORARY INTERCONNECT PLAN AND SCHEMATIC	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:	:\pw_work\pwidot\pociechal\d0306285\D14	4112-sht-TS.dgn	DRAWN - LP / PB	REVISED -	STATE OF ILLINOIS	IL RTE 38 (BAKER HILL DR TO 1–355 NB RAMPS)	347	CY-TS-1 (12)	DUPAGE	32 26
		PLOT SCALE = 100.0000 '/ in.	CHECKED - SM	REVISED -	DEPARTMENT OF TRANSPORTATION	IL NIL 30 (DAKEN HILL DN 10 1-333 ND NAMI'S)			CONTRACT	NO. 60T79
De	efault	PLOT DATE = 8/13/2012	DATE - 07/26/12	REVISED -		SCALE: 1"=50" SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AIG	PROJECT	

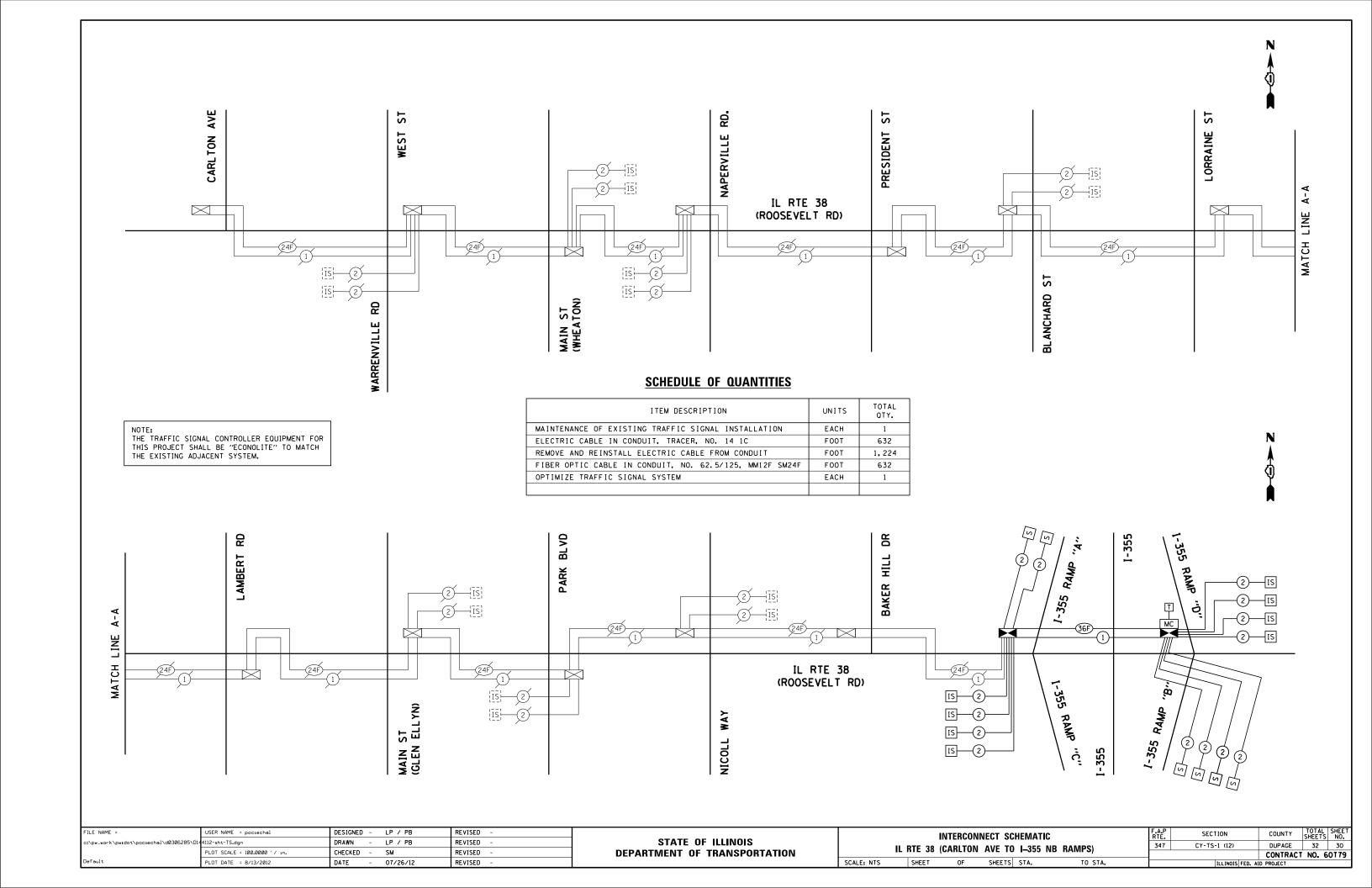


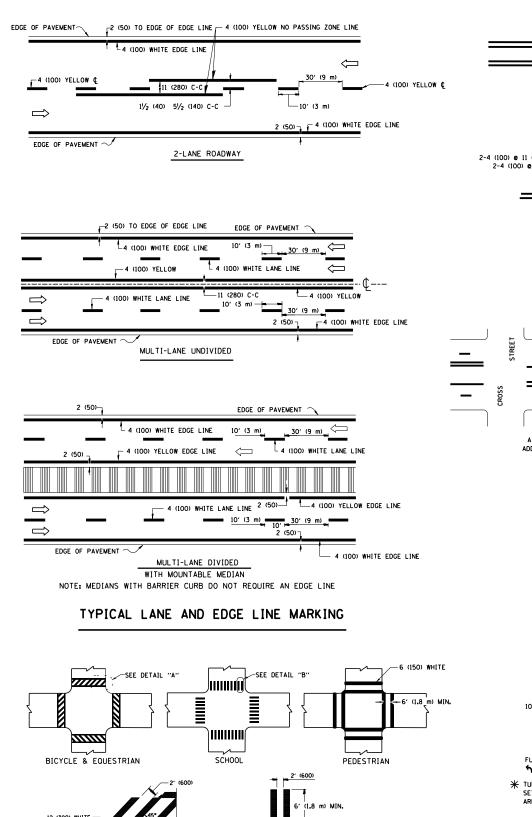
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = pociechal	DESIGNED - LP / PB	REVISED -		TEMPORARY INTER	RCONNECT PLAN A	ND SCHEMATIC	F.A.P	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\pociechal\d0306285\D1	4112-sht-TS.dgn	DRAWN - LP / PB	REVISED -	STATE OF ILLINOIS				347	CY-TS-1 (12)	DUPAGE 32 27
	PLOT SCALE = 100.0000 ' / in.	CHECKED - SM	REVISED -	DEPARTMENT OF TRANSPORTATION	IL KIE 38 (BAKEI	R HILL DR TO 1–35	5 NB KANIPS)			CONTRACT NO. 60179
Default	PLOT DATE = 8/13/2012	DATE - 07/26/12	REVISED -		SCALE: 1"=50" SHEET OF	F SHEETS STA.	TO STA.		ILLINOIS FED. AI	ID PROJECT









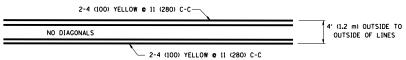
TYPICAL CROSSWALK MARKING

12 (300) WHITE

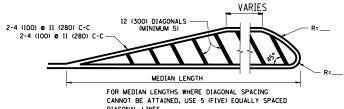
DETAIL "B"

6 (150) WHITE

DETAIL "A"

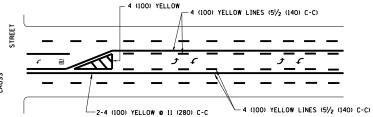


4' (1.2 m) WIDE MEDIANS ONLY

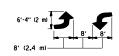


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

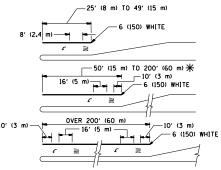


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

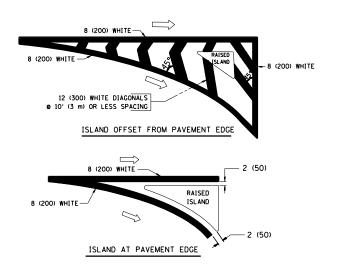


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) \P AREA = 20.8 SO. FT. (1.9 m²)

* 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 APPROW - "ONLY"

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



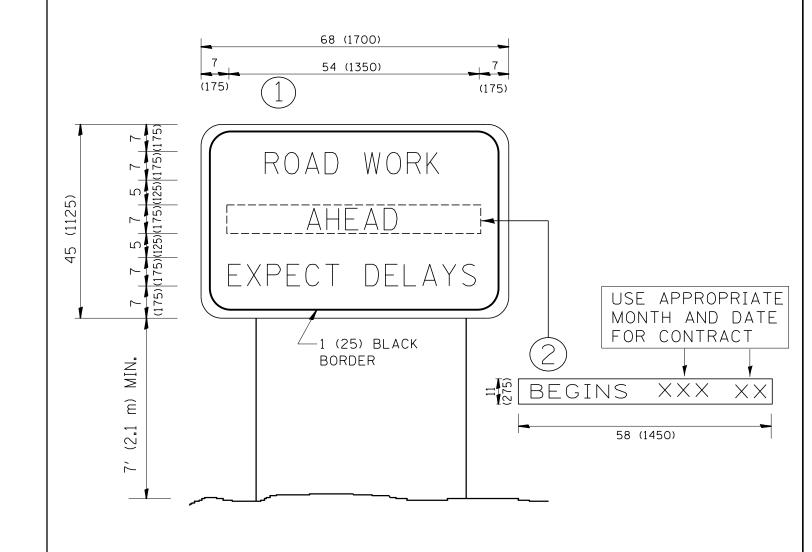
TYPICAL ISLAND MARKING

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 0 4 (100)	SOL ID SOL ID	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 @ 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 SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 e 6 (150) 12 (300) e 45° 12 (300) e 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERNISE, 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.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIACONALS: 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 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) e 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 (0VER 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 = pociechal	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94			DISTRICT ONE	F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\pociechal\d0306285\D1	4112-sht-TS.dgn	DRAWN -	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS			347	CY-TS-1 (12)	DUPAGE	32 31
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS			TC-13	CONTRACT	T NO. 60179
	PLOT DATE = 8/13/2012	DATE - 03-19-90	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT	



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN () 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 = pociechal	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\pociechal\d0306285\D	4112-sht-TS.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		347 CY-TS-1 (12)	DUPAGE 32 32
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN	TC-22	CONTRACT NO. 60179
	PLOT DATE = 8/13/2012	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 THE INDIS FED.	AID PROJECT