STATE OF ILLINOIS 09-21-12 LETTING ITEM 015

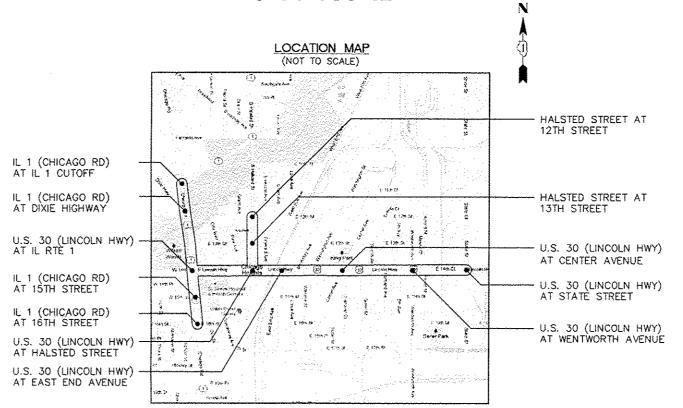
DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 1

FAP876/FAP 353 U.S. 30 (LINCOLN HWY) IL'1 (CHICAGO RD) TO STATE STREET TRAFFIC SIGNAL TIMING / PROGRESSION **SECTION: 2012-038TS** PROJECT: CMF-0005 (905)

COOK COUNTY C-91-488-12



SECTION COUNTY SHEETS 2012-038TS COOK 43 CONTRACT #: 60186

D-91-488-12

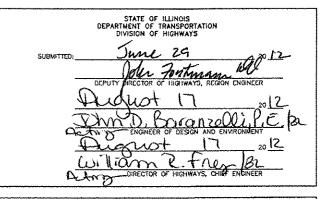




SIGNED KEVIN L. BULGAUNE
Kevin L. Belgran DATE: 6/28/2012

GENAL HAMILIUM ASSOCIATES, INC.

850 Porest Edge Drive * Verson Hills, (L. 6006) Consulting Engineers & Surveyor 241-473-9700 FAX: 847-478-9701



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DESIGN DESIGNATIONS

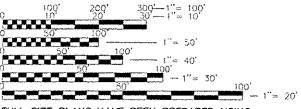
U.S. RTE 30 (UNCOLN HWY) - OTHER PRINCIPAL ARTERIAL 2011 ADT: 16,300 POSTED SPEED LIMIT: 35 MPH

IL RTE 1 (CHICAGO RD) - OTHER PRINCIPAL ARTERIAL 2009 ADT: 22,200 POSTED SPEED LIMIT: 30-35 MPH

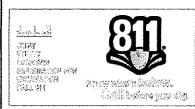
HALSTED ST - MAJOR COLLECTOR

POSTED SPEED LIMIT: 35 MPH

PROJECT IS LOCATED IN THE CITY OF



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 BELOW SCALES MAY BE USED.



THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY

CONTRACT NO. 60T86

INDEX OF SHEETS

- 2. INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS
- 3.-4. SUMMARY OF QUANTITIES

1. TITLE SHEET

- 5.-10. DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETALS
- 11. TRAFFIC SIGNAL PLAN IL 1 (DIXIE HWY-CHICAGO RD) AT 16TH STREET (FOR INFORMATION ONLY)
- 12. CABLE PLAN, AND PHASE
 DESIGNATION DIAGRAM IL 1 (DIXIE
 HWY-CHICAGO RD) AT 16TH STREET
 (FOR INFORMATION ONLY)
- 13. TRAFFIC SIGNAL PLAN IL 1 (DIXIE HWY-CHICAGO RD) AT 15TH STREET (FOR INFORMATION ONLY)
- 14. CABLE PLAN, AND PHASE
 DESIGNATION DIAGRAM IL 1 (DIXIE
 HWY-CHICAGO RD) AT 15TH STREET
 (FOR INFORMATION ONLY)
- 15.-16. TRAFFIC SIGNAL PLAN U.S. RTE 30 (LINCOLN HWY) AT IL RTE 1 (DIXIE HWY-CHICAGO RD) (FOR INFORMATION ONLY)
- 17. SCHEDULE OF QUANTITES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE U.S. 30 (LINCOLN HWY) AT IL 1 (DIXIE HWY-CHICAGO RD)
- 18. TRAFFIC SIGNAL PLAN-IL RTE 1 (CHICAGO RD) AT DIXIE HIGHWAY (FOR INFORMATION ONLY)
- 19. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM IL 1 (CHICAGO RD) AT DIXIE HIGHWAY
- 20. TRAFFIC SIGNAL MODIFICATION PLAN - IL 1 (CHICAGO RD) AT IL 1 CUTOFF
- 21. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM IL1 (CHICAGO RD) AT IL 1 CUTOFF
- 22. TRAFFIC SIGNAL PLAN U.S. 30
 (LINCOLN HWY) AT HALSTED
 STREET (FOR INFORMATION ONLY)
- 23. SCHEDULE OF QUANTITES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE U.S. 30 (LINCOLN HWY) AT HALSTED STREET
- 24. TRAFFIC SIGNAL MODIFICATION PLAN HALSTED STREET AT 13TH STREET
- 25. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM HALSTED STREET AT 13TH STREET
- 26. TRAFFIC SIGNAL MODIFICATION PLAN HALSTED STREET AT 12TH STREET

- 27. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM HALSTED STEET AT 12TH STREET
- TRAFFIC SIGNAL PLAN U.S. 30 (LINCOLN HWY) AT EAST END AVENUE (FOR INFORMATION ONLY)
- 29. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM U.S. 30 (LINCOLN HWY) AT EAST END AVENUE
- 30. TRAFFIC SIGNAL PLAN U.S. 30
 (LINCOLN HWY) AT CENTER AVENUE
 (FOR INFORMATION ONLY)
- 31. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM U.S. 30 (LINCOLN HWY) AT CENTER AVENUE
- 32. TRAFFIC SIGNAL PLAN U.S. 30 (LINCOLN HWY) AT WENTWORTH AVENUE (FOR INFORMATION ONLY)
- 33. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM U.S. 30 (LINCOLN HWY) AT WENTWORTH AVENUE
- 34. TRAFFIC SIGNAL PLAN U.S. 30 (LINCOLN HWY) AT STATE STREET (FOR INFORMATION ONLY)
- 35. SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE U.S. 30 (LINCOLN HWY) AT STATE STREET
- 36.-40. INTERCONNECT PLAN
 - 41. INTERCONNECT SCHEMATIC
- 42.-43. DISTRICT 1 STANDARD DETAILS (TC-10 AND TC-22)

GENERAL NOTES

THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", JANUARY 1, 2012: MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION; PROJECT SPECIFICATIONS; ALL APPLICABLE REQUIREMENTS OF THE CITY OF CHICAGO HEIGHTS; ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION; AND ALL ADDENDA THERETO SHALL GOVERN THIS WORK.

THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OF UNSTABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL SOLEY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER IN RESPECT TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL ALSO CONTACT J.U.L.I.E. TO OBTAIN LOCATES OF THE RESPECTIVE UTILITY COMPANIES UNDERGROUND FACILITIES.

CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO ANY WORK BEING DONE

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 ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD IN ACCORDANCE TO STANDARD SPECIFICATIONS ARTICLE 252 WHICH SHALL INCLUDE THE REQUIRED WATERING PER ARTICLE 252.08. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 250 AND 251, RESPECTIVELY.

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

IDOT STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
001006	DECIMAL OF AN INCH OF A FOOT
701001-02	OFF-RD OPERATIONS 2L, 2W, MORE THAN 15' (4,5 m) AWAY
701006-03	OFF-RD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-02	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701301-04	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE 2L, 2W, UNDIVIDED

701606-08 URBAN LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN 701701-08 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701701-08 ORBAN LANE CLOSURE, MULTILANE INTERSECTION 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-02 TRAFFIC CONTROL DEVICES

814001-02 HANDHOLES

857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

886001-01 DETECTOR LOOP INSTALLATIONS

Rev. FILE HAME . USER NAME - ZACH WALLSTEN DESIGNED JRD REVISED SECTION COUNTY TOTAL SHEET NO. INDEX OF SHEETS, GENERAL NOTES, & STATE OF ILLINOIS REVISED . 4085.883-011.0vo DRAWN - 20W 2012-038TS COOK 43 2 HIGHWAY STANDARDS **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 1" = .0833" CHEÓXEO - KLB REVISED CONTRACT #: 60186 PLOT DATE - 6/28/2012 DATE - 6/28/2012 BEARED SCALE N.A. SHEET NO. OF SHEETS STA TO STA THE BOY OF THE BOOK OF

				FAP 353	FAP	876	FAP 353							
		URR LOCATION	3AN NOFWORK	U.S. RTE 30 (LINCOLN HWY) (AT IL RTE 1 (DIXIE HWY- CHICAGO RD)	IL RTE 1 (CHICAGO RD) AT DIXIE HIGHWAY	IL 1 (CHICAGO RD) AT IL 1 CUTOFF	U.S. 30 (LINCOLN HWY) AT HALSTED STREET	HALSTED STREET AT 13TH STREET	HALSTED STREET AT 12TH STREET	U.S. 30 (LINCOLN HWY) AT EAST END AVENUE	U.S. 30 (LINCOLN HWY) AT CENTER AVENUE	U.S. 30 (LINCOLN HWY) AT WENTWORTH AVENUE	U.S. 30 (LINCOLN HWY) AT STATE STREET	INTERCONNEC
			DING DOWNS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE INTERCONNECT
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CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0,10	4.00
67100100	MOBILIZATION	LSUM	1,00	0.05	0.05	0.05	0.05	0,05	0.05	0.05	0.05	0.05	0.05	0.50
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.50
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1.00	0.05	0,05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.50
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00	0.05	0,05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	организация регородного породного регородного распора 0.50 манели породного породно
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.50
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	6,939			240			519					6,180
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	110											110
81300720	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"	EACH	2	and the second proposed section is a second and approximate the second section of the second section is a second section of the second section is a second section of the second section section is a second section of the second section section is a second section of the second section section is a second section of the second section										2 gumana a marana a m
81400100	HANDHOLE	EACH	15		ana ja 1 angga mangam yamanganan ra sa	The state of the s			2					na renancegariena a aquina e a ca care a careena a agus a
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	10	1	1	1	1		1	1		to an equipment of the contract of the contrac	1	and the second of the second o
86400100	TRANSCEIVER - FIBER OPTIC	EACH	9		1	1	1	1	1	1	1	1	1	
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO, 14 1C	FOOT	11,464											11,464
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4,170			1,209			1,424		721		816	

FRE NAME - USER HAME - ZACH WALLSTEN DESIGNED - JRD REVISED 4095,883-DTI.dwg DRAWN - ZCW REVISED FLOT SCALE = 1° = .0833' CHECKED - KLB REVISED PLOT DATE - 6/28/2012 DATE - 6/28/2012 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 1 OF 2)

SCALE N.A. SHEETNO. OF SHEETS STA TOSTA

GHA #4085.883
FAP. SECTION COUNTY TOTAL SHEET
RTE. SECTION COUNTY SHEET NO.
353 2012-038TS COOK 43 3
CONTRACT #: 60T86

			FAP 353	FAP	876	FAP 353						1	
	1	BAN N OF WORK	U.S. RTE 30 (LINCOLN HWY) AT IL RTE 1 (DIXIE HWY- CHICAGO RD)	IL RTE 1 (CHICAGO RD) AT DIXIE HIGHWAY	IL 1 (CHICAGO RD) AT IL 1 CUTOFF	U.S. 30 (LINCOLN HWY) AT HALSTED STREET	HALSTED STREET AT 13TH STREET	HALSTED STREET AT 12TH STREET	U.S. 30 (LINCOLN HWY) AT EAST END AVENUE	U.S. 30 (LINCOLN HWY) AT CENTER AVENUE	U.S. 30 (LINCOLN HWY) AT WENTWORTH AVENUE	U.S. 30 (LINCOLN HWY) AT STATE STREET	INTERCONNECT
**************************************		DING DOWNS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE TRAFFIC SIGNALS	80% FEDERAL 20% STATE INTERCONNECT
		/PE	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021
CODE NO. ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN
87900200 DRILL EXISTING HANDHOLE	EACH	13	an to a second the second to t		1			2	Secretaria establica specifica de monto se en establica de establica de establica de establica de establica de	the fact of the section of the secti	antan kasal dan kaka menten menala sa kasal kasal kenala keka salah k	**************************************	10
88500100 INDUCTIVE LOOP DETECTOR	EACH	20			8		2	6		2		2	
88600100 DETECTOR LOOP, TYPE I	FOOT	193			66			127					
89502200 MODIFY EXISTING CONTROLLER	EACH	7	1	1		1			1	1	1	1	
89502375 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3			1		1	1					
X8570226 FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	3			1		1	1					
X8710024 FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	12,042											12,042
Z0030850 TEMPORARY INFORMATION SIGNING	SQFT	154.20											154.20
Z0033056 OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	4											1
Z0048665 RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1								and the second s		and the second of the second o	and the specific section of th

ł	FEE HAME ≈	USER NAME = ZACH WALLSTEN	DESIGNED	-	JRD)	REVISED	-	Г
	4085,883-D11.d+g		DRAWN	-	ZCW	REVISED	=	1
i		PLOY SCALE = 1" = .0833"	CHECKED	-	KLB	REVISED	-	1
j		PLOT DATE - 6/28/2012	DATE	_	6/28/2012	REVISED	=	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
DEPARTMENT OF TRANSPORTATION	SCALE

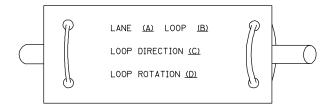
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E N.A.	SHEET NO.	OF	SHEETS	STA	TO STA.

FAP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
353	2012-038TS	COOK	43	4
		CONTRACT	#: 60	T86

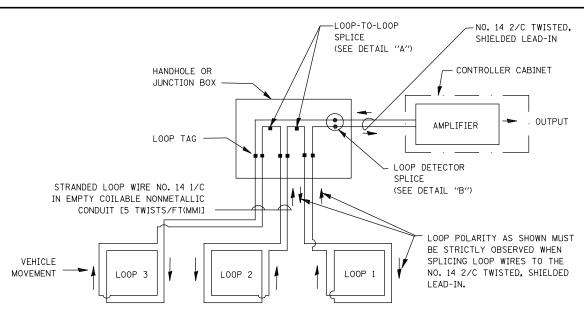
LOOP DETECTOR NOTES

- 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

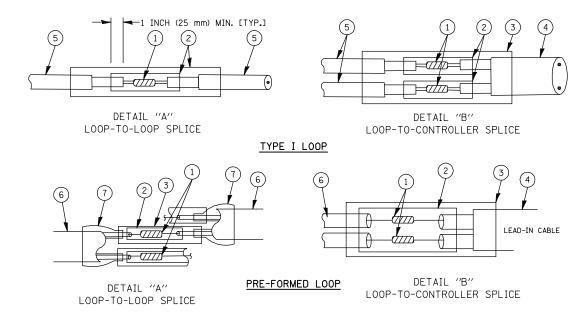


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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.



COUNTY

COOK

CONTRACT #: 60T86

43 5

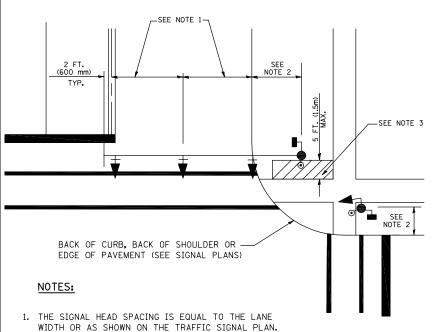
LOOP DETECTOR SPLICE

- (1) 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) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = JSER NAME = ZACH WALLSTEN DESIGNED - DAD REVISED -SECTION DISTRICT ONE STATE OF ILLINOIS 4085.883-DT1.dwg DRAWN - BCK REVISED 353 2012-038TS STANDARD TRAFFIC SIGNAL DESIGN DETAILS **DEPARTMENT OF TRANSPORTATION** REVISED TS-05 SHEET NO. 1 OF 6 SHEETS STA. PLOT DATE = 6/28/2012 **-** 10-28-09 DATE REVISED

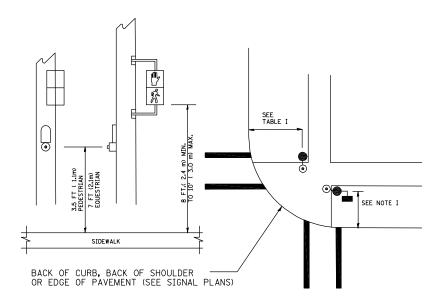
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



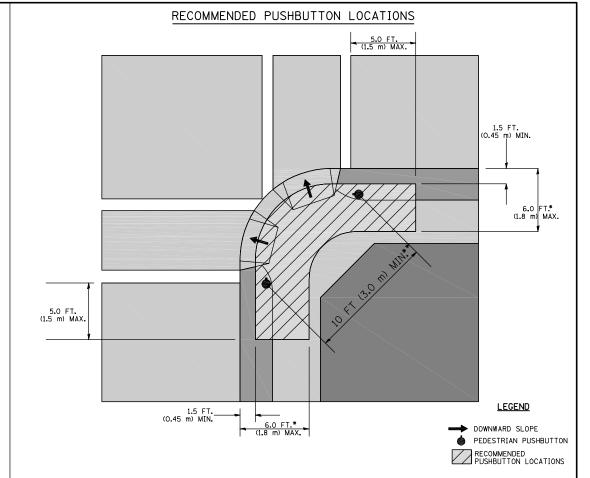
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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



NOTES:

- L. 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.

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.

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.

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.

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.

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

NOTES:

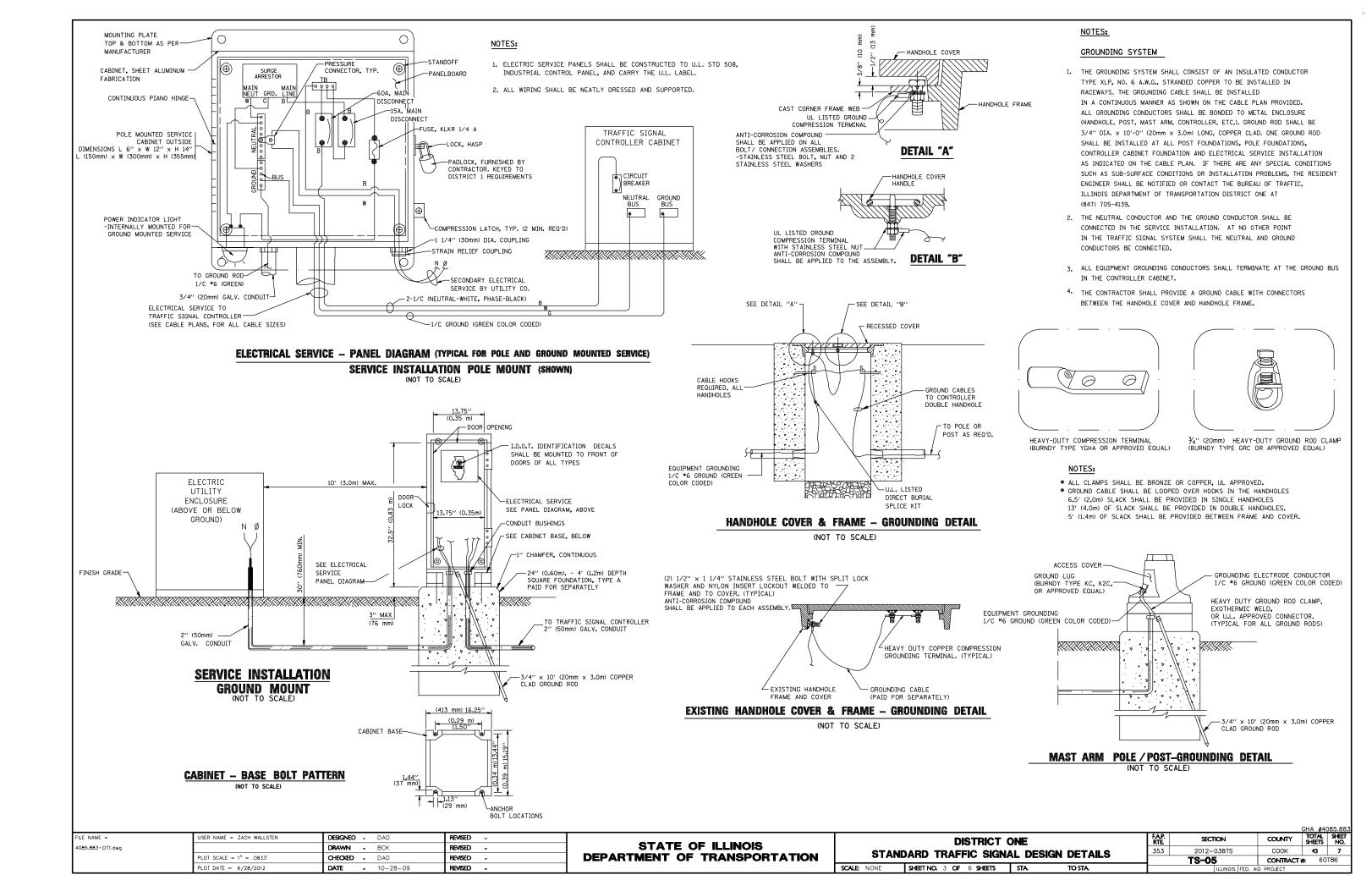
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION
- 3. 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.

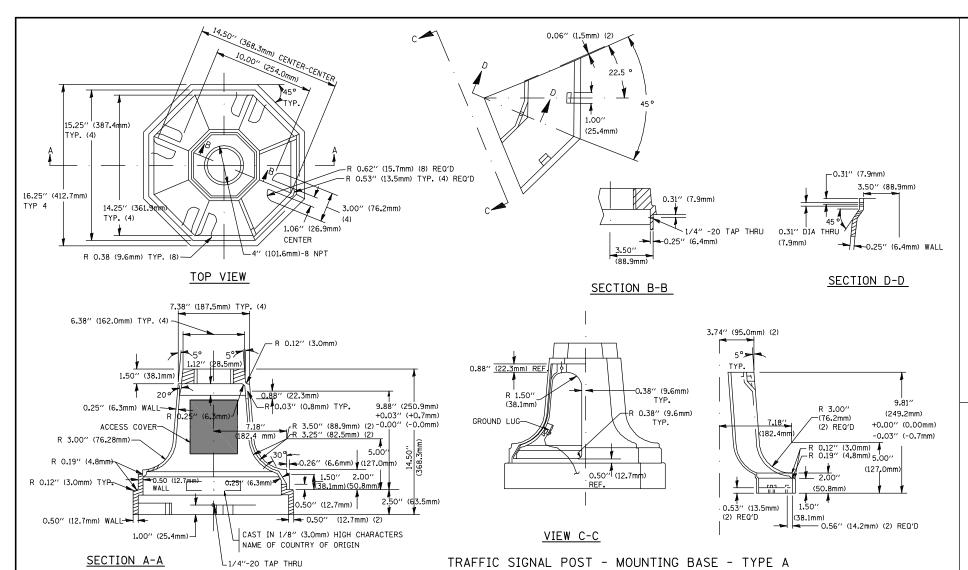
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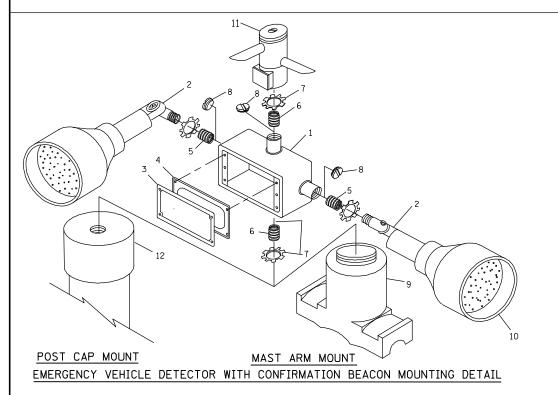
JSER NAME = ZACH WALLSTEN FILE NAME = DESIGNED - DAD REVISED -4085.883-DT1.dwd DRAWN - BCK REVISED CHECKED - DAD REVISED 10-28-09 IOT DATE = 6/28/2012REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

				GHA #40	85.883
DISTRICT ONE	FAP. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	353	2012-038TS	COOK	43	6
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05 CONTRACT #: 60186				T86
NONE SHEET NO. 2 OF 6 SHEETS STA. TO STA.		LILLINOIS FED. AL	D PROJECT		



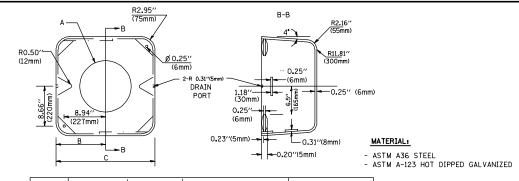




ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	¾′′(19 mm) LOCKNUT
8	¾′′(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- 1. 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 ¾"(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.

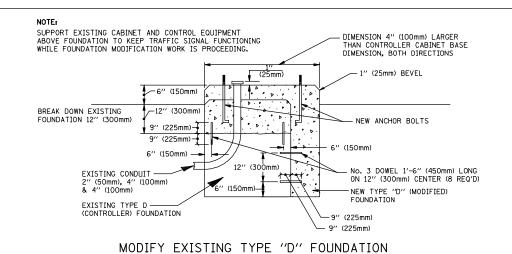


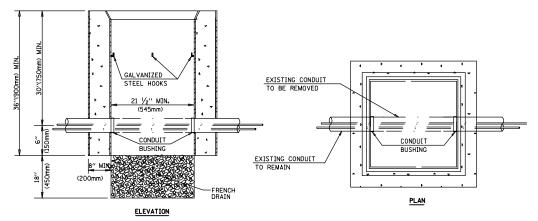
Α	В	С	HEIGHT	WEIGHT
VARIES	9.5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs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





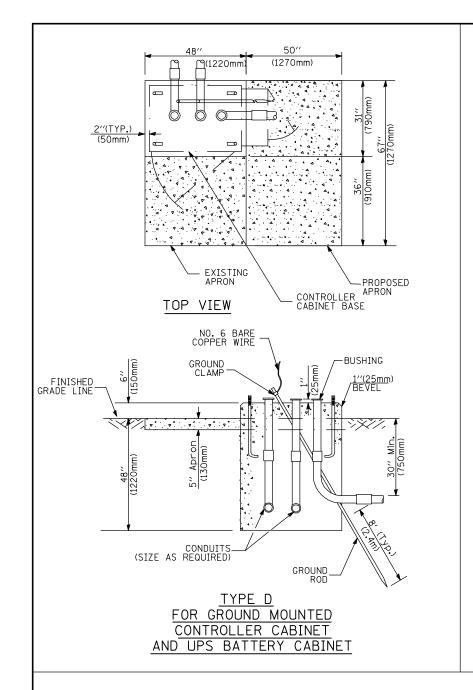
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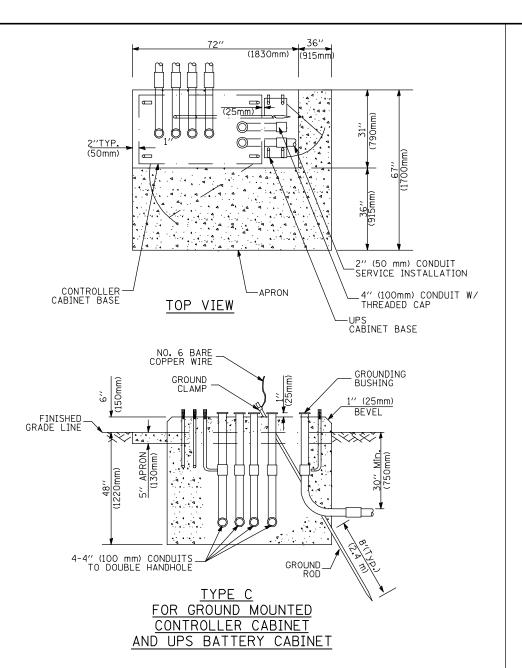
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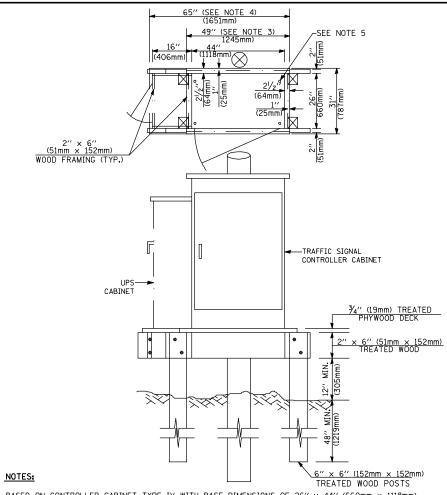
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

							GHA #40	085.883
	DISTRICT	FAP. RTE	SECTION	COUNTY	TOTAL SHEETS	84. EE		
STANI	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			353	2012-038TS	COOK	43	8
SIAN	DAND TRAFFIC SIGN	AL DESIGN DETAILS			TS-05	CONTRACT	# 60	T86
NONE	SHEET NO. 4 OF 6 SHEETS	STA TO STA			LILLINOIS FED. AL	D DROIECT		







- 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 - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	 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:

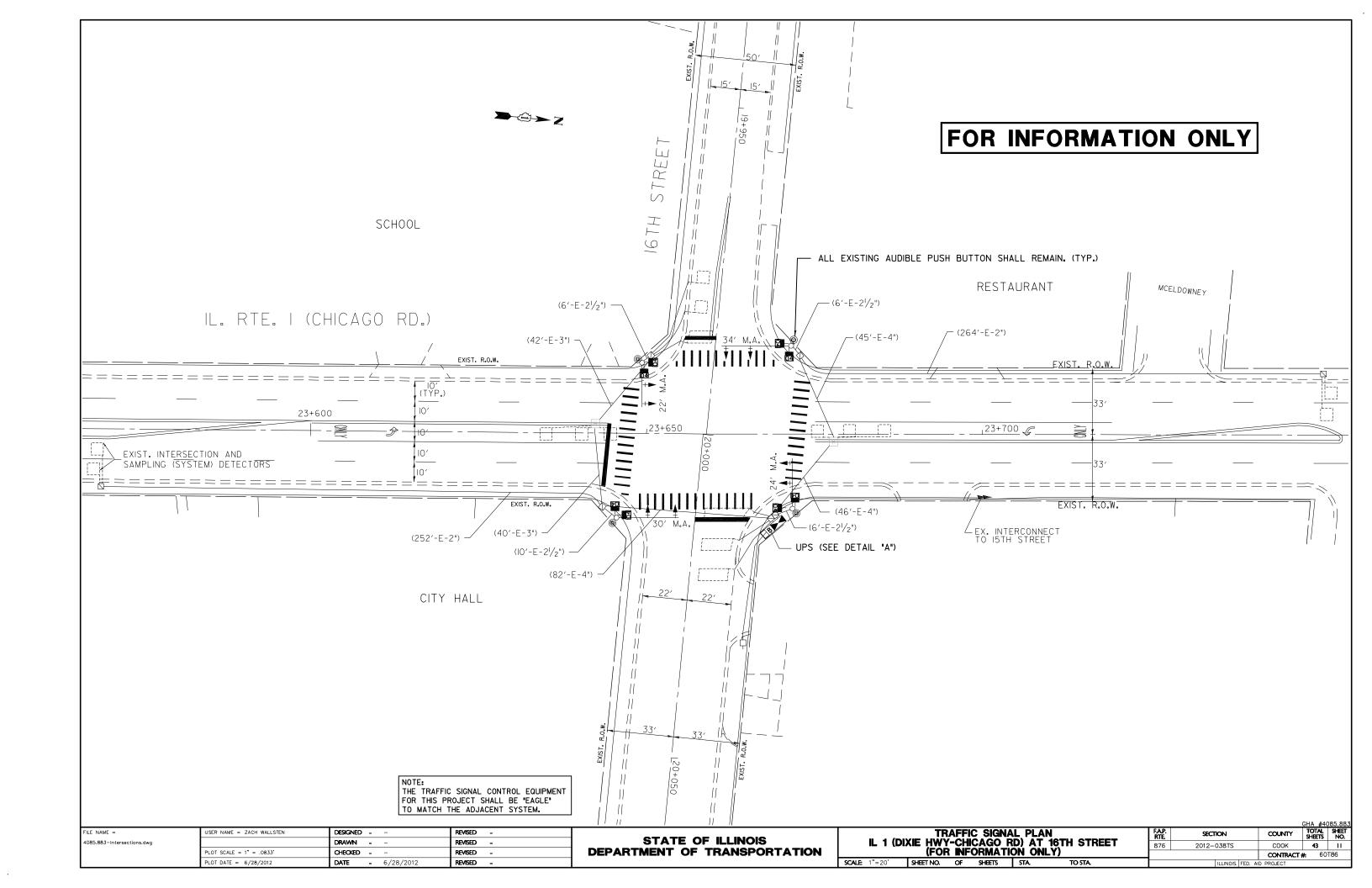
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along
 the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa).
 This strength shall be verified by boring data prior to construction or with testing by the Engineer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

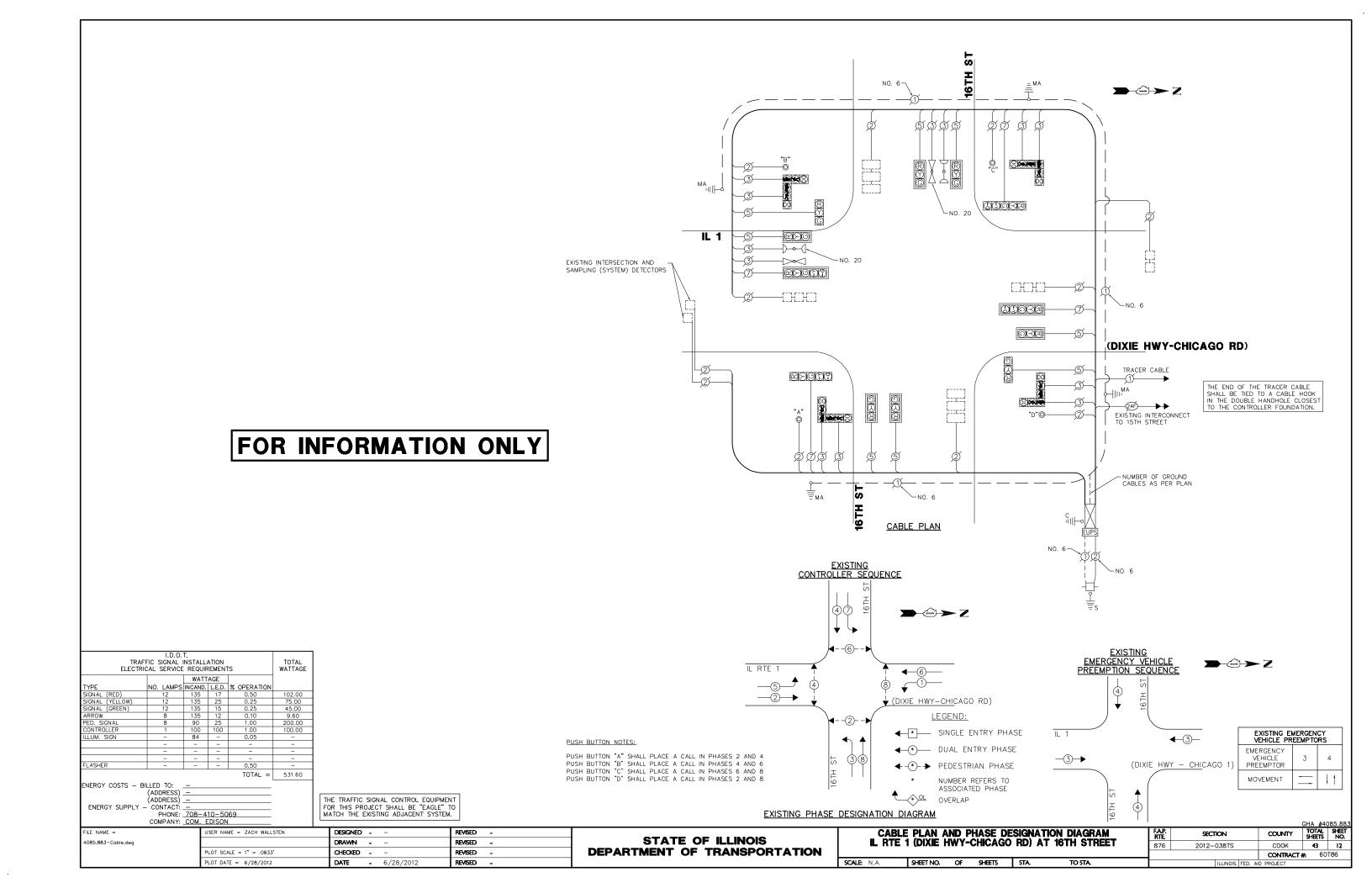
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

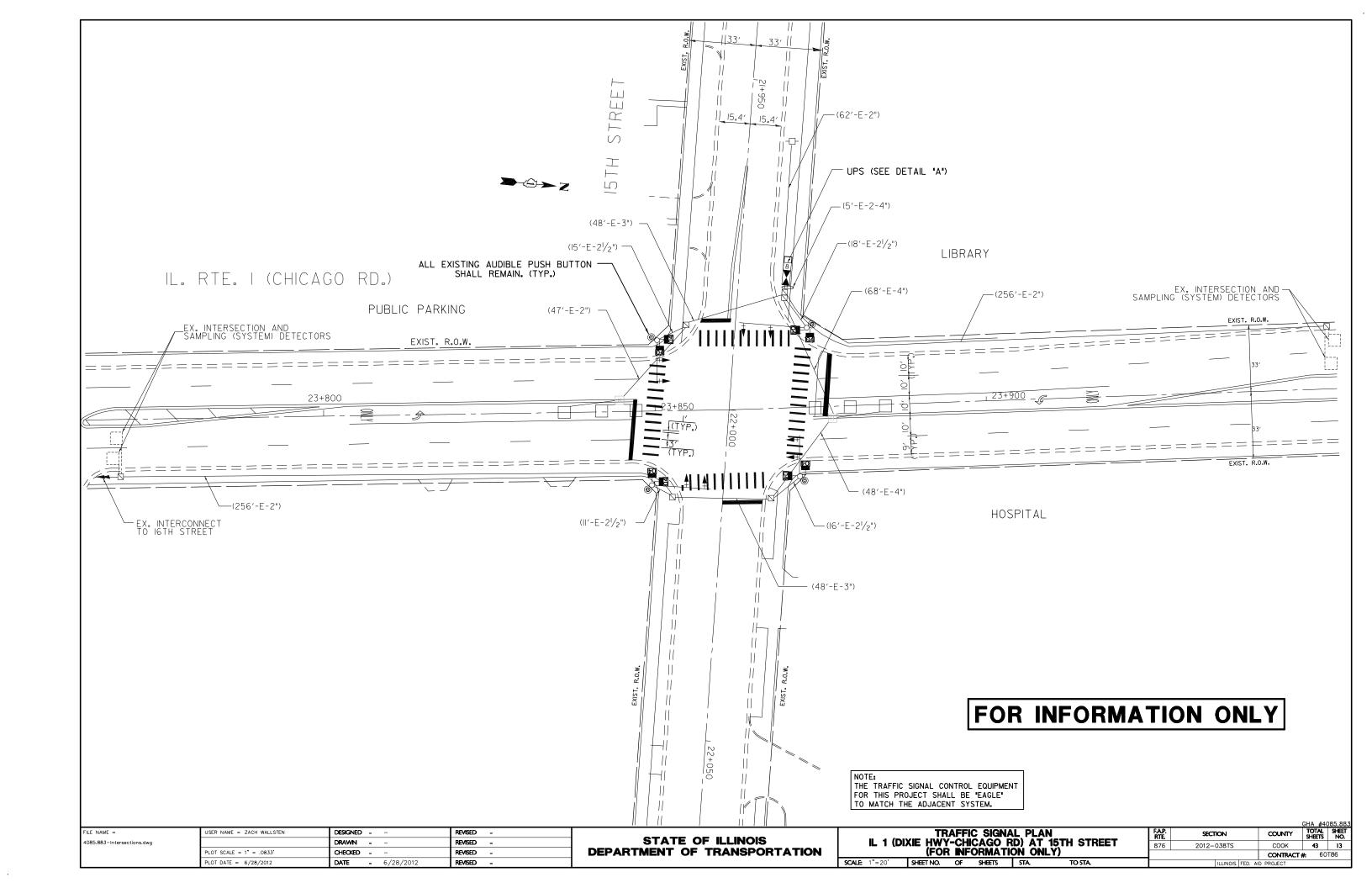
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)NE	FAP. SECTION	COUNTY TOTAL

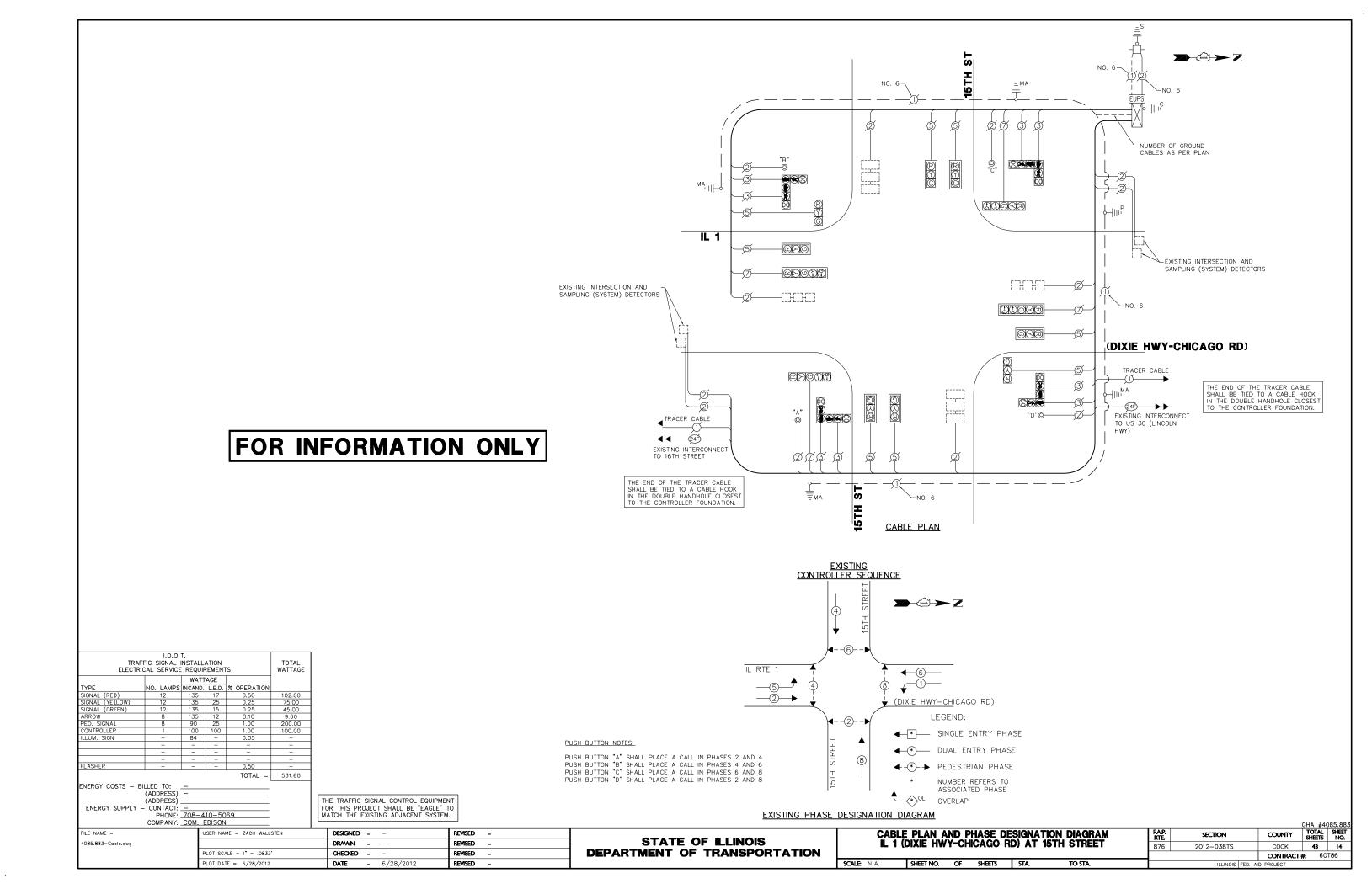
					DEI THE OF MAST ARM T	OUNDA	(1101 (0), 111 L	GHA #4085.883
FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -		DISTRICT ONE	FAP.	SECTION	COUNTY TOTAL SHEET
4085.883-DT1.dwg		DRAWN - BCK	REVISED -	STATE OF ILLINOIS		353	2012-038TS	COOK 43 9
	PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT #: 60T86
	PLOT DATE = 6/28/2012	DATE - 10-28-09	REVISED -		SCALE NONE SHEET NO. 5 OF 6 SHEETS STA. TO STA.	1	ILLINOIS FED. AID	PROJECT

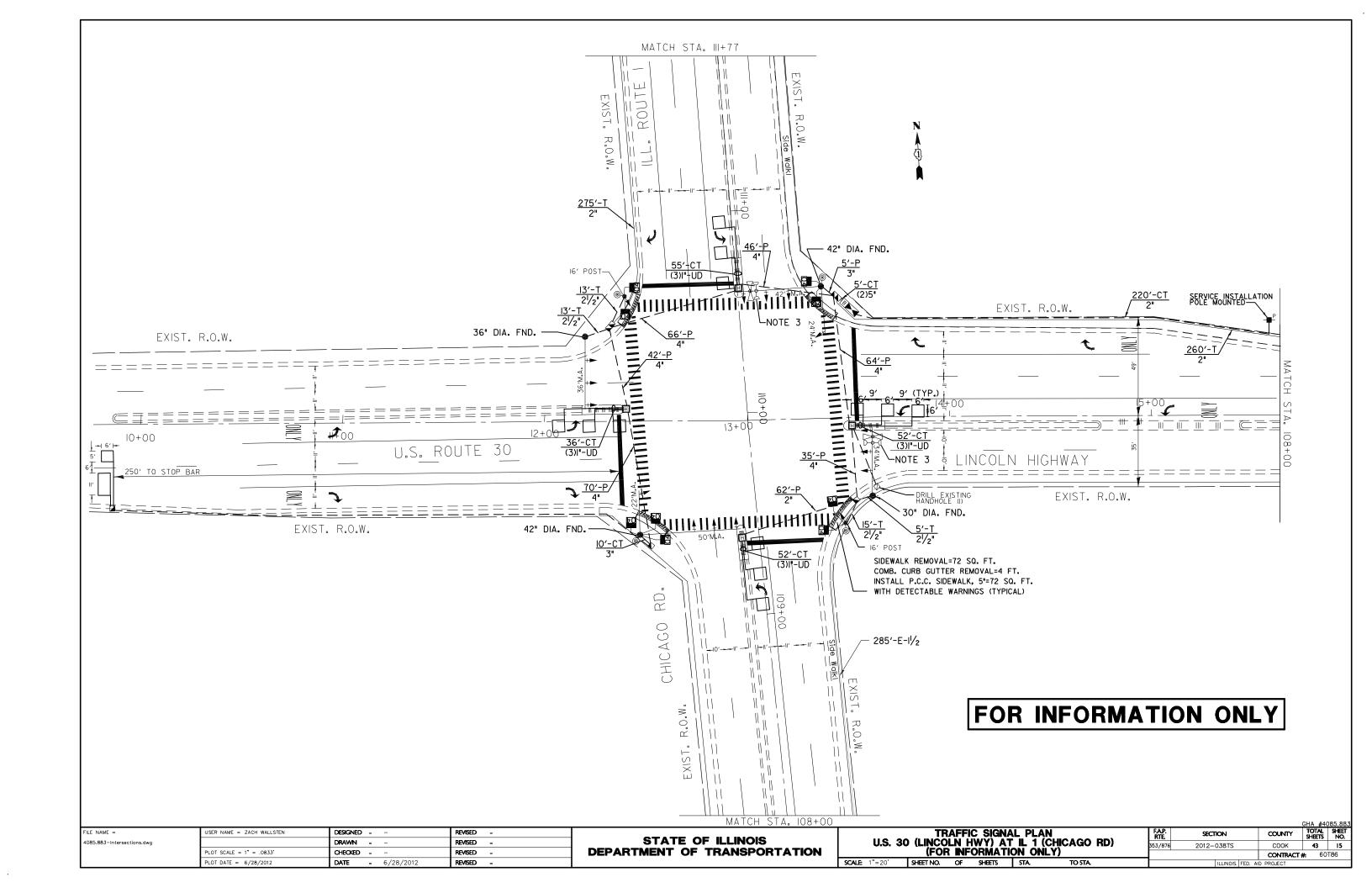
TRAFFIC SIGNAL LEGEND **EXISTING EXISTING** REMOVAL PROPOSED REMOVAL **PROPOSED** REMOVAL **EXISTING PROPOSED** ELECTRIC CABLE IN CONDUIT, TRACER, $\mathbb{R}_{\mathbb{Q}}$ \boxtimes G< ___(1)___ CONTROLLER CABINET \boxtimes lacksquareEMERGENCY VEHICLE LIGHT DETECTOR NO. 14 1/C, UNLESS NOTED OTHERWISE R_{\circ} RAILROAD CONTROL CABINET **3** $\triangleright \blacktriangleleft$ CONFIRMATION BEACON ⊶(] - (—(c)— COAXIAL CABLE R □ E C C СС COMMUNICATIONS CABINET СС HANDHOLE MASTER CONTROLLER EMC MC VENDOR CABLE FOR CAMERA Н oxdotHEAVY DUTY HANDHOLE MASTER MASTER CONTROLLER EMMC MMC $^{\mathsf{R}}$ COPPER INTERCONNECT CABLE, UPS EUPS UPS \square UNINTERRUPTIBLE POWER SUPPLY DOUBLE HANDHOLE NO. 18 3 PAIR TWISTED, SHIELDED R 0 O JUNCTION BOX SERVICE INSTALLATION, -D^F -D-F FIBER OPTIC CABLE (P) POLE OR (G) GROUND MOUNT GALVANIZED STEEL CONDUIT NO. 62.5/125, MM12F ____ IN TRENCH (T) OR PUSHED (P) TELEPHONE CONNECTION т П P. FIBER OPTIC CABLE (P) POLE OR (G) GROUND MOUNT -24F)-TEMPORARY SPAN WIRE, TETHER WIRE, NO. 62.5/125, MM12F SM12F STEEL MAST ARM ASSEMBLY AND POLE AND CABLE FIBER OPTIC CABLE NO. 62.5/125, ALUMINUM MAST ARM ASSEMBLY AND POLE COMMON TRENCH CT (NUMBER OF FIBERS & TYPE TO BE - ---NOTED ON PLANS) COILABLE NONMETALLIC CONDUIT (EMPTY) CNC STEEL COMBINATION MAST ARM $0 = \infty$ _A—A— ASSEMBLY AND POLE WITH LUMINAIRE GROUND ROD AT (C) CONTROLLER, SYSTEM ITEM (H) HANDHOLE, (P) POST, (M) MAST ARM, STEEL COMBINATION MAST ARM OR (S) SERVICE ΙP INTERSECTION ITEM PTZ PIZ PTZ11 ASSEMBLY AND POLE WITH PTZ CAMERA CONTROLLER CABINET AND REMOVE ITEM SIGNAL POST 0 \times R_O FOUNDATION TO BE REMOVED RELOCATE ITEM TEMPORARY WOOD POLE (CLASS 5 OR \otimes $^{\mathsf{R}}\!\!\otimes\!$ BETTER) 45 FOOT (13.7m) MINIMUM STEEL MAST ARM POLE AND ABANDON ITEM FOUNDATION TO BE REMOVED R GUY WIRE 12" (300mm) TRAFFIC SIGNAL SECTION ALUMINUM MAST ARM POLE AND SIGNAL HEAD \rightarrow FOUNDATION TO BE REMOVED 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE SIGNAL HEAD CONSTRUCTION STAGES STEEL COMBINATION MAST ARM ASSEMBLY (NUMBERS INDICATE THE CONSTRUCTION STAGE) AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED + \triangleright R SIGNAL HEAD WITH BACKPLATE + + SIGNAL POST AND FOUNDATION G ◆Y ◆G RMF SIGNAL HEAD OPTICALLY PROGRAMMED -->"P" -.∵ ''P'' -**>**"P" SIGNAL FACE TO BE REMOVED FLASHER INSTALLATION O-D′′F′′ **⊕**→"F" O-D''F'' INTERSECTION & SAMPLING (S DENOTES SOLAR POWER) IS IS (SYSTEM) DETECTOR R --0 PEDESTRIAN SIGNAL HEAD S S SAMPLING (SYSTEM) DETECTOR SIGNAL FACE WITH BACKPLATE. PEDESTRIAN PUSHBUTTON DETECTOR 0 EXISTING INTERSECTION LOOP DETECTOR "P" INDICATES PROGRAMMED HEAD Р PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR ® APS (©) APS APS EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR ILLUMINATED SIGN 9 (3) **9** "NO LEFT TURN" (W) (W) 12" (300mm) PEDESTRIAN SIGNAL HEAD PREFORMED INTERSECTION AND SAMPLING WALK/DON'T WALK SYMBOL (SYSTEM) DETECTOR ILLUMINATED SIGN 8 **®** "NO RIGHT TURN" PS PS 12" (300mm) PEDESTRIAN SIGNAL HEAD PREFORMED SAMPLING (SYSTEM) DETECTOR INTERNATIONAL SYMBOL, OUTLINED DETECTOR LOOP, TYPE I 12" (300mm) PEDESTRIAN SIGNAL HEAD **RAILROAD SYMBOLS** P INTERNATIONAL SYMBOL, SOLID PREFORMED DETECTOR LOOP PEDESTRIAN SIGNAL HEAD, INTERNATIONAL MICROWAVE VEHICLE SENSOR M[M]**4** SYMBOL. WITH COUNTDOWN TIMER **EXISTING** PROPOSED $\sqrt{1}$ VIDEO DETECTION CAMERA ∇ RAILROAD CONTROL CABINET ▶⋖ RADIO INTERCONNECT ###0 VIDEO DETECTION ZONE RAILROAD CANTILEVER MAST ARM $X \circ X = X$ Xex x RERR ERR RR RADIO REPEATER $\times \circ \times$ $\mathbf{X} \mathbf{O} \mathbf{X}$ FLASHING SIGNAL PTZ|1 ₽TZ PAN, TILT, ZOOM CAMERA PTZ)1 DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, _5 CROSSING GATE $\times \circ \times \sim$ XOX-R(W)ALL DETECTOR LOOP CABLE TO BE SHIELDED (W) (W)WIRELESS DETECTOR SENSOR CROSSBUCK \geq \rightarrow GROUND CABLE IN CONDUIT WIRELESS ACCESS POINT NO. 6 SOLID COPPER (GREEN) FILE NAME = USER NAME = ZACH WALLSTEN DESIGNED - DAD/BCK REVISED -DISTRICT ONE SECTION COUNTY STATE OF ILLINOIS REVISED -4085,883-DT1.dwg DRAWN - BCK 353 2012-038TS COOK 43 10 STANDARD TRAFFIC SIGNAL DESIGN DETAILS **DEPARTMENT OF TRANSPORTATION** CHECKED - DAD REVISED -TS-05 CONTRACT #: 60T86 SHEET NO. 6 OF 6 SHEETS STA. PLOT DATE = 6/28/2012 DATE - 10-28-09 REVISED -

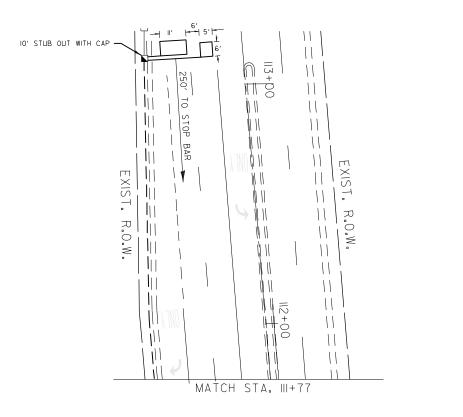


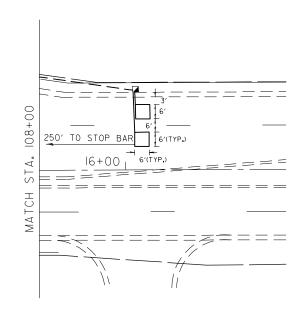


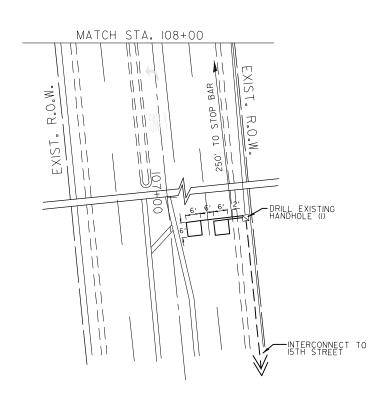






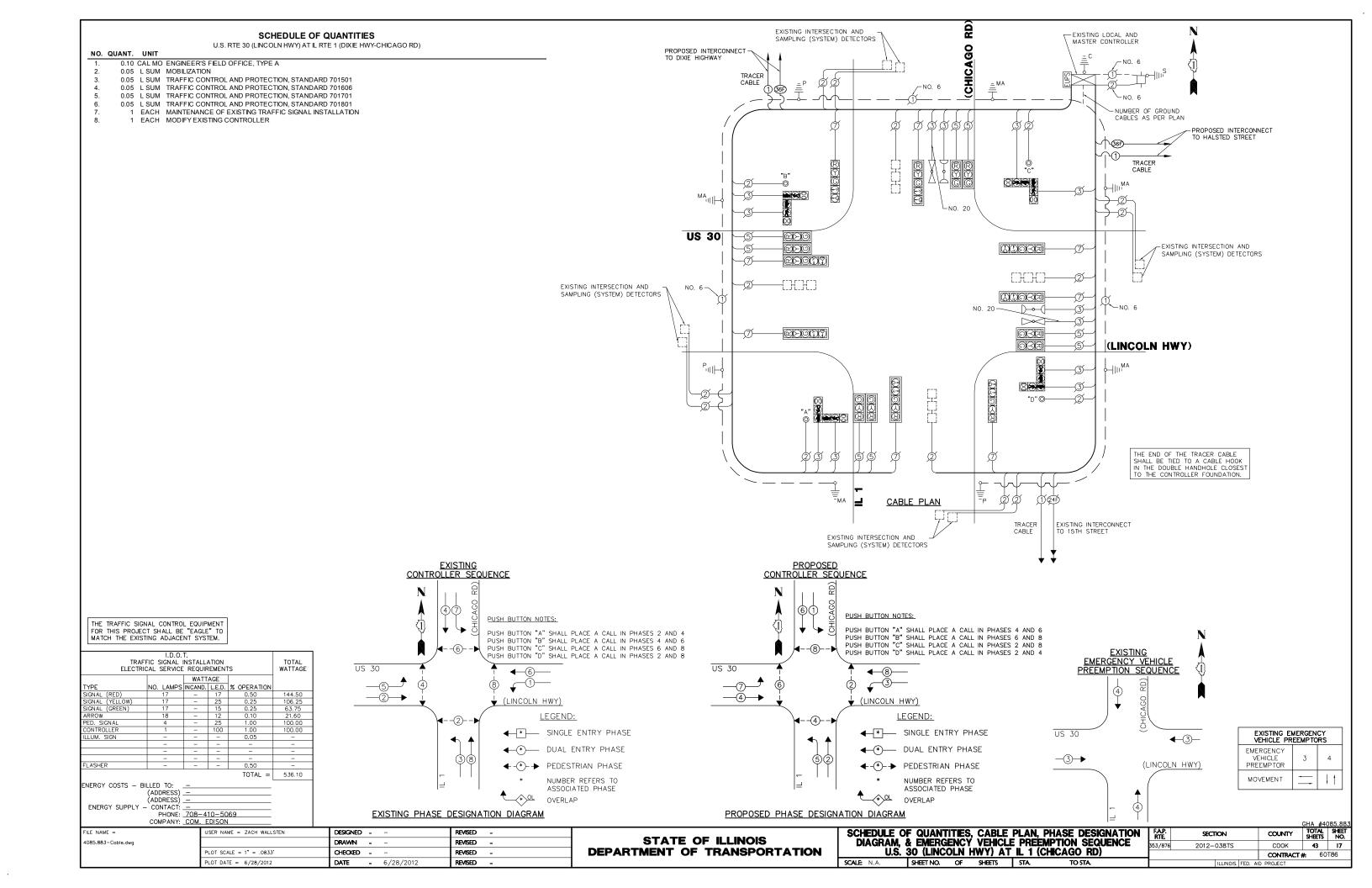


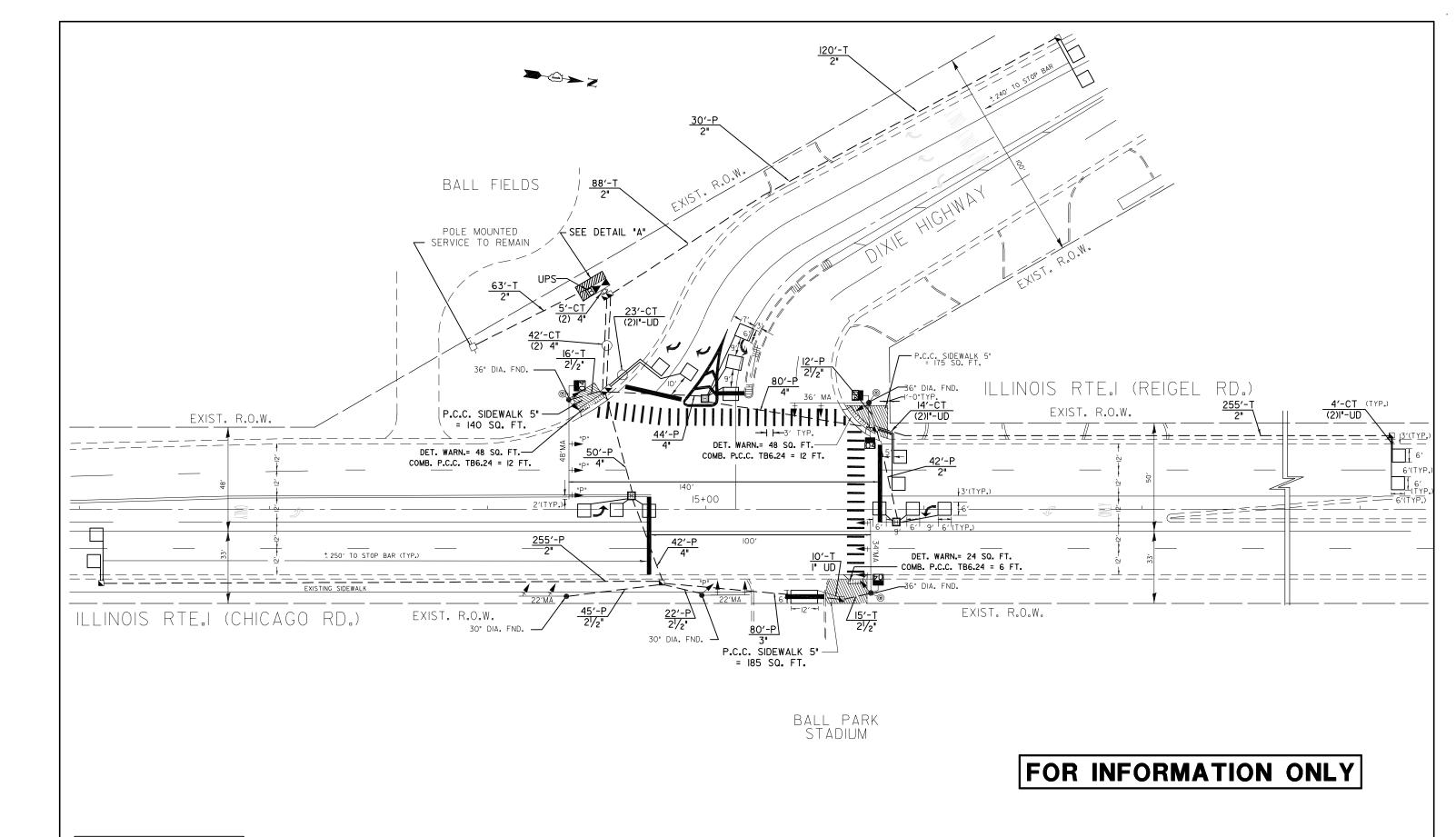




FOR INFORMATION ONLY

											GHA #4085.883
FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED	REVISED -			TRAFFIC SIGNA	AL PLAN	FAP. RTE.	SECTION	COUNTY	TOTAL SHEET SHIFTS NO.
4085.883-Intersections.dwg		DRAWN	REVISED -	STATE OF ILLINOIS	U.S. 30	D (LINCOLN HWY) AT	「IL 1 (CHICAGO RD)	353/876	2012-038T	rs cook	43 16
	PLOT SCALE = 1" = .0833'	CHECKED	REVISED -	DEPARTMENT OF TRANSPORTATION		(FOR INFORMATI	<u>ON ONLY)</u>			CONTRACT	#: 60T86
	PLOT DATE = 6/28/2012	DATE - 6/28/2012	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA TO STA		ILLING	OIS FED. AID PROJECT	



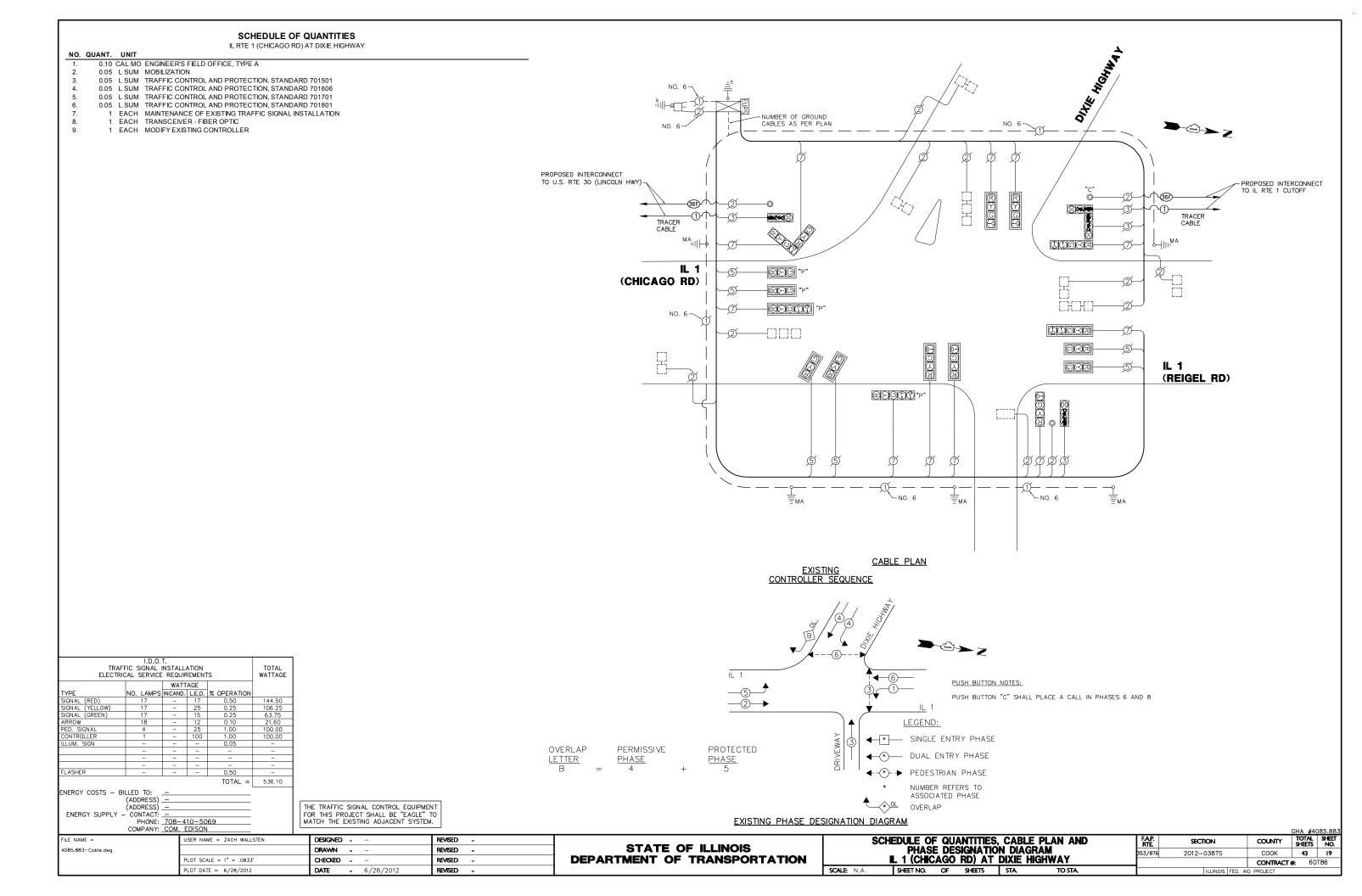


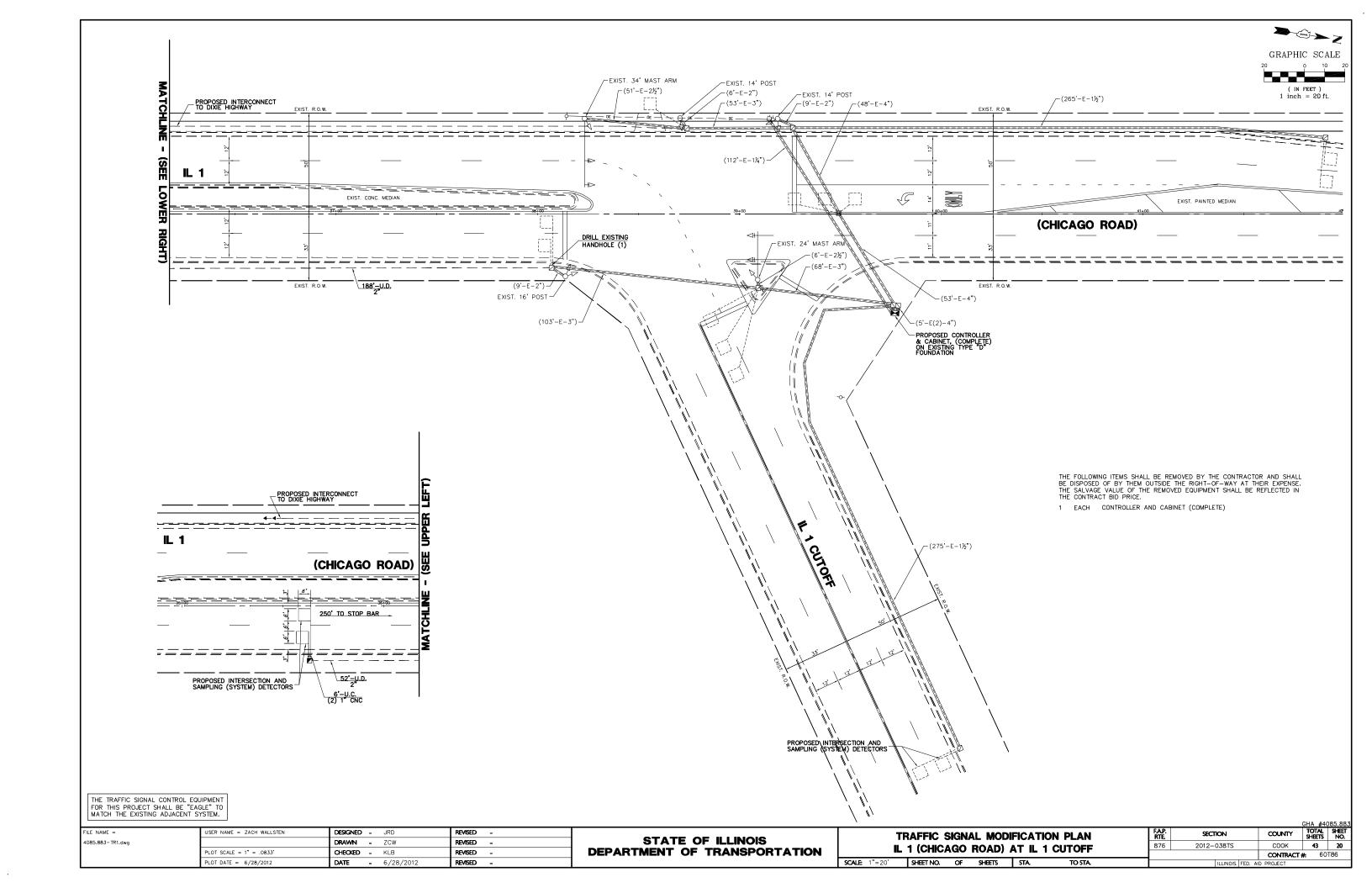
NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED	-	-	REVISED	-
4085.883-Intersections.dwg		DRAWN	-	-	REVISED	-
	PLOT SCALE = 1" = .0833'	CHECKED	-	_	REVISED	-
	PLOT DATE = 6/28/2012	DATE	_	6/28/2012	REVISED	_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

										GHA #40	85.883
	TRAFFIC SIGNAL PLAN						F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 1 (CHICAGO RD) AT DIXIE HIGHWAY				876	2012-038TS	COOK 43 I					
(FOR INFORMATION ONLY)								CONTRACT	#: 60	T86	
=20'	SHEET NO.	OF	SHEETS	STA.	то	STA.		ILLINOIS FED. A	D PROJECT		





IL 1 (CHICAGO RD) AT IL 1 CUTOFF

NO.	QUANT.	UNIT	
1.	0.10	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
2.	0.05	LSUM	MOBILIZATION
3.	0.05	LSUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
4.	0.05	LSUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
5.	0.05	LSUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
6.	0.05	LSUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
7.	240	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
8.	1	EACH	HANDHOLE
9.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
10.	1	EACH	TRANSCEIVER - FIBER OPTIC
11.	1,209	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
12.	1	EACH	DRILL EXISTING HANDHOLE
13.	8	EACH	INDUCTIVE LOOP DETECTOR
14.	66	FOOT	DETECTOR LOOP, TYPE I
15.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

PROPOSED INTERCONNECT -TO DIXIE HIGHWAY TRACER CABLE IL 1 (CHICAGO RD) PROPOSED INTERSECTION AND -SAMPLING (SYSTEM) DETECTORS CABLE PLAN PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

TRAFF ELECTRIC	TOTAL WATTAGE					
			WATT	AGE		
TYPE	NO.	LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)		12	135	17	0.50	810.00
SIGNAL (YELLOW)		12	135	25	0.25	405.00
SIGNAL (GREEN)		12	135	15	0.25	405.00
ARROW		6	135	12	0.10	81.0
PED. SIGNAL		-	90	25	1.00	_

TOTAL = 1801.00 ENERGY COSTS — BILLED TO: CITY OF CHICAGO HEIGHTS

(ADDRESS) 1601 CHICAGO ROAD

(ADDRESS) CHICAGO HEIGHS, IL 60411

ENERGY SUPPLY — CONTACT: NEW BUSINESS
PHONE: 1—866—639—3552

COMPANY: COM. EDISON

FLASHER

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

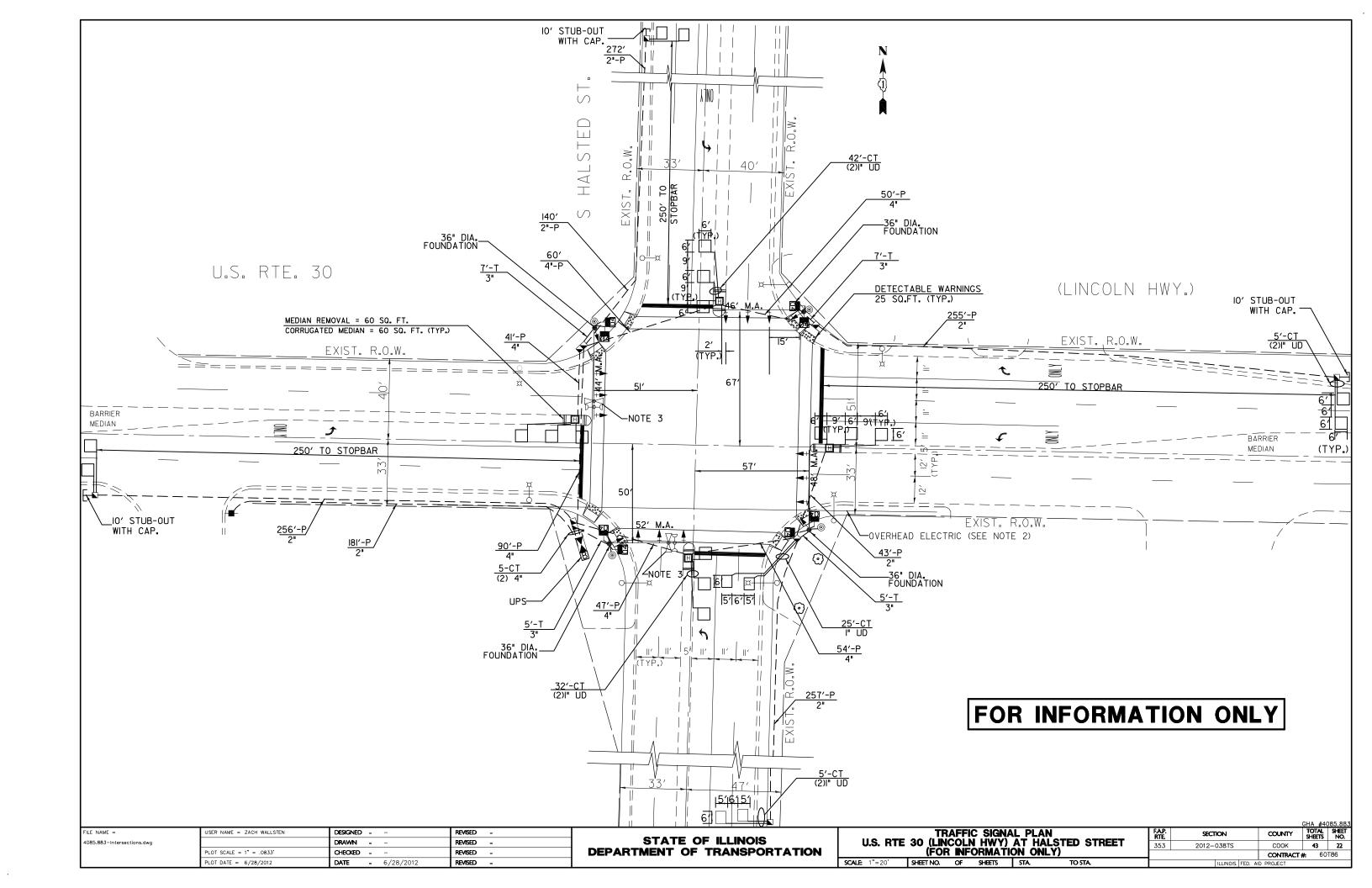
LEGEND: * SINGLE ENTRY PHASE **◆*** DUAL ENTRY PHASE ←-(*)- → PEDESTRIAN PHASE NUMBER REFERS TO ASSOCIATED PHASE

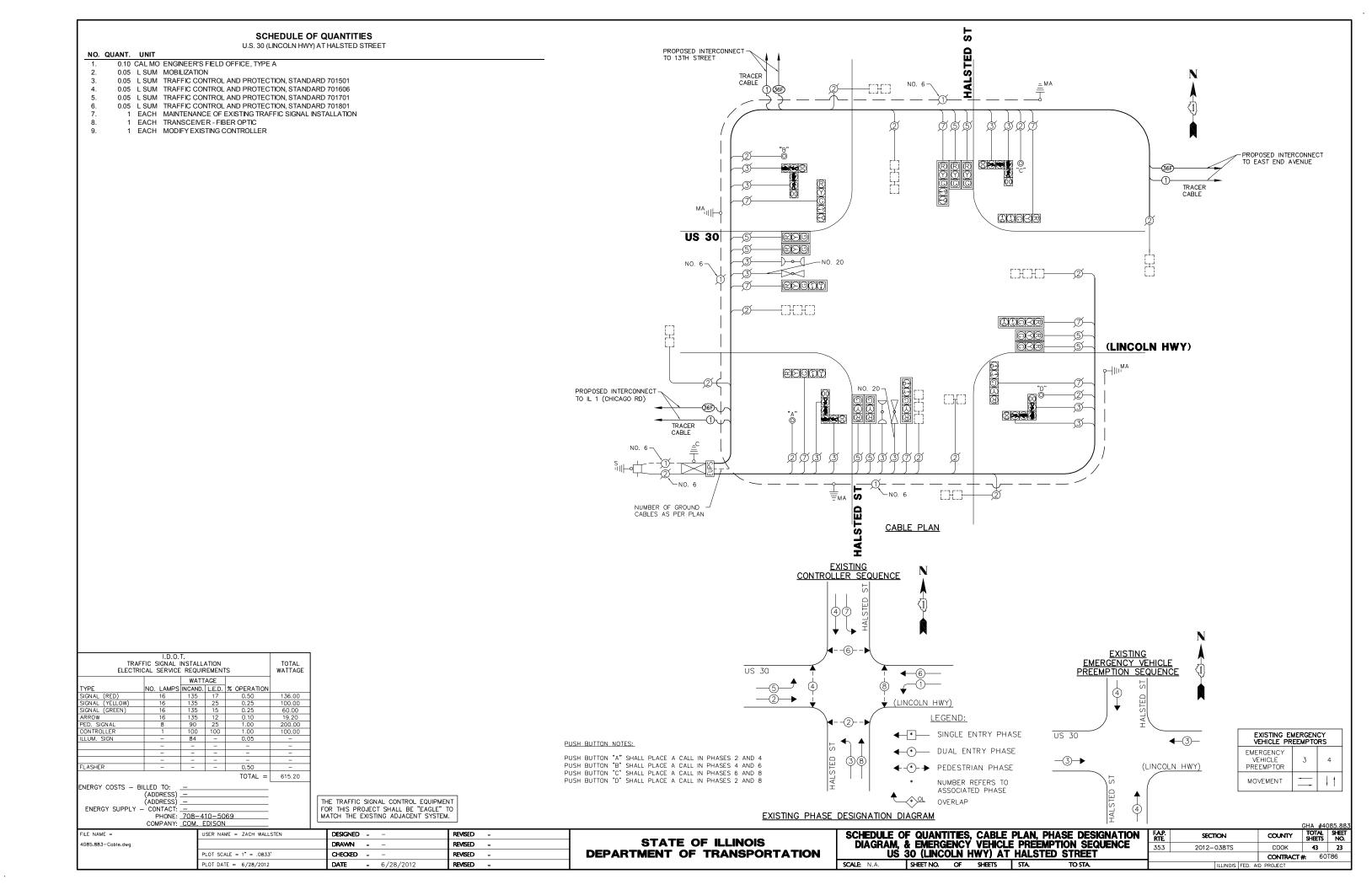
OVERLAP

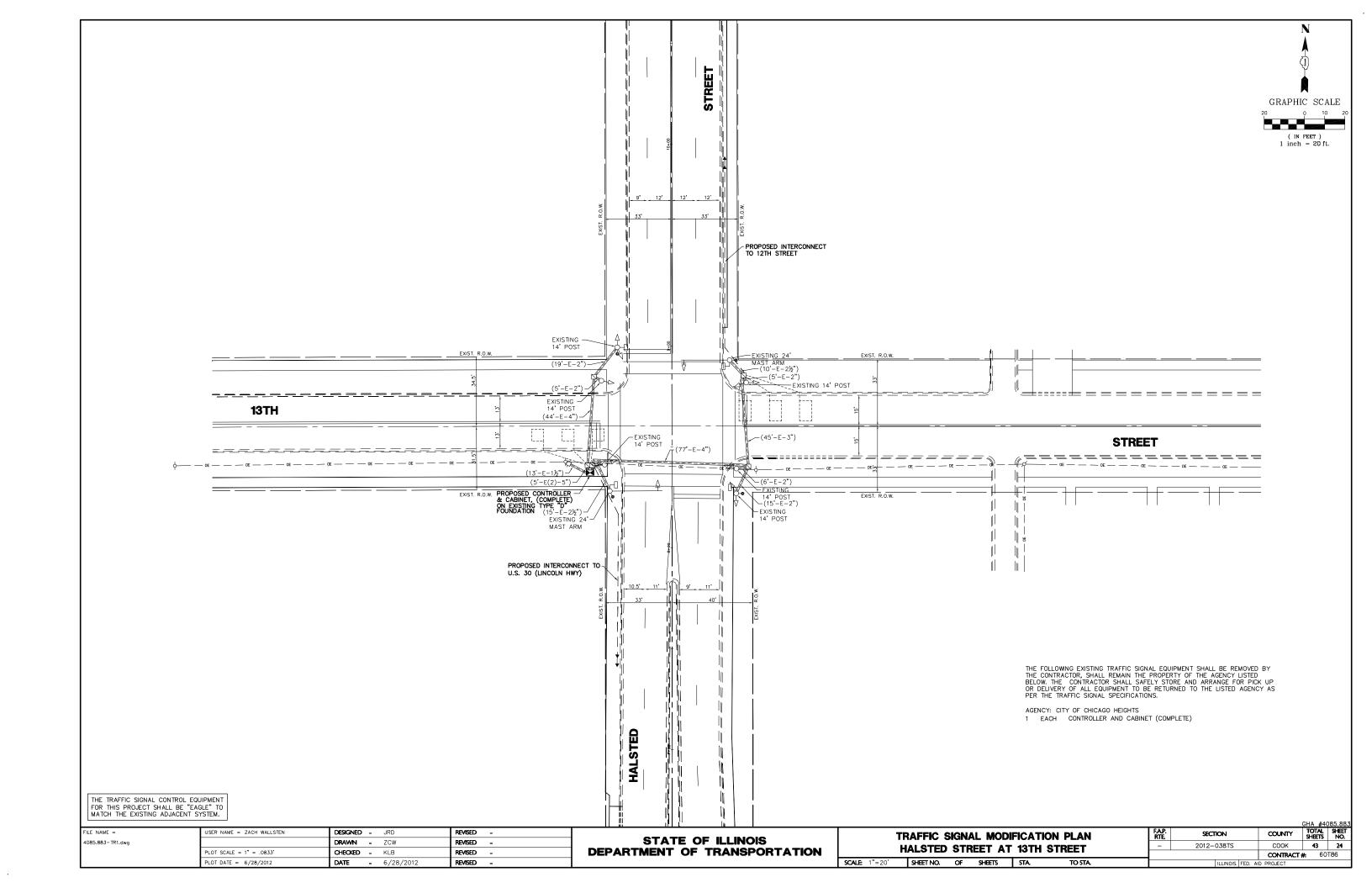
EXISTING AND PROPOSED CONTROLLER SEQUENCE

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

PHONE: <u>1-86</u> COMPANY: <u>COM</u>		MATCH THE EXISTING ADJACENT SYSTEM	И.	EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM							HA #4085.883
FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED	REVISED -	07.47E 0E # 1.010	SCHEDU		BLE PLAN AND PHASE	FAP. RTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
4085.883-Cable.dwg		DRAWN	REVISED -	STATE OF ILLINOIS	DESIGNATION DIAGRAM		876	2012-038TS	соок	43 21	
	PLOT SCALE = 1" = .0833'	CHECKED	REVISED -	DEPARTMENT OF TRANSPORTATION		IL 1 (CHICAGO RD) AT	IL 1 CUTOFF			CONTRACT #	60T86
	PLOT DATE = 6/28/2012	DATE - 6/28/2012	REVISED -		SCALE: N.A.	SHEET NO. OF SHEETS	STA TO STA		ILLINOIS FED. A	ID PROJECT	







HALSTED STREET AT 13TH STREET

NO. QUANT. UNIT

0.10 CAL MO ENGINEER'S FIELD OFFICE, TYPE A

0.05 L SUM MOBILIZATION

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701801

1 EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

1 EACH TRANSCEIVER - FIBER OPTIC 2 EACH INDUCTIVE LOOP DETECTOR

1 EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

TRAFI ELECTRI	TOTAL WATTAGE								
		WATT	AGE						
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION					
SIGNAL (RED)	12	135	17	0.50	810.00				
SIGNAL (YELLOW)	12	135	25	0.25	405.00				
SIGNAL (GREEN)	12	135	15	0.25	405.00				
ARROW	_	135	12	0.10	ı				
PED. SIGNAL	4	90	25	1.00	360.00				
CONTROLLER	1	-	100	1.00	100.00				
ILLUM. SIGN	-	_	_	0.05	-				
	_	-	_	-	-				
	-	-	-	-	-				
	_	-	_	-	_				
FLASHER	_	_	_	0.50	_				
				TOTAL =	2080.00				

ENERGY COSTS - BILLED TO: CITY OF CHICAGO HEIGHTS
(ADDRESS) 1601 CHICAGO ROAD
(ADDRESS) CHICAGO HEIGHS, IL 60411
ENERGY SUPPLY - CONTACT: NEW BUSINESS
PHONE: 1-866-639-3552
COMPANY: COM. EDISON

FILE NAME =

4085.883-Cable.dwg

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

DESIGNED - -

DRAWN - -

- 6/28/2012

DATE

REVISED -

REVISED -

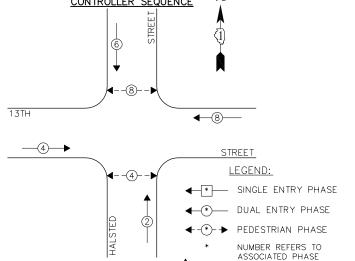
REVISED -

REVISED -

USER NAME = ZACH WALLSTEN

PLOT DATE = 6/28/2012

STREET TRACER 1) CABLE RO C 13TH STREET TRACER (1) CABLE PLAN PROPOSED INTERCONNECT TO U.S. 30 (LINCOLN HWY) -EXISTING AND PROPOSED CONTROLLER SEQUENCE



OVERLAP

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

SCALE: N.A.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

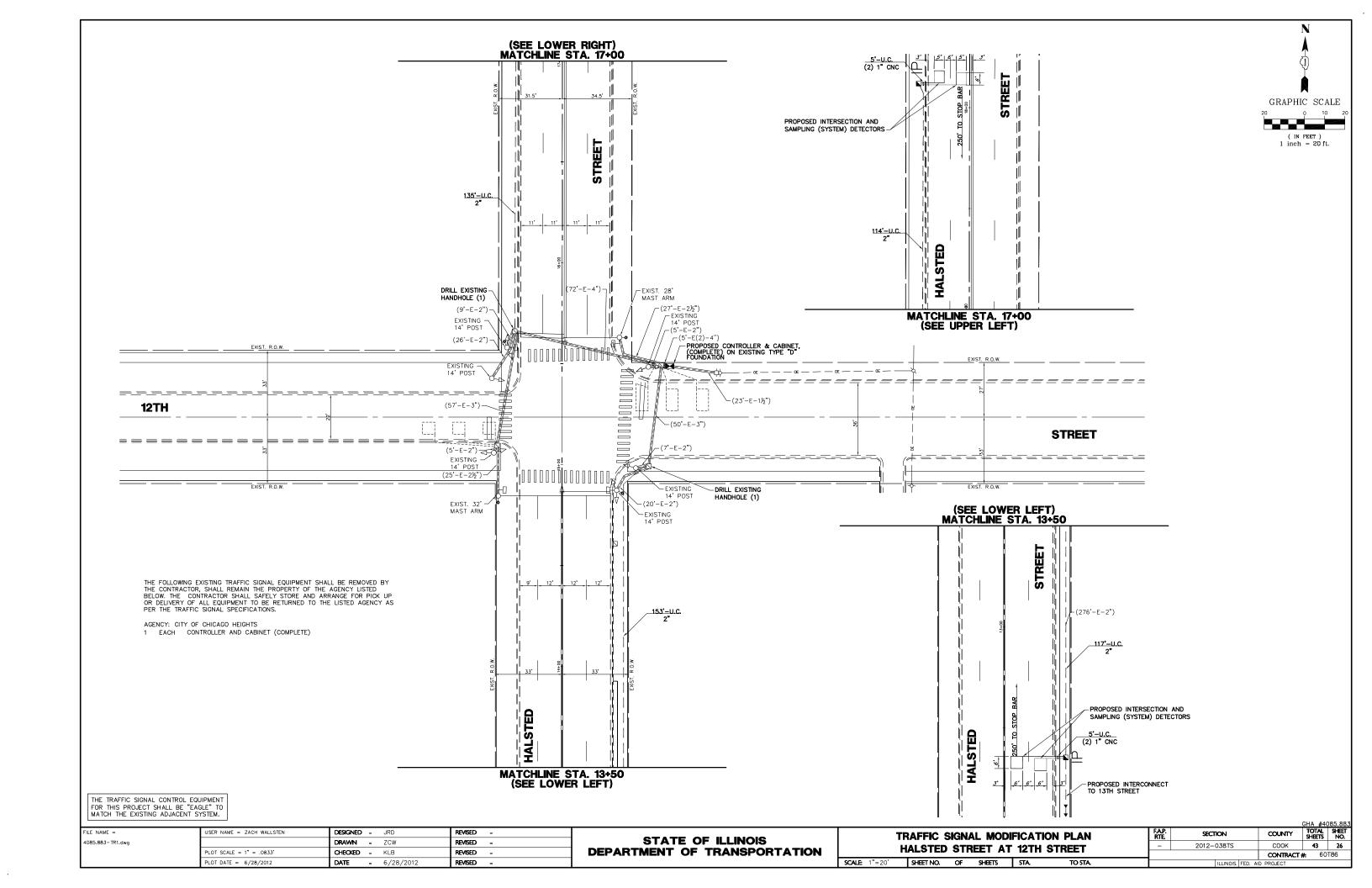
		
SCHEDULE OF QUANTITIES, CABLE PLAN, AND	FAP. RTE.	SECTION
PHASE DESIGNATION DIAGRAM	_	2012-038TS
HALSTED STREET AT 13TH STREET		
SHEET NO OF SHEETS STA TO STA		II LINOIS E

COUNTY TOTAL SHEETS NO.

COOK 43 25

CONTRACT #: 60T86

PROPOSED INTERCONNECT TO 12TH STREET



HALSTED STREET AT 12TH STREET

NO.	QUANT.	UNIT	
1.	0.10	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
2.	0.05	L SUM	MOBILIZATION
3.	0.05	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
4.	0.05	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
5.	0.05	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
6.	0.05	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
7.	519	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
8.	2	EACH	HANDHOLE
9.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
10.	1	EACH	TRANSCEIVER - FIBER OPTIC
11.	1,424	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
12.	2	EACH	DRILL EXISTING HANDHOLE
13.	6	EACH	INDUCTIVE LOOP DETECTOR
14.	127	FOOT	DETECTOR LOOP, TYPE I
15.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
16.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

I.D.O.T.										
TRAFF ELECTRIC	TOTAL WATTAGE									
		WATT	AGE							
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION						
SIGNAL (RED)	12	135	17	0.50	810.00					
SIGNAL (YELLOW)	12	135	25	0.25	405.00					
SIGNAL (GREEN)	12	135	15	0.25	405.00					
ARROW	-	135	12	0.10	-					
PED. SIGNAL	4	90	25	1.00	360.00					
CONTROLLER	1	-	100	1.00	100.00					
ILLUM. SIGN	-	-	_	0.05	-					
	_	-	-	_	_					
	-	-	-	-	_					
	_	-	-	-	_					
FLASHER	_	-	-	0.50	_					
				TOTAL =	2080.00					

ENERGY COSTS - BILLED TO: CITY OF CHICAGO HEIGHTS
(ADDRESS) 1601 CHICAGO ROAD
(ADDRESS) CHICAGO HEIGHS, IL 60411
ENERGY SUPPLY - CONTACT: NEW BUSINESS
PHONE: 1-866-639-3552
COMPANY: COM. EDISON

FILE NAME =

4085.883-Cable.dwg

EDISON		
USER NAME = ZACH WALLSTEN	DESIGNED	REVISED -
	DRAWN	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED	REVISED -
PLOT DATE = 6/28/2012	DATE - 6/28/2012	REVISED -

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

12TH STREET HALSTED PROPOSED INTERCONNECT TO 13TH STREET CABLE PLAN EXISTING AND PROPOSED CONTROLLER SEQUENCE PROPOSED INTERSECTION AND SYSTEM (SAMPLING) DETECTORS -8-12TH **←**®— LEGEND: **4**--**4**--◆ ▼ SINGLE ENTRY PHASE **◆**(*) DUAL ENTRY PHASE ←-(*)- → PEDESTRIAN PHASE NUMBER REFERS TO ASSOCIATED PHASE OVERLAP EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

STREET

RO C

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

PROPOSED INTERSECTION AND SYSTEM (SAMPLING) DETECTORS -

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM
HALSTED STREET AT 12TH STREET SCALE: N.A. SHEET NO. OF SHEETS STA.

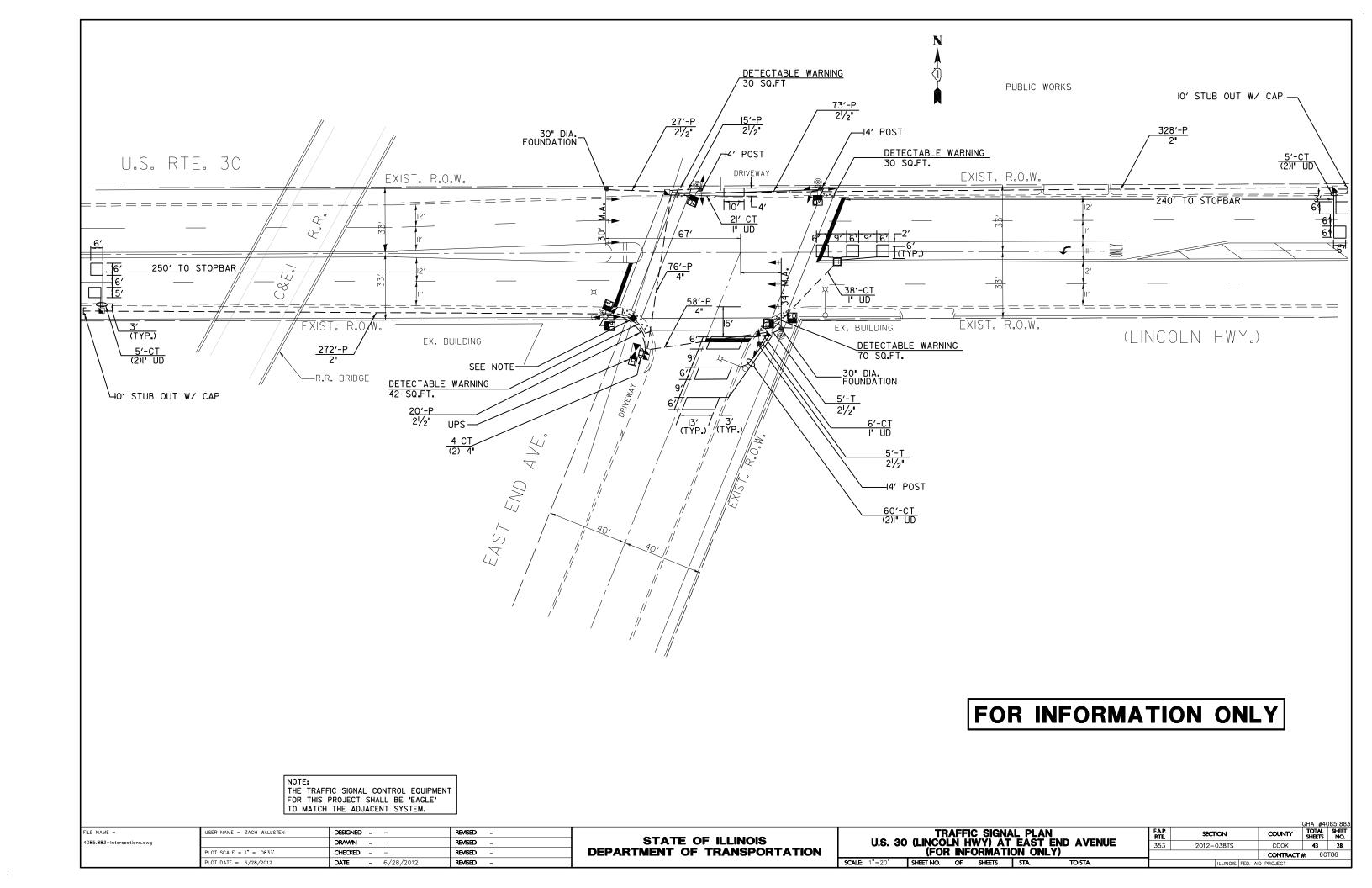
SECTION

2012-038TS

COUNTY

COOK 43 27

CONTRACT #: 60T86



U.S. 30 (LINCOLN HWY) AT EAST END AVENUE

0.05 L SUM MOBILIZATION
0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701501

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
 1 EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

1 EACH TRANSCEIVER - FIBER OPTIC
 1 EACH MODIFY EXISTING CONTROLLER

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS									
		WATT	AGE						
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION					
SIGNAL (RED)	16	135	17	0.50	136.00				
SIGNAL (YELLOW)	16	135	25	0.25	100.00				
SIGNAL (GREEN)	16	135	15	0.25	60.00				
ARROW	4	135	12	0.10	4.80				
PED. SIGNAL	6	90	25	1.00	150.00				
CONTROLLER	1	100	100	1.00	100.00				
ILLUM. SIGN	-	84	-	0.05	_				
	_	-	-	_	_				
	-	-	-	-	-				
	_	-	Ī	_	-				
FLASHER	-	_	-	0.50	_				
				TOTAL =	550.80				
ENERGY COSTS - BI	LLED TO:	_							
	(ADDRESS)	_							
	(ADDRESS)								
ENERGY SUPPLY -									
	PHONE:		10-50	169					
	COMPANY:								

USER NAME = ZACH WALLSTEN

PLOT DATE = 6/28/2012

DESIGNED - -

6/28/2012

DRAWN -

DATE

REVISED

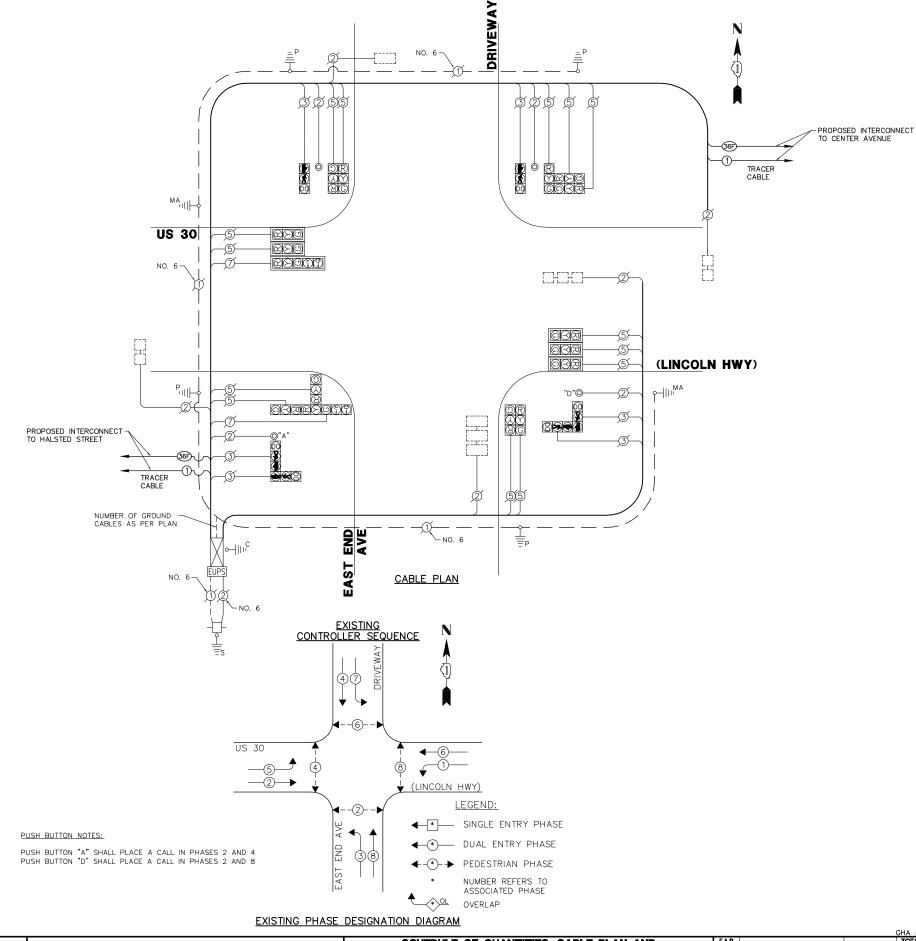
REVISED

REVISED

REVISED

FILE NAME =

4085,883-Cable,dwa



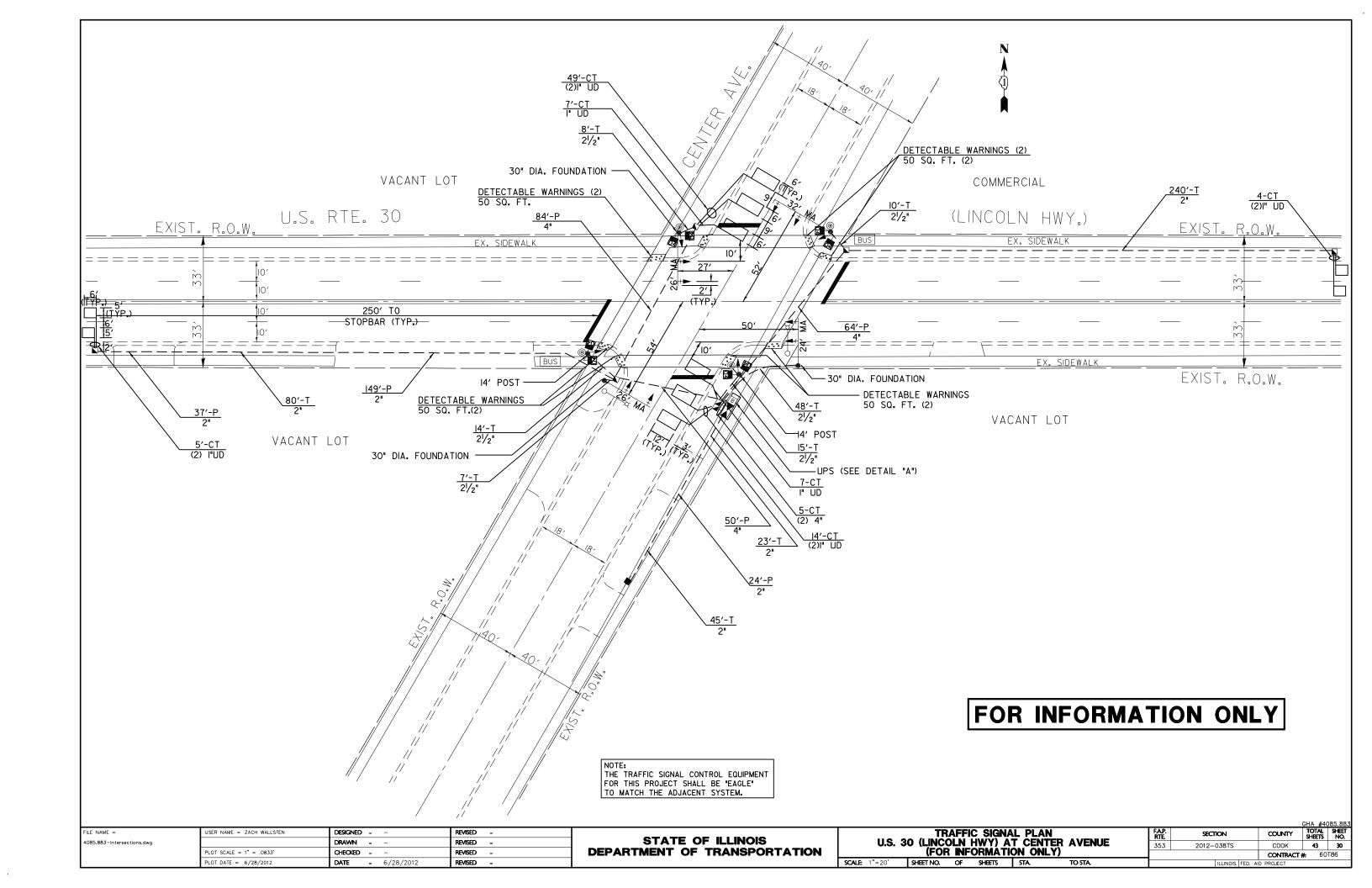
SCALE: N.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
US 30 (LINCOLN HWY) AT EAST END AVENUE

SHEET NO. OF SHEETS STA TO STA

SCHEDULE OF QUANTITIES, CABLE PLAN AND RTE. SECTION COUNTY TOTAL SHEETS NO.
353 2012-038TS COOK 43 29
CONTRACT #6 60T86





U.S. 30 (LINCOLN HWY) AT CENTER AVENUE

NO. QUANT. UNIT 0.10 CAL MO ENGINEER'S FIELD OFFICE, TYPE A 0.05 L SUM MOBILIZATION 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701501 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 1 EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION 1 EACH TRANSCEIVER - FIBER OPTIC 721 FOOT ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR 2 EACH INDUCTIVE LOOP DETECTOR

1 EACH MODIFY EXISTING CONTROLLER

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

TRAFI ELECTRIC	TOTAL WATTAGE								
		WATT							
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION					
SIGNAL (RED)	12	135	17	0.50	102.00				
SIGNAL (YELLOW)	12	135	25	0.25	75.00				
SIGNAL (GREEN)	12	135	15	0.25	45.00				
ARROW	_	135	12	0.10	_				
PED. SIGNAL	8	90	25	1.00	200.00				
CONTROLLER	1	100	100	1.00	100.00				
ILLUM. SIGN	-	84	-	0.05	ı				
	_								
	-	-	-	-	-				
	_	-	-	-	_				
FLASHER	_	-	_	0.50	-				
				TOTAL =	522.00				
ENERGY COSTS - BI	LLED TO: (ADDRESS)								
	(ADDRESS)	_							
ENERGY SUPPLY -	 CONTACT: 	_							
	PHONE:								
	COMPANY:	COM. E	DISON						

USER NAME = ZACH WALLSTEN

PLOT DATE = 6/28/2012

DESIGNED - -

6/28/2012

REVISED

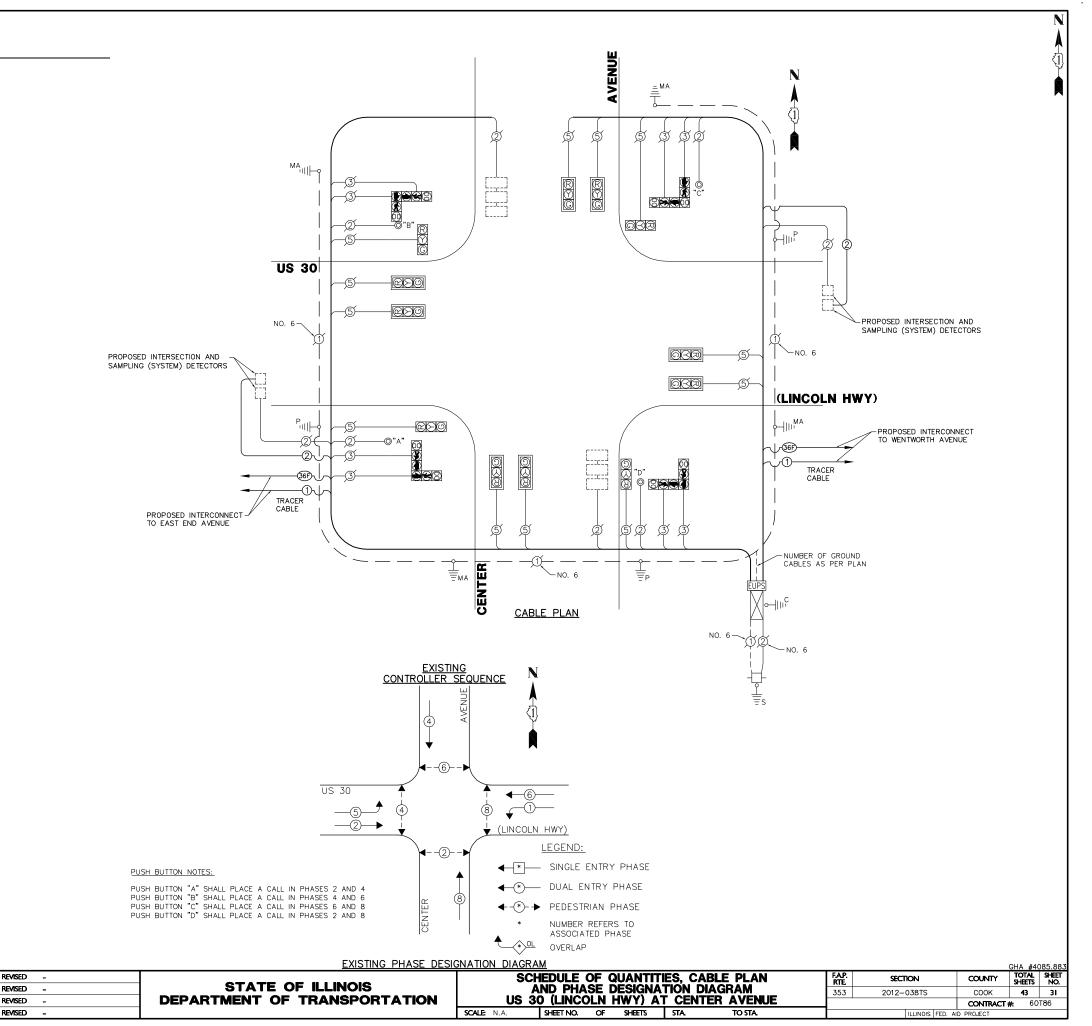
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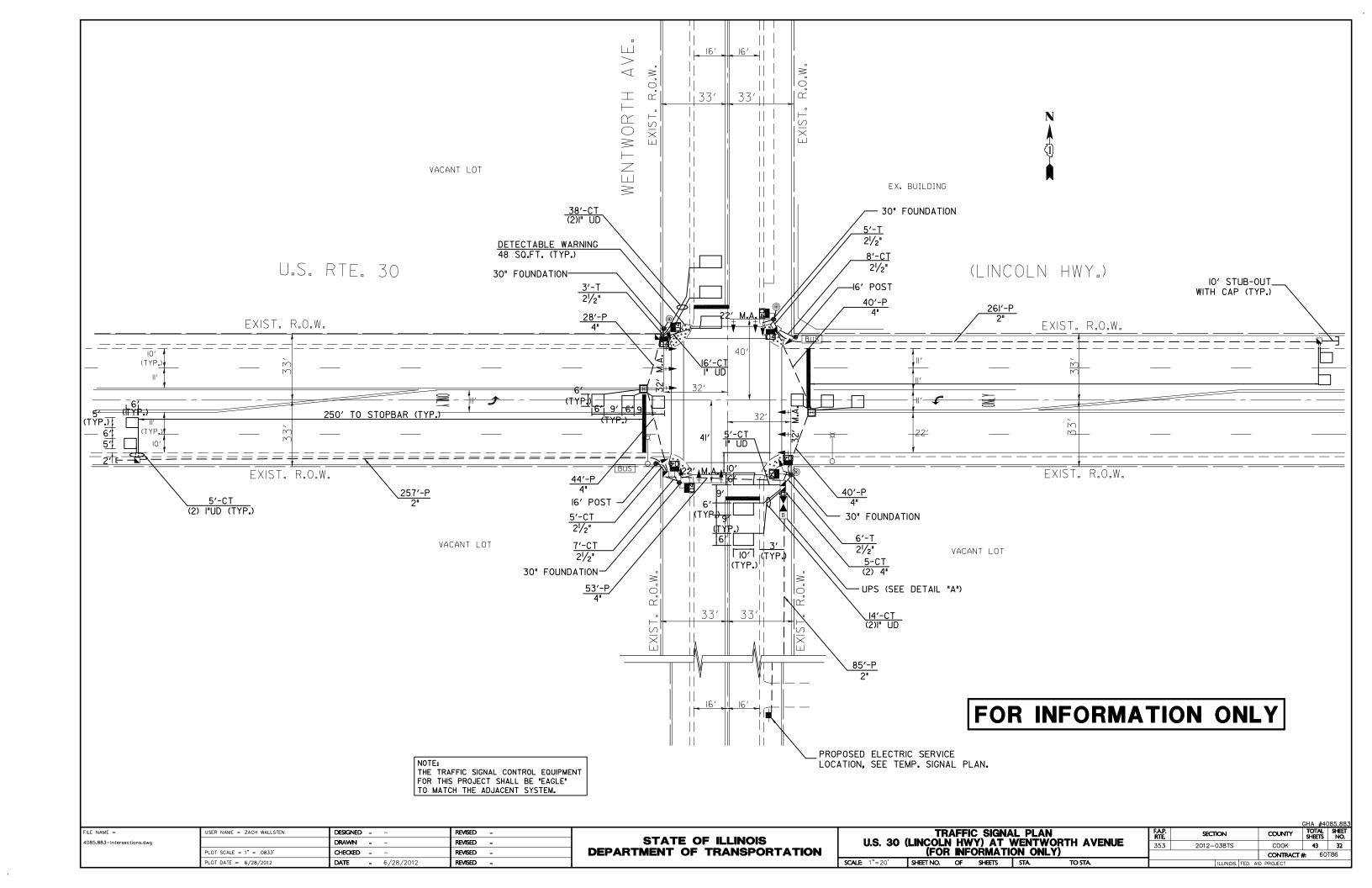
DRAWN -

DATE

FILE NAME =

4085,883-Cable,dwa





U.S. 30 (LINCOLN HWY) AT WENTWORTH AVENUE

NO. QUANT. UNIT

0.10 CAL MO ENGINEER'S FIELD OFFICE, TYPE A

0.05 L SUM MOBILIZATION

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701501

0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701

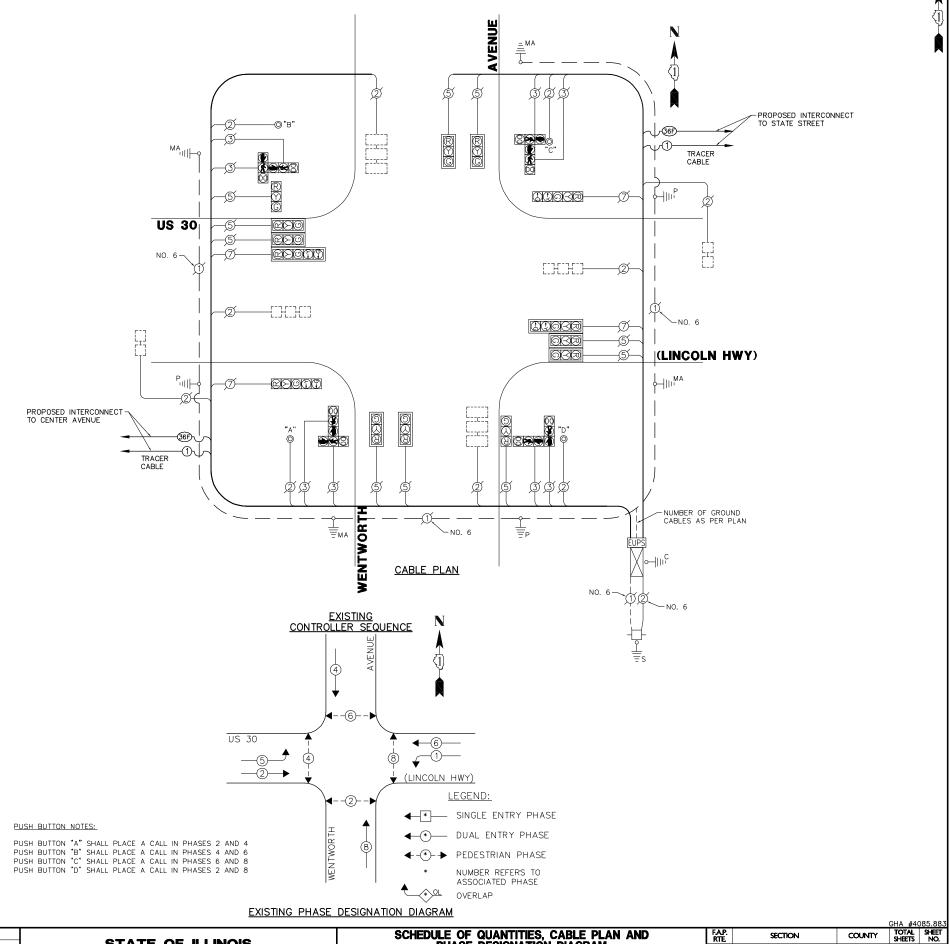
0.05 L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 1 EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

1 EACH TRANSCEIVER - FIBER OPTIC 1 EACH MODIFY EXISTING CONTROLLER

I.D.O.T.											
TRAFF ELECTRIC	TOTAL WATTAGE										
		WATT	AGE								
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION							
SIGNAL (RED)	18	135	17	0.50	153.00						
SIGNAL (YELLOW)	18	135	25	0.25	112.50						
SIGNAL (GREEN)	18	135	15	0.25	67.50						
ARROW	8	135	12	0.10	9.60						
PED. SIGNAL	8	90	25	1.00	200.00						
CONTROLLER	1	100	100	1.00	100.00						
ILLUM. SIGN	-	84		0.05	_						
	_	-			-						
	-	-			_						
	_	-			-						
FLASHER	-	_		0.50	_						
				TOTAL =	642.60						
ENERGY COSTS - BII	LLED TO:	-									

(ADDRESS) _ (ADDRESS) _

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

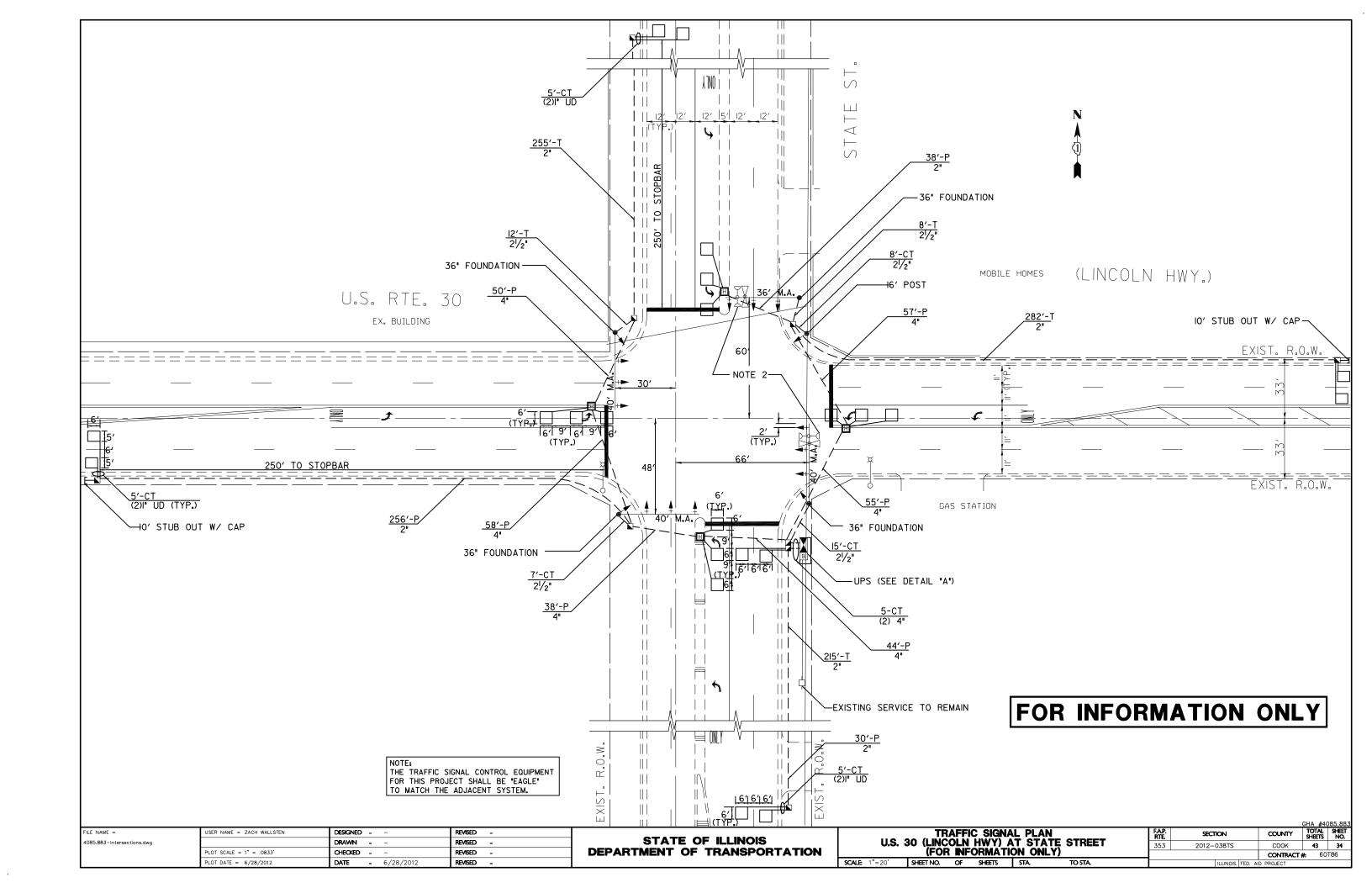


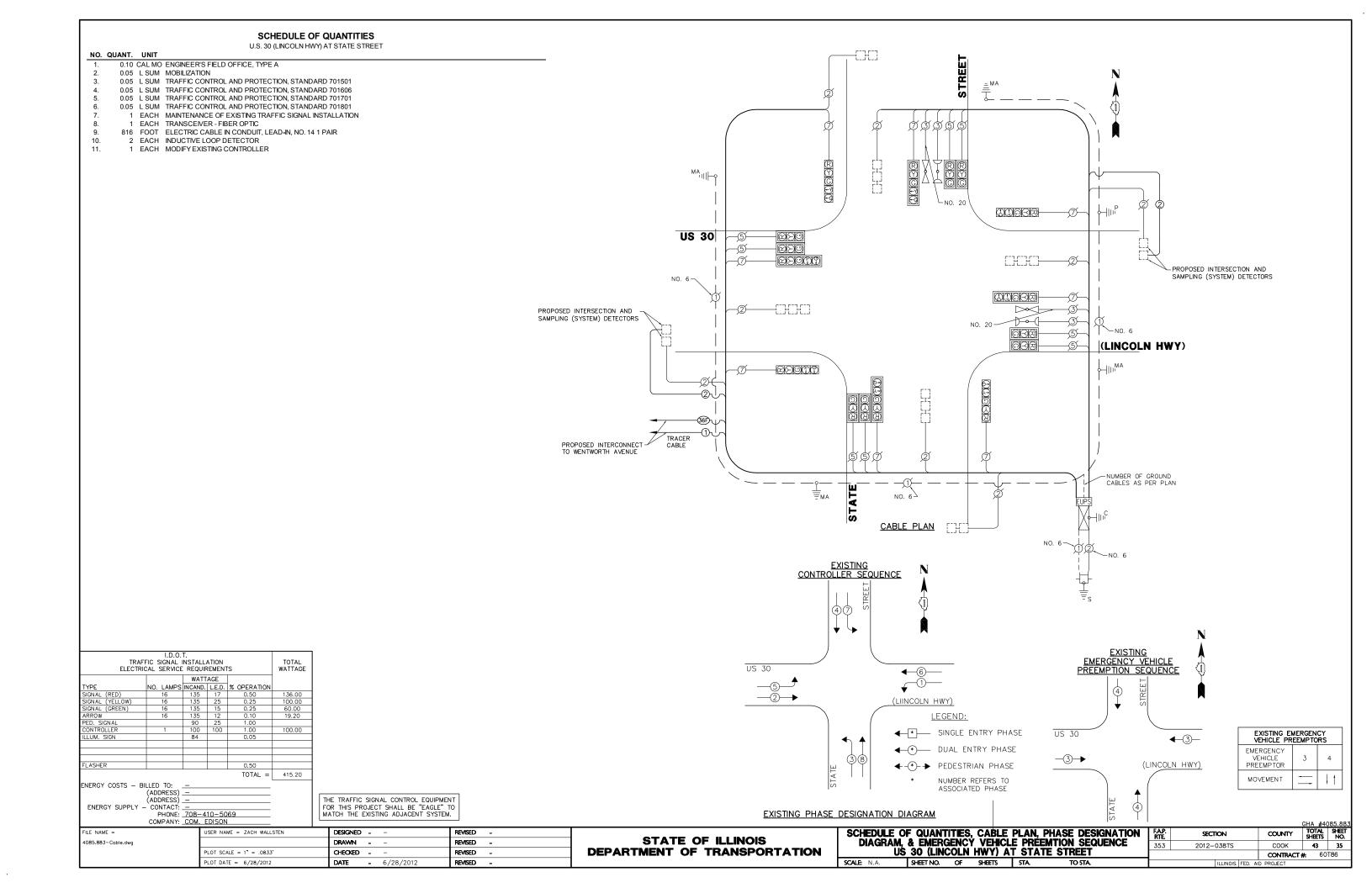
ENERGY SUPPLY - CONTACT: -PHONE: 708-410-5069 COMPANY: COM. EDISON FILE NAME = USER NAME = ZACH WALLSTEN DESIGNED - -REVISED -4085.883-Cable.dwg DRAWN -REVISED REVISED PLOT DATE = 6/28/2012 DATE 6/28/2012 REVISED

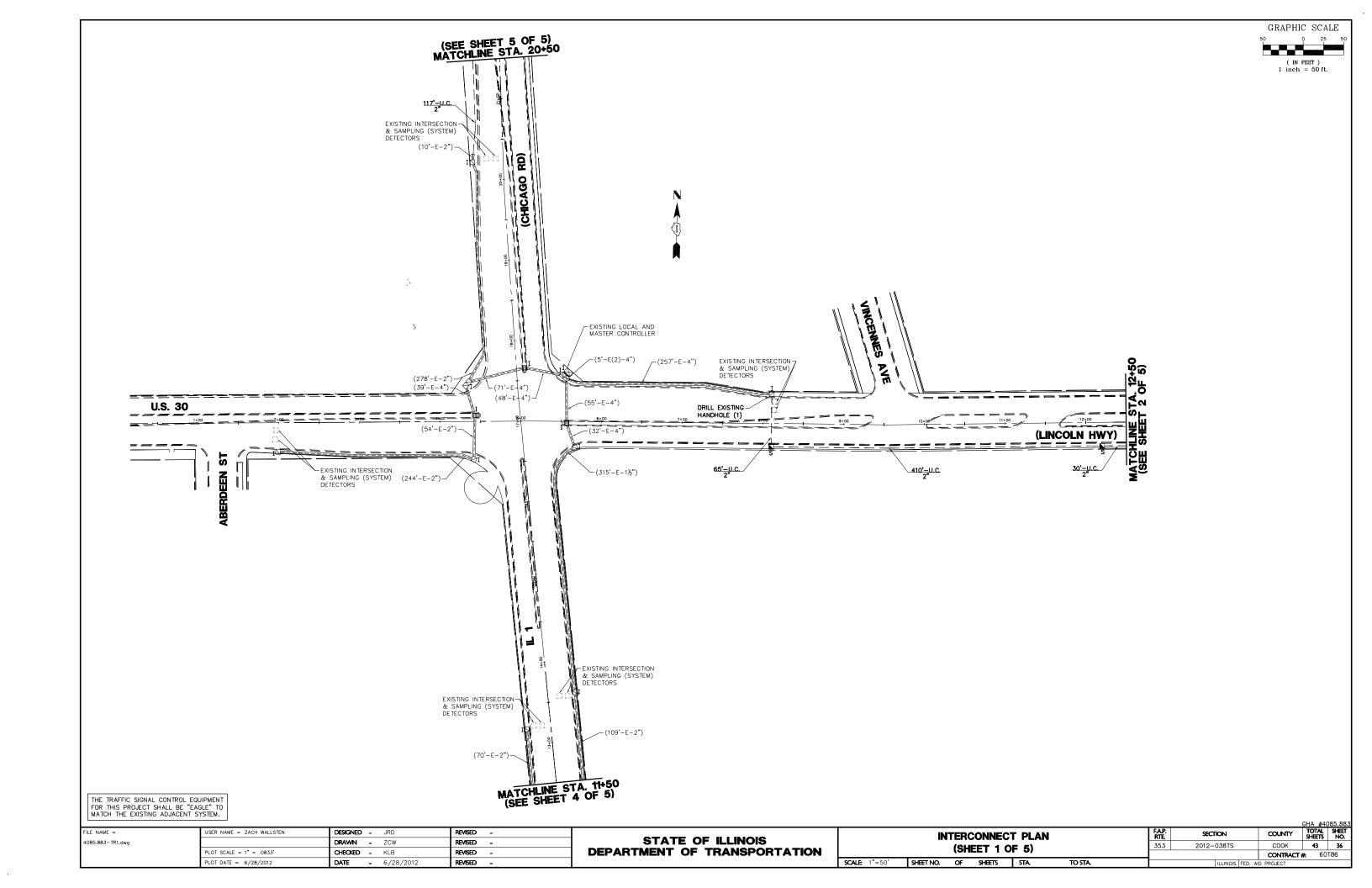
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

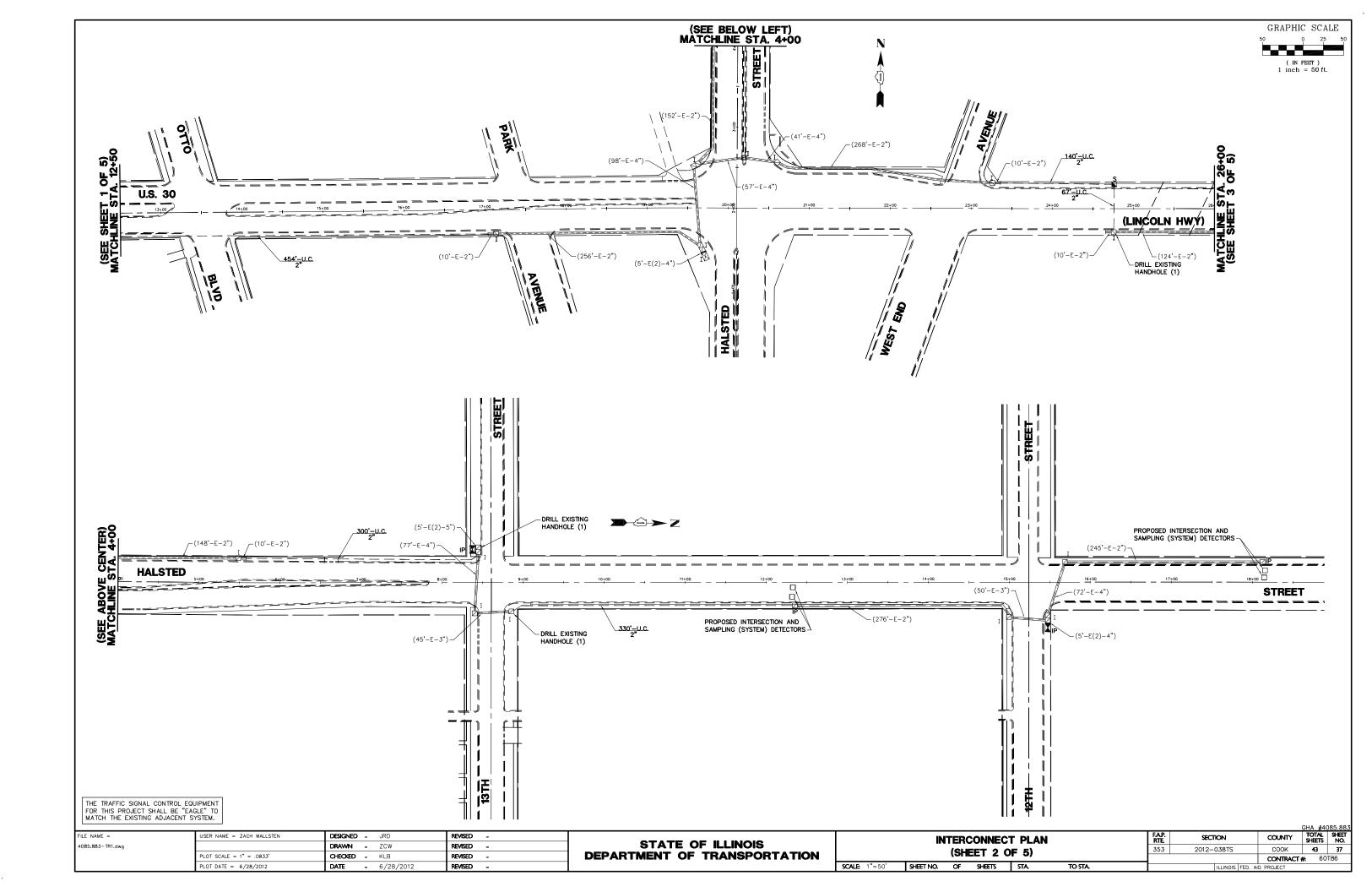
SCALE: N.A.

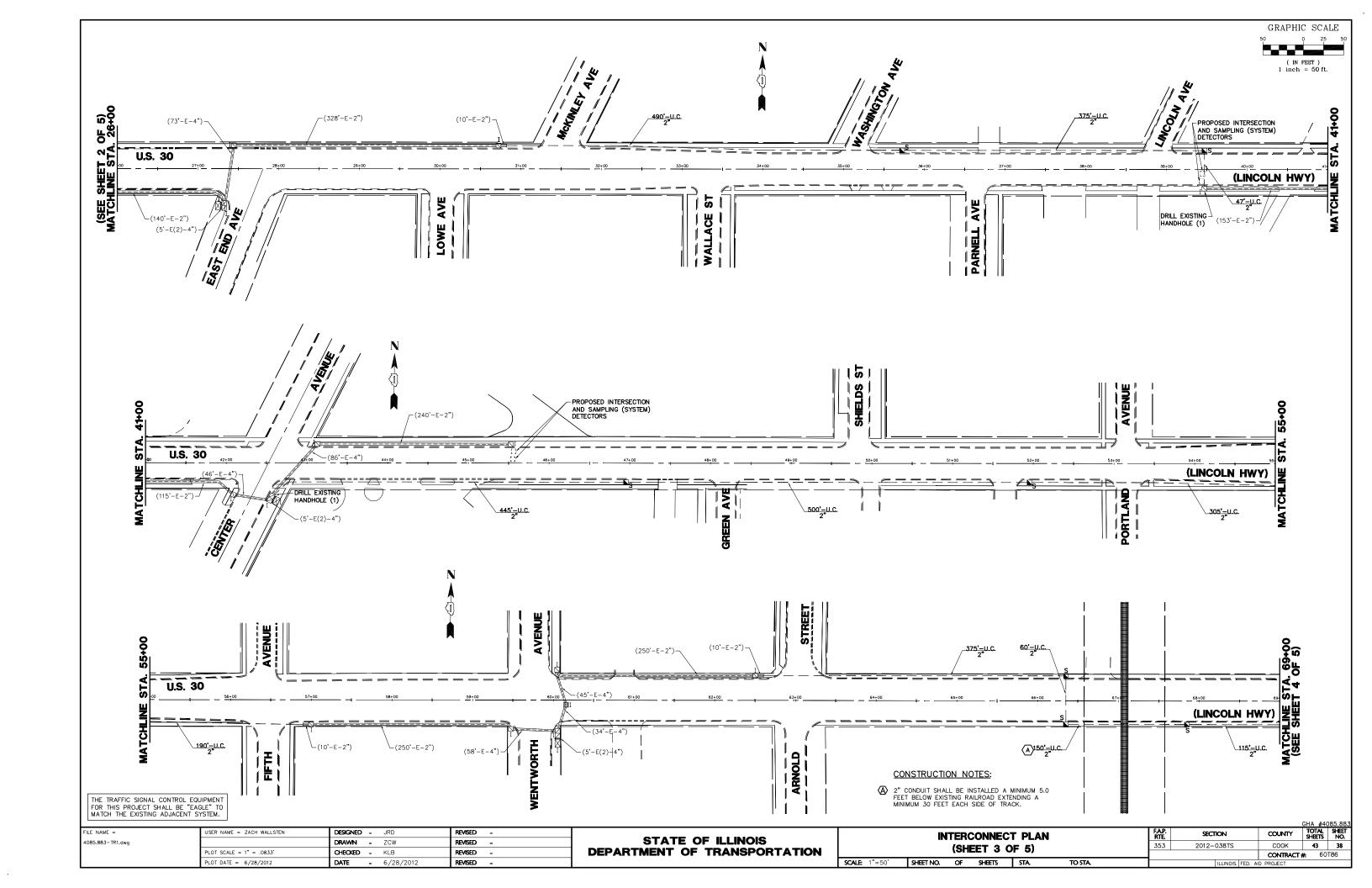
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM US 30 (LINCOLN HWY) AT WENTWORTH AVENUE COOK **43 33** 353 2012-038TS CONTRACT #: 60T86 SHEET NO. OF SHEETS STA.

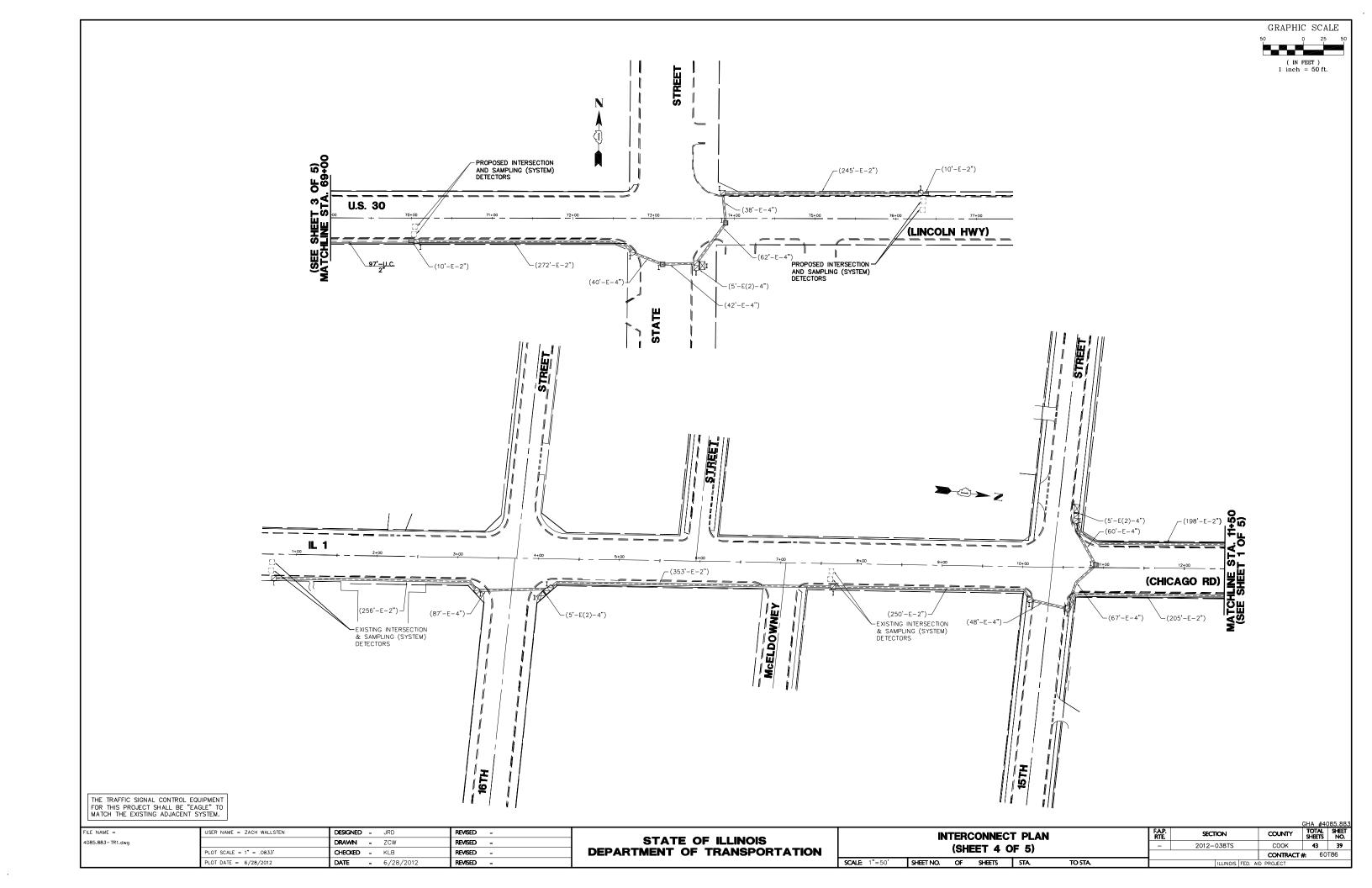


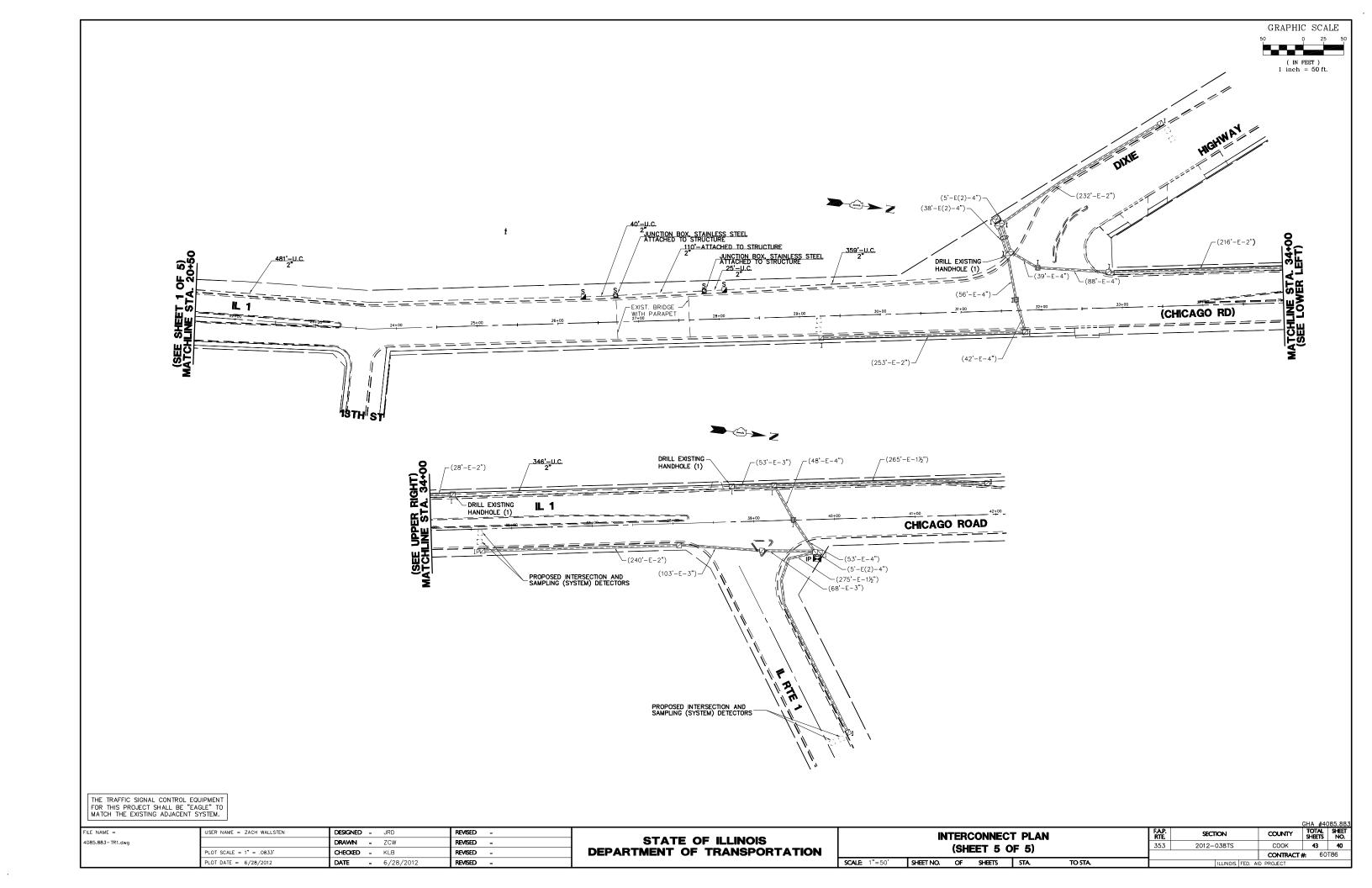




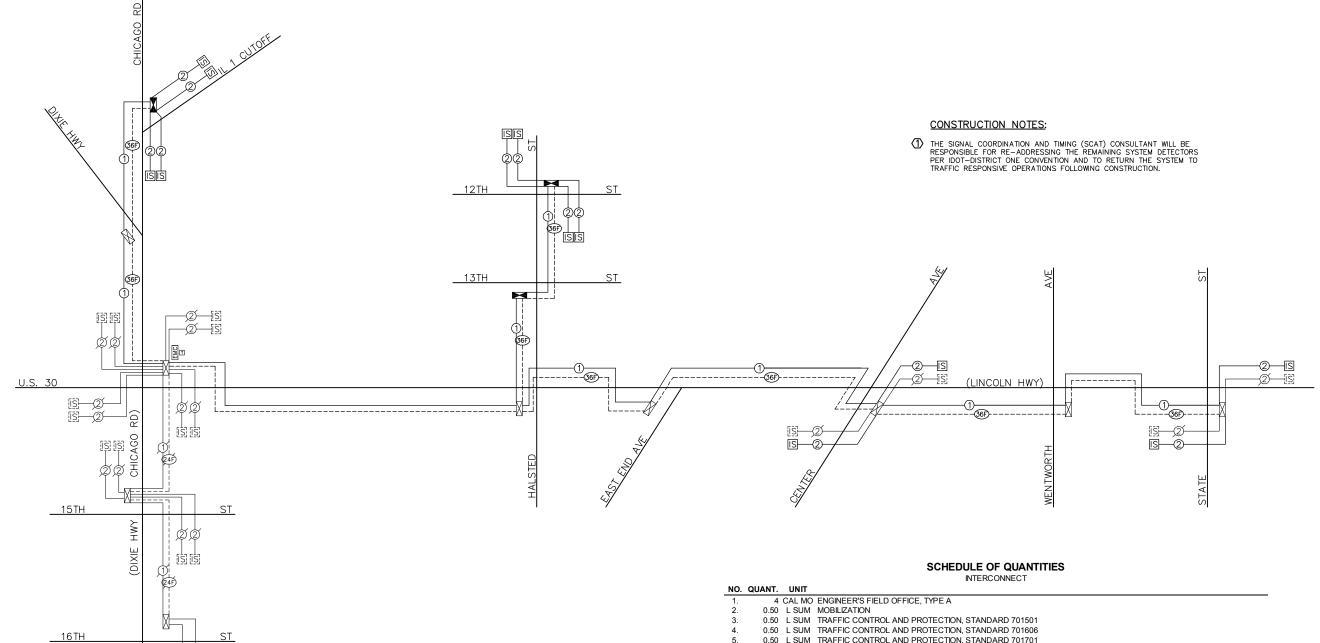












4.	0.50 L SI	IM TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
5.	0.50 L SI	IM TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
6.	0.50 L SI	IM TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
7.	6,180 FO	DT UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
8.	110 FO	DT CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL
9.	2 EA0	H JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"
10.	12 EAG	H HANDHOLE
11.	11,464 FO	DT ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
12.	10 EAG	H DRILL EXISTING HANDHOLE
13.	12,042 FO	DT FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F
14.	154.20 SQ	FT TEMPORARY INFORMATION SIGNING
15.	1 EAG	H OPTIMIZE TRAFFIC SIGNAL SYSTEM
16.	1 L SI	IM RAILROAD PROTECTIVE LIABILITY INSURANCE

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

FILE NAME =	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
4085.883-TR1.dwg		DRAWN - ZCW	REVISED -
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
	PLOT DATE = 6/28/2012	DATE - 6/28/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

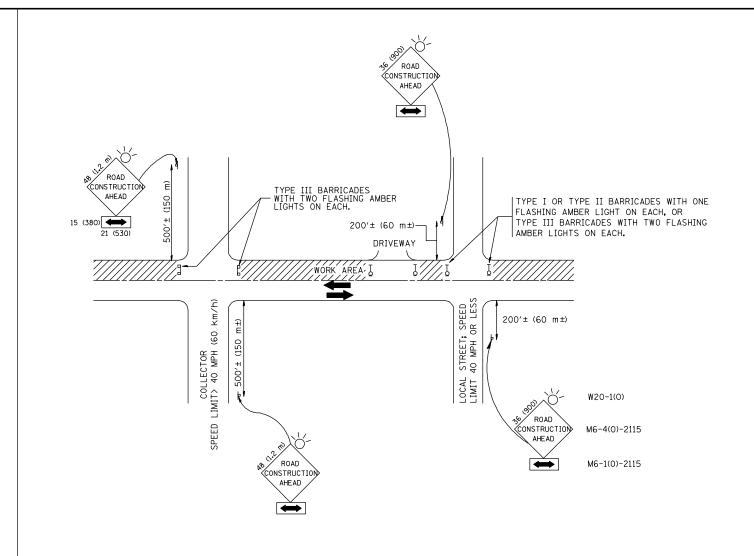
ITERCONNECT SO	HEMATI	C - U.S	. RTE 30	(LINCOLN HWY)	FAP. RTE	SECTION	cc
IL RTE 1 (6	HICAGO	RD) T	O STATE	STREET	353	2012-038TS	
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 GHA
 #4∪85.883

 COUNTY
 TOTAL SHEET NO.

 COOK
 43
 41

 CONTRACT #:
 60⊤86



NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) one **road construction ahead** sign 36 \times 36 (900 \times 900) 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:
- d) one road construction ahead sign 48 \times 48 (1.2 m \times 1.2 m) with a FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

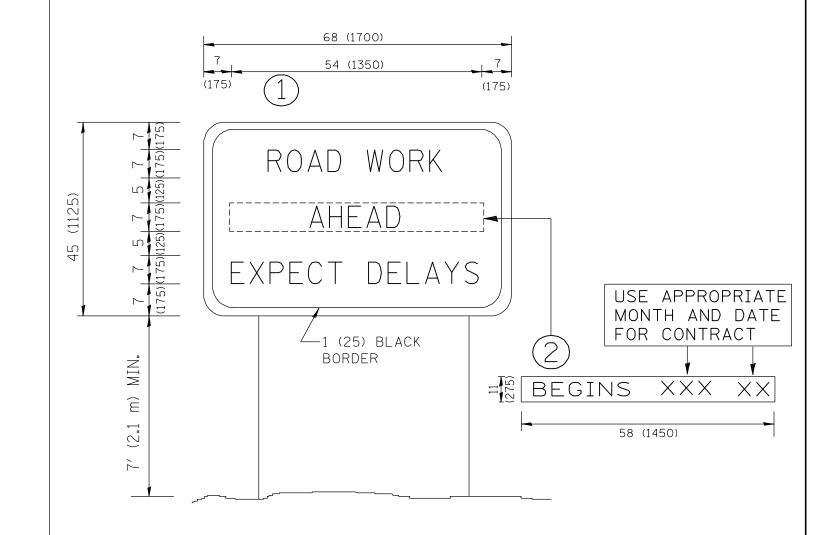
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = USER NAME = ZACH WALLSTEN DESIGNED - LHA **REVISED** - J. OBERLE 10-18-95 4085.883-DT1.dwg DRAWN **REVISED** - A. HOUSEH 03-06-96 PLOT DATE = 6/28/2012 REVISED - T. RAMMACHER 01-06-0 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	TRAF	FIC C	10	NTR	lO	L AND	PROTEC	CTION FOR
	SIDE RO	DADS,	IN	TE	RS	SECTION	IS, AND	DRIVEWAYS
SCALE	NONE	SHEET NO.	. 1	OF	1	SHEETS	STA	TO STA

GHA #4085.883
TOTAL SHEET NO. COUNTY SECTION 353 2012-038TS COOK 43 42 TC-10 CONTRACT #: 60T86



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.

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FILE NAME =		USER NAME = ZACH WALLSTEN	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL F	ROAD		FAP.	SECTION	COUNTY	TOTAL SHEE	Л
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		PLOT SCALE = 1" = .0833"	CHECKED -	REVISED - T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN			TC-22	CONTRACT	#: 60T86	\dashv		
		PLOT DATE = 6/28/2012	DATE -	REVISED - C. JUCIUS 03-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD D		AID PROJECT	-	\dashv