FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY | KANE | 80 | 1 ILLINO'S CONTRACT NO 61E13

01-18-2019 LETTING ITEM 113

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SCHAUMBURG,

E. RAMOS,

CARMEN

ENGINEERING:

FEDERAL AID

 \circ

 \circ

IMPROVEMENTS LOCATED IN THE CITY OF BATAVIA, GENEVA TOWNSHIP, AND BATAVIA TOWNSHIP

TRAFFIC DATA:

CLASS II TRUCK ROUTE DESIGN SPEED = 50 MPH

POSTED SPEED = 45 MPH

BUTTERFIELD RD TO PINE ST: ADT (2014) = 36,100

PINE ST TO FABYAN PKWY: ADT (2014) = 35,000

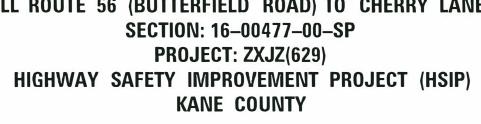
FABYAN PKWY TO CHERRY LN: ADT (2014) = 25,500

OTHER PRINCIPAL ARTERIAL (SRA)

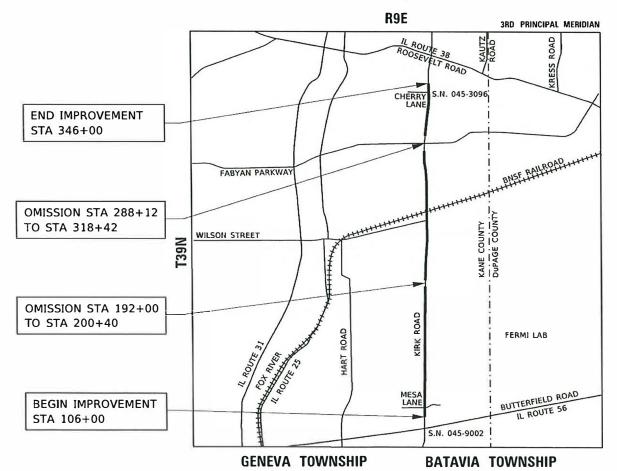
KIRK ROAD:

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP ROUTE 360 (KIRK ROAD) ILL ROUTE 56 (BUTTERFIELD ROAD) TO CHERRY LANE **SECTION: 16-00477-00-SP** PROJECT: ZXJZ(629) HIGHWAY SAFETY IMPROVEMENT PROJECT (HSIP)



C-91-111-18



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PATRICK ENGINEERING INC.

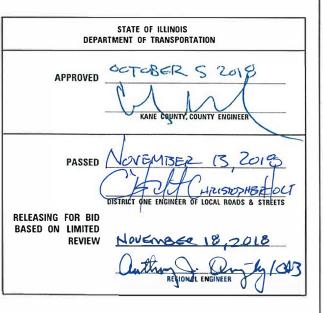
4970 VARSITY DRIVE

GROSS LENGTH = 24,000 FT. = 4.545 MILE NET LENGTH = 20,130 FT. = 3.813 MILE

CONTRACT NO. 61F13

LISLE, IL 60532 patrickengineering.com ENGINEERING

LOCATION OF SECTION INDICATED THUS: - -



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

	IDOT DISTRICT 1 DETAILS
	IDOT DISTRICT T BETALLS
STANDARD NO.	DESCRIPTION
BD-01	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF
BD-01	CURB & EDGE OF SHOULDER >= 15' (4.5M)
BD - 55	RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY (MODIFIED)
BE - 235	COMBINATION LIGHTING CONTROLLER DETAIL
BE-240	COMBINATION LIGHTING TRAFFIC SIGNAL SCHEMATIC
BE-305	LIGHT POLE FOUNDATION, METAL
BF - 702	MISCELLANEOUS ELECTRICAL DETAILS, SHEET A - (CABLE SPLICE,
BE 10E	POLE WIRING, TRENCH DETAIL)
TC - 10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,
10 10	INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKINGS
10-11	(SNOW-PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN
	OPEN TO TRAFFIC)
TC-16	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

	IDOT HIGHWAY STANDARDS
STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001 - 11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424026-03	ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24' FROM PAVEMENT EDGE
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
780001-05	TYPICAL PAVEMENT MARKINGS
830011-03	LIGHT POLE STEEL MAST ARM
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS & PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUND AND BOND
877001-07	STEEL MAST ARM ASSEMBLY AND POLE 16' THRU 55'
877006-06	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
877011-10	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THRU 55'
877012-07	STEEL COMB. MAST ARM ASSEMBLY AND POLE 56' THRU 75'
878001-10	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

PATRICK ENGINEERING INC.
4970 VARSITY DRIVE
LISLE, IL 60532

PLOT SCALE = 100.0000 1/1 DESIGNED YMR REVISED DRAWN YMR REVISED PLOT SCALE = 100.0000 / in. CHECKED -JJC REVISED PLOT DATE = 11/14/2018 DATE 11/14/2018 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ì	IN	DEX OF S	HEETS	AND HIGH	HWAY :	STANDARDS	F.A.P. RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
		KIRK ROAD							360 16-00477-00-SP			80	2
				VIIIX IIOAL							CONTRACT	NO. 6	1F13
	SCALE: 1" = 50'	SHEET 2	OF	SHEETS	STA.	TO STA.	l.		ILLINOIS	FED. A	ID PROJECT		

- 1. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR THE LOCATION OF THE UTILITIES, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 OR 811. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES, CONDUITS, AND ROADWAY LIGHTING SYSTEM CABLES REGARDLESS OF MAINTENANCE RESPONSIBILITY OF THE SYSTEM NEEDING TO BE LOCATED. FOR FIELD LOCATIONS, BURIED ELECTRIC LINES, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE CITY OF BATAVIA, THE CITY OF GENEVA, AND KANE COUNTY DIVISION OF TRANSPORTATION (KDOT).
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON KDOT PROPERTY WITHOUT WRITTEN PERMISSION FROM KDOT.
- 4. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED EACH LOCATION.
- 5. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATIONS FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.
- 6. THE CONTRACTOR SHALL TAKE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN, INCLUDING BUT NOT LIMITED TO, TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. MAJOR ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEM DAMAGE TO THE REMAINING TREE STRUCTURE. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR.
- 7. THIS CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION. ANY COST ASSOCIATED WITH OBTAINING THESE PERMITS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT UNIT PRICE FOR THE ITEMS BEING INSTALLED.
- 8. POLLUTION CONTROL: THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR. WATER, AND NOISE POLLUTION.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.
- 10. ALL REFERENCES IN THE HIGHWAY STANDARDS AND THE STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR JPCP PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- 11. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.
- 12. ALL SIGN PANELS, MOUNTED ON SIGNAL POLES OR MAST ARMS, PROPOSED OR RELOCATED, AND OTHER SIGN PANELS SPECIFIED BY THE ENGINEER. SHALL INCLUDE SUPPORTING CHANNELS INSTALLED ON THE BACK SIDE OF THE SIGN IN ACCORDANCE WITH HIGHWAY STANDARD 720001.
- 13. THE CONTRACTOR SHALL INSPECT ALL SIGNAL CABINETS PRIOR TO WORK TO ADEQUATELY DETERMINE THE REQUIRED MODIFICATIONS THAT WILL BE NEEDED AT EACH INTERSECTION, INCLUDING ASCERTAINING BOTH EXISTING SIGNAL CABINET INFORMATION/DRAWINGS AND PROPOSED SIGNAL PHASING INFORMATION TO BE SHARED WITH ALL VENDORS AND CONTRACTORS PERFOMING SIGNAL CONTROLLER AND CABINET MODIFICATIONS.

- 14. DURING CONSTRUCTION OPERATIONS, WHENEVER LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTER, DRAINAGE STRUCTURES, DITCHES, ETC., SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIAL CREATED AS A RESULT THERE OF.
- 15. TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT RAY JOHNSON, TRAFFIC/UTILITY COORDINATOR FOR KDOT, AT 630-406-7356.
- 14. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- 15. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE BNSF RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE BNSF RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
- 16. THE CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITIES AND OBSERVE LOCAL NOISE ORDINANCES FOR ALL CONSTRUCTION ACTIVITIES.
- 17. THE CONTRACTOR SHALL NOTE THAT PROJECTS WITH CONTRACT NUMBERS 61E75 AND 61E97; PROJECTS WITH SECTION NUMBERS 18-00500-00-RS, 18-00502-00-BT, AND 12-00192-04-BR; AND PROJECT WITH PROJECT NUMBER PLTA-2018-0168 ARE DIRECTLY ADJACENT AND CONNECT TO THIS CONTRACT AND WILL BE ACTIVE DURING THIS PROJECT. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE ADJACENT CONTRACTS.
- 18. ALL MAST ARM MOUNTED SIGNAL HEADS ARE TO BE ATTACHED 2'-0" FROM THE END OF THE MAST ARM UNLESS OTHERWISE NOTED.
- 19. NEW BACKPLATES FOR EXISTING SIGNAL HEADS SHALL CLOSELY CONFORM TO THE SIGNAL HEAD SUCH THAT THERE ARE NO GAPS BETWEEN THE BACKPLATE AND THE SIGNAL HEAD. IF A TRAFFIC SIGNAL HAS NEW BACKPLATES, AS WELL AS EXISTING TO REMAIN BACKPLATES, THE NEW BACKPLATES SHALL CLOSELY MATCH THE SAME STYLE.
- 20. ALL NEW SIGNAL HEADS SHALL MATCH THE COLOR OF THE EXISTING REMAINING TRAFFIC SIGNAL HEADS. IF A TRAFFIC SIGNAL IS TO GET ALL NEW SIGNAL HEADS, THE COLOR OF THE SIGNAL HEADS SHOULD BE BLACK.
- 21. ALL PEDESTRIAN PUSH BUTTONS AND ASSOCIATED SIGN ASSEMBLIES SHALL BE PARALLEL TO THE CROSSWALK AND BE A MAXIMUM OF 10 INCHES FROM THE EDGE OF THE SIDEWALK PATH.
- 22. THE RED SECTIONS OF THE SIGNAL HEADS SHARING THE SAME MAST ARM SHALL BE LEVEL WITH ONE ANOTHER AND MAINTAIN A 17' MINIMUM CLEARANCE FROM THE HIGHEST POINT OF THE ROADWAY.
- 23. THE PROPOSED MAST ARM MOUNTED TRAFFIC SIGNAL HEADS SHALL BE MOUNTED DIRECTLY OVER THE CENTER OF THEIR RESPECTIVE LANES, UNLESS OTHERWISE DIRECTED
- 24. THE USE OF STRAW BALES SHALL BE PROHIBITED FOR INLET PIPE AND PROTECTION.

S.P.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	20200100	EARTH EXCAVATION	CUYD	16
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	62
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2
***************************************	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2
	25200110	SODDING, SALT TOLERANT	SQYD	68
*	28000500	INLET AND PIPE PROTECTION	EACH	53
	42001300	PROTECTIVE COAT	SQYD	263
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQYD	64
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,215
	42400800	DETECTABLE WARNINGS	SQFT	142
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQYD	86
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	178
	44000600	SIDEWALK REMOVAL	SQ FT	846
	60255500	MANHOLES TO BE ADJUSTED	EACH	1
	60260100	INLETS TO BE ADJUSTED	EACH	3
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	62
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	204
 	66900200	NON-SPECIAL WASTE DISPOSAL	CUYD	5
	66900530	SOIL DISPOSAL ANALYSIS	EACH	1
	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1
	66901002	ON-SITE MONITORING OF REGULATED SUBSTANCES	CAL DAYS	2
	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1
	67100100	MOBILIZATION	LSUM	1
	70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	LSUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1
	70102640		LSUM	1
		TRAFFIC CONTROL AND PROTECTION, STANDARD 701801		
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	9,950
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3,320
	72000100	SIGN PANEL - TYPE 1	SQ FT	61
	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,446
	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	77,350
	78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	230
 	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	2,230

INDICATES SPECIALTY ITEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	S.P.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
#		78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	710
L	×	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	212
L	*	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	235
F	*	81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	938
F	*	81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	2,095
F	*	83060720	LIGHT POLE, GALVANIZED STEEL, 60 FT. M.H., 8 FT. MAST ARM	EACH	2
	*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3
	*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,982
	*				
		87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	823.0
	*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	7,370.0
E	*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,935
-	*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	1,217
_	*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,217
F	*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	8
þ	*	87700140	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1
	*	87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
	*	87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
	. *	87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	2
F	×	87702726	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 26 FT.	EACH	1
	*	87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1
F	*	87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	2
	*	87703030	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	2
L	*	87704554	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 54 FT. AND 46 FT.	EACH	1
F	*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	28
	*	87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
	*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	119
	*	87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42
L		87900100	DRILL EXISTING FOUNDATION	EACH	3
L	*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	33
L	*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	19
_	*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
	*	88200100	TRAFFIC SIGNAL BACKPLATE	EACH	57
	*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	74
	×	88800100	PEDESTRIAN PUSH-BUTTON	EACH	2
L					

USER NAME = yrodriguez	DESIGNED	-	YMR	REVISED	-
	DRAWN	-	YMR	REVISED	-
PLOT SCALE = 100.0000 ' / in.	CHECKED	-	JJC	REVISED	-
PLOT DATE = 11/14/2018	DATE	-	11/14/2018	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMM	ARY	OF QU	ANTITIE	S	F.A.P. RTE.	SECTION		COUNTY TOTA		SHEET NO.
	VIE	RK ROAL	1		360 16-00477-00-SP KAN		KANE	80	5	
	VII	IK NUAL	,					CONTRACT	NO. 6	1F13
SHEET SOQ-02 OF	3	SHEETS	STA.	TO STA.		ILLINOIS	FED. AID	PROJECT		

k.int:HIWY SS4/Documents/KDOT/21777,041 KirkHSIP/12 Design/12.3 CAD/SHEETS/Phase

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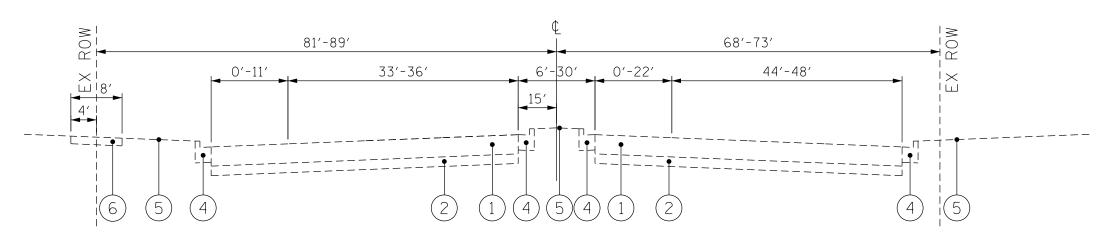
	S.P.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY
	*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
-	*	89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
	*	89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	6
	*	89501420	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, COMPLETE	EACH	8
	#	89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	3
ŀ		89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	10,380
	*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3
ļ		89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	12
	*	X0320028	RELOCATE EXISTING CCTV CAMERAS	LSUM	2
þ	*	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	LSUM	1
-	*	X0322765	RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1
ļ	*	X0325479	RELOCATE EXISTING ITS EQUIPMENT TYPE A	EACH	1
-	*	X0326885	VIDEO DETECTION SYSTEM -	EACH	1
#	*	X0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	18,186
#	*	X0327036	BIKE PATH REMOVAL	SQ YD	46
#	*	X0327693	HIGH FRICTION SURFACE TREATMENT	SQ YD	3,100
	*	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQFT	15,520
.	*	X1400102	OUTDOOR RATED NETWORK CABLE	FOOT .	352
	*	X1400145	RADAR SPEED SIGN	EACH	7
#	*	X4510050	HIGH FRICTION SURFACE TREATMENT CRACK FILLING	FOOT	2,500
#	* .	X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	1,799
#	*	X7830074	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	34,640
#	*	X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 9"	FOOT	90
	*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	Lsym	1
-	*	X8360370	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 10" X 10'	EACH	2
	*	X8760055	PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	6
-	*	X8211125	LUMINAIRE, LED, HORIZONTAL MOUNT, SPECIAL	EACH	2
F	*	X8211190	LUMINAIRE, LED, HORIZONTAL MOUNT, 190 WATT (SPECIAL)	EACH	6
,	*	Z0030850	TEMPORARY INFORMATION SIGNING	SQFT	163
4	*	Z0076600 Z0048665	TRANUEES RAILROAD PROTECTIVE LIABILITY INSURANCE	HOUR LSUM	500 1
Δ	*	Z6076664	TRAINEES TRAINING PROGRAM GRANUATE	Hour	500

△0042

COUNTY TOTAL SHEET NO.

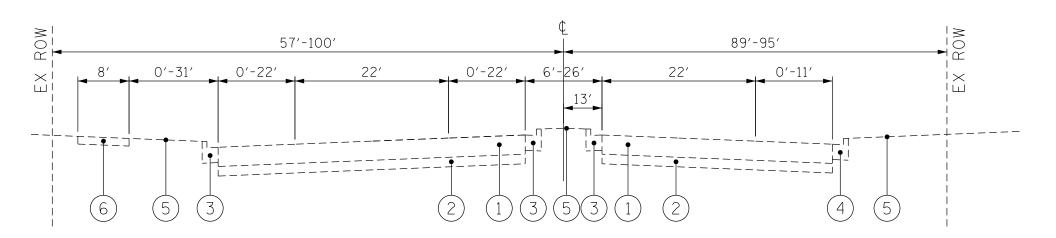
KANE 80 6 SECTION 16-00477-00-SP DESIGNED - YMR
DRAWN - YMR REVISED -SUMMARY OF QUANTITIES STATE OF ILLINOIS REVISED -KIRK ROAD CONTRACT NO. 61F13 REVISED -**DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 100,0000 ' / in. CHECKED - JJC SHEET SOQ-03 OF 3 SHEETS STA. PLOT DATE = 11/14/2018 DATE - 11/14/2018 REVISED -

MODEL: Default



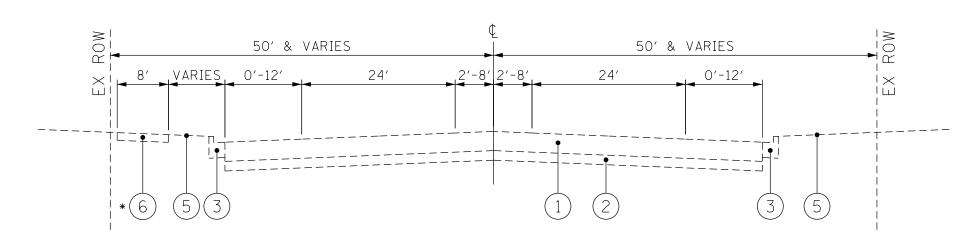
EXISTING TYPICAL SECTION

STA. 106+00.00 TO STA. 115+00.00



EXISTING TYPICAL SECTION

STA. 115+00.00 TO 127+72.28



EXISTING TYPICAL SECTION

STA. 127+72.28 TO STA. 192+00.00 STA. 200+40.00 TO STA. 288+12.00 STA. 318+42.34 TO STA. 346+00.00 *MULTI-USE PATH ENDS STA. 320+00.00

LEGEND:

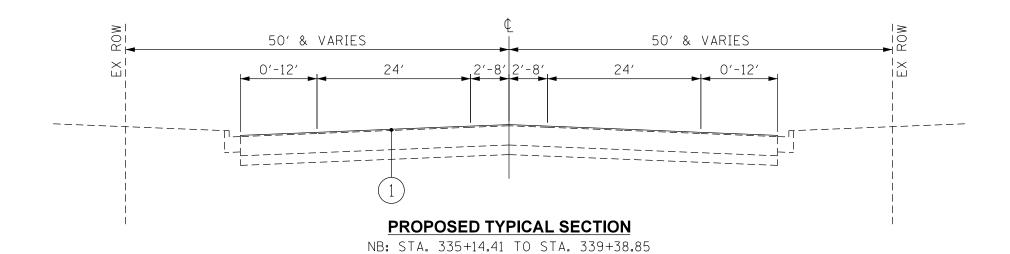
- 1) HMA PAVEMENT STRUCTURE
- (2) GRANULAR SUB-BASE MATERIAL
- (3) COMB CONC CURB & GUTTER, TYPE B-6.12
- 4) COMB CONC CURB & GUTTER, TYPE B-6.24
- 5) SODDING & TOPSOIL
- 6) HMA MULTI-USE PATH

Μď	PATRICK ENGINEERING INC.	Γ
NAME:	4970 VARSITY DRIVE	Г
ž	LISLE, IL 60532	Г
H	PATRICK patrickengineering.com	H
ш	ENGINEERING	1

IC.	USER NAME = yrodriguez	DESIGNED -	YMR	REVISED	-
		DRAWN -	YMR	REVISED	-
	PLOT SCALE = 2000.0000 ' / in.	CHECKED -	JJC	REVISED	-
	PLOT DATE = 11/14/2018	DATE -	SDATE	REVISED	_

STATE OF	FILLINOIS
DEPARTMENT OF	TRANSPORTATION

	EXISTING TYPICAL	F.A.P. SECTION		COUNTY	TOTAL SHEETS			
	KIRK ROA	360 16-00477-00-SP		KANE	80	7		
	KIIIK IIOA					CONTRACT	NO. 6	1F13
SCALE: NTS	SHEET TYP-01 OF 2 SHEETS		ILLINOIS FED. A	ID PROJECT				



SB: STA. 340+54.15 TO STA. 344+79.24

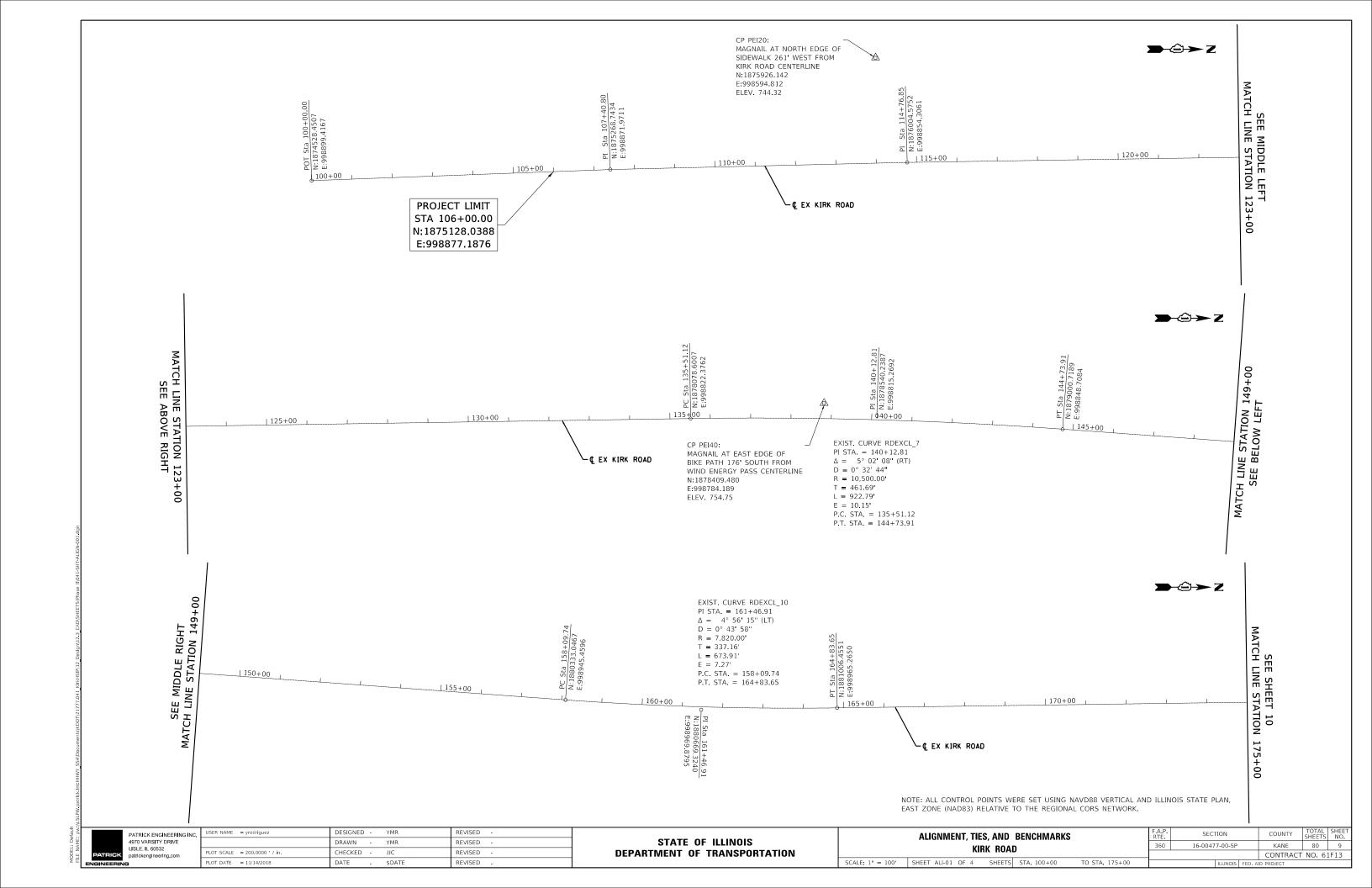
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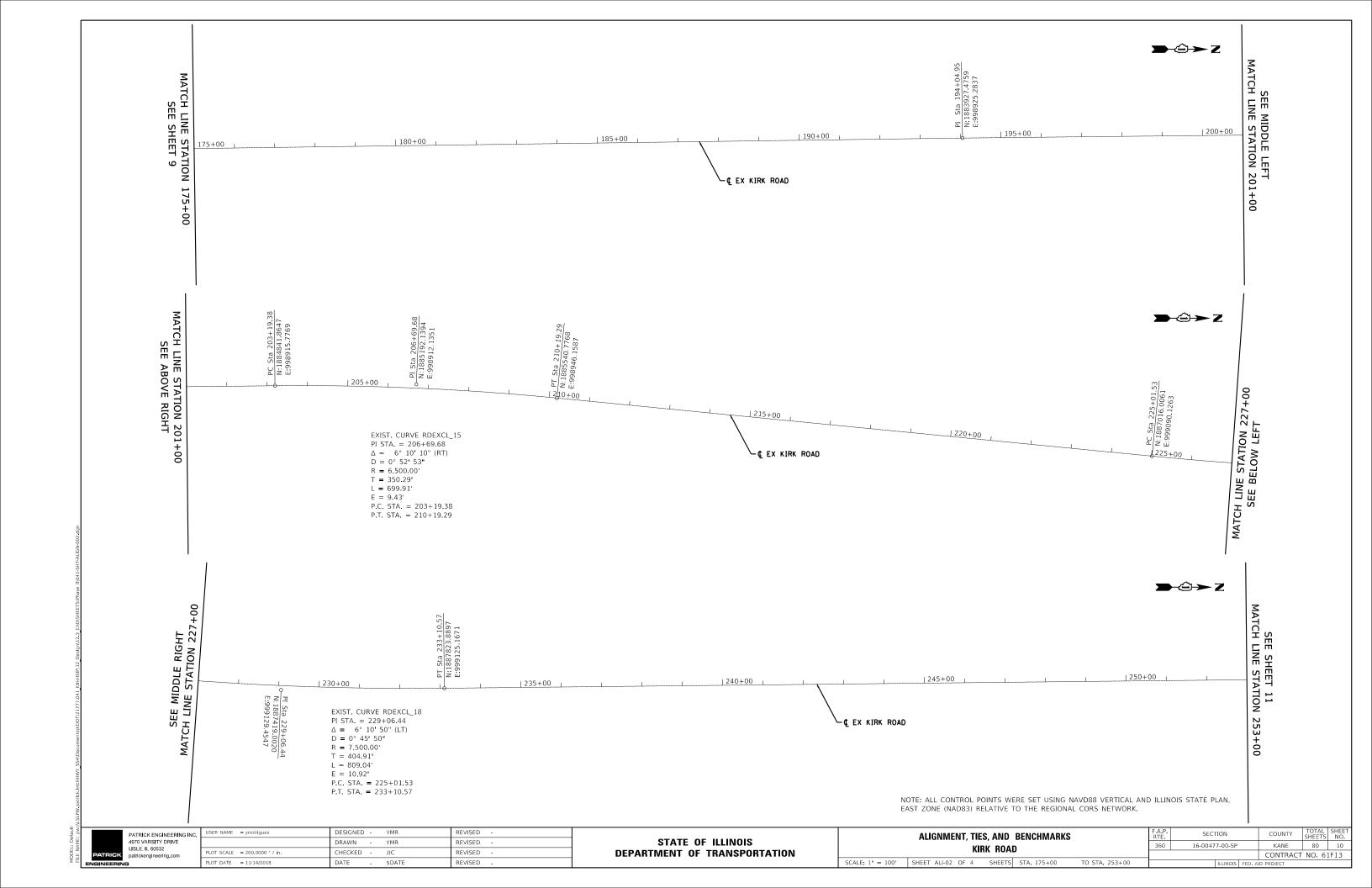
(1) HIGH FRICTION SURFACE TREATMENT

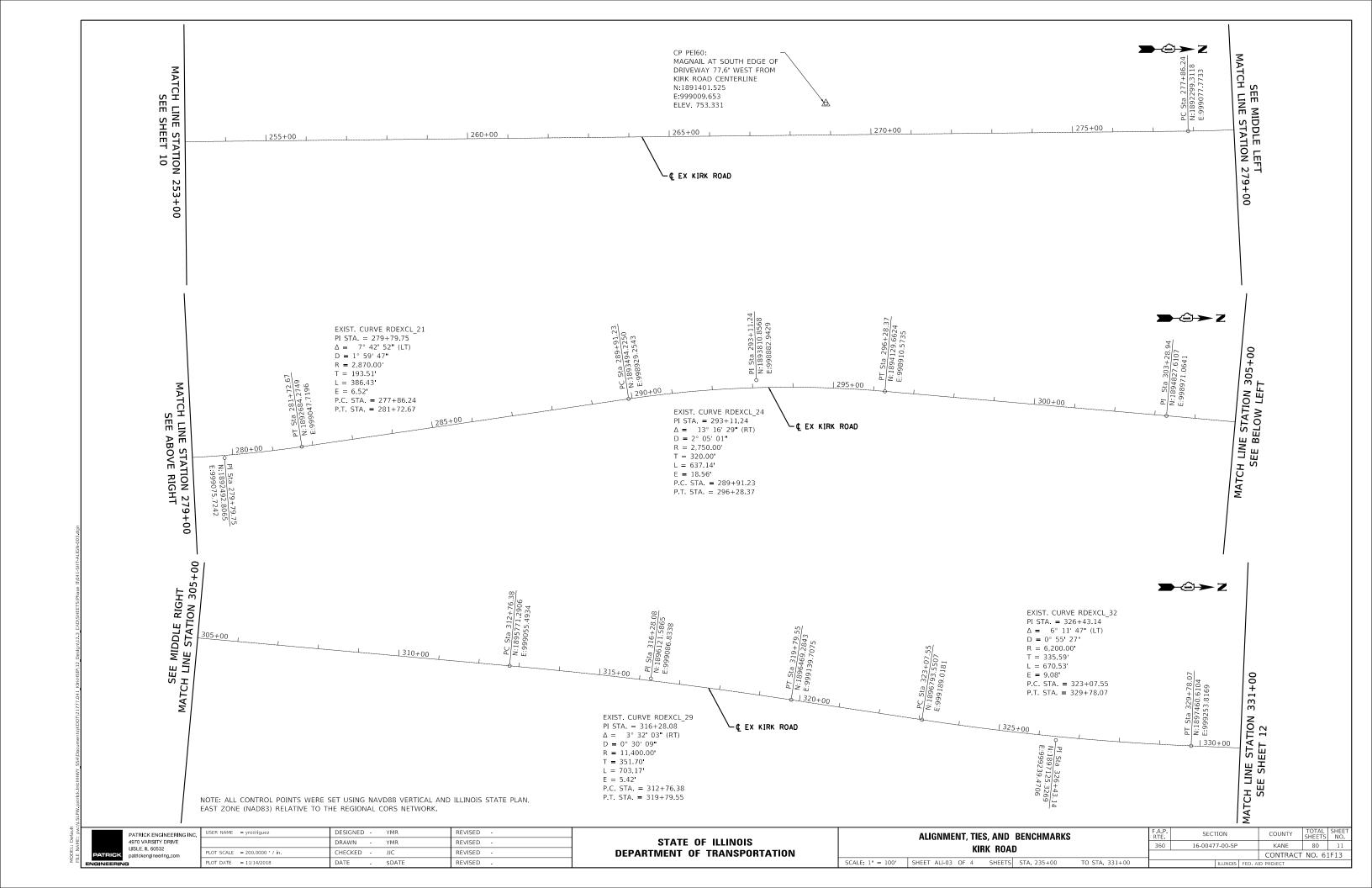
CONTRACT NO. 61F13

E. pw.	PATRICK ENGINEERING INC.	USER NAME = yrodriguez	DESIGNED -	YMR	REVISED -	OTATE OF HAINOID		PROPOSED TYPICAL SECTIONS		F.A.P. RTE	SECTION
ΑĀ	4970 VARSITY DRIVE LISLE, IL 60532		DRAWN -	YMR	REVISED -	STATE OF ILLINOIS	KIRK ROAD				16-00477-00-SP
Ę.	PATRICK patrickengineering.com	PLOT SCALE = 2000.0000 / in.	CHECKED -	JJC	REVISED -	DEPARTMENT OF TRANSPORTATION	KINK NOAD		·		
Ē	ENGINEERING	PLOT DATE = 11/14/2018	DATE -	\$DATE	REVISED -		SCALE: NTS	SHEET TYP-02 OF 2 SHEETS STA. 335+14.41	TO STA. 344+79.24		ILLINOIS FEE

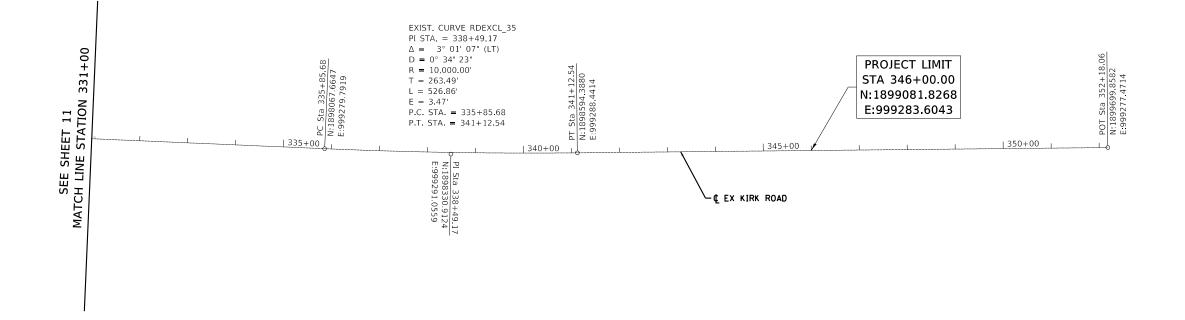
FILE NAME: pw:\\LSLPW.patrick.int:HHWY_SS4\Documents\KDOT\21777.











BENCHMARKS:

- IL-KANE-25-39-8: THE STATION IS LOCATED NORTHWEST OF THE INTERSECTION
 OF THE ILLINOIS PRAIRIE PATH WITH KIRK ROAD AND 229.0 FT SOUTH OF A
 GUARDRAIL ALONG THE WEST SIDE OF KIRK ROAD. THE MONUMENT IS A STEEL
 ROD WITH A LID AT ROAD SURFACE GRADE AND IS FERROMAGNETIC.
- 0183 2006: THE STATION IS LOCATED ALONG THE NORTH SIDE OF PINE STREET, WEST OF THE INTERSECTION OF PINE STREET AND KIRK ROAD. THE MONUMENT IS A 3.5 INCH BRASS DISK ON THE EAST SIDE OF THE CONCRETE STREET LIGHT BASE.
- 3. 0182 2006: THE STATION IS LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF WILSON STREET AND KIRK ROAD. THE MONUMENT IS A 2.5 INCH BRASS DISK ON THE WEST SIDE OF A CONCRETE TRAFFIC SIGNAL BASE.
- 4. 0181 2006: THE STATION IS LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF KIRK ROAD AND FABYAN PARKWAY. THE MONUMENT IS A 3.5 INCH BRASS DISK ON THE SOUTHEAST CORNER OF A CONCRETE TRAFFIC SIGNAL

NOTE: ALL CONTROL POINTS WERE SET USING NAVD88 VERTICAL AND ILLINOIS STATE PLANE, EAST ZONE (NAD83) RELATIVE TO THE REGIONAL CORS NETWORK.

PATRICK ENGINEERI
4970 VARSITY DRIVE
ISLE, IL 60532
PATRICIK patrickengineering.com

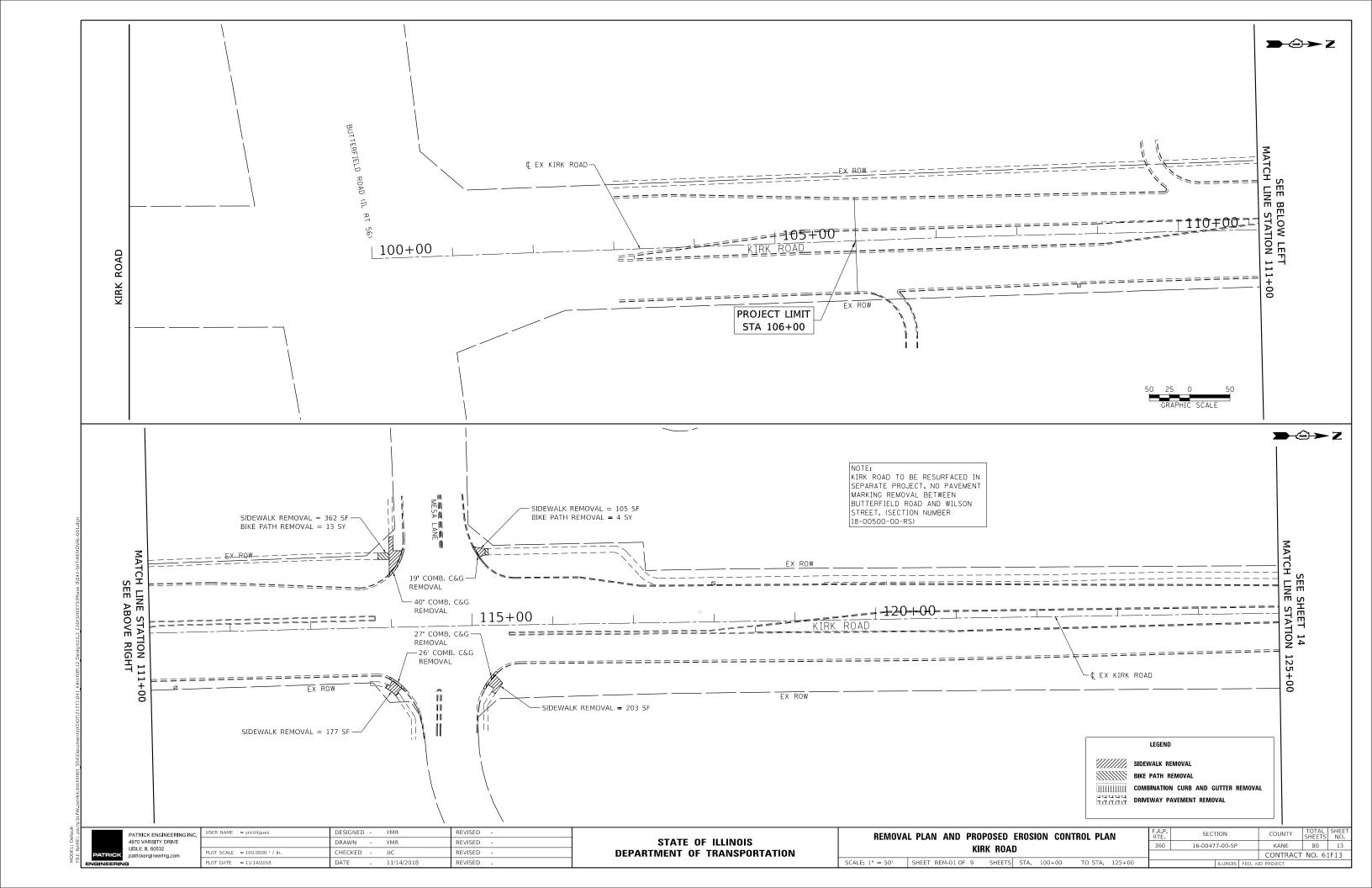
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

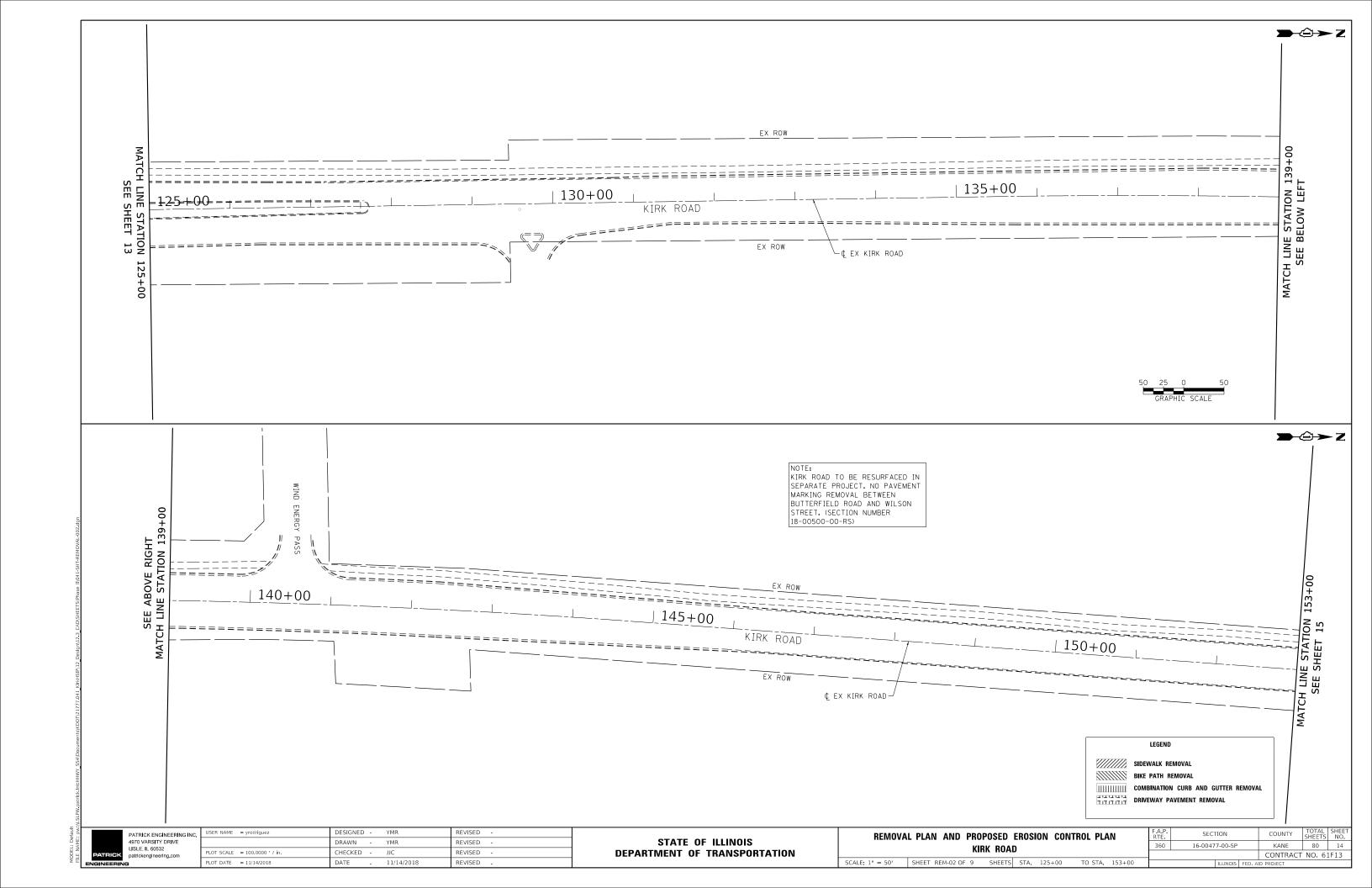
ALIGNMENT, TIES, AND BENCHMARKS

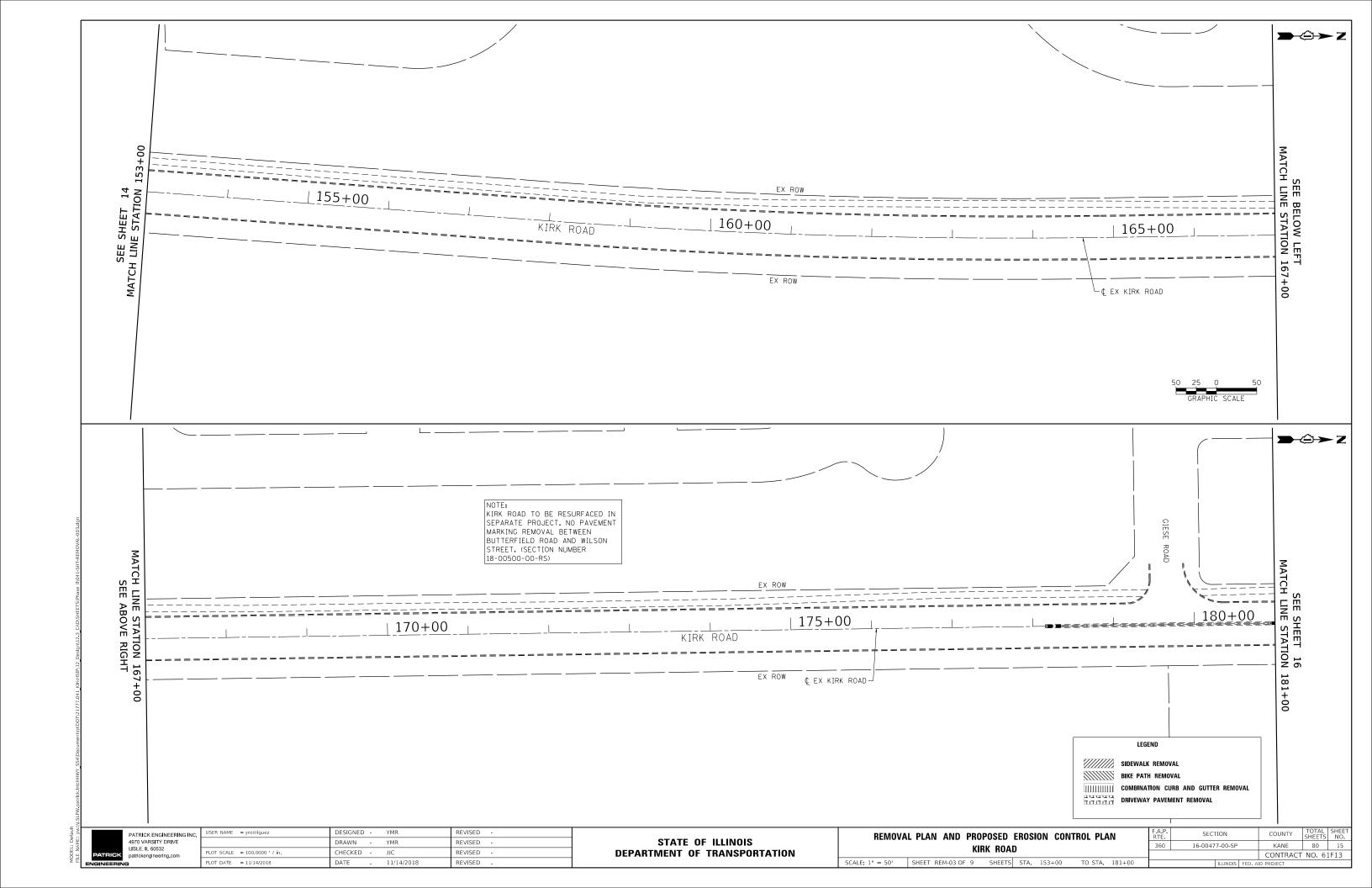
KIRK ROAD

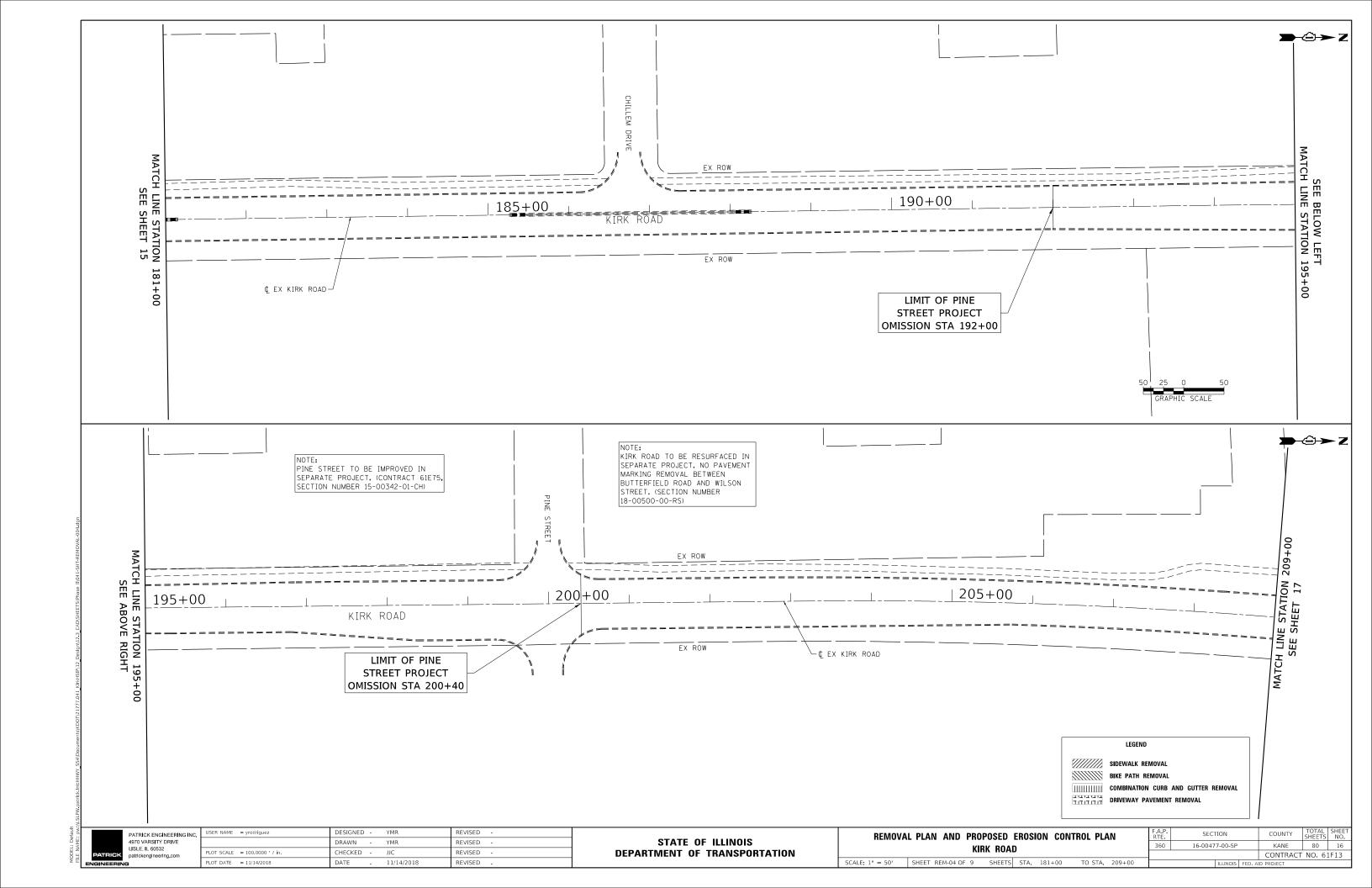
SCALE: 1" = 100' SHEET ALI-04 OF 4 SHEETS STA. 331+00 TO STA. 352+18.06

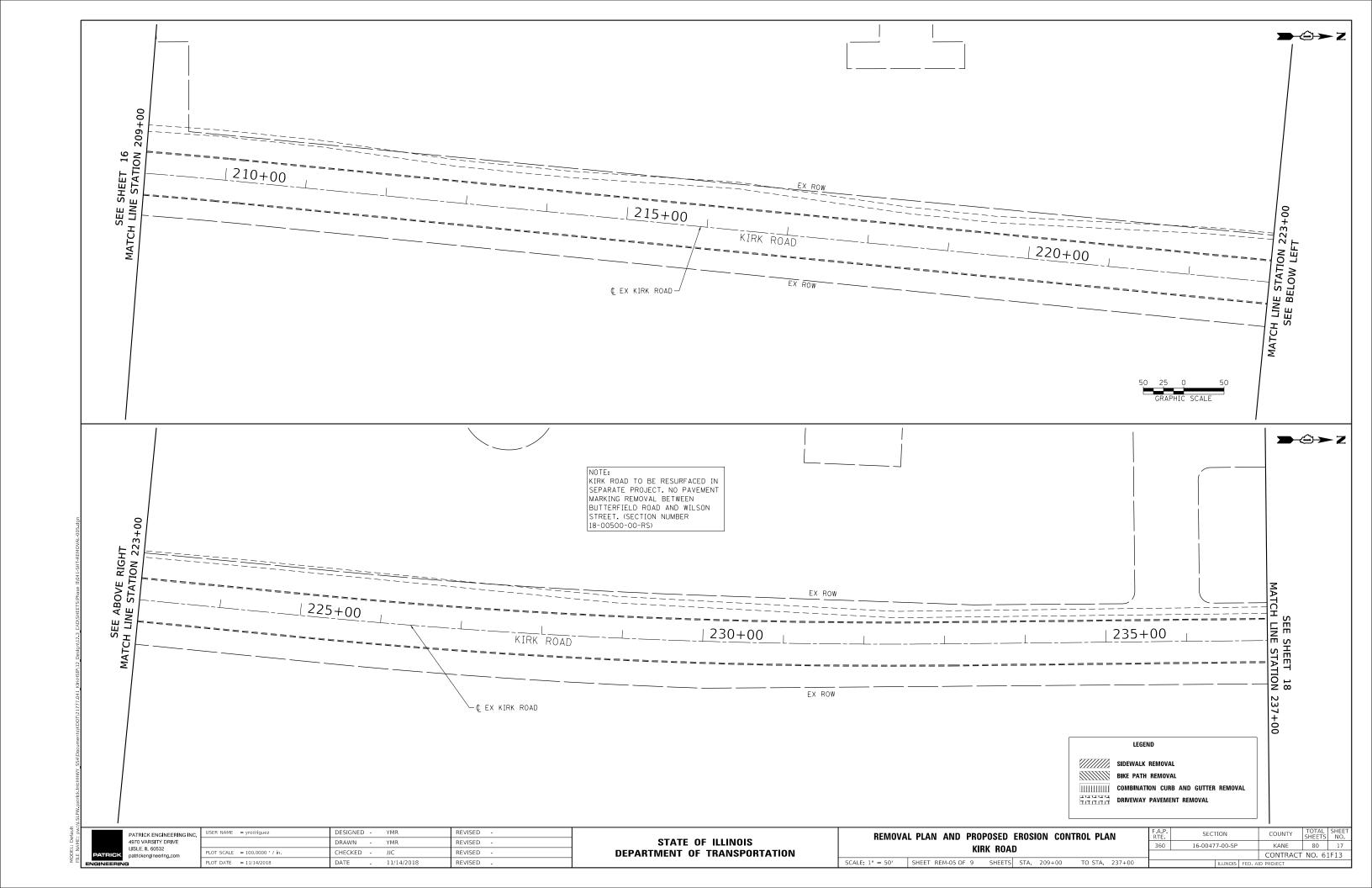
| FA.P. | SECTION | COUNTY | TOTAL | SHEET | SHEETS | NO. |
| 360 | 16-00477-00-SP | KANE | 80 | 12 |
| CONTRACT NO. 61-13

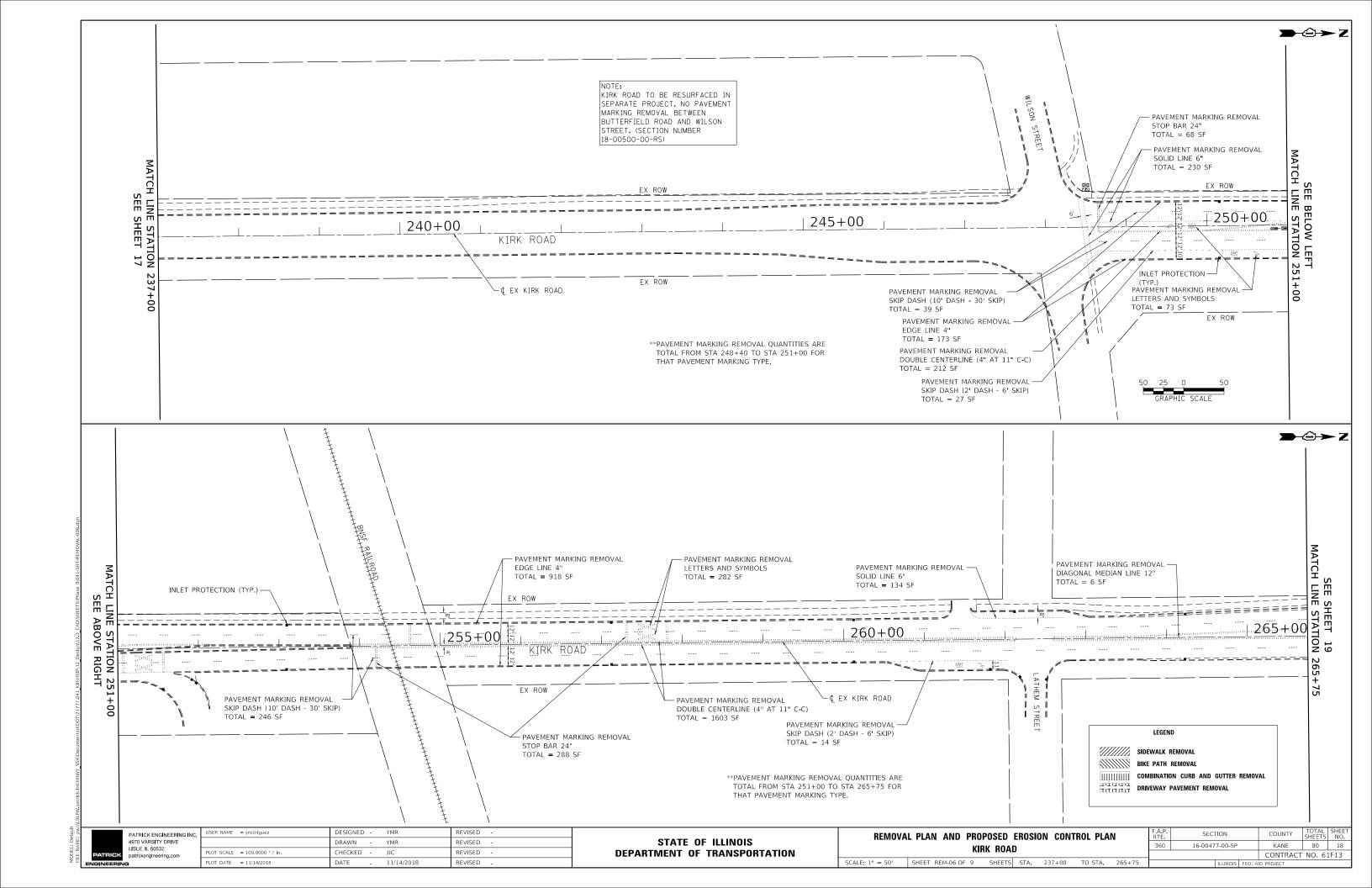


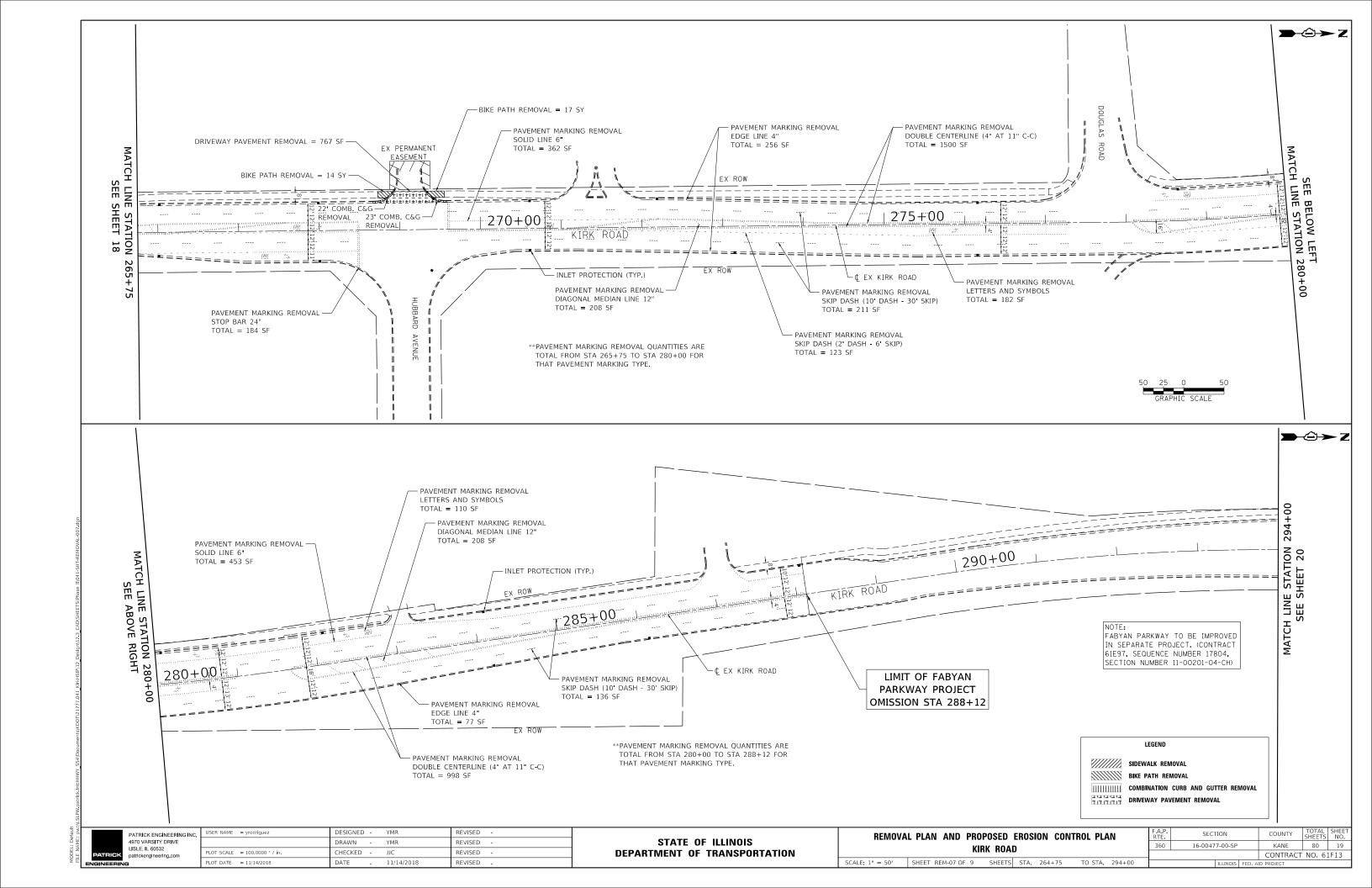


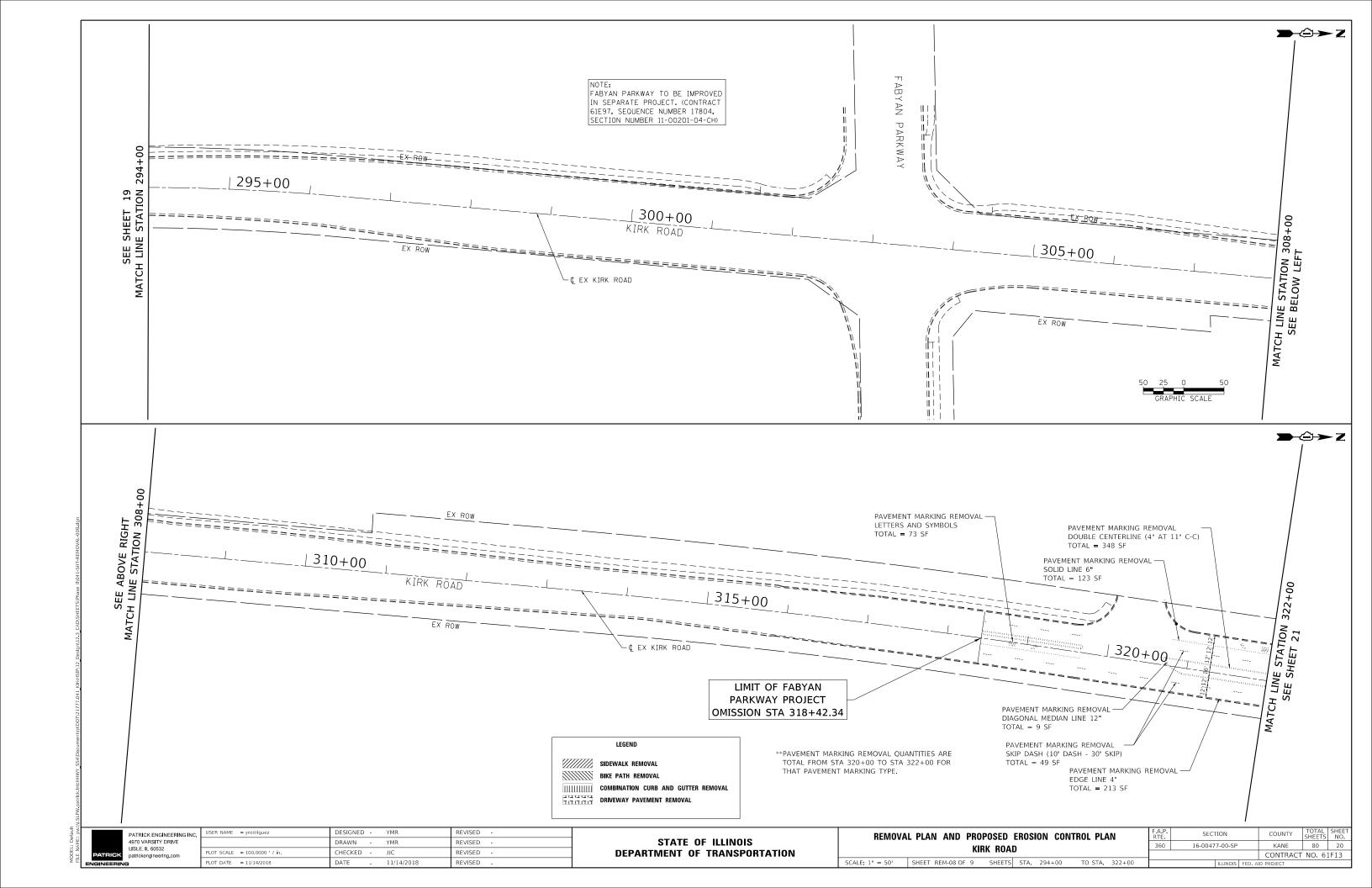


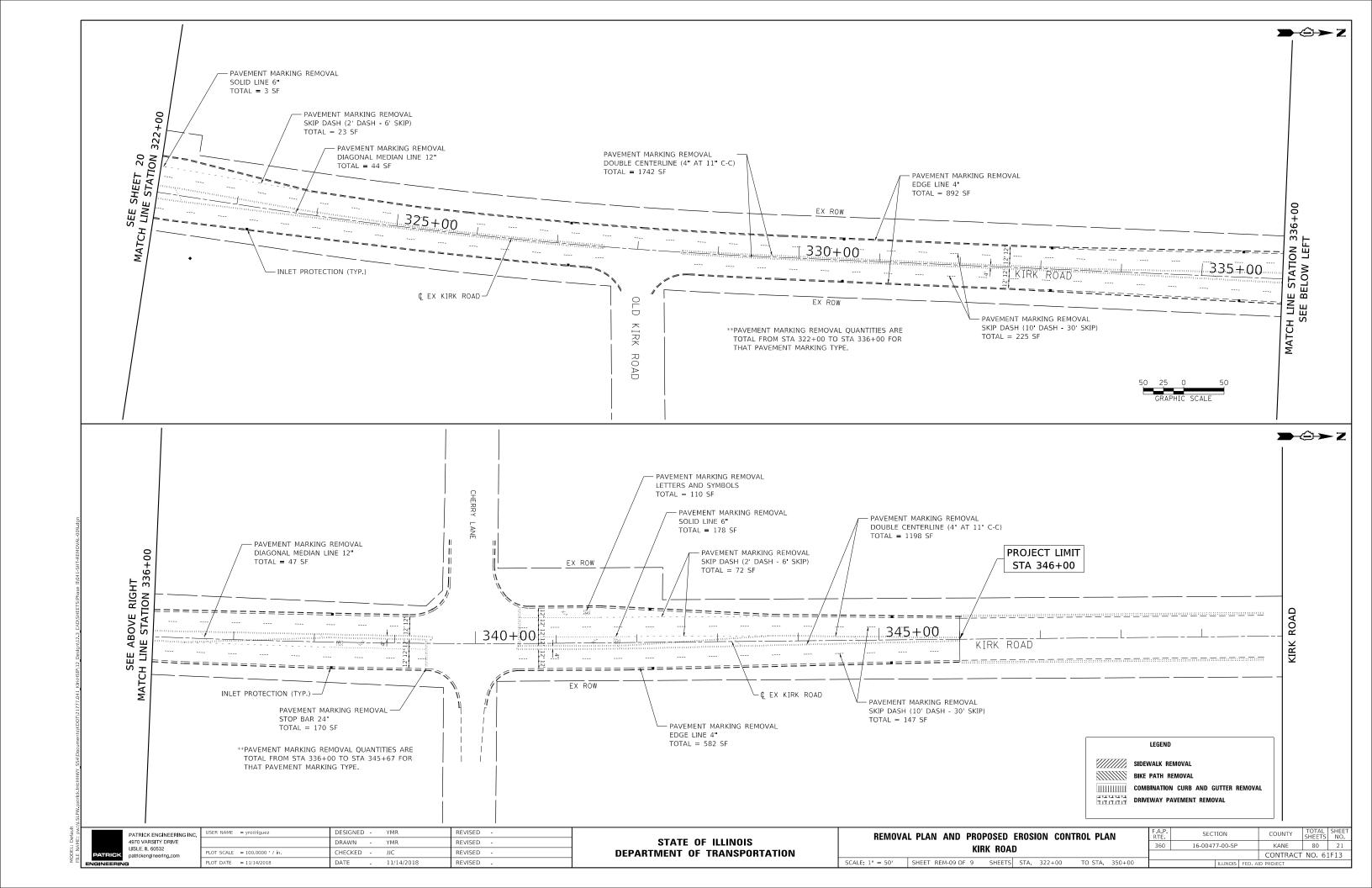


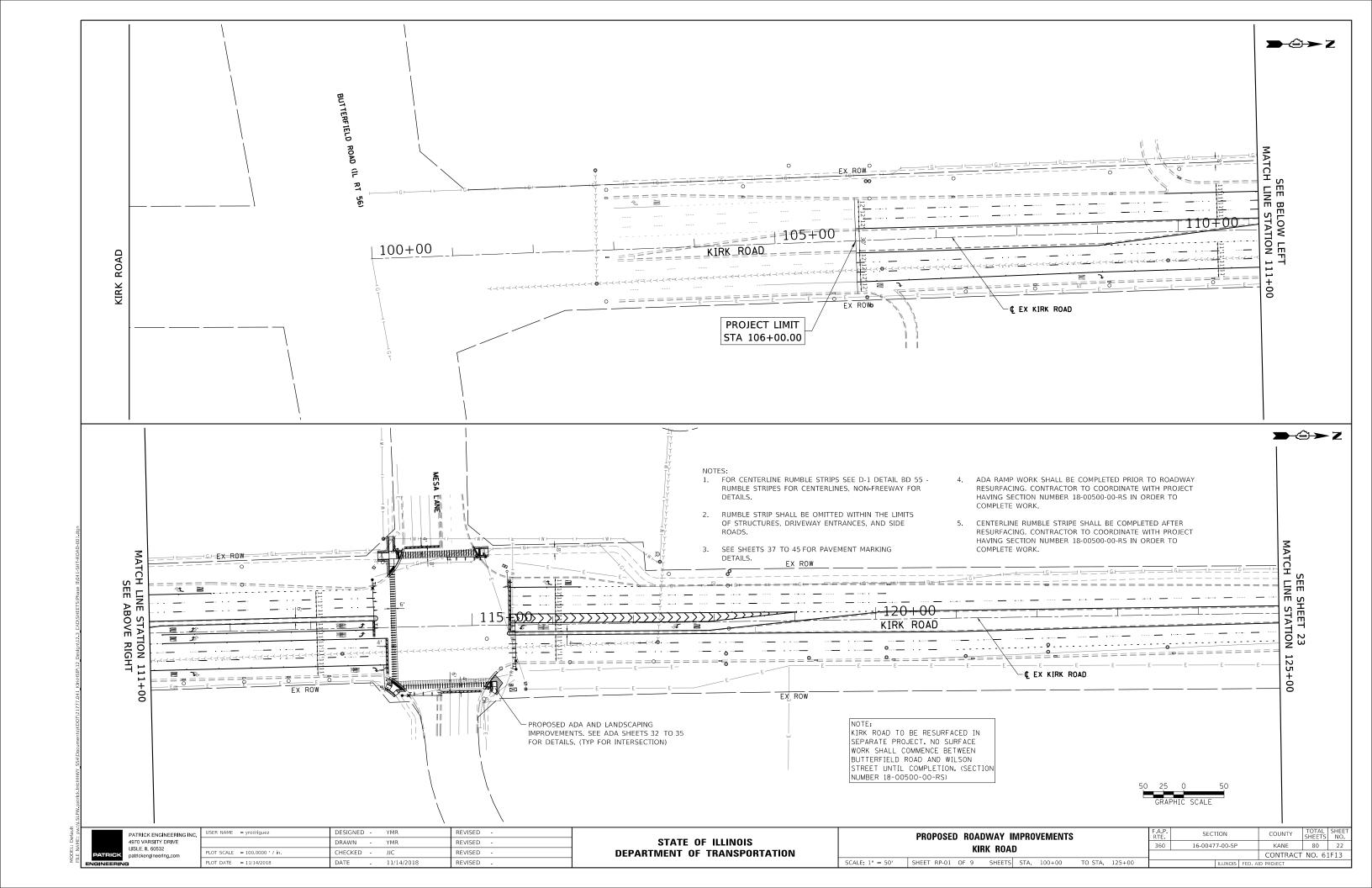


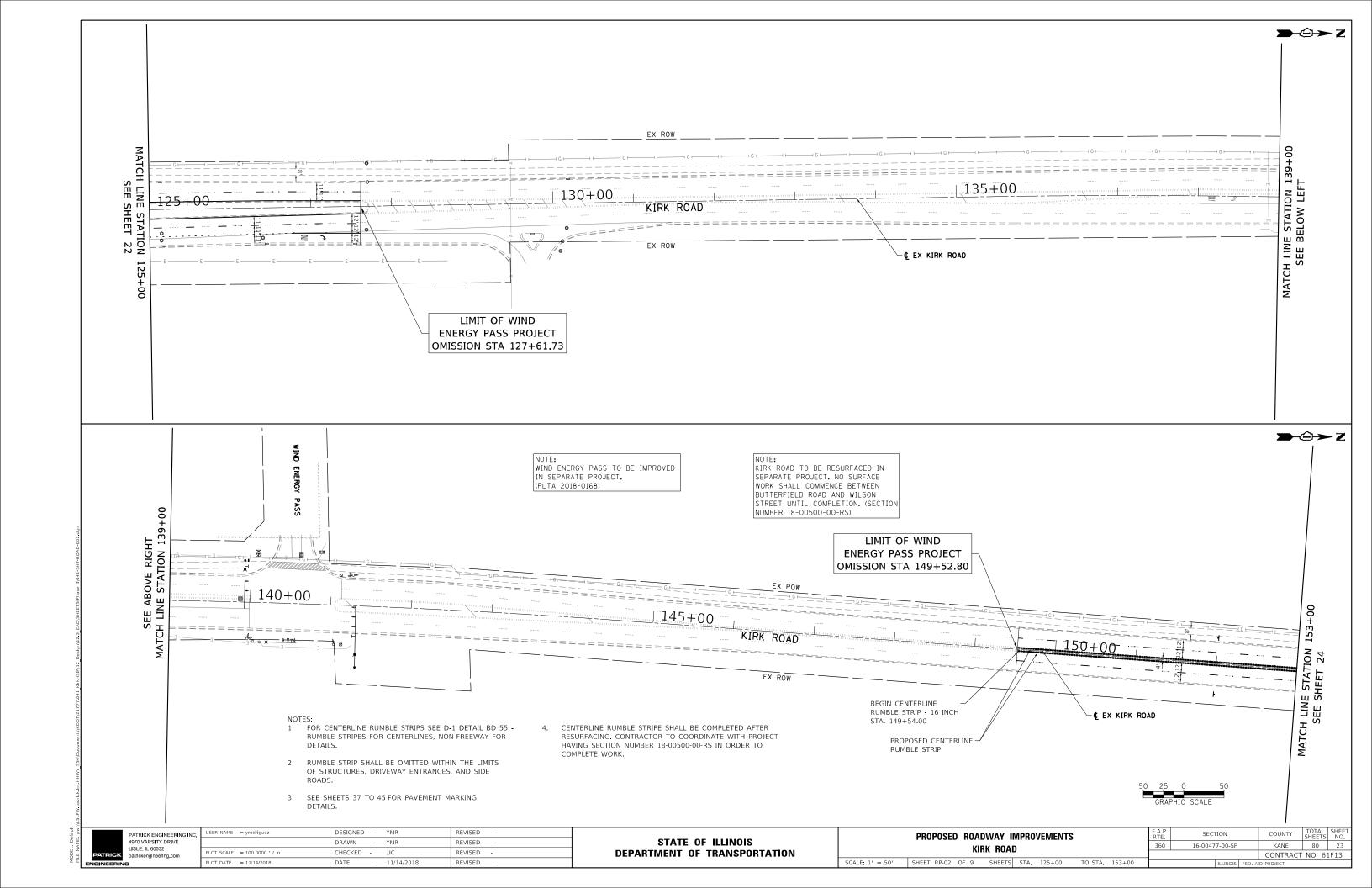


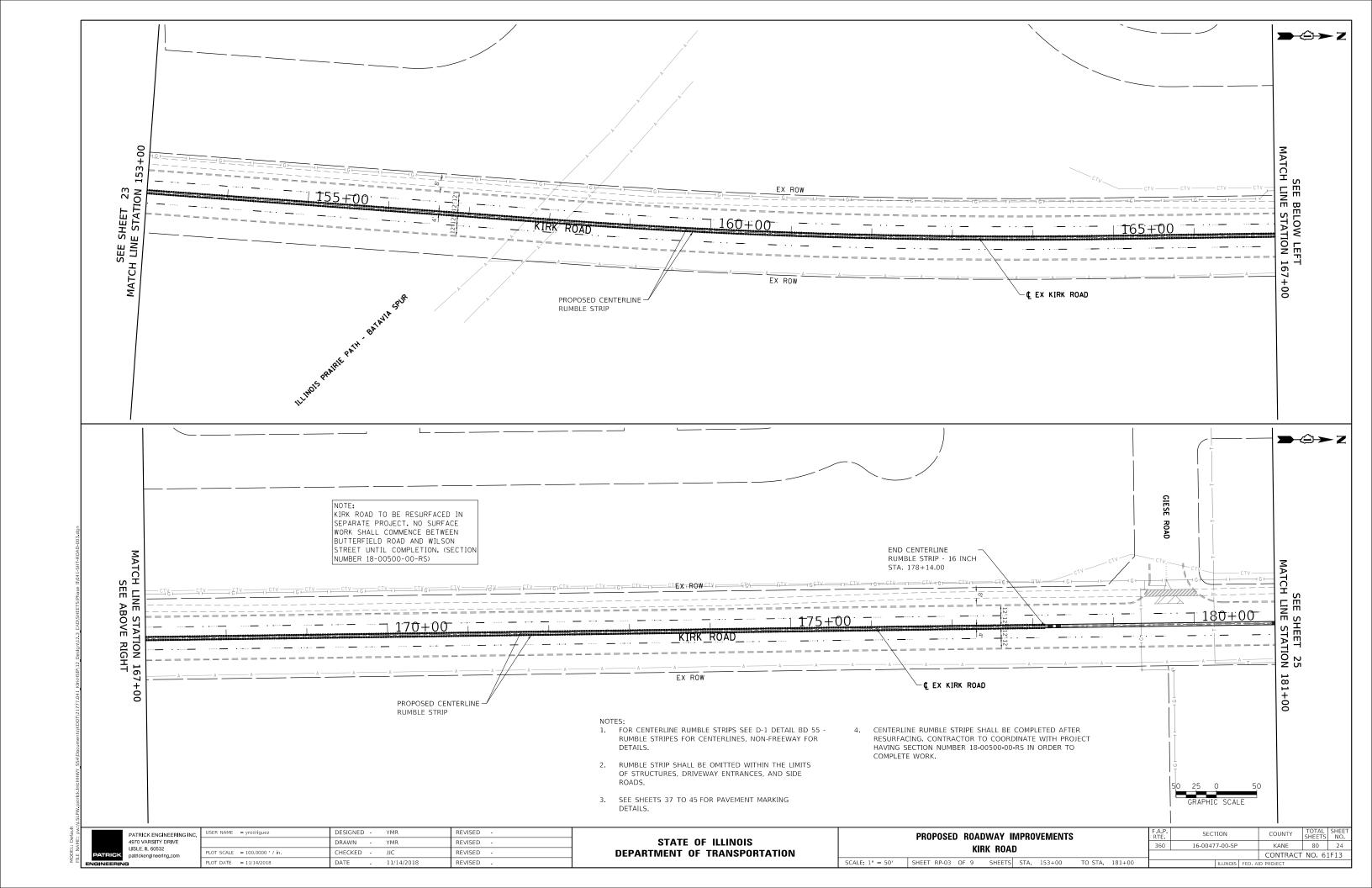


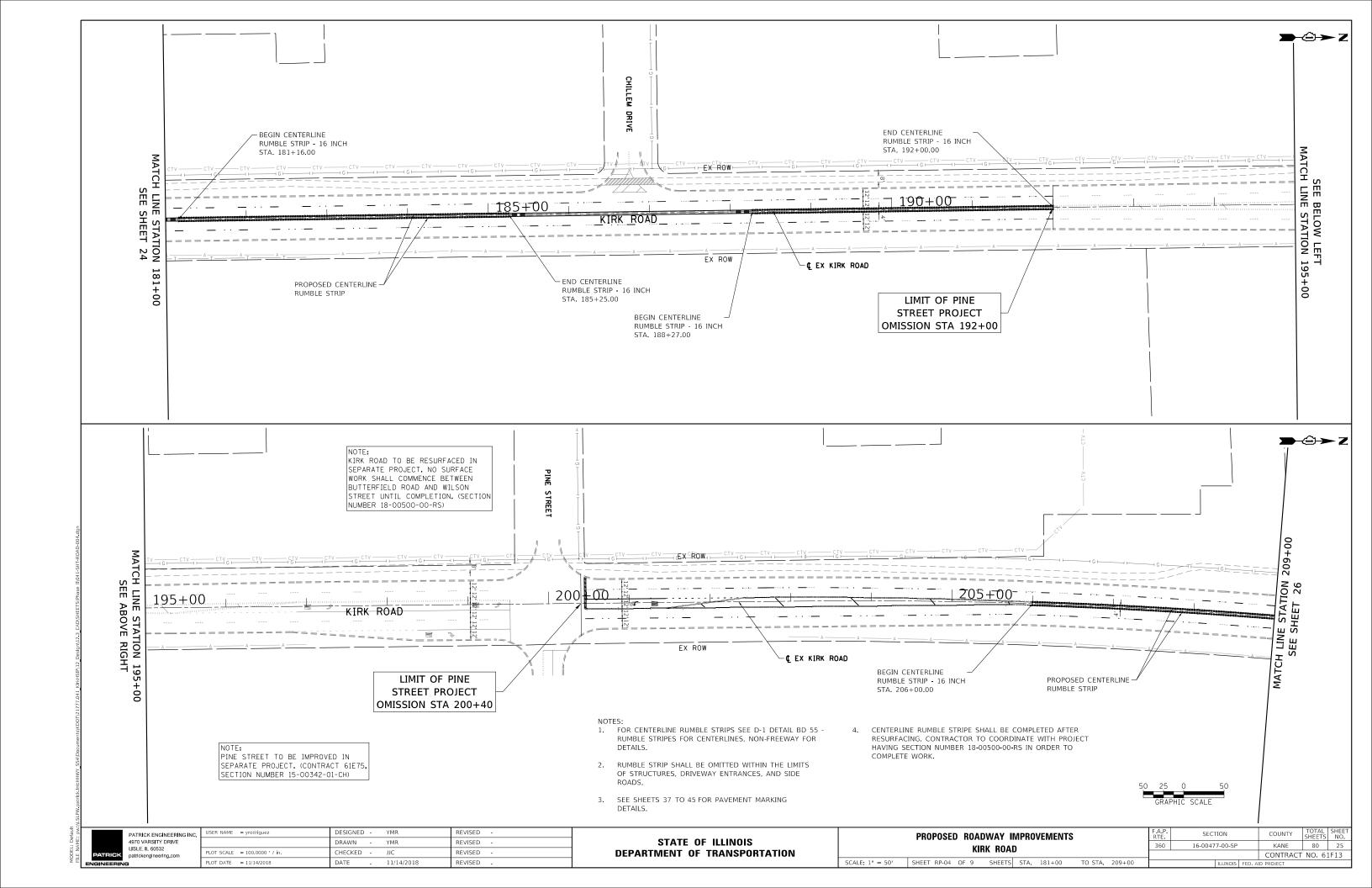


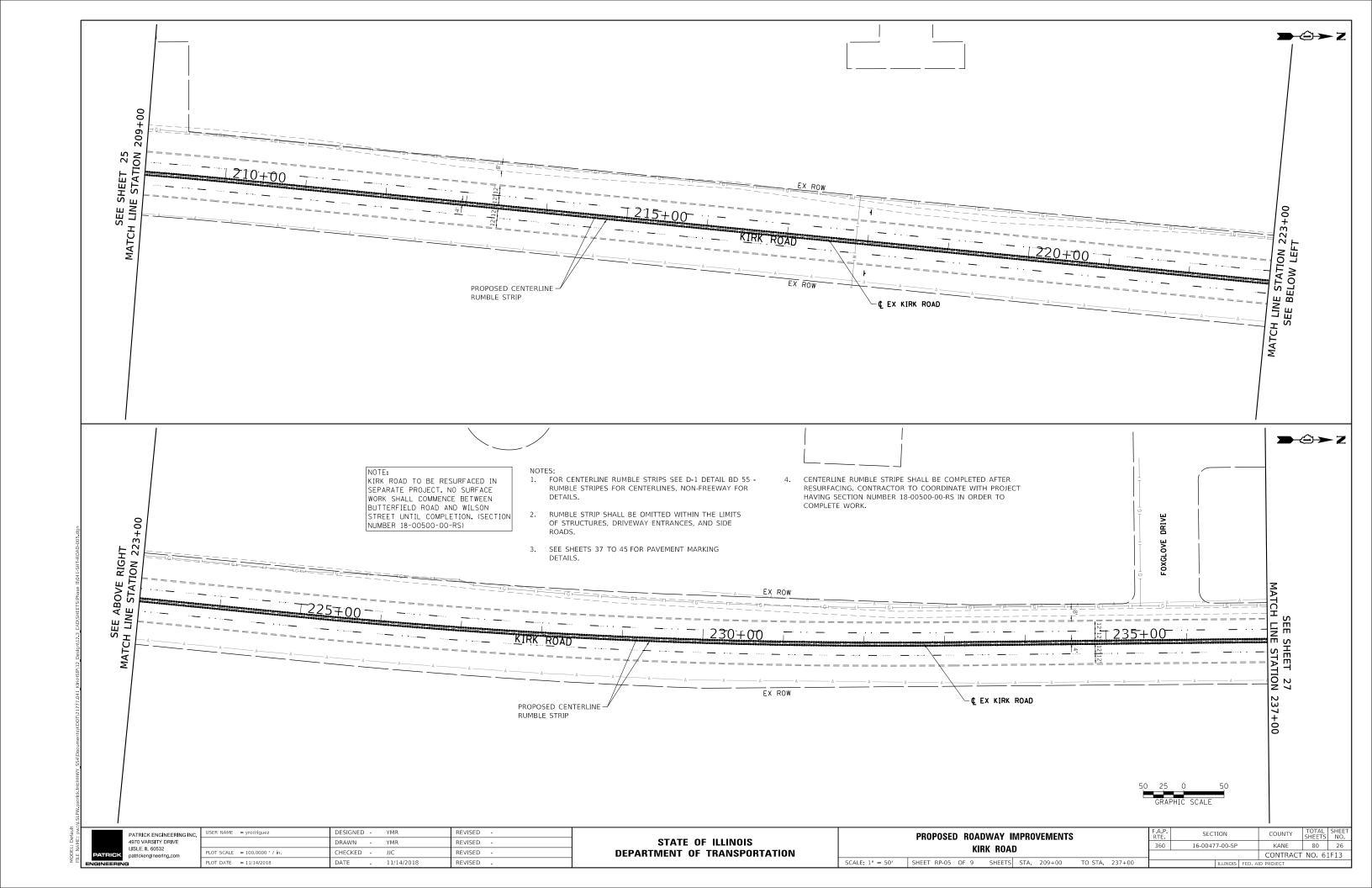


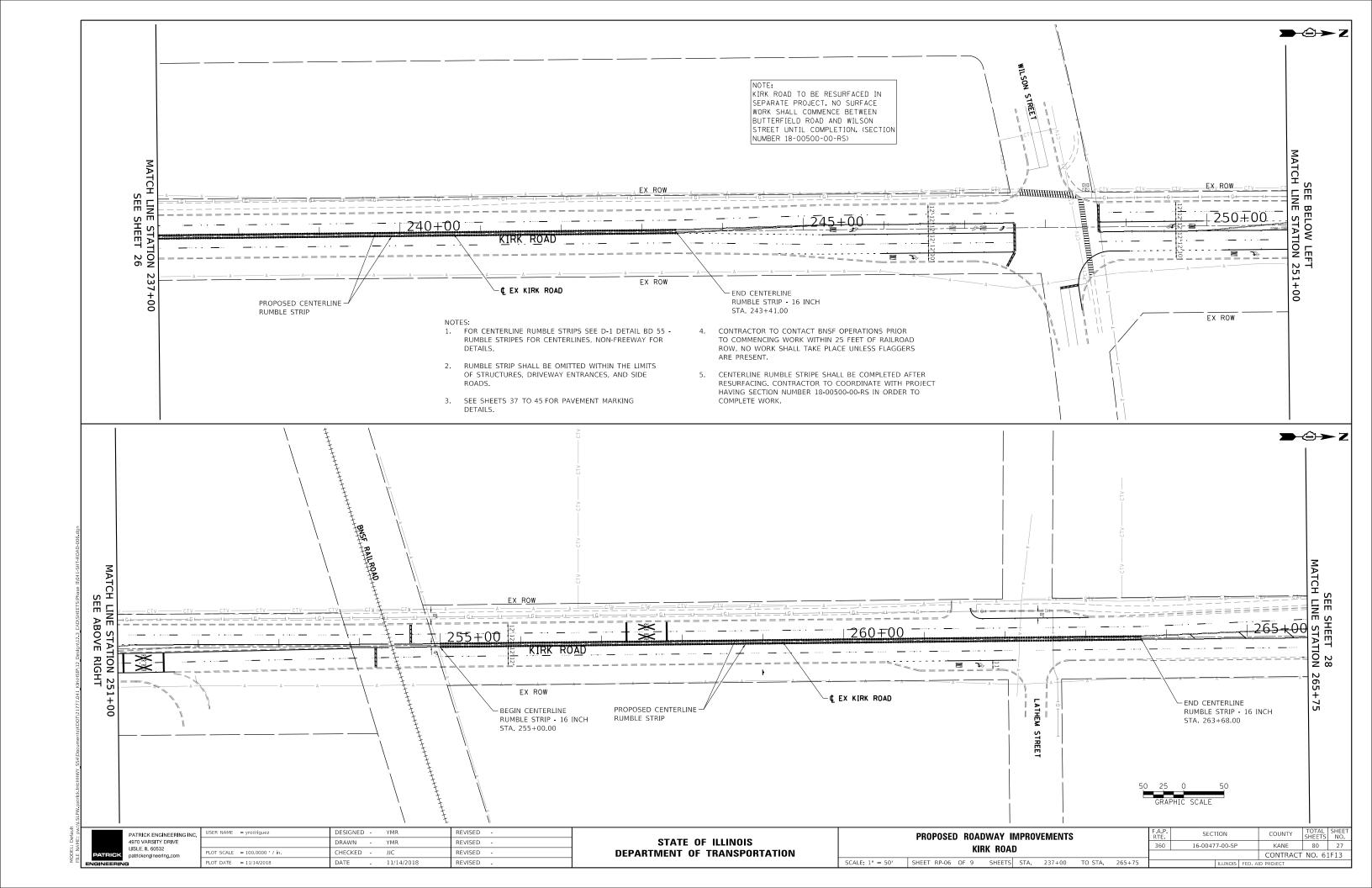


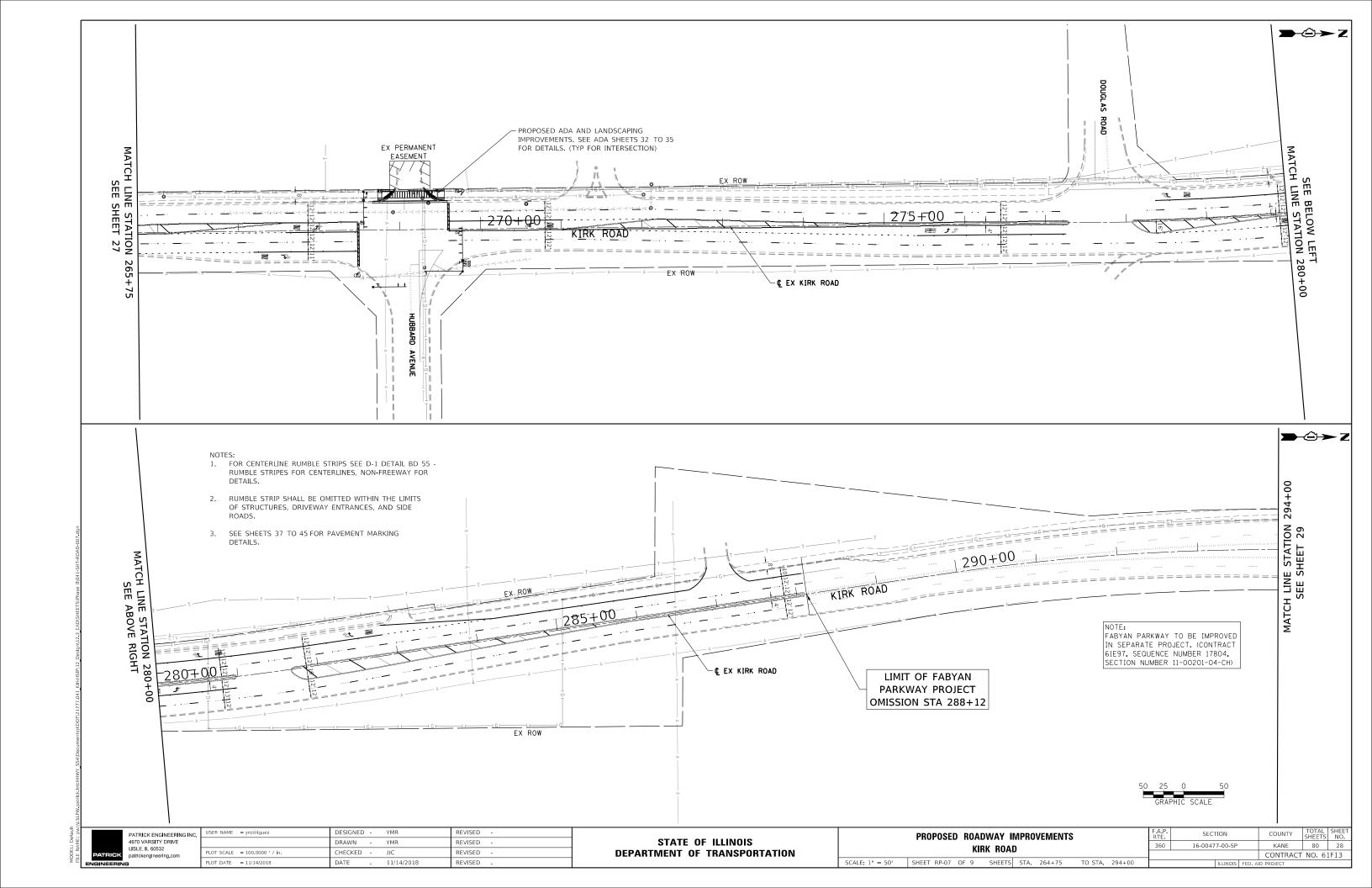


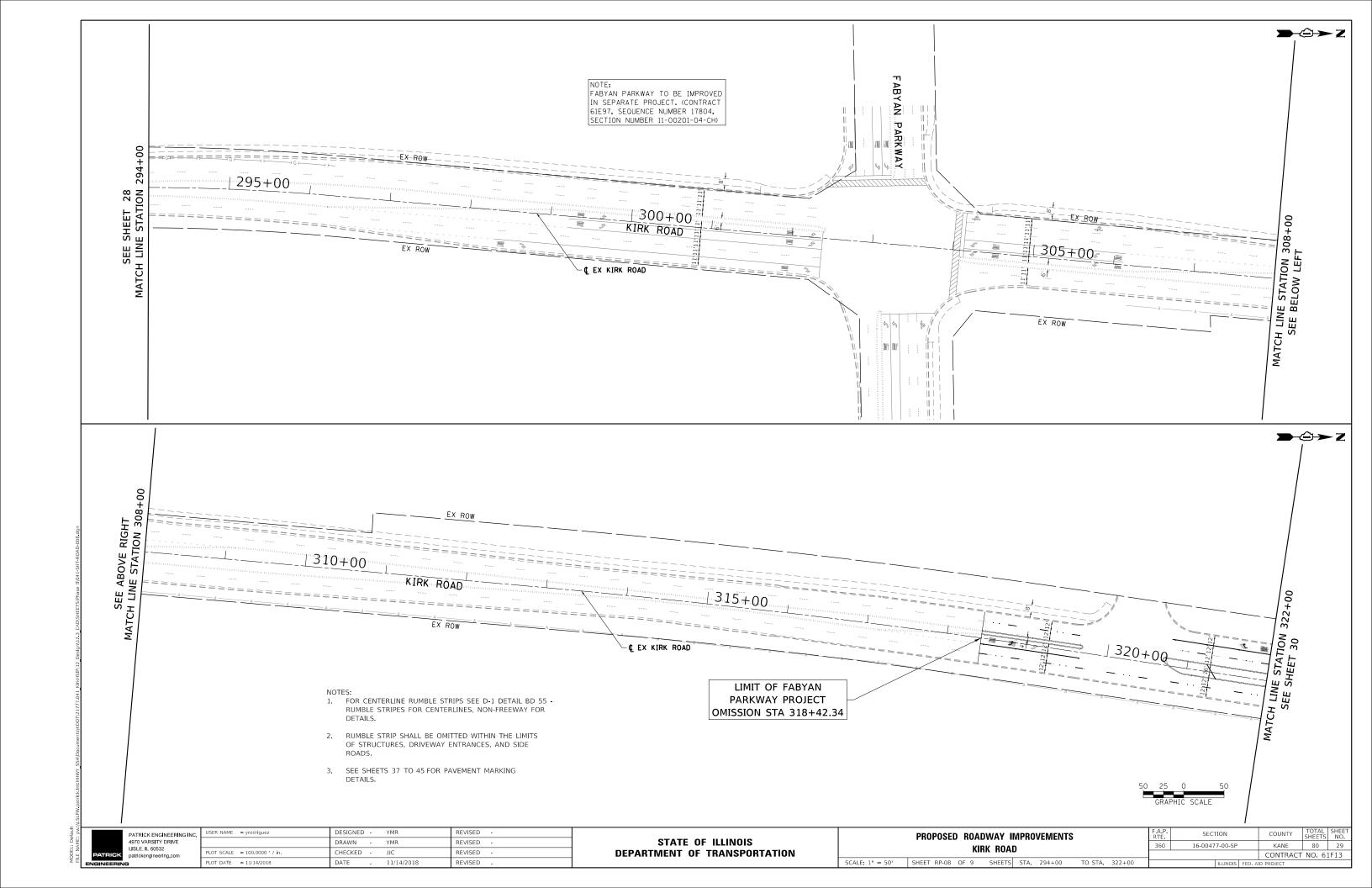


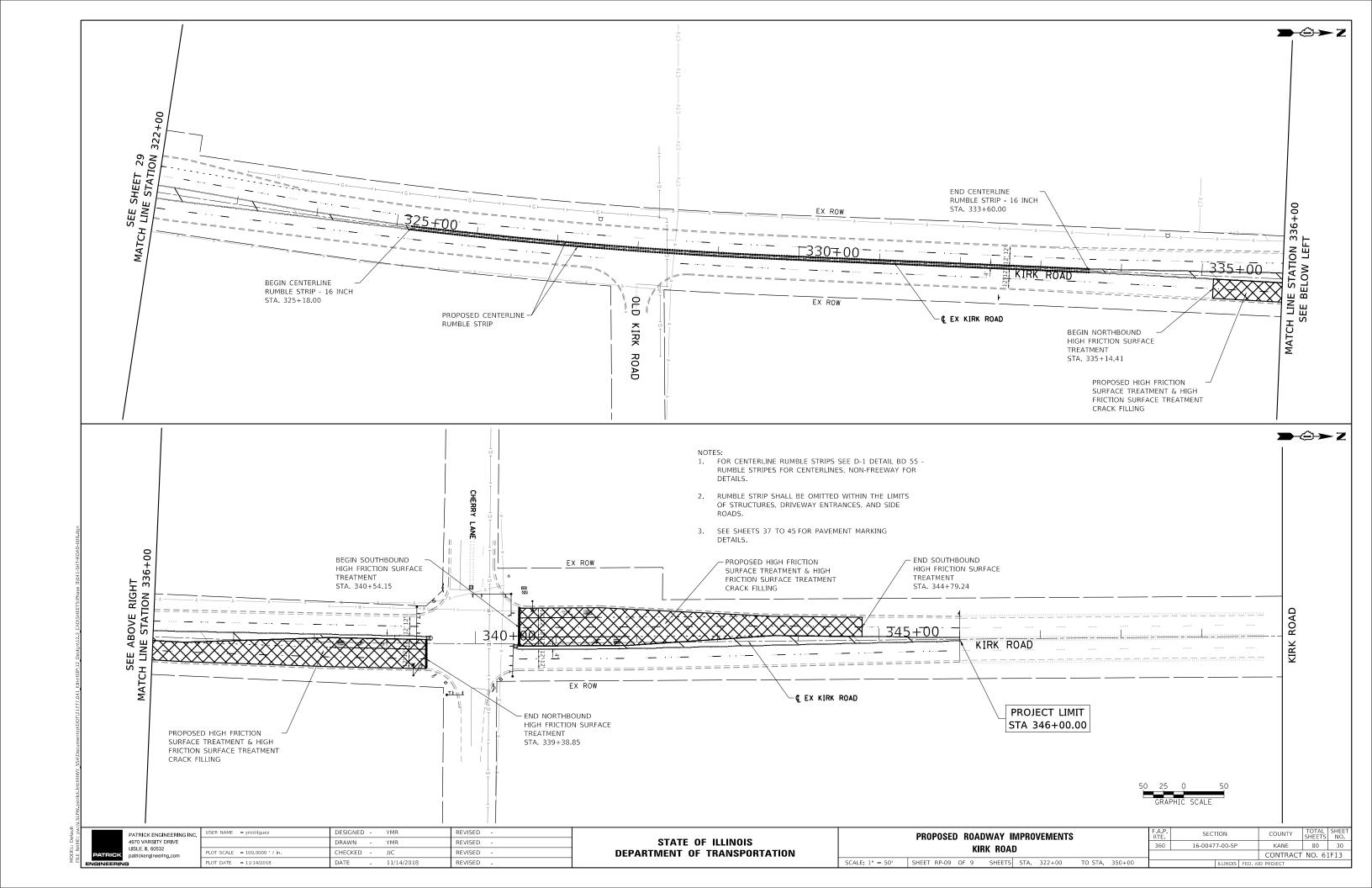












MAINTENANCE OF TRAFFIC GENERAL NOTES

- THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS, BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER AND COUNTY FOR APPROVAL.
- 2. CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGHOUT THE PROJECT AREA AT ALL TIMES.
- 3. TRAFFIC CONDITIONS, CRASHES, AND OTHER UNFORSEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY, OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PALNS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF NOTIFICATION.
- 4. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN, AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
- 5. CONTRACTOR SHALL ONLY PERFORM LANE CLOSURE OPERATIONS DURING DAYTIME OFF-PEAK WORKING HOURS AS DIRECTED BY THE ENGINEER.
- 6. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- ALL TEMPORARY ACCESS LOCATIONS SHALL BE SIGNED ACCORDING TO IDOT DISTRICT ONE STANDARD DETAIL TC-26.
- 8. REFER TO TRAFFIC CONTROL PLAN WITHIN THE PROJECT SPECIFICATIONS FOR ALL TRAFFIC CONTROL RELATED ITEMS.
- 9. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES. CONTRACTOR SHALL PROVIDE ADEQUATE SIGNAGE DIRECTING PEDESTRIANS TO AN ALTERNATE ROUTE OR SHALL PROVIDE "ALL WEATHER" ACCESS THROUGHOUT THE DURATION OF SIDEWALK CONSTRUCTION.

THE FOLLOWING STANDARD DETAIL DRAWINGS SHALL BE USED FOR ALL TRAFFIC CONTROL OPERATIONS TO BE PERFORMED FOR THIS PROJECT:

IDOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24' FROM PAVEMENT EDGE
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES

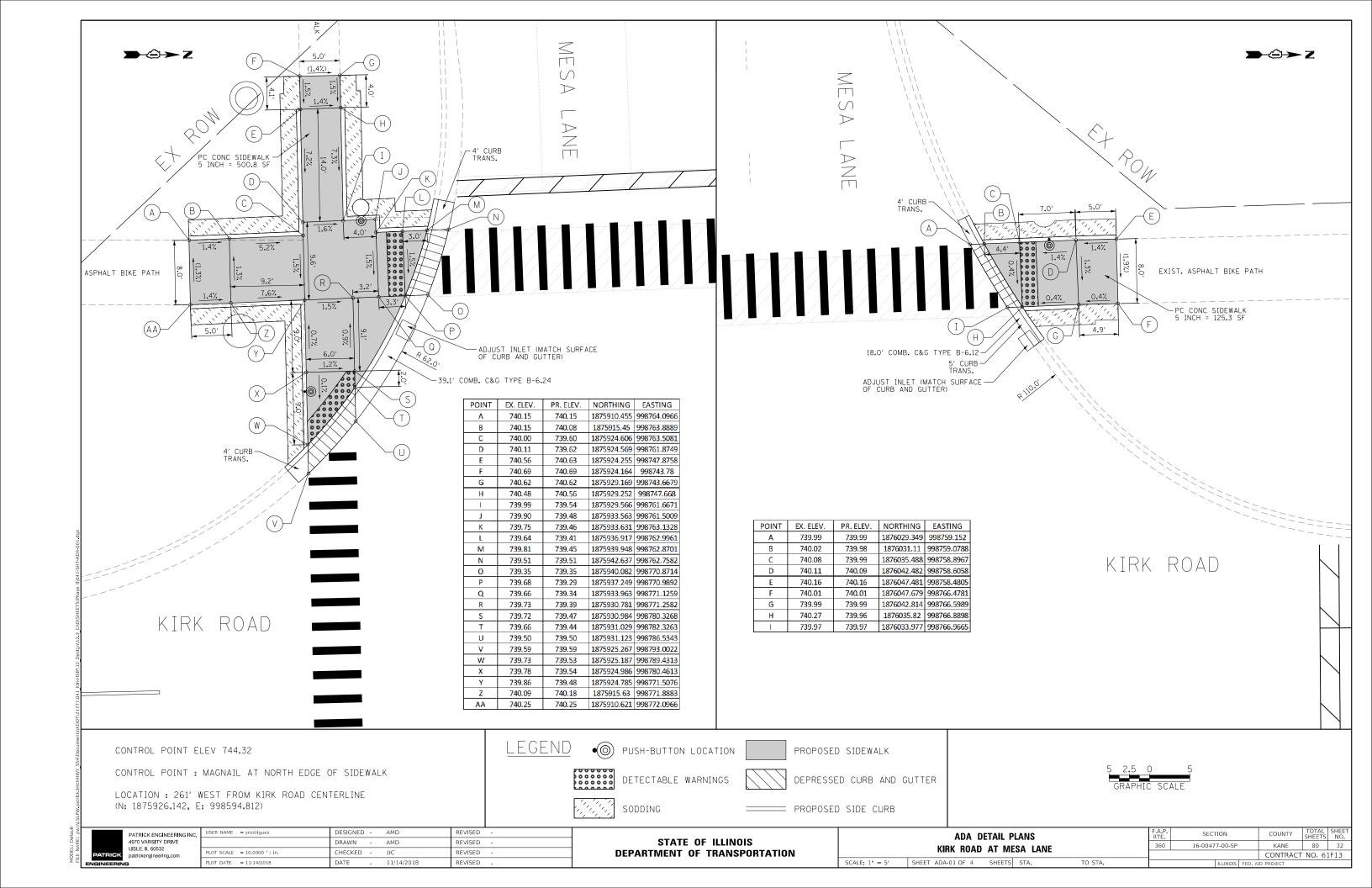
IDOT DISTRICT 1 DETAILS

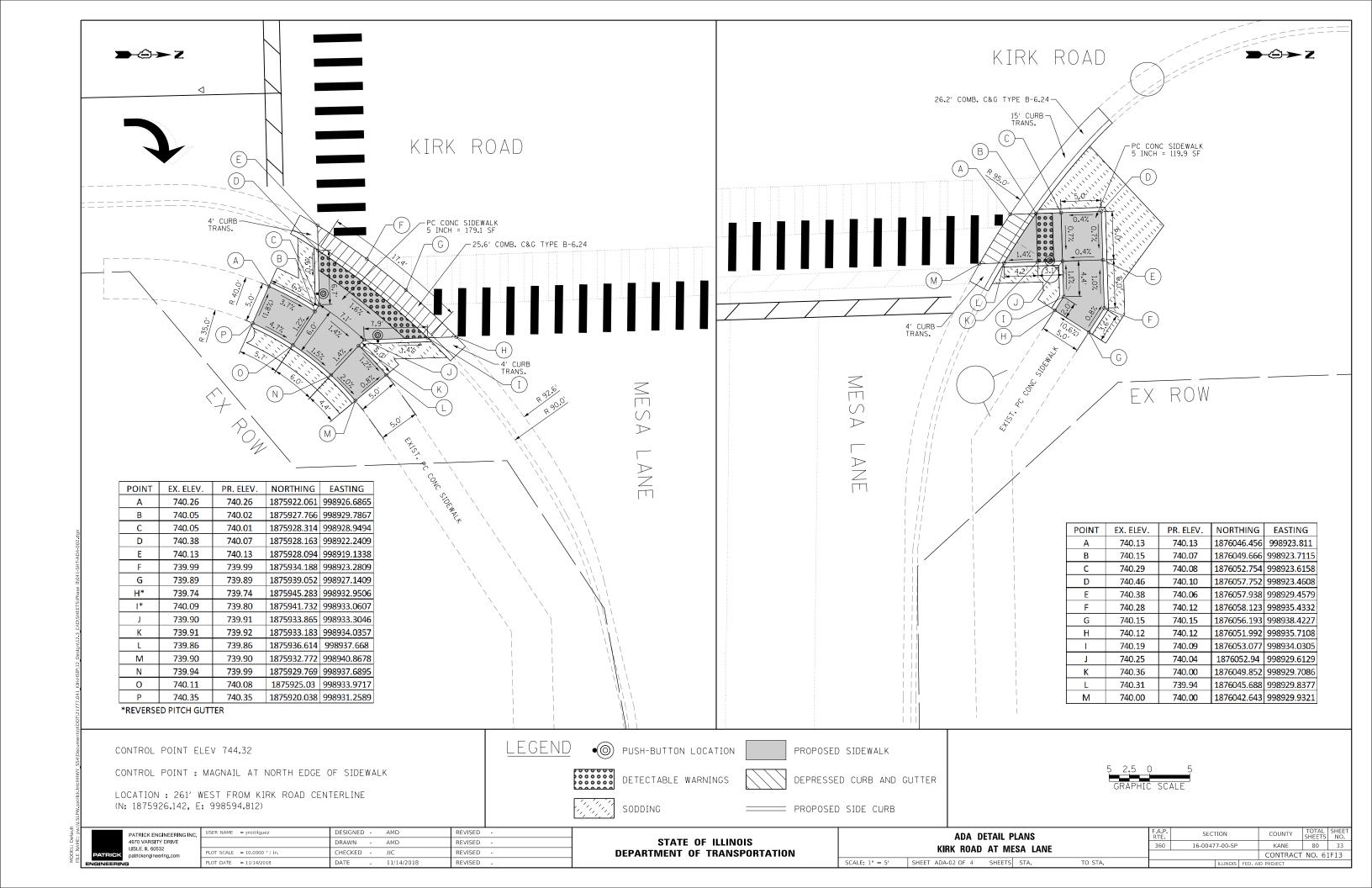
STANDARD NO.	DESCRIPTION
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-16	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING

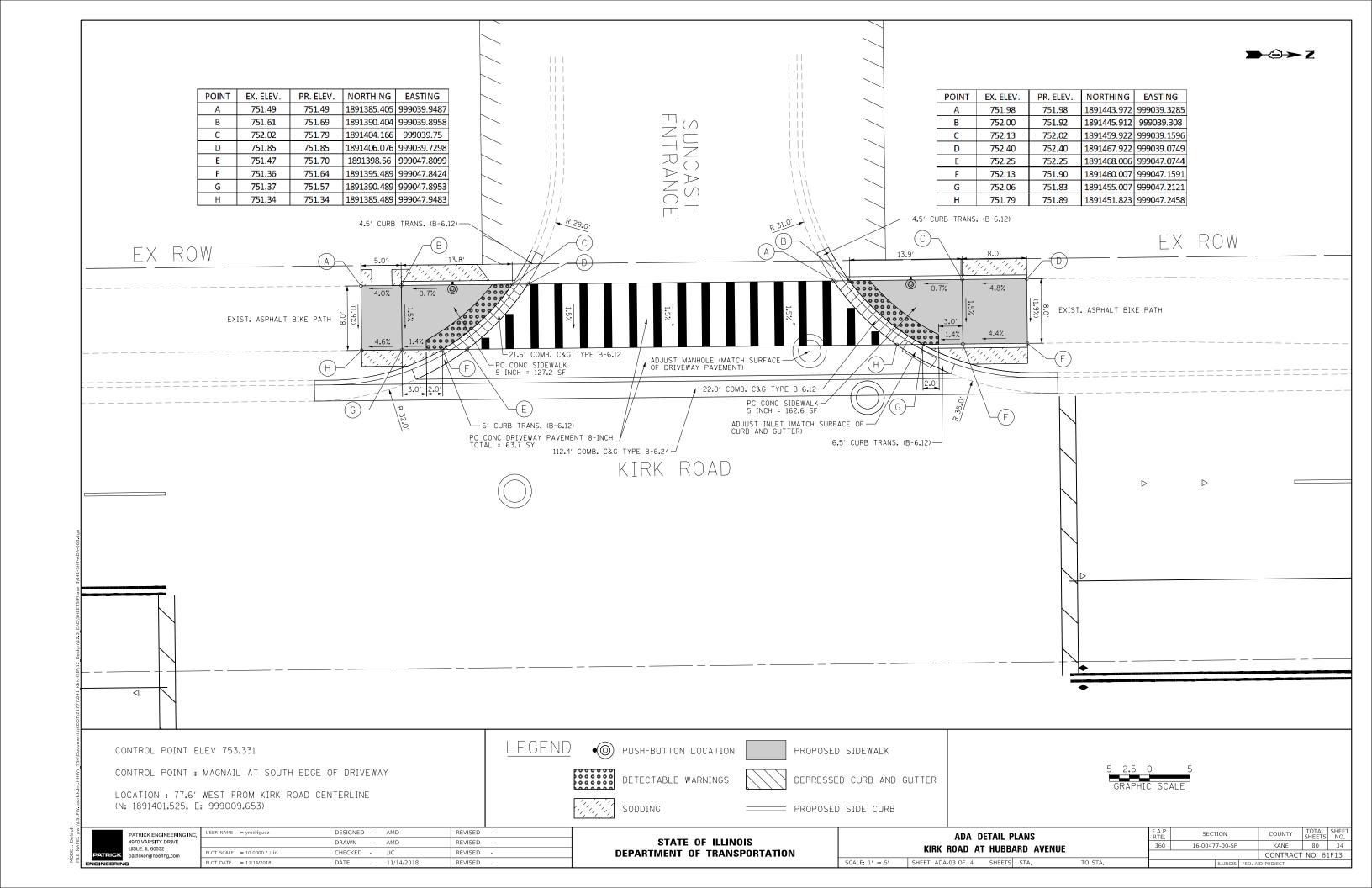
LISLE, IL 60532

SCALE: NTS

MOT GENERAL	NOTES		F.A.P. RTE	SECT	ΠΟΝ		COUNTY	TOTAL SHEETS	
KIRK ROA	n		360	16-0047	7-00-SP		KANE	80	31
KIIIK 1107					CONTRACT	NO. 6	1F13		
SHEET MOT-01 OF 1 SHEET	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		





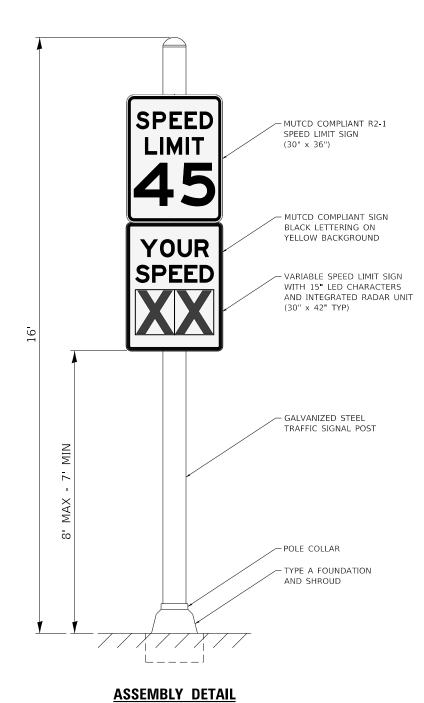


	SCHEDULE OF QUANTITIES - PEDESTRIAN RAMPS										
CODE NO.	ITEM	UNIT	HUBBARD AVE (NW)	HUBBARD AVE (SW)	MESA LN (NW)	MESA LN (SW)	MESA LN (NE)	MESA LN (SE)	TOTAL		
20200100	EARTH EXCAVATION	CU YD	1.6	1.3	1.3	5.0	1.2	1.8	13		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4.0	4.5	6.2	19.6	14.5	8.1	57		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	0.1	0.1	0.1	0.3	0.2	0.2	1		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.1	0.1	0.1	0.3	0.2	0.2	1		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	0.1	0.1	0.1	0.3	0.2	0.2	1		
25200110	SODDING, SALT TOLERANT	SQ YD	4.4	5.0	6.8	21.5	15.9	8.9	63		
42001300	PROTECTIVE COAT	SQ YD	24.2	20.1	17.1	62.5	17.9	24.4	167		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	162.6	127.2	125.3	500.8	119.9	179.1	1,215		
42400800	DETECTABLE WARNINGS	SQ FT	24.3	23.9	16.0	34.1	12.0	31.1	142		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	35.0	34.0	18.0	39.1	26.2	25.6	178		
44000600	SIDEWALK REMOVAL	SQ FT			104.6	361.6	202.6	176.5	846		
60260100	INLETS TO BE ADJUSTED	EACH	1		1	1			3		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	F00T	22.0	21.6	18.0				62		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT				39.1	26.2	25.6	91		
X0327036	BIKE PATH REMOVAL	SQ YD	16.1	13.4	3.6	12.6			46		

SCHEDULE OF QUANTITIES - HUBBARD DRIVEWAY REPLACEMENT									
CODE NO.	ITEM	UNIT	MEASUREMENT	TOTAL					
42001300	PROTECTIVE COAT	SQ YD	96.0	96					
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	63.7	64					
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	85.2	86					
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1					
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	112.4	113					

PATRICK
PAGINEERING
ENGINEERING

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



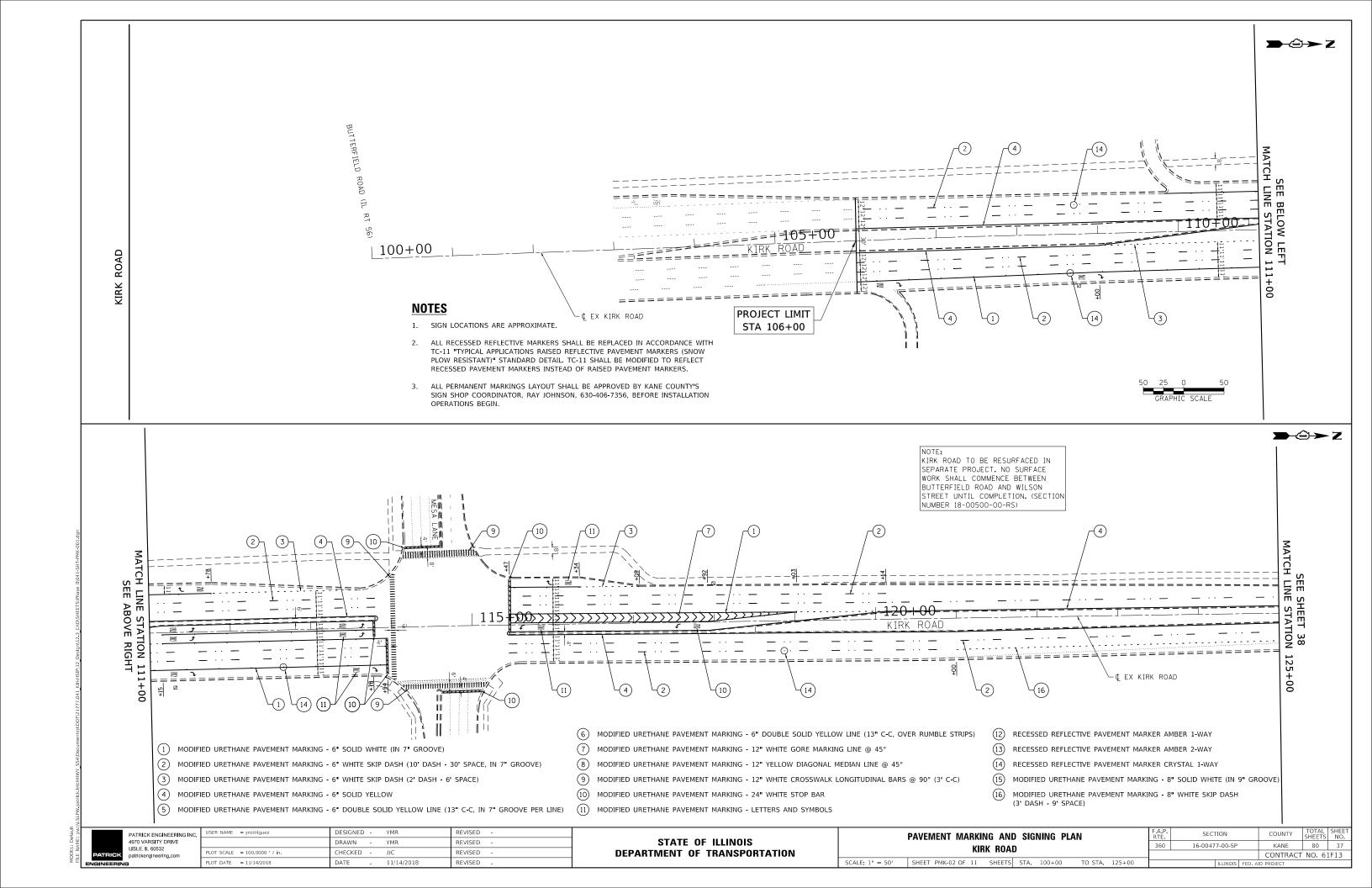
	SCHEDULE OF QUANTITIES										
CODE NO.	ITEM	UNIT	TOTAL								
72000100	SIGN PANEL - TYPE 1	SQ FT	61								
81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	F00T	938								
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	F00T	1,217								
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,217								
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT	EACH	7								
87800100	CONCRETE FOUNDATION, TYPE A	F00T	28								
X1400145	RADAR SPEED SIGN	EACH	7								

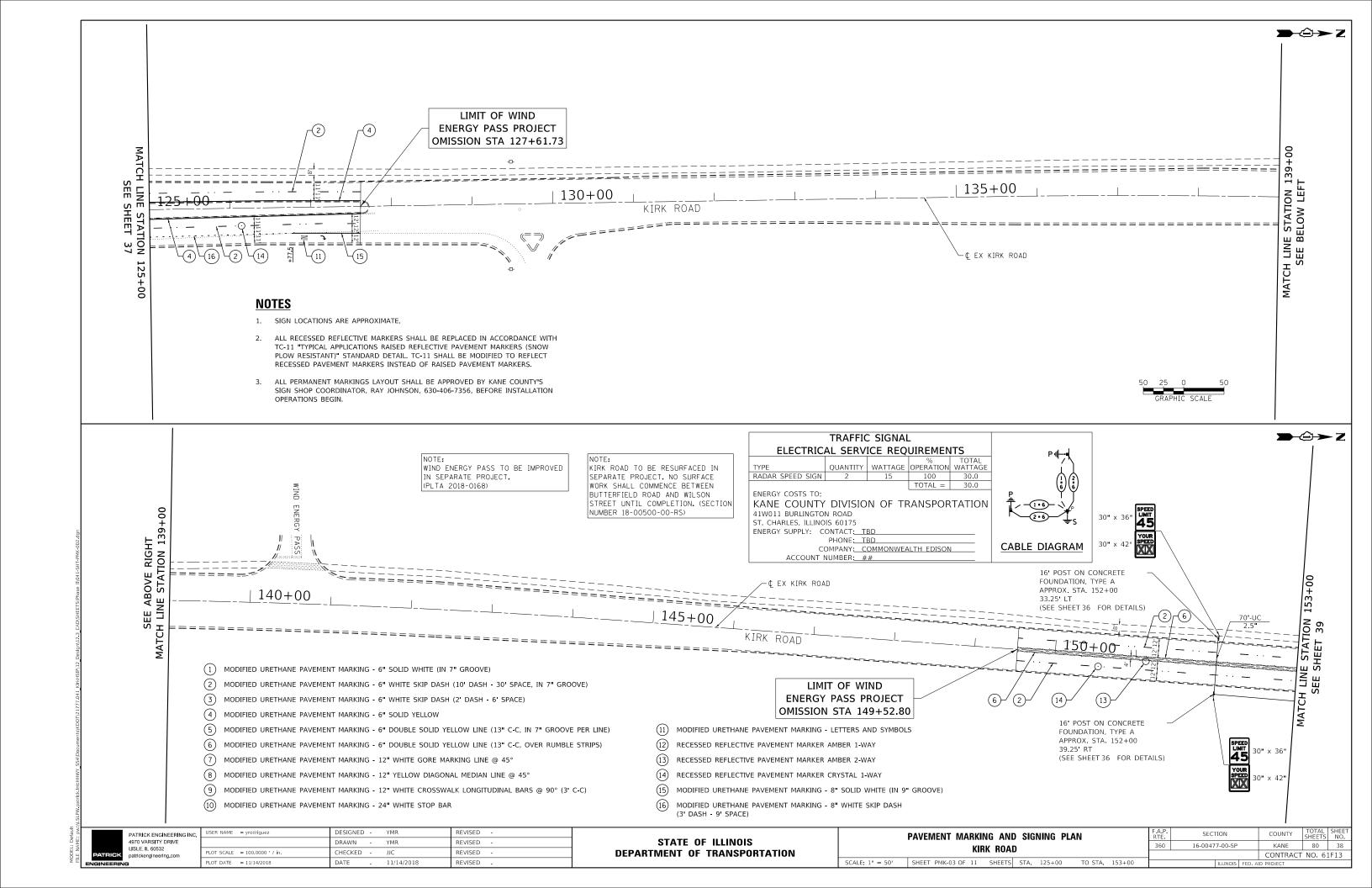
P/	ATRICK ENGINEERING INC.	USER NAME = yrodriguez	DESIGNED - YMR	REVISED -
	70 VARSITY DRIVE		DRAWN - YMR	REVISED -
	SLE, IL 60532 atrickengineering.com	PLOT SCALE = 100.0000 ' / in.	CHECKED - JJC	REVISED -
NGINEERING		PLOT DATE = 11/14/2018	DATE - 11/14/2018	REVISED -

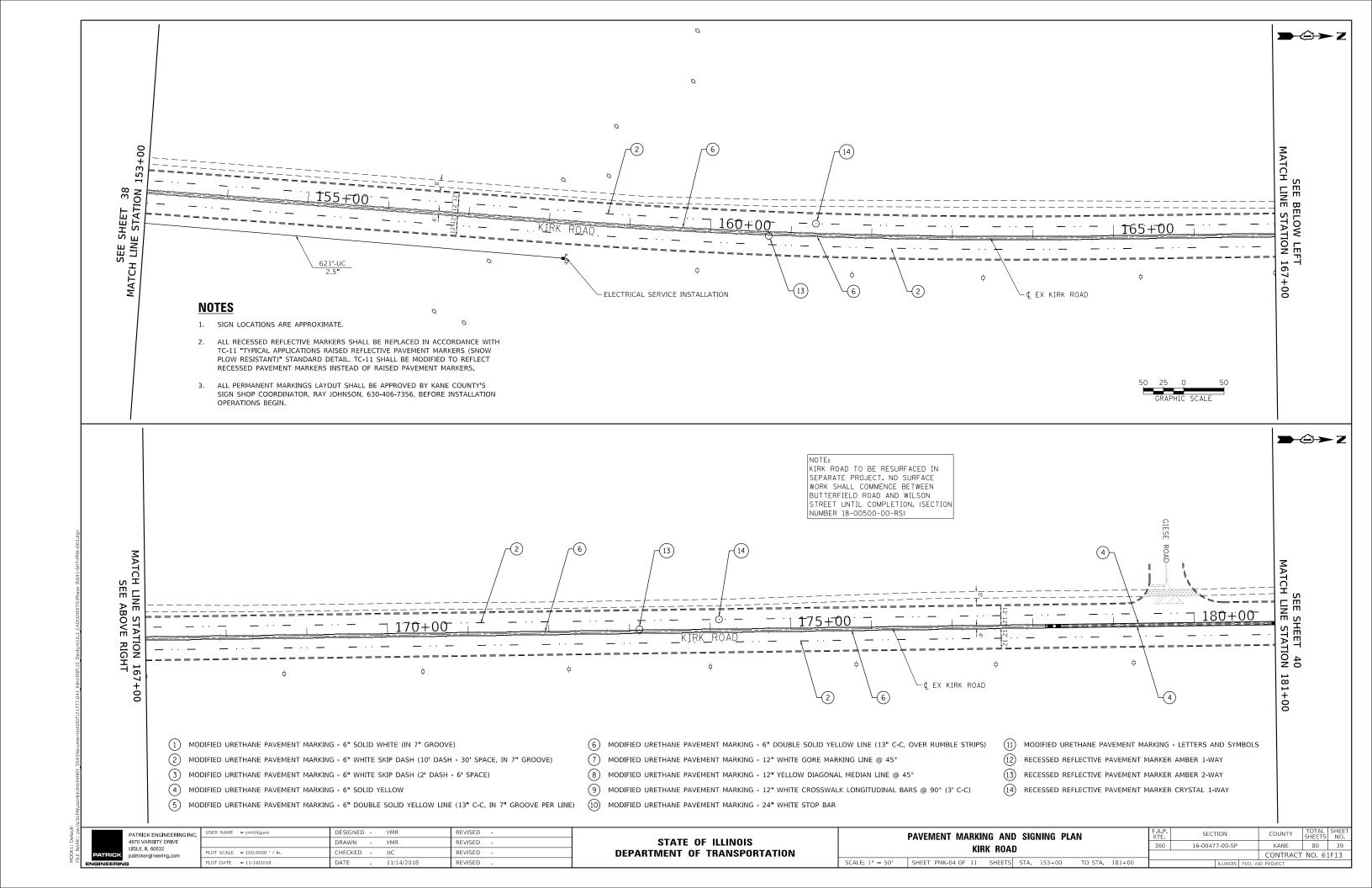
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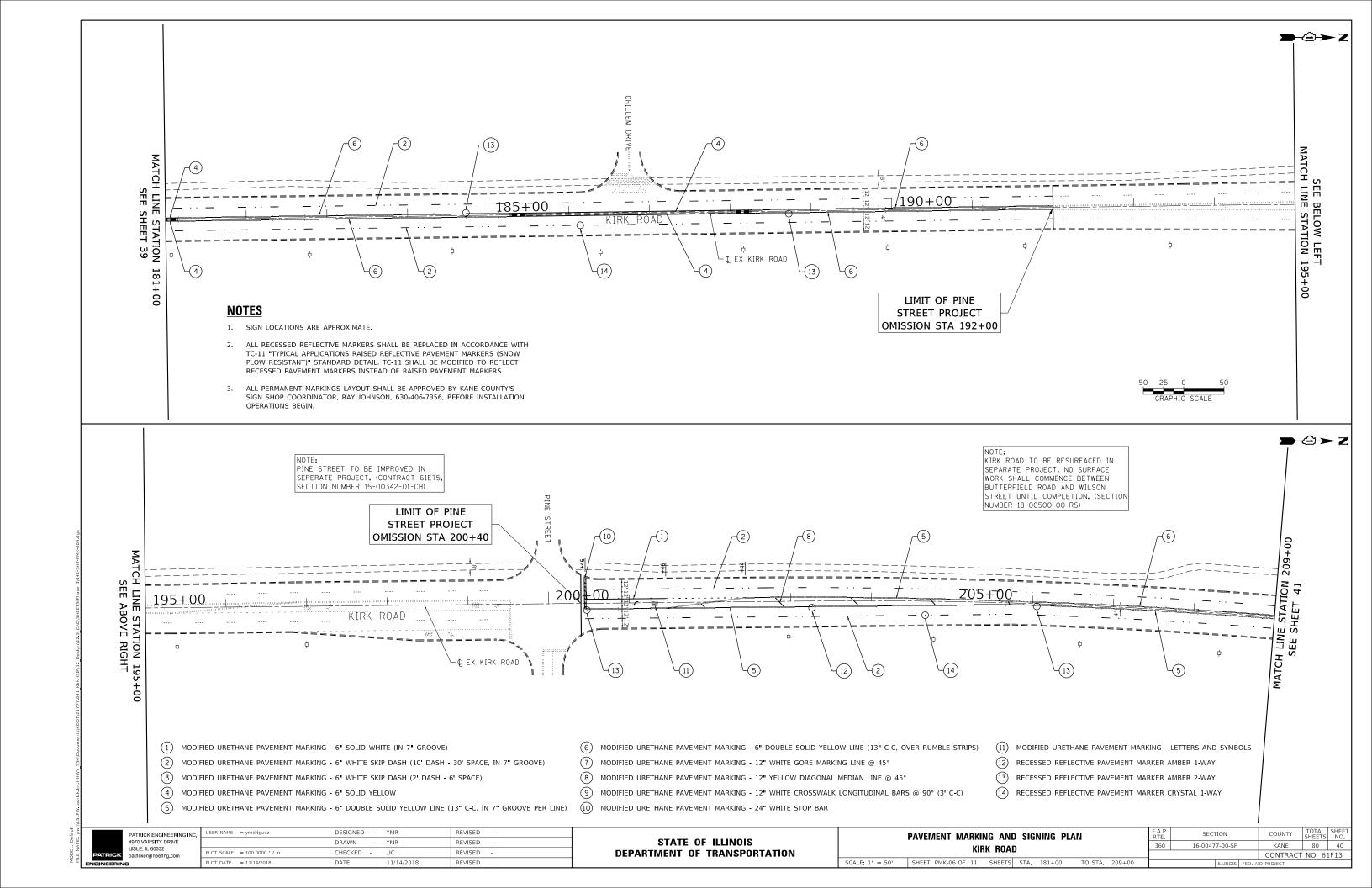
	SIGN DETAIL AND SCHEDULE OF QUANTITIES KIRK ROAD					F.A.P. RTE.				TOTAL SHEETS	SHEET NO.
						360	360 16-00477-00-SP		KANE	80	36
	NINK NUAU								CONTRACT	NO. 6	1F13
	SCALE: 1" = 50'	SHEET PMK-01 OF 11	SHEETS	STA.	TO STA.		ILLINOIS FED. AI				

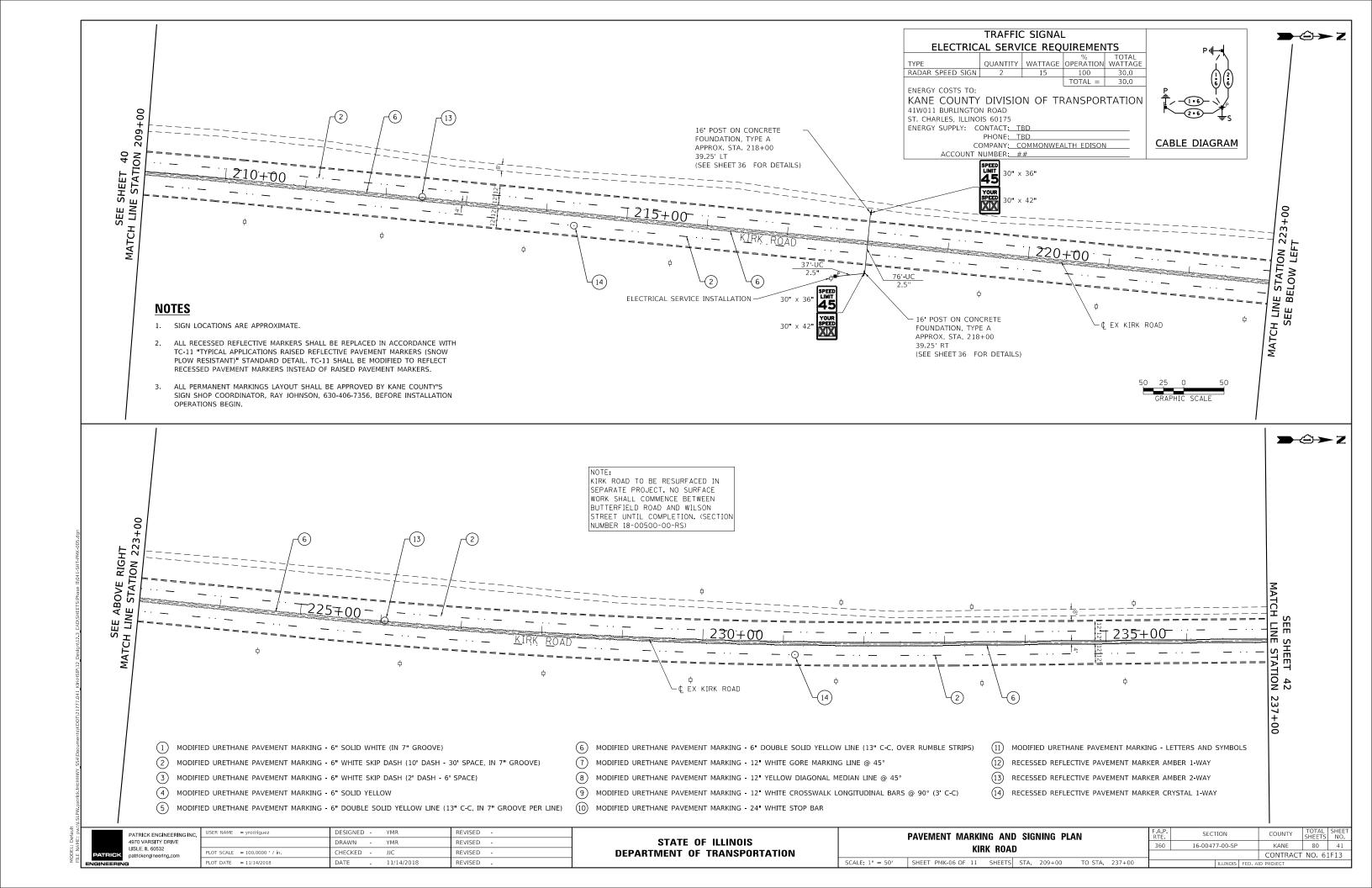
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

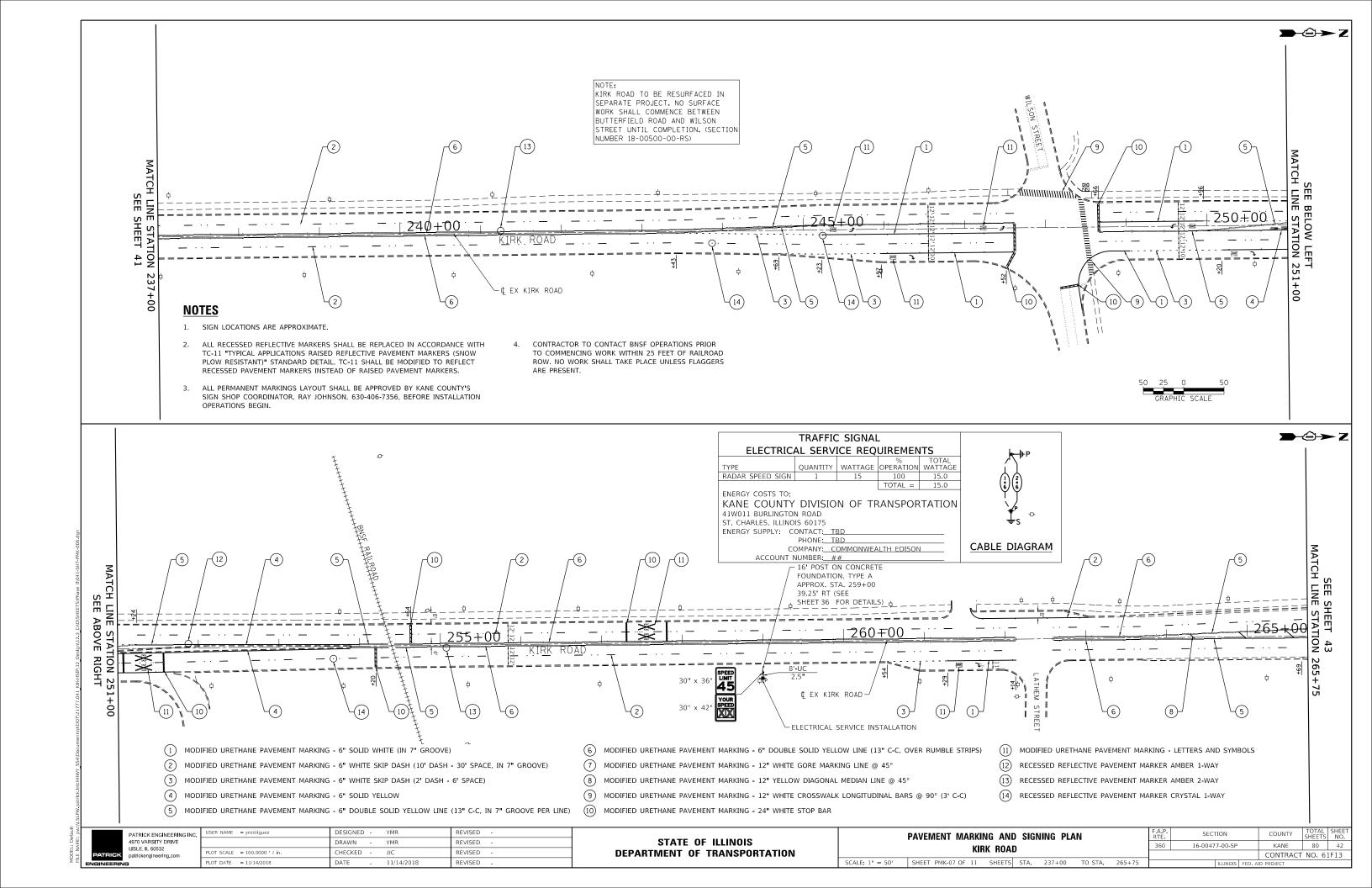


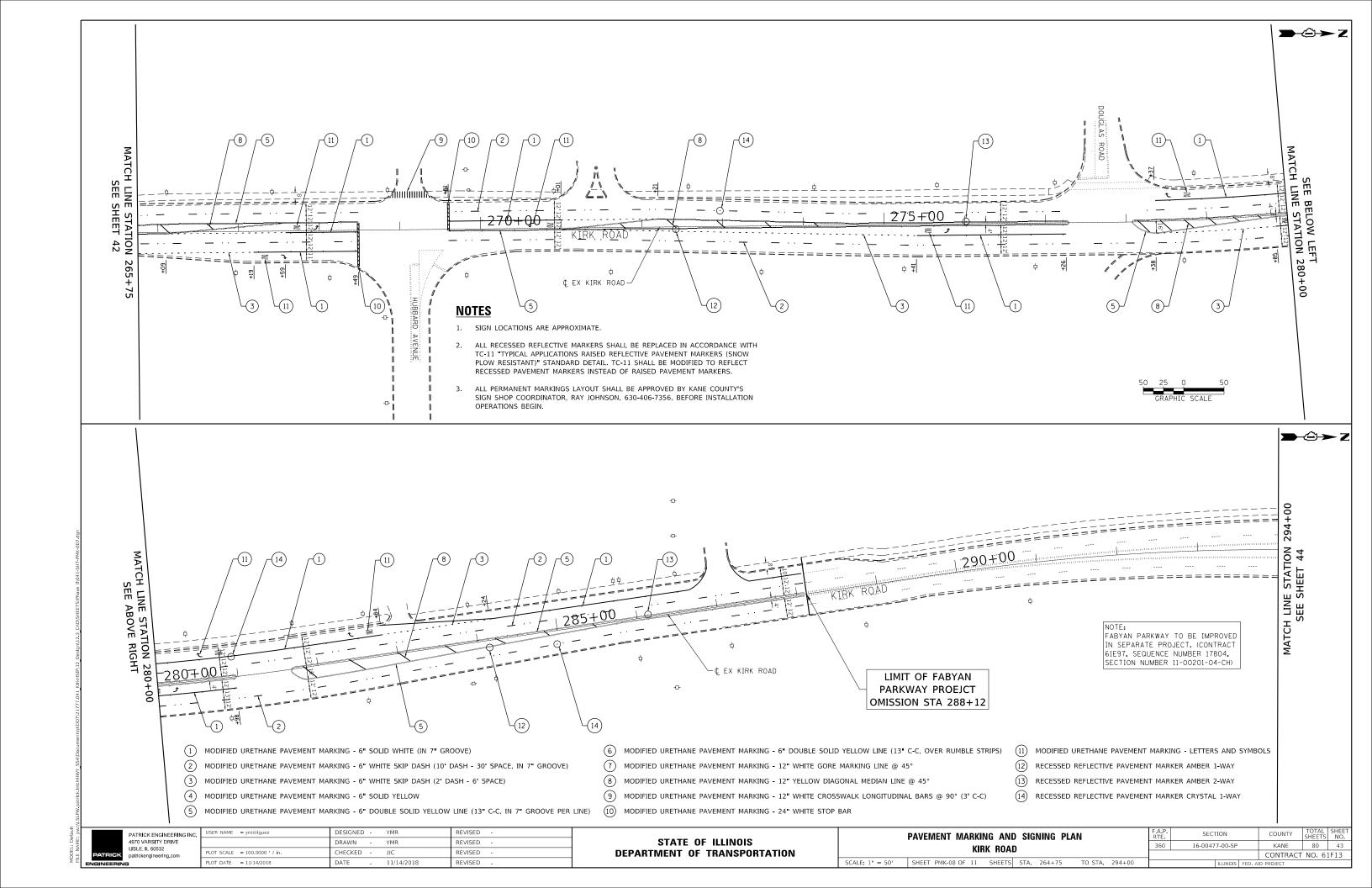


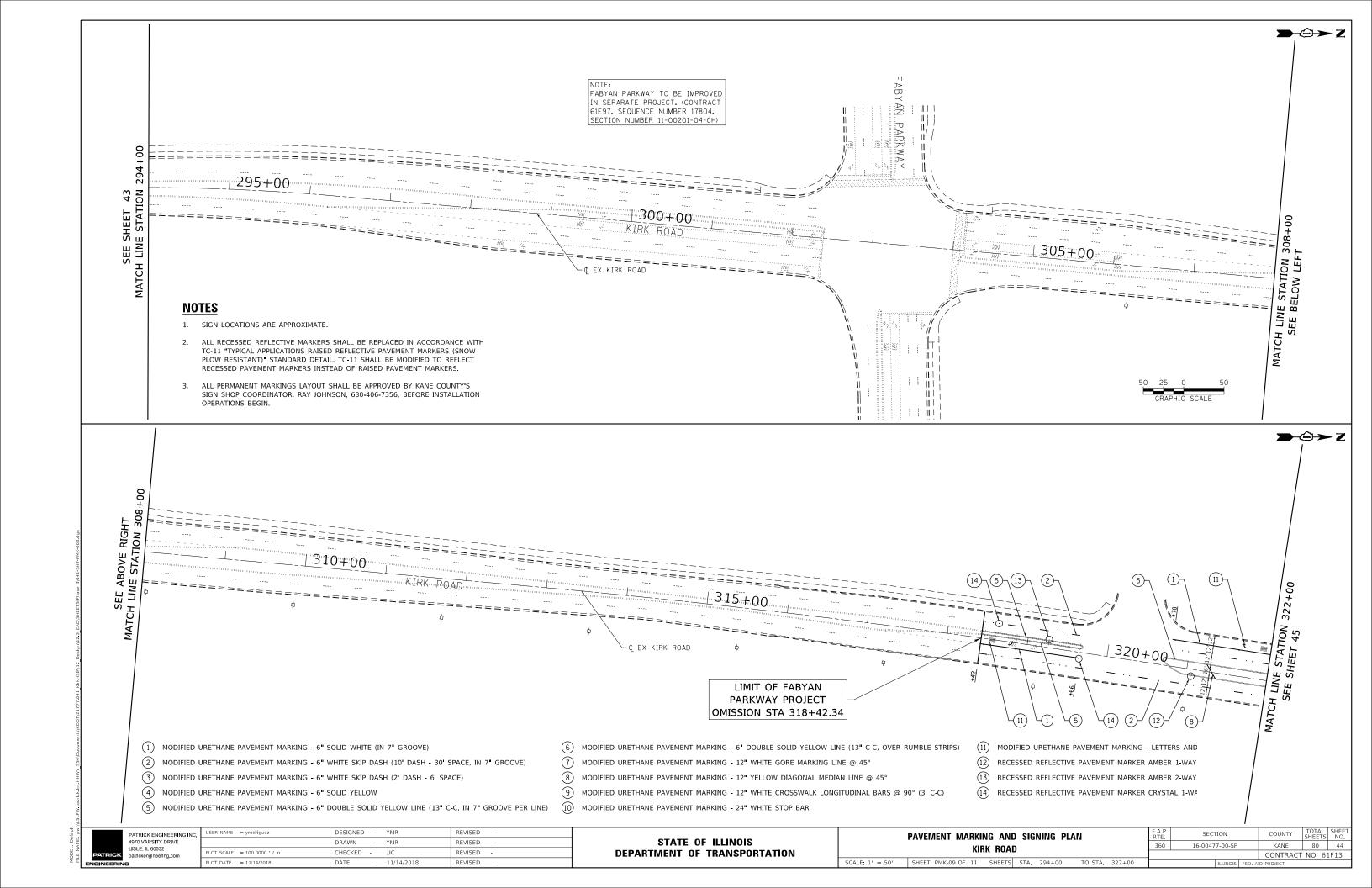


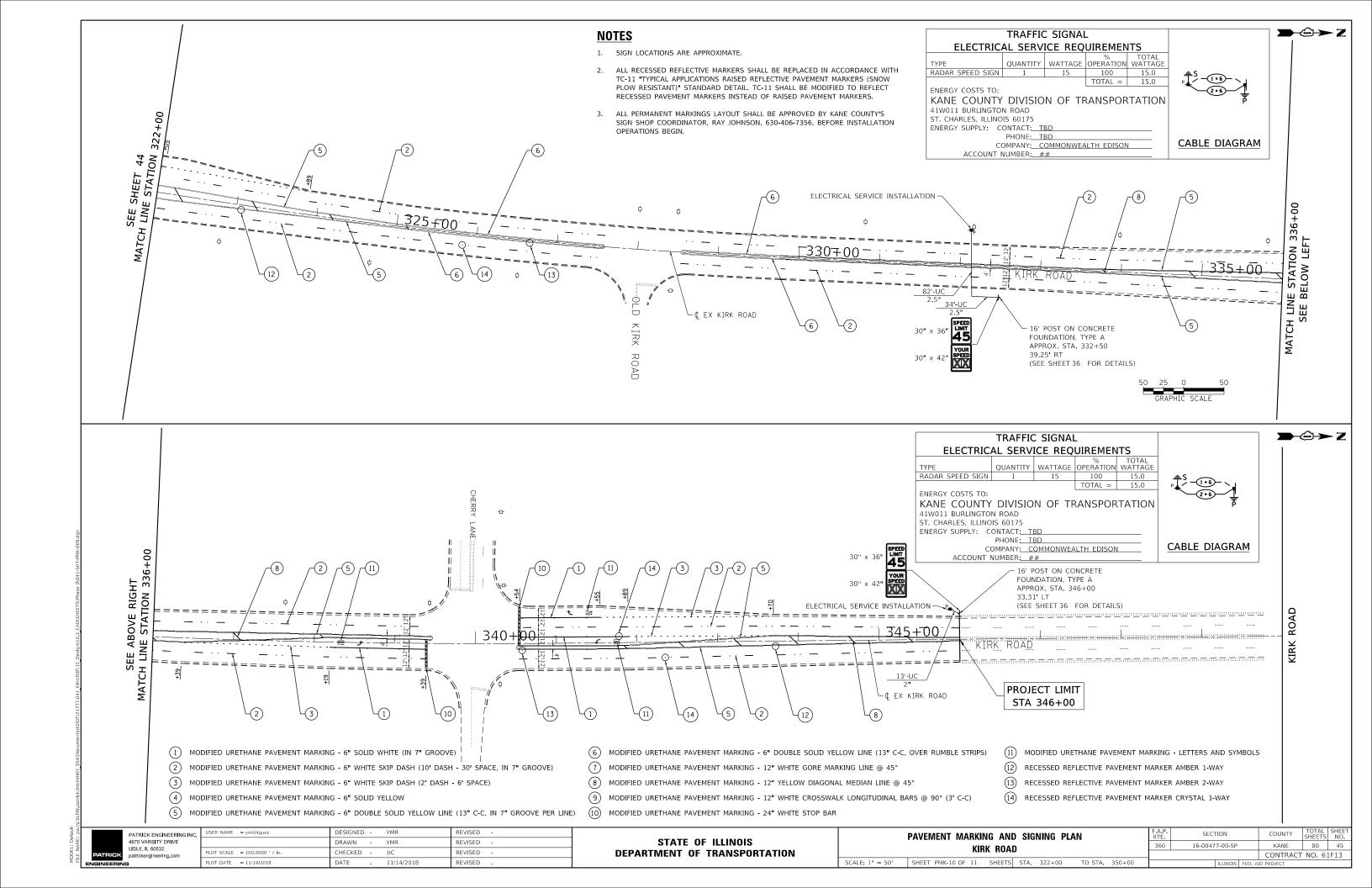


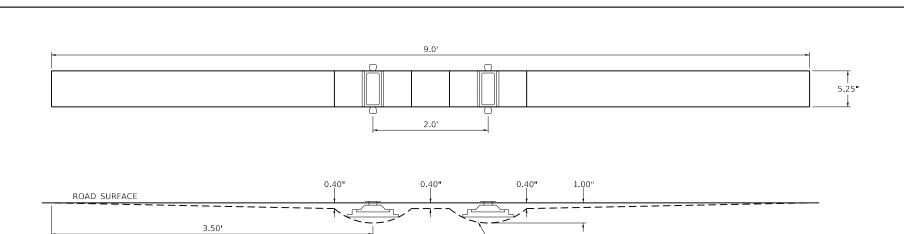








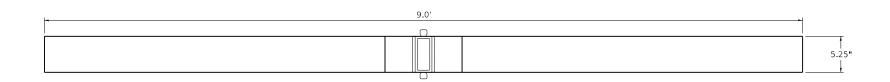


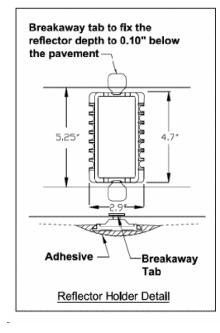


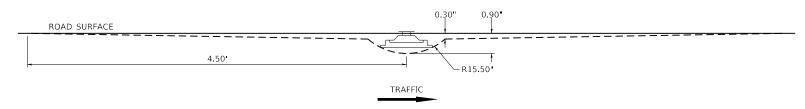
- R15.50"

TANDEM MARKERS

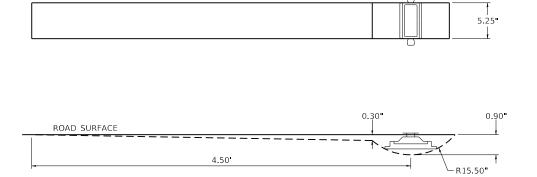
TRAFFIC







TW0-WAY



ONE-WAY

TRAFFIC

NOTES

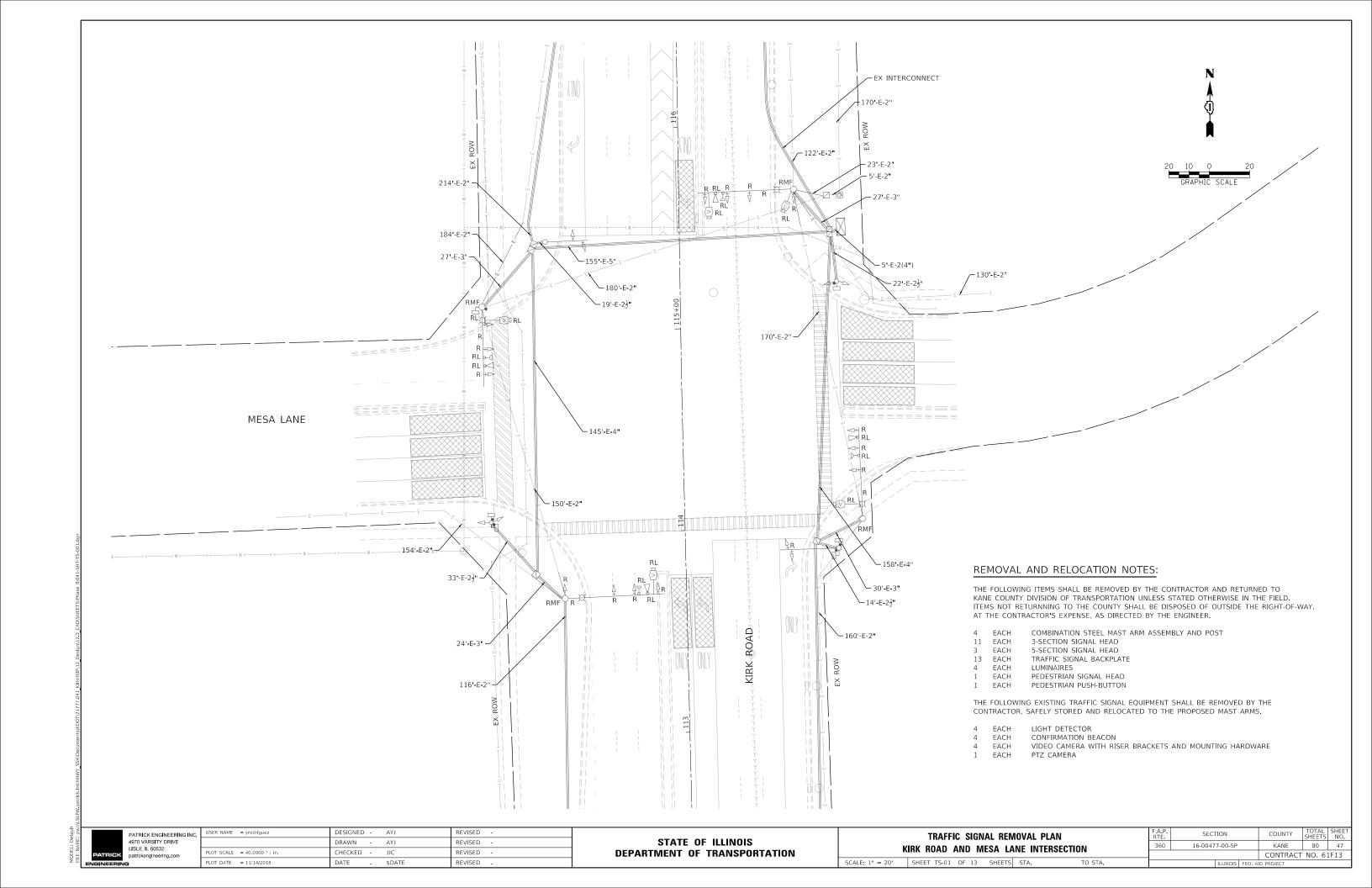
- 1. RECESSED REFLECTIVE PAVEMENT MARKER INSTALLATION SHALL CONFORM TO IDOT HIGHWAY STANDARD 781001 FOR PAVEMENT MARKER PLACEMENT.
- 2. REFLECTOR HOLDER SHALL BE MARKERONE SERIES R100.
- 3. THE ADHESIVE SHALL MEET THE REQUIREMENTS OF AASHTO M237 SPECIFICATION FOR ADHESIVES TO BE USED IN CEMENTING TO ASPHALT SURFACES.
- 4. FOR ONE-WAY MARKERS HEADING UPHILL, UPHILL GRIND TAPER MAY BE OMITTED.
- . MARKERS SHALL BE PLACED AT 80' INTERVALS ON LANE LINES AND PAINTED MEDIANS AND 40' INTERVALS ON CURVES AND APPROACHING INTERSECTIONS OR AS DIRECTED BY THE ENGINEER.
- 6. SEE SPECIAL PROVISIONS FOR TOLERANCES.

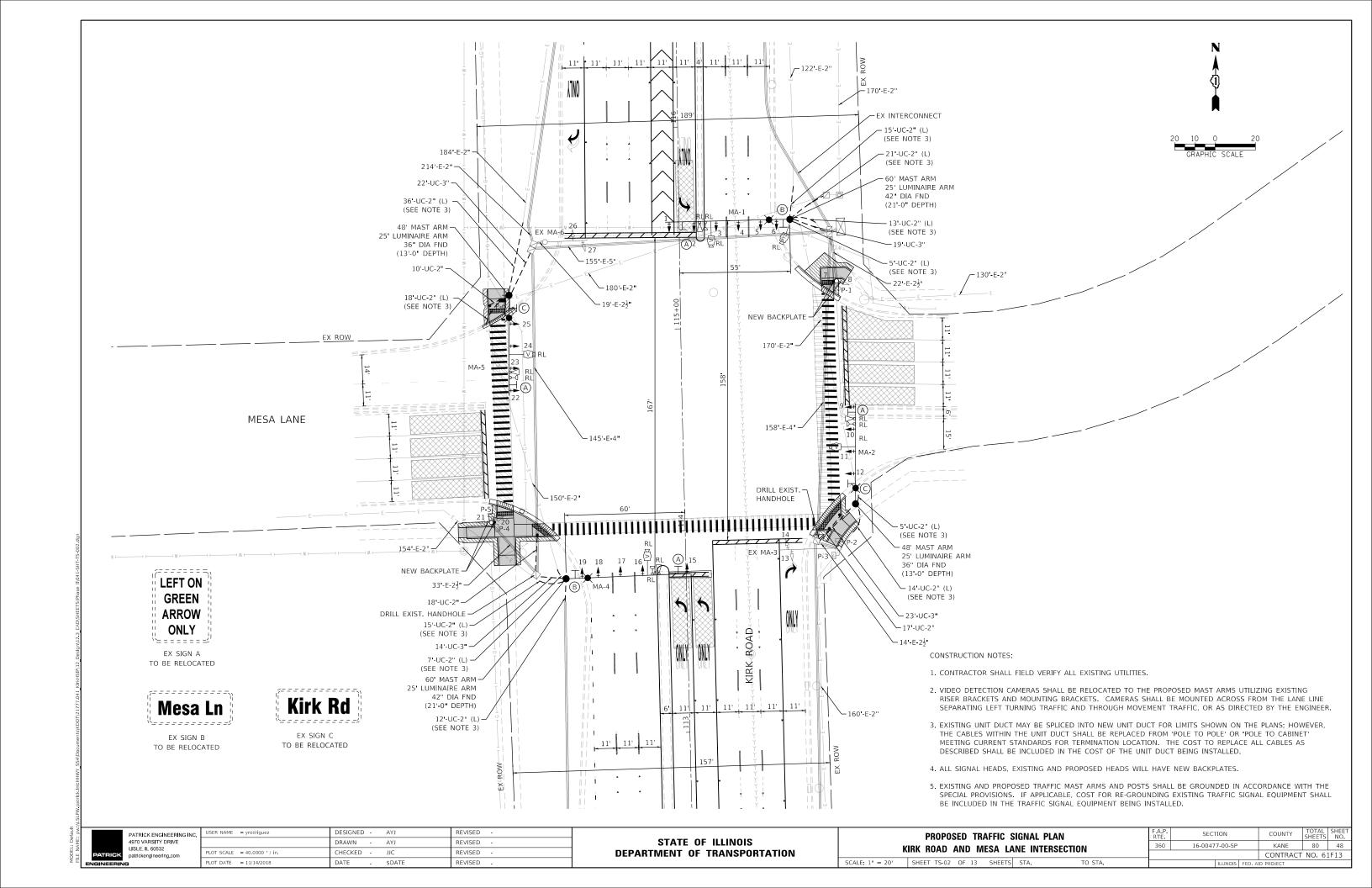
-5-1		
NAME: pw:		PATRICK ENGIN
ü		
Ξ		4970 VARSITY D
ž		LISLE, IL 60532
FILE	PATRICK	patrickengineering
Ξ	ENGINEERIN	
	EMPLIATERIN	

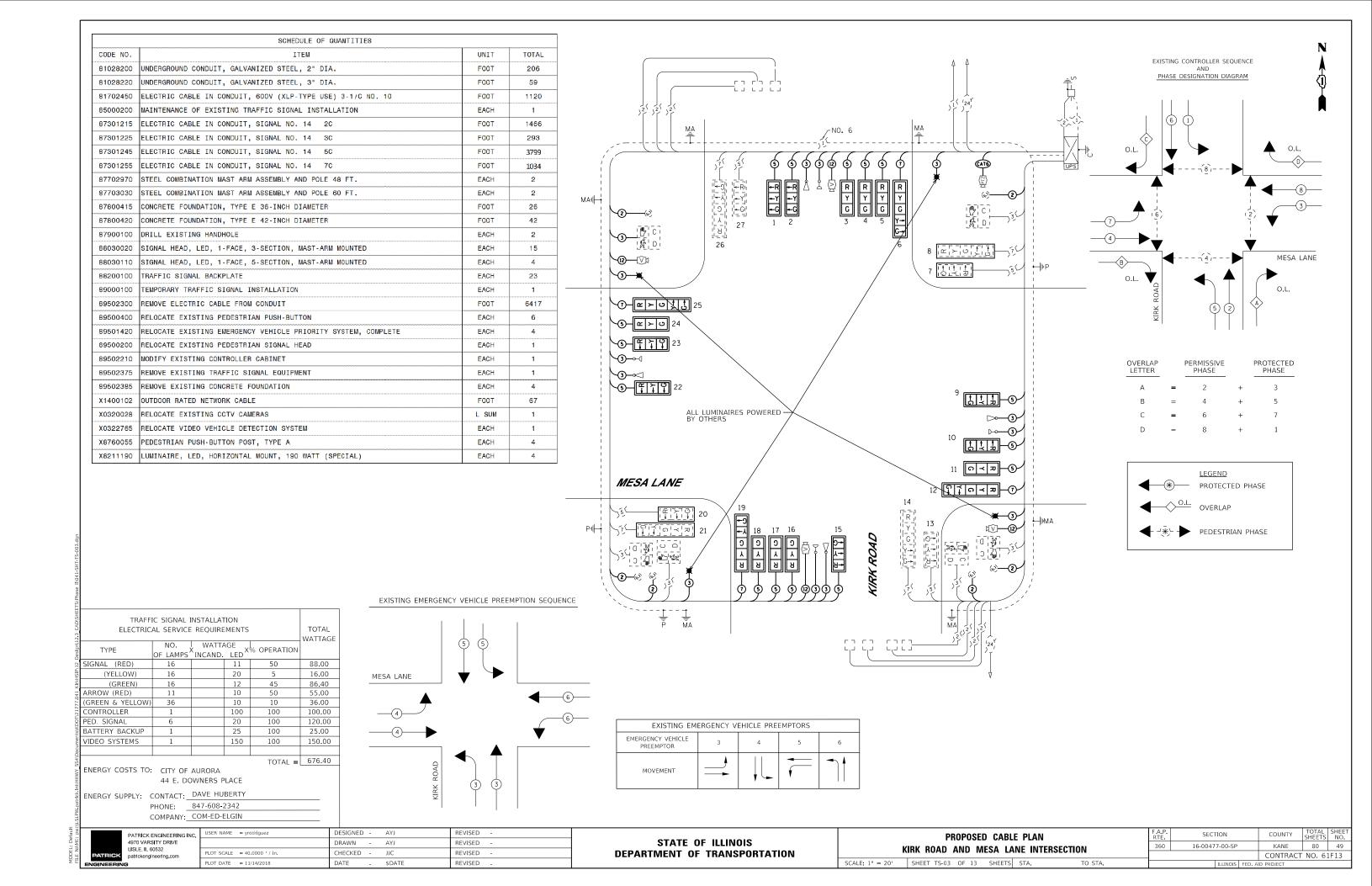
INEERING INC.	USER NAME = vrodriguez	DESIGNED - YMR	REVISED -	
DRIVE		DRAWN - YMR	REVISED -	
2 Ing.com	PLOT SCALE = 50.0000 ' / in.	CHECKED - JJC	REVISED -	
ing.com	PLOT DATE = 11/14/2018	DATE - \$DATE	REVISED -	

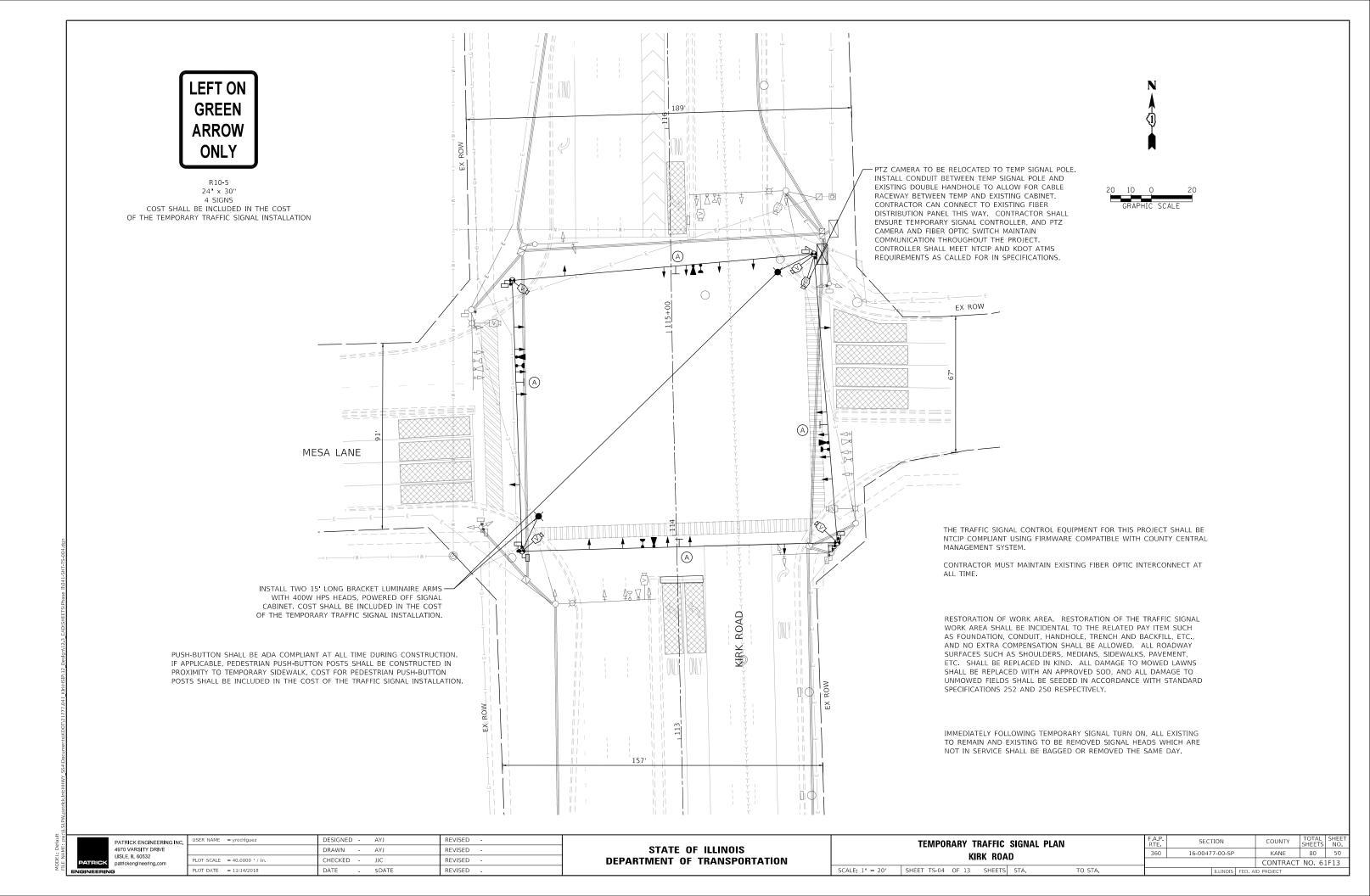
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

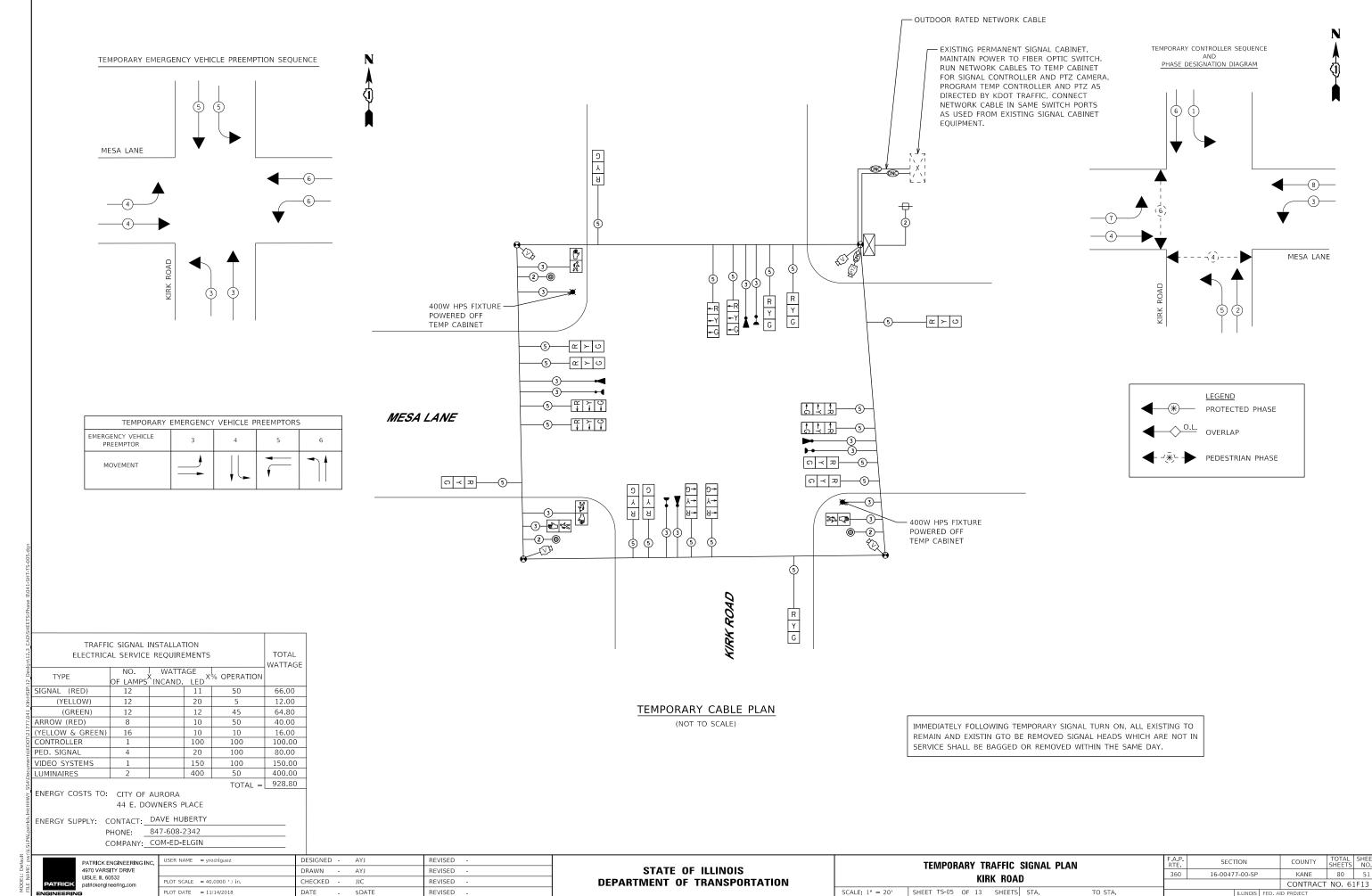
I	KANE COUNTY RECESSED	REFLECTIVE	PAVEMENT MARKER	DETAIL	F.A.P. RTE	SECTI	ION	COUNTY	TOTAL SHEETS	SHEET NO.
ı		KIRK ROA	n		360	16-00477	'-00-SP	KANE	80	46
ļ		KIIIK IIOA						CONTRACT	Γ NO. 6	1F13
ı	SCALE: NTS SHEET 1 OF	1 SHEETS	STA. TO S	A.			ILLINOIS FED. A	ID PROJECT		

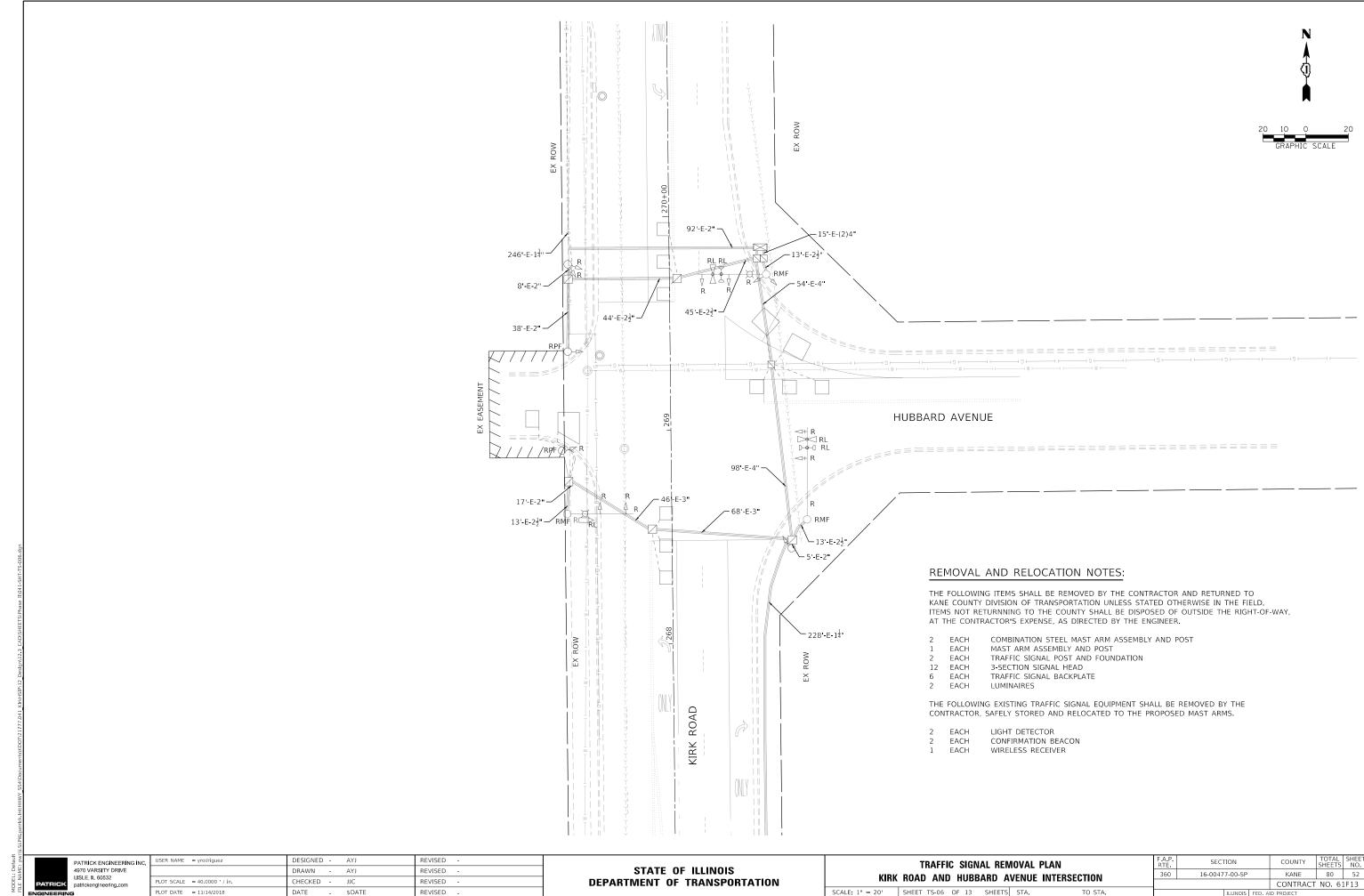




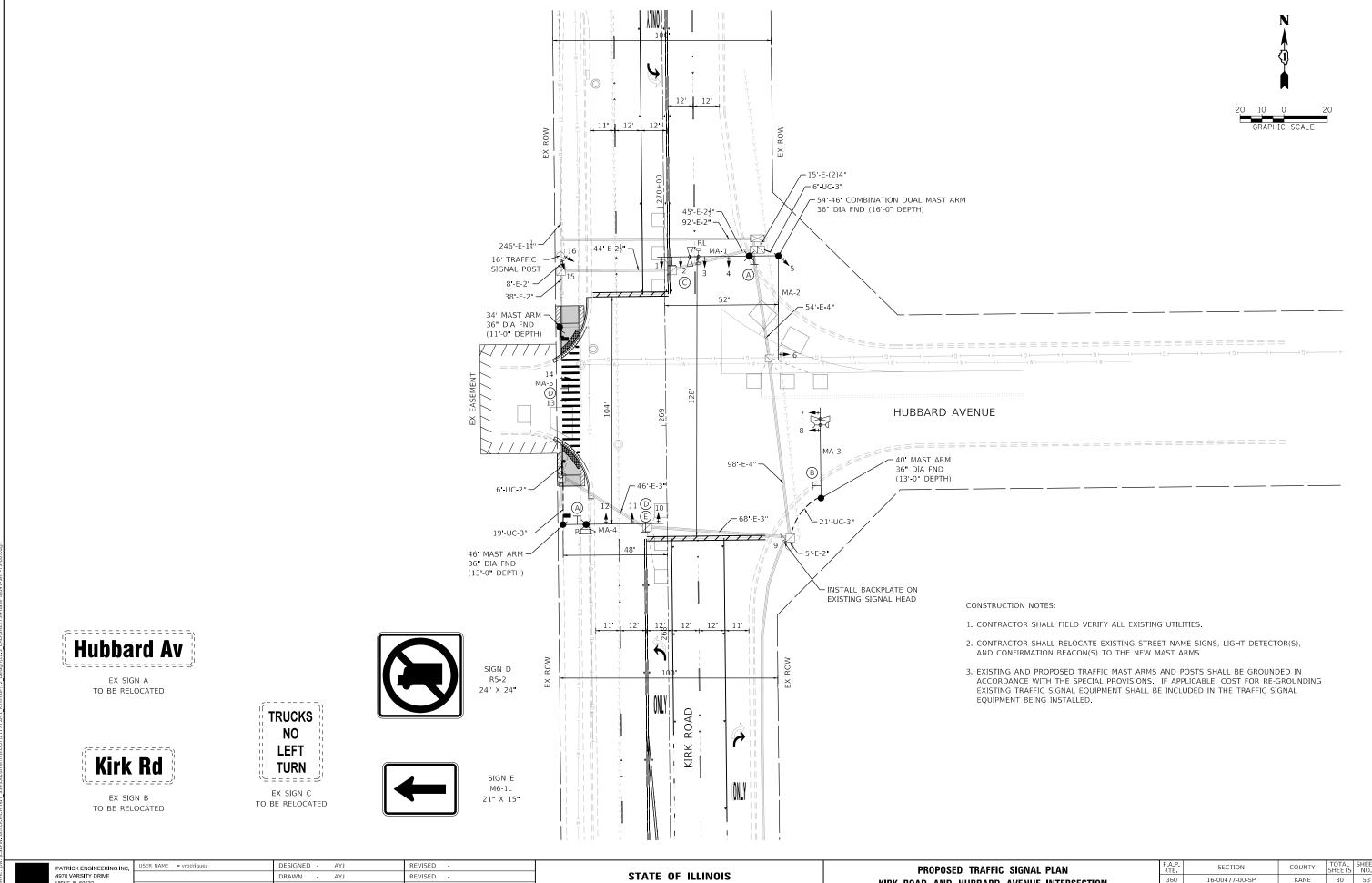








REVISED PLOT DATE = 11/14/2018



DEPARTMENT OF TRANSPORTATION

KIRK ROAD AND HUBBARD AVENUE INTERSECTION

SCALE: 1" = 20' SHEET TS-07 OF 13 SHEETS STA.

CONTRACT NO. 61F13

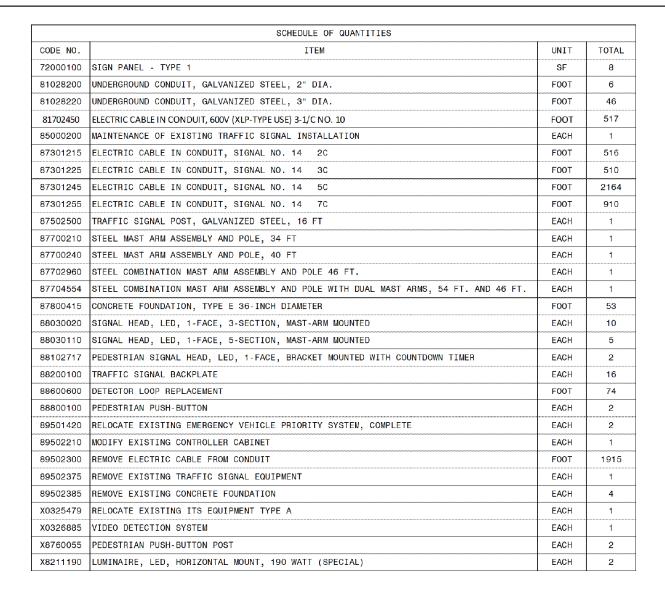
LISLE, IL 60532

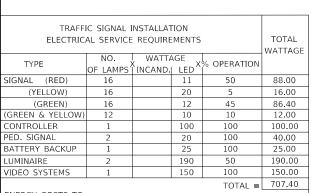
PLOT DATE = 11/14/2018

HECKED -

REVISED

REVISED

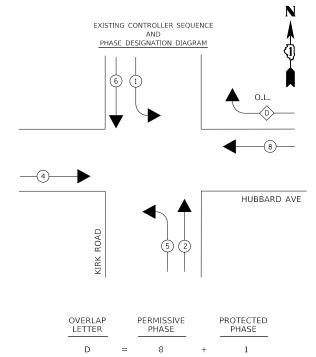


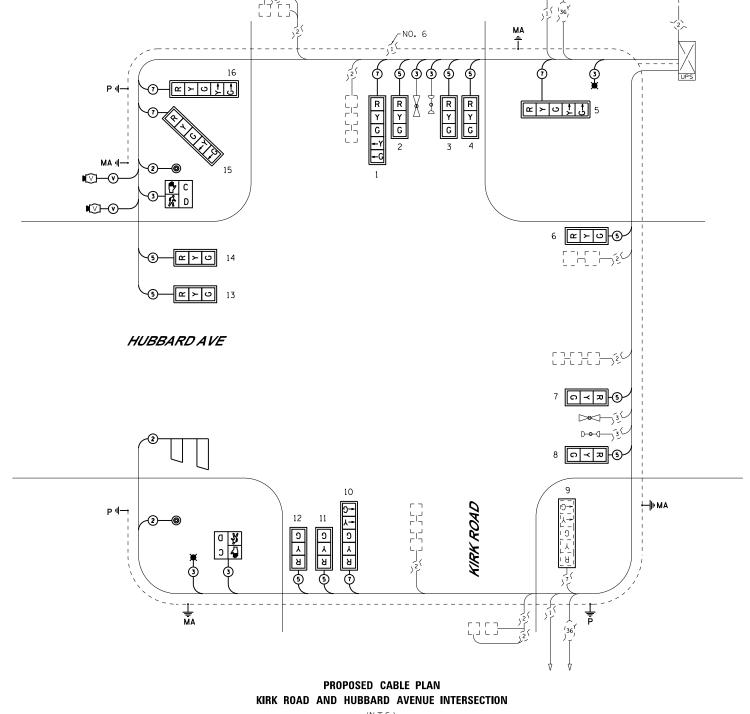


ENERGY COSTS TO: CITY OF BATAVIA
200 N RADDANT ROAD

ENERGY SUPPLY: CONTACT: ELECTRIC UTILITY DIVISION

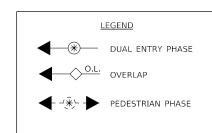
PHONE: 630-454-2350





(N.1.5.)

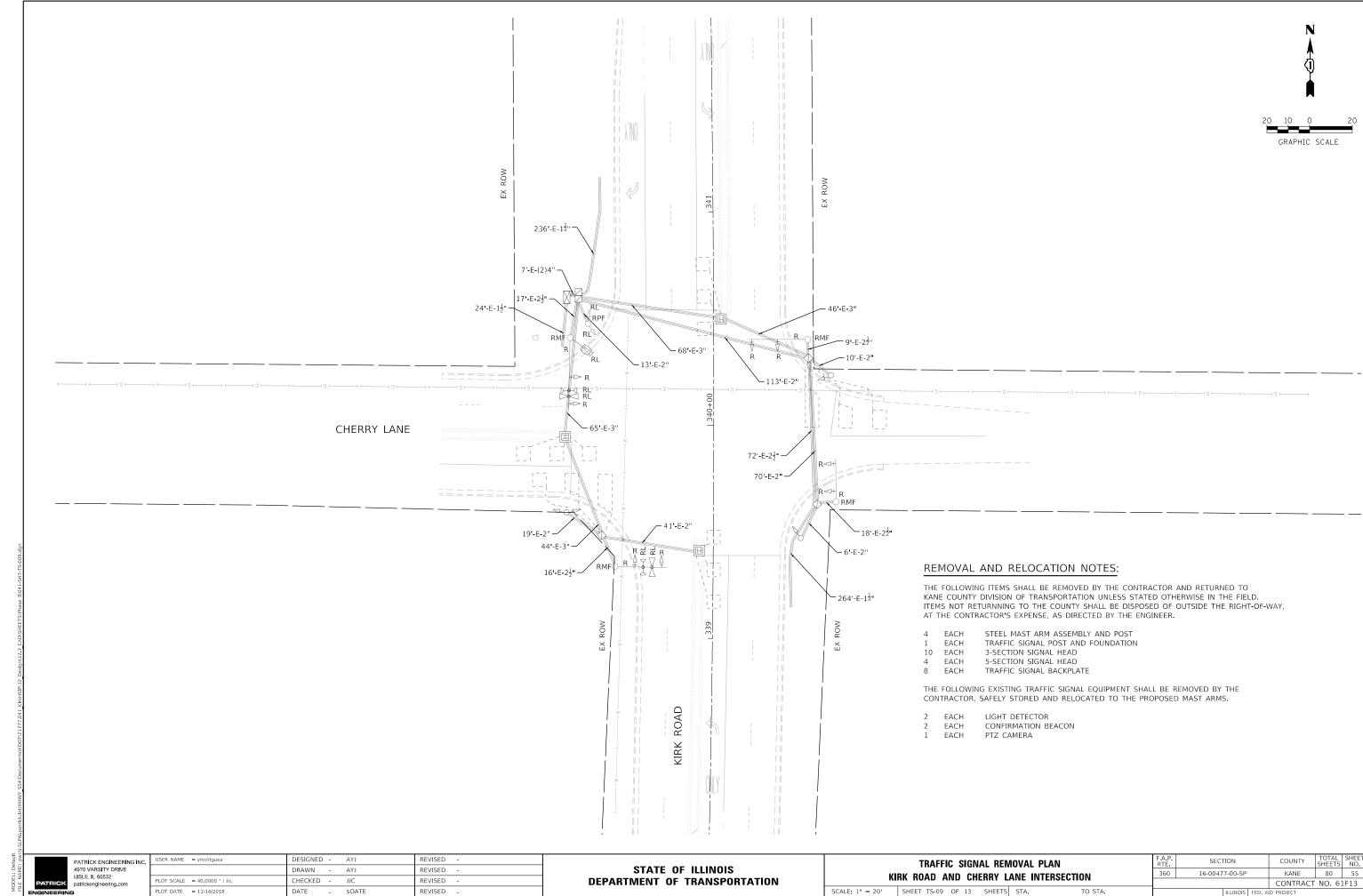
SCALE: 1" = 20'

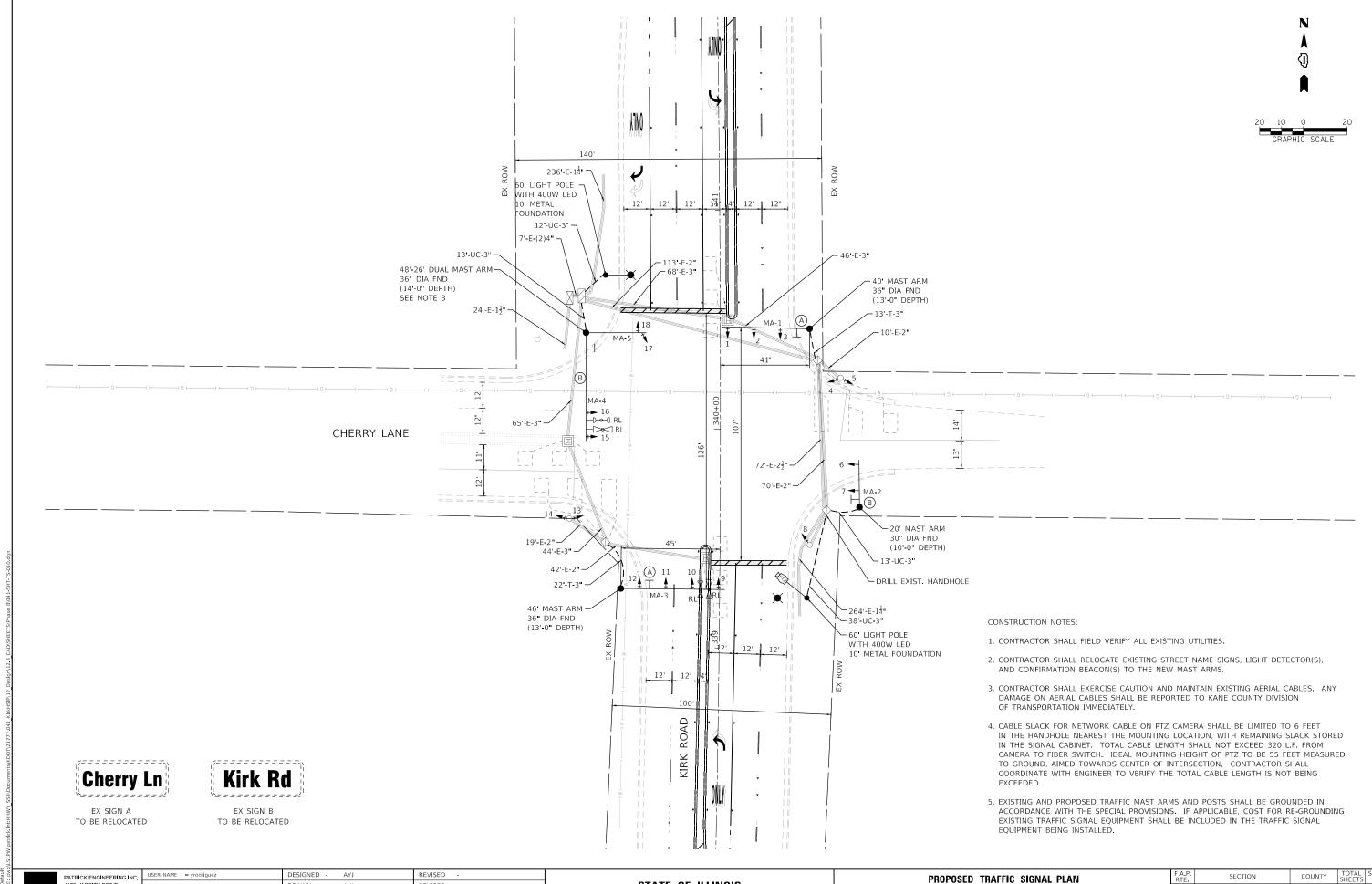


COMPANY: CI	TT OF BATAVIA		U	=
PATRICK ENGINEERING INC.	USER NAME = yrodriguez	DESIGNED -	AYJ	REVISED
4970 VARSITY DRIVE		DRAWN -	AYJ	REVISED
LISLE, IL 60532 PATRICK patrickengineering.com	PLOT SCALE = 40.0000 ' / in.	CHECKED -	JJC	REVISED
NGINEERING	PLOT DATE = 11/14/2018	DATE -	\$DATE	REVISED

STATE O	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

	PROPOSED CABI	E PLAN		F.A.P. RTE	SEC ⁻	TION		COUNTY	TOTAL SHEETS	SHEET NO.
IRK	ROAD AND HUBBARD A	VENIIE I	INTERSECTION	360	16-0047	7-00-SP		KANE	80	54
MIIIN	HOAD AND HODDAND A	VLIVOL	INTERISECTION					CONTRACT	NO. 6	1F13
ı	SHEET TS-08 OF 13 SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	ID PROJECT		





PA ENGI

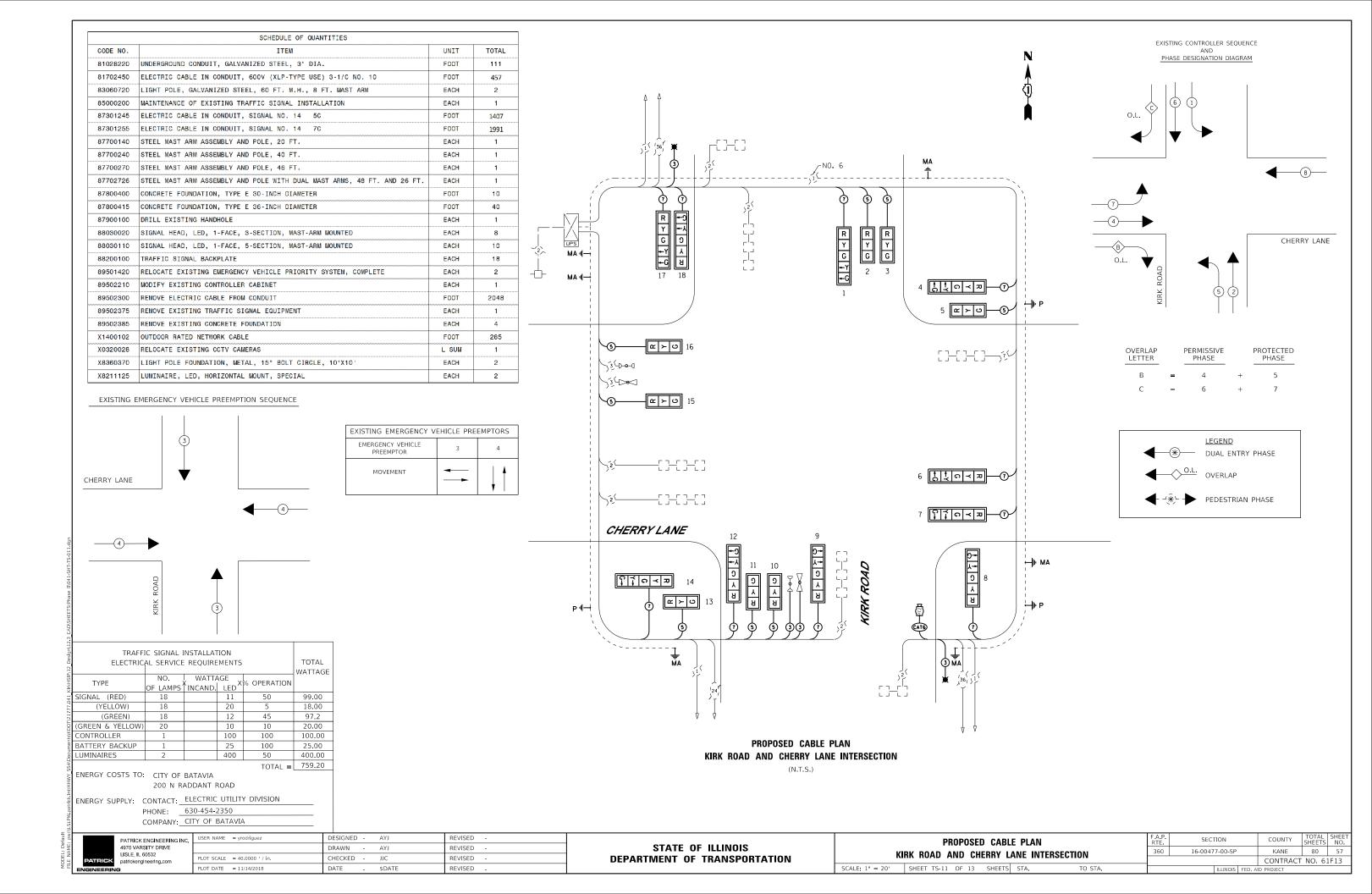
4970 VARSITY DRIVE
LISLE, IL 60532
patrickengineering.com

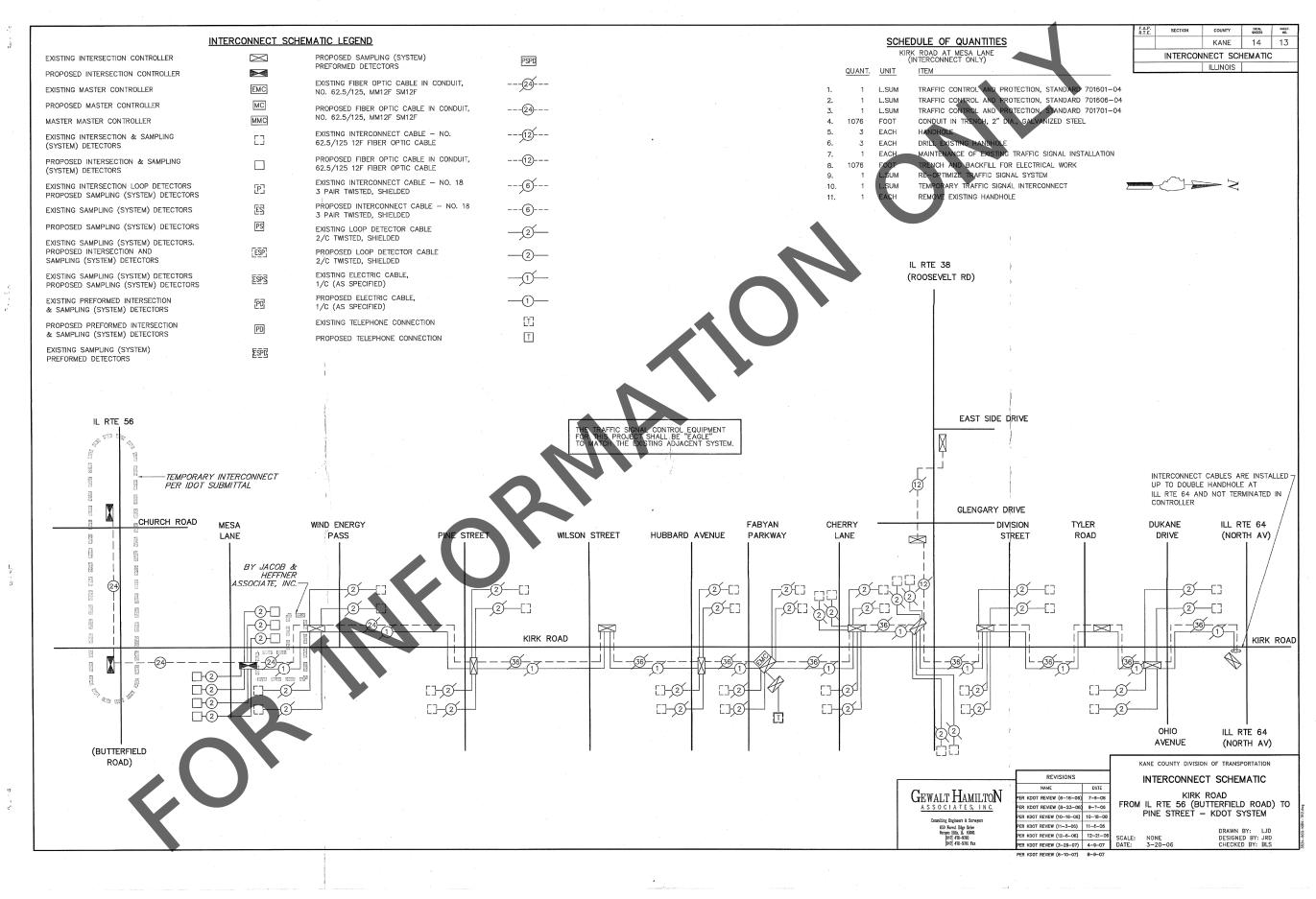
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL PLAN
KIRK ROAD AND CHERRY LANE INTERSECTION

SCALE: 1" = 20' SHEET TS-10 OF 13 SHEETS STA. TO STA

RTE.	SECTION	COUNTY	SHEETS	NO.
360	16-00477-00-SP	KANE	80	56
CONTRACT	NO.	61F13		
ILLINOIS	FED. ALD PROJECT			



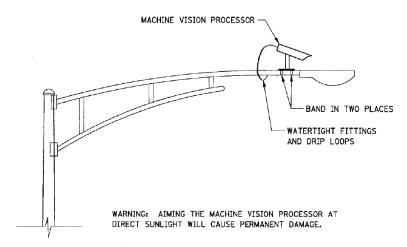


DESIGNED - AYJ JSER NAME = yrodriguez REVISED DRAWN -AYJ REVISED HECKED -REVISED PLOT DATE = 11/14/2018 DATE REVISED SDATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

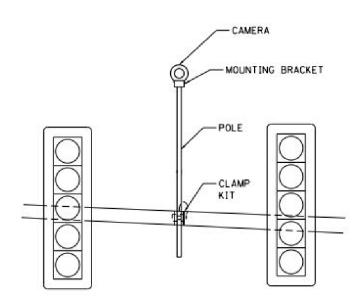
SECTION TRAFFIC SIGNAL SCHEMATIC 16-00477-00-SP KANE 80 58 CONTRACT NO. 61F13 SCALE: 1" = 20' SHEET 58 OF 80 SHEETS STA. TO STA.

1970 VARSITY DRIVE LISLE, IL 60532

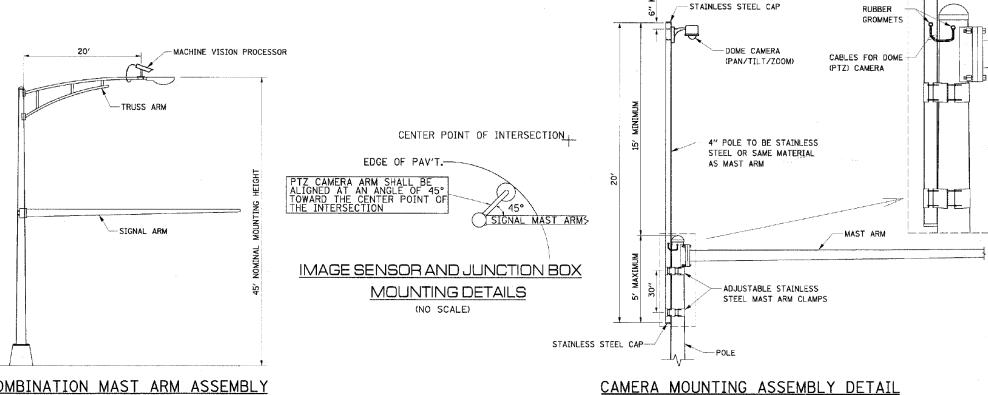


MACHINE VISION PROCESSOR MOUNTING DETAIL

(NOT TO SCALE)



MACHINE VISION PROCESSOR BRACKET MOUNTING DETAIL NOT TO SCALE



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS

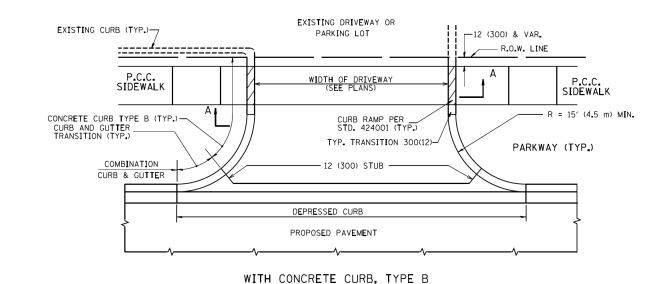
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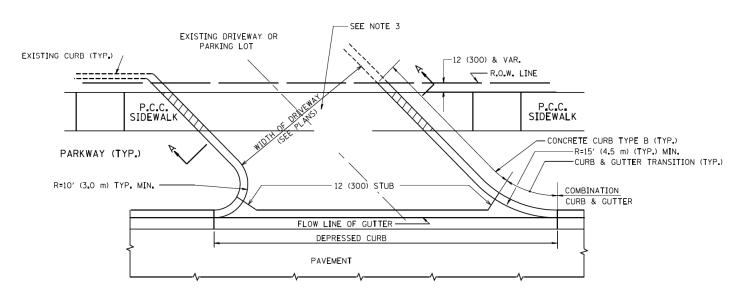
DESIGNED - AYJ REVISED DRAWN -4970 VARSITY DRIVE AYJ REVISED LISLE, IL 60532 CHECKED -REVISED PLOT DATE = 11/14/2018 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

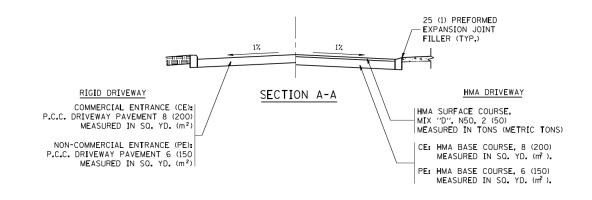
(NOT TO SCALE)

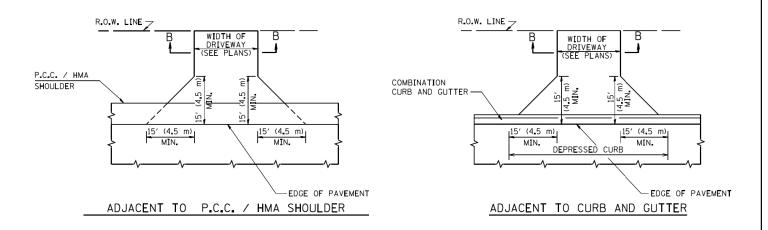
SECTION VIDEO DETECTION SYSTEM/CAMERA MOUNTING DETAILS 16-00477-00-SP KANE 80 59 CONTRACT NO. 61F13 OF SHEETS STA.

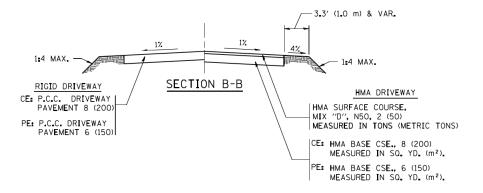




WITH CONCRETE CURB, TYPE B







RURAL FIELD ENTRANCE (FE)

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

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

GENERAL NOTES:

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

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

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

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

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

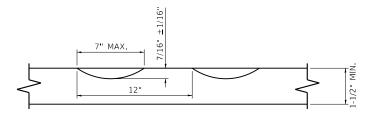
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

SCALE: NONE

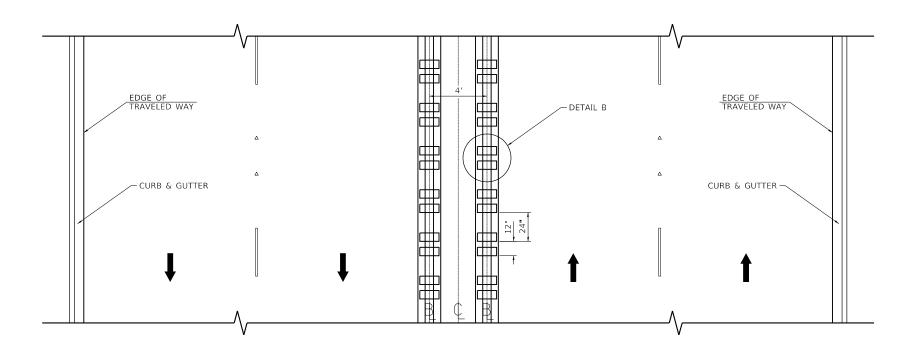
FILE NAME =	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
c:\pw_work\pwidct\leysa\d0108315\bd01.dgr		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.00000 '/ in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

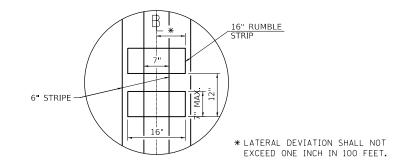
DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AND FACE OF CURB & EDGE OF SHOULDER $>$ = 15' (4.5 m)	360	16-00477-00-SP	KANE	80	60
IND FACE OF CORD & EDGE OF SHOOLDER >= 15 (4.5 III)		BD0156-07 (BD-01)	CONTRACT	NO. 6	1F13
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. F	ROAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



SECTION A-A



TWO-WAY ROAD



DETAIL B

GENERAL NOTES

CENTERLINE RUMBLE STRIPS SHALL BE CONSTRUCTED ACCORDING TO SECTION 642 ALONG THE CENTERLINE OF PAVEMENT.

SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.

AFTER RUMBLE STRIPS ARE INSTALLED, THE PAVEMENT SURFACE SHALL BE SWEPT CLEAN PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT MARKINGS.

WHERE USED, ADJUST SPACING OF RECESSED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

BASIS OF PAYMENT

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CENTERLINE-RUMBLE STRIP OF THE WIDTH SPECIFIED.

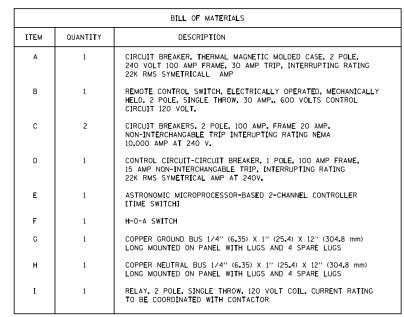
MODIFIED URETHANE PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS, AND WILL BE PAID FOR SEPARATELY.

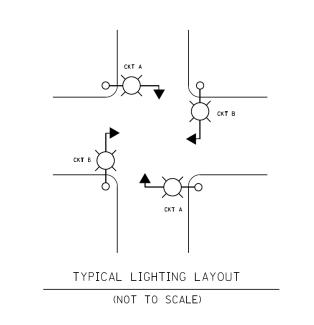
PATRICK ENGINEERING INC
4970 VARSITY DRIVE
LISLE, IL 60532
PATRICK
ENGINEERING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ı	RUMBLE S	STRIPES	FOR C	ENT	ERLINE,	NON-FRI	EEWAY (MODIFIED)	F.A.P. RTE	SE
				KII	RK ROAL	1		360	16-00
				IXII	IIK IIUAI	,			BD-55 (MC
SCALE:	NTS	SHEET 1	OF	1	SHEETS	STA.	TO STA.		

PANEL EQUIPMENT





STANDARD-TYPE SMALL DIMENSION DOUBLE POLE

FUSEHOLDER WITH INSULATED BOOTS, FUSING AND (SEE SPECS)

- CABLE SPLICE (TYP.)

PHASE CONDUCTORS, 600 V TYPE RHW SOLID COLOR, SIZE AS SPECIFIED (TYP.)

COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)

IDOT TRAFFIC SIGNAL/LIGHTING CONTROL CABINET

-GROUND JUMPER

COMBINATION LIGHTING CONTROLLER

WIRING DIAGRAM

(NOT TO SCALE)

SHALL BE BONDED TO CABINET ENCLOSURE

2-1/C #10 AWG, 600 V TYPE RHW, SOLID COLOR CODED CABLES

SPLICE GROUND WIRE AND PIGTAIL SAME SIZE -EXTENSION TO POLE GROUNDING LUG

INSULATED GROUND WIRE, 600 V TYPE RHW.

600V 3-1/C NO. 8 AND 1/C NO. 10 GND IN RGS CONDUIT

FROM DISCONECTCABINET

(SEE NOTES 10 AND 11)

SOLID COLOR GREEN, SIZE AS SPECIFIED

UNIT DUCT (TYP)

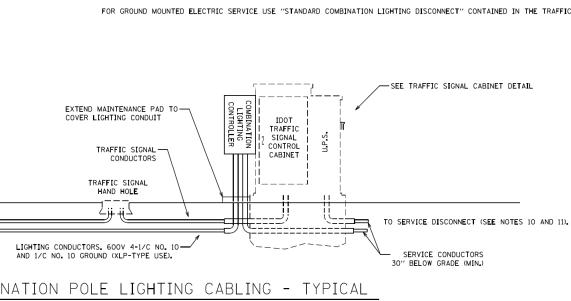
GROUNDING LUG -

NOTES:

- 1. ALL WIRING RELATED TO THE LIGHTING CONTROLS SHALL BE #10 AWG, 600V, TYPE SWITCH BOARD WIRE, STRANDED COPPER.
- 2. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE ENCLOSURE.
- 3. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY. UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED.
- 5. THE COMBINATION POLE LIGHTING CABLING DETAIL IS INTENDED TO SHOW CONNECTIONS ONLY, FOR FURTHER INFORMATION ON THE COMBINATION LIGHT POLE, THE TRAFFIC SIGNAL CONTROL CABINET, AND THE SERVICE DISCONNECT BOX OR CABINET REFER TO THE RESPECTIVE DETAIL DRAWINGS.
- 6. COMBINATION LIGHTING SHALL BE TIMED TO ENERGIZE 20 MINUTES PRIOR TO DUSK AND DE-ENERGIZE 20 MINUTES AFTER DAWN.
- 7. COMBINATION LIGHTING CONTROLLER AND ALL COMBINATION POLES SHALL HAVE IDOT DESIGNATIONS AND LABELS, LIGHTING CONTROLER DESIGNATIONS SHALL BE COORDINATED WITH THE BUREAU OF TRAFFIC - LIGHTING SECTION.
- 8. ENCLOSURE SHALL BE UNPAINTED, NATURAL ALUMINUM FINISH. SHALL BE U.L. LISTED NEMA TYPE 3R AND SHALL BE 26" X 17" X 15"
- 9. 12" x 16" STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
- 10. ELECTRIC SERVICE SHALL BE 120V/240V SERVICE AND SHALL BE A SHARED SERVICE FOR COMBINATION LIGHTING AND TRAFFIC SIGNALS.
- 11. CONDUIT SIZES TO THE SERVICE DISCONNECT SHALL BE COORDINATED WITH THE SERVICE DISCONNECT DETAILS, REFER TO THE FOLLOWING DETAIL DRAWINGS FOR FOR THE SERVICE DISCONNECT.

FOR POLE MOUNTED ELECTRIC SERVICE USE "COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX" (BE-230).

FOR GROUND MOUNTED ELECTRIC SERVICE USE "STANDARD COMBINATION LIGHTING DISCONNECT" CONTAINED IN THE TRAFFIC SIGNAL DETAILS.



COMBINATION POLE LIGHTING CABLING - TYPICAL (NOT TO SCALE)

FILE NAME =	USER NAME = bauerdl	DESIGNED - MP	REVISED - MAP 9/20/11				F.A.P.	SECTION	COUNTY TOTAL SHEETS	SHEET
cs\pw_work\pwidct\bauerdl\d0108315\be235	dgn	DRAWN - MP	REVISED - MAP 10/25/12	STATE OF ILLINOIS	CO	MBINATION LIGHTING CONTROLLER	360	16-00477-00-SP	KANE 80	62
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				B E- 235		1F13
	PLOT DATE = 2/27/2013	DATE - 8/24/11	REVISED -		SCALE: NTS	SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A		

LIGHTING CONDUCTORS OUT TO

NEXT IDOT COMBINATION POLE

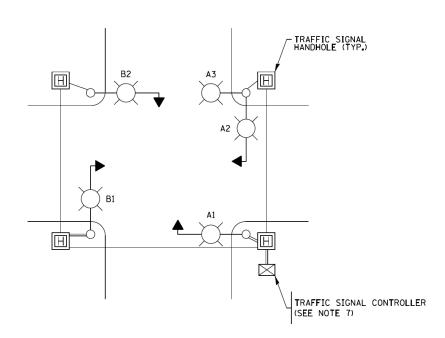
SEE STATE OF ILLINOIS DETAIL DRAWINGS COMBINATION LIGHTING TRAFFIC SIGNAL POLE

-600V 4-1/C NO 10 AND 1/C

— CKT A

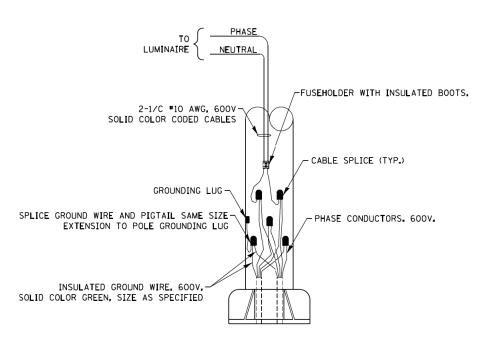
— CKT B

NO. 10 GROUND, (XLP-TYPE USE).
TO COMBINATION LIGHT POLES



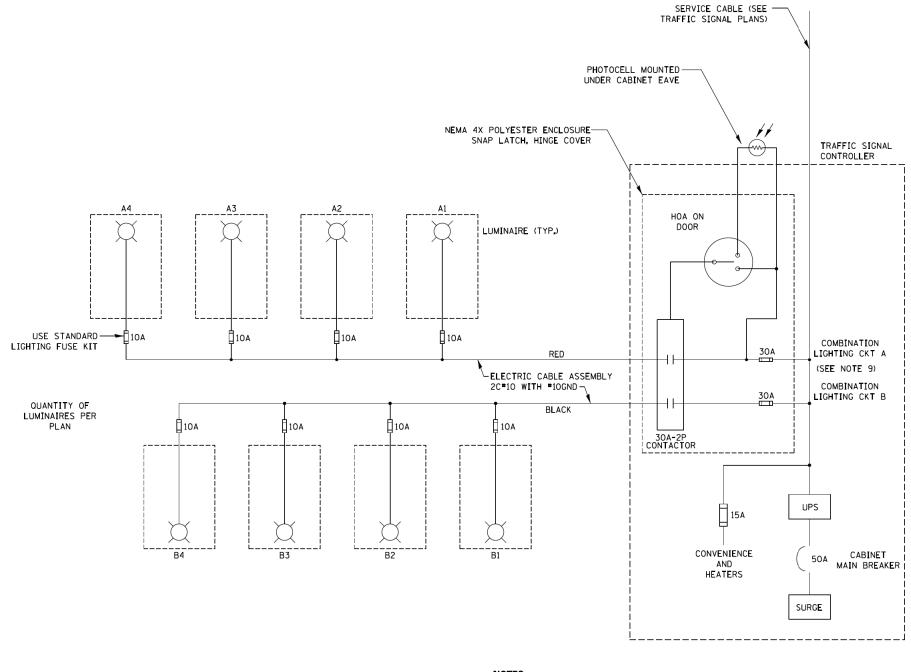
TYPICAL LIGHTING CIRCUIT

(NOT TO SCALE)



COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)



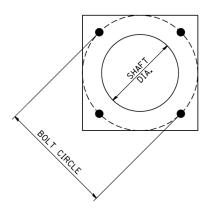
NOTES:

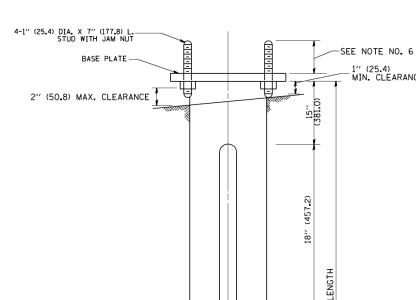
- 1. 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 2. MULTI-CONDUCTOR CABLE ASSEMBLY FOR LIGHTING CIRCUITS.
- 3. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- 5. ALL CONTROLLERS TO HAVE TWO FUSED LIGHTING BRANCH CIRCUITS.
- 6. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 7. RECORD DRAWING SHALL INCLUDE:
 - TRAFFIC SIGNAL PLAN SHEET(S)
 - TRAFFIC SIGNAL CABLE PLAN SHEET(S)
 - LIGHTING PLANSTHIS DETAIL
- 8. THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- 9. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT

FILE NAME =	USER NAME = footemj	DESIGNED	-	RT	REVISED	-	02/10/2015
be240.dgn		DRAWN	-		REVISED	-	10/13/2015
	PLOT SCALE = 50.00000 '/ in.	CHECKED	-	RT	REVISED	-	T.G. 4/12/2017
Default	PLOT DATE = 4/13/2017	DATE	-	08/18/2014	REVISED	-	

STATE C	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC	360	16-00477-00-SP	KANE	80	63
		BE-240	CONTRACT	NO. 6	1F13
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A	D PROJECT		





2¹/₂" (63.5)

SHAFT DIA.

HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE	
30 FT.	111/2"	85/8′′	6 FT.	12''×12''×1''	
31 FT35 FT.	111/2"	85/8′′	6 FT.	12''×12''×1''	
36 FT40FT.	15"	85/8′′	6 FT.	15''×15''×1 ¹ / ₄ ''	
41 FT45 FT.	15"	85%′′	6 FT.	15''×15''×1 ¹ / ₄ ''	
46 FT50 FT.	15''	10''	8 FT.	15"×15"×1 ¹ / ₄ "	
60 FT	15"	10"	10 FT	15"x15"x1 ^{1/4} "	PER KANE COUNTY DIVISION OF TRANSPORTATION 2018-09-24

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

NOTES:

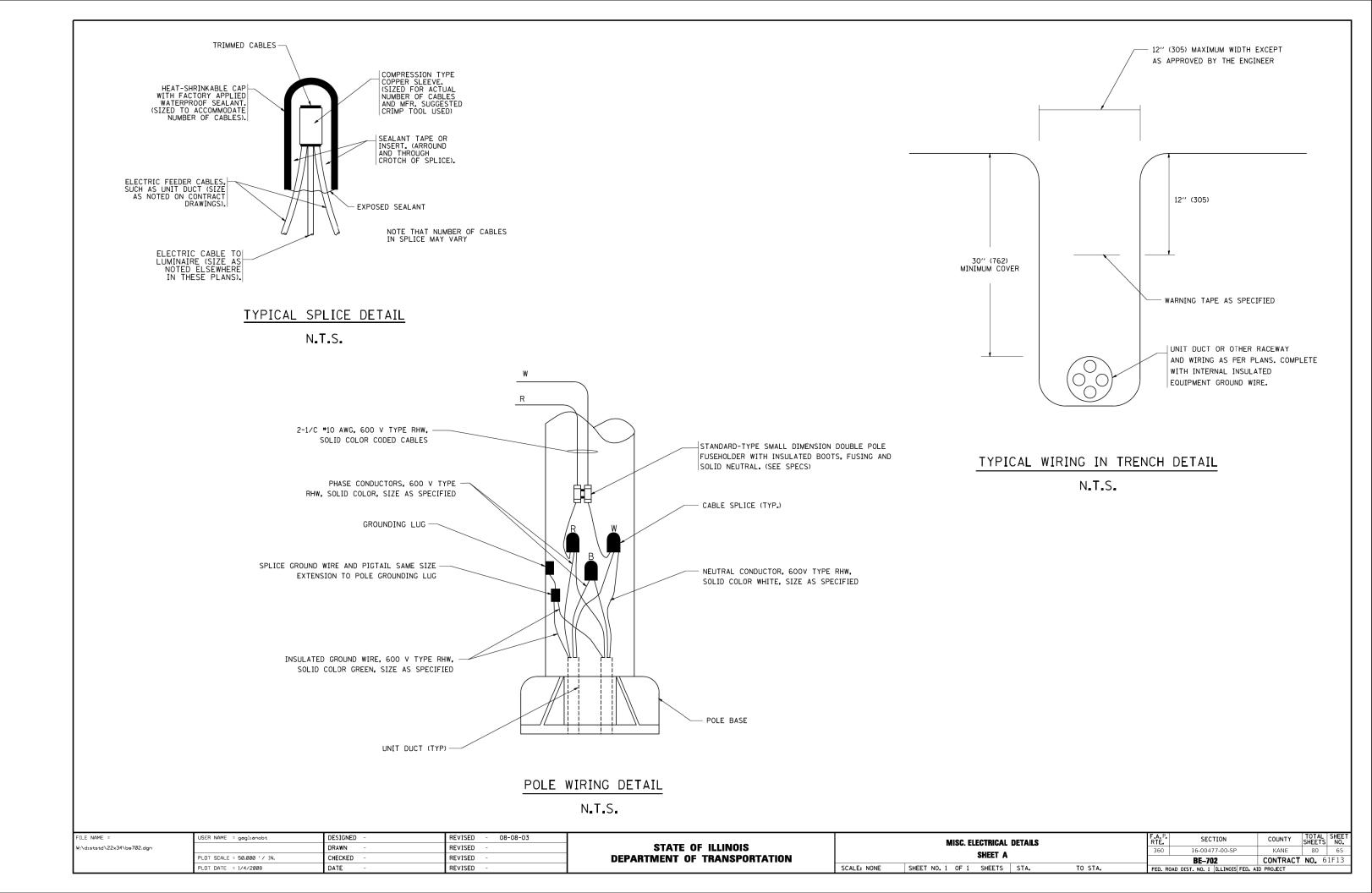
- 1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- 3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- 4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- 5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- 6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- 7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- 8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
- 9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- 10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- 11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
- 12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

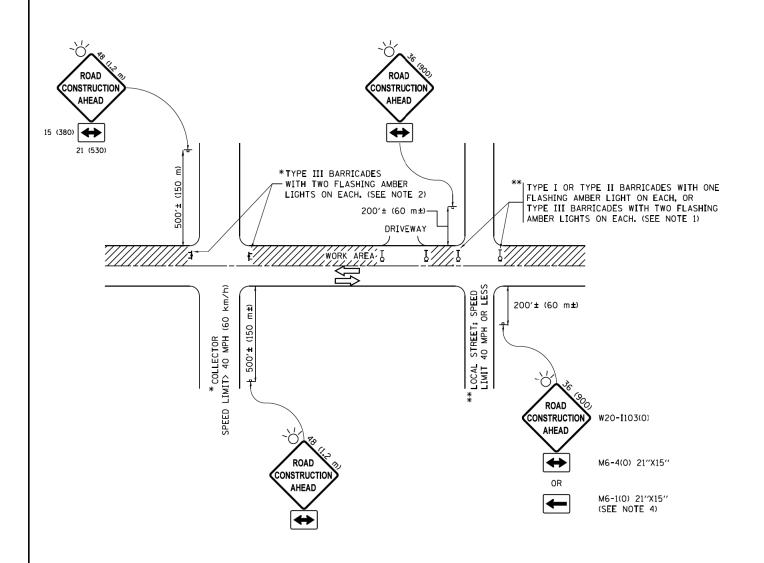
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -			LIGHT POLE FOUNDATION, METAL		F.A.P.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\be305.dgn		DRAWN - DLB	REVISED -	STATE OF ILLINOIS		LIGHT FOLE FOUNDATION, METAL		360	16-00477-00-SP	KANE	80 64
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT	NO. 61F13
	PLOT DATE = 1/4/2008	DATE - 02-27-07	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	EED BOAD DIST	T NO 1 FLI INOIS EED A		

1¹/₄" (31.75) DIA.

O.25" WALL, MIN.

1" (25.4) MIN. CLEARANCE





NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - d) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 \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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- 4. 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).

SCALE NONE

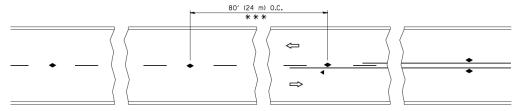
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED	- A. HOUSEH 10-15-96
pw:\\ILØ84EBIDINTEG.:1ll:no::s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	: ⊕R&WM \CADDeta\CADsheets\tc10.dgn	REVISED	-T. RAMMACHER 01-06-00
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

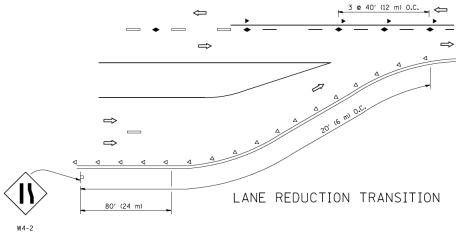
STATI	E OF	: ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

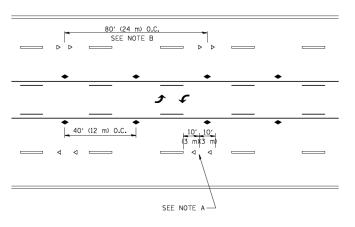
	TRAFFIC	CONTROL	AND P	ROTEC	TION FOR	F.A.P. RTE.	
СI	DE ROADS	INTERS	FCTIONS	: AND	DRIVEWAYS	360	
		, iivi Liio			DINVEVVATO		
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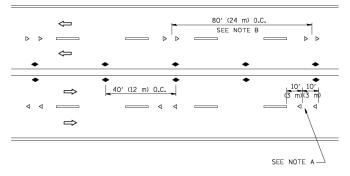
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

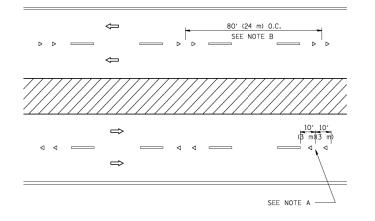




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

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

SYMBOLS

---- YELLOW STRIPE

----- WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

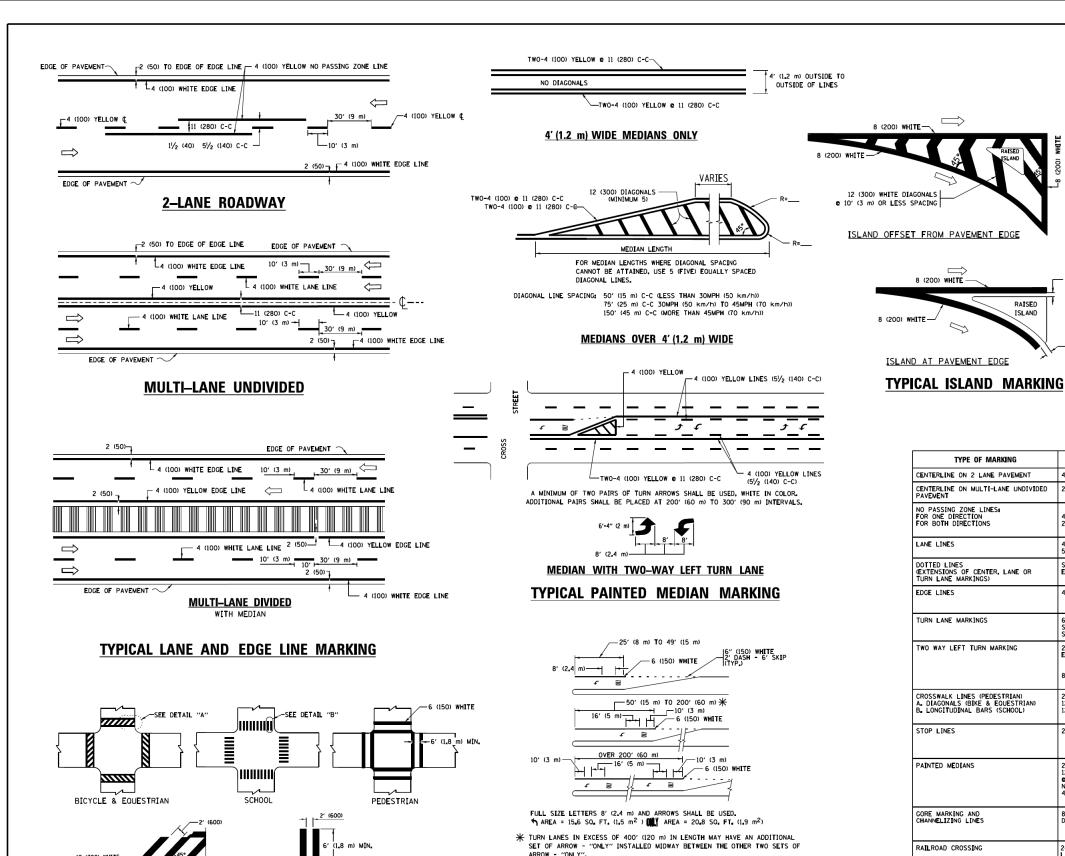
DESIGN NOTES

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

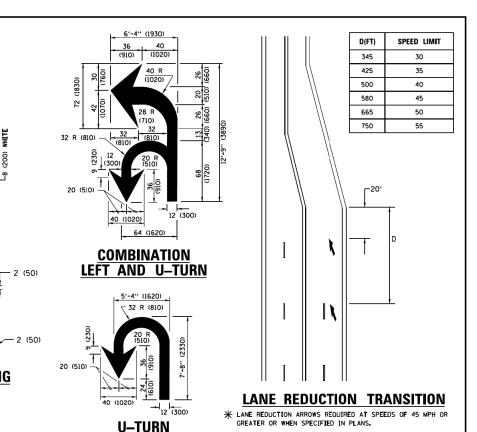
LEFT TURN

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

FILE NAME =	USER NAME = leyso	DESIGNED -	REVISED -T. RAMMACHER 09-19-94			TYPICAL APPLICATION	NS .	F.A.P. RTE.	SECTION	COUNTY TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidct\leysa\d0108315\tc11.dgn		DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS	DAIGED			360	16-00477-00-SP	KANE 80	67
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	KAISED	REFLECTIVE PAVEMENT MARKERS (S	SNUVV-PLUVV RESISTANT)	'	TC-11	CONTRACT NO.	61F13
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA	A. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A	ID PROJECT	



TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



	<u>U-TUNN</u>									
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 e 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN						
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE						
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE						
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW						
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 & EOUESTRIAN) 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' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.						
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CHOSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE						
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1=2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.						
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS & 45°	SOLID	WHITE	DIAGONALS# 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (0VER 45MPH (70 km/h))						
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "X"=3.6 SO. FT. (0,33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)						
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 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) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))						
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF						
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF						

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

RAISED

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

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ı	Wi\diststd\22x34\tcl3.dgn		DRAWN -	REVISED -	C. JUCIUS 07-01-13
		PLOT SCALE = 50,000 '/ in.	CHECKED -	REVISED -	C. JUCIUS 12-21-15
ı	Default	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED -	C. JUCIUS 04-12-16

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

__12 (300) WHITE

DETAIL "B"

-6 (150) WHITE

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS	360	16-00477-00-SP	KANE	80	68
TITIOAL TAVEWENT WANKINGS		TC-13	CONTRACT	NO. 6	1F13
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

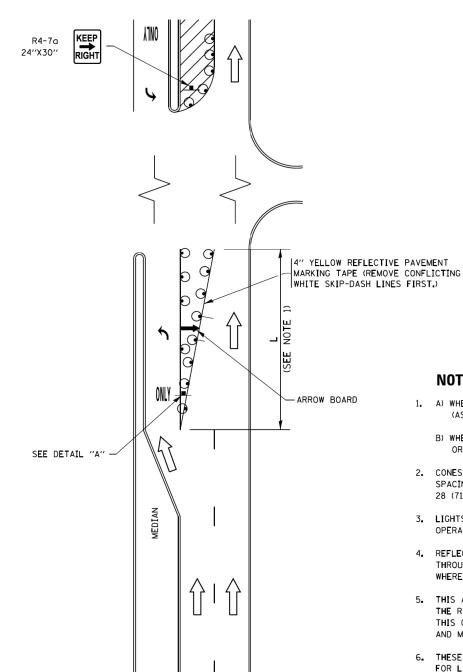


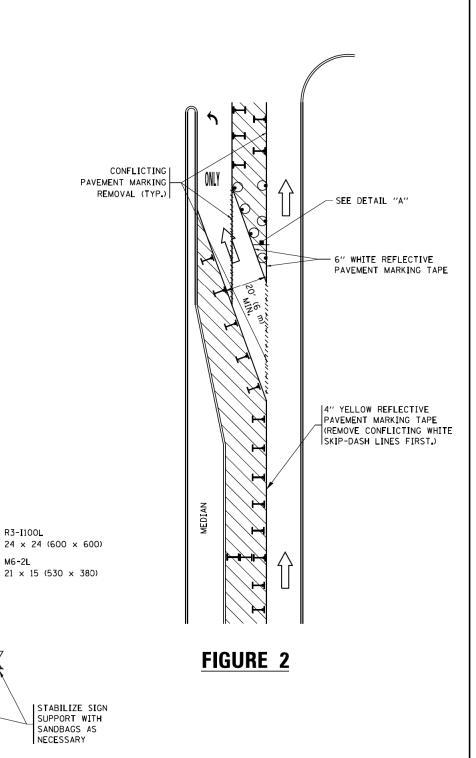
FIGURE 1

LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

- 1. A) WHEN "L" IS < THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE. USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

TURN LANE

5' (1.5 m) MIN. (SEE NOTE 7)

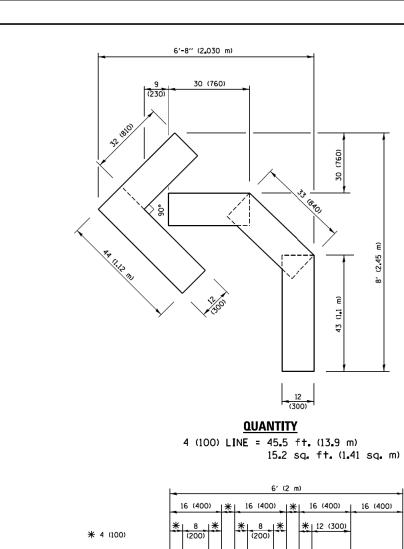
All dimensions are in inches (millimeters) unless otherwise shown.

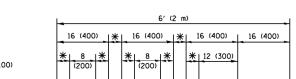
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Default	PLOT DATE = 9/15/2016	REVISED	- T.	RAMMACHER	01-06-00	REVISED	-	•

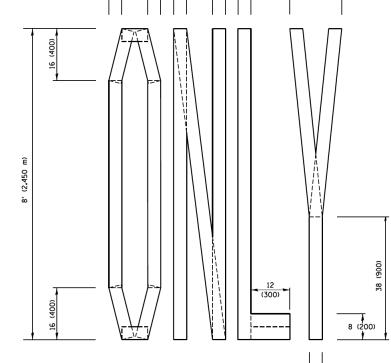
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAF				CTION AT	TURN BAYS IC)
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
360	16-00477-00-SP	KANE	80	69				
	TC-14	CONTRACT	NO. 6	1F13				
ILLINOIS FED. AID PROJECT								

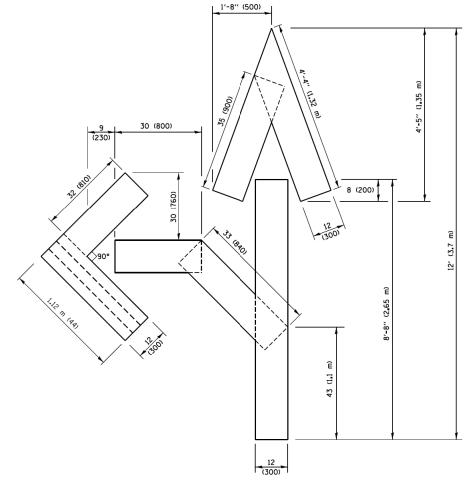






4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

QUANTITY

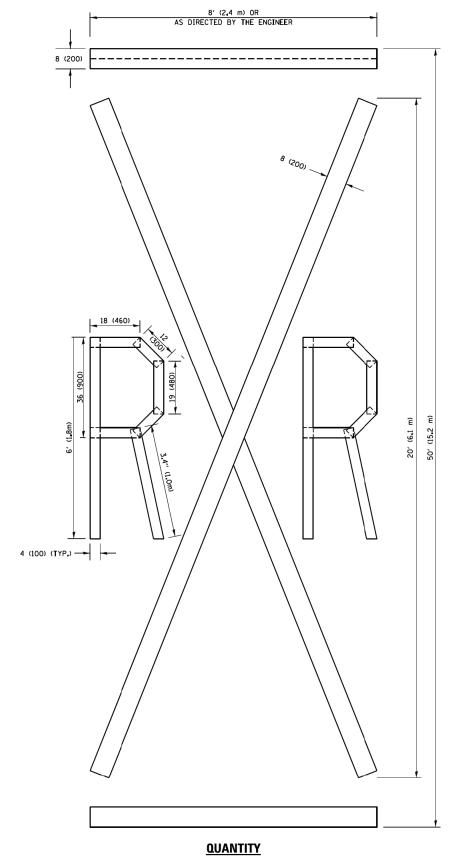


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

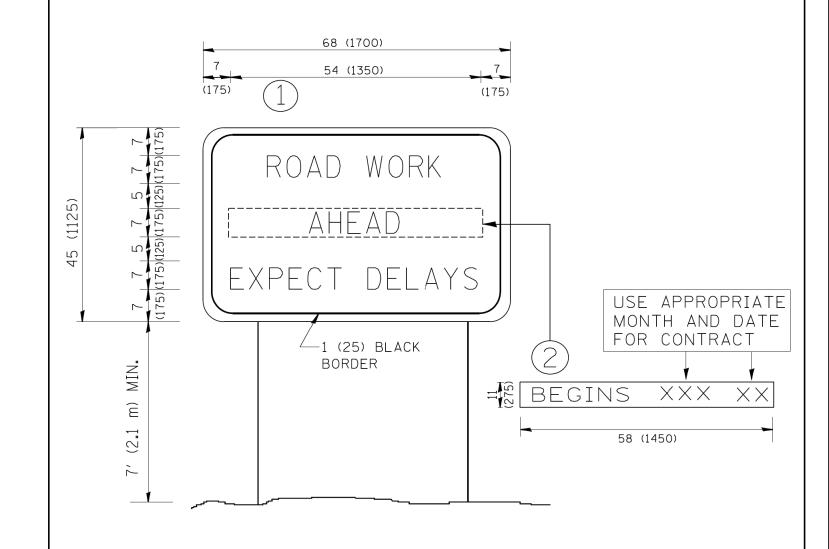
> All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT SCALE = 50.00000 '/ 10.	CHECKED -	REVISED	-E. GOMEZ 08-28-00
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED	- A SCHUETZE 09-15-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

					F.A.P. RTE.	SECTION	
	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS					360	16-00477-00
							TC-16
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED.	ROAD DIST. NO. 1 ILLIN

KANE CONTRACT NO. 61F13

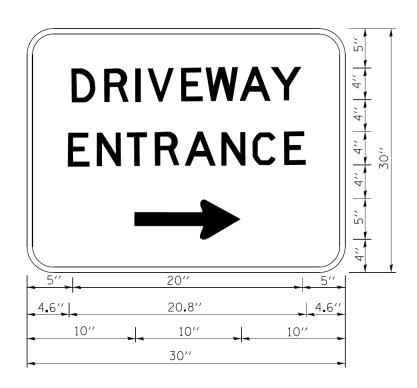


NOTES:

- 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.

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W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		360	16-00477-00-SP	KANE 80	0 71
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN	300	TC-22	CONTRACT NO.	61512
									, 01L12
1	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DE	IST. NO. 1 [LLINOIS FED. AI	→ PROJECT	



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

NOTES:

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

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	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

DRIVEWAY	ENTRANC	E SIGNING	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
					16-00477-00-SP	KANE	80	72	
				TC-26	CONTRACT	NO. 6	1F13		
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TRAFFIC SIGNAL LEGEND

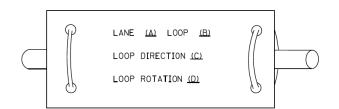
(NOT TO SCALE)

			_ _	(NOT TO SCALL)					
ITEM	EXISTING	PROPOSED	<u>ITEM</u>	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	
CONTROLLER CABINET	\boxtimes		HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	RRY	R R Y	
COMMUNICATION CABINET	ECC	СС	-ROUND HEAVY DUTY HANDHOLE					R R Y Y G G G G G G G G G G G G G G G G	
MASTER CONTROLLER	EMC	мс	-SQUARE -ROUND		H O			4 G 4 G	
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			STOWAL HEAD WITH PACKELATE			
UNINTERRUPTABLE POWER SUPPLY	3	7	JUNCTION BOX		0	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		R R Y Y	
SERVICE INSTALLATION -(P) POLE MOUNTED	- <u>-</u> -	₽ ^P	RAILROAD CANTILEVER MAST ARM	X OX X	X eX X X			G G Y AY AY AG	
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	∑⊙ ∑	X⊕X		P RB	P RB	
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE	∑⊙∑ >	X•X-	PEDESTRIAN SIGNAL HE AD	(D)	P	
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK		*	AT RAILROAD INTERSECTIONS	(P)	₹	
STEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET		≯ ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	(₽) C (\$ C) D	₽ C ★ D	
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL						
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	∞ ∞—	• ×	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"			
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	 ● BM 	SYSTEM ITEM INTERSECTION ITEM	S	SP I P	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		<u>—</u> 5 <u>—</u>	
WOOD POLE	\otimes	$oldsymbol{\Theta}$	REMOVE ITEM	•	r.	GROUND CABLE IN CONDUIT,	1#6	(1*6)	
GUY WIRE	>	>-	RELOCATE ITEM		RL	NO. 6 SOLID COPPER (GREEN)			
SIGNAL HEAD	->	-	ABANDON ITEM		Α	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		_1	
SIGNAL HEAD WITH BACKPLATE	#>	+►	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	<u> </u>	<u> </u>	
SIGNAL HEAD OPTICALLY PROGRAMMED	-> ^P +> ^P	→ ^P +→ ^P	MAST ARM POLE AND			VENDOR CABLE			
FLASHER INSTALLATION -(FS) SOLAR POWERED	od> FS	•→ ^F •→ ^{FS}	FOUNDATION TO BE REMOVED		RMF	COPPER INTERCONNECT CABLE,			
	⊕> ^F ⊕> ^{FS}	₽→ FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RP F	NO. 18, 3 PAIR TWISTED, SHIELDED	6#18		
PEDESTRIAN SIGNAL HEAD	-[]	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	<pre></pre>		PREFORMED DETECTOR LOOP		P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F			
RADAR DETECTION SENSOR	R	R ■	SAMPLING (SYSTEM) DETECTOR	$[\overline{s}]$ (\widehat{s})	s s			—(36F)—	
VIDEO DETECTION CAMERA	ŢŢ	V ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		IS (S)				
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	[05] (05)	os os	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	T T T T	T T T T	
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ)	₽TZ¶	WIRELESS DETECTOR SENSOR	<u> </u>		-(P) POST -(S) SERVICE			
EMERGENCY VEHICLE LIGHT DETECTOR	\bowtie	◄	WIRELESS ACCESS POINT						
CONFIMATION BEACON	o - 0	⊢ 4							
WIRELESS INTERCONNECT	○-1 	•-1 							
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR							
LE NAME = USER NAME = leyso 05.dgn PLOT SCALE = 50.0000 '/		IP REVISED -	STA	TE OF ILLINOIS	LT2	DISTRICT ONE ANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. SECTION 360 16-00477-	00-SP KANE 80 7	
Fault PLOT DATE = 9/29/2016		9/29/2016 REVISED -		T OF TRANSPORTATION		SHEET 1 OF 7 SHEETS STA. TO STA.	TS-05 CONTRACT NO. 61F13		

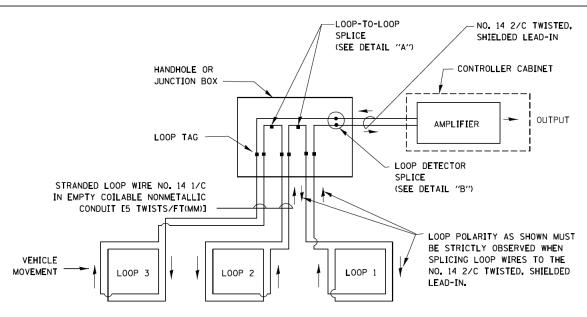
LOOP DETECTOR NOTES

- 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

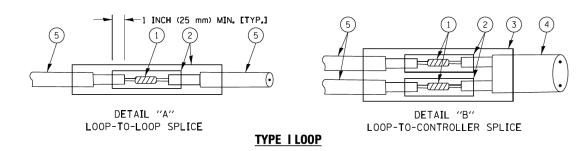


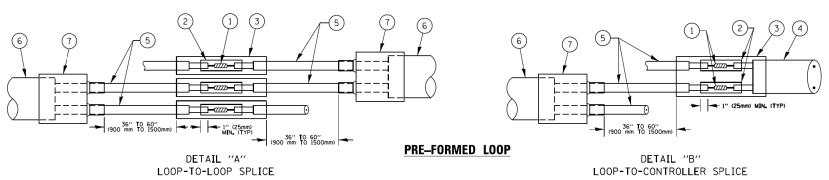
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP *1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LARFI LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (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.

SCALE: NONE

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR 7 BREAKOUT SEALS.

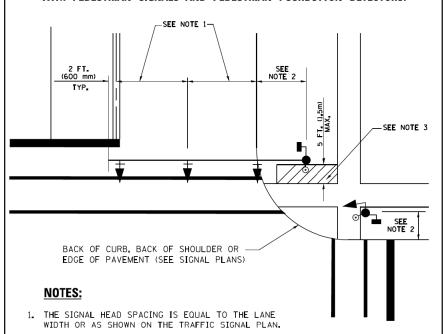
(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

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STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

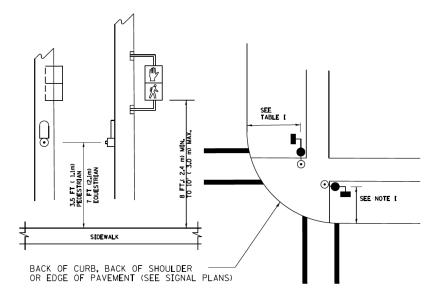
	DISTRICT ONE					SECTION	COUNTY	TOTAL SHEETS	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS				360	16-00477-00-SP	KANE	80	74	
					TS-05	CONTRACT	NO. 6	1F13	
	SHEET NO. 2 OF 7	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



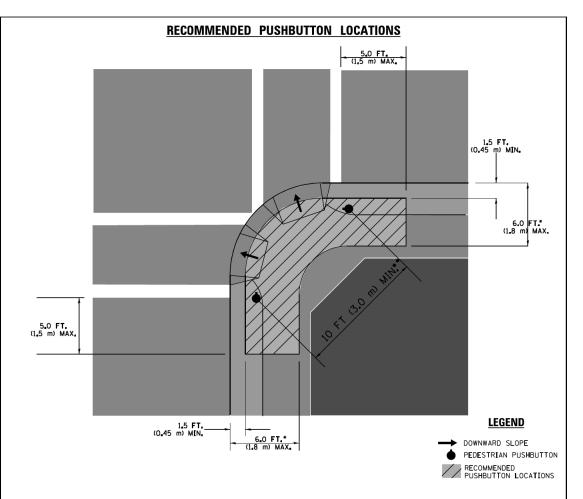
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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

<u>Pedestrian Signal Post</u> <u>and</u> <u>Pedestrian Push Button Post</u>



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:

- 1. 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.

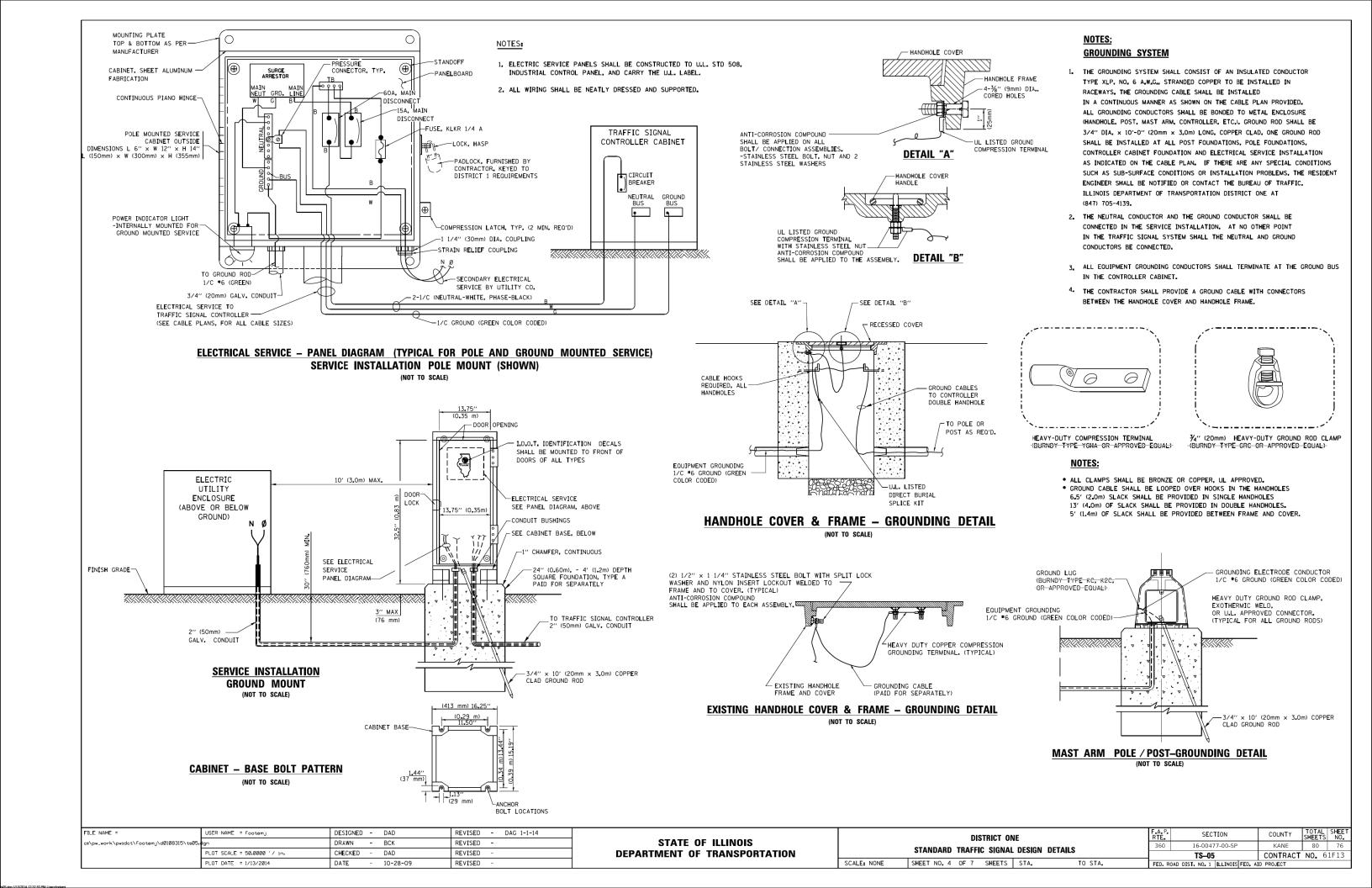
TRAFFIC SIGNAL EQUIPMENT OFFSET

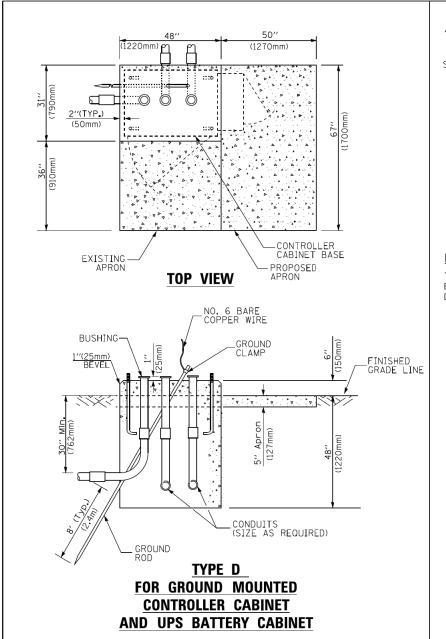
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

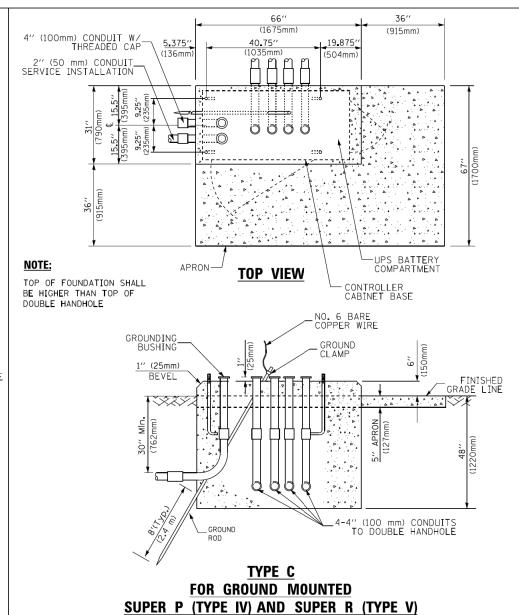
NOTES:

- 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 TOTHE 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.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14		DISTRICT ONE	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
cs\pw_work\pwidot\footemj\d0108315\ts05	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		360 16-00477-00-SP	KANE 80 75
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 3 OF 7 SHEETS STA. TO STA.	FED ROAD DIST, NO. 1 ILLINOIS FED.	AID PROJECT







CONTROLLER CABINETS

SEE NOTE 5	49" (SEE NOTE 3) (1245mm)
2," (51mm	44" 16" (406mm)
(783/mm) (786/mm) (787/mm) (787/mm)	2½/2" (64mm) 1" (25mm) 2" × 6"
2″, (51mm)	WOOD FRAMING (TYP.)
	====
TRAFFIC SIGNAL —— CONTROLLER CABINET	
	UPS CABINET
7/4" (19mm) TREATED PHYWOOD DECK	
2" <u>× 6" (51mm × 152mm)</u> TREATED WOOD	
(305mm)	
48" MIN (1219mm)	
NOTES: 6" (152mm x 152mm) TREATED WOOD POSTS	L_J
	BASE DIMENSIONS OF 26" × 44" (660mm × 1118mm). IMENSIONS BEING SUPPLIED
	INET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm).

- BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS 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 TYPE D - CONTROLLER	4'-0" (1 _a 2m) 4'-0" (1 _a 2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1 ₋ 2m)

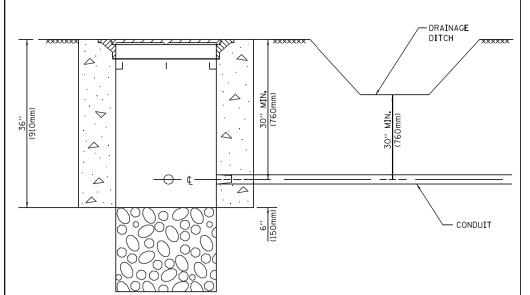
DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 . 6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21' - 0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7 . 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

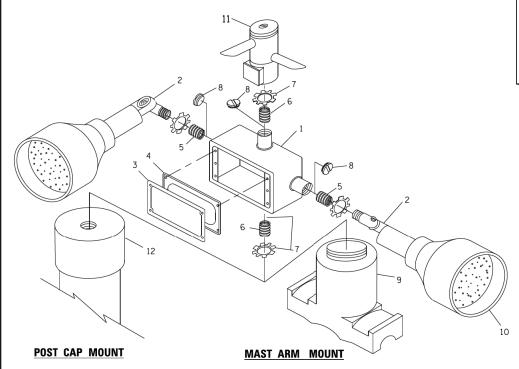
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED -	DAG	REVISED - DAG 1-1-14			DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT SCALE = 50.0000 '/ in.	CHECKED -	DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT	NO. 6	IF13
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. ROA		D PROJECT		



- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH



PROPOSED -APRON -CONTROLLER CABINET BASE **TOP VIEW** BUSHING -NO. 3 DOWEL 18" (450mm) _GROUND CLAMP / LONG (8 REQ.) EXISTING ANCHOR BOLTS 1''(25mm) BEVEL GRADE LINE (300mm) (ZOOmm) (300mm) -EXISTING CONDUITS EXISTING GROUND ROD

(1675mm)

40.75"

(1035mm)

5.375"

(136mm)

(915mm) 19.875"

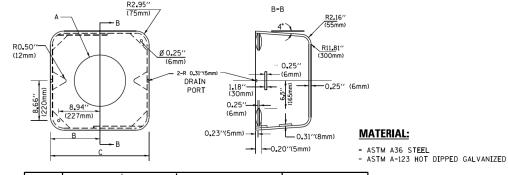
(504mm)

MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

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 (19 mm) CLOSE NIPPLE "(19 mm) LOCKNU 3/4"(19 mm) HOLE PLUG 9 SADDLE BRACKET - GALV. 10 6 WATT PAR 38 LED FLOOD LAMP 11 DETECTOR UNIT 12 POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

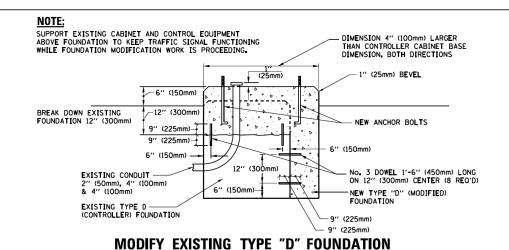
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2 MULBERRY CON O SHADE LAMP SHIELD OR EQUIVALENT ITEM #9 "BAND IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(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. **EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



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 l bs (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

- 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.



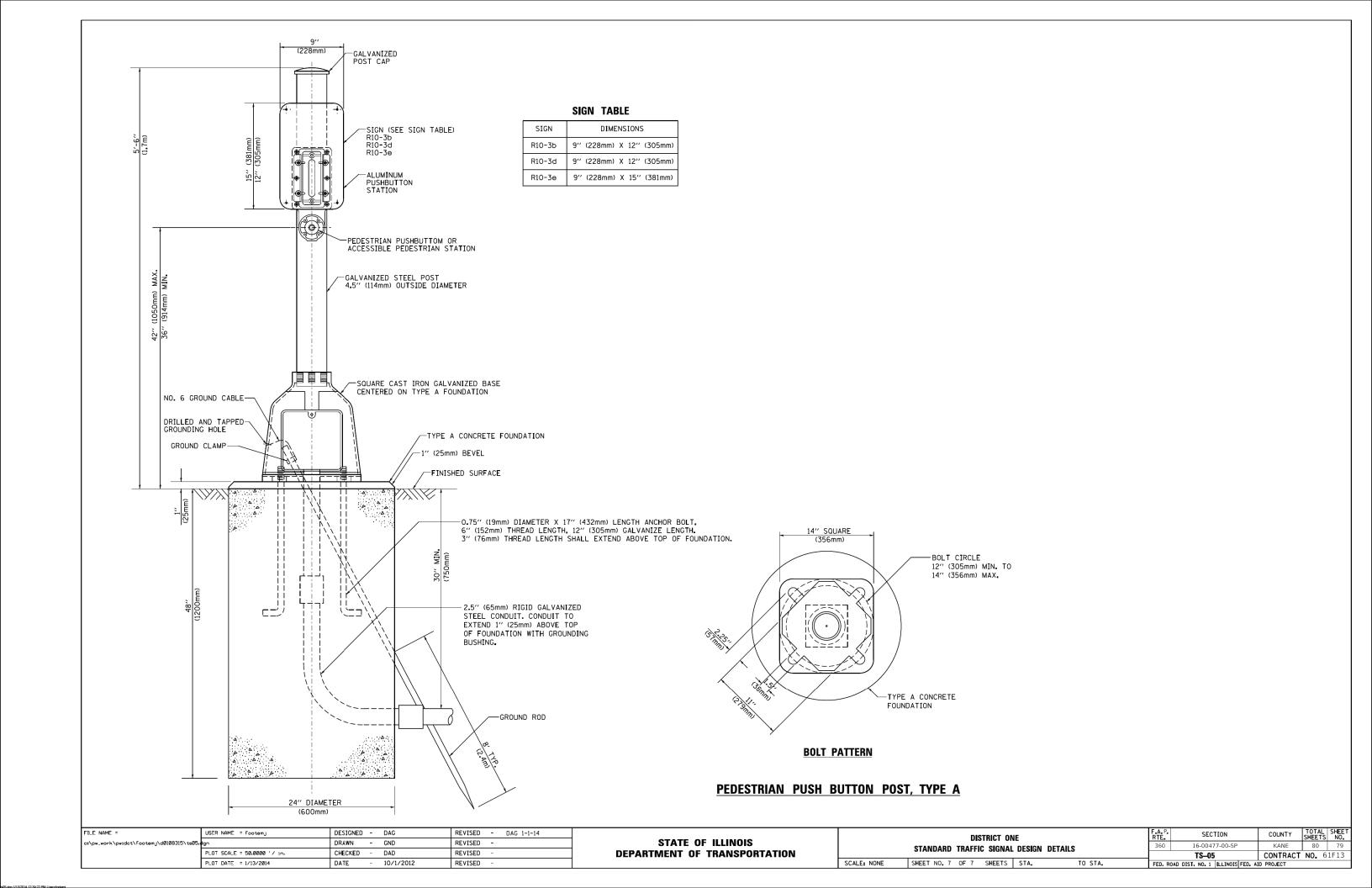
STEEL HOOK EXISTING CONDUIT TO REMAIN PLAN ELEVATION

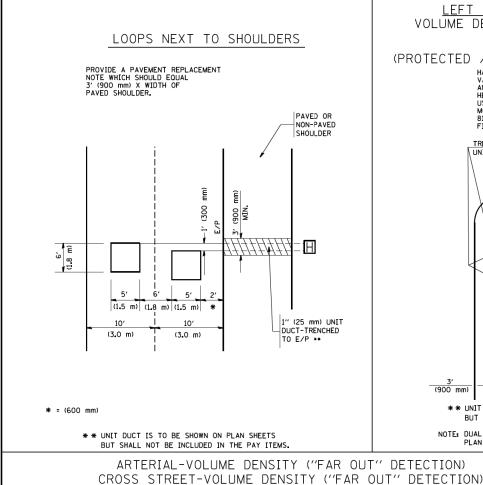
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

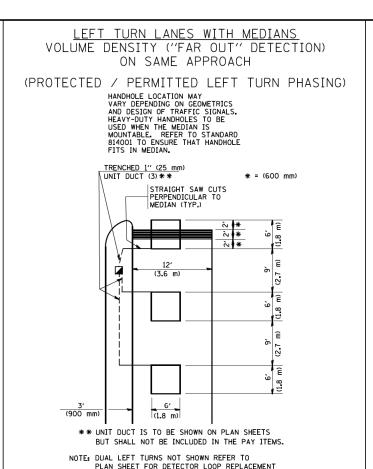
HANDHOLE TO INTERCEPT EXISTING CONDUIT

REVISED - DAG 1-1-14 FILE NAME = DESIGNED - DAD DRAWN - BCK REVISED -STATE OF ILLINOIS STANDARD TRAFFIC SIGNAL DESIGN DETAILS REVISED **DEPARTMENT OF TRANSPORTATION** CHECKED DAD PLOT SCALE = 50.0000 '/ in. SCALE: NONE DATE 10-28-09 REVISED

COUNTY 16-00477-00-SF KANE CONTRACT NO. 61F13 SHEET NO. 6 OF 7 SHEETS STA.







VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

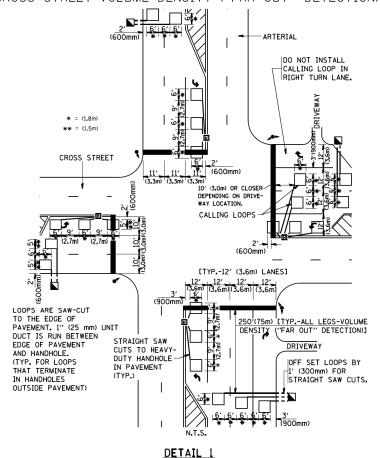
(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)

* = (700 mm)

STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

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



N.T.S.

USER NAME = gaglianobt

PLOT SCALE = 50.0000 ' / IN

DESIGNED

CHECKED

R.K.F.

DRAWN

DATE

REVISED

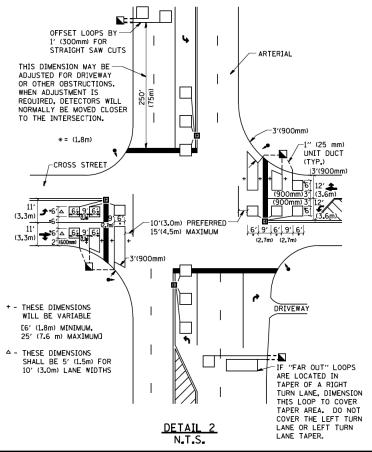
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REVISED

FILE NAME =

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SCALE: NONE

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

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

NOTE:

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

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

DEI

STATE OF ILLINOIS
PARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			360	16-00477-00-SP	KANE	80	80
			TS-07		CONTRACT NO. 61F13		
SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				