#### 08-04-2023 LETTING ITEM 081

#### <u>INDEX</u>

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES5 TRAFFIC SIGNAL REMOVAL PLAN
- 6 PROPOSED TRAFFIC SIGNAL PLAN
- 7 TEMPORARY TRAFFIC SIGNAL PLAN
- 8 CABLE PLAN AND PHASE DESIGNATION
- 9 SIGN SCHEDULE AND DETAILS
- 10 MAST ARM DETAILS
- 11 SOIL BORINGS

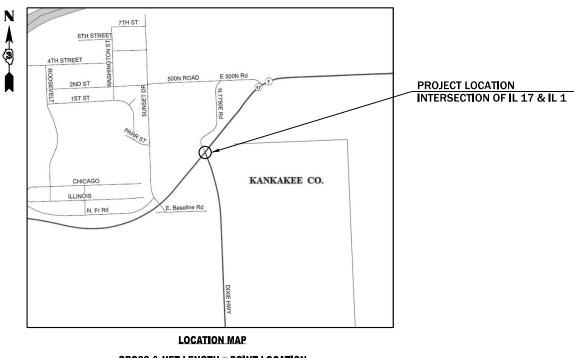
## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# PROPOSED HIGHWAY PLANS

FAP ROUTE 332 (IL 1) SECTION SIGNAL MAST ARM REP 2023-01

## TRAFFIC SIGNAL MAST ARM REPLACEMENT KANKAKEE COUNTY

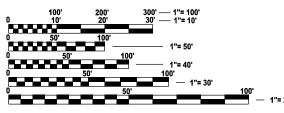
C-93-043-23



GROSS & NET LENGTH = POINT LOCATION

#### **LIST OF ILLINOIS DOT HIGHWAY STANDARDS**

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101 <del>-</del> 05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701701 <del>-</del> 10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901 <del>-</del> 08	TRAFFIC CONTROL DEVICES
720016 <b>-</b> 04	MAST ARM MOUNTED STREET NAME SIGNS
857001 <b>-</b> 01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001 <del>-</del> 02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001 <del>-</del> 11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS



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

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

PROJECT ENGINEER: BRAD DUNCAN, P.E. UNIT CHIEF: MOHAMED YOUSIF DISTRICT 3 NO. (815)434-6131

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CONTRACT NO. 66N15
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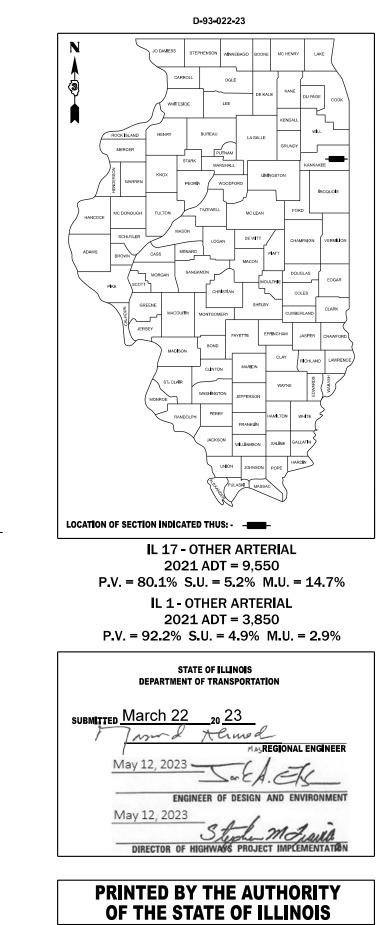
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GINAL MAST ARM REP 2023-01



REV. 5/1/23 REV. 3/27/23

#### **GENERAL NOTES**

- 1. THE TRAFFIC SIGNAL SECTION AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, SHALL BE NOTIFIED AT 815-434-6131 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNITS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123. THE MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
  - AT&T
  - COMCAST
  - COMED
  - NICOR
- ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS.
- 4. ALL TRAFFIC SIGNAL HEADS SHALL BE 12-INCH POLYCARBONATE
- TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
- 6. RELOCATE EXISTING SIGNAL HEAD SHALL INCLUDE THE BACKPLATES AND SNOW CONES.
- 7. A <sup>1</sup>/<sub>4</sub>" DIAMETER CONTINUOUS RODENT RESISTANT NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER. THIS COST SHALL BE INCLUDED WITH THE COST OF CONDUIT PAY ITEM.
- 8. THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNAL IS TURNED ON. COST TO BE INCLUDED WITH THE TRAFFIC SIGNAL CONTROLLER PAY ITEM.
- ALL CONDUIT IN TRENCH SHALL BE P.V.C. ALL PUSHED CONDUIT MAY BE P.V.C. OR GALVANIZED STEEL. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.
- 10. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT A GREATER THAN 2' MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
- 11. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
- 12. ALL THREADS OF BOLTS USED IN THE ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.

- 13. ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED, CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.
- 14. ALL TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN JUNCTION BOXES WILL NOT BE ALLOWED.
- 15. ALL GROUNDING MATERIALS FOR CONCRETE FOUNDATIONS SHALL REFER TO SECTION 807 OF THE STANDARD SPECIFICATIONS.
- 16. ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED WITH SEED OR SOD TO THE SATISFACTION OF THE ENGINEER. SEEDING OR SODDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.
- 17. THE MAST ARM FOUNDATIONS SHALL BE LOCATED A MINIMUM 6' FROM THE FACE OF CURB OR A MINIMUM 18' FROM THE EDGE OF PAVEMENT TO THE FACE OF FOUNDATION WHERE THERE IS NO CURB, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IN CURB AREA, GET MORE THAN 6' IF POSSIBLE IF THE SIGNAL HEAD STILL LINES UP IN CENTER OF LANE.
- 18. ANY EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS.

**COMMITMENTS:** 

USER NAME = Jon.Woodyer	DESIGNED	REVISED					
	DRAWN	REVISED	STATE OF ILLINOIS			GENE	RAL NO
PLOT SCALE = 100.000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION				
PLOT DATE = 3/15/2023	DATE	REVISED		SCALE:	SHEET 1	OF 1	SHEETS
PLOT DATE = 3/15/2023		REVISED -		SCALE:	SHEET 1	OF 1	_

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT THREE AS BUILT INFORMATION

#### SUPERVISING CONSTRUCTION FIELD ENGINEER

#### RESIDENT ENGINEER / TECHNICIAN

START & END DATES OF CONSTRUCTION:

INSPECTORS:

NOTES		P SECTION		COUNTY	TOTAL	SHEET NO.
NOTES		*		KANKAKEE	11	2
		* SIGNAL MAST ARM REP 2023-01		CONTRACT NO. 66N15		
TS STA TO STA		ILLINO	SIS FED. AI	D PROJECT		

				CONSTR. CODE
				80% FED
				20% STATE TRAFFIC SIGNALS
CODE			TOTAL	0021
NO.	ITEM	UNIT	QUANTITY	RURAL
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	7	7
66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	1	1
67100100	MOBILIZATION	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	12	12
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA	FOOT	41	41
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1887	1887
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1007	1007
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	53	53
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1

\*= SPECIALTY ITEM

\*

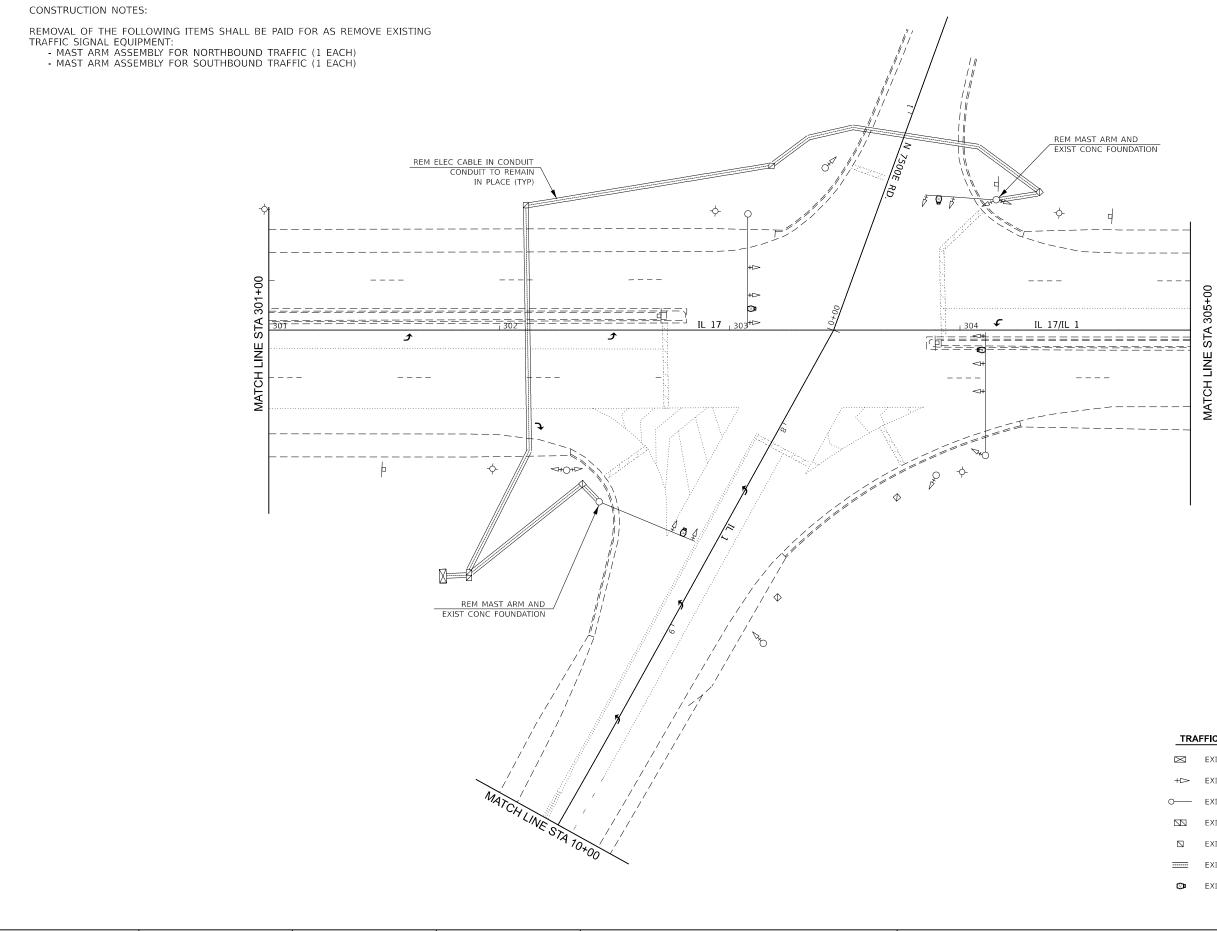
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		DESIGNED DRAWN	REVISED REVISED	STATE OF ILLINOIS		SUN	MMARY	OF QUA	
PLC	LOT SCALE = 100.000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION					
PLC	LOT DATE = 3/15/2023	DATE	REVISED		SCALE:	SHEET 1	OF 2	SHEETS	STA.

JANTITIES		F.A.P RTE	SEC	<b>FION</b>		COUNTY	TOTAL SHEETS	SHEET NO.	
"	ANTITIES		332	*			KANKAKEE	11	3
_			* SIG	NAL MAST ARM	REP 2023	3-01	CONTRACT	NO. 661	v15
s	STA	TO STA			ILLINOIS	FED. A	D PROJECT		

				CONSTR. CODE 80% FED
CODE NO .	ITEM	UNIT	TOTAL QUANTITY	20% STATE TRAFFIC SIGNALS 0021 RURAL
37700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1	1
37800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	27.5	27.5
37900200	DRILL EXISTING HANDHOLE	EACH	2	2
39000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1
39500100	RELOCATE EXISTING SIGNAL HEAD	EACH	6	6
39501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1
39502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2919	2919
39502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1
39502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2	2
×0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	500	500

USER NAME = Jon.Woodyer DESIGNED REVISED		RTE	SECTION	COUNTY	SHEETS NO
DRAWN REVISED STATE OF ILLINOIS SUMMARY OF QUANTITIES		332	*	KANKAKEE	11 4
PLOT SCALE = 100.000 '/ In. CHECKED REVISED DEPARTMENT OF TRANSPORTATION		* SIGNA	AL MAST ARM REP 2023-01	1 CONTRAC	CT NO. 66N15
PLOT DATE = 3/15/2023 DATE REVISED REVISED SCALE: SHEET 2 OF 2 SHEET STA	TO STA		ILLINOIS FE	ED. AID PROJECT	

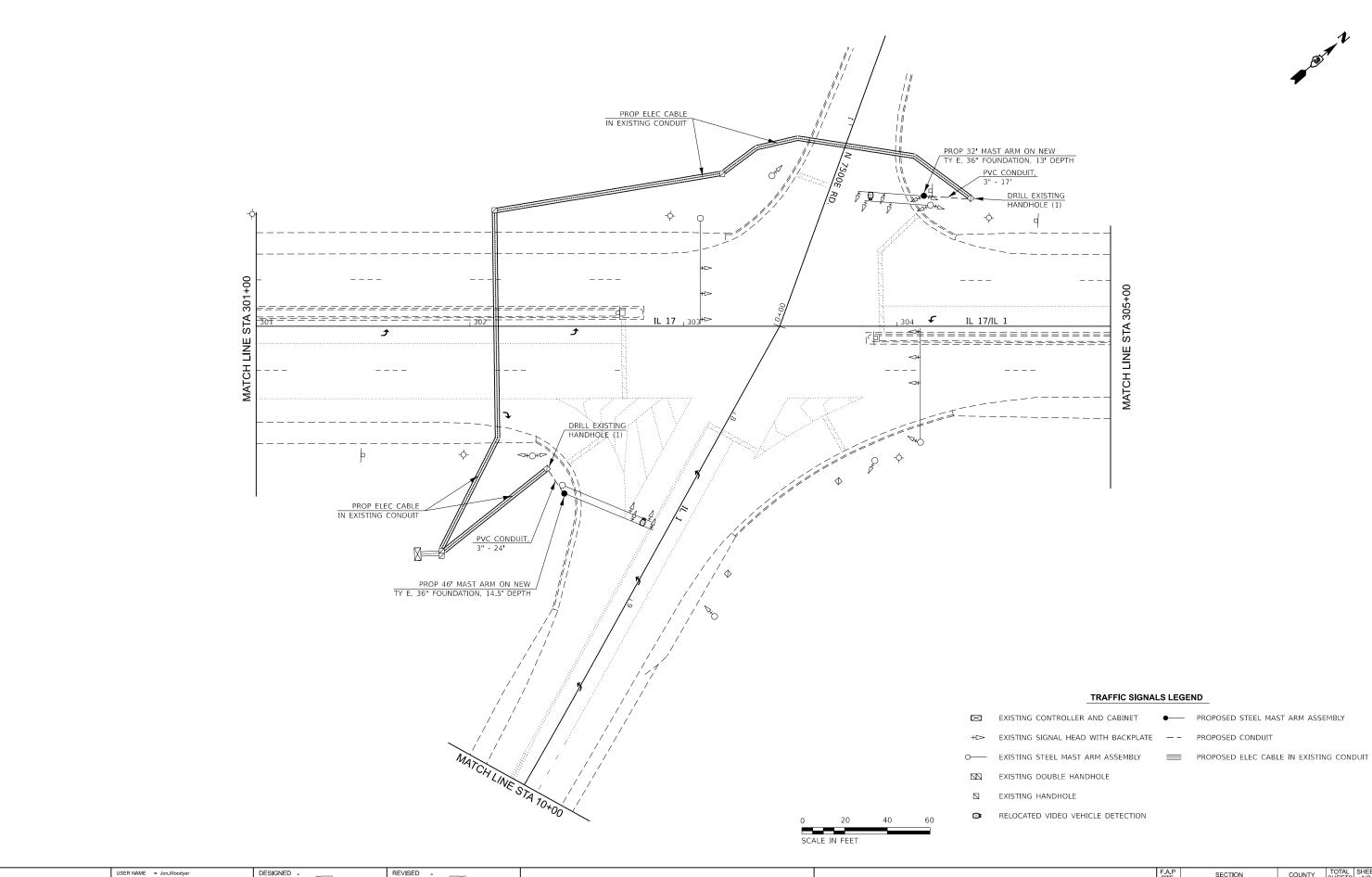


USER NAME = Jon Woodyer	DESIGNED	REVISED			
	DRAWN	REVISED	STATE OF ILLINOIS		TRAFFIC SIGNAL REM
PLOT SCALE = 100.000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION		
PLOT DATE = 3/15/2023	DATE	REVISED		SCALE:	SHEET 1 OF 1 SHEETS



	0 20 40 60 SCALE IN FEET
TRA	FFIC SIGNALS LEGEND
$\boxtimes$	EXISTING CONTROLLER AND CABINET
+>	EXISTING SIGNAL HEAD WITH BACKPLATE
0	EXISTING STEEL MAST ARM ASSEMBLY
	EXISTING DOUBLE HANDHOLE
	EXISTING HANDHOLE
	EXISTING CONDUIT
Ø	EXISTING VIDEO VEHICLE VEHICLE DETECTION

REMOVAL PLAN		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
LEMOVAL PLAN	VAL PLAN 332 *			KANKAKEE 11 5			
		* SIGNAL MAST ARM REP 2023-01		3-01	CONTRACT NO. 66N15		
ETS STA TO STA			ILLINOIS	FED. AI	D PROJECT		

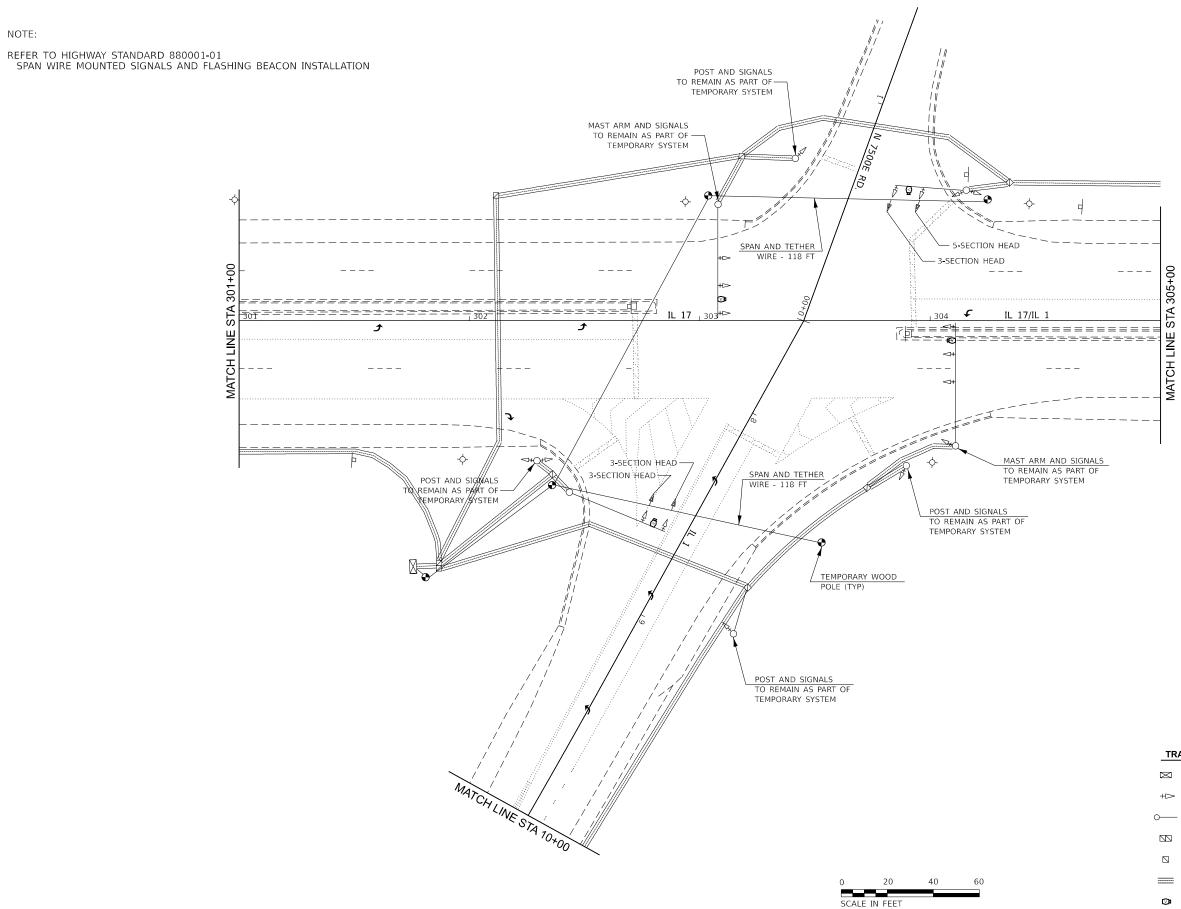


STATE OF ILLINOIS DRAWN -**PROPOSED TRAFFIC** REVISED -DEPARTMENT OF TRANSPORTATION PLOT SCALE = 100.000 ' / in. CHECKED -REVISED -SCALE: SHEET 1 OF 1 SHEET PLOT DATE = 3/15/2023 DATE REVISED -



#### TRAFFIC SIGNALS LEGEND

C SIGNAL PLAN		F.A.P RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.	
CS	IGNAL PLAN	AN 332 * K		* KANKAKEE 11			11	6	
		* SIG	NAL MAST ARM	REP 2023	3-01	CONTRACT	NO. 661	v15	
TS	STA	TO STA			ILLINOIS	FED. AI	D PROJECT		

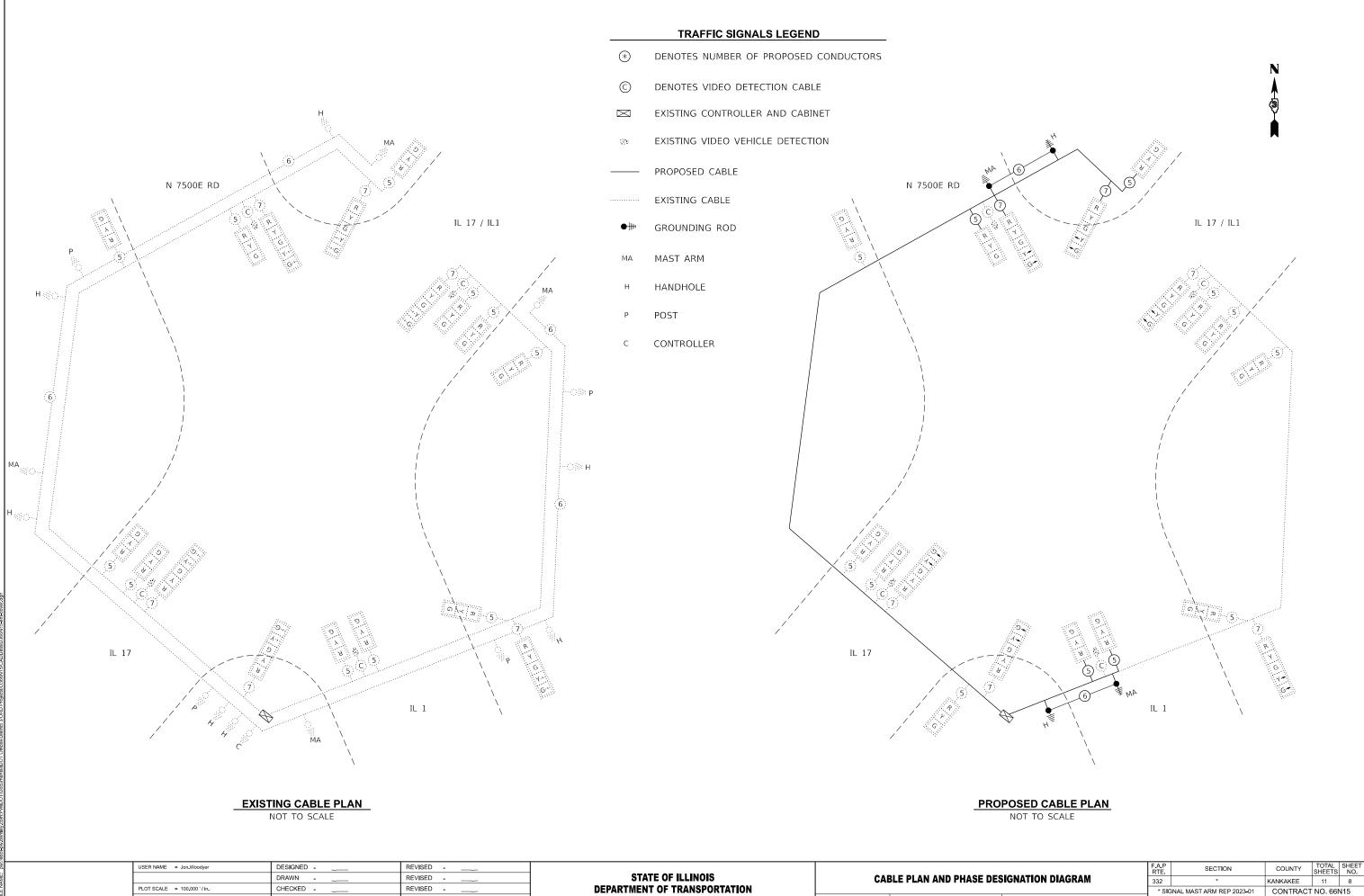


USER NAME = Jon Woodyer	DESIGNED	REVISED			F.A. RTE	P SECTION	COUNTY TOTAL SHEET SHEETS NO.		
	DRAWN	REVISED	STATE OF ILLINOIS	TEMPORARY TRAFFIC SIGNAL PLAN	332	*	KANKAKEE 11 7		
PLOT SCALE = 100.000 '/ in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION						
PLOT DATE = 3/15/2023	DATE	REVISED		SCALE: SHEET 1 OF 1 SHEETS STA	TO STA	ILLINOIS FED	AID PROJECT		



#### TRAFFIC SIGNALS LEGEND

$\boxtimes$	EXISTING CONTROLLER AND CABINET
$+ \triangleright$	EXISTING SIGNAL HEAD WITH BACKPLATE
0	EXISTING STEEL MAST ARM ASSEMBLY
	EXISTING DOUBLE HANDHOLE
	EXISTING HANDHOLE
	EXISTING CONDUIT
Ø	EXISTING VIDEO VEHICLE DETECTION



SCALE: SHEET 1 OF 1 SHEETS STA.

PLOT DATE = 3/15/2023

DATE

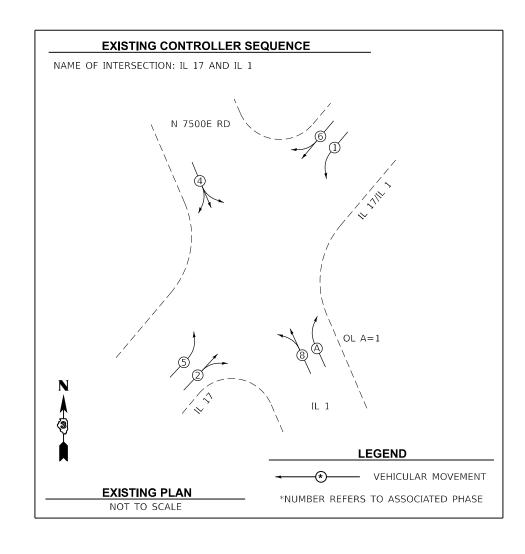
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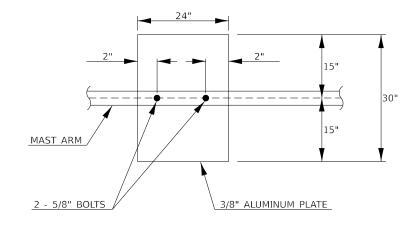
\* SIGNAL MAST ARM REP 2023-01 CONTRACT NO. 66N15 TO STA. ILLINOIS FED. AID PROJECT

SIGN RELOCATION SCHEDULE										
			RELOCATE							
LOCATION/TYPE	SIZE	QUANTITY	SIGN PANEL							
			TYPE 1							
	INCHES	EACH	SQ FT							
NORTHBOUND MAST ARM										
ILLINOIS 17 STREET NAME	48 x 18	1	6.0							
SOUTHBOUND MAST ARM										
ILLINOIS 17 STREET NAME	48 x 18	1	6.0							
тот	TOTAL									



TWO SIGNS TO BE RELOCATED - 6.0 SQ FT EACH UPPER CASE/LOWER CASE LETTERING, 8" TYPE ZZ SHEETING



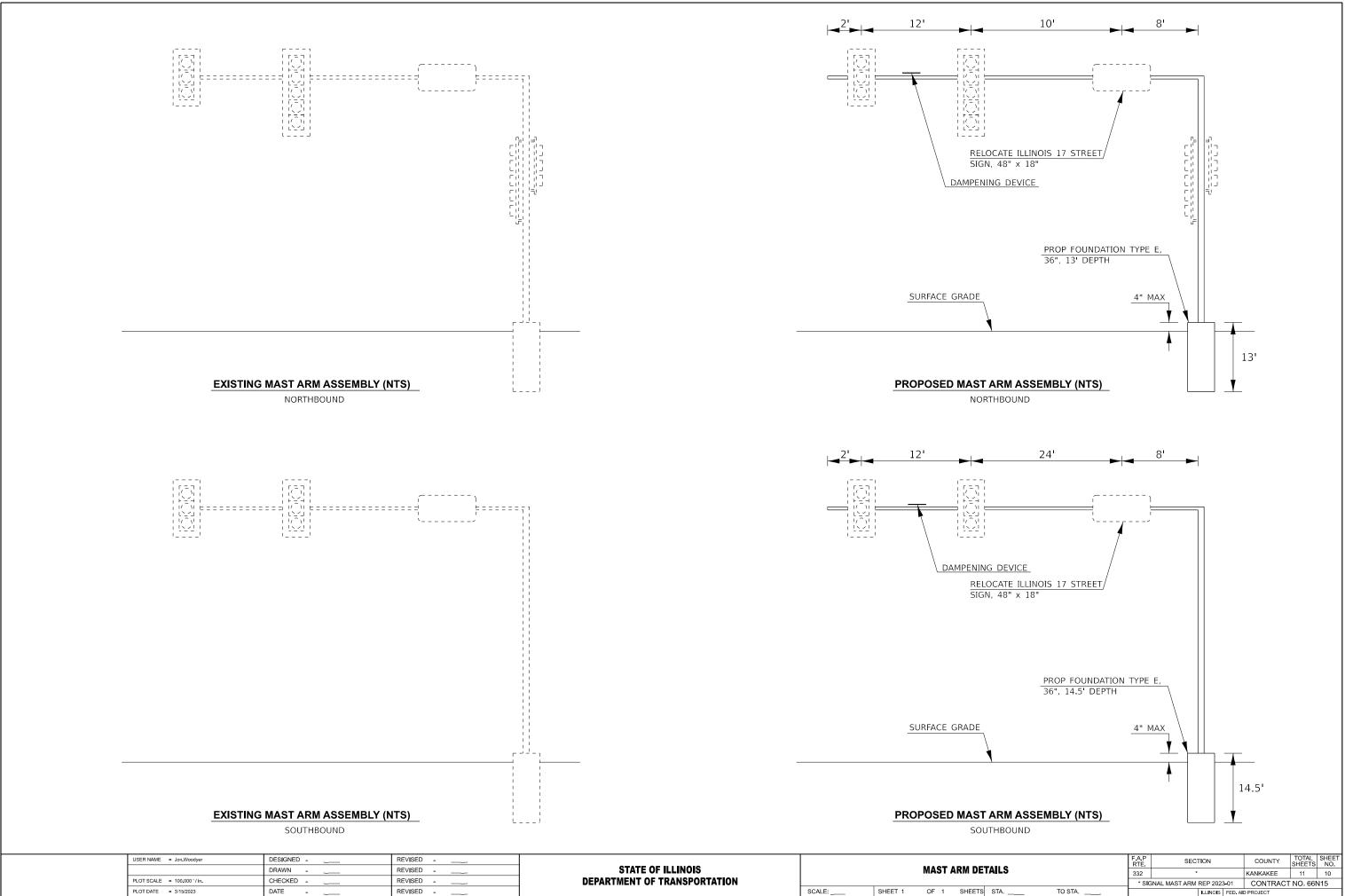


### DAMPENING PLATE DETAIL (NTS)

(TOP VIEW) INCIDENTAL TO MAST ARM QTY

USER NAME = Jon.Woodyer	DESIGNED	REVISED								F.A.P RTE	SECTION	COUNTY TOTAL	L SHEET
	DRAWN	REVISED		STATE OF ILLINOIS SIGN SCHEDULE DEPARTMENT OF TRANSPORTATION						332	*	KANKAKEE 11	9
PLOT SCALE = 100.000 ' / in.	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION							* SIGNAI	MAST ARM REP 2023-01	CONTRACT NO. 66	6N15
PLOT DATE = 3/15/2023	DATE	REVISED		SCALE:	SHEET 1	OF 1	SHEETS	STA	TO STA	ILLINOIS FED.		ID PROJECT	





DETAILS		F.A.P SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
		*			KANKAKEE	11	10	
	* SIGNAL MAST ARM REP 2023-01			CONTRACT NO. 66N15				
TS STA TO STA			ILLINOIS	FED. AI	AID PROJECT			

NOTE:

TEMPORARY OR PERMANENT SLEEVES MAY BE NEEDED.

Illinois Depar of Transporta Division of Highways linois Department of Transportatio	tme ition	nt		sc	DIL BORING LOG
(4D 4)DC /// 4E4 E)DC /	2				17 Intersection in Sun River Terrace LOGGED BYK. Whitting
SECTION (K-15d)BR, (5) W&RS	<u> </u>	OCAT		SE 1/4	. SEC. 33, TWP. 31N, RNG. 13E, 3 <sup>rd</sup> PM, de , Longitude
COUNTY Kankakee DRILL	NG ME	THOD			HAMMER TYPE
STRUCT. NO.	D	в	U	м	Surface Water Elev ft Stream Bed Elev ft
Station	E P	L	C S	0	Stream Bed Elev ft
BORING NOB-1 (S.W. Quad.) Station	T H	W S	Qu	S T	Groundwater Elev.: First Encounter ft
Offeet	ft (ft)	(/6")	(tsf)	(%)	Upon Completion ft
Ground Surface Elev Brown Sandy Loam with Gravel	π (0)	(,0)	(131)	(70)	After Hrs ft
(Fill)	_			11	
	_				
	-		1.0		
Black Sandy Loam					
black Salidy Loan	_			20	
	-5		0.5		
Dark Gray Sandy Loam			0.5	16	
	_				
	_				
Gray Sand - Fine Gravel (Loamy & Cohesive)	_			17	
	-10				
Gray - Brown Sand & Gravel	-10				
(Wet) some Free Water				18	
	_				
	_				
End of Boring	_				
	-15				
	_				
	_				
	_				
	-20				

ROUTE FAP 332 (IL 1)		SCRI	PTION	1
(1R-1)RS, (K-15d,5)RS SECTION (K-15d)BR, (5) W&RS	-3, S	_ L	.OCAT	
COUNTY Kankakee DRILI	ING	ME	THOD	
STRUCT. NO.           Station           BORING NO.           Boriton No.		DEPTH	B L O W S	
Station				
Ground Surface Elev. Black - Brown Sandy Loam (Fill)	ft	(ft)	(/6")	1
Black - Brown Ganay Loann (Filly		_		þ.
		_		
		_		
		_		
		-5		
Black Sandy Loam		-		$\vdash$
Gray Wet Sand				
Glay Wet Salid	3			
Gray Loam				$\vdash$
Gray Wet Sand & Gravel		_		t
		-10		
		_		
		_		
End of Boring		_		
		-15		
		_		
		_		
		-20		1

The Unconfined Compressive Strength (UCS) Failure The SPT (N value) is the sum of the last two blow values of the last two blow values of the last two blow values of the last two blows and the sum of the last two blows are supported by the support of the last two blows are supported by the support of the last two blows are supported by the support of the last two blows are supported by the support of the sup

USER NAME = Jon Woodyer PLOT SCALE = 100.000 ' / In.	DESIGNED DRAWN CHECKED	REVISED         -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			SOIL	BORIN	GS
PLOT DATE = 3/15/2023	DATE	REVISED		SCALE:	SHEET 1	OF 1	SHEETS	STA

	sc	DIL BORING LOG
IL	1 & IL	17 Intersection in Sun River Terrace LOGGED BYK. Whittington
ON _	SE 1/4 Latitu	. SEC. 33, TWP. 31N, RNG. 13E, 3 <sup>rd</sup> PM, de , Longitude
		HAMMER TYPE
U C S	M 0 1	Surface Water Elev ft Stream Bed Elev ft
Qu	S T	Groundwater Elev.: First Encounter ft Upon Completion ft
(tsf)	(%)	After Hrs. ft
.5-1.0	) 14	
0.7	29	
1.0	20	
	20	
Mod ues in	e is ind n each	licated by (B-Bulge, S-Shear, P-Penetrometer) sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)

	F A P RTE	SECT	ON		COUNTY	TOTAL SHEETS	SHEET NO.
NGS		*			KANKAKEE	11	11
	* SIG	NAL MAST ARM R	EP 2023-01		CONTRACT	NO. 661	v15
S STA TO STA		1	ILLINOIS FEE	D. AID	PROJECT		