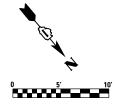


РТ	STATION	OFFSET	ELEV
1	112+12.13	54.31 LT	
2	112+22.12	50.26 LT	596.54
3	112+25.33	40.30 LT	596.53
4	112+12.68	40.32 LT	



ADA RAMP STA 112 + 25.33 (IL ROUTE 83/171)

#### **LEGEND**



DEPRESSED CURB AND GUTTER

DETECTABLE WARNING

#### NOTE:

ALL THE STATION AND OFFSET BASED ON IL ROUTE 83/MAIN ST ALIGNMENT.



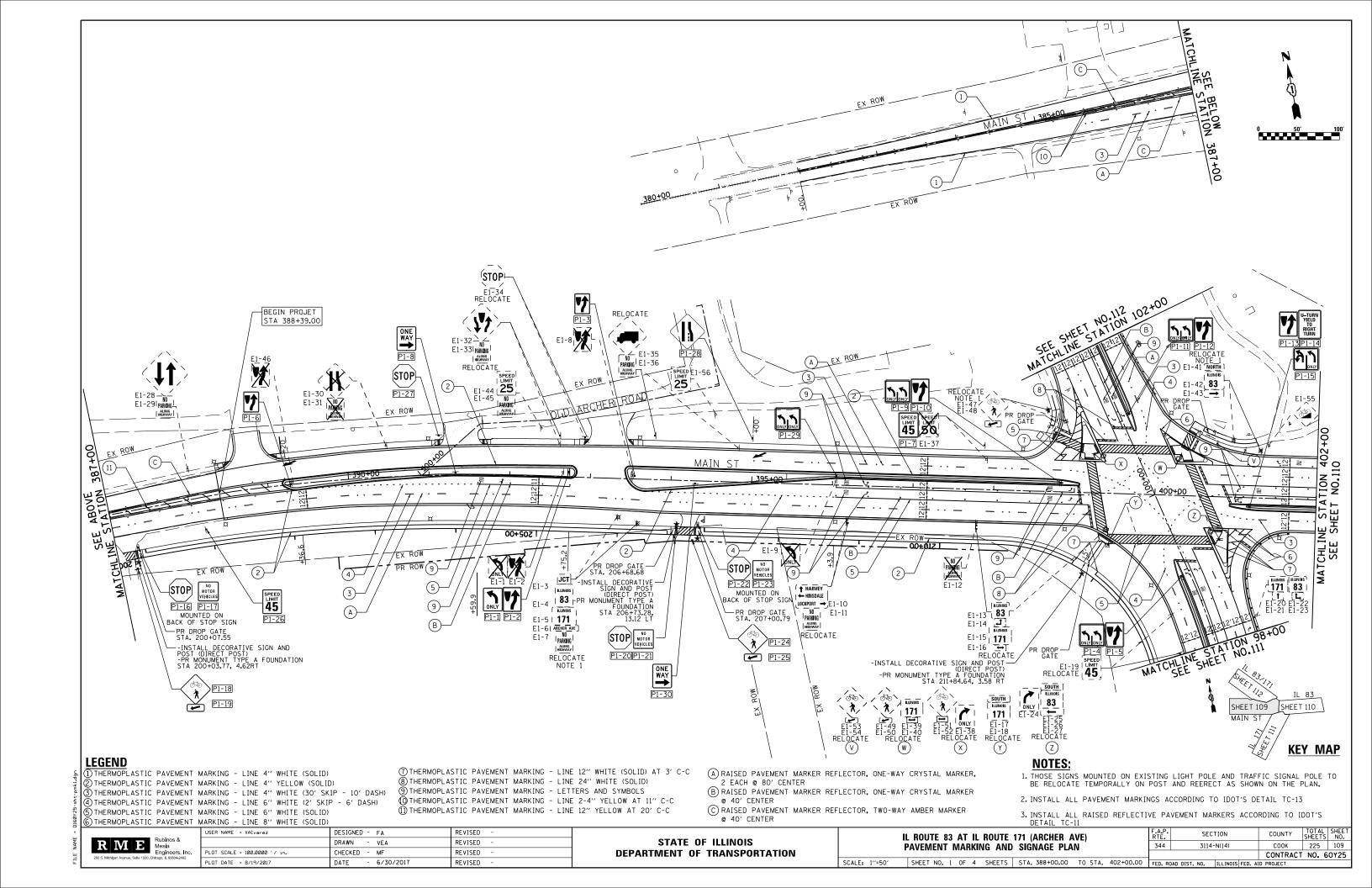
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	DRAWN - VEA	REVISED -
PLOT SCALE = 10.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

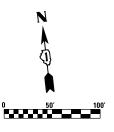
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

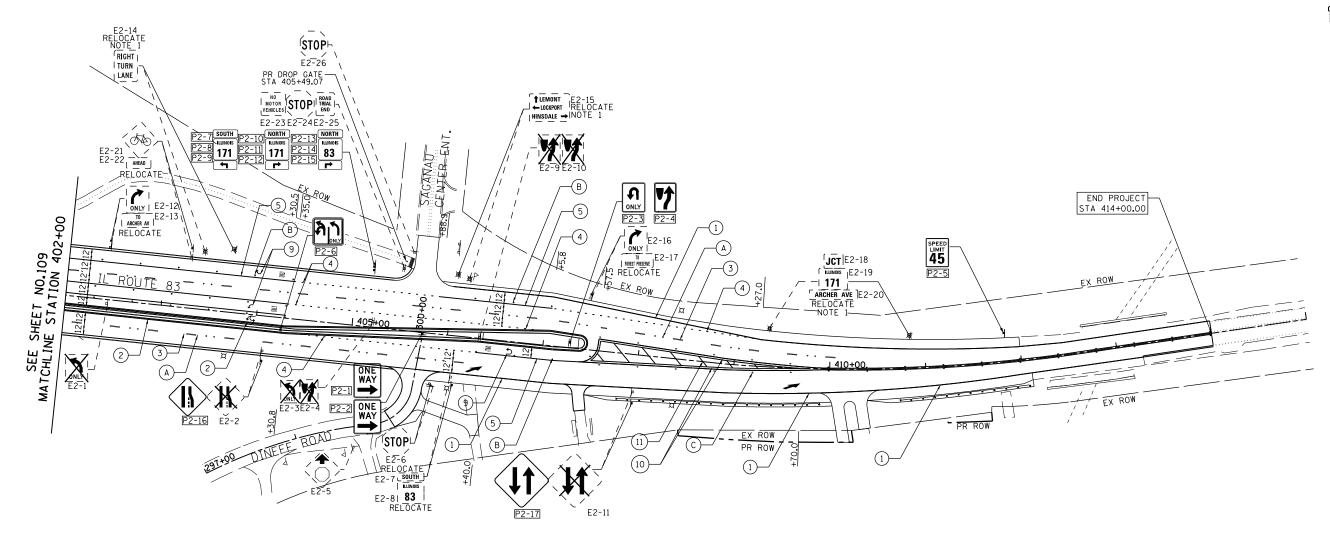
IL	. ROU	ΓΕ	83			ROUTE RAMP:	171 (ARCI S	HER AVE)
	SHEET	NO.	. 7	OF	7	SHEETS	STA.	TO STA.

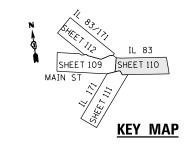
SCALE: 1"=5"

F.A.P. RTE.	SECTION						COUNTY	TOTAL SHEETS	SHEE NO.
344			3114-	N(14)			COOK	225	108
						Т	CONTRACT	NO. 6	0Y25
FED. RO	DAC	DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		









#### **LEGEND**

- (1) THERMOPLASTIC PAVEMENT MARKING LINE 4" WHITE (SOLID)
- THERMOPLASTIC PAVEMENT MARKING LINE 4" YELLOW (SOLID) 3) THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE (30' SKIP - 10' DASH)
- THERMOPLASTIC PAVEMENT MARKING LINE 6" WHITE (2' SKIP 6' DASH)
- ⑤ THERMOPLASTIC PAVEMENT MARKING LINE 6" WHITE (SOLID) ⑥ THERMOPLASTIC PAVEMENT MARKING LINE 8" WHITE (SOLID)
- THERMOPLASTIC PAVEMENT MARKING LINE 12" WHITE (SOLID) AT 3' C-C
- 8 THERMOPLASTIC PAVEMENT MARKING LINE 24" WHITE (SOLID) THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
- THERMOPLASTIC PAVEMENT MARKING LINE 2-4" YELLOW AT 11" C-C 1) THERMOPLASTIC PAVEMENT MARKING - LINE 12" YELLOW AT 20' C-C
- (A) RAISED PAVEMENT MARKER REFLECTOR, ONE-WAY CRYSTAL MARKER, 2 EACH @ 80' CENTER
  (B) RAISED PAVEMENT MARKER REFLECTOR, ONE-WAY CRYSTAL MARKER @ 40' CENTER
- © RAISED PAVEMENT MARKER REFLECTOR, TWO-WAY AMBER MARKER & 40' CENTER

#### **NOTES:**

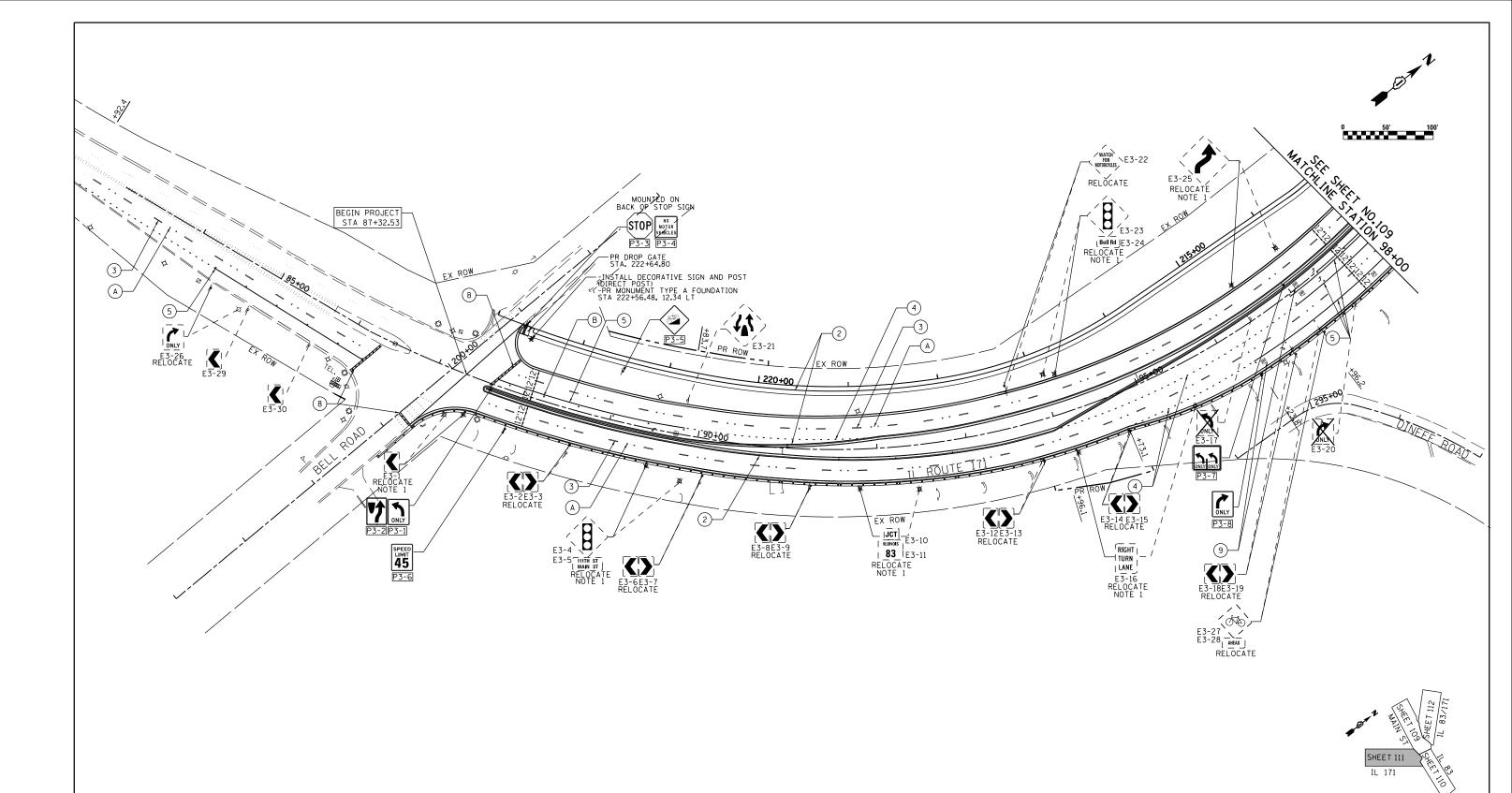
- 1. THOSE SIGNS MOUNTED ON EXISTING LIGHT POLE AND TRAFFIC SIGNAL POLE TO BE RELOCATE TEMPORALLY ON POST AND REERECT AS SHOWN ON THE PLAN.
- 2. INSTALL ALL PAVEMENT MARKINGS ACCORDING TO IDOT'S DETAIL TC-13
- 3. INSTALL ALL RAISED REFLECTIVE PAVEMENT MARKERS ACCORDING TO IDOT'S DETAIL TC-11



USER NAME = VAlvarez DESIGNED - FA REVISED STATE OF ILLINOIS DRAWN - VEA REVISED **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 100.0000 '/ in. CHECKED - MF REVISED DATE - 6/30/2017 REVISED

IL ROUTE 83 AT IL ROUTE 171 (ARCHER AVE) PAVEMENT MARKING AND SIGNAGE PLAN

TOTAL SHEET SHEETS NO. 344 3114-N(14) COOK CONTRACT NO. 60Y25 SHEET NO. 2 OF 4 SHEETS STA. 402+00.00 TO STA. 415+00.00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT



#### **KEY MAP**

LEGEND

1) THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE (SOLID)

THERMOPLASTIC PAVEMENT MARKING - LINE 4" YELLOW (SOLID)

3) THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE (30' SKIP - 10' DASH)

THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (2" SKIP - 6" DASH) © THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (SOLID)
© THERMOPLASTIC PAVEMENT MARKING - LINE 8" WHITE (SOLID)

- THERMOPLASTIC PAVEMENT MARKING LINE 12" WHITE (SOLID) AT 3" C-C 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" WHITE (SOLID)
- THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS
- THERMOPLASTIC PAVEMENT MARKING LINE 2-4" YELLOW AT 11" C-C 1 THERMOPLASTIC PAVEMENT MARKING - LINE 12" YELLOW AT 20' C-C
- (A) RAISED PAVEMENT MARKER REFLECTOR, ONE-WAY CRYSTAL MARKER, 2 EACH @ 80' CENTER

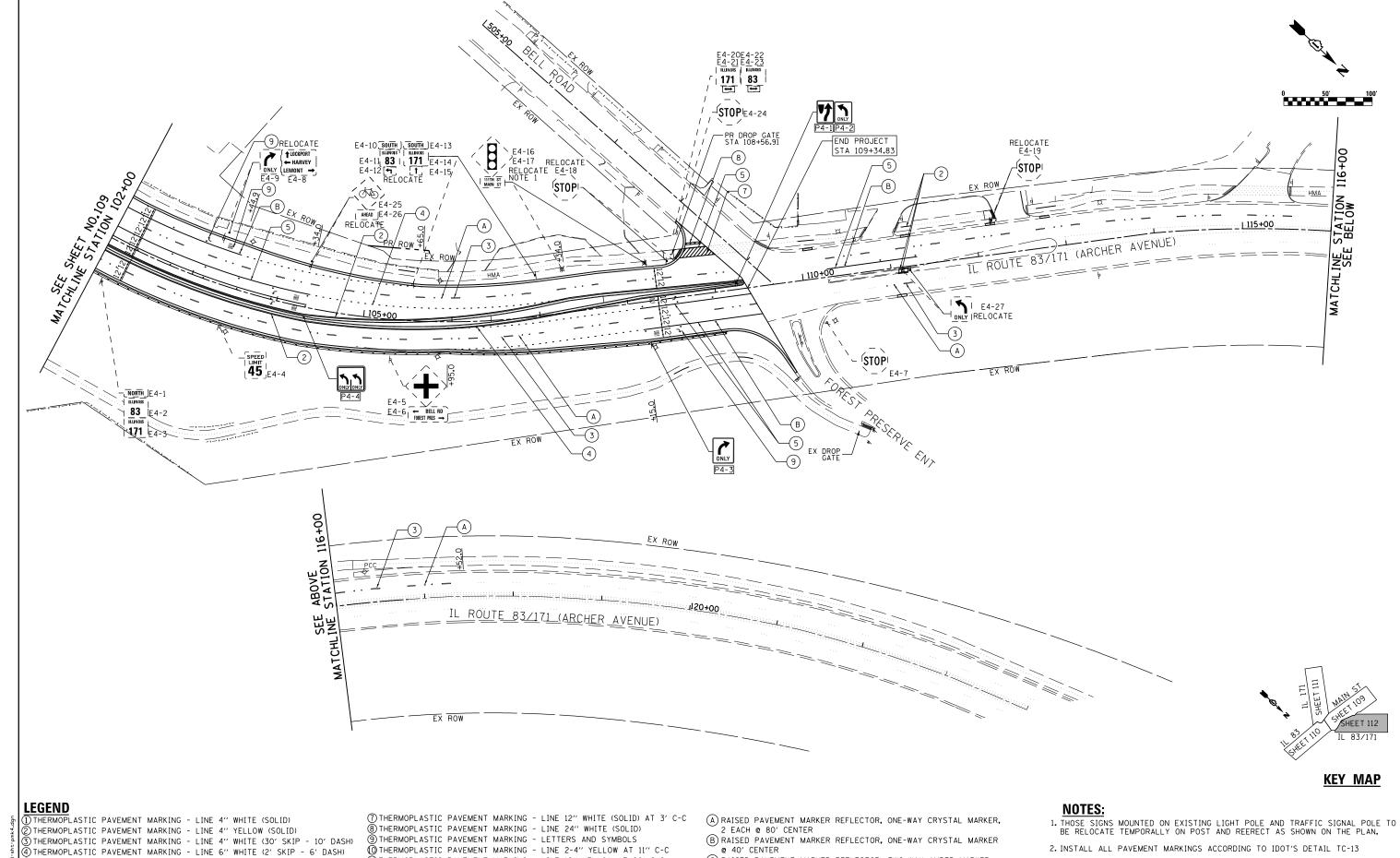
  (B) RAISED PAVEMENT MARKER REFLECTOR, ONE-WAY CRYSTAL MARKER
- @ 40' CENTER
- © RAISED PAVEMENT MARKER REFLECTOR, TWO-WAY AMBER MARKER @ 40' CENTER

#### NOTES:

- 1. THOSE SIGNS MOUNTED ON EXISTING LIGHT POLE AND TRAFFIC SIGNAL POLE TO BE RELOCATE TEMPORALLY ON POST AND REERECT AS SHOWN ON THE PLAN.
- 2. INSTALL ALL PAVEMENT MARKINGS ACCORDING TO IDOT'S DETAIL TC-13
- 3. INSTALL ALL RAISED REFLECTIVE PAVEMENT MARKERS ACCORDING TO IDOT'S



EMENI N	MARKING - LINE 8. WHILE (2011D)						DETAIL TO-	-11					
	USER NAME = VAlvarez	DESIGNED - FA	REVISED -		1	IL ROUTE 83 AT IL ROUTE	171 /ADCUED /	\VE\	F.A.P.	SECTION	COUNTY	TOTAL S	HEET
os &		DRAWN - VEA	REVISED -	STATE OF ILLINOIS	· "		ID SIGNAGE P	,	344	3114-N(14)	СООК	225	111
ers, Inc.	PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -	DEPARTMENT OF TRANSPORTATION	[	PAVEIVIENT WARKING AN	ID SIGNAGE P	LAN			CONTRACT		Y25
	PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -		SCALE: 1"=50"	SHEET NO. 3 OF 4 SHEETS	STA. 84+00.00	TO STA. 98+00.00	FED. ROAD DIST	T. NO. ILLINOIS FED. A	PROJECT		



R IVI B Rubinos & Mesia Engineers, Inc.

3) THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE (30' SKIP - 10' DASH)

THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (2" SKIP - 6" DASH)

THERMOPLASTIC PAVEMENT MARKING - LINE 6" WHITE (SOLID)
THERMOPLASTIC PAVEMENT MARKING - LINE 8" WHITE (SOLID) USER NAME = VAlvarez DESIGNED - FA REVISED DRAWN - VEA REVISED PLOT SCALE = 100.0000 '/ in. CHECKED - MF REVISED DATE - 6/30/2017 PLOT DATE = 8/19/2017 REVISED

THERMOPLASTIC PAVEMENT MARKING - LINE 2-4" YELLOW AT 11" C-C

1) THERMOPLASTIC PAVEMENT MARKING - LINE 12" YELLOW AT 20' C-C

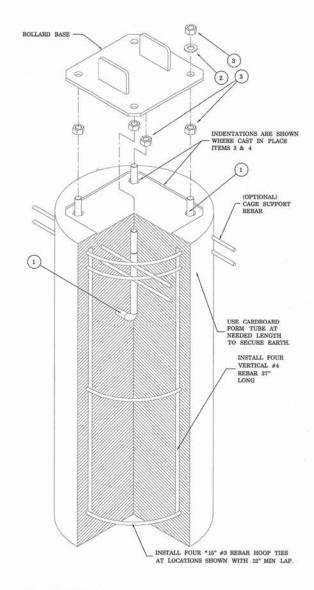
© RAISED PAVEMENT MARKER REFLECTOR, TWO-WAY AMBER MARKER @ 40' CENTER

- 2. INSTALL ALL PAVEMENT MARKINGS ACCORDING TO IDOT'S DETAIL TC-13
- 3. INSTALL ALL RAISED REFLECTIVE PAVEMENT MARKERS ACCORDING TO IDOT'S DETAIL TC-11

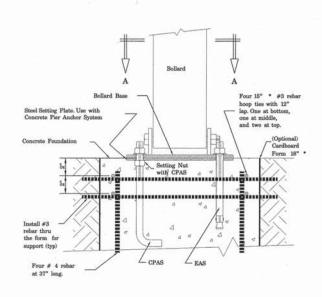
		DETAIL TO	11						
IL	ROUTE 83 AT IL ROUTE	171 (ARCHER A	(VE)		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PAVEMENT MARKING AND	•	•		344	3114-N(14)	соок	225	112
	AVENIENT MAIRING AND	Olditade i E	***				CONTRAC	T NO. 6	0Y25
.	CHEET NO 4 OF 4 CHEETC	CT 4 102±00 00	TO CTA	115+00 00	FF0 00	10 0167 NO THE TOP			

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

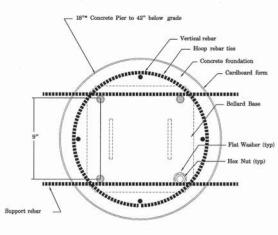
DROP GATE MARKING DETAIL N.T.S.



CONCRETE PIER ANCHOR SYSTEM (CPAS)

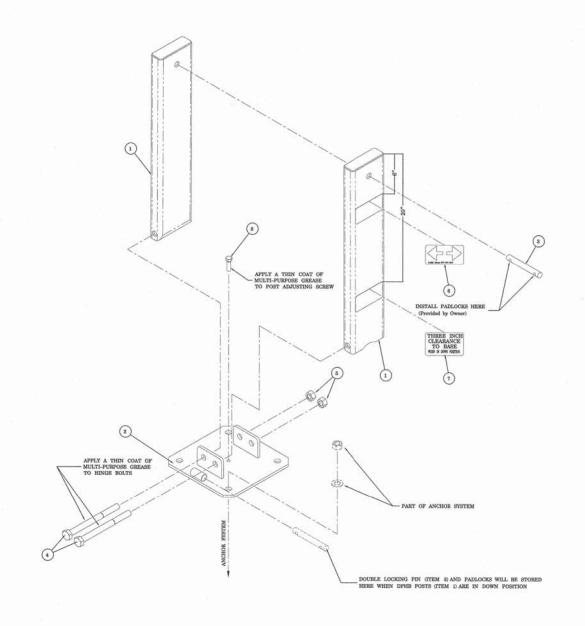


#### FRONT ELEVATION SECTION



PLAN SECTION "A-A"

DROP GATE, INSTALLATION DETAIL



DROP GATE DETAIL

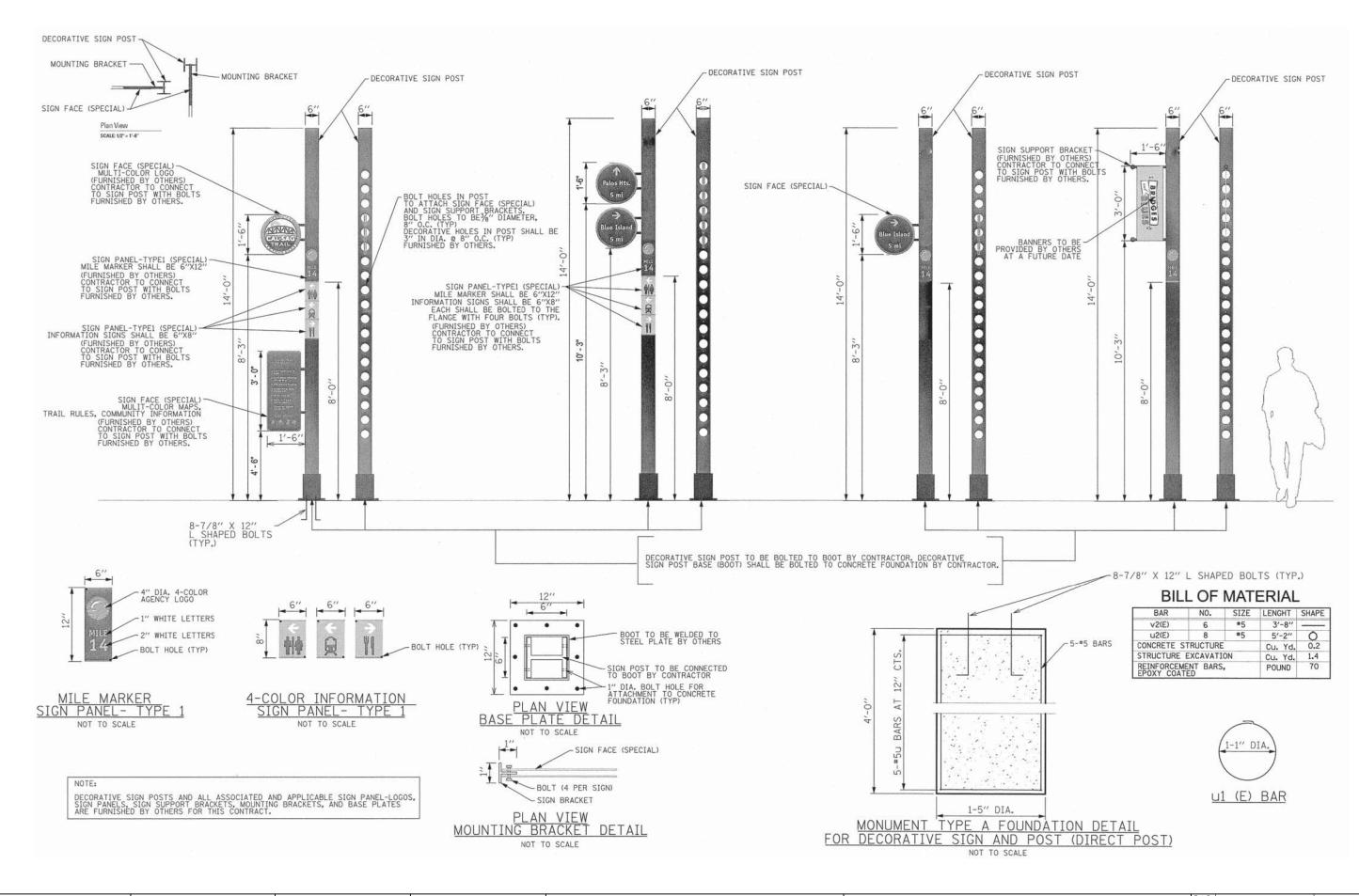
R Winco & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulte 1500, Chicago, It. 65604-2462

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

ı	ROUTE 83	AT IL	ROUTE	171 (AR	CHER AVE)	F.A.P. RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHEE NO.
		DROP	GATE I	DETΔÌΙ	•	344	3114	-N(14)	соок	225	113
		Diloi	OAIL I	JE IAIL					CONTRACT	NO. 6	OY25
	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FFD. RO	DAD DIST. NO.	TILLINOIS FED. A	D PROJECT		



Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulfe 1500, Chicago, It. 60604-2462

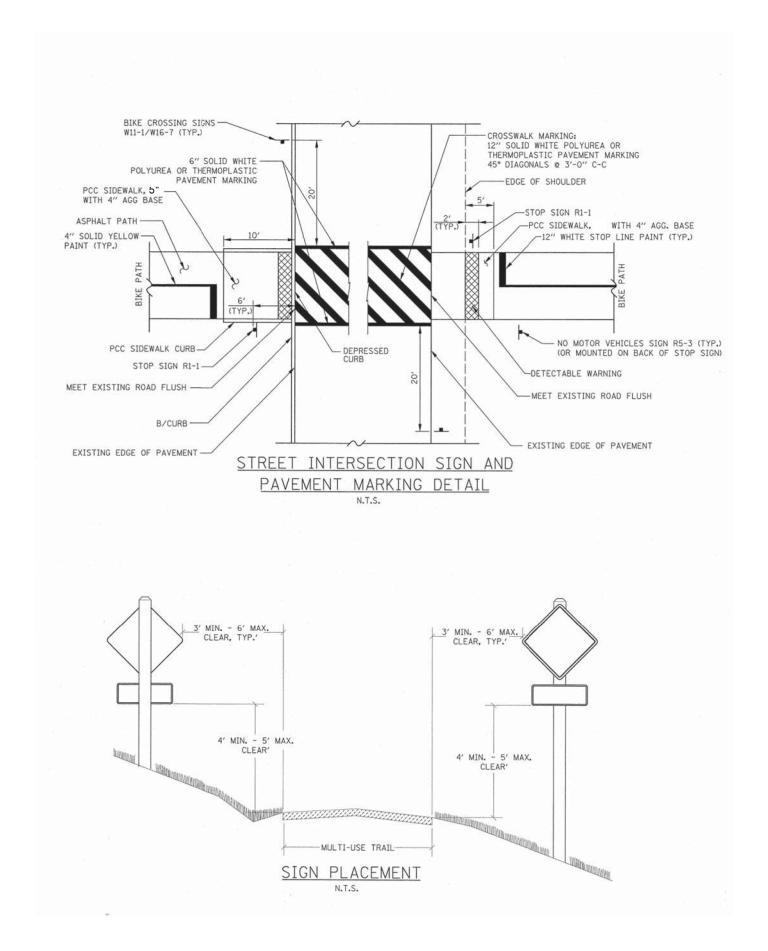
	USER NAME = VAlvarez	DESIGNED - FA	REVISED -
		DRAWN - VEA	REVISED -
nc.	PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
4	PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

							•	ER AVE) Details	
CHEET	NΙΩ	1	ΛE	1	CHEETS	C T		TO	CTA

SCALE: NONE

FED. R	OAD DI	ST. N	10.	ILLINOIS	FED.	AID	PROJECT		
							CONTRACT	NO. 6	0Y25
344			3114-	N(14)			COOK	225	114
F.A.P. RTE.			SECT	TION			COUNTY	SHEETS	SHEET NO.

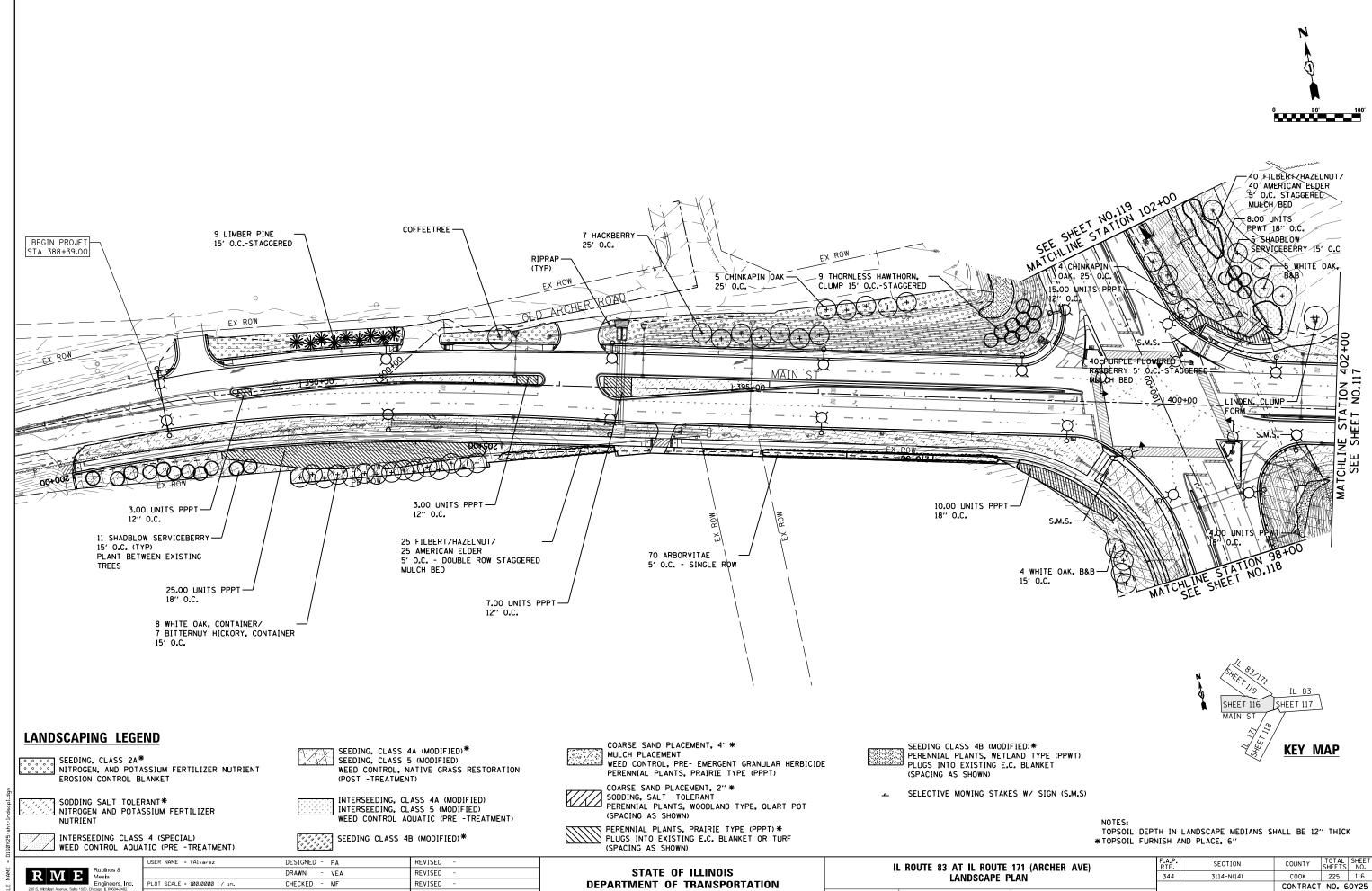


Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulte 1500, Chicago, IL 66004-2462

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

								•	CHER AVE) Arking Detail	
SCALE:	NONE	SHEET	NO.	1	OF	1	SHEETS	STA.	TO STA.	

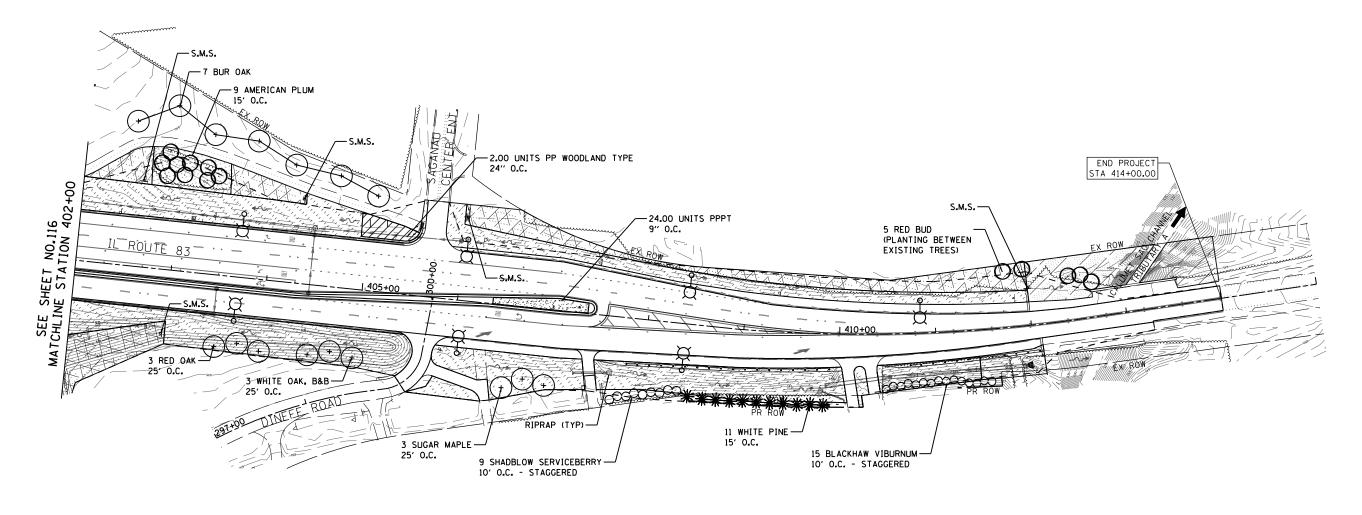


SCALE: 1"=50" SHEET NO. 1 OF 5 SHEETS STA. 388+00.00 TO STA. 402+00.00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

DATE - 6/30/2017

REVISED

PLOT DATE = 8/19/2017





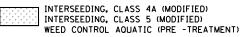
SEEDING, CLASS 2A\*
NITROGEN, AND POTASSIUM FERTILIZER NUTRIENT EROSION CONTROL BLANKET

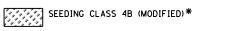
SODDING SALT TOLERANT\*
NITROGEN AND POTASSIUM FERTILIZER

INTERSEEDING CLASS 4 (SPECIAL)
WEED CONTROL AQUATIC (PRE -TREATMENT)



SEEDING, CLASS 4A (MODIFIED)\*
SEEDING, CLASS 5 (MODIFIED)
WEED CONTROL, NATIVE GRASS RESTORATION (POST -TREATMENT)







COARSE SAND PLACEMENT, 4" \* MULCH PLACEMENT
WEED CONTROL, PRE- EMERGENT GRANULAR HERBICIDE
PERENNIAL PLANTS, PRAIRIE TYPE (PPPT)

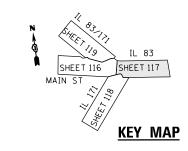
COARSE SAND PLACEMENT, 2" \*
SODDING, SALT -TOLERANT
PERENNIAL PLANTS, WOODLAND TYPE, QUART POT (SPACING AS SHOWN)

PERENNIAL PLANTS, PRAIRIE TYPE (PPPT) \*
PLUGS INTO EXISTING E.C. BLANKET OR TURF
(SPACING AS SHOWN)



SEEDING CLASS 4B (MODIFIED)\*
PERENNIAL PLANTS, WETLAND TYPE (PPWT)
PLUGS INTO EXISTING E.C. BLANKET (SPACING AS SHOWN)

■ SELECTIVE MOWING STAKES W/ SIGN (S.M.S)



NOTES: TOPSOIL DEPTH IN LANDSCAPE MEDIANS SHALL BE 12" THICK \*TOPSOIL FURNISH AND PLACE, 6"

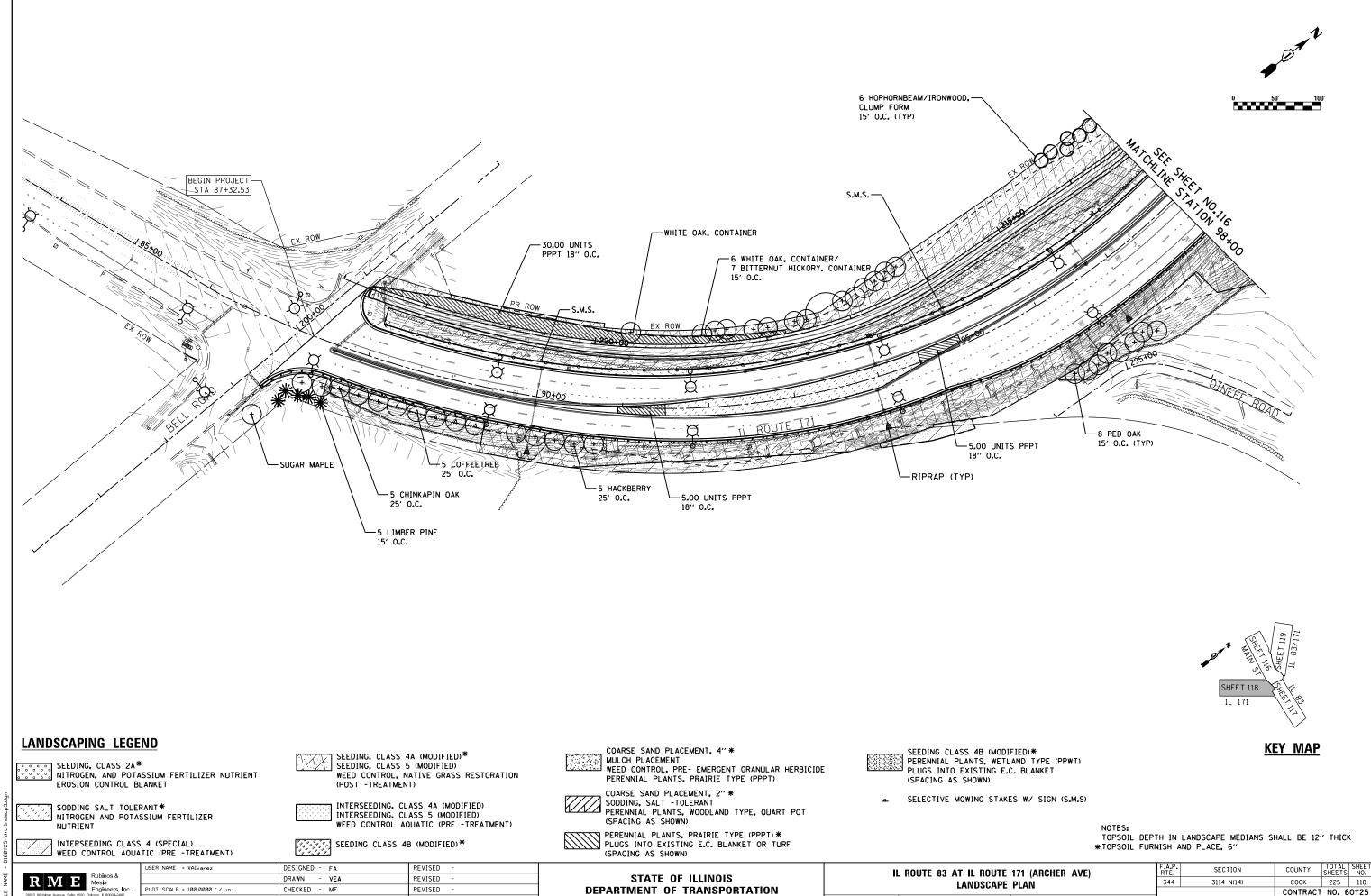


USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

II	. ROUTE			ROUTE CAPE P	171 (ARCHER Lan	AVE)	
SCALE: 1"=50"	SHEET NO.	2 (	F 5	SHEETS	STA. 402+00.00	TO STA.	415-

	F.A.P. RTE.		SEC	TION			COUNTY	TOTAL SHEETS	SHE
	344		3114-	N(14)			COOK	225	11
						П	CONTRACT	NO. 6	0Y2
5+00.00	EED D	TOTAL DAG	NO	TI I INOIS	EED	ΛI	D PROJECT		



**DEPARTMENT OF TRANSPORTATION** 

344

LANDSCAPE PLAN

SCALE: 1"=50" SHEET NO. 3 OF 5 SHEETS STA. 84+00.00 TO STA. 98+00.00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

3114-N(14)

CONTRACT NO. 60Y25

PLOT SCALE = 100.0000 '/ in.

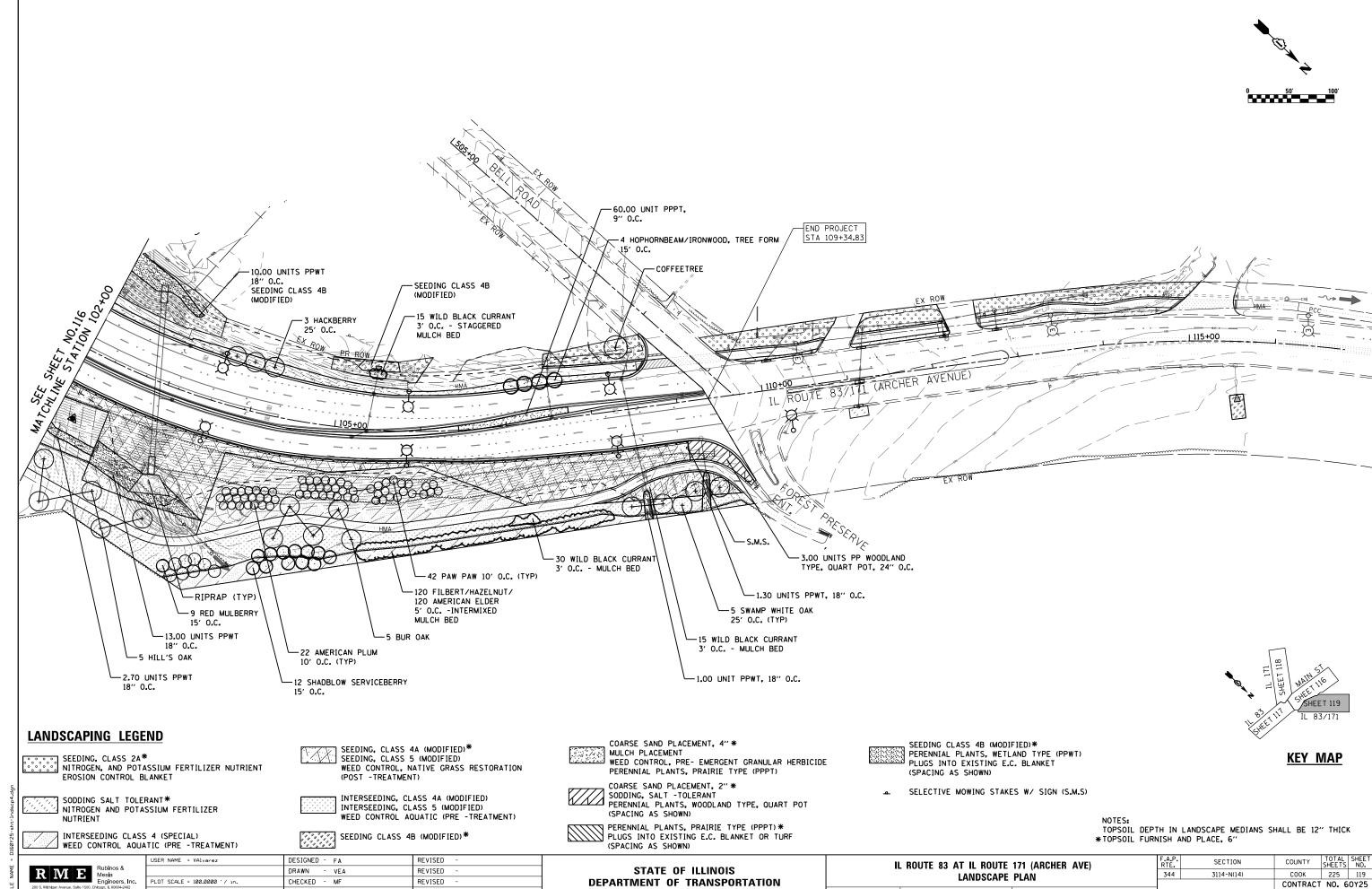
PLOT DATE = 8/19/2017

CHECKED - MF

DATE - 6/30/2017

REVISED

REVISED



SHEET NO. 4 OF 5 SHEETS STA. 102+00.00 TO STA. 115+00.00 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

DATE - 6/30/2017

REVISED

			_		SCF	HEDU	LE OF	PERE	NNIA	LS													
												UNIT	S (OF 10	0 EACH)				,			_		
SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	MAIN	S. R. GRASS	Maria Maria	51,11,21,23,11,23,	17 2 RACHAT	11 520 100° 0101/100 0101/100	SO JUNE	Strang Coly	83 MEDIAN 1271 M	Eduration of the state of the s	det into si	St. John M. J. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	RETH INCHART	JI RORDSOF	12 20 10 1 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 John 11.85	OUTENIA NUTTONIA	JUTA STERO	ALS BY SPECIES BY	rept /
		Sheet	Numbers	1	1	1	1	1	1	2	2	3	3	4	4	4	4	!	4	4			
PRAIRIE																							
CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	2" DIA BY 4" PLUG	9"								12.00				30.00						42.00		
DODECATHEON MEADIA	SHOOTING STARS	2" DIA BY 4" PLUG	9"								6.00				15.00						21.00		
CAMASSIA SCILLOIDES	WILD HYACINTH	2" DIA BY 4" PLUG	9"								6.00				15.00						21.00		
											24.00				60.00								
DODECATHEON MEADIA**	SHOOTING STARS**	2" DIA BY 4" PLUG	12"	6.50								5.00									11.50		
CAMASSIA SCILLOIDES**	WILD HYACINTH**	2" DIA BY 4" PLUG	12"	6.50						ļ		5.00									11.50		
<del> </del>				13.00								10.00											
ALLIUM CERNUUM	NODDING WILD ONION	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
ASCLEPIAS TUBEROSA		2" DIA BY 4" PLUG	18"		2.50	1.00	1.50			ļ			3.00								8.00		
ECHINACEA PALLIDA	PALE PURPLE CONEFLOWER	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
GERANIUM MACULATUM		2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
GEUM TRIFLORUM	PRAIRIE SMOKE	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
PENSTEMON DIGITALIS	FOXGLOVE BEARDTONGUE	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
PHLOX DIVARICATA	WILD BLUE PHLOX	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
RUELLIA HUMILIS	WILD PETUNIA	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
SPOROBOLIS HETEROLEPIS	PRAIRIE DROPSEED	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00		
ZIZIA AUREA	GOLDEN ALEXANDERS	2" DIA BY 4" PLUG	18"		2.50	1.00	1.50						3.00								8.00	PRAIRIE	
					25.00	10.00	15.00						30.00									187.00	
WETLAND																							
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
CAREX STIPATA	FOX SEDGE	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
CAREX VULPINOIDEA	BROWN FOX SEDGE	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
ECHINACEA PURPUREA	PURPLE CONEFLOWER	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
IRIS VIRGINICA	BLUE FLAG IRIS	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
JUNCUS TORREYI	TORREY'S RUSH	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
SPARTINA PECTINATA	PRAIRIE CORD GRASS	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
SYMPHYTOTRICHUM NOVEA-ANGLIA	NEW ENGLAND ASTER	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
VERBENA HASTATA	BLUE VERVAIN	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00		
ZIZIA AUREA	GOLDEN ALEXANDERS	2" DIA BY 4" PLUG	18"					0.80	0.40							1.00	0.27	1.30	0.10	0.13	4.00	WETLAND	
								8.00	4.00							10.00	2.70	13.00	1.00	1.30		40.00	
WOODLAND																						WOODLAND	
MERTENSIA VIRGINICA**	VIRGINIA BLUEBELLS**	QUART POT	24"							2.00				3.00								5.00	
			1										<u> </u>		<u></u>	<u></u>	<u> </u>			GRA	ND TOTAL:	232.00	
ALL PERENNIAL PLANTS SHALL B	E INTERMIXED AND STAGGE	RED													P	ERENNIA	L PLANT	CARE C	ALENDA	R			
				CATED 511										Activ	rity							Time	
ALL PERENNIAL PLANTS SHALL B	E PLANTED INTO SEEDING/BI	LANKET OR TURF <b>EXC</b>	LEPI AS INDIC	CATED BY	-					Prep	are beds w	th soil ame	ndments							5 - May 1	15		
**MAY BE INSTALLED DORMAN	FPRIOR TO TURGRASS SOD I	NSTALLATION								<u></u>										5 - August - June 15	13		
										Plant	Perennials	as per Pla	n							t 15 - Sept	ember 15		
												Beds								urs After P			
											Install Selective Mow Stakes as per Plan or Direction of RE (if applicable)  Prior to Period of Establishment Inspection												
										Perennial Plant Period of Establishment - Watering and Weeding Twice a Week for 4 Weeks  Within 30 Days After Planting													
										Replace Unacceptable Plants  After Period of Establishment Inspection													
																						·	- ties
										Perennial Plant Care (First Cycle)  90 Days After Period of Establishment Inspection  90 Perennial Plant Care (Second Cycle)  90 Days After Period of Establishment Inspection													
																				-			
											nnial Plant (		Cycle)							-		ablishment Inspec	
										10	lemental W								111 4			o. As Directed by I	Jacidant

USER NAME = VAlvarez	DESIGNED - FA	KENIZED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

SCALE: NONE

П	IL ROUTE 83 AT IL ROUTE 171 (ARCHER AVE)										
LANDSCAPE SCHEDULE											
LANDOONI L GOILLDOLL											
	SHEET NO	5 OF	5	SHEETS	STA	TO STA	EED.	DOAD			

			_						
FED. RO	DAD DIST.	NO.	ILL	INOIS	FED.	AID	PROJECT		
							CONTRACT	NO. 6	0Y25
344		311	14-N(1		COOK	225	120		
F.A.P. RTE.		SE	CTIO	N		COUNTY	SHEETS	SHEE	

# TRAFFIC SIGNAL LEGEND (NOT TO SCALE)

				(NOT TO SCALE)				
LTEM	EXISTING	<u>PROPOSED</u>	ITEM	EXISTING	PROPOSED	LTEM	EXISTING	<u>PROPOSED</u>
CONTROLLER CABINET			HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R Y Y	R R
COMMUNICATION CABINET	ECC	СС	-ROUND			17 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		R R Y Y G G G G G G G G G G G G G G G G
MASTER CONTROLLER	EMC	мс	HEAVY DUTY HANDHOLE -SQUARE -ROUND	H H	<b>H B</b>			G G 4Y 4Y 4G 4G P
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
UNINTERRUPTABLE POWER SUPPLY	<b>₹</b>	<b>7</b>	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		R R Y
SERVICE INSTALLATION	-⊡- <sup>P</sup>	- <b></b> -P	RAILROAD CANTILEVER MAST ARM	X <del>OX</del> X	X <del>eX X</del>			G G G Y 4Y 4G 4G
-(P) POLE MOUNTED  SERVICE INSTALLATION	_	_	RAILROAD FLASHING SIGNAL	<del>∑⊙</del> ∑	X•X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$	<b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup>	RAILROAD CROSSING GATE	<del>∑</del> →	X+X-	PEDESTRIAN SIGNAL HEAD		<b>₽</b>
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	<b></b>	*	AT RAILROAD INTERSECTIONS	<b>()</b>	Ā
STEEL MAST ARM ASSEMBLY AND POLE	0——	•——	RAILROAD CONTROLLER CABINET		<b>≯</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	<b>(€)</b> C <b>(</b> ₹) D	<b>₽</b> C <b>★</b> D
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		<del></del> -			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o <del>`</del> X—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	<ul> <li>● BM</li> </ul>	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		
WOOD POLE	⊗	•	INTERSECTION ITEM	I	ΙP	ALL DETECTOR LOOP CABLE TO BE SHIELDED	<i></i>	
GUY WIRE	<i>→</i>	<i>→</i>	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	<u> </u>	<del>- 1*6</del>
SIGNAL HEAD	<b>-</b> ⊳	-	RELOCATE ITEM  ABANDON ITEM		RL A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE	#⊳	+►	CONTROLLER CABINET AND			COAXIAL CABLE	<u> </u>	<u> </u>
SIGNAL HEAD OPTICALLY PROGRAMMED	> P +-> P	→ P + → P	FOUNDATION TO BE REMOVED		RCF			
FLASHER INSTALLATION -(FS) SOLAR POWERED	ors ors FS	•► <sup>F</sup> •► <sup>FS</sup>	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		<u></u>
-1F37 SULAN FUNENEU	BP BP FS	<b>₽→</b> F <b>₽→</b> FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<u>6*18</u>	<del></del>
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	——————————————————————————————————————
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		—(24F)—
RADAR DETECTION SENSOR	R	<b>R</b> ■	SAMPLING (SYSTEM) DETECTOR	[s] $(s)$	s s		—	
VIDEO DETECTION CAMERA	V 1	<b>V</b> ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	$[\overline{IS}]$ $(\widehat{IS})$	IS (IS)	CDOUND DOD	C 4 D C	
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	[ <u>0</u> 5] ( <u>0</u> \$)	os os	GROUND ROD -(C) CONTROLLER -(M) MAST ARM		<u>_</u> C <u>_</u> M <u>_</u> P <u>_</u> S
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ¶	WIRELESS DETECTOR SENSOR	<b>(W)</b>	<b>©</b>	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\boxtimes$	<b>◄</b>	WIRELESS ACCESS POINT					
CONFIMATION BEACON	<b>⊶</b>	-4						
WIRELESS INTERCONNECT	<b>∞<del>।   </del></b>	•· <del>।   </del>						
WIRELESS INTERCONNECT RADIO REPEATER	<b>E</b> RR	RR						

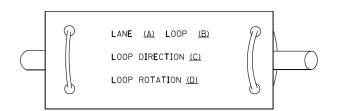
	DISTRICT ONE												
	STANDARD	TRAFFIC	SIGNA	L DESIGN	DETAILS								
SCALE: NONE	SHEET 1	0F 7	SHEETS	STA.	TO STA.								

F.A.P. RTE.	SECTION	I	COUNTY	TOTAL SHEETS	SHEET NO.
344	3114-N(14)	T	COOK	225	121
	TS-05 a	T	CONTRACT	NO. 6	0Y25
	ILLINOIS FED.	ΑĪ	PROJECT		

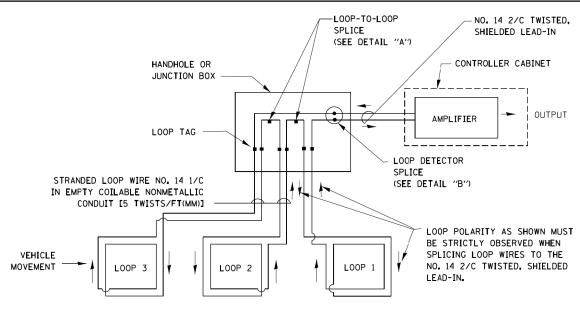
#### LOOP DETECTOR NOTES

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

#### LOOP LEAD-IN CABLE TAG

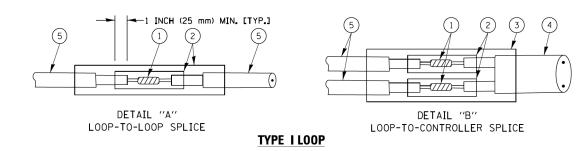


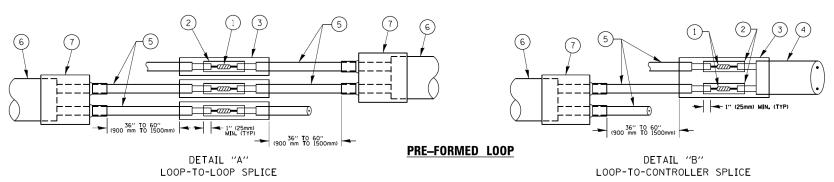
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **DETECTOR LOOP WIRING SCHEMATIC**

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





#### LOOP DETECTOR SPLICE

- $\stackrel{\textstyle \frown}{}_1$  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.

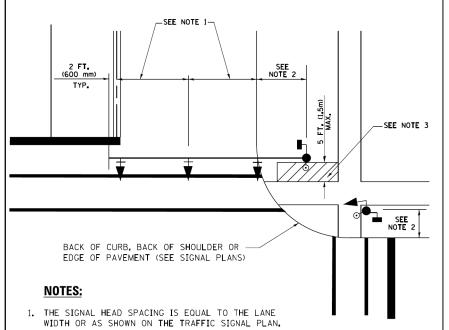
SCALE: NONE

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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

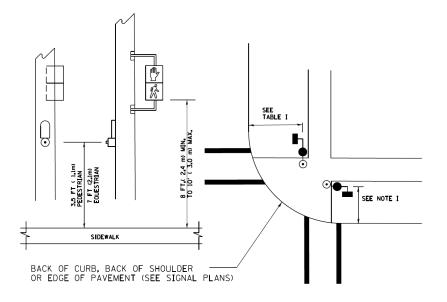
DIS	TRICT OF	IE .		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC	C SIGNAL	DESIGN	DETAILS	344	3114-N(14)	СООК	225	122
STANDARD TRAFFIC	JOINAL	DESIGN	DETAILS		NO. 6	0Y25		
SHEET NO. 2 OF 7	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

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



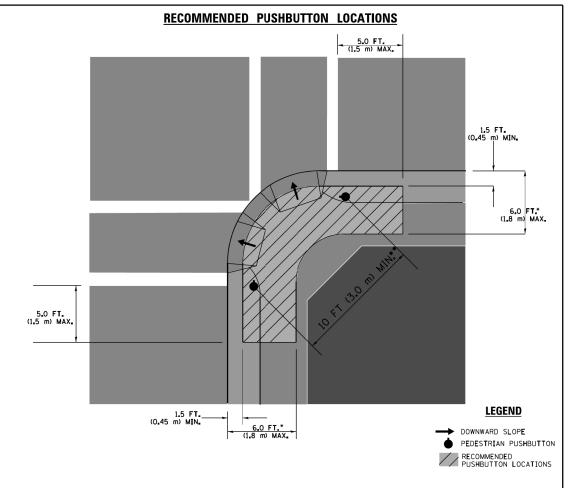
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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

#### PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



#### **NOTES:**

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



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

#### **NOTES:**

- 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.
- 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

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

#### NOTES:

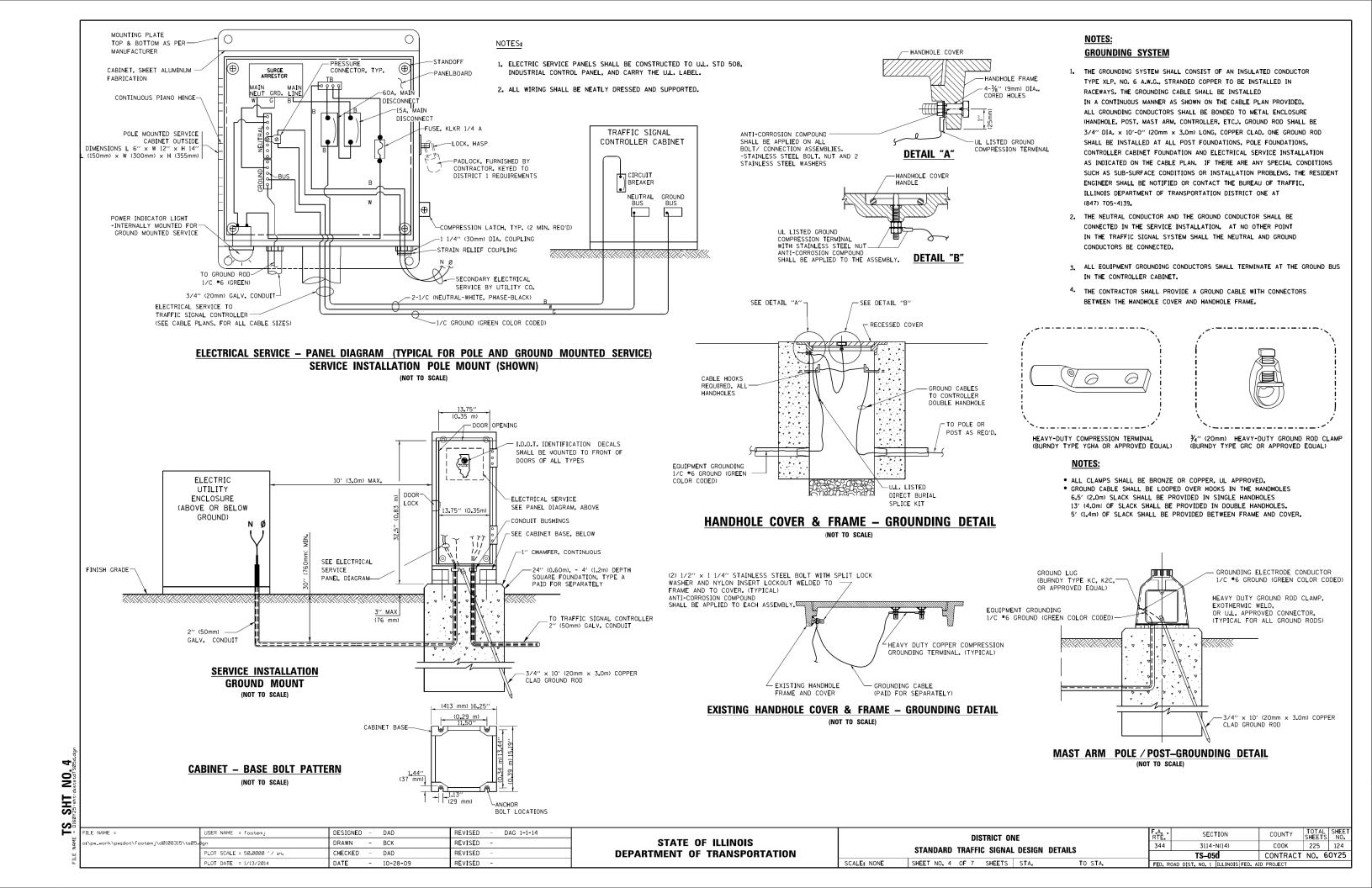
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
-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

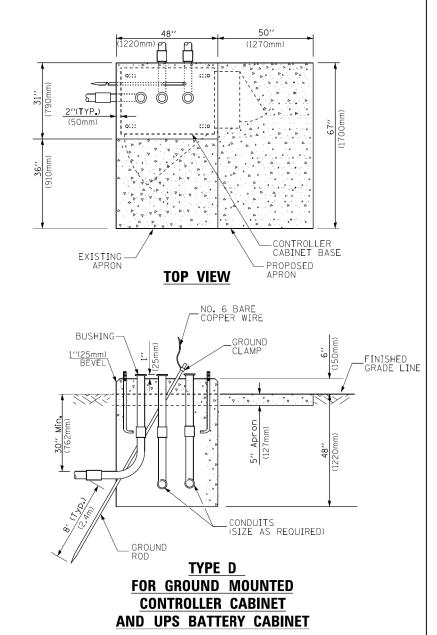
SCALE: NON

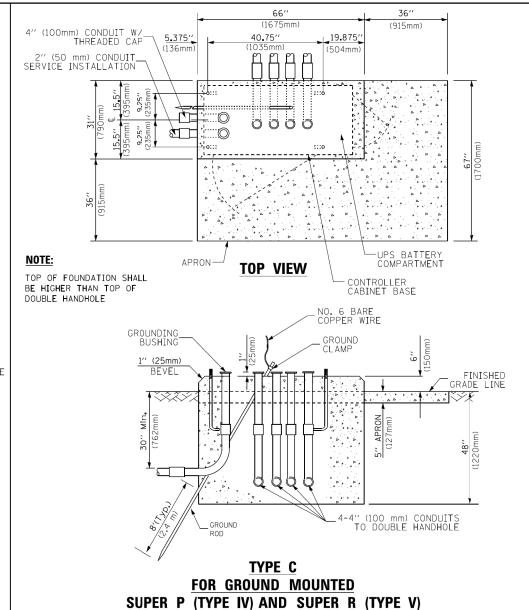
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STATE OF I	LLINOIS
<b>DEPARTMENT OF TR</b>	RANSPORTATION

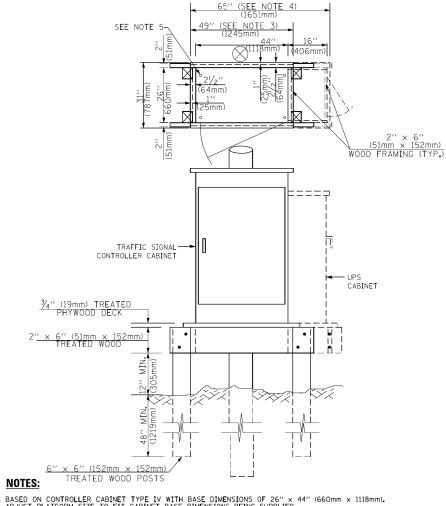
DISTRICT ONE				F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	STANDARD	TRAFFI	SIGNAL	DEGICN	DETAILS	344	3114-N(14)	соок	225	123
	STANDARD	INALLI	JOINAL	DESIGN	DETAILS		TS-05C	CONTRACT	NO. 6	0Y25
٧E	SHEET NO. 3	OF 7	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		







**CONTROLLER CABINETS** 



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

#### **TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM**

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

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 <sub>•</sub> 2m)		
TYPE C - CONTROLLER W/ UPS TYPE D - CONTROLLER	4'-0" (1.2m) 4'-0" (1.2m)		
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SOUARE	4'-0'' (1.2m)		

#### **DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4 <sub>4</sub> 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3 <sub>4</sub> 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)
Creater 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 <b>.</b> 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

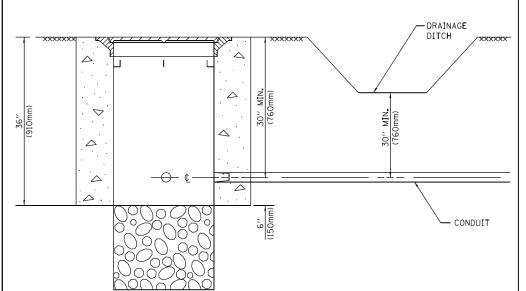
- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer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

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

11	FILE NAME =	USER NAME = footemj	DESIGNED -	DAG	REVISED - DAG 1-1-14	
AME	c:\pw_work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN -	ВСК	REVISED -	
щ		PLOT SCALE = 50.0000 '/ in.	CHECKED -	DAD	REVISED -	
Ξ		PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -	l

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

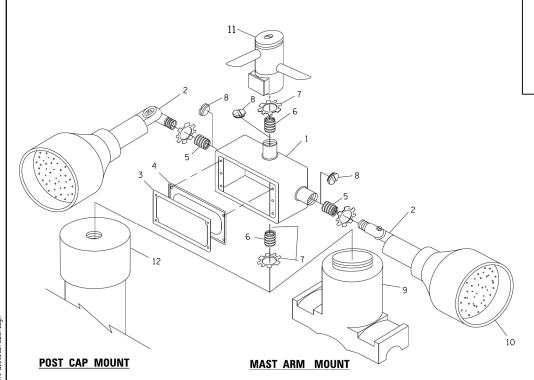
DISTRICT ONE R.				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	STANDARD TRAFFIC	CICNAL	DEGICN I	DETAILS	344	3114-N(14)	соок	225	125
	STANDAND THAFFIC	SIGNAL	DESIGN I	JETAILS		TS-05 <b>e</b>	CONTRACT	NO. 6	0Y25
•	SHEET NO. 5 OF 7 S	HEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		

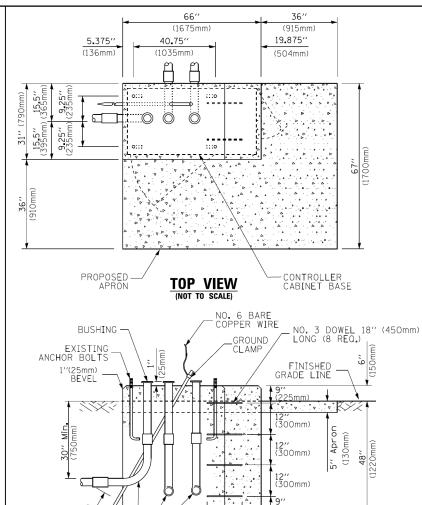


#### NOTES:

- 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 (NOT TO SCALE)





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

-EXISTING CONDUITS

EXISTING GROUND ROD

(NOT TO SCALE)

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

#### NOTES:

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EOUIVALENT
  ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EOUIVALENT
  ITEM #9- "BAND-IT" SADDLE BRACKET OR EOUIVALENT
- POST CAP MOUNT

  MAST ARM MOUNT

  MOUNT

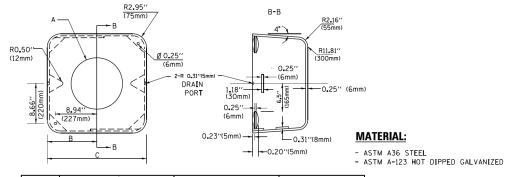
  MAST ARM MOUNT

  MOUNT

  MOUNT

  MAST ARM MOUNT

  MOUNTING BEACON MOUNTING IS SPECIFIED, ITEM 99 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.

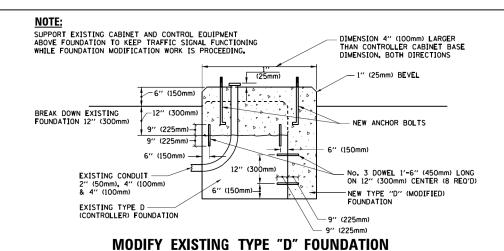


Α	В	С	HEIGHT	WEIGHT
VARIES	9.5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13 <b>.</b> 0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18 <b>.</b> 5′′(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

#### **SHROUD**

#### NOTES:

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



# GALVANIZED STEEL HOOKS 21 1/2\* MIN. (545mm) CONDUIT BUSHING EXISTING CONDUIT TO BE REMOVED CONDUIT BUSHING EXISTING CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN

#### NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.

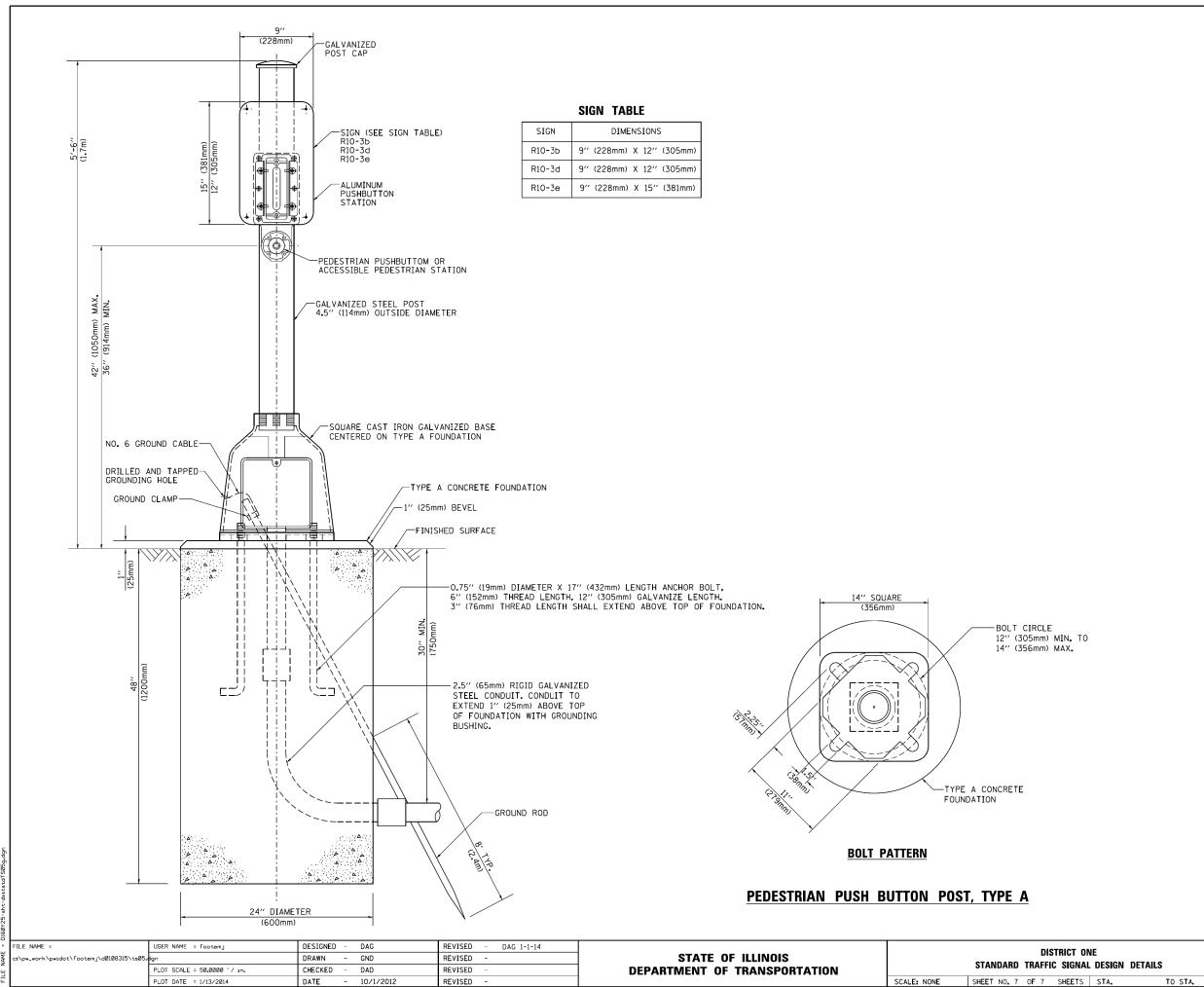
ELEVATION

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

FILE NAME =	USER NAME = footemj	DESIGNED	-	DAD	REVISED	-	DAG 1-1-14
c:\pw_work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN	-	BCK	REVISED	-	
	PLOT SCALE = 50.0000 '/ in.	CHECKED	-	DAD	REVISED	-	
	BLOT DATE - 1/13/2014	DATE		10-28-00	DEVICED		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOTAL SHEET NO. 225 127

CONTRACT NO. 60Y25

COUNTY

COOK

SECTION

3114-N(14)

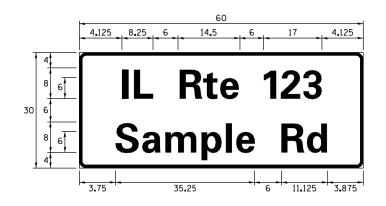
TS-05 g

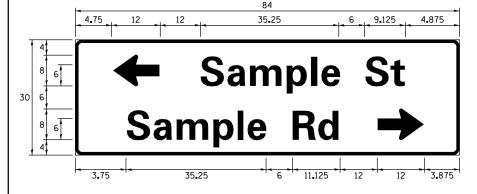
344

TS SHT NO.

#### SIGN PANEL - TYPE 1 OR TYPE 2

# 3.75 35.25 6 11.125 3.875 Sample Rd





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

## COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)			
INAME	ADDREVATION	SERIES "C"	SERIES "D"		
AVENUE	Ave	15.000	18.250		
BOULEVARD	Blvd	17.125	20.000		
CIRCLE	Cir	11.125	13.000		
COURT	C†	8. 250	9. 625		
DRIVE	Dr	8.625	10.125		
HIGHWAY	Hwy	18.375	22.000		
ILLINOIS	ΙL	7. 000	8. 250		
LANE	Ln	9.125	10.750		
PARKWAY	Pkwy	23. 375	27.375		
PLACE	PI	7. 125	7. 750		
ROAD	Rd	9.625	11.125		
ROUTE	R†e	12.625	14.500		
STREET	St	8.000	9.125		
TERRACE	Ter	er 12.625 14.			
TRAIL	Tr	7. 750	9.125		
UNITED STATES	US	10.375	12.250		

#### **GENERAL NOTES**

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" × 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ⅓" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
SIGN SCREWS
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
- WESTERN REMAC, INC.
WOODRIDGE, IL

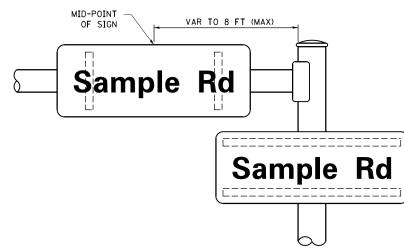
PART \*HPN053 (MED. CHANNEL)

1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
PART \*HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

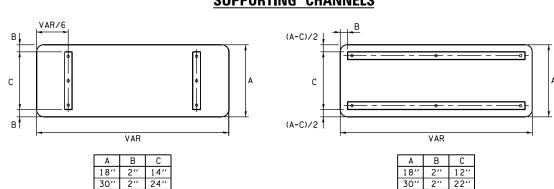
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

#### **MOUNTING LOCATION**

ARM OR POLE MOUNTED



#### SUPPORTING CHANNELS

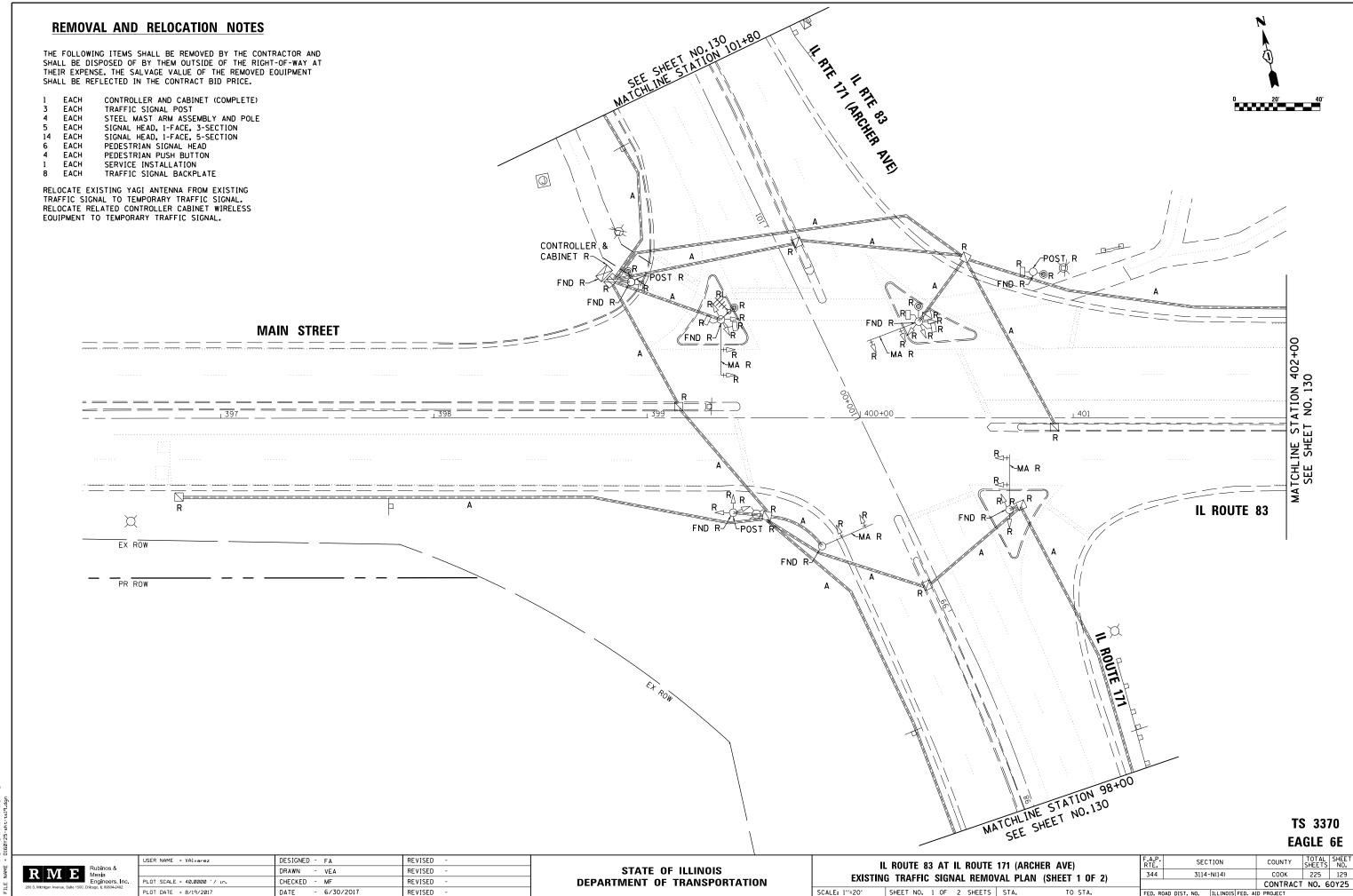


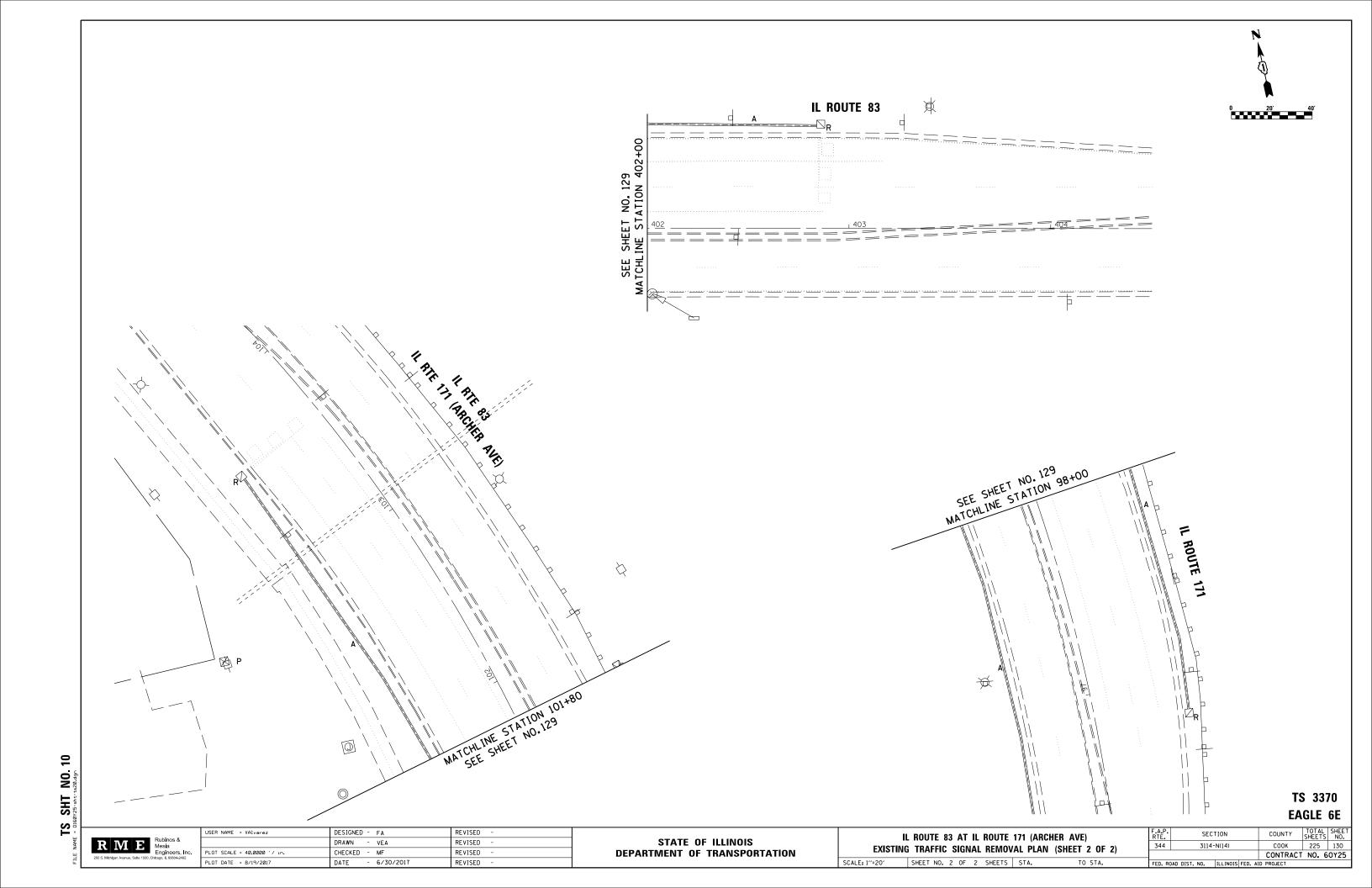
#### STANDARD ALPHABETS SPACING CHART

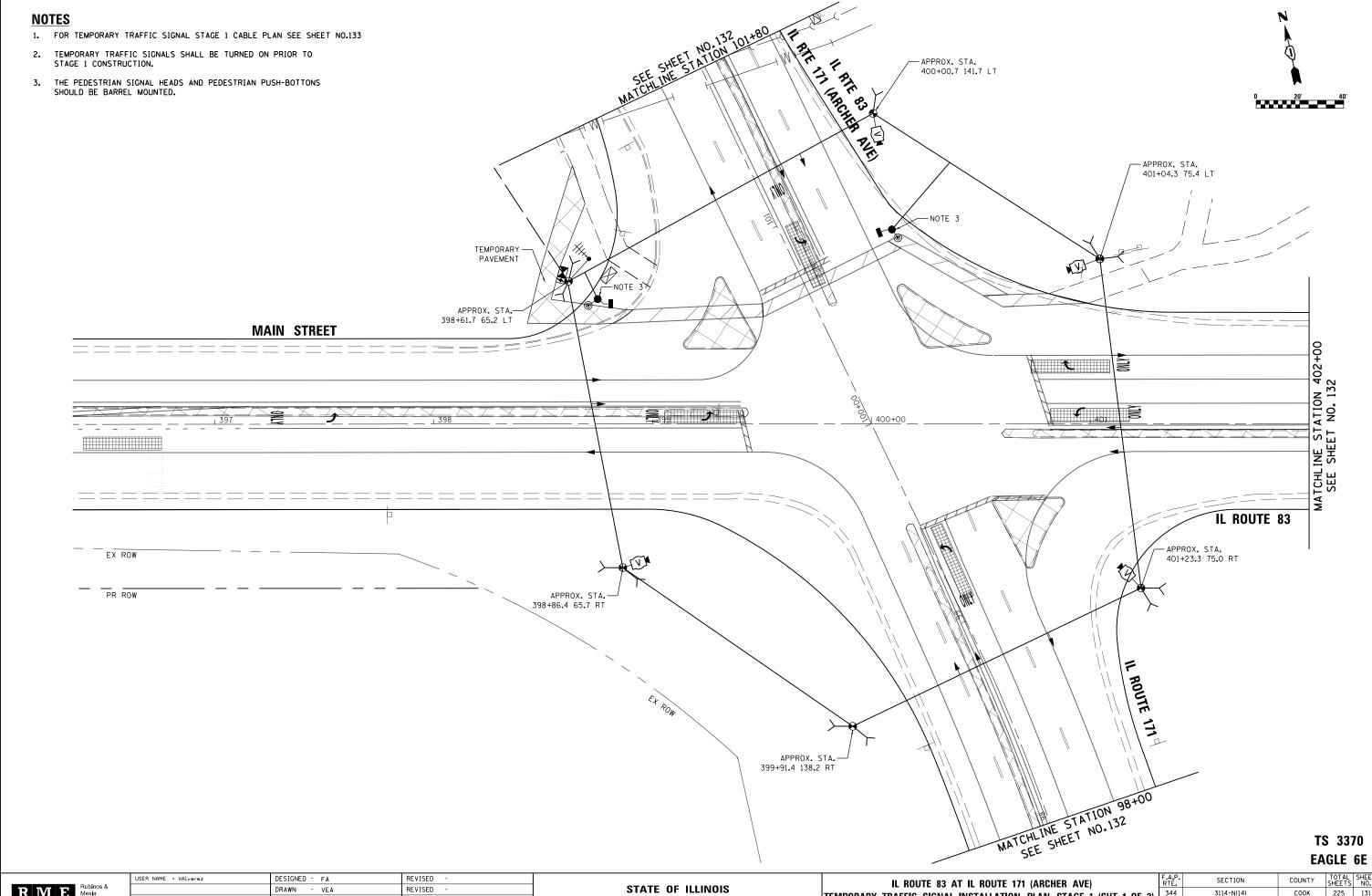
(8") UPPER CASE AND (6") LOWER CASE

	FHWA SEF	RIES "C"		FHWA SERIES "D"					
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)		
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240		
В	0.880	4.482	0.480	В	0.960	5.446	0.400		
С	0.720	4. 482	0.720	С	0.800	5.446	0.800		
D	0.880	4.482	0.720	D	0.960	5.446	0.800		
E F	0.880	4.082	0.480	E F	0.960	4.962	0.400		
G	0.880 0.720	4. 082 4. 482	0.240	G	0.960 0.800	4.962 5.446	0.240		
H	0. 120	4. 482	0.880	Н	0.960	5.446	0.960		
I	0.880	1. 120	0.880	I I	0.960	1.280	0.960		
J	0.240	4.082	0.880	J	0.240	5. 122	0.960		
K	0.880	4.482	0.480	К	0.960	5.604	0.400		
L	0.880	4.082	0.240	L	0.960	4.962	0.240		
М	0.880	5.284	0.880	М	0.960	6.244	0.960		
N	0.880	4.482	0.880	N	0.960	5.446	0.960		
0	0.720	4. 722	0.720	0	0.800	5.684	0.800		
Р	0.880	4.482	0.720	Р	0.960	5.446	0.240		
0	0.720	4. 722	0.720	0	0.800	5.684	0.800		
R	0.880	4.482	0.480	R	0.960	5.446	0.400		
S T	0.480 0.240	4. 482 4. 082	0.480	S T	0.400 0.240	5.446 4.962	0.400		
U	0.880	4. 482	0.880	Ü	0.240	5. 446	0. 240		
V V	0.240	4. 962	0.240	v	0.240	6. 084	0.240		
W	0.240	6.084	0.240	w	0.240	7. 124	0.240		
X	0. 240	4. 722	0.240	X	0.400	5.446	0.400		
Y	0.240	5. 122	0.240	Y	0.240	6.884	0.240		
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400		
а	0.320	3.842	0.640	a	0.400	4.562	0.720		
b	0.720	4.082	0.480	Ь	0.800	4.802	0.480		
С	0.480	4.002	0.240	С	0.480	4.722	0.240		
d	0.480	4.082	0.720	d	0.480	4.802	0.800		
е	0.480	4.082	0.320	е	0.480	4.722	0.320		
f	0.320	2.480	0.160	f	0.320	2.882	0.160		
g h	0.480 0.720	4. 082 4. 082	0.720 0.640	g h	0.480 0.800	4.802 4.722	0.800 0.720		
i	0.720	1. 120	0. 720	i	0.800	1. 280	0. 800		
i	0.000	2. 320	0.720	j	0.000	2.642	0.800		
k	0.720	4. 322	0.160	k	0.800	5. 122	0.160		
ı	0.720	1.120	0.720	i	0.800	1.280	0.800		
m	0.720	6. 724	0.640	m	0.800	7. 926	0.720		
n	0.720	4.082	0.640	n	0.800	4.722	0.720		
0	0.480	4.082	0.480	0	0.480	4.882	0.480		
р	0.720	4.082	0.480	Р	0.800	4.802	0.480		
P	0.480	4.082	0.720	q	0.480	4.802	0.800		
r	0.720	2.642	0.160	r	0.800	3.042	0.160		
S	0.320 0.080	3. 362	0.240	S	0.320 0.080	3. 762 3. 202	0.240		
u	0.640	2.882 4.082	0.080 0.720	u	0.720	4. 722	0.080		
v v	0.160	4. 722	0.160	V	0.160	5.684	0.160		
w	0.160	7. 524	0.160	w	0.160	9.046	0.160		
×	0.000	5. 202	0.000	×	0.000	6. 244	0.000		
У	0.160	4. 962	0.160	у	0.160	6.004	0.160		
Z	0.240	3. 362	0.240	z	0.240	4.002	0.240		
1	0.720	1.680	0.880	1	0.800	2.000	0.960		
2	0.480	4. 482	0.480	2	0.800	5.446	0.800		
3	0.480	4.482	0.480	3	1.440	5.446	0.800		
4	0.240	4.962	0.720	4	0.160	6.004	0.960		
5	0.480	4.482	0.480	5	0.800	5.446	0.800		
6	0.720	4.482	0.720	6	0.800	5.446	0.800		
7	0.240	4.482	0.720	7	0.560	5.446	0.560		
8 9	0.480 0.480	4. 482 4. 482	0.480 0.480	8	0.800 0.800	5. 446 5. 446	0.800		
0	0.480	4. 722	0. 480	0	0.800	5. 684	0.800		
-	0. 120	2. 802	0. 120	-	0.240	2. 802	0.240		
			J						

DISTRICT ONE						F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE1
MAST ARM MOUNTED STREET NAME SIGNS				344	3114-N(14)	COOK	225	128		
						TS-02	CONTRACT	NO. 6	0Y25	
	SHEET	0 <b>F</b>	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		







NO. SHT

R IVI B Rubinos & Mesia Engineers, Inc.

CHECKED - MF REVISED PLOT DATE = 8/19/2017 DATE - 6/30/2017 REVISED

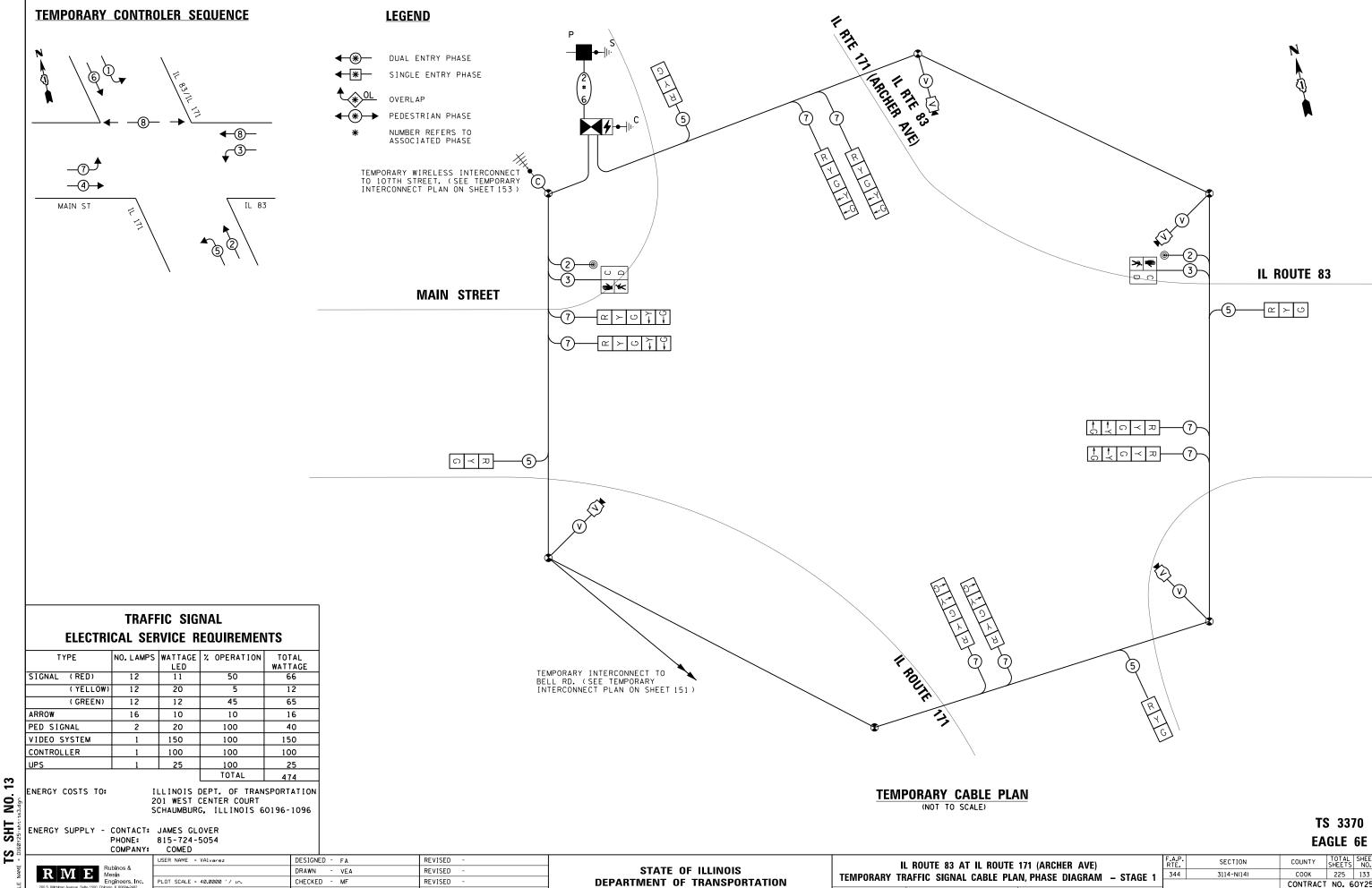
**DEPARTMENT OF TRANSPORTATION** 

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN STAGE 1 (SHT 1 OF 2) SHEET NO. 1 OF 2 SHEETS STA.

 
 COUNTY
 TOTAL SHEETS NO.

 COOK
 225
 131

 CONTRACT
 NO. 60Y25
 344 3114-N(14)



**DEPARTMENT OF TRANSPORTATION** 

344

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DIAGRAM - STAGE 1

SHEET NO. 1 OF 1 SHEETS STA.

3114-N(14)

COOK 225 133

CONTRACT NO. 60Y25

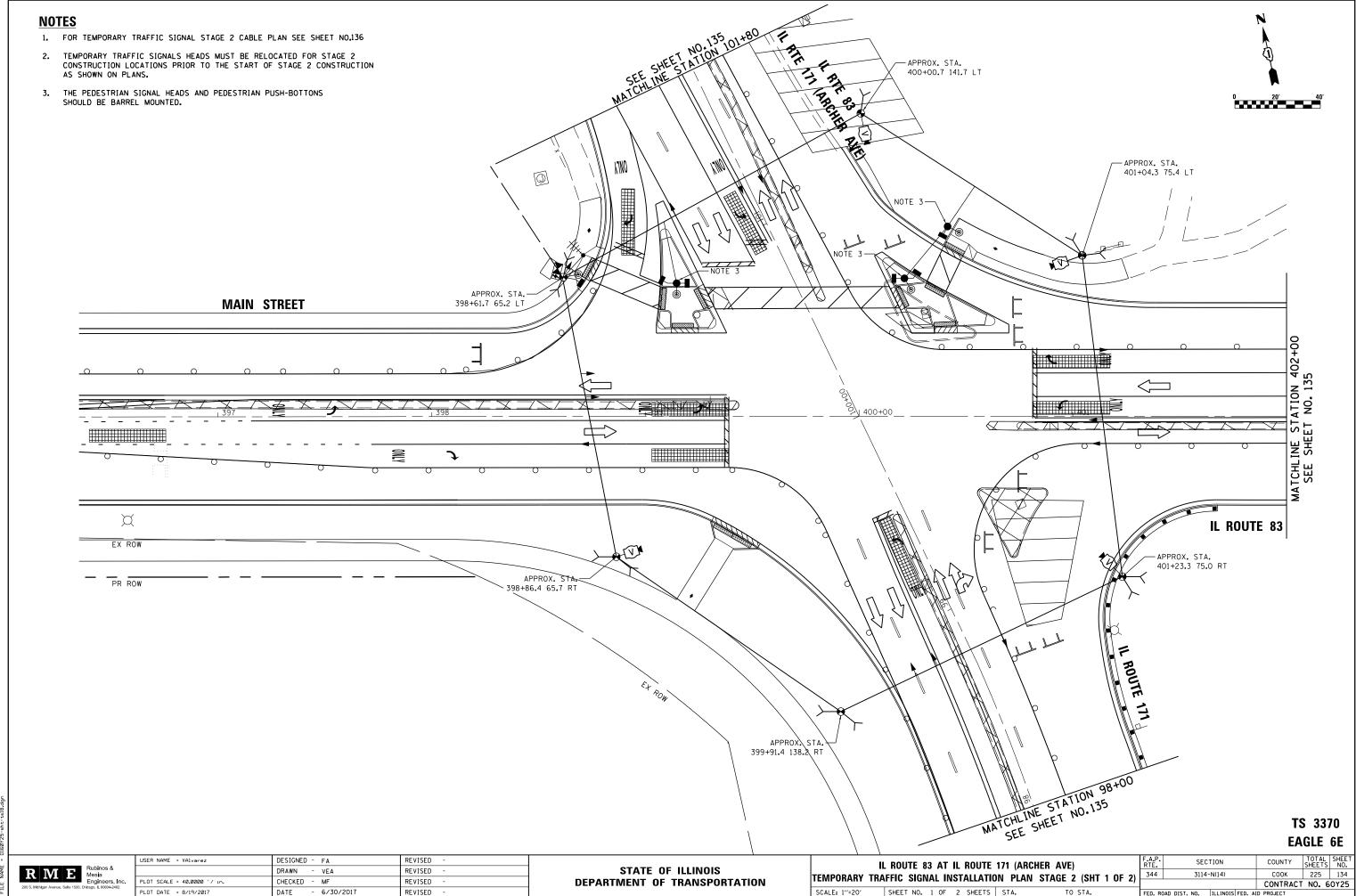
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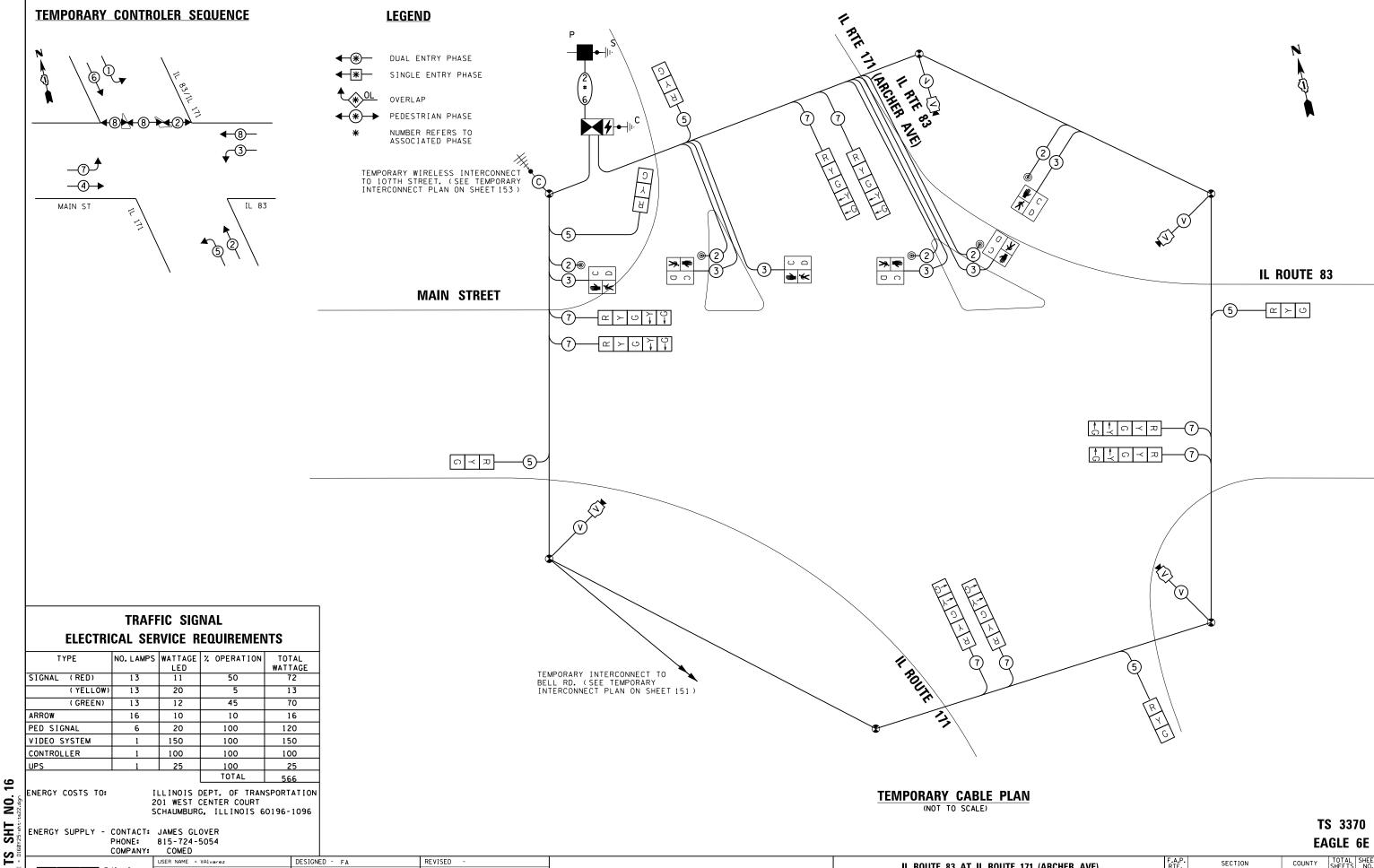
DATE - 6/30/2017

PLOT DATE = 8/19/2017

REVISED

REVISED





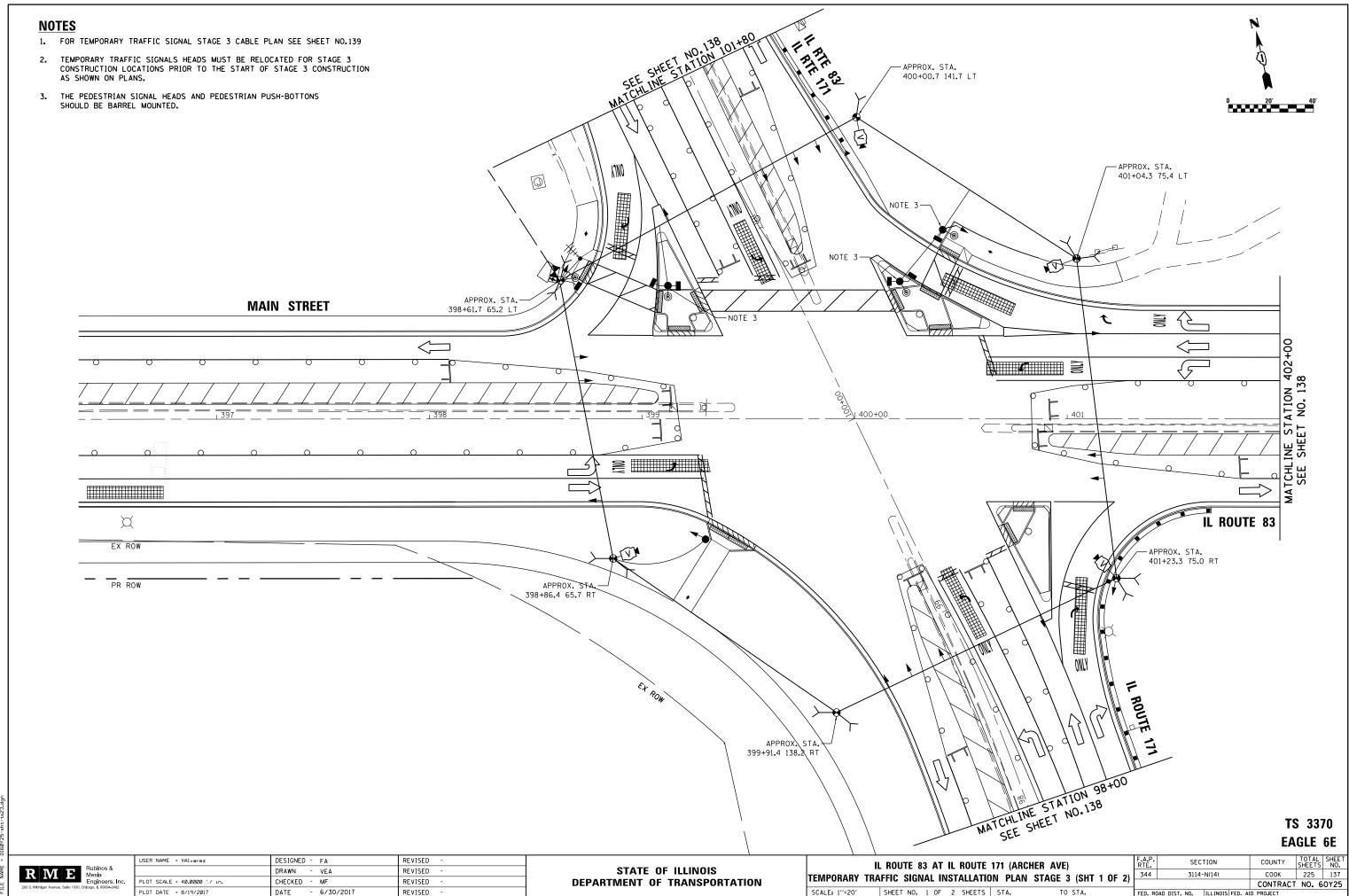
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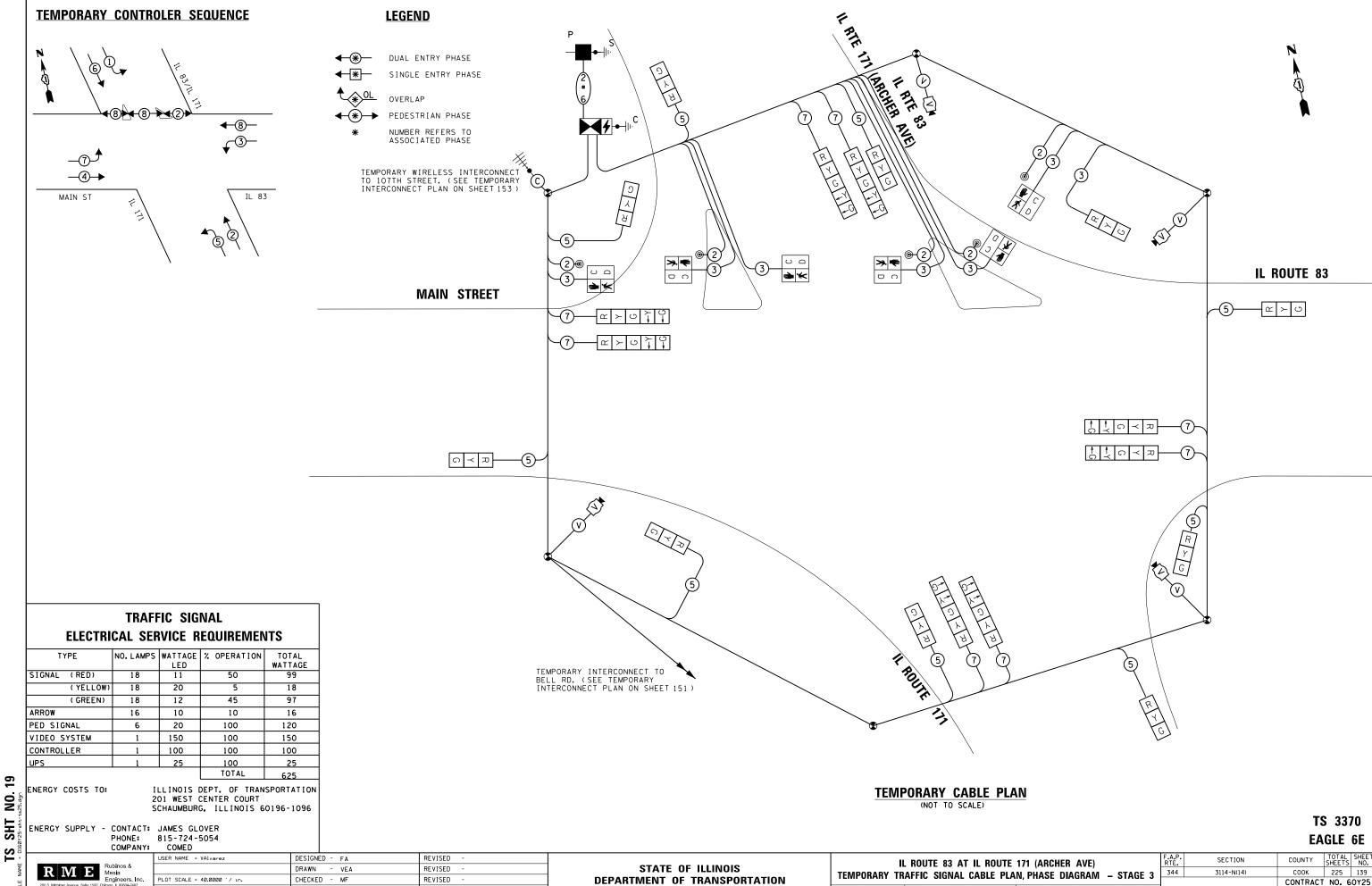
DRAWN - VEA REVISED CHECKED - MF REVISED PLOT DATE = 8/19/2017 DATE - 6/30/2017 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

IL ROUTE 83 AT IL ROUTE 171 (ARCHER AVE) TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DIAGRAM - STAGE 2 SHEET NO. 1 OF 1 SHEETS STA.

COUNTY COOK 225 136 344 3114-N(14) CONTRACT NO. 60Y25





**DEPARTMENT OF TRANSPORTATION** 

COOK 225 139

CONTRACT NO. 60Y25

344

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DIAGRAM - STAGE 3

SHEET NO. 1 OF 1 SHEETS STA.

3114-N(14)

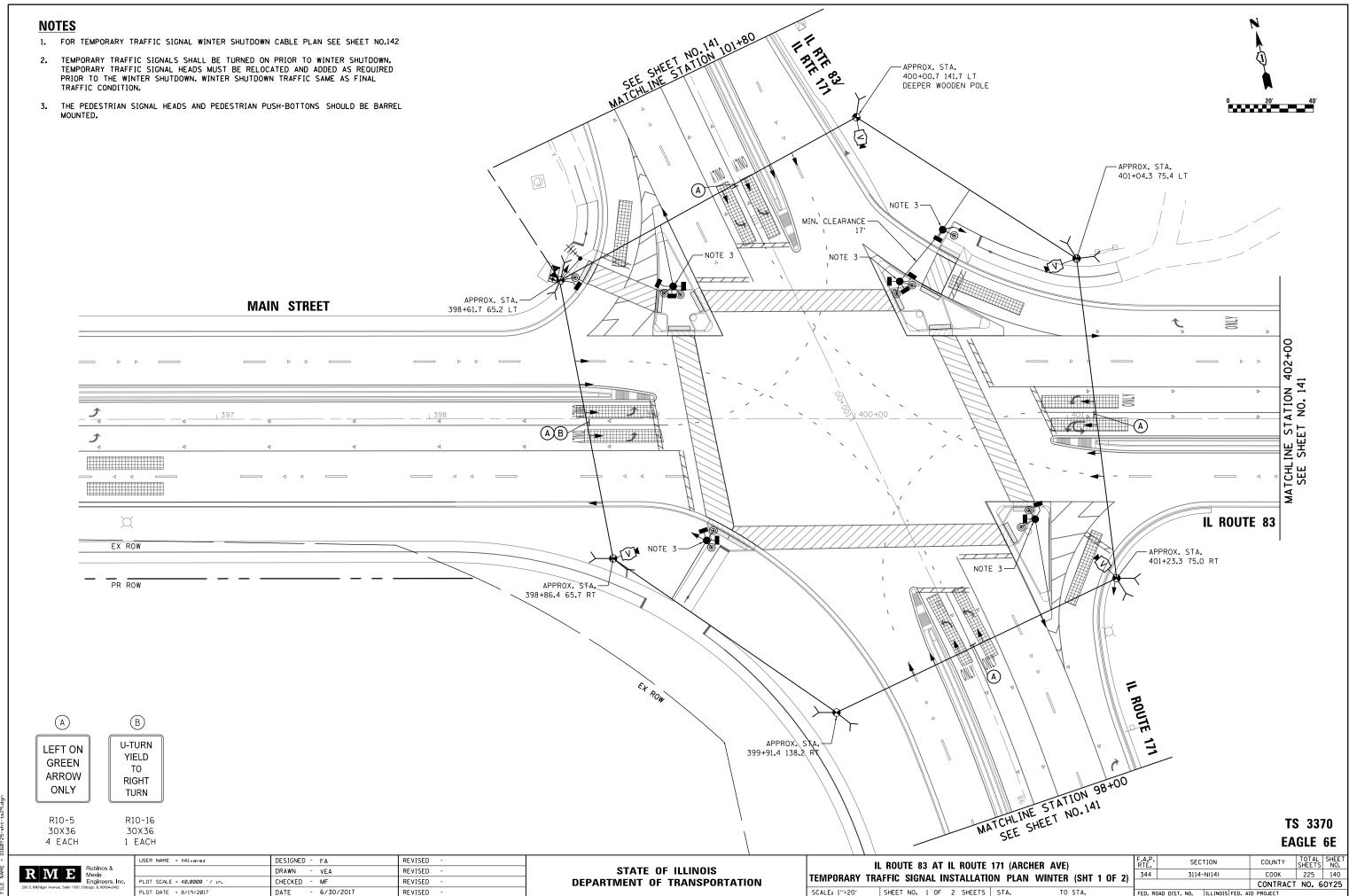
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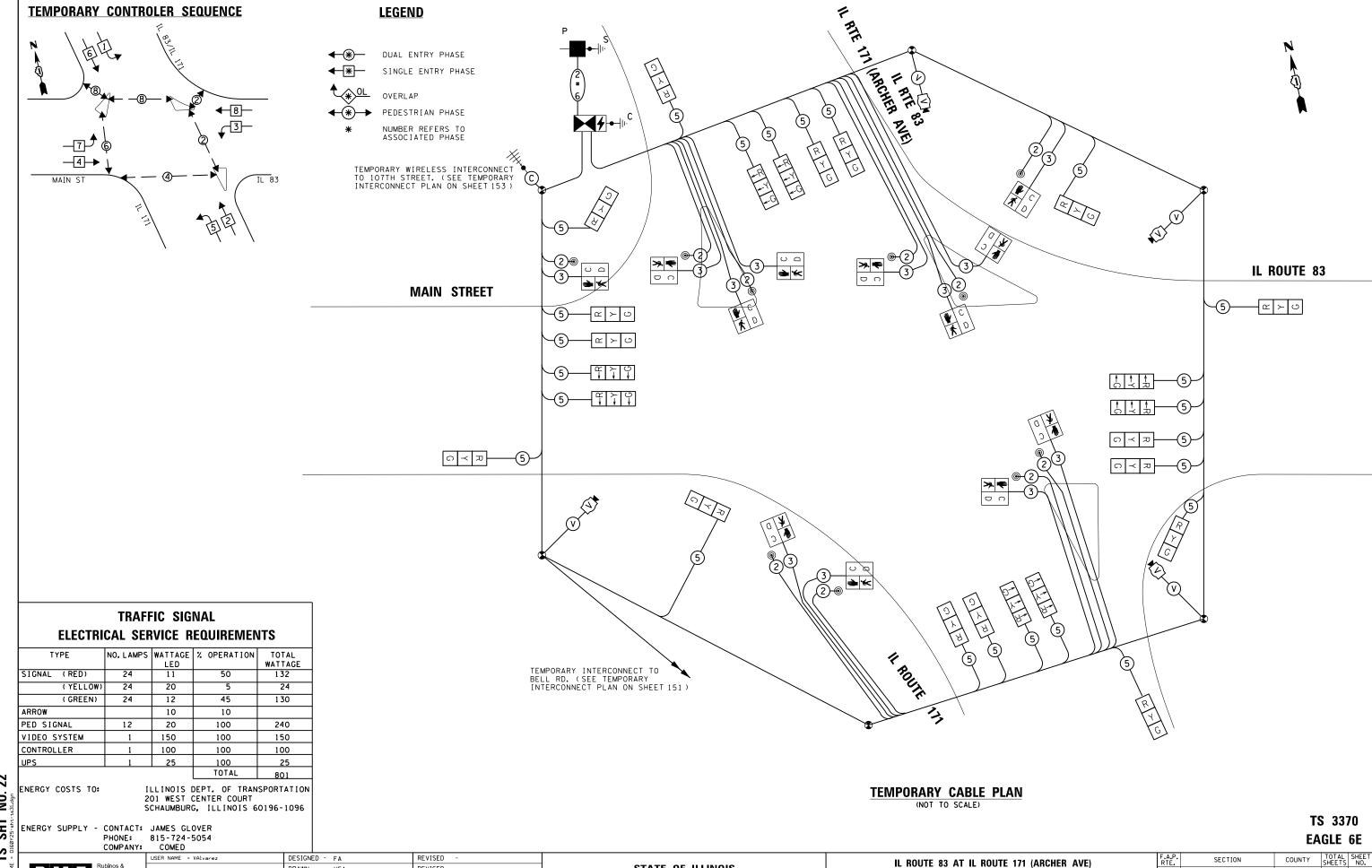
DATE - 6/30/2017

PLOT DATE = 8/19/2017

REVISED

REVISED





STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

COOK 225 142

CONTRACT NO. 60Y25

344

TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DIAGRAM - WINTER

SHEET NO. 1 OF 1 SHEETS STA.

3114-N(14)

2 SHT

DRAWN - VEA

DATE - 6/30/2017

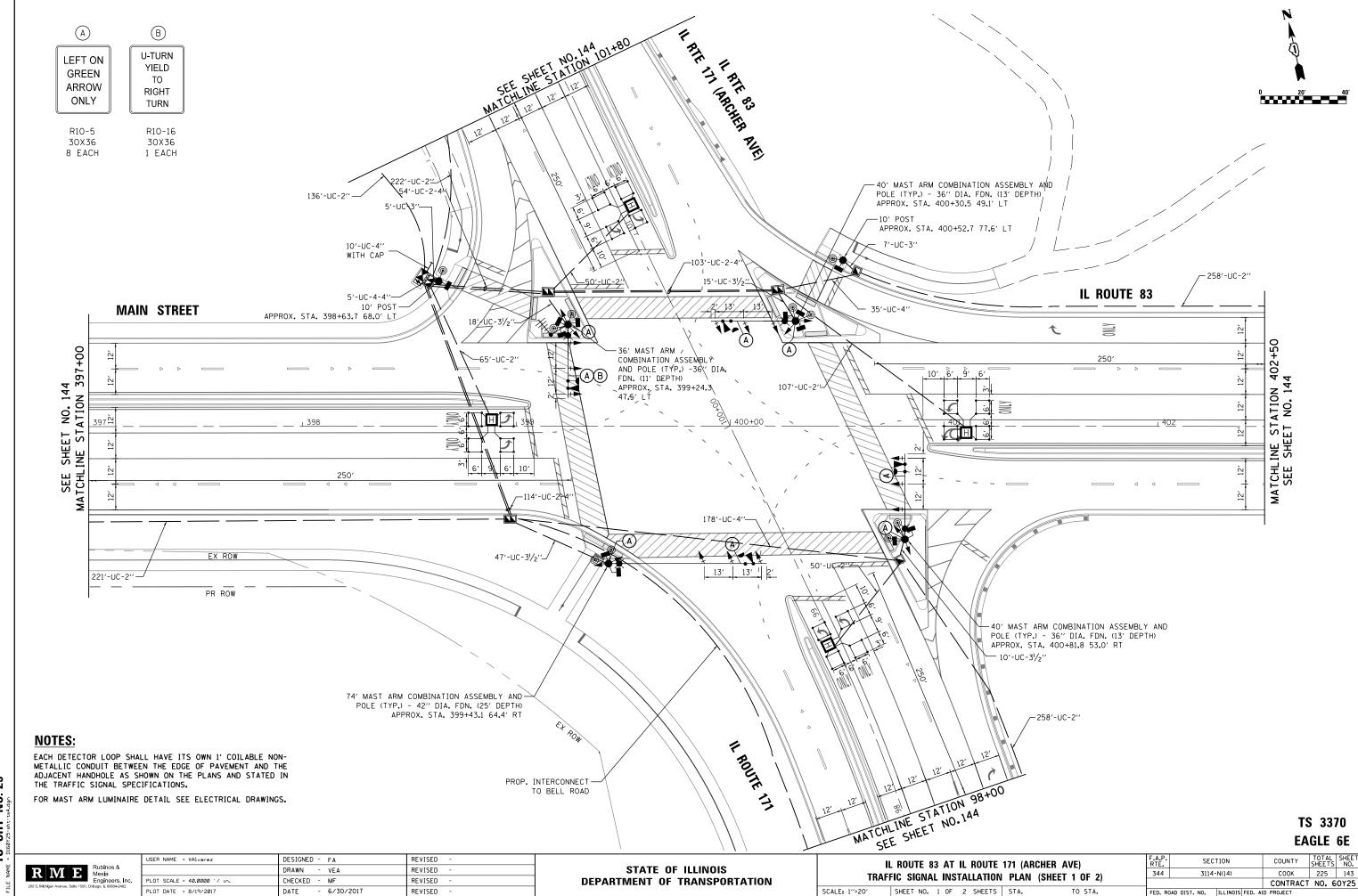
CHECKED - MF

PLOT DATE = 8/19/2017

REVISED

REVISED

REVISED

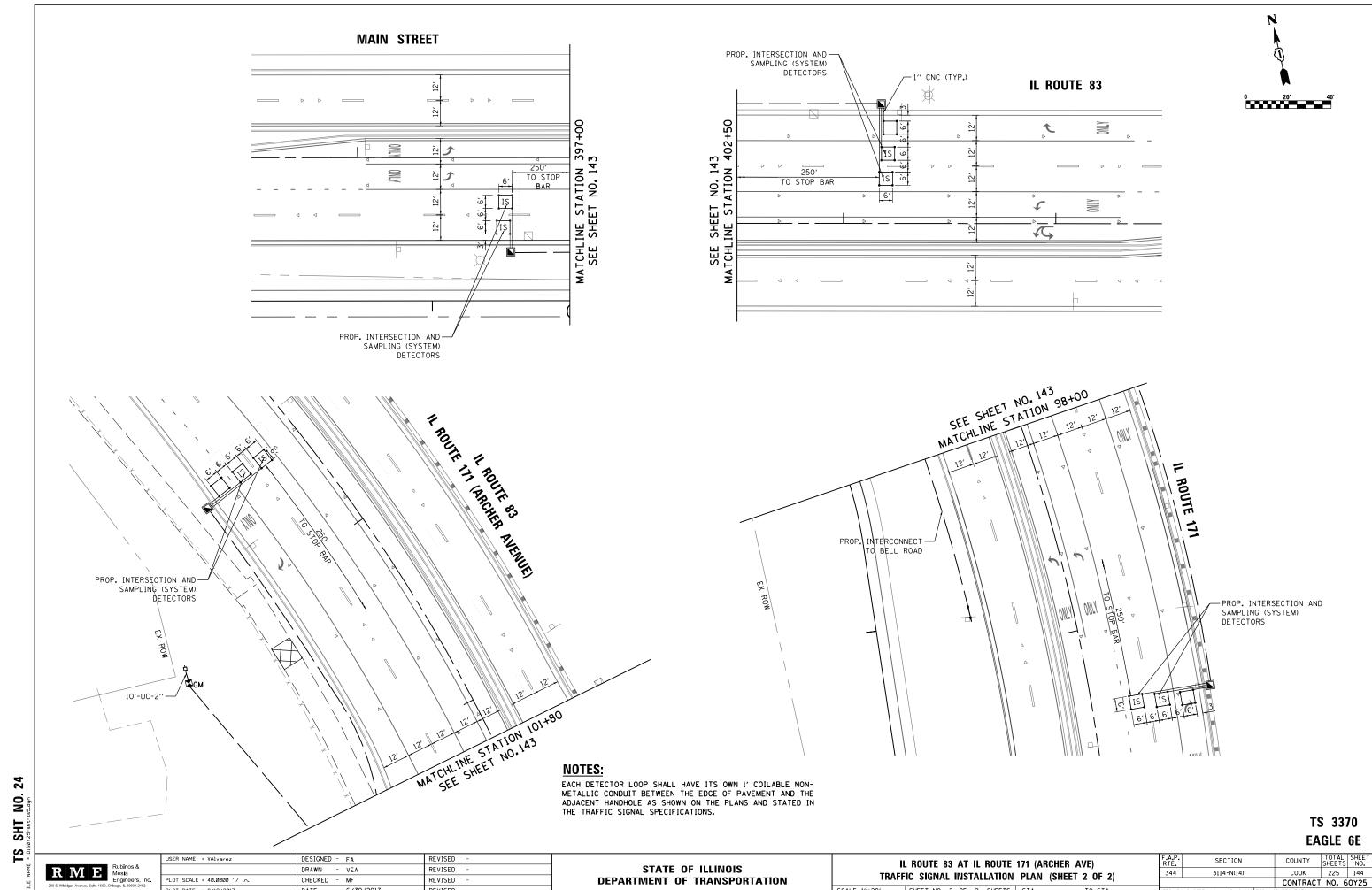


PLOT DATE = 8/19/2017

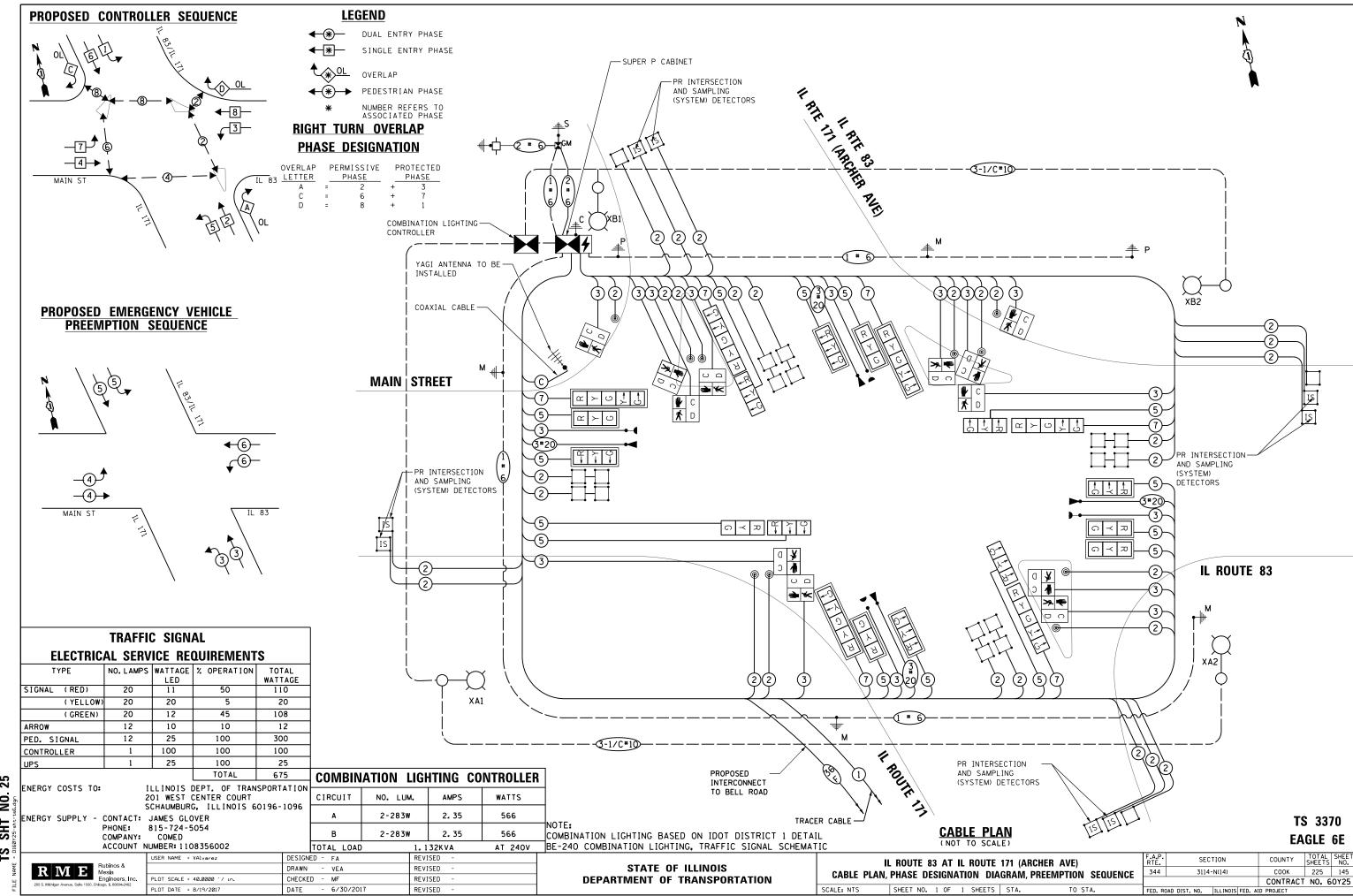
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- 6/30/2017

REVISED

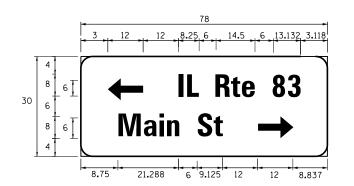


PLOT DATE = 8/19/2017 DATE - 6/30/2017 REVISED SHEET NO. 2 OF 2 SHEETS STA.

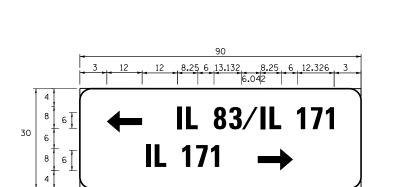


SHT

## SIGN PANEL - TYPE 2



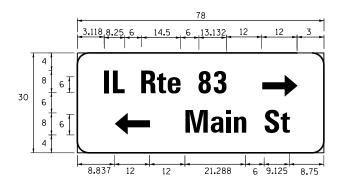
DESIGN	AREA	SIGN PANEL	SHEETING	QTY
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	16.25	2	ZZ	



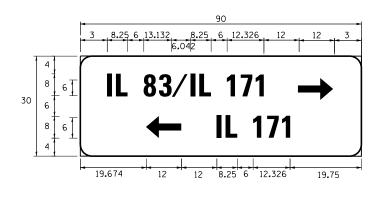
DESIGN	AREA	SIGN PANEL	SHEETING	QTY
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	18.75	2	ZZ	

8.25 6 12.326 12

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION
INFORMATION PLEASE SEE DISTRICT ONE MAST
ARM MOUNTED STREET NAME SIGN DETAIL



DESIGN	AREA	SIGN PANEL	SHEETING	QTY	
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED	
D	16.25	2	ZZ		



DESIGN SERIES			SHEETING TYPE	QTY REQUIRE	
D	18.75	2	ZZ	1	

#### SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	MAIN S QTY.
SIGN PANEL - TYPE 1	SQ FT	67.
SIGN PANEL - TYPE 2	SQ FT	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	136
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	9
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	78
HANDHOLE	EACH	
HEAVY-DUTY HANDHOLE	EACH	
DOUBLE HANDHOLE	EACH	
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	113
TRANSCEIVER - FIBER OPTIC	EACH	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	215
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	366
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	383
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	145
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	670
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	14
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	165
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 74 FT.	EACH	
CONCRETE FOUNDATION, TYPE A	FOOT	
CONCRETE FOUNDATION, TYPE C	FOOT	
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMES		
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	
DETECTOR LOOP, TYPE I LIGHT DETECTOR	FOOT	12
	EACH	
LIGHT DETECTOR AMPLIFIER PEDESTRIAN PUSH-BUTTON	EACH	
	EACH	
TEMPORARY TRAFFIC SIGNAL INSTALLATION REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	
REMOVE EXISTING HANDHOLE REMOVE EXISTING DOUBLE HANDHOLE	EACH	
REMOVE EXISTING DOUBLE HANDHOLE REMOVE EXISTING CONCRETE FOUNDATION	EACH	
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	EACH	
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	FOOT	11
LUMINAIRE, LED. HORIZONTAL MOUNT. TYPE C	EACH	
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	
COMBINATION LIGHTING CONTROLLER		
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	
TEMPORARY TRAFFIC SIGNAL TIMING	EACH EACH	
	LEALH	

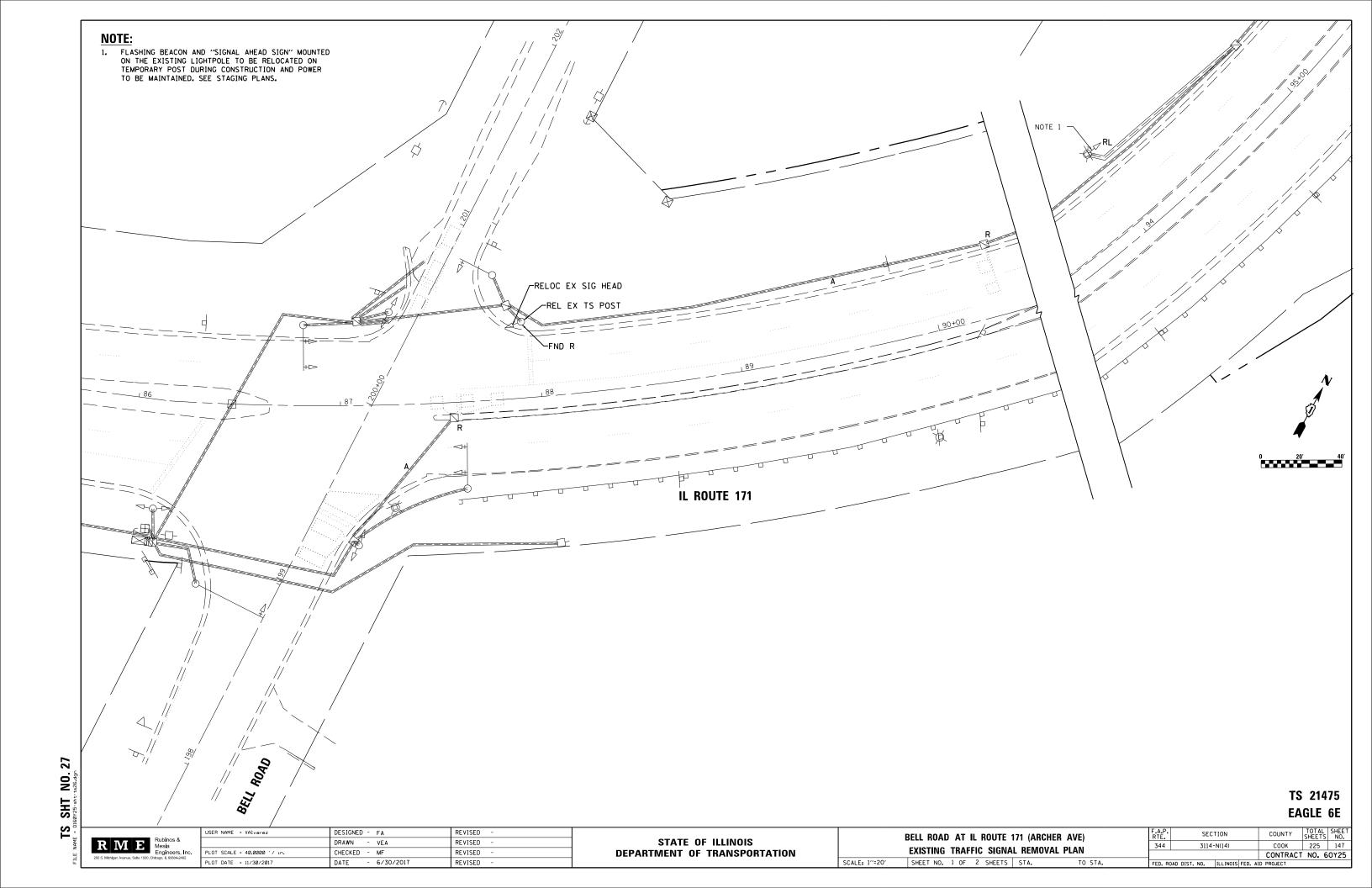
\*100% COST TO LEMONT FIRE DISTRICT

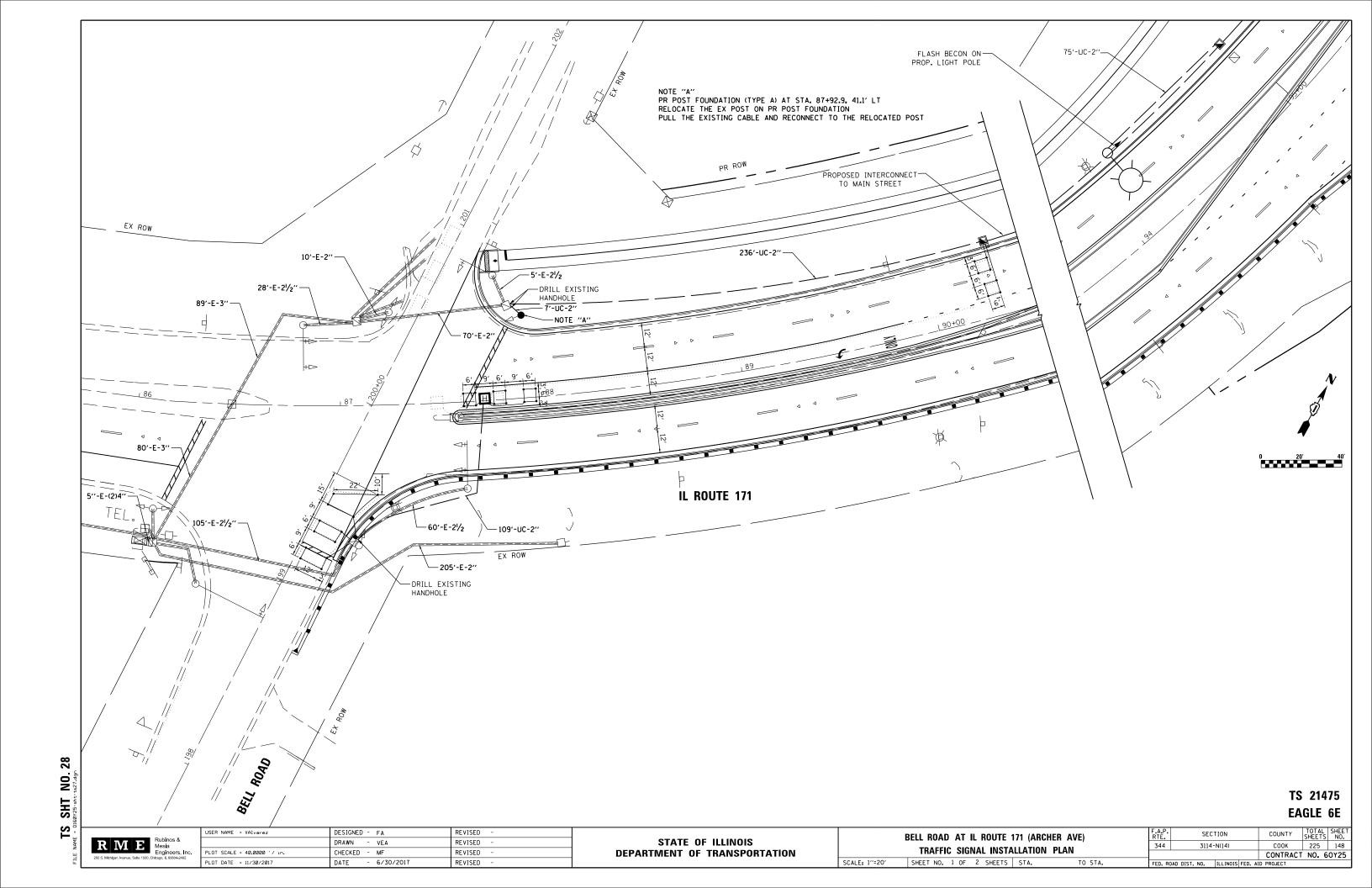
**TS 3370 EAGLE 6E** 

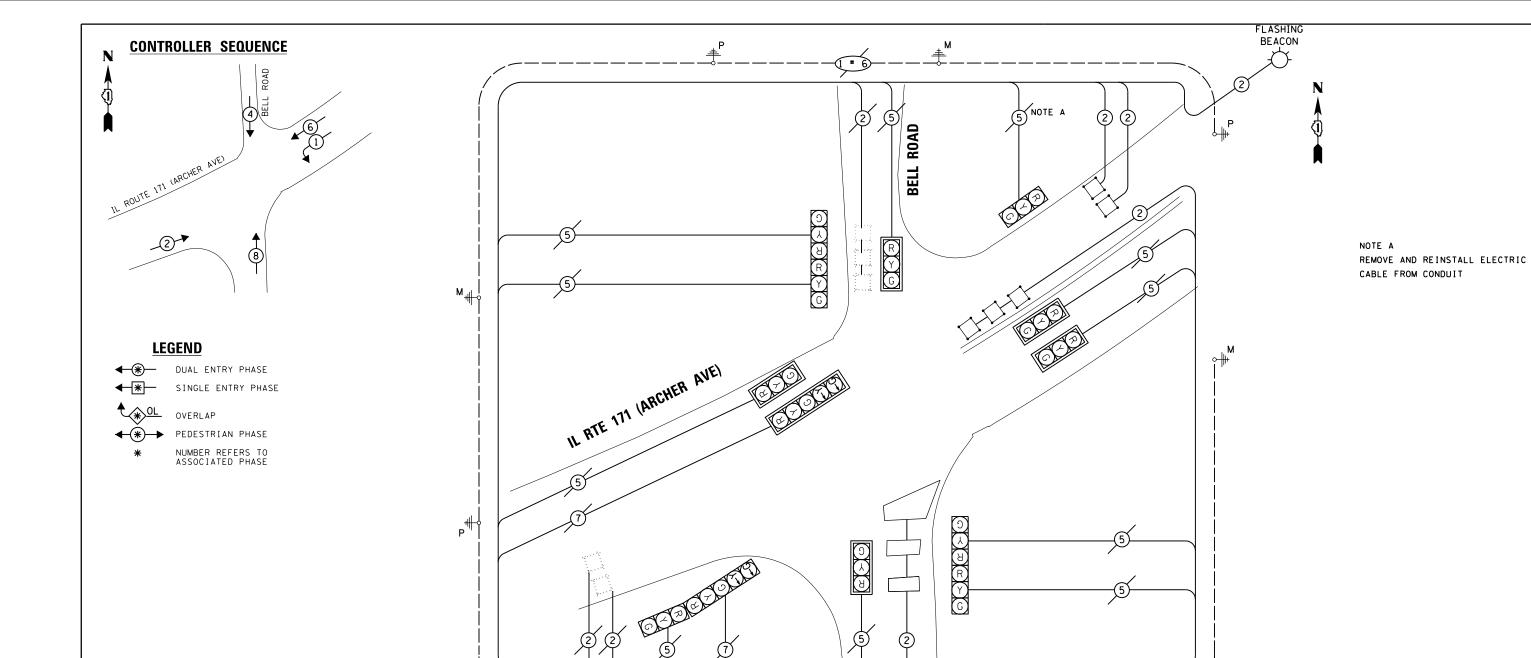


NO. 26

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 2.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -







TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS** NO.LAMPS WATTAGE % OPERATION LED WATTAGE SIGNAL (RED) 71.50 11 13 20 13.00 (YELLOW) (GREEN) 13 12 45 70.20 ARROW 10 10 4.00 PED. SIGNAL 20 100

100

ENERGY COSTS TO:

CONTROLLER

TOTAL 283.70

ILLINOIS DEPT. OF TRANSPORTATION

100

100.00

25.00

201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096

NERGY SUPPLY - CONTACT: JAMES GLOVER
PHONE: 815-724-5054
COMPANY: COMED
ACCOUNT NUMBER: 1108356002

TS	214	175
EAG	<b>3LE</b>	6E

R	M	F	Rubinos & Mesia
200 S. Mic	hlgan Avenue.	Sulte 1500,	Engineers, Inc. Chicago, IL 60604-2482

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 11/30/2017	DATE - 6/30/2017	REVISED -

ET-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**≠**<sub>M</sub>

BELL ROAD AT IL ROUTE 171 (ARCHER AVE)								
CAI	BLE PLA	N, PHASE	DESIGN	IATION I	DIAGRAM	AND	QUANTITIES	
SCALE: N.	T.S.	SHEET NO.	OF	SHEETS	STA.		TO STA.	

HEAVY-DUTY HANDHOLE

CONCRETE FOUNDATION, TYPE A

DRILL EXISTING HANDHOLE

REMOVE EXISTING HANDHOLE

DETECTOR LOOP, TYPE I

RTE.		SECTION				COUNTY	SHEETS	NO.	
344			3114-	N(14)		П	COOK	225	149
						Т	CONTRACT	NO. 6	0Y25
FED. F	ROAD	DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		

UNITS

FOOT

EACH

EACH

FOOT

FOOT

FOOT

EACH

FOOT

EACH

EACH

EACH

EACH

EACH

FOOT

QUANTITY

427

100

403

16

1,422

**SCHEDULE OF QUANTITIES** 

ITEM DESCRIPTION

UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.

ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C

RELOCATE EXISTING TRAFFIC SIGNAL POST

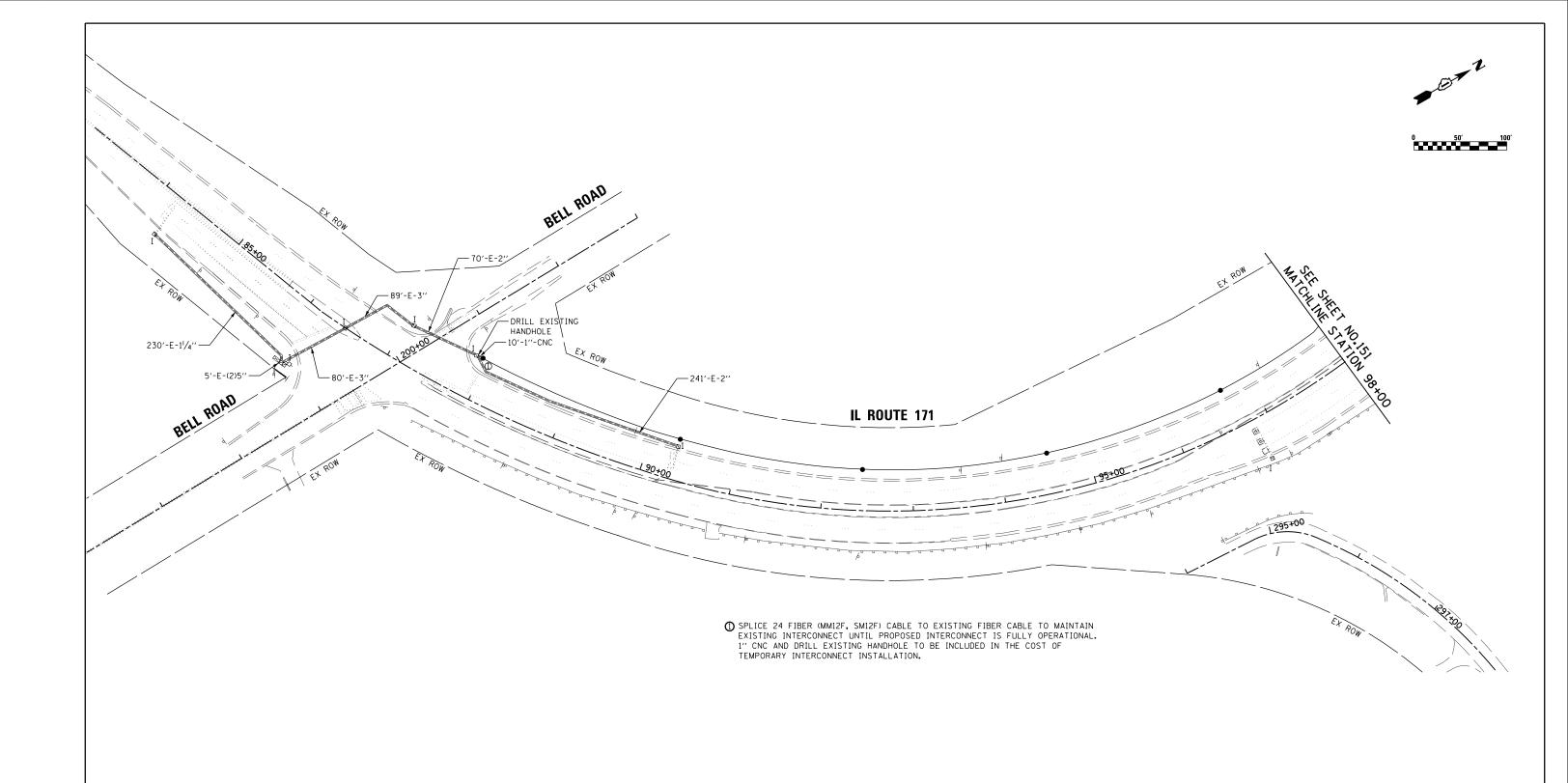
RELOCATE EXISTING FLASHING BEACON

REMOVE EXISTING CONCRETE FOUNDATION

ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR

RELOCATE EXISTING SIGNAL HEAD
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT

TS SHT NO.



SHT R Wibinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulle 1500, Chicago, IL 60604-2487

NO 30

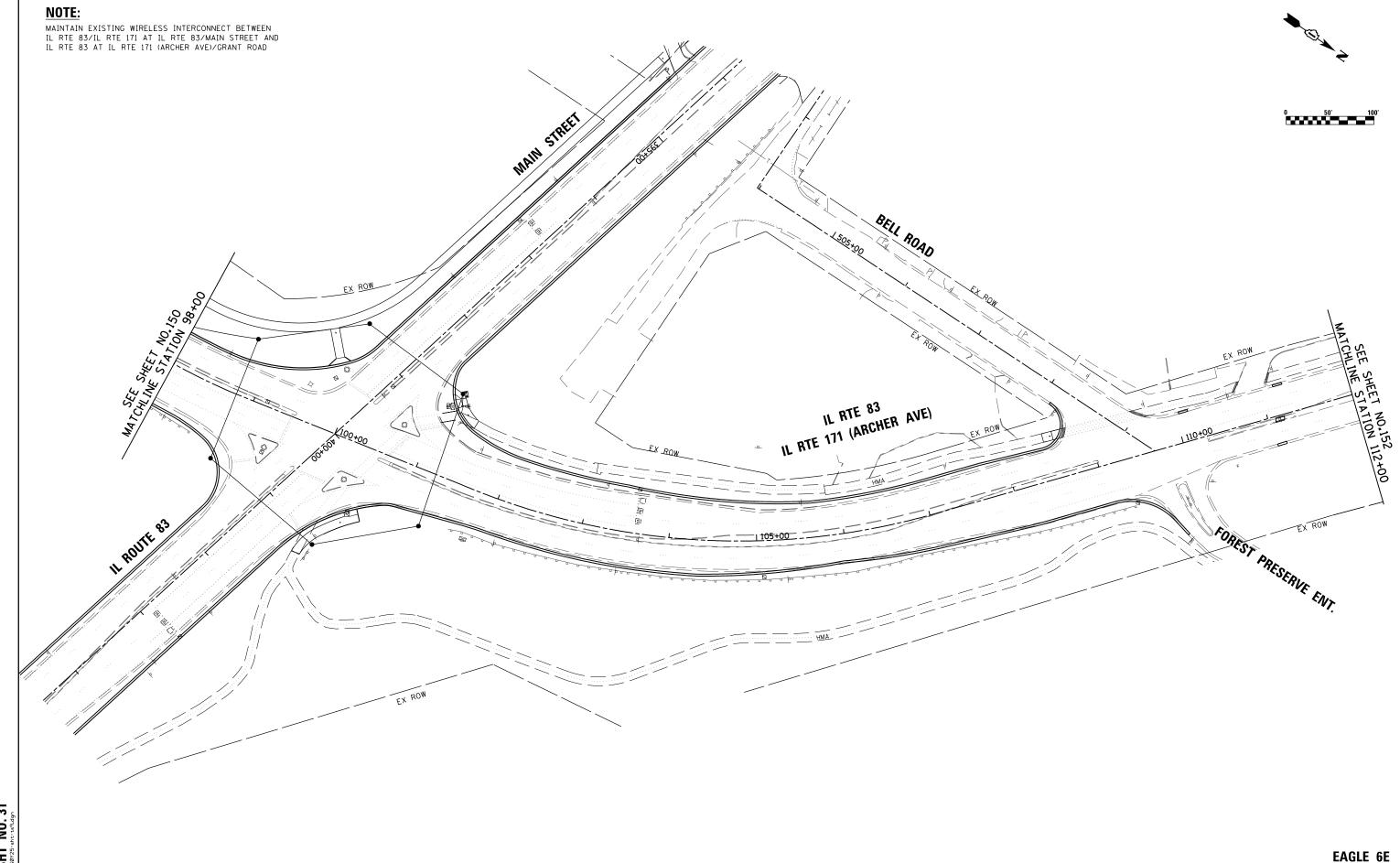
S

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

				ARCHER AVE	
I EIV	IPUKAKY INI	EKCUN	MEGI F	PLAN (SHEET 1	I UF 4)
SCALE: 1"=50"	SHEET NO. 1	OF 4	SHEETS	STA. 84+00.00	TO STA. 98+00.00

**EAGLE 6E** 



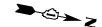
IS SHT NO. 31

R W E Rubinos & Mesia Engineers, Inc.

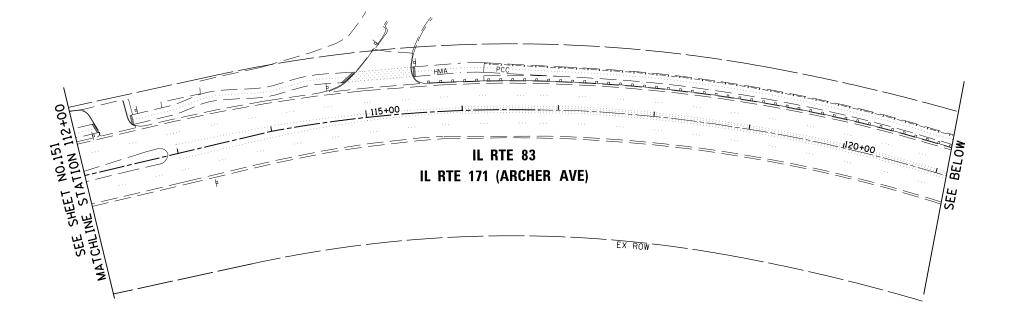
USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

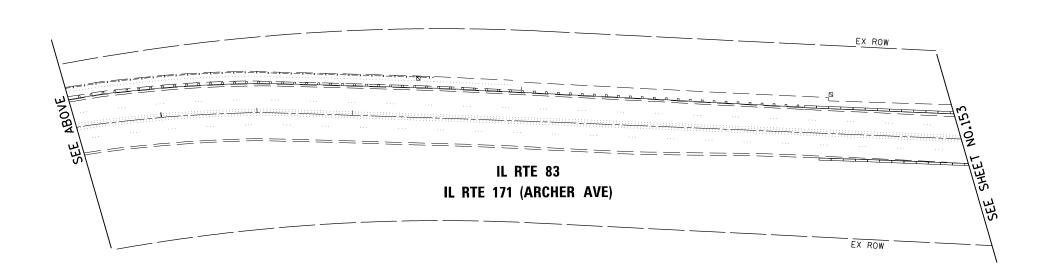
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUT	E 171 FRC	M E	BELL	RD TO	ARCHER AVE	GRANT RD	RTE.	SECT
TEN	IDODADV	INITED	col	MINIECT	PLAN (SHEET	2 OE 4\	344	3114-
I EIV	IPUNANT	INICH	icui	MINECI	PLAIN (SHEET	Z UF 4)		
SCALE: 1"=50"	SHEET NO.	2 OF	4	SHEETS	STA. 98+00.00	TO STA. 112+00.00	FED. RO	DAD DIST. NO.









**EAGLE 6E** 

R W F Rubinos & Mesla Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 68604-2462

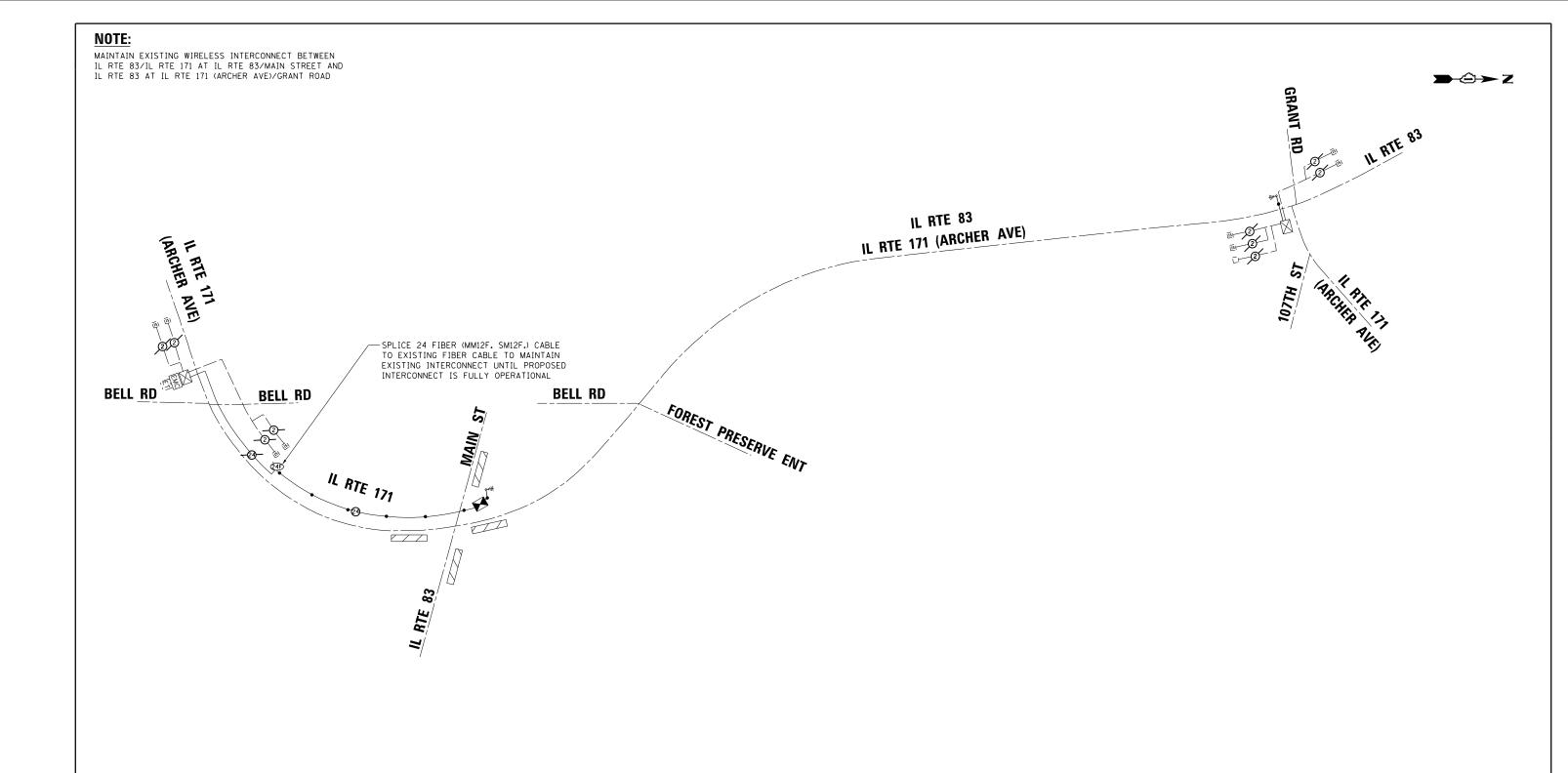
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

R IV B Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulle 1500, Chicago, IL 60604-2482

USER NAME = VAlvarez DESIGNED - FA REVISED DRAWN - VEA REVISED PLOT SCALE = 100.0000 '/ in. CHECKED - MF REVISED DATE - 6/30/2017 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

IL ROUTE 171 FROM BELL RD TO ARCHER AVE/GRANT RD TEMPORARY INTERCONNECT PLAN (SHEET 4 OF 4) SCALE: 1"=50" SHEET NO. 4 OF 4 SHEETS STA.



_	_		Rubinos &
	M	34	Mesia
-11	<u> </u>		Engineers, Inc.
_			Engineers, Inc Chicago, IL 60604-2482

SHT NO. 34

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NTS

ROUT	E 171 F	ROM	BELL	RD TO	ARCHER	AVE/GRANT RI	D	F
	TEMP	ORAR	Y INT	ERCONN	ECT SCHI	EMATIC		L
	SHEET N	۱O. 1	OF 1	SHEETS	STA.	TO STA.		Н

EAGLE 6E

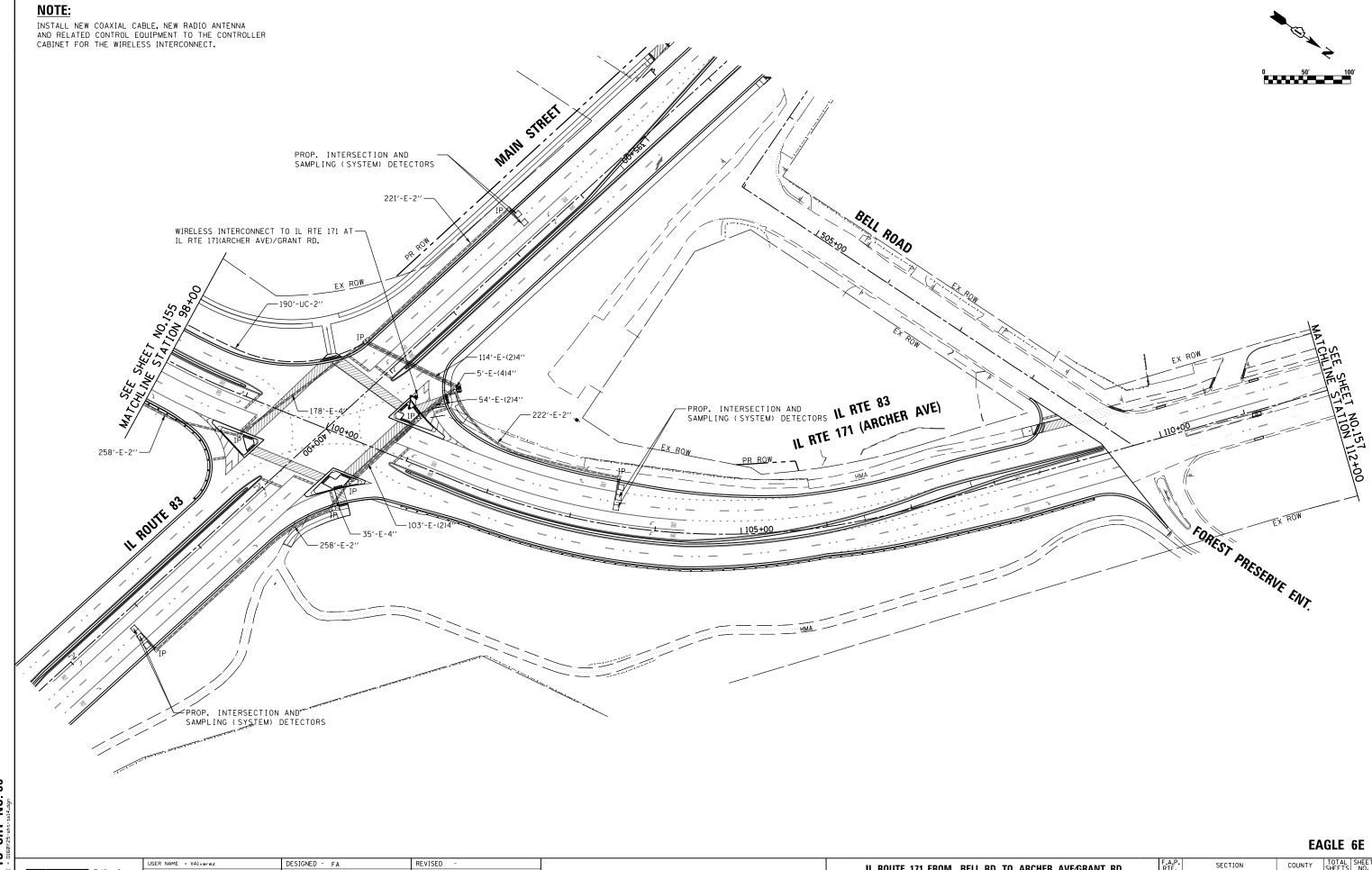


SHT NO. 35

USER NAME = VAlvarez	DESIGNED - FA	REVISED -	
	DRAWN - VEA	REVISED -	
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -	
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 FROM BELL RD TO ARCHER AVE/GRANT RD						
PROPOSED INTERCONNECT PLAN (SHEET 1 OF 4)						
SCALE: 1"=50"	SHEET NO. 1	OF 4 SHEETS	STA. 84+00.00 TO STA. 98+00.00			



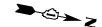
TS SHT NO. 36

Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sulle 1500, Chicago, IL 66604-2462

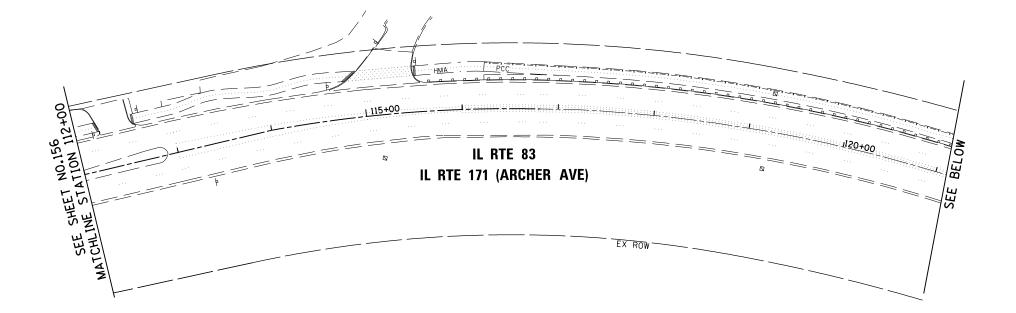
USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

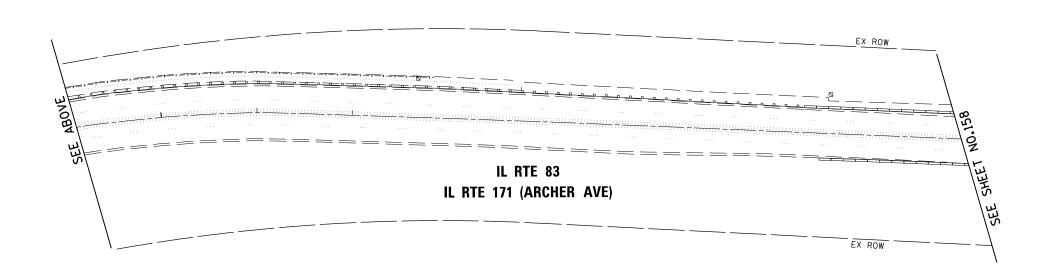
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUT	TE 171 FRO	OM B	ELL	. RD TO	ARCI	HER AVE⁄	GRANT I	RD	RT
PROPOSED INTERCONNECT PLAN (SHEET 2 OF 4)							34		
rn	OPUSED I	NIEN	JUN	INEU I P	LAN	(SHEET 2	UF 4)		
SCALE: 1"=50"	SHEET NO.	2 OF	4	SHEETS	STA.	99+00.00	TO STA.	115+00.00	FEC









**EAGLE 6E** 

R W B Rubinos & Mesla Engineers, Inc.

USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 FROM BELL RD TO ARCHER AVE/GRANT RD
PROPOSED INTERCONNECT PLAN (SHEET 3 OF 4)

SCALE: 1"=50" SHEET NO. 3 OF 4 SHEETS STA. 112+00.00 TO STA.

SHT S

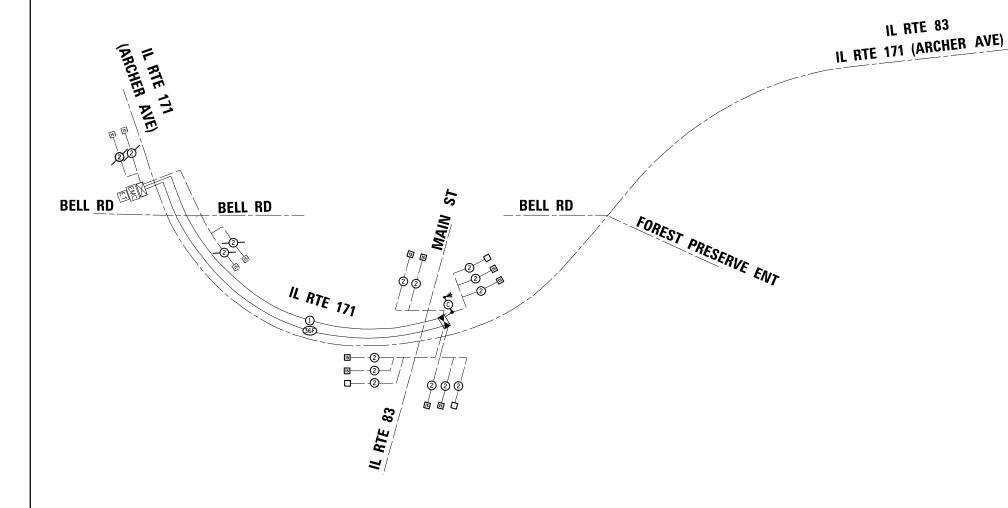
R W B Rubinos & Mesia Engineers, Inc.

USER NAME = VAlvarez DESIGNED - FA REVISED DRAWN - VEA REVISED PLOT SCALE = 100.0000 '/ in. CHECKED - MF REVISED PLOT DATE = 8/19/2017 DATE - 6/30/2017 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  IL ROUTE 171 FROM BELL RD TO ARCHER AVE/GRANT RD PROPOSED INTERCONNECT PLAN (SHEET 4 OF 4) SHEET NO. 4 OF 4 SHEETS STA.

F.A.P. RTE. 344 SECTION 3114-N(14)

NOTE:
PROPOSED WIRELESS INTERCONNECT WILL BE INSTALLED BETWEEN
IL RTE 83/IL RTE 171 AT IL RTE 83/MAIN STREET AND
IL RTE 83 AT IL RTE 171 (ARCHER AVE)/GRANT ROAD.
THE EXISTING WIRELESS INTERCONNECT SHALL BE REMOVED.



# **SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	913
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1624
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1100
ROD AND CLEAN EXISTING CONDUIT	FOOT	500
WIRELESS INTERCONNECT (COMPLETE)	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1650
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

**EAGLE 6E** 

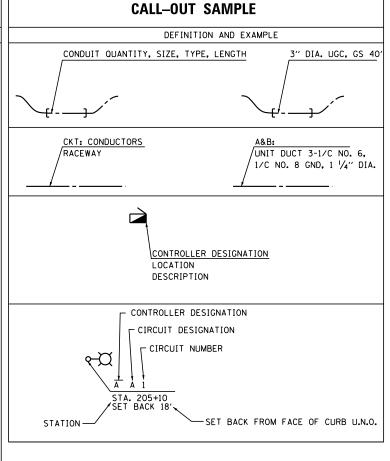


USER NAME = VAlvarez	DESIGNED - FA	REVISED -
	DRAWN - VEA	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MF	REVISED -
PLOT DATE = 8/19/2017	DATE - 6/30/2017	REVISED -

						Т	CONTRACT	NO. 6	0Y2
FED.	ROAD	DIST.	NO.	ILLINOIS	FED.	AID			

LIGHTI	NG AND ELECTRICAL LEGEND
SYMBOL	DESCRIPTION
<b>~</b> ¤	PROPOSED IDOT LIGHTING UNIT MOUNTED ON BREAKAWAY DEVICE, 47.5FT M.H., LED LUMINAIRE MOUNTED ON 10FT DAVIT ARM UNLESS NOTED OTHERWISE
<b>-</b> □	COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. MAST ARM, LED LUMINAIRE
<b>⊶</b> ¤	TEMPORARY LIGHTING UNIT. 60FT WOOD POLE, 15FT MAST ARM, 40OW HPS TYPE III LUMINAIRE AT 50 FT. MOUNTING HEIGHT
o—(R) o—(E)	EXISTING LIGHTING UNIT TO BE REMOVED
○— <u>`</u> E`	EXISTING LICHTING UNIT TO REMAIN IN PLACE
	PROPOSED LIGHTING CONTROLLER
$\bowtie$	EXISTING LIGHTING CONTROLLER
À	ELECTRIC UTILITY SERVICE
•	TEMPORARY WOOD POLE, CLASS 4, 60FT
<del></del>	PROPOSED CABLE OR UNIT DUCT IN UNDERGROUND CONDUIT, SIZE AND TYPE AS NOTED
	PROPOSED UNIT DUCT, SIZE AND TYPE AS NOTED
A/C	PROPOSED AERIAL LIGHTING CABLE WITH MESSENGER WIRE, SIZE AND TYPE AS NOTED

		ABBREVIATIONS
	ABBREVIATION	DESCRIPTION
	AC	ALTERNATING CURRENT
	A/C	AERIAL CABLE
l	B.O.C.	BACK OF CURB
	СВ	CIRCUIT BREAKER
	CKT	CIRCUIT
	CP	CONTROL PANEL
	DA	DAVIT ARM
	DIA	DIAMETER
	DP E	DISTRIBUTION PANEL EXISTING UNIT TO REMAIN
	E.O.P.	EDGE OF PAVEMENT
	FT	FEET OR FOOT
	FU	FUSE
l	GND	GROUND
	KVA	KILOVOLT-AMPERE
	KW	KILOWATTS
	MA	MAST ARM
	MC	MULTI-CONDUCTOR
	M.H.	MOUNTING HEIGHT
	MW	MESSENGER WIRE
	NO. #	NUMBER
l	N.T.S.	NOT TO SCALE
l	Р	PROPOSED
	PNL	PANEL
l	PVC	POLYVINYL CHLORIDE
l	PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
l	R	EXISTING UNIT TO BE REMOVED
l	5505	(OWNER SALVAGED U.N.O.)
l	RECP	RECEPTACLE
	RGC SEL SW	RIGID GALVANIZED CONDUIT SELECTOR SWITCH
l	SPARE	SPARE
	SPACE	SPACE
ĺ	SS	STAINLESS STEEL
١	STA	STATION
١	T/F	TOP OF FOUNDATION
١	UD	UNIT DUCT
١	U.N.O.	UNLESS NOTED OTHERWISE
	UGC, GS	UNDERGROUND CONDUCT, GALVANIZED STEEL
	WP	WOOD POLE
	XFMR	TRANSFORMER
	HPS	HIGH PRESSURE SODIUM
	LPS	LOW PRESSURE SODIUM
	LTFM	LIQUID TIGHT FLEXIBLE METALLIC



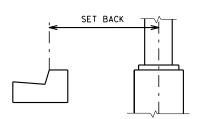
# **GENERAL NOTES**

- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
- 2. THE CONTRACT EMC DATABASE LOCATION NUMBER IS L1850.

### **INDEX OF DRAWINGS:**

DRAWING NO.	TITLE
E-1	LEGEND, ABBREVIATIONS, GENERAL NOTES, AND INDEX OF DRAWINGS
E-2	SCHEDULE OF QUANTITIES
E-3	REMOVAL AND TEMPORARY LIGHTING PLANS (SHEET 1 OF 3)
E-4	REMOVAL AND TEMPORARY LIGHTING PLANS (SHEET 2 OF 3)
E-5	REMOVAL AND TEMPORARY LIGHTING PLANS (SHEET 3 OF 3)
E-6	PROPOSED LIGHTING PLANS (SHEET 1 OF 3)
E-7	PROPOSED LIGHTING PLANS (SHEET 2 OF 3)
E-8	PROPOSED LIGHTING PLANS (SHEET 3 OF 3)
E-9	LIGHTING CONTROLLER "CD" WIRING DIAGRAM
E-10	COMBINATION LIGHTING CONTROLLER WIRING DIAGRAM

## **IDOT-D1 STANDARDS**:



# **POLE SET BACK DETAIL**

STANDAR	D NO. TITLE	
BE-2	I5 LIGHTI	NG CONTROLLER, SINGLE DOOR
BE-2	20 ELECT	RIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
BE-3	D1 LIGHT	POLE FOUNDATION 40' TO 47 1/2' M.H. 15" BOLT CIRCLE
BE-3	IO LIGHT	POLE FOUNDATION OFFSET 40' TO 47 1/2' M.H. 15" BOLT CIRCLE
BE-4	O DAVIT	LIGHT POLE, 47'-6" (14.478m) MOUNTING HEIGHT
BE-7	D1 LUMINA	AIRE SAFETY CABLE ASSEMBLY
BE-7	D2 MISC.	ELECTRICAL DETAILS SHEET A
BE-8	OO TEMPO	RARY LIGHT POLE DETAILS
BE-8	O1 TEMPO	RARY AERIAL CABLE INSTALLATION

SINGH + ASSOCIATES, INC.

USER NAME = mgarvida	DESIGNED - VG	REVISED	-
	DRAWN - MG	REVISED	-
PLOT SCALE = 100.0000000:1.0000000	CHECKED - RDP	REVISED	-
PLOT DATE = 30-JAN-2017 09:41	DATE - 01/30	/2017 REVISED	-

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

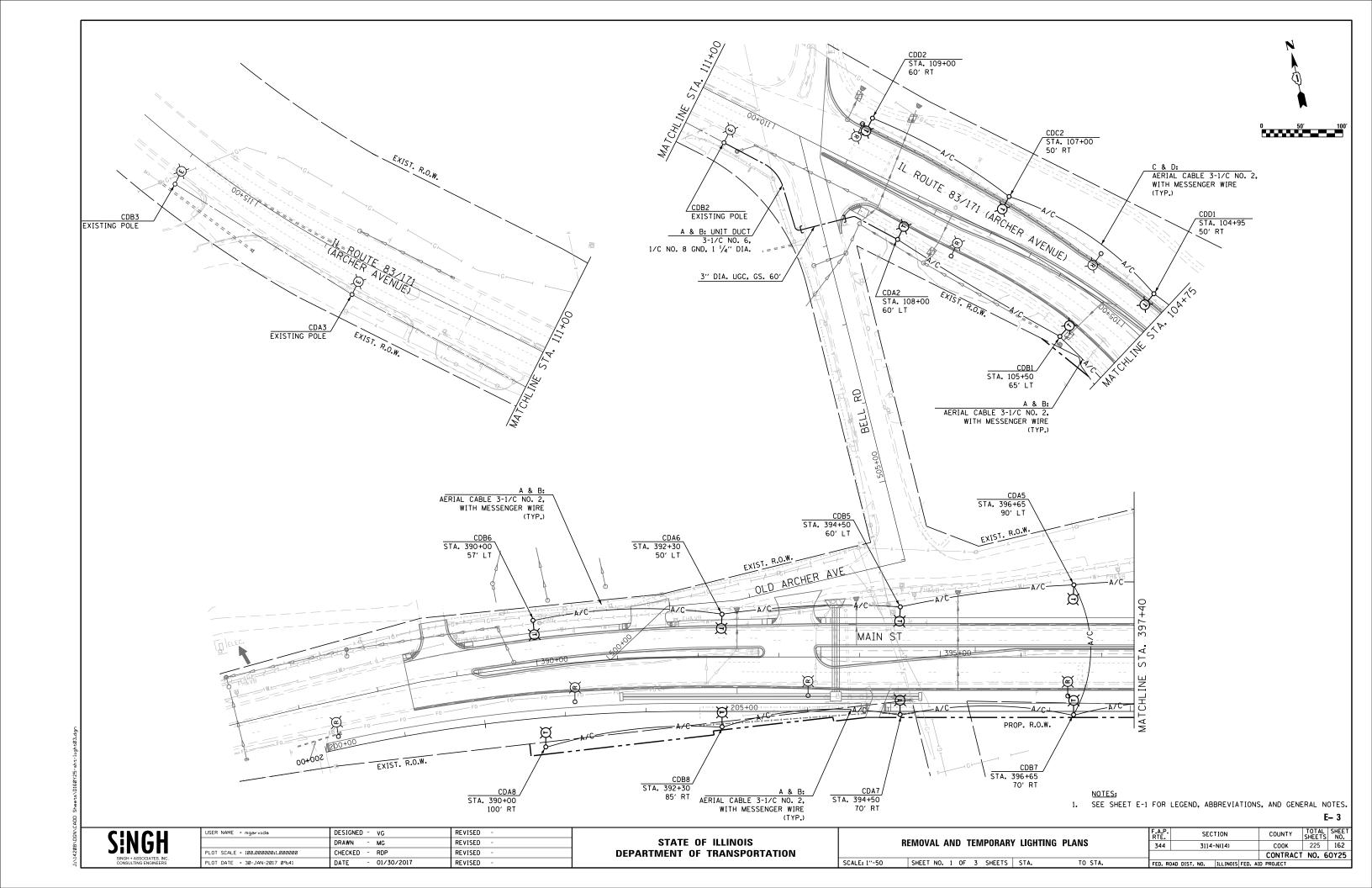
		051			FO 411D	INDEX O	5 DD414/1100	F.A.I RTE	P.		SEC	TION	
LEGEND, ABBREVIATIONS, GENERAL NOTES, AND INDEX OF DRAWINGS								344	1		3114-	-N(14)	
SCALE: N.T.S.	SHEET NO. 1	OF	1	SHEETS	STA.	TO	STA.	FED.	ROAD	DIST.	NO.	ILLINOIS	FED.

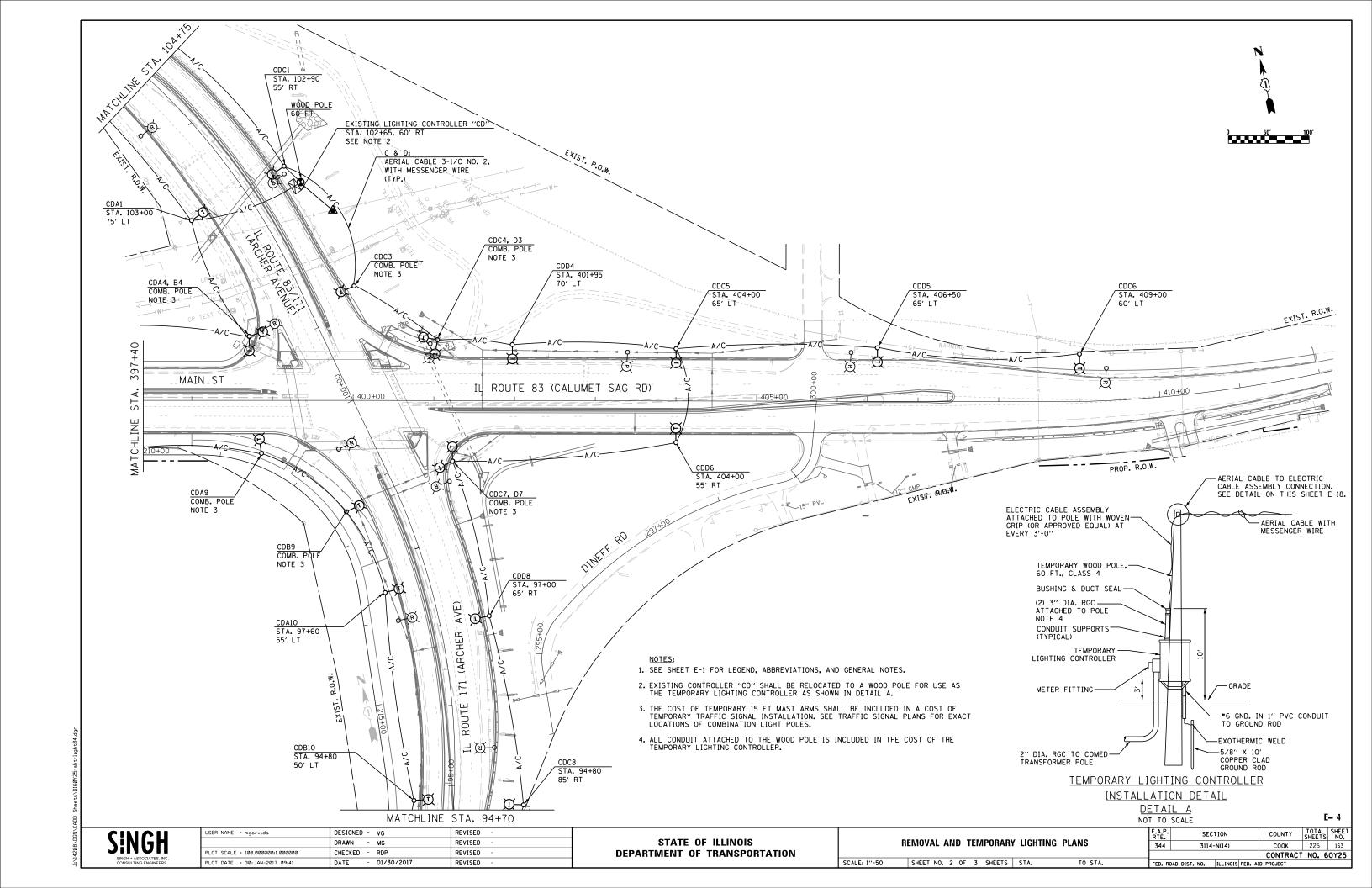
# SCHEDULE OF ROADWAY LIGHTING QUANTITIES

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	50
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1290
UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	10780
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	50
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	6900
LICHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP	EACH	1
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 10 FT. DAVIT ARM	EACH	43
LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	29
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	387
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	43
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	29
REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	22
REMOVAL OF POLE FOUNDATION	EACH	22
REMOVAL OF LIGHTING CONTROLLER	EACH	1
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	38
TEMPORARY ELECTRIC SERVICE INSTALLATION	EACH	1
TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	1
LUMINAIRE, LED, HORIZONTAL MOUNT, TYPE C	EACH	47
LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	10
RELOCATE EXISTING LIGHTING CONTROLLER	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	47
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12
REMOVE EXISTING LUMINAIRE	EACH	4

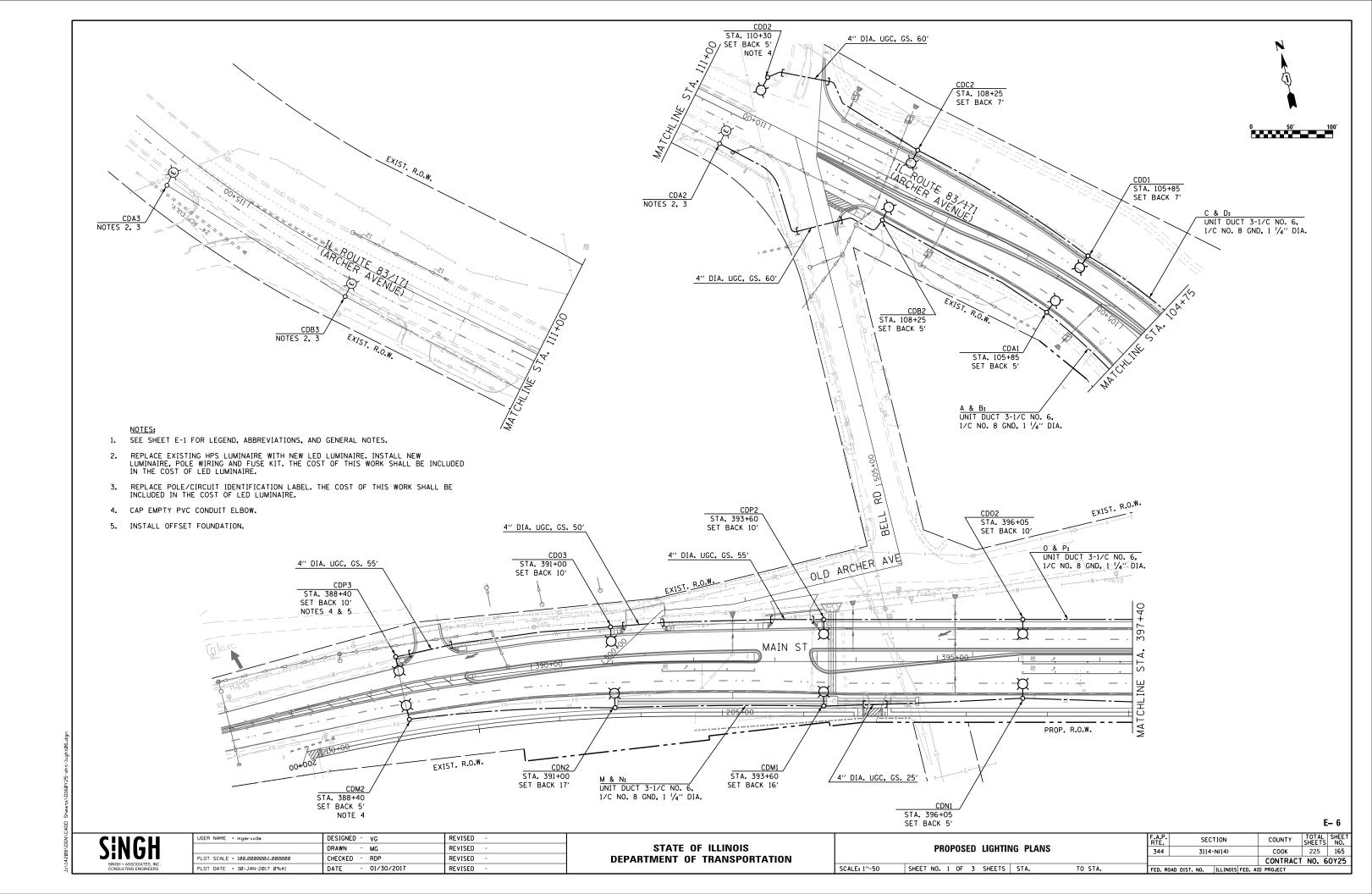
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	DRAWN - MG	REVISED -
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PLOT DATE = 30-JAN-2017 09:41	DATE - 01/30/2017	REVISED -

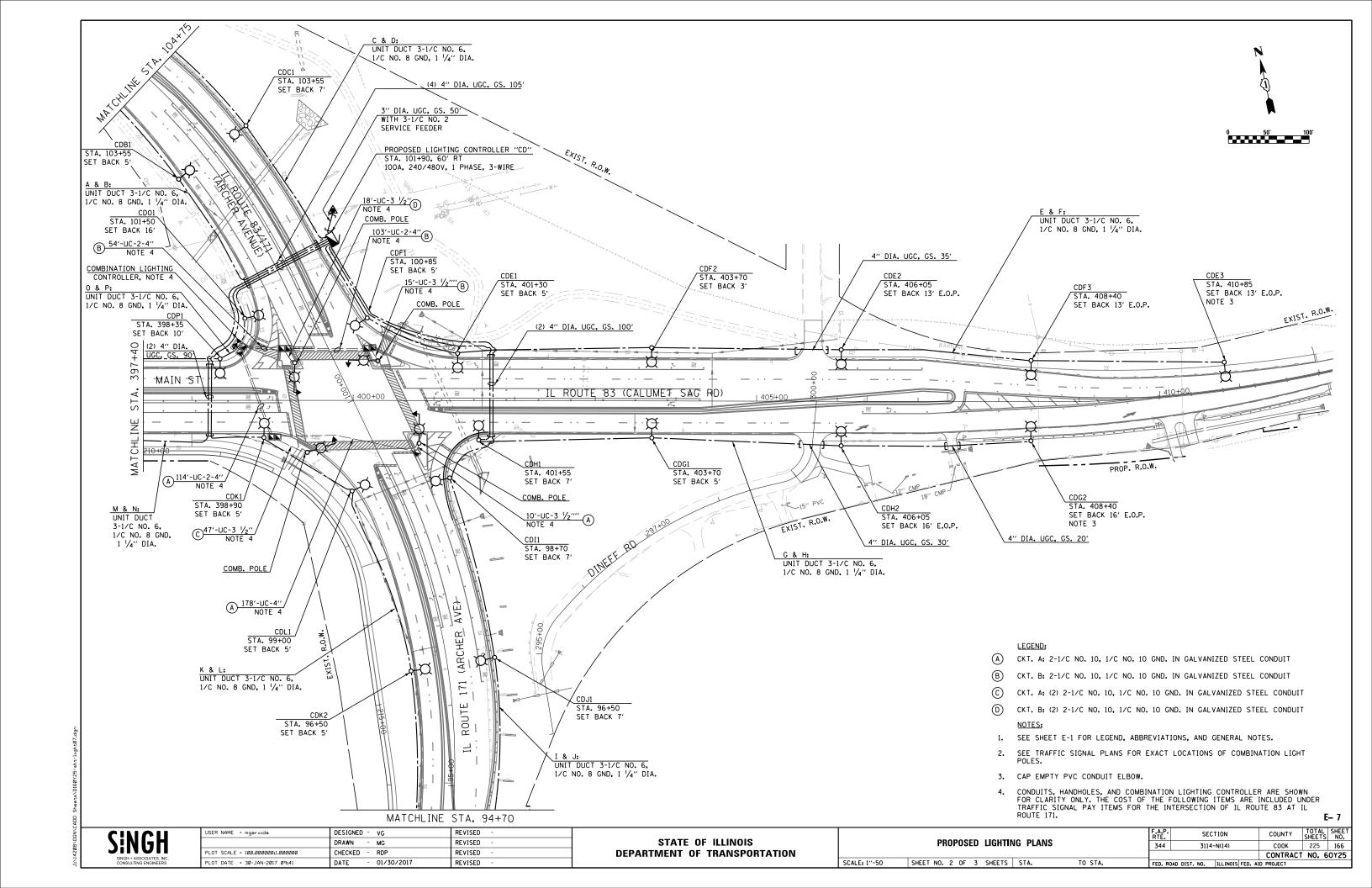
		SCHEDULE OF QU	F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.			
		344 3114-N(14)		COOK	225	161				
						CONTRACT	NO. 6	0Y25		
SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.						AD DIST. NO.	LLINOIS FED. AI	D PROJECT		

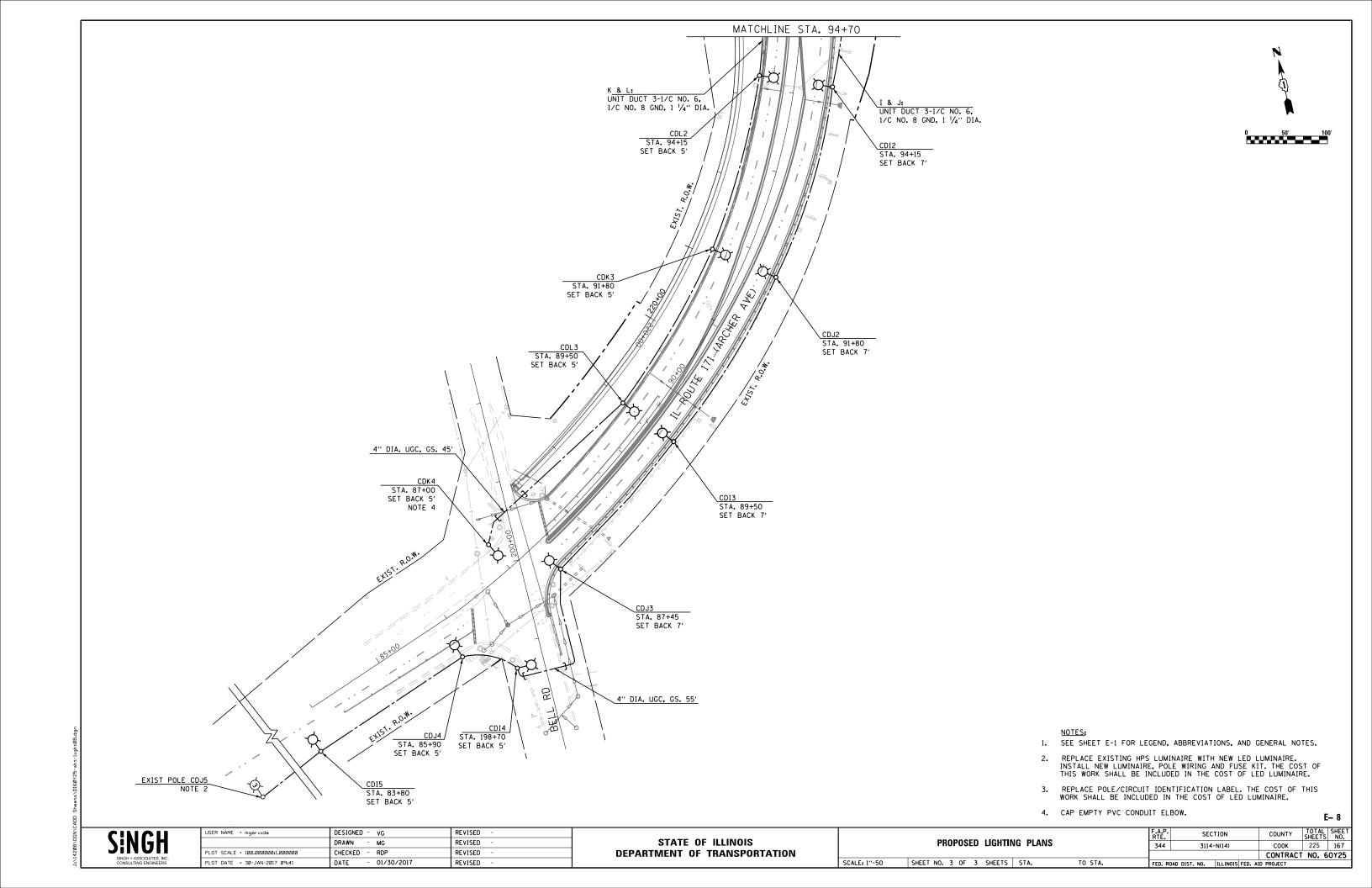


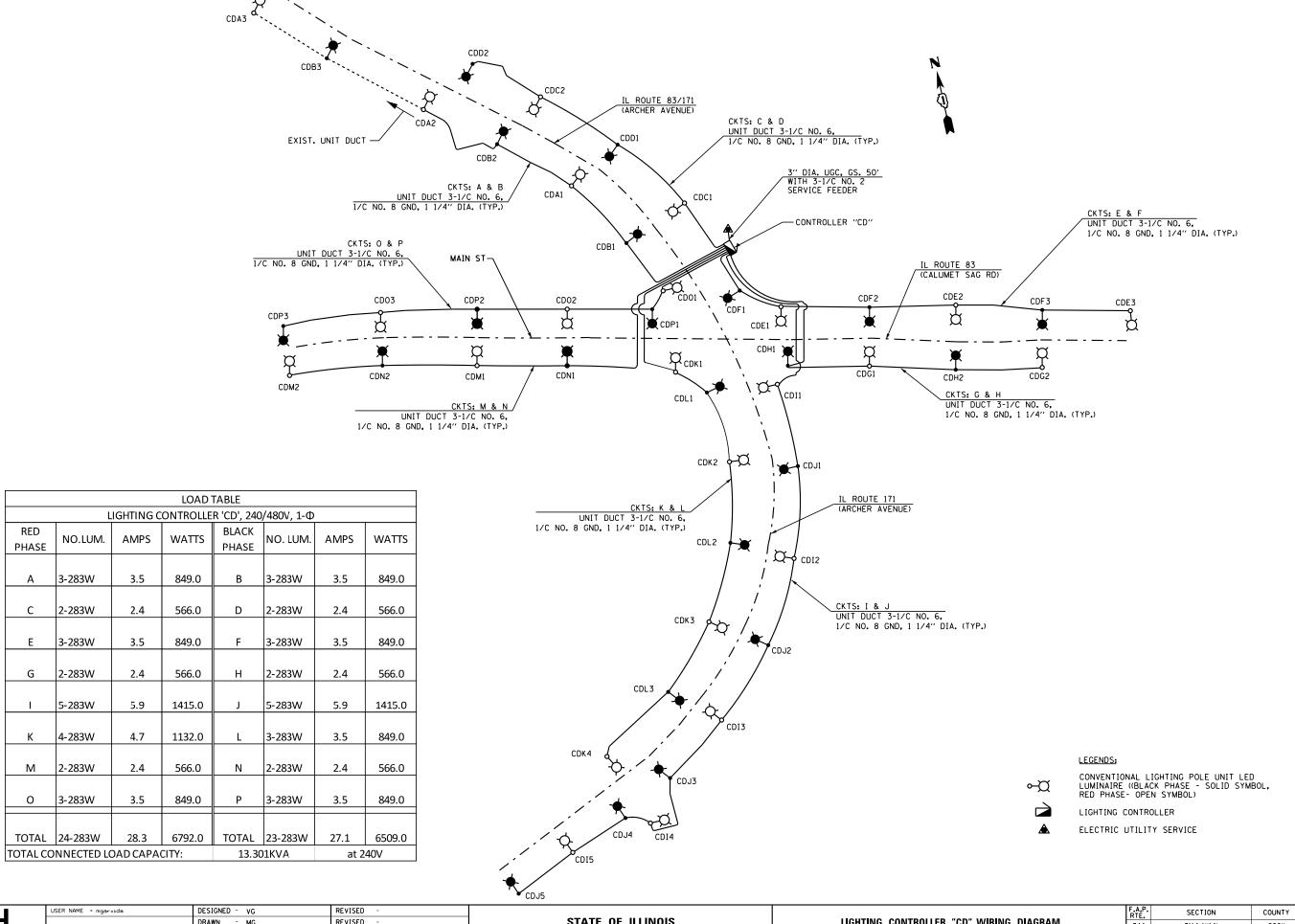


MATCHLINE STA. 94+70 0 50′ 100′ A & B: AERIAL CABLE 3-1/C NO. 2, WITH MESSENGER WIRE (TYP.) C & D: AERIAL CABLE 3-1/C NO. 2, WITH MESSENGER WIRE (TYP.) CDA11 STA. 92+60 45' LT CDD9 STA. 92+60 70' RT CDC9 STA. 90+10 55' RT C & D: UNIT DUCT 3-1/C NO. 6, 1/C NO. 8 GND, 1 1/4" DIA. CDD10 STA. 87+40 55' RT B/ CDC10 STA. 86+00 55' RT CDC11 EXISTING POLE CDD11 EXISTING POLE 1. SEE SHEET E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES. E- 5 COUNTY | TOTAL | SHEET NO. |
COOK | 225 | 164 |
CONTRACT | NO. | 60Y25 DESIGNED - VG SINGH USER NAME = mgarvida REVISED SECTION STATE OF ILLINOIS REMOVAL AND TEMPORARY LIGHTING PLANS DRAWN - MG REVISED 344 3114-N(14) PLOT SCALE = 100.000000:1.000000 CHECKED - RDP REVISED **DEPARTMENT OF TRANSPORTATION** PLOT DATE = 30-JAN-2017 09:41 DATE - 01/30/2017 SCALE: 1"-50 SHEET NO. 3 OF 3 SHEETS STA. TO STA. REVISED FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT









\DGN\CADD Sheets\D160Y25-sht-light09.

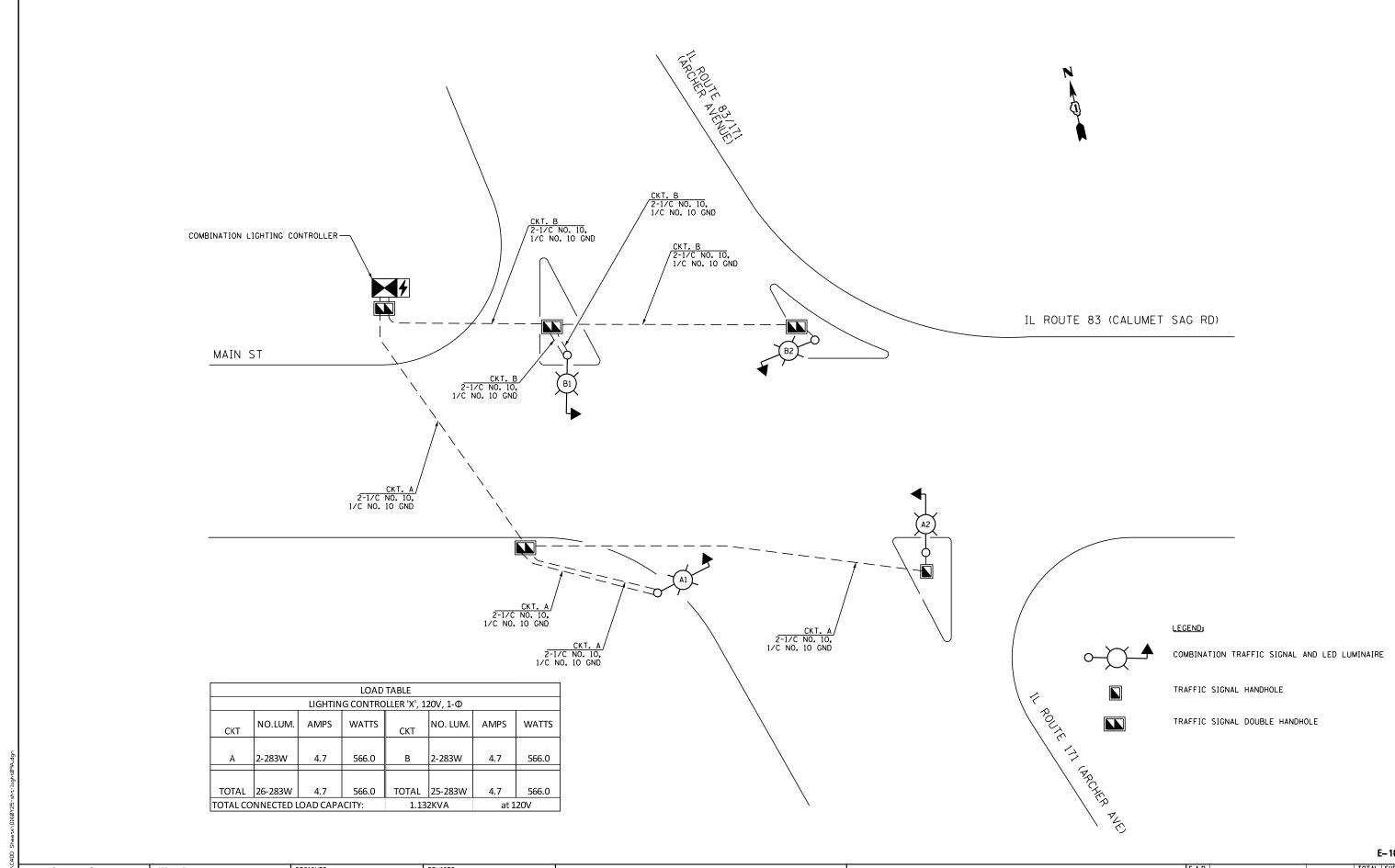
SINGH ASSOCIATES, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER "CD" WIRING DIAGRAM

SCALE: N.T.S SHEET NO. 1 OF 1 SHEETS STA. TO STA.

E- 9



SINGH

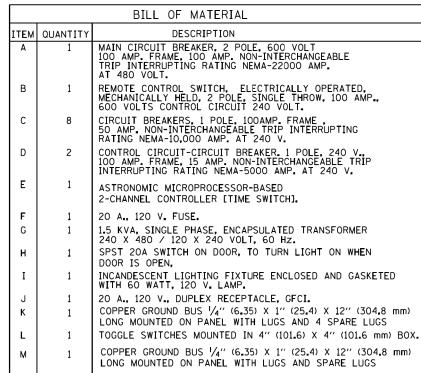
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  COMBINATION LIGHTING CONTROLLER WIRING DIAGRAM SHEET NO. 1 OF 1 SHEETS STA.

COUNTY | TOTAL | SHEET NO. |
COOK | 225 | 169 |
CONTRACT | NO. | 60Y25 F.A.P. RTE. 344 SECTION 3114-N(14)

E-10

# PANEL EQUIPMENT



### NOTES:

SCALE: NONE

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- 3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE 12. ALL WIRING WITHIN THE CABINET SHALL BE TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) x 60" (18.288 m) x 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- 4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- 5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- 6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- 7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- 9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.

- 10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- 11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- COLOR CODED AS INDICATED. R = RFD BI = BIUF W = WHITE B = BLACK Y = YELLOW G = GREEN
- 13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- 14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- 15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

	30" (762) MIN.	NAME PLATE SEE NOTE 16		SCREENED AIR VENT	19" (483) MIN.
NEMA 3R ENCLOUSERE		METER AND BASE		3 POINT LOCKING HANDLE WITH PAD LOCK PROVISION	
CABINET ALUMINUM ALLOY SHEET 0.125" (3.175)		2½" (63,5)  GALV. STEEL  CONDUIT		CONCRETE WORK PAD SEE NOTE 3	ANCHOR RODS, 4 MIN. COORD. WITH CABINET MFR. REOUIREMENTS
1" (25) DIA.—2 PVC CONDUIT		GROUND LINE—    4" (101) DIA.   PVC RACEWAYS 6-MIN. COORD.   WITH CKT	; [ <u>§</u> 2]	60" (1.52 m)	(1)
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		REQUIREMENTS			30
	36" (914) MIN.	1			21" MIN <sub>e</sub> (533,4)

CIRCUIT BREAKER

0

laie

**(**J)

(H)

1/4" (6.35) MINIMUM

MOUNTING PANEL.

NON-ASBESTOS INORGANIC

NONCONDUCTING MATERIAL

-CABINET ENCLOSURE

3-1/C SERVICE ENTRANCE CABLE FROM ELECTRIC

LITTLITY METER BOX

WIRES, 60 CYCLES.

GROUNDING CONDUCTOR #2 AWG.

240/480 VOLT, 10,3

MAIN BREAKER

l

(c)

ABCDEF

BONDING JUMPER -

GROUND ROD 5/8" (15.875)

DIA. × 10' (3.048 m) LONG

PANEL WIRING DIAGRAM

\*6 AWG. 600V

K

(POWER)

(D)

AUXII TARY

CONTROL RELAY (IF NECESSARY)

TWO POSITION TOGGLE SWITCH

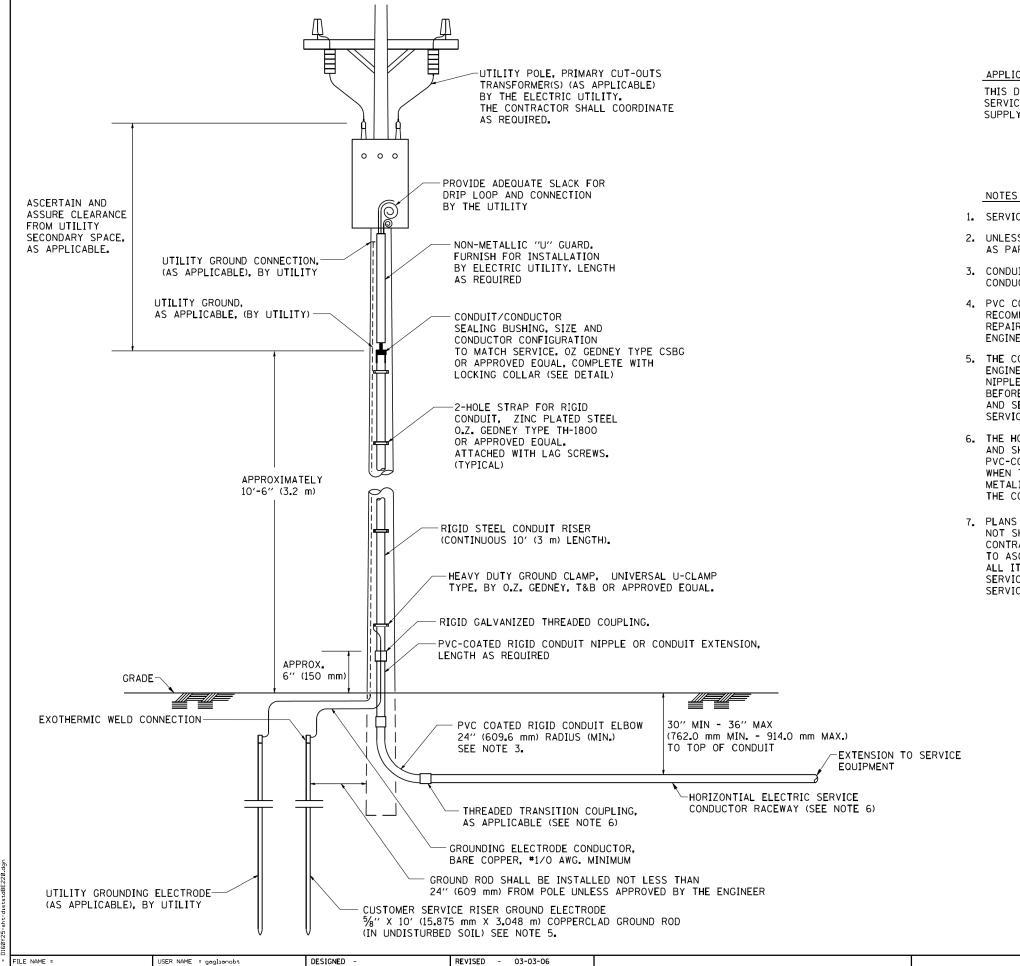
TOGGLE SWITCH MOMENTARY CONTACT TYPE SPDT 20 A.

240V AC AND TOGGLE SWITCH 20A, 240V, TYPE SPDT

DESIGNED -REVISED - 08-20-04 FILE NAME = USER NAME = gaglianobt :\diststd\22x34\be215.dgr DRAWN REVISED CHECKED REVISED PLOT SCALE = 50.0000 '/ IN. INT DATE = 1/4/2008 DATE REVISED

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SECTION COUN**T**Y LIGHTING CONTROLLER 3114-N(14) СООК 225 170 SINGLE DOOR BE-215 CONTRACT NO. 60Y25 SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



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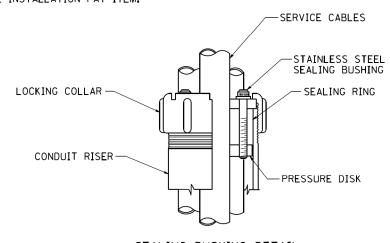
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#### APPLICATION

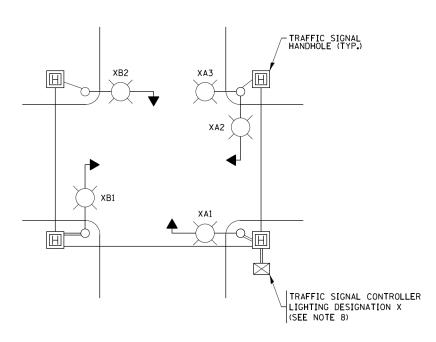
THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



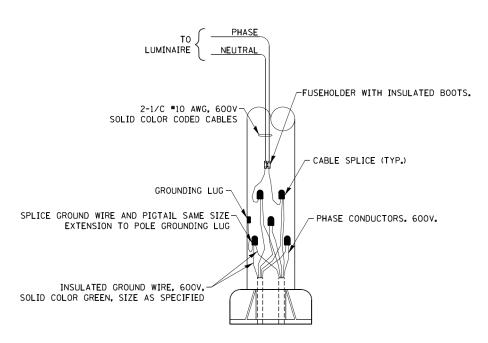
SEALING BUSHING DETAIL

TOTAL SHEE NO. 225 171 COUN**T**Y **ELECTRIC SERVICE INSTALLATION** STATE OF ILLINOIS 3114-N(14) СООК **AERIAL, REMOTE DISCONNECT DEPARTMENT OF TRANSPORTATION** BE-220 CONTRACT NO. 60Y25 SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.



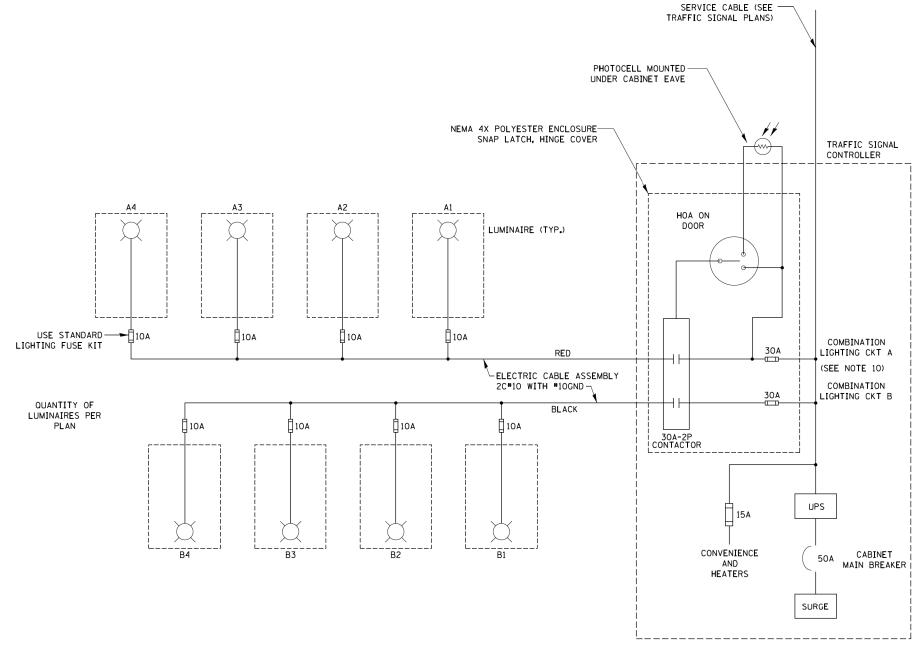
#### TYPICAL LIGHTING CIRCUIT DESIGNATIONS

(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. LIGHTING CONTROLLER DESIGNATION SHALL BE CONFIRMED WITH THE ENGINEER.
- 8. RECORD DRAWING SHALL INCLUDE:

   TRAFFIC SIGNAL PLAN SHEET(S)

   TRAFFIC SIGNAL CABLE PLAN SHEET(S)
  - LIGHTING PLANS
  - THIS DETAIL
- 9. THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- 10. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT

5								
	FILE NAME =	USER NAME = liszekrf	DESIGNED -	RT	REVISED	-	02/10/2015	
	be240.dgn		DRAWN -		REVISED	-	10/13/2015	1
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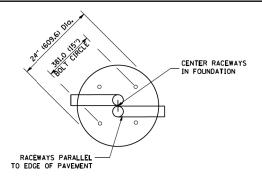
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

SCALE: NTS

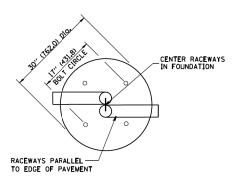
									F.A. RTE.	SECTION	COUNTY TOTAL SHEETS		SHEET NO.		
COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC							IC SIGNA	AL SCHEMATIC	344	3114-N(14)	соок	225	172		
										BE-240	CONTRACT NO. 60Y25				
S	SHEET	1	0	F	1	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT					

#### LIGHT POLE FOUNDATION DEPTH TABLE 40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "	DESIGN DEPTH "D" OF FOUNDATION				
201F CONDITION2	SINGLE ARM POLE	TWIN ARM POLE				
SOFT CLAY Ou = 0.375 TON/SO. FT.	13'-0" (3 <sub>-</sub> 96 m)	15'-0'' (4 <b>.</b> 57 m)				
MEDIUM CLAY Ou = 0.75 TON/SO.FT	9'-6" (2 <b>.</b> 09 m)	10'-9" (3 <b>-</b> 23 m)				
STIFF CLAY  Ou = 1.50 TON/SO. FT.	7'-0'' (2 <b>.</b> 13 m)	8'-0'' (2 <b>.</b> 44 m)				
LOOSE SAND Ø = 34°	9'-0'' (2,74 m)	10′-0″ (3₌05 m)				
MEDIUM SAND Ø = 37.5°	8'-3'' (2 <u>.</u> 52 m)	9'-0'' (2 <b>.</b> 74 m)				
DENSE SAND Ø = 40°	7'-9'' (2 <b>.</b> 36 m)	9'-0'' (2 <b>,</b> 74 m)				



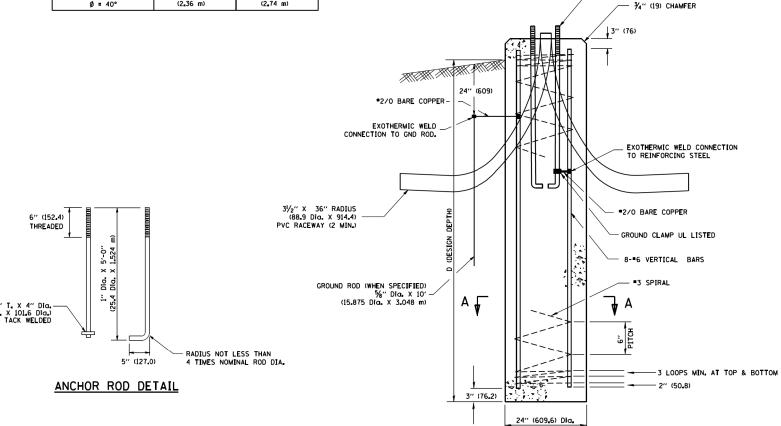
TOP VIEW



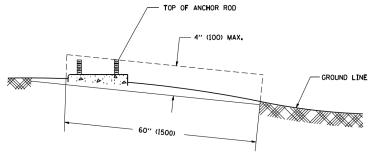
TOP VIEW

4-1" Dia. X 5'-0"

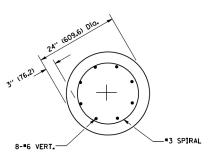
(4-25.4 Dia X 1.524 m)



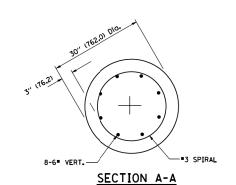




FOUNDATION EXTENSION DETAIL



SECTION A-A



SCALE: NONE

#### **NOTES**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES, IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION, IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE
- 8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE
- 9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 2¾" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION, IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A \*3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE \*3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

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	DRAWN	-	REVISED	-	
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#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

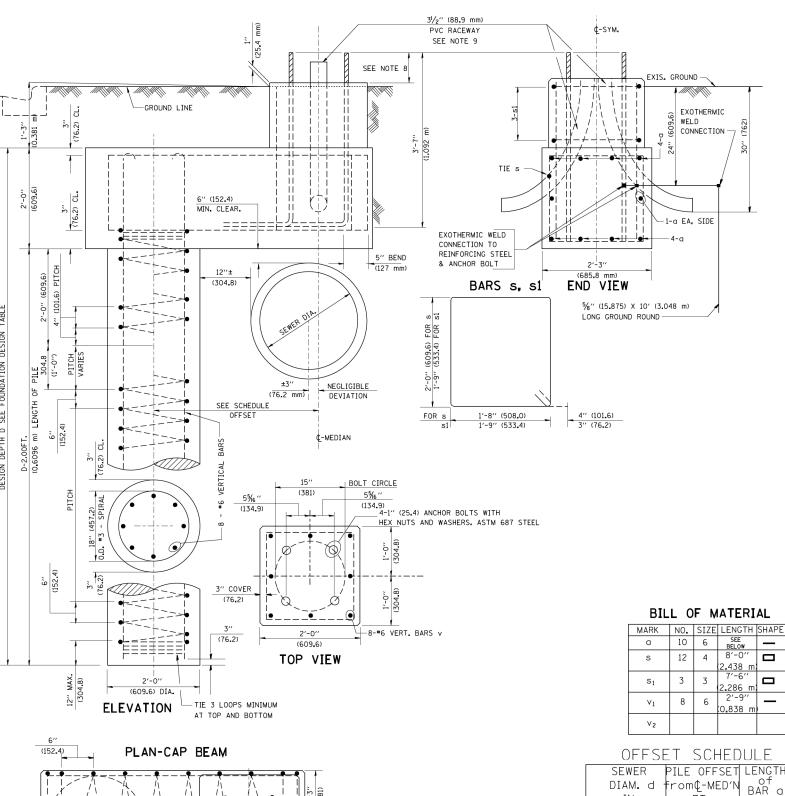
LIGHT POLE FOUNDATION	F.A. RTE.	SECTION	COUN <b>T</b> Y	TOTAL SHEETS	SHEET NO.
(12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE		3114-N(14)	COOK	225	173
		BE-301	CONTRACT	NO. 6	0Y25
SHEET NO. 1 OF 1 SHEETS   STA. TO STA.	EEU D	OAD DIST NO 1 HI INDIS EED AT	n ppn iert		

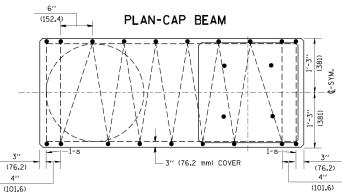
#### FOUNDATION DESIGN TABLE

	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION				
TYPE OF SOIL	SINGLE ARM	TWIN ARM	SINGLE		TWIN	ARM	
	D	D	VERT BARS	SPIRAL	VERT BARS	SPIRAL	
SOFT CLAY	13'-0''	15'-0''	8-#6X12'-6''	#3X122′	8-#6X14'-3''	#3X141′	
	(3 <b>.</b> 962 m)	(4 <b>.</b> 572 m)	(3.810 m)	(37.186 m)	(4.343 m)	(42 <b>.</b> 977 m)	
MEDIUM CLAY	9'-6''	10′-9′′	8-#6X9'-0''	#3X90′	8-#6X10'-0''	#3X100′	
	(2.896 m)	(3.277 m)	(2.743 m)	(27.432 m)	(3.048 m)	(30.480 m)	
STIFF CLAY	7'-0''	8'-0''	8-#6X6′-6′′	#3X66′	8-#6X7'-6''	#3X76′	
	(2.134 m)	(2.438 m)	(1.981 m)	(20 <b>.</b> 112 m)	(2.286 m)	(23.165 m)	
LOOSE SAND	9′-0′′	10'-0''	8-#6X8'-6''	#3X85′	8-#6X9'-6''	#3X94'	
	(2.743 m)	(3 <b>.</b> 048 m)	(2.591 m)	(25.908 m)	(2.896 m)	(28.651 m)	
MEDIUM SAND	8′-3′′	9'-0''	8-#6X8'-0''	#3X78′	8-#6X8'-6''	#3X85′	
	(2.515 m)	(2 <b>.</b> 743 m)	(2.438 m)	(23.774 m)	(2.591 m)	(25.908 m)	
DENSE SAND	7'-9''	9'-0''	8-#6X7'-6''	#3X73′	8-#6X8'-6''	#3X85′	
	(2 <b>.</b> 362 m)	(2.743 m)	(2.286 m)	(22.250 m)	(2.591 m)	(25.908 m)	
ROCK OR SOLIDIFIED SLAG	5′-0′′ (1.524 m)	5′-0′′ (1 <b>.</b> 524 m)	NONE	NONE	NONE	NONE	

#### NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- 3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE, COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾' (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- 9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.

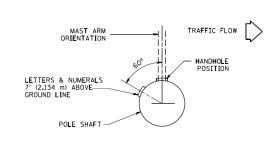




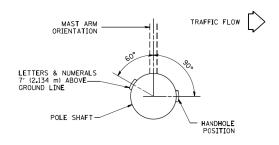
	SEWER	PILE OFFSET	LENGIF
	DIAM. d -	from¢-MED′N	l ot BAR a
	IN.	FT.	FT.
	UP TO 24"	3'-3''	#6 × 5′-3′′
	(609.6 mm)	(0.991 m)	(1.600 m)
	27" (685.8 m)TO	3′-9′′	5′-9′′
	36" (914.4 mm)	(1.143 m)	(1.753 m)
	42" (1066.8 mm) TO	4′-6′′	6′-6′′
	48" (1219.2 mm)	(1.372 m)	(1 <b>.</b> 981 m)
	54" (1371.6 mm) TO	5′-0′′	7′-0′′
	60" (1524.0 mm)	(1.524 m)	(2.134 m)
ĺ	66" (1676.4 mm) TO	5′-6′′	7′-6′′
	72" (1828.8 mm)	(1.676 m)	(2.286 m)

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED - 06-16-08 R. TOMSONS
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	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 6/16/2008	DATE -	REVISED -

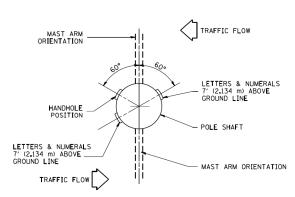
LIGHT POLE FOUNDATION OFFSET 40' (12.192 m) TO 47 1/2 ' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE		F.A. RTE. 344	SECTION 3114-N(14)	COUNTY	TOTAL SHEETS 225	SHEE NO.
			BE-310	CONTRACT	NO. 6	0Y25
SHEET NO. 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		



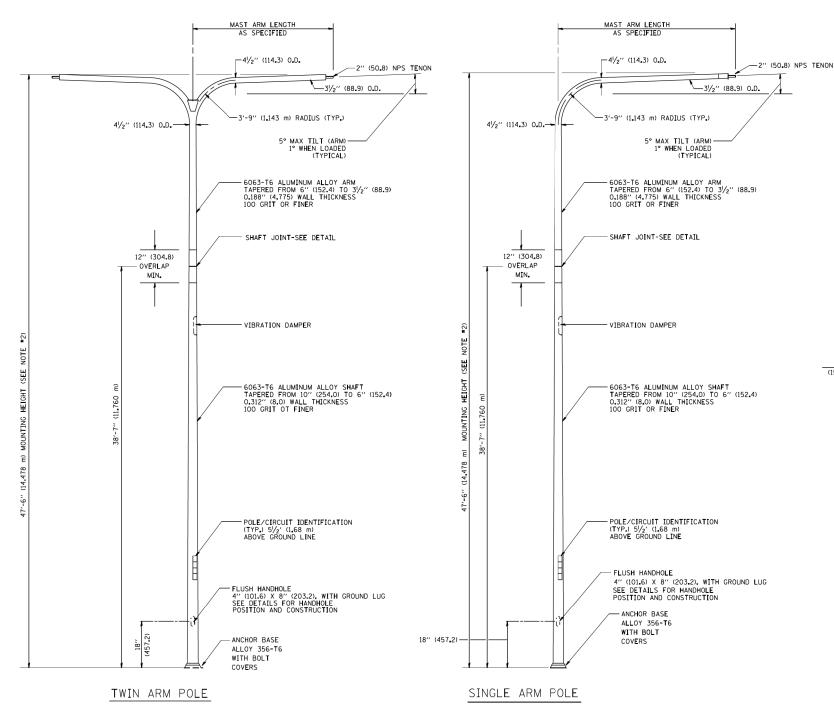
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



NOTES:

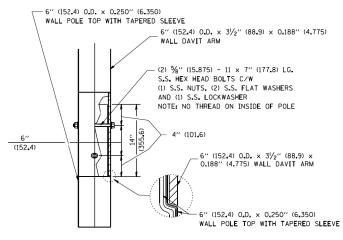
- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
- 3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
- 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- CRITERIA AS SPECIFIED.

  5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.

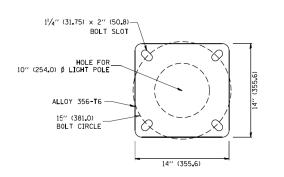
  6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.

  7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.

- 8. LIGHTING UNIT IDENTIFICATION NUMBERS
  SHALL BE INSTALLED BEFORE THE LIGHTING
  UNIT IS ENERGIZED.

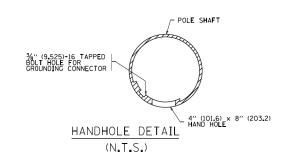


#### DAVIT ARM CONNECTION [14" (355.6) OVERLAP SHOWN]



#### LIGHT POLE BASE PLATE DETAIL

(FOR POLE MOUNTED ON 15 INCH (381.0) BOLT CIRCLE FOUNDATION)

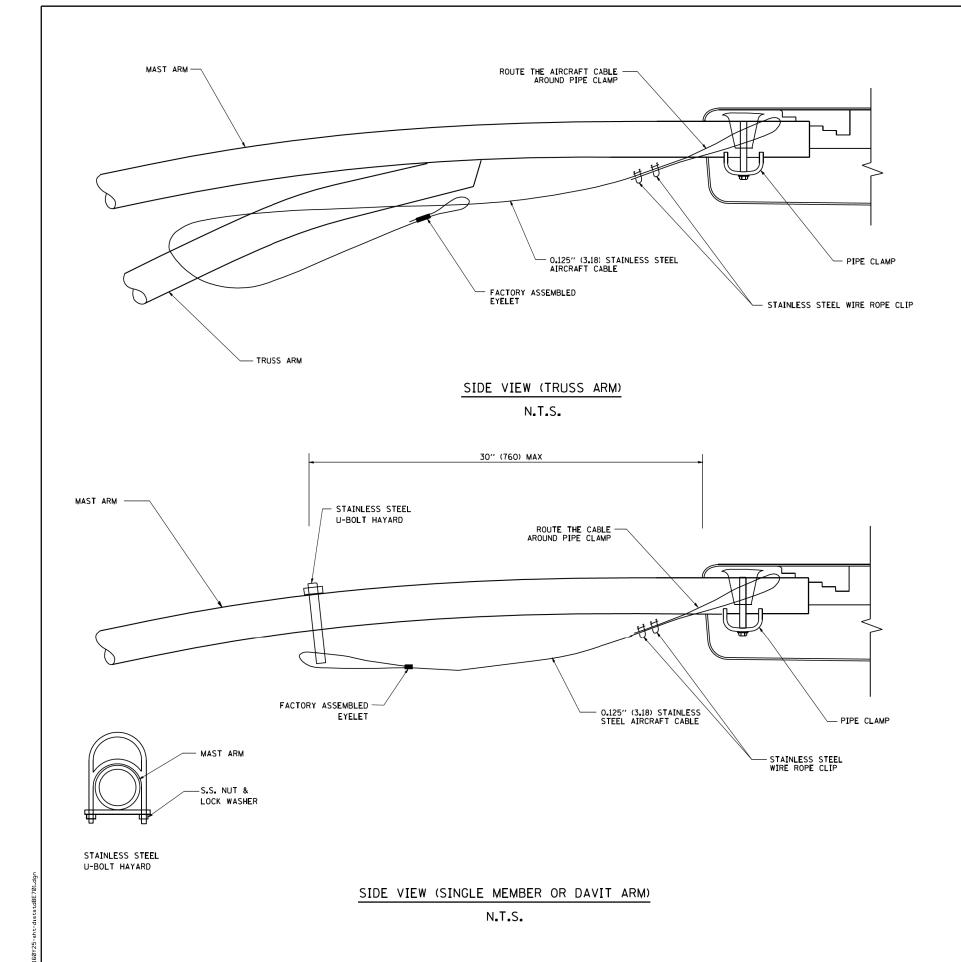


SCALE: NONE

11	FILE NAME =	USER NAME = leysa	DESIGNED -	REVISED	-	D. DREW 05-07-92
AME	c:\pw_work\pwidot\leysa\d0108315\be410.dg	n	DRAWN - LEY	REVISED	-	R. TOMSONS 09-06-00
Ψ.		PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	-	R. TOMSONS 09-02-03
Ξ		PLOT DATE = 4/4/2013	DATE -	REVISED	-	R. TOMSONS 01-18-13

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

TOTAL SHEE SHEETS NO. SECTION COUNTY DAVIT LIGHT POLE 344 3114-N(14) COOK 225 175 47'-6" (14.478 m) MOUNTING HEIGHT BE-410 CONTRACT NO. 60Y25 SHEET NO. 1 OF 1 SHEETS STA. TO STA.



REVISED - 08-08-03

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**STATE OF ILLINOIS** 

**DEPARTMENT OF TRANSPORTATION** 

DESIGNED -

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DATE

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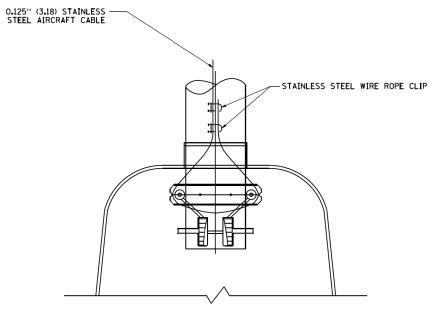
USER NAME = gaglianobt

PLOT DATE = 1/4/2008

PLOT SCALE = 50.000 '/ IN.

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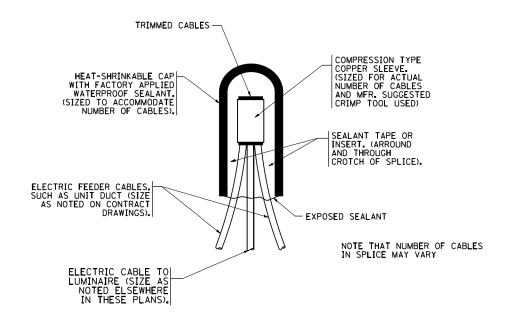
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# BOTTOM VIEW N.T.S.

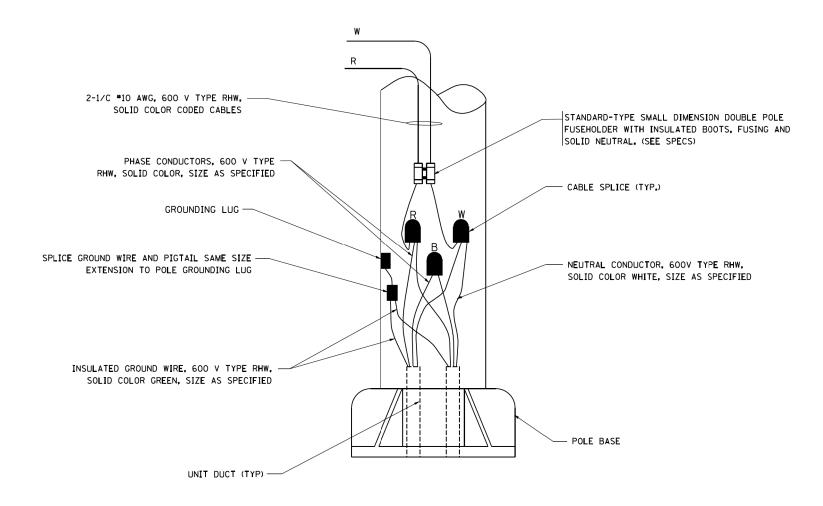
#### NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
- 3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
- 4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.



## TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

30" (762) MINIMUM COVER 12" (305) MAXIMUM WIDTH EXCEPT AS APPROVED BY THE ENGINEER

12" (305)

WARNING TAPE AS SPECIFIED

UNIT DUCT OR OTHER RACEWAY
AND WIRING AS PER PLANS. COMPLETE

WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

POLE WIRING DETAIL

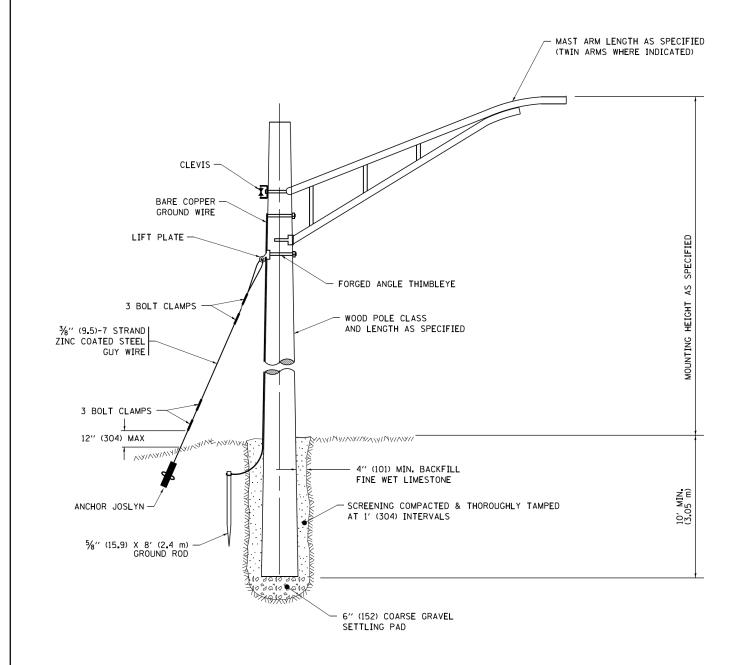
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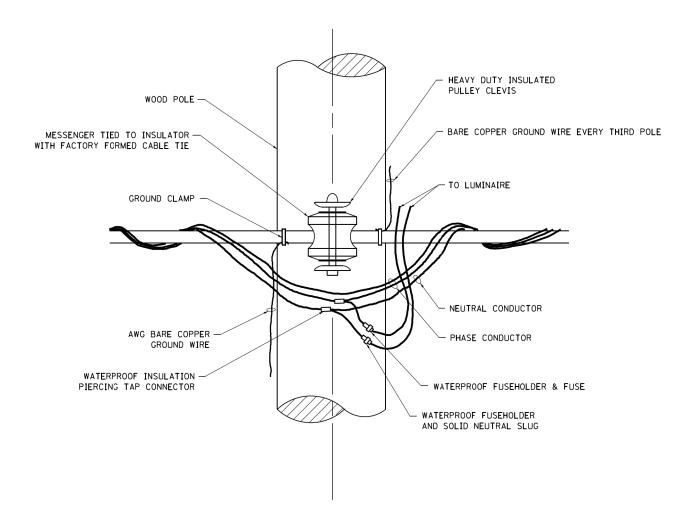
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PLOT DATE = 1/4/2008	DATE	-	REVISED	-	

STATE	E 01	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	MISC. ELECTRICAL DETAILS SHEET A						SECTION	COUNTY	SHEETS	NO.
							3114-N(14)	COOK	225	177
							BE-702	CONTRACT	NO. 6	0Y25
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		



# **TEMPORARY LIGHT POLE DETAIL**

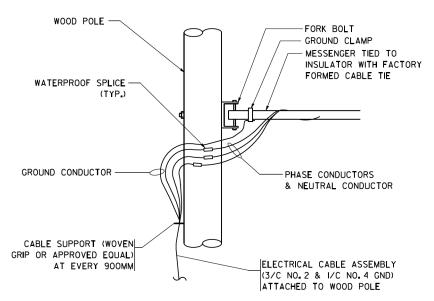


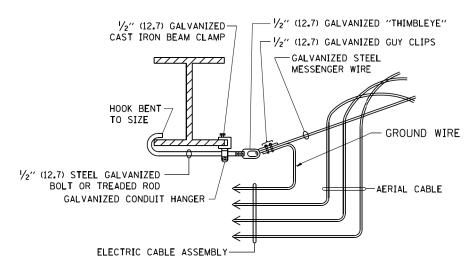
# **TEMPORARY LIGHT POLE ATTACHMENT DETAIL**

#### NOTE

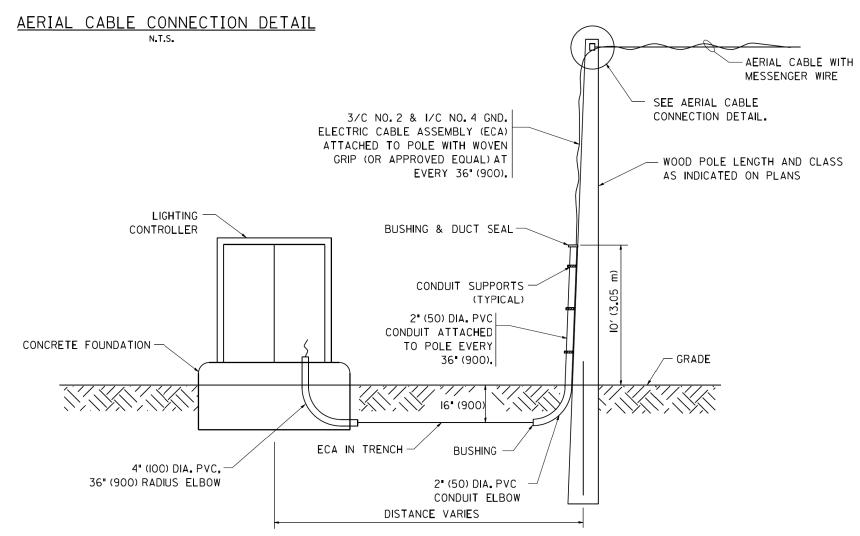
- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

	FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED -	08-08-03			TFM	PΩRARY	LIGHT POLE DETA	AII S	F.A.	SECTION	COUNTY	TOTAL	SHEET
MAM	pw:\\ILØ84EBIDINTEG.:1ll:nois.gov:PWIDOT\Do	ouments\IDOT Offices\District 1\Projects\Dist	S <b>-DRAWM</b> \CADDeta\CADsheets\be800.dgn	REVISED -	R.T. 07-26-16	STATE OF ILLINOIS		i Livi	UllAlli	LIGHT TOLL DETA	area area area area area area area area	344	3114-N(14)	соок	225	178
- H		PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -		DEPARTMENT OF TRANSPORTATION							BE-800	CONTRACT	NO. f	OY25
Ē	Default	PLOT DATE = 9/1/2016	DATE -	REVISED -			SCALE: NONE	SHEET 1	OF 1	SHEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT		





# AERIAL CABLE ATTACHED TO STRUCTURE NOT TO SCALE



#### NOTES:

- ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
- 3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
- 4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

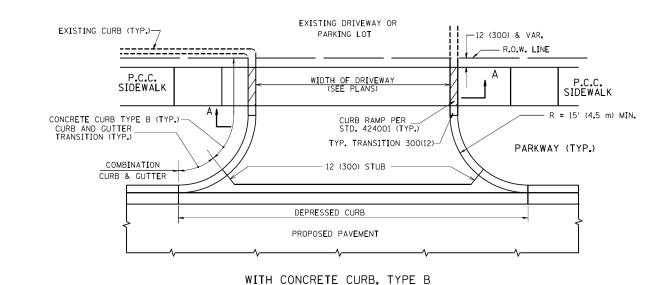
# WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

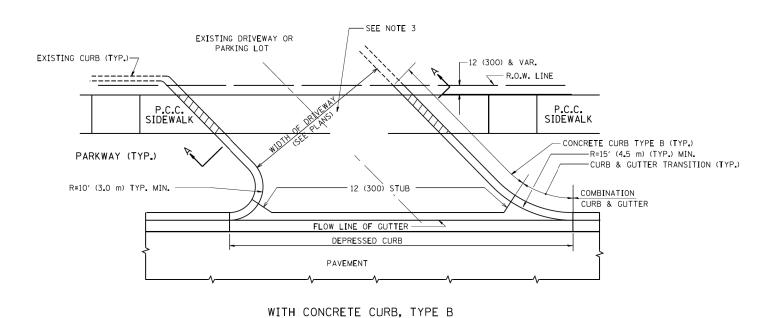
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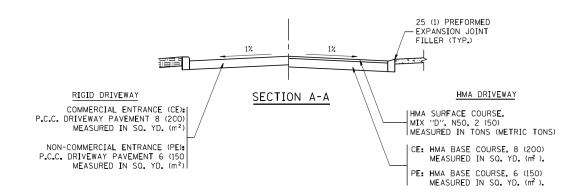
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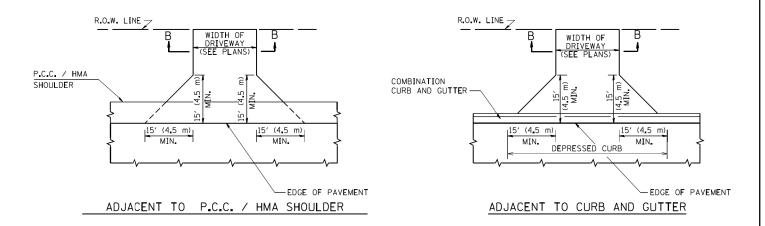
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

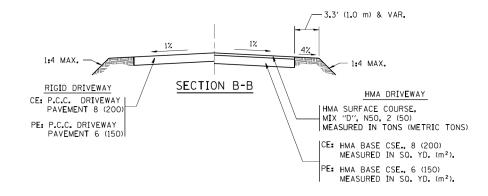
TEMPORARY AERIAL CABLE INSTALLATION						F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
								344	3114-N(14)	соок	225	179
									BE-801	CONTRACT	NO. 6	0Y25
ALE: NONE	SHEET NO	1	OF 1	SHEETS	STA.	TO STA.		FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		











#### 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. (m<sup>2</sup>).

#### 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

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c:\pw_work\pwidot\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

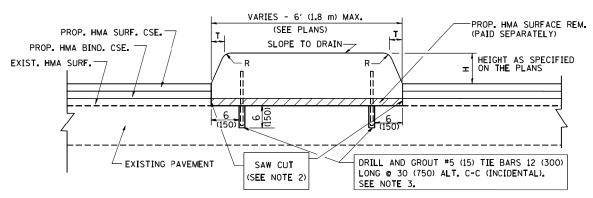
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIV	'EWAY DETAILS – DISTANCE	BETWEEN R.O.W.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.		
AND EA	CE OF CURB & EDGE OF S	UNII DED > _ 15' // 5 m\	344	3114-N(14)	COOK	225 180		
AND FA	CE OF CORB & EDGE OF 3	100LDEN >= 15 (4.5 III)		BD0156-07 (BD-01) CONTRACT NO. 60Y2				
NE S	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

- NOTES: 1. CORRUGATED MEDIAN (MODIFIED) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE PORTIONS OF STATE STANDARD 606306.
  - 2. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR
    MAY DELETE THE SAW CUT IF A NEAT JOINT CAN BE
    OBTAINED BY MILLING THE HMA SURFACE TO BE REMOVED.
    SAW CUT WILL BE INCLUDED IN THE COST OF CORRUGATED MEDIAN (MODIFIED)
  - 3. PAVEMENT FABRIC WILL BE INCLUDED IN THE COST OF CORRUGATED MEDIAN (MODIFIED)

#### DETAILS FOR CORRUGATED MEDIAN (MODIFIED)

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE FOOT (SOUARE METER) FOR "CORRUGATED MEDIAN (MODIFIED)"



Н	R	T
6(150)	1(25)	1(25)
9(225)	1(25)	2(50)

NOTES: 1. CONCRETE MEDIAN TYPE SB (DOWELLED) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF STATE STANDARD 606301 AND SECTION 606 OF THE STANDARD SPECIFICATIONS.

- 2. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR
  MAY DELETE THE SAW CUT IF A NEAT JOINT CAN BE
  OBTAINED BY MILLING THE HMA SURFACE TO BE REMOVED.
  SAW CUT WILL BE INCLUDED IN THE COST OF "CONCRETE MEDIAN TYPE SB (DOWELLED)"
- 3. FOR MEDIAN WIDTH LESS THAN 4' (1.2 m) USE ONE ROW OF \*5 (15) BARS @ 30 (750) C-C ALONG THE MEDIAN CENTERLINE. TIE BARS WILL BE INCLUDED IN THE COST OF "CONCRETE MEDIAN TYPE SB (DOWELLED)"

#### DETAILS FOR CONCRETE MEDIAN

#### TYPE SB (DOWELLED)

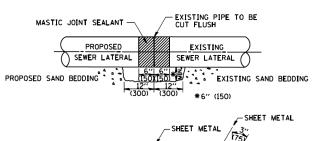
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT (SQUARE METER) FOR "CONCRETE MEDIAN TYPE SB (DOWELLED)"

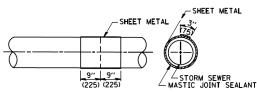
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

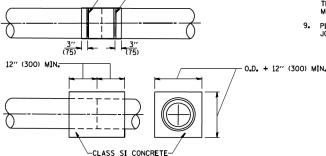
FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94
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	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - E. GOMEZ 08-28-00
	PLOT DATE = 1/4/2008	DATE - 05-14-90	REVISED - R. BORO 01-01-07

#### DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER





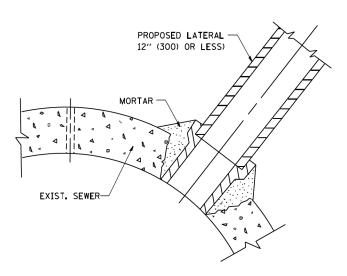


METAL BINDING

<u>DETAIL "B"</u> CLASS SI CONCRETE COLLAR

#### CONSTRUCTION SEQUENCE

- 1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT, BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- 7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



#### DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

#### NOTES

#### MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

#### CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

  A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

#### GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

#### BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REDUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

SCALE: NONE

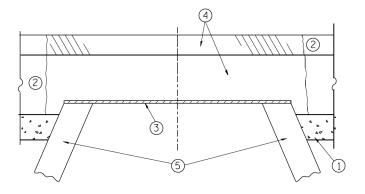
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

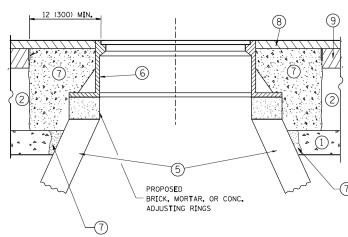
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92
W:\diststd\22x34\bd07.dgn		DRAWN -	REVISED - R. SHAH 09-09-94
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.		
CONNECTION TO EXISTI	NG SEWER		344	3114-N(14)	COOK	225	182
COMMECTION TO EXISTING SEVEN				BD500-01 (BD-7)	CONTRACT	NO. 6	0Y25
SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		





EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM
- AROUND THE STRUCTURE.

  B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

  D) BACKFILL WITH CRUSHED STONE AND A MINIMUM  $1\frac{1}{2}$  (40)
- THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

#### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- \* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE

#### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

(5) EXISTING STRUCTURE

- (7) CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 9 PROPOSED HMA BINDER COURSE

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

#### BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

#### DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

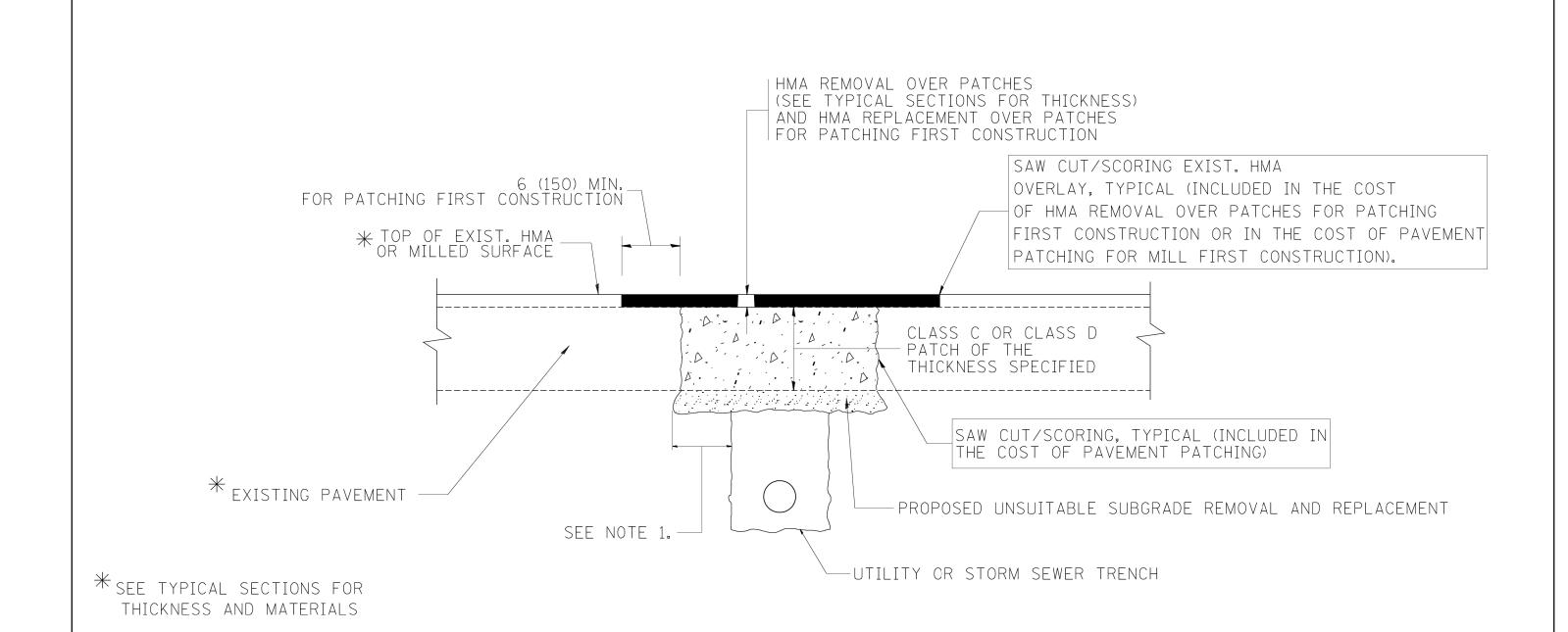
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

DESIGNED - R. SHAH FILE NAME = USER NAME = bauerdl REVISED - R. WIEDEMAN 05-14-04 DRAWN REVISED - R. BORO 01-01-07 CHECKED REVISED LOT SCALE = 1968.5000 '/ m - R. BORO 03-09-11 - R. BORO 12-06-11 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**DETAILS FOR** FRAMES AND LIDS ADJUSTMENT WITH MILLING SHEET NO. 1 OF 1 SHEETS STA.

COUNTY 3114-N(14) COOK 225 183 BD600-03 (BD-8) CONTRACT NO. 60Y25



### NOTES:

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

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

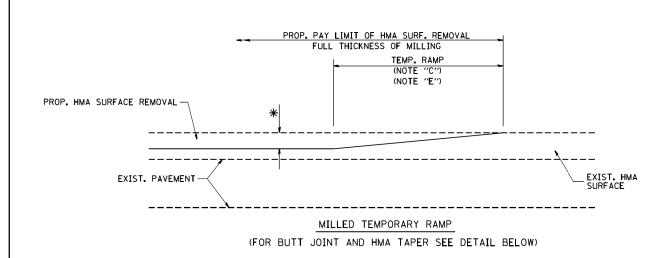
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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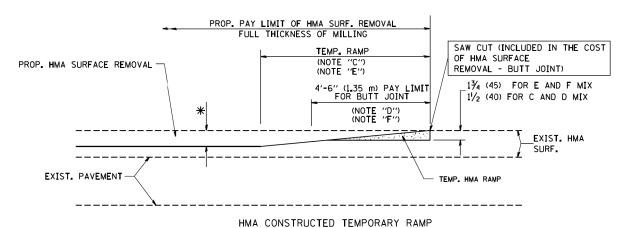
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

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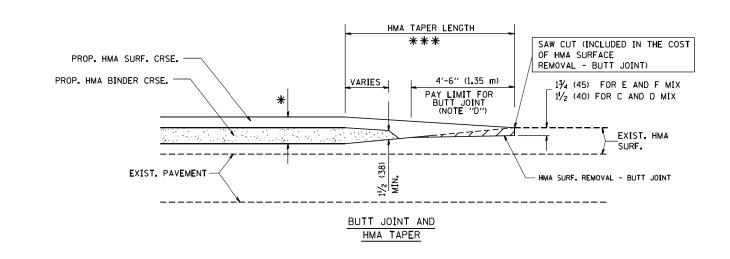
#### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 2

#### TYPICAL TEMPORARY RAMP



### TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 USER NAME = gaglianobt DRAWN REVISED - A. ABBAS 03-21-97 CHECKED REVISED - M. GOMEZ 04-06-01 PLOT SCALE = 50.0000 '/ IN. DATE 06-13-90 REVISED - R. BORO 01-01-07

FILE NAME =

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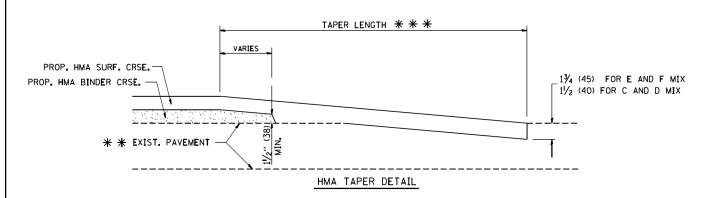
**STATE OF ILLINOIS** 

TOTAL SHEE NO.
225 185 SECTION COUN**T**Y **BUTT JOINT AND** 3114-N(14) СООК HMA TAPER DETAILS BD400-05 BD32 CONTRACT NO. 60Y25 SHEET NO. 1 OF 1 SHEETS STA. TO STA.

OTHERWISE SHOWN.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE 30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 13/4 (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX \* \* EXIST. PAVEMENT BUTT JOINT DETAIL



### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

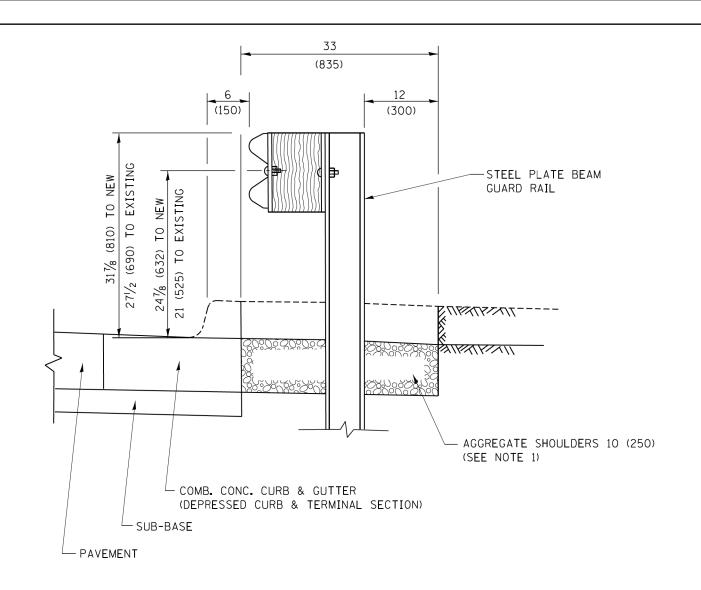
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\* \* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### BASIS OF PAYMENT:

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

SCALE: NONE

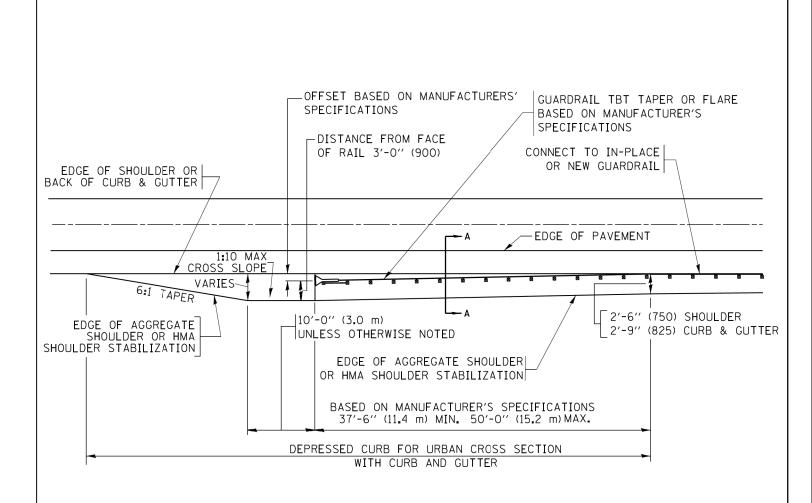
**DEPARTMENT OF TRANSPORTATION** 



### SECTION A-A

- NOTES: 1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
  - 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
  - 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



## DEPRESSED CURB AND GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

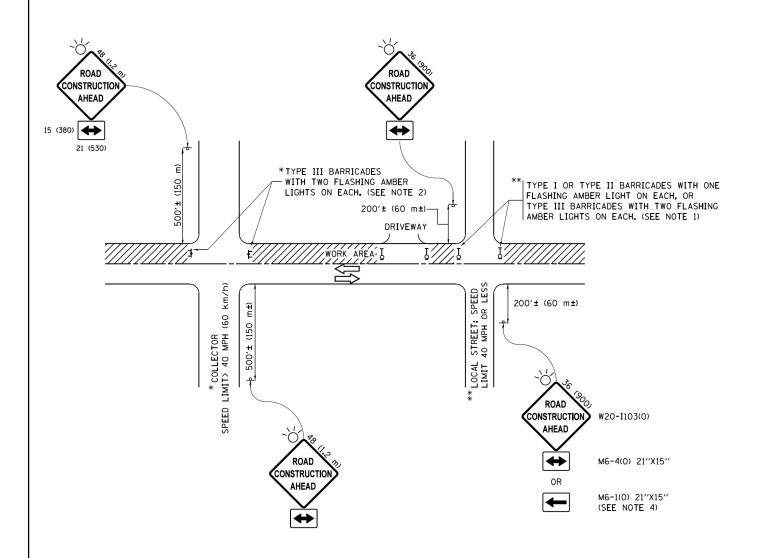
> TBT = TRAFFIC BARRIER TERMINAL ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

DESIGNED - M. DE YONG REVISED - R. BORO 12-08-2008 FILE NAME = USER NAME = drivakosgn st5t0R2WEN\CADData\CADsheets\bd34.dgr w:\\ILØ84EBIDINTEG.:111:n ents\IDOT Offices\District 1\Projects\Di REVISED - R. BORO 09-14-200 PLOT SCALE = 50.0000 '/ 10. CHECKED -REVISED -R. BORO 08-06-2012 INT DATE = 12/21/2015 DATE REVISED -R- BORO 05-08-201

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DETAILS FOR DEPRESSED CURB & GUTTER AND** SHOULDER TREATMENT AT TBT TY. 1 SPL.

SECTION COUNTY СООК 3114-N(14) 225 186 BD600-10 (BD 34) CONTRACT NO. 60Y25

SCALE: NONE SHEET 1 OF 1 SHEETS STA.



#### 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:
  - a) 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.

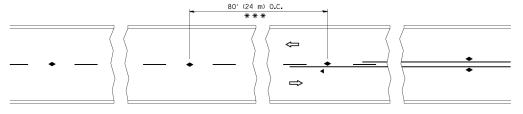
All dimensions are in inches (millimeters) unless otherwise shown.

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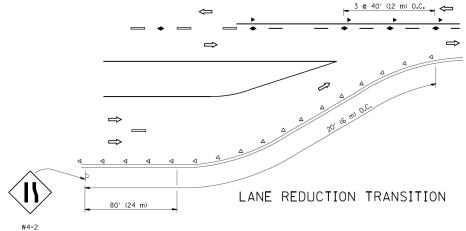
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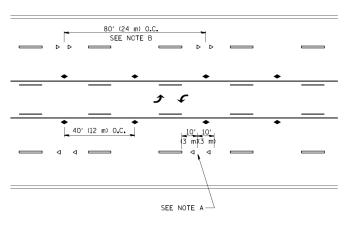
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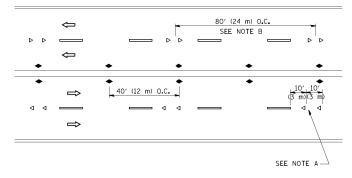
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

#### TWO-LANE/TWO-WAY

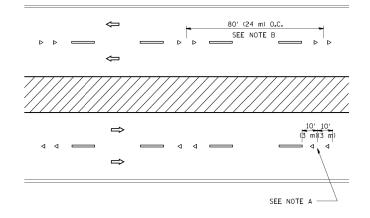




TWO-WAY LEFT TURN



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 (W/O)
- ◆ TWO-WAY AMBER MARKER

#### DESIGN NOTES

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

#### 

LEFT TURN

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

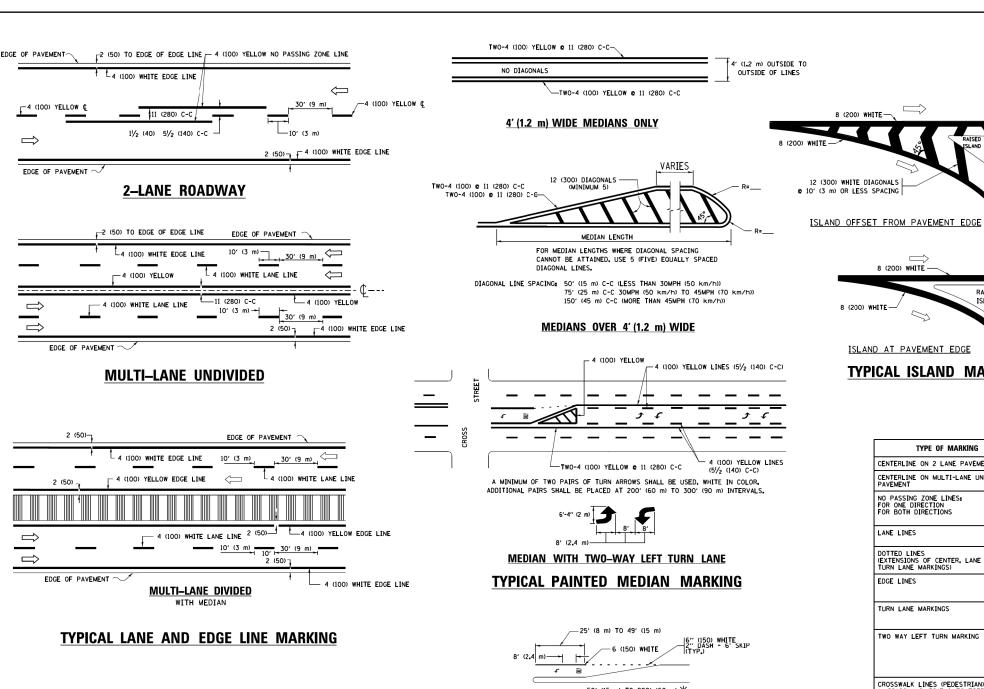
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1		PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-T. RAMMACHER	01-06-00
1		PLOT DATE = 3/2/2011	DATE -	REVISED	- C. JUCIUS	09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	RAISED	RE	FLECTI	VE				APPLICA MARKER	TIONS IS (SNOW-PLOW	RESISTANT)	
Ε:	NONE		SHEET	NO.	1	OF	1	SHEETS	STA.	TO STA.	

F.A. SECTION COUNTY TOTAL SHEET NO.
344 3114-N(14) COOK 225 188

TC-11 CONTRACT NO. 60Y25



#### -6 (150) WHITE 16' (5 m) 10' (3 m) 6 (150) WHITE hmmi OVER 200' (60 m) \_\_\_ 6 (150) WHITE

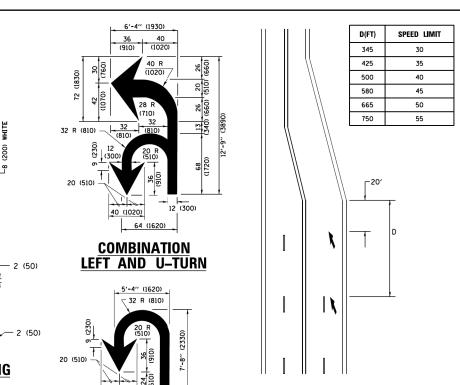
PEDESTRIAN

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) (11) AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



LANE REDUCTION TRANSITION

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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 2 LANE PAVEMENT	2 0 4 (100)	SOLID	YELLOW	11 (280) C-C
PAVEMENT	2 2 4 (100)	JOLID	TELLOW	11 (2807 C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 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 <b>e</b> 6 (150) 12 (300) <b>e</b> 45° 12 (300) <b>e</b> 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1,8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4" (12 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT, OTHERNISE, PLACE AT DESIFIED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALSa 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 (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 ml LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"-3,6 SQ, FT. (0,33 m²) EACH "X"-54,0 SQ, FT. (5,0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) <b>@</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 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

**U**-TURN

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

8 (200) WHITE-

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

8 (200) WHITE-

RAISED

ISLAND

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

FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED	-	C. JUCIUS 09-09-09
pw:\\IL084EBIDINTEG.1111no1s.gov:PWID0T\Do	cuments\IDOT Offices\District 1\Projects\Dist	<b>∙DRAWM</b> \CADDeta\CADsheets\tc13.dgn	REVISED	-	C. JUCIUS 07-01-13
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED	-	C. JUCIUS 12-21-15
Default	PLOT DATE = 4/13/2016	DATE - 03-19-90	REVISED	-	C. JUCIUS 04-12-16

TYPICAL CROSSWALK MARKING

 $oldsymbol{*}$  markings shall be installed parallel to the centerline of the road which it crosses

-6 (150) WHITE

DETAIL "A"

2' (600)

DETAIL "B"

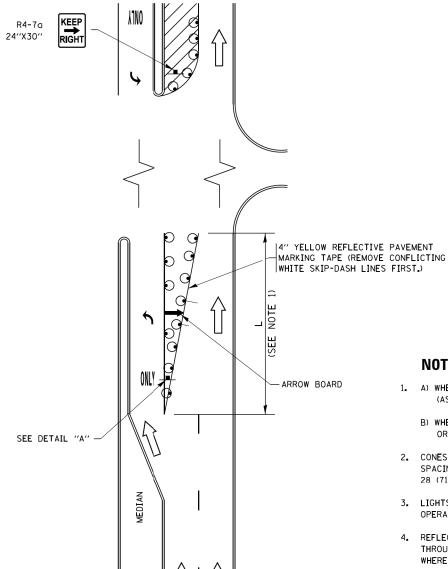
\_\_12 (300) WHITE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	DISTRICT ONE									COUNTY	TOTAL SHEETS	SHEET NO.
	TYPI	CVI	DΛV	EMENT	MARKING	20	344	3114-N(14)		COOK	225	189
		UAL	1 7	LIVILIVI	IVIAIIKIIV	10		TC-13		CONTRACT	NO. 6	0Y25
SCALE: NONE	SHEET 1	0F	1	SHEETS	STA.	TO STA.		ILLINOI	S FED. Al	ID PROJECT		

BICYCLE & EQUESTRIAN

# 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

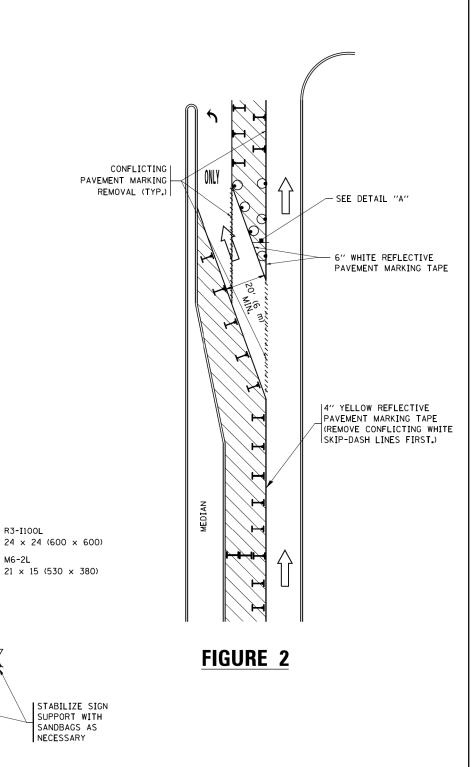
TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

SIGN ASSEMBLY

#### 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

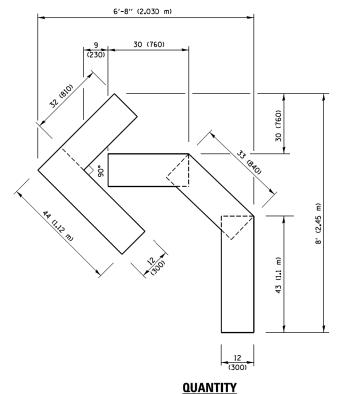
All dimensions are in inches (millimeters) unless otherwise shown.

REVISED -T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 FILE NAME = USER NAME = footemj ow:\\ILØ84EBIDINTEG.1111no1 ents\IDOT Offices\District I\Projects\Dist<mark>해E冰(\$EO</mark>ADDeta\C#Qs**HQU\$EH**14분g07-95 REVISED - A. SCHUETZE 07-01-13 PLOT SCALE = 50.0000 '/ 10. REVISED - A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 PLOT DATE = 9/15/2016 REVISED - T. RAMMACHER 01-06-00 REVISED

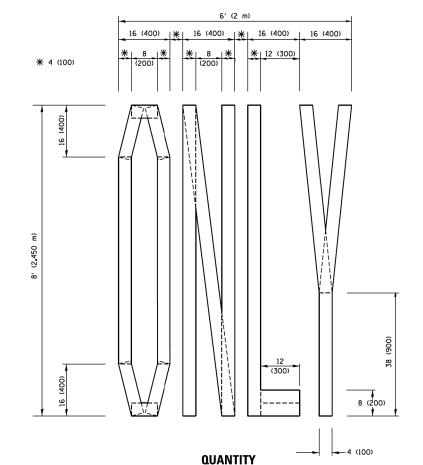
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHEET 1 OF 1 SHEETS STA. SCALE: NONE

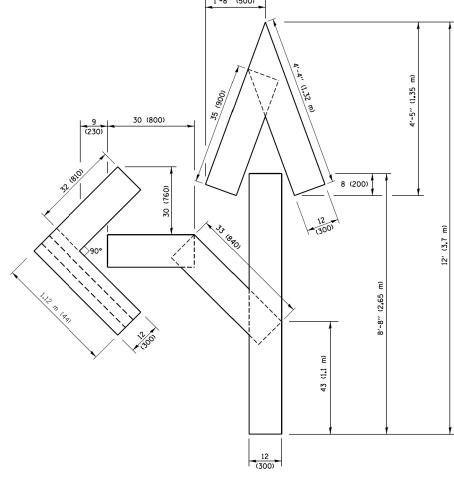
SECTION COUNTY 3114-N(14) СООК 225 190 TC-14 CONTRACT NO. 60Y25



4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



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

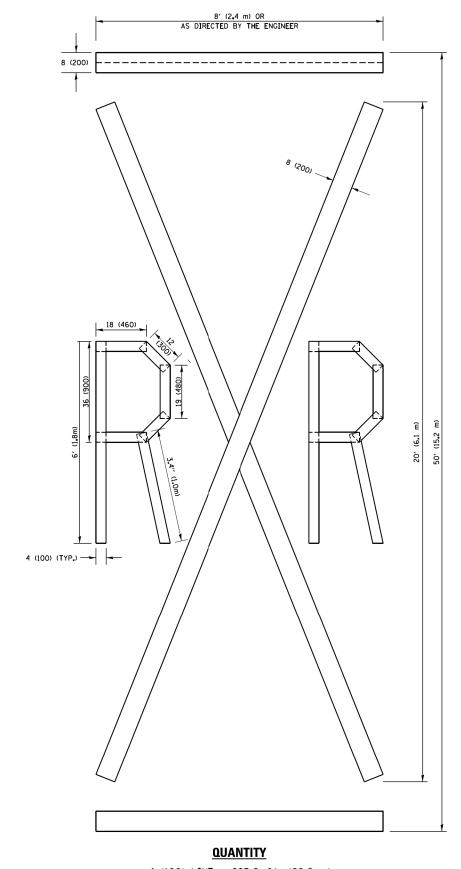


#### QUANTITY

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.

11	FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED	-T. RAMMACHER 03-02-98
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ے س		PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	-E. GOMEZ 08-28-00
Ē		PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

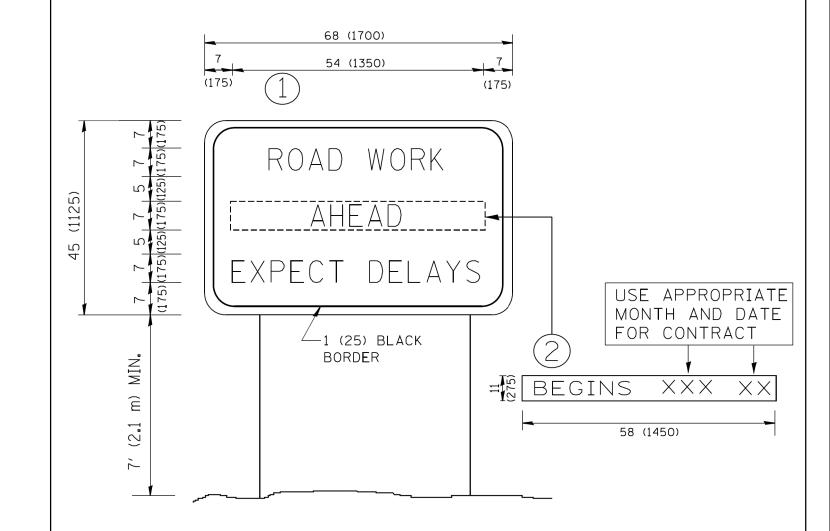
STATE (	OF ILLINOIS
DEPARTMENT O	F TRANSPORTATION

	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS					F.A RTE.	SECTION	
SHOR	TERM	PAVE	MENT	MARKING	LETTERS AF	ND SYMBOLS	344	3114-N(14)
								TC-16
SCALE NONE	SHEET	NO. 1	OF 1	SHEETS	STA.	TO STA.	EED P	DAD DIST NO 1 ILLINOIS FE

 COUNTY
 TOTAL SHEETS NO.

 COOK
 225
 191

 CONTRACT
 NO.
 60Y25



# NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.

SCALE: NONE

- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED	- R. MIRS 09-15-97
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	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED	- C. JUCIUS 01-31-07

STATI	E OF	: ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		3114-N(14)	соок	225	192
INFORMATION SIGN		TC-22	CONTRACT NO. 60Y25		
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			



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

#### NOTES:

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

FILE NAME = Geglianobt DESIGNED - REVISED - C. JUCIUS 02-15-07
ci\pw.work\pwidot\gaglianobt\d0108315\tau 26.dgn DRAWN - REVISED PLOT SCALE = 50.000 '/ in. CHECKED - REVISED PLOT DATE = 12/13/2012 DATE - REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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