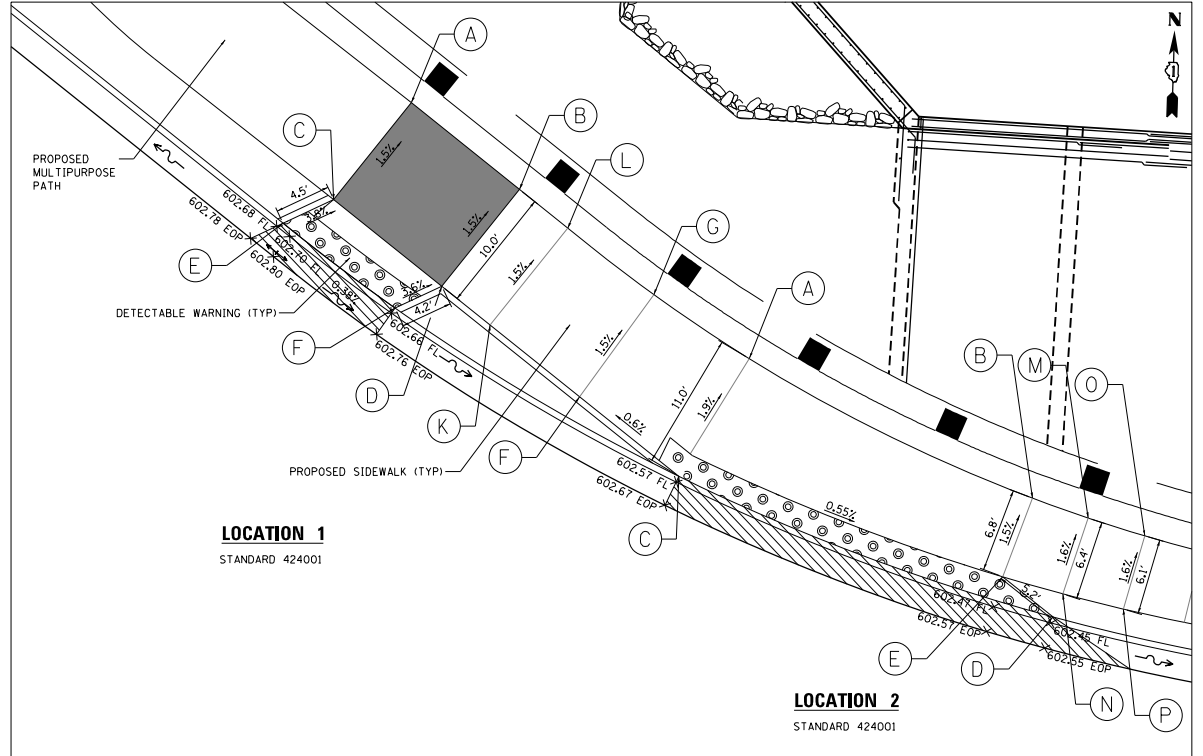
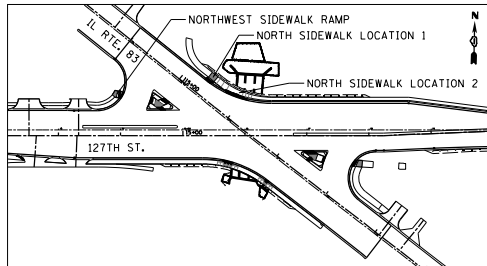


NORTHWEST SIDEWALK RAMP
STANDARD 424001

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	114+30.77	79.66' RT	602.16	602.66
B	114+31.47	87.71' RT	602.10	602.40
C	114+34.30	77.72' RT	602.10	602.50
D	114+39.04	86.49' RT	601.99	602.12
E	114+36.47	87.87' RT	602.03	602.20
F	114+38.69	75.31' RT	601.85	602.14
G	114+43.44	84.10' RT	601.74	602.00
H	114+41.73	73.65' RT	601.80	602.25

LOCATION MAP



LOCATION 1
STANDARD 424001

LOCATION 2
STANDARD 424001

NORTH SIDEWALK RAMP

LOCATION 1

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	115+34.71	41.62' LT	602.40	-
B	115+45.86	41.62' LT	602.40	-
C	115+34.71	31.62' LT	602.55	602.95
D	115+45.86	31.62' LT	602.55	602.95
E	115+32.72	27.58' LT	602.72	603.12
F	115+44.02	27.90' LT	602.70	603.10

LOCATION 2

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	115+68.82	42.56' LT	602.40	-
B	115+93.64	48.05' LT	602.40	-
C	115+70.34	31.62' LT	602.61	603.01
D	116+00.90	41.62' LT	602.49	-
E	115+95.74	41.62' LT	602.50	-
F	115+60.09	31.62' LT	602.55	602.90
G	115+59.59	41.78' LT	602.40	-
K	115+50.86	31.62' LT	602.55	602.90
L	115+50.86	41.62' LT	602.40	-
M	115+98.14	49.62' LT	602.40	-
N	116+00.36	43.57' LT	602.50	-
O	116+02.59	51.35' LT	602.40	-
P	116+04.92	45.66' LT	602.50	-

LEGEND

- PROPOSED DEPRESSED CURB AND GUTTER
- TURNING SPACE
- TC TOP OF CURB ELEVATION
- SW SIDEWALK ELEVATION
- GUTTER DRAINAGE PATTERN
- FLOW SUMMIT
- XXX.XX FL GUTTER FLOW LINE ELEVATION
- XXX.XX EOP EDGE OF PAVEMENT ELEVATION

NOTES:

- STATIONS AND OFFSETS REFERENCE PROPOSED CAL SAG RD (IL RTE 83) CENTERLINE
- SEE INTERSECTION DETAIL SHEET 85 FOR PROPOSED DETAILS WITHIN THE LIMITS OF THE INTERSECTION AND CURB RAMPS.

FILE NAME : I:\8274 - I01F1B18 - 01 - Revision\8274.dwg - I:\03 - J.D. Tinley - Creek\000\0000 - Sheets\018874.dwg - 018874.dwg

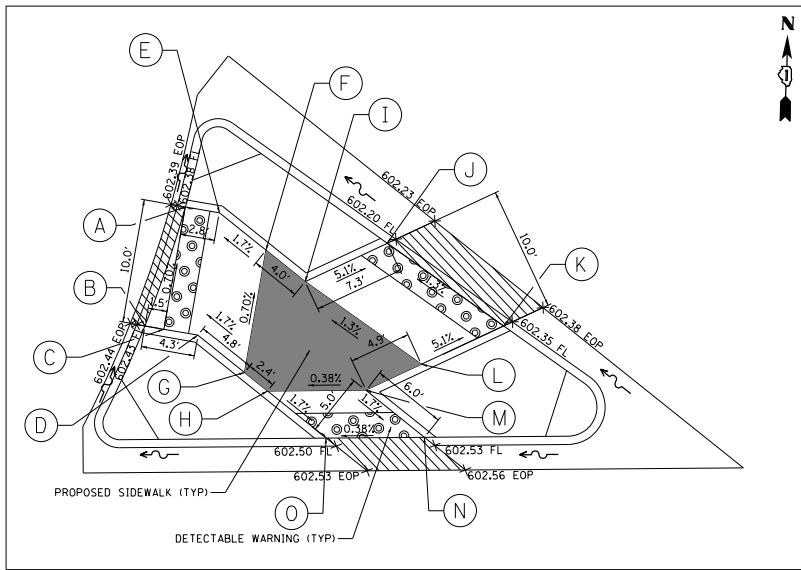
COLLINS ENGINEERS

USER NAME : stanner	DESIGNED - DSH	REVISED -
	DRAWN - DSH	REVISED -
PLOT SCALE = 18.8000' / 1"	CHECKED - RAG	REVISED -
PLOT DATE = 5/4/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

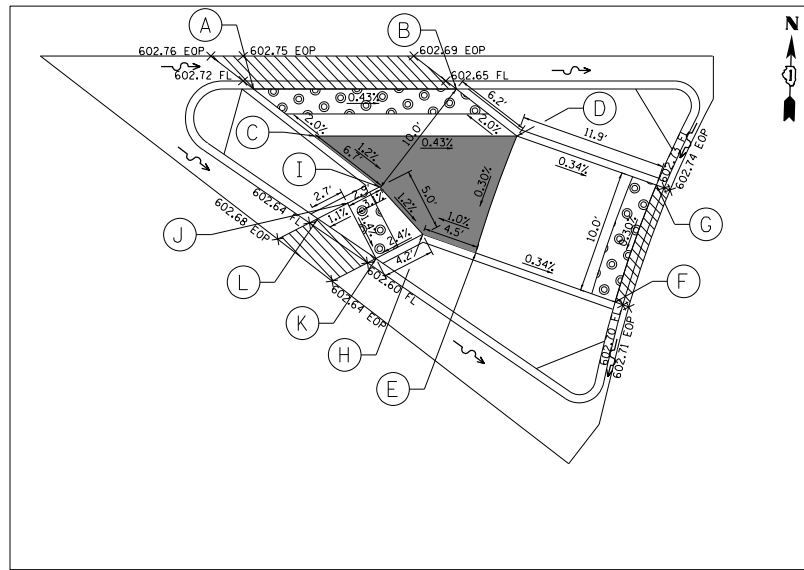
**IL ROUTE 83 (CAL SAG ROAD) OVER TINLEY CREEK (AT 127TH STREET)
PROPOSED ADA RAMP DETAILS - NORTH**

P.L. ELEV.	SECTION	COUNTY	TOTAL SHEET	
			NO.	NO.
344	3034B&N-2	COOK	207	101
			CONTRACT NO. 60X74	
SCALE:	SHEET	OF	SHEETS	STA. TO STA.
		ILLINOIS FED. AID PROJECT		



NORTHWEST ISLAND

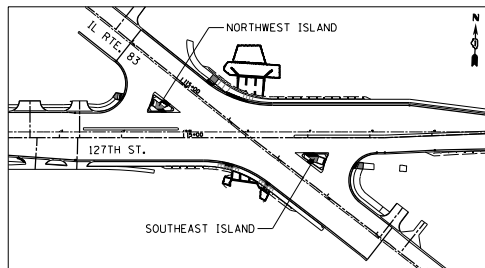
STANDARD 424001



SOUTHEAST ISLAND

STANDARD 424001

LOCATION MAP



POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	114+83.45	50.74' RT	602.42	602.42
B	114+86.90	60.25' RT	602.47	602.47
C	114+88.26	59.51' RT	602.49	602.89
D	114+90.69	58.17' RT	602.54	602.94
E	114+85.88	49.41' RT	602.47	602.87
F	114+90.70	49.41' RT	602.55	602.95
G	114+95.51	58.17' RT	602.62	603.02
H	114+97.88	58.17' RT	602.64	603.04
I	114+94.73	49.41' RT	602.61	603.01
J	114+97.96	42.86' RT	602.24	602.24
K	115+09.44	42.19' RT	602.39	602.39
L	115+06.21	48.74' RT	602.76	603.16
M	115+04.02	53.17' RT	602.67	603.07
N	115+10.06	53.17' RT	602.57	602.57
O	115+03.92	58.17' RT	602.54	602.54

NOTES:

- STATIONS AND OFFSETS REFERENCE PROPOSED CAL SAG RD (IL RTE 83) CENTERLINE
- SEE INTERSECTION DETAIL SHEET 85 FOR PROPOSED DETAILS WITHIN THE LIMITS OF THE INTERSECTION AND CURB RAMPS.

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	117+31.48	32.37' LT	602.76	602.76
B	117+44.41	42.35' LT	602.69	602.69
C	117+37.64	32.36' LT	602.88	603.28
D	117+50.57	42.34' LT	602.81	603.21
E	117+53.70	32.84' LT	602.78	603.18
F	117+65.00	36.57' LT	602.74	602.74
G	117+61.87	46.07' LT	602.77	602.77
H	117+49.40	31.42' LT	602.74	603.14
I	117+44.31	32.35' LT	602.80	603.20
J	117+43.08	29.72' LT	602.71	603.11
K	117+47.60	27.59' LT	602.64	602.64
L	117+41.93	27.28' LT	602.68	602.68

LEGEND

- PROPOSED DEPRESSED CURB AND GUTTER
- TURNING SPACE
- TC TOP OF CURB ELEVATION
- SW SIDEWALK ELEVATION
- GUTTER DRAINAGE PATTERN
- FLOW SUMMIT
- XXX.XX FL GUTTER FLOW LINE ELEVATION
- XXX.XX EOP EDGE OF PAVEMENT ELEVATION



USER NAME : atanner	DESIGNED - DSH	REVISOR -
	DRAWN - DSH	REVISOR -
PLOT SCALE = 1/8" = 1'	CHECKED - RAG	REVISOR -
PLOT DATE = 5/4/2021	DATE -	REVISOR -

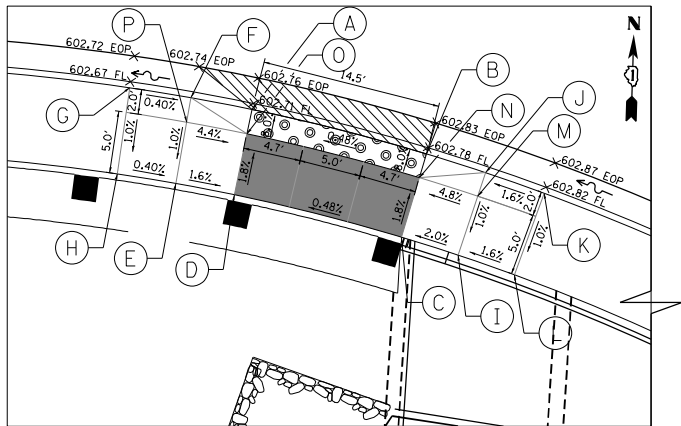
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (CAL SAG ROAD) OVER TINLEY CREEK (AT 127TH STREET)
PROPOSED ADA RAMP DETAILS - ISLANDS

SCALE:	SHEET OF SHEETS STA. TO STA.	P.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		344	30348&N-2	COOK	207	102
					CONTRACT NO. 60X74	
					ILLINOIS FED. AID PROJECT	

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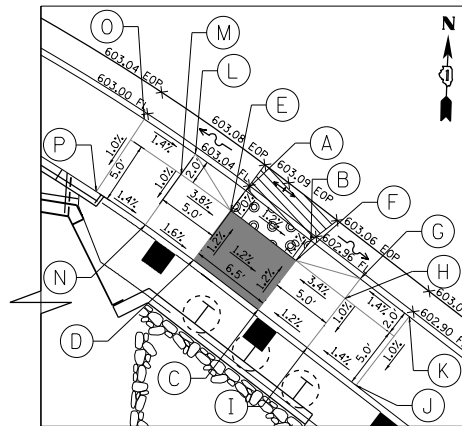
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SOUTH SIDEWALK RAMP - LOCATION 1

STANDARD 424001

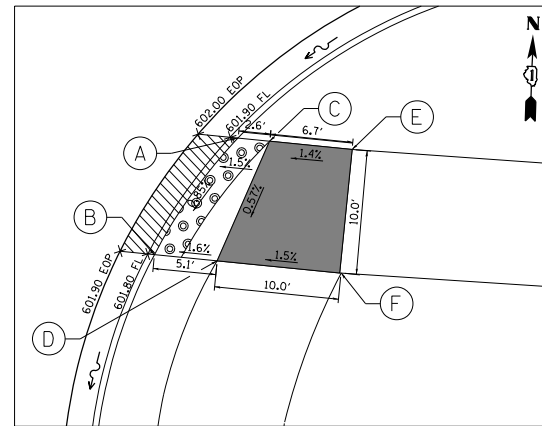
POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	116+37.88	59.38' RT	602.75	602.75
B	116+51.19	53.62' RT	602.82	602.82
C	116+53.68	60.16' RT	603.07	-
D	116+40.94	65.68' RT	603.00	-
E	116+36.66	67.83' RT	603.08	-
F	116+33.42	61.63' RT	603.15	603.15
G	116+29.02	64.01' RT	603.17	603.17
H	116+32.45	70.11' RT	603.10	-
I	116+58.19	58.51' RT	603.17	-
J	116+55.88	51.90' RT	603.24	603.24
K	116+60.63	50.33' RT	603.32	603.32
L	116+62.73	57.01' RT	603.25	-
M	116+56.54	53.79' RT	603.22	-
N	116+51.90	55.49' RT	602.98	-
O	116+38.76	61.18' RT	602.91	-
P	116+34.34	63.40' RT	603.13	-



SOUTH SIDEWALK RAMP - LOCATION 2

STANDARD 424001

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	117+08.60	42.60' RT	603.08	603.08
B	117+15.23	42.58' RT	603.00	603.00
C	117+15.23	49.58' RT	603.20	-
D	117+08.70	49.60' RT	603.28	-
E	117+08.63	44.60' RT	603.22	-
F	117+15.23	44.58' RT	603.14	-
G	117+08.70	42.58' RT	603.33	603.33
H	117+20.23	44.58' RT	603.31	-
I	117+20.23	49.58' RT	603.26	-
J	117+25.23	49.58' RT	603.33	-
K	117+25.23	42.58' RT	603.40	603.40
L	117+03.60	42.75' RT	603.43	603.43
M	117+03.69	44.74' RT	603.41	-
N	117+03.91	49.74' RT	603.36	-
O	116+98.61	43.04' RT	603.50	603.50
P	116+99.12	49.91' RT	603.43	-



SOUTHEAST SIDEWALK RAMP

STANDARD 424001

POINT	STATION	OFFSET	SW ELEV	TC ELEV
A	118+06.02	73.29' LT	601.94	601.94
B	118+06.42	61.75' LT	601.84	601.84
C	118+08.20	74.65' LT	601.98	-
D	118+10.73	64.44' LT	601.92	-
E	118+13.85	78.18' LT	602.07	-
F	118+19.24	69.76' LT	602.07	-

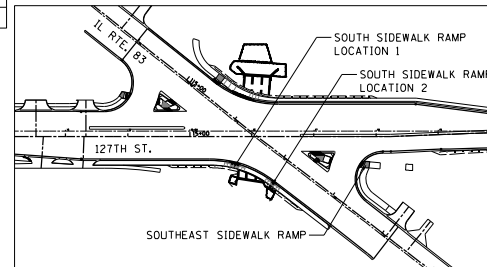
NOTES:

- STATIONS AND OFFSETS REFERENCE PROPOSED CAL SAG RD (IL RTE 83) CENTERLINE
- SEE INTERSECTION DETAIL SHEET 85 FOR PROPOSED DETAILS WITHIN THE LIMITS OF THE INTERSECTION AND CURB RAMPS.

LEGEND

- PROPOSED DEPRESSED CURB AND GUTTER
- TURNING SPACE
- TC TOP OF CURB ELEVATION
- SW SIDEWALK ELEVATION
- GUTTER DRAINAGE PATTERN
- FLOW SUMMIT
- XXX.XX FL GUTTER FLOW LINE ELEVATION
- XXX.XX EOP EDGE OF PAVEMENT ELEVATION

LOCATION MAP



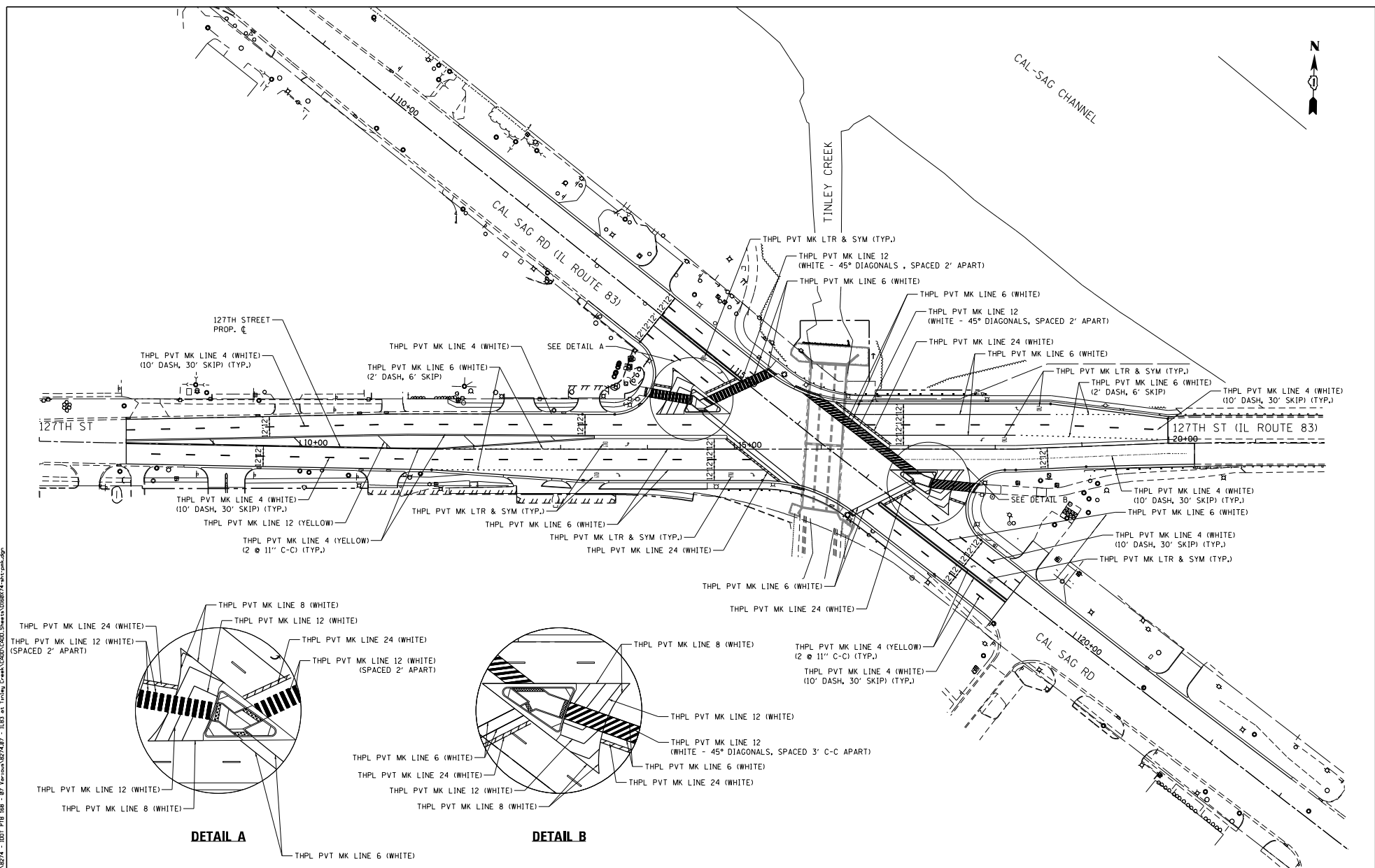
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	DRAWN - DSH	REVISED -
	CHECKED - RAG	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 83 (CAL SAG ROAD) OVER TINLEY CREEK (AT 127TH STREET)
PROPOSED ADA RAMP DETAILS - SOUTH**

SCALE: SHEET OF SHEETS STA. TO STA.

P.A.T. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	30348&N-2	COOK	207	103
				CONTRACT NO. 60X74
				ILLINOIS FED. AID PROJECT



FILE NAME: I:\274 - I\274 - 1001 P18 - 07 - 1103 at Tinley Creek\1001\1001.DWG
 USER: stanner
 DATE: 5/4/2021

COLLINS ENGINEERS

USER NAME : stanner
 DESIGNED - DSH
 DRAWN - DSH
 CHECKED - RAG
 DATE -
 PLOT SCALE = 1/8" = 1'-0"
 PLOT DATE = 5/4/2021

DESIGNED - DSH
 DRAWN - DSH
 CHECKED - RAG
 DATE -
 REVISIONS:

REVISIONS:

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

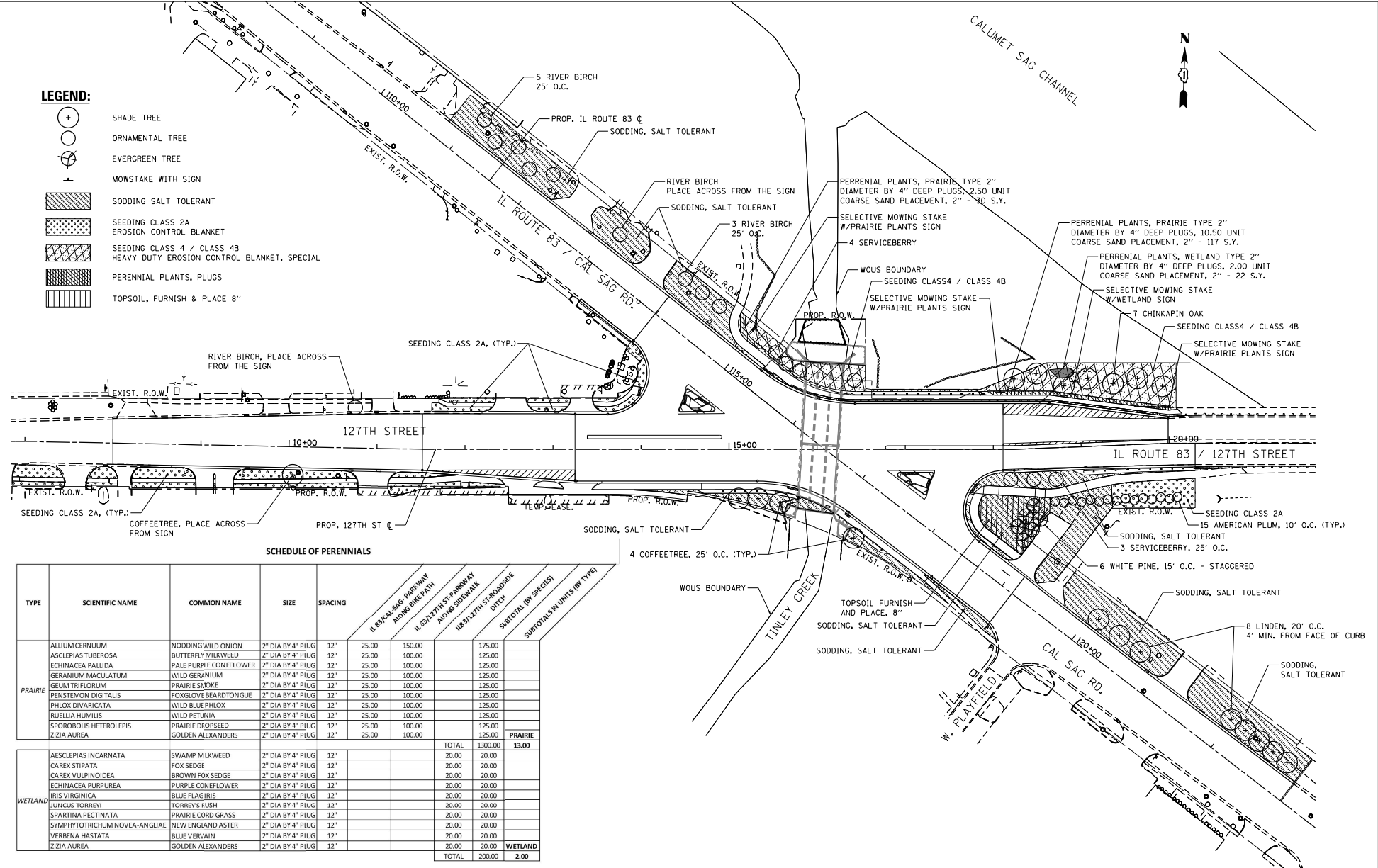
IL ROUTE 83 (CAL SAG ROAD) OVER TINLEY CREEK (AT 127TH STREET)
 PAVEMENT MARKING AND SIGNING PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

P.A.T. SITE	SECTION	COUNTY	TOTAL SHEET NO.
344	3034B&N-2	COOK	207 104
CONTRACT NO. 60X74			
ILLINOIS FED. AID PROJECT			

LEGEND:

- SHADE TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- MOWSTAKE WITH SIGN
- SODDING SALT TOLERANT
- SEEDING CLASS 2A
- EROSION CONTROL BLANKET
- SEEDING CLASS 4 / CLASS 4B
- HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL
- PERENNIAL PLANTS, PLUGS
- TOPSOIL, FURNISH & PLACE 8"



SCHEDULE OF PERENNIALS

TYPE	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	IL 83 / CAL SAG PARKWAY				SUBTOTAL (BY SPECIES)	
					ADJACENT BIKE PATH	ADJACENT BIKE PATH	ADJACENT BIKE PATH	ADJACENT BIKE PATH	ADJACENT BIKE PATH	ADJACENT BIKE PATH
PRAIRIE	ALLIUM CERNUUM	NODDING WILD ONION	2" DIA BY 4" PLUG	12"	25.00	150.00			175.00	
	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	ECHINACEA PALLIDA	PALE PURPLE CONEFLOWER	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	GERANIUM MACULATUM	WILD GERANIUM	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	GELUM TRIFLORUM	PRAIRIE SMOKE	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	PENSTEMON DIGITALIS	FOXGLOVE BEARDTONGUE	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	PHLOX DIVARICATA	WILD BLUE PHLOX	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	RUELLIA HUMILIS	WILD PETUNIA	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
	ZIZIA AUREA	GOLDEN ALEXANDERS	2" DIA BY 4" PLUG	12"	25.00	100.00			125.00	
									PRAIRIE	13.00
WETLAND	AESCLEPIAS INCARNATA	SWAMP MILKWEED	2" DIA BY 4" PLUG	12"				20.00	20.00	
	CAREX STIPATA	FOX SEDGE	2" DIA BY 4" PLUG	12"				20.00	20.00	
	CAREX VULPINOIDEA	BROWN FOX SEDGE	2" DIA BY 4" PLUG	12"				20.00	20.00	
	ECHINACEA PURPUREA	PURPLE CONEFLOWER	2" DIA BY 4" PLUG	12"				20.00	20.00	
	IRIS VIRGINICA	BLUE FLAG IRIS	2" DIA BY 4" PLUG	12"				20.00	20.00	
	JUNCUS TORREYI	TORREY'S FLUSH	2" DIA BY 4" PLUG	12"				20.00	20.00	
	SPARTINA PECTINATA	PRAIRIE CORO GRASS	2" DIA BY 4" PLUG	12"				20.00	20.00	
	SYMPHYOTRICHUM NOVEA-ANGLIAE	NEW ENGLAND ASTER	2" DIA BY 4" PLUG	12"				20.00	20.00	
	VERBENA HASTATA	BLUE VERVAIN	2" DIA BY 4" PLUG	12"				20.00	20.00	
	ZIZIA AUREA	GOLDEN ALEXANDERS	2" DIA BY 4" PLUG	12"				20.00	20.00	
									WETLAND	2.00
									TOTAL	200.00

FILE NAME: I:\18274 - I18274 - I01 P18 188 - 07 18274.dwg; User: J. L. DODD; Date: 5/4/2021; Plot: 5/4/2021 10:00:00 AM



USER NAME: jstanner	DESIGNED: DSH	REVISED: -
PLOT SCALE: 1/8" = 1'-0"	DRAWN: DSH	REVISED: -
PLOT DATE: 5/4/2021	CHECKED: RAG	REVISED: -
	DATE: -	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 83 (CAL SAG ROAD) OVER TINLEY CREEK (AT 127TH STREET)
LANDSCAPING PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

P.A.T. NO. 344	SECTION 303488N-2	COUNTY COOK	TOTAL SHEET NO. 207
			SHEET NO. 105
CONTRACT NO. 60X74			
ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLEF CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMEINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HFA)			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PERFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								



R. D. Patel
5/7/2021
RASHESHKUMAR D. PATEL, P.E. DATE
LICENSE NO.: 062-064617
EXPIRES: 11-30-2021
SHEETS: 106-127

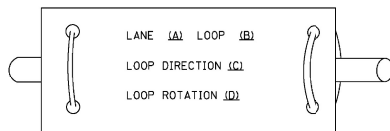
4-TS-SHT 01.dgn

FILE NAME =	USER NAME = plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS	DISTRICT ONE	P.A.U. FILE #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	1587	3034B&N	COOK	207	106
Default	PLOT SCALE = 100,0000 "/> <td>CHECKED - LP</td> <td>REVISED -</td> <td></td> <td></td> <td></td> <td>TS-05</td> <td></td> <td></td> <td>CONTRACT NO. 60X74</td>	CHECKED - LP	REVISED -				TS-05			CONTRACT NO. 60X74
	PLOT DATE = 6/10/2016	DATE = 6/8/2016	REVISED -			SCALE: NONE	SHEET 1	OF 7	SHEETS	STA. TO STA.
										ILLINOIS FED. AID PROJECT

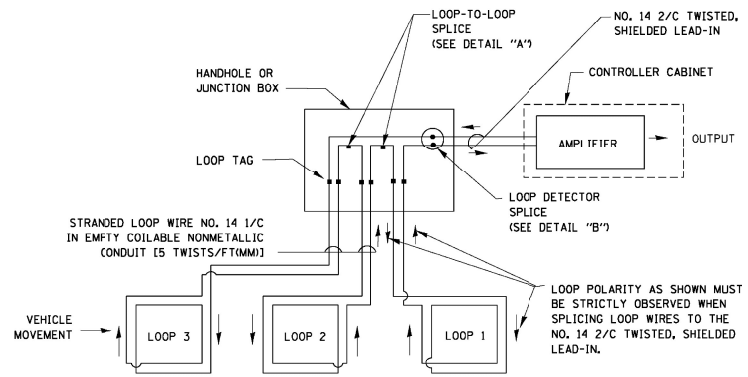
LOOP DETECTOR NOTES

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES 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.
- 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.
- 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

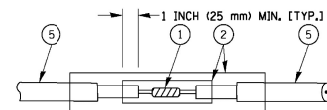


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

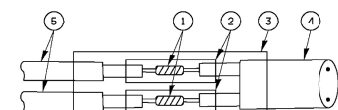


DETECTOR LOOP WIRING SCHEMATIC

- 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.

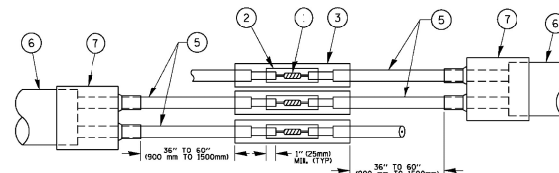


DETAIL "A"
LOOP-TO-LOOP SPLICE

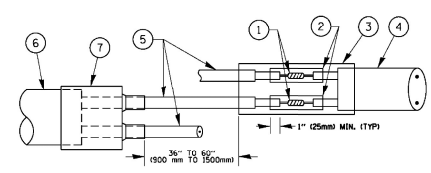


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

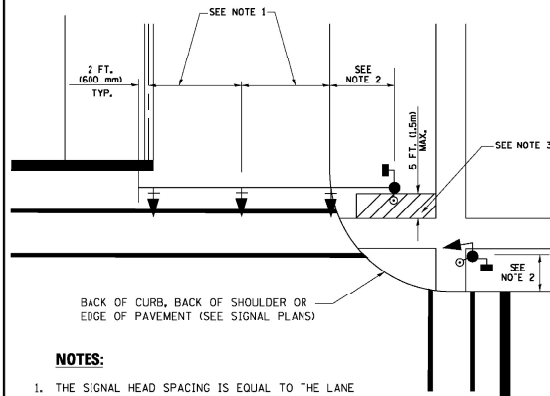
LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PREFORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

4-15-Smt 02.dgn

FILE NAME =	USER NAME = foatenj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.J. SITE = 1587	SECTION = 3034B&N	COUNTY = COOK	TOTAL SHEETS = 207	SHEET NO. = 107
PLDT SCALE = 50:0000 1/2" = 1'	CHECKED - DAD	REVISED -	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	TS-05		CONTRACT NO. 60X74	
PLDT DATE = 1/13/2014	DATE = 10-28-09	REVISED -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

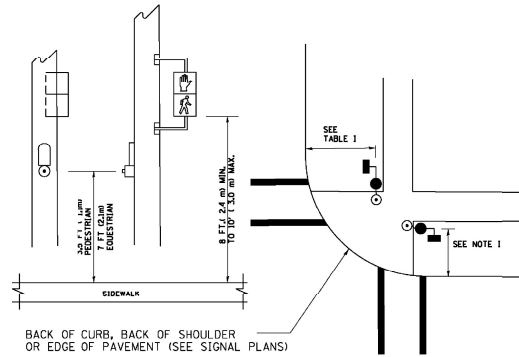
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA, INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

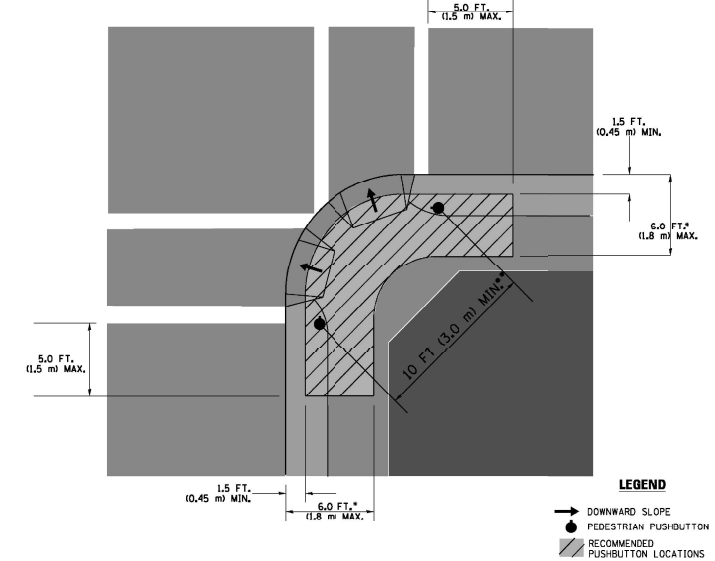
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



- 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) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

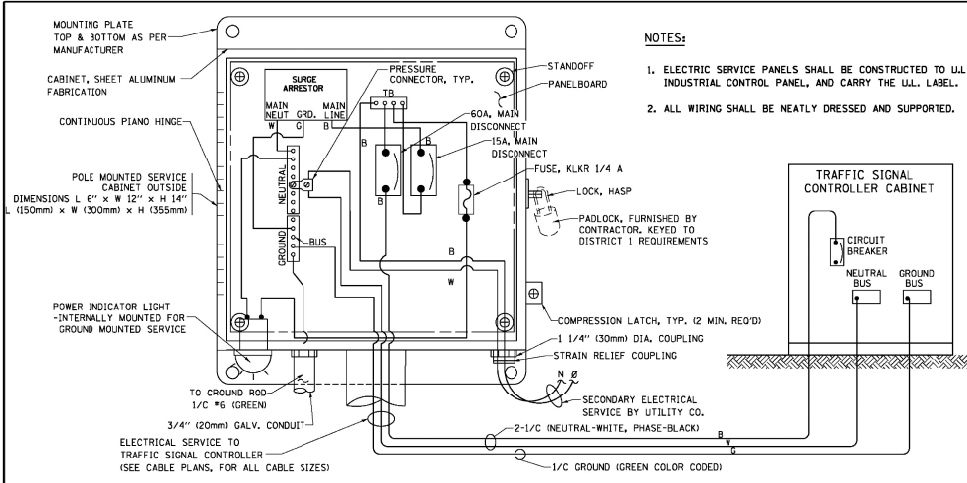
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

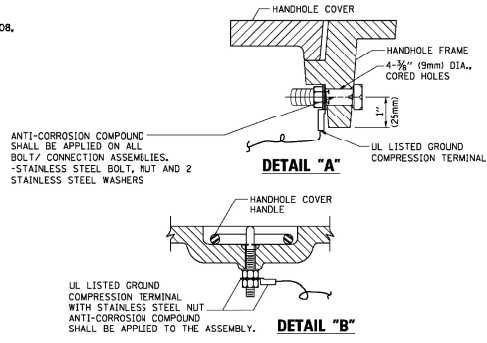
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT 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.

4115-SMT 03.dgn

FILE NAME =	USER NAME = foatanj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.U. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO: 108	
DRAWN - BCK	CHECKED - DAD	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 7 SHEETS	STA. TO STA.	TS-05 CONTRACT NO. 60X74				
PL01 SCALE = 50.00000 1/16"					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
PL01 DATE = 1/13/2014												

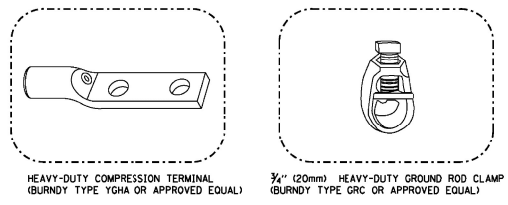
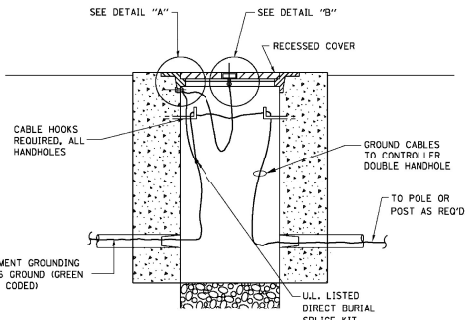


- NOTES:**
1. ELECTRICAL SERVICE PANELS SHALL BE CONSTRUCTED TO ULL STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE ULL LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



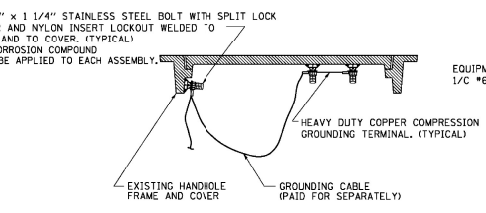
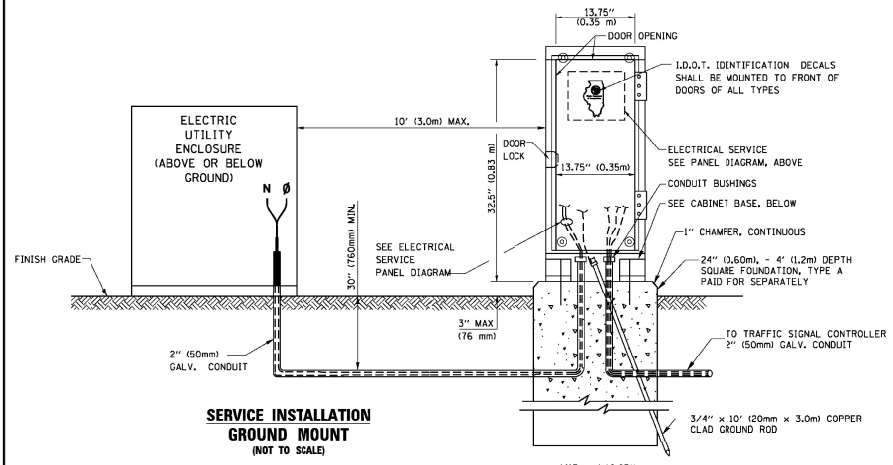
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)

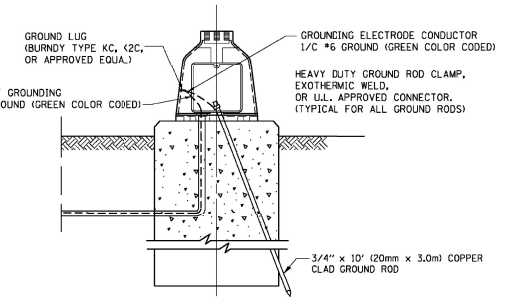


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



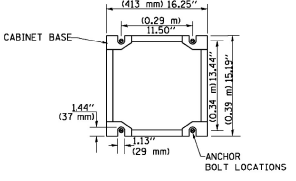
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

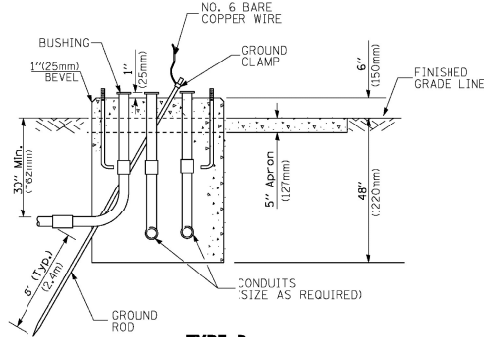
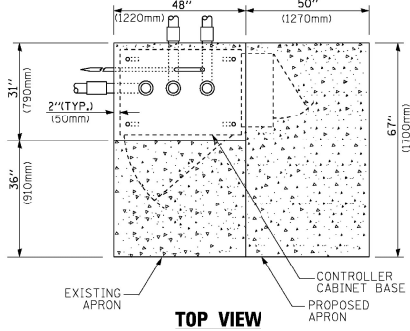
CABINET - BASE BOLT PATTERN (NOT TO SCALE)



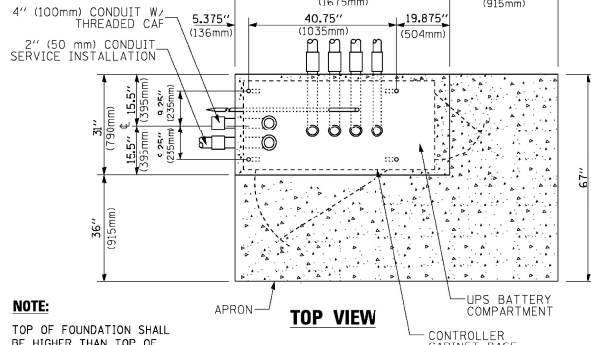
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	PLDT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

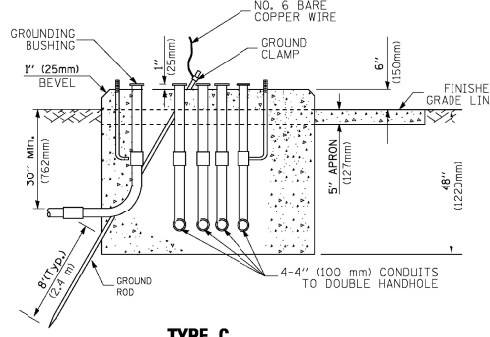
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.U. SITE	SECTION	COUNTY	TOTAL SHEET NO.
		1587	3034B&N	COOK	207 109
SCALE: NONE SHEET NO. 4 OF 7 SHEETS STA. TO STA.		TS-05		CONTRACT NO. 60X74	
		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



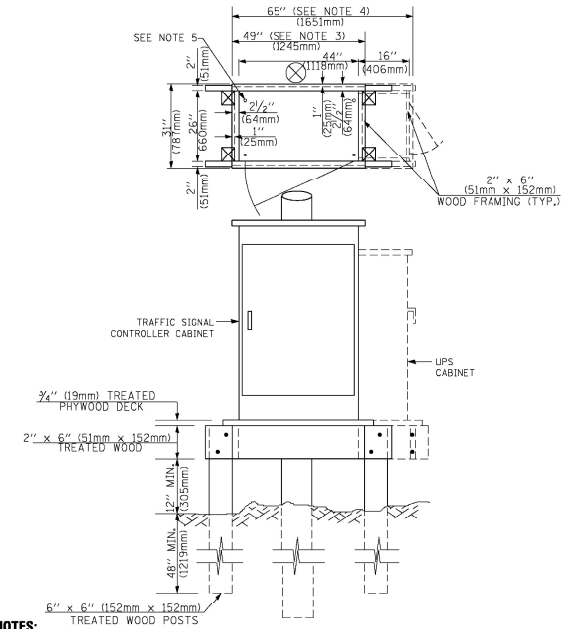
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



- NOTES:**
- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 - 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.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 - 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.
 - 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	1.5	0.5
CONTROLLER CABINET	13.0	4.0
FIBER OPTIC AT CABINET	1.5	0.5
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - (DISTANCE TO SIGNAL HEAD FROM END OF ARM))	20.0-41	6.0-12.4
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

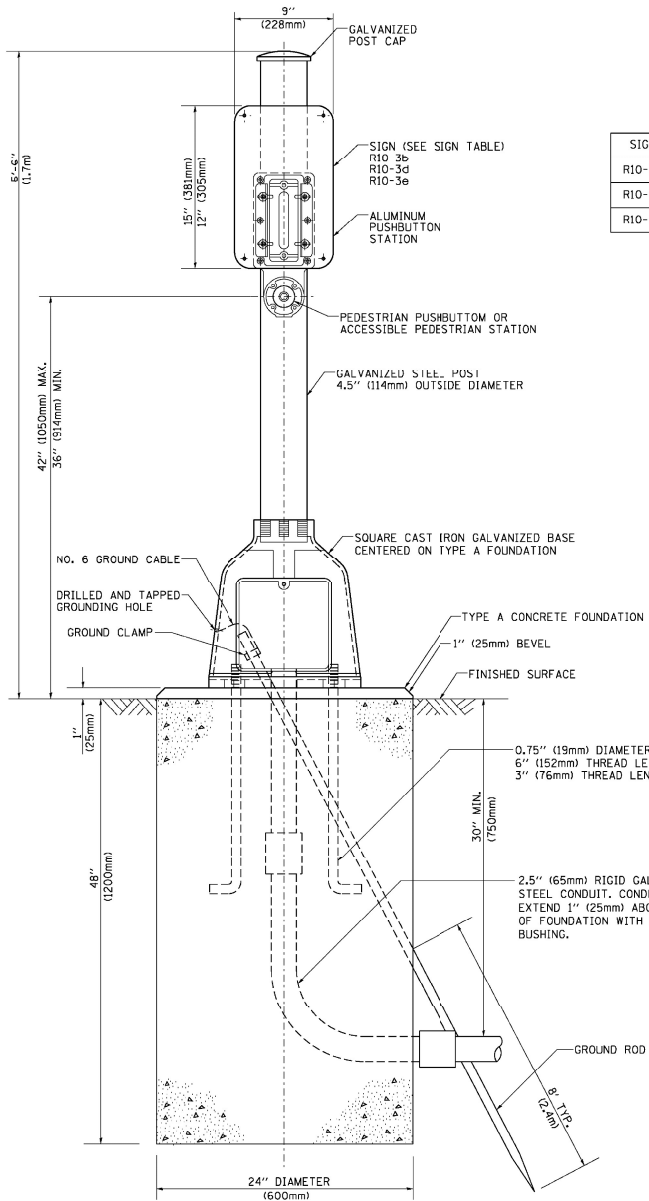
DEPTH OF FOUNDATION

MAST ARM LENGTH	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 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- NOTES:**
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (q_u) > 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.
 - Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 - Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 - For mast arm assemblies with dual arms refer to state standard 878001.

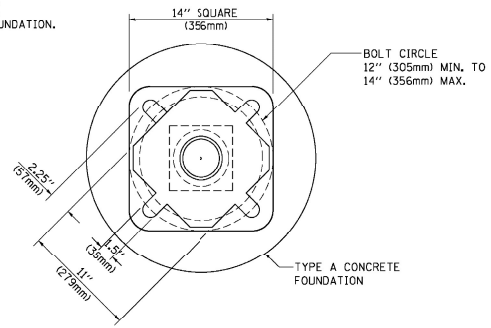
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = FastenJ	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.J. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 110
DRAWN - BCK	CHECKED - DAD	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7	TOTAL SHEETS: STA. TO STA.	TS-05		CONTRACT NO. 60X74	
PL01 SCALE = 50:0000 1/4" = 1'-0"	PL01 DATE = 1/13/2014	DATE -	REVISED -		SHEET NO. 5 OF 7		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



SIGN TABLE

SIGN	DIMENSIONS
R10-3b R10-3c R10-3d R10-3e	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

4-15-5nt 07.dgn

FILE NAME =	USER NAME = FastenJ	DESIGNED - DAG	REVISIONS - DAG 1-1-14
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	PLDT DATE = 1/13/2014	DATE - 10/1/2012	REVISIONS -

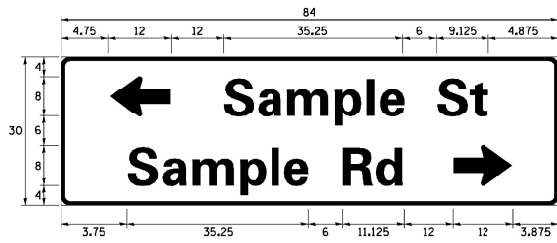
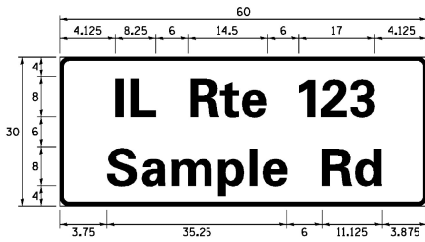
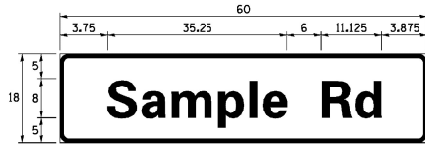
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.J. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	3034B&N	COOK	207	112
TS-05		CONTRACT NO. 60X74		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1 OR TYPE 2



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

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Bldvd	17.125	20.000
CIRCLE	Cr	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- 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" x 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)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" 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.
- 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 THERE IS SPACE AVAILABLE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA

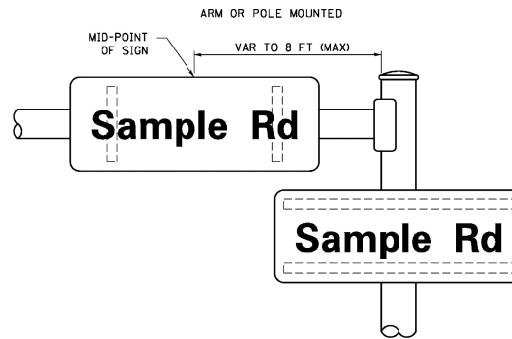
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

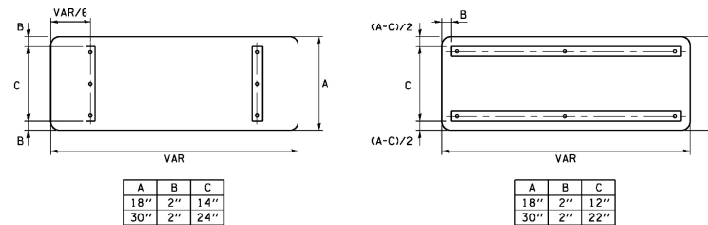
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER PART #HPN034 (UNIVERSAL)
BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART
(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"			FHWA SERIES "D"				
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	CHARACTER	LEFT SPACING (INCH)	RIGHT SPACING (INCH)		
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.492	0.480	B	0.960	5.446	0.400
C	0.720	4.492	0.720	C	0.800	5.446	0.800
D	0.880	4.492	0.720	D	0.960	5.446	0.800
E	0.880	4.092	0.480	E	0.960	4.962	0.400
F	0.880	4.092	0.240	F	0.960	4.962	0.240
G	0.720	4.492	0.720	G	0.800	5.446	0.800
H	0.880	4.492	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.092	0.880	J	0.240	5.122	0.960
K	0.880	4.492	0.480	K	0.960	5.604	0.400
L	0.880	4.092	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.492	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.492	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.492	0.480	R	0.960	5.446	0.400
S	0.480	4.492	0.480	S	0.400	5.446	0.400
T	0.240	4.092	0.240	T	0.240	4.962	0.240
U	0.880	4.492	0.880	U	0.960	5.446	0.960
V	0.240	4.952	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	4.492	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.092	0.480	b	0.800	4.802	0.480
c	0.480	4.032	0.240	c	0.480	4.722	0.240
d	0.480	4.032	0.720	d	0.480	4.802	0.800
e	0.480	4.092	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.092	0.720	g	0.480	4.802	0.800
h	0.720	4.092	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	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
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.092	0.640	n	0.800	4.722	0.720
o	0.480	4.092	0.480	o	0.480	4.882	0.480
p	0.720	4.092	0.480	p	0.800	4.802	0.480
q	0.480	4.092	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	3.352	0.240	s	0.320	3.762	0.240
t	0.080	2.892	0.080	t	0.080	3.202	0.080
u	0.640	4.092	0.720	u	0.720	4.722	0.800
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
x	0.000	5.222	0.000	x	0.000	6.244	0.000
y	0.160	4.952	0.160	y	0.160	6.004	0.160
z	0.240	3.352	0.240	z	0.240	4.002	0.240
1	0.720	1.630	0.880	1	0.800	2.000	0.960
2	0.480	4.492	0.480	2	0.800	6.446	0.800
3	0.480	4.492	0.480	3	1.440	5.446	0.800
4	0.240	4.952	0.720	4	0.160	6.004	0.960
5	0.480	4.492	0.480	5	0.800	5.446	0.800
6	0.720	4.492	0.720	6	0.800	5.446	0.800
7	0.240	4.492	0.720	7	0.560	5.446	0.560
8	0.480	4.492	0.480	8	0.800	5.446	0.800
9	0.480	4.492	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

4" IS-SHT 08.dgn

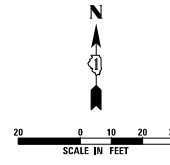
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SWP/Design/Manuals and Reference Materials/CADD/Details/1882.dgn		DRAWN - LP	REVISED -
		CHECKED - IP	REVISED -
		DATE - 10/01/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

F.A.U. SITE: 1587	SECTION: 303488N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 113
TS-02		CONTRACT NO. 60X74		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



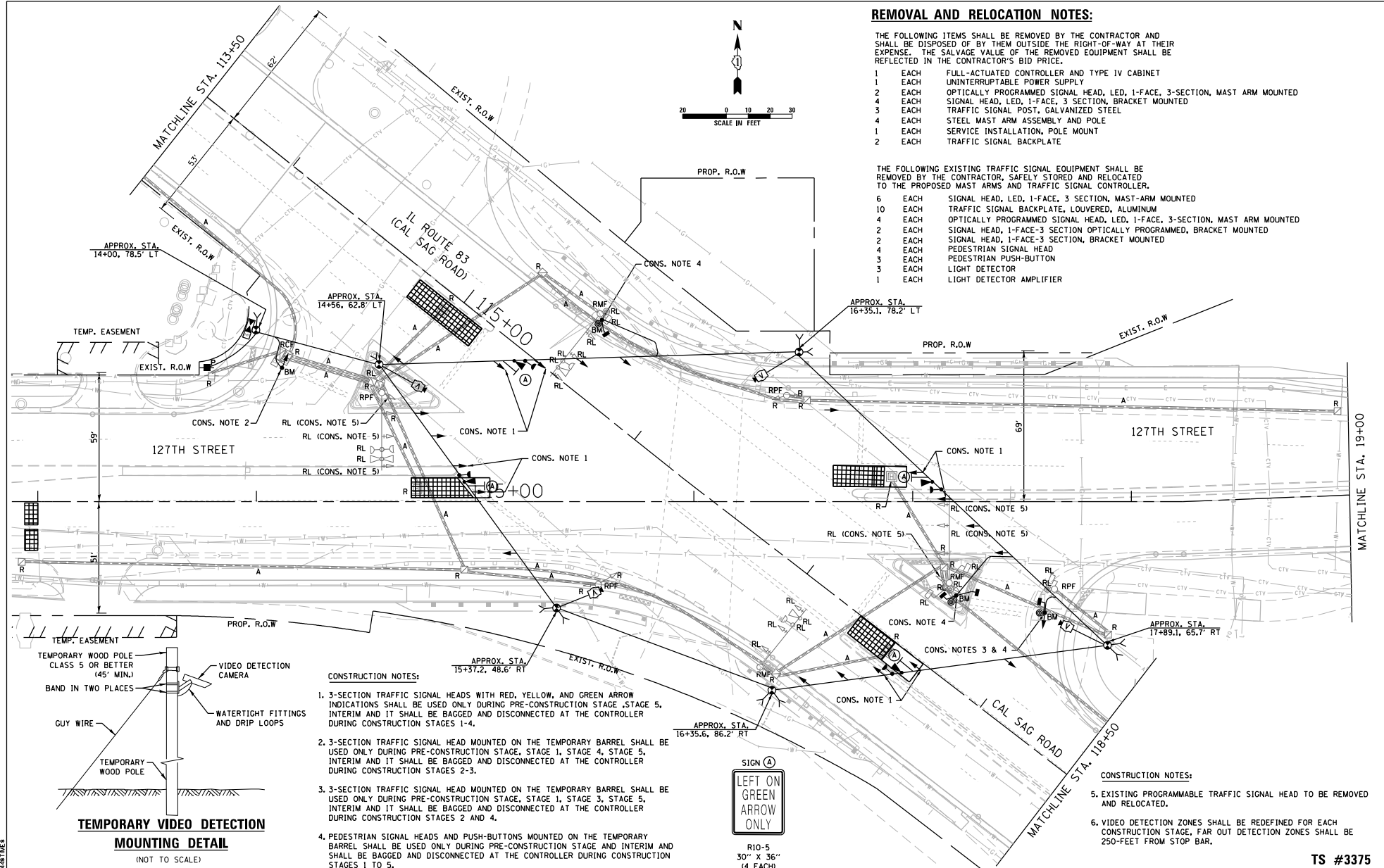
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACTOR'S BID PRICE.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH UNINTERRUPTABLE POWER SUPPLY
- 2 EACH OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 4 EACH SIGNAL HEAD, LED, 1-FACE, 3 SECTION, BRACKET MOUNTED
- 3 EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION, POLE MOUNT
- 2 EACH TRAFFIC SIGNAL BACKPLATE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER.

- 6 EACH SIGNAL HEAD, LED, 1-FACE, 3 SECTION, MAST ARM MOUNTED
- 10 EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
- 4 EACH OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE-3 SECTION OPTICALLY PROGRAMMED, BRACKET MOUNTED
- 2 EACH SIGNAL HEAD, 1-FACE-3 SECTION, BRACKET MOUNTED
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

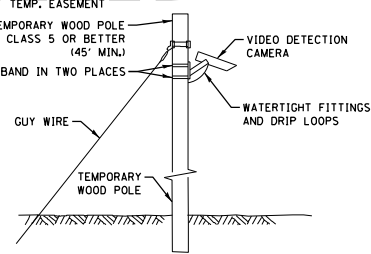


CONSTRUCTION NOTES:

1. 3-SECTION TRAFFIC SIGNAL HEADS WITH RED, YELLOW, AND GREEN ARROW INDICATIONS SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 1-4.
2. 3-SECTION TRAFFIC SIGNAL HEAD MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE 1, STAGE 4, STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 2-3.
3. 3-SECTION TRAFFIC SIGNAL HEAD MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE 1, STAGE 3, STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 2 AND 4.
4. PEDESTRIAN SIGNAL HEADS AND PUSH-BUTTONS MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE AND INTERIM AND SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 1 TO 5.

CONSTRUCTION NOTES:

5. EXISTING PROGRAMMABLE TRAFFIC SIGNAL HEAD TO BE REMOVED AND RELOCATED.
6. VIDEO DETECTION ZONES SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE, FAR OUT DETECTION ZONES SHALL BE 250-FEET FROM STOP BAR.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)



R10-5
30" X 36"
14 EACH

TS #3375

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
IL ROUTE 83 AT 127TH ST (SHEET 1 OF 2)

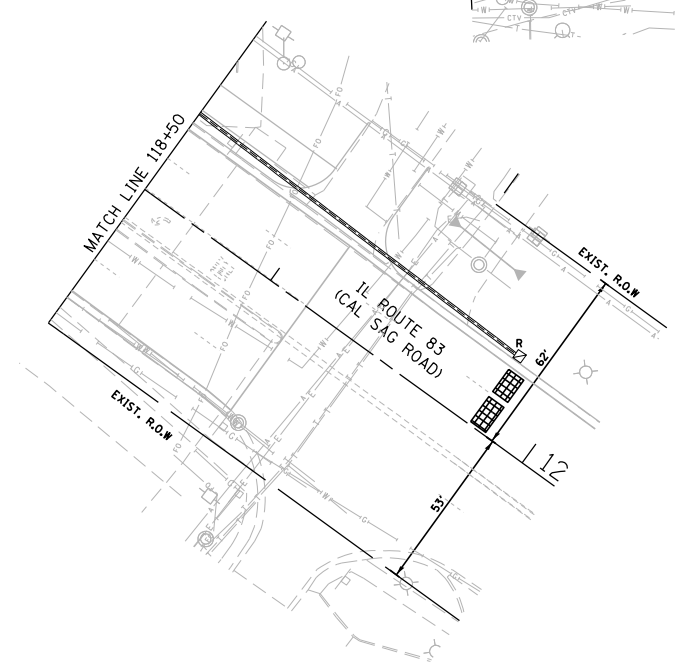
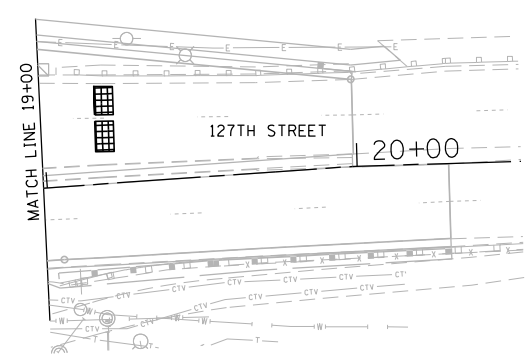
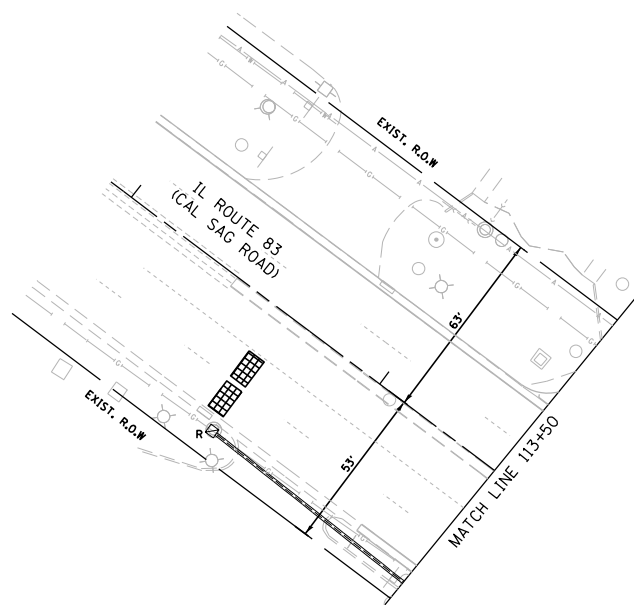
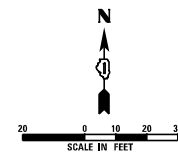


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	DATE - 1/24/2018	REVISED -

SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.U. DIST. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 114
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	

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 24-JAN-2018 15:11 8 TIME

SINGH
 SINGH ASSOCIATES INC.
 CONSULTING ENGINEERS

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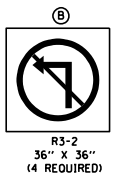
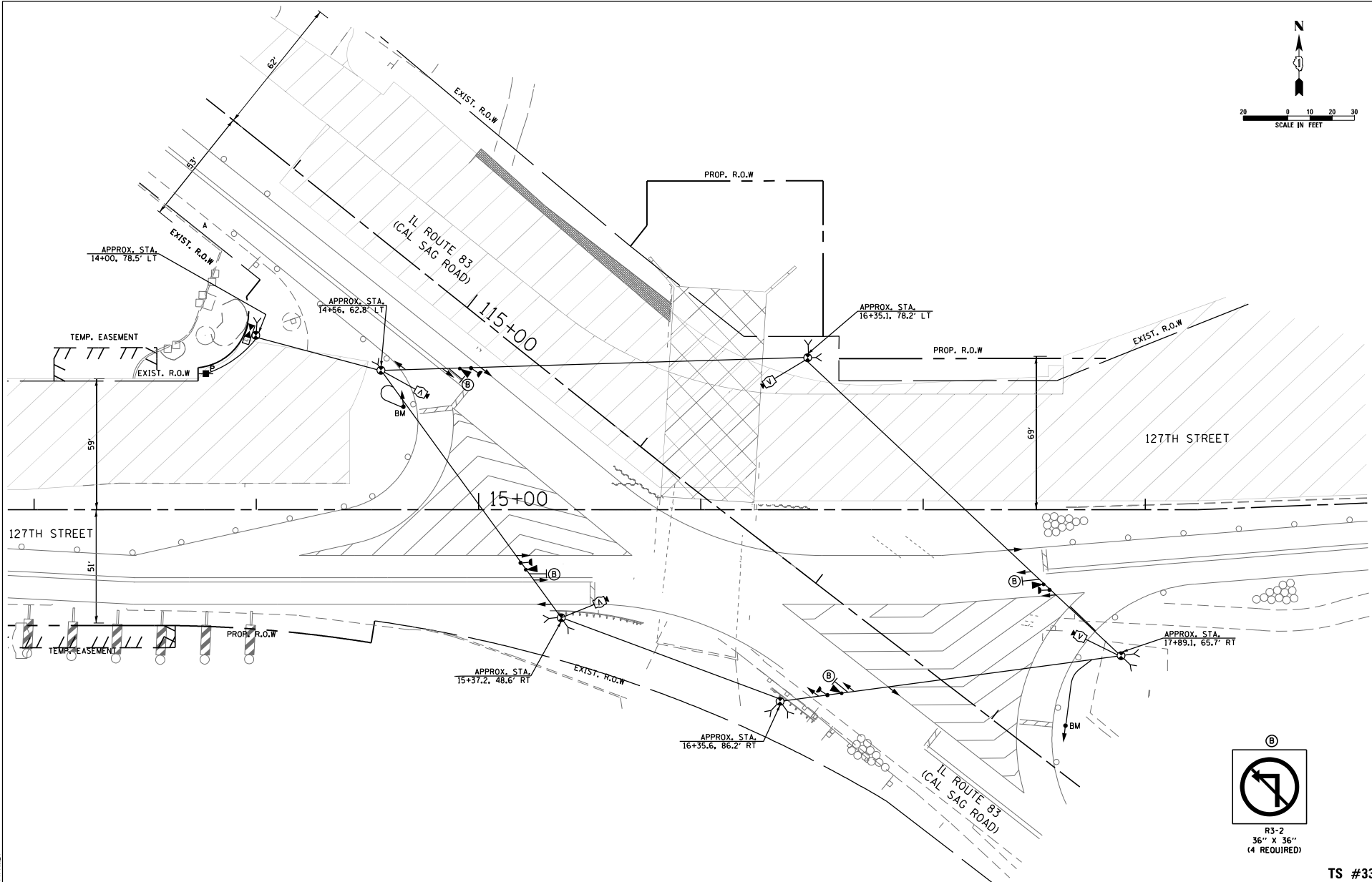
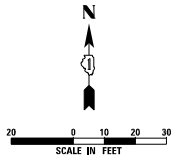
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
 IL ROUTE 83 AT 127TH ST (SHEET 2 OF 2)

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

F.A.J. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 115
			CONTRACT NO. 60X74	
ILLINOIS FED. AID PROJECT				

TS #3375



TS #3375

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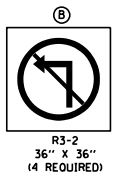
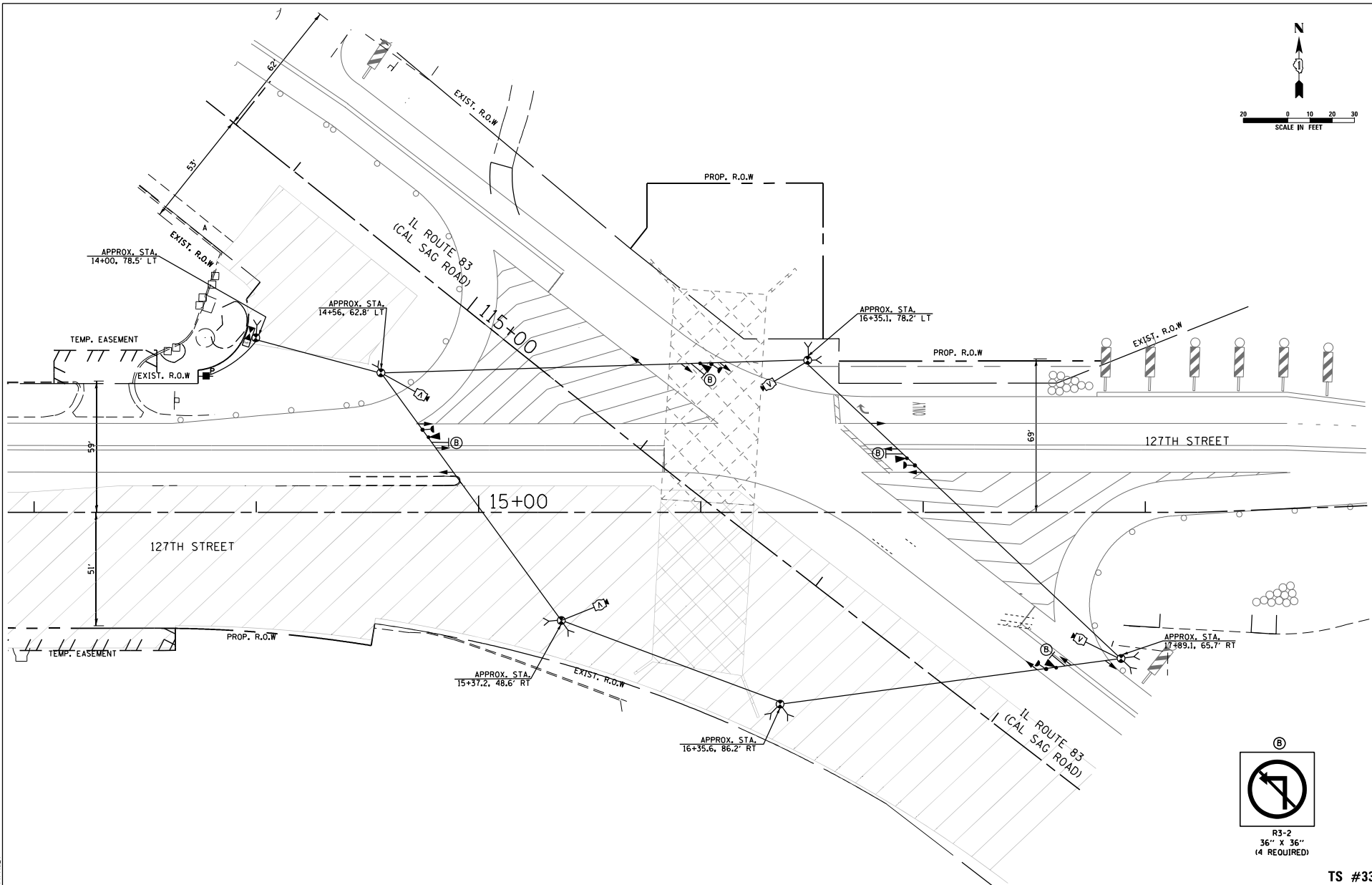
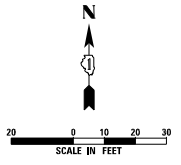
SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

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	DATE - 1/24/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION
 STAGE 1
 IL ROUTE 83 AT 127TH ST

P.A.U. R.T.E. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 116
SCALE: AS NOTED				SHEET NO. OF SHEETS
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74



TS #3375

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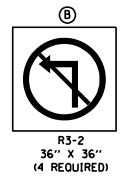
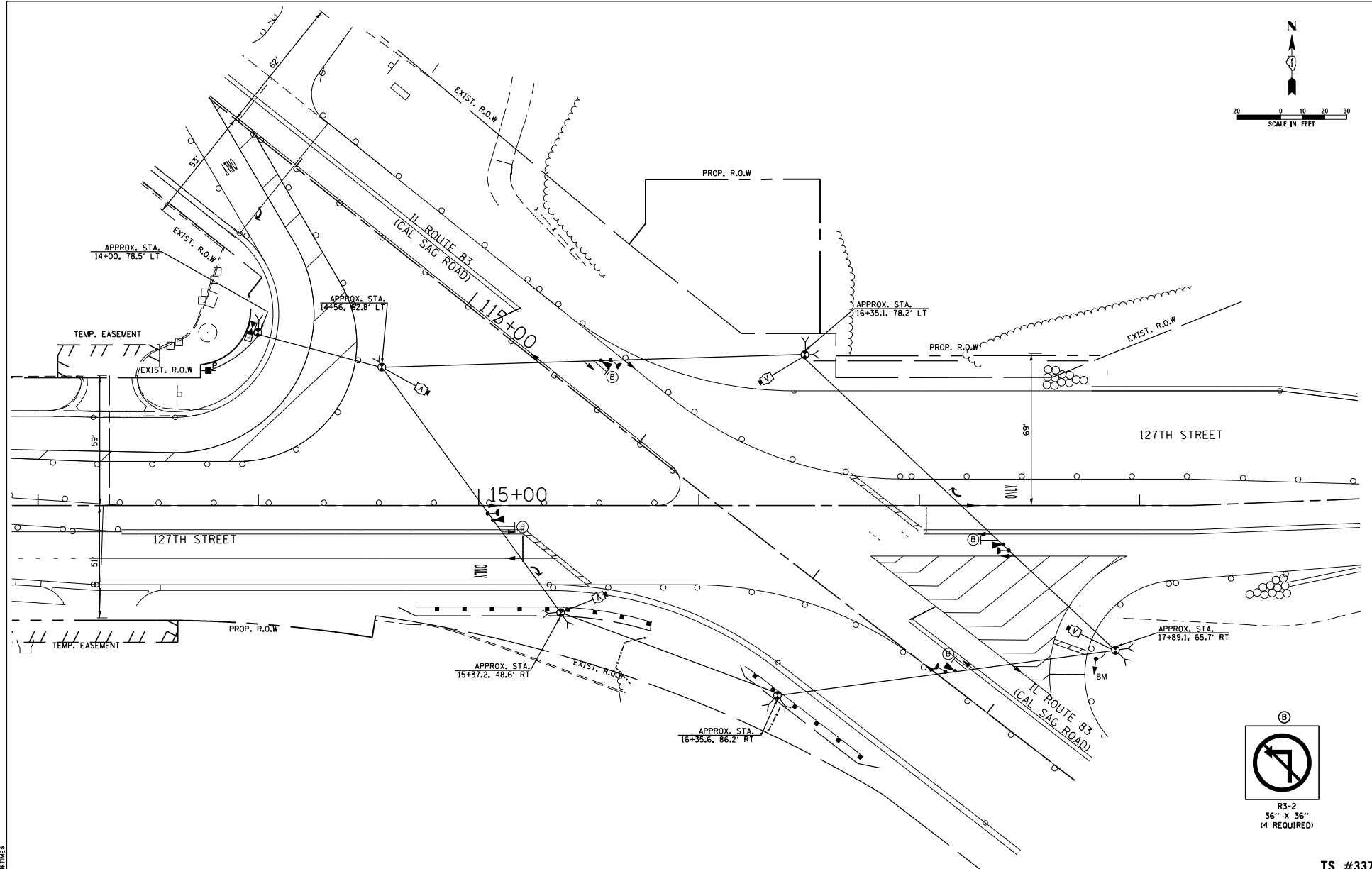
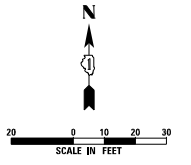
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 CONSULTING ENGINEERS

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION			
STAGE 2			
IL ROUTE 83 AT 127TH ST			
SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA. TO STA.

P.A.U. RITE: 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 117
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74



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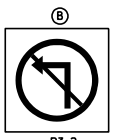
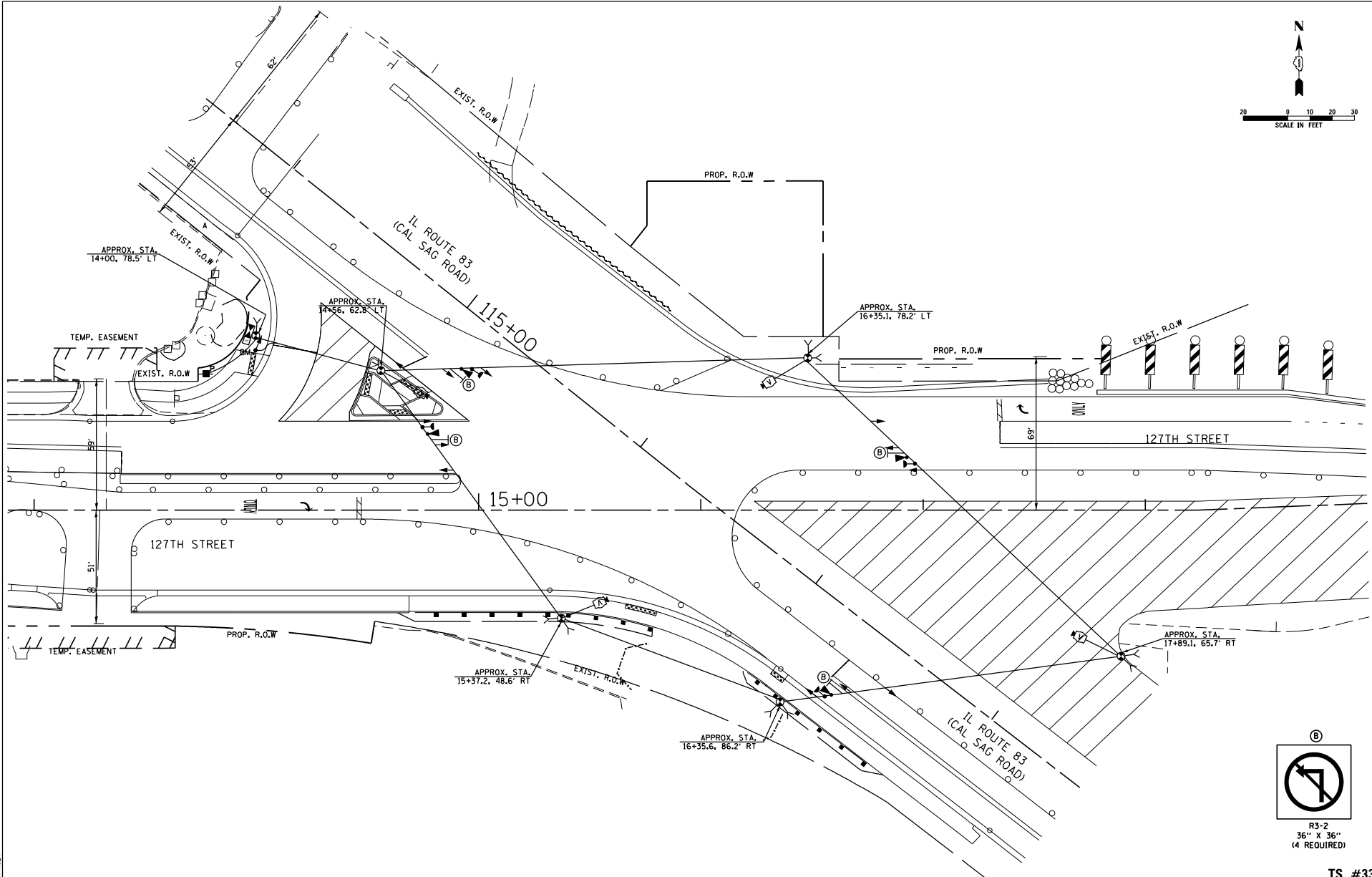
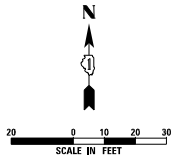
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 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION			
STAGE 3			
IL ROUTE 83 AT 127TH ST			
SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA. TO STA.

P.A.U. RITE: 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 118
ILLINOIS FED. AID PROJECT CONTRACT NO. 60X74				



R3-2
36" x 36"
(4 REQUIRED)

TS #3375

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CONSULTING ENGINEERS

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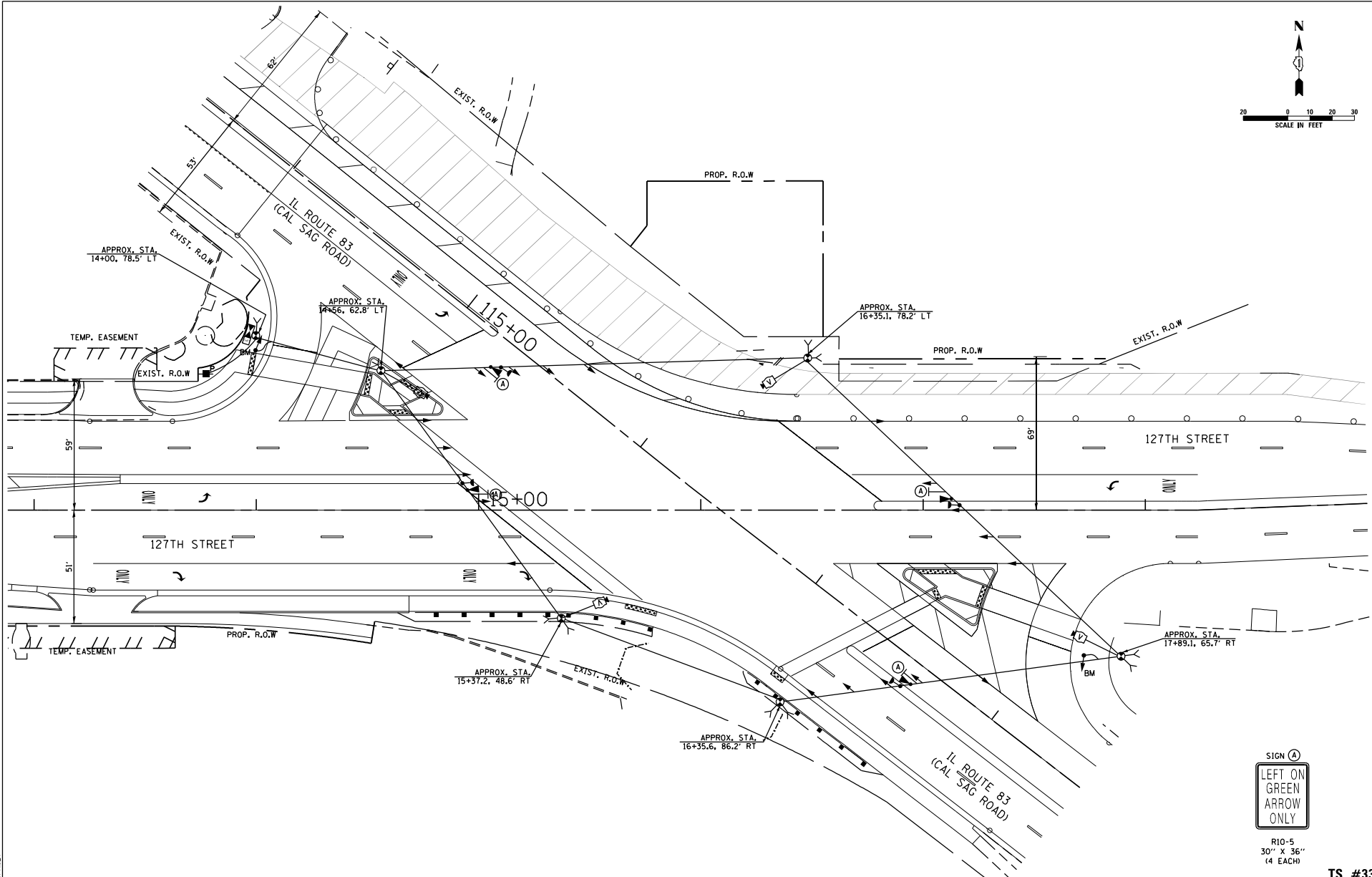
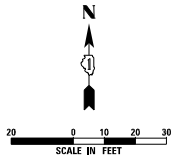
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION
 STAGE 4
 IL ROUTE 83 AT 127TH ST
 SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

P.A.U. RITE: 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 119
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	



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SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS

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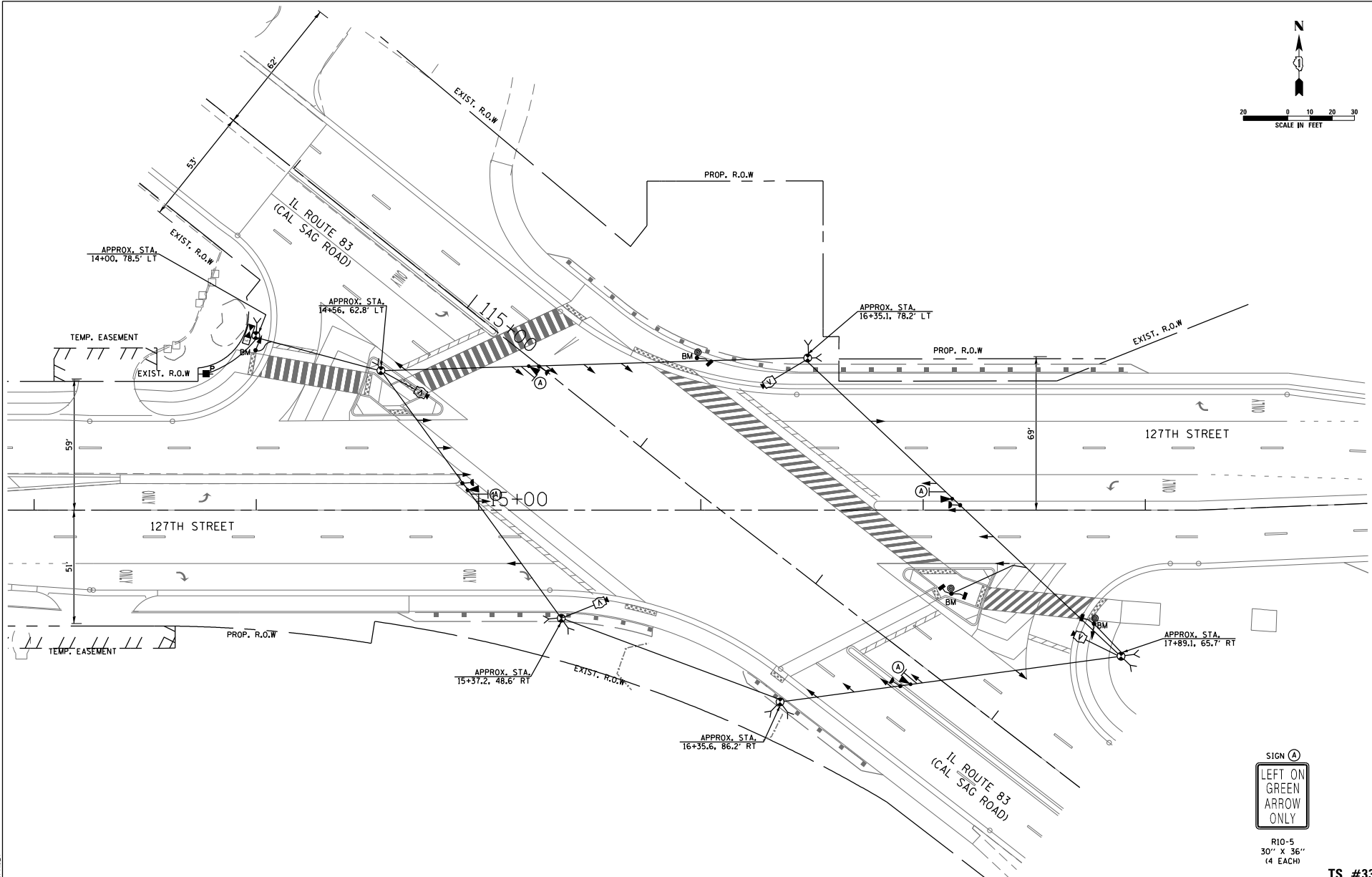
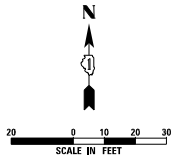
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DATE	1/24/2018	REVISED	-

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION
 STAGE 5
 IL ROUTE 83 AT 127TH ST
 SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

P.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	3034B&N	COOK	207	120
			CONTRACT NO. 60X74	
ILLINOIS FED. AID PROJECT				

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R10-5
30" x 36"
(4 EACH)

TS #3375

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SINGH & ASSOCIATES
CONSULTING ENGINEERS

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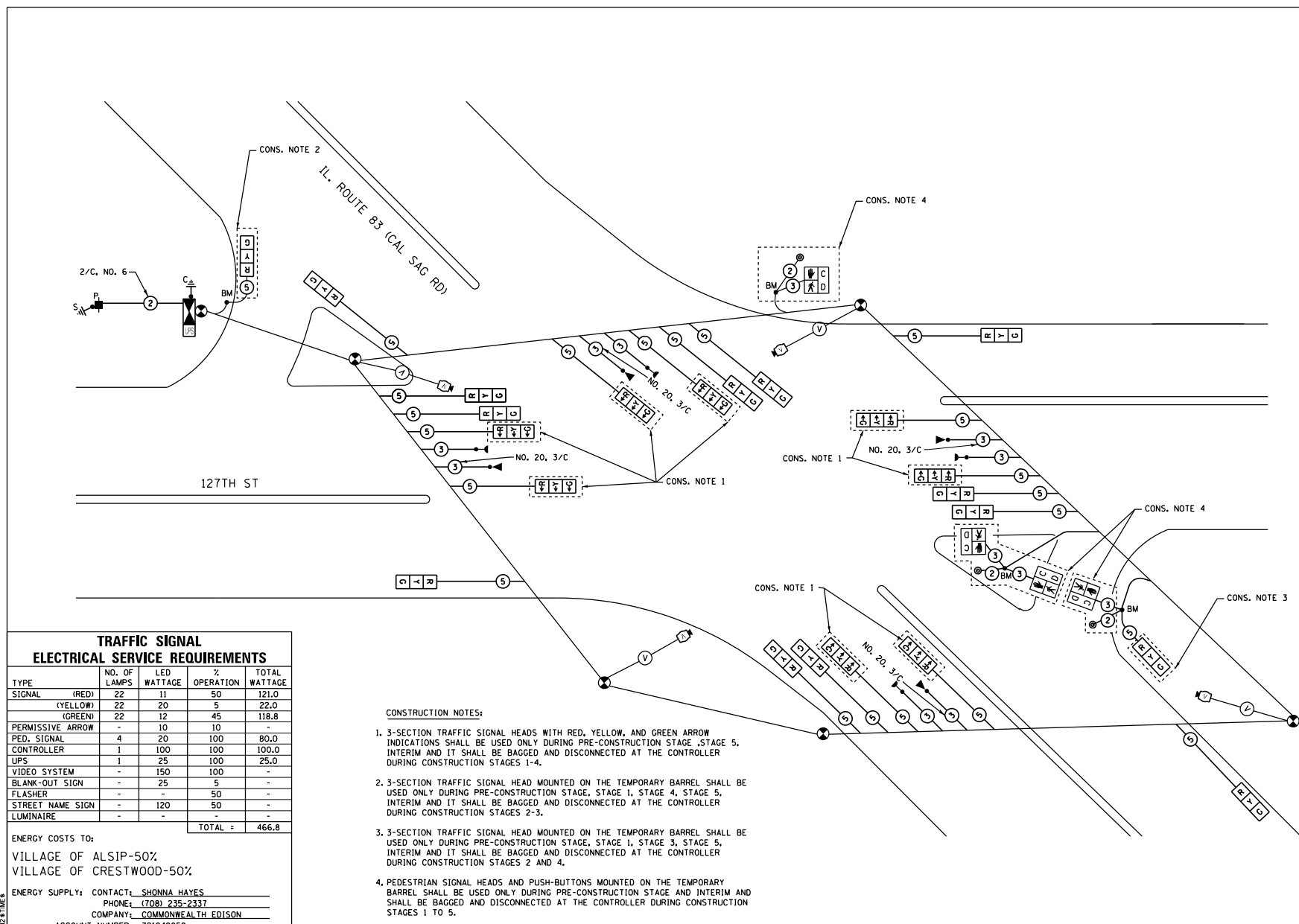
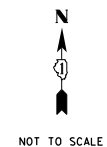
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION
 INTERIM
 IL ROUTE 83 AT 127TH ST
 SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

P.A.J. RTE. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEET NO. 207	SHEET NO. 121
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				466.8

ENERGY COSTS TO:
 VILLAGE OF ALSIP-50%
 VILLAGE OF CRESTWOOD-50%

ENERGY SUPPLY: CONTACT: SHONNA HAYES
 PHONE: (708) 235-2337
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 321049058

- CONSTRUCTION NOTES:
- 3-SECTION TRAFFIC SIGNAL HEADS WITH RED, YELLOW, AND GREEN ARROW INDICATIONS SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 1-4.
 - 3-SECTION TRAFFIC SIGNAL HEAD MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE, STAGE 1, STAGE 4, STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 2-3.
 - 3-SECTION TRAFFIC SIGNAL HEAD MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE, STAGE 1, STAGE 3, STAGE 5, INTERIM AND IT SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 2 AND 4.
 - PEDESTRIAN SIGNAL HEADS AND PUSH-BUTTONS MOUNTED ON THE TEMPORARY BARREL SHALL BE USED ONLY DURING PRE-CONSTRUCTION STAGE AND INTERIM AND SHALL BE BAGGED AND DISCONNECTED AT THE CONTROLLER DURING CONSTRUCTION STAGES 1 TO 5.

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 SINGH CONSULTING ENGINEERS



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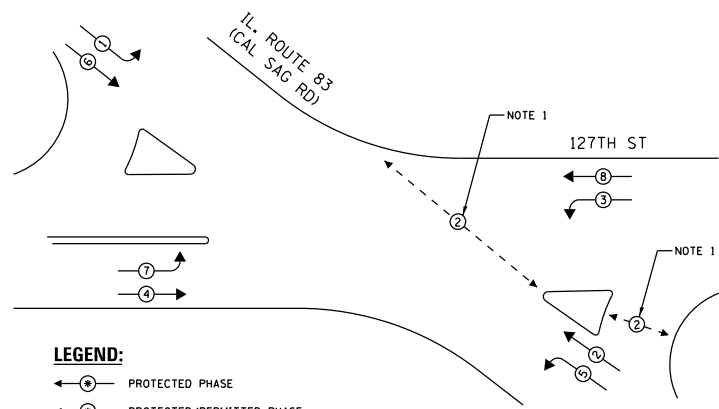
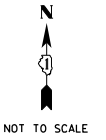
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN
 IL ROUTE 83 AT 127TH ST

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 122
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74

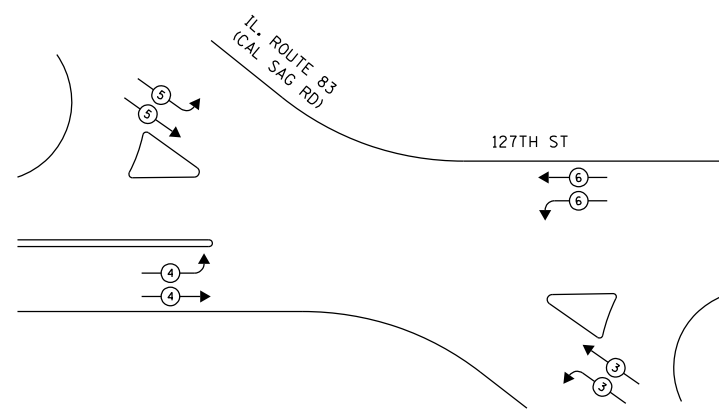
TS #3375



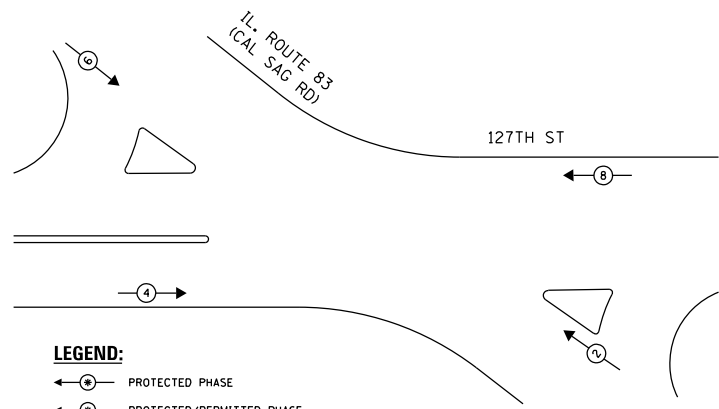
- LEGEND:**
- ← ⊕ → PROTECTED PHASE
 - ← ⊕ - PROTECTED/PERMITTED PHASE
 - ← ⊕ → PEDESTRIAN PHASE
 - ← ⊕ → DL OVERLAP

TEMPORARY PHASE DESIGNATION DIAGRAM
PRE-STAGE, STAGE 5, AND INTERIM
(NOT TO SCALE)

NOTE:
1. PEDESTRIAN PHASE IS APPLICABLE DURING PRE-STAGE AND INTERIM ONLY.

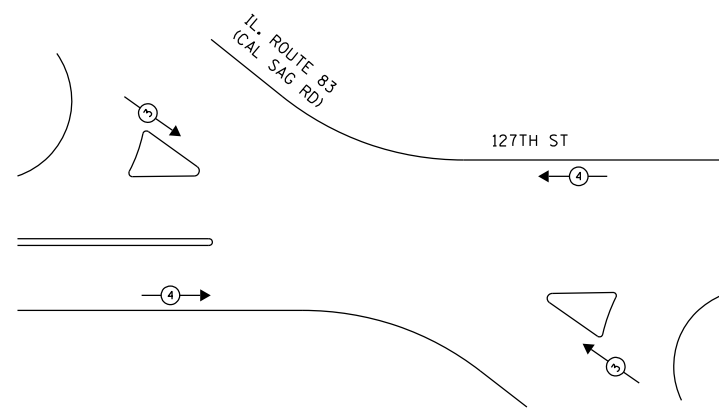


TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
PRE-STAGE, STAGE 5, AND INTERIM
(NOT TO SCALE)



- LEGEND:**
- ← ⊕ → PROTECTED PHASE
 - ← ⊕ - PROTECTED/PERMITTED PHASE
 - ← ⊕ → PEDESTRIAN PHASE
 - ← ⊕ → DL OVERLAP

TEMPORARY PHASE DESIGNATION DIAGRAM
STAGE 1-STAGE 4
(NOT TO SCALE)



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
STAGE 1-STAGE 4
(NOT TO SCALE)

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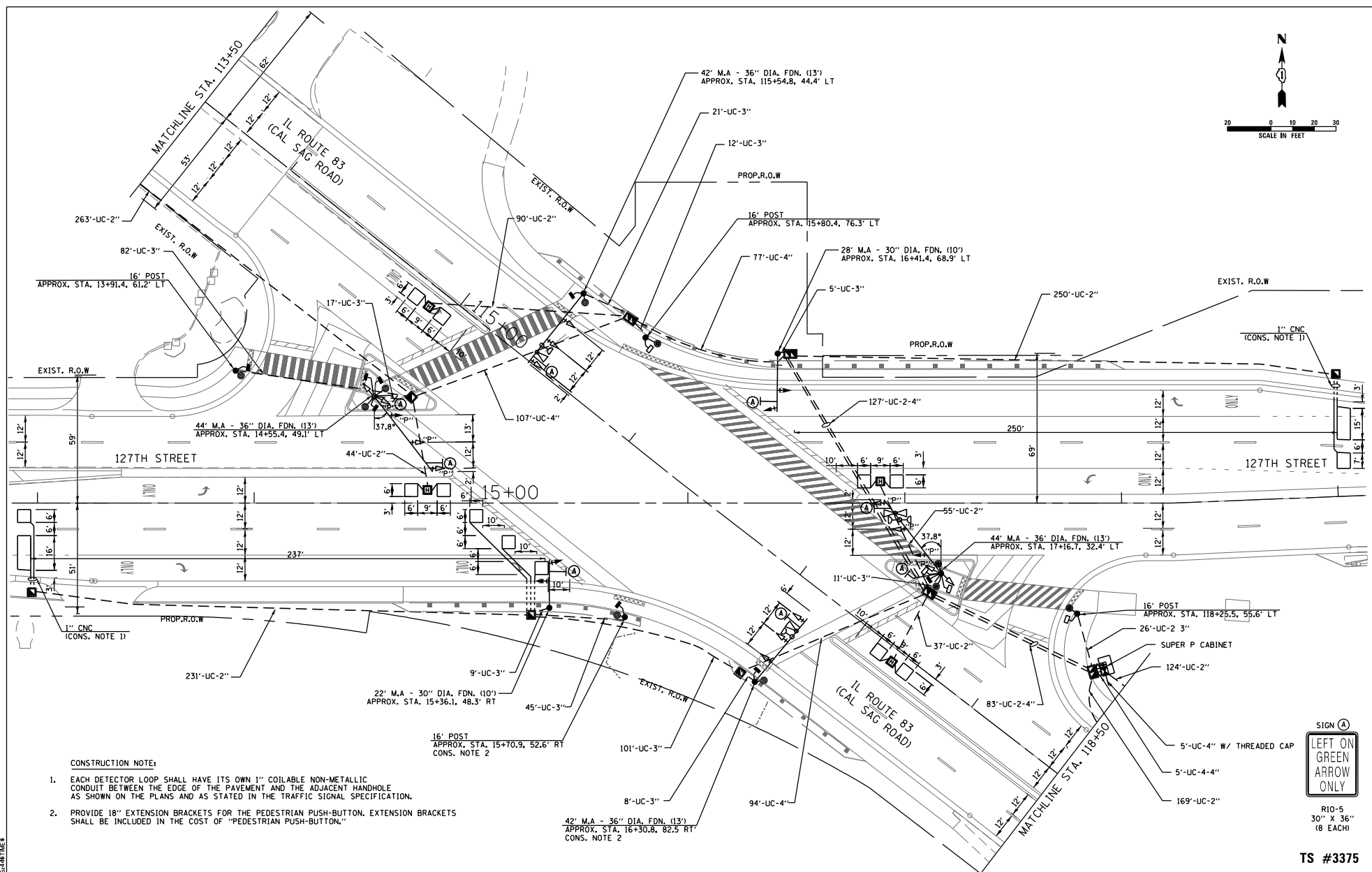
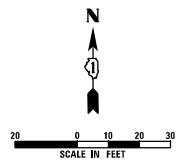
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	DATE - 1/24/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 83 AT 127TH ST			
SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 123
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	

TS #3375



- CONSTRUCTION NOTE:**
- EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF THE PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATION.
 - PROVIDE 18" EXTENSION BRACKETS FOR THE PEDESTRIAN PUSH-BUTTON. EXTENSION BRACKETS SHALL BE INCLUDED IN THE COST OF "PEDESTRIAN PUSH-BUTTON."



R10-5
30" X 36"
(8 EACH)

TS #3375

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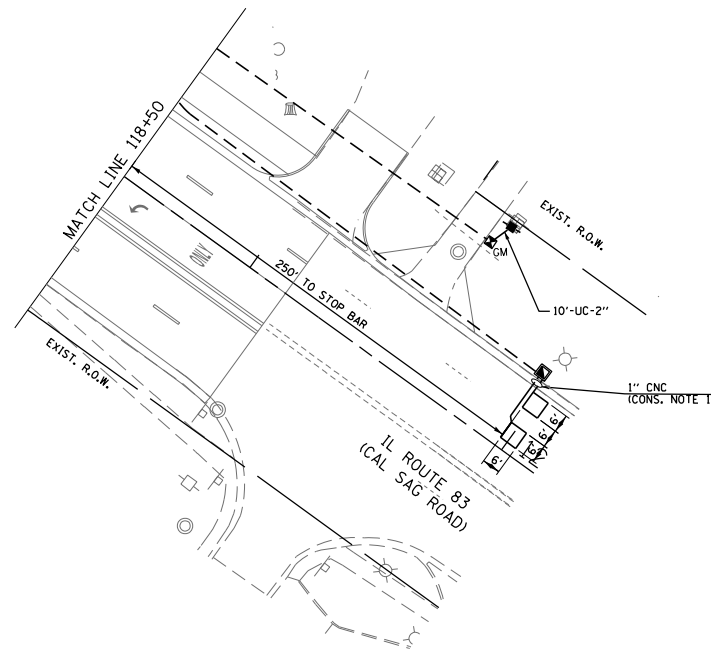
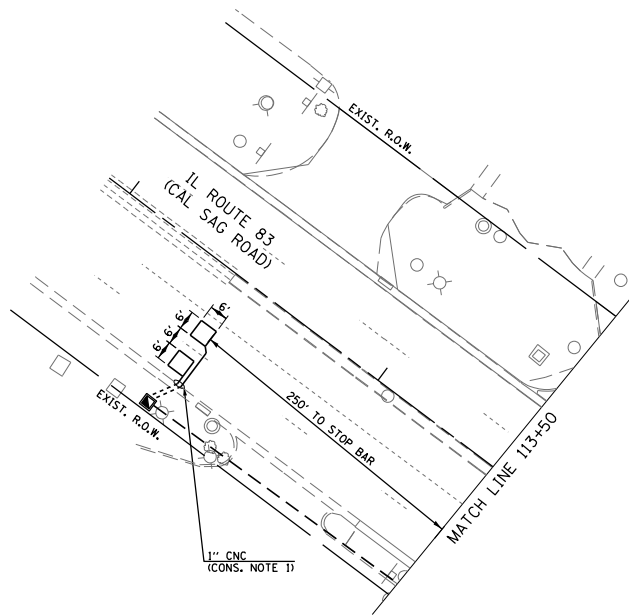
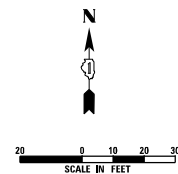
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	DATE - 1/24/2018	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 83 AT 127TH ST (SHEET 1 OF 2)**

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

P.A.U. FILE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 124
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	



CONSTRUCTION NOTE:

1. EACH DETECTOR LOOP SHALL HAVE IT'S OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF THE PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATION.

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 SINGH AND ASSOCIATES, INC.
 CONSULTING ENGINEERS

USER NAME : mgarvito	DESIGNED - MG	REVISED -
PLOT SCALE : 48.000000x1.000000	DRAWN - JA	REVISED -
PLOT DATE : 24-JAN-2018 15:12	CHECKED - KGP	REVISED -
	DATE - 1/24/2018	REVISED -

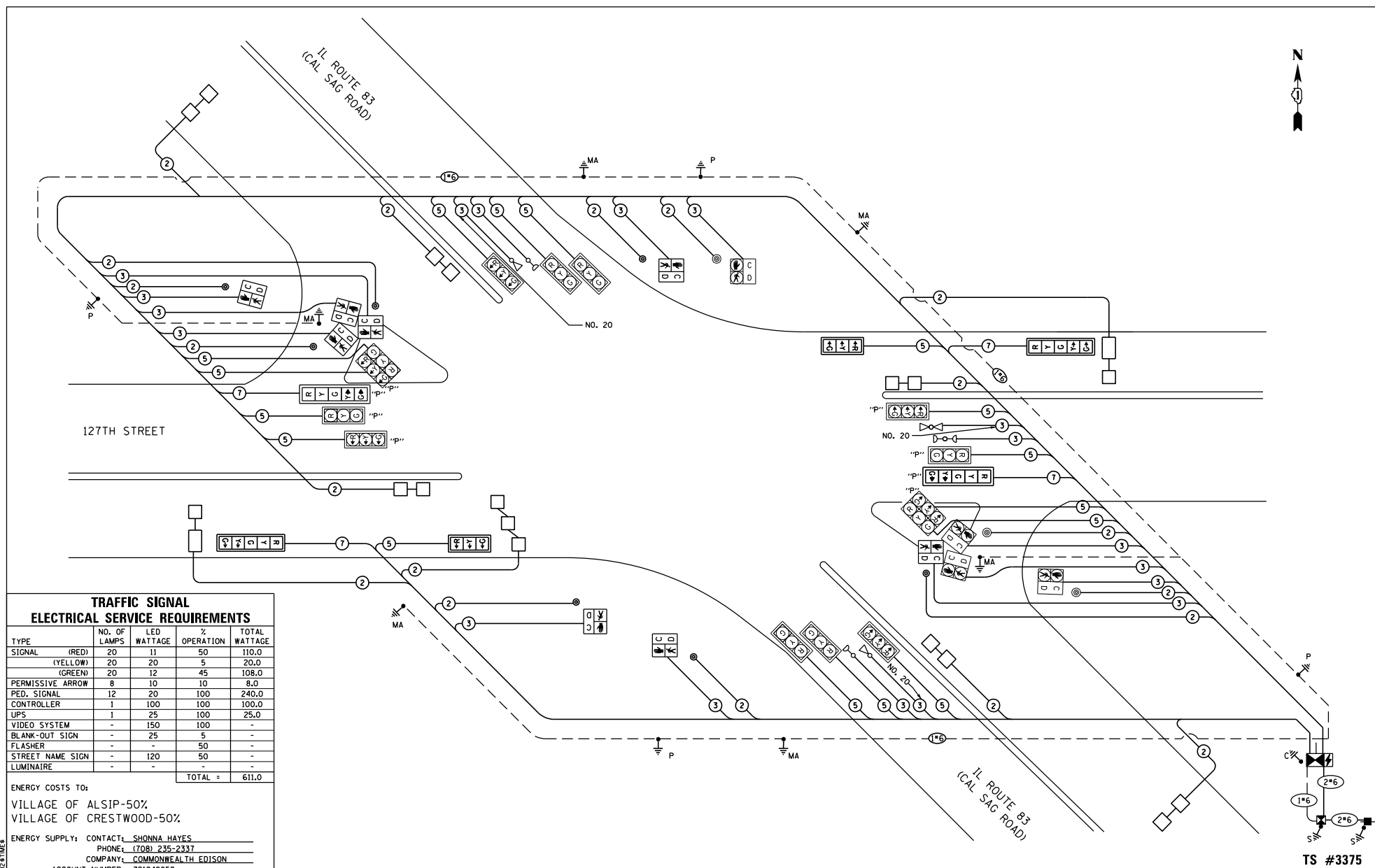
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
 IL ROUTE 83 AT 127TH ST (SHEET 2 OF 2)

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

F.A.J. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 125
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

TS #3375



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
TOTAL =				611.0

ENERGY COSTS TO:
 VILLAGE OF ALSIP-50%
 VILLAGE OF CRESTWOOD-50%

ENERGY SUPPLY: CONTACT: SHONNA HAYES
 PHONE: (708) 235-2337
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 321049058

SINGH
 CONSULTING ENGINEERS

USER NAME: mgarvide
 DESIGNED - MG
 DRAWN - JA
 CHECKED - KGP
 DATE - 1/24/2018

PLOT SCALE: 1/48,000,000
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN
 IL ROUTE 83 AT 127TH ST

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

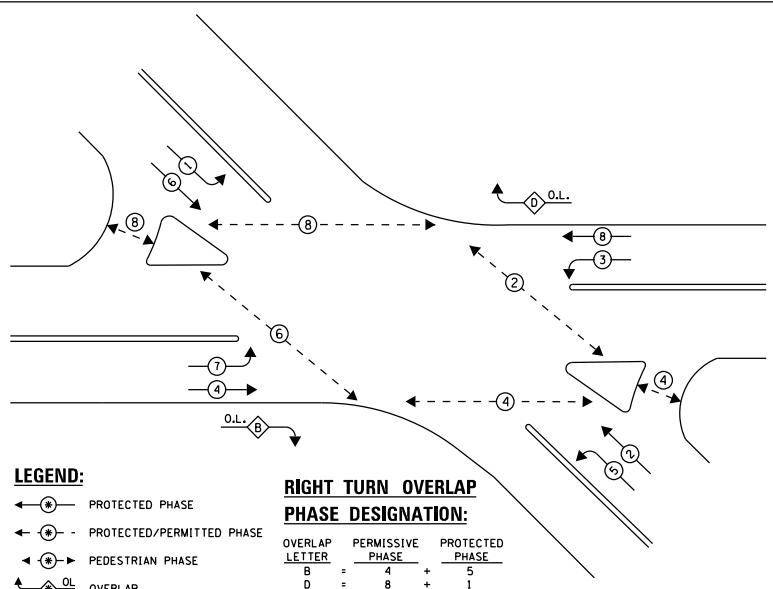
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X74	

TS #3375

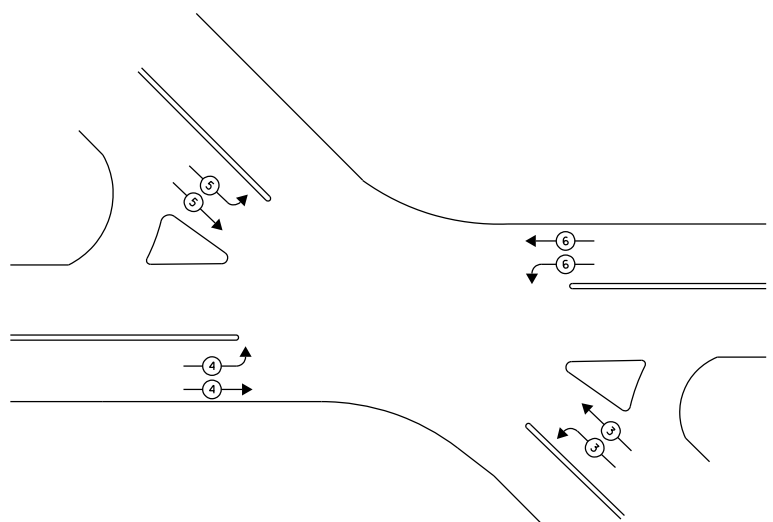
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SCHEDULE OF QUANTITIES

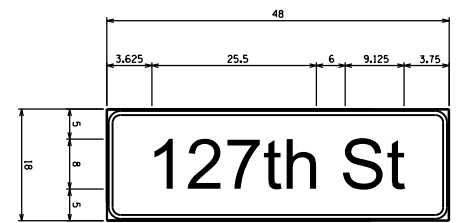
QTY	UNIT	ITEM
87	SO FT	SIGN PANEL - TYPE 1
1273	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
337	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
640	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
7	EACH	HANDHOLE
4	EACH	HEAVY-DUTY HANDHOLE
4	EACH	DOUBLE HANDHOLE
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3248	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
4866	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
5553	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1370	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
3635	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
158	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
1794	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
20	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
52	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC
9	EACH	INDUCTIVE LOOP DETECTOR
632	FOOT	DETECTOR LOOP, TYPE 1
120	FOOT	PREFORMED DETECTOR LOOP
7	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
14	EACH	RELOCATE EXISTING SIGNAL HEAD
4	EACH	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD
3	EACH	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON
3	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9	EACH	REMOVE EXISTING HANDHOLE
2	EACH	REMOVE EXISTING DOUBLE HANDHOLE
7	EACH	REMOVE EXISTING CONCRETE FOUNDATION
904	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET
1	EACH	SERVICE INSTALLATION, GROUND MOUNTED, METERED
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
6	EACH	TEMPORARY TRAFFIC SIGNAL TIMING



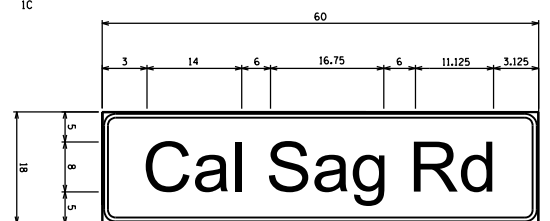
PHASE DESIGNATION DIAGRAM
(NOT TO SCALE)



EMERGENCY VEHICLE PREEMPTION SEQUENCE
(NOT TO SCALE)



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	7.5	1	ZZ	2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE
PREEMPTION SEQUENCE, AND SCHEDULE OF QUANTITIES
IL ROUTE 83 AT 127TH ST

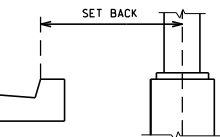
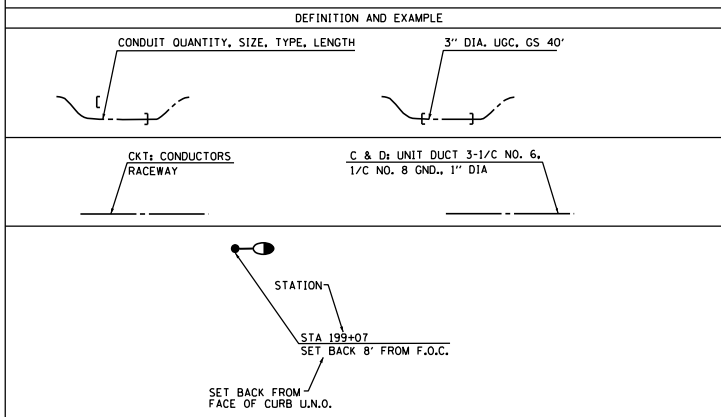
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SCALE: AS NOTED			SHEET NO. OF SHEETS STA. TO STA.	
ILLINOIS FED. AID PROJECT CONTRACT NO. 60X74				

TS #3375

LIGHTING AND ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	EXISTING LIGHTING UNIT TO BE REMOVED AND RELOCATED
	EXISTING LIGHTING UNIT TO REMAIN IN PLACE, REPLACE LUMINAIRE WITH PHILIPS RFL-241W12LED4K-G2-R3S
	EXISTING LIGHTING UNIT TO REMAIN IN PLACE, EXISTING 174W LED LUMINAIRE
	RELOCATED EXISTING LIGHTING UNIT ON NEW BREAKAWAY COUPLING, 45 FT M.H., EXISTING 174W LED LUMINAIRE MOUNTED ON 12FT MAST ARM
	RELOCATED EXISTING LIGHTING UNIT ON NEW BREAKAWAY COUPLING, 12FT MAST ARM, 45 FT M.H., PROPOSED LED LUMINAIRE, PHILIPS RFL-241W12LED4K-G2-R3S
	PROPOSED LIGHTING UNIT MOUNTED ON BREAKAWAY COUPLING, 12FT MAST ARM, 45 FT M.H., PROPOSED PHILIPS RFL-241W12LED4K-G2-R3S
	TEMPORARY LIGHTING UNIT, 50FT WOOD POLE, 15FT MAST ARM, 400W HPS TYPE III LUMINAIRE AT 45FT MOUNTING HEIGHT
	TEMPORARY WOOD POLE, CLASS 4, 40FT
	EXISTING LIGHTING CONTROLLER
	EXISTING UNDERGROUND UNIT DUCT, TO REMAIN
	PROPOSED AERIAL LIGHTING CABLE WITH MESSENGER WIRE, SIZE AND TYPE AS NOTED
	PROPOSED UNDERGROUND UNIT DUCT, SIZE AND TYPE AS NOTED
	PROPOSED CABLE OR UNIT DUCT IN UNDERGROUND CONDUIT, SIZE AND TYPE AS NOTED
	ELECTRIC UTILITY SERVICE

CALL-OUT SAMPLE



POLE SET BACK DETAIL

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
F.O.C.	FACE OF CURB
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CM	CENTIMETER
CP	CONTROL PANEL
DC	DIRECT CURRENT
DIA	DIAMETER
E	EXISTING UNIT TO REMAIN
E.O.P.	EDGE OF PAVEMENT
FT	FEET OR FOOT
GND	GROUND
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M	METER
MA	MAST ARM
MC	MULTI-CONDUCTOR
MM	MILLIMETER
M.H.	MOUNTING HEIGHT
MW	MESSENGER WIRE
NO. #	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
PB	PUSH BUTTON
PNL	PANEL
PT	POTENTIAL TRANSFORMER
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
STA	STATION
T/F	TOP OF FOUNDATION
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
UGC, GS	UNDERGROUND CONDUIT, GALVANIZED STEEL
WP	WOOD POLE
HPS	HIGH PRESSURE SODIUM
LTFM	LIQUID TIGHT FLEXIBLE METALLIC

IDOT-D1 STANDARDS

- BE-301 LIGHT POLE FOUNDATION 40' TO 47 1/2' M.H. 15" BOLT CIRCLE
- BE-305 LIGHT POLE FOUNDATION, METAL
- BE-701 LUMINAIRE SAFETY CABLE ASSEMBLY
- BE-702 MISC. ELECTRICAL DETAILS SHEET A
- BE-800 TEMPORARY LIGHT POLE DETAILS
- BE-801 TEMPORARY AERIAL CABLE INSTALLATION

ENERGY SUPPLY CONTACT: SHONNA HAYES
 PHONE: (708) 235-2337
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3553024037



R.D. Patel 5/7/2021
RASHESHKUMAR D. PATEL, P.E. DATE
 LICENSE NO.: 062-064817
 EXPIRES: 11-30-2021
 SHEETS: 128-163

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, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
- THE AERIAL CABLE INSTALLATION FOR TEMPORARY LIGHTING SHALL COMPLY WITH NEC (NATIONAL ELECTRICAL CODE) ARTICLE 225.18, NESC AND COMED STANDARDS FOR MINIMUM VERTICAL AND HORIZONTAL CLEARANCES.
- THE POLE SETBACK IS MEASURED FROM THE FACE OF THE CURB TO THE CENTER OF POLE.

INDEX OF DRAWINGS:

DRAWING NO.	TITLE
E-1	LEGEND, ABBREVIATIONS, INDEX OF DRAWINGS, AND SCHEDULE OF QUANTITIES
E-2	EXISTING LIGHTING REMOVAL PLAN
E-3	TEMPORARY LIGHTING PLAN
E-4	PROPOSED LIGHTING PLAN
E-5	VILLAGE OF CRESTWOOD LIGHTING CONTROLLER WIRING DIAGRAM
E-6 TO E-11	IDOT-D1 STANDARDS
E-12 TO E-14	LIGHTING DETAILS

SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM
1	EACH	ELECTRIC SERVICE INSTALLATION
1	LSUM	ELECTRIC UTILITY SERVICE CONNECTION
1027	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
3352	FOOT	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
900	FOOT	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0
300	FOOT	AERIAL CABLE, 3-1/C NO. 3/0 WITH MESSENGER WIRE
2265	FOOT	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE
3	EACH	LIGHT POLE, ALUMINUM, 45 FT. M.H., 12 FT. MAST ARM
12	EACH	LIGHT POLE, WOOD, 50 FOOT, CLASS 4, WITH 15FT MAST ARM
152	FOOT	LIGHT POLE FOUNDATION, 24" DIAMETER
2	EACH	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 8"
14	EACH	REMOVAL OF TEMPORARY LIGHTING UNIT
16	EACH	REMOVAL OF POLE FOUNDATION
16	EACH	RELOCATE EXISTING LIGHTING UNIT
1	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	TEMPORARY ELECTRIC SERVICE INSTALLATION
1	EACH	REMOVE TEMPORARY WOOD POLE
1	EACH	TEMPORARY WOOD POLE, 40 FT., CLASS 4
12	EACH	LUMINAIRE, LED, SPECIAL
17	EACH	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT
1	EACH	PHOTOCELL
3	EACH	MAST ARM, ALUMINUM, 12 FT.
72	EACH	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN AND ALUMINUM SKIRT
5	EACH	TEMPORARY MAST ARM, ALUMINUM, 15FT
1	EACH	REMOVE AND RELOCATE EXISTING LIGHTING CONTROLLER
1	EACH	RELOCATE EXISTING LIGHTING CONTROLLER
3	EACH	LUMINAIRE SAFETY CABLE ASSEMBLY
6	CAL MO	MAINTENANCE OF LIGHTING SYSTEM

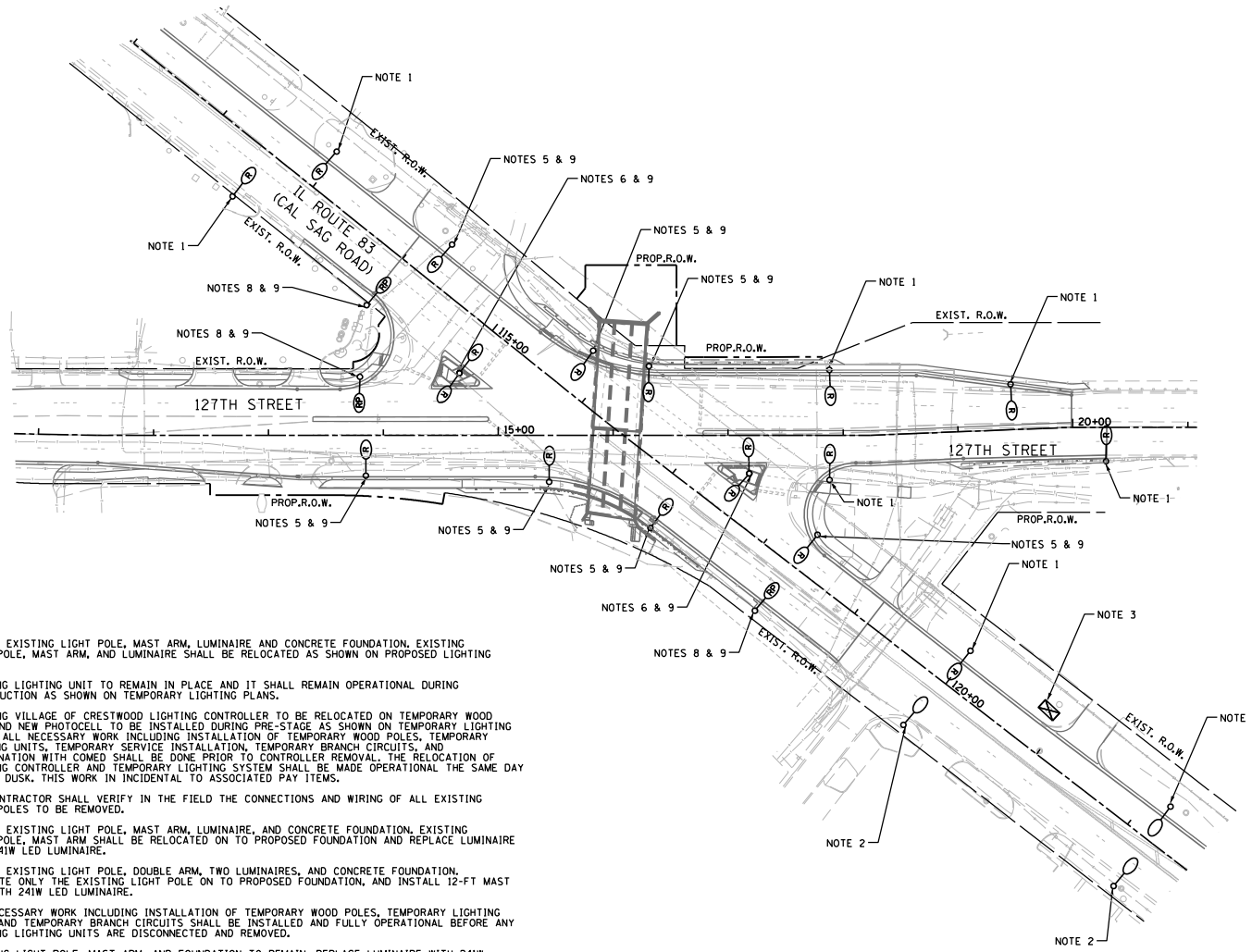
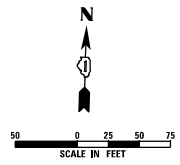
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DEPARTMENT OF TRANSPORTATION

LEGEND, ABBREVIATIONS, INDEX OF DRAWINGS, AND SCHEDULE OF QUANTITIES		F.A.U. RITE: 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 128
SCALE: AS NOTED	SHEET NO. OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 60X74		



- NOTES:**
1. REMOVE EXISTING LIGHT POLE, MAST ARM, LUMINAIRE AND CONCRETE FOUNDATION. EXISTING LIGHT POLE, MAST ARM, AND LUMINAIRE SHALL BE RELOCATED AS SHOWN ON PROPOSED LIGHTING PLANS.
 2. EXISTING LIGHTING UNIT TO REMAIN IN PLACE AND IT SHALL REMAIN OPERATIONAL DURING CONSTRUCTION AS SHOWN ON TEMPORARY LIGHTING PLANS.
 3. EXISTING VILLAGE OF CRESTWOOD LIGHTING CONTROLLER TO BE RELOCATED ON TEMPORARY WOOD POLE AND NEW PHOTOCELL TO BE INSTALLED DURING PRE-STAGE AS SHOWN ON TEMPORARY LIGHTING PLANS. ALL NECESSARY WORK INCLUDING INSTALLATION OF TEMPORARY WOOD POLES, TEMPORARY LIGHTING UNITS, TEMPORARY SERVICE INSTALLATION, TEMPORARY BRANCH CIRCUITS, AND COORDINATION WITH COMED SHALL BE DONE PRIOR TO CONTROLLER REMOVAL. THE RELOCATION OF EXISTING CONTROLLER AND TEMPORARY LIGHTING SYSTEM SHALL BE MADE OPERATIONAL THE SAME DAY BEFORE DUSK. THIS WORK IS INCIDENTAL TO ASSOCIATED PAY ITEMS.
 4. THE CONTRACTOR SHALL VERIFY IN THE FIELD THE CONNECTIONS AND WIRING OF ALL EXISTING LIGHT POLES TO BE REMOVED.
 5. REMOVE EXISTING LIGHT POLE, MAST ARM, LUMINAIRE, AND CONCRETE FOUNDATION. EXISTING LIGHT POLE, MAST ARM SHALL BE RELOCATED ON TO PROPOSED FOUNDATION AND REPLACE LUMINAIRE WITH 241W LED LUMINAIRE.
 6. REMOVE EXISTING LIGHT POLE, DOUBLE ARM, TWO LUMINAIRES, AND CONCRETE FOUNDATION. RELOCATE ONLY THE EXISTING LIGHT POLE ON TO PROPOSED FOUNDATION, AND INSTALL 12-FT MAST ARM WITH 241W LED LUMINAIRE.
 7. ALL NECESSARY WORK INCLUDING INSTALLATION OF TEMPORARY WOOD POLES, TEMPORARY LIGHTING UNITS AND TEMPORARY BRANCH CIRCUITS SHALL BE INSTALLED AND FULLY OPERATIONAL BEFORE ANY EXISTING LIGHTING UNITS ARE DISCONNECTED AND REMOVED.
 8. EXISTING LIGHT POLE, MAST ARM, AND FOUNDATION TO REMAIN. REPLACE LUMINAIRE WITH 241W LED LUMINAIRE. LIGHTING UNIT SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
 9. REMOVAL OF EXISTING LUMINAIRES SHALL BE INCLUDED IN THE COST OF "RELOCATE EXISTING LIGHTING UNIT". ALL LUMINAIRES SHALL REMAIN THE PROPERTY OF VILLAGE OF CRESTWOOD. LUMINAIRES SHALL BE REMOVED, BOXED IN NEW CONTAINERS, APPROVED BY THE ENGINEER AND SHALL BE DELIVERED TO THE VILLAGE OF CRESTWOOD.

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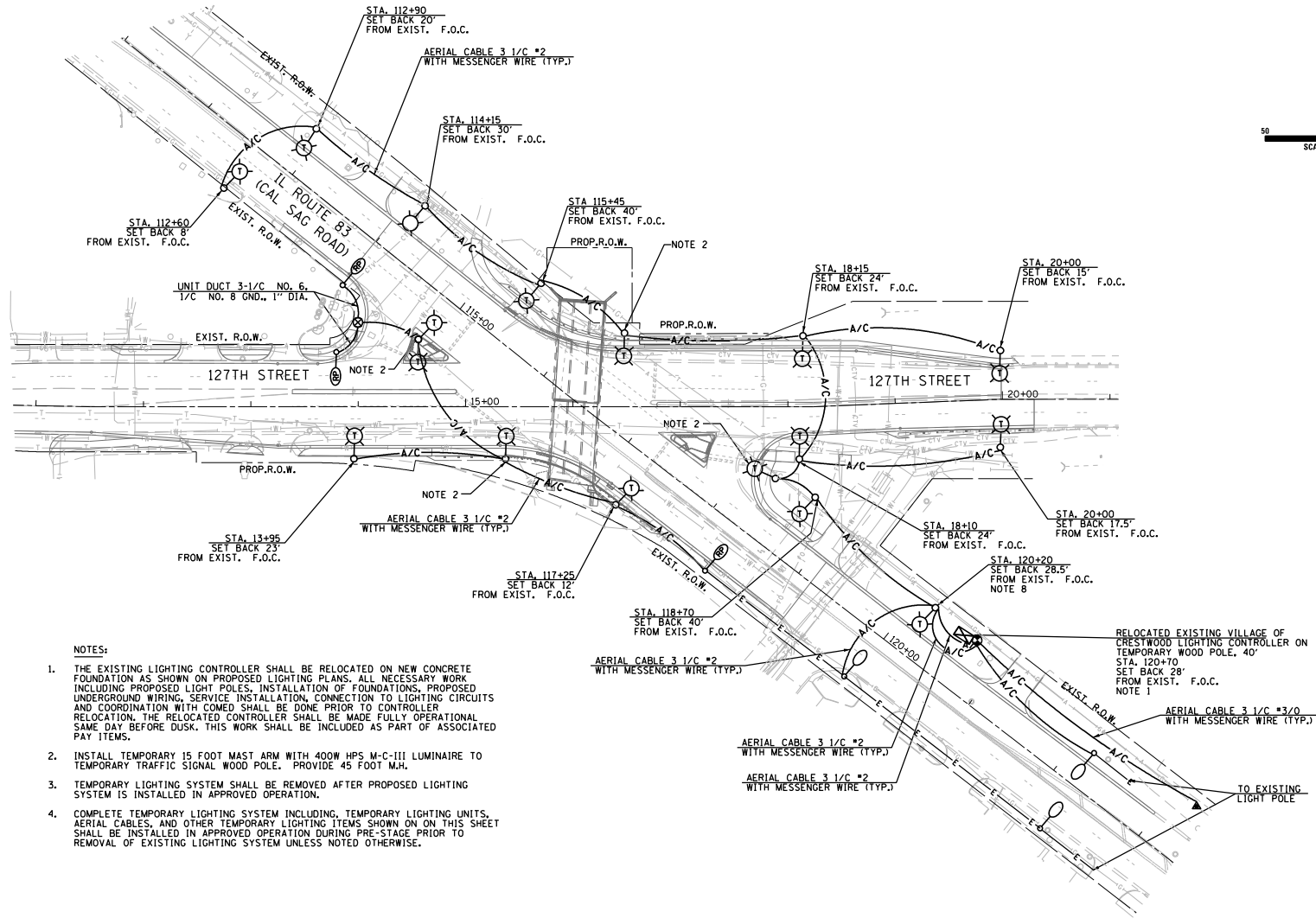
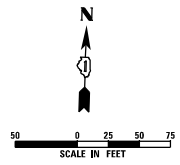


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL PLAN IL ROUTE 83 AT 127TH ST			
SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA. TO STA.

P.A.U. R.T.E. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 129
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74



- NOTES:**
1. THE EXISTING LIGHTING CONTROLLER SHALL BE RELOCATED ON NEW CONCRETE FOUNDATION AS SHOWN ON PROPOSED LIGHTING PLANS. ALL NECESSARY WORK INCLUDING PROPOSED LIGHT POLES, INSTALLATION OF FOUNDATIONS, PROPOSED UNDERGROUND WIRING, SERVICE INSTALLATION, CONNECTION TO LIGHTING CIRCUITS AND COORDINATION WITH COMED SHALL BE DONE PRIOR TO CONTROLLER RELOCATION. THE RELOCATED CONTROLLER SHALL BE MADE FULLY OPERATIONAL SAME DAY BEFORE DUSK. THIS WORK SHALL BE INCLUDED AS PART OF ASSOCIATED PAY ITEMS.
 2. INSTALL TEMPORARY 15 FOOT MAST ARM WITH 400W HPS M-C-III LUMINAIRE TO TEMPORARY TRAFFIC SIGNAL WOOD POLE. PROVIDE 45 FOOT M.H.
 3. TEMPORARY LIGHTING SYSTEM SHALL BE REMOVED AFTER PROPOSED LIGHTING SYSTEM IS INSTALLED IN APPROVED OPERATION.
 4. COMPLETE TEMPORARY LIGHTING SYSTEM INCLUDING, TEMPORARY LIGHTING UNITS, AERIAL CABLES, AND OTHER TEMPORARY LIGHTING ITEMS SHOWN ON THIS SHEET SHALL BE INSTALLED IN APPROVED OPERATION DURING PRE-STAGE PRIOR TO REMOVAL OF EXISTING LIGHTING SYSTEM UNLESS NOTED OTHERWISE.

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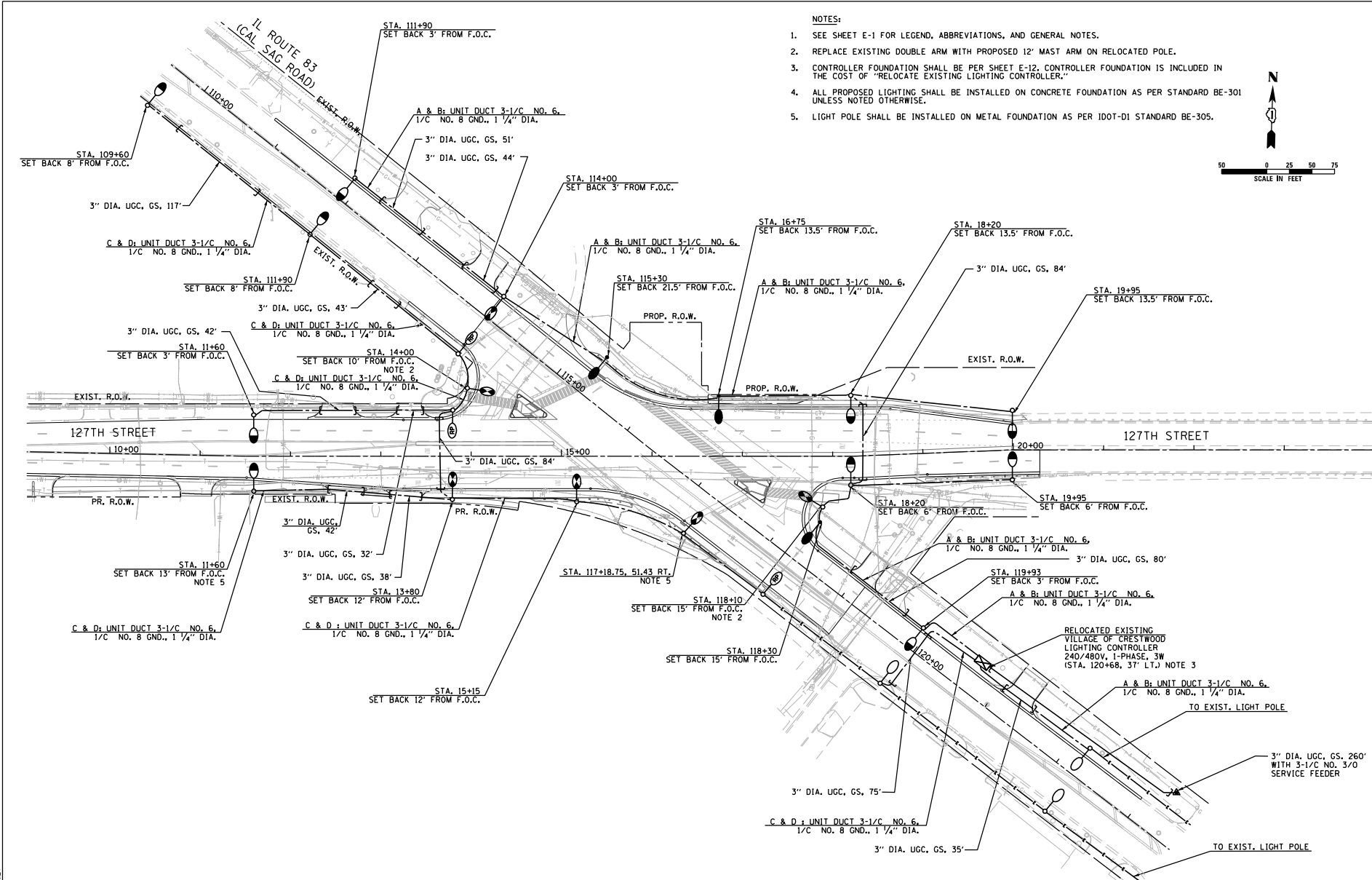
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

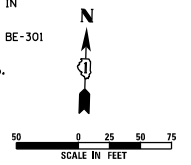
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**TEMPORARY LIGHTING PLAN
 IL ROUTE 83 AT 127TH ST**

F.A.J. SITE: 1587	SECTION: 3034B&N	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 130
			CONTRACT NO. 60X74	



- NOTES:
1. SEE SHEET E-1 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
 2. REPLACE EXISTING DOUBLE ARM WITH PROPOSED 12' MAST ARM ON RELOCATED POLE.
 3. CONTROLLER FOUNDATION SHALL BE PER SHEET E-12. CONTROLLER FOUNDATION IS INCLUDED IN THE COST OF "RELOCATE EXISTING LIGHTING CONTROLLER."
 4. ALL PROPOSED LIGHTING SHALL BE INSTALLED ON CONCRETE FOUNDATION AS PER STANDARD BE-301 UNLESS NOTED OTHERWISE.
 5. LIGHT POLE SHALL BE INSTALLED ON METAL FOUNDATION AS PER 100T-D1 STANDARD BE-305.



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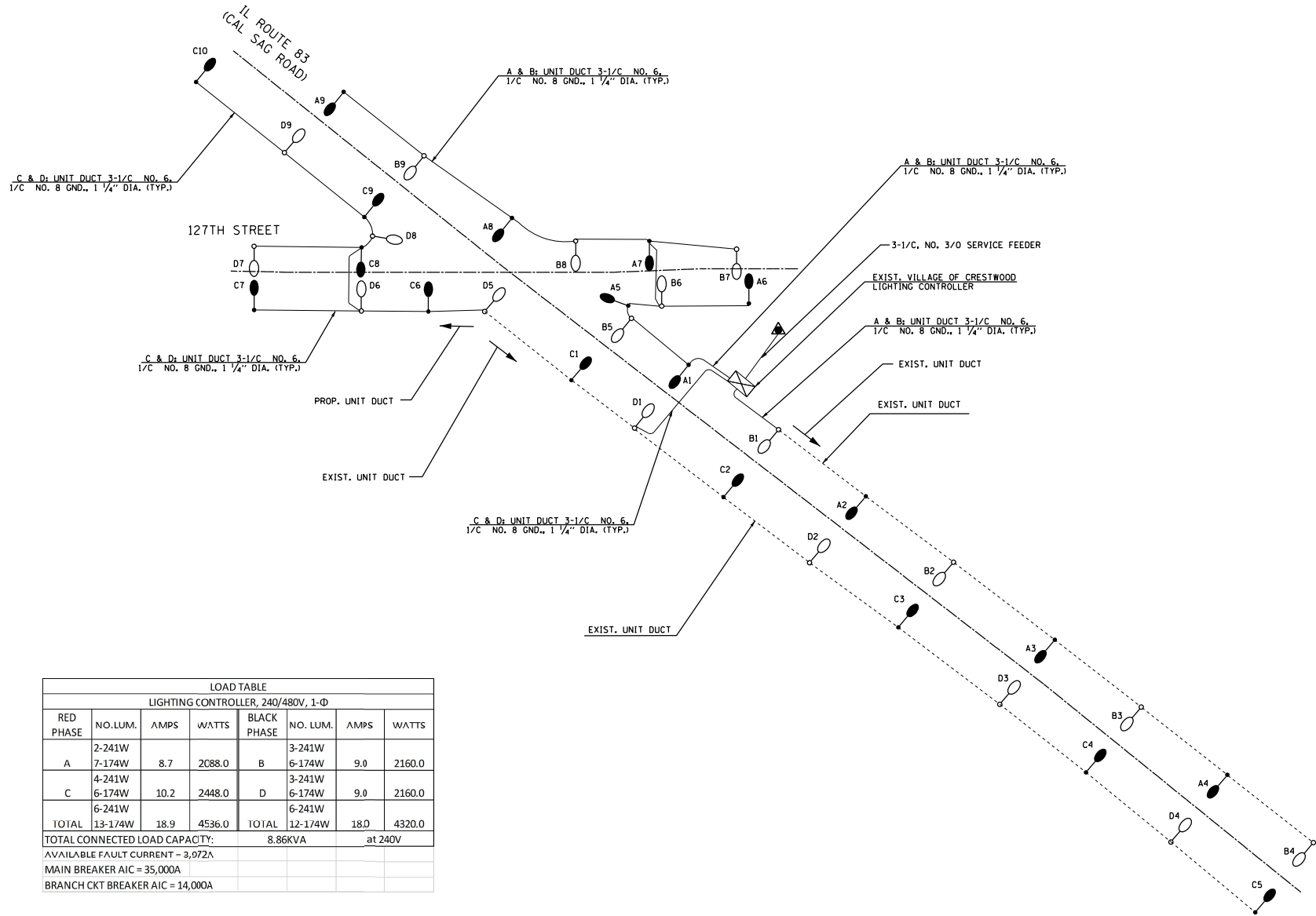
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
IL ROUTE 83 AT 127TH ST

SCALE: AS NOTED	SHEET NO. OF SHEETS	STA. TO STA.
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F.A.U. RITE: 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEET NO. 207	TOTAL SHEETS 131
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				



LOAD TABLE							
LIGHTING CONTROLLER, 240/480V, 1-Φ							
RED PHASE	NO. LUM.	AMPS	WATTS	BLACK PHASE	NO. LUM.	AMPS	WATTS
A	2-241W			B	3-241W		
	7-174W	8.7	2088.0		6-174W	9.0	2160.0
C	4-241W			D	3-241W		
	6-174W	10.2	2448.0		6-174W	9.0	2160.0
	6-241W				6-241W		
TOTAL	13-174W	18.9	4536.0	TOTAL	12-174W	18.0	4320.0
TOTAL CONNECTED LOAD CAPACITY:				8.86KVA at 240V			
AVAILABLE FAULT CURRENT = 3,972A							
MAIN BREAKER AIC = 35,000A							
BRANCH CKT BREAKER AIC = 14,000A							

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 CONSULTING ENGINEERS

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

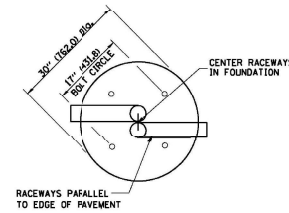
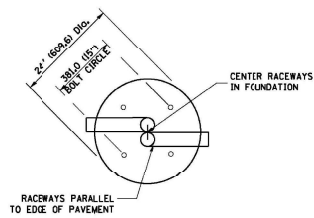
VILLAGE OF CRESTWOOD LIGHTING CONTROLLER
 WIRING DIAGRAM

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

F.A.U. PTE. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 132
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74

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

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)

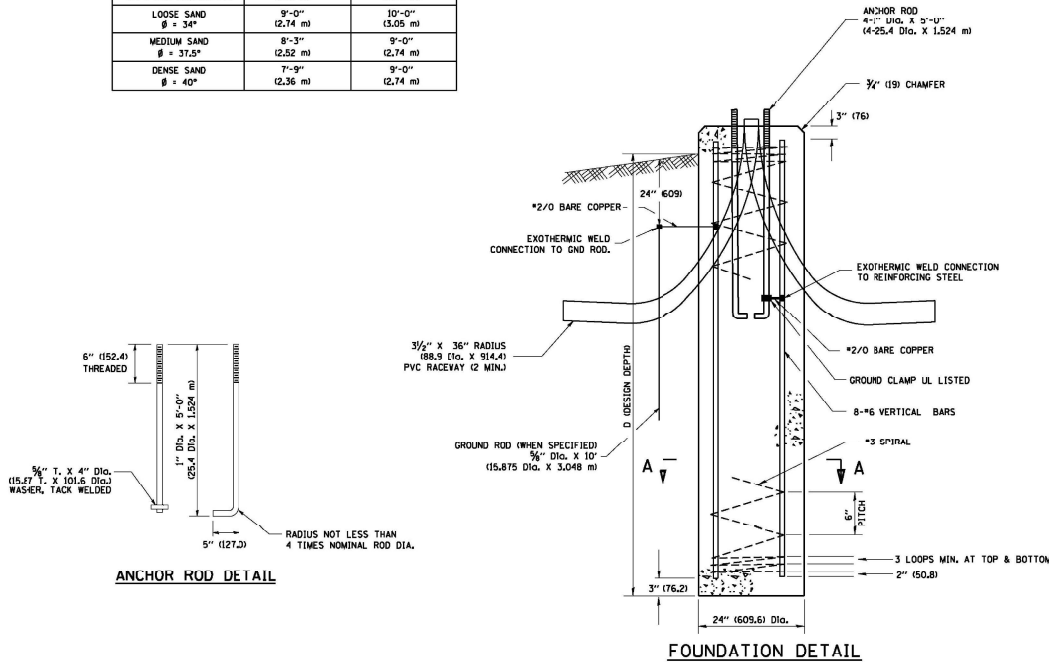


TOP VIEW

TOP VIEW

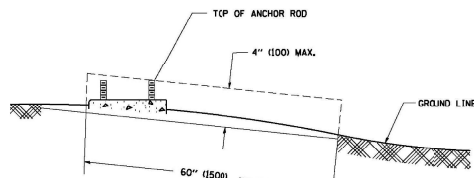
NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 M) CHORD AROUND 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.
- 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 SHALL BE CHAMFERED 3/4-IN. (19.0 MM).
- THE CONCRETE SHALL BE CLASS SI, CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 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.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 75 (GRADE 105), NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 2H, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 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 296, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 MM) WITH A MINIMUM OF 3 INCHES (76 MM) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (63.5 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.
- THE CONTRACTOR SHALL USE #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.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 MM) ABOVE THE TOP OF THE FOUNDATION.

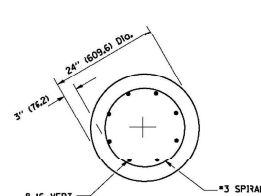


ANCHOR ROD DETAIL

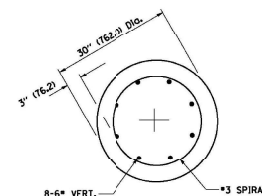
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL

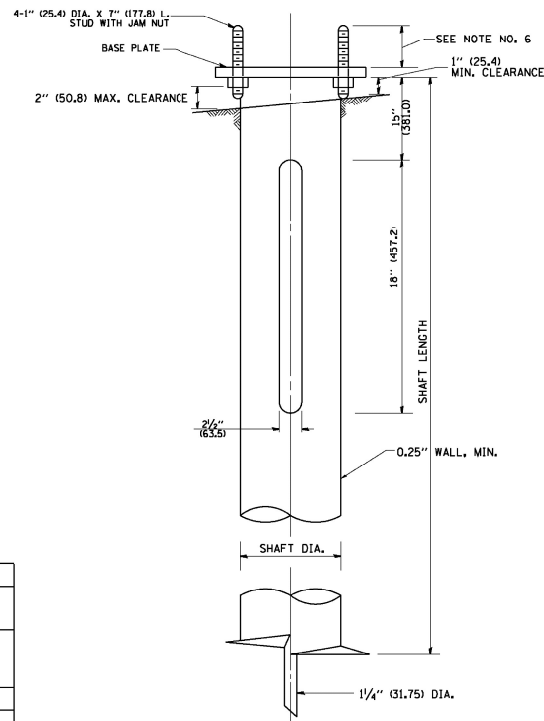
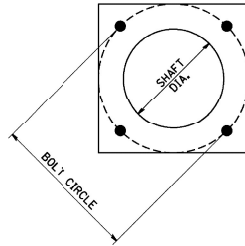


SECTION A-A



SECTION A-A

FILE NAME = W:\distrtd\22x34\ba301.dgn	USER NAME = greglenobit	DESIGNED -	REVISD - 04-22-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHT POLE FOUNDATION			F.A.D. SITE = 1587	SECTION = 30348AN	COUNTY = COOK	TOTAL SHEET SHEETS = 207
PLOT SCALE = 60/8000 = 1/133	DRAWN -	CHECKED -	REVISD -		40' (12.192 m) TO 47' 12" (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE			BE-301		CONTRACT NO. 60X74	
PLOT DATE = 1/4/2008	DATE -	REVISD -	REVISD -		SCALE: NONE			SHEET NO. 1	OF 1 SHEETS	STA. TO STA.	
					FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT			



HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

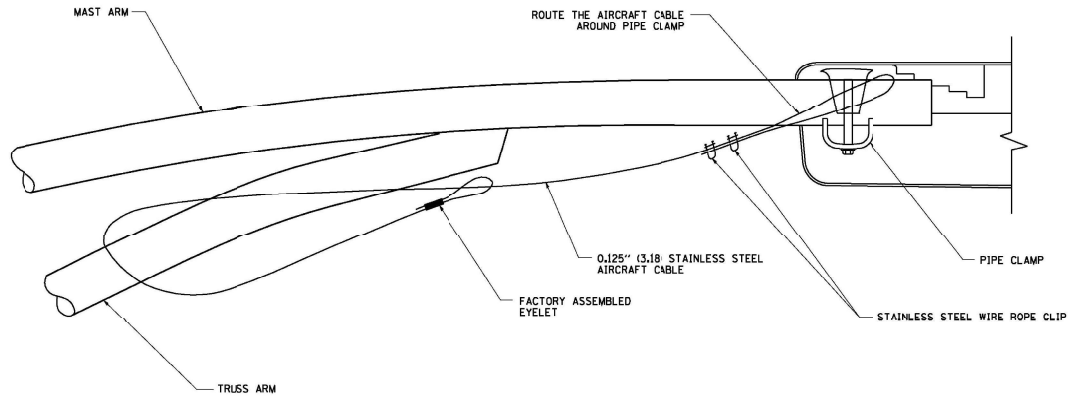
METAL HELIX FOUNDATION MATERIALS

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

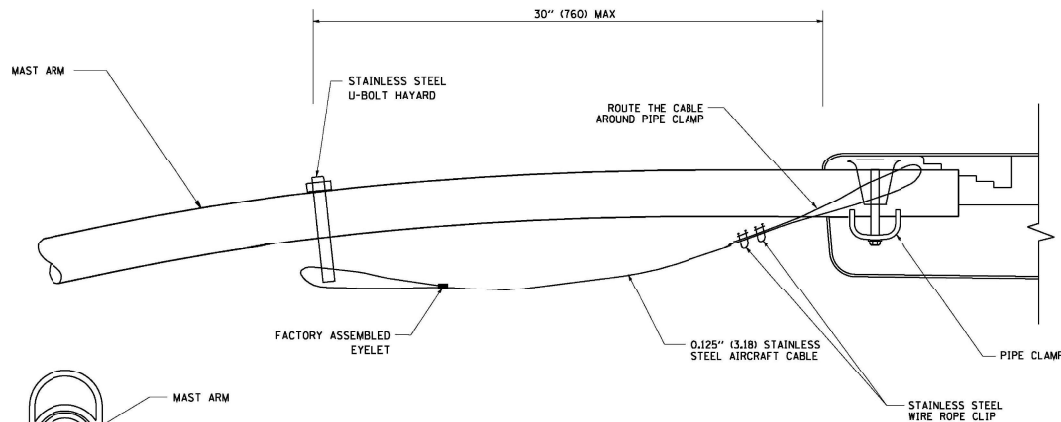
NOTES:

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

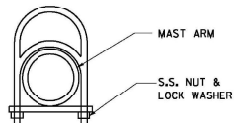
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PLOT SCALE = 50.000' / IN.	DRAWN - DLB	REVISED -	REVISED -			1587	30348AN	COOK	207	134
PLOT DATE = 1/4/2008	CHECKED -	REVISED -	REVISED -			BE-305		CONTRACT NO. 60X74		
	DATE = 02-27-07	REVISED -	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.



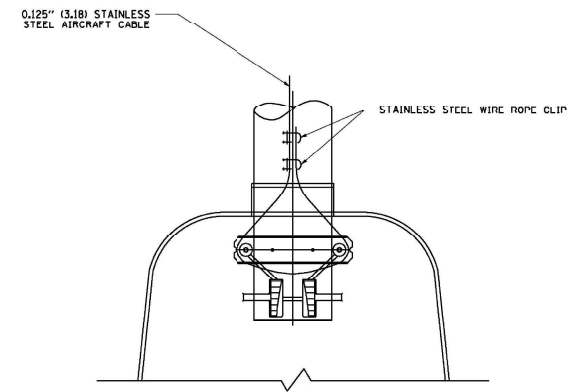
SIDE VIEW (TRUSS ARM)
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.



STAINLESS STEEL U-BOLT HAYARD

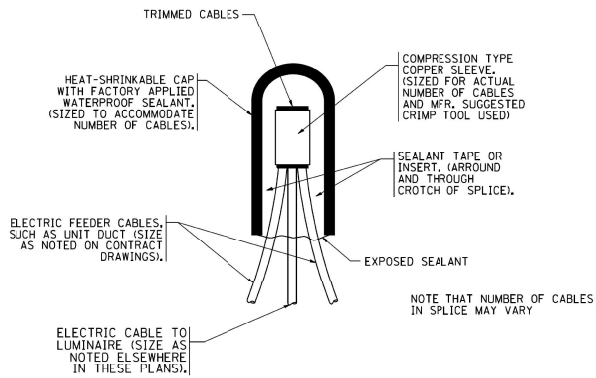


BOTTOM VIEW
N.T.S.

NOTES:

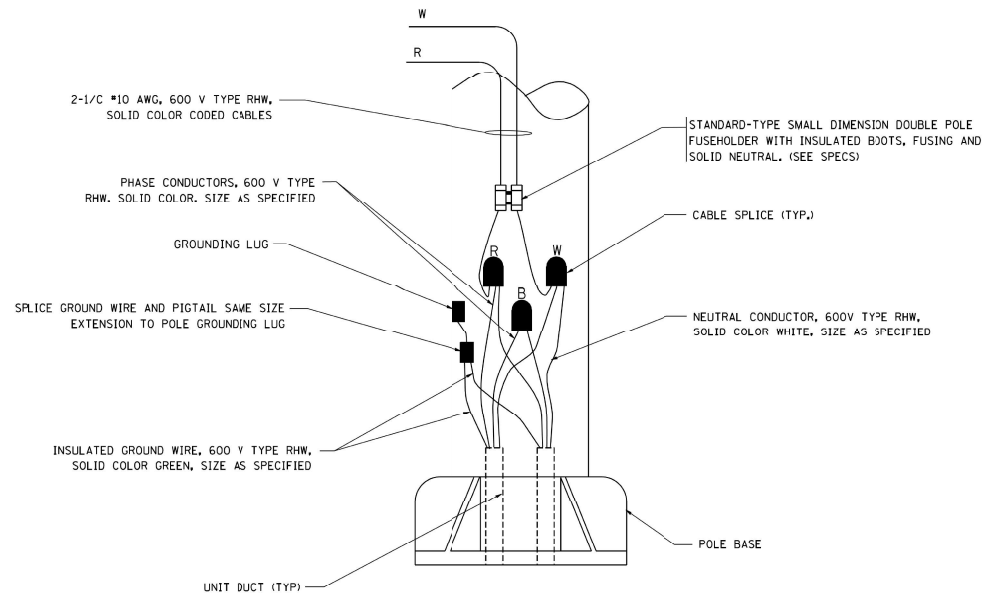
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700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

FILE NAME = W:\distrtd\22x34\ba701.dgn	USER NAME = greg11evobist	DESIGNED - DRAWN -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LUMINAIRE SAFETY CABLE ASSEMBLY			<table border="1"> <tr> <th>FED. AID DIST. NO.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEET NO.</th> </tr> <tr> <td>1587</td> <td>3034B&N</td> <td>COOK</td> <td>207 135</td> </tr> <tr> <td colspan="3" style="text-align: center;">BE-701</td> <td style="text-align: center;">CONTRACT NO. 60X74</td> </tr> </table>	FED. AID DIST. NO.	SECTION	COUNTY	TOTAL SHEET NO.	1587	3034B&N	COOK	207 135	BE-701			CONTRACT NO. 60X74
FED. AID DIST. NO.	SECTION	COUNTY	TOTAL SHEET NO.																	
1587	3034B&N	COOK	207 135																	
BE-701			CONTRACT NO. 60X74																	
PLOT SCALE = 60:000 P / IN.	CHECKED -	REVISED -	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.													
PLOT DATE = 1/4/2008	DATE -	REVISED -	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT																



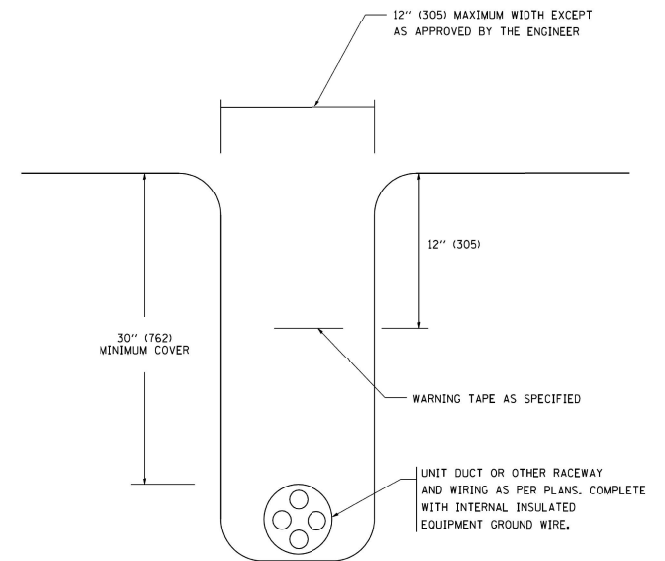
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

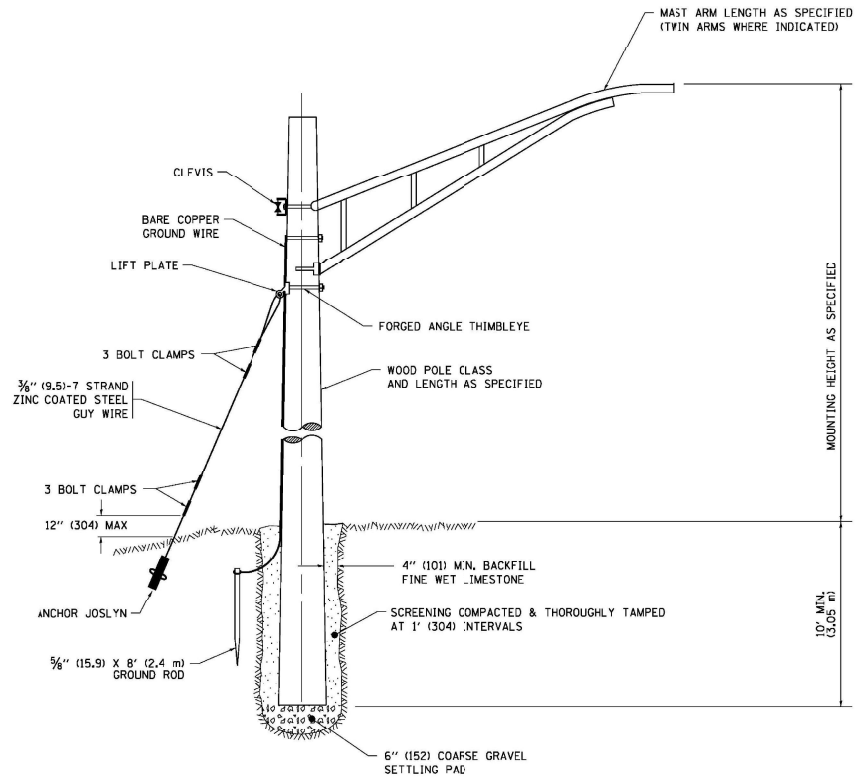
N.T.S.



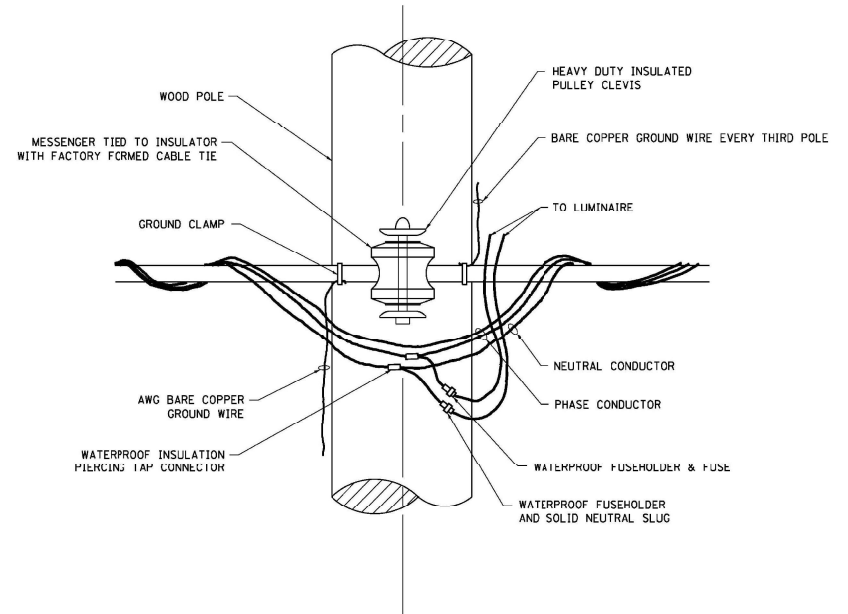
TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

FILE NAME = W:\diststd\22-34\1b1782.dgn	USER NAME = gegl1erob1	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISC. ELECTRICAL DETAILS SHEET A			F.A.D. SITE	SECTION	COUNTY	TOTAL SHEET NO.
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	PLOT DATE = 1/4/2008	CHECKED -	REVISED -		BE-702 CONTRACT NO. 60X74						
		DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
					SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	



TEMPORARY LIGHT POLE DETAIL

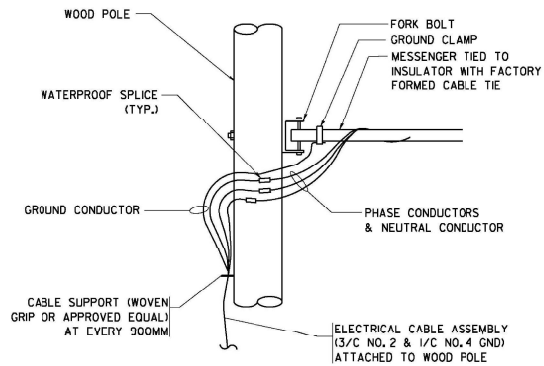


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

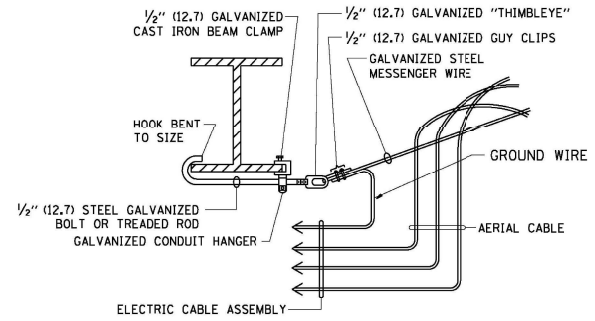
NOTE:

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

FILE NAME =	USER NAME = foatanj	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHT POLE DETAILS	FILED	SECTION	COUNTY	TOTAL SHEET	
ps\\N1084810\NET\Illinois.gov\PI\DOT\Documents\DOT\Office\Dissect\Projects\Dissect\CA0Data\CA0Data\sh0822.dgn	PROJECT = 60488	CHECKED	REVISED - R.T. 07-26-16			1587	30348AN	COOK	207	137
Default	PLOT SCALE = 1/8" = 1'	DATE	REVISED -			BE-800		CONTRACT NO. 60X74		
	PLOT DATE = 9/1/2016		REVISED -			ILLINOIS FED. AID PROJECT				
SCALE: NONE						SHEET 1 OF 1 SHEETS STA. TO STA.				



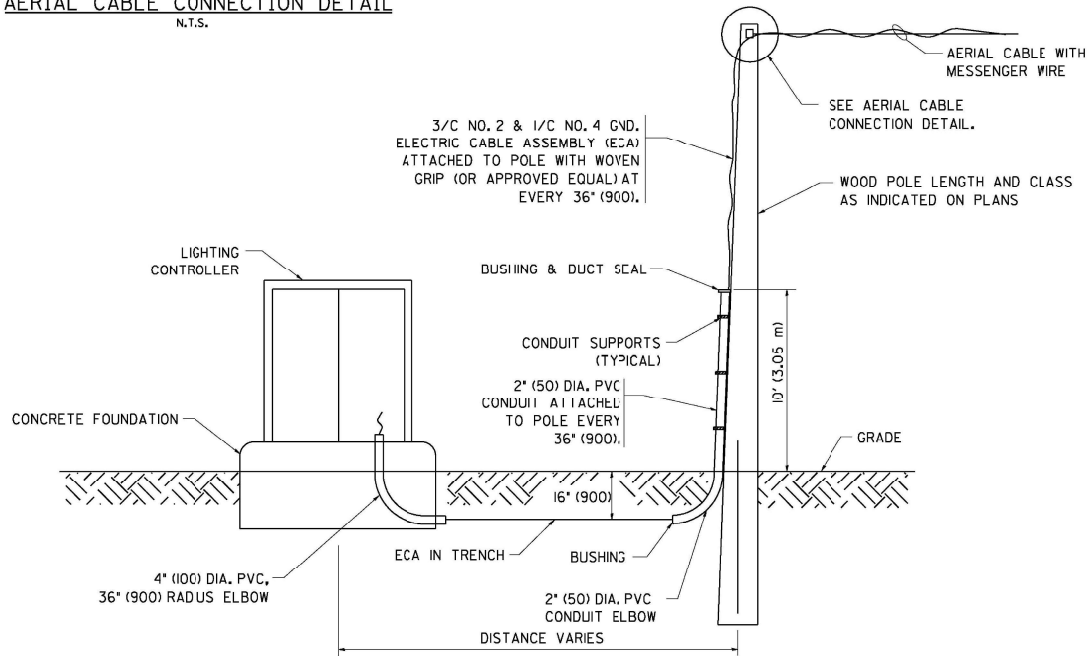
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

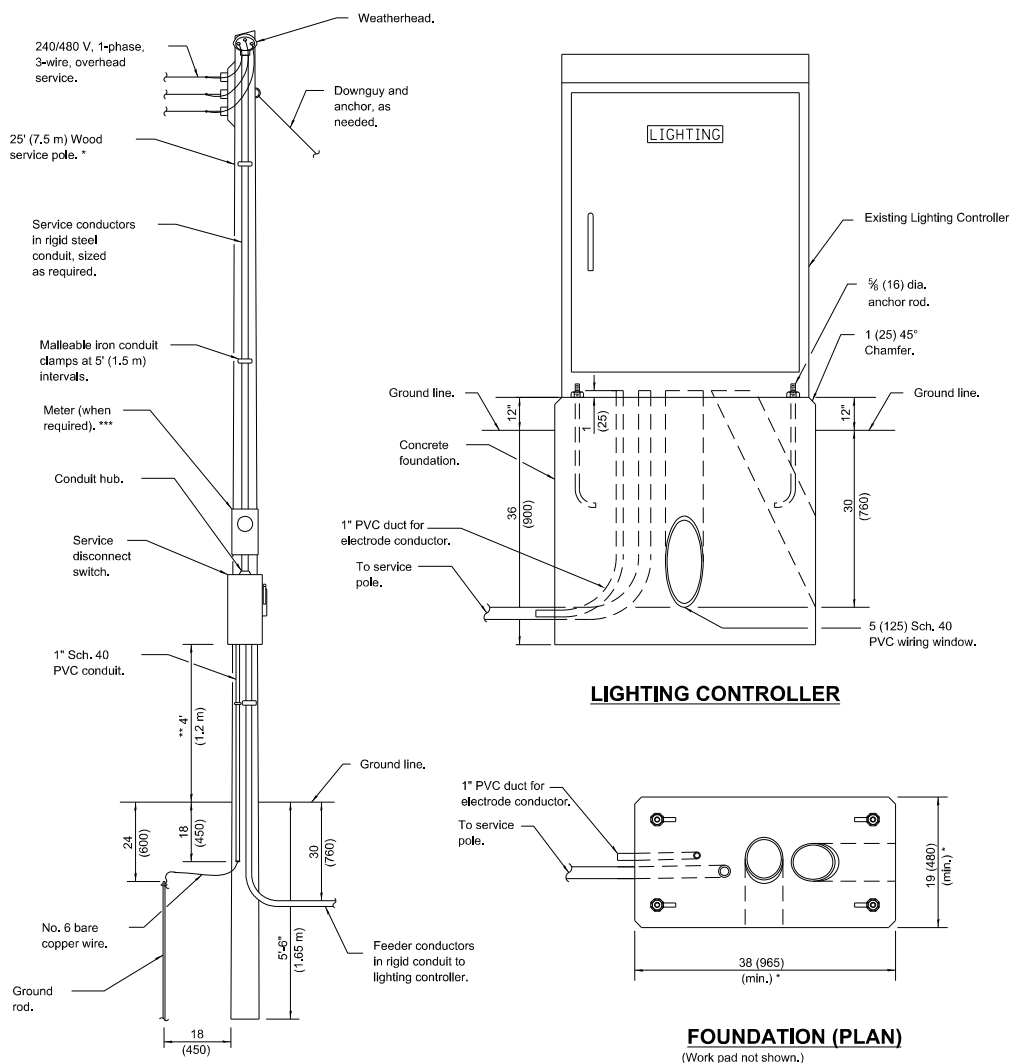
NOTES:

1. 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 CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



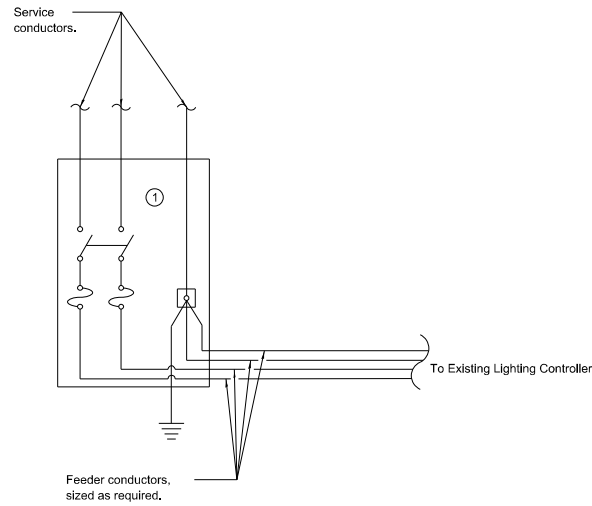
WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

FILE NAME = W:\dist\d\22-34\ba801.dgn	USER NAME = greg11enob1	DESIGNED -	REVISION - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AERIAL CABLE INSTALLATION			FEED SITE -	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
PLOT SCALE = 60:800 P / IN.	DRAWN -	REVISION -	REVISION -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	1587	3034B&N	COOK	207 138
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	DATE -	REVISION -	REVISION -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



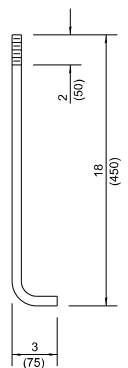
LIGHTING CONTROLLER

FOUNDATION (PLAN)
(Work pad not shown.)



SCHEMATIC

① Service disconnect switch - 2-pole, 3-wire, 100 amp*, fused at 100 amp*, solid neutral in NEMA 4X enclosure having lockable external handle.



ANCHOR ROD DETAIL

* Size larger as needed,
 ** Or as directed by Utility Company.
 *** When cold sequencing is required, provide a meter disconnect switch as directed by Utility Company.

ELECTRIC SERVICE INSTALLATION

J:\NORTHWOOD\DRINKWATERD 5 sheets\146074-LT-Sht-12.dgn 22-FEB-2018 14:44 TIME\$

SINGH
 ENGINEERING
 CONSULTING ENGINEERS

USER NAME	mgarvada
DESIGNED	- MC
DRAWN	- JA
CHECKED	- KGP
DATE	- 2/21/2018
REVISIONS	
REVISED	-
REVISED	-
REVISED	-

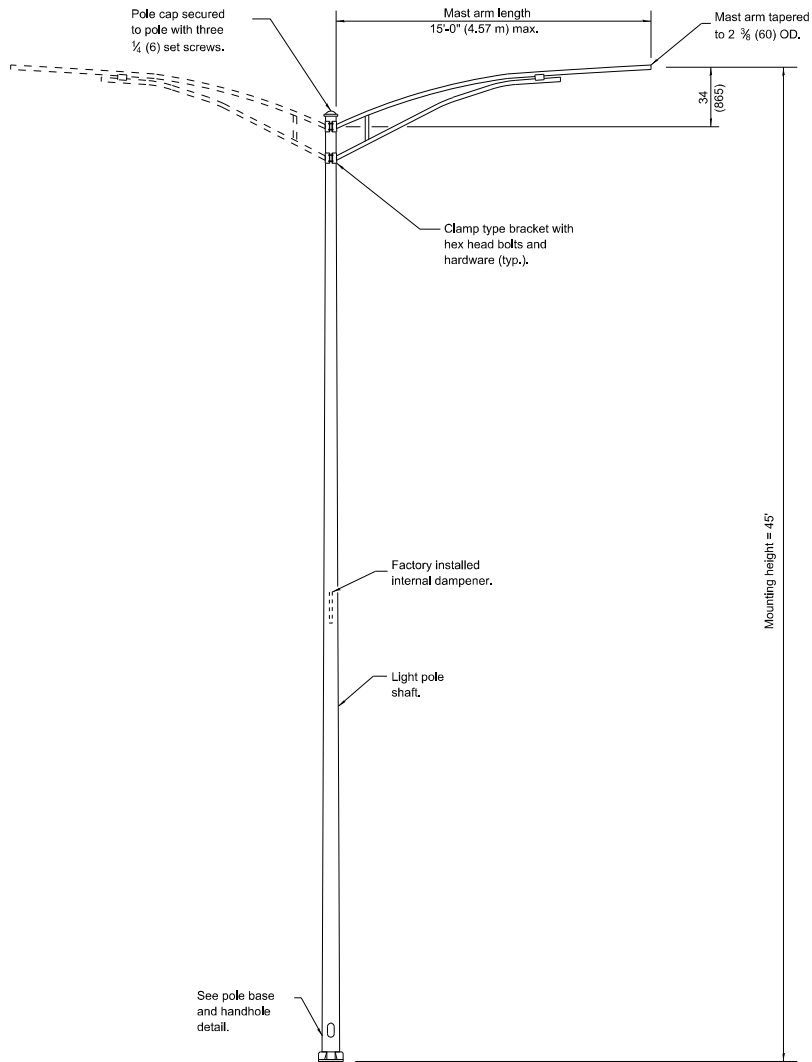
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DRAWN	- JA	REVISED	-
CHECKED	- KGP	REVISED	-
DATE	- 2/21/2018	REVISED	-

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER
 FOUNDATION DETAIL

SCALE: AS NOTED	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 139
ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60X74				



MAST ARM LIGHT POLE

(Single or twin mount)

* Unless directed otherwise by the Engineer.

POLE		
MOUNTING HEIGHT	MINIMUM SHAFT DIAMETER	MINIMUM WALL THICKNESS
35' (10.7 m) or less	8 tapered to 4 1/2 (200 to 114)	0.25 (6)
Greater than 35' (10.7 m) to 45' (13.7 m)	10 tapered to 6 (250 to 150)	0.25 (6)
Greater than 45' (13.7 m) to 50' (15.2 m)	10 tapered to 6 (250 to 150)	0.312 (8)

POLE BASE	
MOUNTING HEIGHT	BOLT CIRCLE DIAMETER
35' (10.7 m) or less	11 1/2 (290)
Greater than 35' (10.7 m) to 50' (15.2 m)	15 (380)

GENERAL NOTES

See IDOT D1 Standard on sheet E-6 for Light Pole Foundation.

Voids in light pole base shall be sealed to prevent rodent entry.

Provide breakaway devices where required.

Where anchor rods on existing bridge parapets are too short to mount poles as shown, install leveling plate directly on concrete and level with stainless steel washers.

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

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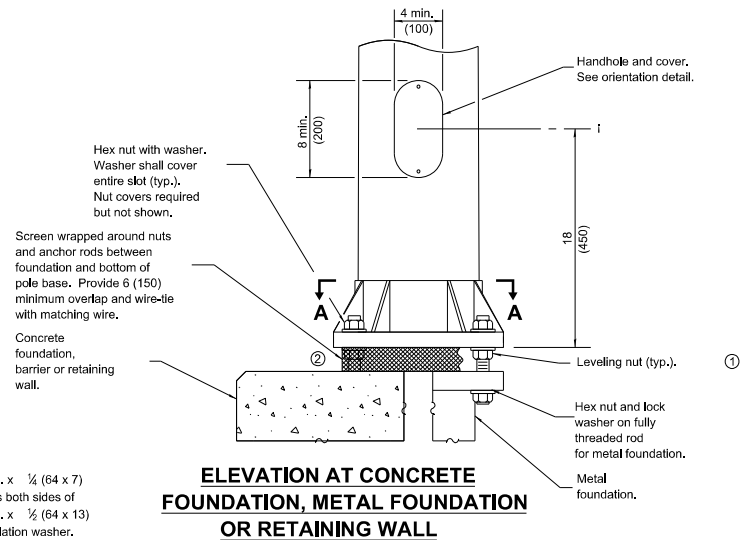
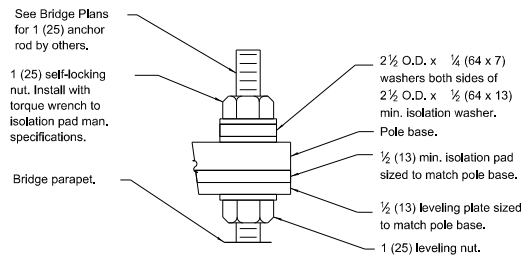
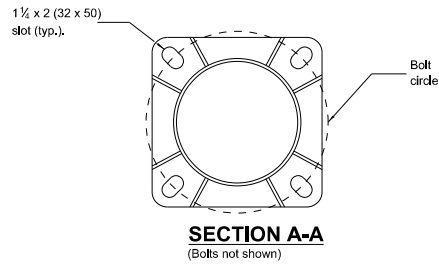
SINGH
SINGH & ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME : mgarvada	DESIGNED - MC	REVISED -
	DRAWN - JA	REVISED -
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PLOT DATE : 22-FEB-2018 14:44	DATE - 2/21/2018	REVISED -

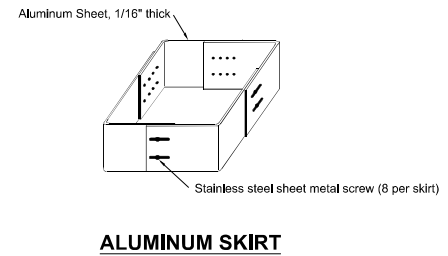
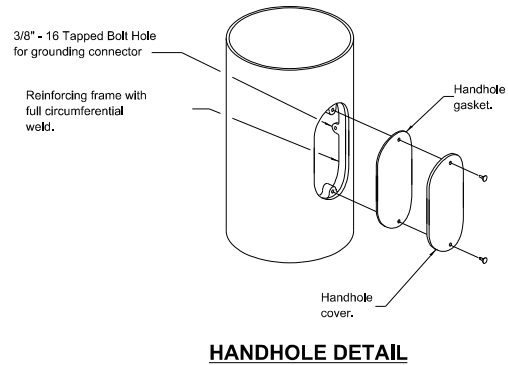
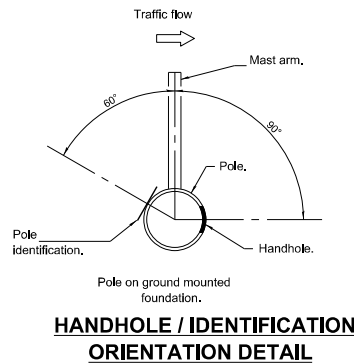
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE ALUMINUM MAST ARM			
SCALE: AS NOTED	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE. 1587	SECTION 3034B&N	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. L&D
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60X74



- ① Omit leveling nuts when breakaway devices are required.
- ② Provide aluminum skirt sheet 1/16" thick (4 panels per skirt).



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 22-FEB-2018 14:44:28 TIME \$

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 SINGH ARBORETRIC
 CONSULTING ENGINEERS

USER NAME : mgarvada	DESIGNED - MC	REVISED -
PLOT SCALE : 100.00000001.000000	DRAWN - JA	REVISED -
PLOT DATE : 22-FEB-2018 14:44	CHECKED - KGP	REVISED -
	DATE - 2/21/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LIGHT POLE ALUMINUM MAST ARM

SCALE: AS NOTED SHEET NO. OF SHEETS STA. TO STA.

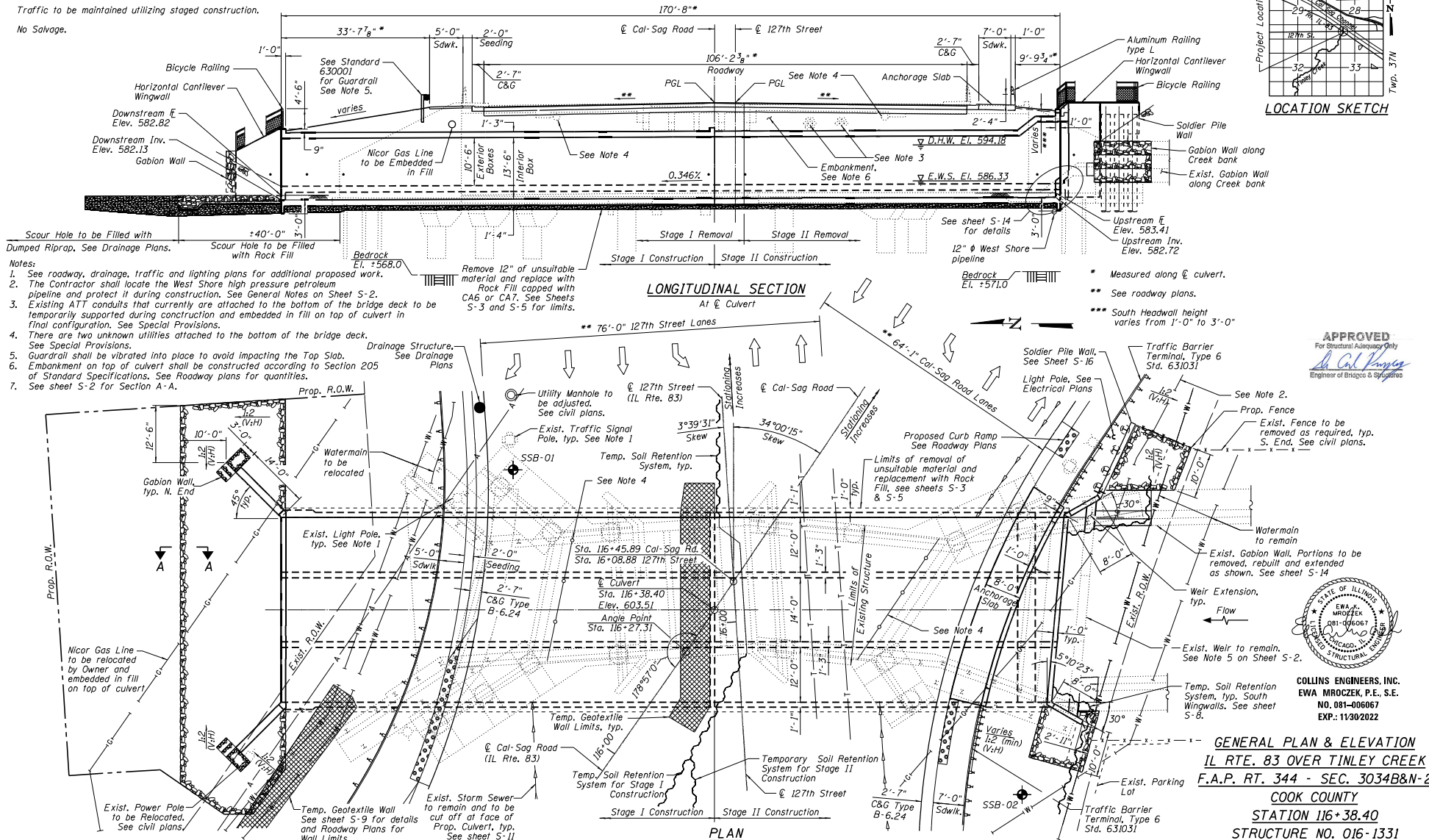
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				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

Bench Mark T137: 3/2" brass disc found in top of southeast concrete wingwall; Sta. 16+16.22, 67.06' Rt. (Prop. 127th St. \bar{C}), Sta. 116+92.68, 48.60' Rt. (Prop. Cal-Sag Rd. \bar{C}), Elevation 603.19

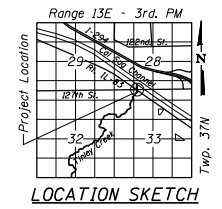
Existing Structure: S.N. 016-0569 was originally constructed as a single span of reinforced concrete T-Beams on closed abutments. In 1935 and 1984, the structure was widened to the north and south with single span reinforced concrete slabs on cantilevered closed abutments. The existing structure is to be removed and replaced with a triple barrel cast in place concrete box culvert.

Traffic to be maintained utilizing staged construction.

No Salvage.



- Notes:
- See roadway, drainage, traffic and lighting plans for additional proposed work.
 - The Contractor shall locate the West Shore high pressure petroleum pipeline and protect it during construction. See General Notes on Sheet S-2.
 - Existing ATT conduits that currently are attached to the bottom of the bridge deck to be temporarily supported during construction and embedded in fill on top of culvert in final configuration. See Special Provisions.
 - There are two unknown utilities attached to the bottom of the bridge deck. See Special Provisions.
 - Guardrail shall be vibrated into place to avoid impacting the Top Slab.
 - Embankment on top of culvert shall be constructed according to Section 205 of Standard Specifications. See Roadway plans for quantities.
 - See sheet S-2 for Section A-A.



APPROVED
For Structural Adequacy Only
A. C. Payne
Engineer of Bridges & Structures



GENERAL PLAN & ELEVATION
IL RTE. 83 OVER TINLEY CREEK
F.A.P. RT. 344 - SEC. 3034B&N-2
COOK COUNTY
STATION 116+38.40
STRUCTURE NO. 016-1331

COLLINS ENGINEERS

USER NAME	DESIGNED - AMS	REVISED
PLLOT SCALE	CHECKED - EKM	REVISED
PLLOT DATE	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-1331
SHEET NO. S-1 OF S-23 SHEETS

F.A.P. SHEET NO.	SECTION	COUNTY	TOTAL SHEET NO.
344	3034B&N-2	COOK	207 142
			CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT			

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INDEX OF SHEETS

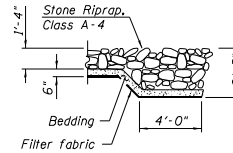
- S-1 General Plan & Elevation
- S-2 General Notes, Index of Sheets, and Total Bill of Material
- S-3 Stage I Removal Details
- S-4 Stage I Construction Details
- S-5 Stage II Removal Details
- S-6 Stage II Construction Details
- S-7 Temporary Concrete Barrier for Stage Construction
- S-8 Temporary Soil Retention System
- S-9 Temporary Geotextile Retaining Wall
- S-10 Culvert Details I
- S-11 Culvert Details II
- S-12 Culvert Details III
- S-13 Culvert Details IV
- S-14 Weir and Gabion Details at South End of Culvert
- S-15 Anchorage Slab Details
- S-16 Soldier Pile Wall Details
- S-17 Aluminum Railing, Type L
- S-18 Bicycle Railing
- S-19 Bar Splicer Assembly and Mechanical Splicer Details
- S-20 HP Pile Details
- S-21 Soil Boring Logs
- S-22 Existing Slope Protection - Typical Sections
- S-23 Existing Slope Protection - Landscaping Plan

GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
3. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
4. Excavation required for construction of the culvert as shown in these plans and in accordance with the Standard Specifications shall be included in the cost of Concrete Box Culverts. Excavation for Soldier Pile wall will be paid for as Structure Excavation per Article 502 of the Standard Specifications.
5. Portions of the existing weir to be removed in order to construct the culvert. The remaining part shall be protected by the Contractor and temporarily braced, if needed. See sheet S-14 for the suggested method of construction that doesn't require bracing. The pay item is included in the event that the contractor chooses a different method. After the culvert is constructed, the weir shall be reconstructed and extended as required. The Contractor is solely responsible for the stability of the weir during construction. The cost of the temporary brace, if required, shall be included in the cost of Temporary Wall Bracing System pay item.
6. Precast alternate is not allowed.
7. It shall be the responsibility of the Contractor to divert flow during construction in order to keep construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and shall be included in the cost of Concrete Box Culverts. The water flow management during construction may possibly require sub-stages with temporary soil retention systems, in addition to the systems shown on the plans.
8. All exposed concrete edges shall be chamfered 3/4" unless otherwise noted.
9. The Contractor shall locate all existing utilities prior to construction. Any damage to utilities to be repaired at the Contractor's expense.
10. The contractor shall contact Bobby LaFann (309-303-9213) from Buckeye Partners, L.P. (West Shore) prior to any construction in the vicinity of the West Shore pipeline to schedule a watch and protect for the pipeline.
11. The contractor is advised about the overhead electric line on the north side of existing structure. Extra caution is required when working near overhead lines.

STATION 116+38.40
 BUILT 201L BY
 STATE OF ILLINOIS
 F.A.P. RT. 344
 SEC 3034B&N-2
 LOADING HL-93
 STR. NO. 016-1331

NAME PLATE
 See Std. 515001



SECTION A - A

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A-4	Sq. Yd.	265
Filter Fabric	Sq. Yd.	288
Gabions	Cu. Yd.	45
Removal of Existing Structures	Each	1
Structure Excavation	Cu. Yd.	25
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	245.0
Concrete Structures	Cu. Yd.	15.8
Concrete Superstructure	Cu. Yd.	22.7
Protective Coat	Sq. Yd.	75
Stud Shear Connectors	Each	34
Reinforcement Bars	Pound	204,760
Reinforcement Bars, Epoxy Coated	Pound	5,410
Bar Splicers	Each	290
Aluminum Railing, Type L	Foot	39.5
Bicycle Railing	Foot	148
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	1,437
Furnishing Soldier Piles (HP Section)	Foot	120
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	340
Drilling and Setting Soldier Piles (In Rock)	Cu. Ft.	26
Untreated Timber Lagging	Sq. Ft.	150
Geotextile Retaining Wall	Sq. Ft.	251
Concrete Box Culverts	Cu. Yd.	1,106
Geocomposite Wall Drain	Sq. Yd.	16
Gabion Removal	Cu. Yd.	28
Rock Fill	Cu. Yd.	507.6
Temporary Wall Bracing System	L. Sum	1

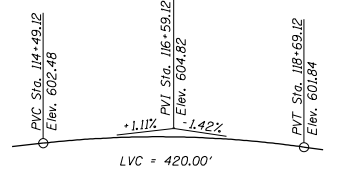
WATERWAY INFORMATION

Drainage Area = 12.8 Sq. mi. Exist. Low Grade Elev. 600.63 @ Exist. Sta. 11+00 (127th St.)
 Prop. Low Grade Elev. 600.63 @ Prop. Sta. 11+00

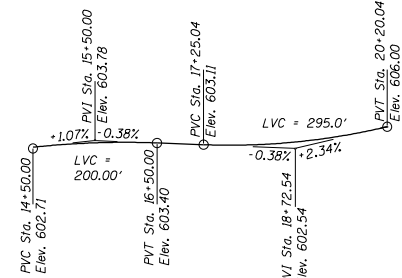
Flood	Freq. Yr.	Q	C.F.S.	Exist. Prop.	Opening Sq. Ft.	Nat. Prop.	H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater E.L. Exist. Prop.
10	10	1368	242.0	297.24	593.25	0.06	0.0	593.31	593.25
Design	50	1665	266.0	328.92	594.18	0.13	0.0	594.31	594.18
Base	100	1770	265.5	343.32	594.61	0.13	0.0	594.74	594.61
Max. Calc.	500	2005	299.3	388.68	595.94	0.18	0.0	596.12	595.94

Datum: NGVD29 (to convert from NGVD29 to NAVD88 subtract 0.31 feet)

10-Year Velocity Through Proposed Bridge = 4.6 fps.
 2-Year Peak Discharge Rate = 637 cfs.
 2-Year Peak Elevation = 591.91
 2 Year Bypass Water Opening = 211.3 sq. ft.



PROFILE GRADE
 (Along PGL Col-Sag Road)



PROFILE GRADE
 (Along PGL 127th Street)

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

LOADING HL-93

Allow 50#/#sq. ft. for future wearing surface.

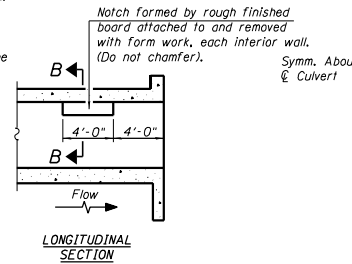
DESIGN FILL HEIGHT

Design earth cover = varies from 5'-6" to 6'-4" (Measured to top of pavement)

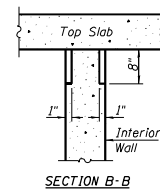
DESIGN STRESSES

FIELD UNITS

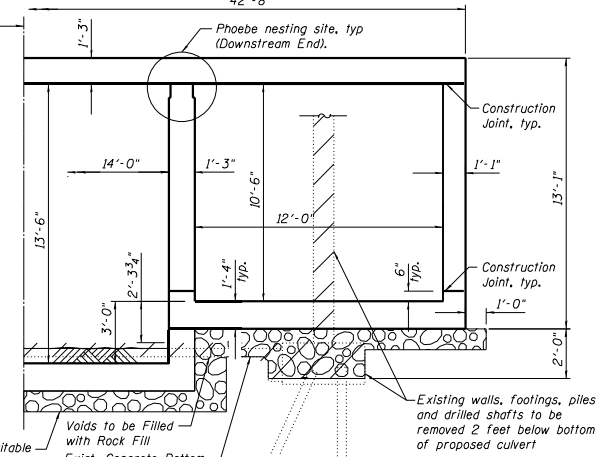
f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)



LONGITUDINAL SECTION



SECTION B - B
PHOEBE NESTING SITE DETAILS
 (Downstream End Only)



Remove 12" of unsuitable material and replace with Rock Fill capped with CA6 or CA7

HALF-SECTION THRU BARRELS



USER NAME :	DESIGNED - AMS	REVISED
PLT SCALE :	CHECKED - EKM	REVISED
PLT DATE :	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIALS
 STRUCTURE NO. 016-1331

F.A.P. PTE.	SECTION	COUNTY	TOTAL SHEET NO.
344	3034B&N-2	COOK	207 143
			CONTRACT NO. 60X74

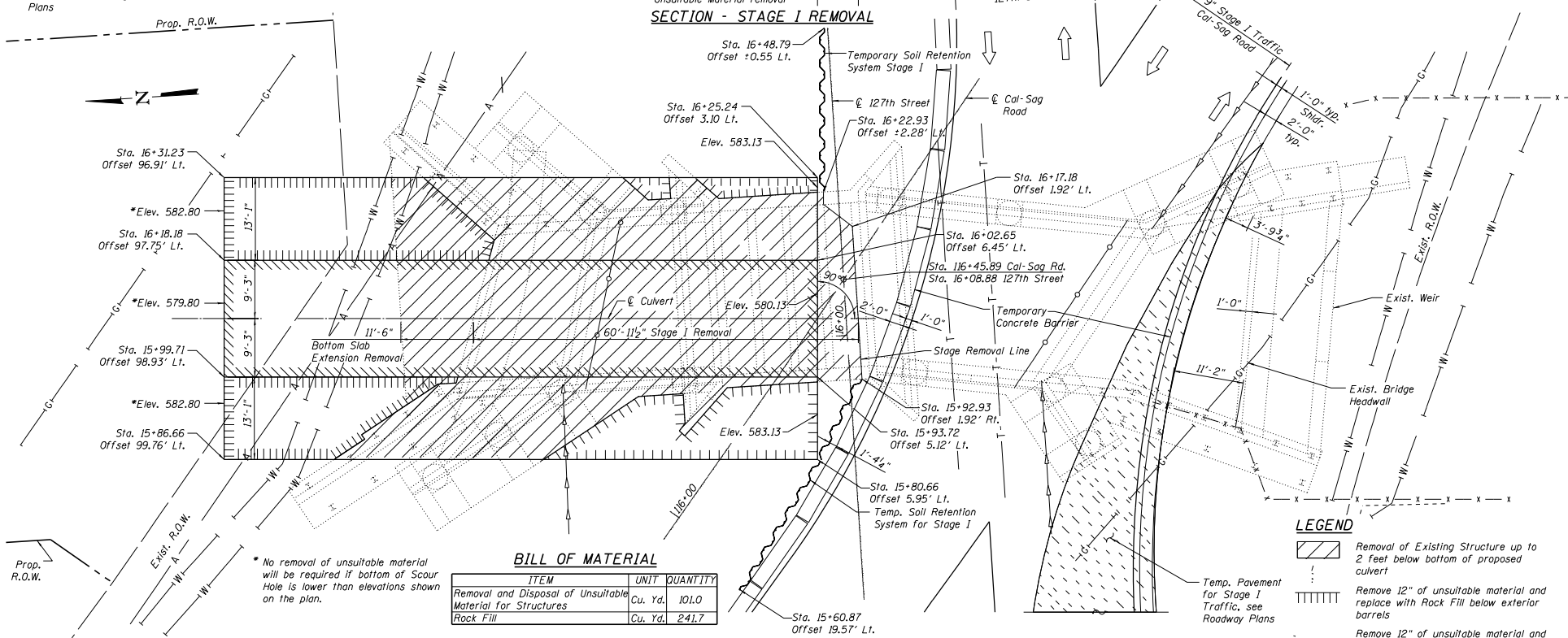
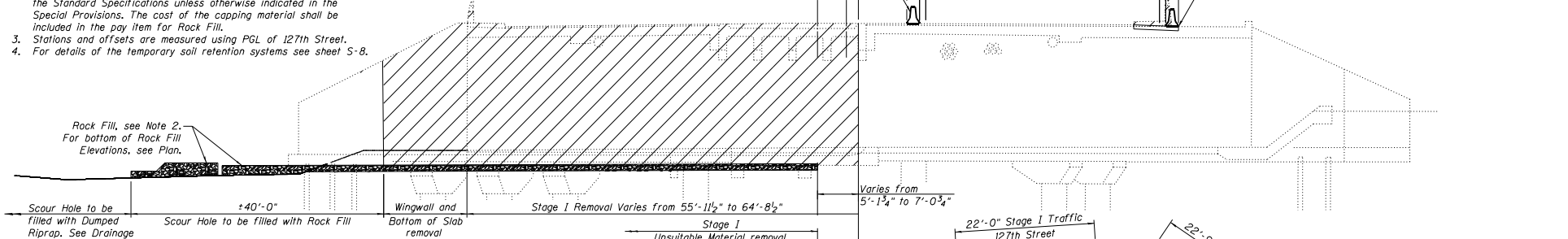
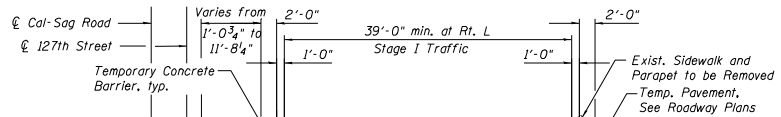
SHEET NO. S-2 OF S-23 SHEETS

ILLINOIS FED. AID PROJECT

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Notes:

1. The limits and quantities of removal of unsuitable material and replacement with Rock Fill shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
2. The Rock Fill shall be capped with 6" of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill.
3. Stations and offsets are measured using PGL of 127th Street.
4. For details of the temporary soil retention systems see sheet S-8.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	101.0
Rock Fill	Cu. Yd.	241.7

* No removal of unsuitable material will be required if bottom of Scour Hole is lower than elevations shown on the plan.

LEGEND

- Removal of Existing Structure up to 2 feet below bottom of proposed culvert
- Remove 12" of unsuitable material and replace with Rock Fill below exterior barrels
- Remove 12" of unsuitable material and replace with Rock Fill below interior barrel

PLAN - STAGE I REMOVAL

COLLINS ENGINEERS

USER NAME :	DESIGNED - AMS	REVISED
PLLOT SCALE :	CHECKED - EKM	REVISED
PLLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I REMOVAL DETAILS
STRUCTURE NO. 016-1331

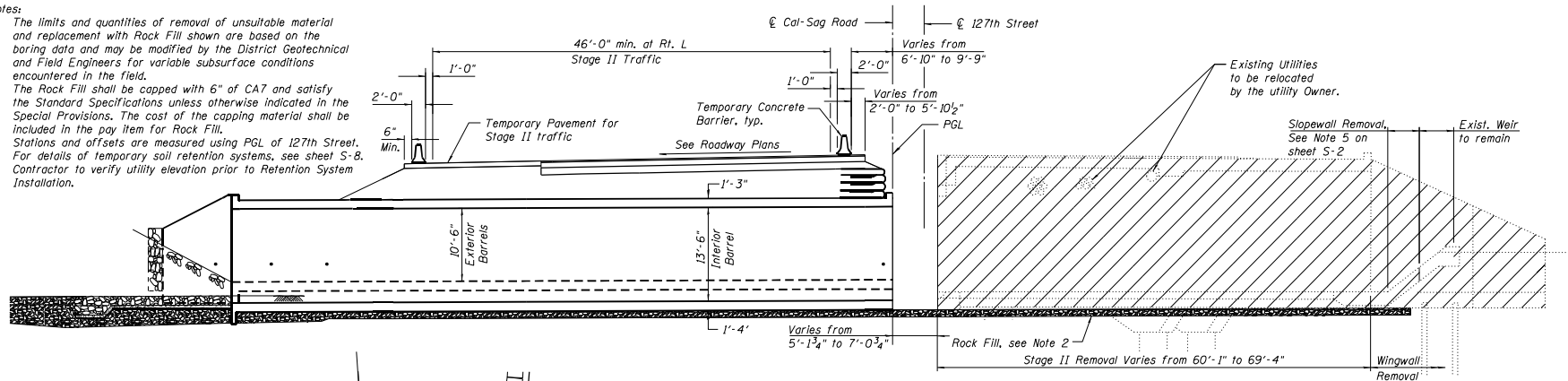
SHEET NO. S-3 OF S-23 SHEETS

P.A.P. PTE.:	SECTION	COUNTY	TOTAL SHEET NO.
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			CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT			

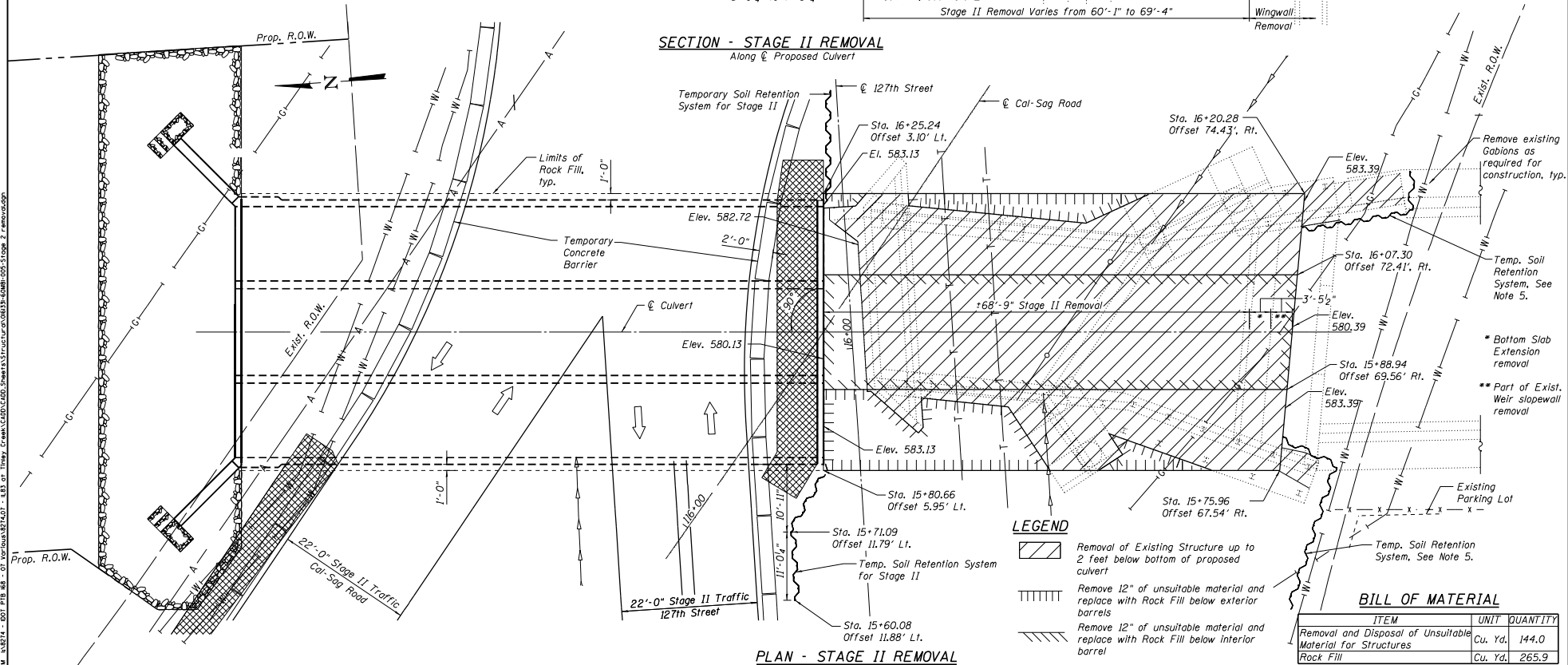
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Notes:

1. The limits and quantities of removal of unsuitable material and replacement with Rock Fill shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
2. The Rock Fill shall be capped with 6" of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill.
3. Stations and offsets are measured using PGL of 127th Street.
4. For details of temporary soil retention systems, see sheet S-8.
5. Contractor to verify utility elevation prior to Retention System Installation.



SECTION - STAGE II REMOVAL
Along \bar{C} Proposed Culvert



LEGEND

- Removal of Existing Structure up to 2 feet below bottom of proposed culvert
- Remove 12" of unsuitable material and replace with Rock Fill below exterior barrels
- Remove 12" of unsuitable material and replace with Rock Fill below interior barrel

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	144.0
Rock Fill	Cu. Yd.	265.9

COLLINS ENGINEERS

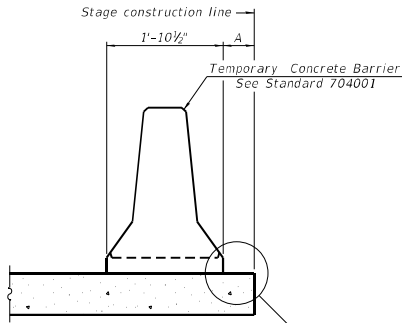
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PLOT SCALE :	CHECKED - EKM	REVISED
PLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II REMOVAL DETAILS
STRUCTURE NO. 016-1331

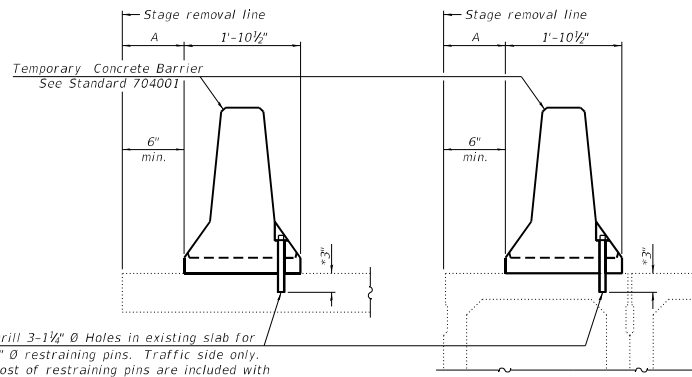
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CONTRACT NO. 60X74				ILLINOIS FED. AID PROJECT

5/4/2021 10:57 PM M324 - DOT P18 85 - 07 VARIOUS STAGES - L&S OF THREE EXISTING STRUCTURES TO BE REMOVED - STAGE 2 - REMOVAL



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

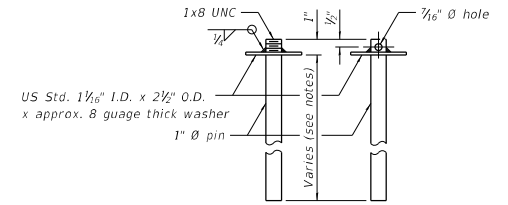


Drill 3-1/2" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

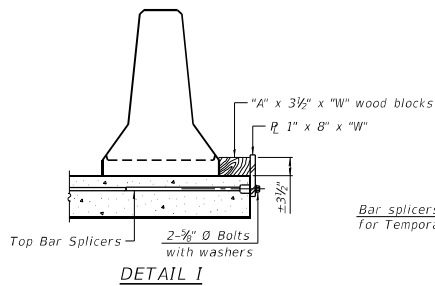
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

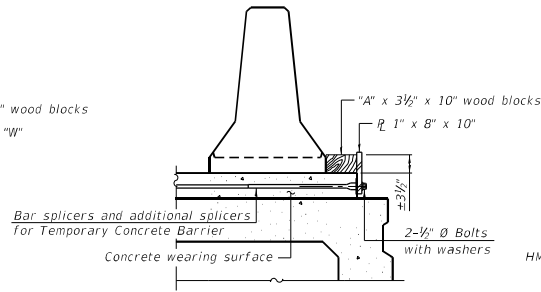


RESTRAINING PIN

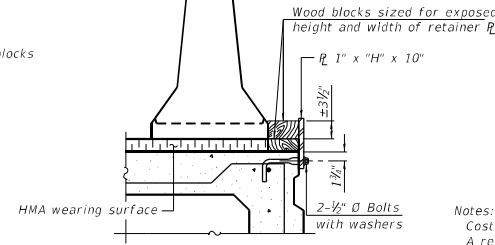
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.



DETAIL I

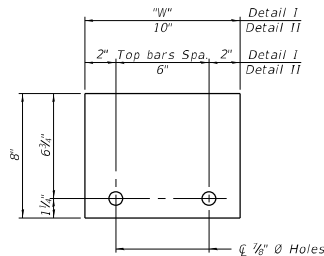


DETAIL II

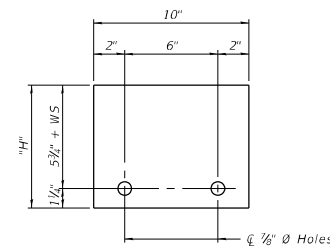


DETAIL III

BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate C of each temporary concrete barrier.
The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6' to accommodate the shear key clamping device.

- Detail I - Installation for a new bridge deck or bridge slab.
- Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27 2-17-2017

COLLINS ENGINEERS

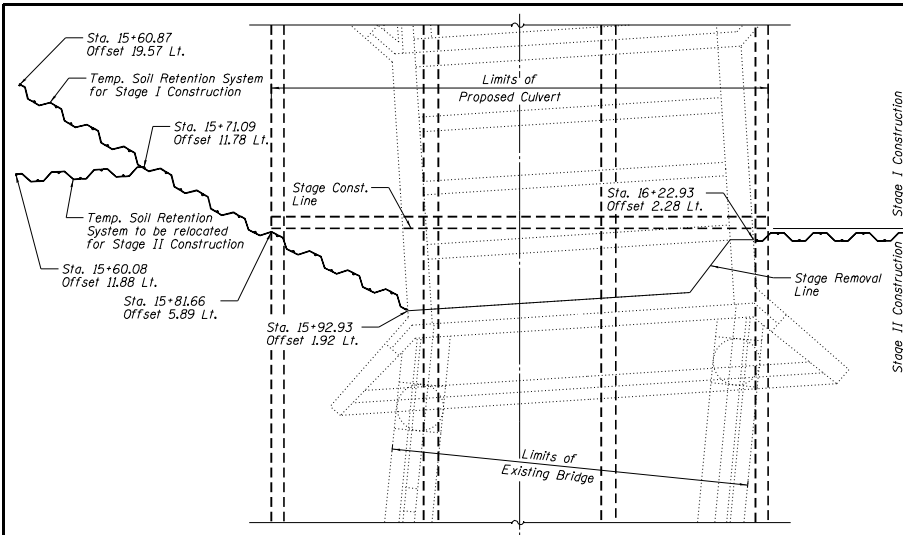
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PLOT SCALE :	CHECKED - EKM	REVISED
PLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

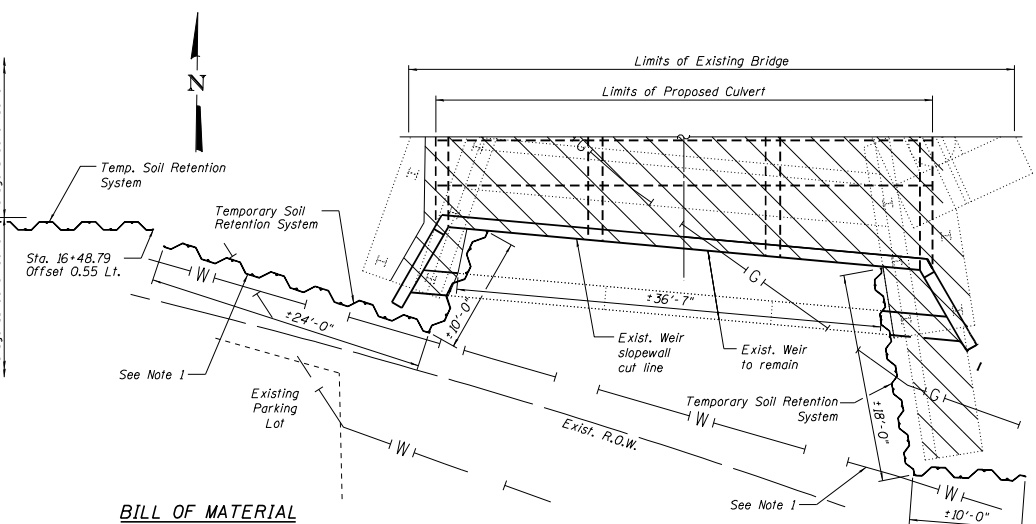
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-1331

F.A.P. PTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

SHEET NO. 5-7 OF 5-23 SHEETS



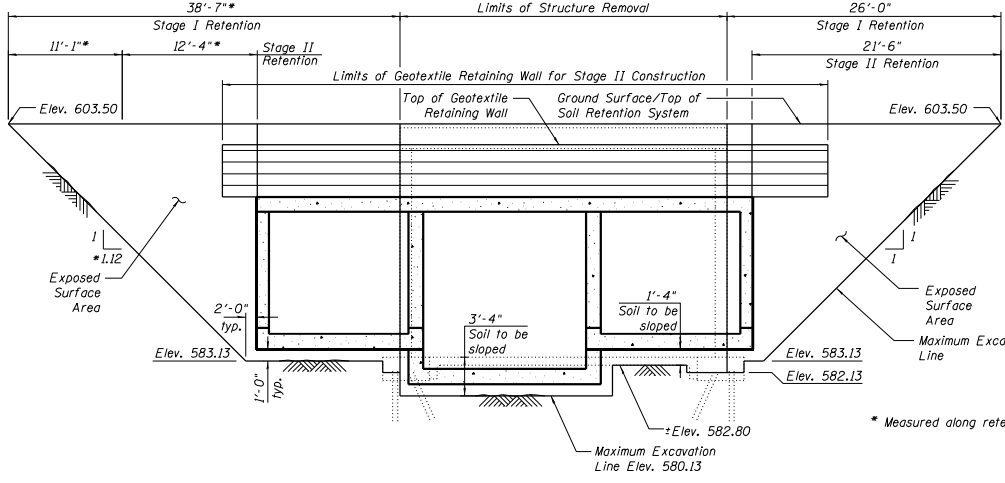
TEMPORARY SOIL RETENTION SYSTEM - PLAN
at Stage Construction Line



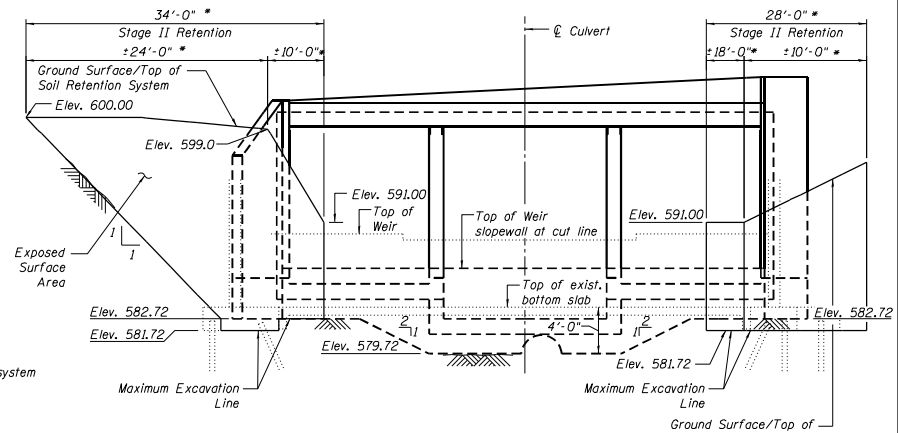
TEMPORARY SOIL RETENTION SYSTEM - PLAN
at South End

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Soil Retention System	Sq. Ft.	1,437



TEMPORARY SOIL RETENTION SYSTEM
At Stage Construction Line
Looking North



TEMPORARY SOIL RETENTION SYSTEM
at South End
Looking North

- Notes:**
- Contractor to verify utility locations and elevations prior to installation of Soil Retention System.
 - See General Notes on sheet S-2 for water diversion notes.
 - A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit temporary Soil Retention designs for each location including plan details and calculations for review and acceptance by the Engineer.

COLLINS ENGINEERS

USER NAME :	DESIGNED - AMS	REVISED
PLOT SCALE :	CHECKED - EKM	REVISED
PLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

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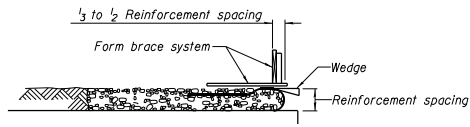
TEMPORARY SOIL RETENTION SYSTEM
STRUCTURE NO. 016-1331

SHEET NO. S-8 OF S-23 SHEETS

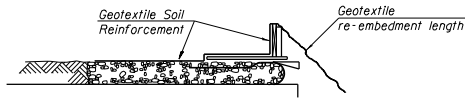
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344	3034B&N-2	COOK	207	149
				CONTRACT NO. 60X74

ILLINOIS FED. AID PROJECT

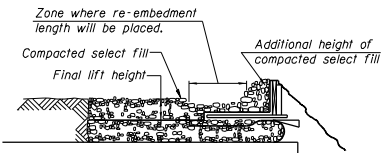
5/4/2021 2:00:02 PM N3274 - 001 P18 85 - 01 V:\ROAD\374537 - L&B of They, Frank\CD\CD_Sheet\STRUCTURE\016-1331-008-Temp. Soil Retention



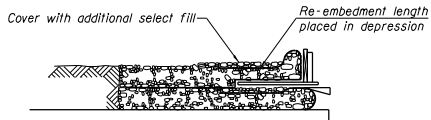
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of $\frac{1}{3}$ to $\frac{1}{2}$ the geotextile reinforcement spacing.



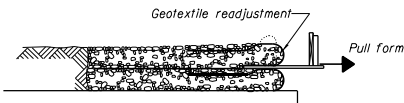
2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.



3. Compact select fill material in lifts to final lift height, create (+3") depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.

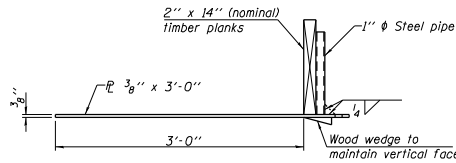
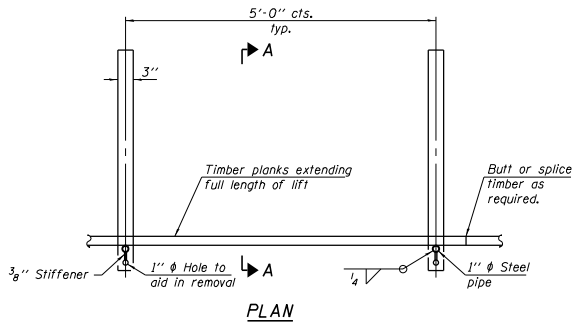


4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill (+3") to embed geotextile and bring to final lift height.



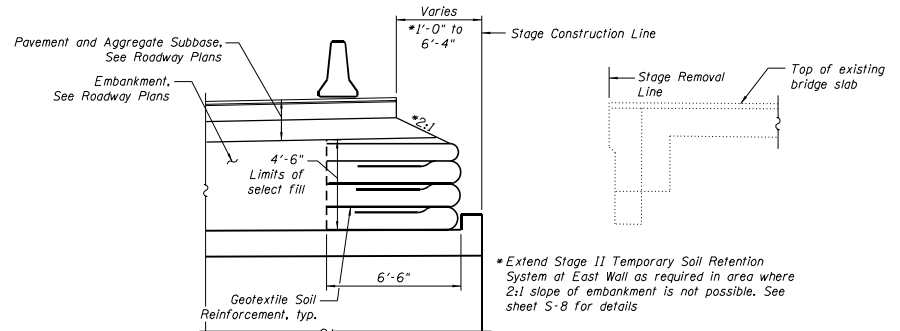
5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

GEOTEXTILE WALL CONSTRUCTION SEQUENCE



GEOTEXTILE FORM BRACE DETAIL

Note: This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.



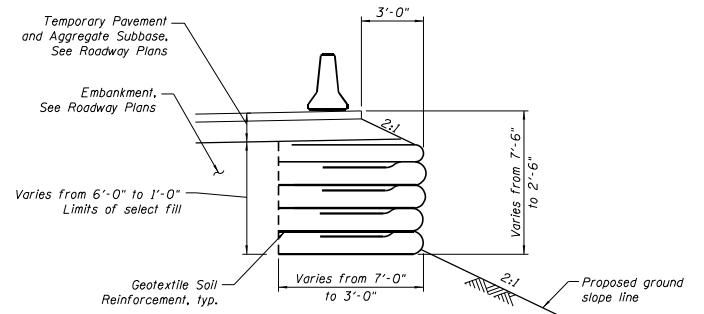
* Extend Stage II Temporary Soil Retention System at East Wall as required in area where 2:1 slope of embankment is not possible. See sheet S-8 for details

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Geotextile Retaining Wall	Sq. Ft.	251

TEMPORARY GEOTEXTILE WALL SECTION

At Culvert's Stage Construction Line



TEMPORARY GEOTEXTILE WALL SECTION

For Stage II temporary pavement at North West end of culvert. See Roadway Plans for limits and quantities.

Note: The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 50 lb./in. as determined by the procedure described in Standard Specifications Section 522. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.

COLLINS ENGINEERS

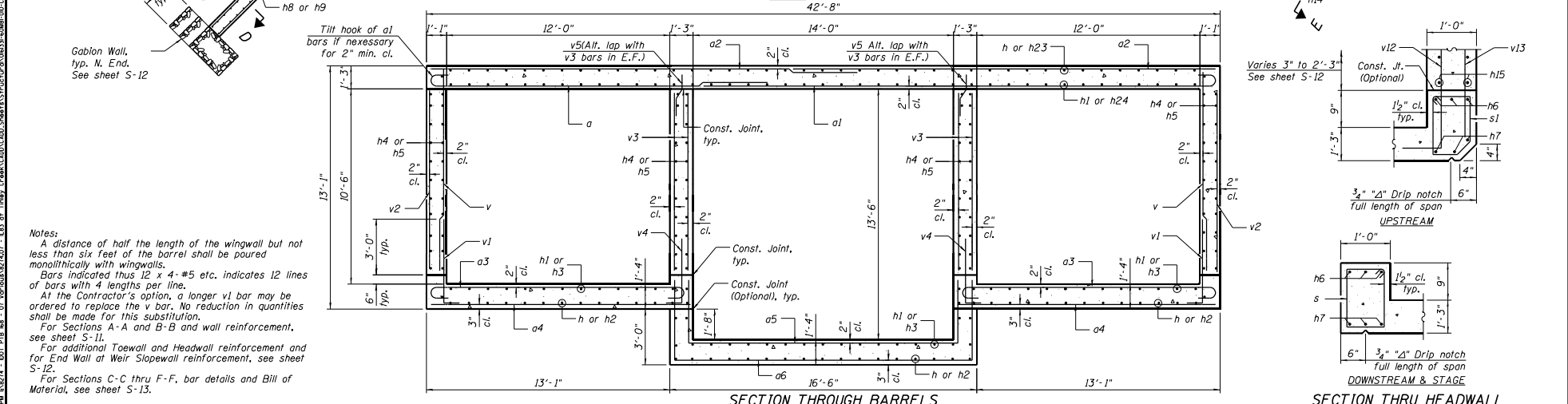
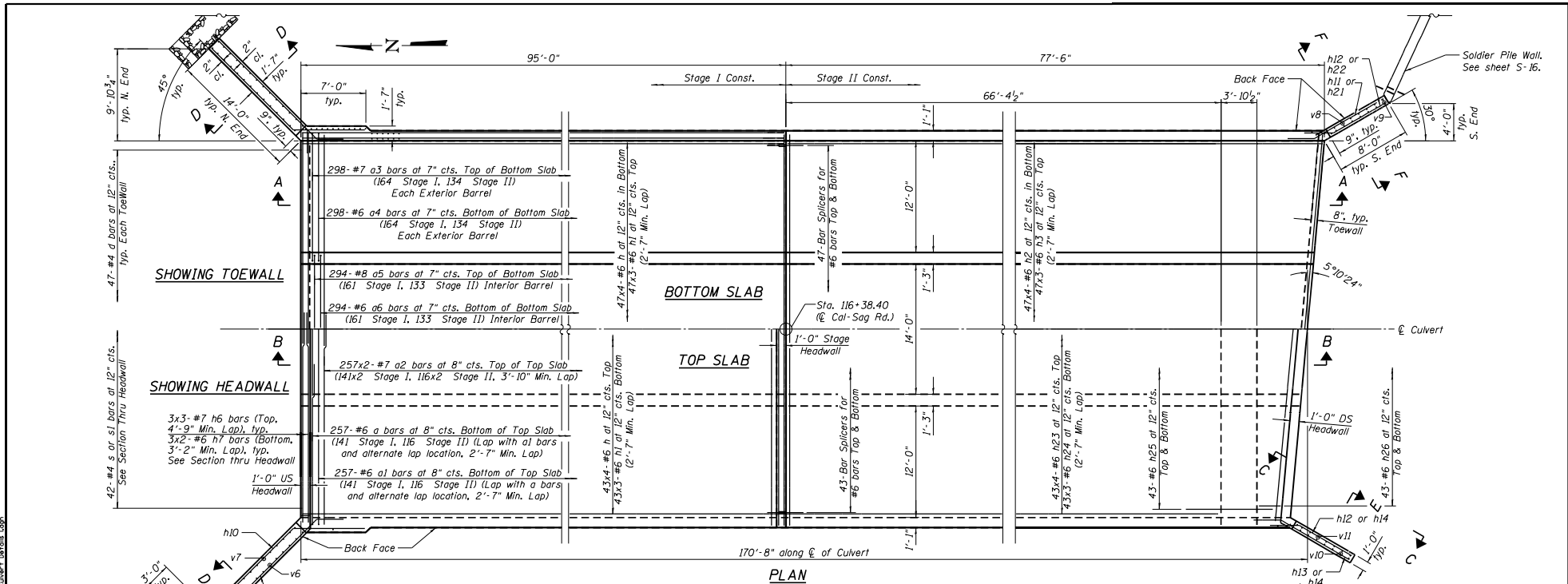
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PLOT SCALE :	CHECKED - EKM	REVISED
PLOT DATE :	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY GEOTEXTILE RETAINING WALL
STRUCTURE NO. 016-1331

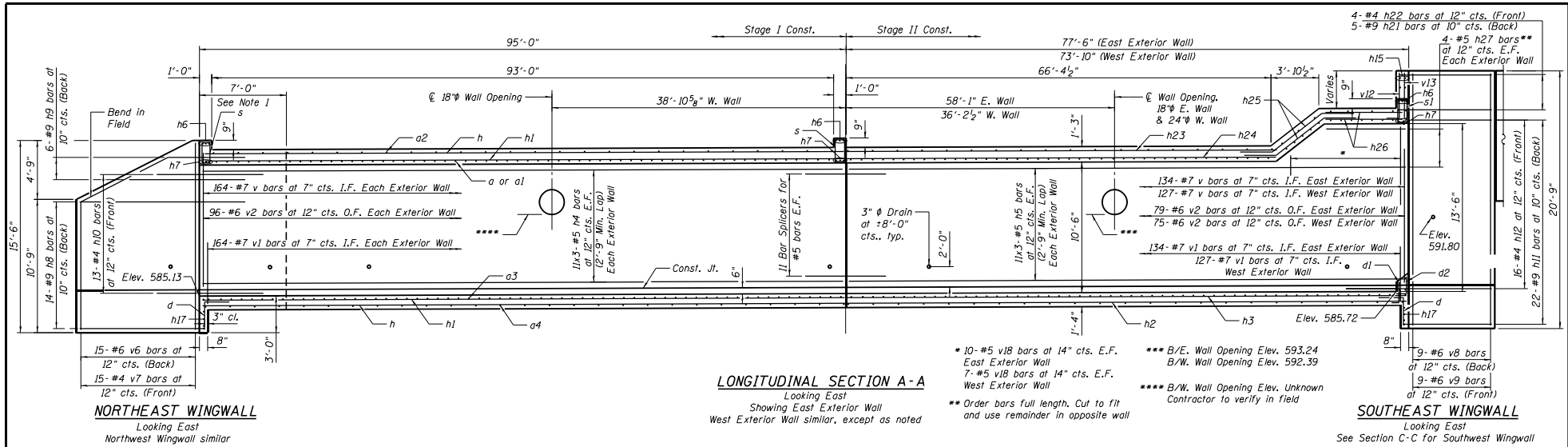
F.A.P. PAGES	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034B&N-2	COOK	207	150
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

SHEET NO. S-9 OF S-23 SHEETS



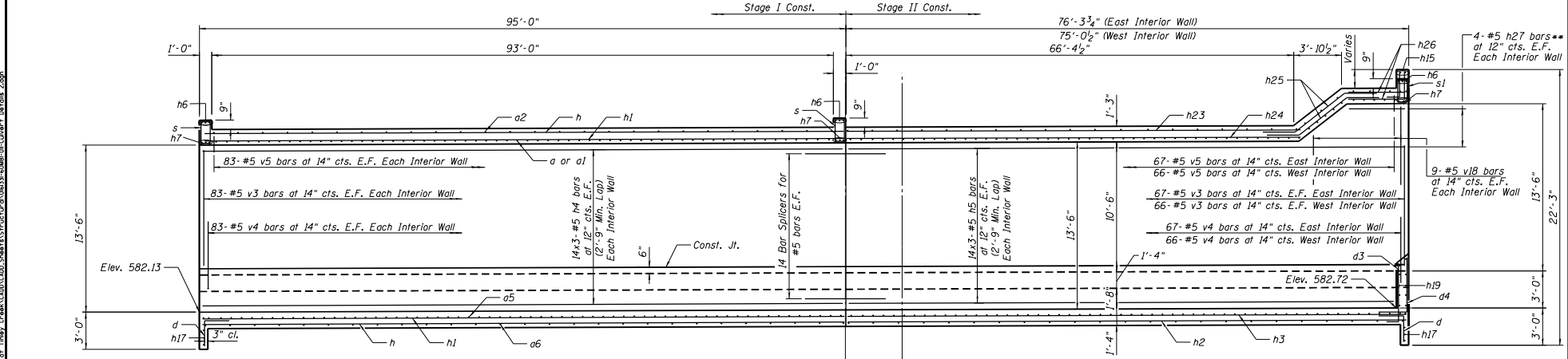
Notes:
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with wingwalls.
 Bars indicated thus 12 x 4 #5 etc. indicates 12 lines of bars with 4 lengths per line.
 At the Contractor's option, a longer v1 bar may be ordered to replace the v bar. No reduction in quantities shall be made for this substitution.
 For Sections A-A and B-B and wall reinforcement, see sheet S-11.
 For additional Toewall and Headwall reinforcement and for End Wall at Weir Slope/wall reinforcement, see sheet S-12.
 For Sections C-C thru F-F, bar details and Bill of Material, see sheet S-13.

COLLINS ENGINEERS <small>5/4/2020 10:20:54 AM 143274 - 007 P18 85 - 07 V:\Road\1347457 - LB3 - 07 - They, Frank\CADD\CAD_Sheets\STRUCTURE\WB18-606R-02-Culvert 1 Detail.dwg</small>	USER NAME :	DESIGNED - AMS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT DETAILS I STRUCTURE NO. 016-1331 SHEET NO. S-10 OF S-23 SHEETS	P.P. 12 P.P. 13 344	SECTION 30348N-2	COUNTY COOK	TOTAL SHEET NO. 207 151	CONTRACT NO. 60X74 ILLINOIS FED. AID PROJECT
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	PLOT DATE :	CHECKED - EKM	REVISED							

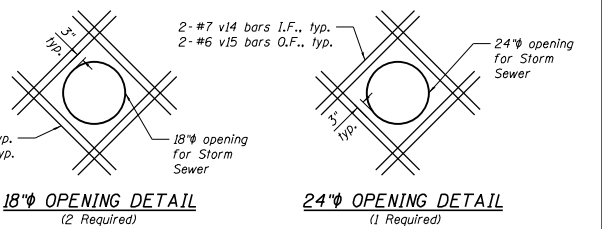


LONGITUDINAL SECTION A-A
Looking East
Showing East Exterior Wall
West Exterior Wall similar, except as noted

SOUTHEAST WINGWALL
Looking East
See Section C-C for Southwest Wingwall



LONGITUDINAL SECTION B-B
Looking East
Showing East Interior Wall
West Interior Wall similar, except as noted



Storm Sewer Opening Notes:
Existing Storm Sewers are to be cut off at the face of the exterior walls of the culvert. Openings shall be provided to allow for drainage. See Plan on sheet S-1 for locations.
One 18" Opening is required in the East Wall. One 18" and one 24" Opening are required in the West Wall.
Cut vertical and horizontal reinforcement to clear openings.

- Notes:**
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with wingwalls. See sheet S-10.
 2. Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 3. At the Contractor's option, a longer v1 bar may be ordered to replace the v bar. No reduction in quantities shall be made for this substitution.
 4. For Section C-C, bar details and Bill of Material, see sheet S-13.

COLLINS ENGINEERS

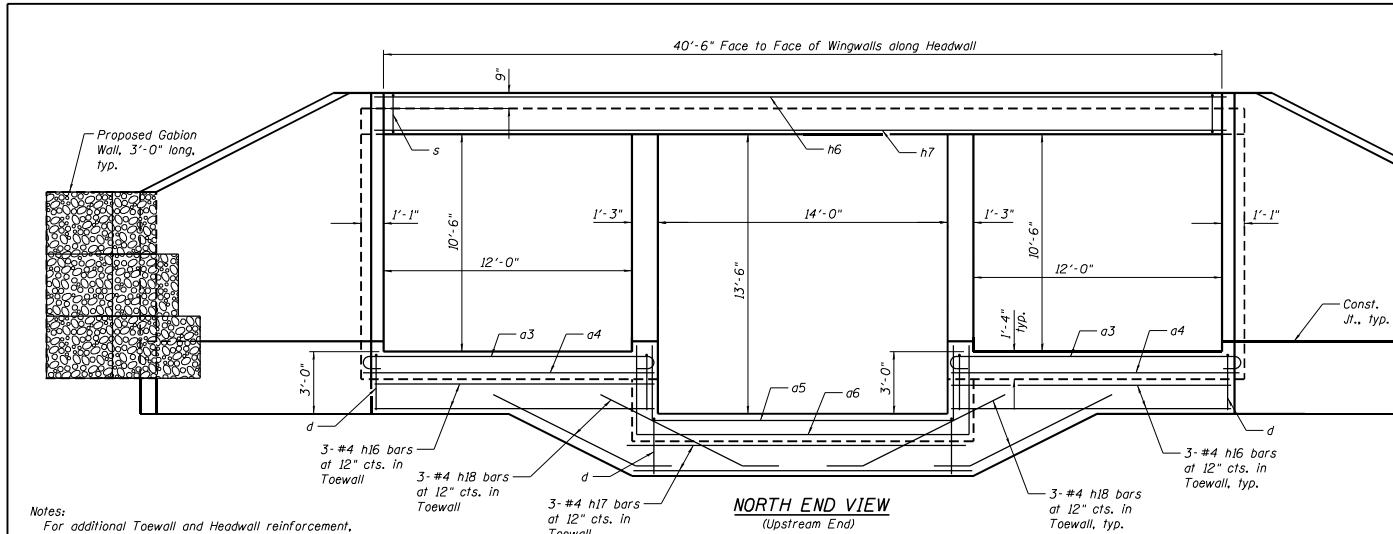
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CHECKED - EKM	REVISED	
DRAWN - PRH	REVISED	
CHECKED - EKM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS II
STRUCTURE NO. 016-1331

SHEET NO. S-11 OF S-23 SHEETS

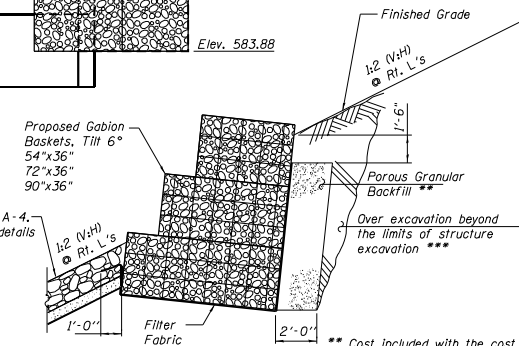
F.A.P. RFE:	SECTION	COUNTY	TOTAL SHEET NO.
344	30348&N-2	COOK	207 152
			CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT			



Notes:
 For additional Toewall and Headwall reinforcement, see sheet S-10.
 For bar details and Bill of Material, see sheet S-13.
 For Gabion wall on the south end, see sheet S-14.
 For Sections G-G, H-H and J-J, see sheet S-14.
 Contractor shall verify End Wall height at Weir Slopewall, prior to ordering and fabricating d1 thru d4 bars.

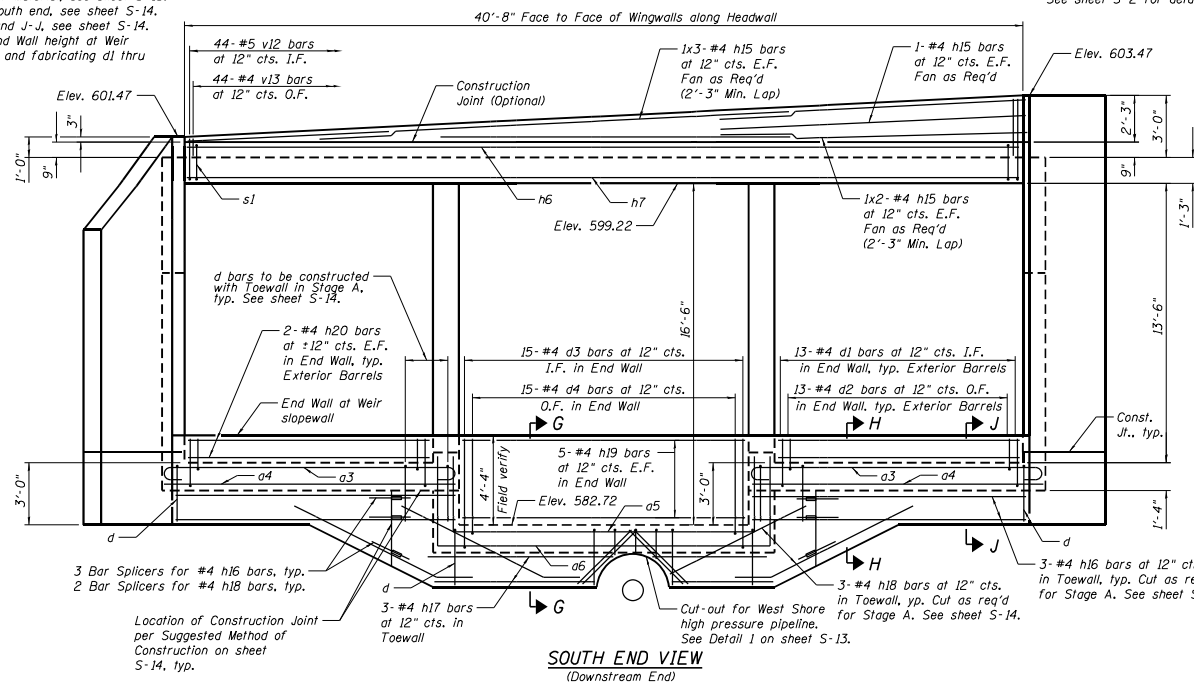
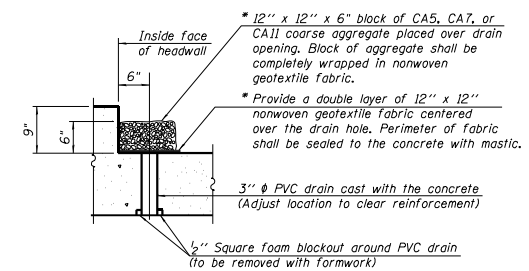
SUGGESTED SEQUENCE OF CONSTRUCTION
NORTH WINGWALLS

1. Construct Culvert Wingwalls
2. Backfill excavation to bottom of gabion elevation with suitable material approved by the Engineer compacted according to Article 502.10. Cost included with Concrete Box Culvert.
3. Construct Gabion Wingwall Extension
4. Backfill as shown on the section below.
5. Install Filter Fabric and Stone Riprap in front of wingwalls



** Cost included with the cost Gabions.
 *** This area shall be backfilled with Porous Granular Backfill and not measured for payment.

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



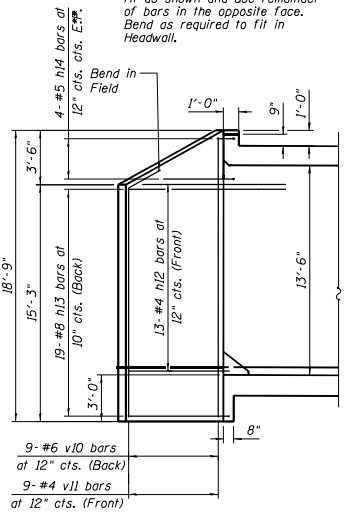
Location of Construction Joint per Suggested Method of Construction on sheet S-14, typ.

USER NAME :	DESIGNED - AMS	REVISED
PLLOT SCALE :	CHECKED - EKM	REVISED
PLLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

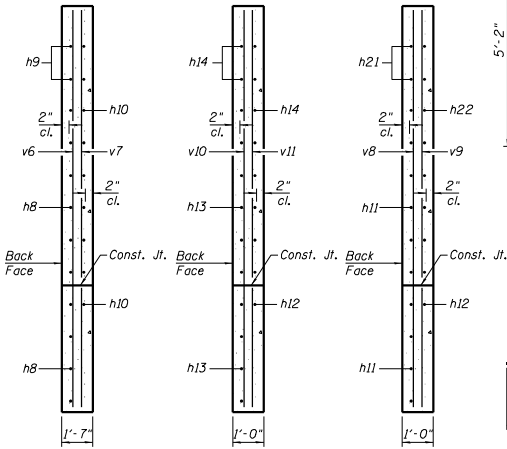
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ILLINOIS FED. AID PROJECT				

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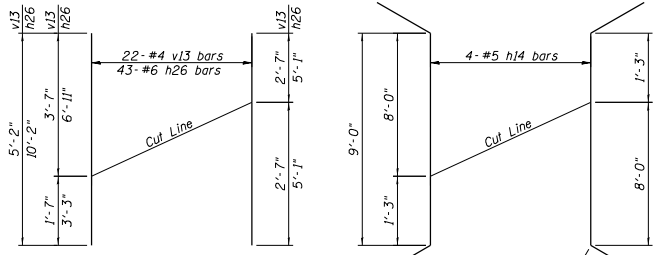
** Order bars full length. Cut to fit as shown and use remainder of bars in the opposite face. Bend as required to fit in Headwall.



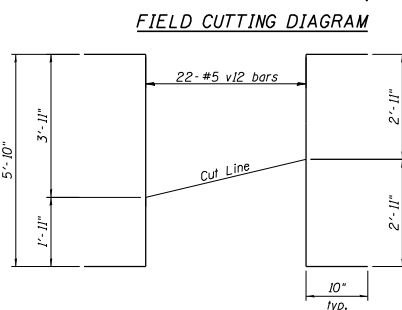
SECTION C-C
Southwest Wingwall
Looking East



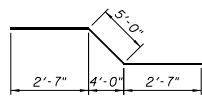
SECTION D-D **SECTION E-E** **SECTION F-F**



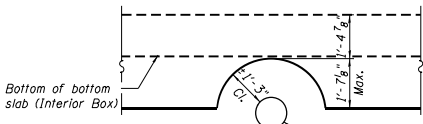
FIELD CUTTING DIAGRAM



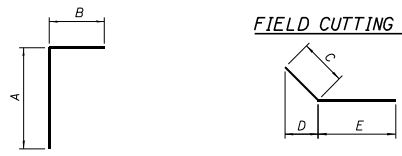
FIELD CUTTING DIAGRAM



BAR h25



DETAIL 1



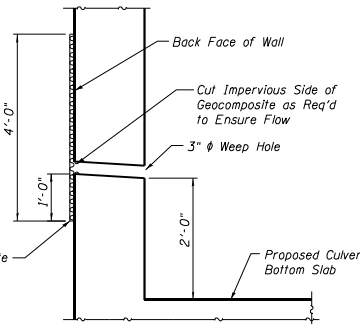
BARS d thru d4

BARS h8 thru h13, h18, h21 & h22

Bar	A	B
d	2'-8"	1'-9"
d1	2'-5"	8"
d2	1'-6"	8"
d3	5'-5"	8"
d4	4'-6"	8"

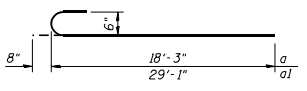
Note:
Contractor shall verify End Wall height of Weir Slope wall, prior to ordering and fabricating d1 thru d4 bars.

Bar	C	D	E
h8	4'-2"	2'-11 3/4"	14'-10"
h9	4'-2"	2'-11 3/4"	8'-0"
h10	7'-9"	5'-5 3/4"	12'-6"
h11	4'-2"	3'-7 1/4"	8'-7"
h12	3'-0"	2'-7 1/8"	6'-6"
h13	4'-2"	3'-7 1/4"	8'-7"
h18	1'-9"	1'-6 3/4"	7'-8"
h21	3'-0"	2'-4 3/4"	8'-7"
h22	3'-0"	1'-8 3/4"	7'-10"

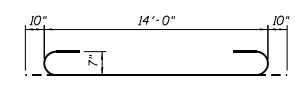


WEEPHOLE DRAIN DETAIL

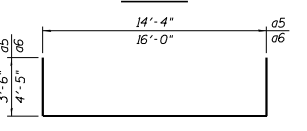
* Cost included with Concrete Box Culverts.



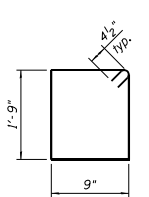
BARS a & d1



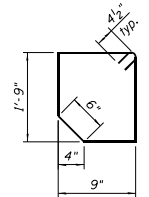
BAR a3



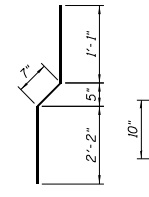
BARS a5 & a6



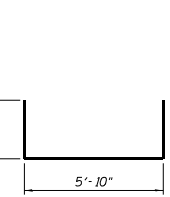
BAR s



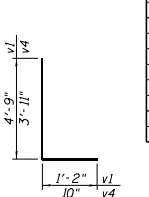
BAR s1



BAR v5



BAR v12



BARS v1 & v4

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	257	#6	17'-5"	U
a1	257	#6	29'-1"	U
a2	514	#7	23'-3"	U
a3	596	#7	15'-8"	U
a4	596	#6	14'-0"	U
a5	298	#8	21'-4"	U
a6	298	#6	24'-10"	U
d	94	#4	4'-5"	U
d1	26	#4	3'-1"	U
d2	26	#4	2'-2"	U
d3	15	#4	6'-1"	U
d4	15	#4	5'-2"	U
h	360	#6	25'-8"	U
h1	270	#6	33'-4"	U
h2	188	#6	21'-3"	U
h3	141	#6	27'-6"	U
h4	100	#5	33'-5"	U
h5	100	#5	27'-7"	U
h6	27	#7	17'-5"	U
h7	18	#6	22'-11"	U
h8	28	#9	19'-0"	U
h9	12	#9	12'-2"	U
h10	26	#4	20'-3"	U
h11	22	#9	12'-9"	U
h12	29	#4	9'-6"	U
h13	19	#8	12'-9"	U
h14	4	#5	15'-3"	U
h15	16	#4	15'-9"	U
h16	12	#4	14'-0"	U
h17	6	#4	16'-2"	U
h18	12	#4	9'-5"	U
h19	5	#4	13'-8"	U
h20	4	#4	11'-8"	U
h21	5	#9	12'-3"	U
h22	4	#4	10'-10"	U
h23	172	#6	19'-5"	U
h24	129	#6	25'-0"	U
h25	86	#6	10'-2"	U
h26	43	#6	10'-2"	U
h27	16	#5	18'-0"	U
s	84	#4	5'-9"	U
s1	42	#4	5'-7"	U
v	589	#7	10'-11"	U
v1	589	#7	5'-11"	U
v2	346	#6	9'-8"	U
v3	598	#5	9'-8"	U
v4	299	#5	4'-9"	U
v5	299	#5	3'-10"	U
v6	30	#6	15'-1"	U
v7	30	#4	15'-1"	U
v8	9	#6	20'-4"	U
v9	9	#4	20'-4"	U
v10	9	#6	18'-4"	U
v11	9	#4	18'-4"	U
v12	22	#5	7'-6"	U
v13	22	#4	5'-2"	U
v14	8	#7	4'-6"	U
v15	8	#7	4'-6"	U
v16	16	#7	4'-0"	U
v17	16	#6	4'-0"	U
v18	20	#5	5'-2"	U
Concrete Box Culverts		Cu. Yd.	1106.0	
Reinforcement Bars		Pound	204,300	
Gabions		Cu. Yd.	12	
Filter Fabric		Sq. Yd.	10	

COLLINS ENGINEERS

USER NAME :	DESIGNED - AMS	REVISED
CHECKED - EKM	REVISOR - EKM	REVISOR
DRAWN - PRH	REVISOR - PRH	REVISOR
CHECKED - EKM	REVISOR - EKM	REVISOR

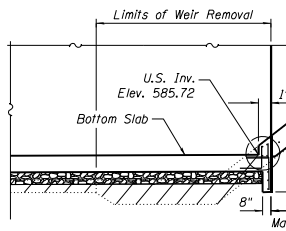
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS IV
STRUCTURE NO. 016-1331

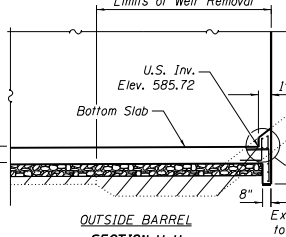
SHEET NO. S-13 OF S-23 SHEETS

F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60X74			ILLINOIS FED. AID PROJECT	

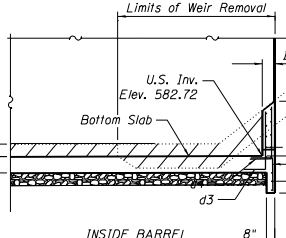
5/4/2021 10:00 AM 142874 - DOT P18 - 07 VARIOUS STRUCTURE SHEETS - 04-CULVERT - Detail 5.dgn



SECTION J-J
OUTSIDE BARREL WITH WEIR EXTENSION



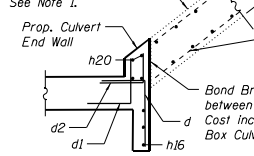
SECTION H-H
OUTSIDE BARREL



SECTION G-G
INSIDE BARREL



SECTION THRU END WALL



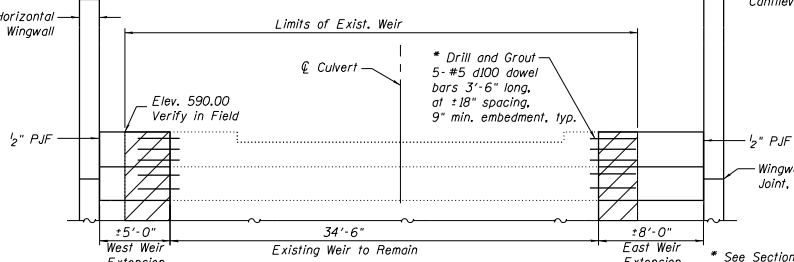
DETAIL 1

Notes:
For culvert bar details and Bill of Material, see sheet S-13.
Contractor shall verify End Wall height at Weir Slabwall, prior to ordering and fabricating bars. Cost of 1/2" P.J.F. is included with the cost of Concrete Box Culvert.
Excavation required for construction of the Gabions is included with the cost of Gabions.

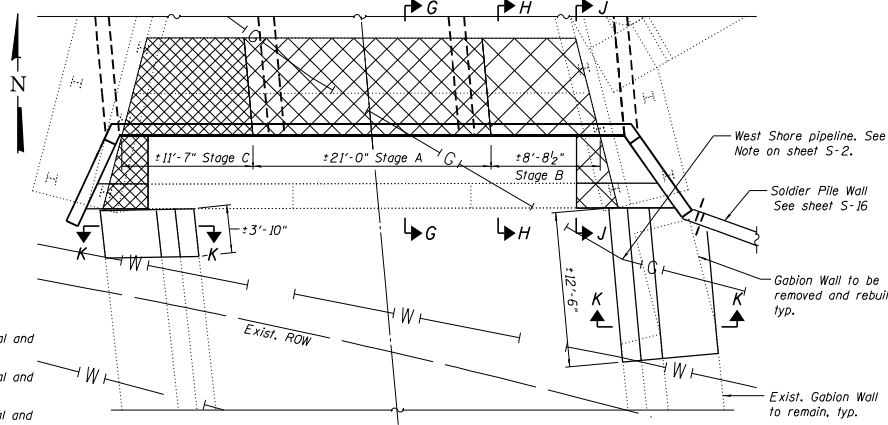
LEGEND

	Stage A Removal and Construction
	Stage B Removal and Construction
	Stage C Removal and Construction
	Existing Structure Removal

Note 1:
Portions of the Existing Weir to be removed in order to construct the culvert. The remaining part shall be temporarily braced or removal shall be done in stages as suggested below to allow for culvert excavation and construction. The bracing type and location, if required, shall be determined and designed by the Contractor and submitted to the Engineer for approval. Cost included with Temporary Wall Bracing System. After the culvert is constructed, the Weir shall be reconstructed and extended as required. The cost of reconstruction and extension, including excavation and all required reinforcement, shall be paid for as Concrete Structures.

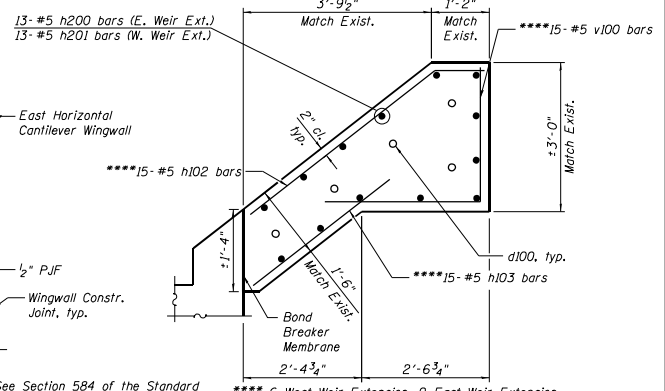


WEIR ELEVATION
Looking North



PLAN
South End of Culvert
SUGGESTED SEQUENCE OF CONSTRUCTION
SOUTH END OF CULVERT

- Remove bottom portion of existing weir as required to construct the Inside Barrel and as shown on Section G-G, leaving existing weir braced by existing wingwalls as shown on South End of Culvert Plan on this sheet, Stage A. Remove Unsuitable Material as detailed on sheet S-5 and replace with Rock Fill capped with CA6 or CA7.
- West Shore representative shall be contacted prior to working in the vicinity of the pipeline. See General Notes on sheet S-2.
- Construct the Inside Barrel bottom slab with the Toewall as shown in Section G-G and on sheet S-12. The minimum length of the bottom slab constructed at this stage shall be 15 feet. The horizontal reinforcement in the Toewall as shown on sheet S-12 shall be cut in the field as required and bar splicers shall be used in the construction joint to provide rebar continuation.
- Install temporary Soil Retention System as shown on sheet S-8.
- Remove bottom portion and part of the upper portion of existing weir as required to construct the outside barrel with vertical end wall (as shown on Sections H-H and J-J), and part of the wingwall (Stage B).
- Construct the outside barrel bottom slab, end wall, weir extension, vertical culvert walls, and part of wingwall up to the Construction Joint.
- Repeat the procedure with the west outside barrel.
- Continue with Culvert construction.
- Backfill to bottom of Gabion Wall, Construct Gabion Walls.
- Remove temporary Soil Retention System.
- Construct Soldier Pile Wall. See sheet S-16 for Sequence of Construction.
- Backfill to finished grade.
- Contractor to protect the native seed mix areas during construction and to restore damaged areas as required. The area behind gabions to be filled with Stone Riprap as shown on sheet S-1 and on Section K-K.

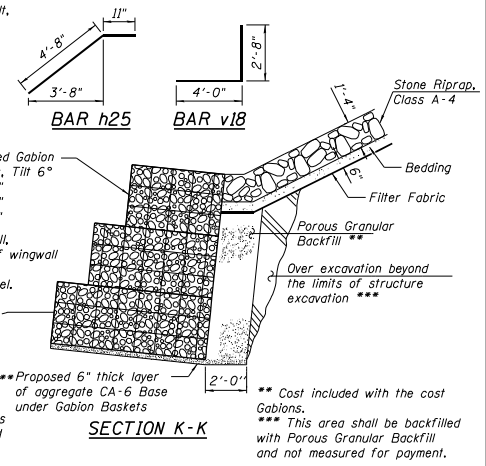


DETAIL 2

Contractor shall verify weir dimension in field and adjust rebar dimensions accordingly.

Weir Extension Reinforcement Table

Bar	No.	Size	Length	Shape
d100	10	#5	3'-6"	—
h100	13	#5	7'-8"	—
h101	13	#5	4'-8"	—
h102	15	#5	5'-7"	—
h103	15	#5	4'-0"	—
v100	15	#5	6'-8"	—
Gabions			Cu. Yd.	33
Concrete Structures			Cu. Yd.	9.7
Reinforcement Bars			Pound	460
Temporary Wall Bracing System			L. Sum	1
Gabion Removal			Cu. Yd.	28



SECTION K-K

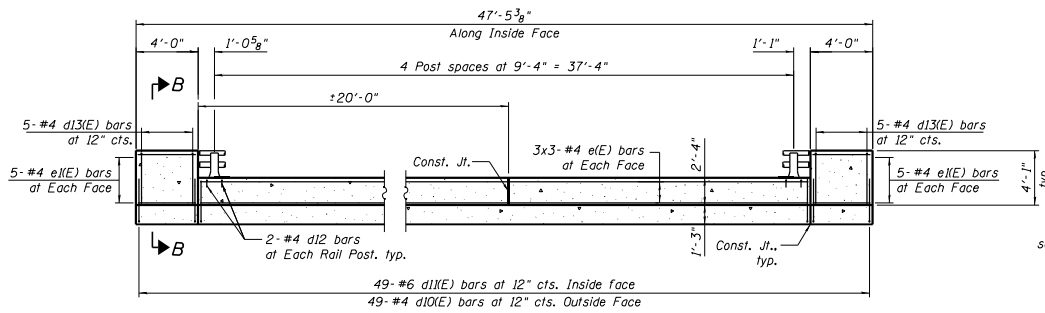
COLLINS ENGINEERS

USER NAME :	DESIGNED - AMS	REVISED
CHECKED - EKM	REVISED	
PLLOT SCALE :	DRAWN - PRH	REVISED
PLLOT DATE :	CHECKED - EKM	REVISED

STATE OF ILLINOIS
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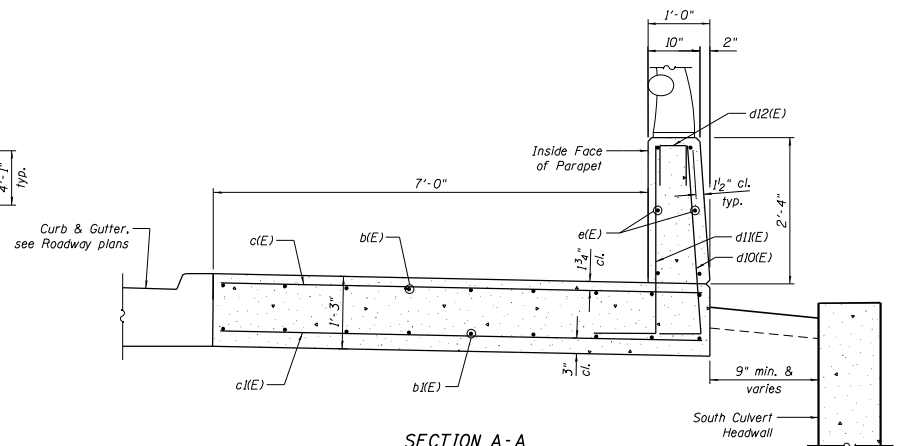
WEIR AND GABION DETAILS AT SOUTH END OF CULVERT
STRUCTURE NO. 016-1331

F.A.P. SITE:	SECTION:	COUNTY:	TOTAL SHEET NO.:
344	3034B&N-2	COOK	207 155
			CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT			

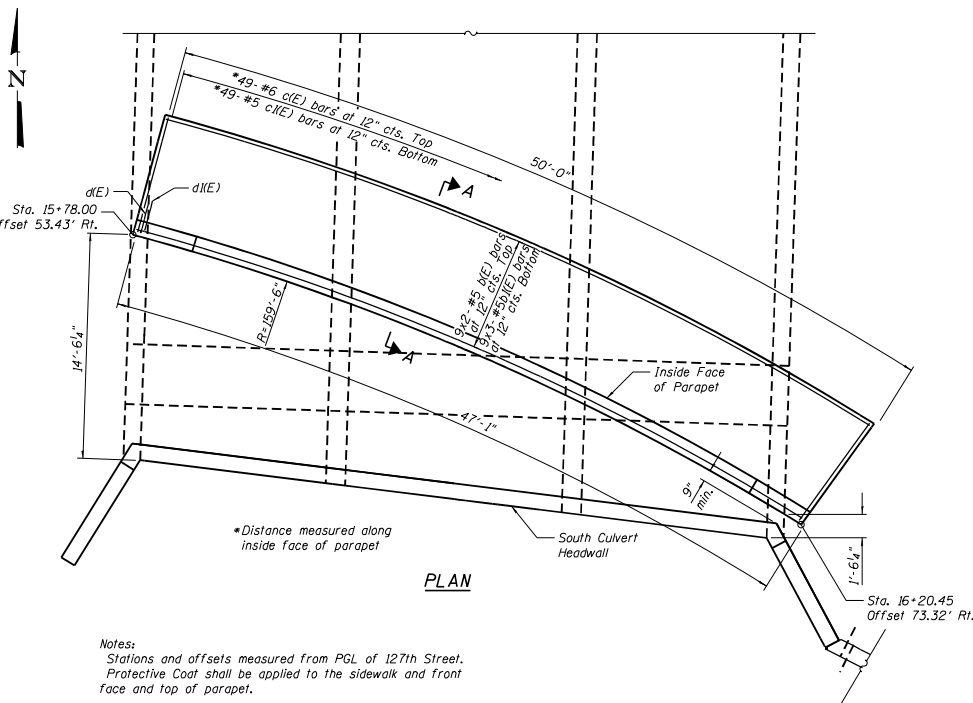


PARAPET ELEVATION

BAR LAP
 #4 bar = 2'-8"
 #5 bar = 3'-4"

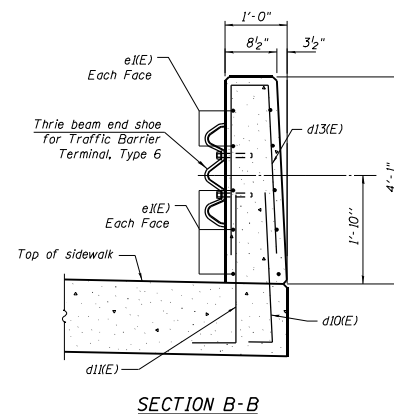
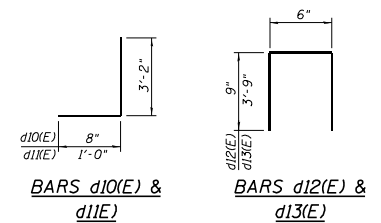


SECTION A-A



PLAN

Notes:
 Stations and offsets measured from PGL of 127th Street.
 Protective Coat shall be applied to the sidewalk and front face and top of parapet.



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b(E)	18	#5	26'-7"	—
b1(E)	27	#5	18'-10"	—
c(E)	49	#6	7'-8"	—
c1(E)	49	#5	7'-8"	—
d10(E)	49	#4	3'-10"	J
d11(E)	49	#6	4'-2"	—
d12(E)	10	#4	2'-0"	—
d13(E)	10	#4	8'-0"	—
e(E)	18	#4	14'-10"	—
e1(E)	20	#4	3'-8"	—
Concrete Superstructures			Cu. Yd.	22.7
Reinforcement Bars, Epoxy Coated			Pound	4,620
Protective Coat			Sq. Yd.	57

COLLINS ENGINEERS

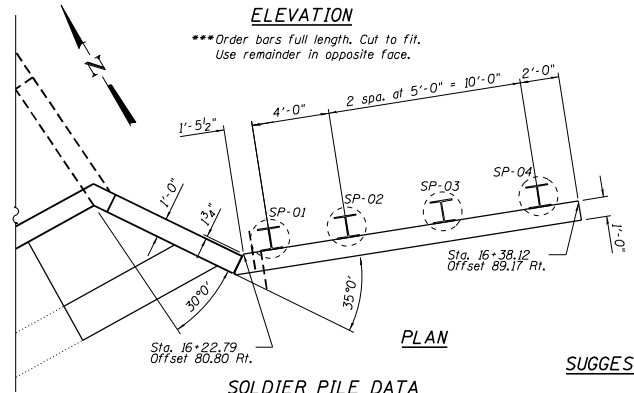
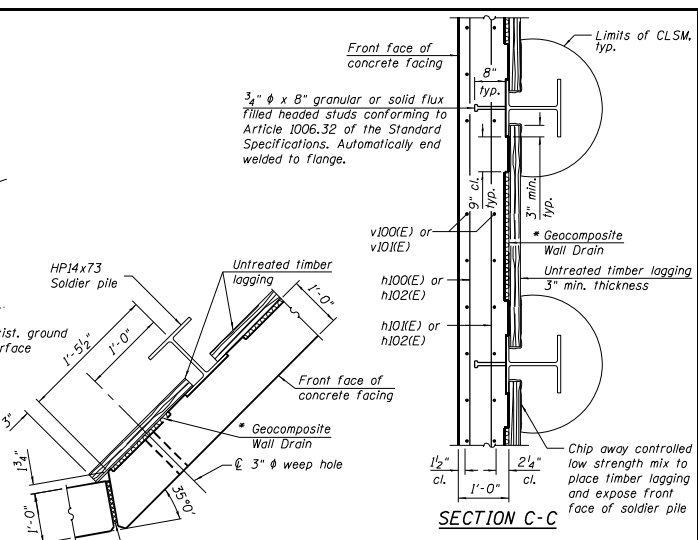
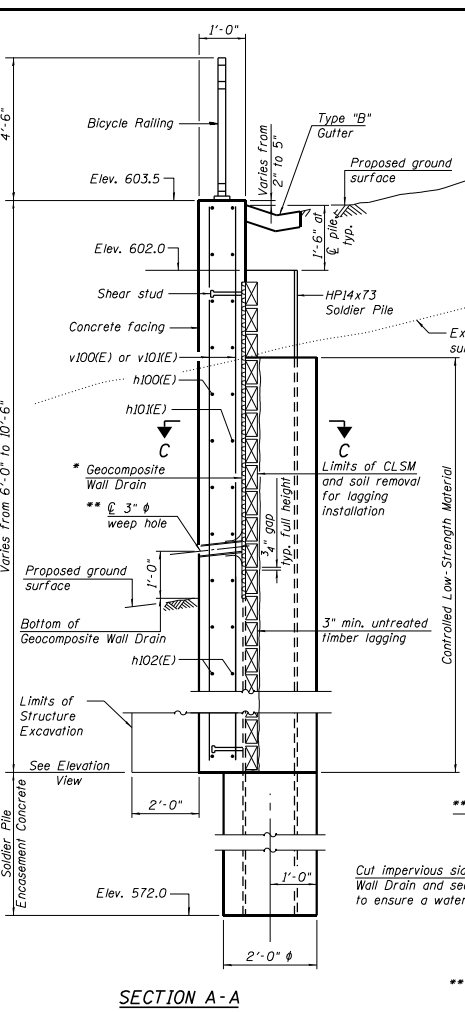
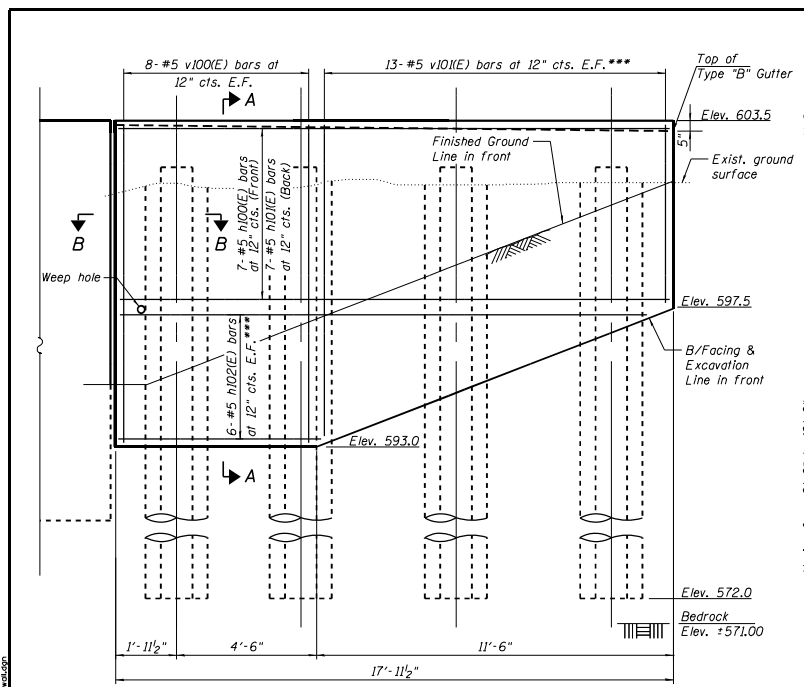
USER NAME	DESIGNED	REVISIONS
	- AMS	REVISED
	- EKM	REVISED
	- PRH	REVISED
	- EKM	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ANCHORAGE SLAB DETAILS
 STRUCTURE NO. 016-1131

SHEET NO. 5-15 OF 5-23 SHEETS

F.A.P. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034B&N-2	COOK	207	156
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				



SOLDIER PILE DATA

Soldier Pile	Station	Offset	Number of Shear Studs
SP-01	16+24.35	81.00 Rt.	10
SP-02	16+27.86	82.92 Rt.	10
SP-03	16+32.25	85.32 Rt.	8
SP-04	16+36.64	87.72 Rt.	6

Stations and offsets measured from PGL of 127th Street.

SUGGESTED SEQUENCE OF CONSTRUCTION
SOLDIER PILE WALL

1. Drill and Set Soldier Piles. Encase with concrete to the bottom of the proposed facing as shown in the Elevation.
2. Excavate as shown to install timber lagging.
3. Backfill as required behind wall.
4. Install shear studs and construct concrete facing.
5. Backfill to finished grade.

Notes:
 Protective Coat shall be applied to the concrete facing.
 For Suggested Sequence of Culvert's south end Construction, see sheet S-14.
 For Bicycle Railing details, see sheet S-18.
 In order to minimize excessive deflection and/or stresses in the soldier piles, compaction equipment used within 4 ft of the back face of the timber lagging shall be limited to lightweight mechanical tampers, rollers, or vibratory systems.
 The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
 The cost of Type "B" Gutter is included with Concrete Structures.
 Nominal quantity provided for Drilling and Setting Soldier Piles (In Rock) in case rock encountered above estimated elevation determined from soil borings.

WEEP HOLE DRAIN DETAIL

** Cost of the weep hole drain and connection to the Geocomposite Wall Drain are included in the cost of Concrete Structures.

SHEAR STUD DETAIL
(Elevation of pile shown)

BILL OF MATERIAL

Bar	No.	Size	Length	Shope
h100(E)	7	#5	17'-8"	—
h101(E)	7	#5	17'-3"	—
h102(E)	6	#5	23'-8"	—
v100(E)	16	#5	10'-2"	—
v101(E)	13	#5	15'-10"	—
Concrete Structures			Cu. Yd.	6.1
Reinforcement Bars, Epoxy Coated			Pound	790
Stud Shear Connectors			Each	34
Protective Coat			Sq. Yd.	18
Furnishing Soldier Piles (HP Section)			Foot	120
Drilling and Setting Soldier Piles (In Soil)			Cu. Ft.	340
Drilling and Setting Soldier Piles (In Rock)			Cu. Ft.	26
Untreated Timber Lagging			Sq. Ft.	150
Structure Excavation			Cu. Yd.	25
Geocomposite Wall Drain			Sq. Yd.	16



USER NAME :	DESIGNED - AMS	REVISED
PLLOT SCALE :	CHECKED - EKM	REVISED
PLLOT DATE :	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

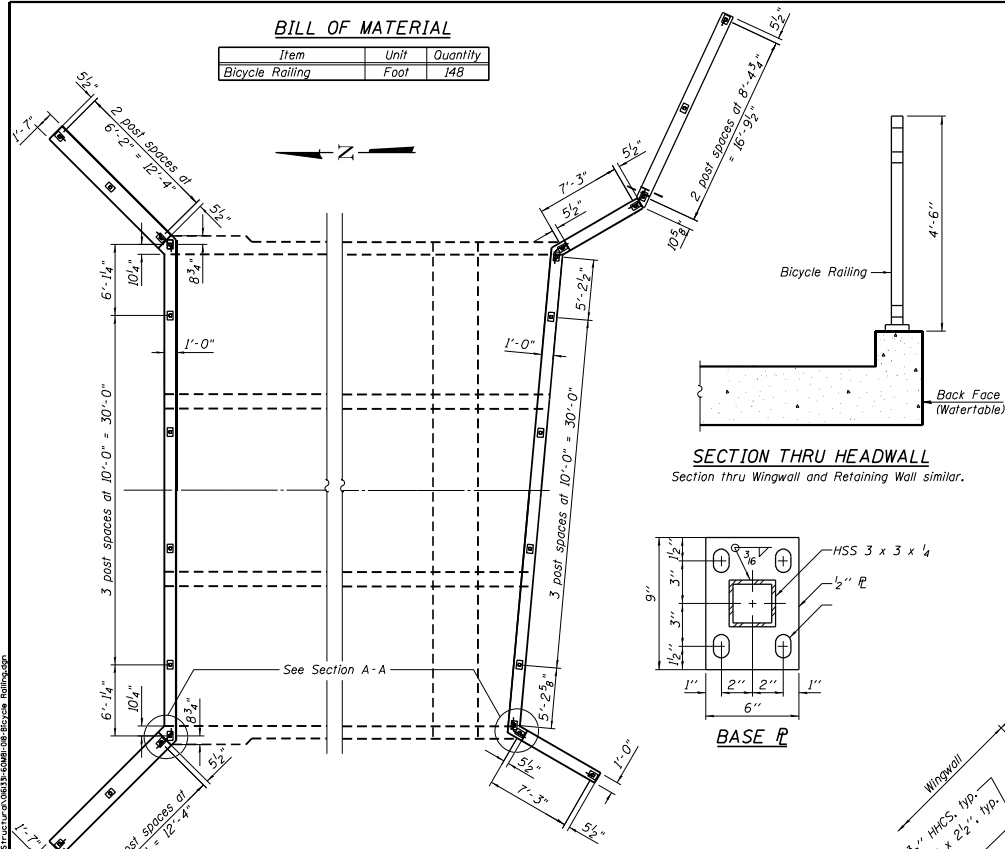
SOLDIER PILE WALL DETAILS
STRUCTURE NO. 016-1331

F.P.P. PTE.	SECTION	COUNTY	TOTAL SHEET NO.
344	30348N-2	COOK	207 157
			CONTRACT NO. 60X74
(ILLINOIS) FED. AID PROJECT			

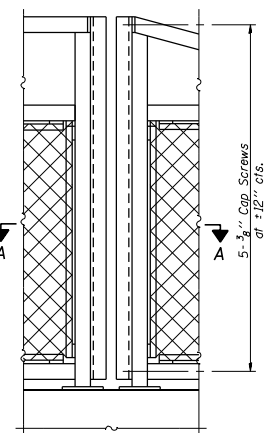
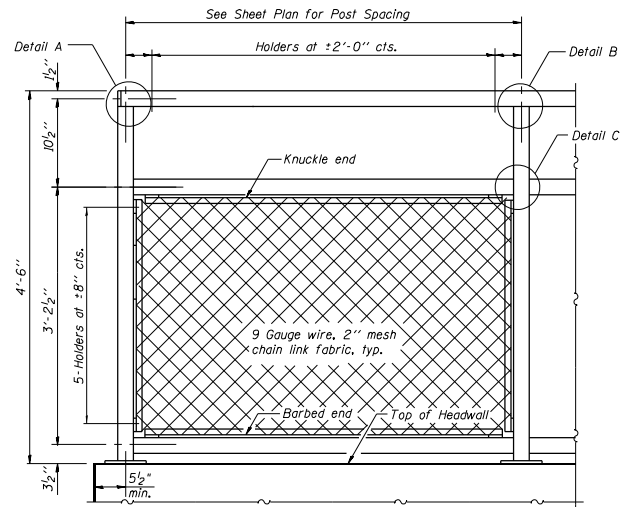
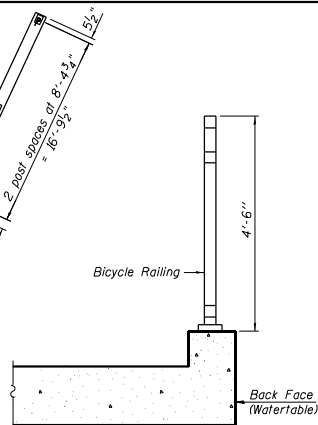
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BILL OF MATERIAL

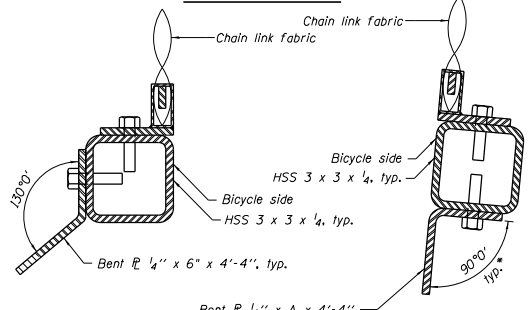
Item	Unit	Quantity
Bicycle Railing	Foot	148



SECTION THRU HEADWALL
Section thru Wingwall and Retaining Wall similar.



BICYCLE RAILING

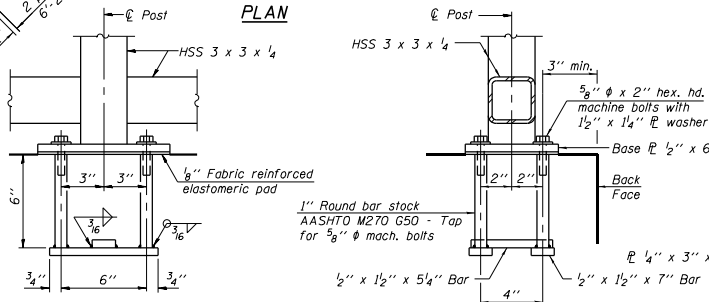


BICYCLE RAILING AT WINGWALL JOINT
Soldier Pile Wall joint similar.

Location	A	B
Southwest Corner	6"	9"
Southeast Corner	8"	8"
Wingwall/Retaining Wall	7"	7"

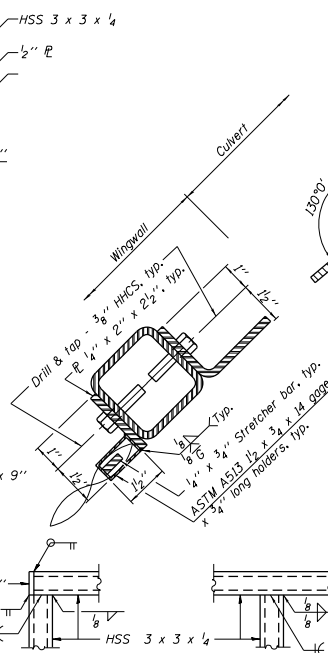
• At Wingwall to Retaining Wall Corner, Angle is 110° (Wingwall) and 100° (Retaining Wall).

PLAN



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



DETAIL A

DETAIL B

DETAIL C

DOWNSTREAM END

UPSTREAM END

SECTION A-A

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
Steel posts to be installed vertical on the sloped top of wingwalls (northeast, northwest and southwest corners). Rails shall run parallel to top of concrete.

COLLINS ENGINEERS

USER NAME	DESIGNED	REVISIONS
	AMS	REVISED
	EKM	REVISED
	PRH	REVISED
	EKM	REVISED

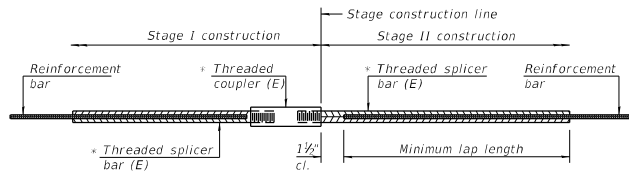
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING
STRUCTURE NO. 016-1331

F.A.P. DIST.	SECTION	COUNTY	TOTAL SHEET NO.
344	3034B&N-2	COOK	207 159

SHEET NO. 5-18 OF 5-23 SHEETS

CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT

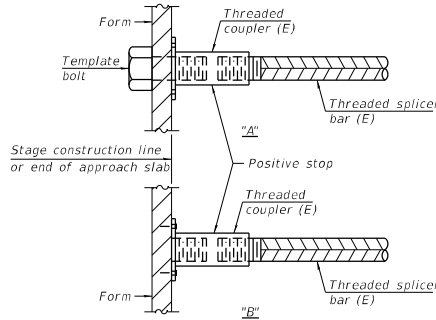


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#6	86	2'-7"
Bottom Slab	#6	94	2'-7"
Walls	#5	100	2'-9"
South Toewall	#4	10	1'-9"

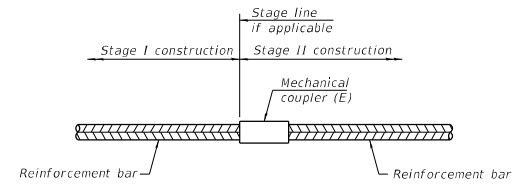


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

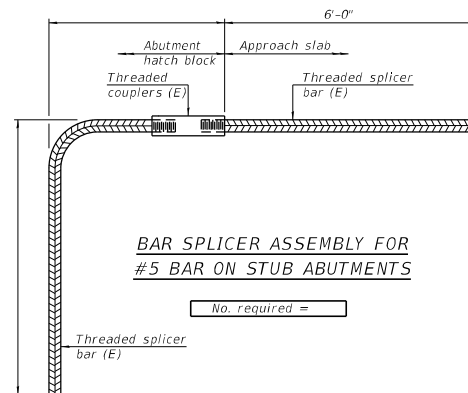
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

5/4/2021 2:02:03 PM 143274 - DOT P18 85 - 07 Vproulx\27457 - LBS of Thery\27457\CDP_Sheet\STRUCTURE\018-1331-09-Bar_Spicer-Bar.dgn

BSD-1

2-17-2017

COLLINS ENGINEERS

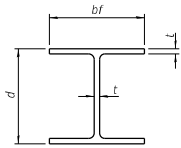
USER NAME	DESIGNED	CHECKED	DRAWN	PLotted
AMS	- AMS	- EKM	- PRH	-
	REVISIED	REVISIED	REVISIED	
	REVISIED	REVISIED	REVISIED	
	REVISIED	REVISIED	REVISIED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-1331

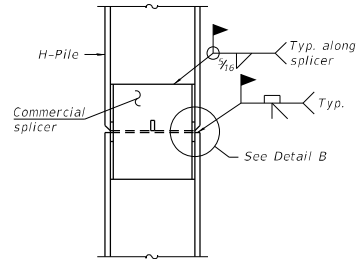
SHEET NO. S-19 OF S-23 SHEETS

F.A.P. RFE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034B&N-2	COOK	207	160
CONTRACT NO. 60X74				
ILLINOIS FED. AID PROJECT				

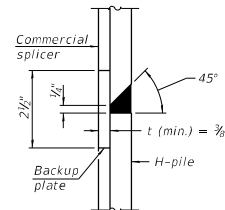


STEEL PILE TABLE

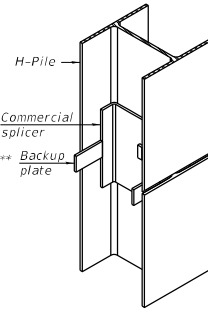
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 3/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 3/8"	14 3/4"	3/8"	30"
x73	13 3/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/2"	12 1/2"	1 1/16"	24"
x74	12 1/8"	12 1/2"	3/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	3/16"	24"
x42	9 3/4"	10 1/8"	1/16"	24"
HP 8x36	8"	8 3/8"	7/16"	18"



ELEVATION

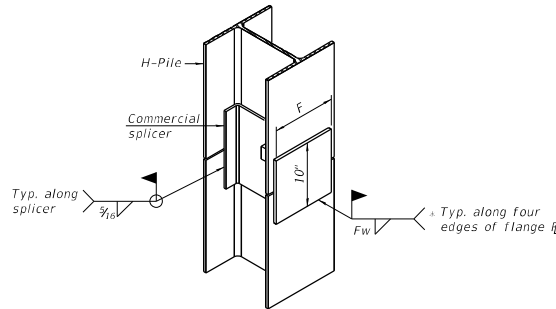


DETAIL "B"



ISOMETRIC VIEW

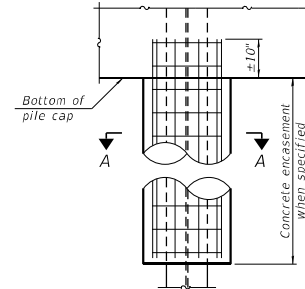
WELDED COMMERCIAL SPLICE



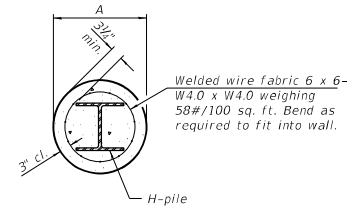
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (3/16" min.).

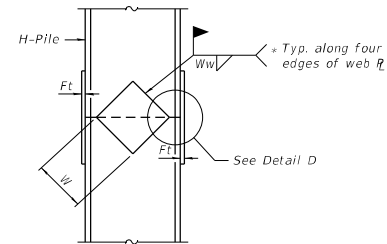


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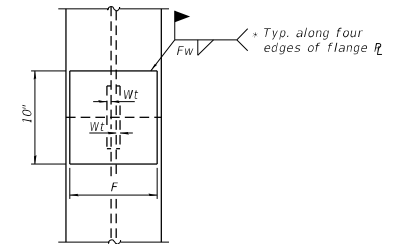


SECTION A-A

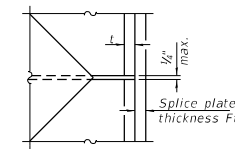
INDIVIDUAL PILE CONCRETE ENCASEMENT
(Forms for encasement may be omitted when soil conditions permit).



ELEVATION



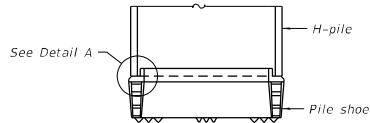
END VIEW



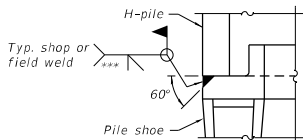
DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	3/8"	7 3/4"	3/8"	1/2"
x102	12 1/2"	7/8"	3/8"	7 3/4"	3/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	3/8"	1/2"
x73	12 1/2"	3/8"	3/16"	7 3/4"	3/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	3/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	3/8"	1/2"
x63	10"	3/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	3/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	3/16"	5 1/4"	1/2"	3/8"
x42	8"	3/8"	3/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	3/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE



ELEVATION



DETAIL A

SHOE ATTACHMENT

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 2-17-2017

COLLINS ENGINEERS

USER NAME :	DESIGNED - AMS	REVISED
PLLOT SCALE :	CHECKED - EKM	REVISED
PLLOT DATE : 5/4/2021	DRAWN - PRH	REVISED
	CHECKED - EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 016-1331

SHEET NO. S-20 OF S-23 SHEETS

F.A.P. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034B&N-2	COOK	207	161
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

5/4/2021 2:00:00 PM A3274 - 001 P18 85 - 07 V:\p016\37457 - LB3 of Thinly Seamed Cold-Formed Steel Structures\016-1331-020-SP Pile Details.dwg

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG SSB-01
 WEI Job No.: 486-17-02

Datum: NAVD 88
 Elevation: 602.77 ft
 North: 1819801.59 ft
 East: 1142902.32 ft
 Station: 116+39.18
 Offset: 53.70' LT

Client: **Collins Engineers, Inc.**
 Project: **IL Route 83 over Tinley Creek**
 Location: **Crestwood, Illinois**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
601.9	11-inch thick ASPHALT												
601.9	--PAVEMENT--												
601.9	5-inch thick CRUSHED STONE												
601.9	--BASE COURSE--												
601.9	Stiff to very stiff, black and brown CLAY LOAM, trace gravel												
601.9	--FILL--												
597.3	Loose to medium dense, brown SILTY LOAM, trace gravel and organics												
597.3	--Dry--												
593.8	Stiff (1.5P), brown CLAY LOAM, trace gravel												
593.8	--Moist--												
592.3	Medium dense, brown SANDY GRAVEL												
592.3	--Wet--												
589.8	Loose, gray SILT												
589.8	--Wet--												
587.3	Medium dense to very dense, gray SILTY LOAM, trace to little gravel												
587.3	--Moist--												
587.3	--HARD DRILLING from 18 ft--												
587.3	--Possible Gravel and Cobbles--												
569.3	--DIFFICULT DRILLING--												
569.3	--WEATHERED BEDROCK--												
567.3	Strong, gray to greenish gray, very poor to poor rock mass quality, bedded shaly DOLOSTONE, horizontal and vertical joints with none or little infill, hard joint wall												
567.3	--Run 1 - RECOVERY=100%--												
567.3	--Run 2 - RECOVERY=83%--												
567.3	--RQD=0%--												
567.3	--Run 3 - RECOVERY=90%--												
567.3	--RQD=27%--												
563.0	Boring terminated at 39.75 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	09-22-2014	Complete Drilling	09-22-2014	While Drilling	37	10.25 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D-50	At Completion of Drilling	NA		
Driller	R&J	Logger	A. Tomarae	Time After Drilling	NA		
Drilling Method	2.25" SSA to 10', Mud Rotary to rock	Checked by	C. Marin	Depth to Water	NA		

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG SSB-02
 WEI Job No.: 486-17-02

Datum: NAVD 88
 Elevation: 601.37 ft
 North: 1819701.48 ft
 East: 1142814.94 ft
 Station: 116+39.18
 Offset: 78.52' RT

Client: **Collins Engineers, Inc.**
 Project: **IL Route 83 over Tinley Creek**
 Location: **Crestwood, Illinois**

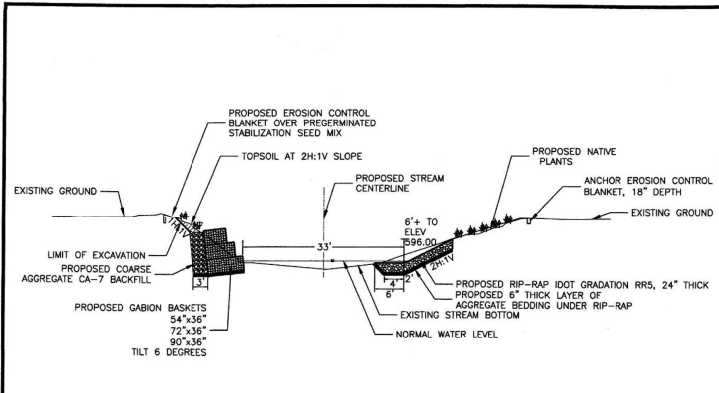
Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
601.05	11-inch thick, black SILTY LOAM												
601.05	--TOPSOIL--												
601.05	Very stiff, black and brown CLAY LOAM, trace gravel, roots												
601.05	--FILL--												
598.4	Medium dense, brown, gray, and black SILTY LOAM, trace gravel												
598.4	--Dry--												
597.9	Loose to medium dense, gray SILT, trace gravel												
597.9	--Moist--												
597.9	--Wet--												
575.9	Very dense, gray SILTY LOAM, and gravel, rock fragments												
575.9	--Moist--												
575.9	--HARD DRILLING to 28.8 ft--												
575.9	--Possible Cobbles--												
572.6	--DIFFICULT DRILLING--												
572.6	--WEATHERED BEDROCK--												
570.4	Strong, gray to greenish gray, very poor to fair rock mass quality, bedded shaly DOLOSTONE, horizontal and vertical joints with none or little infill, hard joint wall												
570.4	--Run 1 - RECOVERY=100%--												
570.4	--Run 2 - RECOVERY=99%--												
570.4	--RQD=8%--												
570.4	--Run 3 - RECOVERY=67%--												
570.4	--RQD=0%--												
563.9	Boring terminated at 37.50 ft												

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	09-23-2014	Complete Drilling	09-23-2014	While Drilling	37	8.75 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D-50	At Completion of Drilling	NA		
Driller	R&J	Logger	A. Tomarae	Time After Drilling	NA		
Drilling Method	2.25" SSA to 10', Mud Rotary to rock	Checked by	C. Marin	Depth to Water	NA		

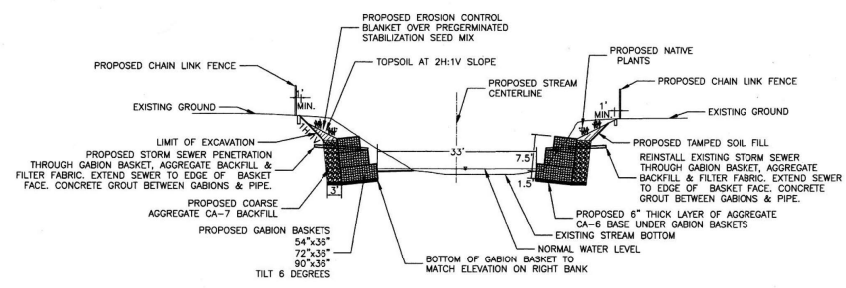
Note: Stations and offsets are measured using PGL of Cal-Sag Road.

COLLINS ENGINEERS	USER NAME :	DESIGNED - AMS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 016-1331	F.A.P. REF.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE :	CHECKED - EKM	REVISED			344	30348&N-2	COOK	207	162
	PLOT DATE :	DRAWN - PRH	REVISED			CONTRACT NO. 60X74				
		CHECKED - EKM	REVISED			ILLINOIS FED. AID PROJECT				

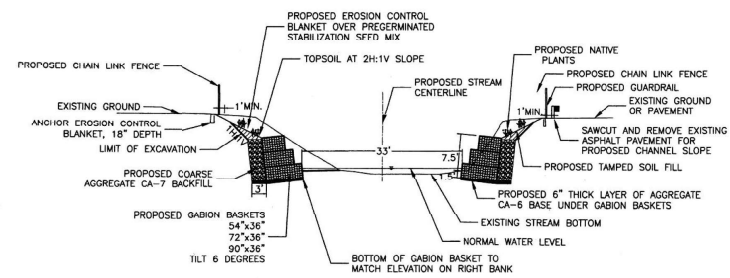
5/4/2021 2:05:25 PM 1/2874 - DOT P18 88 - 07 VOROUT874507 - L&S - 07 VOROUT874507_Sheets\STRUCTURE\SSB-01-SSB-01-SSB-01.dwg



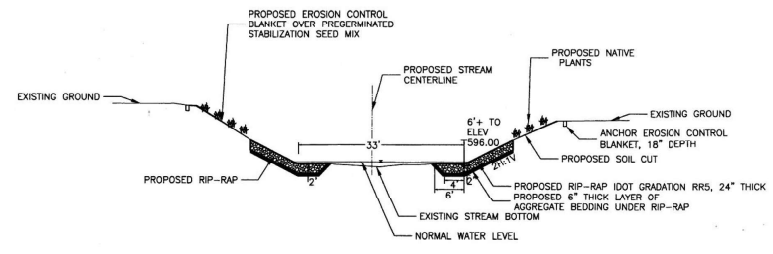
TYPICAL SECTION SLOPE PROTECTION
STATION 12+55.00 TO 13+00.00 - LOOKING SOUTH



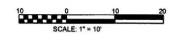
TYPICAL STORM DRAIN OUTFALL
LOOKING SOUTH



TYPICAL SECTION SLOPE PROTECTION
STATION 6+64.25 TO 12+55.00 - LOOKING SOUTH



TYPICAL SECTION SLOPE PROTECTION
STATION 13+00.00 TO 17+25.00 - LOOKING SOUTH



Rev.	Description	Appr.	Date

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

DESIGNED BY: AR
 DRAWN BY: AK
 CHECKED BY: IT
 DATE: OCT 2014
 SCALE: 1"=10'

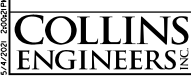
INFRAStructure
 Infrastructure
 Infrastructure
 Infrastructure

CONTRACT 10-883-AF
 FLOOD CONTROL/STREAMBANK STABILIZATION
 PROJECT ON TINLEY CREEK

TYPICAL SECTIONS



Sheet Number:
C-128
Page Number: 31



USER NAME	DESIGNED	CHECKED	REVISION
AMS	- AMS	- EKM	REVISED
PRH	- PRH	- EKM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY
 EXISTING SLOPE PROTECTION - TYPICAL SECTIONS
 STRUCTURE NO. 016-1331

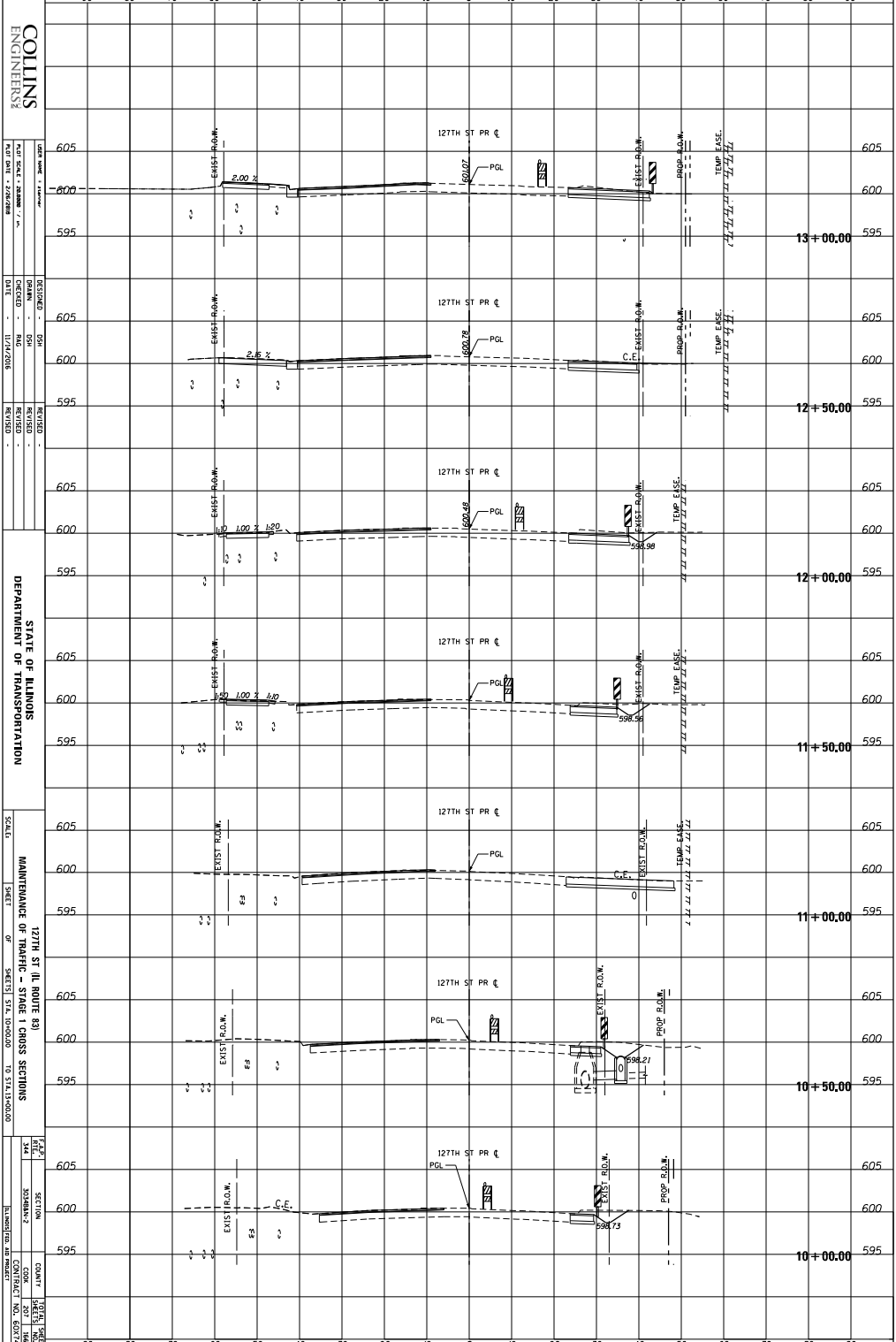
P.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	3034B&N-2	COOK	207	163
				CONTRACT NO. 60X74
ILLINOIS FED. AID PROJECT				

5/4/2021 10:02:01 AM N3274 - DOT P18 88 - 07 VOROUAN37457 - L&S of Tinley Creek/Channel/Stream/Structure/016-1331-008-022-E-01-172-56c-Slope-Protection

DESIGNED	DATE
CHECKED	DATE
APPROVED	DATE
DATE	
NO.	
REVISED	
DATE	
NO.	
REVISED	
DATE	
NO.	
REVISED	
DATE	

DESIGNED	DATE
CHECKED	DATE
APPROVED	DATE
DATE	
NO.	
REVISED	
DATE	
NO.	
REVISED	
DATE	
NO.	
REVISED	
DATE	

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COLLINS ENGINEERS

DESIGNED: [Name]
 CHECKED: [Name]
 DATE: 11/24/2015

REVISIONS:

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

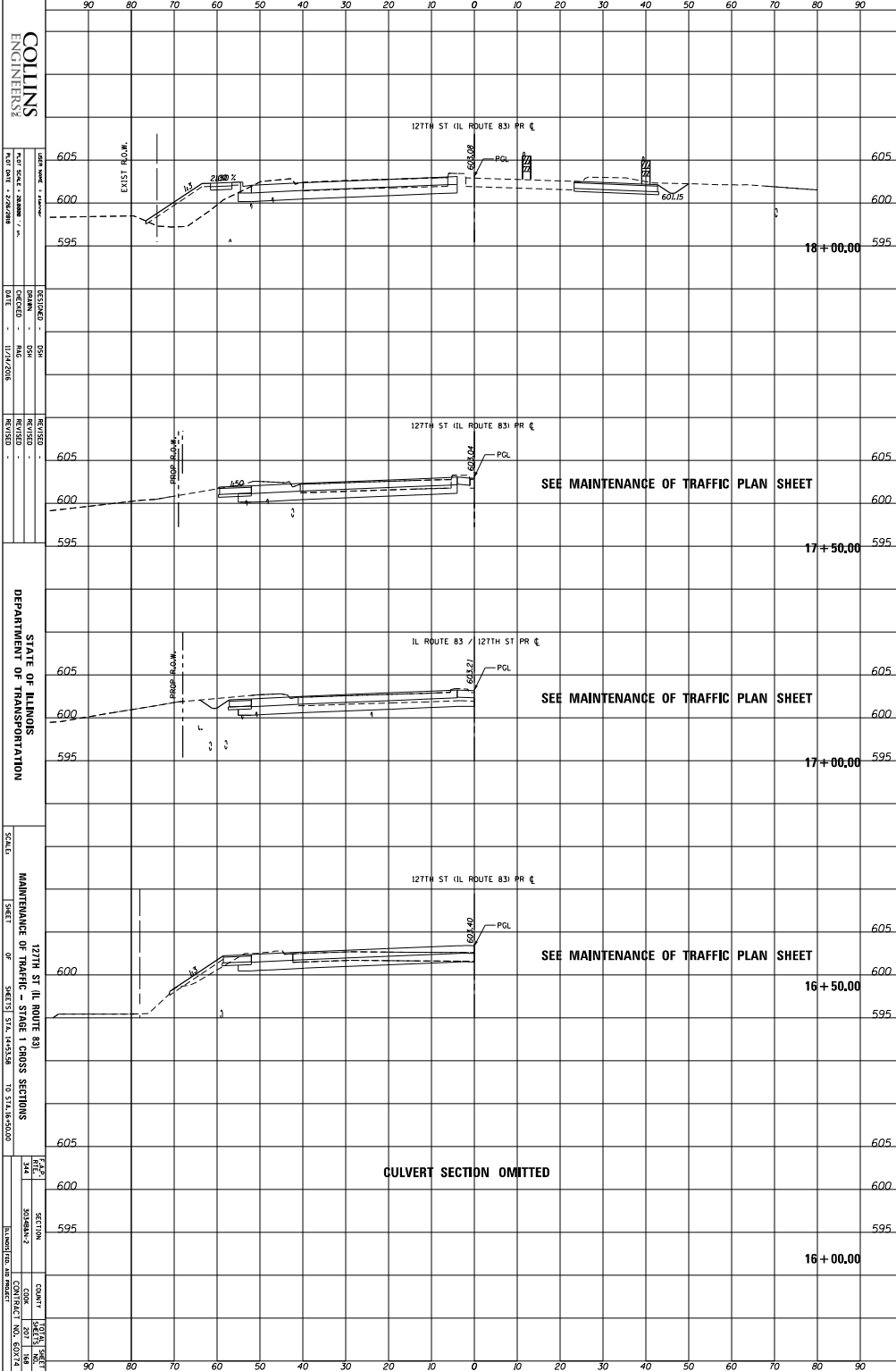
127TH ST (IL ROUTE 83)
 MAINTENANCE OF TRAFFIC - STAGE 1 CROSS SECTIONS

SCALE: 1"=20'
 SHEET NO. 10 OF 10
 CONTRACT NO. 18274

ORIGINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

FINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

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COLLINS ENGINEERS
 PROJECT: MAINTENANCE OF TRAFFIC - STAGE 1 CROSS SECTIONS
 SHEET 17A OF 17A
 DATE: 11/24/2015
 SCALE: AS SHOWN
 STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
 CONTRACT NO. 60724

ORIGINAL	DATE	BY
SURVEY		
DESIGN		
CHECKED		

FINAL	DATE	BY
SURVEY		
DESIGN		
CHECKED		

FILE NAME: I:\8274 - 807 P1B 368 - 87\Drawings\8274-87 - 1.83 in 1"=20' Day Creek\CORD-CADD\Drawings\8274-87\807-P1B-1-11.dwg

COLLINS
ENGINEERS

DATE: 11/24/2015
PROJECT: MAINTENANCE OF TRAFFIC - STAGE 1 CROSS SECTIONS

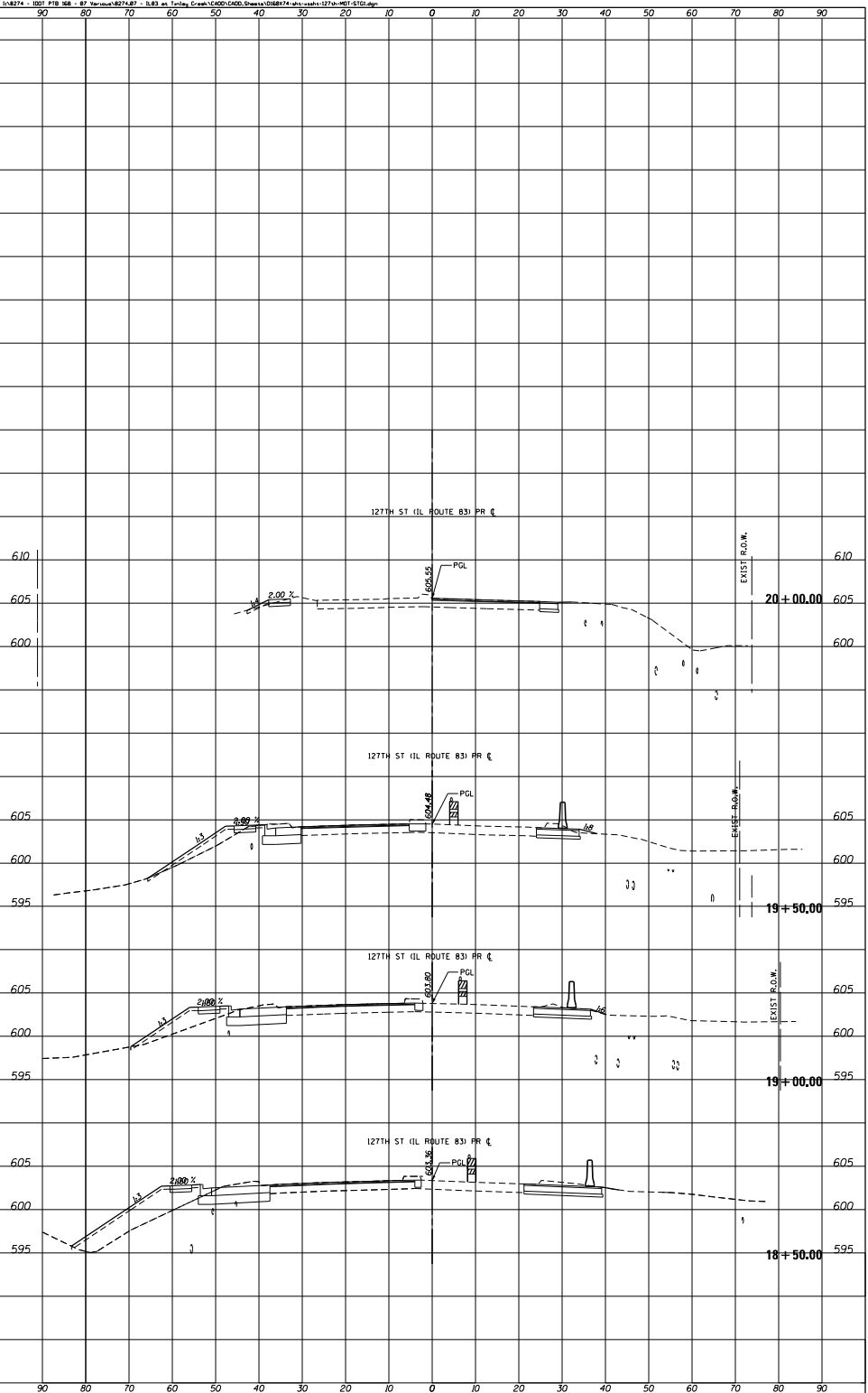
DESIGNED BY: RAG
CHECKED BY: RAG
DATE: 11/24/2015

REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'
SHEET 07 OF 07
127TH ST (IL ROUTE 83) MAINTENANCE OF TRAFFIC - STAGE 1 CROSS SECTIONS
TO STA 18+96.24

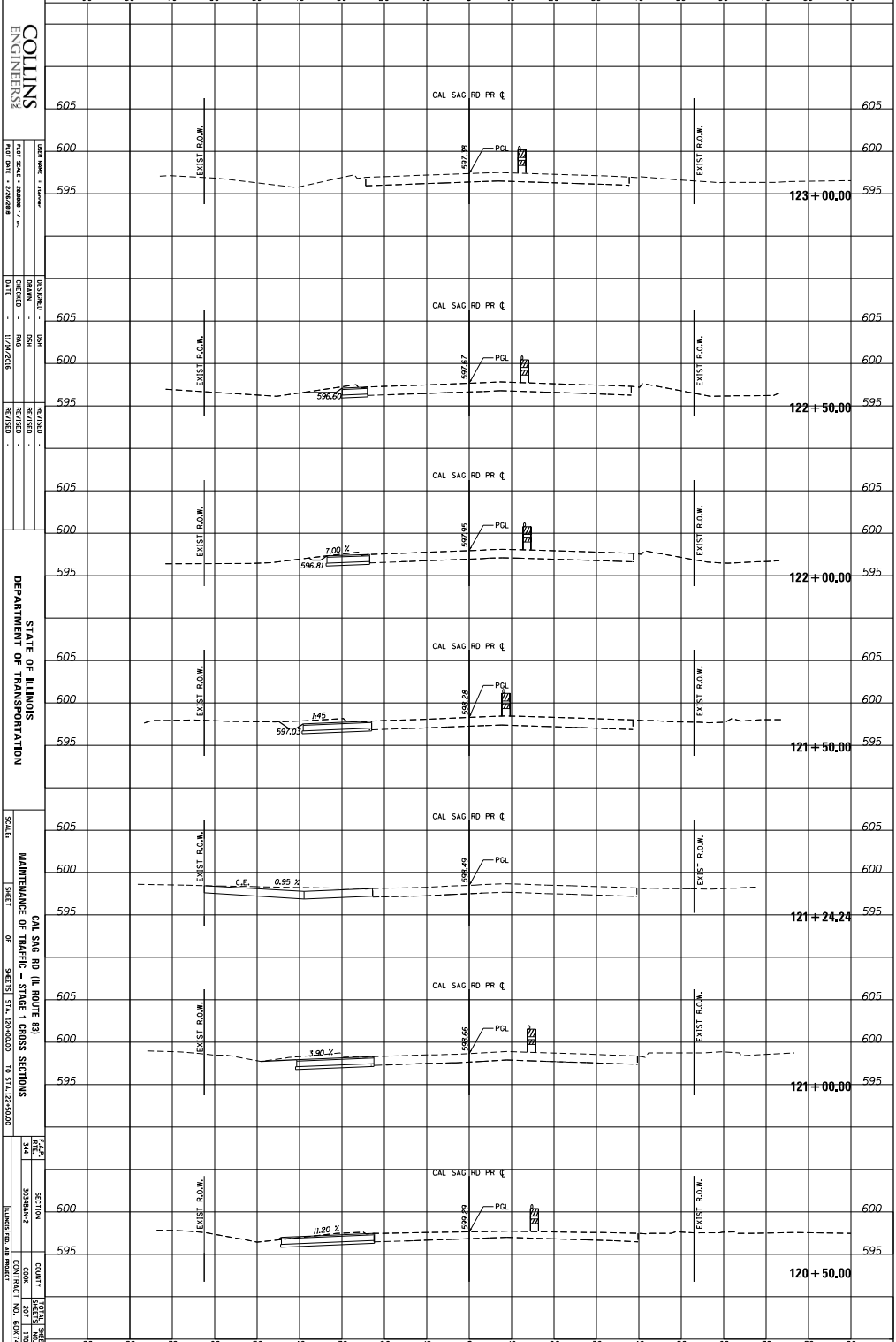
CONTRACT NO. 60724
SHEET NO. 07 OF 07



ORIGIN	BY	DATE
DESIGNED		
CHECKED		
DATE		

FINAL	DATE
APPROVED	
DATE	

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COLLINS ENGINEERS

DESIGNED BY: [Name] DATE: [Date]

CHECKED BY: [Name] DATE: [Date]

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'

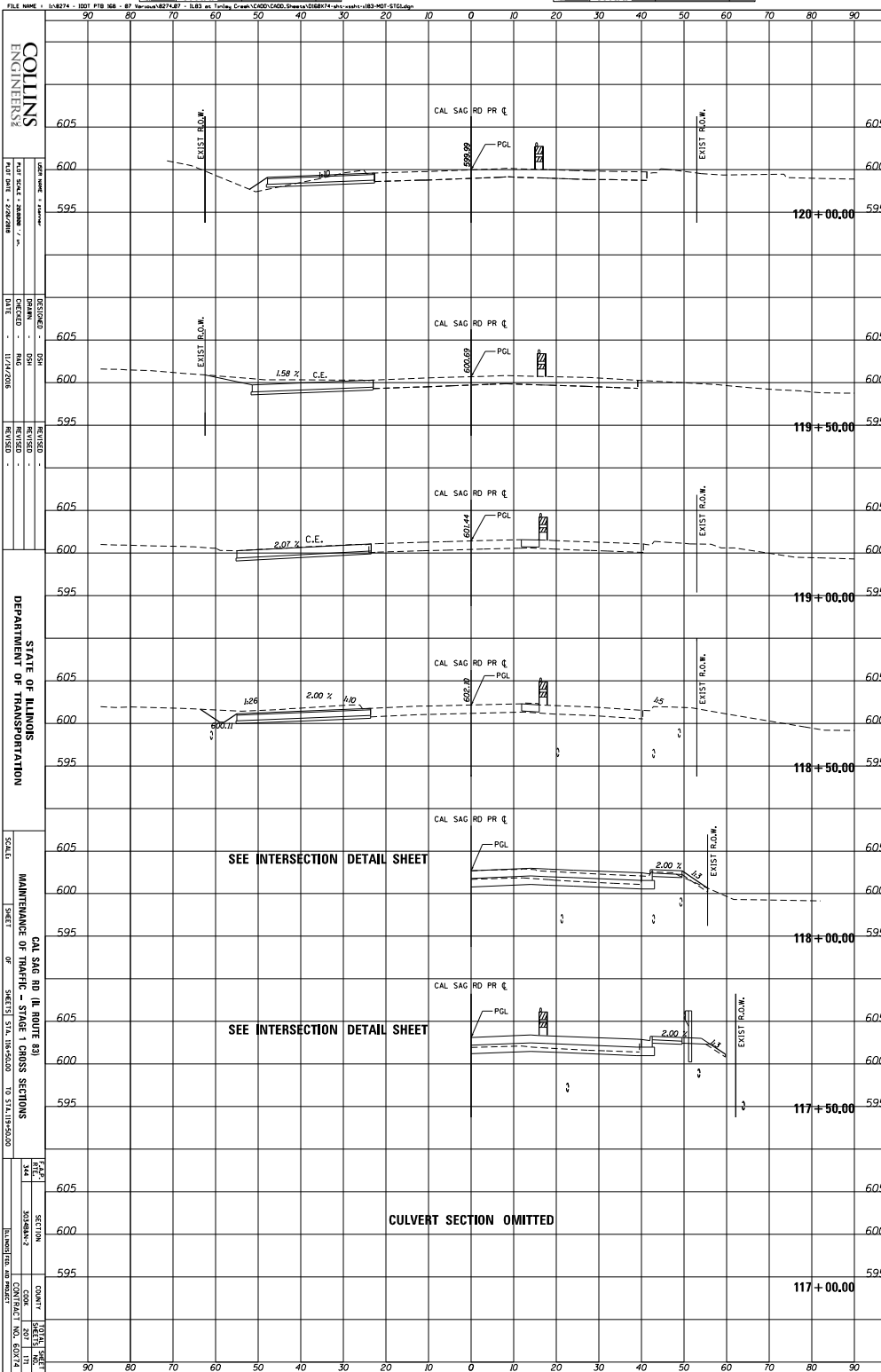
CAL SAG RD (IL ROUTE 83) MAINTENANCE OF TRAFFIC - STAGE 1 CROSS SECTIONS

SHEET 13 OF 13

CONTRACT NO. 60723

ORIGINAL	SUPERSEDED	BY	DATE
NOTE BOOK	NO.		
DESIGNED	CHECKED		

FINAL	SUPERSEDED	BY	DATE
NOTE BOOK	NO.		
DESIGNED	CHECKED		



COLLINS ENGINEERS
 PROJECT: MAINTENANCE OF TRAFFIC - STATE I CROSS SECTIONS
 SHEET NO. 12 OF 12
 DATE: 11/24/2015
 SCALE: AS SHOWN
 DRAWN BY: [REDACTED]
 CHECKED BY: [REDACTED]
 DESIGNED BY: [REDACTED]
 PROJECT NO.: 60773

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 CAL SAG RD 1L ROUTE 831
 MAINTENANCE OF TRAFFIC - STATE I CROSS SECTIONS
 SHEETS 12L INR2500 TO 12L INR2500

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

SECTION NO. 12
 CONTRACT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

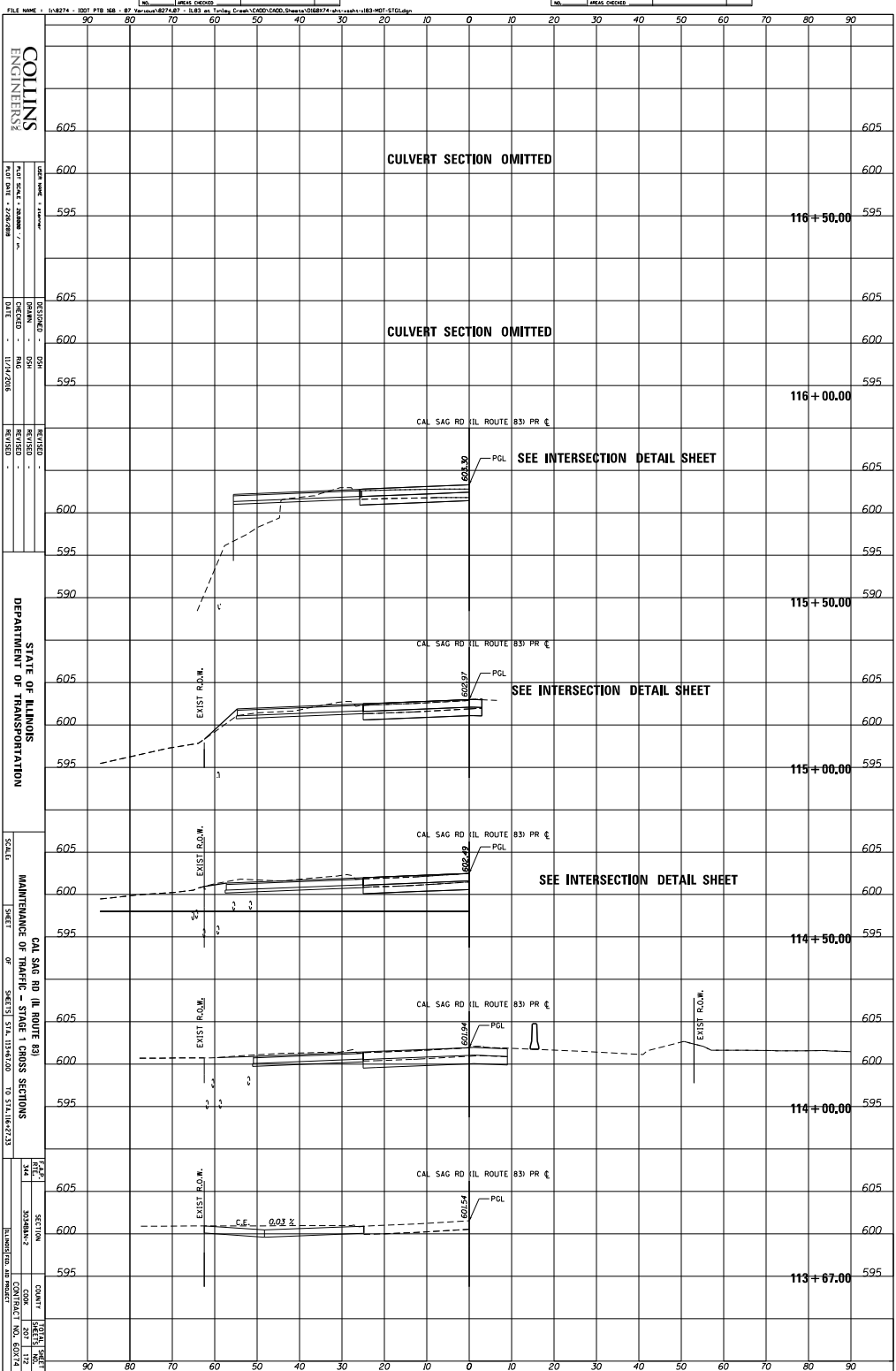
CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

CONTRACT NO. 60773
 SHEET NO. 12 OF 12
 PROJECT NO. 60773

ORIGINAL	DATE	BY

FINAL	DATE	BY



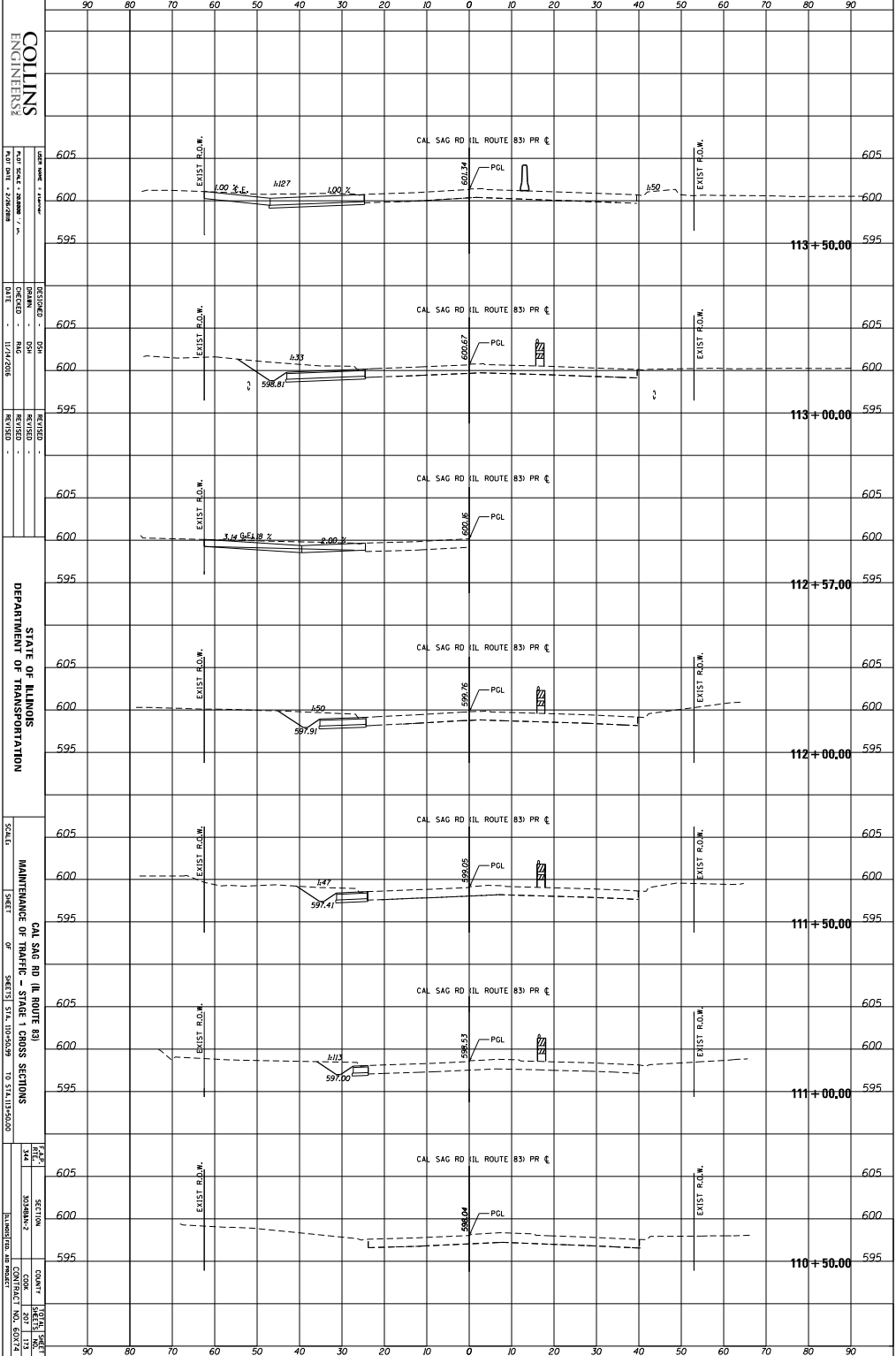
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 PROJECT: CAL SAG RD ILL ROUTE 83
 SHEET NO. 113+67.00 TO 116+50.00
 DATE: 11/24/2015
 SCALE: 1"=20'
 DRAWN BY: RIG
 CHECKED BY: RIG
 PROJECT: CAL SAG RD ILL ROUTE 83
 SHEET NO. 113+67.00 TO 116+50.00
 CONTRACT NO. 60723
 SHEET NO. 113+67.00 TO 116+50.00

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FINAL	DATE
SURVEY	
NOTE BOOK	
MEAS	
CHECKED	

ORIGINAL	BY	DATE
SURVEY		
NOTE BOOK		
MEAS		
CHECKED		

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COLLINS ENGINEERS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC - STATE I CROSS SECTIONS

SCALE: 1"=10'

SHEET 17A OF 17A

CONTRACT NO. 03721

SECTION NO. 17A

DATE: 11/24/2015

DESIGNED BY: DSH

CHECKED BY: RAG

REVISIONS:

ORIGINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

FINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

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COLLINS ENGINEERS

DESIGNED: J. J. JENSEN
 CHECKED: J. J. JENSEN
 DATE: 11/24/2015

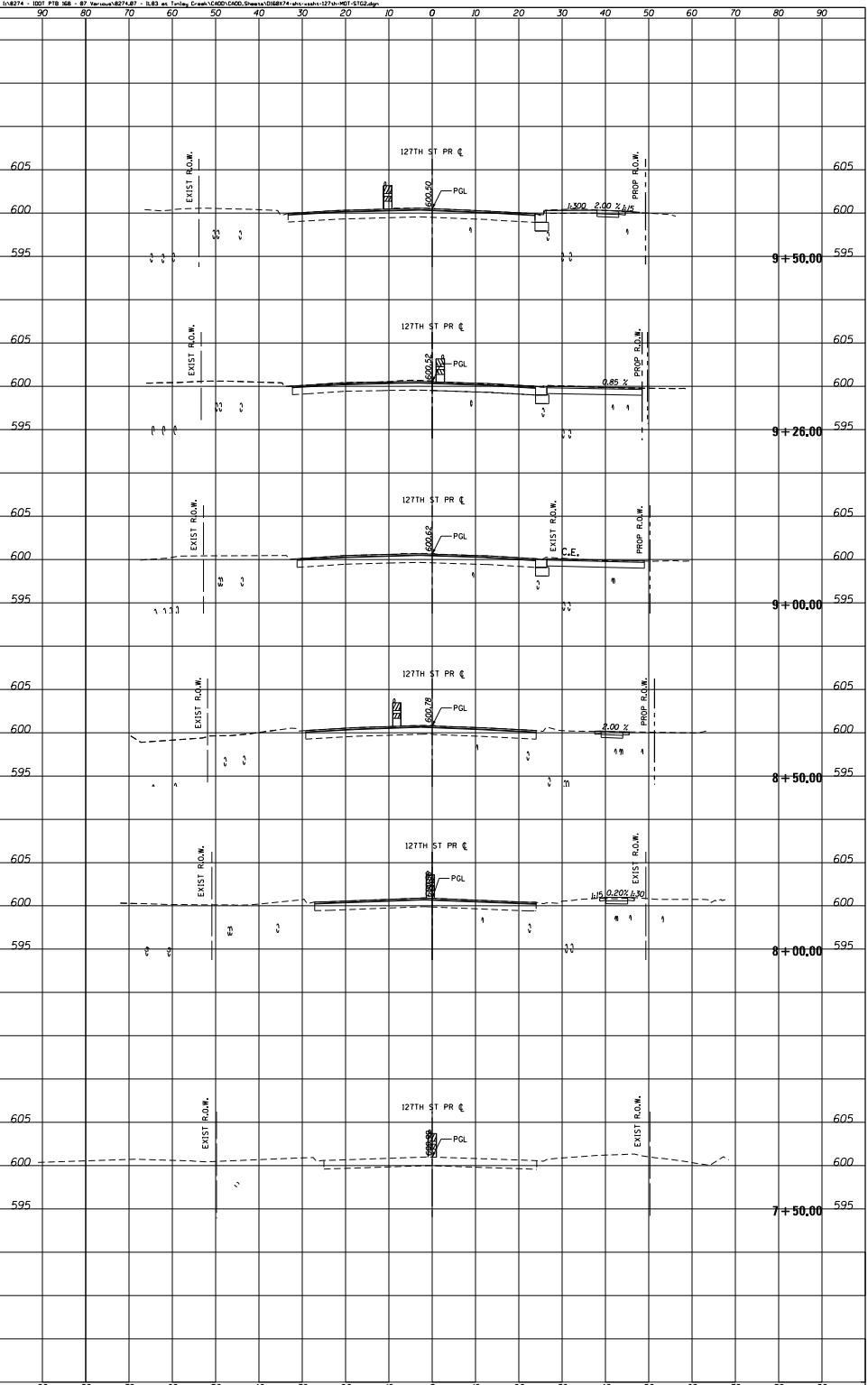
DESIGNED: DSH
 CHECKED: RIG
 DATE: 11/24/2015

DESIGNED: [blank]
 CHECKED: [blank]
 DATE: [blank]

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: [blank]
 SHEET: [blank]
 OF: [blank]
 SHEETS: STA. 7+50.00 TO STA. 9+50.00

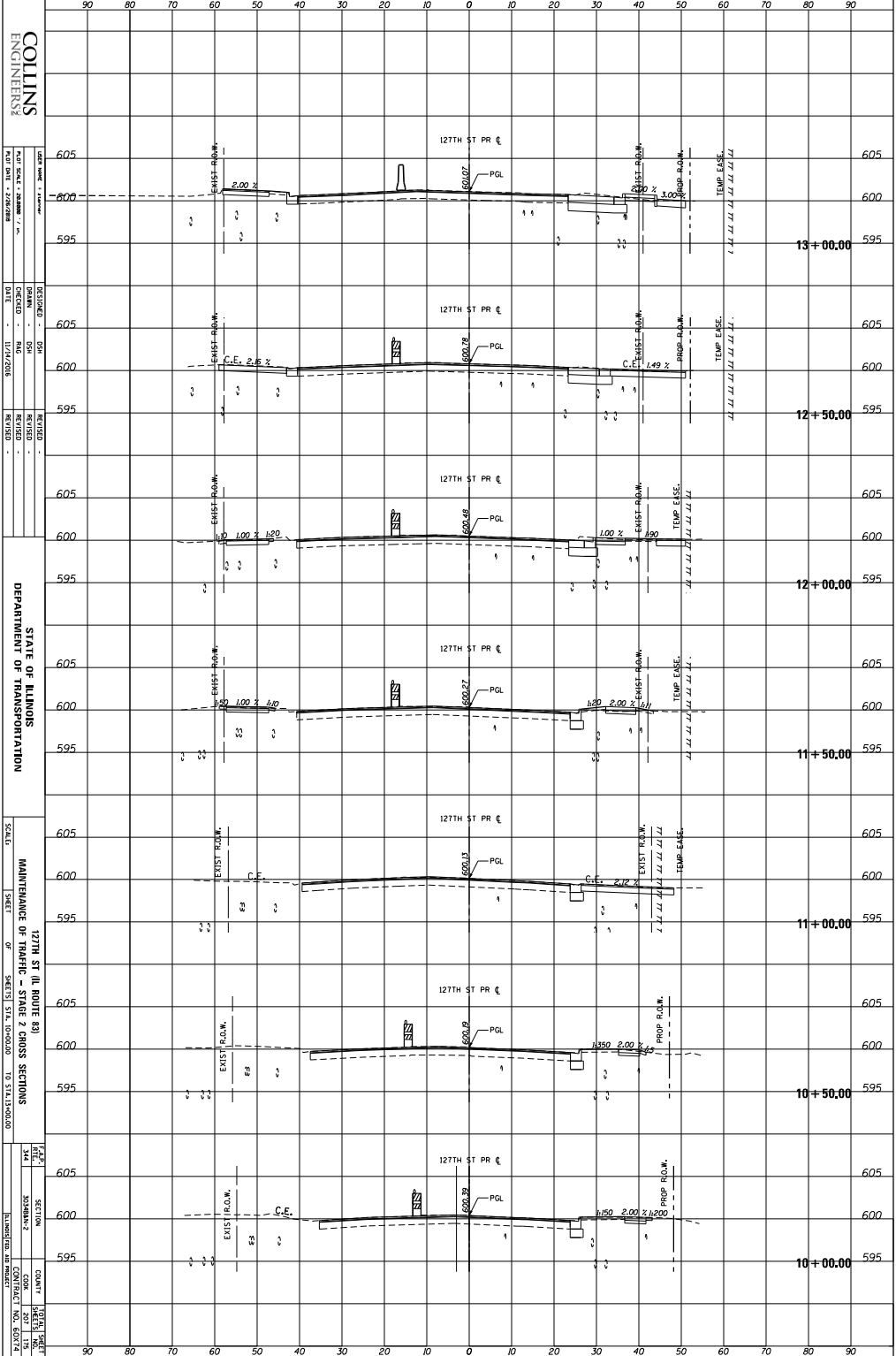
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 CONTRACT: [blank]
 CONTRACT NO.: 60774



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FINAL	BY	DATE

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COLLINS
ENGINEERS

PROJECT: 127TH ST (IL ROUTE 83)
SHEET: 127TH ST (IL ROUTE 83)
DATE: 11/24/2010

DESIGNED BY: [Name]
CHECKED BY: [Name]

SCALE: 1"=20'

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

127TH ST (IL ROUTE 83)
MAINTENANCE OF TRAFFIC - STAGE 2 CROSS SECTIONS

SHEET 127TH ST (IL ROUTE 83)
OF 127TH ST (IL ROUTE 83)

SECTION: 127TH ST (IL ROUTE 83)
CONTRACT: 127TH ST (IL ROUTE 83)

CONTRACT NO. 127TH ST (IL ROUTE 83)
SHEET NO. 127TH ST (IL ROUTE 83)

ORIGINAL	BY	DATE
SURVEY		
PLANS		
NOTES		
REVISED		
CHECKED		

FINAL	BY	DATE
SURVEY		
PLANS		
NOTES		
REVISED		
CHECKED		

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COLLINS
ENGINEERS

DATE: 11/24/2015
 TIME: 10:28:15 AM
 USER: J. J. J.

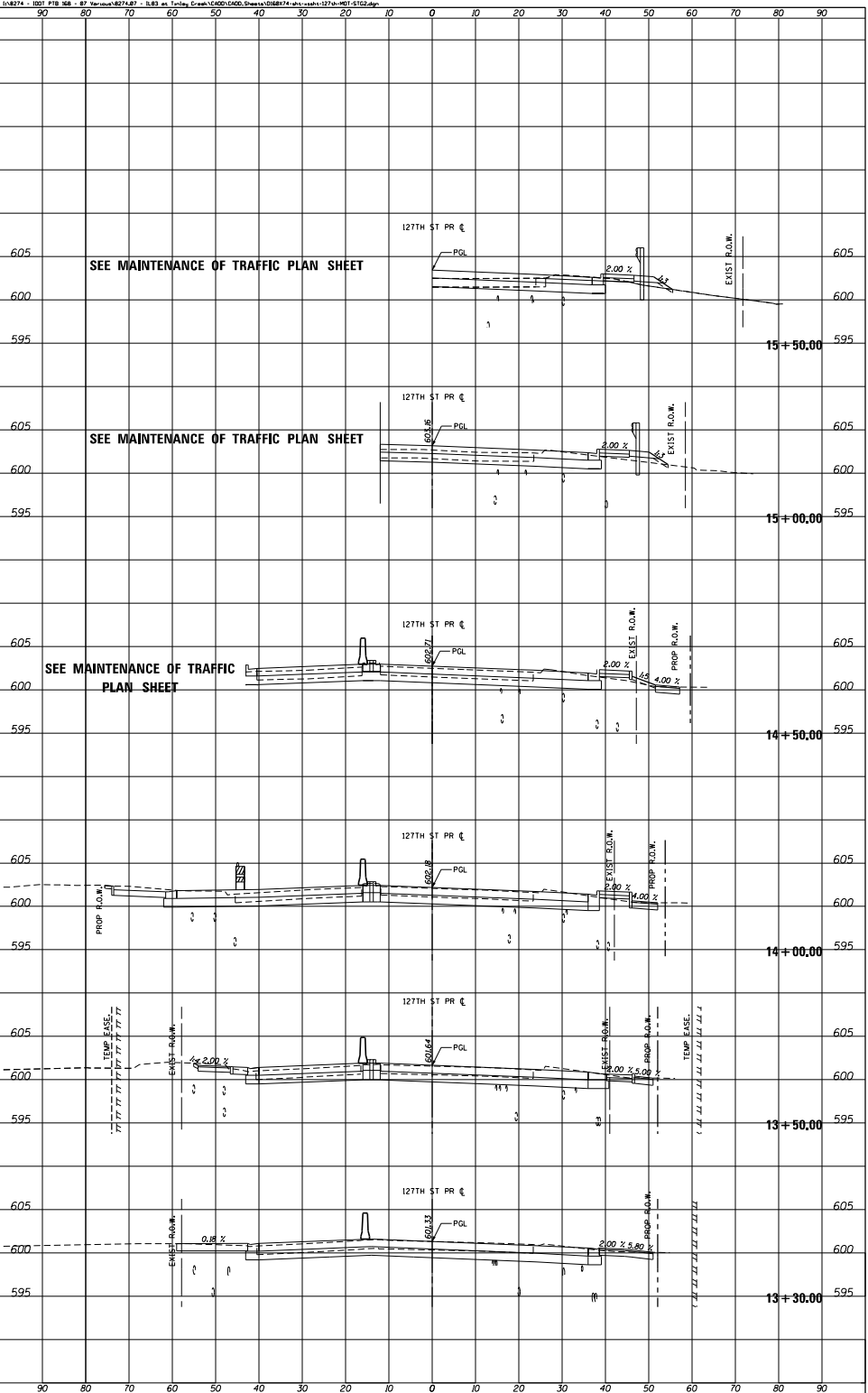
DESIGNED BY: J. J. J.
 CHECKED BY: J. J. J.
 DATE: 11/24/2015

REVISIONS:
 NO. DATE DESCRIPTION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 40'
 SHEET 13 OF 17
 127TH ST (IL ROUTE 83)
 MAINTENANCE OF TRAFFIC - STAGE 2 CROSS SECTIONS
 SHEET 13 OF 17

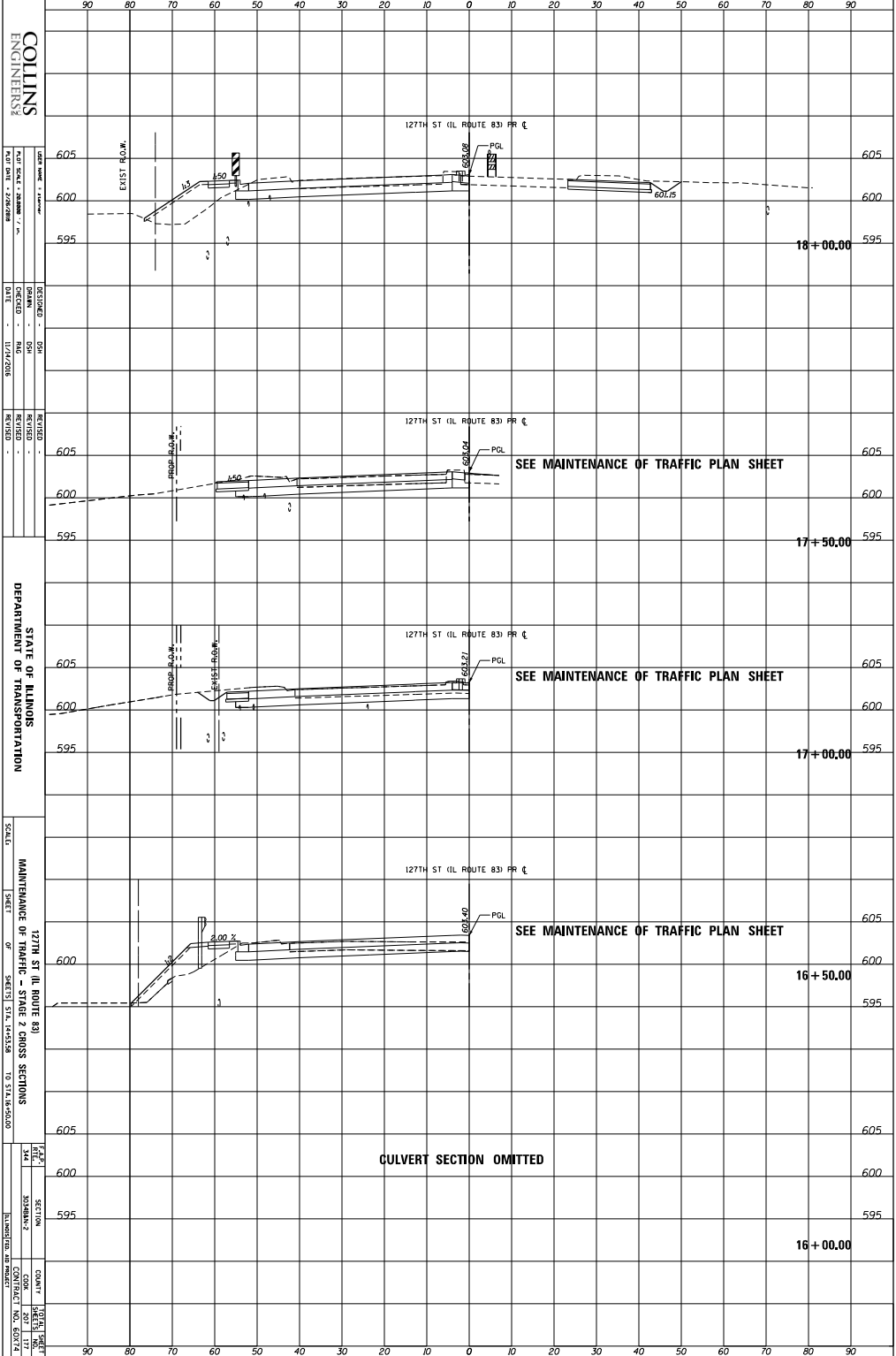
CONTRACT NO. 1274
 SHEET NO. 13 OF 17
 PROJECT NO. 1274



ORIGINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

FINAL	DATE	BY
DESIGNED		
CHECKED		
DATE		
BY		

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COLLINS
ENGINEERS

DATE: 11/24/2015
PROJECT: 127TH ST (IL ROUTE 83) - STAGE 2 CROSS SECTIONS

DESIGNED: DJR
CHECKED: RAG
DATE: 11/24/2015

REVISIONS:
NO. DATE BY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 20'
SHEET 13 OF 13
PROJECT: 127TH ST (IL ROUTE 83) - STAGE 2 CROSS SECTIONS

CONTRACT NO. 050721
SHEET NO. 13 OF 13

ORIGINAL	SUPERVISOR	BY	DATE

FINAL	SUPERVISOR	BY	DATE

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COLLINS
ENGINEERS

DATE: 11/24/2015
PROJECT: 8274

DESIGNED BY: DSE
CHECKED BY: RAG
DATE: 11/24/2015

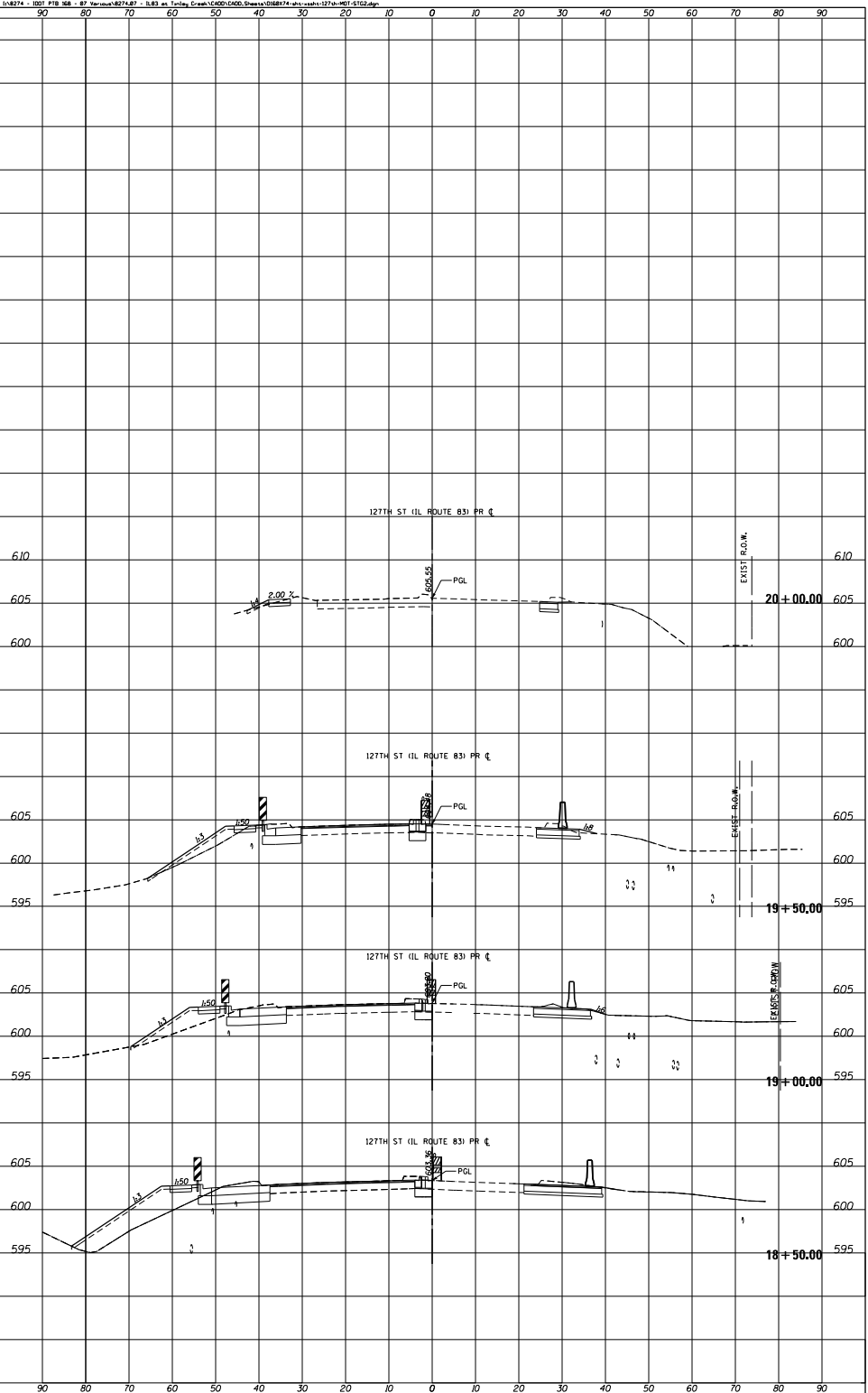
REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'

127TH ST (IL ROUTE 83) PR &
MAINTENANCE OF TRAFFIC - STAGE 2 CROSS SECTIONS

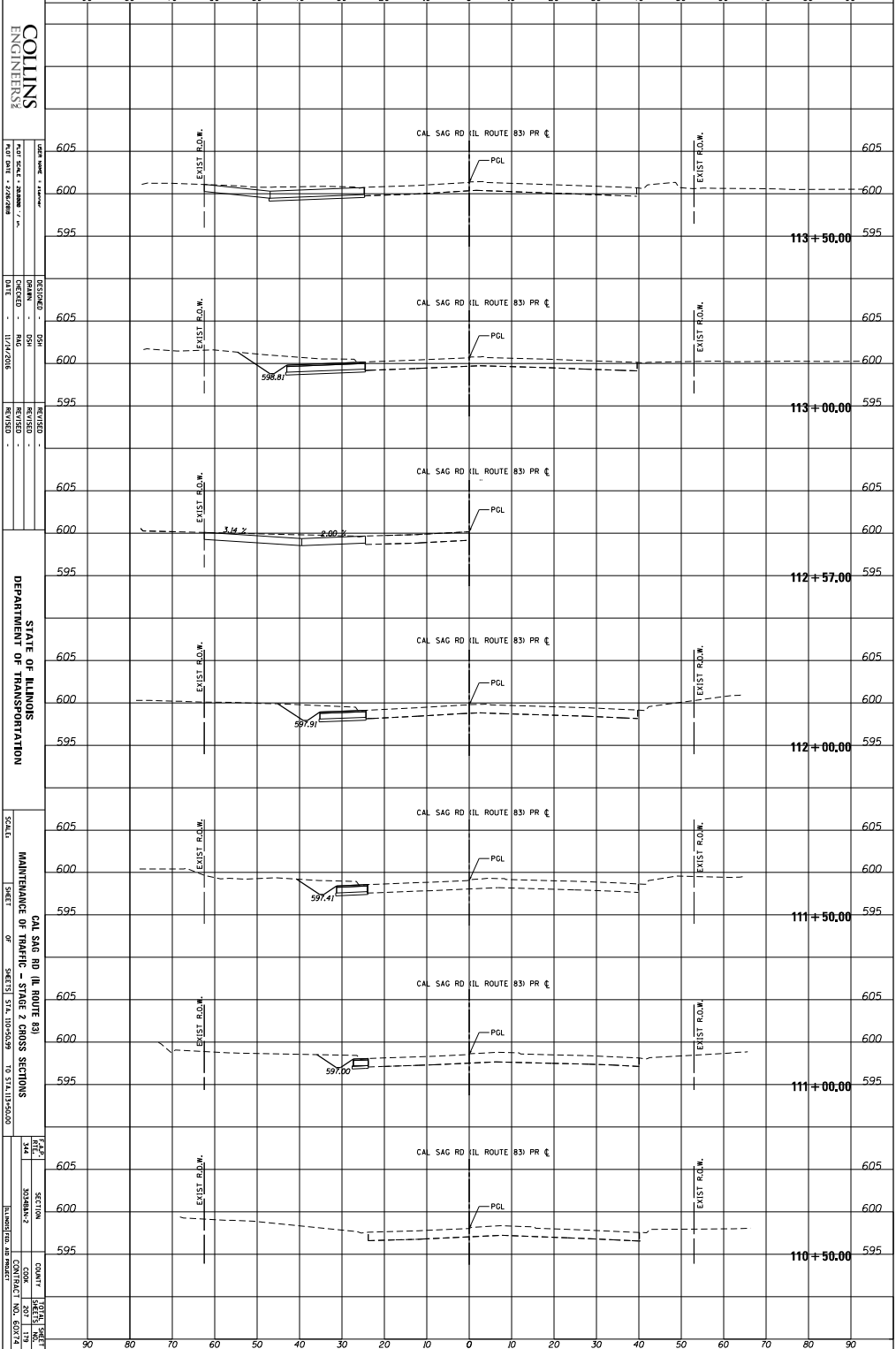
CONTRACT NO. 60724
SHEET NO. 13 OF 13



ORIGINAL	BY	DATE
DESIGNED		
DRAWN		
CHECKED		
IN CHARGE		

FINAL	BY	DATE
APPROVED		
REVISIONS		
NO.		
DATE		

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 I:\8274 - 807 P1B 368 - 87 - 8274.dwg



COLLINS ENGINEERS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'
 SHEET 11 OF 11
 CAL SAG RD ILL ROUTE 831
 MAINTENANCE OF TRAFFIC - STAGE 2 CROSS SECTIONS
 SHEET 11A OF 11A
 TO STA 110+50.00

DATE: 11/24/2015

DESIGNED: DSH
 DRAWN: RAG
 CHECKED: [blank]
 IN CHARGE: [blank]

CONTRACT NO. 60724

ORIGINAL	BY	DATE
SURVEY		
DESIGN		
NOTE BOOK		
MEAS		
CHECKED		

FINAL	BY	DATE
SURVEY		
DESIGN		
NOTE BOOK		
MEAS		
CHECKED		

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COLLINS ENGINEERS

DATE: 11/24/2015

DESIGNED BY: RAG

CHECKED BY: RAG

SCALE: 1"=20'

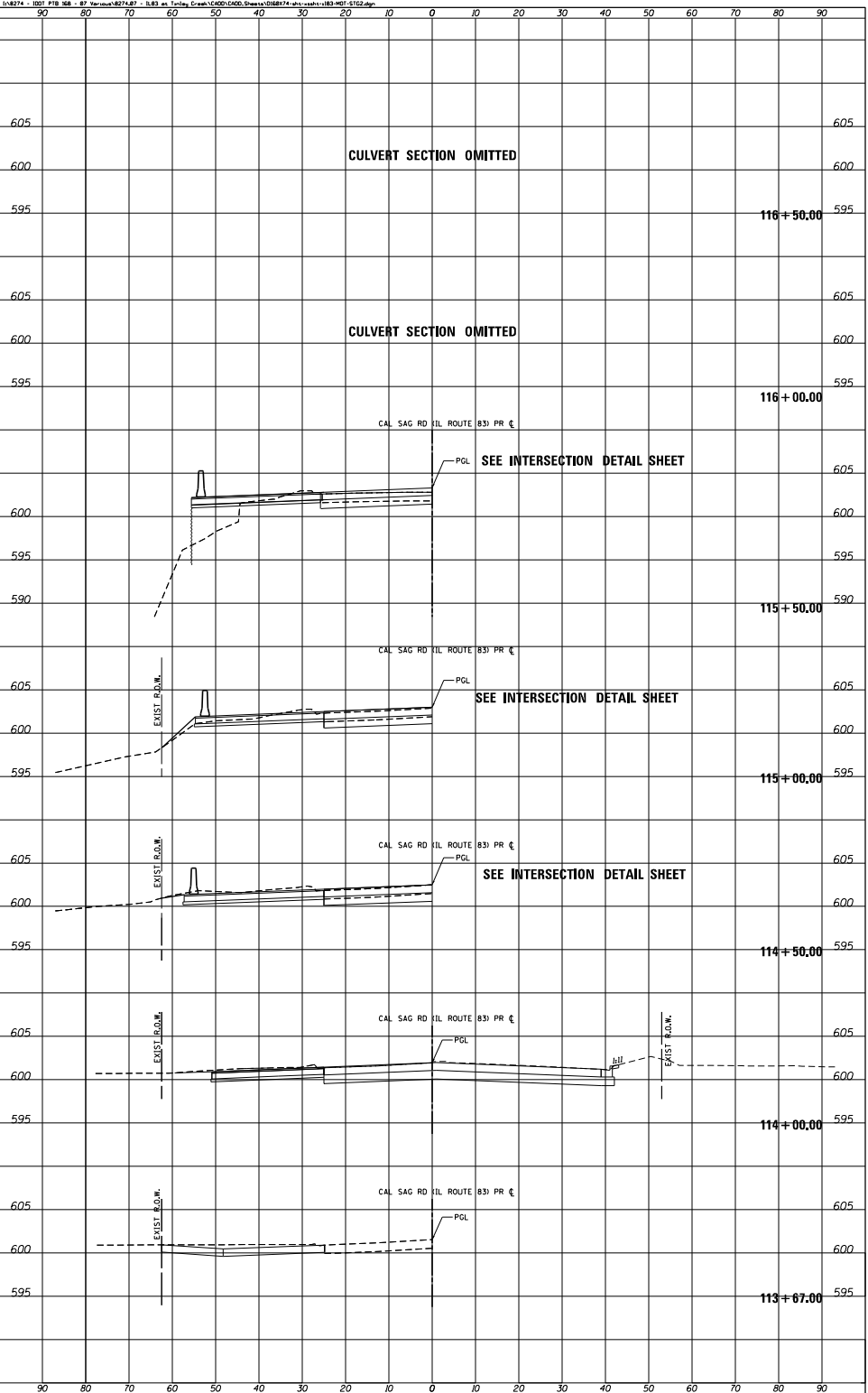
SHEET 3 OF 3

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC - STAGE 2 CROSS SECTIONS

CAL SAG RD ILL ROUTE 83

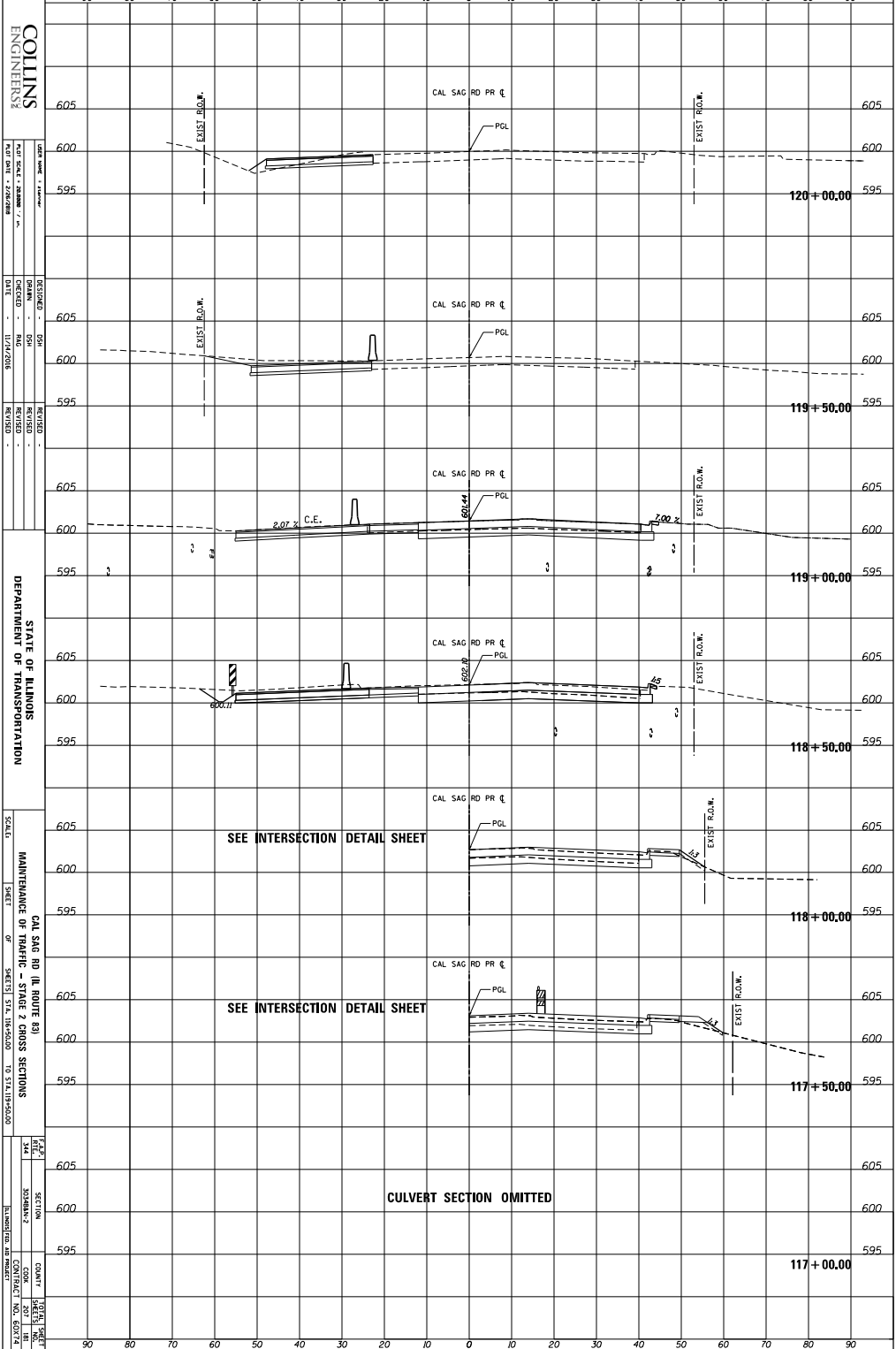
CONTRACT NO. 60724



ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	NO.
MEAS	CHECKED

FINAL	DATE
SURVEY	BY
NOTE BOOK	NO.
MEAS	CHECKED

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COLLINS ENGINEERS
 PROJECT: MAINTENANCE OF TRAFFIC - STATE 2 CROSS SECTIONS
 SHEET 57A, INVS-5000 TO STA 117+50.00
 SCALE: 1"=40'
 DATE: 11/24/2015
 DESIGNED BY: DSE
 CHECKED BY: RAG
 REVISIONS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	CONTRACT
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NO.	NO.	NO.

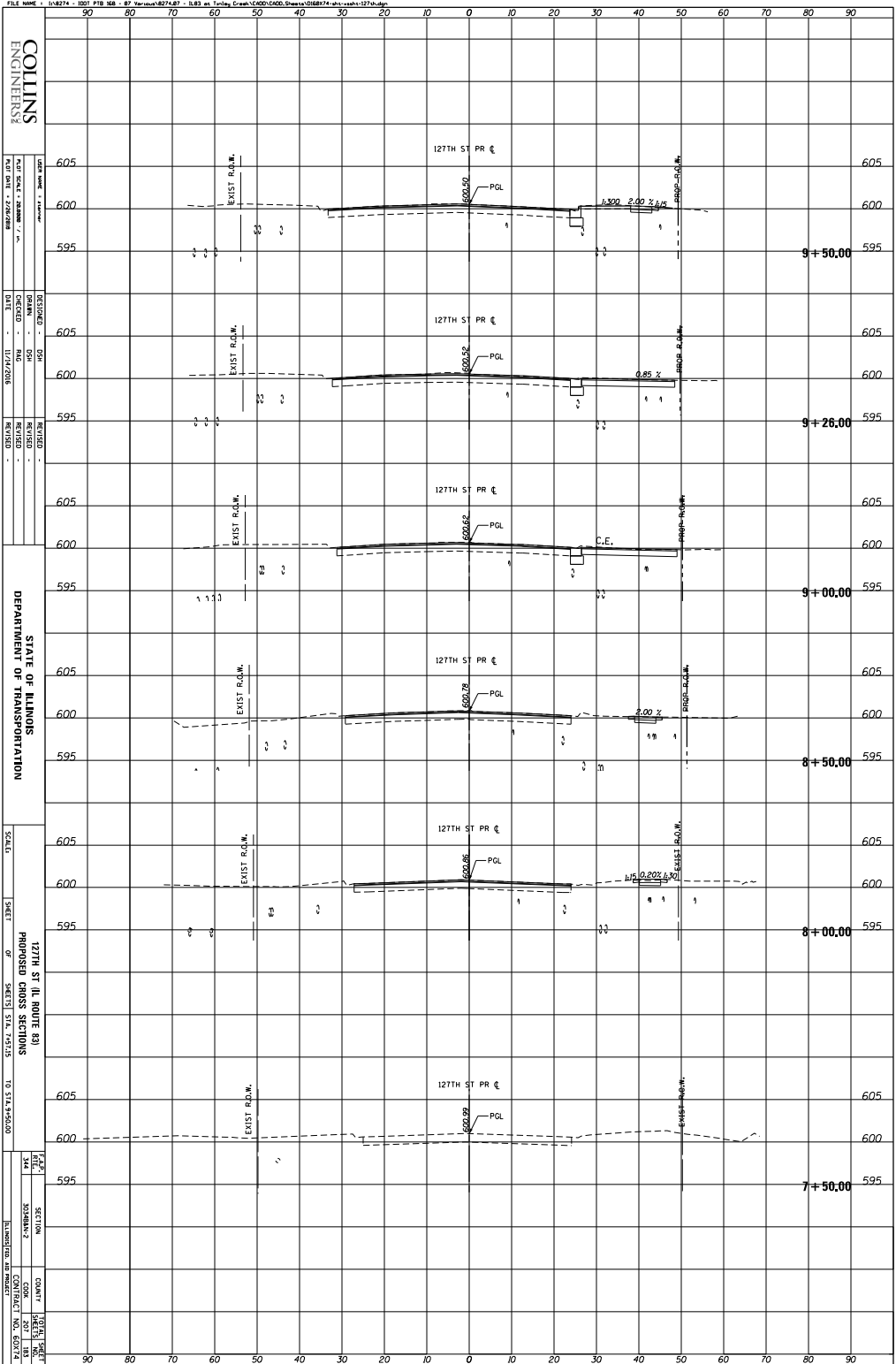
SEE INTERSECTION DETAIL SHEET

SEE INTERSECTION DETAIL SHEET

CULVERT SECTION OMITTED

ORIGINAL	DATE	BY

FINAL	DATE	BY



COLLINS ENGINEERS

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 CHECKED BY: [Name]
 DATE: 11/24/2015

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DATE: 11/24/2015

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DATE: 11/24/2015

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DATE: 11/24/2015

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DATE: 11/24/2015

DESIGNED BY: [Name]
 CHECKED BY: [Name]
 DATE: 11/24/2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

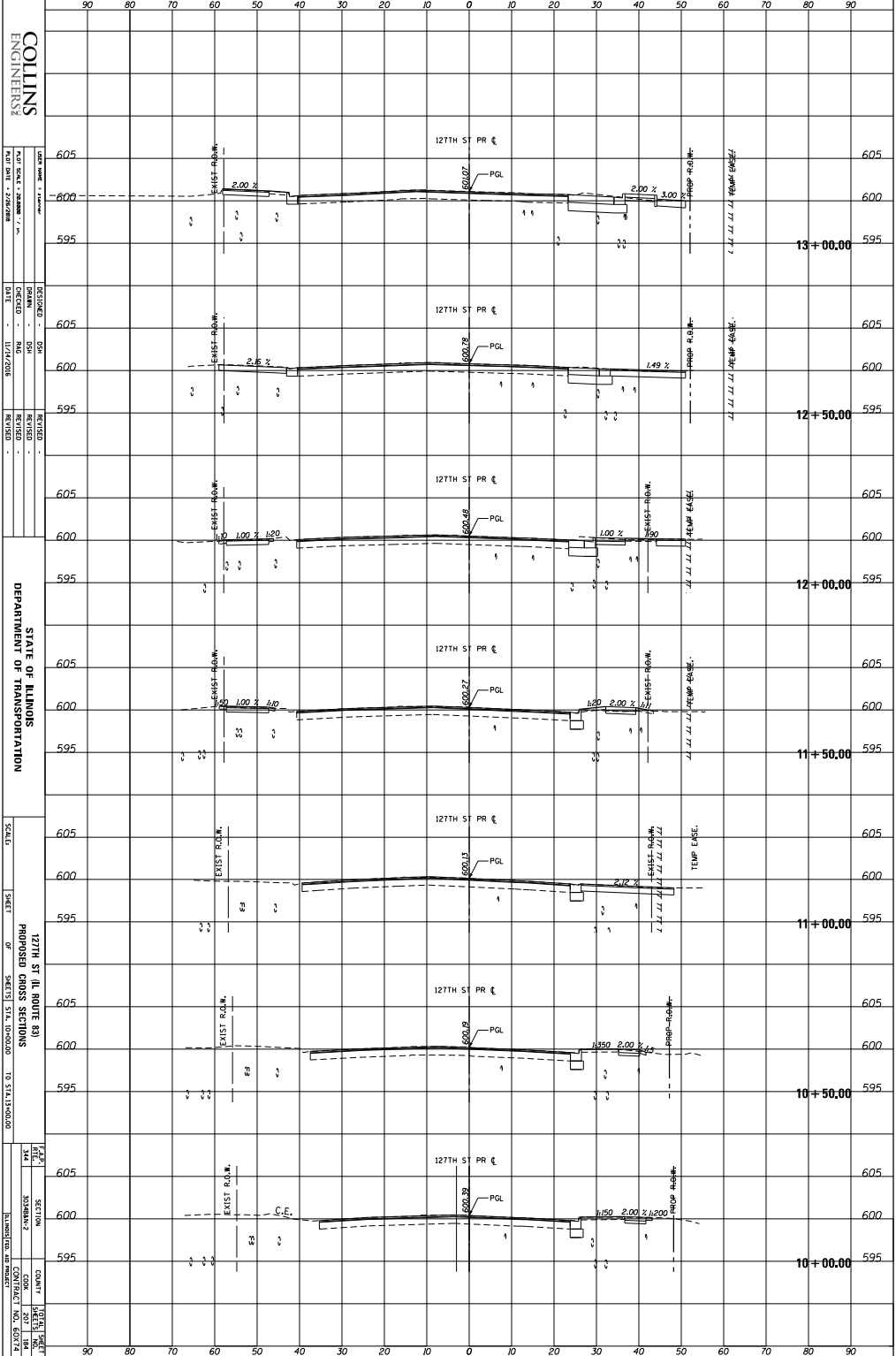
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 OF: [Total Sheets]
 127TH ST AT IL ROUTE 831
 PROPOSED CROSS SECTIONS
 SHEETS 51A, 75A/75B TO 51E, 75E/200

CONTRACT NO. 60774
 SHEET NO. 51A

ORIGINAL	BY	DATE
DESIGNED		
CHECKED		
DATE		

FINAL	DATE
APPROVED	
DATE	

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COLLINS ENGINEERS

PROJECT: 127TH ST. 3/20/15
 DRAWN: RIG
 CHECKED: RIG
 DATE: 11/27/2015

DESIGNED: DSH
 CHECKED: RIG
 DATE: 11/27/2015

REVISIONS:
 NO. DATE DESCRIPTION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: SHEET

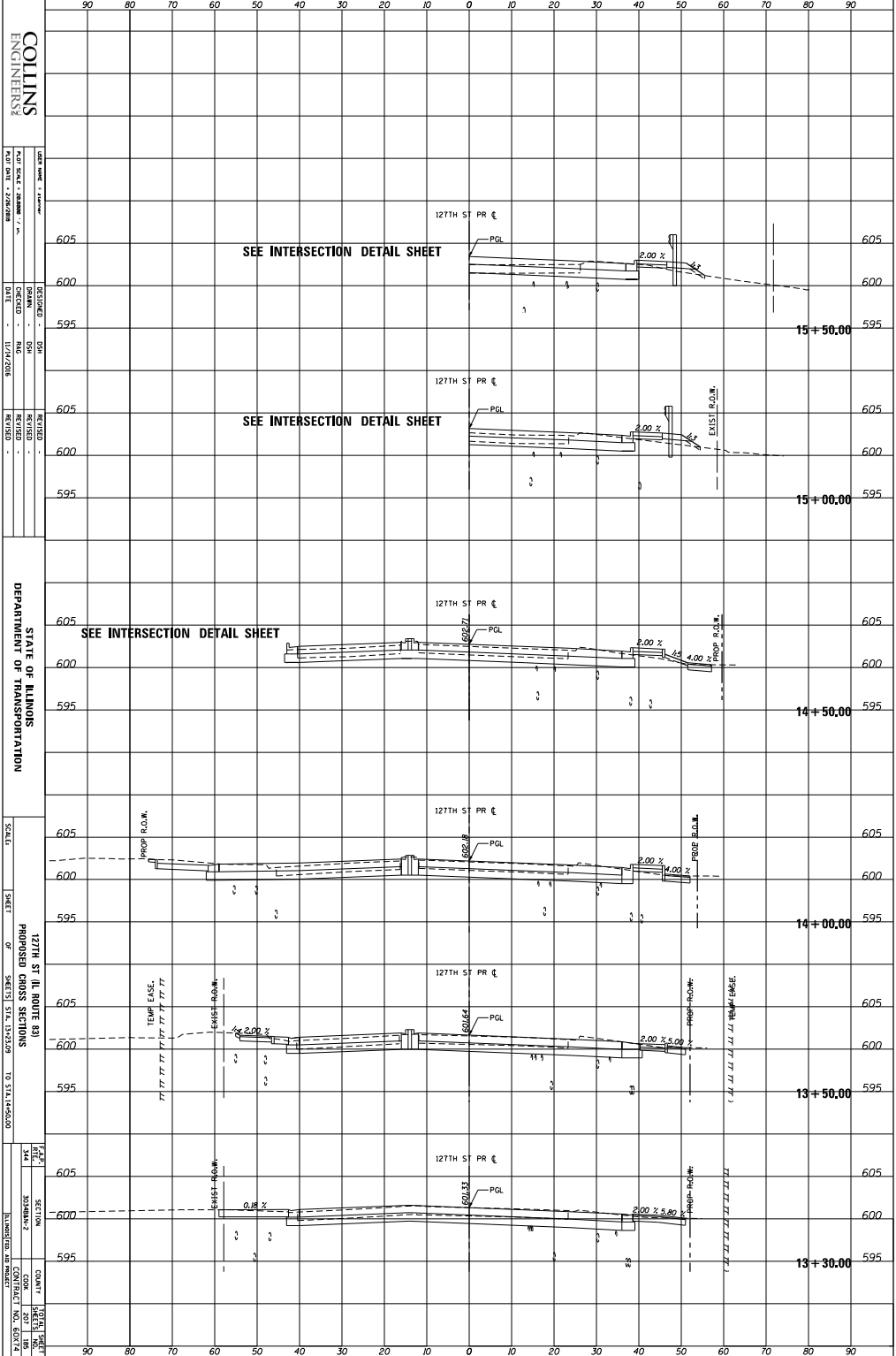
127TH ST. ILL. ROUTE 831
 PROPOSED CROSS SECTIONS
 SHEETS 57A, 100000

10 51119-000-00
 CONTRACT NO. 60724

ORIGINAL	BY	DATE

FINAL	BY	DATE

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COLLINS ENGINEERS

DATE: 11/24/2015

PROJECT: 127TH ST AT IL ROUTE 831

SCALE: 1" = 20'

SHEET: 13 OF 13

CONTRACT NO. 60774

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

127TH ST AT IL ROUTE 831
PROPOSED CROSS SECTIONS

SHEET 13 OF 13

SCALE: 1" = 20'

SHEET: 13 OF 13

127TH ST AT IL ROUTE 831
PROPOSED CROSS SECTIONS

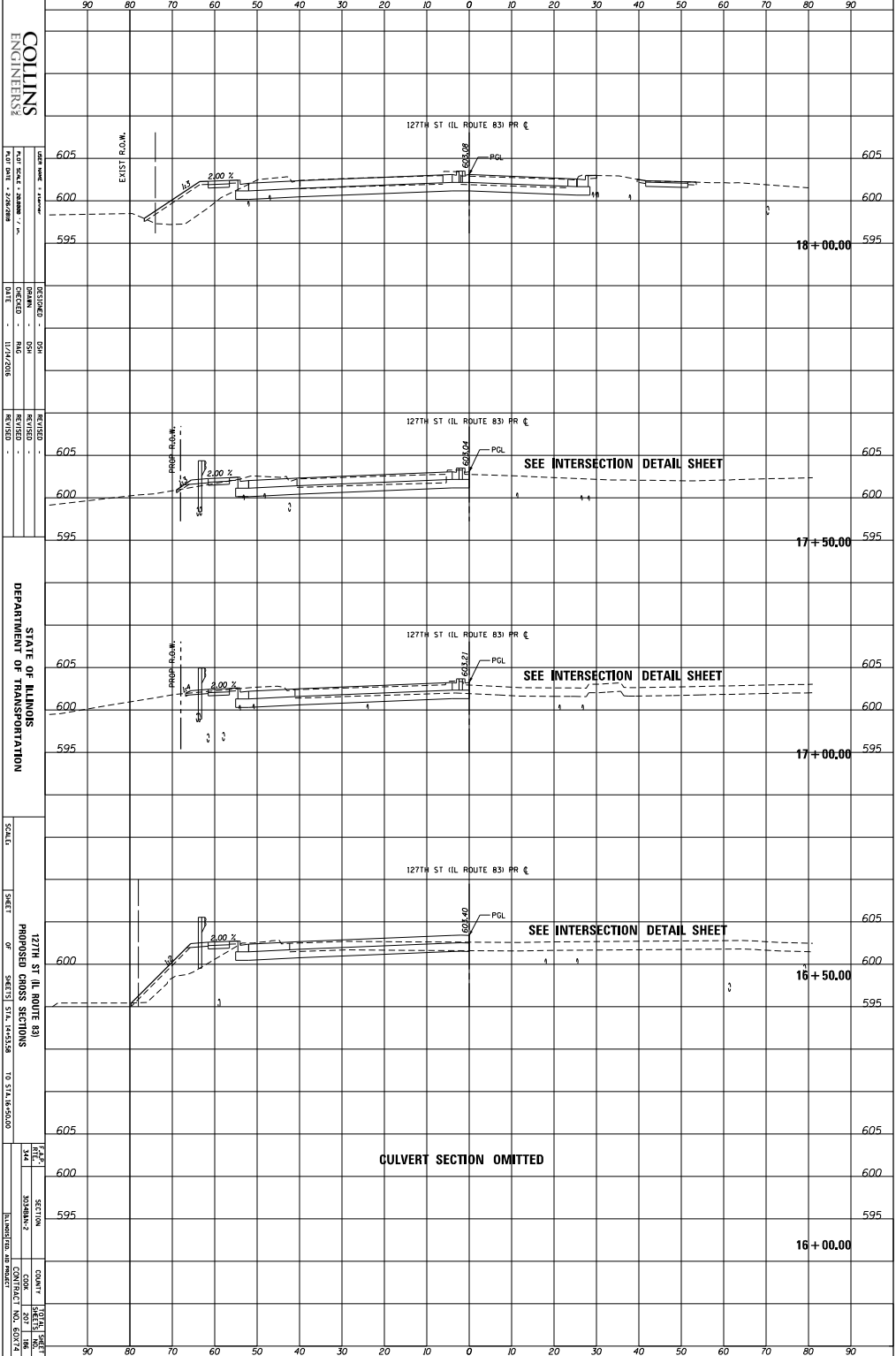
SHEET 13 OF 13

CONTRACT NO. 60774

ORIGINAL	BY	DATE
SURVEYED		
DESIGNED		
CHECKED		
DATE		

FINAL	BY	DATE
SURVEYED		
DESIGNED		
CHECKED		
DATE		

FILE NAME: I:\8274 - 807 P18 368 - 87\Drawings\8274.dwg - 1:8.3 in Title Draw - CADD - CADD - 127th.dwg



COLLINS ENGINEERS
 127TH ST (IL ROUTE 83)
 PROPOSED CROSS SECTIONS
 SHEET 13 OF 13
 127TH ST, ILLINOIS
 TO STA. 16+00.00

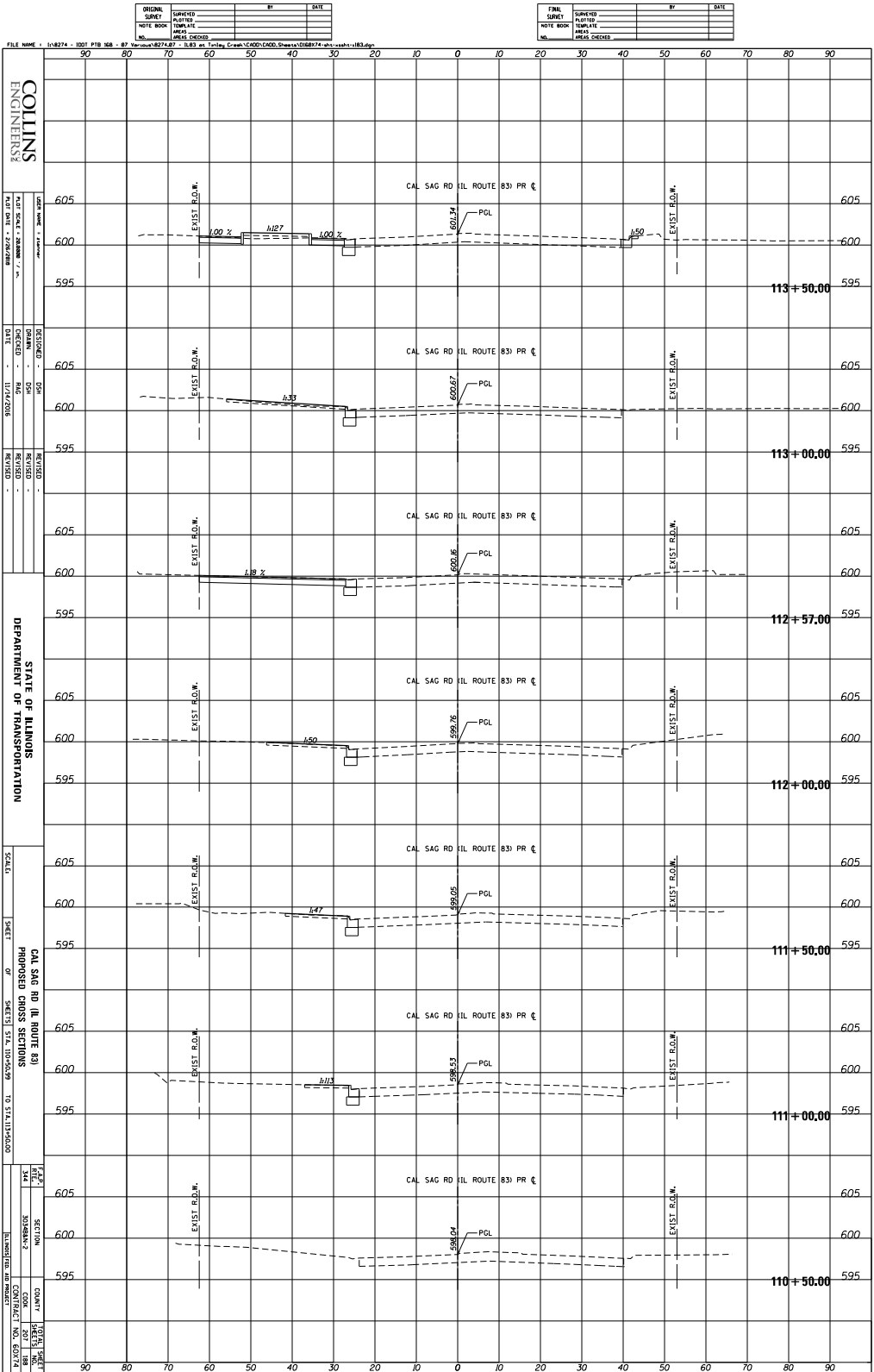
DESIGNED	DSH
CHECKED	RAG
DATE	11/24/2015

DESIGNED	DSH
CHECKED	RAG
DATE	11/24/2015

SCALE	SHEET
1" = 20'	13

SECTION	NO.
127TH ST	13

CONTRACT	NO.
127TH ST	13



ORIGIN	BY	DATE
DESIGNED		
CHECKED		
DATE		

FINAL	BY	DATE
DESIGNED		
CHECKED		
DATE		

FILE NAME: 110274 - 807 P1B 368 - 87 - 110274.dwg
 COLLINS ENGINEERS
 PROJECT: CAL SAG RD II ROUTE 831
 SHEET: 110274-000
 OF 110274-000
 SCALE: AS SHOWN
 DATE: 11/24/2015
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 CONTRACT NO. 110274-000
 SHEET NO. 110274-000

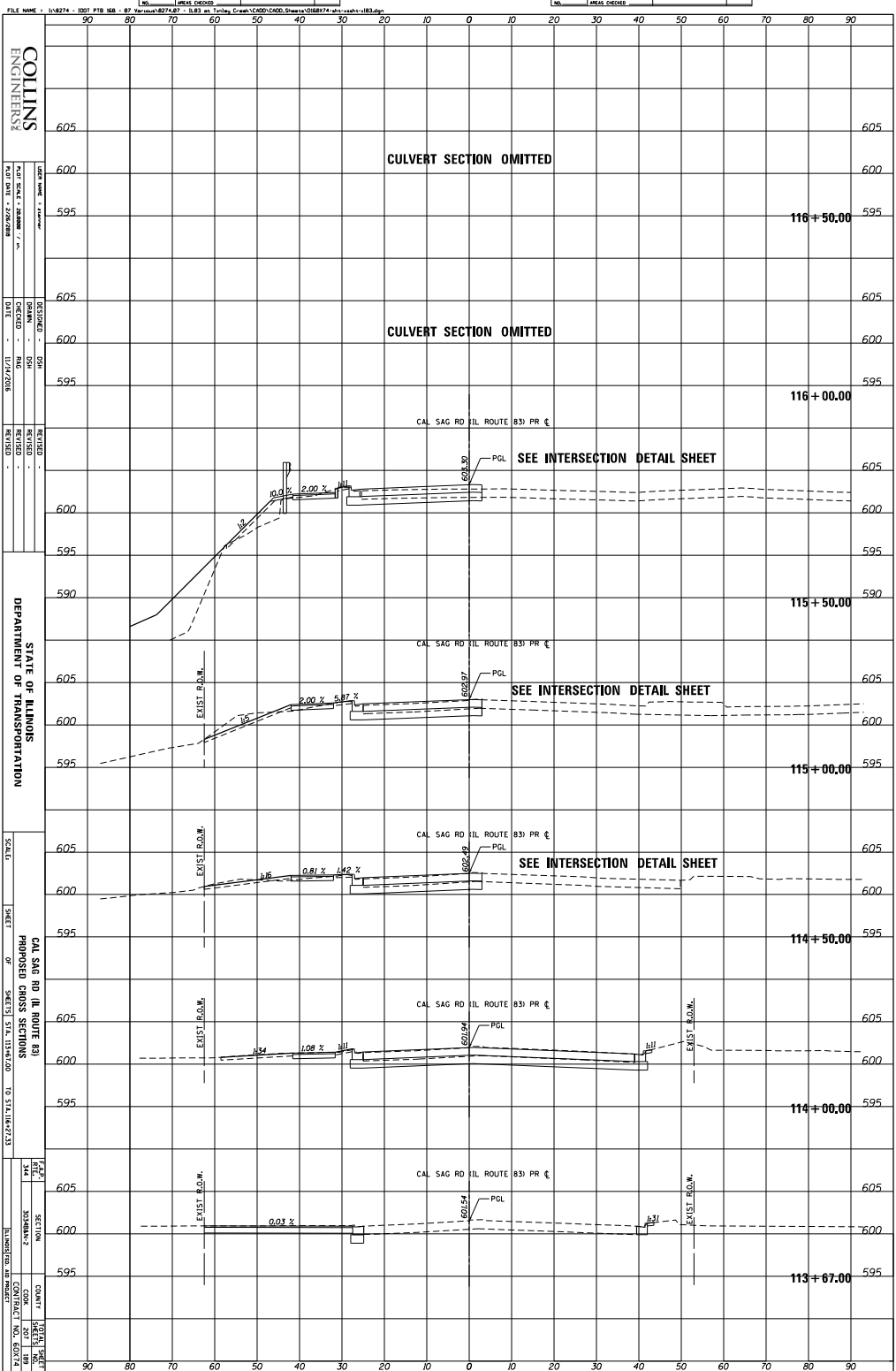
DESIGNED: [Name]
 CHECKED: [Name]
 DATE: 11/24/2015
 REVISIONS:
 NO. DATE BY DESCRIPTION

CAL SAG RD II ROUTE 831
 PROPOSED CROSS SECTIONS
 SHEET 110274-000 OF 110274-000

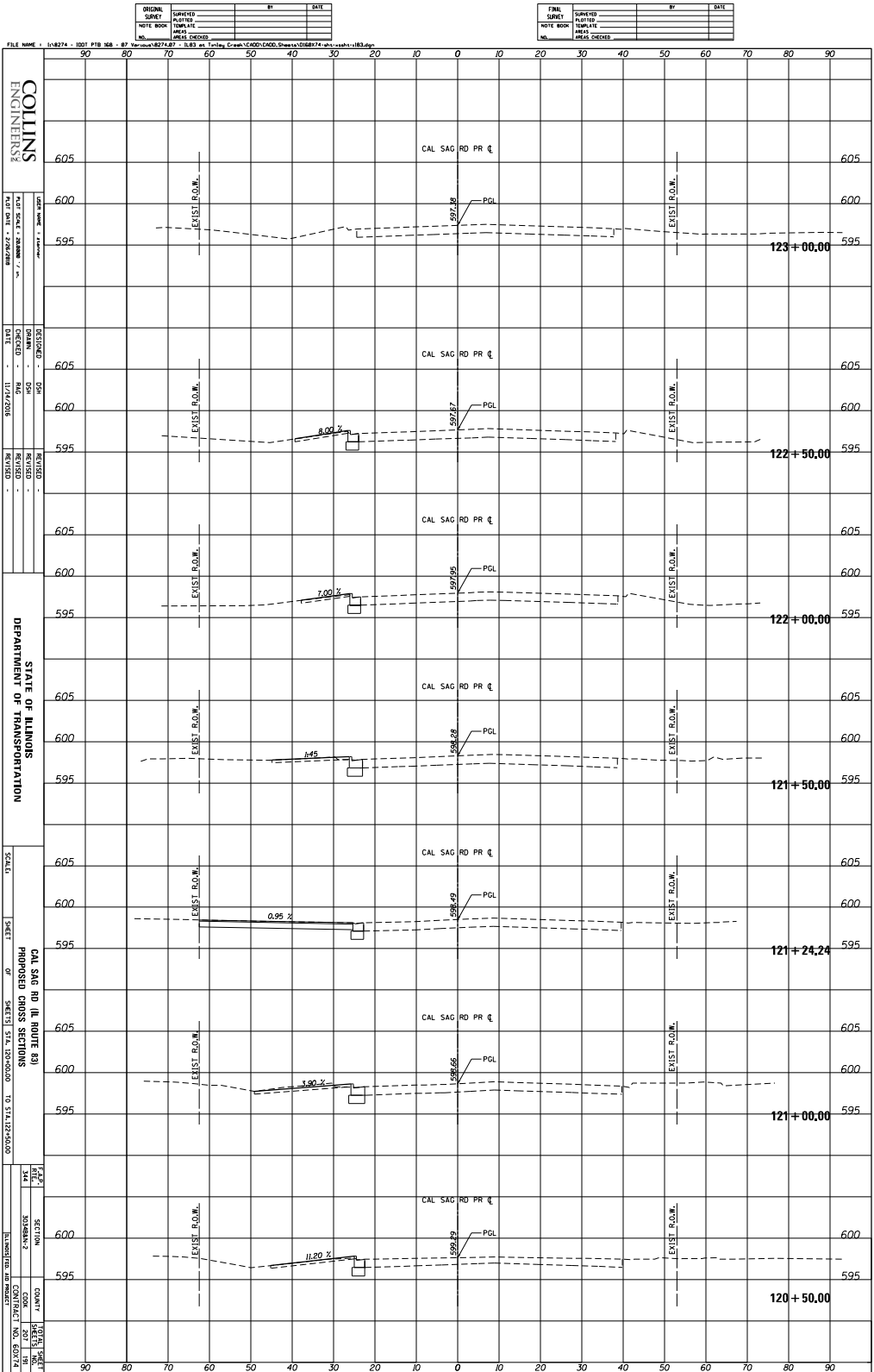
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 SHEET NO. 110274-000

ORIGINAL	BY	DATE

FINAL	BY	DATE



COLLINS ENGINEERS
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 SHEET NO. 114+00.00
 SCALE: 1" = 20'
 DATE: 11/24/2015
 DESIGNED BY: RIG
 CHECKED BY: RIG
 DRAWN BY: RIG
 PROJECT NO.: 151118-27-23
 CONTRACT NO.: 60721
 SHEET NO.: 114+00.00
 TOTAL SHEETS: 10



COLLINS ENGINEERS

DESIGNED BY: DSE
 DRAWN BY: RAG
 CHECKED BY: [blank]
 DATE: 11/24/2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

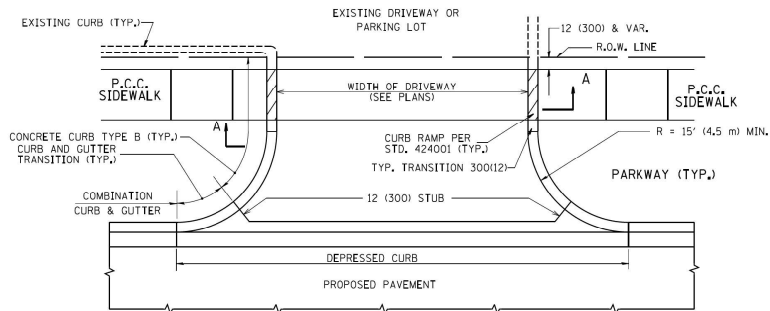
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 CAL SAG RD 1L ROUTE 831
 PROPOSED CROSS SECTIONS
 SHEETS STA. 120+00.00 TO STA. 122+50.00

PROJECT NO. 050723
 CONTRACT NO. 050723

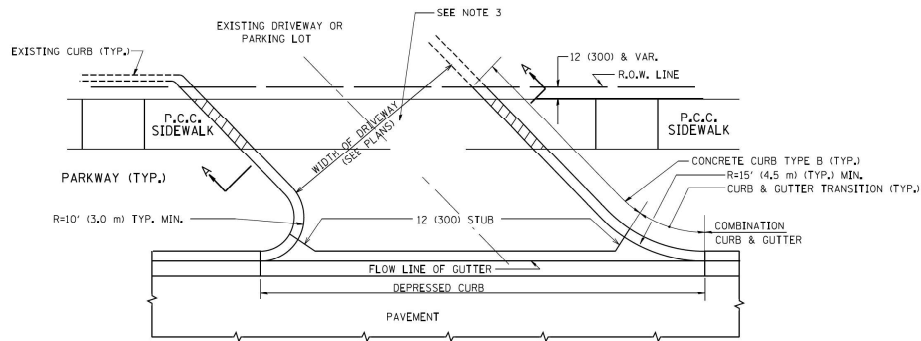
ORIGINAL	DATE	BY

FINAL	DATE	BY

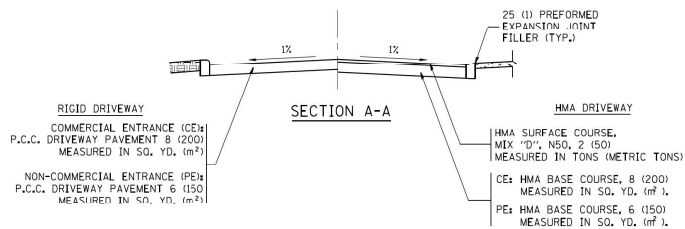
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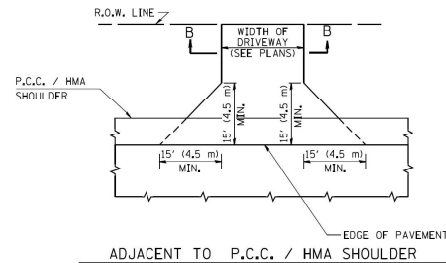
WITH CONCRETE CURB, TYPE B



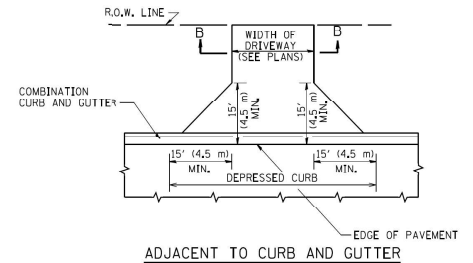
WITH CONCRETE CURB, TYPE B



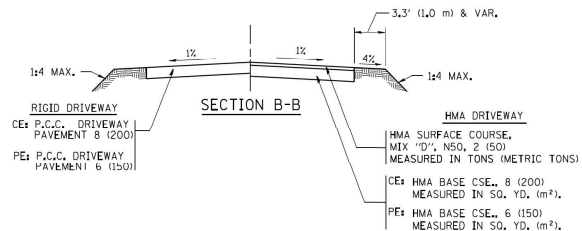
SECTION A-A



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



SECTION B-B

RURAL FIELD ENTRANCE (RFE)
 HMA SURFACE COURSE,
 MIX "D", N50, 2 (50)
 MEASURED IN TONS (METRIC TONS)
 CE: HMA BASE CSE., 8 (200)
 MEASURED IN SQ. YD. (m²)
 PE: HMA BASE CSE., 6 (150)
 MEASURED IN SQ. YD. (m²)
 AGGREGATE BASE CSE., TYPE B, 8 (200)
 MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

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

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

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/705-4131 FOR ANY QUESTIONS 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.

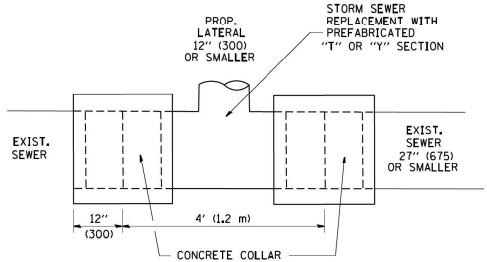
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

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 SLIP THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1/50.

FILE NAME =	USER NAME = lnyuan	DESIGNED - R. SHAH	REVISED - P. LGFLUER 04-15-03
ca:\pwwork\pdsd\l\lanyuan\08315\bd01.dwg		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 06-11-08
		DATE - 11-04-95	REVISED - R. BORO 09-06-11

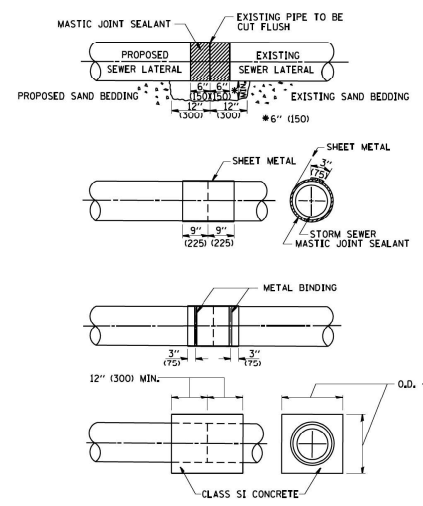
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER ≥ 15' (4.5 m)		F.A.P. ETE: 344	SECTION 303488N-2	COUNTY COOK	TOTAL SHEET 207	SHEET NO. 192
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD0156-07 (BD-01) CONTRACT NO. 60X74		
				FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT		



DETAIL "A"

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

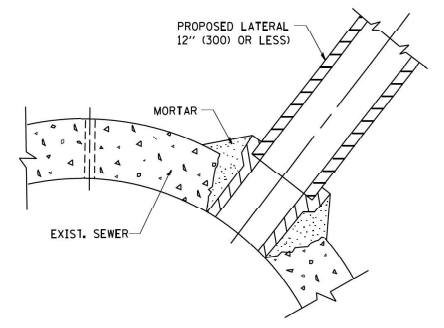


DETAIL "B"

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.
3. 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 1/2 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. 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 OZZES 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

1. 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 REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

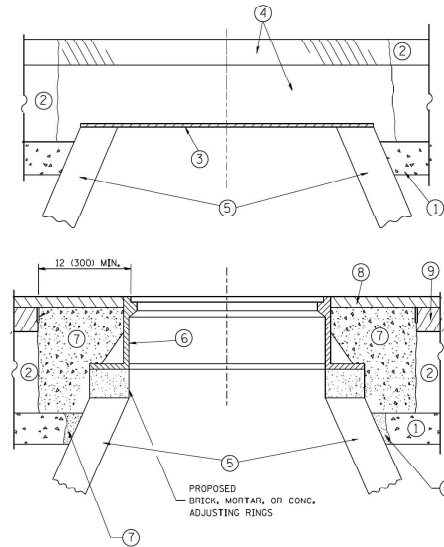
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

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

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE 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 = W:\distrs\22x34\ba087.dgn	USER NAME = goglianob	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER		F.A.P. SITE: 344	SECTION: 303488N-2	COUNTY: COOK	TOTAL SHEET SWEETS: 207 193	
PL01 SCALE = 50.000 1/4 IN.	DRAWN -	CHECKED -	REVISED - R. SHAH 09-09-94		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS: STA.	TO STA.	BD500-01 (BD-7) CONTRACT NO. 60X74		
PL01 DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 10-25-94	REVISED - R. SHAH 06-12-96		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
<p>CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.</p>											



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 1½ (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 ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

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.

NOTES:

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.

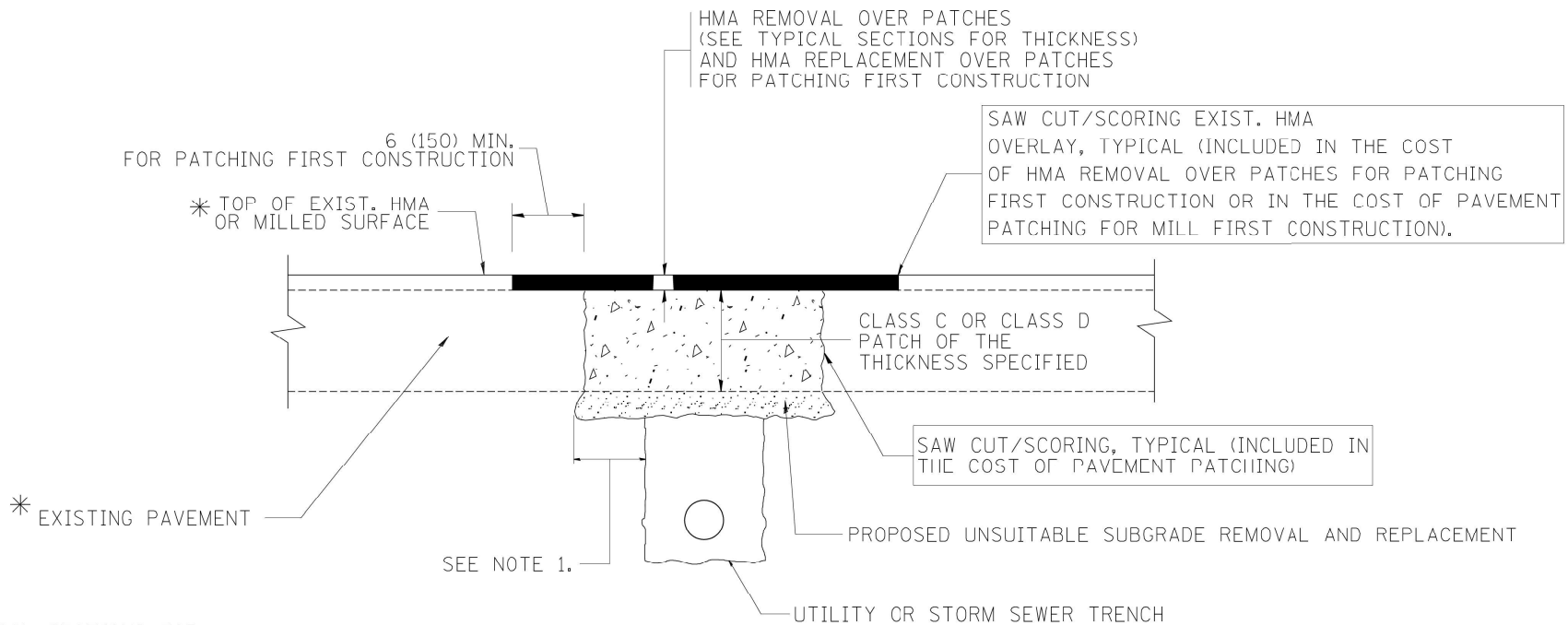
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerd	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			F.A.P. SITE: 344	SECTION: 30348&N-2	COUNTY: COOK	TOTAL SHEETS: 207	SHEET NO.: 194
DRAWN -	CHECKED -	DATE - 10-25-94	REVISED - R. BORO 01-01-07		REVISED - R. BORO 03-09-11	REVISED - R. BORO 12-06-11	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS STA. TO STA.	BD600-03 (BD-8) FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
PLOT SCALE = 1/8" = 1' / 8" m												
PLOT DATE = 12/6/2011												



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

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)

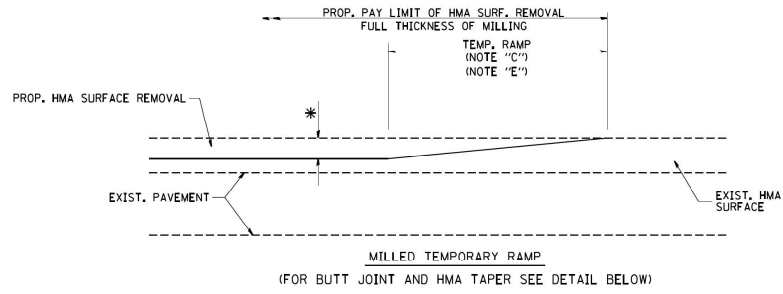
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

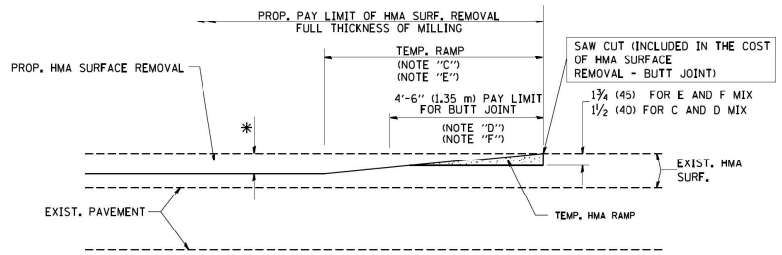
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

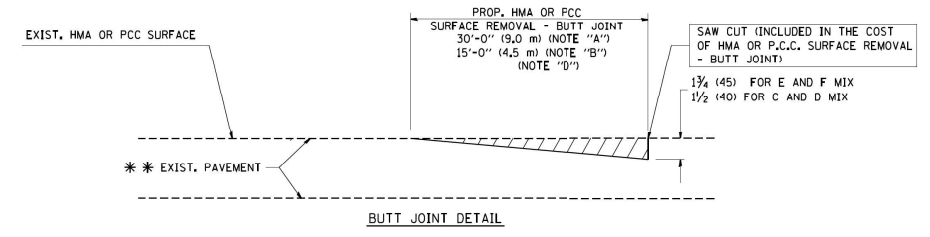
FILE NAME = c:\projects\data\2222\34\bd22.dgn	USER NAME = bouardl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		F.A.P. ETES: 344	SECTION 303488N-2	COUNTY COOK	TOTAL SHEET 207	SHEET NO. 195	
PLT SCALE = 50.000' / IN.	DRAWN -	REVISOR - R. BORO 01-01-07	REVISED - R. BORO 09-04-07		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT		
PLT DATE = 10/27/2008	CHECKED -	DATE - 10-25-94	REVISED - K. ENG 10-27-08					BD400-04 (BD-22)			CONTRACT NO. 60X74	



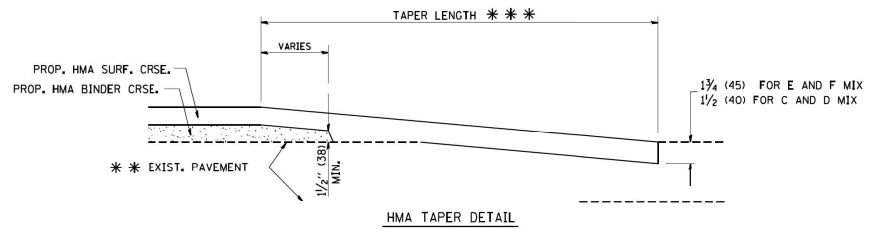
OPTION 1



OPTION 2
TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

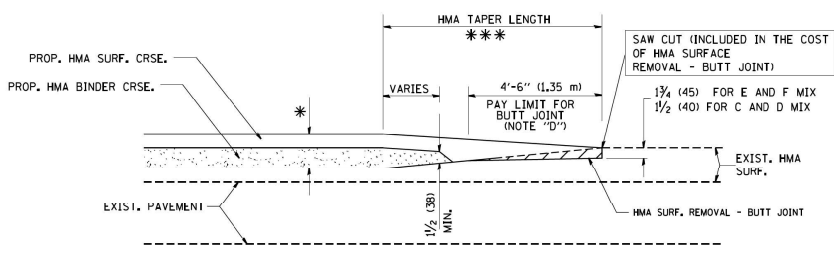
*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

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")

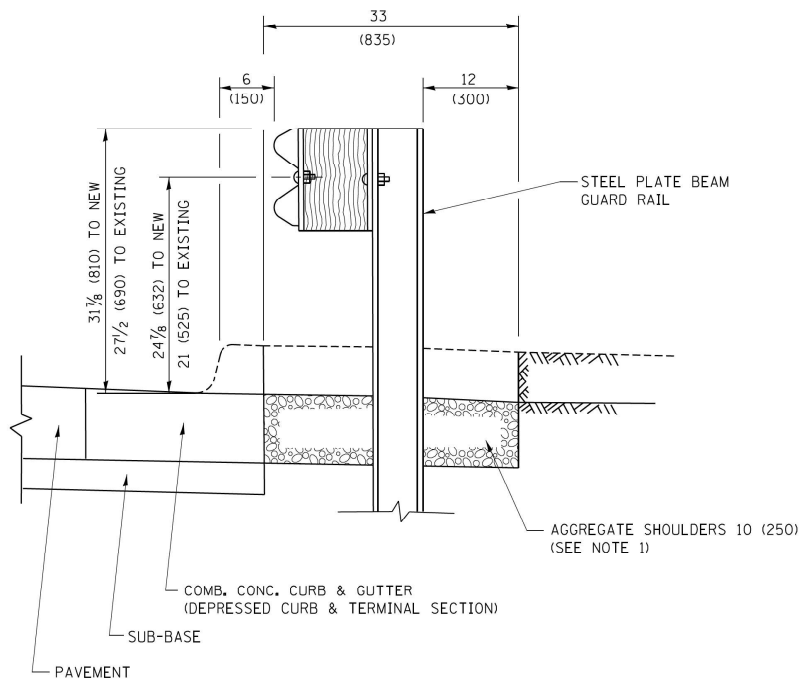
BASIS OF PAYMENT:
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

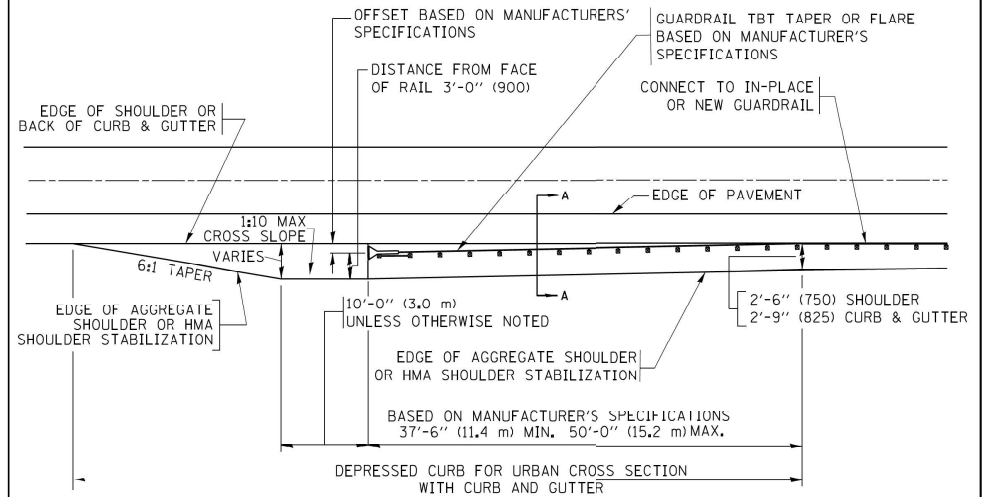
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PL01 SCALE = 50.0000 1/32"	DRAWN -	CHECKED -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS STA.	BD400-05 BD32		CONTRACT NO. 60X74		
PL01 DATE = 1/4/2008	DATE - 06-13-90	REVISED - M. GOMEZ 04-06-01	REVISED - R. BORO 01-01-07									
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT												



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.

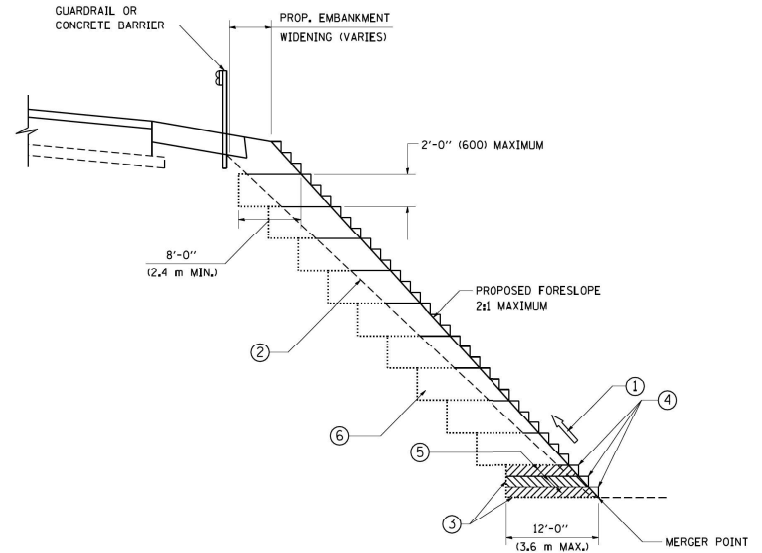
FILE NAME =	USER NAME = dravakogn	DESIGNED - M. DE YONG	REVISED - R. BORO 12-08-2008
PROJECT =	PROJECT OFFICE =	DRAWN =	REVISED - R. BORO 09-14-2009
PLOT SCALE = 50,0000 1/16"	CHECKED -	REVISIONS	REVISED - R. BORO 08-06-2012
PLOT DATE = 12/21/2015	DATE = 09-22-90	REVISIONS	REVISED - R. BORO 05-08-2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND
 SHOULDER TREATMENT AT TBT TY. 1 SPL.

F.A.P. P. 344	SECTION 30348&N-2	COUNTY COOK	TOTAL SHEETS 207	SHEET NO. 197
BD600-10 (BD 34)			CONTRACT NO. 60X74	
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.



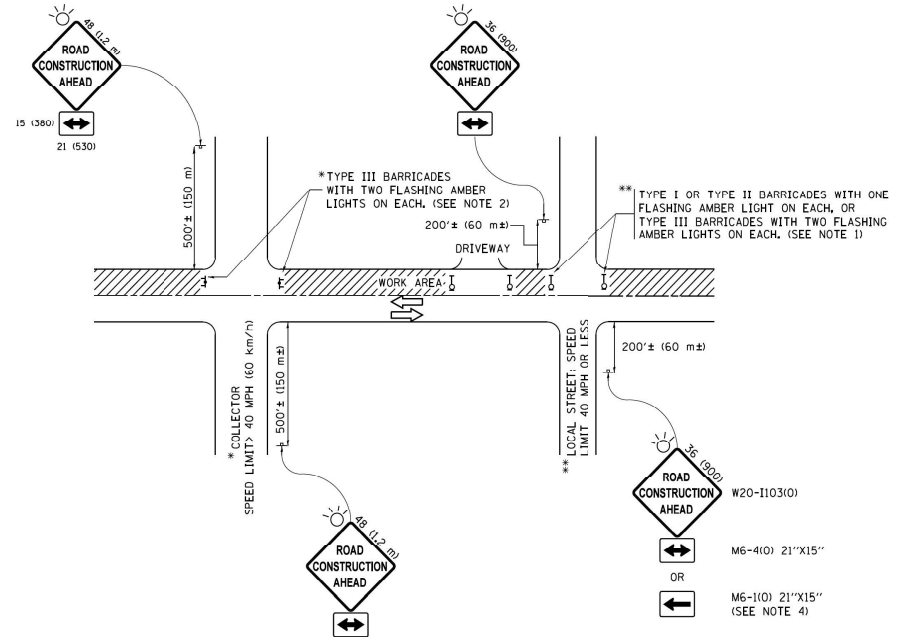
TYPICAL BENCHING DETAIL
FOR EMBANKMENT

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 6 INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

FILE NAME = W:\projects\22x34\bd51.dgn	USER NAME = geglennob	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BENCHING DETAIL FOR EMBANKMENT WIDENING			F.A.P. DTE:	SECTION	COUNTY	TOTAL SHEET
	PLOT SCALE = 50.0000' / 3/4"	DRAWN - CADD	REVISED -		344	303488N-2	COOK	207	198		
PLOT DATE = 1/4/2008	CHECKED - S.E.B.	DATE - 06-16-04	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	BD-51 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60X74		

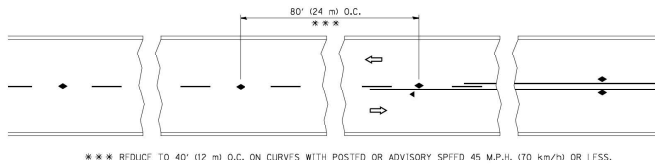


NOTES:

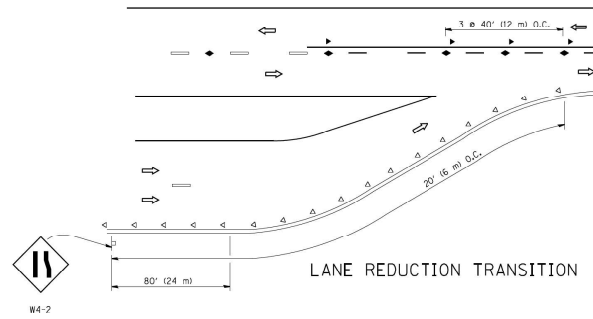
1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE 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 x 48 (1.2 m x 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) IN HEIGHT.
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).
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.

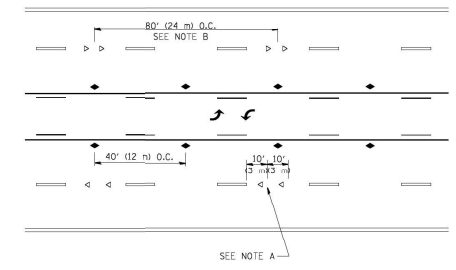
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Default	Documents\DOT Offices\Contract 1\Projects\Dist 4\DRAWING\CADData\CADsheets\scil\Bldg	CHECKED -	REVISED - T. RAMMACHER 01-06-00			344	3034B&N-2	COOK	207	199
	PLOT SCALE = 50,000 1" = 50'	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13			TC-10		CONTRACT NO. 60X74		
	PLOT DATE = 9/15/2016	REVISED - A. SCHUETZE 05-15-16				ILLINOIS FED. AID PROJECT				
SCALE: NONE						SHEET 1 OF 1 SHEETS		STA. TO STA.		



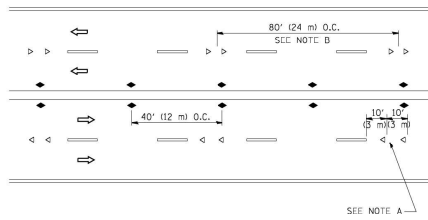
TWO-LANE/TWO-WAY



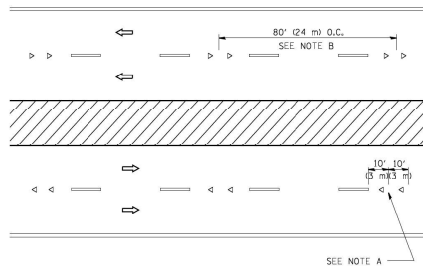
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. 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 INCHES TO 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.

SYMBOLS

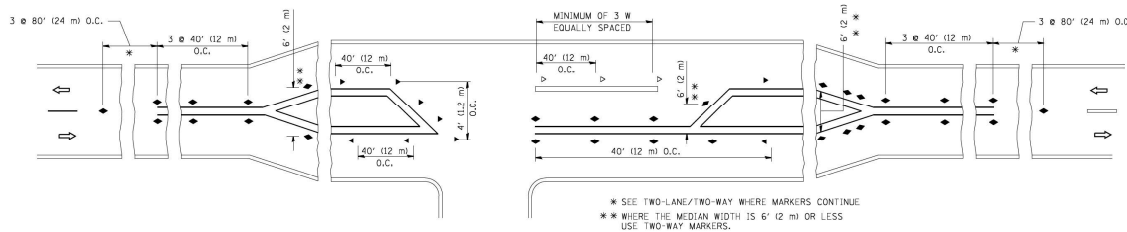
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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 (16 km/h) LOWER THAN POSTED SPEEDS.

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.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTERNALLY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

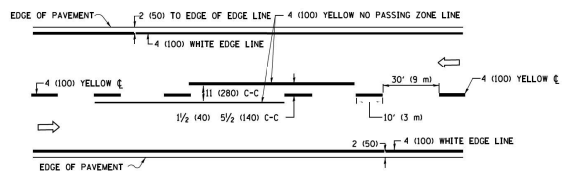
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = jayue	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
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	PLLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

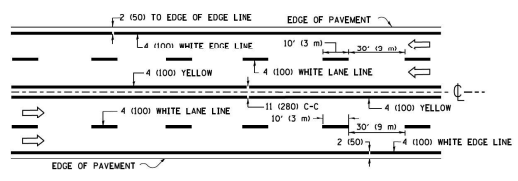
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-FLOW RESISTANT)

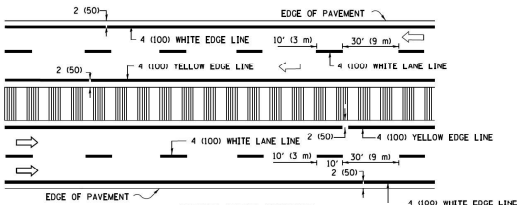
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					TC-11		CONTRACT NO. 60X74		
					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

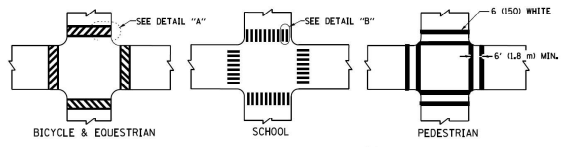


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

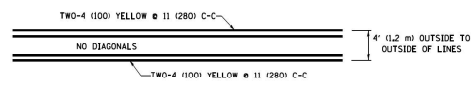


DETAIL "A"

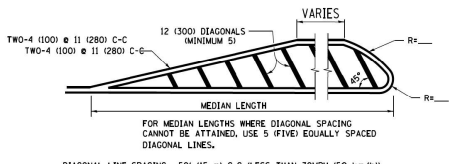
DETAIL "B"

TYPICAL CROSSWALK MARKING

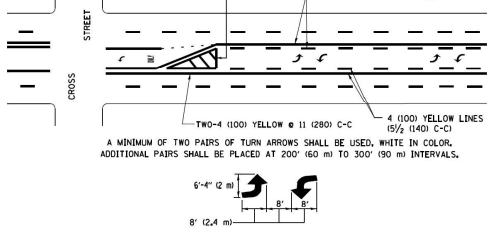
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



4' (1.2 m) WIDE MEDIANS ONLY

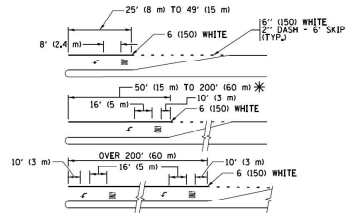


MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

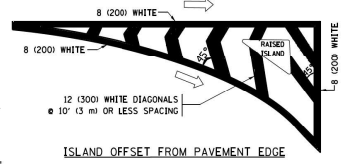
TYPICAL PAINTED MEDIAN MARKING



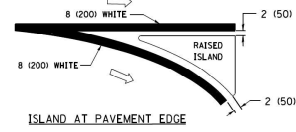
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 6" (150 mm) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) [] AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LINES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

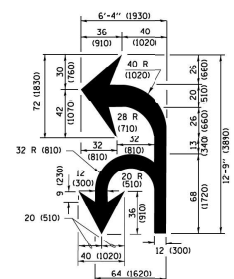


ISLAND OFFSET FROM PAVEMENT EDGE

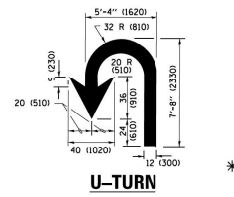


ISLAND AT PAVEMENT EDGE

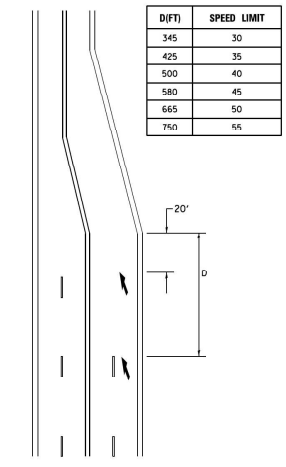
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN



LANE REDUCTION TRANSITION

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

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	6 & 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 & 4 (100)	SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
LANE 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-TIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE, FULL SIZE LETTERS & SYMBOLS 18" (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 WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN & BICYCLE & EQUESTRIAN) & LONGITUDINAL BARS (SCHOOL)	2 & 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID	WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK. IF IMPROPER, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSWALK 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 WHITE	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h)) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' 6" (4.8 m) LETTERS 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "X"=54.0 SQ. FT. (5.0 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h)) TO 45MPH (70 km/h)) 150' (45 m) C-C (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

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

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

FILE NAME =	USER NAME = fcastenj	DESIGNED = EVERS	REVISED = C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	F.P.P. SITE: 344	SECTION: 30348N-2	COUNTY: COOK	TOTAL SHEET SHEETS: 207	TOTAL SHEET NO.: 201
Default	Documents\DOT Offices\District 1\Projects\Dist 1\ORAWM\CAD\Drawings\CADsheets\tscl3.dgn	CHECKED =	REVISED = C. JUCIUS 07-01-13			TC-13		CONTRACT NO. 60X74		
	PLOT SCALE = 50,000 1" = 50'	DATE = 03-19-90	REVISED = C. JUCIUS 12-21-15		SCALE: NONE	SHEET 1	OF 1	SHEETS STA.	TO STA.	ILLINOIS FED. AID PROJECT

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

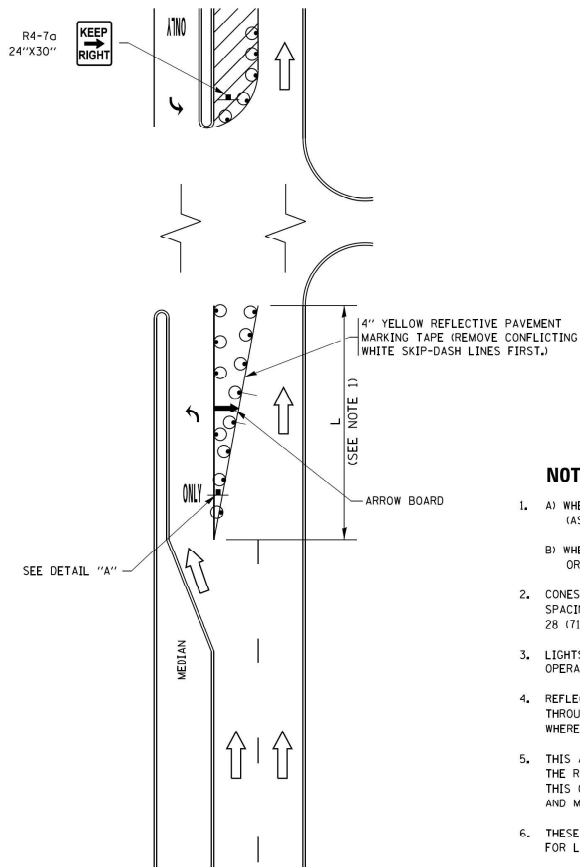
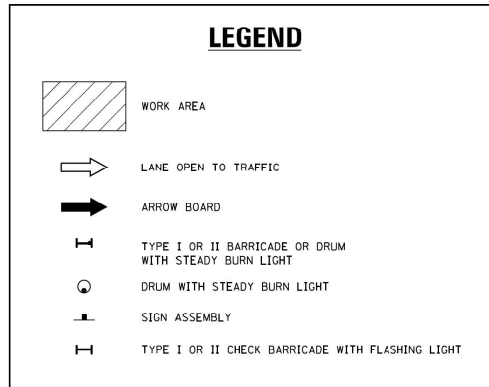


FIGURE 1



NOTES:

1. A) WHEN "L" IS \leq 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" R3-1100R 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 REQUIREMENTS.
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

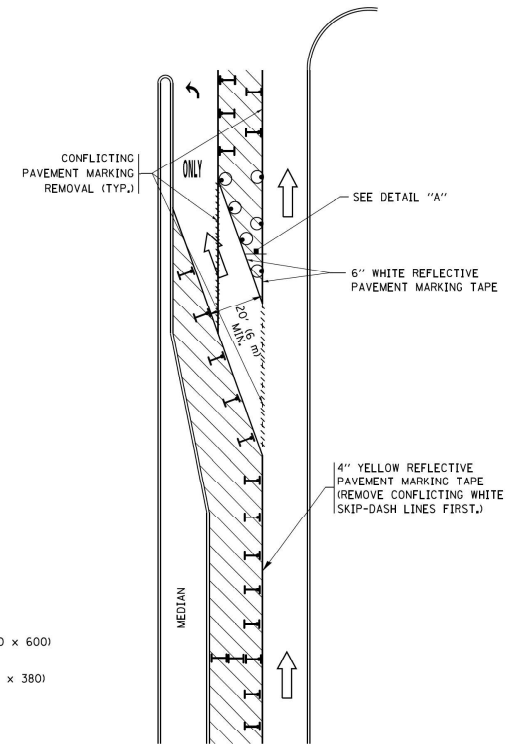
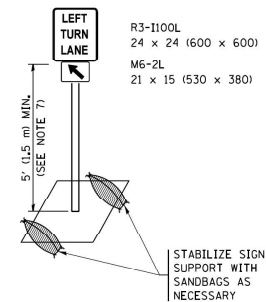


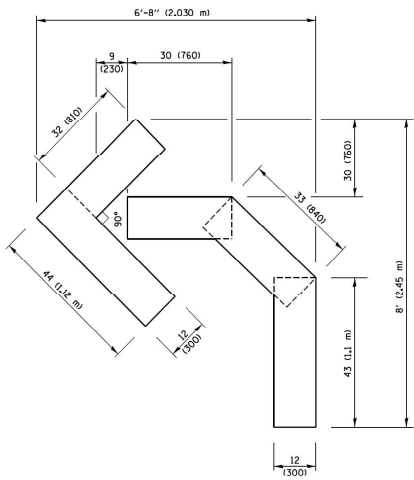
FIGURE 2



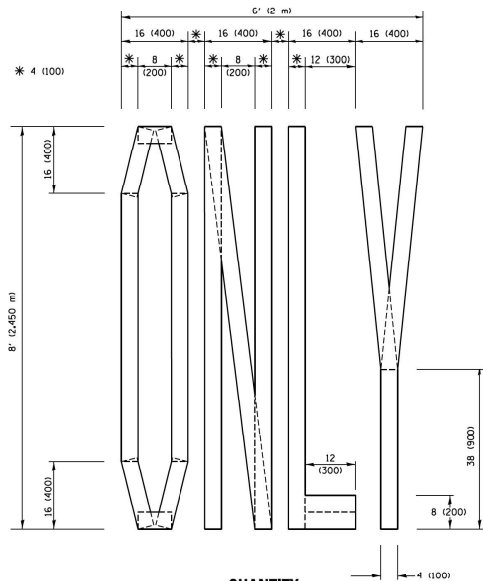
DETAIL A

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

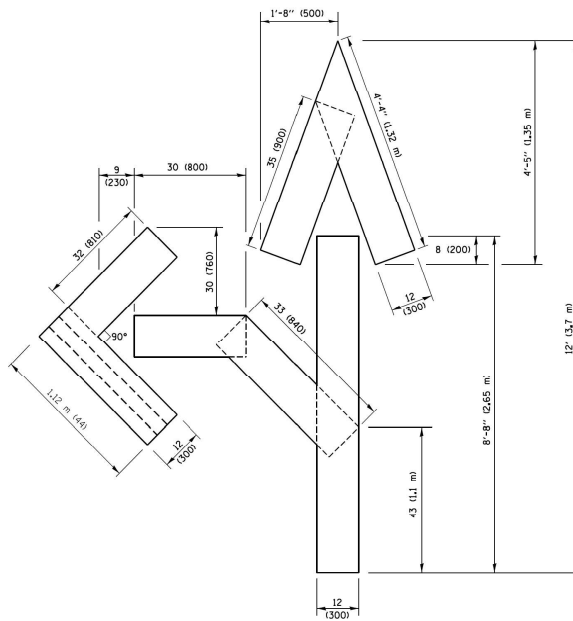
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ps:\1\884EB\INTEG\allmessages\FWIDOT\Documents\JDOT Offices\Contract 1\Projects\Dis	REVISED - A. HOUSEH 01-07-95	REVISED - A. SCHUETZE 07-01-13	344			3034B&N-2	COOK	207	202
Default	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	TC-14			CONTRACT NO. 60X74			
	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE		SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT	



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

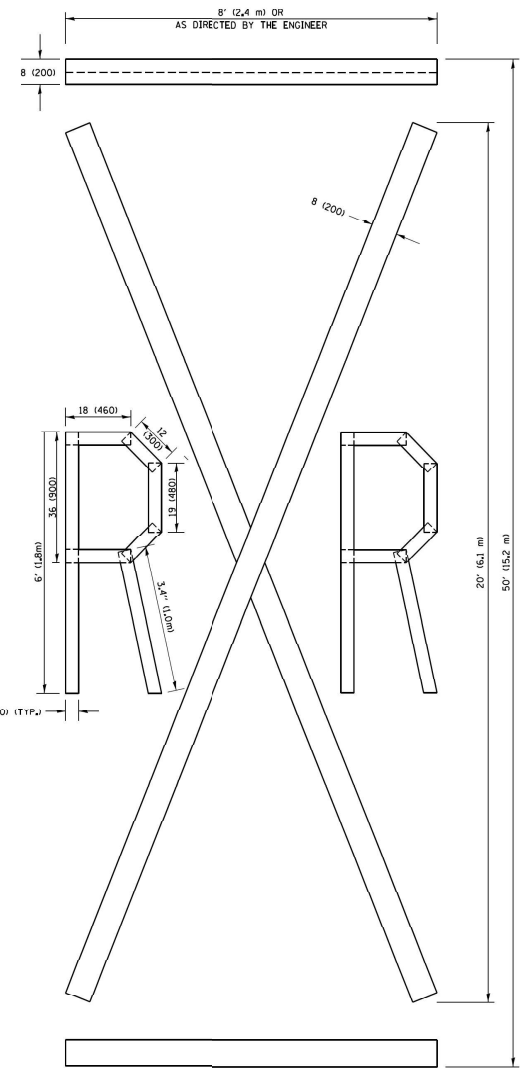


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



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.



QUANTITY
 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.

FILE NAME =	USER NAME = foosterj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
PROJECT =	PROJECT =	CHECKED -	REVISED - E. GOMEZ 08-28-00
PLOT SCALE = 50.0000 / 1" = 50'	DATE = 09-15-2016	DATE = 09-15-2016	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA. TO STA.

F.A.P. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	30348&N-2	COOK	207	203
TC-16			CONTRACT NO. 60X74	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

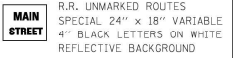
ROUTE MARKERS



FOR U.S. ROUTES
MI-40-2424



FOR ILLINOIS ROUTES
MI-50-2424



R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
" MAIN STREET" IN BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS



M5-1L-2115



M5-1R-2115



M6-1-2115



M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS



M3-1-2412



M3-2-2412



M3-3-2412



M3-4-2412



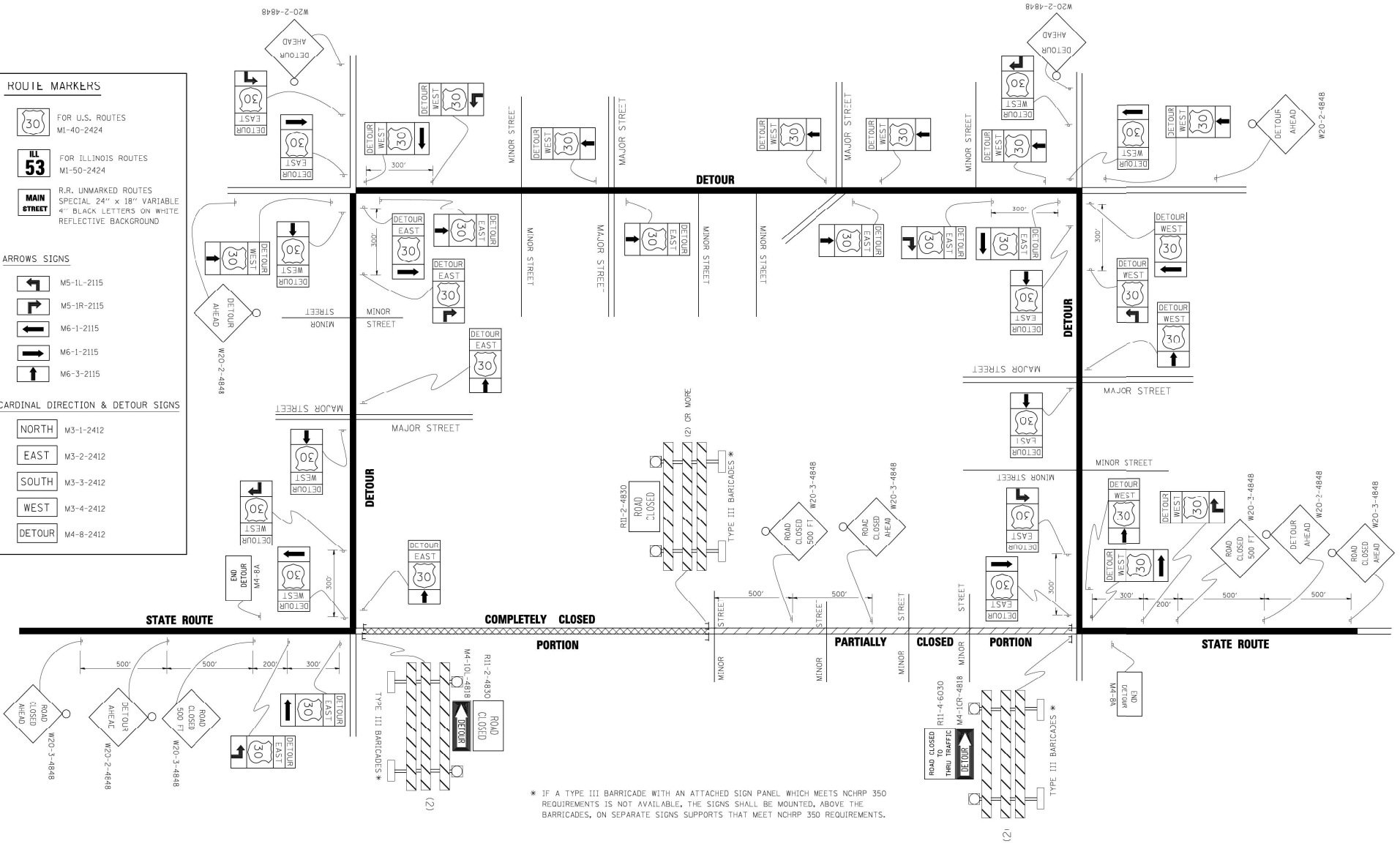
M4-8-2412

STATE ROUTE

COMPLETELY CLOSED PORTION

PARTIALLY CLOSED PORTION

STATE ROUTE



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

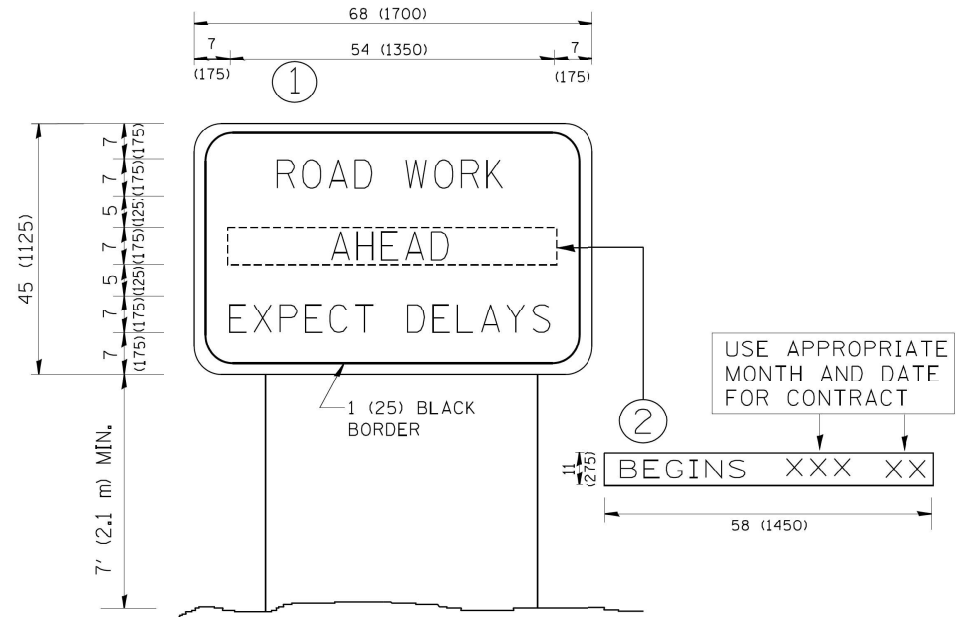
FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
cs:\pwwork\pkidd\DRIVAKOSGN\0810831514	214.dgn	DRAWN -	REVISED - R. BORO 09-14-09
PLT SCALE = 49.9999' / IN	CHECKED -	REVISED -	
PLT DATE = 9/14/2009	DATE -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING
FOR CLOSING STATE HIGHWAYS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. PFS -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	303488N-2	COOK	207	204
TC-21			CONTRACT NO. 60X74	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

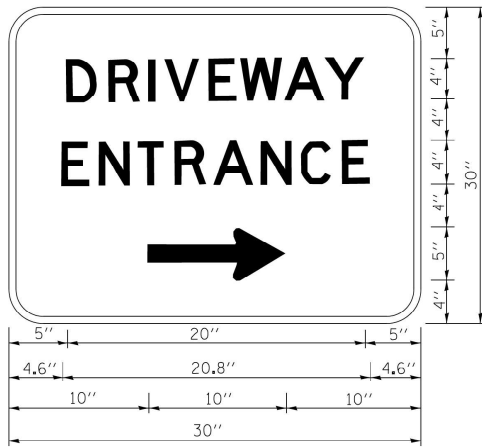
FILE NAME = W:\distrsta\22x34\sc22.dgn	USER NAME = geglianob	DESIGNED - DRAWN -	REVISOR - R. MIRS 09-15-97
PLT SCALE = 50.000 1/1 IN.	CHECKED -	REVISOR - R. MIRS 12-11-97	
PLT DATE = 1/4/2008	DATE -	REVISOR - T. RAMMACHER 02-02-99	
		REVISOR - C. JUCIUS 01-31-07	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. SITE:	SECTION	COUNTY	TOTAL SHEETS
344	303488N-2	COOK	207 205
TC-22		CONTRACT NO. 60X74	
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 =	USER NAME = gqg1tenobts	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ca:\pwwork\pwwork\gqg1tenobts\0208315\10	Edgdn	DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

F.A.P. EYES:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	303488N-2	COOK	207	206
TC-26			CONTRACT NO. 60X74	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

