

**PROPOSED  
HIGHWAY PLANS**

F.A.P. ROUTE 341 (IL 72 - HIGGINS ROAD)

SECTION: 2011-071-N

AT BEVERLY RD AND AT ROCK ROAD DR

INTERSECTION IMPROVEMENT AND TRAFFIC SIGNAL MODERNIZATION

PROJECT: HSIP-0341(055)

COOK AND KANE COUNTY

C-91-628-11

R 8 E | R 9 E

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 60P90	
D-91-628-11				

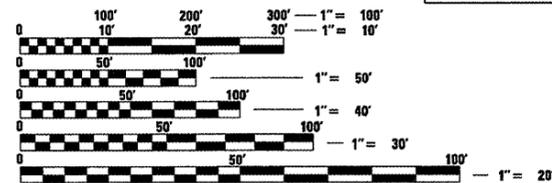
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED WITHIN THE VILLAGES OF HOFFMAN ESTATES AND EAST DUNDEE



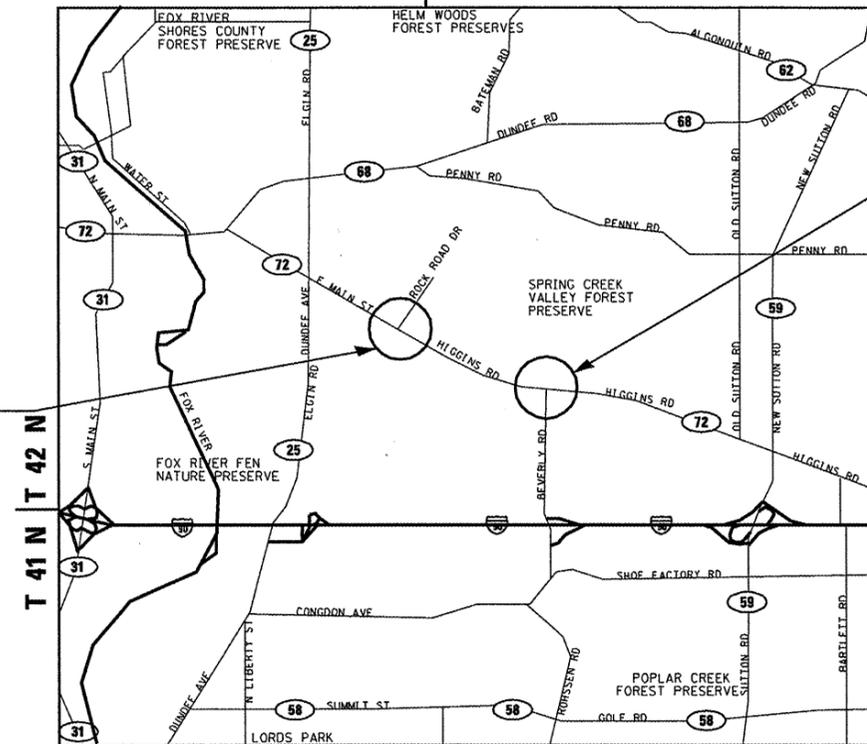
**TRAFFIC DATA**  
IL RTE 72 (HIGGINS RD)  
2010 ADT=34,500  
SPEED LIMIT=50 MPH

**BEVERLY ROAD**  
2010 ADT=9,500  
SPEED LIMIT=40 MPH



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

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



PROJECT LOCATION 1  
BEVERLY RD

PROJECT LOCATION 2  
ROCK ROAD DR

R 8 E | R 9 E

SCALE: NTS  
DUNDEE AND BARRINGTON TOWNSHIP  
GROSS LENGTH OF PROJECT = 689.1 FT = 0.13 MILE  
NET LENGTH OF PROJECT = 689.1 FT = 0.13 MILE

MILLENNIA PROFESSIONAL SERVICES  
THOMAS V. NGO, P.E.  
\* 062-058379

*Thomas V. Ngo*  
DATE: 4/2/2012  
SIGNATURE AND SEAL APPLIES TO DRWG.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED APRIL 3 2012  
*Dino Okrofe/ASO*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

MAY 11 2012  
*DDr D. Baranzelli, P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

MAY 11 2012  
*William R. Frey, Jr.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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MILLENNIA PROFESSIONAL SERVICES

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**LIST OF ILLINOIS DOT HIGHWAY STANDARDS**

- 000001 - 06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 420101 - 04 24'(7.2 m) JOINTED PCC PAVEMENT
- 482011 - 03 HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
- 606001 - 04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 602001 - 02 CATCH BASIN TYPE A
- 602011 - 02 CATCH BASIN TYPE C
- 602016 - 02 CATCH BASIN TYPE D
- 602301 - 03 INLET - TYPE A
- 602401 - 03 MANHOLE TYPE A
- 604091 - 02 FRAME AND GRATE TYPE 24
- 701201 - 04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
- 701301 - 04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306 - 03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > OR = 45 MPH
- 701311 - 03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
- 701336 - 06 LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > OR = 45 MPH
- 701501 - 04 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701606 - 08 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701 - 08 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901 - 02 TRAFFIC CONTROL DEVICES
- 720001 - 01 SIGN PANEL MOUNTING DETAILS
- 720006 - 03 SIGN PANEL ERECTION DETAILS
- 728001 - 01 TELESCOPING STEEL SIGN SUPPORT
- 780001 - 03 TYPICAL PAVEMENT MARKINGS
- 814001 - 02 HANDHOLES
- 814006 - 02 DOUDLE HANDHOLES
- 857001 - 01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SQUENCES
- 862001 - 01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 886001 - 01 DETECTOR LOOP INSTALLATIONS
- 873001 - 02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877001 - 05 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 878001 - 09 CONCRETE FOUNDATION DETAILS
- 701001-02, 701006-03, 701011-02, 701101-02, 701106-02, 701326-04, 701421-04

**COMMITMENTS**

NO COMMITMENTS FOR THIS PROJECT

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, VILLAGES OF HOFFMAN ESTATES AND EAST DUNDEE.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
5. ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
6. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. DRAINAGE ADJUSTMENTS OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
10. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
11. THE ENGINEER SHALL CONTACT THE TRAFFIC FIELD TECHNICIAN A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
12. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
13. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
14. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN ON THE PLANS.
15. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
16. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
17. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.
18. THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
19. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB & GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLANS.
20. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

FILE NAME : p:\2009\me09086.ver\er.phis\cadd\0308\_IL72\_Beverly\Shits\02-DIG0908-shr-gennote.dgn  
 PLOT SCALE : 2.0000' / IN.  
 USER NAME : Millennium Professional Services



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DATE - 4/4/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**INDEX OF SHEETS, LIST OF IDOT  
 HIGHWAY STANDARDS,  
 GENERAL NOTES & COMMITMENTS**

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	2
CONTRACT NO.			60P90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

Rev.

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**SUMMARY OF QUANTITIES**

LS3EL LS3EL LS3EL LS3EL 07POL 07POL

CONSTRUCTION TYPE CODE

VHE = VILLAGE OF HOFFMAN ESTATES  
VED = VILLAGE OF EAST DUNDEE

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE					
				ROADWAY BEVERLY RD	BEVERLY RD TRAFFIC SIGNAL	ROCK RD DR TRAFFIC SIGNAL	INTERCONNECT	BEVERLY RD LIGHTING	EMERGENCY VEHICLE PRE-EMPTION (EVP) DEVICE
				COOK	COOK	KANE	COOK	COOK	COOK
				90% FED 10% STATE	90% FED 6.67% STATE 3.33% VHE	90% FED 6.67% STATE 3.33% VED	90% FED 10% STATE	100% VHE	100% VHE
				0005	0021 .01	0021	0021 .02	0021 .01	0021 .02
20200100	EARTH EXCAVATION	CU YD	793	793					
20800150	TRENCH BACKFILL	CU YD	12	12					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	2862	2862					
21400100	GRADING AND SHAPING DITCHES	FOOT	392	392					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3.9	3.9					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	3.9	3.9					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3.9	3.9					
25200110	SODDING, SALT TOLERANT	SO YD	2862	2862					
28000305	TEMPORARY DITCH CHECKS	FOOT	125	125					
28000400	PERIMETER EROSION BARRIER	FOOT	1367	1367					
28000510	INLET FILTERS	EACH	25	25					
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SO YD	1394	1394					
31200502	STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"	SO YD	438	438					
35501314	HOT-MIX ASPHALT BASE COURSE, 7 1/2"	SO YD	816	816					
40600215	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	TON	2.4	2.4					
40600300	AGGREGATE (PRIME COAT)	TON	12	12					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	9	9					
40600825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	36	36					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SO YD	61	61					
40600985	CONCRETE SURFACE REMOVAL-BUTT JOINT	SO YD	429	429					
40603240	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N90	TON	103	103					
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	676	676					
42000511	PORTLAND CEMENT CONCRETE PAVEMENT 10 1/2" (JOINTED)	SO YD	438	438					
42001300	PROTECTIVE COAT	SO YD	751	751					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	76	-	38	38			
44000100	PAVEMENT REMOVAL	SO YD	29	29					
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	4462	4462					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1030	1030					

URBAN

FILE NAME: p:\2009\m030866.vor\p01\cadd\W038\_IL72\_Beverly\Shets\03-0168P98-ht-500.dgn  
 PLOT SCALE: 2.0000 / IN.  
 PLOT DATE: 4/6/2012  
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SPECIALTY ITEM *Rev.*



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DATE - 4/6/2012	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**  
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 3
CONTRACT NO. 60P90			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

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**SUMMARY OF QUANTITIES**

**CONSTRUCTION TYPE CODE**

*URBAN*

VHE = VILLAGE OF HOFFMAN ESTATES  
VED = VILLAGE OF EAST DUNDEE

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY	BEVERLY RD	ROCK RD DR	INTERCONNECT	BEVERLY RD	EMERGENCY
				BEVERLY RD	TRAFFIC SIGNAL	TRAFFIC SIGNAL		LIGHTING	VEHICLE PRE-EMPTION (EVP) DEVICE
				COOK	COOK	KANE	COOK	COOK	COOK
				90% FED 10% STATE	90% FED 6.67% STATE 3.33% VHE	90% FED 6.67% STATE 3.33% VED	90% FED 10% STATE	100% VHE	100% VHE
				0005	0021	0021	0021	0021	0021
44003100	MEDIAN REMOVAL	SO FT	4460	4460					
44004250	PAVED SHOULDER REMOVAL	SO YD	534	534					
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	120	120					
44213204	TIE BARS 3/4"	EACH	270	270					
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	829	829					
48101200	AGGREGATE SHOULDER, TYPE B	TON	78	78					
54390160	INSERTION CULVERT LINER 21"	FOOT	145	145					
60211800	CATCH BASINS, TYPE D, 4' -DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2					
60212813	CATCH BASINS, TYPE D, 4' -DIAMETER, TYPE 23 FRAME AND GRATE	EACH	1	1					
60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	1	1					
60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1					
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1					
60500060	REMOVING INLETS	EACH	3	3					
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	501	501					
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SO FT	1759	1759					
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	563	563					
66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1					
66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1			1			
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	365	365					
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	219	219					

• SPECIALTY ITEM

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 PLOT SCALE = 1"=40'  
 USER NAME = William Professional Services



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**SUMMARY OF QUANTITIES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P90	

p:\2009\me99086-ver-ar phi\cadd\W038\_IL72\_Beverly\Shets\03-0168P98-ah-t-500.dgn

**SUMMARY OF QUANTITIES**

**CONSTRUCTION TYPE CODE**

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				COOK	COOK	KANE	COOK	COOK	COOK
				90% FED 10% STATE	90% FED 6.67% STATE 3.33% VHE	90% FED 6.67% STATE 3.33% VED	90% FED 10% STATE	100% VHE	100% VHE
				0005	0021	0021	0021	0021	0021
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4018	4018					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1410	1410					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	665	665					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	128	128					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	61	61					
72000100	SIGN PANEL - TYPE 1	SO FT	49	29	20				
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	41	41					
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	219	219					
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4018	4018					
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1410	1410					
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	665	665					
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	128	128					
78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SO FT	37	37					
78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	400	400					
78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	400	400					
78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	36	36					
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	86	86					
78300100	PAVEMENT MARKING REMOVAL	SO FT	2263	2263					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	25	25					
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1					1	
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1					1	
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1				
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	40		40				
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	367		145			222	
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	158		158				
81400100	HANDHOLE	EACH	2		2				
81400200	HEAVY-DUTY HANDHOLE	EACH	1		1				
81603040	UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA	FOOT	385					385	

POLYETHYLENE ↓

• SPECIALTY ITEM

FILE NAME = p:\2009\m08086\var\var phi\cadd\W038.IL72.Beverly\Shts\03-0168P90-ant-S00.dgn  
 PLOT SCALE = 2.0000 / 1 IN.  
 USER NAME = Millennium Professional Services



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DATE - 4/6/2012	REVISED -

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**AT BEVERLY RD AND AT ROCK ROAD DR**  
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 5
CONTRACT NO. 60P90			FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT	

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# SUMMARY OF QUANTITIES

URBAN

## CONSTRUCTION TYPE CODE

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY	BEVERLY RD	ROCK RD DR	INTERCONNECT	BEVERLY RD	EMERGENCY
				BEVERLY RD	TRAFFIC SIGNAL	TRAFFIC SIGNAL		LIGHTING	VEHICLE PRE-EMPTION (EVP) DEVICE
				COOK	COOK	KANE	COOK	COOK	COOK
				90% FED 10% STATE	90% FED 6.67% STATE 3.33% VHE	90% FED 6.67% STATE 3.33% VED	90% FED 10% STATE	100% VHE	100% VHE
				0005	0021	0021	0021	0021	0021
81603050	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA <i>POLYETHYLENE</i>	FOOT	2550					2550	
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	12					12	
82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1					1	
83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	12					12	
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	108					108	
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	12					12	
84200804	REMOVAL OF POLE FOUNDATION	EACH	3					3	
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	3					3	
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1		1				
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	3034		3034				
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	1587		1587				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	5112		5112				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	529		529				
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4851		4851				
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	96		96				
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1		1				
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1		1				
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1				
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1		1				
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1				
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1		1				
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8		8				
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4				
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10		10				
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35		35				
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12		8	4			
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5		2	3			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1		-	1			

VHE = VILLAGE OF HOFFMAN ESTATES  
VED = VILLAGE OF EAST DUNDEE

• SPECIALTY ITEM

FILE NAME : p:\2009\m09006\server\phi\1\cadd\W038\_IL72\_Beverly\Shits\03-0168P90-shit-500.dgn  
PLOT SCALE : 2.0000 7 IN.  
USER NAME : Millenna Professional Services



200 22ND Street, Suite 216, Lombard, IL 60148  
630.705.0110 voice, 630.839.2566 fax  
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MILLENNIA PROFESSIONAL SERVICES

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DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 4/6/2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL 72 - HIGGINS RD		SUMMARY OF QUANTITIES	
AT BEVERLY RD AND AT ROCK ROAD DR			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 6
CONTRACT NO. 60P90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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**SUMMARY OF QUANTITIES**

**CONSTRUCTION TYPE CODE**

VHE = VILLAGE OF HOFFMAN ESTATES  
VED = VILLAGE OF EAST DUNDEE

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE					
				ROADWAY BEVERLY RD	BEVERLY RD TRAFFIC SIGNAL	ROCK RD DR TRAFFIC SIGNAL	INTERCONNECT	BEVERLY RD LIGHTING	EMERGENCY VEHICLE PRE-EMPTION (EVP) DEVICE
				COOK	COOK	KANE	COOK	COOK	COOK
				90% FED 10% STATE	90% FED 6.67% STATE 3.33% VHE	90% FED 6.67% STATE 3.33% VED	90% FED 10% STATE	100% VHE	100% VHE
				0005	0021	0021	0021	0021	0021
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2				
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1			1			
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3-SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1			1			
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1				
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2		2				
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14		10	4			
88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8				
88600100	DETECTOR LOOP, TYPE 1	FOOT	496		496				
88600700	PREFORMED DETECTOR LOOP	FOOT	129		129				
88700200	LIGHT DETECTOR	EACH	3						3
88700300	LIGHT DETECTOR AMPLIFIER	EACH	3						3
88800100	PEDESTRIAN PUSH-BUTTON	EACH	2		2				
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1				
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2144				2144		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1				
89502380	REMOVE EXISTING HANDHOLE	EACH	2		2				
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5		5				
X0323927	MAINTENANCE OF LIGHTING SYSTEM	EACH	1					1	
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1170						1170
Δ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	132	132					
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1					
* X8360110	LIGHT POLE FOUNDATION, SPECIAL	FOOT	27					27	
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1				
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2		1	1			
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2144				2144		
X8950305	REMOVE EXISTING SIGNAL HEAD	EACH	12			12			
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	11	11					
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	78	78					

Δ Non-participating (100% State) *OTASL*

• SPECIALTY ITEM

FILE NAME : p:\2009\m09086-ver-ver-phs\cadd\W038-IL72-Beverly\Shets\03-0168P98-ht-500.dgn  
PLOT SCALE : 2.0000 / IN.  
USER NAME : Millennium Professional Services



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CHECKED - TVN	REVISED -
DATE - 4/6/2012	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
AT BEVERLY RD AND AT ROCK ROAD DR**

**SUMMARY OF QUANTITIES**

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 7
CONTRACT NO. 60P90			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

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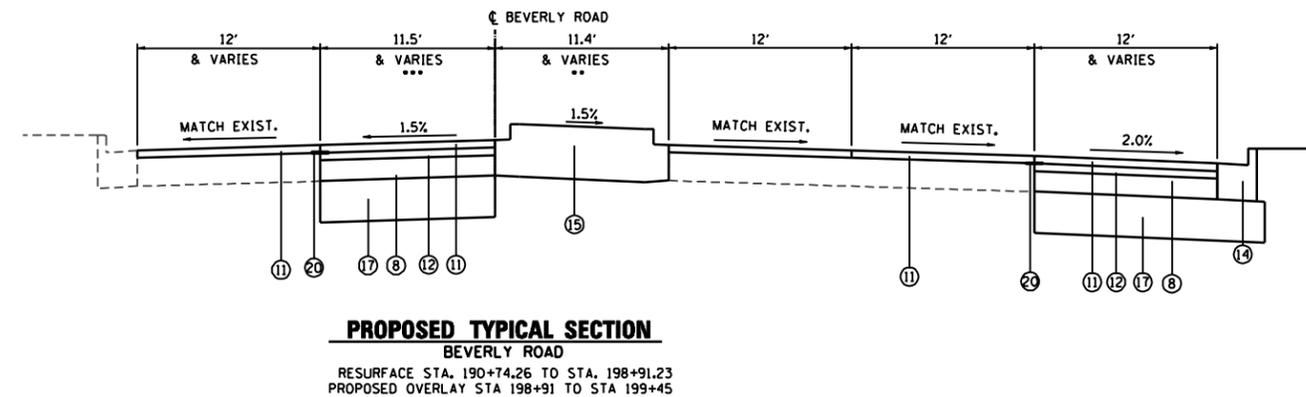
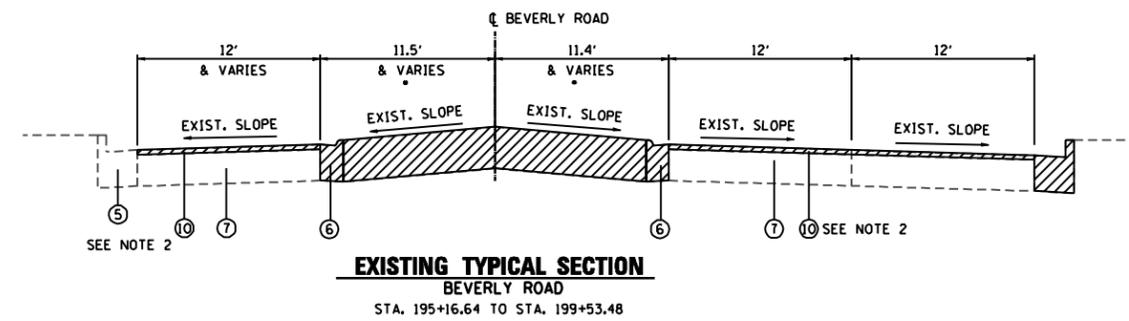
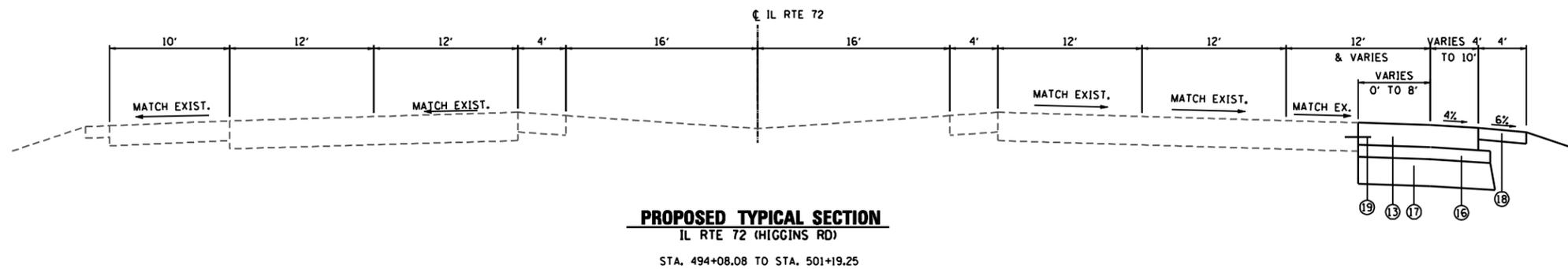
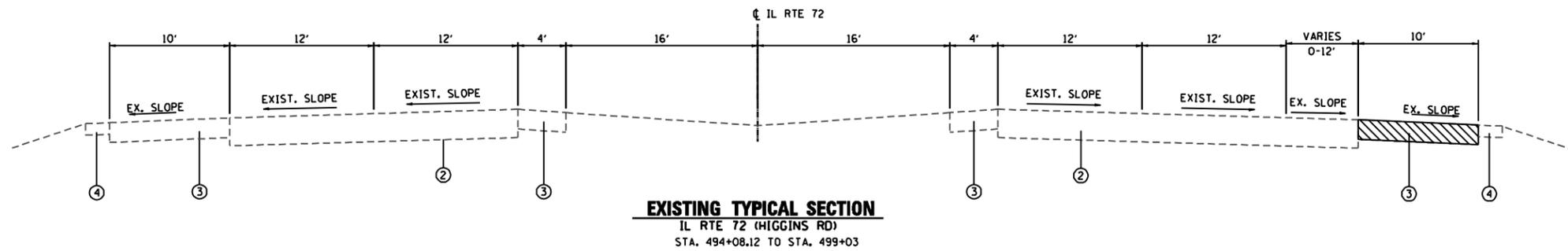


**LEGEND**

- ① EXISTING BITUMINOUS SURFACE
  - ② EXISTING P.C.C. PAVEMENT
  - ③ EXISTING CONCRETE SHOULDER
  - ④ EXISTING AGGREGATE SHOULDER
  - ⑤ EXISTING B-6.18 CURB AND GUTTER
  - ⑥ EXISTING M-2.12 CURB AND GUTTER
  - ⑦ EXISTING HMA PAVEMENT 11" (FULL DEPTH)
  - ⑧ HOT-MIX ASPHALT BINDER COURSE, IL-19, N90, 7 1/2"
  - ⑨ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
  - ⑩ HOT-MIX ASPHALT SURFACE REMOVAL, 2"
  - ⑪ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 2"
  - ⑫ PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
  - ⑬ PROPOSED PORTLAND CEMENT PAVEMENT, 10 1/2" (JOINTED)
  - ⑭ PROPOSED B-6.18 CURB AND GUTTER
  - ⑮ PROPOSED SB-6.12 MEDIAN
  - ⑯ PROPOSED STABILIZED SUB-BASE HOT-MIX ASPHALT, 4 1/2"
  - ⑰ PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12"
  - ⑱ AGGREGATE SHOULDER, TYPE B
  - ⑲ TIE BARS 3/4" @ 24" CENTERS (DRILL AND GROUT)
  - ⑳ STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ▨ REMOVAL

**NOTES**

1. SEE DISTRICT ONE DETAIL (BD33) HMA TAPER AT EDGE OF P.C.C. PAVEMENT
2. HMA SURFACE REMOVAL FROM STA 195+16.64 TO STA 198+96.45
3. THE BUREAU OF MATERIALS - GEOTECHNICAL SECTION SHOULD BE CONTACTED AT (847) 705-4003 FOR SUBGRADE INSPECTION PRIOR TO THE PLACEMENT OF ALL SUBGRADE MATERIAL.
4. CONTRACTOR SHALL MILL BEFORE PATCHING



- EXISTING 16' PAINTED MEDIAN STA 190+74.26 TO STA 196+61
- EXISTING RAISED MEDIAN STA 196+61 STA 199+31.
- PROPOSED MEDIAN STA 197+73 TO STA 199+40.
- PROPOSED RESURFACE FROM STA 190+74 TO STA 198+91.23.

HMA MIXTURES REQUIREMENT	
MIXTURE USES	AIR VOIDS @ Ndes
<b>PAVEMENT WIDENING/RESURFACING</b>	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm)	4% @ 90 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, N90 (IL-19 mm)	4% @ 90 GYR.
HOT-MIX ASPHALT BINDER COURSE, N90 (IL-19 mm)	4% @ 90 GYR.
STABILIZED SUB-BASE HOT-MIX ASPHALT	2% @ 30 GYR.
<b>OVERLAY P.C.C. PAVEMENT</b>	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm)	4% @ 90 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (IL 9.5mm)	3.5% @ 50 GYR.
<b>PAVEMENT PATCHING</b>	
CLASS D PATCH (HMA BINDER IL-19 mm)	4% @ TO GYR.

**MIXTURE NOTES:**

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SO YD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME : p:\2009\me09006-ver-ver-phi\cadd\1038-IL-72-Beverly\Shvs\07-D160P90-sht-typical.dgn  
 USER : ME09006  
 MILLENNIA PROFESSIONAL SERVICES


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DATE - 4/5/2012	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

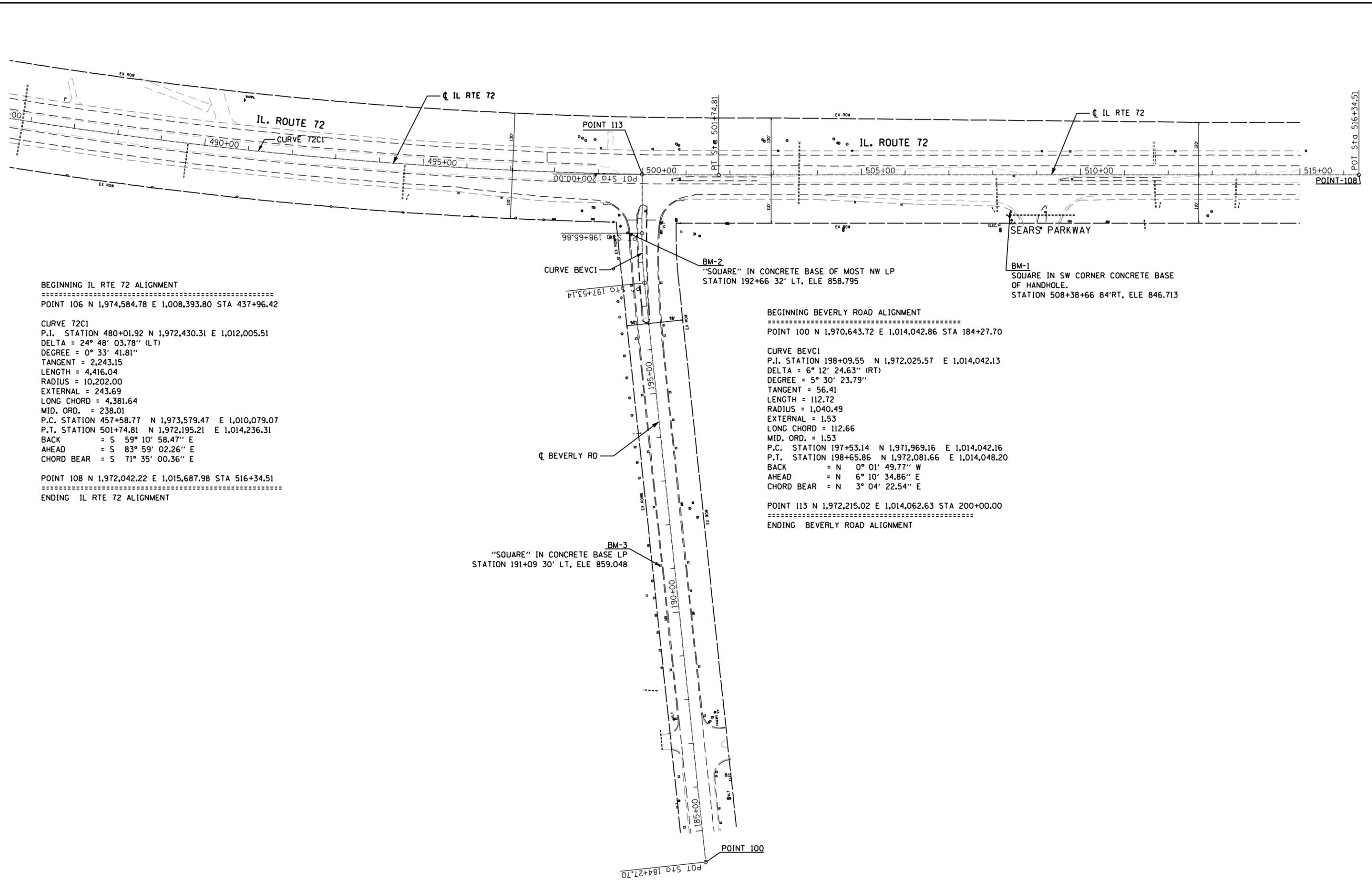
**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 9
SCALE: NTS SHEET NO. 1 OF 1 SHEETS			CONTRACT NO. 60P90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**TYP-01**

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FILE NAME : p:\2009\me09006-ver\proj\phicadd\038-IL72-Beverly\Shvs\08-D160P90-sht-ATB.dgn  
 USER : MILENNIA PROFESSIONAL SERVICES



BEGINNING IL RTE 72 ALIGNMENT  
 =====  
 POINT 106 N 1,974,584.78 E 1,008,393.80 STA 437+96.42  
 =====  
 CURVE 72C1  
 P.I. STATION 480+01.92 N 1,972,430.31 E 1,012,005.51  
 DELTA = 24° 48' 03.78" (LT)  
 DEGREE = 0° 33' 41.81"  
 TANGENT = 2,243.15  
 LENGTH = 4,416.04  
 RADIUS = 10,202.00  
 EXTERNAL = 243.69  
 LONG CHORD = 4,381.64  
 MID. ORD. = 238.01  
 P.C. STATION 457+58.77 N 1,973,579.47 E 1,010,079.07  
 P.T. STATION 501+74.81 N 1,972,195.21 E 1,014,236.31  
 BACK = S 59° 10' 58.47" E  
 AHEAD = S 83° 59' 02.26" E  
 CHORD BEAR = S 71° 35' 00.36" E  
 =====  
 POINT 108 N 1,972,042.22 E 1,015,687.98 STA 516+34.51  
 =====  
 ENDING IL RTE 72 ALIGNMENT

BEGINNING BEVERLY ROAD ALIGNMENT  
 =====  
 POINT 100 N 1,970,643.72 E 1,014,042.86 STA 184+27.70  
 =====  
 CURVE BEVC1  
 P.I. STATION 198+09.55 N 1,972,025.57 E 1,014,042.13  
 DELTA = 6° 12' 24.63" (RT)  
 DEGREE = 5° 30' 23.79"  
 TANGENT = 56.41  
 LENGTH = 112.72  
 RADIUS = 1,040.49  
 EXTERNAL = 1.53  
 LONG CHORD = 112.66  
 MID. ORD. = 1.53  
 P.C. STATION 197+53.14 N 1,971,969.16 E 1,014,042.16  
 P.T. STATION 198+65.86 N 1,972,081.66 E 1,014,048.20  
 BACK = N 0° 01' 49.77" W  
 AHEAD = N 6° 10' 34.86" E  
 CHORD BEAR = N 3° 04' 22.54" E  
 =====  
 POINT 113 N 1,972,215.02 E 1,014,062.63 STA 200+00.00  
 =====  
 ENDING BEVERLY ROAD ALIGNMENT

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CHECKED -	TVN	REVISED -	
DATE -	4/4/2012	REVISED -	

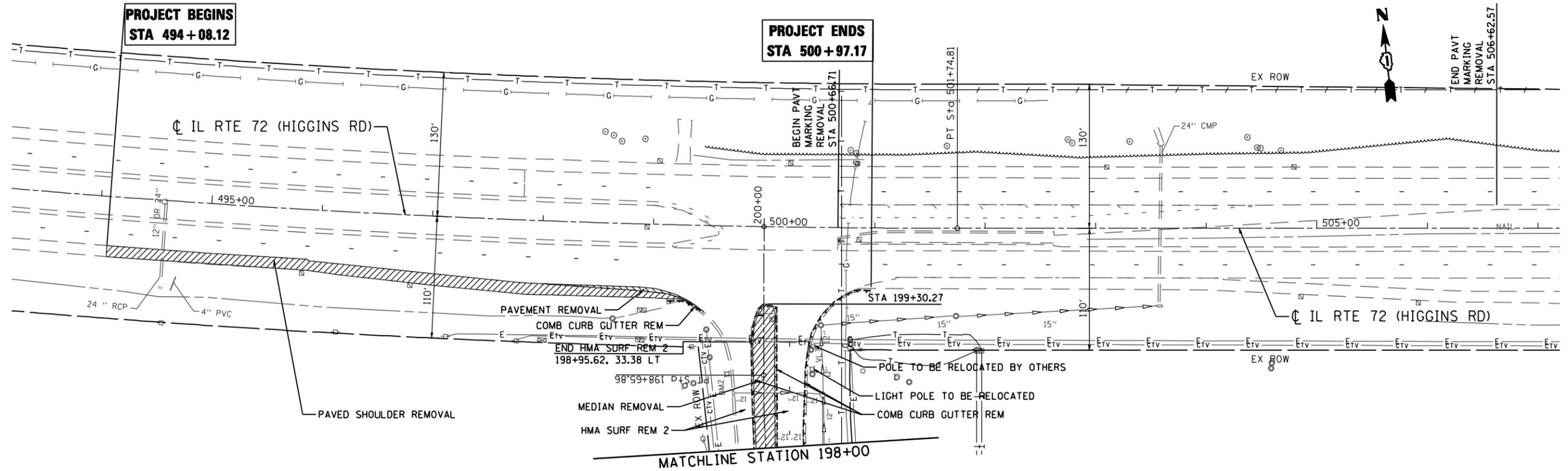
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**ALIGNMENT AND BENCHMARKS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	10
CONTRACT NO. 60P90				

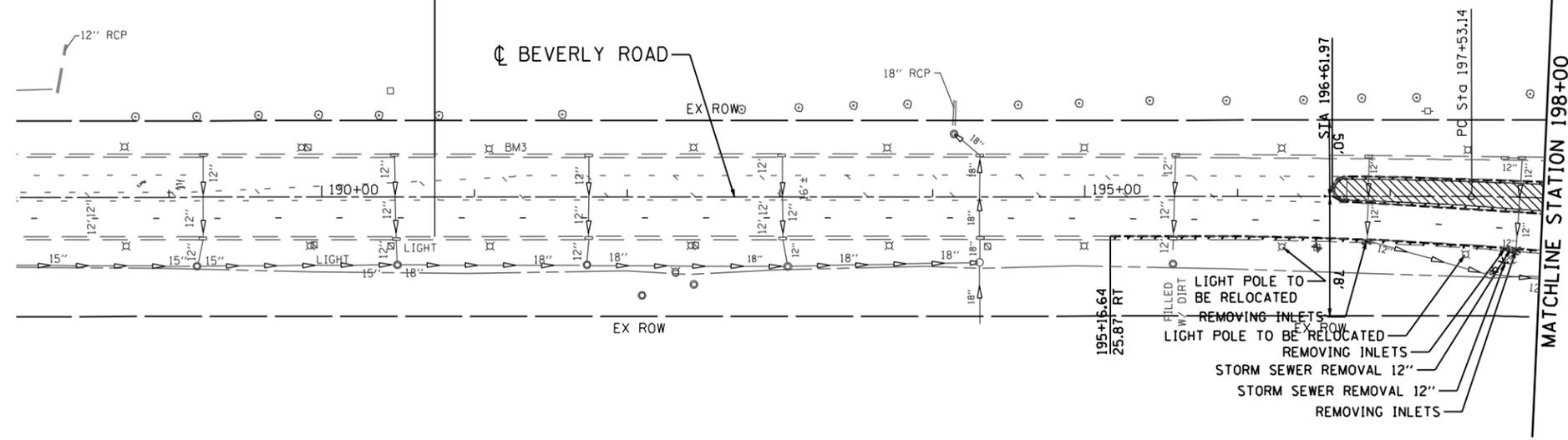
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PI STA. = 198+09.55  
 $\Delta$  = 6° 12' 25" (RT)  
 D = 5° 30' 24"  
 R = 1,040.49'  
 T = 56.41'  
 L = 112.72'  
 E = 1.53'  
 $\theta$  = -----  
 T.R. = -----  
 S.E. RUN = -----  
 P.C. STA. = 197+53.14  
 P.T. STA. = 198+65.86

**PROJECT LIMITS**  
STA 190+74.00

HOT-MIX ASPHALT SURFACE REMOVAL - 2"



**REMOVAL LEGEND**

-  PAVED SHOULDER REMOVAL
-  MEDIAN REMOVAL
-  STORM SEWER REMOVAL
-  LINEAR REMOVAL
-  REMOVING INLETS

FILE NAME : F:\2009\ME09006\_Ver\0 - PH11\CADD\038\_IL72\_Beverly\Shvs\0160P900-sht-rem.dgn  
 USER : ME09006  
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DRAWN -	CJD	REVISED -	
CHECKED -	TVN	REVISED -	
DATE -	5/9/2012	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
AT BEVERLY RD AND AT ROCK ROAD DR**

**REMOVAL PLAN**

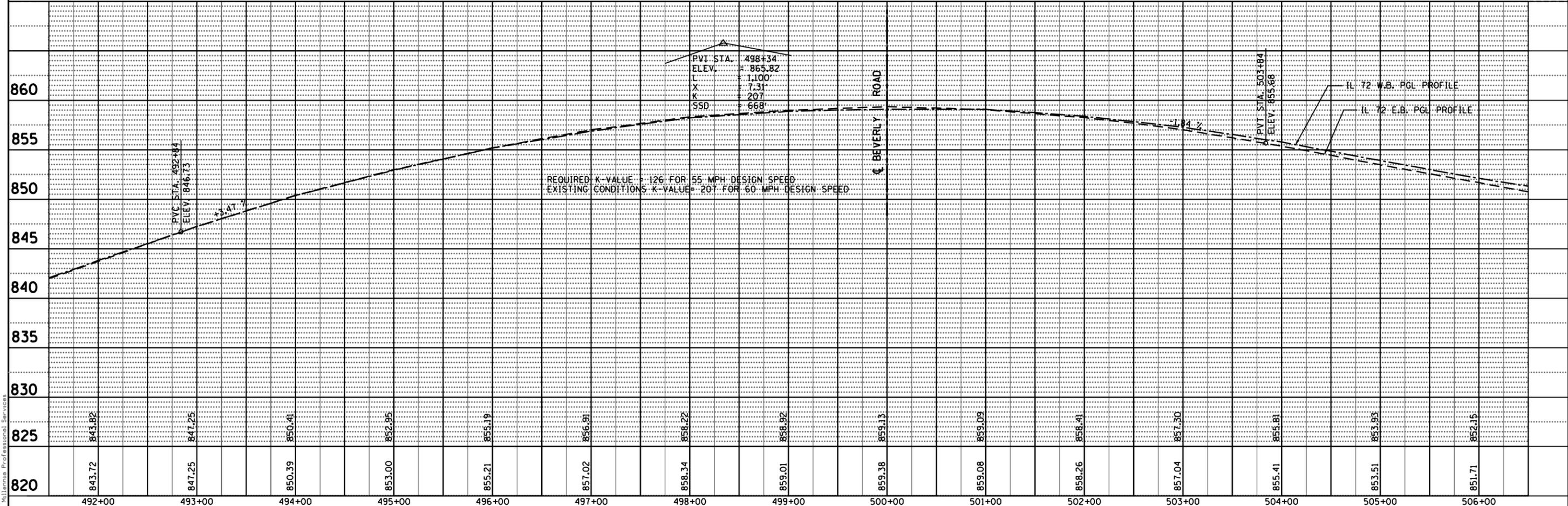
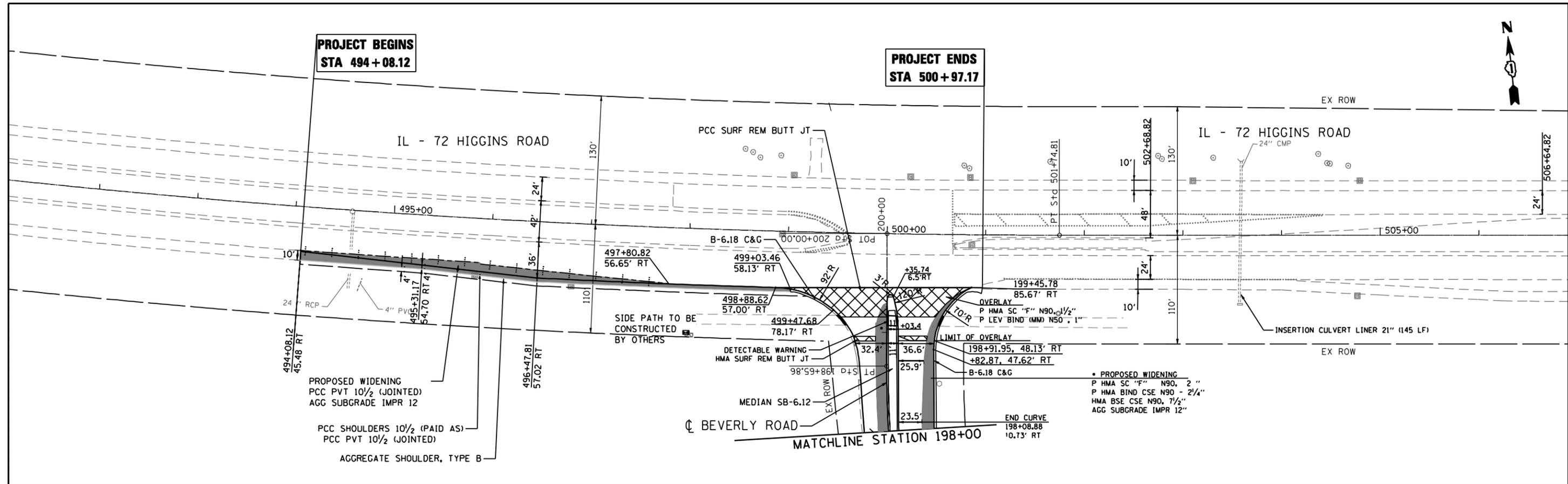
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	11
CONTRACT NO. 60P90				

FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	ALIGNMENT CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO. CAD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	ALIGNMENT CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO. CAD FILE NAME		



FILE NAME : p:\2009\me09006.ver\var: ph1\cadd\038\_IL72\_Beverly\Shst\000229.dwg  
 PLOT SCALE : 1/8"=1'-0"  
 USER NAME : Millennium Professional Services

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DESIGNED	CJD	REVISED	-
DRAWN	CJD	REVISED	-
CHECKED	TVN	REVISED	-
DATE	4/5/2012	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
AT BEVERLY RD AND AT ROCK ROAD DR**

**PLAN & PROFILE  
IL 72 - HIGGINS RD**

SCALE: 1"=50' SHEET NO. 1 OF 2 SHEETS STA. 494+08.12 TO STA. 500+97.17

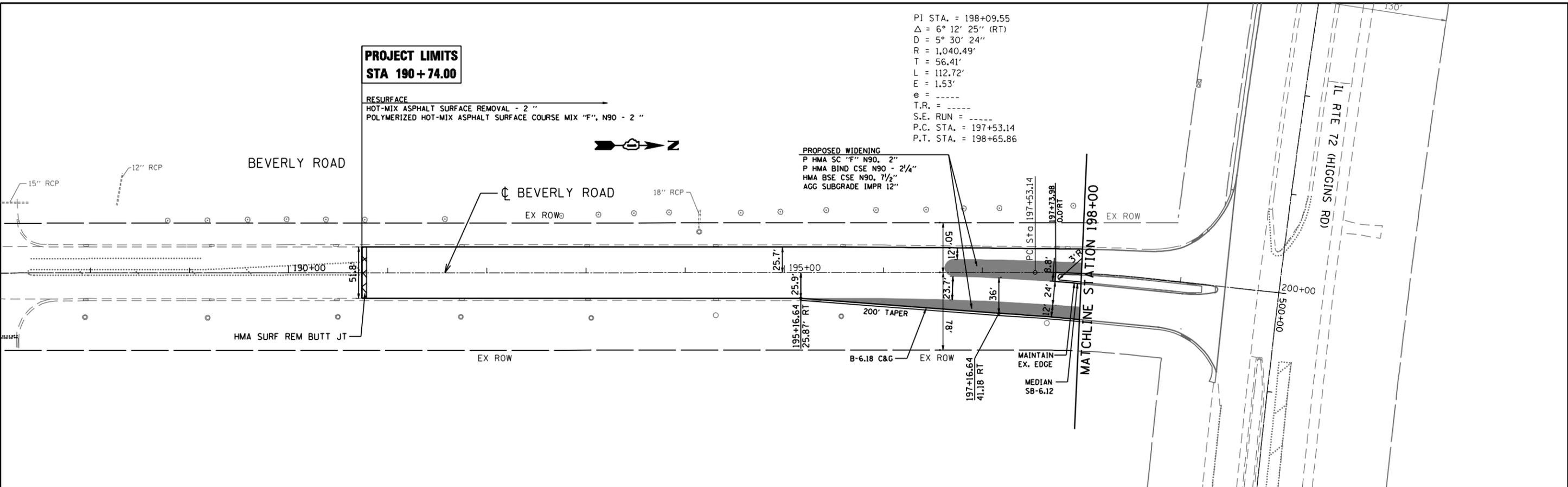
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	201-071-N	COOK/KANE	56	12
CONTRACT NO. 60P90				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

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PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	CHECKED	
	BY	
	NO.	

FILE NAME : p:\2009\me0906.vervar.ph1\cadd\W038.IL.72.Beverly\Shs\160P90.sht  
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 USER NAME : Millennium Professional Services

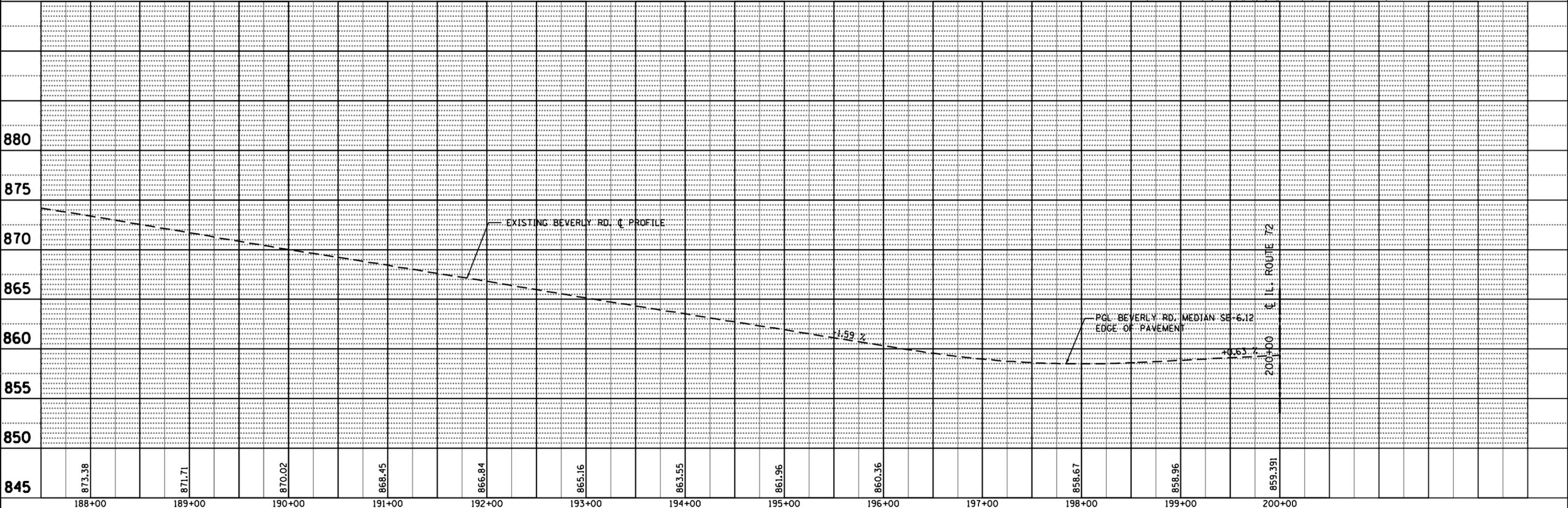


PI STA. = 198+09.55  
 $\Delta$  = 6° 12' 25" (RT)  
 D = 5° 30' 24"  
 R = 1,040.49'  
 T = 56.41'  
 L = 112.72'  
 E = 1.53'  
 e = -----  
 T.R. = -----  
 S.E. RUN = -----  
 P.C. STA. = 197+53.14  
 P.T. STA. = 198+65.86

**PROJECT LIMITS**  
**STA 190 + 74.00**

RESURFACE  
 HOT-MIX ASPHALT SURFACE REMOVAL - 2"  
 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "F", N90 - 2"

PROPOSED WIDENING  
 P HMA SC "F" N90, 2"  
 P HMA BIND CSE N90 - 2 1/4"  
 HMA BSE CSE N90, 7 1/2"  
 AGG SUBGRADE IMPR 12"



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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

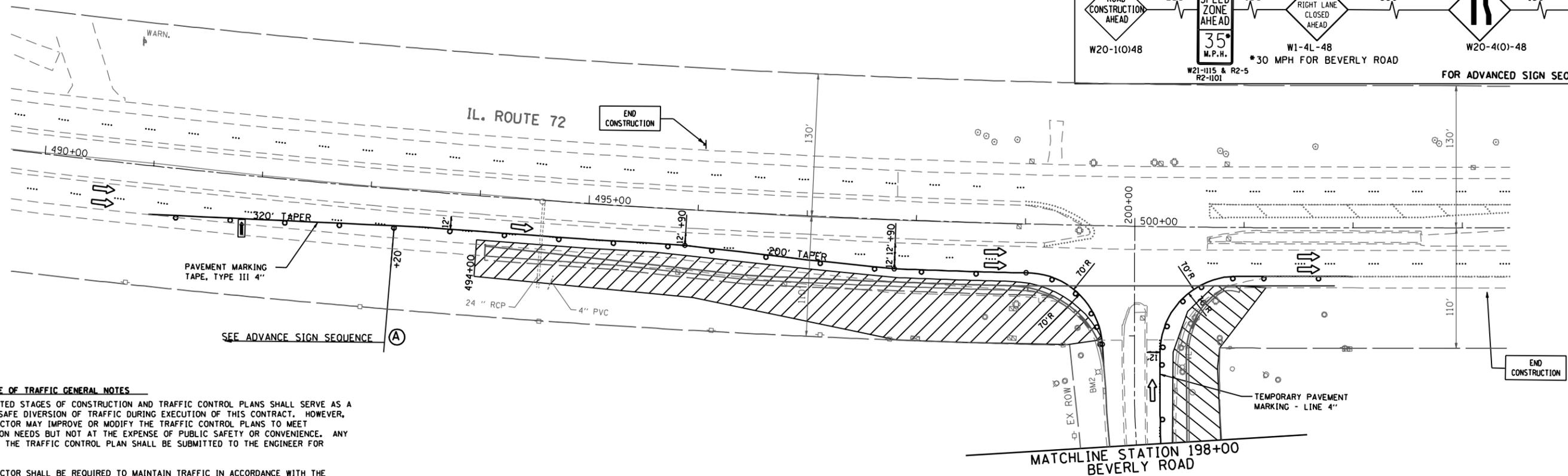
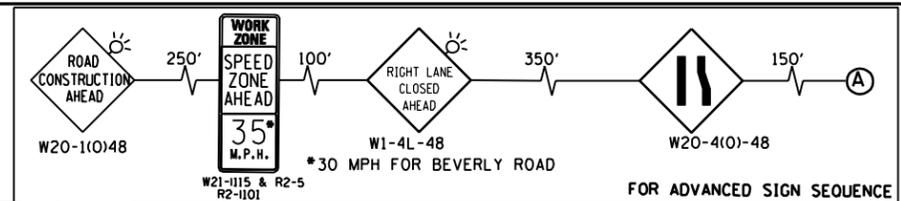
**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**

**PLAN & PROFILE**  
**BEVERLY**

SCALE: 1"=50' SHEET NO. 2 OF 2 SHEETS STA. 195+16.64 TO STA. 198+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	13
CONTRACT NO. 60P90			FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT	

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**MAINTENANCE OF TRAFFIC GENERAL NOTES**

THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER.

CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGH OUT THE PROJECT AREA AT ALL TIMES.

THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APPROACHES, AND TEMPORARY ROADS WITHIN THE PROJECT LIMITS. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON, "AGGREGATE SURFACE COURSE, TYPE B."

THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS

TYPE II BARRICADES SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FEET CENTER TO CENTER ON TANGENT, AND 15 FEET CENTER TO CENTER ON TAPERS AND CURVES.

THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL PHASES OF CONSTRUCTION.

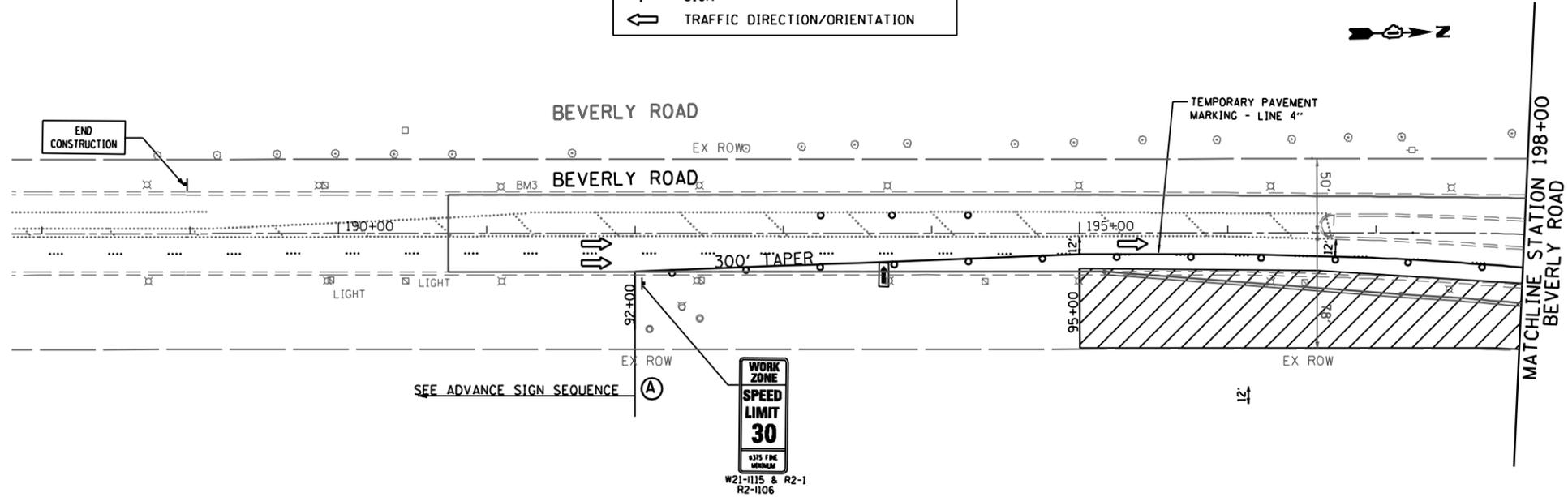
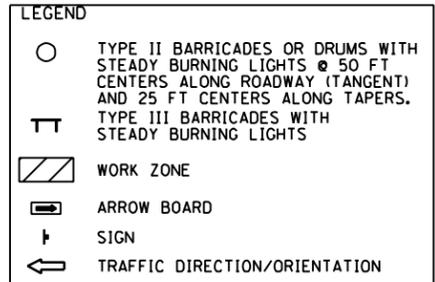
ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.

THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".

THE CONTRACTOR SHALL PLACE "DRIVEWAY ENTRANCE" SIGNS AT EVERY COMMERCIAL ENTRANCE WITHIN THE PROJECT LIMITS WHERE ENTRANCE IS OBSTRUCTED DUE TO CONSTRUCTION AND/OR AS DIRECTED BY THE ENGINEER. SEE TEMPORARY INFORMATION SIGNS SHEET.

ALL TEMPORARY INFORMATION SIGNS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION SPECIAL".



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 USER : ME09086  
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**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**

**SUGGESTED STAGES CONSTRUCTION & TRAFFIC CONTROL PLAN**  
**STAGE-I**

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 14
CONTRACT NO. 60P90			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

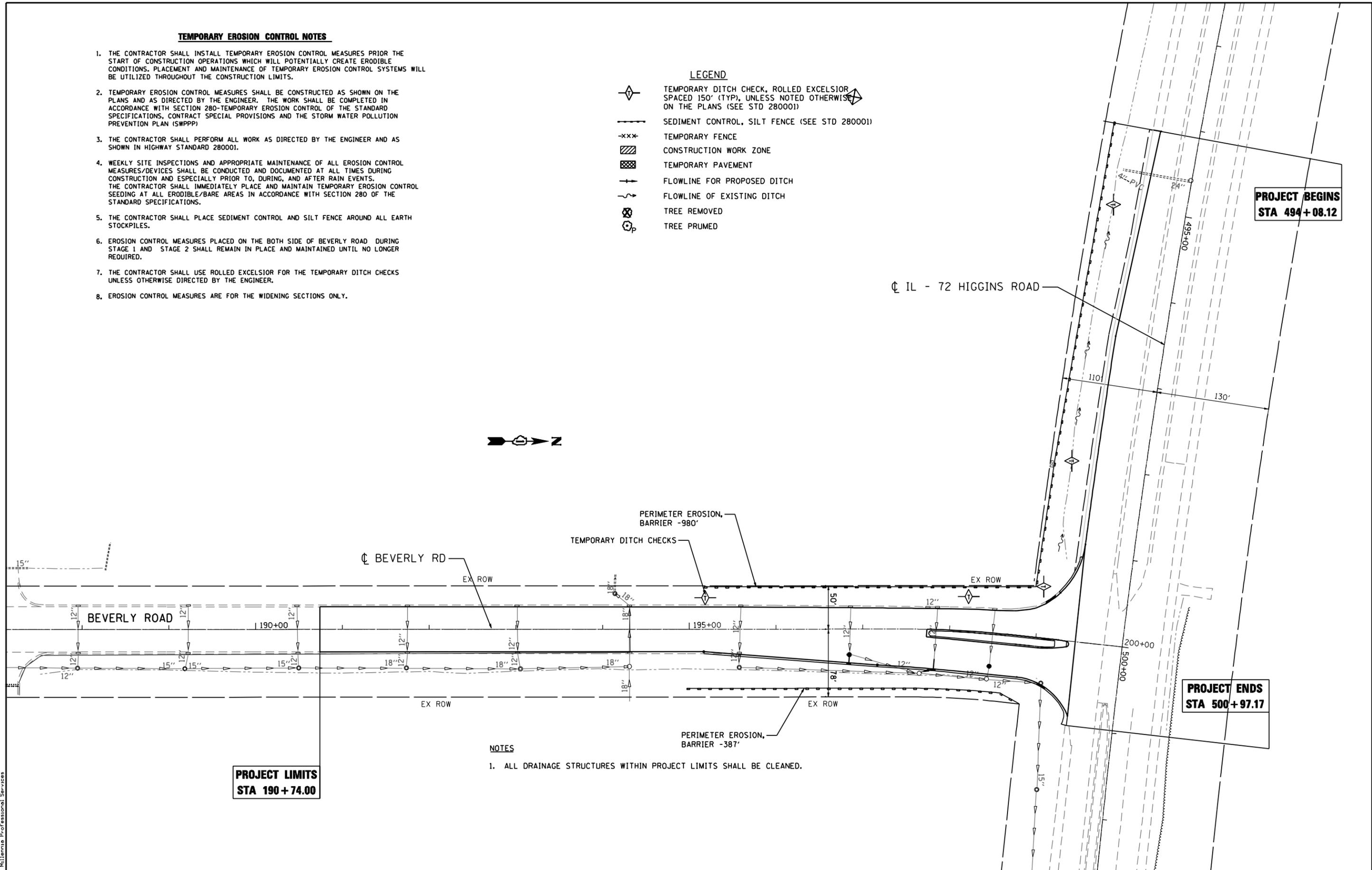


**TEMPORARY EROSION CONTROL NOTES**

1. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION OPERATIONS WHICH WILL POTENTIALLY CREATE ERODIBLE CONDITIONS. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION LIMITS.
2. TEMPORARY EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 280-TEMPORARY EROSION CONTROL OF THE STANDARD SPECIFICATIONS, CONTRACT SPECIAL PROVISIONS AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN HIGHWAY STANDARD 280001.
4. WEEKLY SITE INSPECTIONS AND APPROPRIATE MAINTENANCE OF ALL EROSION CONTROL MEASURES/DEVICES SHALL BE CONDUCTED AND DOCUMENTED AT ALL TIMES DURING CONSTRUCTION AND ESPECIALLY PRIOR TO, DURING, AND AFTER RAIN EVENTS. THE CONTRACTOR SHALL IMMEDIATELY PLACE AND MAINTAIN TEMPORARY EROSION CONTROL SEEDING AT ALL ERODIBLE/BARE AREAS IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL PLACE SEDIMENT CONTROL AND SILT FENCE AROUND ALL EARTH STOCKPILES.
6. EROSION CONTROL MEASURES PLACED ON THE BOTH SIDE OF BEVERLY ROAD DURING STAGE 1 AND STAGE 2 SHALL REMAIN IN PLACE AND MAINTAINED UNTIL NO LONGER REQUIRED.
7. THE CONTRACTOR SHALL USE ROLLED EXCELSIOR FOR THE TEMPORARY DITCH CHECKS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
8. EROSION CONTROL MEASURES ARE FOR THE WIDENING SECTIONS ONLY.

**LEGEND**

- TEMPORARY DITCH CHECK, ROLLED EXCELSIOR SPACED 150' (TYP), UNLESS NOTED OTHERWISE ON THE PLANS (SEE STD 280001)
- SEDIMENT CONTROL, SILT FENCE (SEE STD 280001)
- TEMPORARY FENCE
- CONSTRUCTION WORK ZONE
- TEMPORARY PAVEMENT
- FLOWLINE FOR PROPOSED DITCH
- FLOWLINE OF EXISTING DITCH
- TREE REMOVED
- TREE PRUNED



**PROJECT BEGINS  
STA 494+08.12**

**PROJECT ENDS  
STA 500+97.17**

**PROJECT LIMITS  
STA 190+74.00**

**NOTES**

1. ALL DRAINAGE STRUCTURES WITHIN PROJECT LIMITS SHALL BE CLEANED.

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**STATE OF ILLINOIS  
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**IL 72 - HIGGINS RD  
AT BEVERLY RD AND AT ROCK ROAD DR**

**EROSION AND SEDIMENT  
CONTROL PLAN**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	16
CONTRACT NO. 60P90				

SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 195+16.64 TO STA. 200+00.00

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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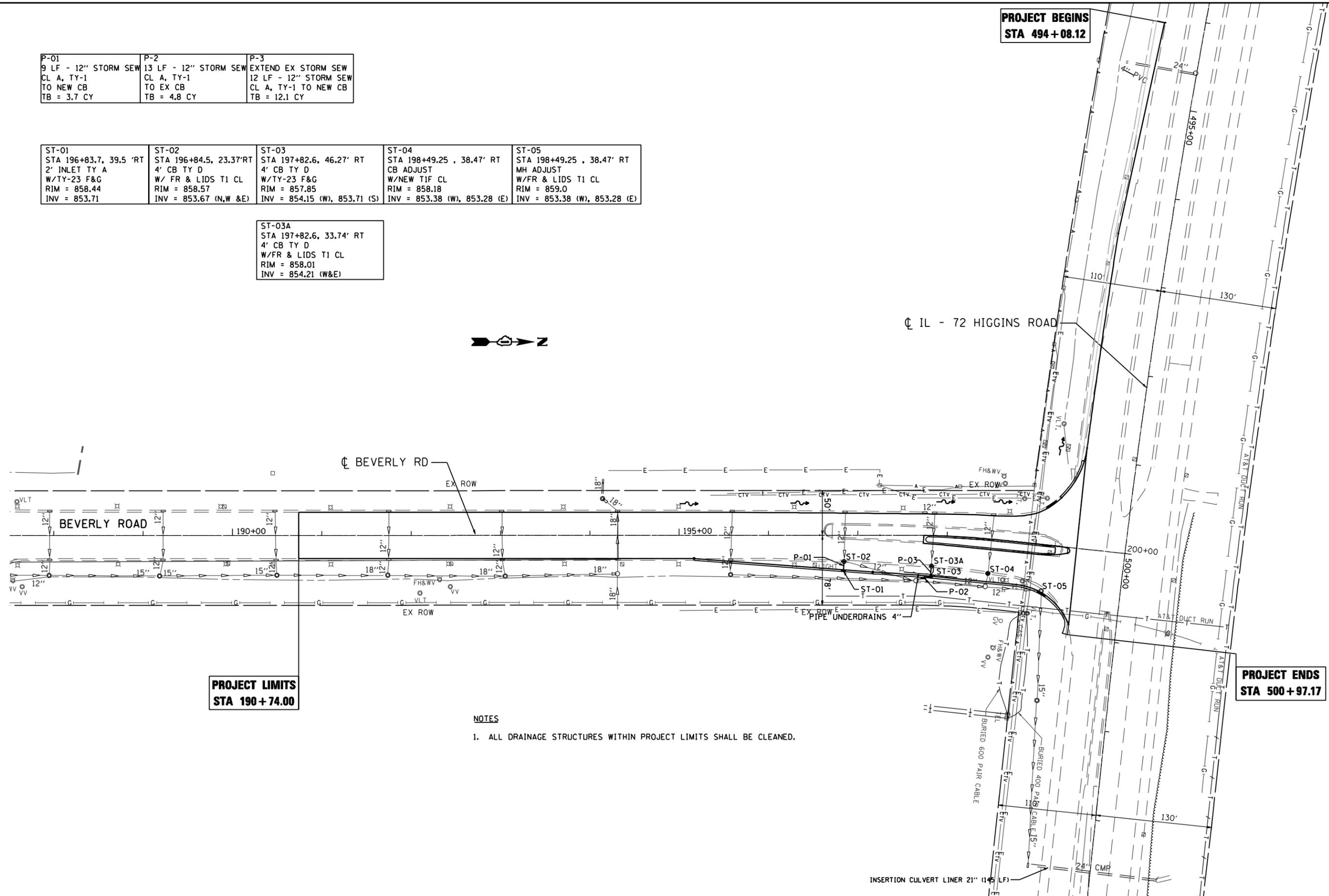
P-01 9 LF - 12" STORM SEW CL A, TY-1 TO NEW CB TB = 3.7 CY	P-2 13 LF - 12" STORM SEW CL A, TY-1 TO EX CB TB = 4.8 CY	P-3 EXTEND EX STORM SEW 12 LF - 12" STORM SEW CL A, TY-1 TO NEW CB TB = 12.1 CY
--	---	---

ST-01 STA 196+83.7, 39.5' RT 2' INLET TY A W/TY-23 F&G RIM = 858.44 INV = 853.71	ST-02 STA 196+84.5, 23.37' RT 4' CB TY D W/ FR & LIDS T1 CL RIM = 858.57 INV = 853.67 (N,W &E)	ST-03 STA 197+82.6, 46.27' RT 4' CB TY D W/TY-23 F&G RIM = 857.85 INV = 854.15 (W), 853.71 (S)	ST-04 STA 198+49.25, 38.47' RT CB ADJUST W/NEW T1F CL RIM = 858.18 INV = 853.38 (W), 853.28 (E)	ST-05 STA 198+49.25, 38.47' RT MH ADJUST W/FR & LIDS T1 CL RIM = 859.0 INV = 853.38 (W), 853.28 (E)
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ST-03A STA 197+82.6, 33.74' RT 4' CB TY D W/FR & LIDS T1 CL RIM = 858.01 INV = 854.21 (W&E)
--

**PROJECT BEGINS  
STA 494 + 08.12**

**PROJECT ENDS  
STA 500 + 97.17**



**PROJECT LIMITS  
STA 190 + 74.00**

**NOTES**

1. ALL DRAINAGE STRUCTURES WITHIN PROJECT LIMITS SHALL BE CLEANED.

FILE NAME : P:\2009\ME\9006 - Var\Var - PH11\CADD\038-IL-72-Beverly\Shis\0168p90-sht-dr-ans.dgn  
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**IL 72 - HIGGINS RD  
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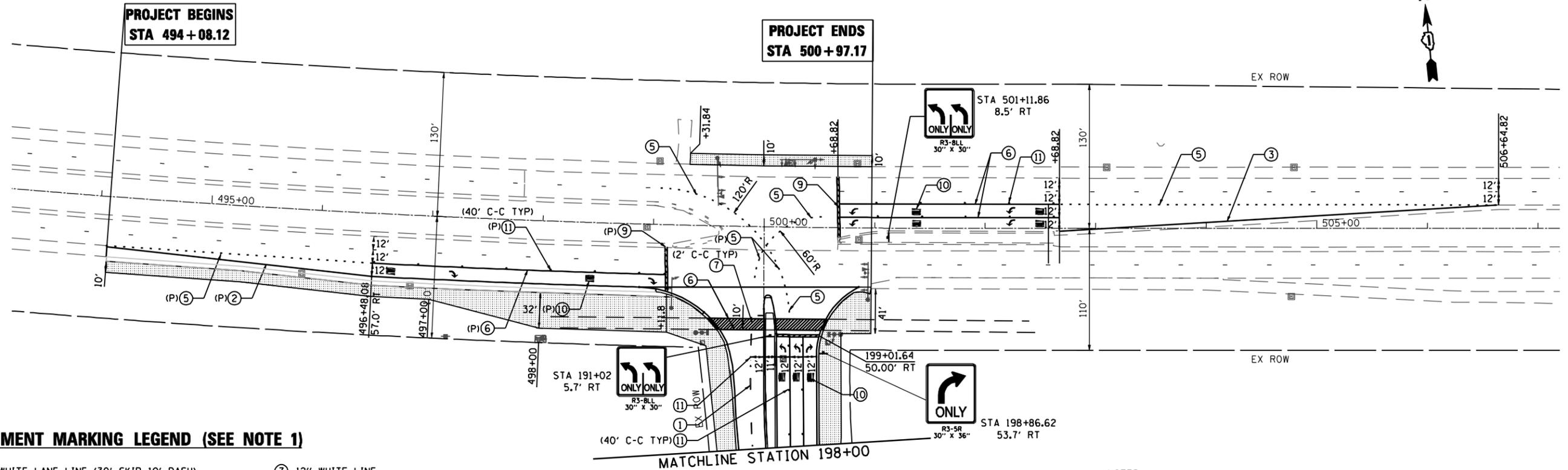
**DRAINAGE AND UTILITY PLAN**

SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 195+16.64 TO STA. 200+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	17
CONTRACT NO. 60P90				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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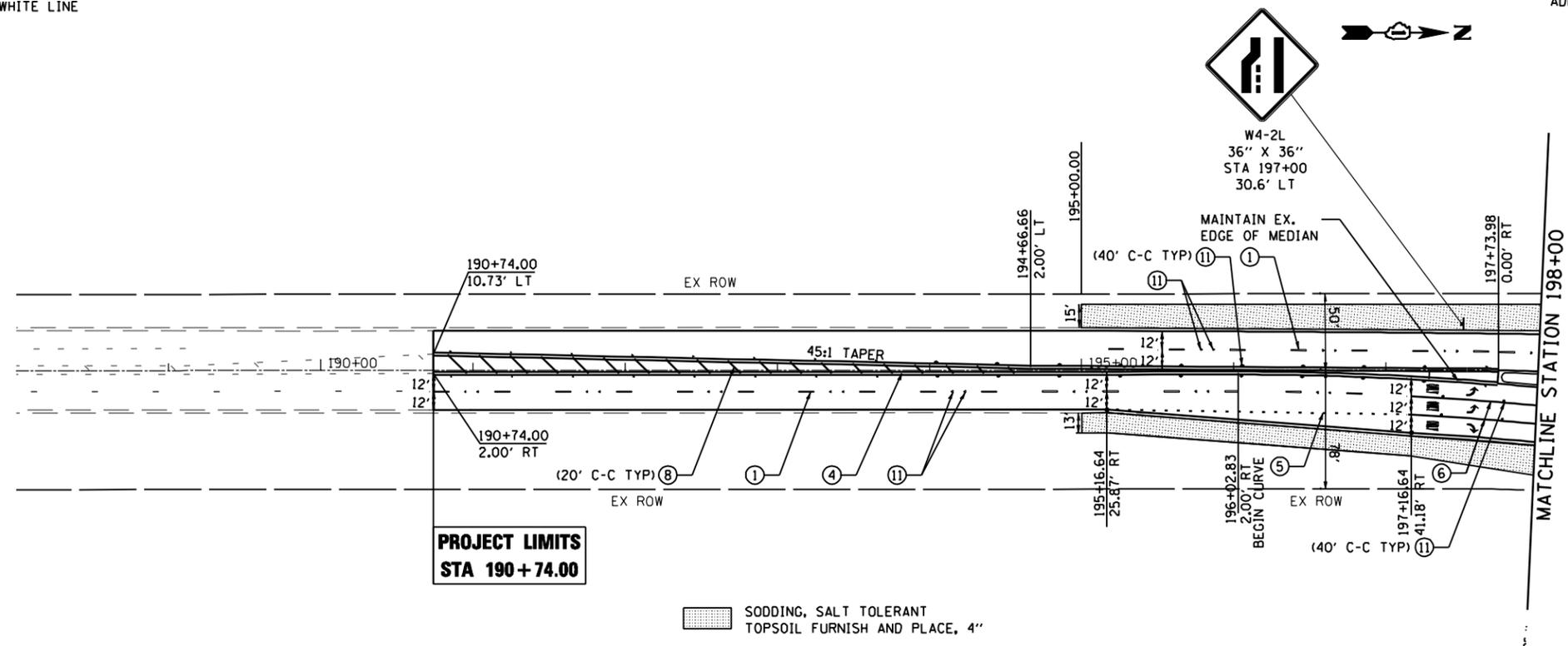


**PAVEMENT MARKING LEGEND (SEE NOTE 1)**

- ① 4" WHITE LANE LINE (30' SKIP 10' DASH)
- ② 4" WHITE SOLID LINE
- ③ 4" YELLOW SOLID LINE
- ④ 4" DOUBLE YELLOW
- ⑤ 6" WHITE LINE (6' SKIP 2' DASH)
- ⑥ 6" WHITE LINE
- ⑦ 12" WHITE LINE
- ⑧ 12" YELLOW LINE
- ⑨ 24" WHITE STOP BAR
- ⑩ LETTERS AND SYMBOLS (TYP)
- ⑪ RAISED REFLECTIVE PAVEMENT MARKER (SEE NOTE 3)

**NOTES**

1. ALL PAVEMENT MARKINGS APPLIED TO BARE CONCRETE, DESIGNATED WITH (P), ARE POLYUREA. ALL OTHER PAVEMENT MARKINGS ARE THERMOPLASTIC.
2. THE CONSTRUCTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
3. REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.



**PROJECT LIMITS**  
STA 190+74.00

SOODING, SALT TOLERANT  
TOPSOIL FURNISH AND PLACE, 4"

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**

**PAVEMENT MARKING PLAN**  
**AND LANDSCAPING PLAN**

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 18
CONTRACT NO. 60P90				

SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 494+08.12 TO STA. 500+97.17

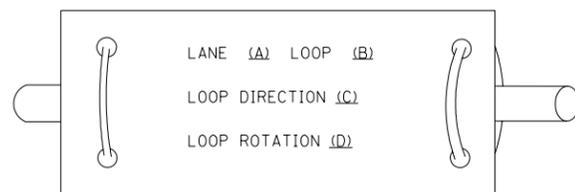
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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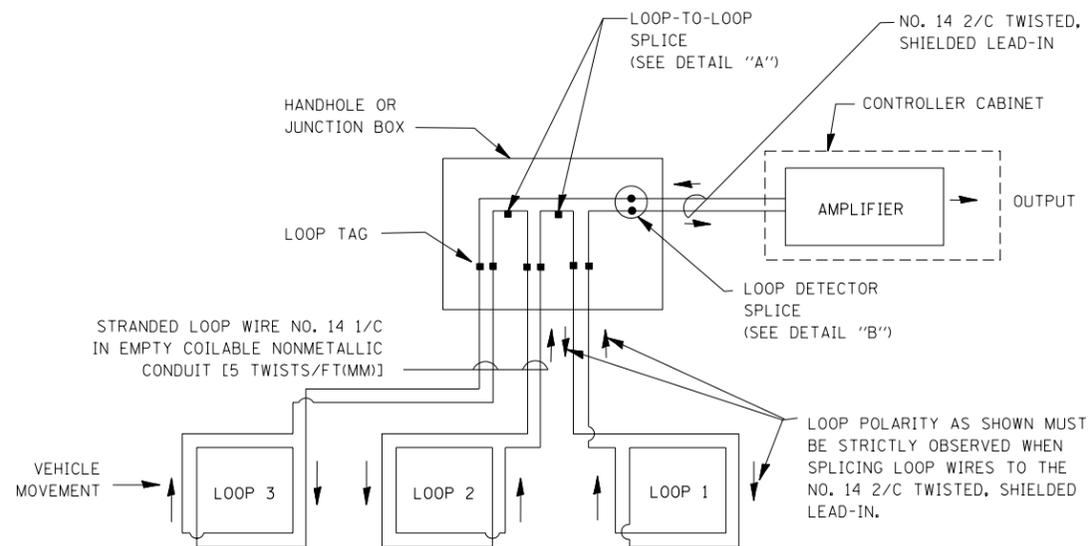
**LOOP DETECTOR NOTES**

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

**LOOP LEAD-IN CABLE TAG**

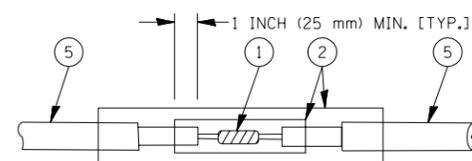


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

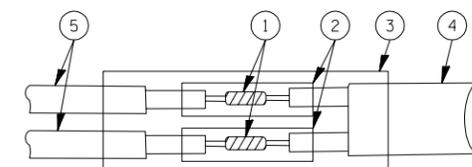


**DETECTOR LOOP WIRING SCHEMATIC**

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

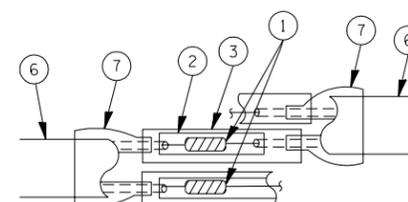


**DETAIL "A"  
LOOP-TO-LOOP SPLICE**

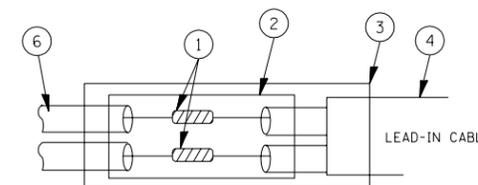


**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**



**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

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

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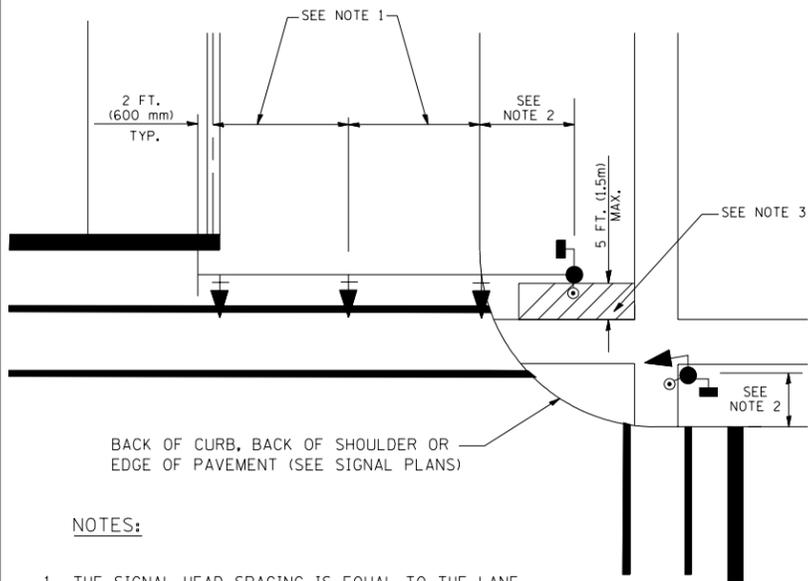
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	19
<b>TS-05</b>			CONTRACT NO. <b>60P90</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

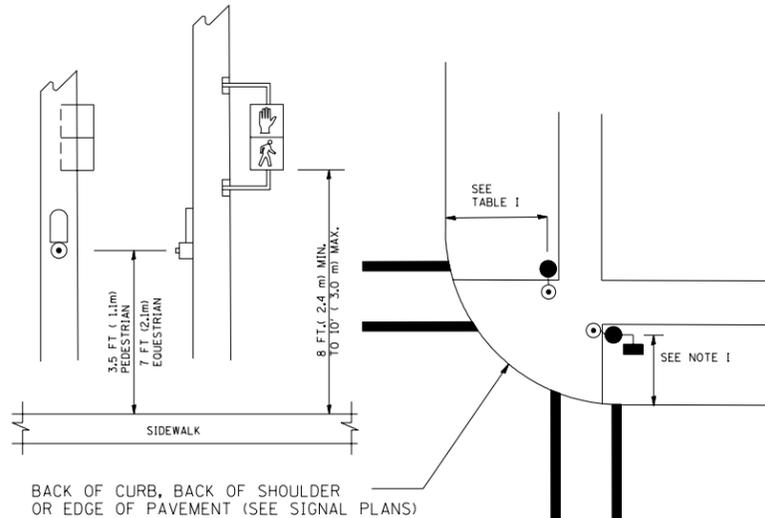
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**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."

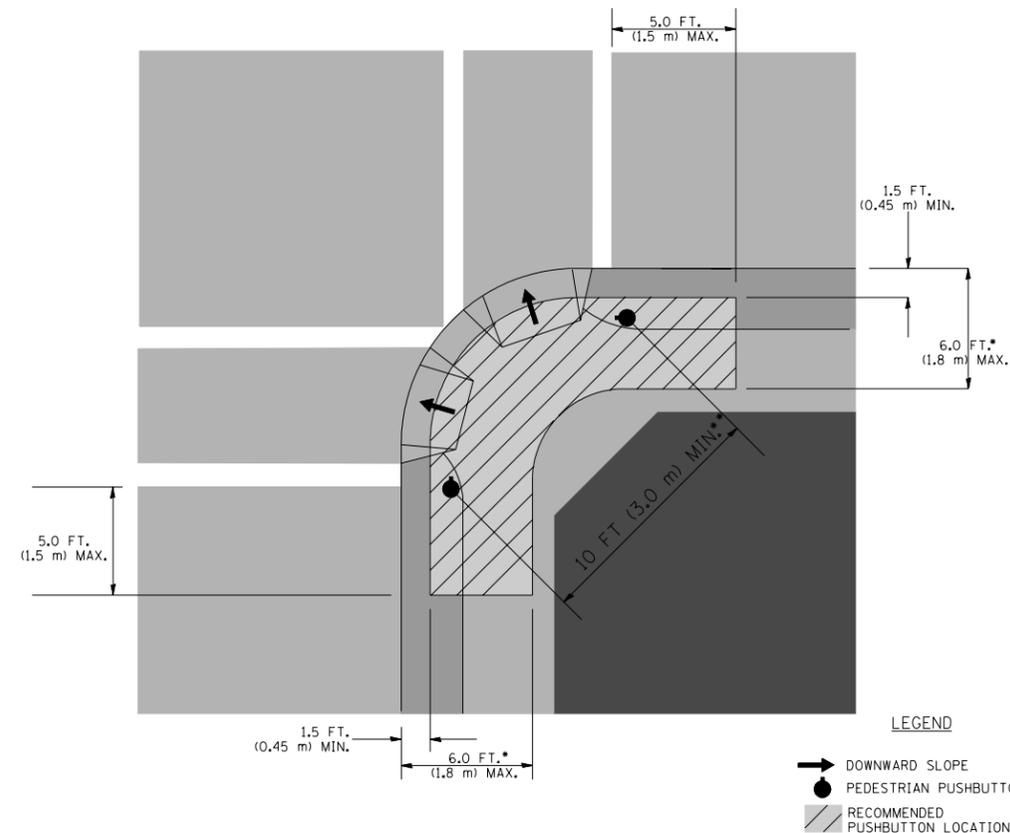
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



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

**NOTES:**

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

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (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 EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

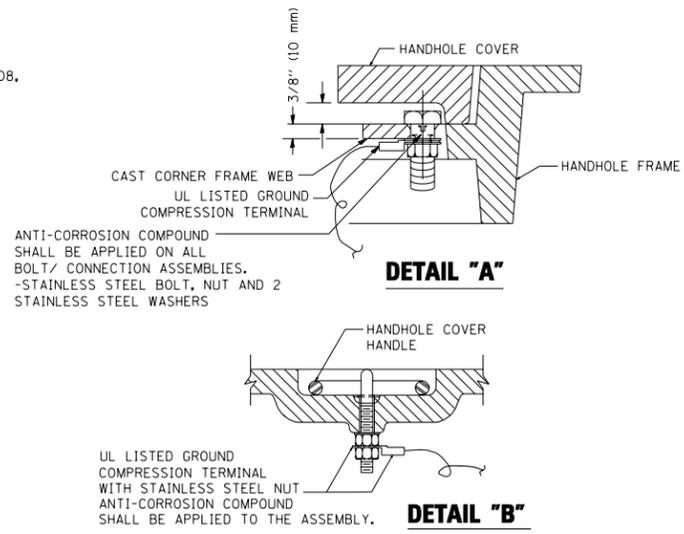
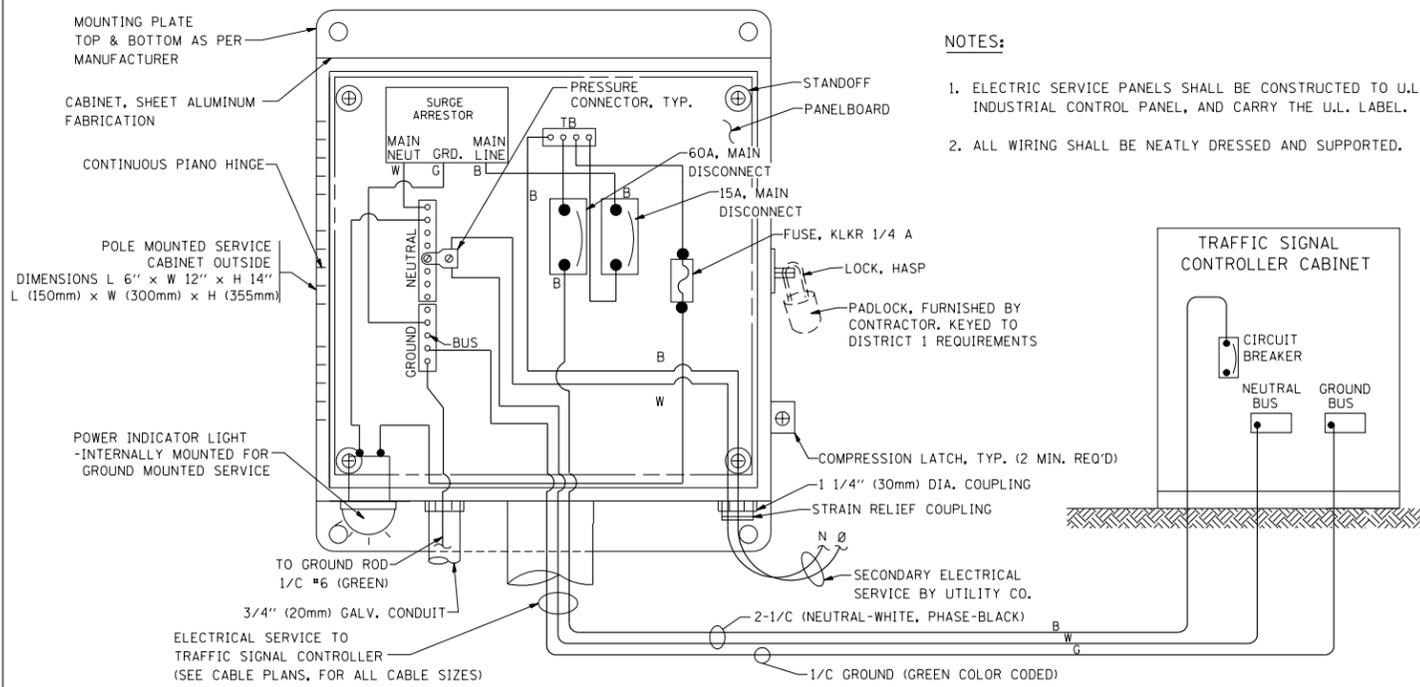
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

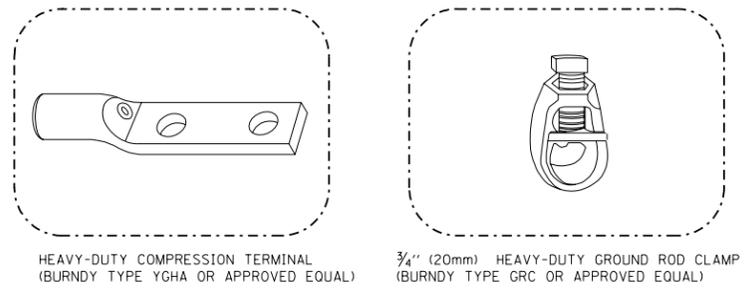
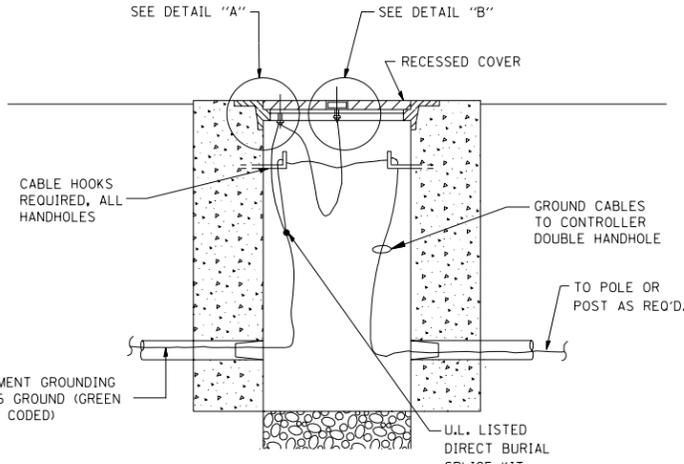
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 2 OF 6 SHEETS STA. TO STA.

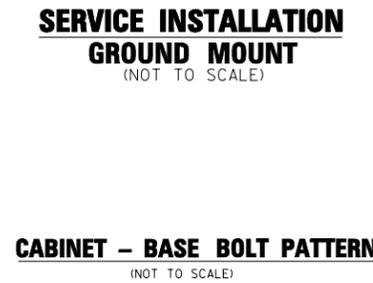
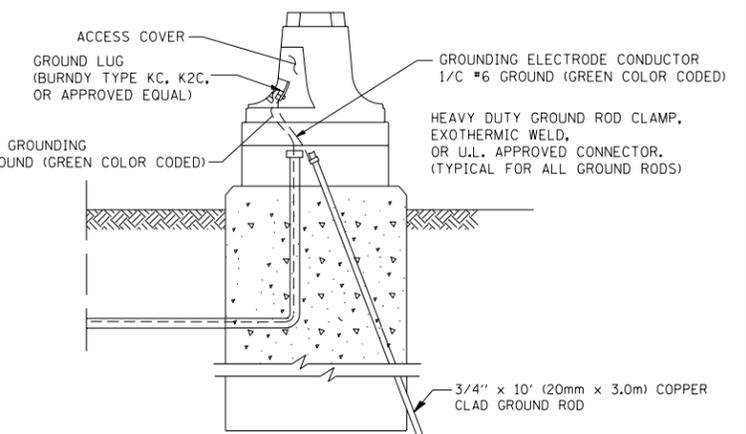
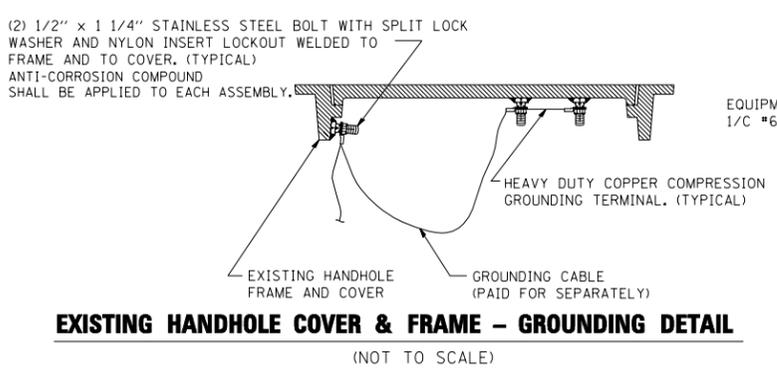
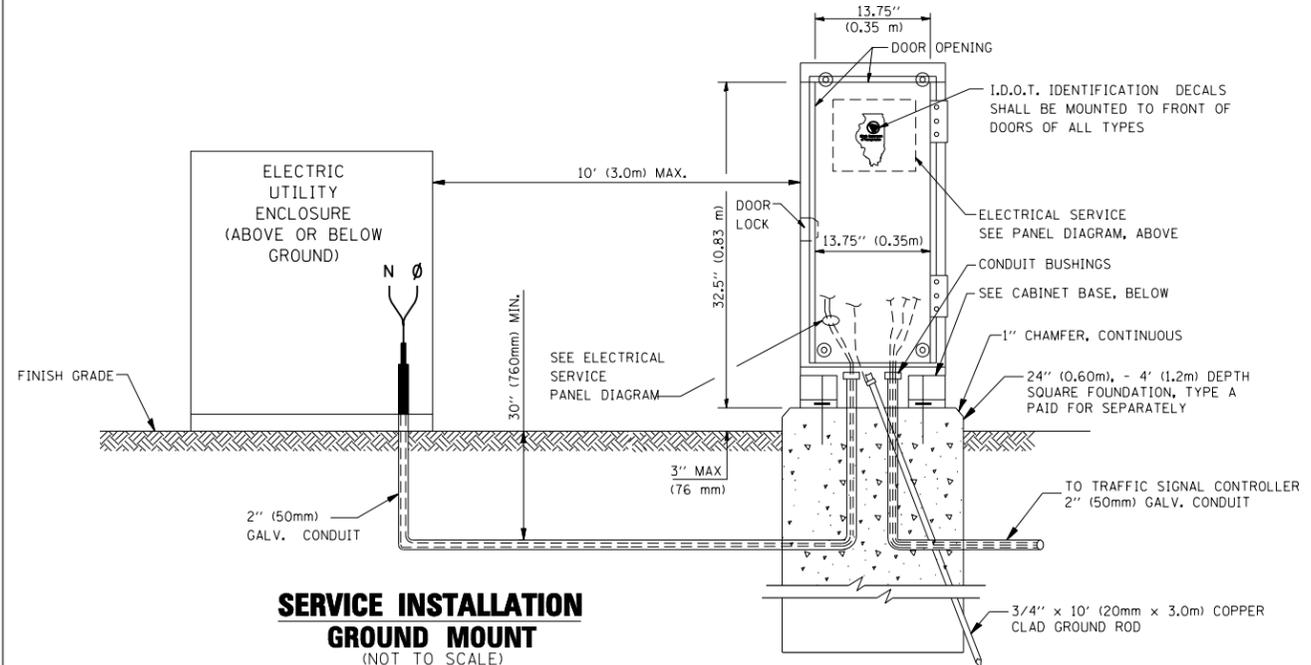
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	20
<b>TS-05</b>		CONTRACT NO. <b>60P90</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:**
- GROUNDING SYSTEM**
- 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.
  - 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.
  - ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
  - THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- 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.



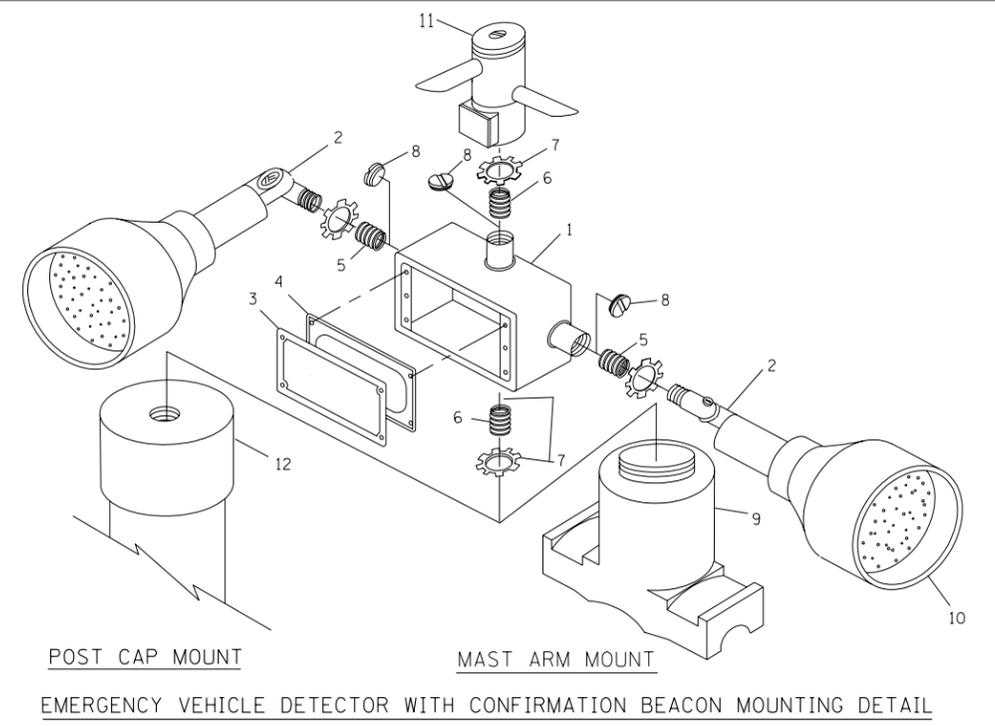
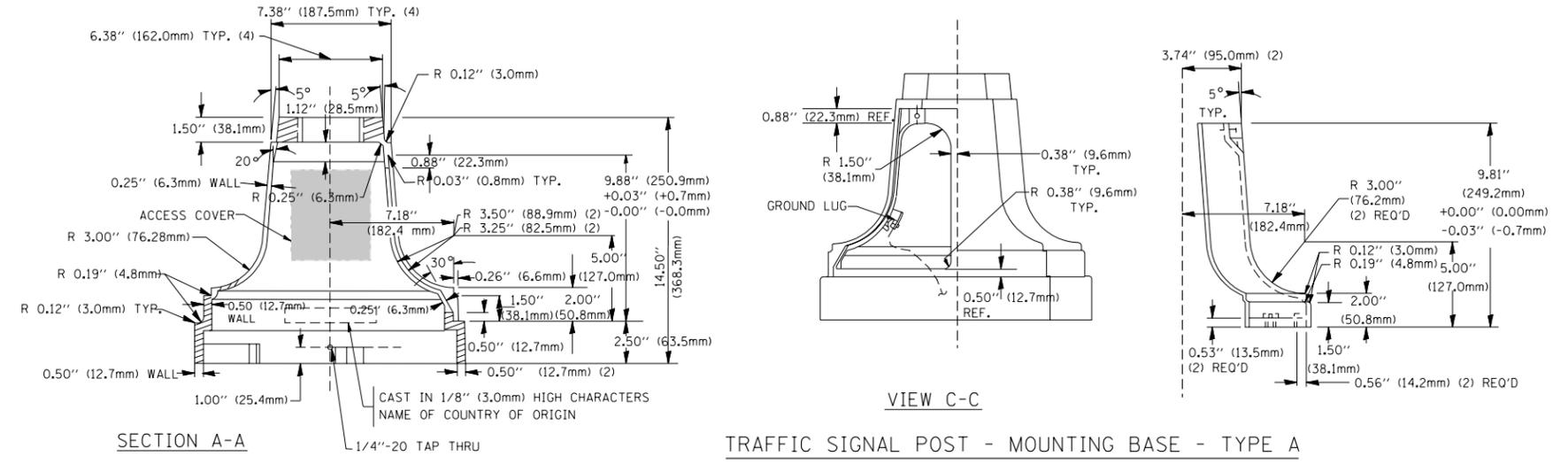
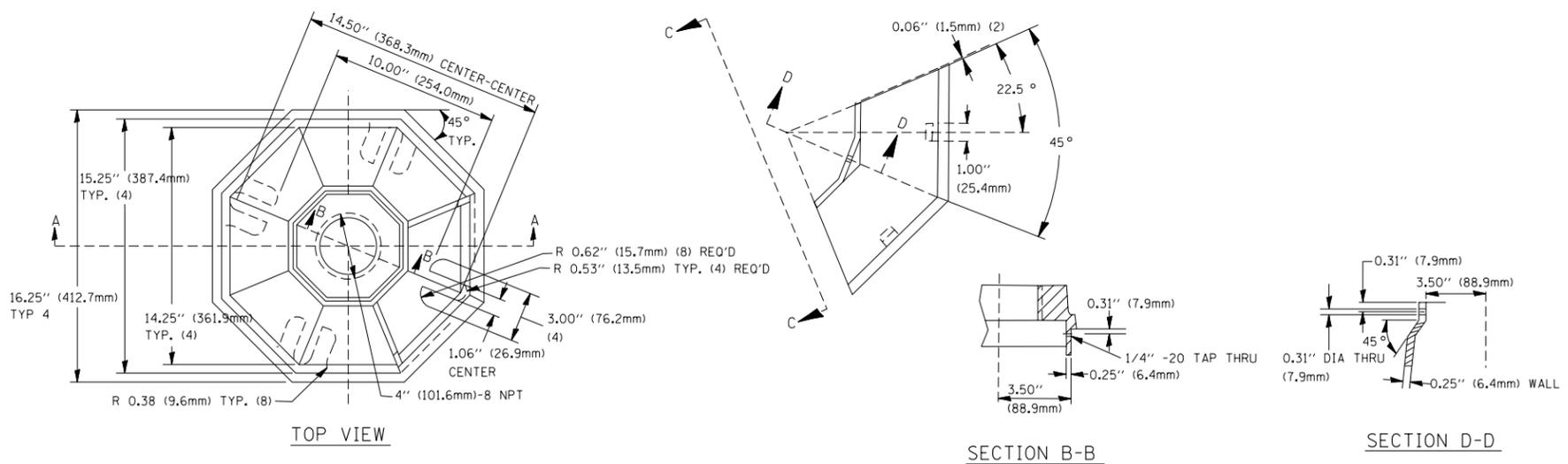
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

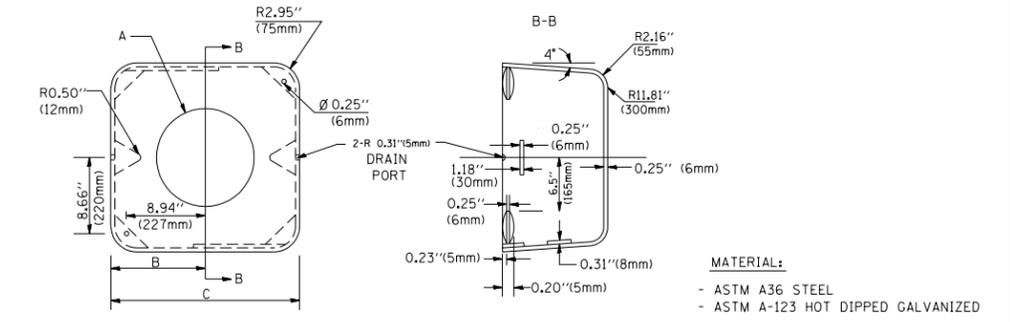
SCALE: NONE SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	21
<b>TS-05</b>		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



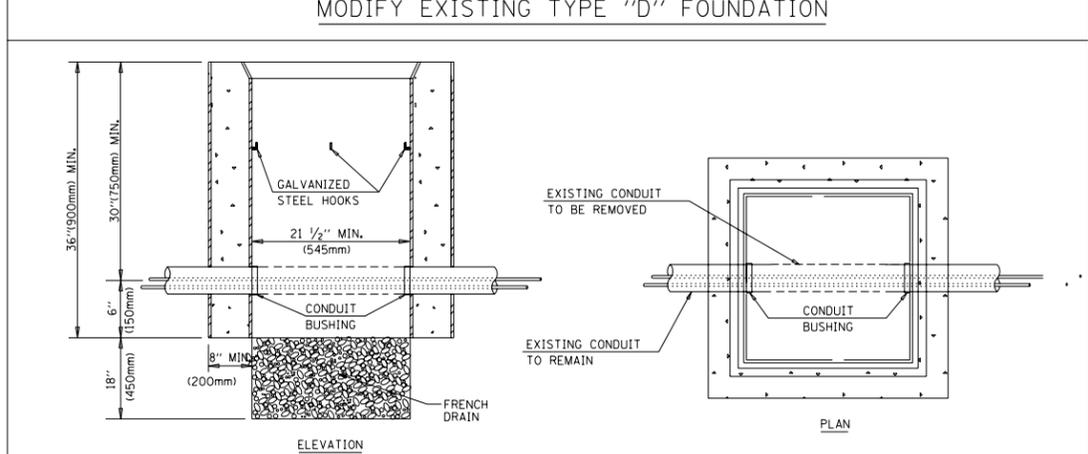
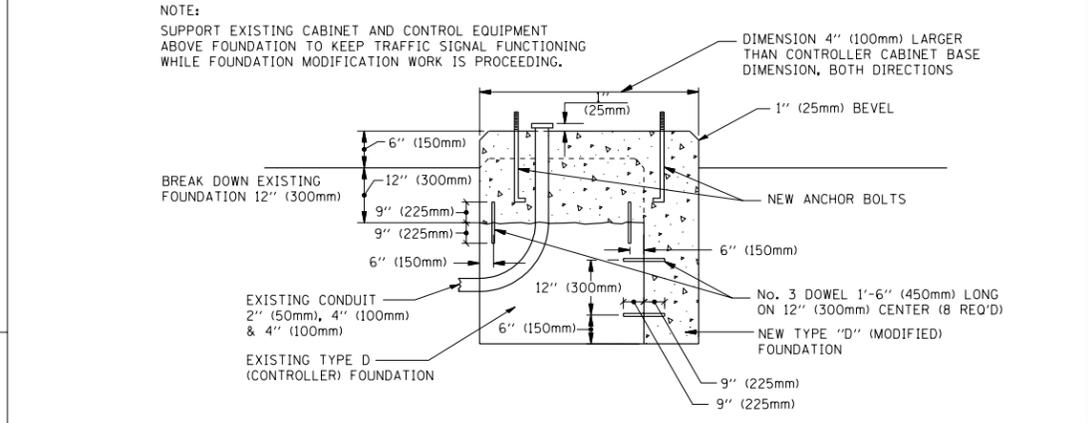
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
  - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
  - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



A	B	C	HEIGHT	WEIGHT
VARIES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)	126 lbs (57 kg)

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



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

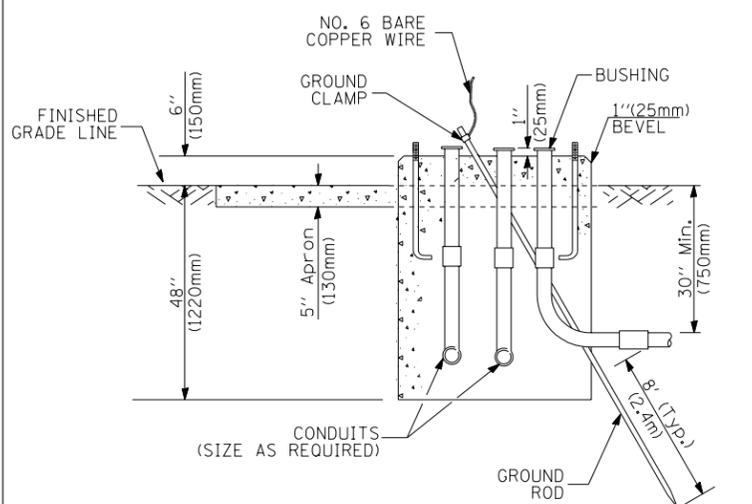
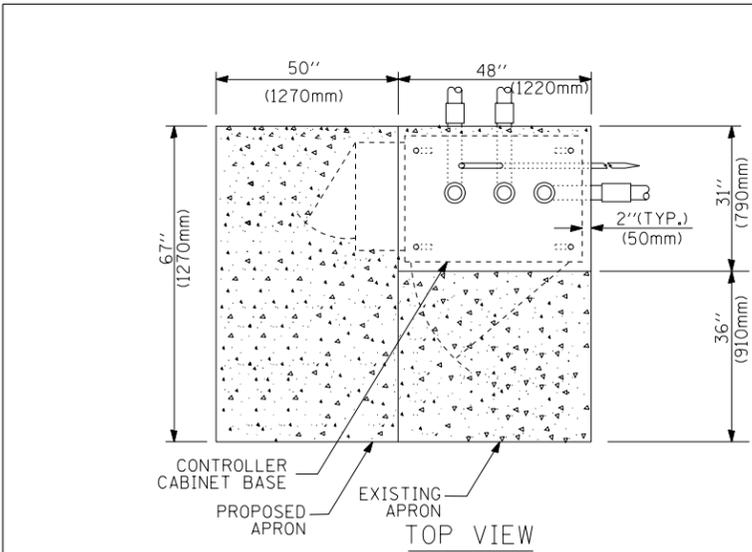
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

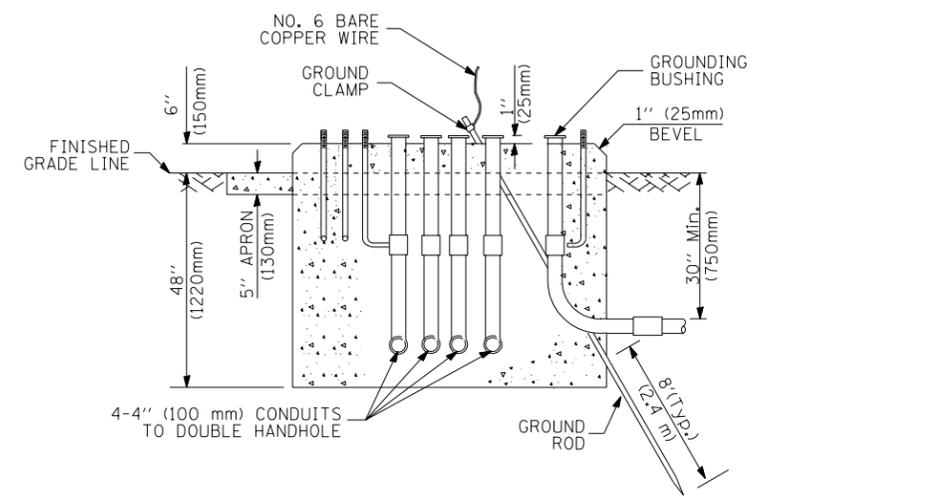
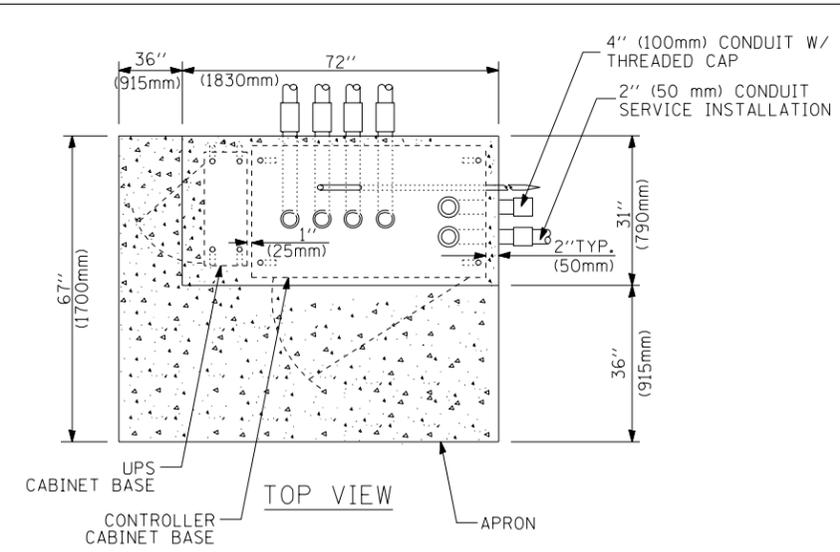
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE    SHEET NO. 4 OF 6 SHEETS    STA.    TO STA.

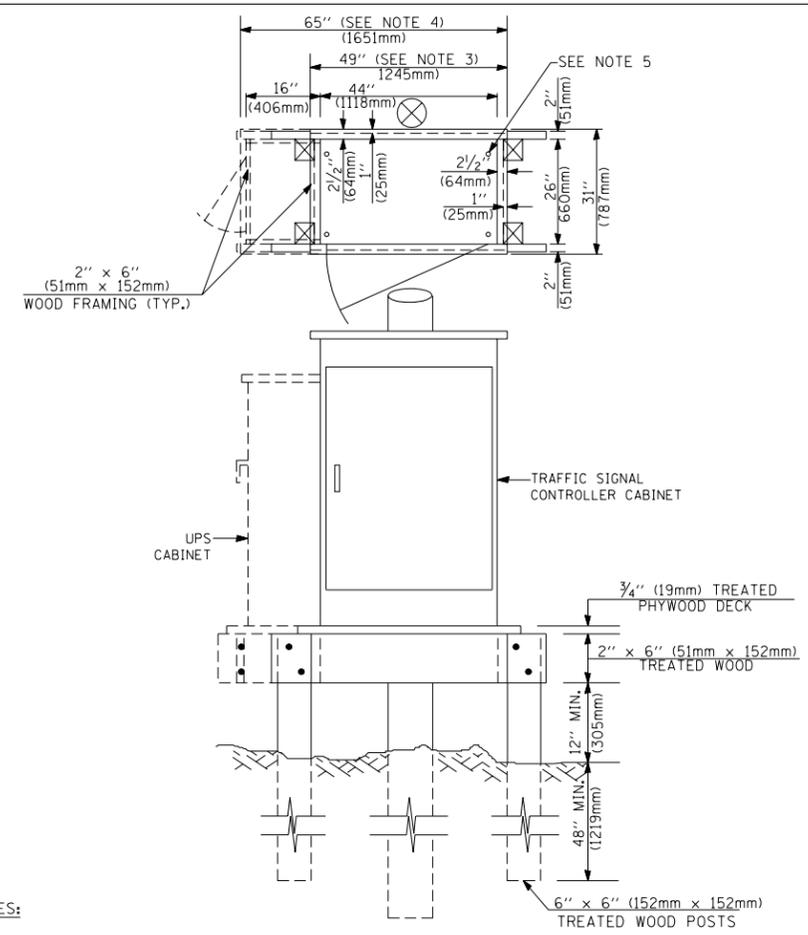
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	22
<b>TS-05</b>		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



**NOTES:**

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

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

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

**DEPTH OF FOUNDATION**

Mast Arm Length	Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

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

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

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>			
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			
SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	23
<b>TS-05</b>		CONTRACT NO. <b>60P90</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				<b>RAILROAD SYMBOLS</b>			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				RAILROAD CONTROL CABINET			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CANTILEVER MAST ARM			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				FLASHING SIGNAL			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				CROSSING GATE			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSBUCK			
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

FILE NAME =	USER NAME = bauerdl	DESIGNED - DAG/BCK	REVISED -
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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE    SHEET NO. 6 OF 6 SHEETS    STA.    TO STA.

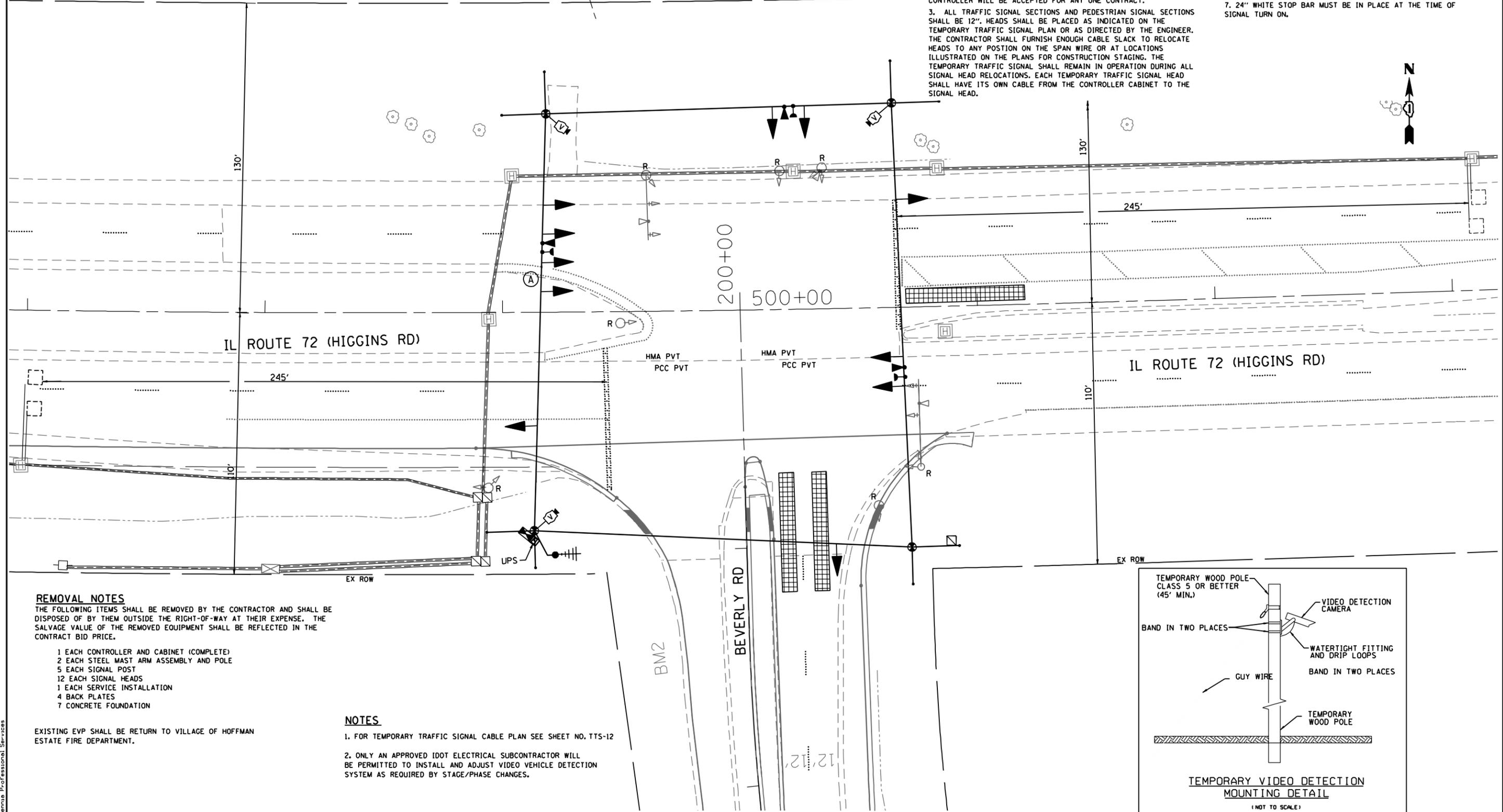
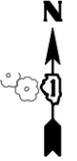
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK	56	24
<b>TS-05</b>		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**(A) LEFT ON GREEN ARROW ONLY**

R10-5  
24"x30"

**NOTES FOR TEMPORARY TRAFFIC SIGNALS**

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR MICROPROCESSOR BASE WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1 INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC STAGING ARE IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. 24" WHITE STOP BAR MUST BE IN PLACE AT THE TIME OF SIGNAL TURN ON.



**REMOVAL NOTES**

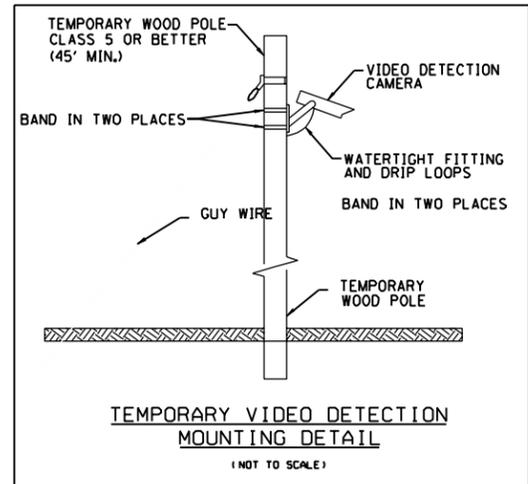
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 5 EACH SIGNAL POST
- 12 EACH SIGNAL HEADS
- 1 EACH SERVICE INSTALLATION
- 4 BACK PLATES
- 7 CONCRETE FOUNDATION

EXISTING EVP SHALL BE RETURN TO VILLAGE OF HOFFMAN ESTATE FIRE DEPARTMENT.

**NOTES**

1. FOR TEMPORARY TRAFFIC SIGNAL CABLE PLAN SEE SHEET NO. TTS-12
2. ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/PAGE CHANGES.



FILE NAME : p:\2009\me0906-ver-var-phi\cadd\038-IL72-Beverly\Shvs\0160P90-sht-01TTS11-Beverly.dgn  
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

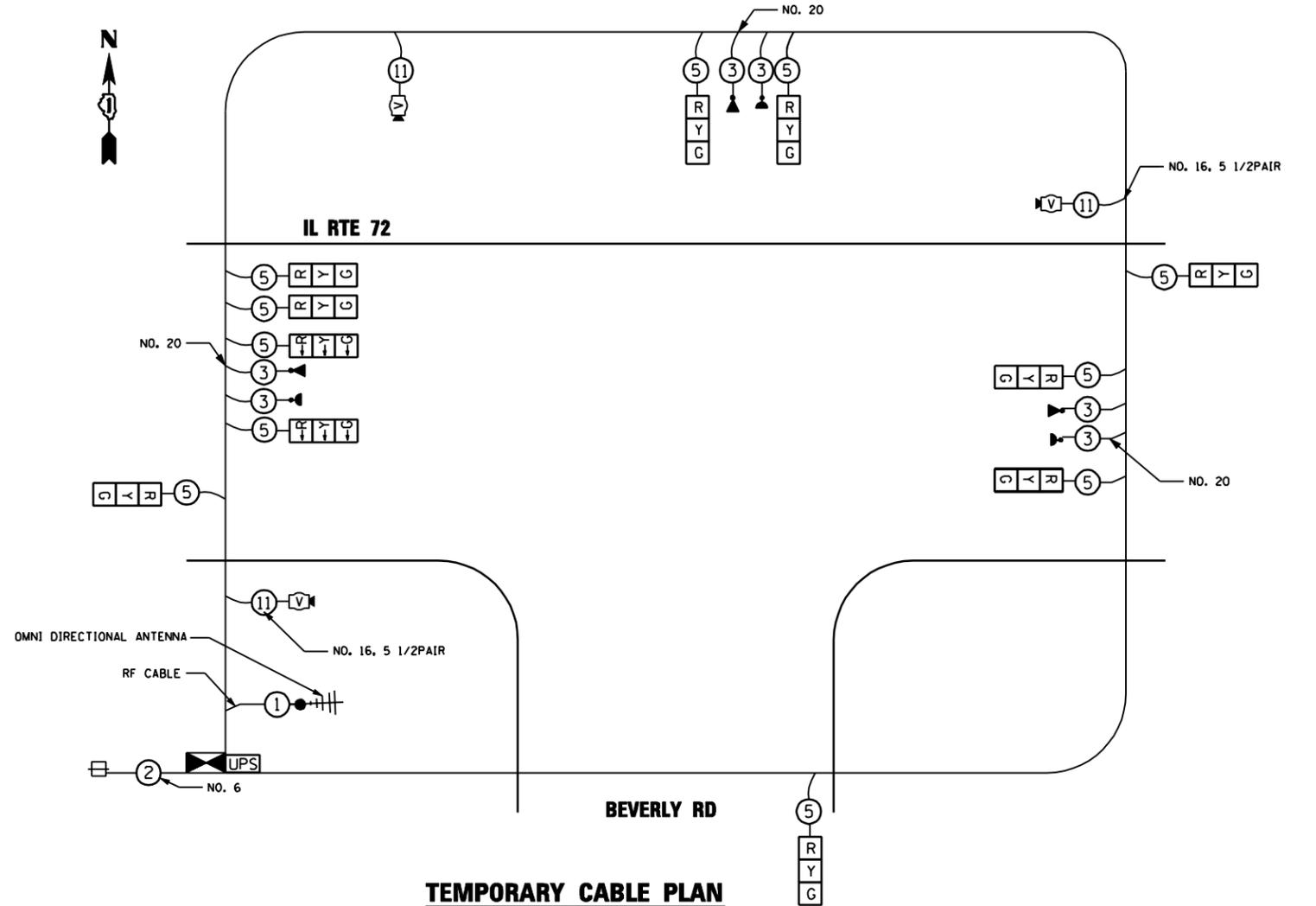
**IL ROUTE 72 AT BEVERLY ROAD  
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN**

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	25
CONTRACT NO. 60P90				

TTS-11

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

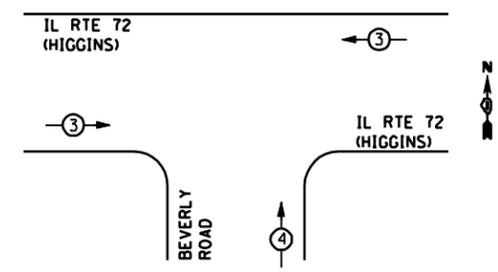


**NOTES**  
 1. ONLY AN APPROVED IDOT ELECTRICAL SUBCONTRACTOR WILL BE PERMITTED TO INSTALL AND ADJUST VIDEO VEHICLE DETECTION SYSTEM AS REQUIRED BY STAGE/PHASE CHANCES.

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

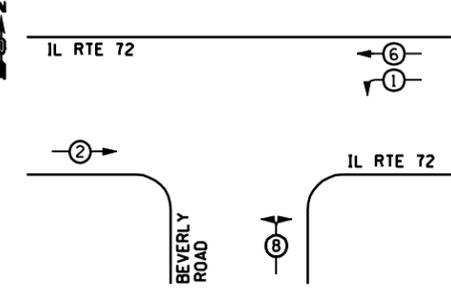
**TEMPORARY CABLE PLAN**

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↑

**TEMPORARY CONTROLLER SEQUENCE**



- LEGEND**
- ◻ SINGLE ENTRY PHASE
  - ◻ DUAL ENTRY PHASE
  - ◻ OVERLAP
  - ◻ PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.8
(GREEN)	11	135	15	0.25	41.3
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
COTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
VIDEO VEH. SENSOR	3	15	15	1.00	45
FLASHER				0.50	
<b>TOTAL</b>					<b>348.5</b>

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 CENTER CT/SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT:  
 PHONE: 630-691-4379  
 COMPANY: COMMONWEALTH EDISON

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CHECKED - TVN	REVISED -
DATE - 4/5/2012	REVISED -

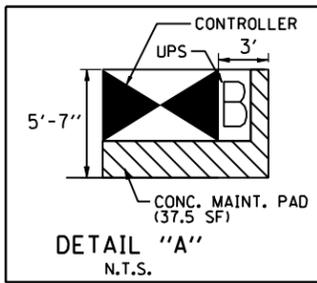
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 72 (HIGGINS RD) AT BEVERLY RD  
 TEMPORARY TRAFFIC SIGNAL CABLE PLAN, AND  
 PHASE DESIGNATION DIAGRAM**

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 26
CONTRACT NO. 60P90			TTS12	

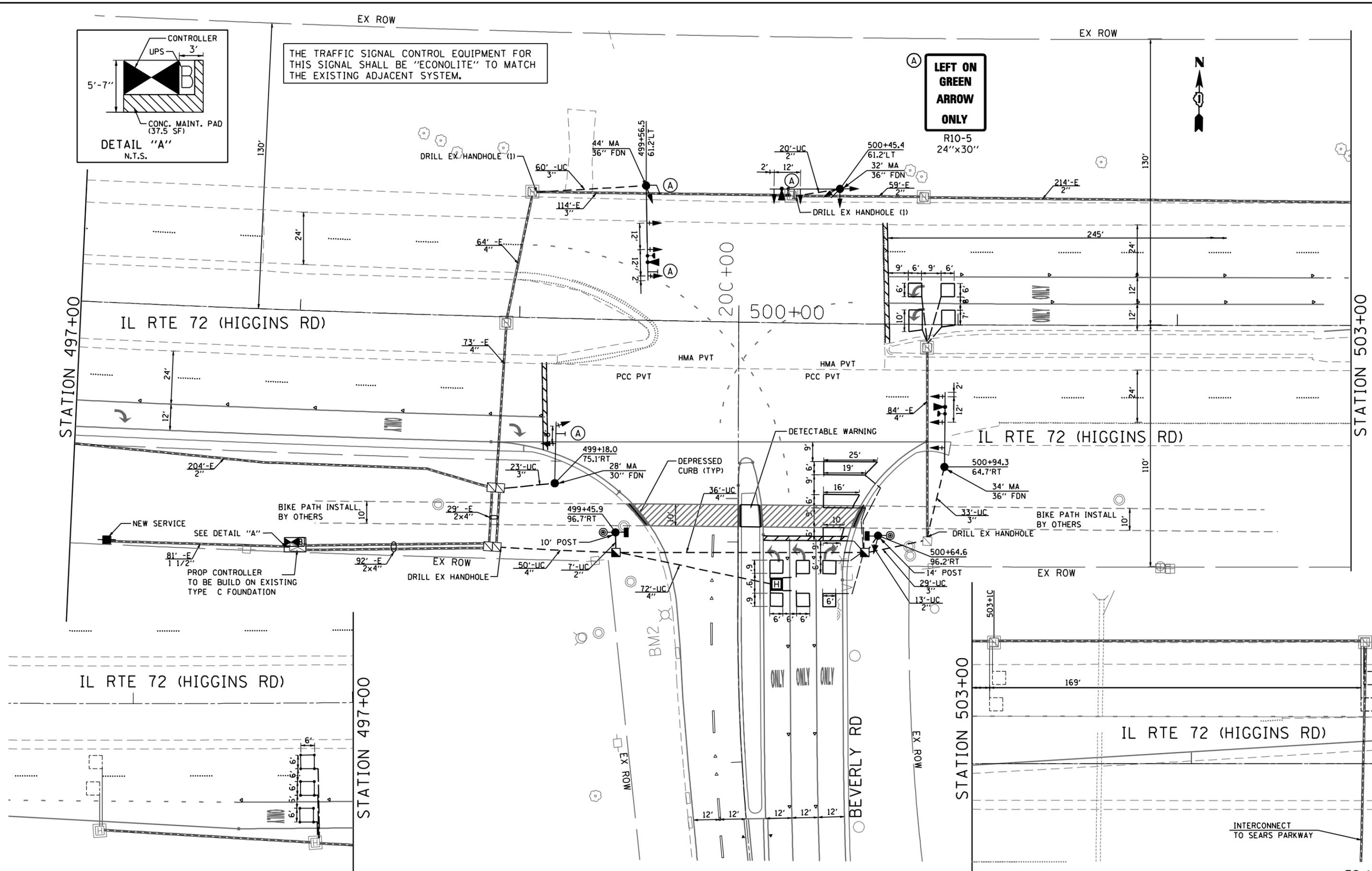
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 USER NAME : Millennium Professional Services  
 PRINT DATE : 4/5/2012 10:00 AM

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

LEFT ON GREEN ARROW ONLY  
R10-5  
24" x 30"



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 USER : JLN  
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DATE -	4/5/2012	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 72 AT BEVERLY ROAD  
TRAFFIC SIGNAL INSTALLATION PLAN**

SCALE: 1"=20'    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	27
CONTRACT NO. 60P90				

FED. ROAD DIST. NO. 1    ILLINOIS FED. AID PROJECT

TS-11

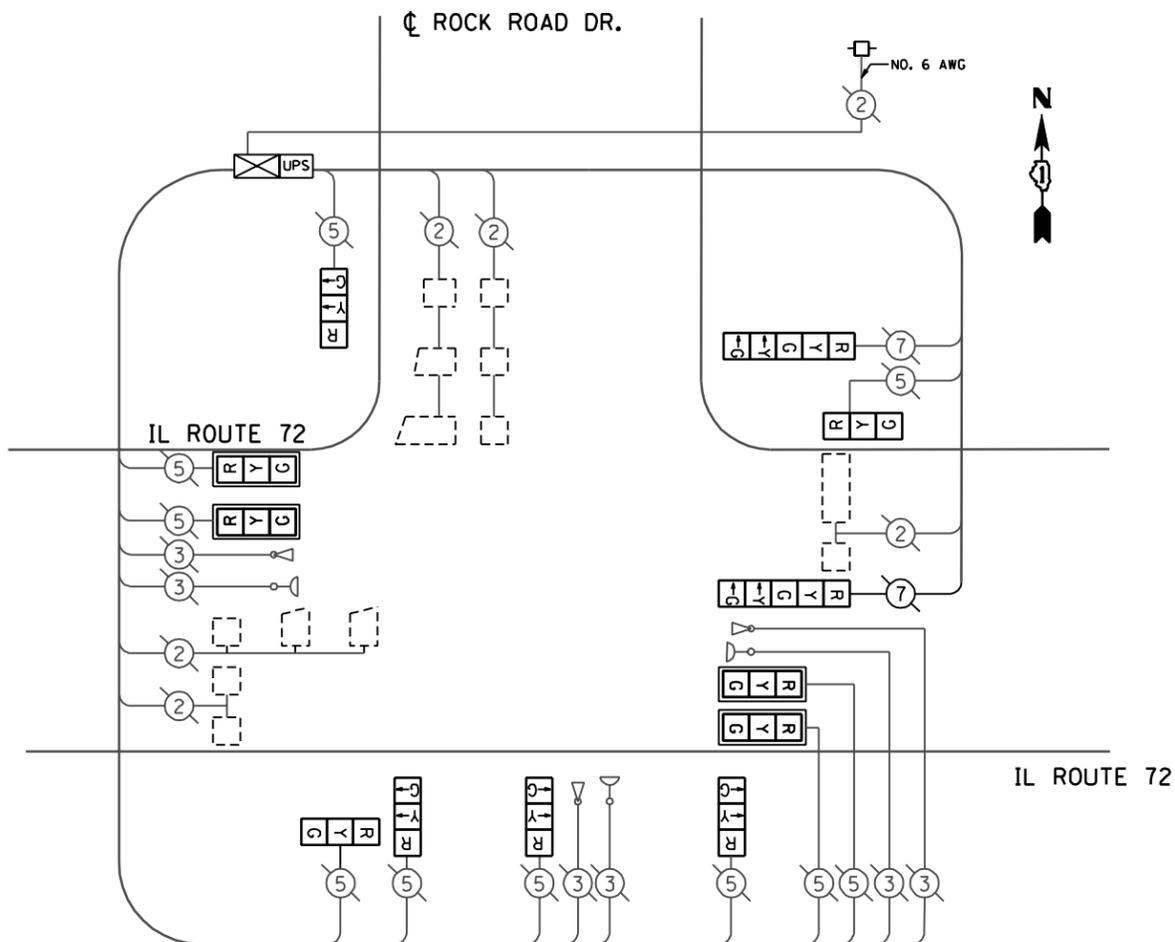
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SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	38
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
REMOVE EXISTING SIGNAL HEAD	EACH	12
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



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

I. D. O. T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	L. E. D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	120	0.05	
VIDEO VEH. SENSOR		15	15	1.00	
FLASHER				0.50	
TOTAL					326.8

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAY/DISTRICT 1  
201 CENTER CT/SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: ROSE PECORARO  
PHONE: (847) 608-2331  
COMPANY: COMMONWEALTH EDISON

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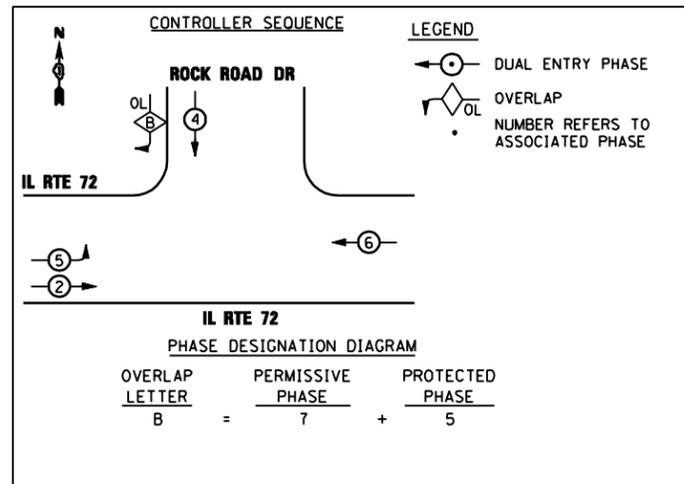
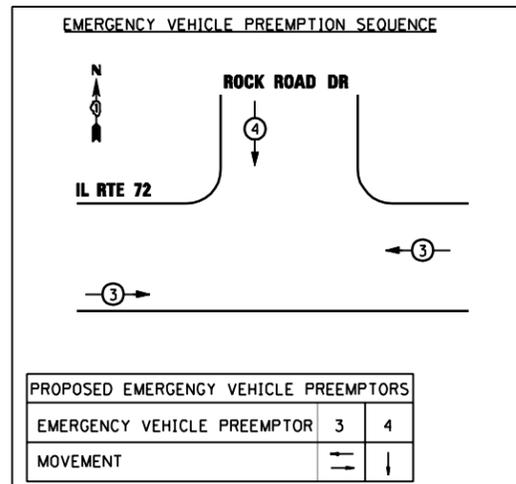
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DATE - 4/5/2012	REVISED -

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DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
SCHEDULE OF QUANTITIES  
IL ROUTE 72 AT ROCK ROAD DRIVE

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

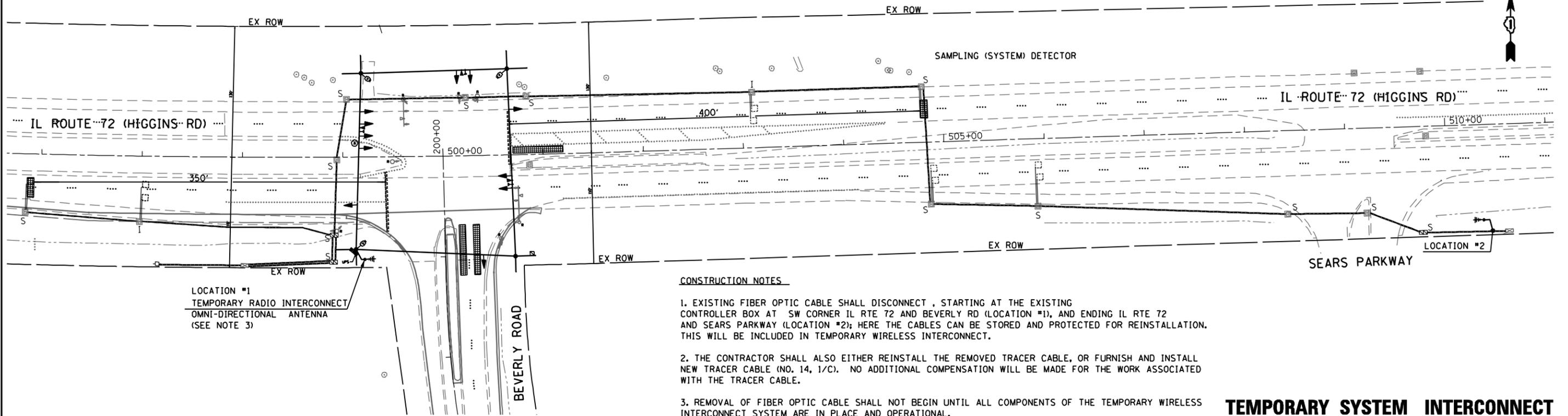
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	30
CONTRACT NO. 60P90				



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 USER : ME09086  
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THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS TEMPORARY SIGNAL SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



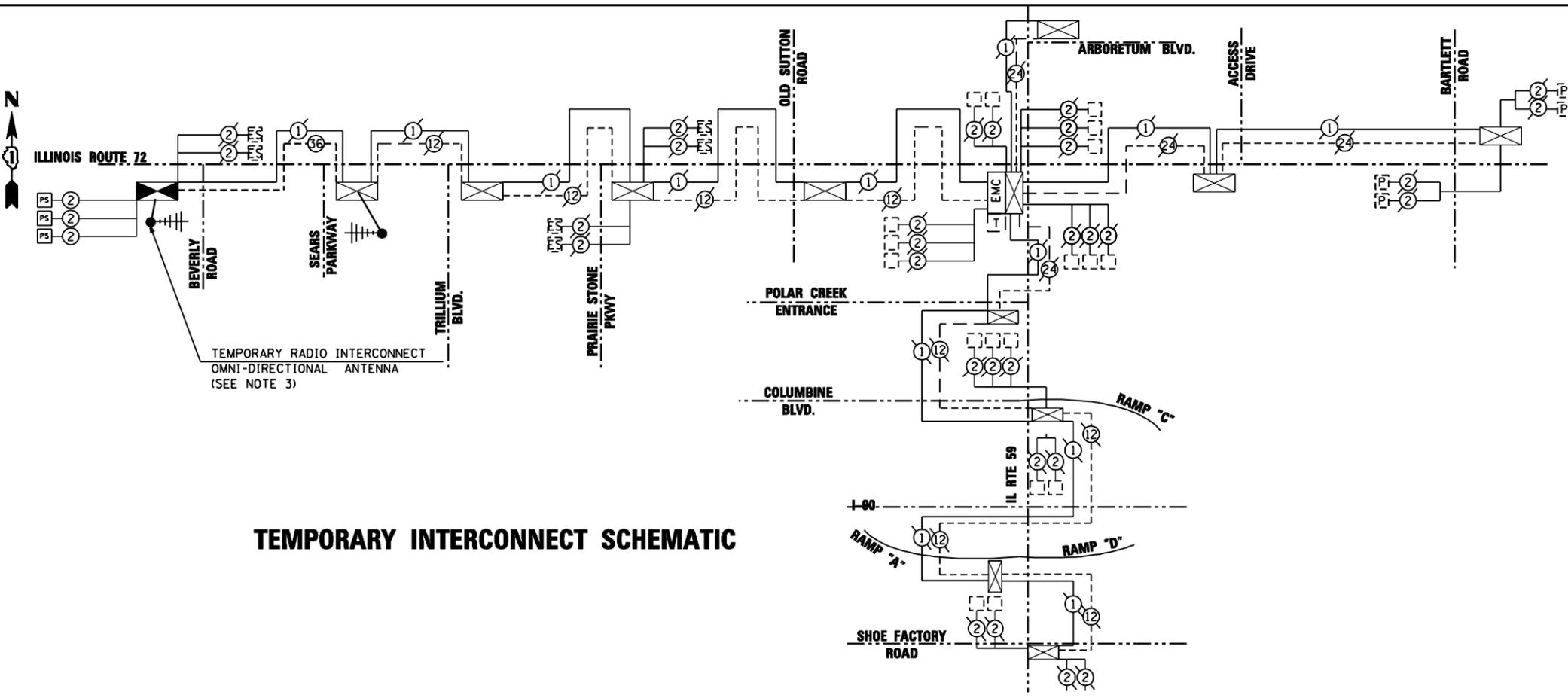
LOCATION #1  
TEMPORARY RADIO INTERCONNECT  
OMNI-DIRECTIONAL ANTENNA  
(SEE NOTE 3)

**CONSTRUCTION NOTES**

1. EXISTING FIBER OPTIC CABLE SHALL DISCONNECT, STARTING AT THE EXISTING CONTROLLER BOX AT SW CORNER IL RTE 72 AND BEVERLY RD (LOCATION #1), AND ENDING IL RTE 72 AND SEARS PARKWAY (LOCATION #2); HERE THE CABLES CAN BE STORED AND PROTECTED FOR REINSTALLATION. THIS WILL BE INCLUDED IN TEMPORARY WIRELESS INTERCONNECT.
2. THE CONTRACTOR SHALL ALSO EITHER REINSTALL THE REMOVED TRACER CABLE, OR FURNISH AND INSTALL NEW TRACER CABLE (NO. 14, 1/C). NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE WORK ASSOCIATED WITH THE TRACER CABLE.
3. REMOVAL OF FIBER OPTIC CABLE SHALL NOT BEGIN UNTIL ALL COMPONENTS OF THE TEMPORARY WIRELESS INTERCONNECT SYSTEM ARE IN PLACE AND OPERATIONAL.

**TEMPORARY SYSTEM INTERCONNECT**

- NOTES:**
1. ALL WORK SPECIFIED IN THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN SHALL BE COMPLETED ACCORDING TO IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2007, AND DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS REVISED JANUARY 1, 2007.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EXISTING TRAFFIC SIGNAL INSTALLATION AT BEVERLY RD AND IL ROUTE 72 WITH SEARS PARKWAY AND THE INTERCONNECT SYSTEM BETWEEN THE TWO INTERSECTIONS.
  3. THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT SYSTEM BETWEEN THE BEVERLY ROAD INTERSECTIONS WITH SEARS PARKWAY INTERSECTION SHALL BE WIRELESS INTERCONNECT ACCORDING TO THE TEMPORARY TRAFFIC SIGNAL SPECIFICATION OF THE DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS. THE ANTENNA SHALL BE PLACED ON THE EXISTING MAST ARM ASSEMBLY AND POLE AS INDICATED AT THE INTERSECTIONS OF SEARS PARKWAY CONNECTED TO THE EXISTING CONTROLLER AT EACH INTERSECTION.
  4. THE ANTENNA SHALL BE PLACED ON WOOD POLE CLOSEST TO THE TEMPORARY CONTROLLER AT BEVERLY RD AND IL ROUTE 72 (HIGGINS RD) INTERSECTIONS. ANTENNA RF CABLE SHALL BE INSTALLED BETWEEN THE ANTENNA AND THE CONTROLLER CABINET.
  5. ALL NECESSARY CABLES, ANTENNA, AND OTHER COMPONENTS REQUIRED FOR FULLY FUNCTIONAL TEMPORARY RADIO INTERCONNECT SYSTEM SHALL BE INCLUDED AND PAID FOR AS THE ITEM TEMPORARY TRAFFIC SIGNAL INTERCONNECT.
  6. THE ANTENNA AND ALL CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARMS SHALL BE PLUGGED. THIS SHALL BE INCLUDED IN THE PAY ITEM OF TEMPORARY TRAFFIC SIGNAL INTERCONNECT.



TEMPORARY RADIO INTERCONNECT  
OMNI-DIRECTIONAL ANTENNA  
(SEE NOTE 3)

**TEMPORARY INTERCONNECT SCHEMATIC**

FILE NAME : p:\2009\me0906-ver-phi\cadd\038-IL72-Beverly\Shs\DI60P90-sht-07TINTC01.dgn  
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DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 72 AT BEVERLY ROAD  
TEMPORARY SYSTEM INTERCONNECT AND SCHEMATIC**

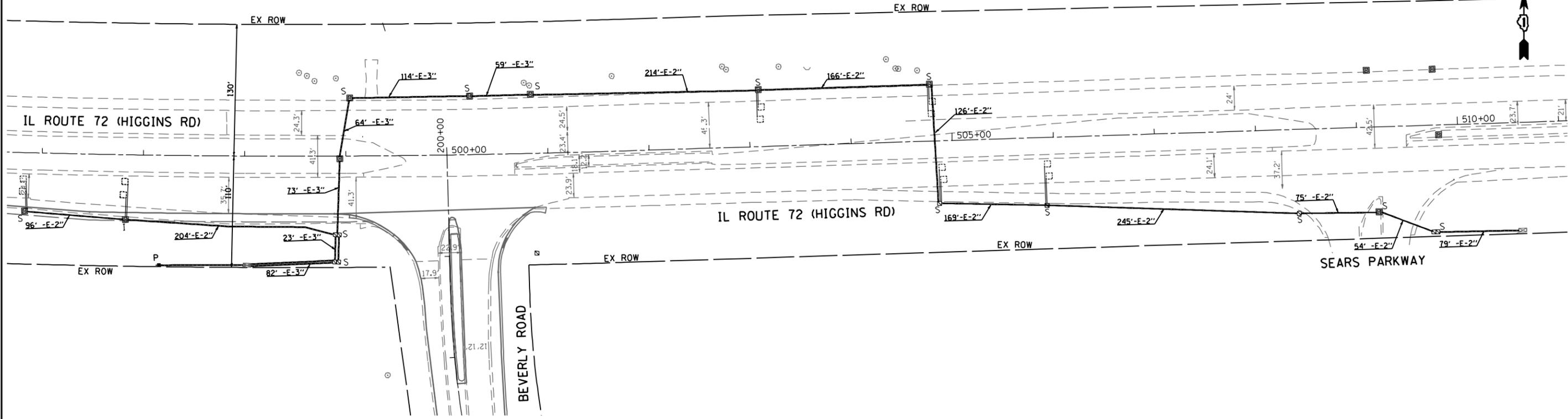
SCALE: 1"=50'    SHEET NO.    OF SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	31
CONTRACT NO. 60P90				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

TINTC-11

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



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**STATE OF ILLINOIS  
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**IL ROUTE 72 AT BEVERLY ROAD  
 TRAFFIC SIGNAL INTERCONNECT PLAN**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	32
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P90	

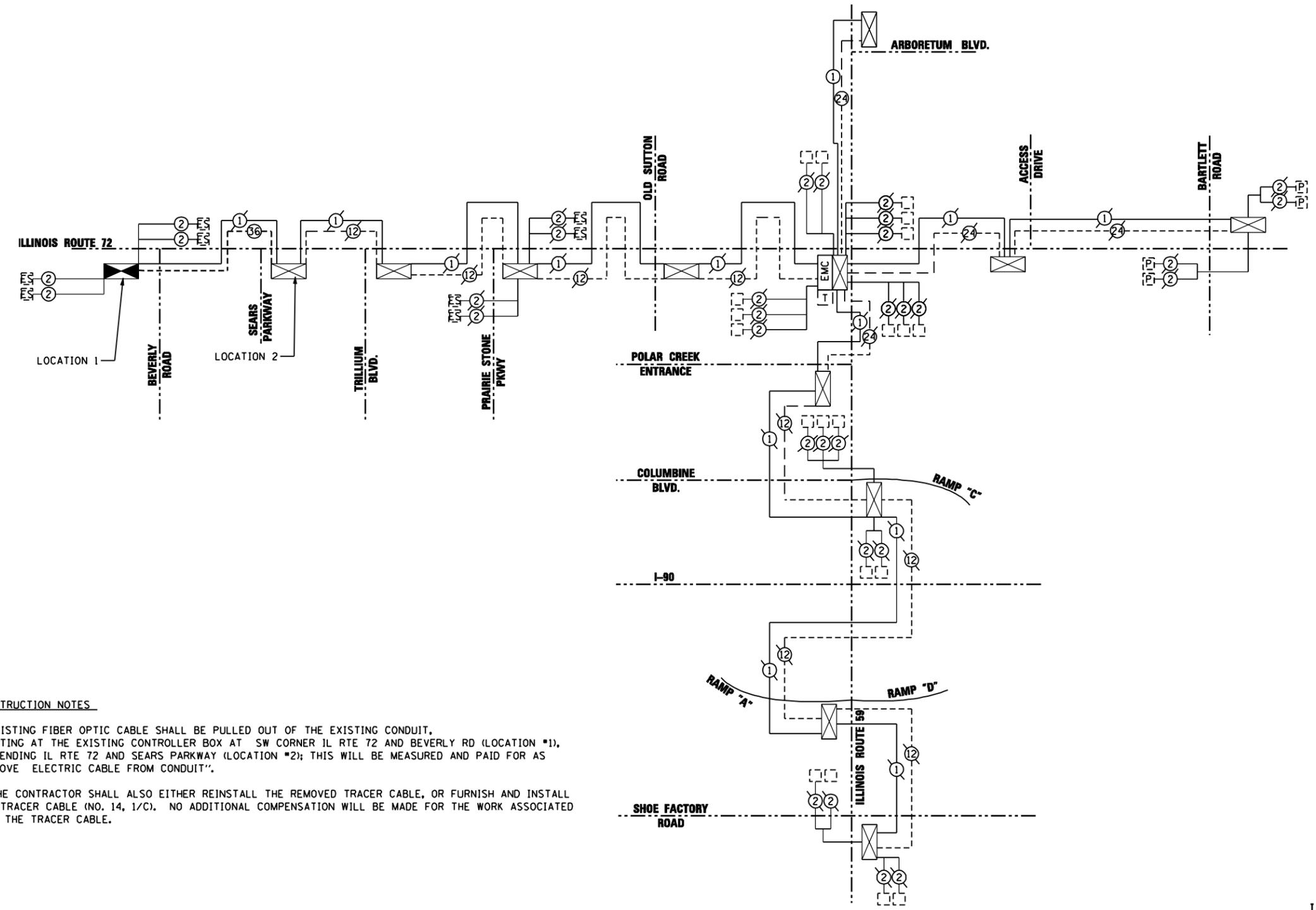
INTC-11

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**SYSTEM INTERCONNECT SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL QUANTITY
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2144
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2144
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1

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



**CONSTRUCTION NOTES**

- EXISTING FIBER OPTIC CABLE SHALL BE PULLED OUT OF THE EXISTING CONDUIT, STARTING AT THE EXISTING CONTROLLER BOX AT SW CORNER IL RTE 72 AND BEVERLY RD (LOCATION #1), AND ENDING IL RTE 72 AND SEARS PARKWAY (LOCATION #2); THIS WILL BE MEASURED AND PAID FOR AS "REMOVE ELECTRIC CABLE FROM CONDUIT".
- THE CONTRACTOR SHALL ALSO EITHER REINSTALL THE REMOVED TRACER CABLE, OR FURNISH AND INSTALL NEW TRACER CABLE (NO. 14, 1/C). NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE WORK ASSOCIATED WITH THE TRACER CABLE.

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DATE - 4/5/2012	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC**  
**IL RTE 72 AT IL RTE 59**

SCALE: NONE    SHEET NO: IC070F    SHEETS:    STA.    TO STA.

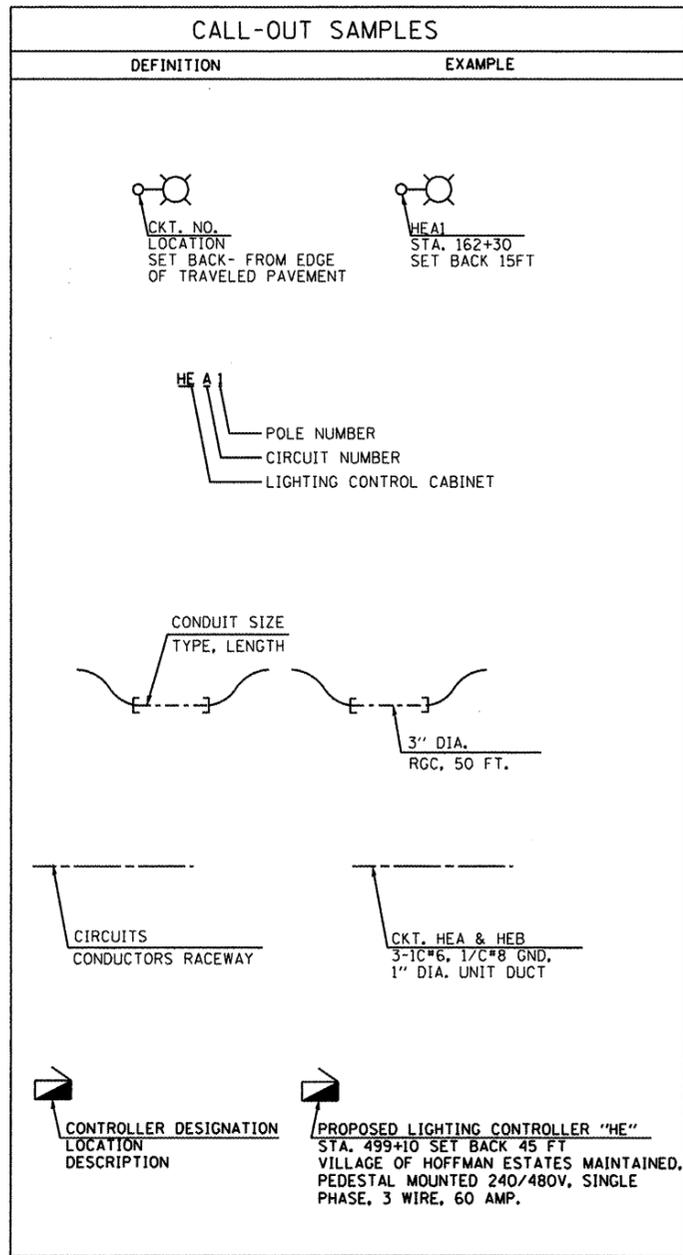
F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 33
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P90	

IC-01

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**LEGEND**

-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS  
COBRA HEAD LUMINAIRE, TYPE MC-III,  
TRANSFORMER BASE BREAKAWAY
-  EXISTING RELOCATED LIGHTING UNIT
-  EXISTING LIGHT UNIT  
TO REMAIN IN PLACE
-  UNDERGROUND CONDUITS  
SIZE AS INDICATED
-  UNIT DUCT, AS SPECIFIED IN PLANS
-  LIGHTING CONTROLLER CABINET, AS  
SPECIFIED IN PLANS
-  PROPOSED ELECTRIC SERVICE TRANSFORMER  
BY COMED ON EXISTING OR PROPOSED  
UTILITY WOOD POLE
-  ELECTRIC GROUND ROD

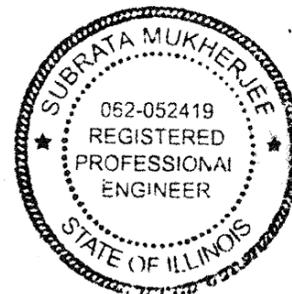


**ABBREVIATIONS**

SYMBOL	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CM	CENTIMETER
CNC	COILABLE NONMETALLIC CONDUIT
CT	CURRENT TRANSFORMER
CP	CONTROL PANEL
DA	DAVIT ARM
DC	DIRECT CURRENT
DIA	DIAMETER
DP	DISTRIBUTION PANEL
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
EM	EXISTING UNIT TO BE MODIFIED (e.g. NEW LUMINAIRE, BALLAST OR MAST ARM)
ER	EXISTING RELOCATED UNIT
ET	EXISTING TEMPORARY UNIT TO REMAIN
ETR	EXISTING TEMPORARY RELOCATED UNIT
FT	FEET OR FOOT
FND BW	FOUNDATION BARRIER WALL
FND BW OS	FOUNDATION BARRIER WALL OFFSET
FND CON	FOUNDATION CONCRETE
FND CON OS	FOUNDATION CONCRETE OFFSET
FND MET	FOUNDATION METAL
FND PW	FOUNDATION PARAPET WALL
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M	METER
MA	MAST ARM
MM	MILLIMETER
MH	MOUNTING HEIGHT
NO. #	NUMBER
P	PROPOSED
PB	PUSH BUTTON
PNL	PANEL
PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
PT	POTENTIAL TRANSFORMER
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
RGS	RIGID GALVANIZED STEEL
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
SS	STAINLESS STEEL
STA	STATION
T	TEMPORARY LIGHTING UNIT
TB	TRANSFORMER BASE
TMP	TEMPORARY
TR	TEMPORARY UNIT TO BE REMOVED, SALVAGE EQUIPMENT AS SPECIFIED
TRR	TEMPORARY UNIT TO BE REMOVED AND RELOCATED
TUR	TEMPORARY UNIT ON UTILITY POLE TO BE REMOVED
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE
XFMR	TRANSFORMER

**GENERAL NOTES:**

1. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS (LATEST EDITION).
2. BREAKAWAY DEVICE, TRANSFORMER BASE, 9", SHALL BE INSTALLED ON ALL GROUND MOUNTED POLES WITH 15" BOLT CIRCLE ON 24" DIA. FOUNDATION AS SHOWN IN THE PLANS.
3. SET BACK DISTANCES FOR LIGHT POLES ARE MEASURED FROM THE EDGE OF PAVEMENT TO THE CENTER OF POLE.
4. CONTRACTOR SHALL FIELD VERIFY UTILITY LOCATIONS AND PROPERLY MAINTAIN AND PROTECT ALL KNOWN ABOVE GROUND AND UNDERGROUND UTILITIES FROM DAMAGE OR SERVICE INTERRUPTION. CONTACT J.U.L.I.E. AT 1-800-892-0123 48 HOURS BEFORE ANY EXCAVATION WORK TO ENSURE ALL EXISTING UTILITIES ARE IDENTIFIED AND ASSISTANCE IS OBTAINED WITH WORK RELATED TO ACCURATELY LOCATING UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE REPLACED WITH NEW AT CONTRACTORS COST.



*Subrata Mukherjee*  
 SUBRATA MUKHERJEE, P.E.  
 NO. 062-052419  
 EXPIRES: 11/30/2013  
 SHEETS 34-38

4-4-2012

FILE NAME: K:\PROJECTS\Projects 2011\Illinois\Various\ILL\_Rte 72 at Beverly Rd\IDB099-Lighting Ldgn  
 SCALE: AS SHOWN  
 DATE: 4/4/2012



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
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DATE - 4/4/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**LIGHTING LEGEND AND  
 GENERAL NOTES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	34
CONTRACT NO. 60P90				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

SCHEDULE OF QUANTITIES

DESIGNATION	UNIT	TOTAL QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	222
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	385
UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	2700
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	12
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	12
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	108
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	12
REMOVAL OF POLE FOUNDATION	EACH	3
RELOCATE EXISTING LIGHTING UNIT	EACH	3
* MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4
* LIGHT POLE FOUNDATION, SPECIAL	FOOT	27
* LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	12

\* DESIGNATES SPECIAL PROVISIONS

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 USER NAME : USERNAME



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DATE - 4/30/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

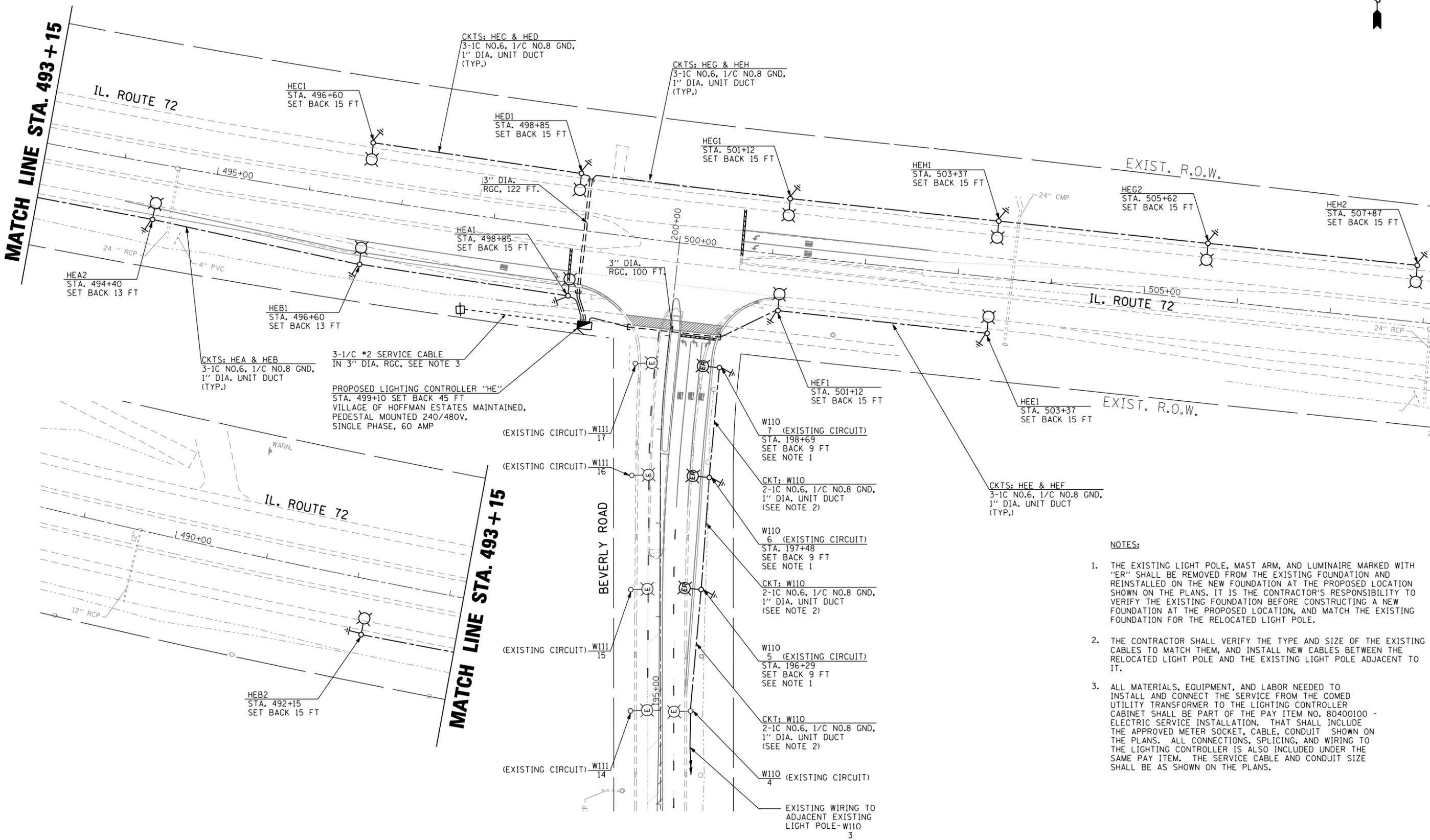
**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**SCHEDULE OF QUANTITIES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	35
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P90	

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CKTS: HEA & HEB  
3-1C NO.6, 1/C NO.8 GND,  
1" DIA. UNIT DUCT  
(TYP.)

3-1/2" SERVICE CABLE  
IN 3" DIA. RGC, SEE NOTE 3

PROPOSED LIGHTING CONTROLLER "HE"  
STA. 499+10 SET BACK 45 FT  
VILLAGE OF HOFFMAN ESTATES MAINTAINED,  
PEDESTAL MOUNTED 240/480V,  
SINGLE PHASE, 60 AMP

- NOTES:**
1. THE EXISTING LIGHT POLE, MAST ARM, AND LUMINAIRE MARKED WITH "ER" SHALL BE REMOVED FROM THE EXISTING FOUNDATION AND REINSTALLED ON THE NEW FOUNDATION AT THE PROPOSED LOCATION SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTING FOUNDATION BEFORE CONSTRUCTING A NEW FOUNDATION AT THE PROPOSED LOCATION, AND MATCH THE EXISTING FOUNDATION FOR THE RELOCATED LIGHT POLE.
  2. THE CONTRACTOR SHALL VERIFY THE TYPE AND SIZE OF THE EXISTING CABLES TO MATCH THEM, AND INSTALL NEW CABLES BETWEEN THE RELOCATED LIGHT POLE AND THE EXISTING LIGHT POLE ADJACENT TO IT.
  3. ALL MATERIALS, EQUIPMENT, AND LABOR NEEDED TO INSTALL AND CONNECT THE SERVICE FROM THE COMED UTILITY TRANSFORMER TO THE LIGHTING CONTROLLER CABINET SHALL BE PART OF THE PAY ITEM NO. 80400100 - ELECTRIC SERVICE INSTALLATION. THAT SHALL INCLUDE THE APPROVED METER SOCKET, CABLE, CONDUIT SHOWN ON THE PLANS. ALL CONNECTIONS, SPLICING, AND WIRING TO THE LIGHTING CONTROLLER IS ALSO INCLUDED UNDER THE SAME PAY ITEM. THE SERVICE CABLE AND CONDUIT SIZE SHALL BE AS SHOWN ON THE PLANS.

FILE NAME : K:\PROJECTS\Projects 2011\Millenia\Various\ILL Rte 72 at Beverly Rd\160P90-Lighting 3.dgn  
 USER : JG  
 USERNAME : JG


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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL 72 - HIGGINS RD**  
**AT BEVERLY RD AND AT ROCK ROAD DR**

**PROPOSED LIGHTING PLAN**

SCALE: 1"=50'    SHEET NO.    OF    SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	36
CONTRACT NO. 60P90				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

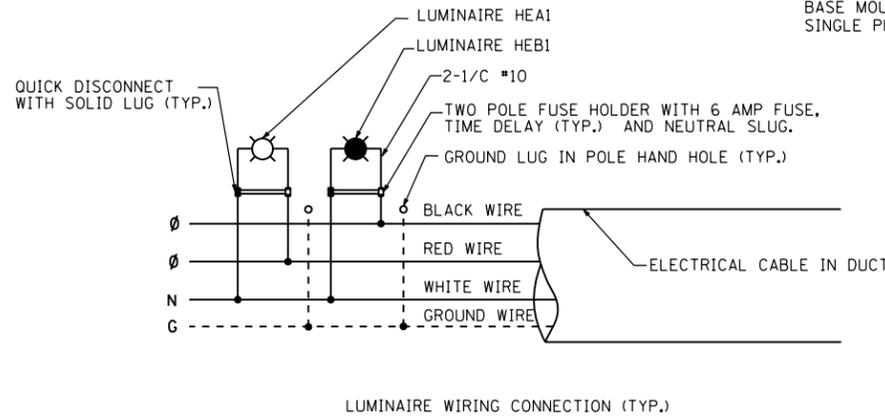
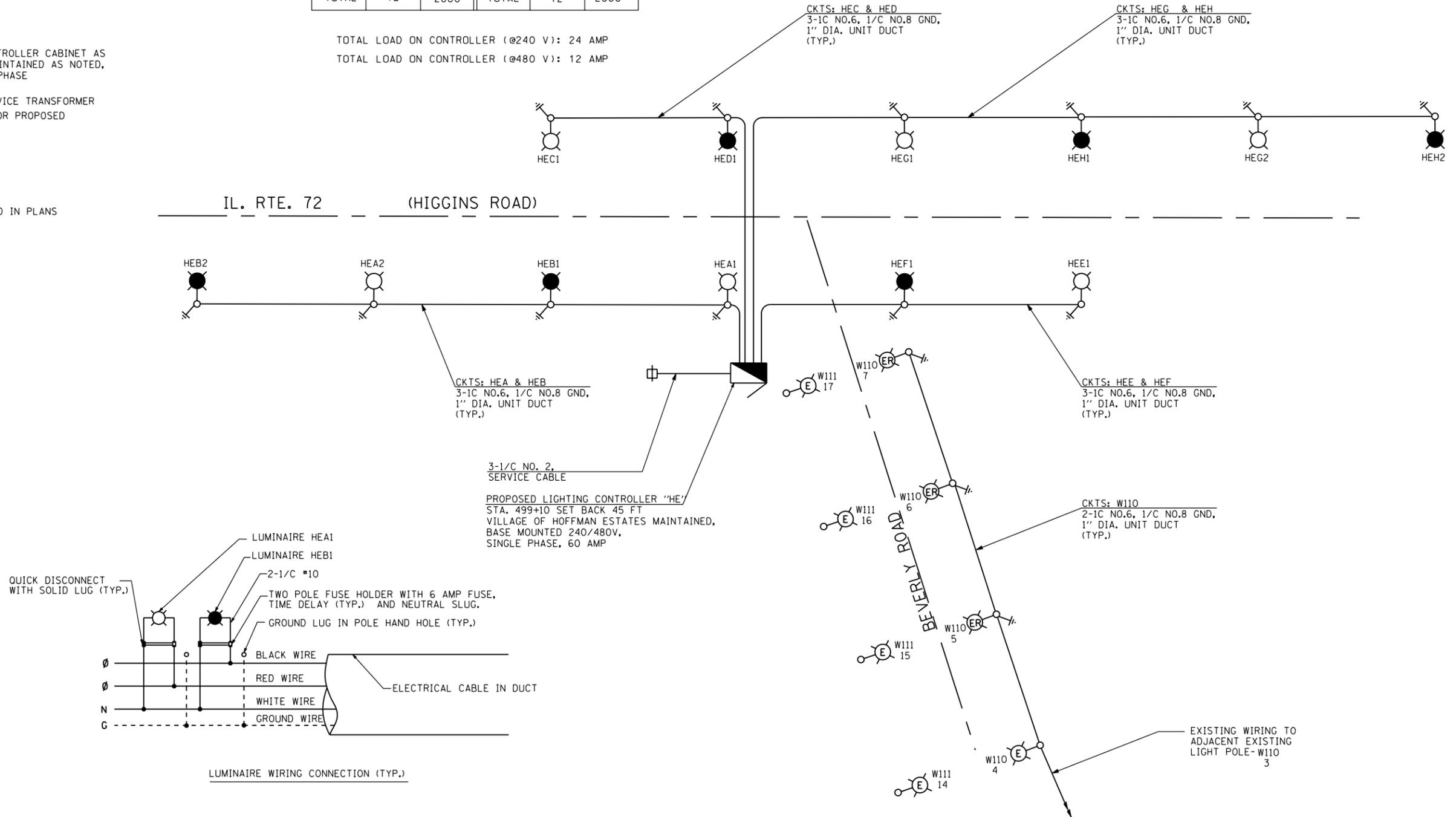
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LEGEND

-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS  
COBRA HEAD LUMINAIRE, TYPE MC-III,  
TRANSFORMER BASE BREAKAWAY  
(RED PHASE)
-  PROPOSED LIGHTING UNIT  
47.5' M.H., 15' M.A., 400W, 240V HPS  
COBRA HEAD LUMINAIRE, TYPE MC-III,  
TRANSFORMER BASE BREAKAWAY  
(BLACK PHASE)
-  EXISTING RELOCATED LIGHTING UNIT
-  EXISTING LIGHTING UNIT  
TO REMAIN IN PLACE
-  PROPOSED LIGHTING CONTROLLER CABINET AS  
NOTED, SINGLE DOOR, MAINTAINED AS NOTED,  
60A, 240/480V, SINGLE PHASE
-  PROPOSED ELECTRIC SERVICE TRANSFORMER  
BY COMED ON EXISTING OR PROPOSED  
UTILITY WOOD POLE
-  ELECTRIC GROUND ROD
-  UNIT DUCT, AS SPECIFIED IN PLANS

LOAD TABLE PROPOSED LIGHTING CONTROLLER "HE" (@ 240 VOLTS)					
CIRCUIT	RED PHASE		CIRCUIT	BLACK PHASE	
	AMPS	WATTS		AMPS	WATTS
A	4	960	B	4	960
C	2	480	D	2	480
E	2	480	F	2	480
G	4	960	H	4	960
<b>TOTAL</b>	<b>12</b>	<b>2880</b>	<b>TOTAL</b>	<b>12</b>	<b>2880</b>

TOTAL LOAD ON CONTROLLER (@240 V): 24 AMP  
TOTAL LOAD ON CONTROLLER (@480 V): 12 AMP



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**IL 72 - HIGGINS RD  
AT BEVERLY RD AND AT ROCK ROAD DR**

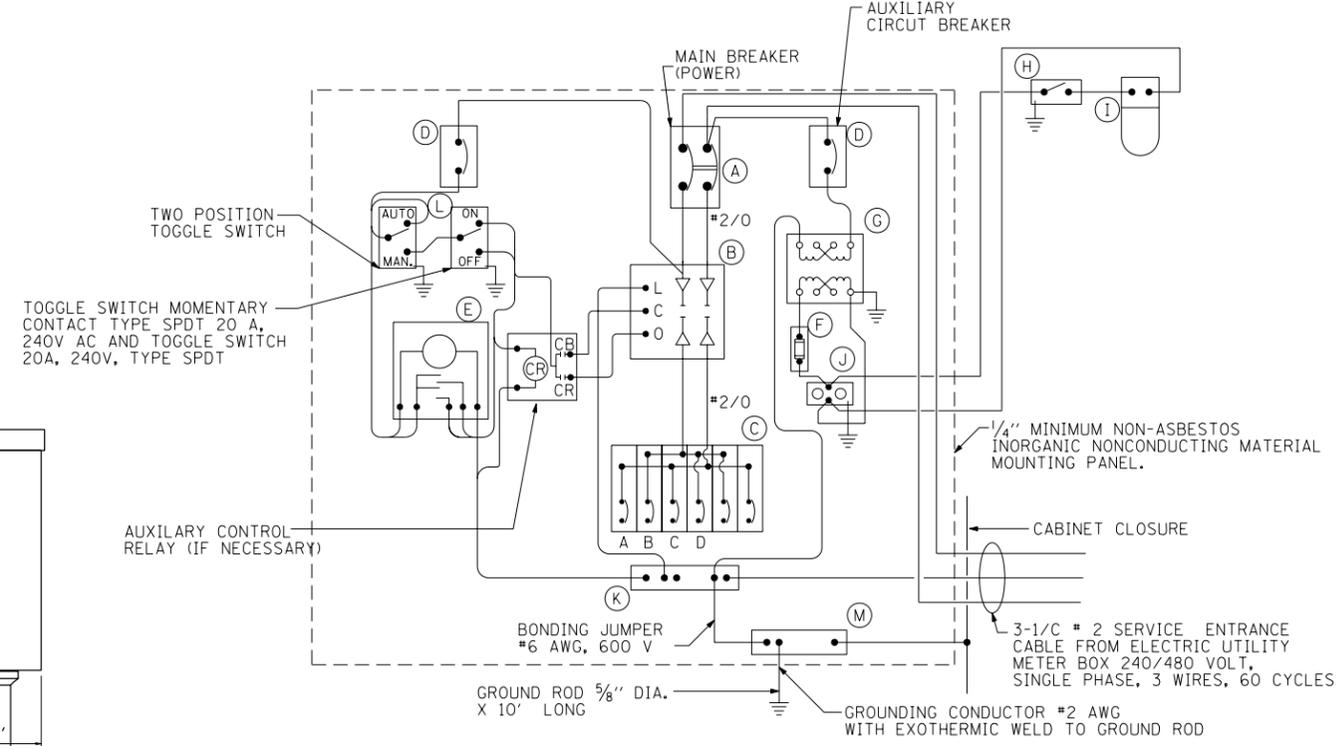
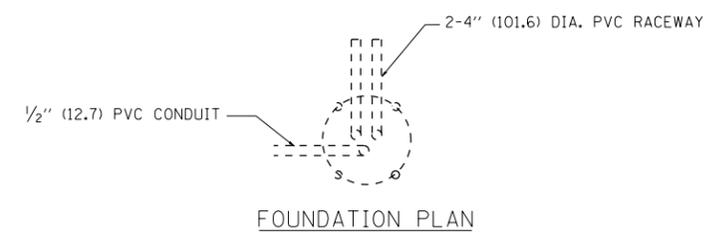
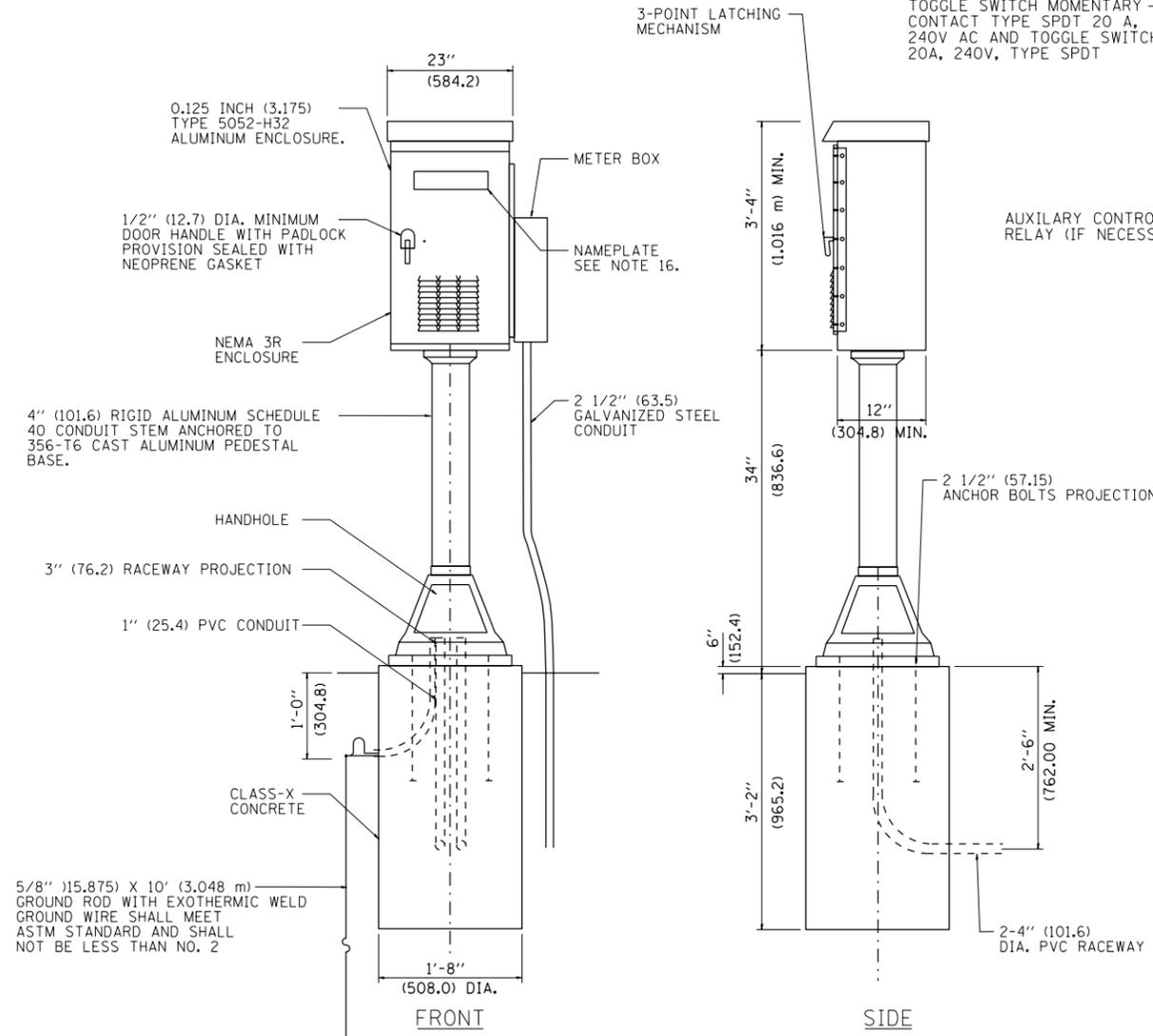
**PROPOSED SINGLE LINE DIAGRAM**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	37
CONTRACT NO. 60P90				
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

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PANEL WIRING DIAGRAM

PANEL EQUIPMENT

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 60 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 60 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	6	CIRCUIT BREAKERS, 1 POLE, 100 AMP. FRAME, 30 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT - CIRCUIT BREAKER, 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60Hz.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V. DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" X 1" X 12" LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" X 4" BOX.
M	1	COPPER GROUND BUS 1/4" X 1" X 12" LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS

**NOTES:**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- UNLESS OTHERWISE INDICATED, THE CABINET SHALL BE MOUNTED ATOP A 4-INCH (101.6 mm) RIGID ALUMINUM SCHEDULE 40 CONDUIT STEM ANCHORED TO A CAST ALUMINUM PEDESTAL BASE.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL. LEVEL THE AREA AND ON TOP PLACE LENGTH WISE PARALLEL TO CONTROL CABINET. A CONCRETE PAD 36" (914.4 mm) X 60" (1828.8 mm) X 4" (101 mm) MINIMUM SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM THE SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP AND BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET NEAREST TO THE SERVICE POLE.
- CONTRACTOR TO COORDINATE WITH VILLAGE AUTHORITIES AND PRIME /PAINT LIGHTING CONTROLLER PER VILLAGE REQUIREMENTS
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:  
R= RED                      BL= BLUE                      W= WHITE  
B= BLACK                      Y= YELLOW                      G= GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 12" (304.8 mm) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "VILLAGE OF HOFFMAN ESTATES LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.

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**IL 72 - HIGGINS RD  
 AT BEVERLY RD AND AT ROCK ROAD DR**

**LIGHTING CONTROLLER  
 PEDESTAL MOUNT**

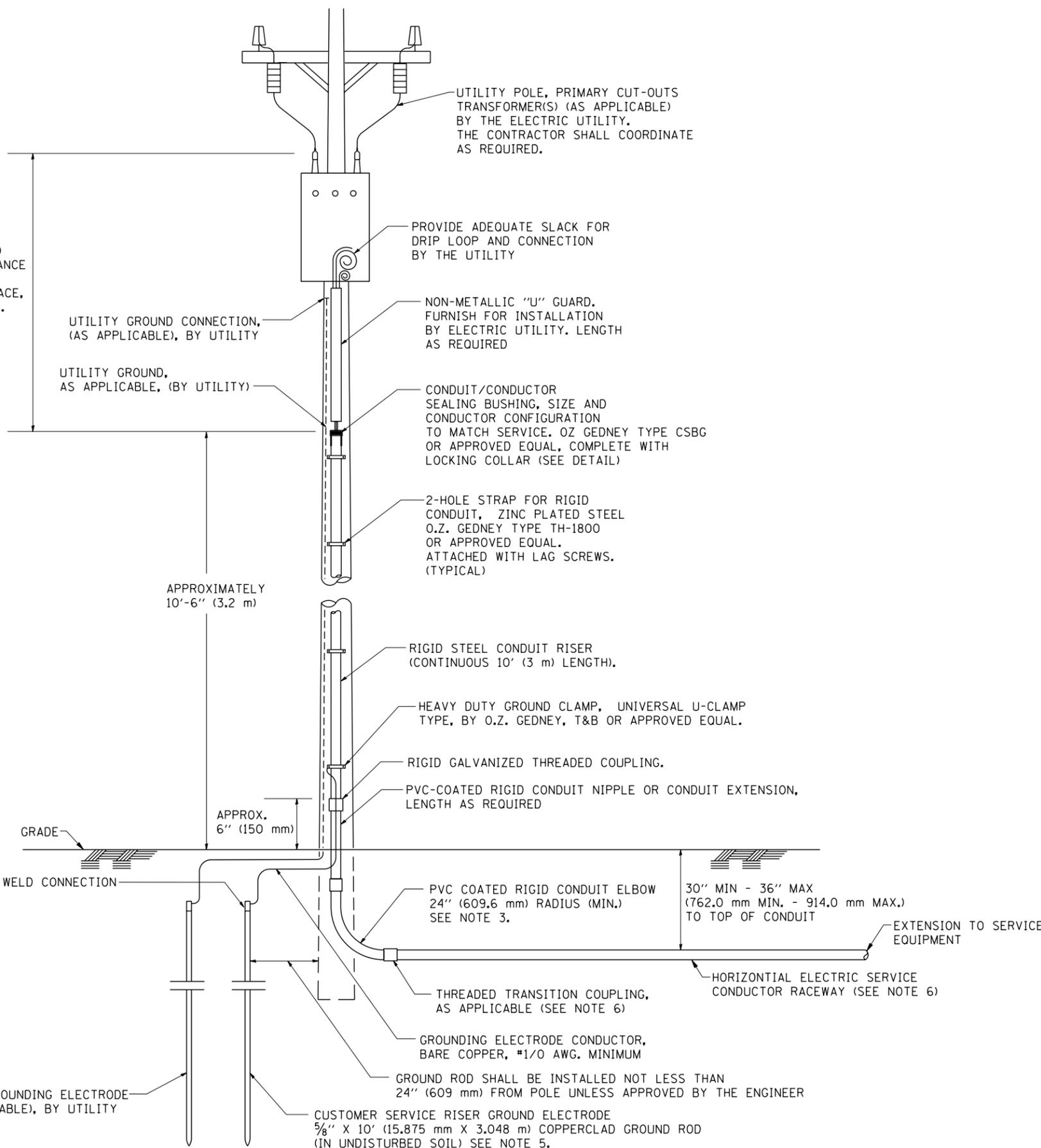
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	38
CONTRACT NO. 60P90				

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

NONE

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ASCERTAIN AND ASSURE CLEARANCE FROM UTILITY SECONDARY SPACE, AS APPLICABLE.

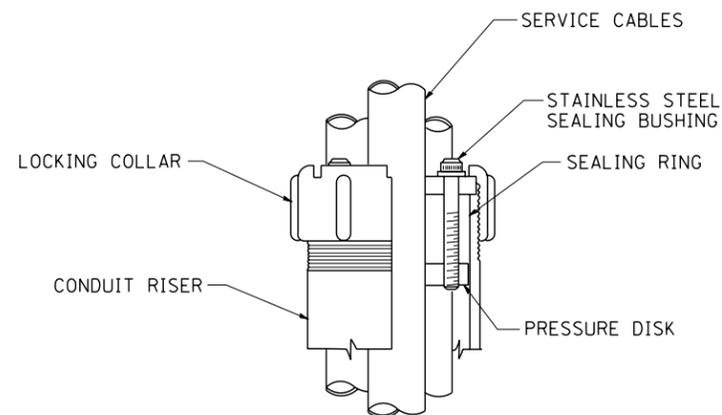


**APPLICATION**

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

**NOTES**

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

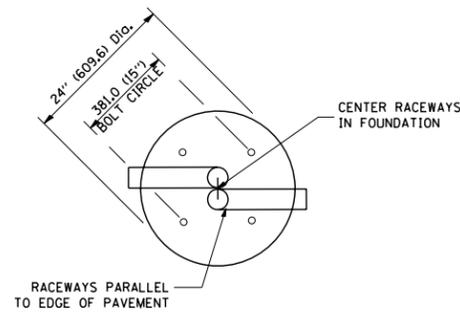


**SEALING BUSHING DETAIL**

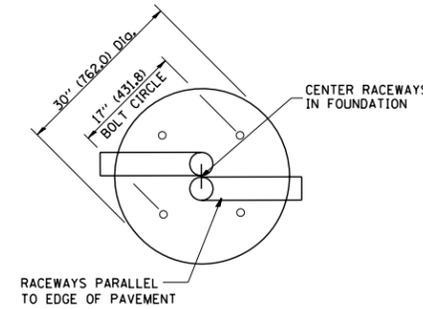
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PLOT SCALE = 50.0000' / IN.	CHECKED - MEA	REVISIED -	REVISIED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-220</b>		CONTRACT NO. 60P90
PLOT DATE = 1/4/2008	DATE -	REVISIED -	REVISIED -		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT						

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

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O <sub>u</sub> = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY O <sub>u</sub> = 0.75 TON/SO.FT	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY O <sub>u</sub> = 1.50 TON/SO. 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)



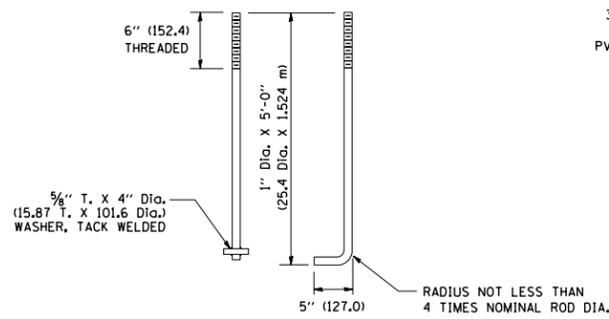
**TOP VIEW**



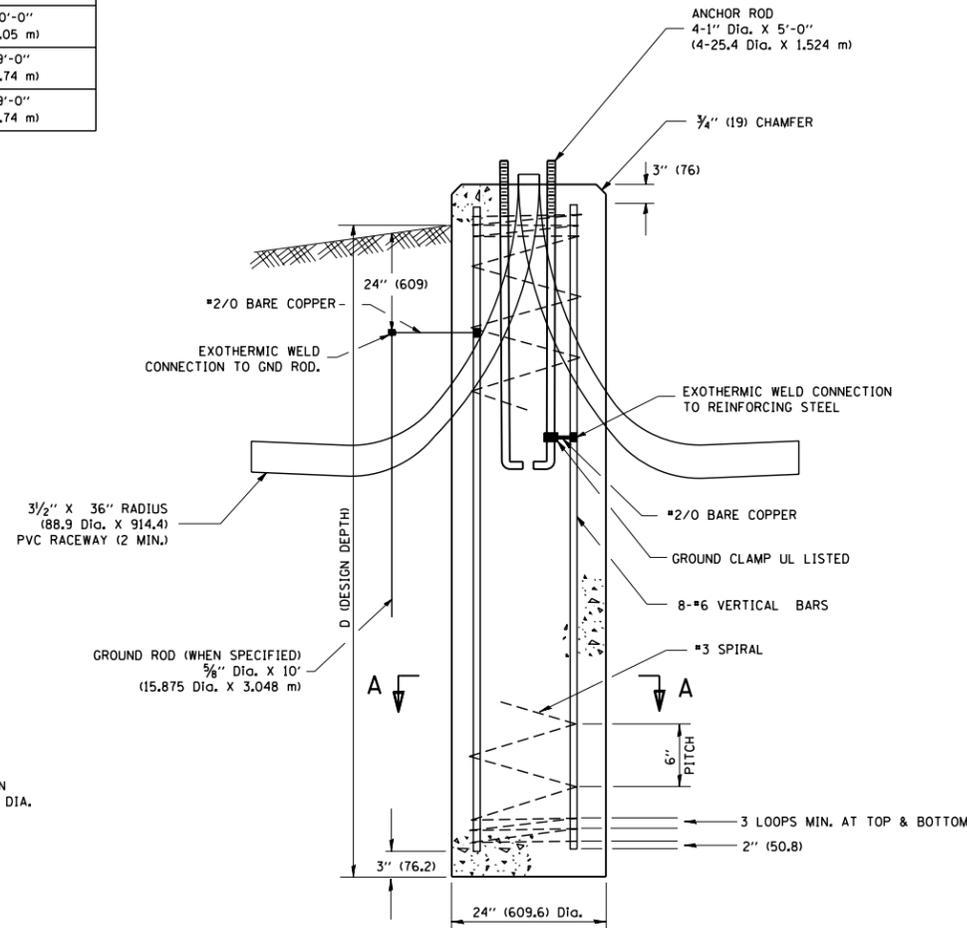
**TOP VIEW**

**NOTES**

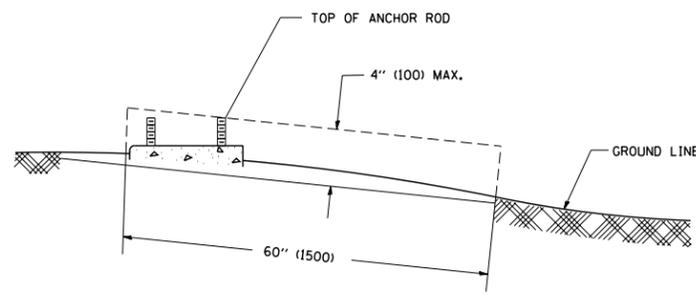
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 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. (20 mm).
- THE CONCRETE SHALL BE CLASS S1. 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 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 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 (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 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.



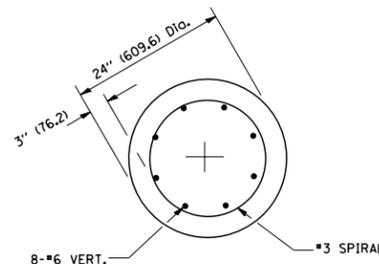
**ANCHOR ROD DETAIL**



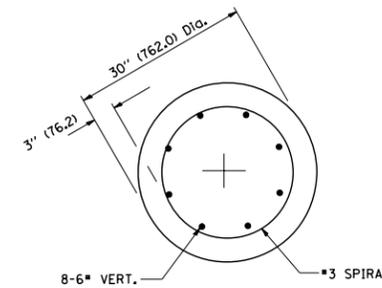
**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**



**SECTION A-A**

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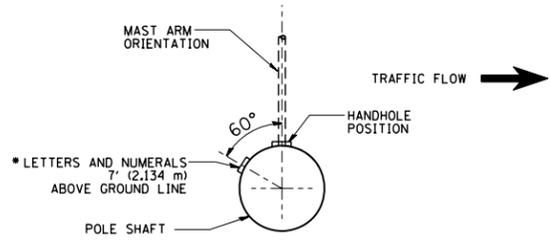
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 DATE -

REVISED - 04-22-02  
 REVISED -  
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 REVISED -

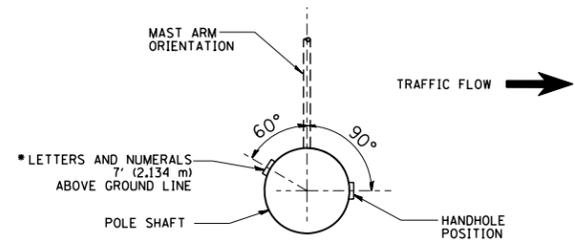
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE FOUNDATION**  
**40' (12.192 m) TO 47' 12" (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE**  
 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

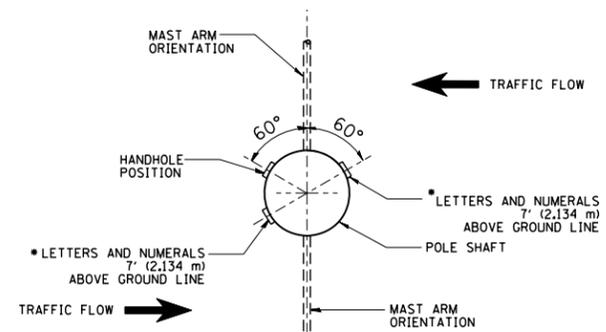
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BE-301			CONTRACT NO. 60P90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



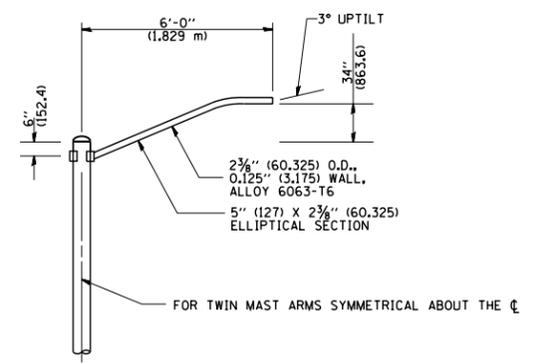
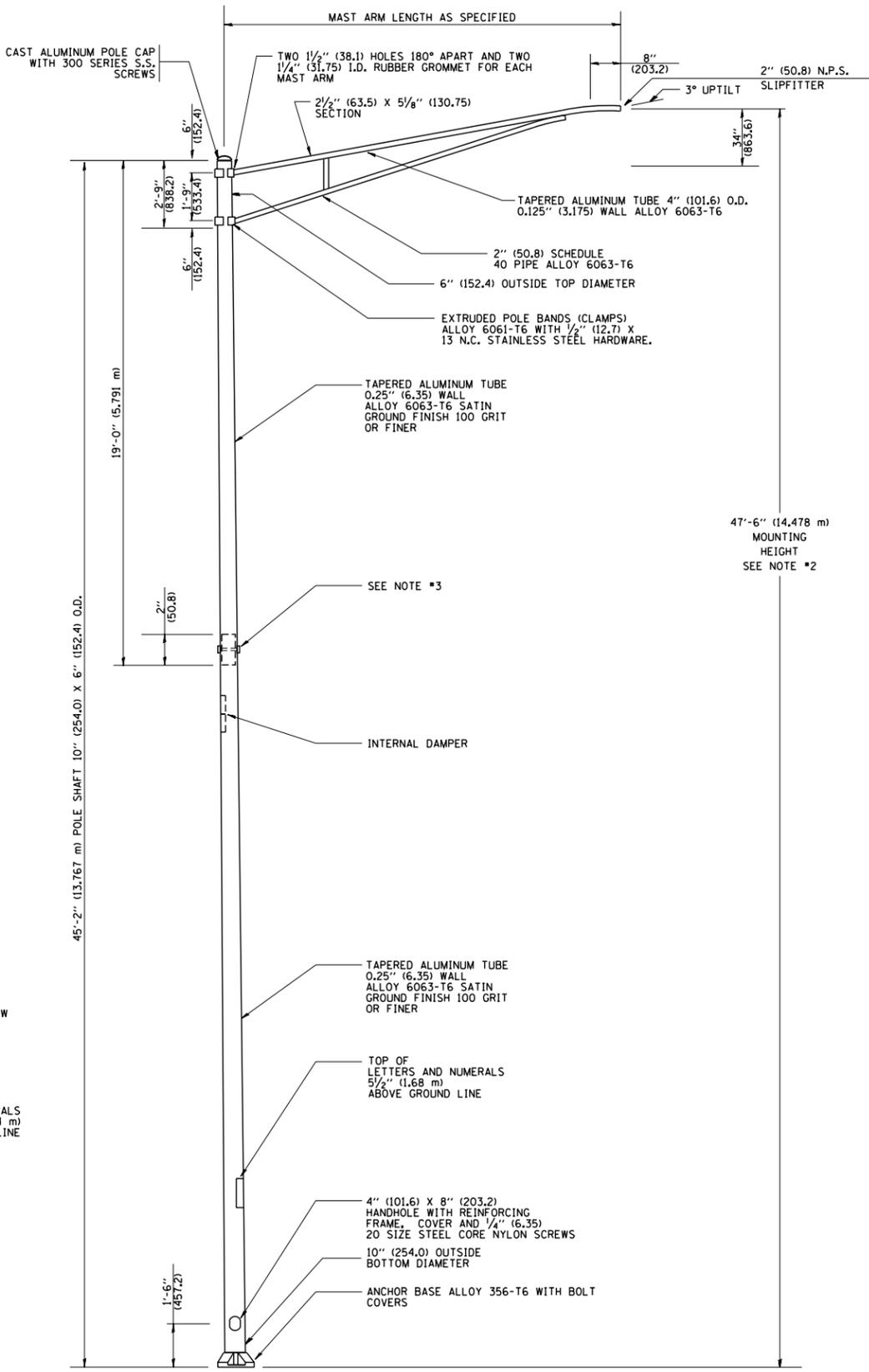
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES

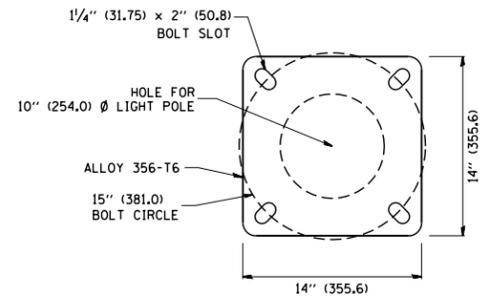


POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

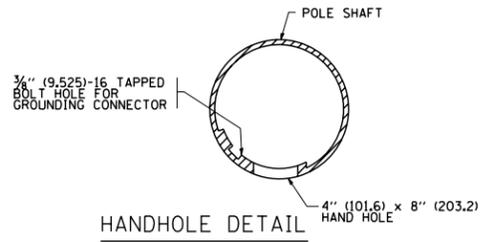


6' (1.8 m) SINGLE MEMBER MAST ARM (N.T.S.)

- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
  2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
  3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
  4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
  5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
  6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
  7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
  8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL  
15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL (N.T.S.)

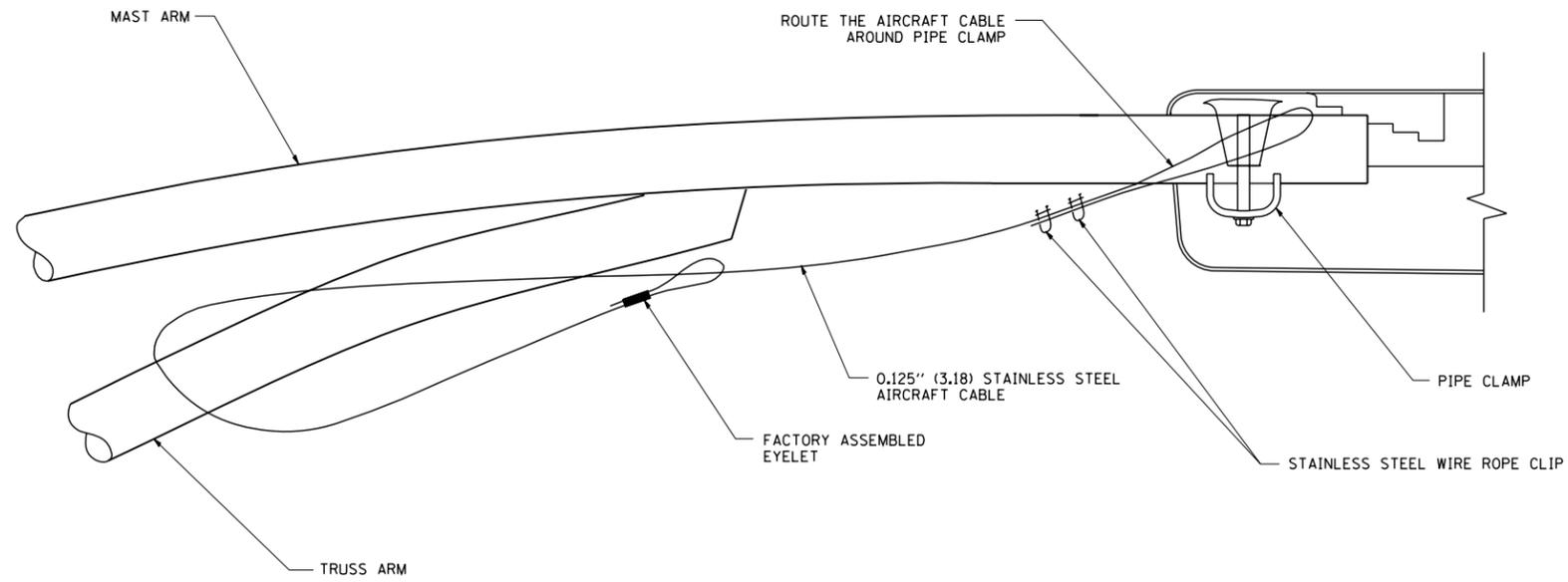
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W:\diststd\22x34\be400.dgn		DRAWN -	REVISED - R. TOMSONS 09-03-03
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

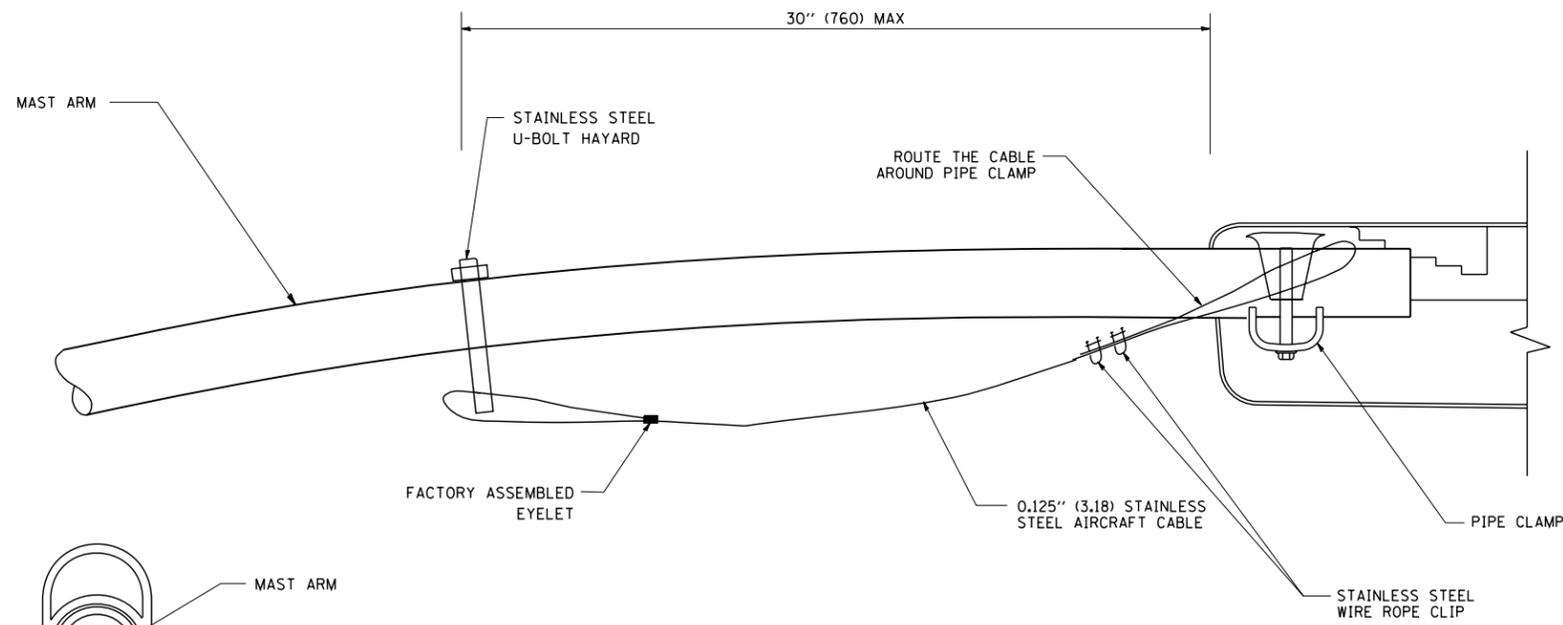
ALUMINUM LIGHT POLE  
47'-6" (14.478 m) MOUNTING HEIGHT

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

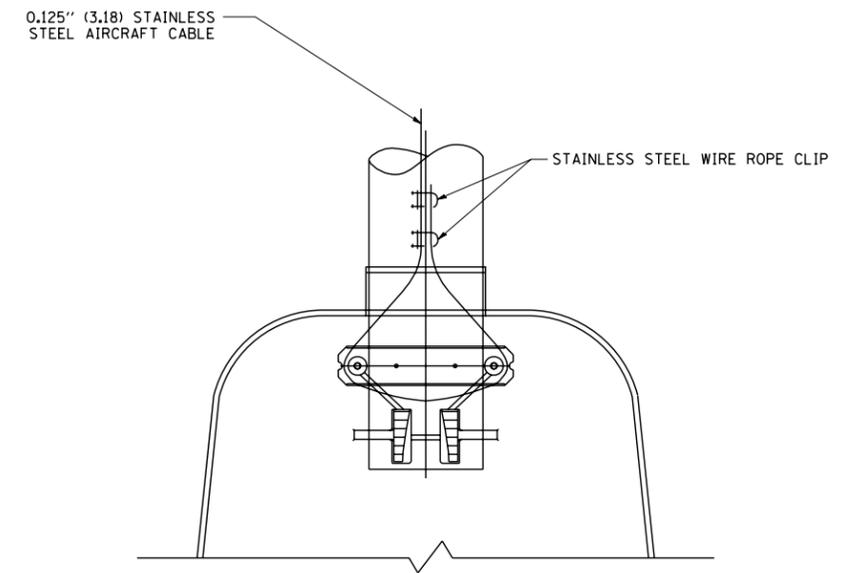
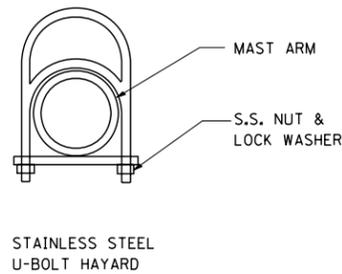
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	41
BE-400		CONTRACT NO.	60P90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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

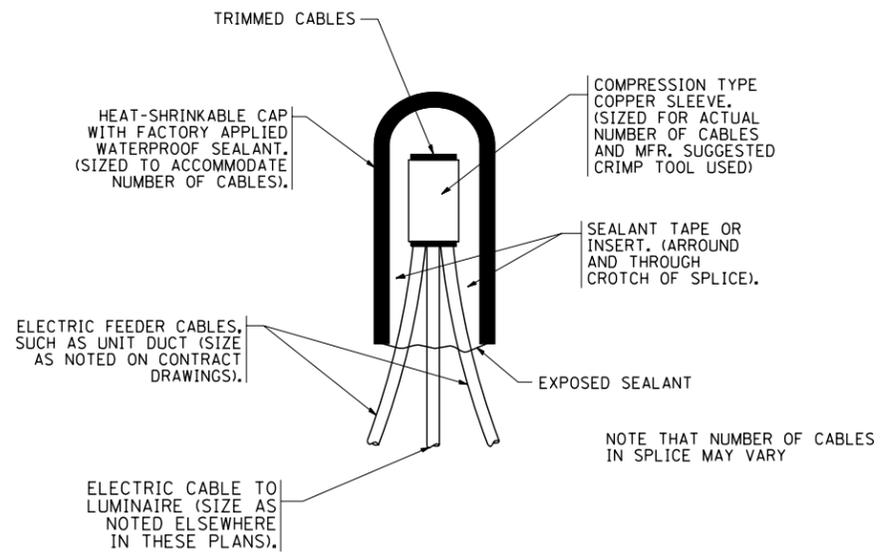


BOTTOM VIEW  
N.T.S.

**NOTES:**

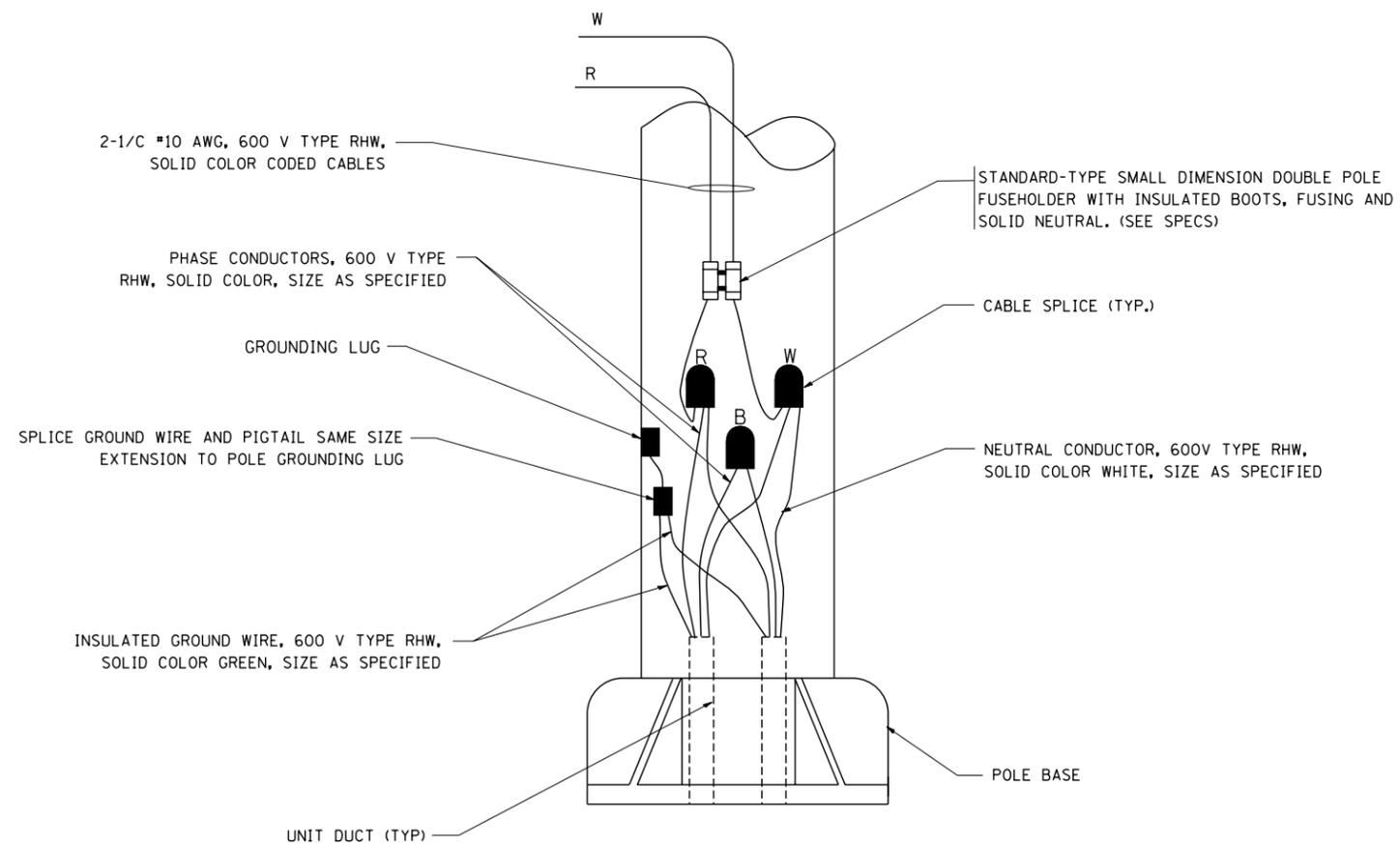
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700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

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	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED -					341	211-071-N	COOK/KANE	56	42
PLOT DATE = 1/4/2008	DATE -	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			
									CONTRACT NO. 60P90			



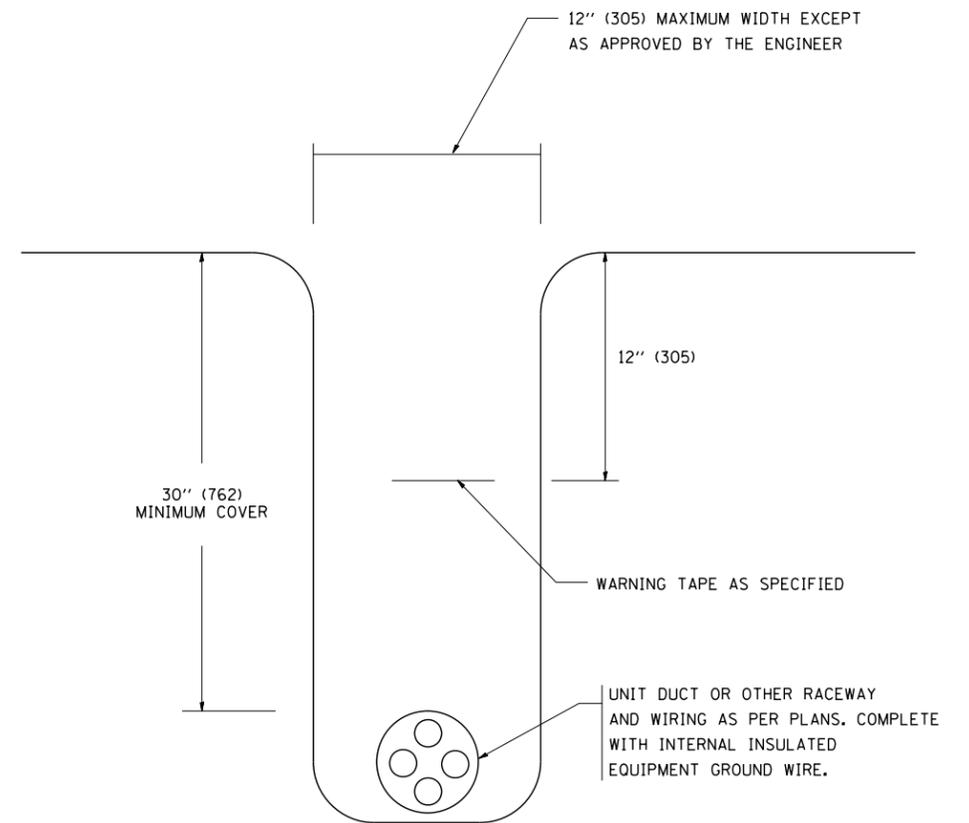
**TYPICAL SPLICE DETAIL**

N.T.S.



**POLE WIRING DETAIL**

N.T.S.



**TYPICAL WIRING IN TRENCH DETAIL**

N.T.S.

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		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) \*\*

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

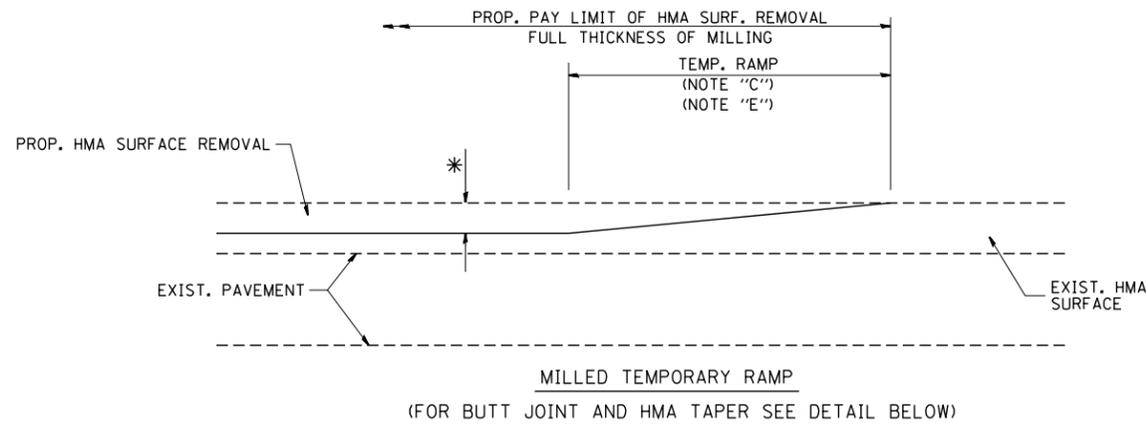
⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

BASIS OF PAYMENT:  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

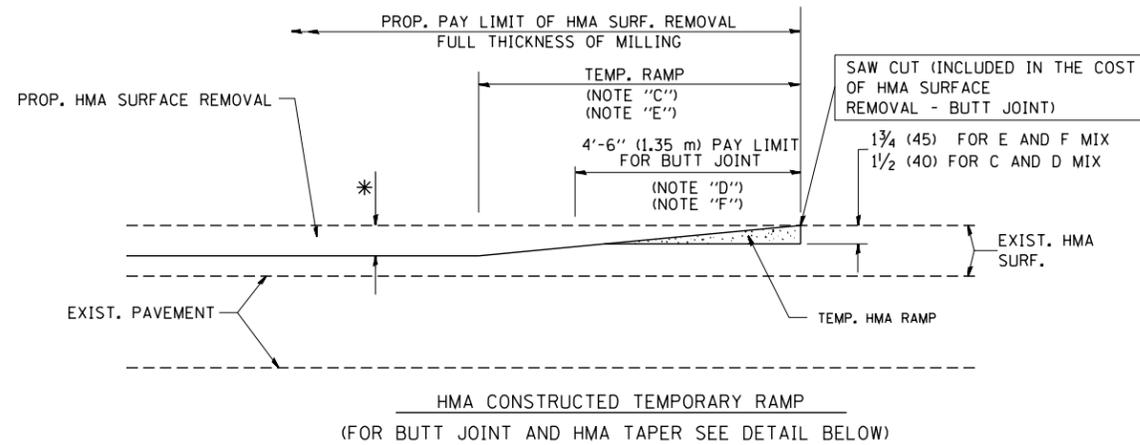
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\dot\drivakosgn\0108315\bd24.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	341			211-071-N	COOK/KANE	56	44	
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	<b>BD600-06 (BD-24)</b>			CONTRACT NO. 60P90				
PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

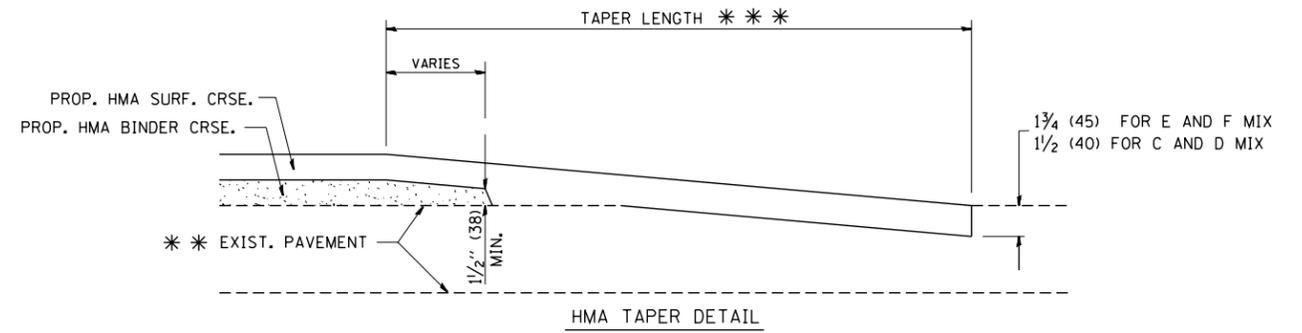
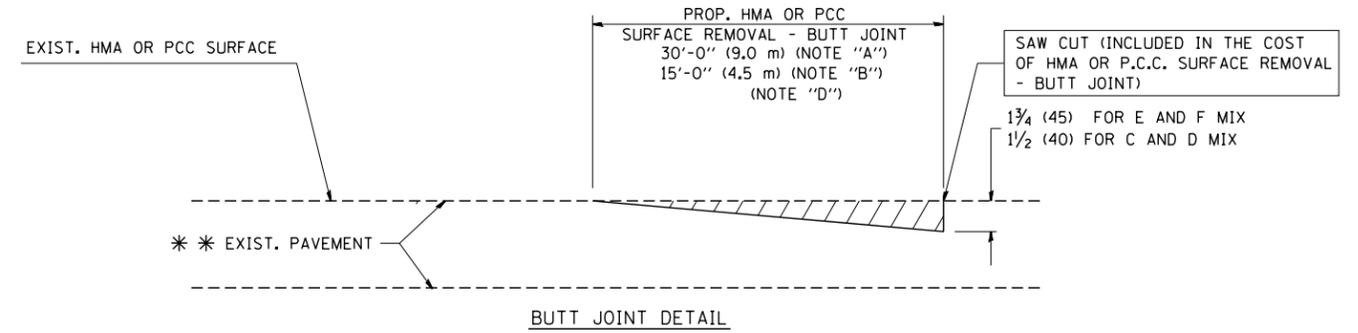


**OPTION 1**



**OPTION 2**

**TYPICAL TEMPORARY RAMP**



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

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

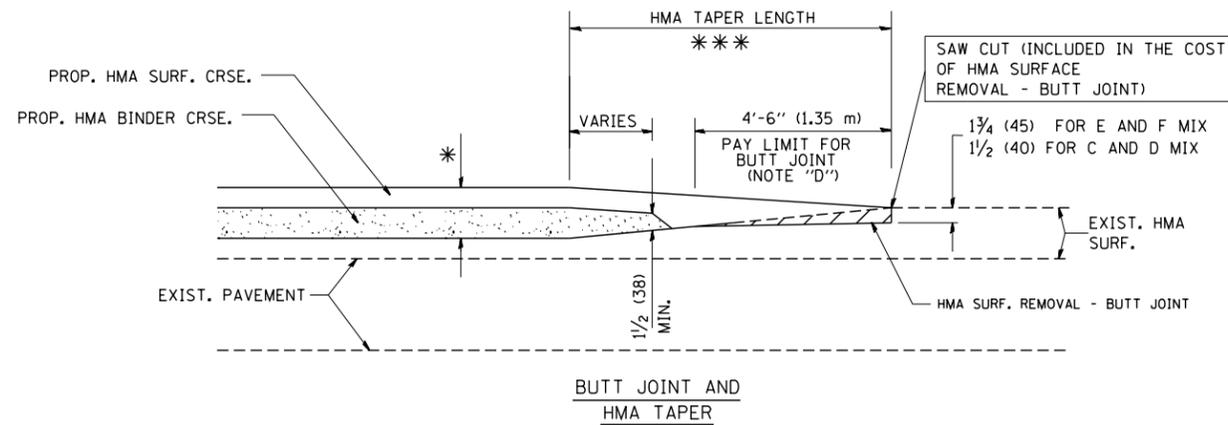
**NOTES**

- 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**

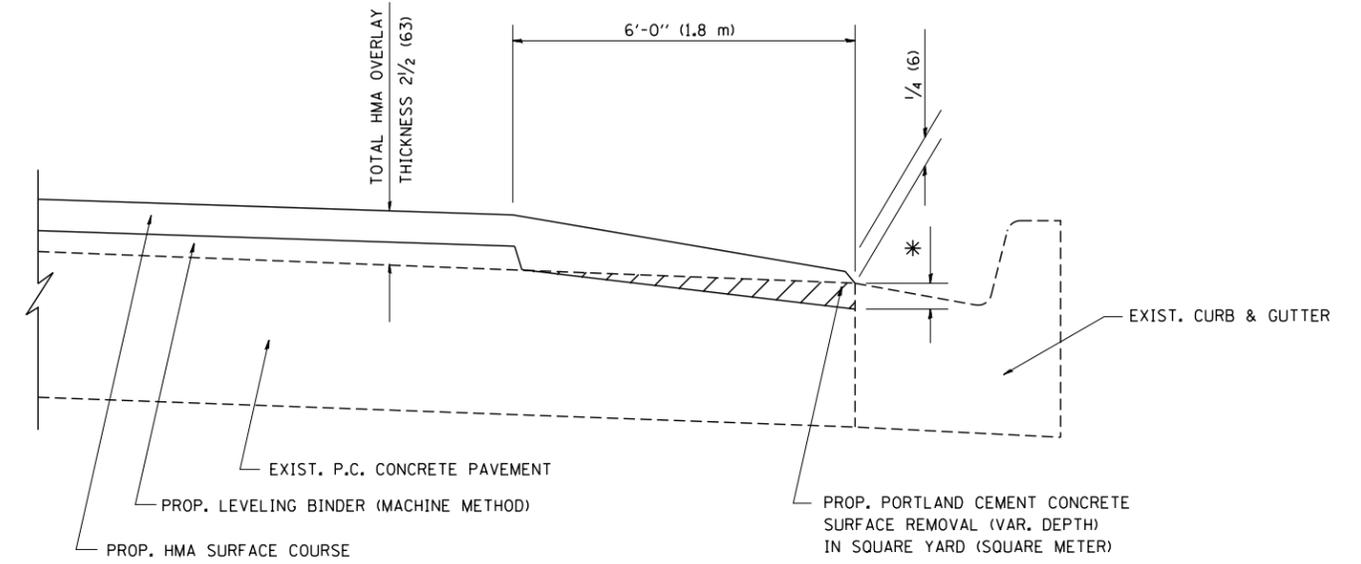
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	45
BD400-05 BD32			CONTRACT NO. 60P90	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



HMA TAPER AT  
EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER		* MILLING AT GUTTER FLAG
MIX	THICKNESS	THICKNESS		
C OR D	1 1/2 (38)	1 (25)	1 1/4 (33)	
F	1 3/4 (44)	3/4 (19)	1 1/2 (38)	

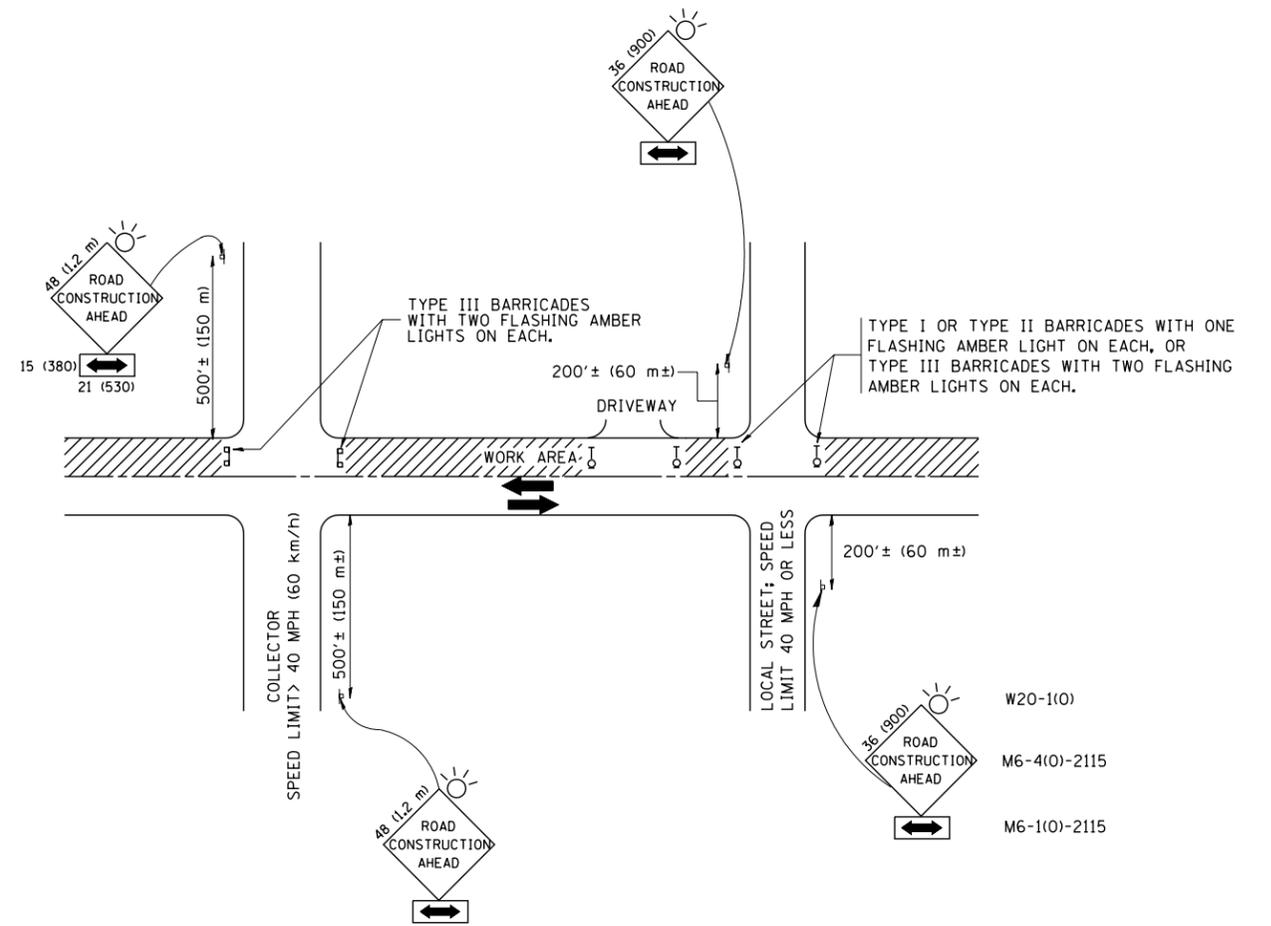
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	PLOT DATE = 1/4/2008	DATE - 09-10-94	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>HMA TAPER AT EDGE OF P.C.C PAVEMENT</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	46
<b>BD400-06 (BD33)</b>		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
    - ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - 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.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - 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.
    - 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.
  - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

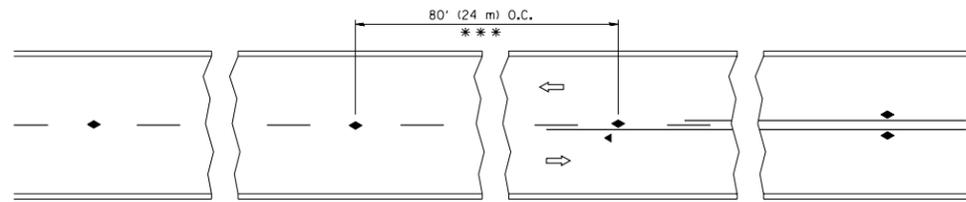
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

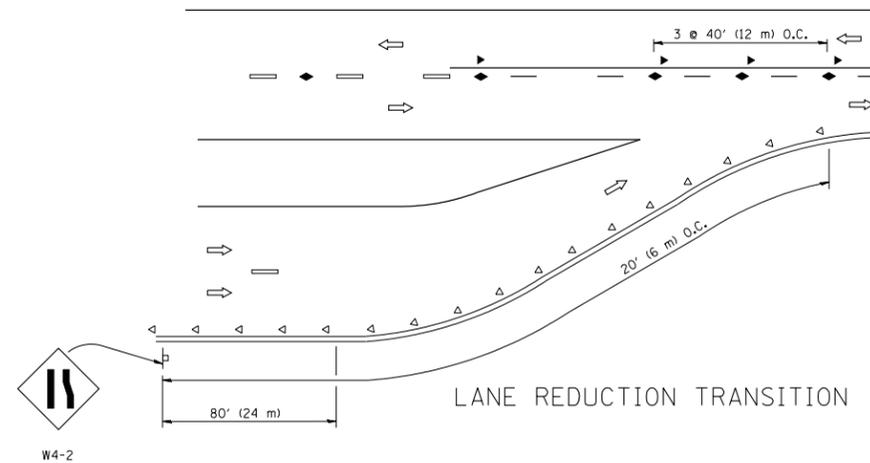
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	47
<b>TC-10</b>		<b>CONTRACT NO. 60P90</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

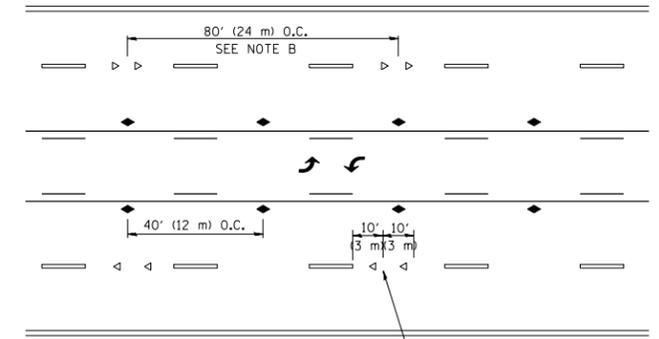


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

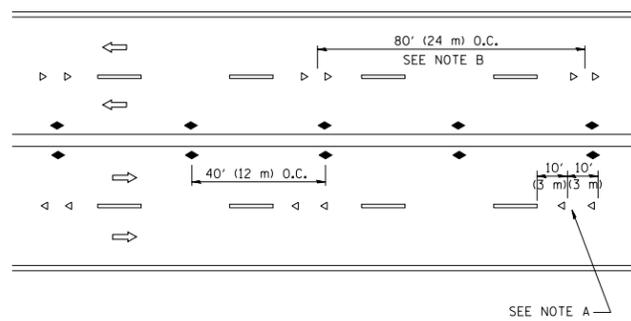
TWO-LANE/TWO-WAY



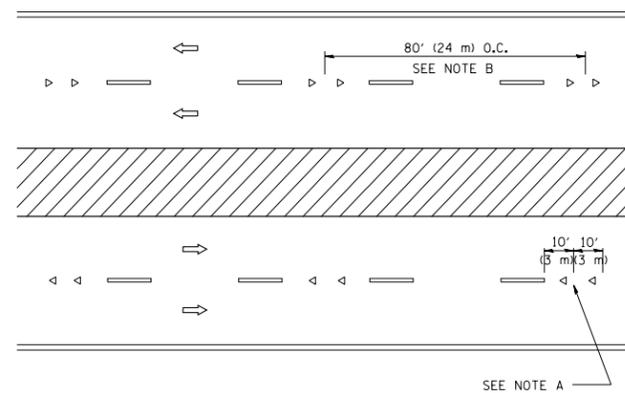
LANE REDUCTION TRANSITION



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 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

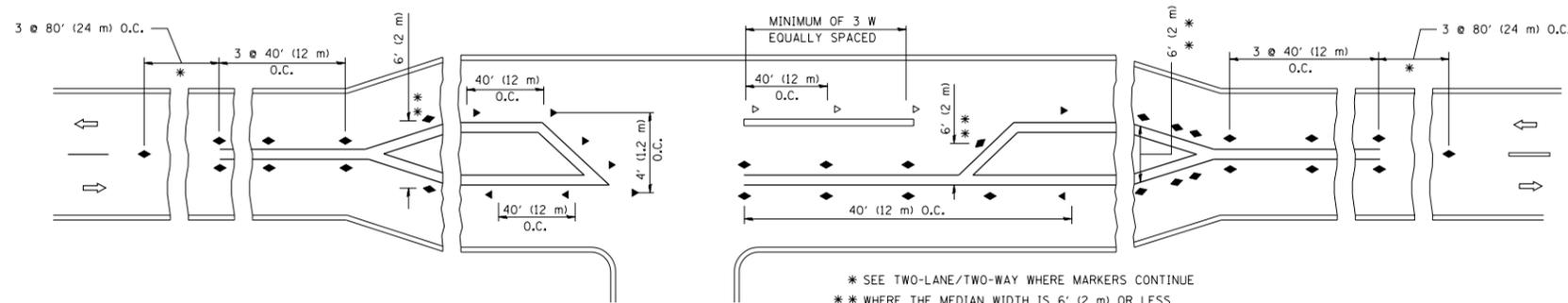
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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 (20 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 SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

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

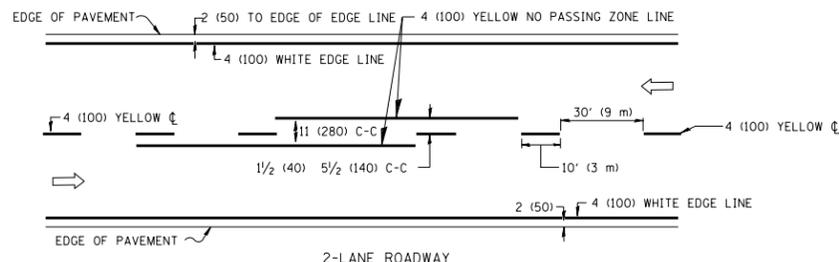
FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
cr:\pw\work\p\dot\drivakosgn\d0108315\td\l.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 9/9/2009	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

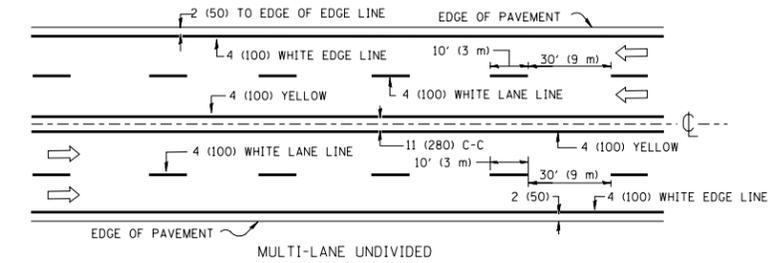
TYPICAL APPLICATIONS  
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

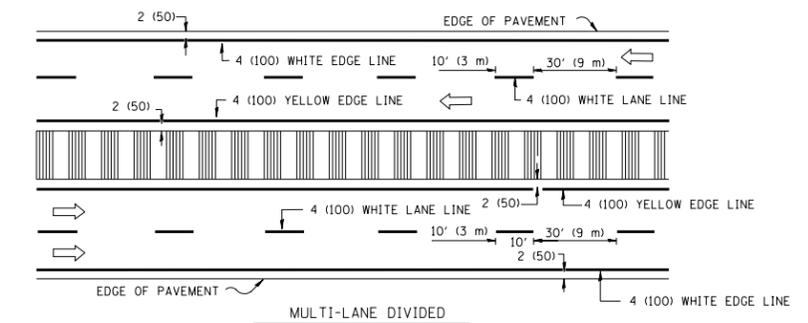
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	48
TC-11		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



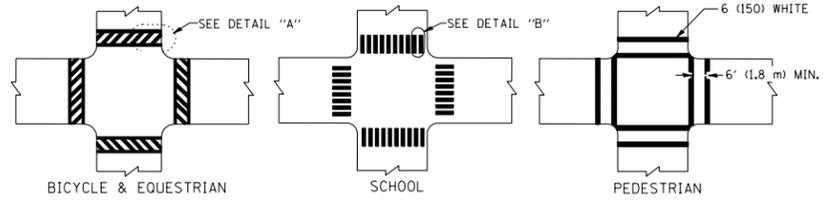
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

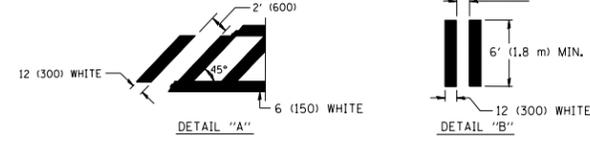
TYPICAL LANE AND EDGE LINE MARKING



BICYCLE & EQUESTRIAN

SCHOOL

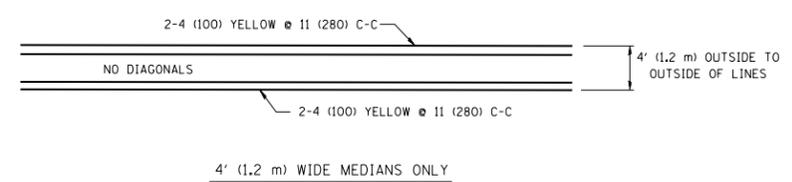
PEDESTRIAN



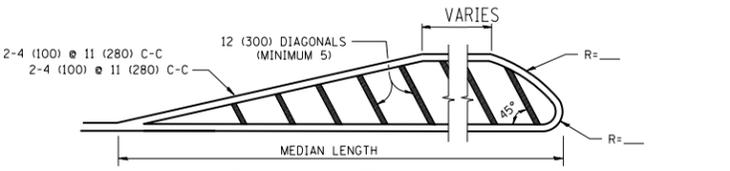
DETAIL "A"

DETAIL "B"

TYPICAL CROSSWALK MARKING



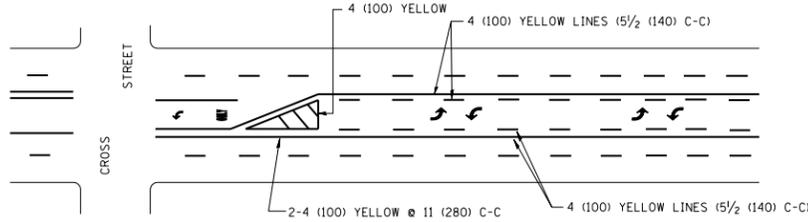
4' (1.2 m) WIDE MEDIANS ONLY



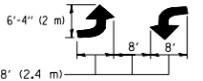
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

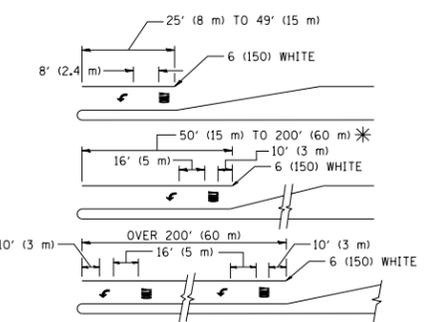


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

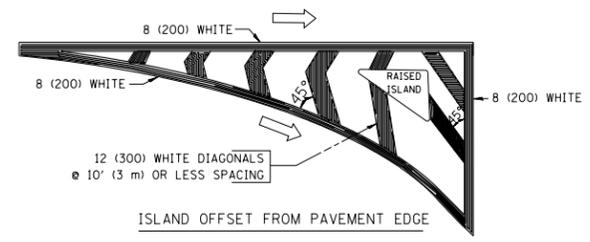


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

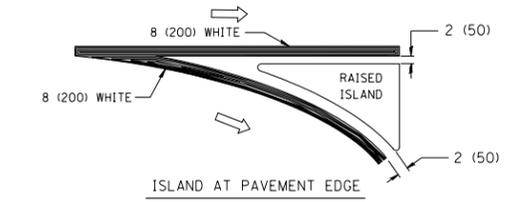
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	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' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	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))

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

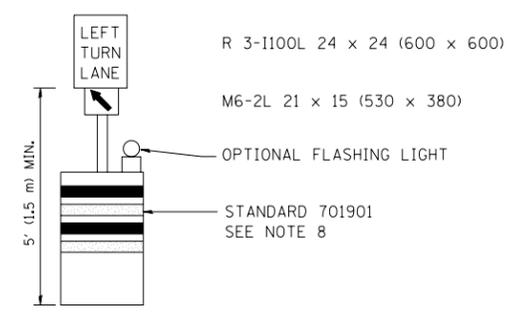
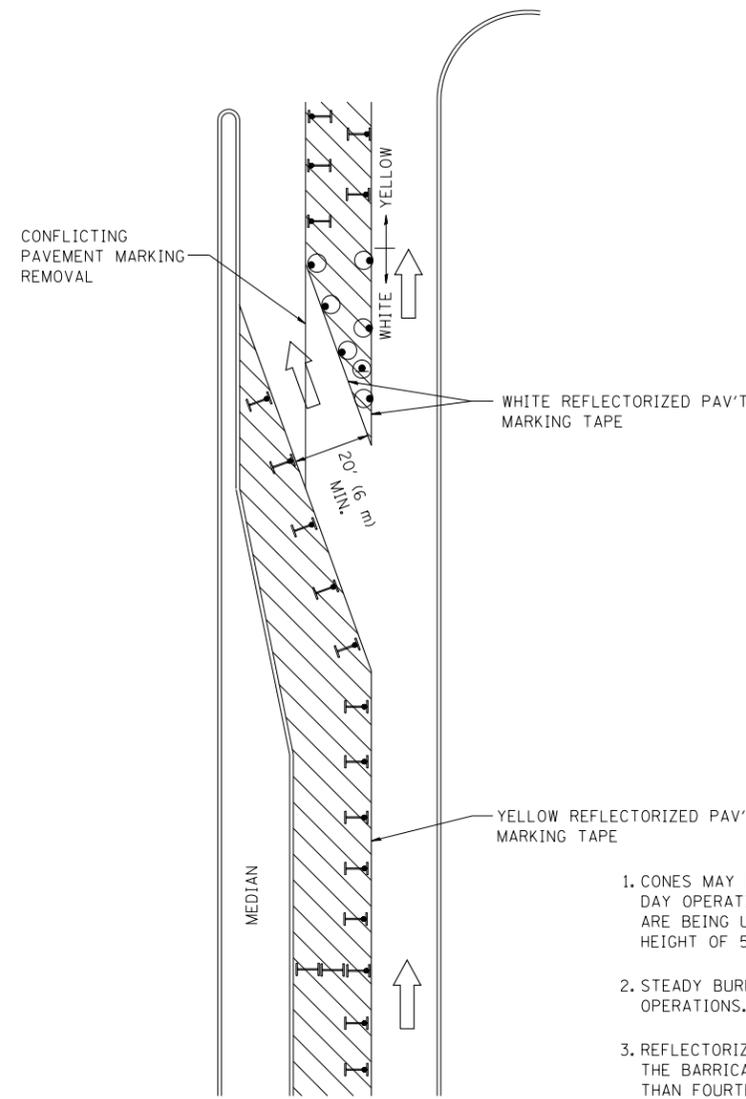
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	49
TC-13		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**GENERAL NOTES**

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. 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" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II 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 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

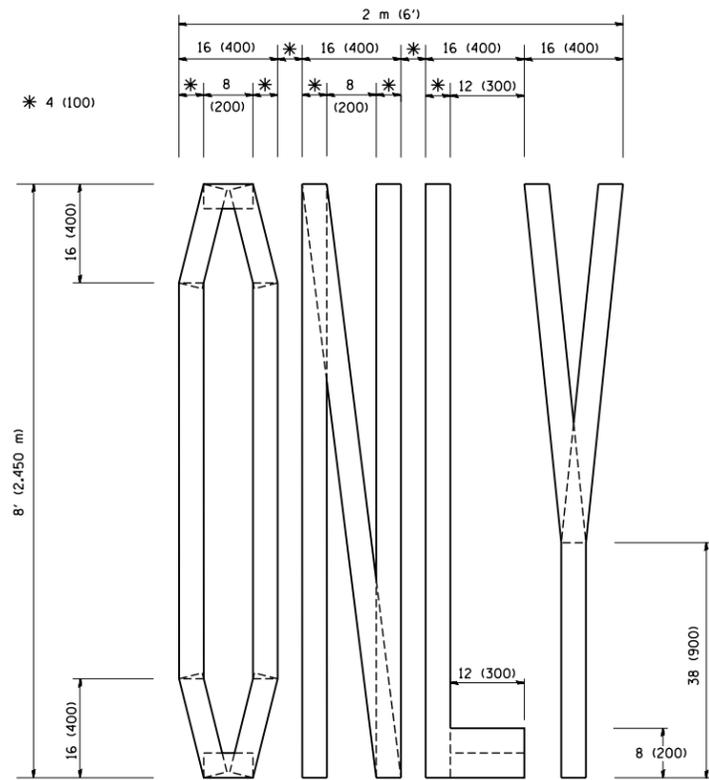
- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\td14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
		REVISED - A. HOUSEH 10-12-96	REVISED -
		REVISED -T. RAMMACHER 01-06-00	REVISED -

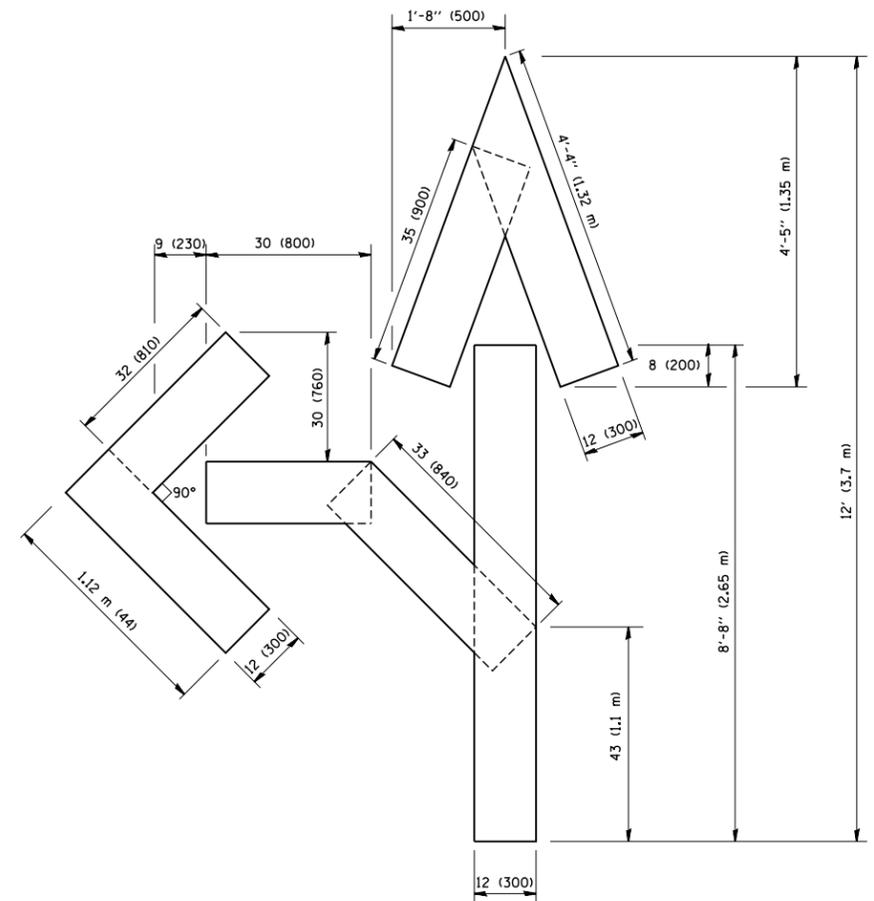
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

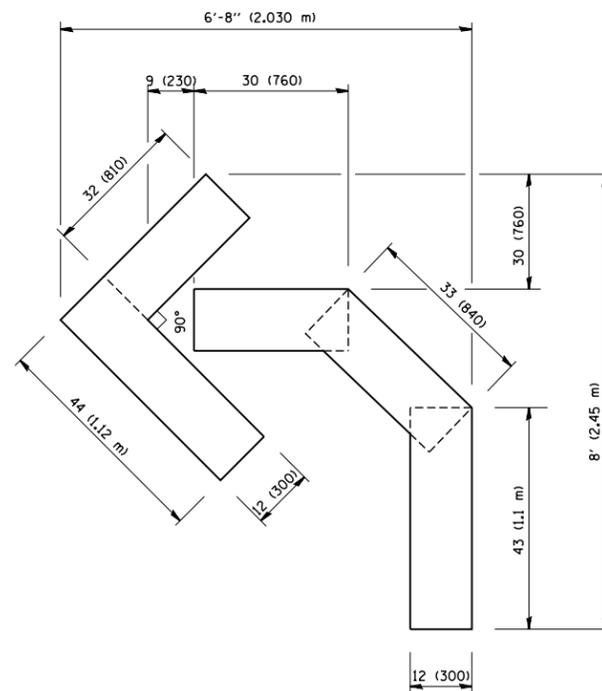
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	50
TC-14		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

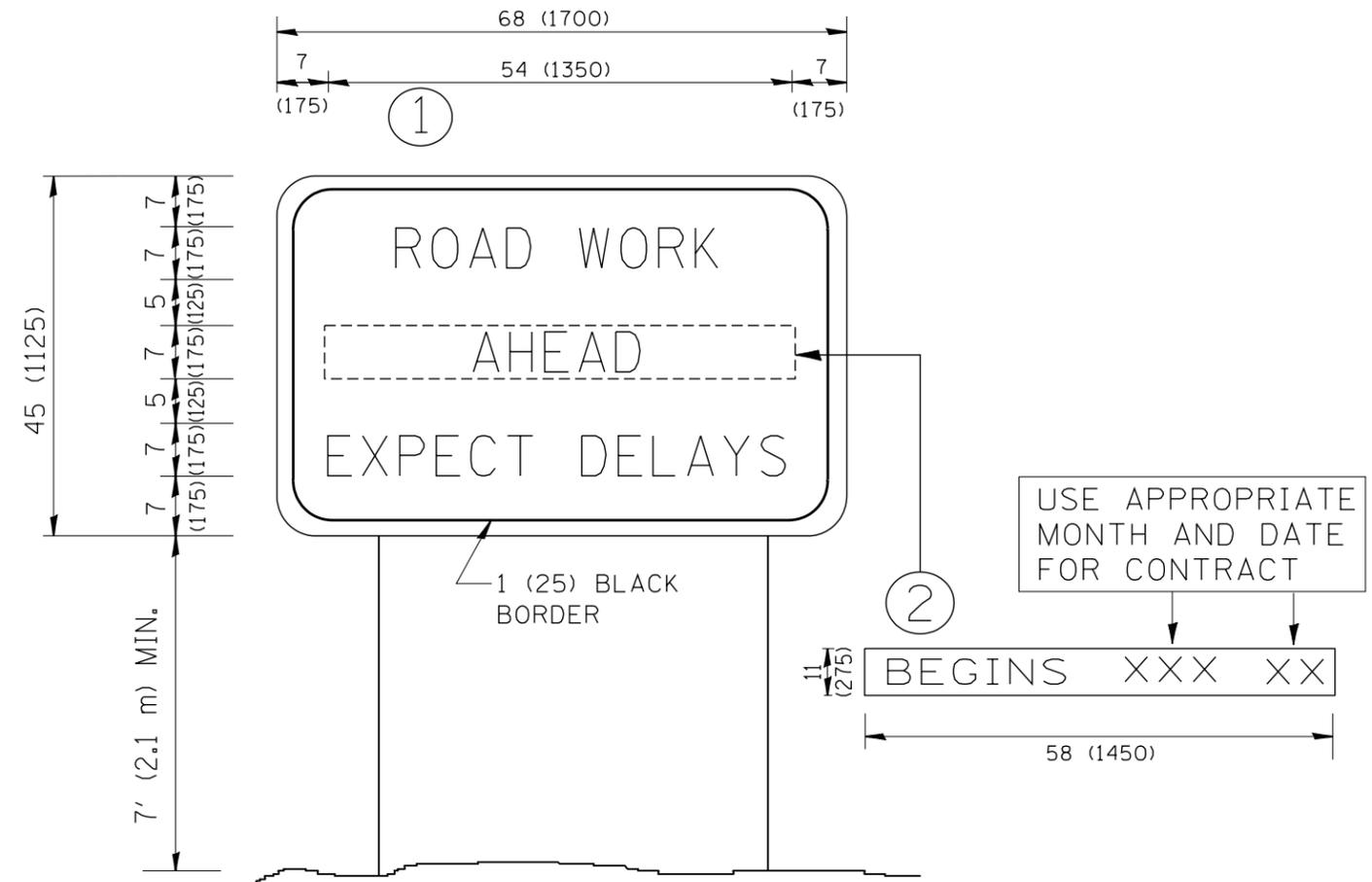
FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED -T. RAMMACHER 06-05-96 REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	211-071-N	COOK/KANE	56	51
TC-16		CONTRACT NO. 60P90		
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:\diststd\22x34\tc22.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

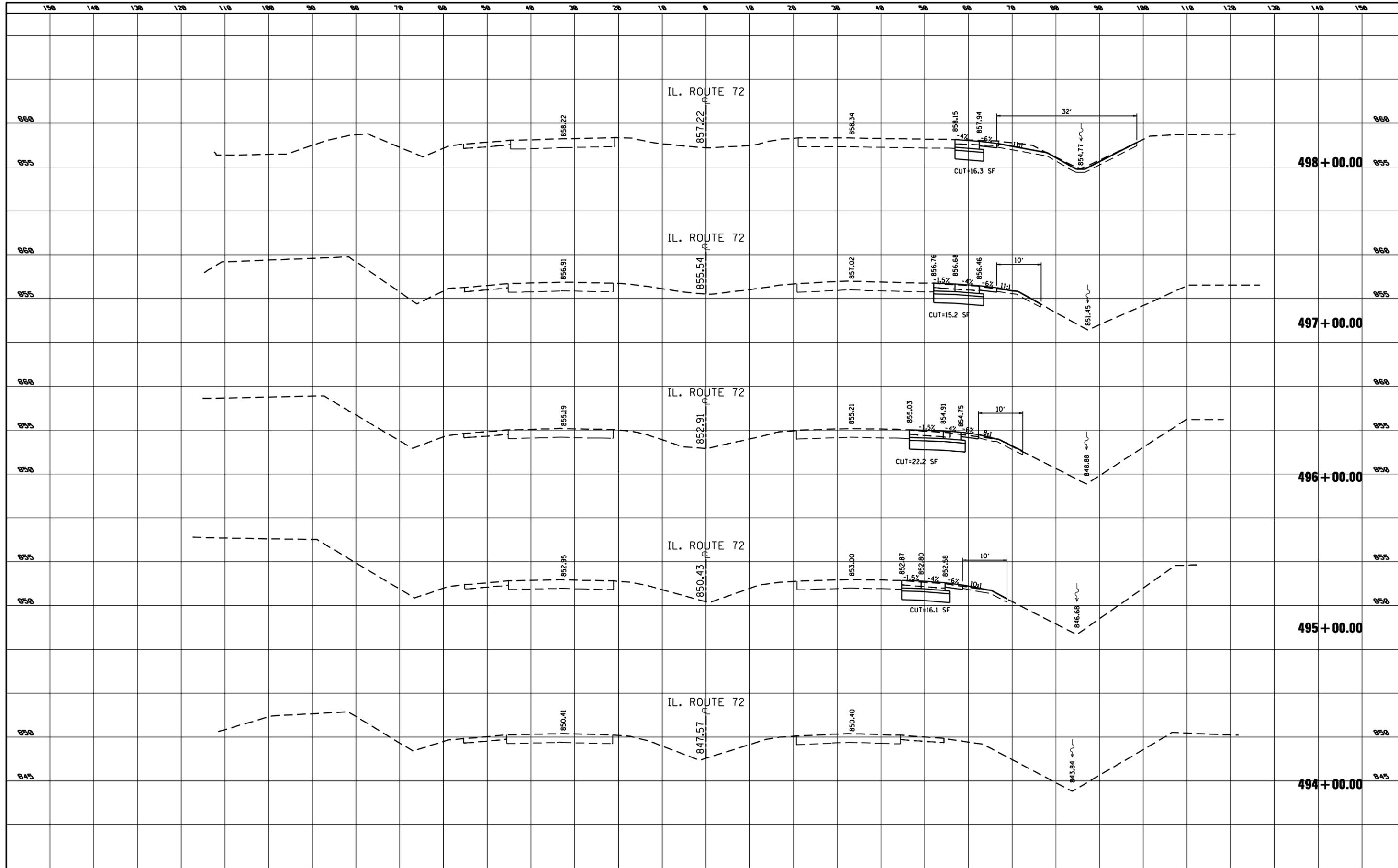
**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE. 341	SECTION 2011-071-N	COUNTY COOK/KANE	TOTAL SHEETS 56	SHEET NO. 52
<b>TC-22</b>		CONTRACT NO. 60P90		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	

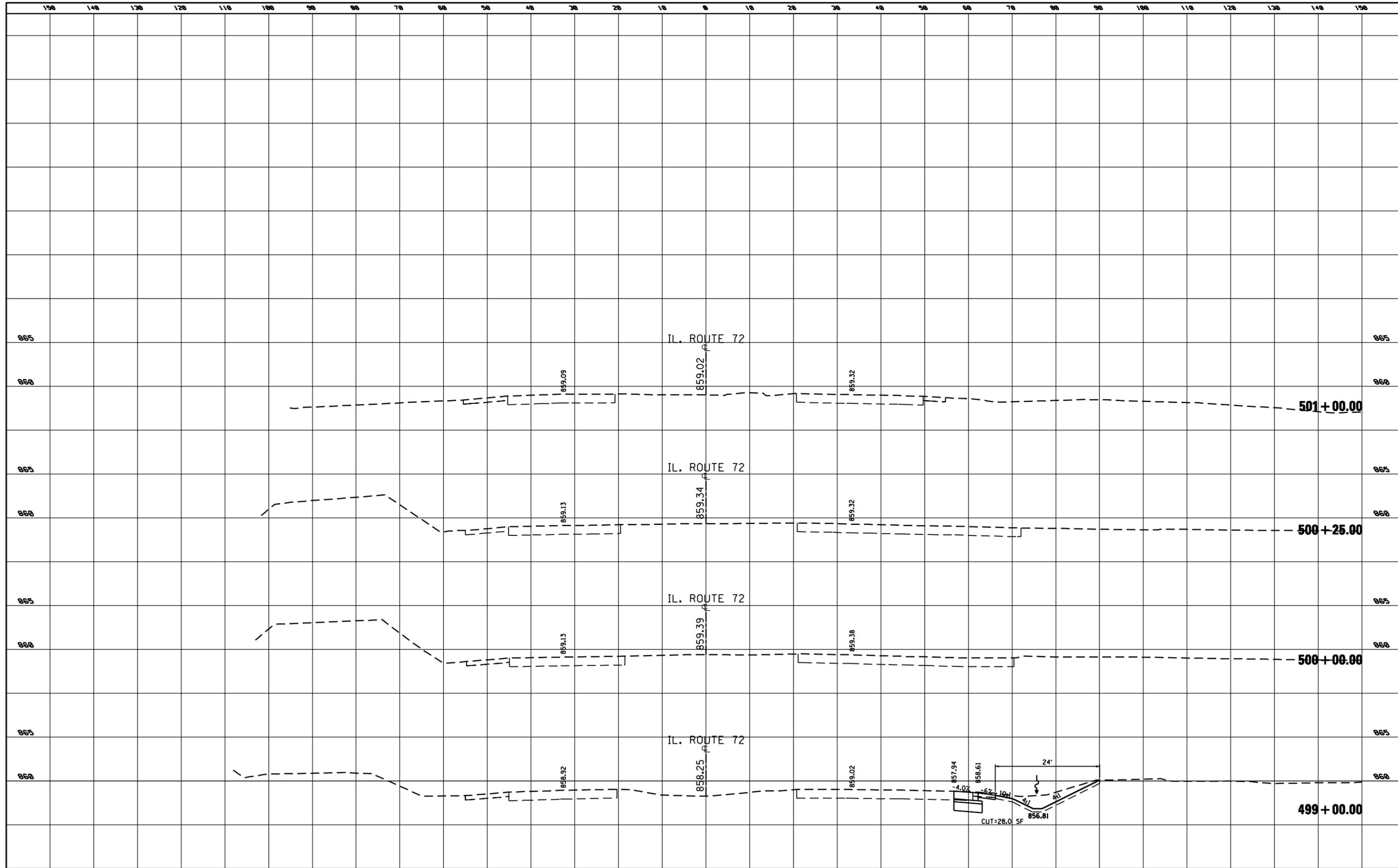
ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	



FILE NAME =	USER NAME = Peter	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS - IL ROUTE 72</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pr:\2009\me09006_vorvar_phi\cadd\W038_IL72_Beverly\Shots\DI60P90-sht-ssht IL-72.dgn		DRAWN -	REVISED -		341	2011-071-N	COOK/KANE	56	53			
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -		SCALE: 1" = 10'			SHEET NO. 1 OF 2 SHEETS		STA. 494+00.00 TO STA. 498+00.00	CONTRACT NO. 60P90	
PLOT DATE = 4/5/2012		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		



FILE NAME =	USER NAME = Peter	DESIGNED -	REVISED -
pr:\2009\me09006_vorvar_phi\cadd\W038_IL72_Beverly\Shots\DI60P90-sht-xssht IL-72.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - IL ROUTE 72**

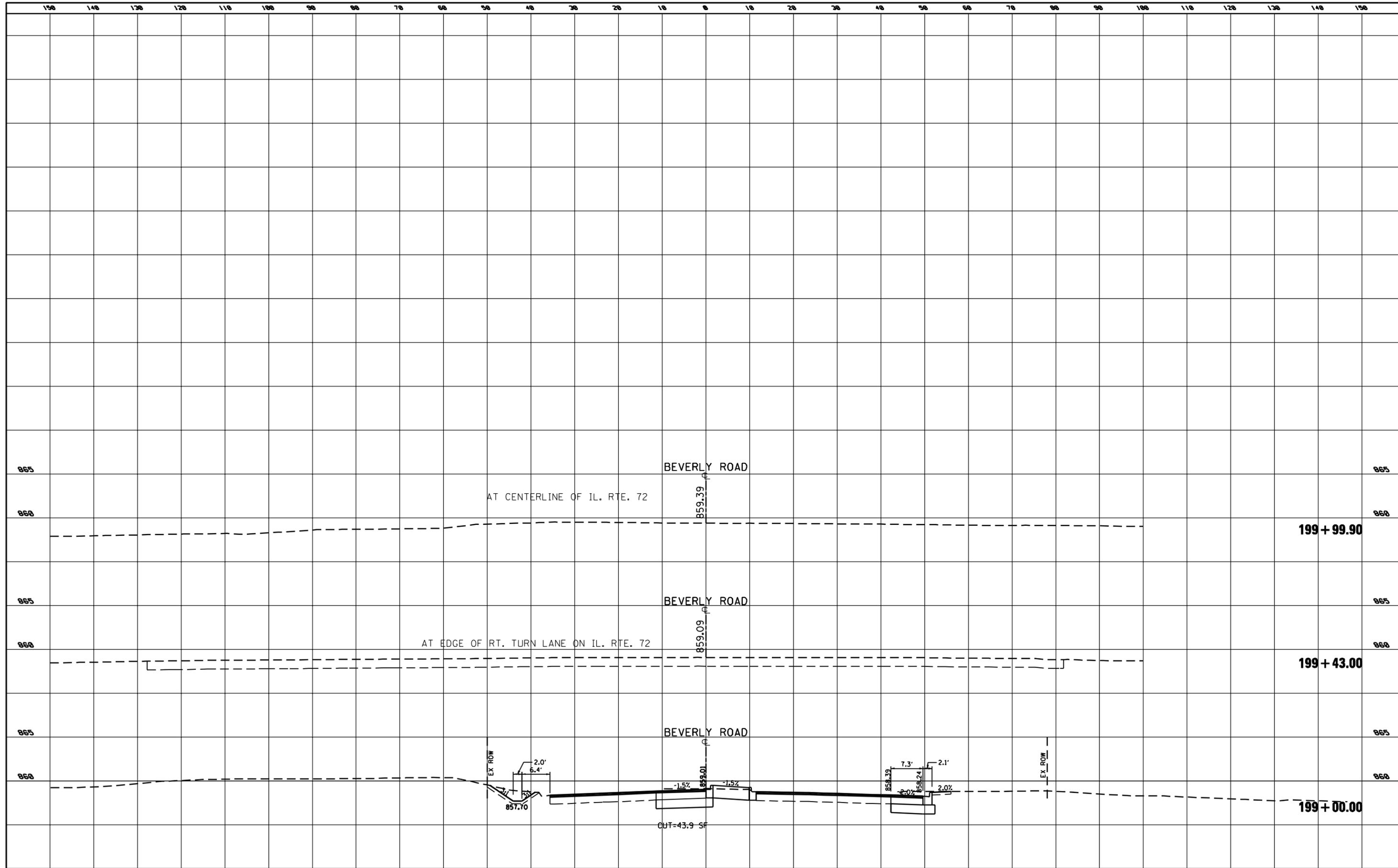
SCALE: 1" = 10'    SHEET NO. 2 OF 2 SHEETS    STA. 499+00.00 TO STA. 501+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	2011-071-N	COOK/KANE	56	54
CONTRACT NO. 60P90			ILLINOIS FED. AID PROJECT	



FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



FILE NAME =	USER NAME = Peter	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS - BEVERLY RD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pr:\2009\me09006_vorvar_phi\cadd\W038_IL72_Beverly\Shots\DI60P90-sht-xssht_Beverly.dgn		DRAWN -	REVISED -		341	2011-071-N	COOK/KANE	56	56			
PLOT SCALE = 20.0000' / IN.		CHECKED -	REVISED -		CONTRACT NO. 60P90			ILLINOIS FED. AID PROJECT				
PLOT DATE = 4/5/2012		DATE -	REVISED -		SCALE: 1" = 10'	SHEET NO. 2 OF 2 SHEETS	STA. 199+00.00 TO STA. 199+99.90					