

FED. AID DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-00-LT	COOK	9	1
STA.	TO STA.			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

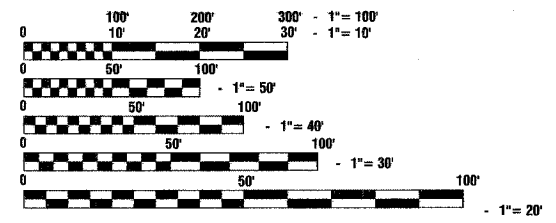
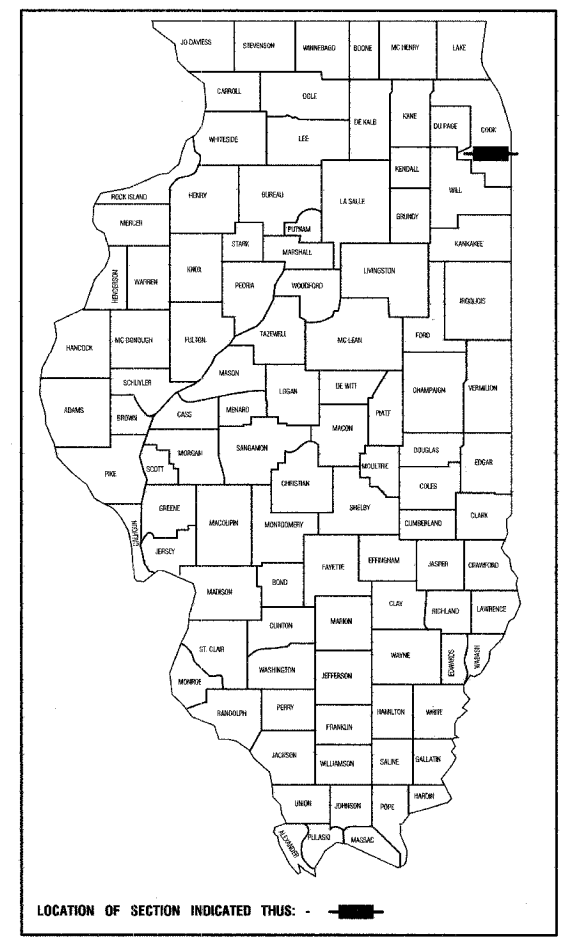
- INDEX OF SHEETS**
1. COVER SHEET
 2. SUMMARY OF QUANTITIES
 - 3-4. PLAN SHEETS
 5. SINGLE LINE DIAGRAM
 - 6-9. CONSTRUCTION DETAILS

- STATE STANDARDS**
- 000001-04 Standard Symbols, Abbreviations and Patterns
 - 701501-03 Lane Closure, 2L 2W, Day Or Night Operations, For Speeds < 45 MPH
 - 701606-04 Lane Closure, Multilane, 2W, With Mountable Median, For Speeds < 45 MPH
 - 701701-04 Lane Closure, Multilane, Intersection, For Speeds < 45 MPH
 - 701801-03 Lane Closure, Multilane, 1W Or 2W, Crosswalk or Sidewalk Closure, For Speeds < 45 MPH

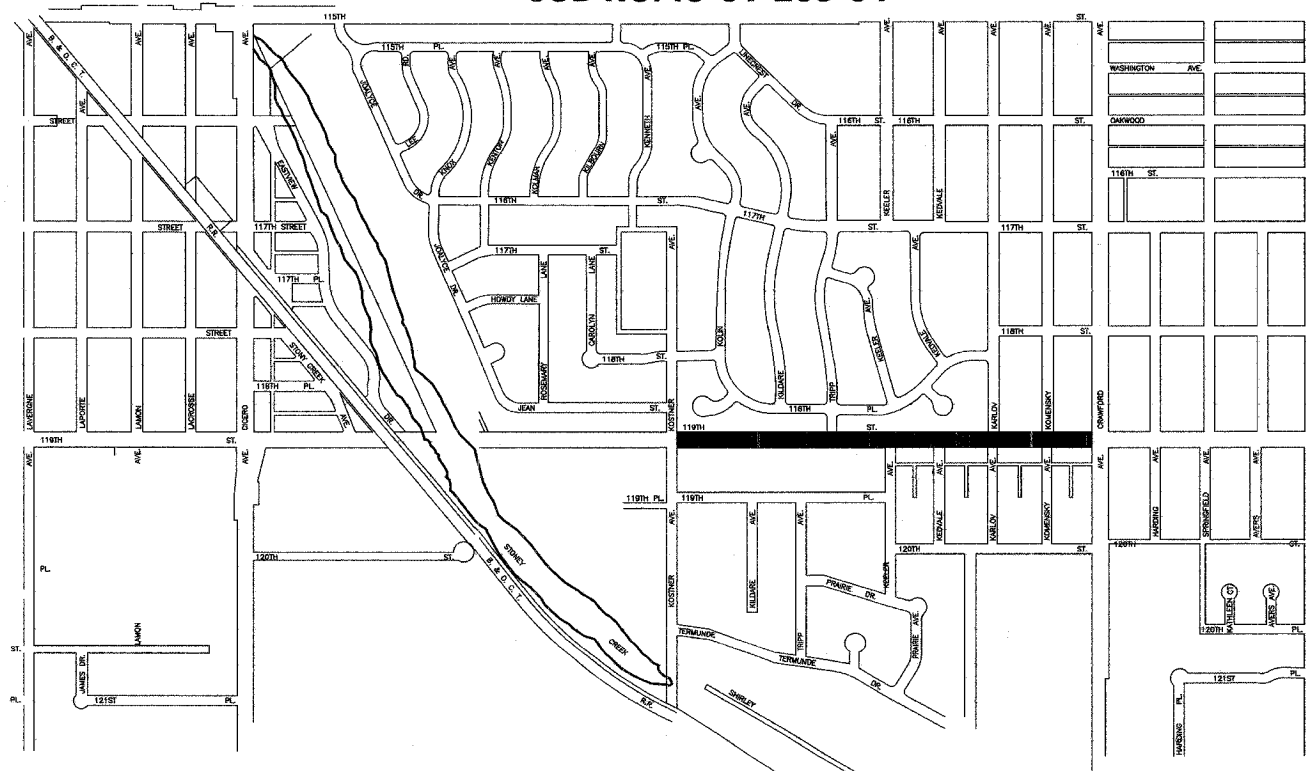
LOCATED IN THE VILLAGE OF:
ALSIP, ILLINOIS

SCALES { PLAN - 1"=50'
CONSTRUCTION DETAILS - 1"=1'

**F.A.U. ROUTE 1585 (119TH STREET)
KOSTNER AVENUE TO PULASKI AVENUE
STREET LIGHTING
PROJECT NO.:M-8003 (410)
SECTION NO.: 02-00079-00-LT
VILLAGE OF ALSIP
COOK COUNTY
JOB NO. :C-91-203-04**



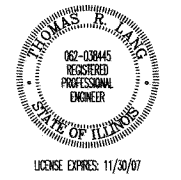
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.



LOCATION MAP
SECTION 22, TOWNSHIP 37, RANGE 13
GROSS LENGTH=2,185 FEET=0.42 MILES
NET LENGTH=2,185 FEET=0.42 MILES

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

Thomas R. J. [Signature]
2/6/06




STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 2/6 2006
Robert E. Ritzberg LOCAL AGENCY OFFICIAL

PASSED FEBRUARY 9 2006
[Signature] BUREAU CHIEF OF LOCAL ROADS & STREETS

PASSED FEB 10 2006
Diane M. [Signature] DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

I.D.O.T. FEDERAL AID COORDINATOR: PHIL MARCYN 847-705-4189



JOINT
UTILITY
LOCATING
INFORMATION FOR
EXCAVATORS

Call 48 hours before you dig
(EXCLUDING SAT., SUN. & HOL.)

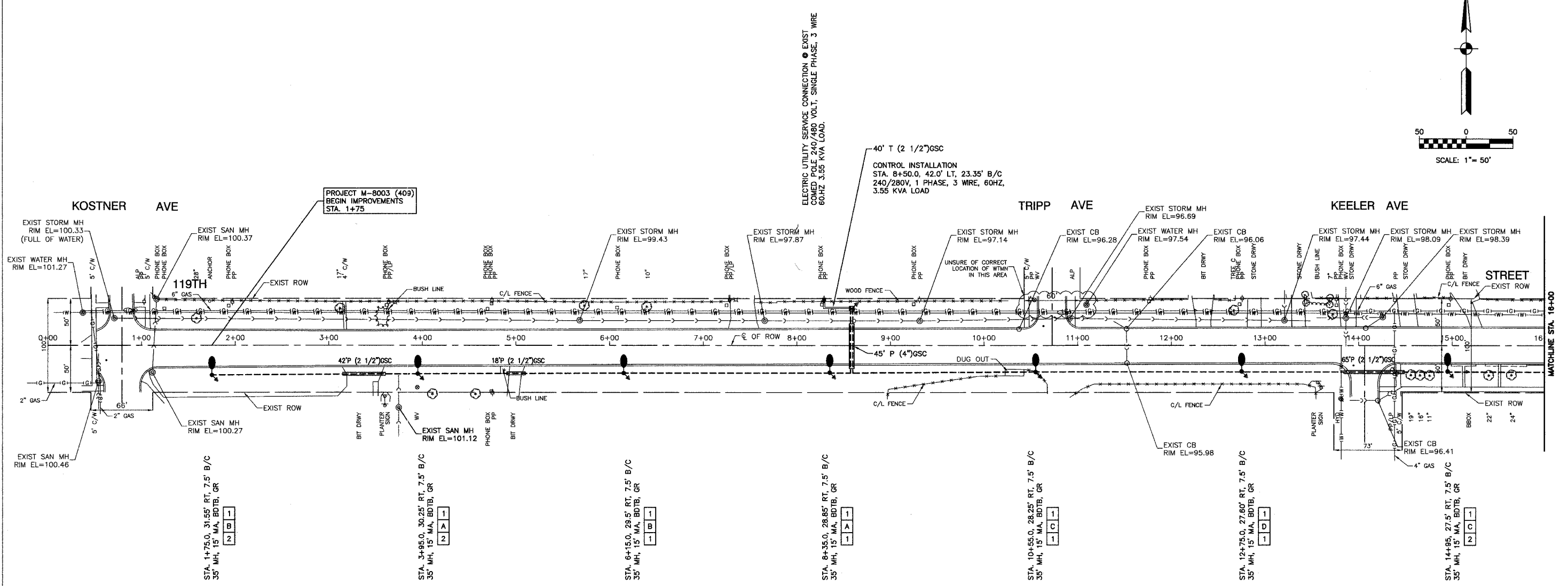
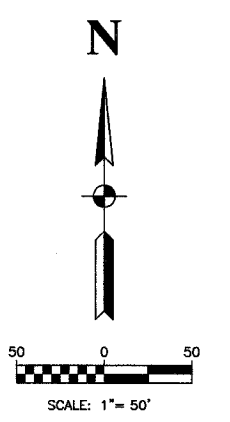
FAX NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-00-LT	COOK	9	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES					PAVEMENT	MARKINGS	SIGNS	LANDSCAPE	LIGHTS	SIGNALS	TRAINING		
ITEM #	CODE NO.	PAY ITEM	UNIT	QUAN	CONSTRUCTION TYPE CODE								
					SFTY-1B	SFTY-1D	Y002-1C	Y003	Y030-1E	Y031	Y080		
* 1	21101615	TOPSOIL, FURNISH AND PLACE, 4"	SQ YD	852				852					
2	21300010	EXPLORATION TRENCH, SPECIAL	FOOT	200					200				
* 3	25200650	SODDING, SALT TOLERANT (SPECIAL)	SQ YD	852				852					
* 4	42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	100	100								
* 5	44000600	SIDEWALK REMOVAL	SQ FT	100	100								
6	67100100	MOBILIZATION	L SUM	1					1				
7	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1					1				
8	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1					1				
9	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1					1				
10	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1					1				
11	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1					1				
12	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1					1				
13	80700140	GROUND ROD, 5/8" DIA. X 10 FT.	EACH	12					12				
14	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	53					53				
15	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	333					333				
16	81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2010					2010				
17	81600925	UNIT DUCT, WITH 3-1/C NO. 6 AND 1/C NO. 8 GROUND, 600V (XLP-TYPE USE), 1 1/4" DIA., POLYETHYLENE	FOOT	2544					2544				
18	81702440	ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	60					60				
19	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	11					11				
20	82500520	LIGHTING CONTROLLER TYPE CB-RCS 60 AMP - 480 VOLT	EACH	1					1				
21	83007600	LIGHTING POLE, ALUMINUM, 35 FT. M.H., 15 FT. MAST ARM	EACH	11					11				
22	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	83					83				
23	83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	13.5					13.5				
24	83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	11					11				

* SPECIALTY ITEMS

ROBINSON ENGINEERING, LTD. CONSULTING REGISTERED PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473 (708) 331-8700 FAX (708) 331-3828 © COPYRIGHT 2005 ILLINOIS DESIGN FIRM REGISTRATION NO. 184001128		REVISIONS <table border="1"> <tr> <th>No.</th> <th>Date</th> <th>Remarks</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		No.	Date	Remarks															
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119TH STREET STREET LIGHTING SUMMARY OF QUANTITIES ALSIP, ILLINOIS																					
Drawn by: RM	Date: 12/20/05																				
Checked by: PAP	Scale: NONE																				
Sheet 2 of 9	Project No. 02-160.02																				

FAZ. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-00-LT	COOK	9	3
STA.	TO STA.			
FED. ROAD DIST. NO.	BLINDS	FED. AID PROJECT		



STA. 1+75.0, 31.55' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 3+95.0, 30.25' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 6+15.0, 29.5' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 8+35.0, 28.85' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 10+55.0, 28.25' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 12+75.0, 27.60' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

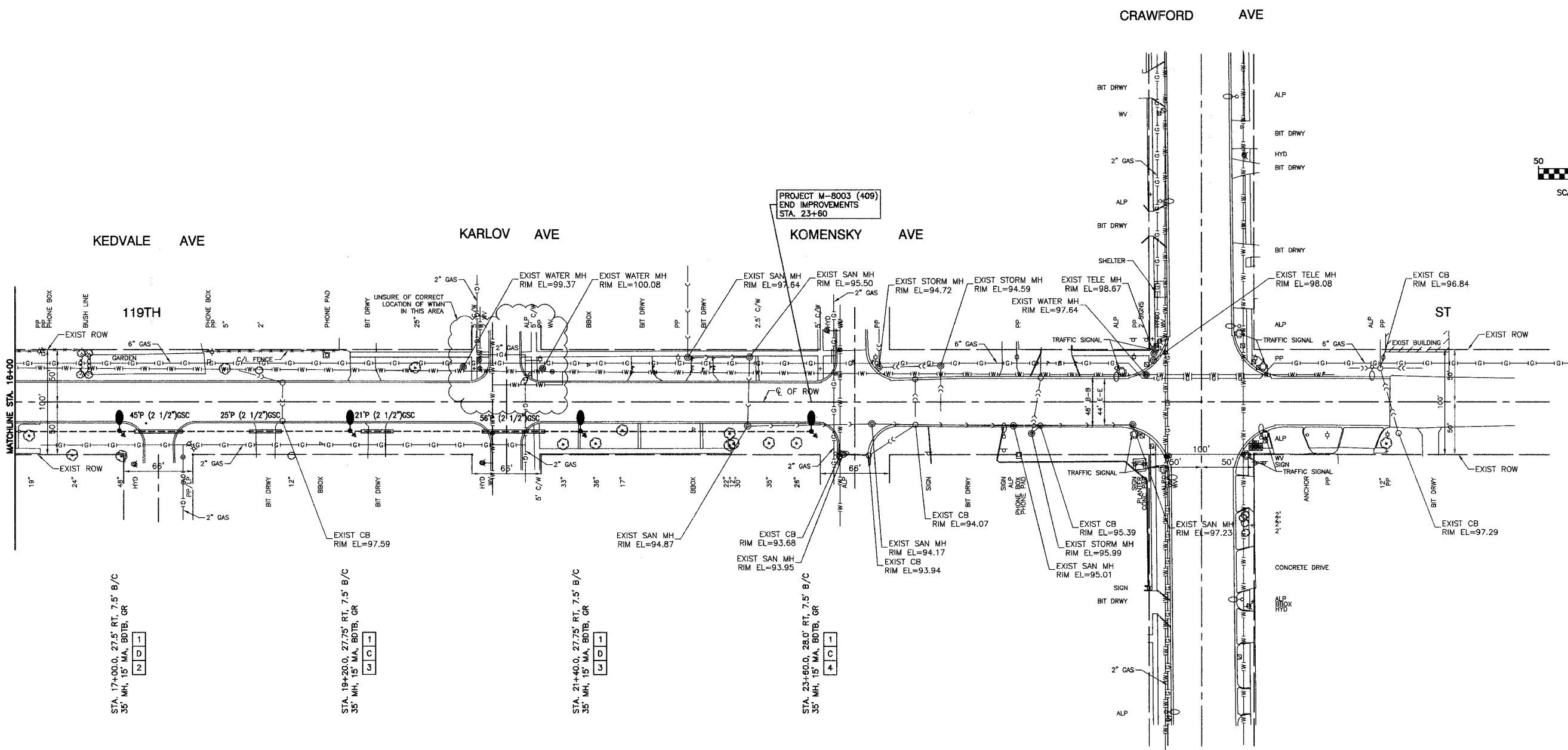
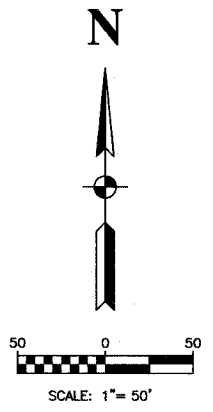
STA. 14+95.0, 27.5' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

LEGEND

- ⊕ EXISTING COM ED LIGHT ON WOOD POLE
- ⊙ EXISTING POWER POLE
- ⊙ EXISTING STREET LIGHT
- ⊙ PROPOSED LIGHT STANDARD, 250W HPS, 240V, 1PH LUMINAIRE, 35' MH, 15' MA
- ⊙ PROPOSED LIGHTING CONTROLLER
- ⊙ GROUND ROD, 5/8" DIA. x 10'
- CONDUIT, PUSHED, GALVANIZED STEEL, SIZE AS MARKED
- CONDUIT, TRENCHED, GALVANIZED STEEL, SIZE AS MARKED
- UNIT DUCT, 3-1/2" NO.6 AWG AND NO.8 GROUND, 800V IN 1-1/4" POLYETHYLENE DUCT FOR ROADWAY LIGHTING.
- SERVICE WIRE, 3-1/2" NO.1/0
- LT. LEFT
- RT. RIGHT
- MH MOUNTING HEIGHT
- MA MAST ARM
- B/C BACK OF CURB
- B/EP BACK OF EDGE OF PAVEMENT
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE, LOW PROFILE TYPE
- GR GROUND ROD, 5/8" DIA. x 10'

<p>ROBINSON ENGINEERING, LTD. CONSULTING REGISTERED PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473 (708) 331-6700 FAX (708) 331-8826</p> <p>© COPYRIGHT 2006 ILLINOIS DESIGN FIRM REGISTRATION NO. 184001128</p>																							
<p>119TH STREET LIGHTING PLAN SHEET STA. 1+75.0 TO STA. 16+00</p>																							
<p>ALSIP, ILLINOIS</p>	<p>Drawn by: JM</p> <p>Checked by: TRL/PAP</p> <p>Sheet 3 of 9</p>	<p>Date:</p> <p>Scale: 1"=50'</p> <p>Project No. 02-160.02</p>																					
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FED. RT. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-00-LT	COOK	9	4
STA.	TO STA.			
FED. ROAD DIST. NO.				
ILLINOIS FED. AID PROJECT				



STA. 17+00.0, 27.5' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 19+20.0, 27.75' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 21+40.0, 27.75' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

STA. 23+60.0, 28.0' RT, 7.5' B/C
35' MH, 15' MA, BDTB, GR

LEGEND

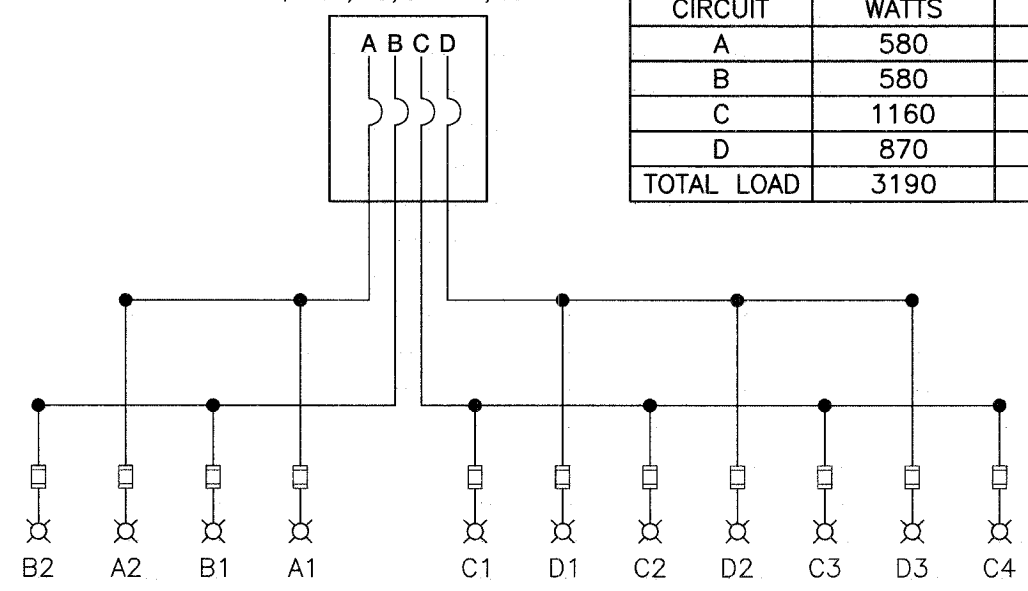
- ⊕ EXISTING COM ED LIGHT ON WOOD POLE
- ⊙ EXISTING POWER POLE
- EXISTING STREET LIGHT
- PROPOSED LIGHT STANDARD, 250W HPS, 240V, 1PH LUMINAIRE, 35' MH, 15' MA
- PROPOSED LIGHTING CONTROLLER
- ⊕ GROUND ROD, 5/8" DIA. x 10'
- CONDUIT, PUSHED, GALVANIZED STEEL, SIZE AS MARKED
- CONDUIT, TRENCHED, GALVANIZED STEEL, SIZE AS MARKED
- UNIT DUCT, 3-1/2" NO.6 AWG AND NO.8 GROUND, 800V IN 1-1/4" POLYETHYLENE DUCT FOR ROADWAY LIGHTING.
- SERVICE WIRE, 3-1/C NO.1/0
- LT. LEFT
- RT. RIGHT
- MH MOUNTING HEIGHT
- MA MAST ARM
- B/C BACK OF CURB
- B/EP BACK OF EDGE OF PAVEMENT
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE, LOW PROFILE TYPE
- GR GROUND ROD, 5/8" DIA. x 10'

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<p>119TH STREET LIGHTING PLAN SHEET STA. 16+00 TO STA. 23+60.0</p>																																						
<p>ALSIP, ILLINOIS</p>			<p>Drawn by: JIM Date: 12/20/05 Checked by: TRL/PAP Scale: 1"=50' Sheet 4 of 9 Project No. 02-160.02</p>																																			

FAM. SITE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-00-LT	COOK	9	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER #1
240/480V, 1Ø, 3 WIRE, 60 HZ.

CIRCUIT	WATTS	AMPS
A	580	2.60
B	580	2.60
C	1160	5.20
D	870	3.90
TOTAL LOAD	3190	14.30

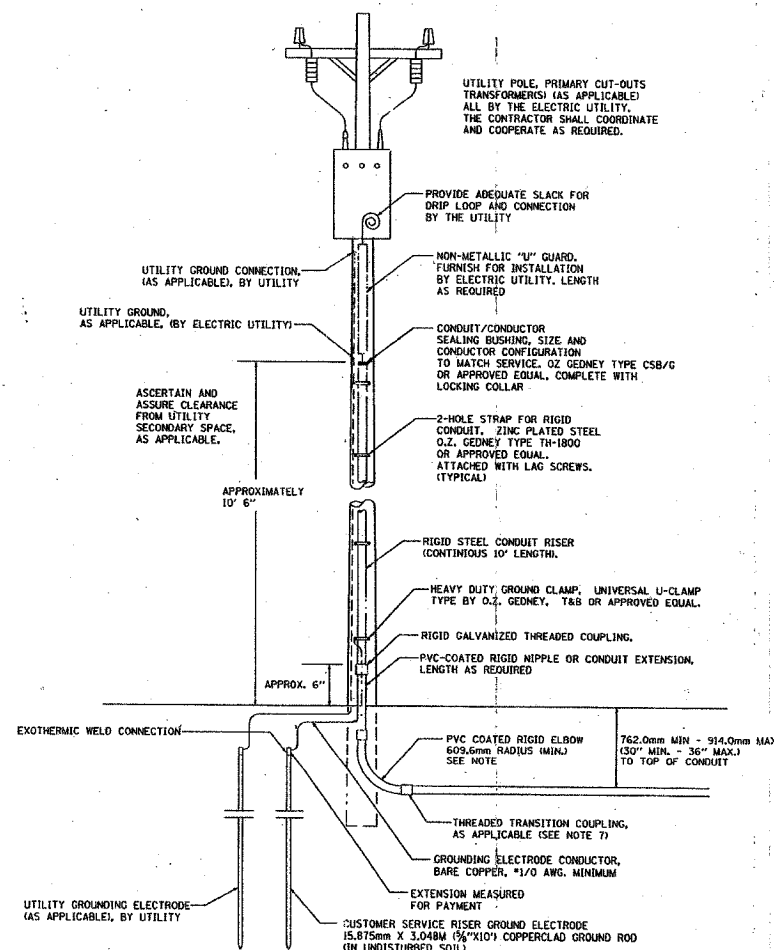
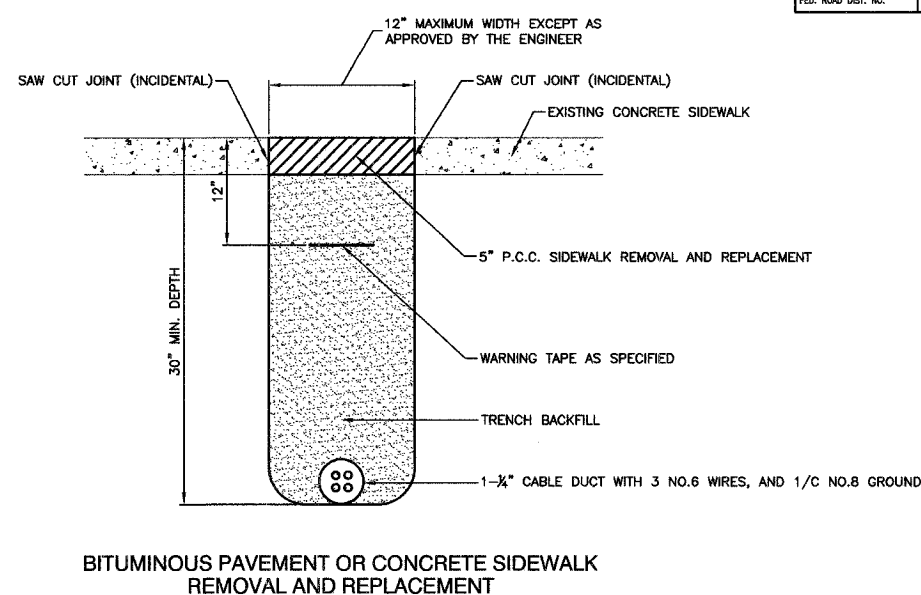
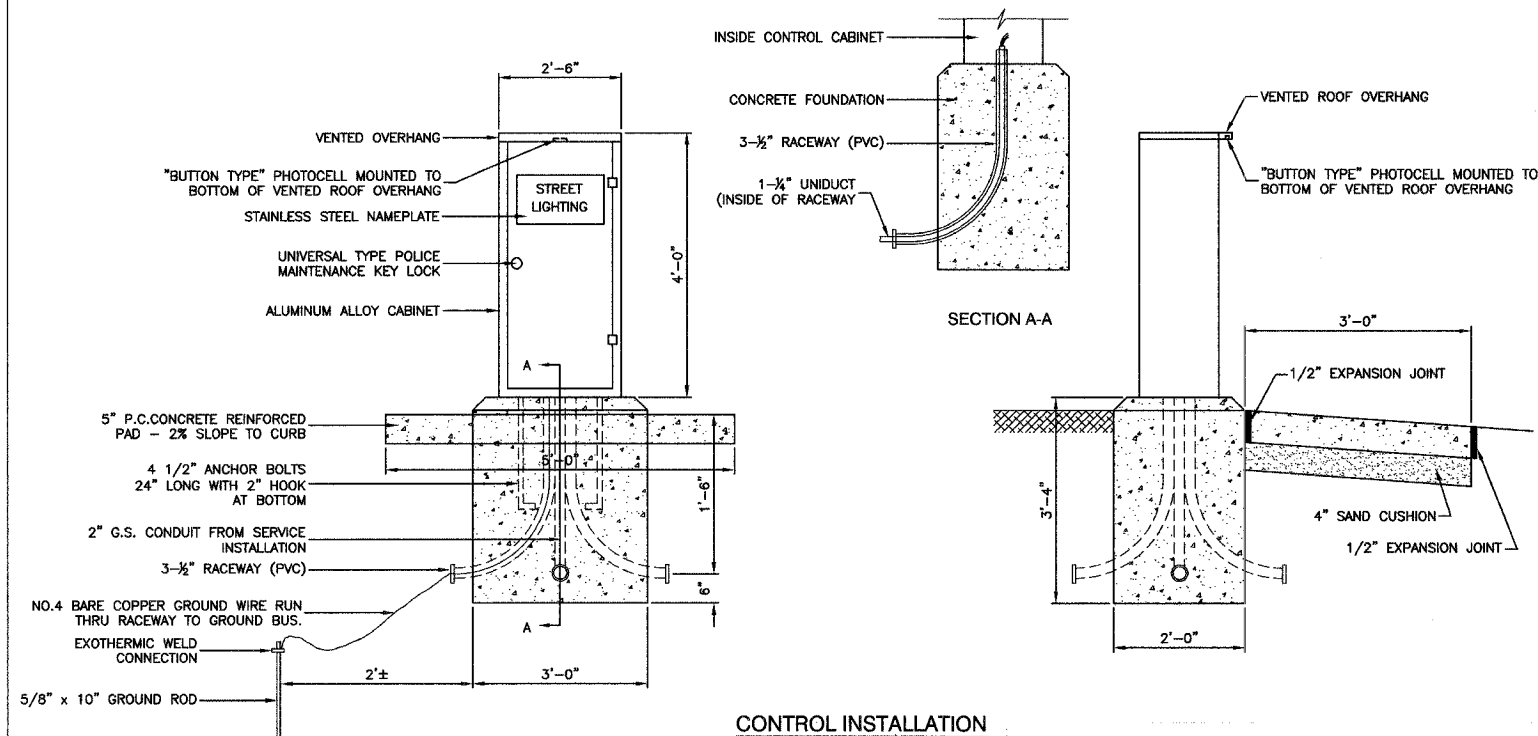


SINGLE LINE LEGEND

- ⊗ LUMINAIRE, 250W HPS, STREET LIGHT
- FUSE, 3.5 AMP
- ⌋ CIRCUIT BREAKER
- CONNECTION

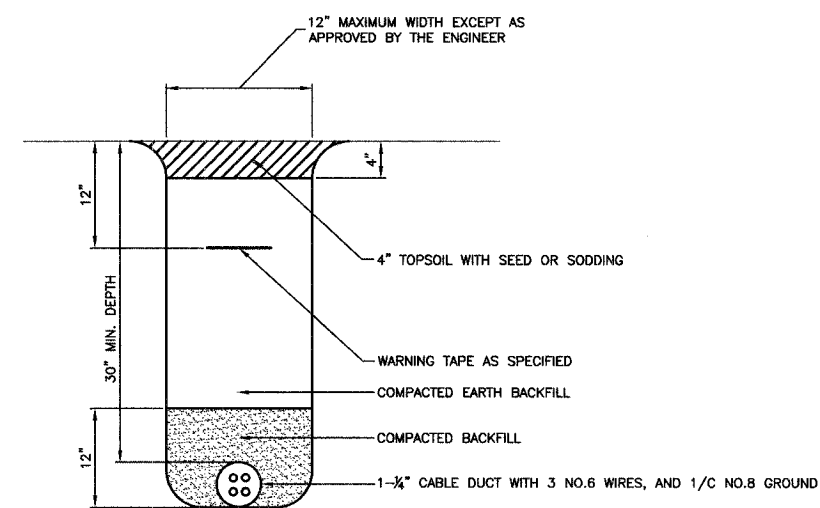
ROBINSON ENGINEERING, LTD. CONSULTING REGISTERED PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473 (708) 331-6700 FAX (708) 331-3826 © COPYRIGHT 2005		REVISIONS <table border="1"> <thead> <tr> <th>No.</th> <th>Date</th> <th>Remarks</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		No.	Date	Remarks																														
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119TH STREET STREET LIGHTING SINGLE LINE WIRING DIAGRAM ALSIP, ILLINOIS																																				
Drawn by: RM	Date: 12/20/05																																			
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Sheet 5 of 9	Project No. 02-160.02																																			

FAM. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-0-LT	COOK	9	6
STA.	TO STA.			
FED. ROAD DIST. NO.	BLANKS	FED. AID PROJECT		



- 240/480 VOLT, 1 ϕ , 3 WIRE, 60 HZ. SERVICE
3.55 KVA LOAD FOR CONTROLLER NO.1
- 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 ELECTRIC UTILITY SERVICE INSTALLATION.
 - CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED.
 - 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 SERVICE METER SOCKET, AS APPLICABLE, MOUNTED ELSEWHERE AS INDICATED SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRICAL UTILITY SERVICE INSTALLATION PAY ITEM.
 - THE 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.

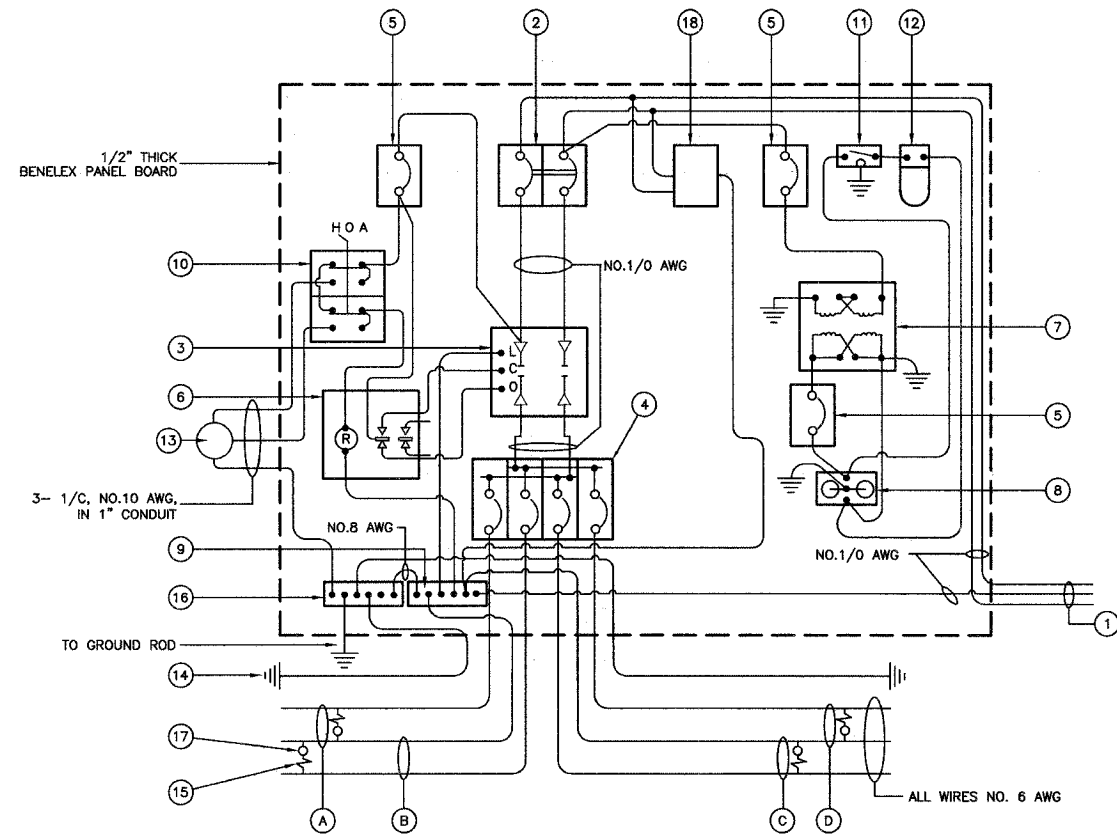
SERVICE CONNECTION FOR ALL CONTROLLERS



TRENCH DETAIL

ROBINSON ENGINEERING, LTD. CONSULTING REGISTERED PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 17000 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473 (708) 331-8700 FAX (708) 331-3826 © COPYRIGHT 2005		REVISIONS No. Date Remarks	
119TH STREET LIGHTING DETAILS			
ALSIP, ILLINOIS			
Drawn by: RM	Date: 12/20/05		
Checked by: TRL/PAP	Scale: NONE		
Sheet 6 of 9	Project No. 02-160.02		

F.A.M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-0-LT	COOK	9	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONTROLLER WIRING DIAGRAM

CONTROLLER WIRING DIAGRAM LEGEND

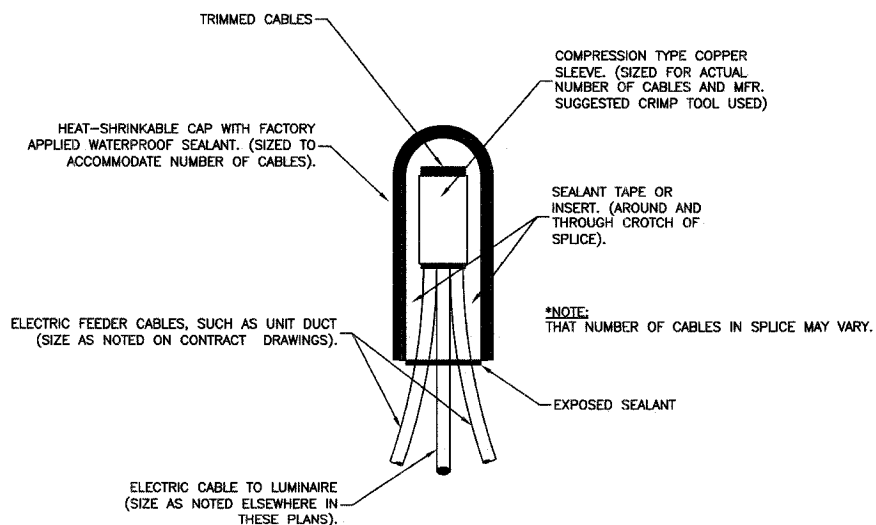
- ① 3-1/2" DIA. GALVANIZED STEEL CONDUIT FOR 240/480 VOLT, 1Ø, 3 WIRE, 60HZ. SERVICE.
- ② (1) 60 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V.
- ③ (1) 60 AMP REMOTE CONTROL CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, MINIMUM 60 AMP, 600 VOLT.
- ④ (4) 30 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 240 VOLTS.
- ⑤ (3) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- ⑥ (1) 20 AMP, 1 POLE DOUBLE THROW, 240 VOLT RELAY
- ⑦ (1) 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240x480/120x240 VOLT, 60 HZ.
- ⑧ (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE.
- ⑨ NEUTRAL BUS BAR, 1/4"x1"x12" LONG MOUNTED ON PANEL WITH TAPS.
- ⑩ 3 POSITION SELECTOR SWITCH
- ⑪ SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX.
- ⑫ WEATHER-PROOF INCANDESCENT LIGHTING FIXTURE WITH 60 WATT, 120 V LAMP.
- ⑬ PHOTOCCELL MOUNTED TO BOTTOM OF VENTED CONTROL CABINET OVERHANG
- ⑭ NO.8 AWG INSULATED GROUND WIRE
- ⑮ IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
- ⑯ GROUND BUS BAR 1/4"x1"x12" LONG MOUNTED ON PANEL WITH TAPS.
- ⑰ LUMINAIRE, 250 HPS
- ⑱ SURGE SUPPRESSOR
- Ⓐ PROPOSED CIRCUIT
- Ⓒ PROPOSED CIRCUIT
- Ⓓ PROPOSED CIRCUIT
- Ⓔ PROPOSED CIRCUIT

GENERAL NOTES FOR CONTROL CABINET

1. ENTIRE CONTROL CABINET SHALL BE GROUNDED.
2. ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
3. GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
4. ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
5. CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.

LIGHTING GENERAL NOTES

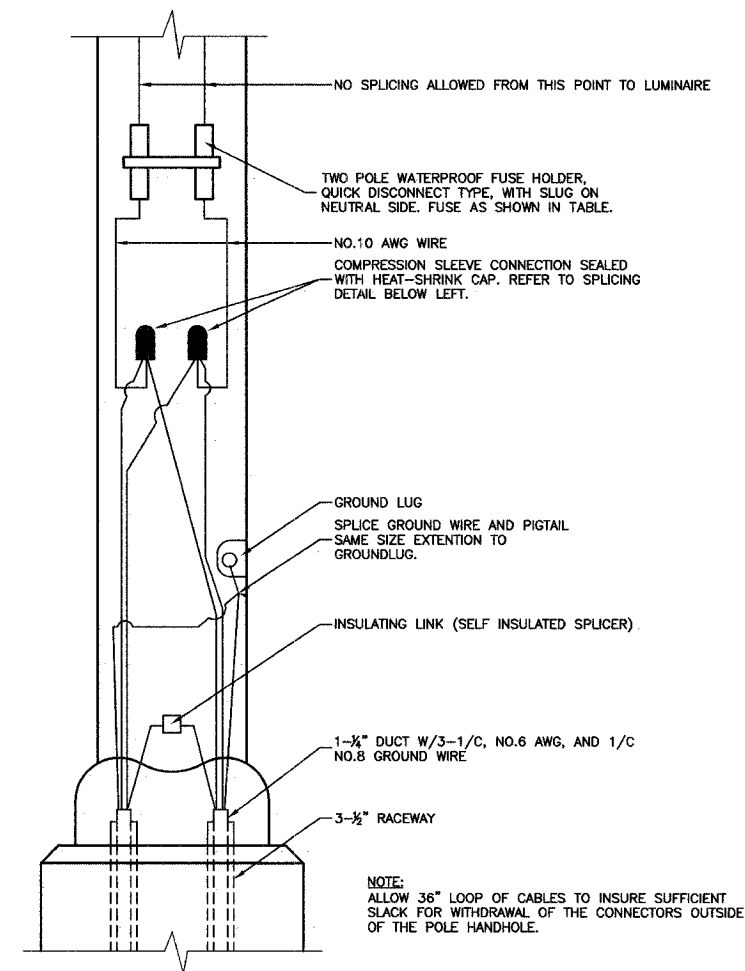
1. ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
2. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
3. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL C.E. Co. FOR APPROVAL OF LOCATION.
4. FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL C.E. Co.
5. SIZE ALL CONDUIT AS SPECIFIED ON DRAWINGS.
6. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



SPlicing ELECTRIC CABLES
BASIC MATERIALS AND METHODS

NOMINAL WATTAGE	FUSE SIZE
250	3.5 AMP

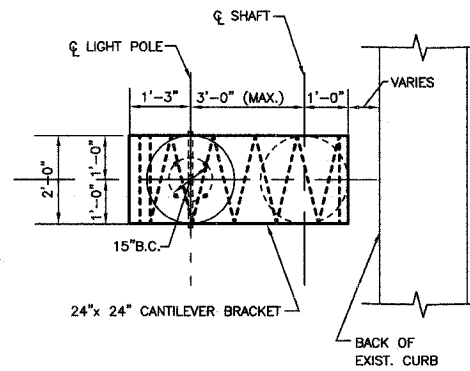
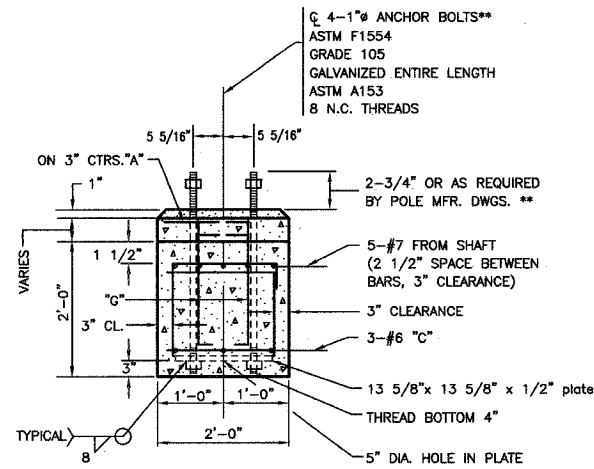
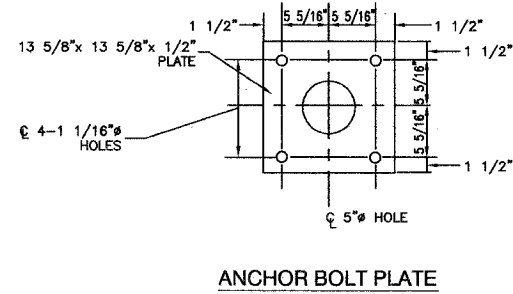
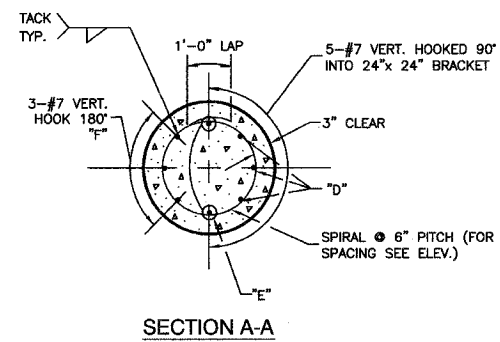
LUMINAIRE FUSE SIZE TABLE



POLE HANDHOLE WIRING DIAGRAM
(TYPICAL FOR SINGLE LUMINAIRE INSTALLATION)

ROBINSON ENGINEERING, LTD. CONSULTING REGISTERED PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS 1700 SOUTH PARK AVENUE SOUTH HOLLAND, ILLINOIS 60473 (708) 531-8700 FAX (708) 331-3826 © COPYRIGHT 2005		REVISIONS No. Date Remarks	
119TH STREET LIGHTING DETAILS			
ALSIP, ILLINOIS			
Drawn by: RM	Date: 12/20/05		
Checked by: TRU/PAP	Scale: NONE		
Sheet 7 of 9	Project No. 02-160.02		

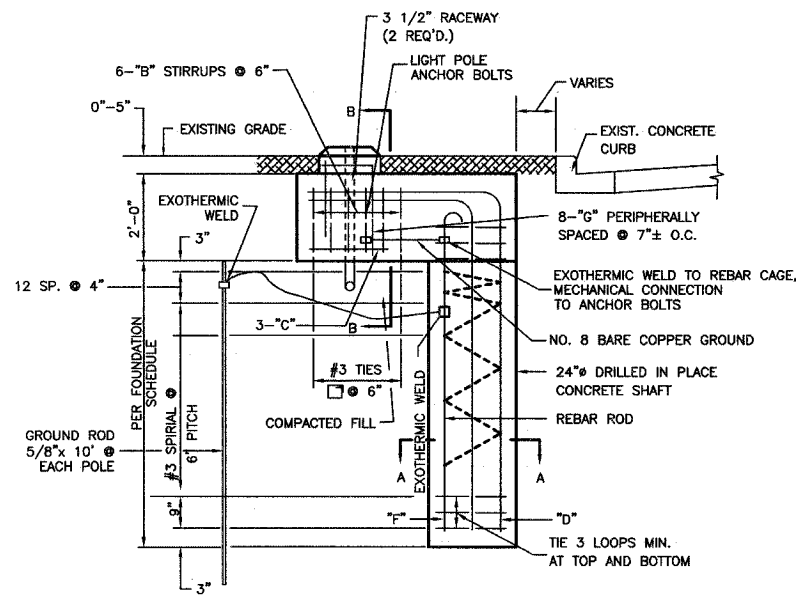
FAUL. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-0-LT	COOK	9	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



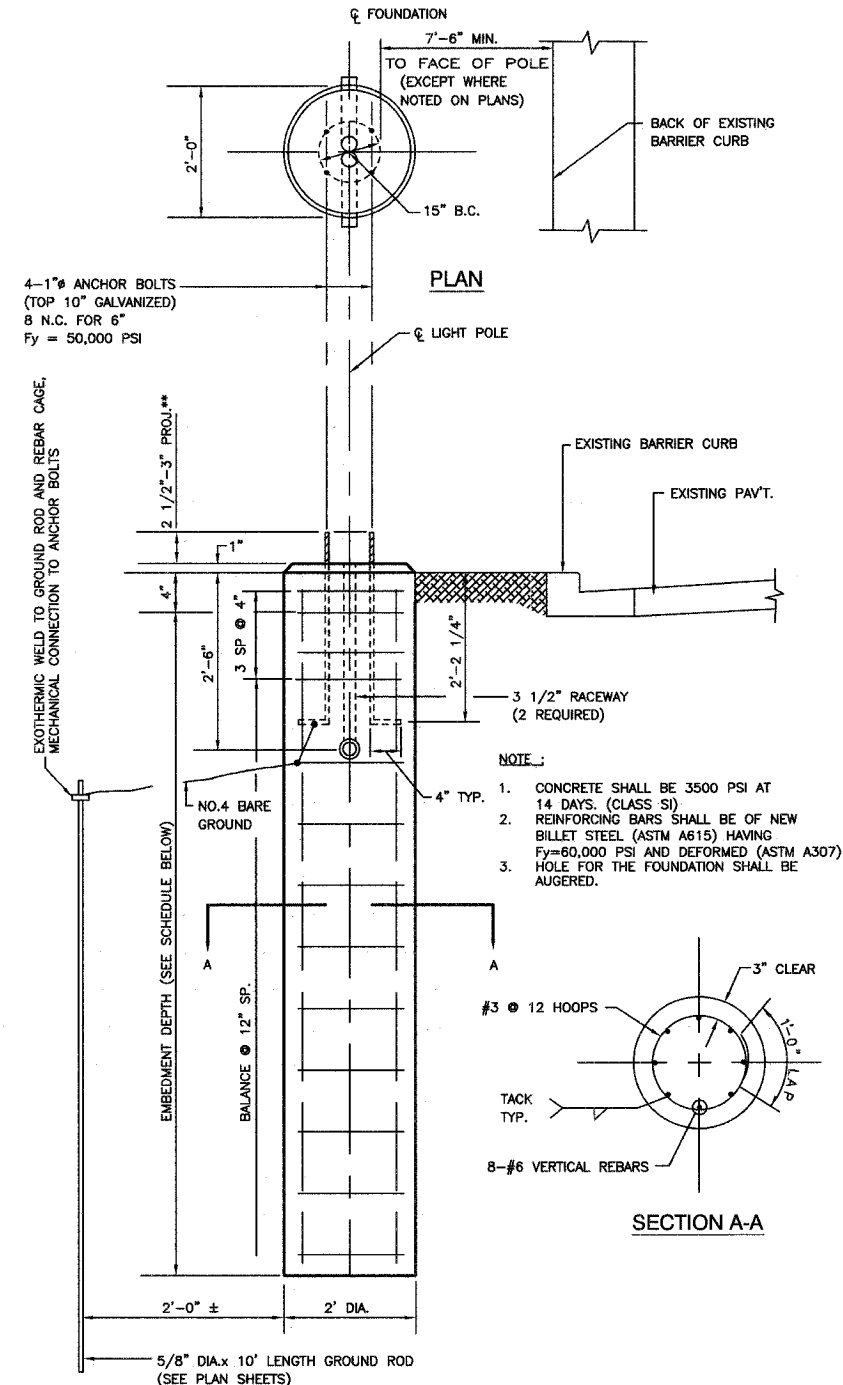
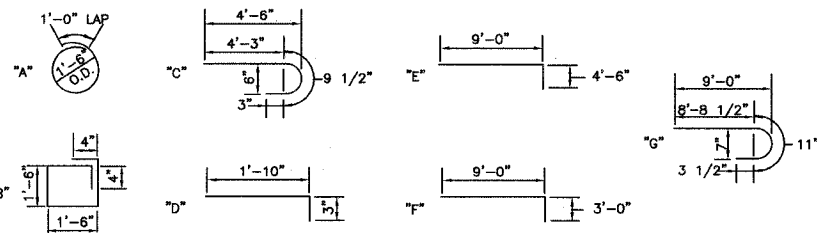
****NOTE:**
THE TOP OF THE ANCHOR BOLTS SHOULD NOT PROJECT MORE THAN 4" ABOVE A 60" CHORD ALIGNED RADIALLY TO THE CENTERLINE OF THE HIGHWAY AND CONNECTING ANY POINT WITHIN THE LENGTH OF THE CHORD, ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE.

- NOTE:**
- CONCRETE SHALL BE 3500 PSI AT 14 DAYS. (CLASS SI)
 - REINFORCING BARS SHALL BE OF NEW BILLET STEEL ASTM M42M (M42) AND DEFORMED
 - HOLE FOR THE FOUNDATION (SHAFT) SHALL BE AUGERED
 - POLE FOUNDATION, OFFSET FOR THIS APPLICATION IS EQUIVALENT TO 13.5 IN. FT. PER FOUNDATION.
 - THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" PITCH OR MAY SUBSTITUTE #3 TIES 12" O.C. WITH THE APPROVAL OF THE ENGINEER

BILL OF MATERIALS				
"LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET"				
QUAN.	MARK	SIZE	LENGTH	SHAPE
11	A	NO.3	5'-9"	○
6	B	NO.3	6'-8"	□
3	C	NO.6	5'-31/2"	—
8	G	NO.6	2'-1"	—
3	D	NO.7	13'-6"	—
2	E	NO.7	12'-0"	—
3	F	NO.7	9'-11"	—
REINFORCING BARS		LBS.	285	
CLASS X CONCRETE		CU.YDS.	1.7	
ANCHOR BOLTS		NO.	4	
ANCHOR BOLT PLATE NO.			1	



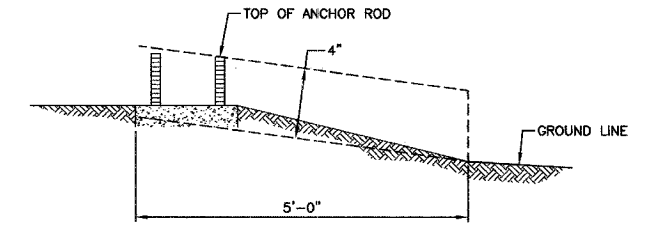
POLE FOUNDATION, OFFSET - DETAILS



LIGHT POLE FOUNDATION (TYPICAL)

****NOTE:**
ACTUAL FOUNDATION DEPTH IS EMBEDMENT DEPTH (FROM SCHEDULE) PLUS 6" EQUALS TOTAL DEPTH.
7'-0"+6"= 7'-6" FOR 35" MH

TYPE OF SOILS		EMBEDMENT MOUNTING HEIGHT			
DESCRIPTION	STANDARDS	30 FT.	35 FT.	40 FT.	47.5 FT.
SOFT CLAY	Qu = .25-.50 T/FT. 2	9'-0"	9'-8"	10'-6"	14'-0"
MEDIUM CLAY	Qu = .50-1.0 T/FT. 2	6'-6"	7'-0"	7'-6"	10'-0"
DENSE CLAY	Qu = 1.0-2.0 T/FT. 2	5'-6"	6'-0"	6'-6"	8'-6"
LOOSE SAND	N = 4-10	7'-0"	7'-8"	8'-4"	11'-0"
MEDIUM SAND	N = 10-30	6'-0"	6'-6"	7'-3"	9'-6"
DENSE SAND	N = 30-50	5'-6"	6'-0"	6'-6"	8'-6"



FOUNDATION EXTENSION DETAIL

****NOTE:**
THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4") ABOVE THE FINISHED GRADE WITHIN A 1.5M (60") 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 CONTRACTORS EXPENSE. SEE FOUNDATION EXTENSION DETAIL.

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119TH STREET LIGHTING DETAILS

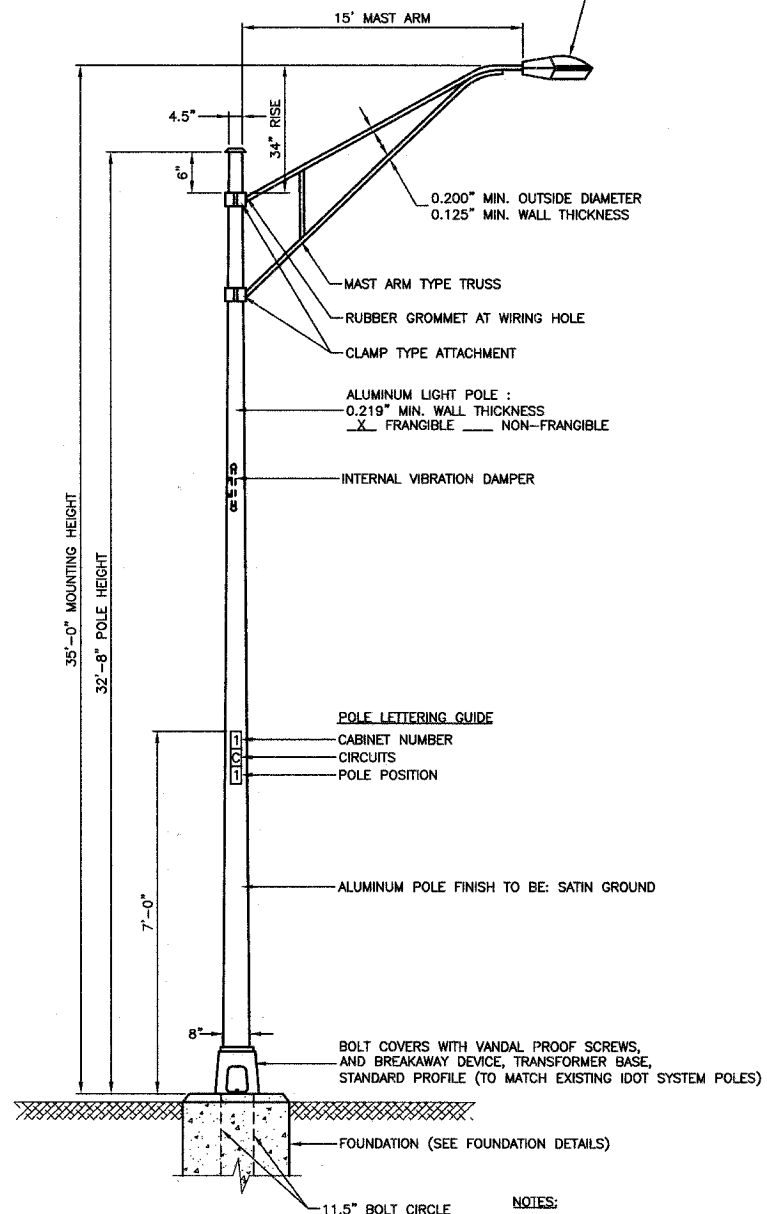
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Checked by: TRL/PAP Scale: NONE
Sheet 8 of 9 Project No. 02-160.02

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No.	Date	Remarks

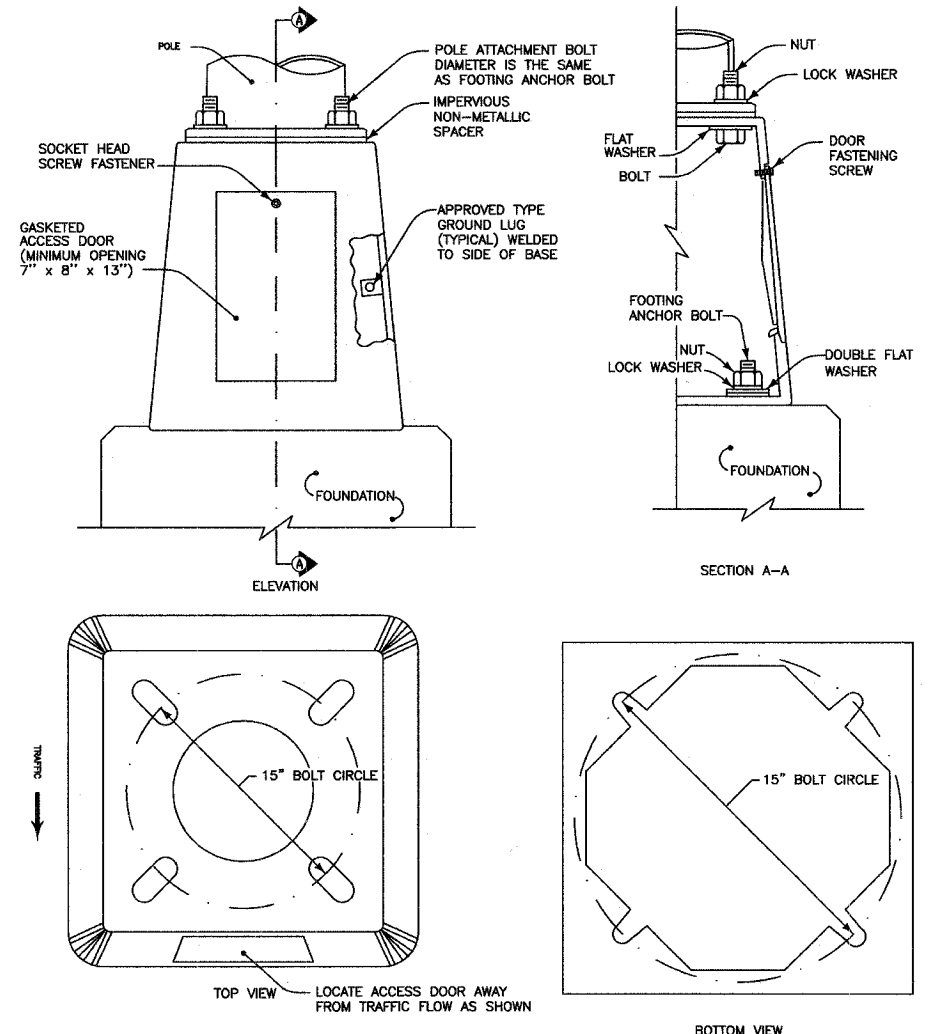
F.A.M. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1585	02-00079-0-LT	COOK	9	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LUMINAIRE:
 250 WATT HIGH PRESSURE SODIUM LAMP
 240 VOLT BALLAST
 I.E.S. TYPE: MC III LIGHT DISTRIBUTION
 LENS TYPE: FLAT
 INITIAL LAMP LUMENS: 28,000
 LAMP LIFE: 24,000 HOURS



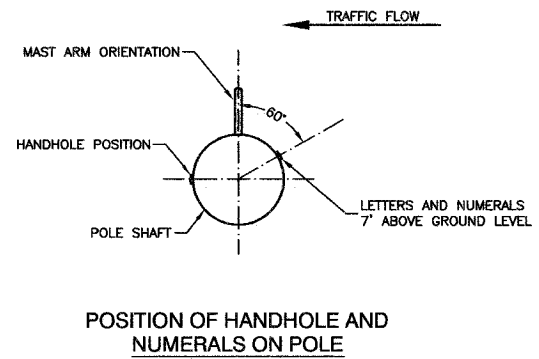
TYPICAL POLE INSTALLATION (35' MH)

- NOTES:**
1. THE LIGHTING UNITS SHALL MEET AASHTO DESIGN CRITERIA. DESIGN FOR 90 M.P.H. WIND WITH 30% GUST AND 75 POUND LUMINAIRE HAVING AN E.P.A. OF 1.6 SQ. FT. AND PROPER ICE LOADING.
 2. ALUMINUM ALLOY 6063-T6 SHALL BE USED.



- TRANSFORMER BASE NOTES:**
1. THE DETAILS INDICATED HEREON ARE TYPICAL FOR A CAST ALUMINUM TRANSFORMER BASE. ALTERNATE DESIGNS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
 2. ALL DIMENSIONS SHALL MEET AASHTO STANDARDS.
 3. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH 2002 IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 4. ALL MATERIALS, COMPONENTS AND EQUIPMENT SHALL BE U.L. LISTED.

TRANSFORMER BASE DETAIL



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119TH STREET
 LIGHTING DETAILS

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REVISIONS		
No.	Date	Remarks