

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

STREET LIGHTING

HARLEM AVENUE IL. 43(FAP 348) 71ST STREET TO NORTH OF 70TH STREET EAST FRONTAGE ROAD (FAU 3546) WEST FRONTAGE ROAD (FAU 3544) PROJECT NO.: ARA-M-9003(670) SECTION NO.: 10-00062-00-LT VILLAGE of BRIDGEVIEW, COOK COUNTY C-91-669-10

F. A. P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	10-00062-00-LT	COOK	15	1
STA. SEE MAP BELOW		TO STA. SEE MAP BELOW		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	ARA-M-9003(670)	

CONTRACT #63486

INDEX OF SHEETS

1. COVER SHEET
2. SUMMARY OF QUANTITIES
- 3.-4. STREET LIGHTING PLANS
- 5.-6. SINGLE LINE WIRING DIAGRAM
- 7.-15. DETAIL DRAWINGS

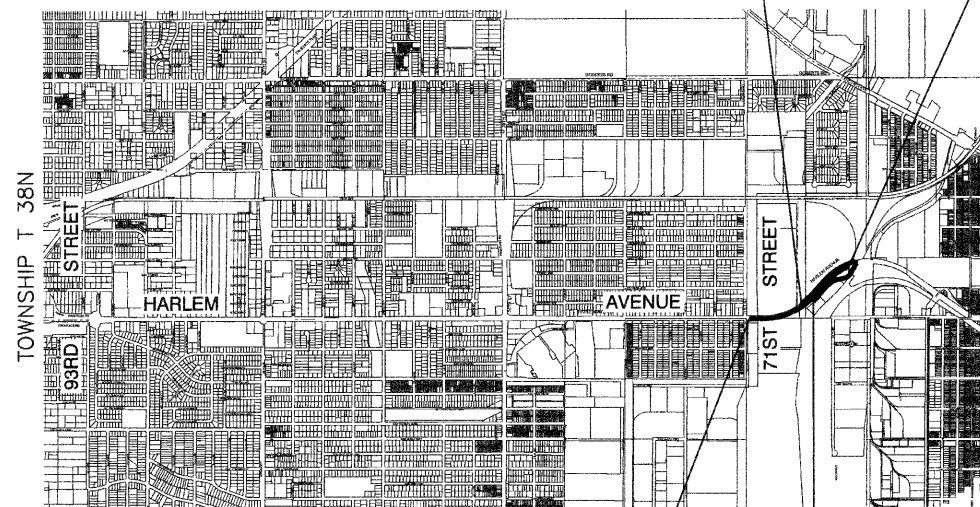
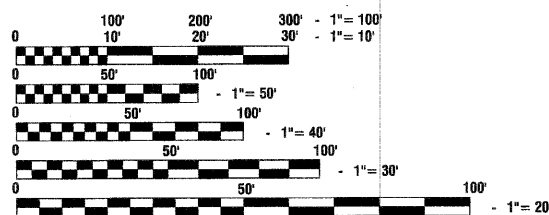
STATE STANDARDS

- | | |
|-----------|--|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 701501-05 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED |
| 701606-06 | URBAN LANE CLOSURE, MULTILANE, 2W, WITH MOUNTABLE MEDIAN |
| 701701-06 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701801-04 | LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE |
| 701901-01 | TRAFFIC CONTROL DEVICES |

HARLEM AVENUE URBAN ARTERIAL	EAST FRONTAGE ROAD	WEST FRONTAGE ROAD
ADT=42,050 (2009)	ADT=800 (2009)	ADT=800 (2009)
=45,000 (2030)	=800 (2030)	=800 (2030)
DESIGN SPEED=40 MPH	DESIGN SPEED=25 MPH	DESIGN SPEED=25 MPH
SPEED LIMIT=35 MPH	SPEED LIMIT=20 MPH	SPEED LIMIT=20 MPH

SCALES

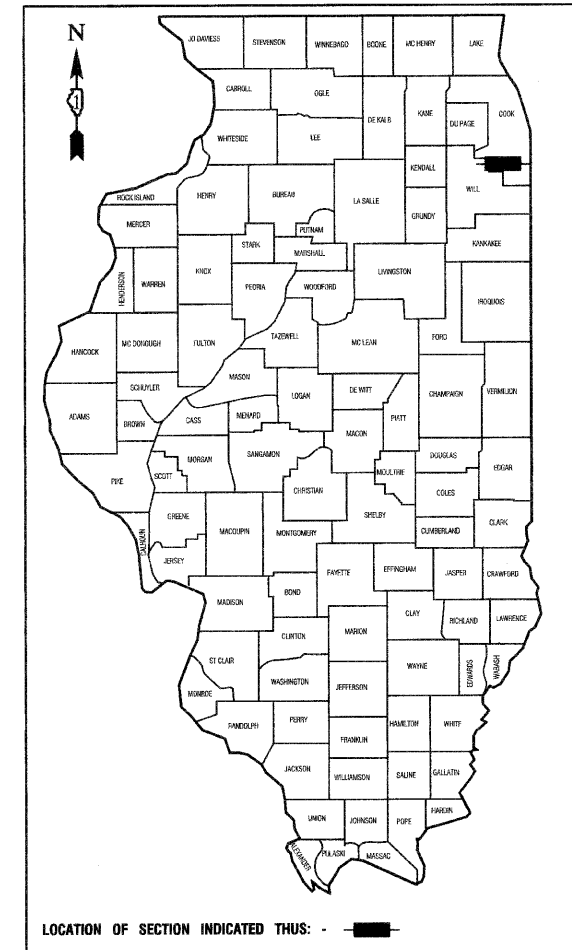
PLAN - 1"=50'
PROFILE HORIZ. - 1"=50'
PROFILE VERT. - 1"=5'
CROSS SECTIONS - 1"=10'



BEGIN PROJECT HARLEM AVENUE STA 500+90
WORK ENDS WEST FRONTAGE ROAD STA 231+62.3
END PROJECT HARLEM AVENUE STA 527+66
WORK BEGINS EAST FRONTAGE ROAD STA 202+95

LOCATION MAP

- INDICATES PROPOSED IMPROVEMENT
GROSS LENGTH=5,543 FEET=1.05 MILES
NET LENGTH=5,543 FEET=1.05 MILES



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Approved: 6-29-2010
Glenn
President, Village of Bridgeview

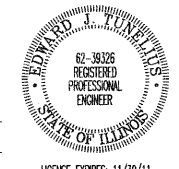
Passed: July 12, 2010
Chas
District 1 Engineer of Local Roads & Streets

Released for Bid Based on Limited Review: JULY 15, 2010
Diane M. O'Keefe
Deputy Director of Highways, Region 1 Engineer

PRINTED BY THE AUTHORITY OF
THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

Edward J. Tunick
6-28-2010



PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL.
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

CONTRACT NO. 63486

SUMMARY OF QUANTITIES

S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	LIGHTS	
					CONSTRUCTION TYPE CODE	Y030-1E
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1115		1115
	X2150010	EXPLORATION TRENCH, SPECIAL	FOOT	100		100
	25200200	SUPPLEMENTAL WATERING	UNIT	21		21
	25200110	SODDING, SALT TOLERANT	SQ YD	1115		1115
	67100100	MOBILIZATION	L SUM	1		1
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1		1
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1		1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1		1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1		1
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1
	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	280		280
	81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	430		430
	81100705	CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., PVC COATED GALVANIZED STEEL	FOOT	220		220
	81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	2		2
	81300730	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 14" X 6"	EACH	4		4
	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	125		125
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2885		2885
	82102150	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 150 WATT	EACH	16		16
	82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	23		23
	82107100	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	2		2
	83001200	LIGHT POLE, ALUMINUM, 35 FT. M.H., 6 FT. DAVIT ARM	EACH	2		2
	83001500	LIGHT POLE, ALUMINUM, 35 FT. M.H., 12 FT. DAVIT ARM	EACH	14		14
	83050730	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 8 FT. DAVIT ARM	EACH	8		8
	83050825	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM	EACH	15		15
	83050910	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 2-15 FT. MAST ARMS	EACH	1		1
	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	98		98
	83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	28		28
	83800105	BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	16		16
	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	22		22
	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	33		33
	84200804	REMOVAL OF POLE FOUNDATION	EACH	1		1
	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2		2
	82500365	LIGHTING CONTROLLER, BASE MOUNTED, 480 VOLT, 150 AMP	EACH	1		1
	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	2		2
	X8163090	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	3344		3344
	XX007586	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 4/C NO. 6 & 1/C NO. 6 GROUND, SPECIAL	FOOT	715		715

GENERAL NOTES :

- ALL WORK TO CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
- BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL ComEd FOR APPROVAL OF LOCATION.
- FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL ComEd.
- ALL CONDUIT TO BE 2.5" DIAMETER UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ETC.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE INCLUDED IN THE COST OF THE LIGHT POLE ITEMS.
- CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE COUNTY, STATE, OR THE VILLAGE.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING FLOWING OPERATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
- NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
- EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
- ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE COST OF WHICH SHALL BE INCLUDED IN THE COST OF THE LIGHT POLE ITEMS.
- THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
- SAW CUT JOINTS - THE REMOVAL AND/OR REPLACEMENT OF ANY DRIVEWAYS, PAVEMENT, CURB, SIDEWALK, ETC. SHALL BE ACCOMPLISHED BY MEANS OF A SAW CUT JOINT, AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS.
- THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.

* - INDICATES SPECIALTY ITEMS

DATE	BY
SUBMITTED	BY
PLANNED	BY
NOTED	BY
NO.	NAME

DATE	BY
SUBMITTED	BY
PLANNED	BY
NOTED	BY
NO.	NAME

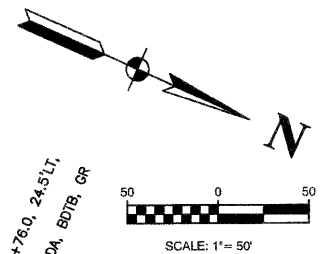


FILE NAME = 09301-QUAN-01 - P01

USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10
	CHECKED -- PKB	REVISED -- #2 06-29-10
PLOT SCALE = N/A	DRAWN -- MJD	REVISED --
PLOT DATE = 04-28-10	CHECKED -- DWS	REVISED --

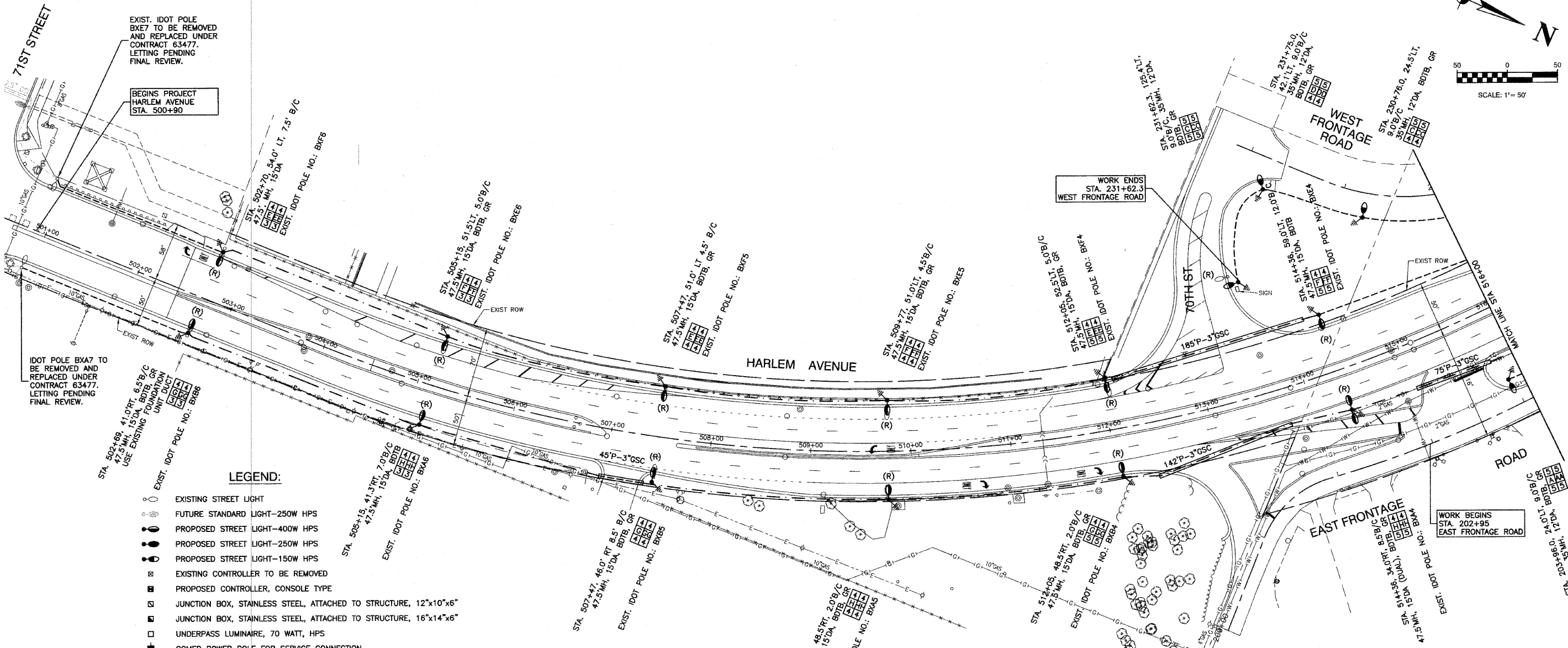
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HARLEM AVENUE STREET LIGHTING SUMMARY OF QUANTITIES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: N/A		348	10-0062-00-LT	COOK	15	2
SHEET NO. 2 OF 15 SHEETS		CONTRACT NO. 63486		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)		



PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	CHECKED	
	BY	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
	CHECKED	
	BY	
	FILE NAME	



EXIST. IDOT POLE BXE7 TO BE REMOVED AND REPLACED UNDER CONTRACT 63477. LETTING PENDING FINAL REVIEW.

BEGINS PROJECT HARLEM AVENUE STA. 500+90

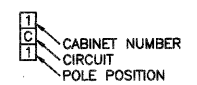
WORK ENDS STA. 231+62.3 WEST FRONTAGE ROAD

WORK BEGINS STA. 202+95 EAST FRONTAGE ROAD

LEGEND:

- EXISTING STREET LIGHT
- FUTURE STANDARD LIGHT-250W HPS
- PROPOSED STREET LIGHT-400W HPS
- PROPOSED STREET LIGHT-250W HPS
- PROPOSED STREET LIGHT-150W HPS
- EXISTING CONTROLLER TO BE REMOVED
- PROPOSED CONTROLLER, CONSOLE TYPE
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"x10"x6"
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16"x14"x6"
- UNDERPASS LUMINAIRE, 70 WATT, HPS
- COMED POWER POLE FOR SERVICE CONNECTION
- CONDUIT, PUSHED, GALVANIZED STEEL
- CONDUIT, TRENCHED, GALVANIZED STEEL
- UNIT DUCT, 600V, 6-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1-1/2" DIA., POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 800V(XLP-TYPE USE), 6-1/C NO.4 AND 1/C NO.6 GROUND PULLED THROUGH EXISTING 1 1/2" UNIT DUCT
- ⊗ GR GROUND ROD, 5/8" DIA. x 10'
- (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
- (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
- (RCC) REMOVE EXISTING CONTROL CABINET AND FOUNDATION
- MH MOUNTING HEIGHT
- DA DAVIT ARM
- B/C BACK OF CURB
- B/EP BEHIND EDGE OF PAVEMENT
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE
- SERVICE WIRE, 3-1/C, NO. 3/0 AWG.
- LT LEFT
- RT RIGHT

POLE IDENTIFICATION



NOTE:

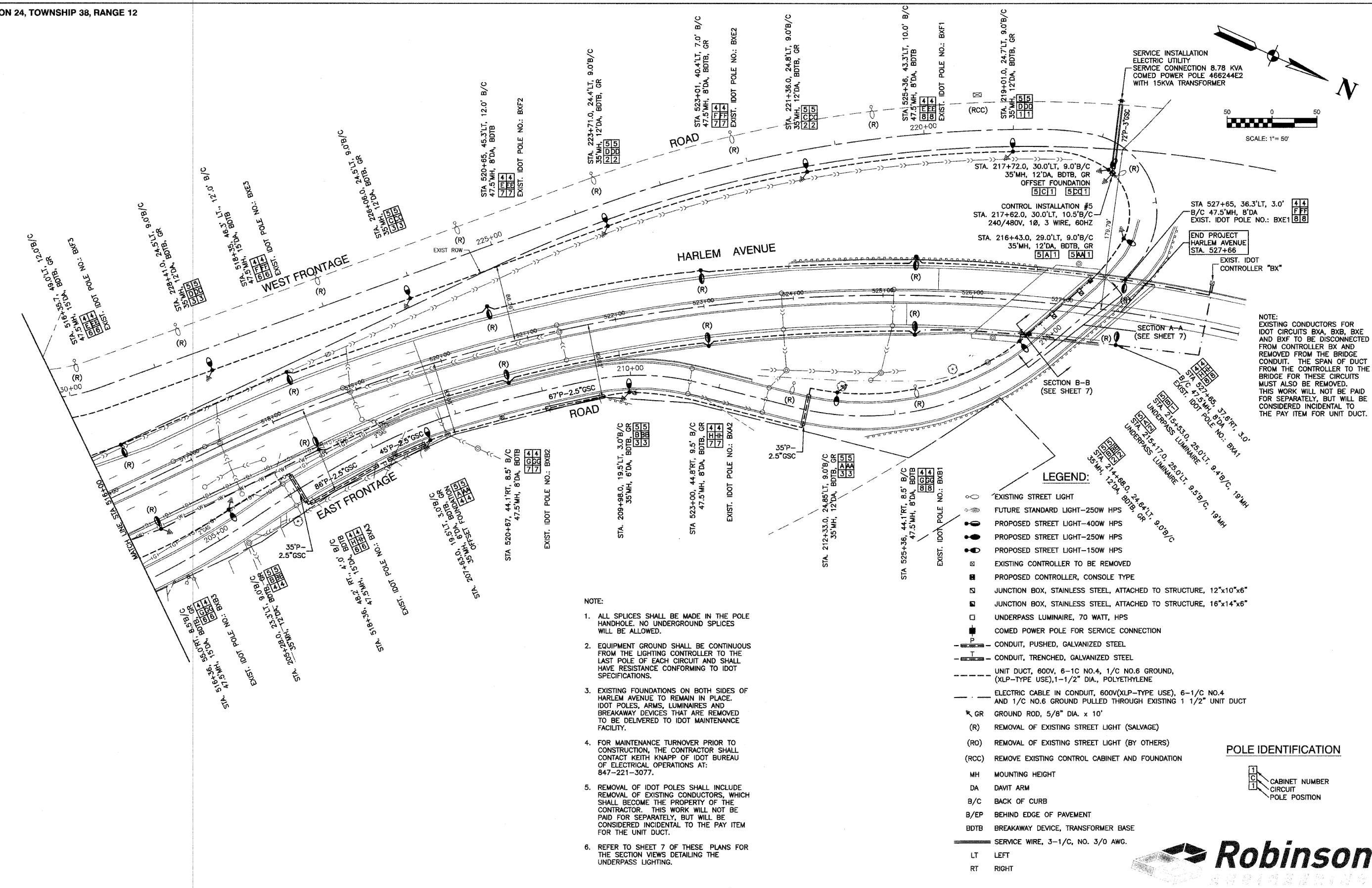
1. ALL SPLICES SHALL BE MADE IN THE POLE HANDHOLE. NO UNDERGROUND SPLICES WILL BE ALLOWED.
2. EQUIPMENT GROUND SHALL BE CONTINUOUS FROM THE LIGHTING CONTROLLER TO THE LAST POLE OF EACH CIRCUIT AND SHALL HAVE RESISTANCE CONFORMING TO IDOT SPECIFICATIONS.
3. EXISTING FOUNDATIONS ON BOTH SIDES OF HARLEM AVENUE TO REMAIN IN PLACE. IDOT POLES, ARMS, LUMINAIRES AND BREAKAWAY DEVICES THAT ARE REMOVED TO BE DELIVERED TO IDOT MAINTENANCE FACILITY.
4. FOR MAINTENANCE TURNOVER PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KEITH KNAPP OF IDOT BUREAU OF ELECTRICAL OPERATIONS AT: 847-221-3077.
5. REMOVAL OF IDOT POLES SHALL INCLUDE REMOVAL OF EXISTING CONDUCTORS, WHICH SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEM FOR THE UNIT DUCT.

FILE NAME = 09301-LIGHT-01 - P08	USER NAME =	DESIGNED — PAP	REVISED — #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING	F.A.P. RTE. 348	SECTION 10-00062-00-LT	COUNTY COOK	TOTAL SHEETS 15	SHEET NO. 3	
PLOT SCALE = 1"=50'	CHECKED — PKB	REVISOR — #2 06-29-10	SCALE: 1"=50'			SHEET NO. 3 OF 15 SHEETS	STA. 500+90 TO STA. 516+00	CONTRACT NO. 63486		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)	
PLOT DATE = 04-28-10	DRAWN — MJD	REVISOR —									
	CHECKED — DWS	REVISOR —									



PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NOTE BOOK	
	NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NOTE BOOK	
	NO.	
	CADD FILE NAME	



NOTE:
EXISTING CONDUCTORS FOR
IDOT CIRCUITS BXA, BXB, BXE
AND BXF TO BE DISCONNECTED
FROM CONTROLLER BX AND
REMOVED FROM THE BRIDGE
CONDUIT. THE SPAN OF DUCT
FROM THE CONTROLLER TO THE
BRIDGE FOR THESE CIRCUITS
MUST ALSO BE REMOVED.
THIS WORK WILL NOT BE PAID
FOR SEPARATELY, BUT WILL BE
CONSIDERED INCIDENTAL TO
THE PAY ITEM FOR UNIT DUCT.

- NOTE:
1. ALL SPLICES SHALL BE MADE IN THE POLE HANDHOLE. NO UNDERGROUND SPLICES WILL BE ALLOWED.
 2. EQUIPMENT GROUND SHALL BE CONTINUOUS FROM THE LIGHTING CONTROLLER TO THE LAST POLE OF EACH CIRCUIT AND SHALL HAVE RESISTANCE CONFORMING TO IDOT SPECIFICATIONS.
 3. EXISTING FOUNDATIONS ON BOTH SIDES OF HARLEM AVENUE TO REMAIN IN PLACE. IDOT POLES, ARMS, LUMINAIRES AND BREAKAWAY DEVICES THAT ARE REMOVED TO BE DELIVERED TO IDOT MAINTENANCE FACILITY.
 4. FOR MAINTENANCE TURNOVER PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KEITH KNAPP OF IDOT BUREAU OF ELECTRICAL OPERATIONS AT: 847-221-3077.
 5. REMOVAL OF IDOT POLES SHALL INCLUDE REMOVAL OF EXISTING CONDUCTORS, WHICH SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEM FOR THE UNIT DUCT.
 6. REFER TO SHEET 7 OF THESE PLANS FOR THE SECTION VIEWS DETAILING THE UNDERPASS LIGHTING.

- LEGEND:
- EXISTING STREET LIGHT
 - FUTURE STANDARD LIGHT-250W HPS
 - PROPOSED STREET LIGHT-400W HPS
 - PROPOSED STREET LIGHT-250W HPS
 - PROPOSED STREET LIGHT-150W HPS
 - EXISTING CONTROLLER TO BE REMOVED
 - PROPOSED CONTROLLER, CONSOLE TYPE
 - JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12"x10"x6"
 - JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16"x14"x6"
 - UNDERPASS LUMINAIRE, 70 WATT, HPS
 - COMED POWER POLE FOR SERVICE CONNECTION
 - CONDUIT, PUSHED, GALVANIZED STEEL
 - CONDUIT, TRENCHED, GALVANIZED STEEL
 - UNIT DUCT, 600V, 6-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1-1/2" DIA., POLYETHYLENE
 - ELECTRIC CABLE IN CONDUIT, 600V(XLP-TYPE USE), 6-1/C NO.4 AND 1/C NO.6 GROUND PULLED THROUGH EXISTING 1 1/2" UNIT DUCT
 - GR GROUND ROD, 5/8" DIA. x 10'
 - (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
 - (RC) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
 - (RO) REMOVE EXISTING CONTROL CABINET AND FOUNDATION
- POLE IDENTIFICATION
- MH MOUNTING HEIGHT
 - DA DAVIT ARM
 - B/C BACK OF CURB
 - B/EP BEHIND EDGE OF PAVEMENT
 - BDTB BREAKAWAY DEVICE, TRANSFORMER BASE
 - LT LEFT
 - RT RIGHT

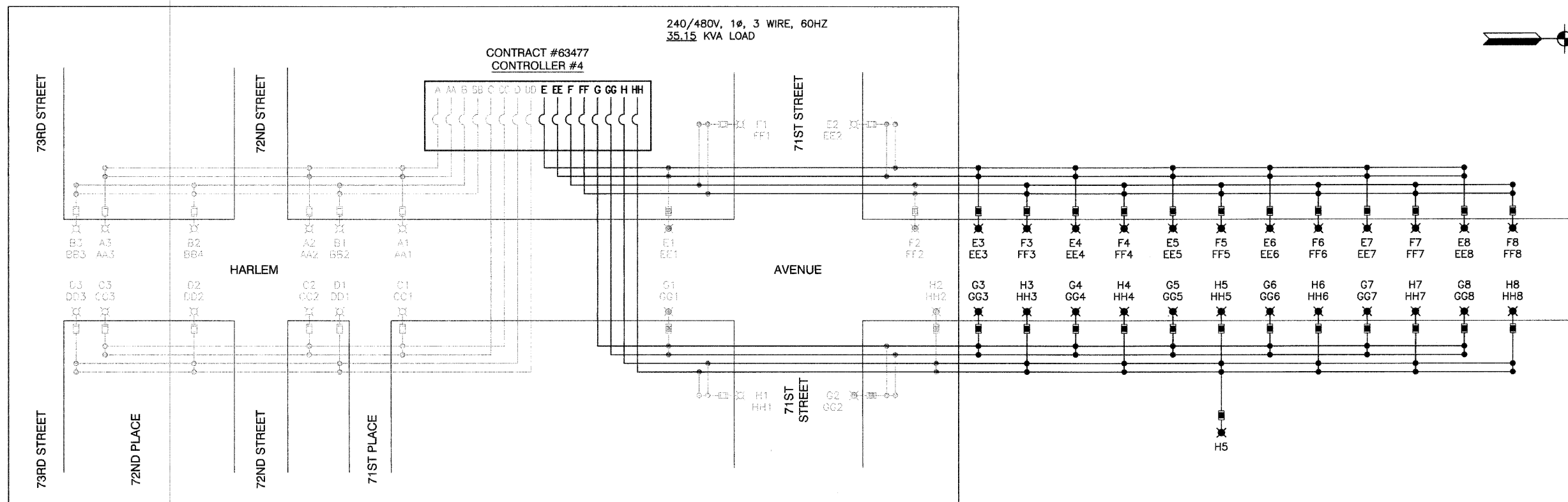
FILE NAME = 06301-LGHT-01 - P09	USER NAME =	DESIGNED = PAP	REVISED = #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING		F.A.P. RATE = 348	SECTION = 10-00062-00-LT	COUNTY = COOK	TOTAL SHEETS = 15	SHEET NO. = 4
PLOT SCALE = 1"=50'	CHECKED = PKB	REVISOR = MJD	REVISED = #2 06-29-10		SCALE: 1"=50'	SHEET NO. 4 OF 15 SHEETS	STA. 516+00 TO STA. 527+66	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT ARA-M-9003(670)	CONTRACT NO. 63486
PLOT DATE = 04-28-10	DRAWN = DWS	CHECKED = DWS	REVISED =								



NOTE:
 CIRCUITS A, B, C, D & AA, BB, CC, & DD FOR
 CONTROLLER #4 ARE INCLUDED IN CONTRACT #63477,
 WHICH IS ANOTHER LOCAL LIGHTING PROJECT.
 THE PART OF CONTROLLER #4 SYSTEM THAT IS
 SHOWN IN THE BOX BELOW IS PART OF THE
 REFERENCED CONTRACT #63477.

240/480V, 1 ϕ , 3 WIRE, 60HZ
 35.15 KVA LOAD

CONTRACT #63477
 CONTROLLER #4



LOAD TABULATIONS - CONTROLLER #4

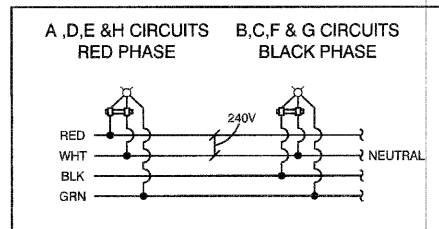
CIRCUIT	WATTS	AMPS @ 240V	
		RED PHASE	BLACK PHASE
A	915	3.90	
B	915		3.90
C	915	3.90	
D	915		3.90
E	3,651	15.30	
F	3,651		15.30
G	3,824	16.00	
H	3,651		17.30
LUMINAIRE SUBTOTAL	18,437	39.10	40.40
AA	900	3.75	
BB	900		3.75
CC	900	3.75	
DD	900		3.75
EE	2,400	10.00	
FF	2,400		10.00
GG	2,400	10.00	
HH	2,400		10.00
GFCI SUBTOTAL	13,200	27.50	27.50
CAB TOTAL	31,637	66.60	67.90
TOTAL AMPS @ 240V		134.50	

LEGEND

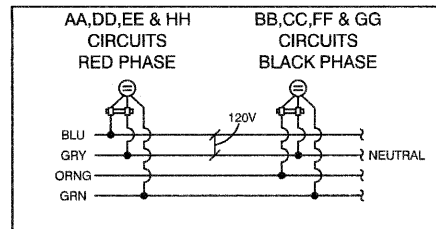
- ⊗ LUMINAIRE, UNDERPASS 70W HPS, 240V (0.4 AMPS)
- ⊗ LUMINAIRE, 150W HPS, 240V (0.8 AMPS)
- ⊗ LUMINAIRE, 250W HPS, 240V (1.3 AMPS)
- ⊗ LUMINAIRE, 400W HPS, 240V (2.0 AMPS)
- ⊗ LUMINAIRE, UNDERPASS, 70W HPS, 240V (0.4 AMPS)
- FUSE, 1.0 AMP
- FUSE, 2.0 AMP
- FUSE, 3.5 AMP
- FUSE, 4.0 AMP
- A1 LUMINAIRE CIRCUIT, 240V
- AA1 GFCI CIRCUIT, 120V (2.5 AMPS EACH)
- ⎓ CIRCUIT BREAKER
- CONNECTION



TYPICAL LUMINAIRE WIRING



TYPICAL FESTOON WIRING



PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	CHECKED	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	CHECKED	
	BY	
	DATE	

FILE NAME = 09301-LIGHT-02 - SLWD02

USER NAME =	DESIGNED — PAP	REVISED — #1 06-11-10
PLOT SCALE = N/A	CHECKED — PKB	REVISED — #2 06-29-10
PLOT DATE = 04-28-10	DRAWN — MJD	REVISED —
	CHECKED — DWS	REVISED —

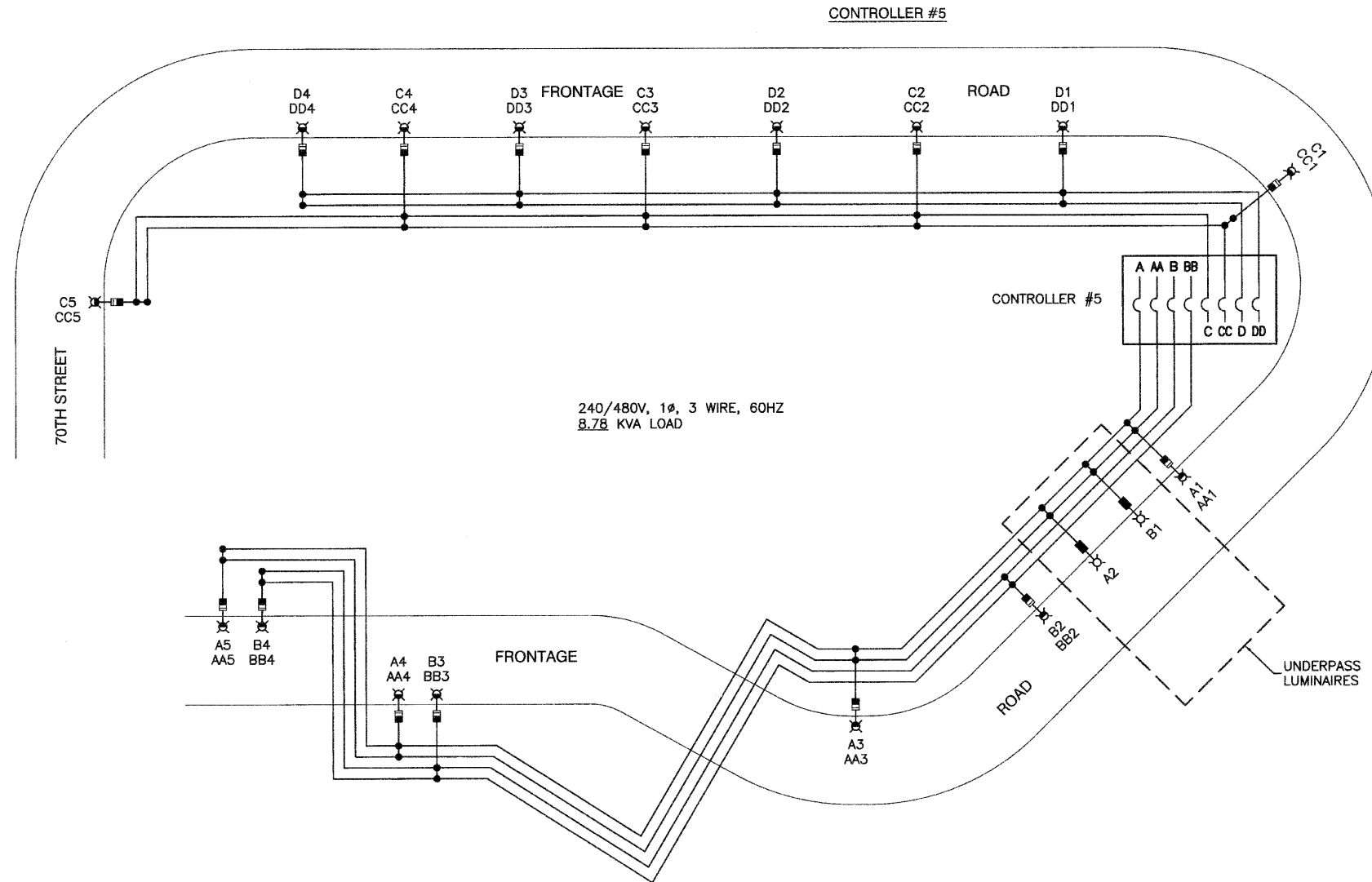
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: N/A	SHEET NO. 5	OF 15 SHEETS	STA. N/A	TO STA. N/A
------------	-------------	--------------	----------	-------------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	10-00062-00-LT	COOK	15	5
CONTRACT NO. 63486				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)				

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

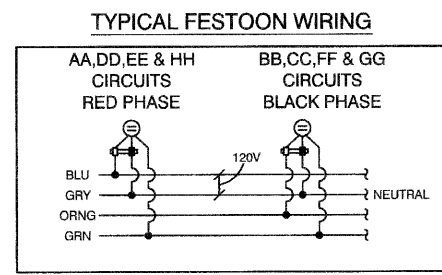
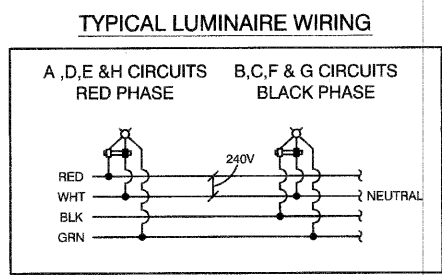
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



- LEGEND**
- ⊗ LUMINAIRE, UNDERPASS 70W HPS, 240V (0.4 AMPS)
 - ⊗ LUMINAIRE, 150W HPS, 240V (0.8 AMPS)
 - ⊗ LUMINAIRE, 250W HPS, 240V (1.3 AMPS)
 - ⊗ LUMINAIRE, 400W HPS, 240V (2.0 AMPS)
 - ⊗ LUMINAIRE, UNDERPASS, 70W HPS, 240V (0.4 AMPS)
 - FUSE, 1.0 AMP
 - FUSE, 2.0 AMP
 - FUSE, 3.5 AMP
 - FUSE, 4.0 AMP
 - A1 LUMINAIRE CIRCUIT, 240V
 - AA1 GFCI CIRCUIT, 120V (2.5 AMPS EACH)
 - ⌋ CIRCUIT BREAKER
 - CONNECTION

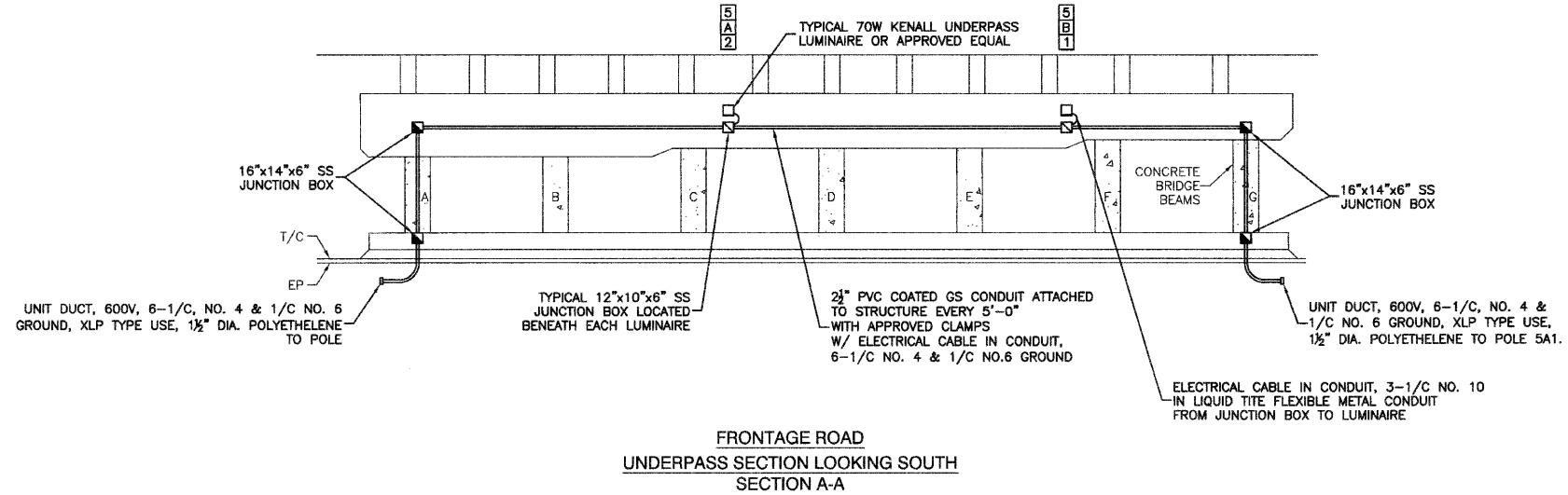
LOAD TABULATIONS - CONTROLLER #5

CIRCUIT	WATTS	AMPS @ 240V	
		RED PHASE	BLACK PHASE
A	819	3.60	
B	636		2.80
C	915	4.00	
D	732		3.20
LUMINAIRE SUBTOTAL	3,102	7.60	6.00
AA	1,200	5.00	
BB	900		3.75
CC	1,500	6.25	
DD	1,200		5.00
GFCI SUBTOTAL	4,800	11.25	8.75
CAB TOTAL	7,902	18.85	14.75
TOTAL AMPS @ 240V			33.60

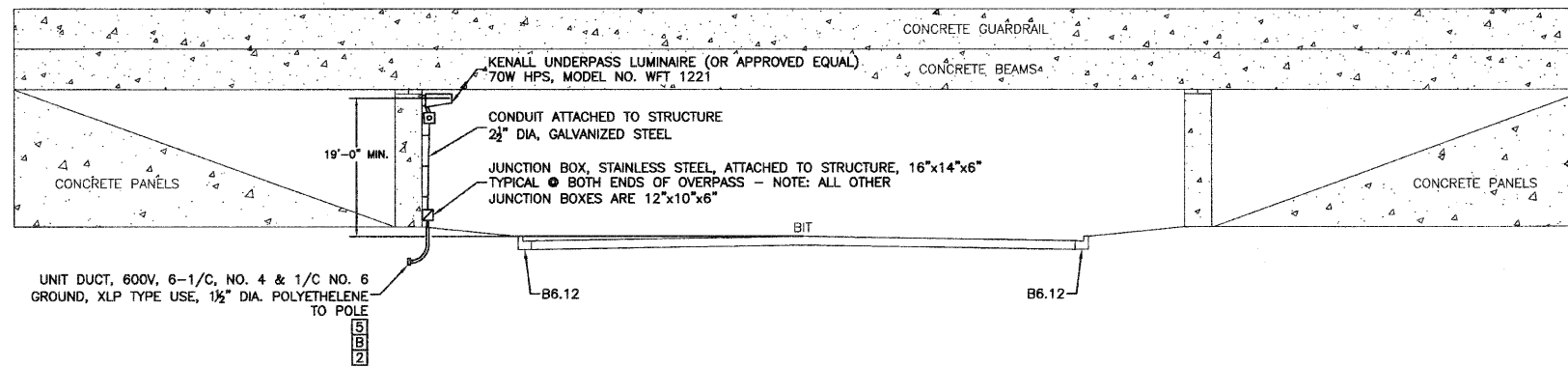


DATE	
BY	
PLAN	
DATE	
BY	
PROFILE	
DATE	
BY	
PLAN	
DATE	
BY	
PROFILE	
DATE	
BY	

DATE	
BY	
PLAN	
DATE	
BY	
PROFILE	
DATE	
BY	
PLAN	
DATE	
BY	
PROFILE	
DATE	
BY	

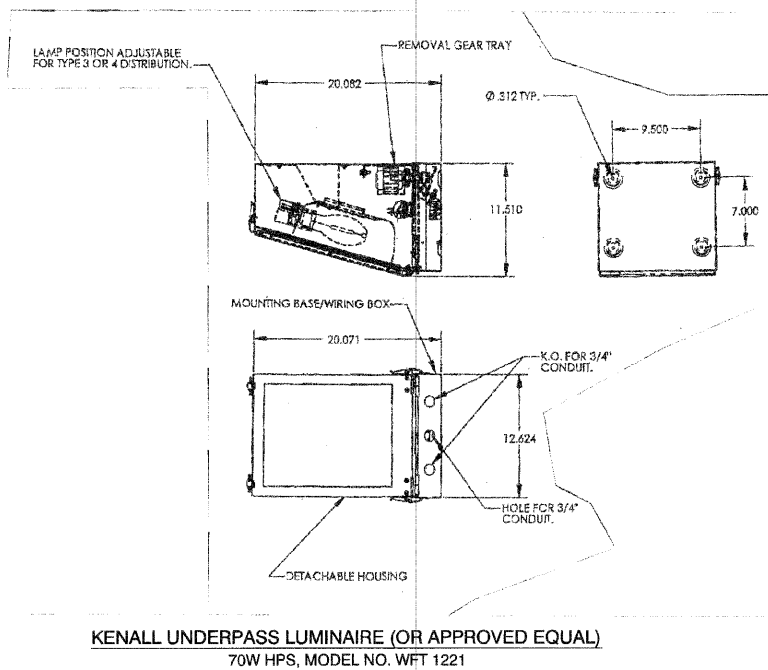


- NOTES:
1. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE 2 1/2" DIA., PVC COATED, GALVANIZED STEEL.
 2. FOR CONTINUATION OF UNIT DUCT TO LIGHT POLES 5A1 & 5B2, REFER TO SHEET 4 OF THESE PLANS.

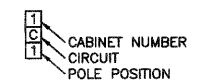


LEGEND:

- EXISTING STREET LIGHT
- FUTURE STANDARD LIGHT-250W HPS
- PROPOSED STREET LIGHT-400W HPS
- PROPOSED STREET LIGHT-250W HPS
- PROPOSED STREET LIGHT-150W HPS
- EXISTING CONTROLLER TO BE REMOVED
- PROPOSED CONTROLLER, CONSOLE TYPE
- ⊥ COMED POWER POLE FOR SERVICE CONNECTION
- - - CONDUIT, PUSHED, GALVANIZED STEEL
- - - CONDUIT, TRENCHED, GALVANIZED STEEL
- - - UNIT DUCT, 600V, 6-1/2" NO.4, 1/2" NO.6 GROUND, (XLP-TYPE USE), 1-1/2" DIA., POLYETHYLENE
- - - ELECTRIC CABLE IN CONDUIT, 600V(XLP-TYPE USE), 6-1/2" NO.4 AND 1/2" NO.6 GROUND PULLED THROUGH EXISTING 1 1/2" UNIT DUCT
- ⊥ GR GROUND ROD, 5/8" DIA. x 10'
- (R) REMOVAL OF EXISTING STREET LIGHT (SALVAGE)
- (RO) REMOVAL OF EXISTING STREET LIGHT (BY OTHERS)
- (RCC) REMOVE EXISTING CONTROL CABINET AND FOUNDATION
- MH MOUNTING HEIGHT
- DA DAVIT ARM
- B/C BACK OF CURB
- B/EP BEHIND EDGE OF PAVEMENT
- BDTB BREAKAWAY DEVICE, TRANSFORMER BASE
- - - CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., PVC COATED GALVANIZED STEEL, W/6-1/2" NO.4 & 1/2" NO.6 GROUND
- LT LEFT
- RT RIGHT
- STAINLESS STEEL JUNCTION BOX, 16"x14"x6", ATTACHED TO STRUCTURE
- STAINLESS STEEL JUNCTION BOX, 12"x10"x6", ATTACHED TO STRUCTURE



POLE IDENTIFICATION

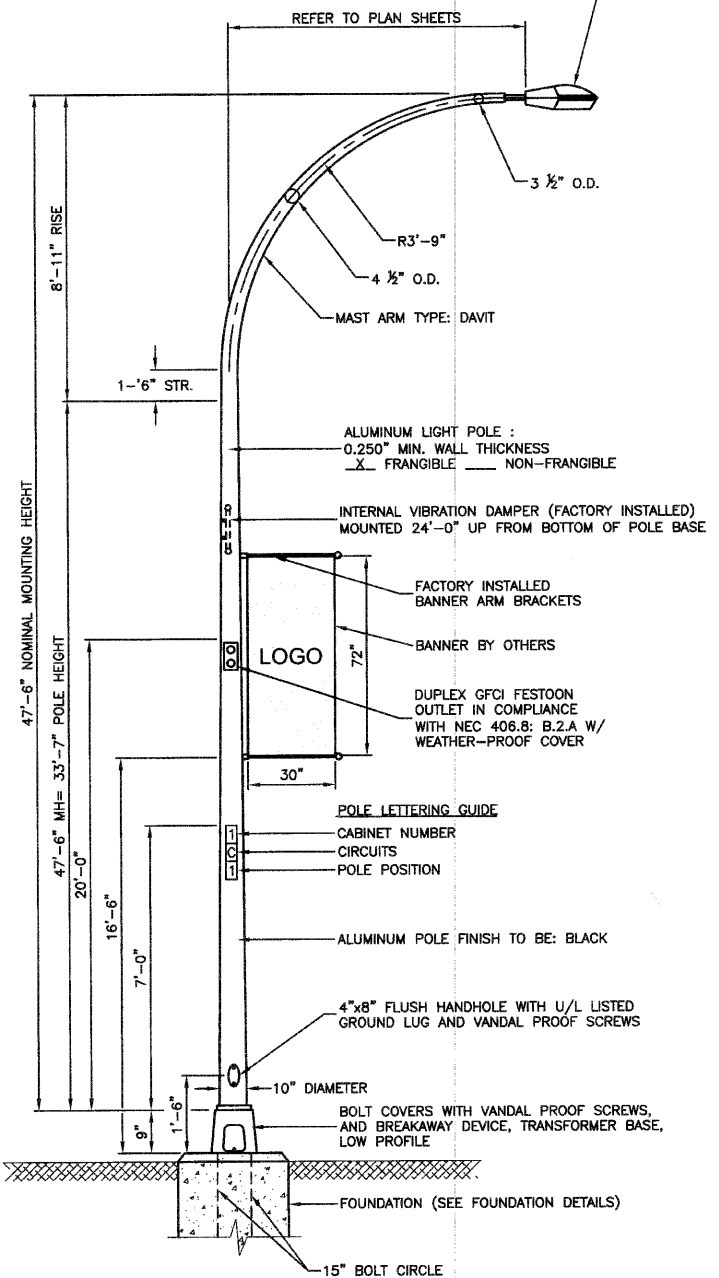


FILE NAME = 09301-LGHT-02 - D01	USER NAME =	DESIGNED — PAP	REVISED — #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET UNDERPASS DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DESIGNED — PKB	REVISED — #2 06-29-10	348			10-0062-00-LT	COOK	15	7	
PLOT SCALE = N/A	DRAWN — MJD	REVISED —	CONTRACT NO. 63486							
PLOT DATE = 04-28-10	CHECKED — DWS	REVISED —	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)							
				SCALE: 1"=10'		SHEET NO. 7 OF 15 SHEETS		STA. N/A TO STA. N/A		

LUMINAIRE: FINISH TO BE BLACK
 400 WATT HIGH PRESSURE SODIUM LAMP
 240 VOLT BALLAST
 I.E.S. TYPE: MC III LIGHT DISTRIBUTION
 (MEDIUM FULL CUTOFF TYPE 3)
 LENS TYPE: FLAT
 INITIAL LAMP LUMENS: 50,000
 LAMP LIFE: 24,000 HOURS

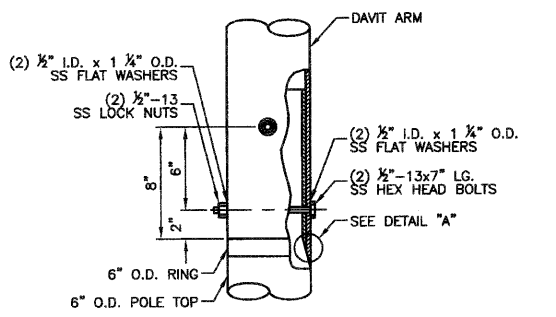
DATE	
BY	
PLAN	
SURVEYED	
ALIGNED	
NOTED	
RT. OF WAY CHECKED	
NO. _____	
FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
ALIGNED	
NOTED	
RT. OF WAY CHECKED	
NO. _____	
FILE NAME	

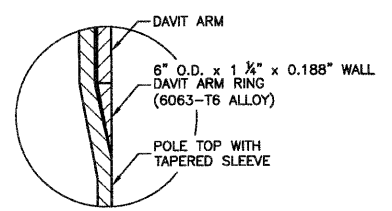


- NOTES:
1. THE LIGHTING UNITS SHALL MEET AASHTO DESIGN CRITERIA. DESIGN FOR 90 M.P.H. WIND WITH 30% GUST AND 75 POUND LUMINAIRE HAVING AN E.P.A. OF 1.6 SQ. FT. AND PROPER ICE LOADING.
 2. ALUMINUM ALLOY 6063-T6 SHALL BE USED.

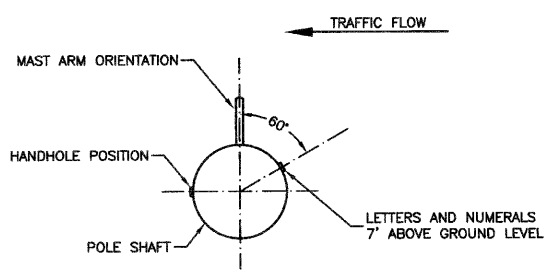
TYPICAL POLE INSTALLATION (47.5' MH)
 HARLEM AVENUE



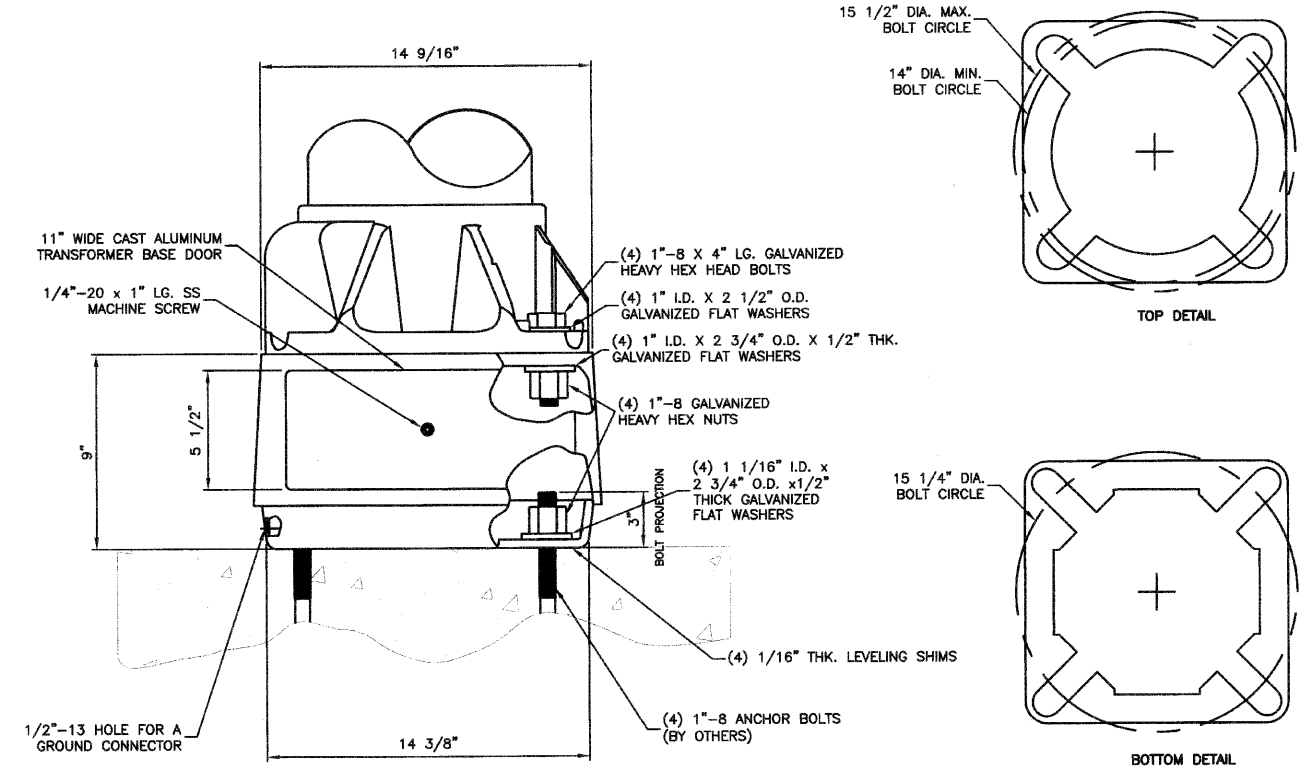
CONNECTION DETAIL



DETAIL "A"



POSITION OF HANDHOLE AND NUMERALS ON POLE



TRANSFORMER BASE DETAIL, 15" BOLT CIRCLE

- NOTES:
1. BREAKAWAY DEVICE TO BE AASHTO APPROVED.
 2. TRANSFORMER BASE AND LIGHTPOLE TO BE LEVELED AS ONE UNIT USING LEVELING SHIMS IF REQUIRED.
 3. ALUMINUM ALLOY FINISH TO BE BLACK.

FILE NAME = 09301-LGHT-02 - P01	USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED -- PKB	REVISED -- #2 06-29-10	348			10-00062-00-LT	COOK	15	8	
PLOT SCALE = N/A	DRAWN -- MJD	REVISED --	CONTRACT NO. 63486							
PLOT DATE = 04-28-10	CHECKED -- DWS	REVISED --	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)							
SCALE: N/A					SHEET NO. 8 OF 15 SHEETS		STA. N/A TO STA. N/A			



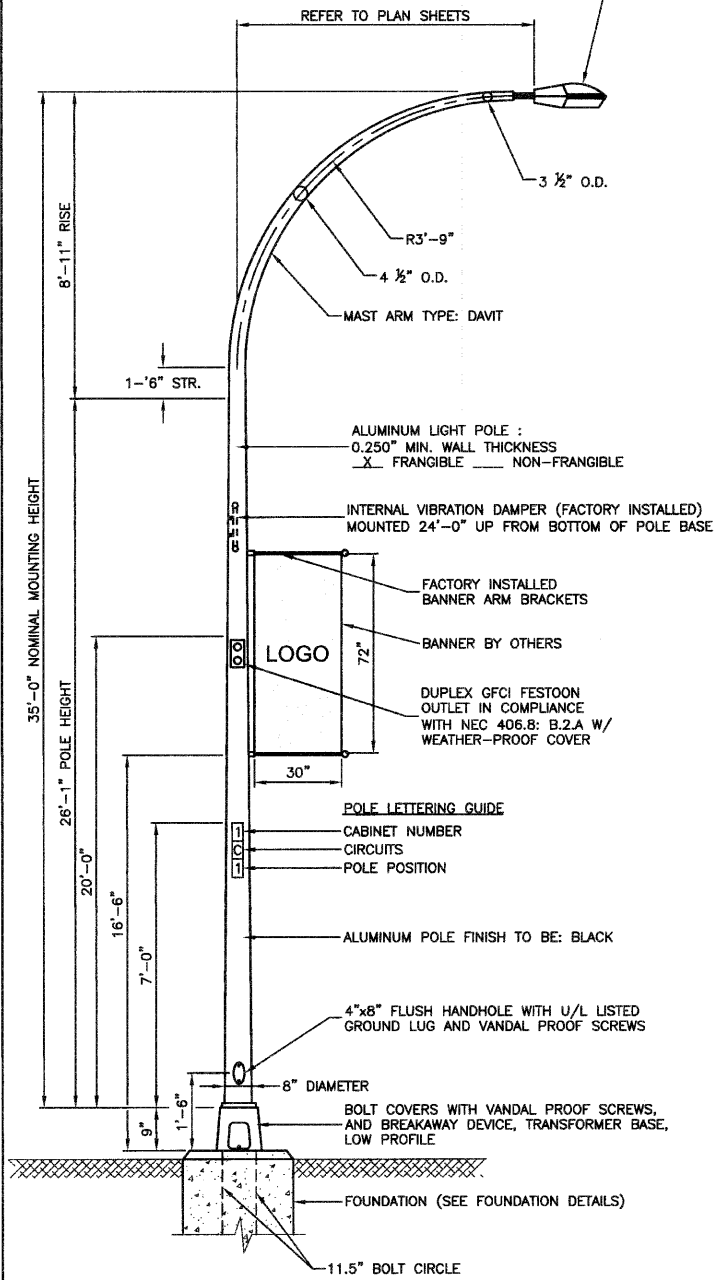
LUMINAIRE: FINISH TO BE BLACK
 150 WATT HIGH PRESSURE SODIUM LAMP
 240 VOLT BALLAST

I.E.S. TYPE: MC III LIGHT DISTRIBUTION
 (MEDIUM FULL CUTOFF TYPE 3)

LENS TYPE: FLAT
 INITIAL LAMP LUMENS: 16,000
 LAMP LIFE: 24,000 HOURS

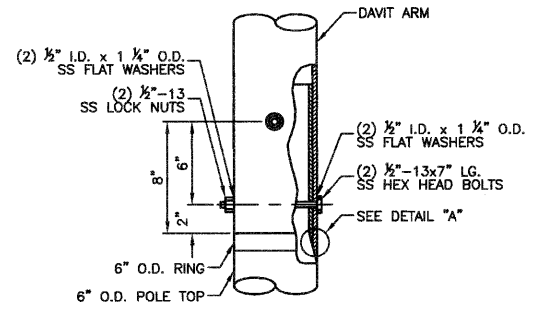
PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAYS CHECKED	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO. OF WAYS CHECKED	
	CADD FILE NAME	

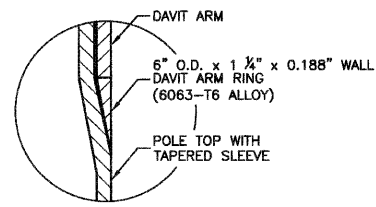


- NOTES:
1. THE LIGHTING UNITS SHALL MEET AASHTO DESIGN CRITERIA. DESIGN FOR 90 M.P.H. WIND WITH 30% GUST AND 75 POUND LUMINAIRE HAVING AN E.P.A. OF 1.6 SQ. FT. AND PROPER ICE LOADING.
 2. ALUMINUM ALLOY 6063-T6 SHALL BE USED.

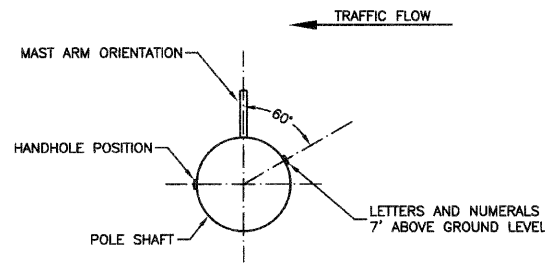
TYPICAL POLE INSTALLATION (35' MH)
 FRONTAGE ROAD



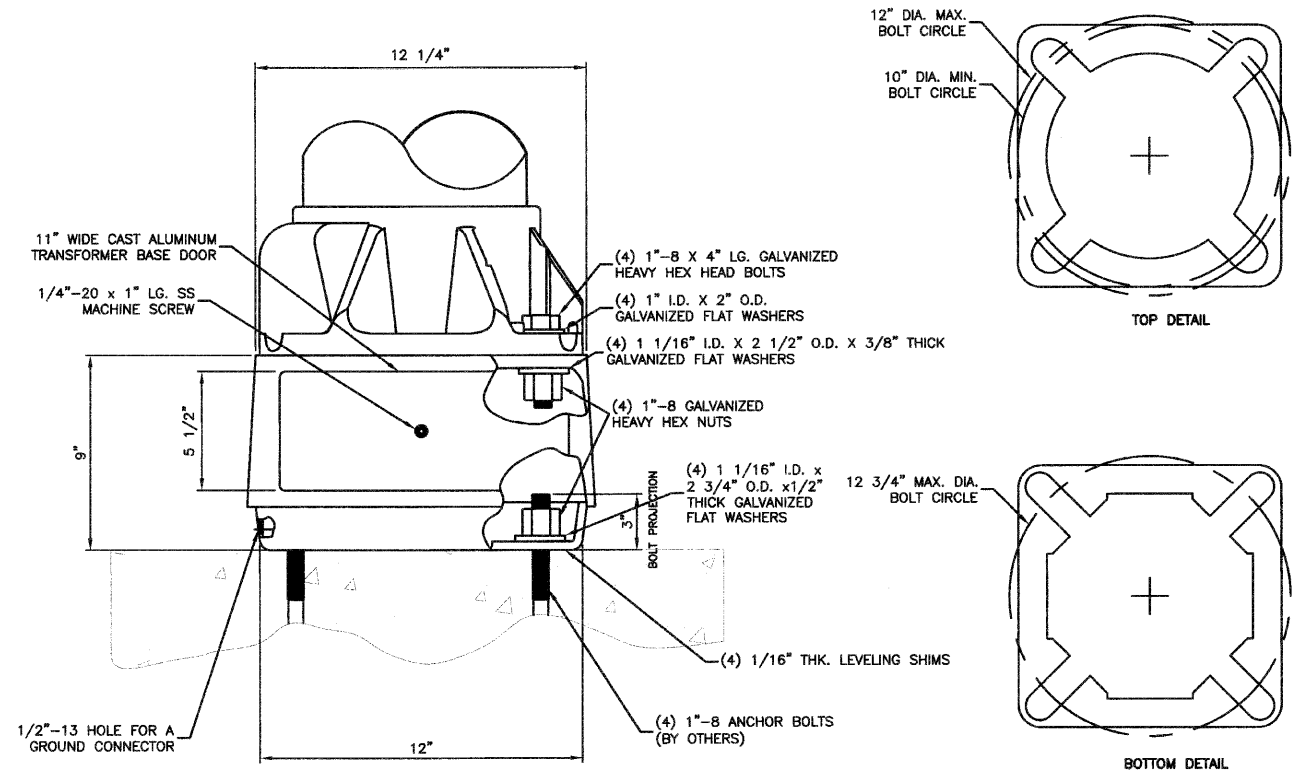
CONNECTION DETAIL



DETAIL "A"



POSITION OF HANDHOLE AND NUMERALS ON POLE



TRANSFORMER BASE DETAIL, 11.5" BOLT CIRCLE

- NOTES:
1. BREAKAWAY DEVICE TO BE AASHTO APPROVED.
 2. TRANSFORMER BASE AND LIGHTPOLE TO BE LEVELED AS ONE UNIT USING LEVELING SHIMS IF REQUIRED.
 3. ALUMINUM ALLOY FINISH TO BE BLACK.



FILE NAME = 09301-LGHT-02 - P02

USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10
	CHECKED -- PKB	REVISED -- #2 06-29-10
PLOT SCALE = N/A	DRAWN -- MJD	REVISED --
PLOT DATE = 04-28-10	CHECKED -- DWS	REVISED --

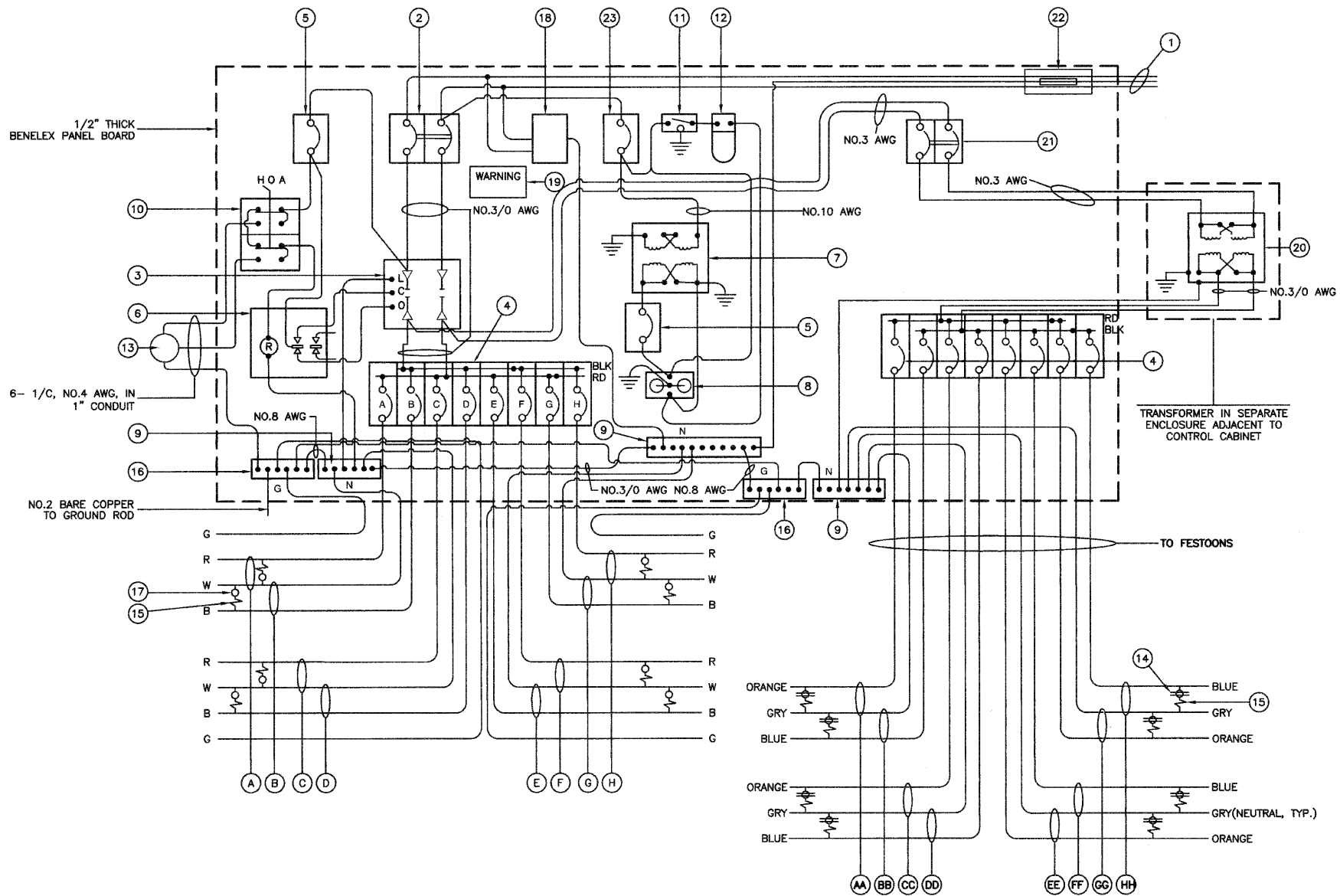
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

HARLEM AVENUE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71ST STREET TO NORTH OF 70TH STREET		348	10-00062-00-LT	COOK	15	9
STREET LIGHTING DETAILS		SCALE: N/A		SHEET NO. 9 OF 15 SHEETS		STA. N/A TO STA. N/A

CONTRACT NO. 63486	
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT ARA-M-9003(670)

DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 PROFILE _____
 NOTE BOOK _____
 NO. _____

DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 PROFILE _____
 NOTE BOOK _____
 NO. _____



CONTROLLER WIRING DIAGRAM
 CONTROLLER NO. 4 (CONTRACT #63477)

NOTE:
 THIS CONTROLLER IS NOT PART OF THIS CONTRACT.
 IT IS SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 AS THE HARLEM AVENUE LIGHTS IN THIS CONTRACT
 WILL BECOME CONNECTED TO THE LIGHTS IN IDOT
 CONTRACT #63477.

CONTROLLER WIRING DIAGRAM LEGEND

- ① 3-1/8" NO. 3/0 600V SERVICE WIRE IN 1 1/2" DIA GALVANIZED STEEL CONDUIT FOR 240/480 VOLT, 1ϕ, 3 WIRE, 60HZ. SERVICE.
 - ② (1) 225 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 250 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V.
 - ③ (1) 225 AMP CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, 600 VOLT
 - ④ (8) 30 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 240 VOLTS.
 - ⑤ (2) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
 - ⑥ (1) 25 AMP, 1 POLE DOUBLE THROW, 240 VOLT RELAY
 - ⑦ (1) 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480/120 X 240 VOLT, 60HZ.
 - ⑧ (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED IN BOX.
 - ⑨ (2) NEUTRAL BUS BAR, 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
 - ⑩ 3 POSITION SELECTOR SWITCH, 240V, 30 AMP.
 - ⑪ SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX, 20 AMP.
 - ⑫ WEATHER-PROOF INCANDESCENT LIGHTING FIXTURE WITH 60 WATT, 120 V LAMP.
 - ⑬ PHOTOCCELL MOUNTED TO CABINET, 240 V, 1000 VA. BALLAST RATING, 1-4 FC ON, 3-12 FC OFF, 30 SECOND DELAY, MIN.
 - ⑭ 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED TO POLE.
 - ⑮ IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
 - ⑯ (2) GROUND BUS BAR 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
 - ⑰ LUMINAIRE
 - ⑱ SURGE ARRESTOR, UL LISTED, NEC 280 COMPLIANT, 1ϕ, 3 WIRE, 60HZ MAX.
 - ⑲ WARNING PLATE TO READ: WARNING, MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF.
 - ⑳ 25.0 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240x480/120x240 V, 60HZ, MOUNTED ADJACENT TO CONTROLLER.
 - ㉑ 70 AMP CIRCUIT BREAKER, 1 POLE, 600 VOLT, 100 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 277 VOLTS.
 - ㉒ MILBANK 1ϕ, 3 WIRE, 225A METER SOCKET
 - ㉓ 15 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- | | | | |
|---------------------|---------------------|-----------------------|-----------------------|
| (A) CIRCUIT (RED) | (E) CIRCUIT (BLACK) | (AA) CIRCUIT (ORANGE) | (EE) CIRCUIT (ORANGE) |
| (B) CIRCUIT (BLACK) | (F) CIRCUIT (RED) | (BB) CIRCUIT (BLUE) | (FF) CIRCUIT (BLUE) |
| (C) CIRCUIT (RED) | (G) CIRCUIT (BLACK) | (CC) CIRCUIT (ORANGE) | (GG) CIRCUIT (ORANGE) |
| (D) CIRCUIT (BLACK) | (H) CIRCUIT (RED) | (DD) CIRCUIT (BLUE) | (HH) CIRCUIT (BLUE) |
- (A) LIGHTING CIRCUIT
 (AA) FESTOON CIRCUIT

GENERAL NOTES FOR CONTROL CABINET

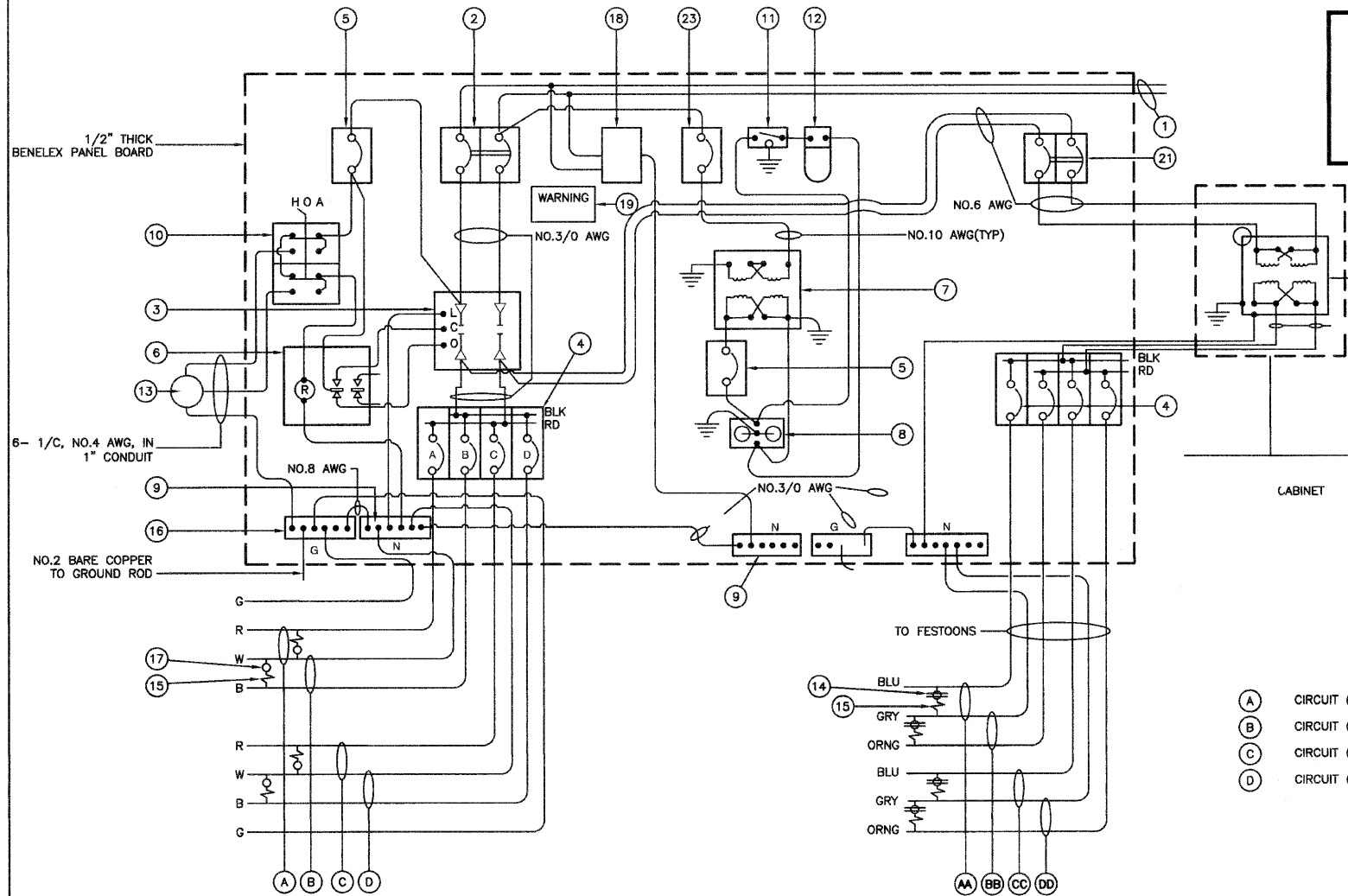
1. ENTIRE CONTROL CABINET SHALL BE GROUNDING.
2. ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
3. GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE, BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
4. ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
5. CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.
6. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
7. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
8. THE CONTROLLER SHALL BE UL LISTED, NEMA 3R, AND BE SUITABLE FOR USE AS SERVICE ENTRANCE RATED.



FILE NAME = 09301-LGHT-02 - P03	USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING DETAILS	F.A.P. RTE. 348	SECTION 10-00062-00-LT	COUNTY COOK	TOTAL SHEETS 15	SHEET NO. 10		
PLOT SCALE = N/A	DRAWN -- MJD	CHECKED -- PKB	REVISED -- #2 06-29-10			SCALE: N/A	SHEET NO. 10 OF 15 SHEETS	STA. N/A	TO STA. N/A	CONTRACT NO. 63486		
PLOT DATE = 04-28-10	CHECKED -- DWS	REVISIONS				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)						

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
DESCRIPTION	
DATE	
BY	
DESCRIPTION	
DATE	
BY	
DESCRIPTION	

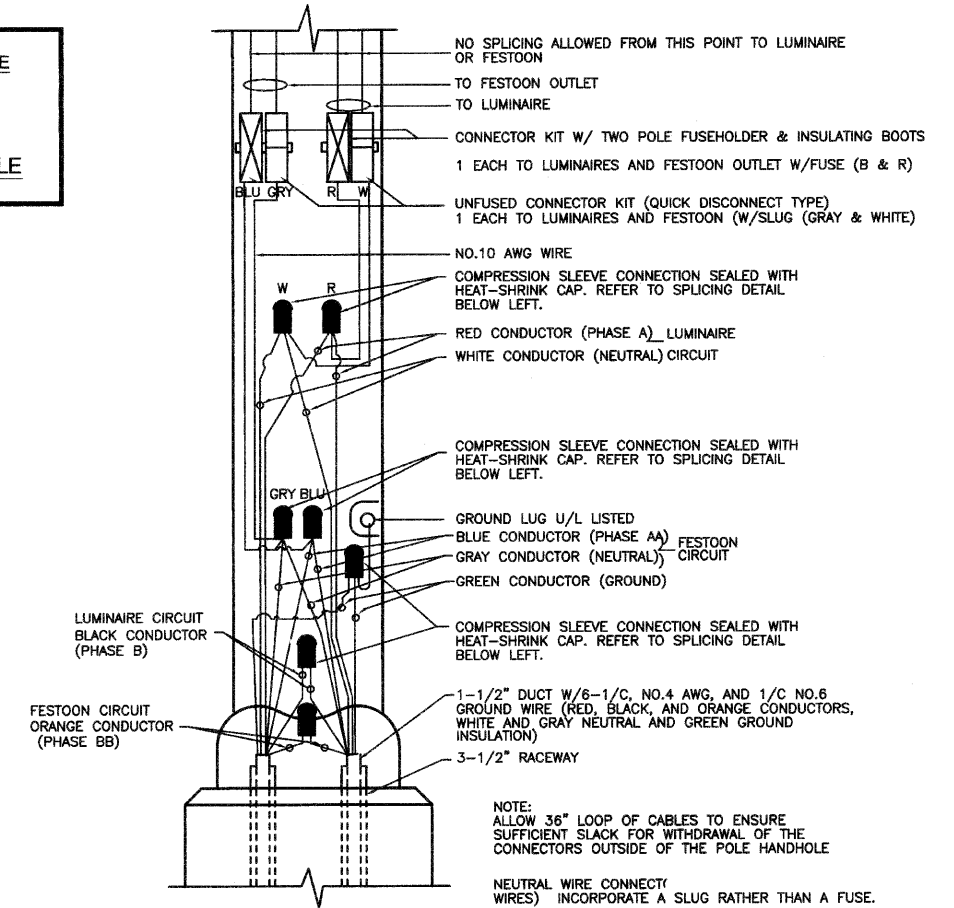
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
DESCRIPTION	
DATE	
BY	
DESCRIPTION	
DATE	
BY	
DESCRIPTION	



CONTROLLER WIRING DIAGRAM
CONTROLLER NO. 5

NOMINAL WATTAGE	FUSE SIZE
70	1.0 AMP
150	2.0 AMP
400	5.0 AMP
FESTOON OUTLET	6.0 AMP

LUMINAIRE FUSE SIZE TABLE



POLE HANDHOLE WIRING DIAGRAM
(TYPICAL FOR LUMINAIRE INSTALLATION)
(WITH FESTOON)

GENERAL NOTES FOR CONTROL CABINET

- ENTIRE CONTROL CABINET SHALL BE GROUNDED.
- ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
- GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE, BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
- ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
- CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
- EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- THE CONTROLLER SHALL BE UL LISTED, NEMA 3R, AND BE SUITABLE FOR USE AS SERVICE ENTRANCE RATED.
- (2) GROUND BUS BARS TO BE CONNECTED TO EACH OTHER.
- (2) NEUTRAL BUS BARS TO BE CONNECTED TO EACH OTHER.

CONTROLLER WIRING DIAGRAM LEGEND

- 3-1/C, NO. 3/0 600V SERVICE WIRE IN 1 1/2" DIA GALVANIZED STEEL CONDUIT FOR 240/480 VOLT, 1Ø, 3 WIRE, 60HZ. SERVICE.
- (1) 150 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 250 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V.
- (1) 150 AMP CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, 600 VOLT
- (3) 30 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTER-CHANGEABLE TRIP RATING NEMA - 14000 AMP AT 240 VOLTS.
- (3) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- (1) 25 AMP, 1 POLE DOUBLE THROW, 240 VOLT RELAY
- (1) 1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480/120 X 240 VOLT, 60HZ.
- (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED IN BOX.
- (2) NEUTRAL BUS BAR, 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
- 3 POSITION SELECTOR SWITCH, 240V, 30 AMP.
- SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX, 20 AMP.
- WEATHER-PROOF INCANDESCENT LIGHTING FIXTURE WITH 60 WATT, 120 V LAMP.
- PHOTOCELL MOUNTED TO CABINET, 240 V, 1000 VA.

- 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED TO POLE.
- IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
- (1) GROUND BUS BAR 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
- LUMINAIRE
- (1) SURGE SUPPRESSOR, UL LISTED, NEC 280 COMPLIANT, USE SUITABLE.
- WARNING PLATE TO READ: WARNING, MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF.
- 10.0 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240x480/120x240 V, 60HZ
- 30 AMP CIRCUIT BREAKER, 1 POLE, 600 VOLT, 100 AMP FRAME, NONE-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 277 VOLTS.
- 15 AMP CIRCUIT BREAKER, 1 POLE, 240 VOLT, 100 AMP FRAME, NON-INTER-CHANGEABLE TRIP RATING NEMA - 14000 AMP AT 240 VOLTS.



FILE NAME = 09301-LGHT-02 - P04

USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10
	CHECKED -- PKB	REVISED -- #2 08-29-10
PLOT SCALE = N/A	DRAWN -- MJD	REVISED --
PLOT DATE = 04-28-10	CHECKED -- DWS	REVISED --

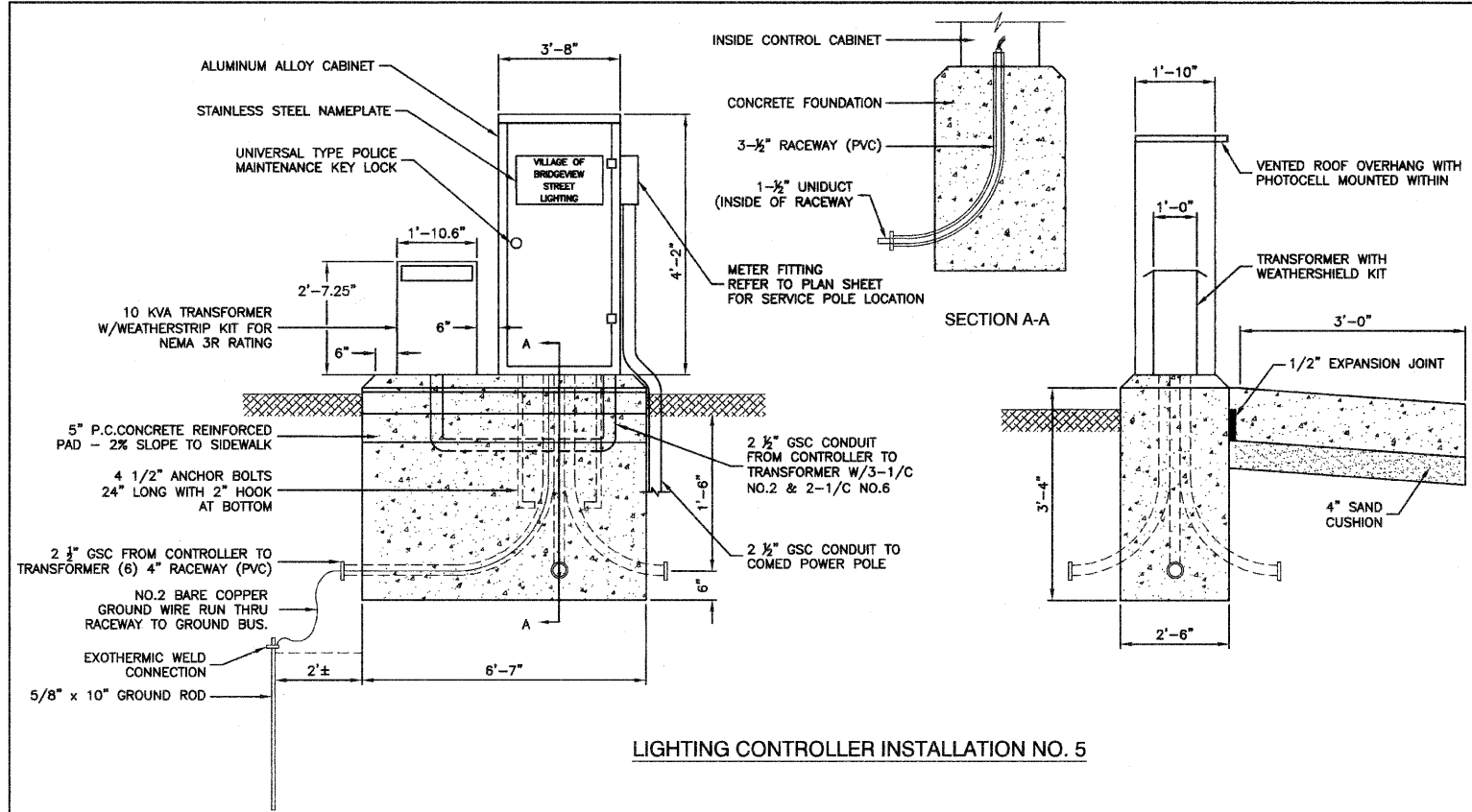
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING DETAILS	
SCALE: N/A	SHEET NO. 11 OF 15 SHEETS STA. N/A TO STA. N/A

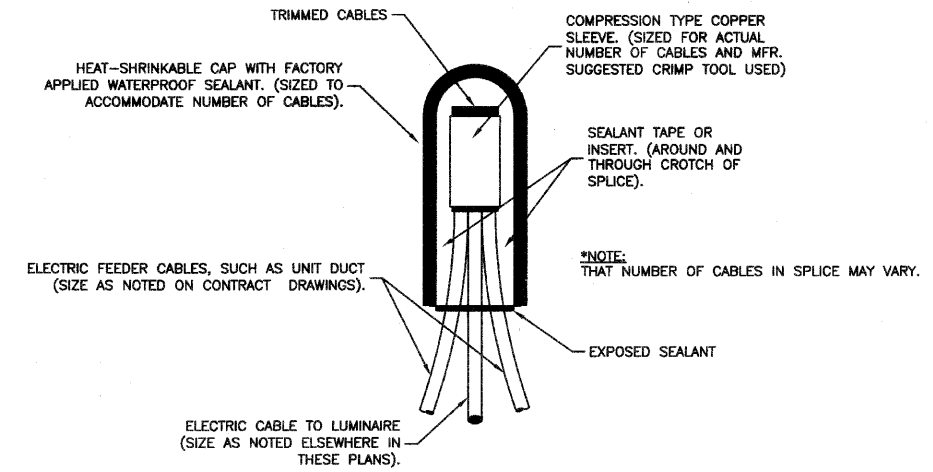
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	10-0062-00-LT	COOK	15	11
CONTRACT NO. 63486				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)				

PLAN	SUBMITTED	DATE
	ALLOWED	
	CHECKED	
	BY	
	NO. OF WKS. CHECKED	
	DATE FILE NAME	

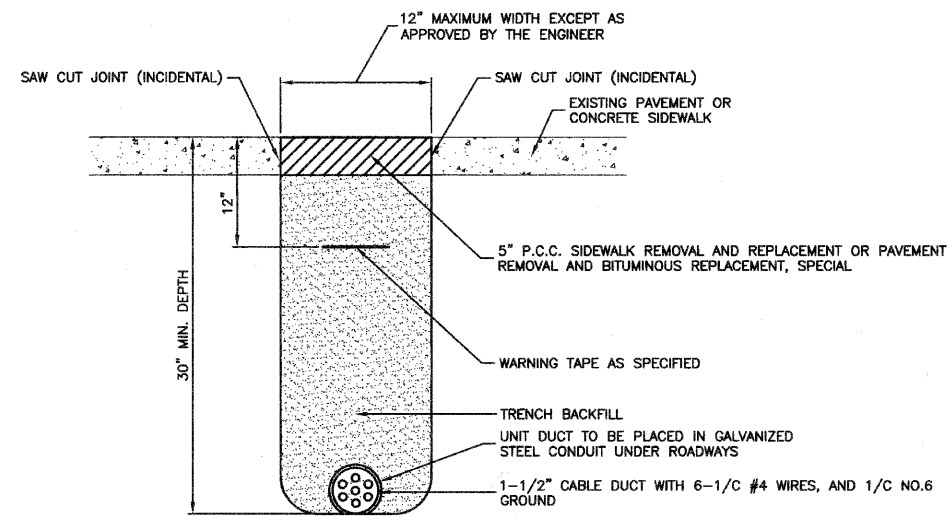
PROFILE	SUBMITTED	DATE
	ALLOWED	
	CHECKED	
	BY	
	NO. OF WKS. CHECKED	
	DATE FILE NAME	



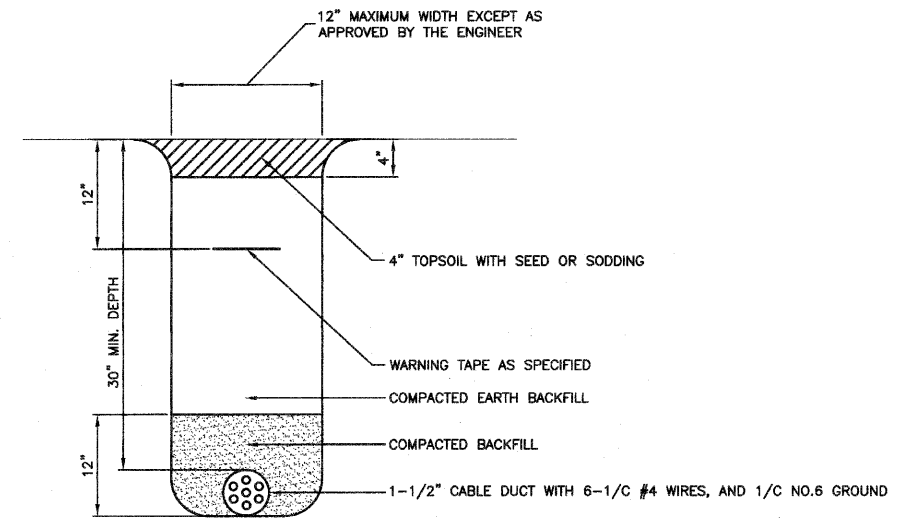
LIGHTING CONTROLLER INSTALLATION NO. 5



SPLICING ELECTRIC CABLES
BASIC MATERIALS AND METHODS



HOT-MIX ASPHALT PAVEMENT OR CONCRETE SIDEWALK
REMOVAL AND REPLACEMENT



TRENCH DETAIL

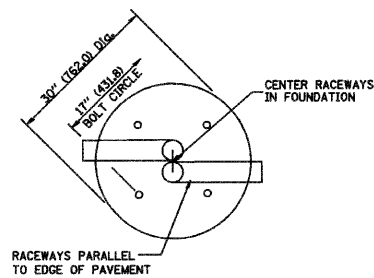
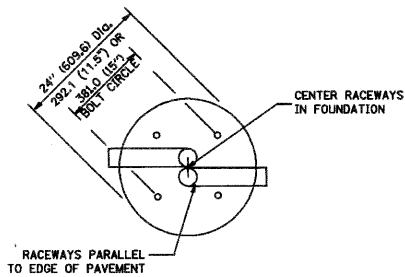


FILE NAME = 09301-LGHT-02 - P05	USER NAME =	DESIGNED -- PAP	REVISED -- #1 06-11-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HARLEM AVENUE 71ST STREET TO NORTH OF 70TH STREET STREET LIGHTING DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = N/A	CHECKED -- PKB	REVISED -- #2 06-29-10			348	10-00062-00-LT	COOK	15	12	
	PLOT DATE = 04-28-10	DRAWN -- MJD	REVISED --			CONTRACT NO. 63486					
		CHECKED -- DWS	REVISED --			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)					

DATE	
BY	
PLAN	
NOTE BOOK	
NO.	
SURVEYED	
ALIGNED	
CHECKED	
RT. OF WAY CHECKED	
STAD FILE NAME	

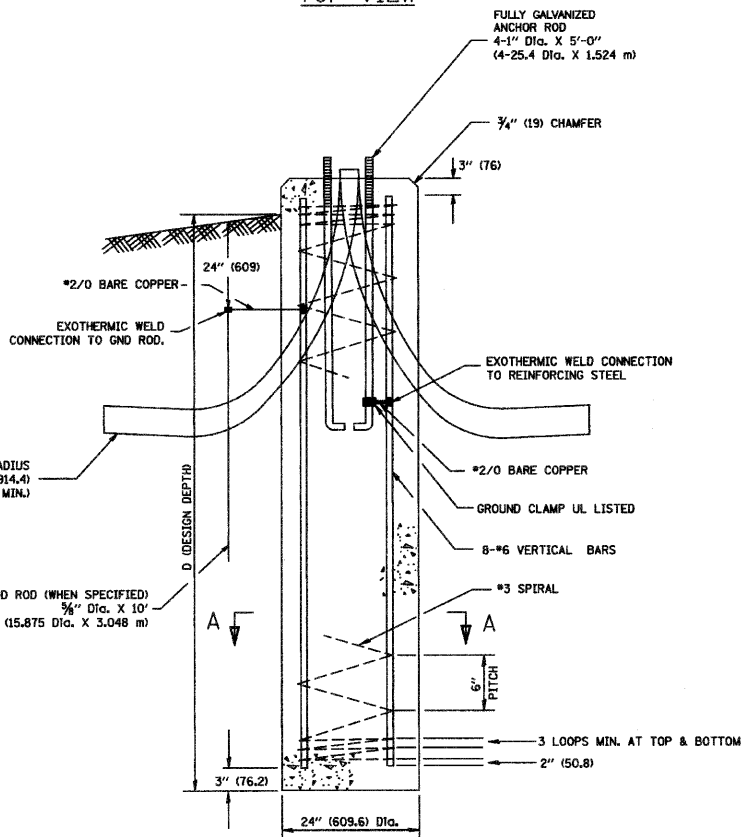
DATE	
BY	
PROFILE	
NOTE BOOK	
NO.	
SURVEYED	
ALIGNED	
CHECKED	
B.M. NOTED	

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

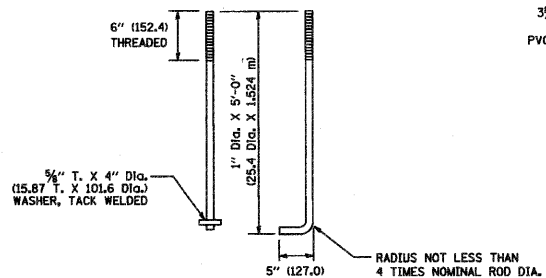


TOP VIEW

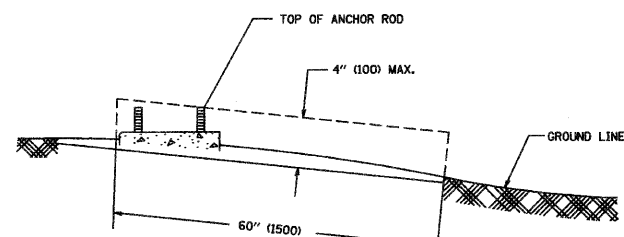
TOP VIEW



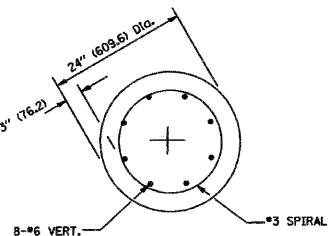
FOUNDATION DETAIL



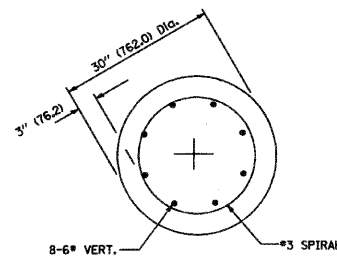
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

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.
- 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 SL. 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 API.
-
- 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.



FILE NAME = 09301-LGHT-02 - P06

USER NAME =	DESIGNED — PAP	REVISED — #1 06-11-10
	CHECKED — PKB	REVISED — #2 06-29-10
PLOT SCALE = N/A	DRAWN — MJD	REVISED —
PLOT DATE = 04-28-10	CHECKED — DWS	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HARLEM AVENUE
71ST STREET TO NORTH OF 70TH STREET
STREET LIGHTING DETAILS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	10-00062-00-LT	COOK	15	13
SCALE: N/A			SHEET NO. 13 OF 15 SHEETS	STA. N/A TO STA. N/A
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)				

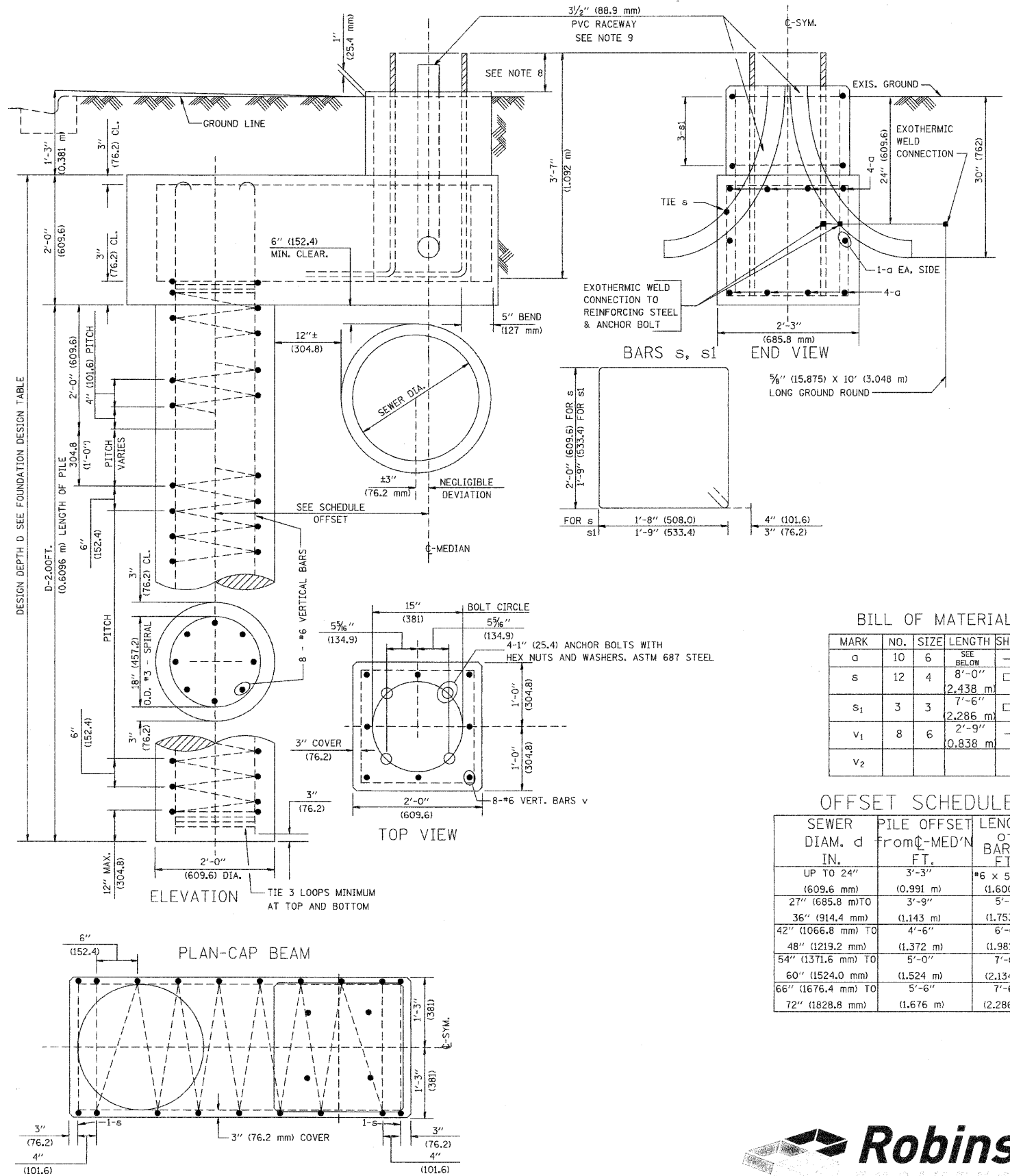
CONTRACT NO. 63486

35 FT. TO 47.5 FT. MOUNTING HEIGHT
FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3.962 m)	15'-0" (4.572 m)	8-#6X12'-6" (3.810 m)	#3X122' (37.186 m)	8-#6X14'-3" (4.343 m)	#3X141' (42.977 m)
MEDIUM CLAY	9'-6" (2.896 m)	10'-9" (3.277 m)	8-#6X9'-0" (2.743 m)	#3X90' (27.432 m)	8-#6X10'-0" (3.048 m)	#3X100' (30.480 m)
STIFF CLAY	7'-0" (2.134 m)	8'-0" (2.438 m)	8-#6X6'-6" (1.981 m)	#3X66' (20.112 m)	8-#6X7'-6" (2.286 m)	#3X76' (23.165 m)
LOOSE SAND	9'-0" (2.743 m)	10'-0" (3.048 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)	8-#6X9'-6" (2.896 m)	#3X94' (28.651 m)
MEDIUM SAND	8'-3" (2.515 m)	9'-0" (2.743 m)	8-#6X8'-0" (2.438 m)	#3X78' (23.774 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
DENSE SAND	7'-9" (2.362 m)	9'-0" (2.743 m)	8-#6X7'-6" (2.286 m)	#3X73' (22.250 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 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 BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 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.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2.438 m)	□
s1	3	3	7'-6" (2.286 m)	□
v1	8	6	2'-9" (0.838 m)	—
v2				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from C-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0.991 m)	#6 x 5'-3" (1.600 m)
27" (685.8 mm) TO	3'-9" (1.143 m)	5'-9" (1.753 m)
36" (914.4 mm) TO	4'-6" (1.372 m)	6'-6" (1.981 m)
48" (1219.2 mm) TO	5'-0" (1.524 m)	7'-0" (2.134 m)
54" (1371.6 mm) TO	5'-6" (1.676 m)	7'-6" (2.286 m)
60" (1524.0 mm) TO	6'-0" (1.828 m)	8'-0" (2.438 m)
66" (1676.4 mm) TO	6'-6" (1.981 m)	8'-6" (2.591 m)
72" (1828.8 mm) TO	7'-0" (2.134 m)	9'-0" (2.743 m)

PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	CADD FILE NAME	

FILE NAME = 09301-LGHT-02 - P07

USER NAME =	DESIGNED — PAP	REVISED — #1 06-11-10
	CHECKED — PKB	REVISED — #2 06-29-10
PLOT SCALE = N/A	DRAWN — MJD	REVISED —
PLOT DATE = 04-28-10	CHECKED — DWS	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HARLEM AVENUE
71ST STREET TO NORTH OF 70TH STREET
STREET LIGHTING DETAILS

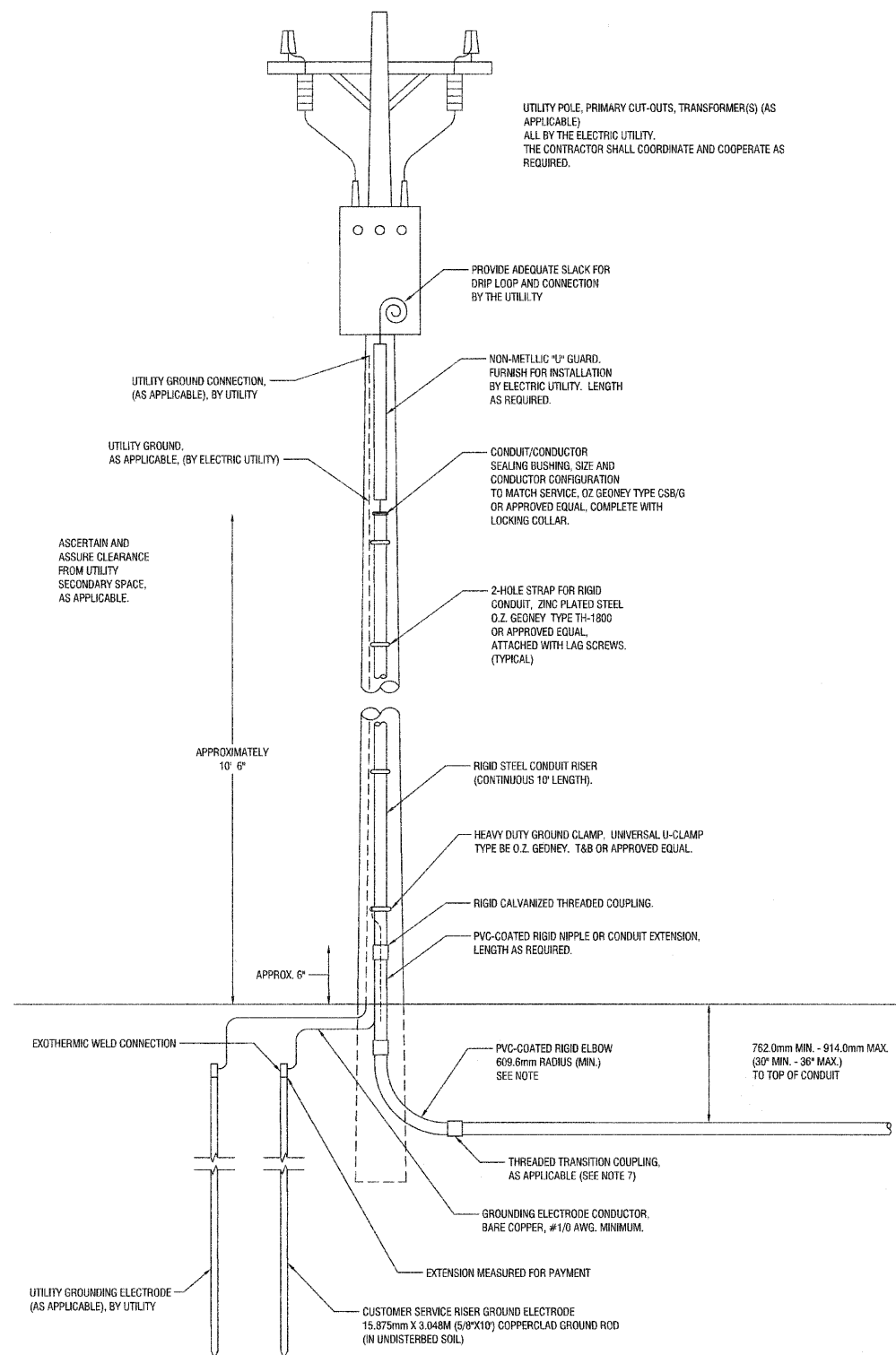
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	10-00062-00-LT	COOK	15	14
CONTRACT NO. 63486				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	ARA-M-9003(670)	

SCALE: N/A SHEET NO. 14 OF 15 SHEETS STA. N/A TO STA. N/A



BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE

BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE
BY	DATE



UTILITY POLE, PRIMARY CUT-OUTS, TRANSFORMER(S) (AS APPLICABLE)
ALL BY THE ELECTRIC UTILITY.
THE CONTRACTOR SHALL COORDINATE AND COOPERATE AS REQUIRED.

PROVIDE ADEQUATE SLACK FOR DRIP LOOP AND CONNECTION BY THE UTILITY

UTILITY GROUND CONNECTION, (AS APPLICABLE), BY UTILITY

NON-METLLIC "1/2" GUARD, FURNISH FOR INSTALLATION BY ELECTRIC UTILITY. LENGTH AS REQUIRED.

UTILITY GROUND, AS APPLICABLE, (BY ELECTRIC UTILITY)

CONDUIT/CONDUCTOR SEALING BUSHING, SIZE AND CONDUCTOR CONFIGURATION TO MATCH SERVICE, OZ GEONEY TYPE CSB/G OR APPROVED EQUAL, COMPLETE WITH LOCKING COLLAR.

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

2-HOLE STRAP FOR RIGID CONDUIT, ZINC PLATED STEEL O.Z. GEONEY TYPE TH-1800 OR APPROVED EQUAL. ATTACHED WITH LAG SCREWS. (TYPICAL)

APPROXIMATELY 10' 6"

RIGID STEEL CONDUIT RISER (CONTINUOUS 10' LENGTH).

HEAVY DUTY GROUND CLAMP, UNIVERSAL U-CLAMP TYPE BE O.Z. GEONEY, T&B OR APPROVED EQUAL.

RIGID GALVANIZED THREADED COUPLING.

PVC-COATED RIGID NIPPLE OR CONDUIT EXTENSION, LENGTH AS REQUIRED.

APPROX. 6"

EXOTHERMIC WELD CONNECTION

PVC-COATED RIGID ELBOW 609.6mm RADIUS (MIN.) SEE NOTE

762.0mm MIN. - 914.0mm MAX. (30" MIN. - 36" MAX.) TO TOP OF CONDUIT

THREADED TRANSITION COUPLING, AS APPLICABLE (SEE NOTE 7)

GROUNDING ELECTRODE CONDUCTOR, BARE COPPER, #1/0 AWG. MINIMUM.

EXTENSION MEASURED FOR PAYMENT

UTILITY GROUNDING ELECTRODE (AS APPLICABLE), BY UTILITY

CUSTOMER SERVICE RISER GROUND ELECTRODE 15.875mm X 3.048M (5/8"X10") COPPERCLAD GROUND ROD (N UNDISTURBED SOL)

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 MF 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 "1/2" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE SERVICE METER SOCKET, AS APPLICABLE, MOUNTED ELSEWHERE AS INCLUDED 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 CONTROL CABINETS



FILE NAME = 09301-LGHT-02 - P08	USER NAME =	DESIGNED -- PWP	REVISED -- #1 06-11-10	STATE OF ILLINOIS		HARLEM AVENUE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -- PKG	REVISED -- #2 06-29-10	DEPARTMENT OF TRANSPORTATION		71ST STREET TO NORTH OF 70TH STREET		348	10-00062-00-LT	COOK	15	15	
PLOT SCALE = N/A		DRAWN -- MJD	REVISED --			STREET LIGHTING DETAILS		CONTRACT NO. 63486					
PLOT DATE = 04-28-10		CHECKED -- DWS	REVISED --			SCALE: N/A		SHEET NO. 15 OF 15 SHEETS		STA. N/A TO STA. N/A			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-M-9003(670)