INDEX OF SHEETS

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- SUMMARY OF QUANTITIES
- PLAN SHEET STA. 112+60 TO 124+00
- PLAN SHEET STA. 124+00 TO 138+00
- PLAN SHEET STA. 138+00 TO 152+00
- 7 PLAN SHEET STA. 152+00 TO 162+90
- CIRCUIT WIRING DIAGRAM STA. 112+60 TO 138+00
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- 11 CONTROL CABINET WIRING DIAGRAM
- 12 ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
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STATE STANDARDS

STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS (SHEETS 1, 2, 3, & 4) 000001-05

TEMPORARY EROSION CONTROL SYSTEMS 280001-05

URBAN LANE CLOSURE, MULTILANE, DAY OPERATIONS 701421-02 ONLY, FOR SPEEDS > 45 MPH TO 55 MPH

701606-06 URBAN LANE CLOSURE MULTILANE 2W

URBAN LANE CLOSURE MULTILANE INTERSECTION

LANE CLOSURE MULTILANE, 1W OR 2W 701801-04 CROSSWALK OR SIDEWALK CLOSURE

701901-01 TRAFFIC CONTROL DEVICES (SHEETS 1, 2, & 3)

STRUCTURAL DESIGN TRAFFIC YEAR 2018

PV=1700 SU=200 MU=100

CLASS III ROADWAY

ADT 2000 IBR 3.0

TRAFFIC FACTOR=0.24

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.

SAUK TRAIL

CALL J.U.L.I.E.
JOINT UTILITY LOCATION NFORMATION FOR EXCAVATION 1-800-892-0123 OR 811 48 HOURS (TWO WORKING DAYS) TOLL FREE 24 HOURS A DAY 7 DAYS A WEEK

CONSULTANT: JOSEPH A. SCHUDT & ASSOCIATES, MATT ANDERSON

CONTRACT-No. 63327

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED

FEDERAL-AID HIGHWAY

F.A.U. ROUTE: 1632 (SAUK TRAIL)

EAST END AVENUE TO STATE STREET

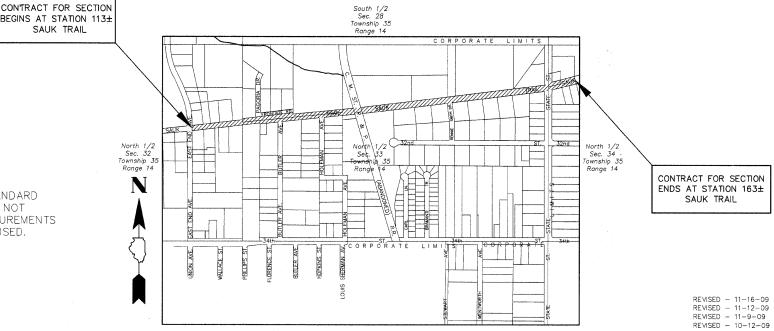
SECTION: 09-00059-00-LT

STREET LIGHTING

PROJECT: ARA - 9003 (367)

VILLAGE OF SOUTH CHICAGO HEIGHTS COOK COUNTY

JOB No. C-91-681-09



SAUK TRAIL: GROSS LENGTH = 5,030 FT.± NET LENGTH = $5,030 \text{ FT.} \pm (0.95 \text{ MILES})$

PROJECT LOCATION

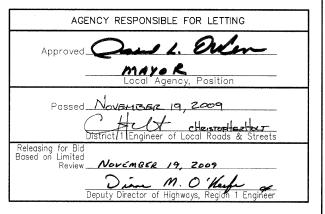


Joseph A. Schudt & Associates

19350 S. HARLEM AVENUE FRANKFORT, IL 60423 ILLINOIS REGISTERED DESIGN FIRM No. 184-001172 CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES SECTION







PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LEGEND

EX. MANHOLE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS SECTION 09-00059-00-LT									
MIXTURE TYPE AIR VOIDS @ Nd									
FULL DEPTH PAVEMENT									
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 2"	4% @ 50 Gyr.								
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	4% @ 50 Gyr.								

FILE NAME =

SER NAME =

PLOT SCALE =

OT DATE =

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS./SQ. YD./IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" 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.

МН	EX. MANHULE
9	EX. INLET
CB	EX. CATCHBASIN
E====	EX. CULVERT
	EX. HEADWALL
	EX. FENCE
12" 🗘	EX. TREE w/CALIPER SIZE
oo	EX. GUARD RAIL
H	EX. TRAFFIC SIGNAL
	EX. TRAFFIC HANDHOLE
gv ⊗	EX. GAS VALVE
W	EX. WATER VALVE VAULT
0	EX. WATER VALVE BOX
Δ	EX. A.T.&T. PEDESTAL
X	EX. HYDRANT
þ	EX. TRAFFIC SIGN
Ç— CE LP	EX. LIGHT POLE (COM-ED)
PP	EX. POWER POLE
₽ _{MB}	EX. MAIL BOX
r ^O	EX. TELEPHONE PEDESTAL
•	PR. LIGHT FIXTURE
	PR. LIGHTING UNIT DUCT
	PR. LIGHTING CONDUIT
	PR. CONTROL CABINET
A-1	PR. LIGHT FIXTURE NUMBER
RED	PR. LUMINAIRE ON RED CABLE
BLACK	PR. LUMINAIRE ON BLACK CABLE

GENERAL NOTES:

DESIGNED - S.M.H.

DRAWN - J.A.R.

CHECKED - SMH

- 7-31-09

DATE

- ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
- BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES, CALL COM-ED FOR APPROVAL OF LOCATION.
- FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE, CALL COM-ED CO.
- ANY TREE TRIMMING REQUIRED, AS DIRECTED BY THE ENGINEER, SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING (i.e. TREES, DECORATIVE ROCKS, SHRUBS, PLANTS, etc.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

REVISED - 8-26-09

11-9-09

REVISED -10-12

REVISED



Joseph A. Schudt & Associates

19350 S. HARLEM AVENUE FRANKFORT, IL 60423 PHONE: 708–720–1000 FAX: 708–720–1065
ILLINOIS REGISTERED DESIGN FIRM No. 184–001172

CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES

VILLAGE COORDINATION:

THE CONTRACTOR SHALL NOTIFY THE VILLAGE ENGINEER (1-708-720-1000) AT LEAST 72 HOURS IN ADVANCE OF BEGINNING WORK AND SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT OF THE VILLAGE OF SOUTH CHICAGO HEIGHTS (1-708-755-7888) 48 HOURS PRIOR TO ANY WORK IN ORDER TO OBTAIN VILLAGE UTILITY LOCATIONS. THE CONTRACTOR SHOULD PLAN HIS WORK TO AVOID ALL INTERFERENCE WITH THE UNDERGROUND UTILITIES.

THE LOCATION OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE, AND THE DEPARTMENT DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATIONS OF SUCH UTILITIES AND EXERCISE CARE DURING CONSTRUCTION OPERATIONS, SO AS NOT TO DAMAGE THEM, IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR DESTRUCTION OF PUBLIC OR PRIVATE PROPERTY AND SHALL RESTORE SUCH PROPERTY AT HIS OWN EXPENSE. COORDINATION OF ALL WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT A PRECONSTRUCTION CONFERENCE. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION. IN PARTICULAR, THE CONTRACTOR WILL TAKE ADEQUATE MEASURES TO PREVENT THE UNDERMINING OF UTILITIES AND SEWERS WHICH ARE STILL IN SERVICE. WHENEVER THE CONTRACTOR ENCOUNTERS FACILITIES AND APPURTENANCES WITHIN THE LIMITS OF THE IMPROVEMENTS DURING TRENCHING OR AUGERING OPERATIONS, HE WILL BE REQUIRED TO HAND TRENCH IN THAT AREA IN ORDER NOT TO DAMAGE THE FACILITIES.

THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR LOCATIONS OF THE UTILITIES, CALL J.U.L.I.E. TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.

SURVEY MONUMENTS:
WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS OR MONUMENTS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

DRAINAGE STRUCTURES:

WHEREVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN

TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, OR CATCH BASINS, HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS. THIS WORK WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

FIELD OBSERVATION:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THE PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

GENERAL NOTES:

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

GROUND RODS WILL BE CONNECTED AT ALL CONCRETE FOUNDATIONS AND ELSEWHERE AS SHOWN IN THE CONTRACT DRAWINGS. EQUIPMENT GROUND CONDUCTORS SHALL BE CONNECTED AND BONDED AT EACH PIECE OF EQUIPMENT. THIS IS INCIDENTAL TO CONTRACT.

THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL

CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS, AND OTHER LITHLITIES AND LANDSCAPING

ALL DISTURBED AREA WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFICATION OF THE ENGINEER. THE WORK MUST BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.

- ITEMS THAT ARE INCIDENTAL TO CONTRACT

Village of South Chicago Heights Sauk Trail Lighting Project

STATE OF ILLINOIS	T		-1 C1	\ \T \L	F.A.P. RTE.	SECTION	COUNTY	TOTAL S SHEETS	SHEET NO.
DEPARTMENT OF TRANSPORTATION	Lege	end an	d General	Notes	1632	09-00059-00-LT	COOK	15	2
DEPARTMENT OF TRANSPORTATION			45				CONTRACT	No. 633:	27
	SCALE: N/A	SHEET NO. 2 OF	T 15 SHEETS STA.	TO STA.		ILLINOIS FED. A	AID PROJECT ARA	4 - 9003 (36	(7)

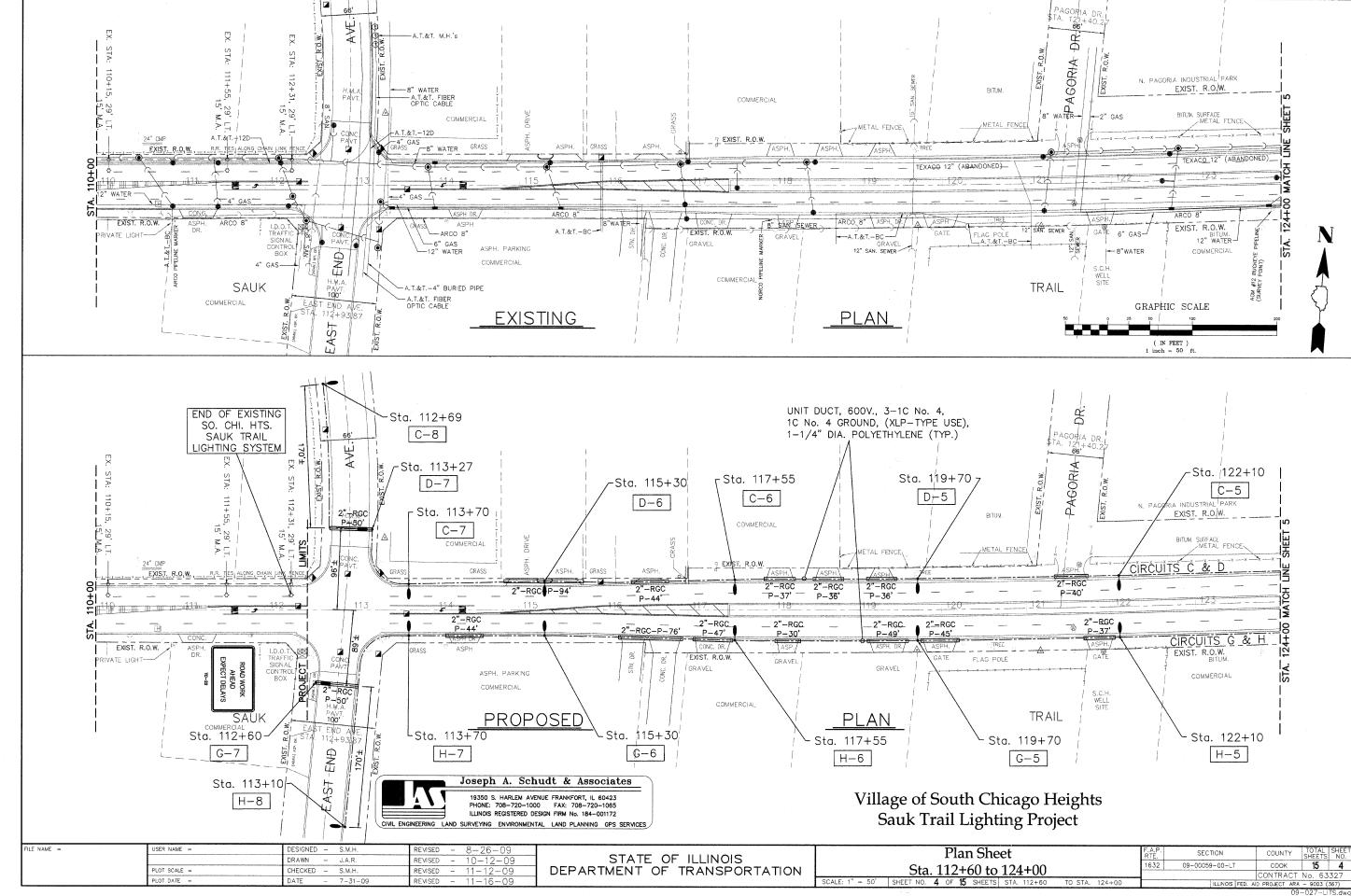
		SUMMARY OF QUANTITIES	CON	STRU	CTION	TYP	E CC	DE	
	CODE NO.	PAY ITEM	UNIT	Y030 ₁₆		•			
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ. YD.	1500					1
-	21300010	EXPLORATION TRENCH, SPECIAL	FOOT	45					
	25000210	SEEDING, CLASS 2A	ACRE	0.31					
	25100630	EROSION CONTROL BLANKET	SQ. YD.	1500					
*	40701841	HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 8"	SQ. YD.	66					
	67100100	MOBILIZATION	L. SUM	1					
	70101700	TRAFFIC CONTROL AND PROTECTION	L. SUM	1					
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1					
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1					
	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	100		s			
	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1860					
	81018900	CONDUIT PUSHED 4" DIA. GALVANIZED STEEL	FOOT	130					
	81603085	UNIT DUCT, 600V., 3-1C No. 4, 1C No. 4 GROUND, (XLP-TYPE USE), 1-1/4" DIA. POLYETHYLENE	FOOT	11,420					
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	50					
	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	56					
	83022200	LIGHT POLE, ALUMINUM, TRANSFORMER BASE, 40 FT. M. H., 6 FT. MAST ARM	EACH	56					
	83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	162					
	83600355	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 8"x6"	EACH	37					
	XX001579	LIGHTING CONTROLLER, CONSOLE TYPE	EACH	1					
	×8170245	ELECTRIC CABLE IN CONDUIT, 600V., (XLP TYPE USE) 3-1/C No. 12	FOOT	50					
	XX006937	GROUND ROD - 5/8 INCH DIA. x 10 FEET	EACH	19					

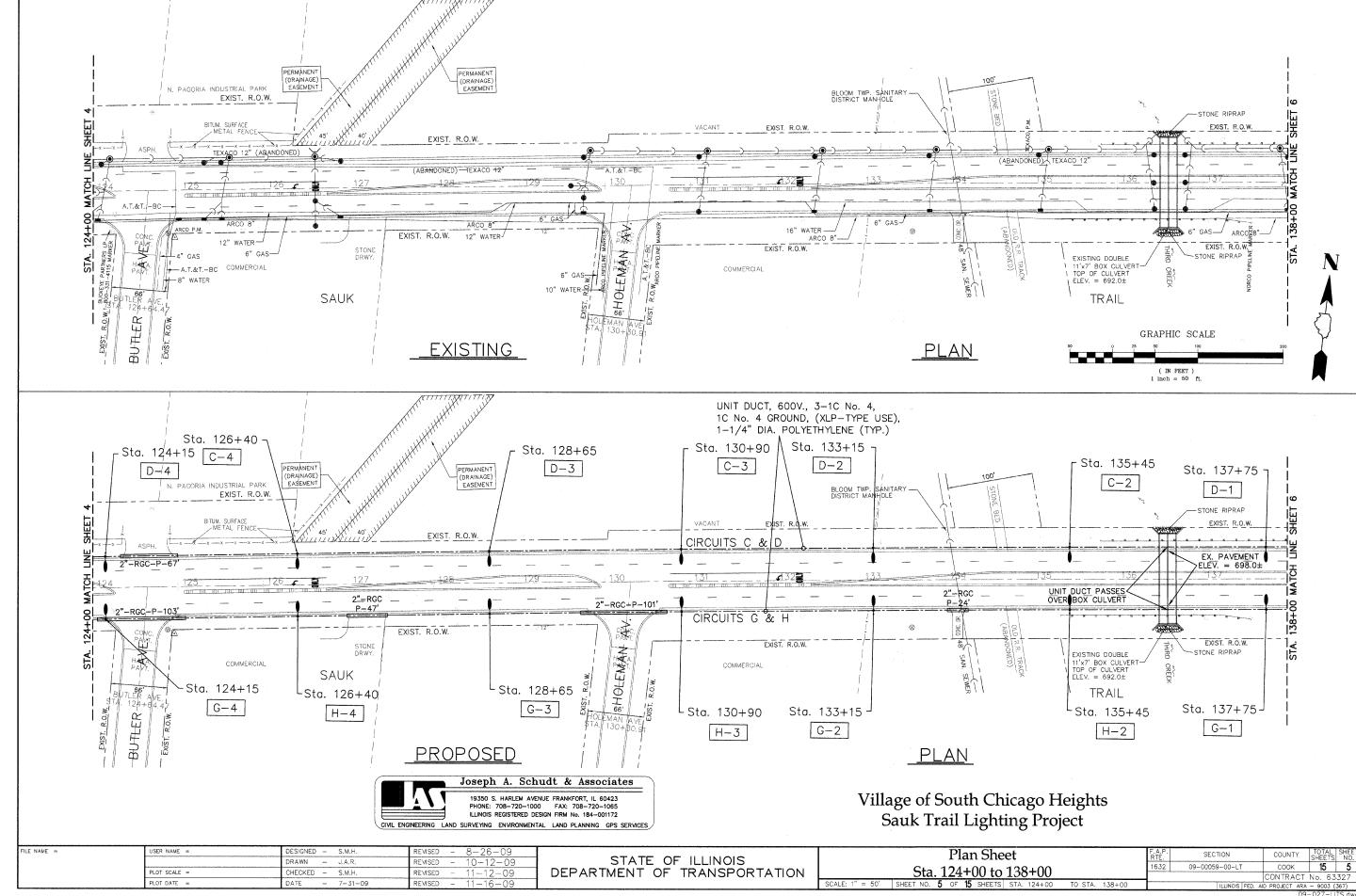
^{*} DENOTES SPECIALTY ITEMS

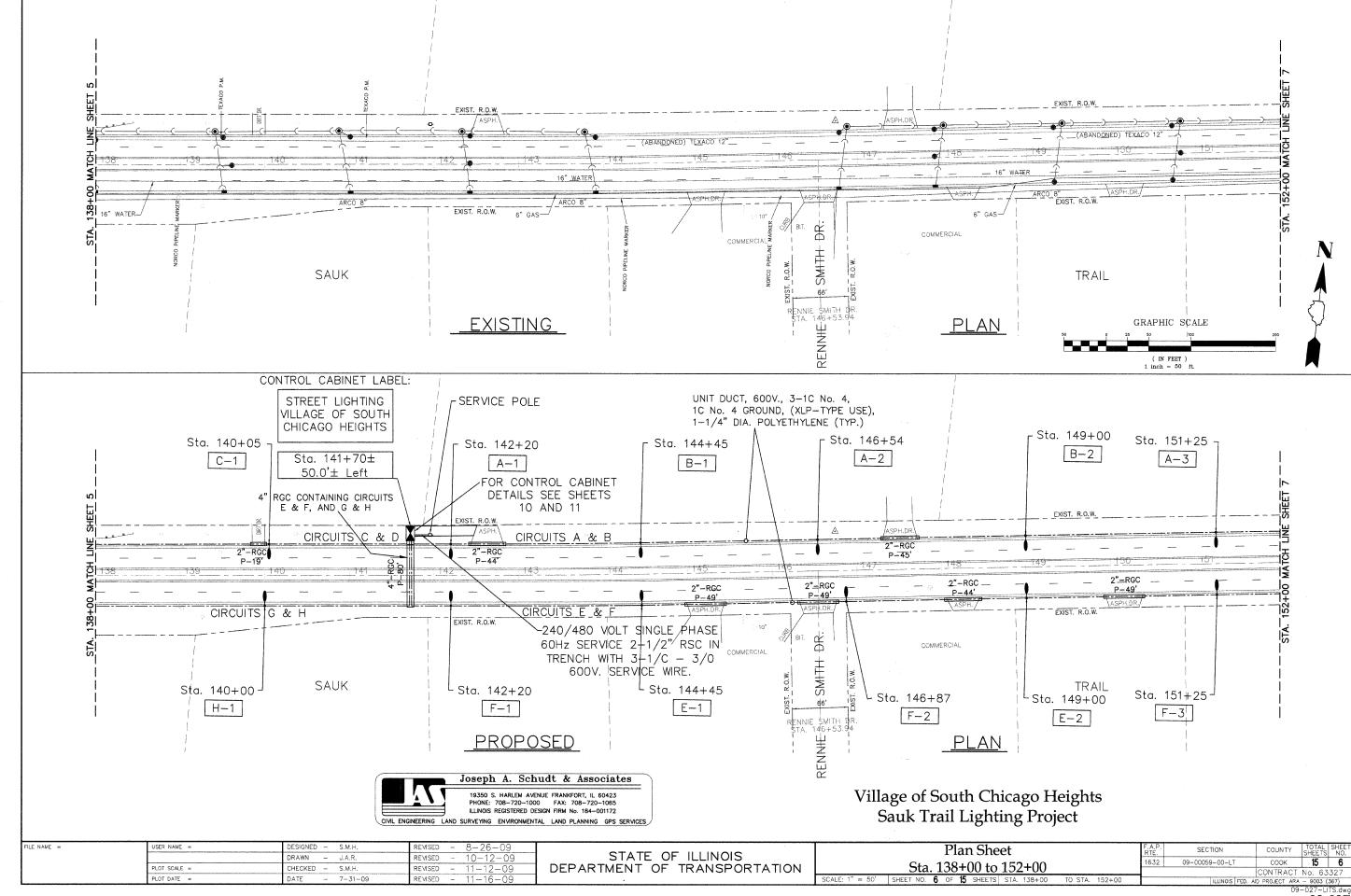


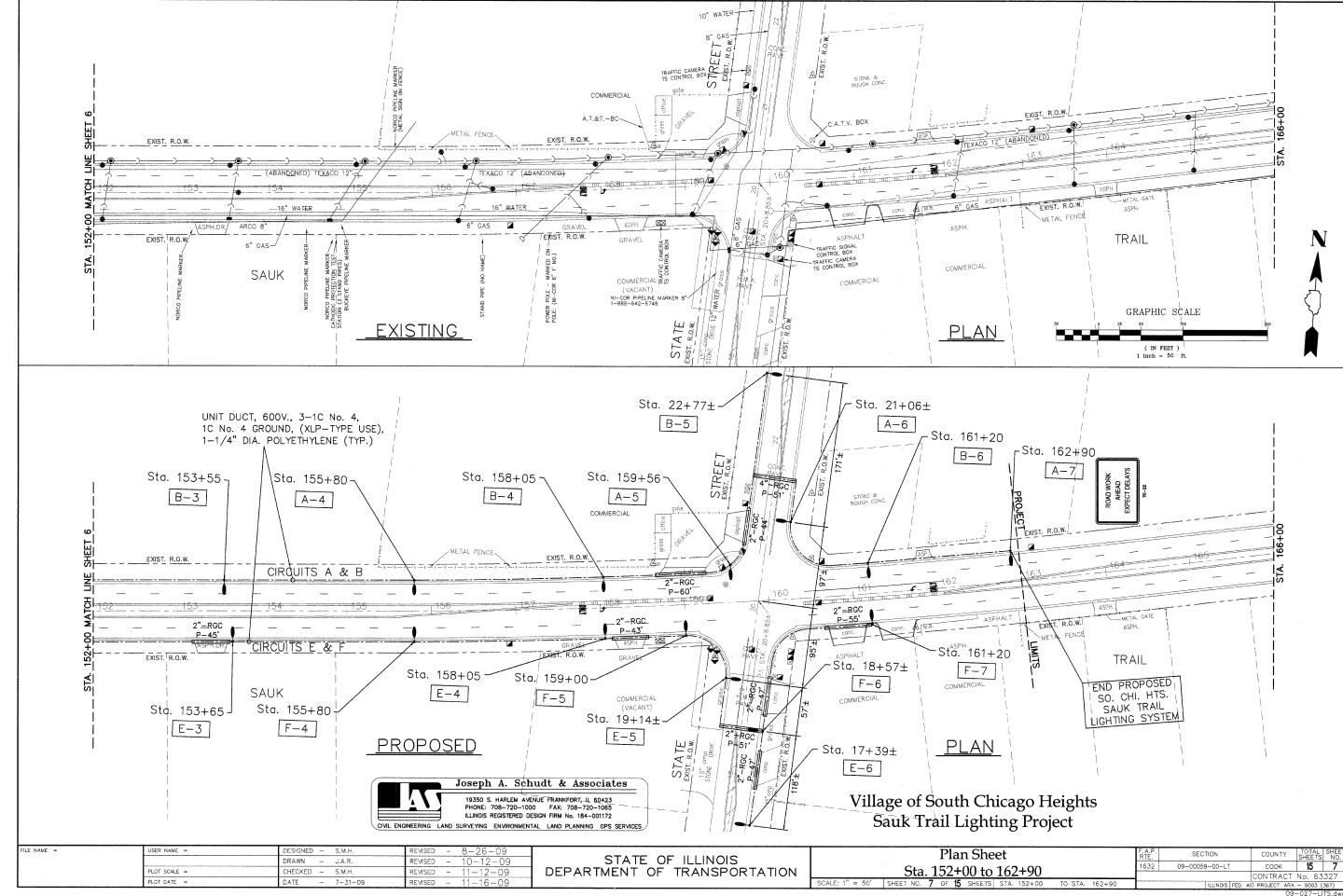
Village of South Chicago Heights Sauk Trail Lighting Project

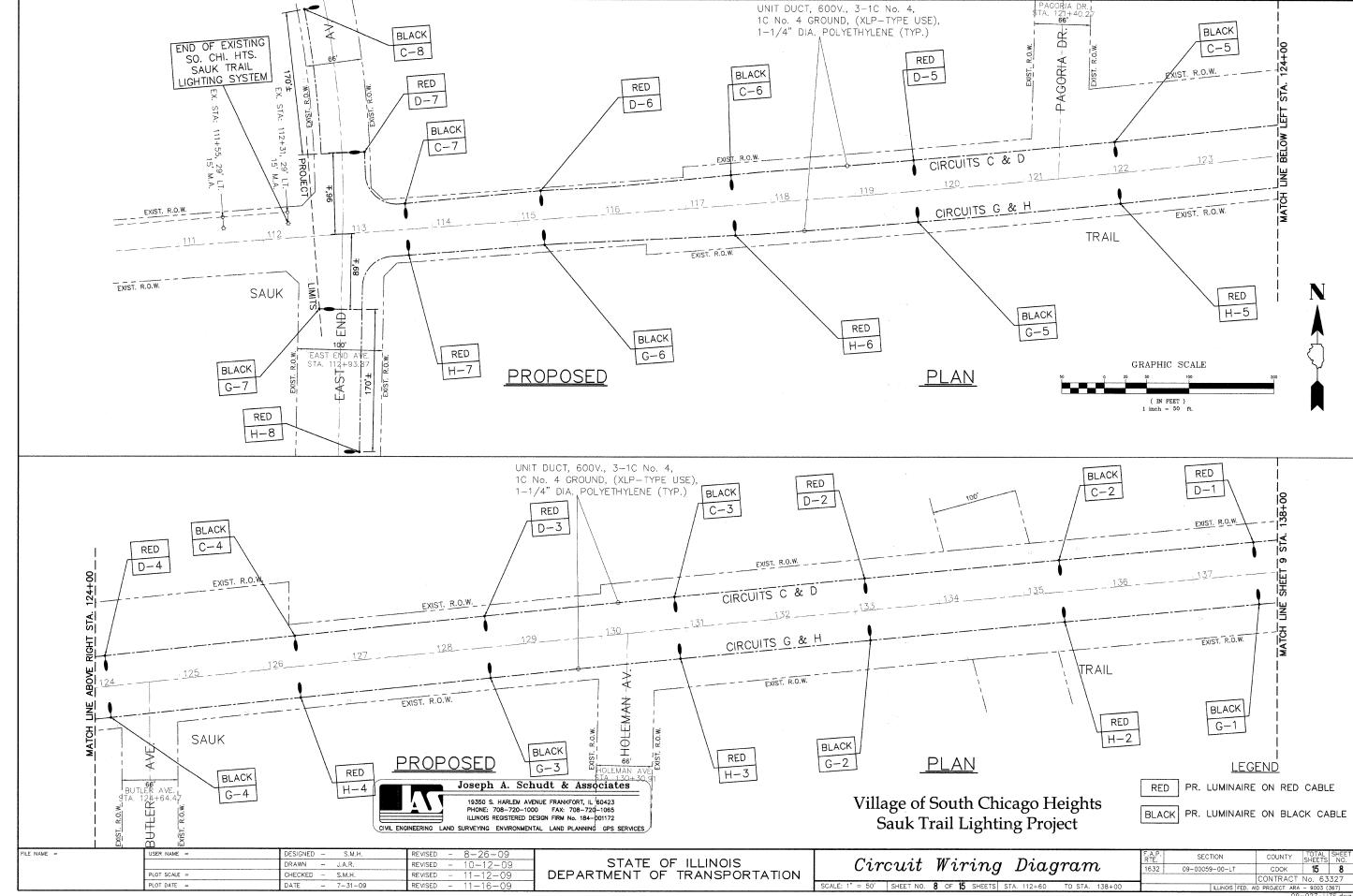
FILE NAME =	USER NAME = .	DESIGNED - S.M.H.	REVISED - 8-26-09			F.A.P. SECTION	COUNTY TOTAL SHEET
	·	DRAWN J.A.R.	REVISED - 10-12-09	STATE OF ILLINOIS	Summary of Quantities	1632 09-00059 00 17	соок 15 3
	PLOT SCALE ==	CHECKED - S.M.H.	REVISED - 11-12-09	DEPARTMENT OF TRANSPORTATION		1032 09-00039-00-21	CONTRACT No. 63327
	PLOT DATE =	DATE - 7-31-09	REVISED - 11-16-09		SCALE: N/A SHEET NO. 3 OF 15 SHEETS STA. TO STA.	ILLINOIS FED. AI	ID PROJECT ARA - 9003 (367)

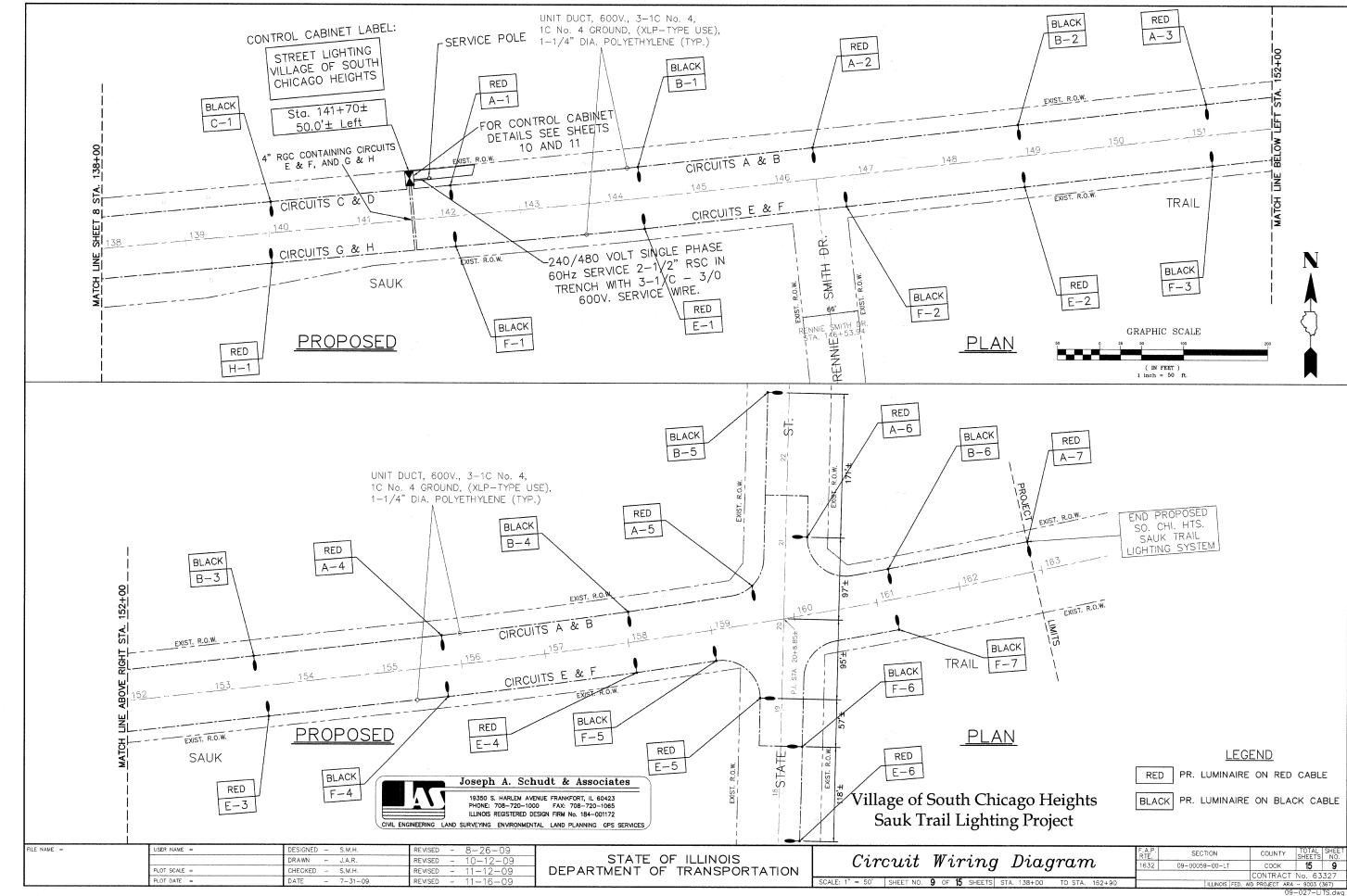


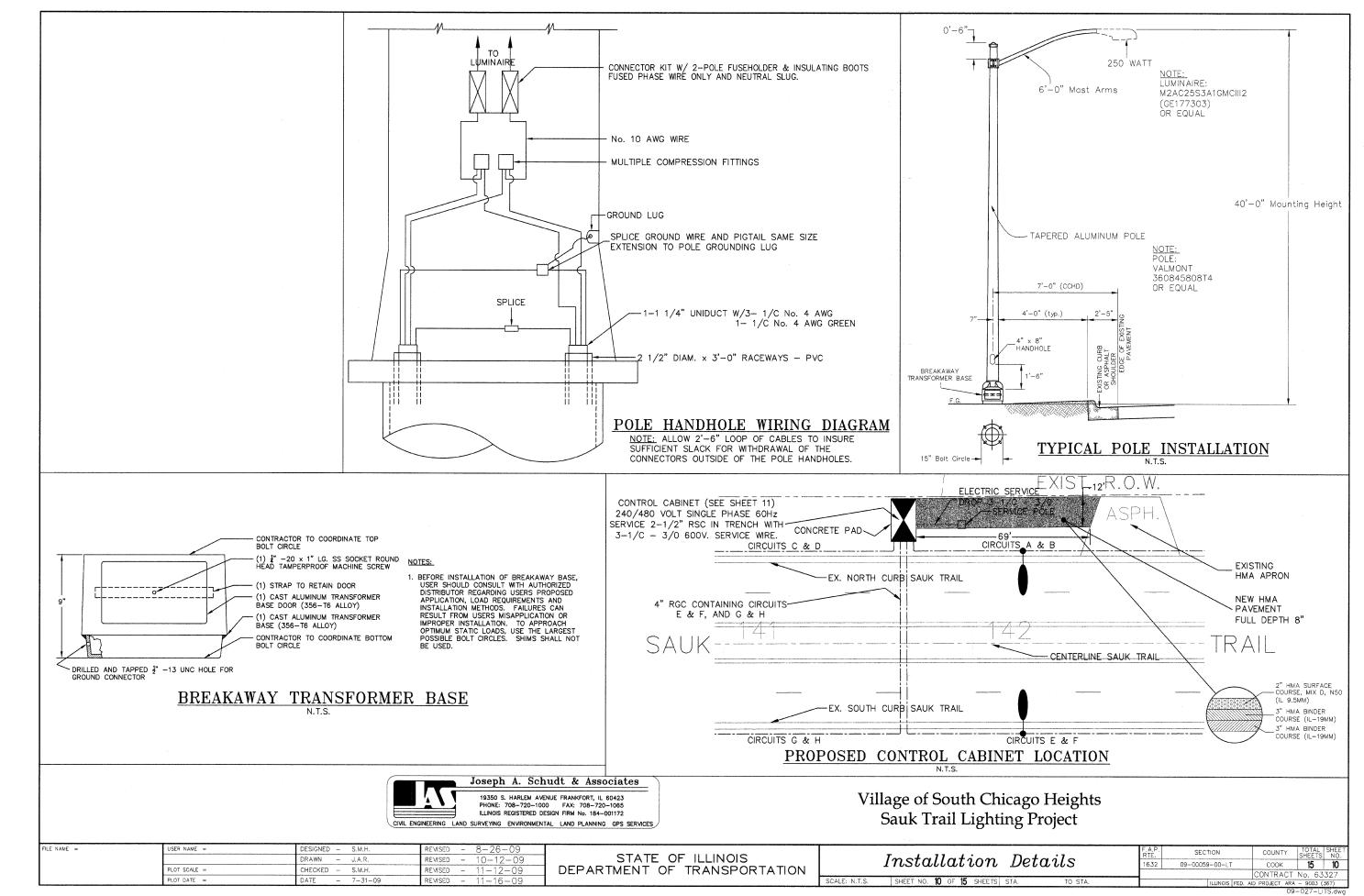


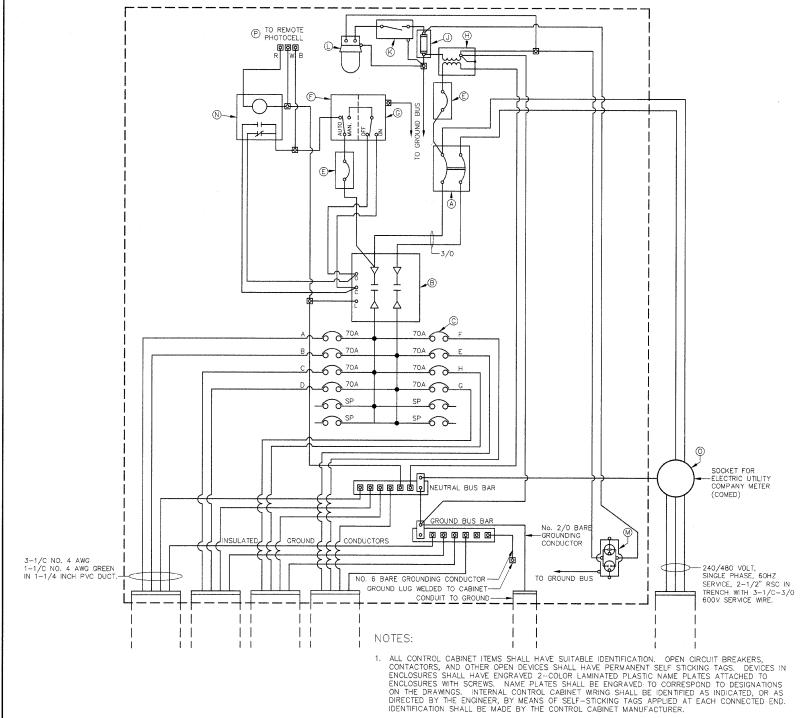








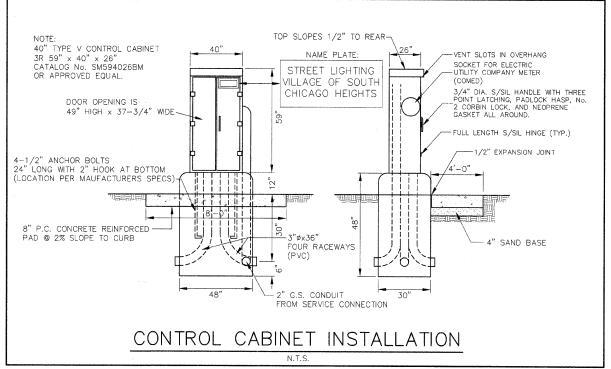




		DEVICE SCHEDULE
ITEM	QUAN.	DESCRIPTION
A	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2—POLE, 600V. A.C., 225A. FRAME, 175A. NON—INTERCHANGEABLE TRIP, BOLT—ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 480V.
B	1	LIGHTING CONTACTOR (REMOTE CONTROL SWITCH) MECHANICALLY HELD, ASCO 920, MOUNTED ON SUB PANEL 200A., 2—POLE, 600V. WITH 240V. COIL
©	1	PANEL BOARD (INTERIOR ONLY) 480/240V. SINGLE PHASE WITH 200A. COPPER MAINS AND TWELVE IP-70A BOLT-ON BRANCH BREAKERS EACH RATED 277V. WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
Ē	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1—POLE, 277V., BOLT—ON TYPE, WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
Ē	1	CONTROL SWITCH, TOGGLE TYPE, SPDT, 20A., 240V. PREMIUM SPEC. GRADE
©	1	CONTROL SWITCH, MOMENTARY CONTACT, SPDT, 15A., 240V.
H	1	STEP DOWN TRANSFORMER 240V120V., 1KVA.
0	1	FUSE HOLDER 15A., 250V., 5A. FUSE
(K)	1	MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
©	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX
M	1	GFI RECEPTACLE, 120V., 15A., PREMIUM SPEC. GRADE, NEMA REFERENCE 5-15R IN WEATHER PROOF BOX WITH FLAP TYPE COVER
\odot	1	CONTROL RELAY 240V., DPDT 25A.
0	1	ELECTRIC UTILITY COMPANY METER SOCKET (COMED)
Ð	1	PHOTOELECTRIC CONTROL MOUNTED TO TOP OF NEAREST POLE
@	1	3-1/C No. 10 AWC, 600W, INSTALLED IN DUCT TO NEAREST POLE

DEVICE COULDING

CONTROL CABINET LOAD TABLE								
CIRCUIT	AMPS	WATTS	V LOSS					
А	7.29	1750	6.14					
В	6.25	1500	5.21					
С	8.33	2000	9.12					
D	8.33	2000	9.49					
E	7.29	1750	5.90					
F	6.25	1500	4.96					
G	8.32	2000	8.92					
Н	7.25	1750	7.82					



Village of South Chicago Heights Sauk Trail Lighting Project

Joseph A. Schudt & Associates
19350 S. HARLEM AVENUE FRANKFORT, IL 60423 PHONE: 708–720–1000 FAX: 708–720–1065
ILLINOIS REGISTERED DESIGN FIRM No. 184-001172

CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES

4. ALL CONTROL CABINET WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

"ENCLOSED INDUSTRIAL CONTROL PANEL"

2. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS

6. SEE CONTROL CABINET AND FOUNDATION DETAIL SHEET FOR SCHEMATIC DIAGRAM AND DEVICE LAYOUT.

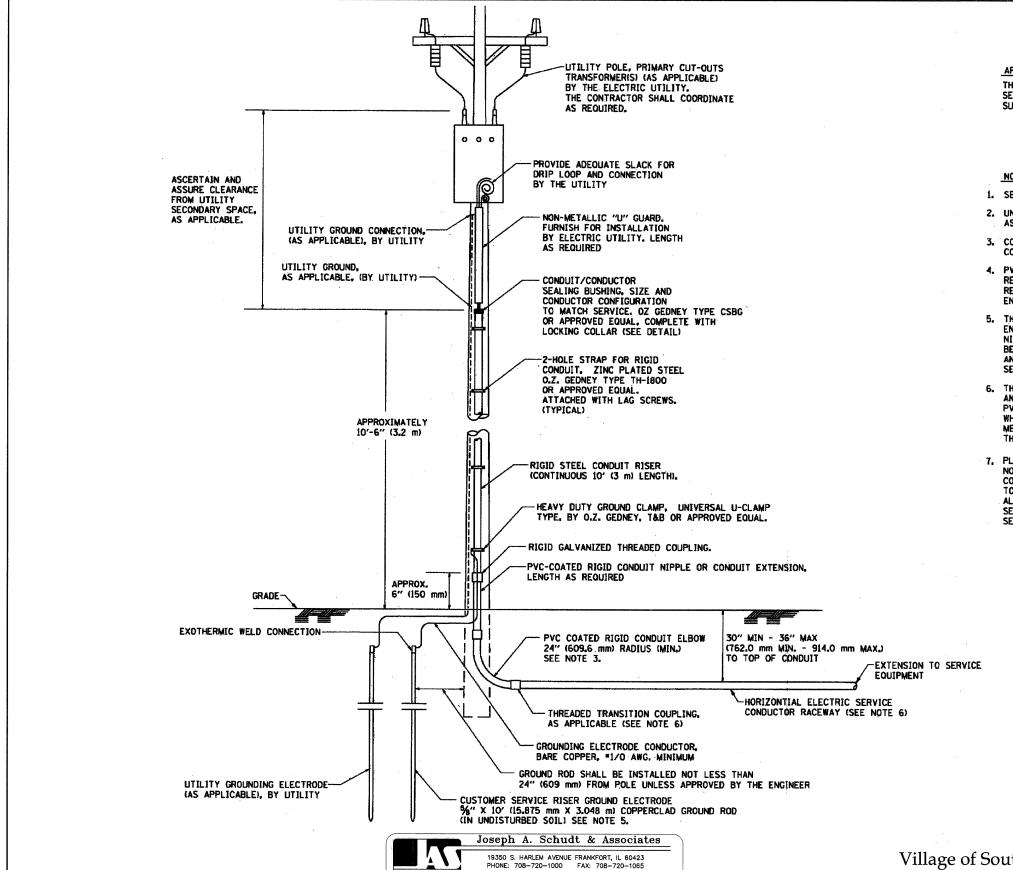
3. ALL CONTROL CABINET WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.

5. THE CONTROL CABINET SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL

FILE NAME =	USER NAME =	DESIGNED -	S.M.H.	REVISED -	- 8-26-09
		DRAWN	J.A.R.	REVISED	- 10-12-09
	PLOT SCALE =	CHECKED -	S.M.H.	REVISED -	- 11-12-09
	PLOT DATE =	DATE -	7-31-09	REVISED -	12-2-09

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	C	07	tr	ol	Cabinet	,	F.A.P. RTE.	
	W	ir	in	g	Diagran	n	1632	09-0
N.T.S.	SHEET NO.	11	OF	15	SHEETS STA.	TO STA.	_	



ILLINOIS REGISTERED DESIGN FIRM No. 184-001172

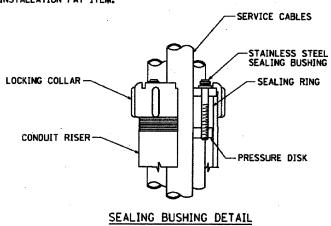
CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES

APPLICATION

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

NOTES

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



Village of South Chicago Heights Sauk Trail Lighting Project

USER NAME =	DESIGNED -	S.M.H.	REVISED		8-26-09
	DRAWN -	J.A.R.	REVISED	_	10-12-09
PLOT SCALE =	CHECKED -	S.M.H.	REVISED		
PLOT DATE =	DATE -	7-31-09	REVISED		

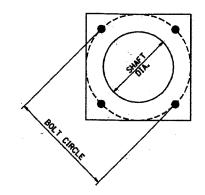
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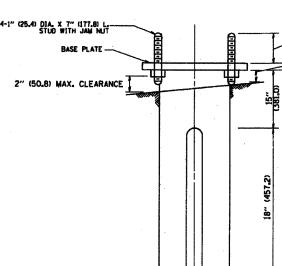
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION Electric Service Installation

Aerial, Remote Disconnect

N.T.S. | SHEET NO. 12 OF 15 SHEETS | STA. TO STA.

F.A.P. RTE.	SEC		COUNT	Υ	TOTAL SHEETS	SHEE NO.	
1632	09-00059	9-00-LT		COOK		15	12
	BE-220			CONTRA	СТ	No. 63	327
		ILLINOIS FED	. A	D PROJECT	ARA	- 9003 (367)
 Long	Section Number	r			09-	-027-LI	TS.dw





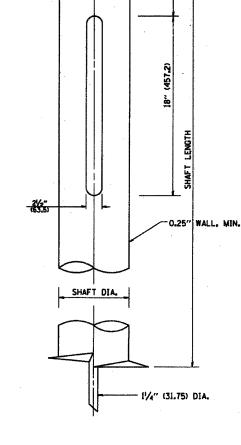
HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
. 30 FT.	111/2"	85%"	6 FT.	12"×12"×1"
31 FT35 FT.	111/2"	85%"	6 FT.	12"×12"×1"
36 FT40FT.	15"	85%**	6 FT.	15"×15"×1¼"
41 FT45 FT.	15"	8%"	6 FT.	15"×15"×1¼"
46 FT50 FT.	15"	10"	8 FT.	15"×15"×11/4"

METAL HELIX FOUNDATION MATERIALS

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

FILE NAME =



SEE NOTE NO. 6

1" (25.4) MIN. CLEARANCE

NOTES:

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

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CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES

USER NAME = DESIGNED - S.M.H. REVISED -8-26-09STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION DRAWN - J.A.R. REVISED - 10-12-09 PLOT SCALE = CHECKED - S.M.H. REVISED

Light Pole Foundation, Metal and Installation Details

SECTION COUNTY 09-00059-00-LT COOK CONTRACT No. 63327 BE-305

SHEET NO. 13 OF 15 SHEETS STA.

Village of South Chicago Heights

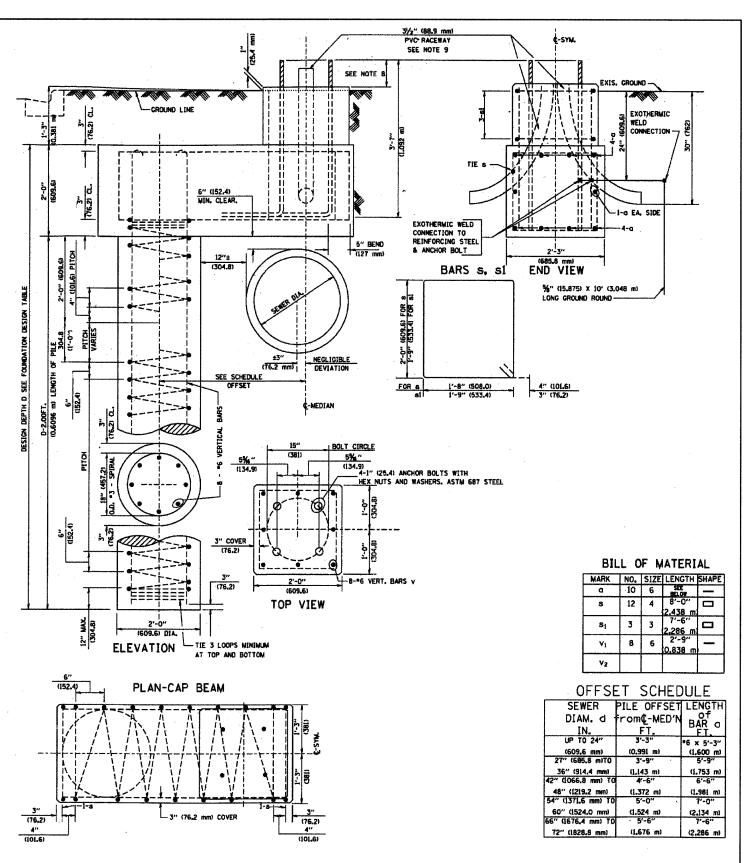
Sauk Trail Lighting Project

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION					
	SINGLE ARM	TWIN ARM	SINGLE	ARM	TWIN ARM			
	D .	D	VERT BARS	SPIRAL	VERT BARS	SPIRAL		
SOFT CLAY	13'-0"	15'-0''	8-*6X12'-6"	#3X122'	8-#6X14'-3''	#3X141′		
	(3.962 m)	(4 . 572 m)	(3.810 m)	(37.186 m)	(4.343 m)	(42.977 m)		
MEDIUM CLAY	9'-6"	10'-9"	8-#6X9'-0''	#3X90′	8-#6X10'-0"	*3X100′		
	(2.896 m)	(3.277 m)	(2.743 m)	(27.432 m)	(3.048 m)	(30.480 m)		
STIFF CLAY	7′-0′′	8'-0''	8-#6X6'-6''	*3X66′	8-*6X7'-6"	*3X76′		
	(2.134 m)	(2.438 m)	(1.981 m)	(20.112 m)	(2.286 m)	(23,165 m)		
LOOSE SAND	9′-0′′	10'-0''	8-*6X8'-6"	*3X85′	8-#6X9'-6"	*3X94′		
	(2.743 m)	(3.048 m)	(2.591 m)	(25.908 m)	(2.896 m)	(28.651 m)		
MEDIUM SAND	8′-3"	9'-0''	8-#6X8'-0"	*3X78′	8-*6X8'-6"	*3X85′		
	(2.515 m)	(2.743 m)	(2.438 m)	(23.774 m)	(2.591 m)	(25.908 m)		
DENSE SAND	7'-9"	9'-0''	8-#6X7'-6"	#3X73′	8-*6X8'-6"	*3X85′		
	(2 . 362 m)	(2.743 m)	(2.286 m)	(22.250 m)	(2,591 m)	(25.908 m)		
ROCK OR SOLIDIFIED SLAG	5'-0'' (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE		

NOTES

- 1. 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.
- 4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



Village of South Chicago Heights Sauk Trail Lighting Project

Joseph A. Schudt & Associates 19350 S. HARLEM AVENUE FRANKFORT, IL 60423 PHONE: 708-720-1000 FAX: 708-720-1065 ILLINOIS REGISTERED DESIGN FIRM No. 184-001172 CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL LAND PLANNING GPS SERVICES

FILE NAME =	USER NAME =	DESIGNED - S.M.H.	REVISED - 8-26-09	
		DRAWN - J.A.R.	REVISED - 10-12-09	STATE OF ILLINOIS
	PLOT SCALE ==	CHECKED - S.M.H.	REVISED -	DEPARTMENT OF TRANSPORTATION
	PLOT DATE =	DATE - 7-31-09	REVISED -	

Light Pole Foundation Offset	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
and Installation Details	1632	09-00059-00-LT	COOK	15 14
		BE-310	CONTRACT	No. 63327
N.T.S. SHEET NO. 14 OF 15 SHEETS STA. TO STA.		ILLINOIS FED. A	D PROJECT ARA	- 9003 (367)

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

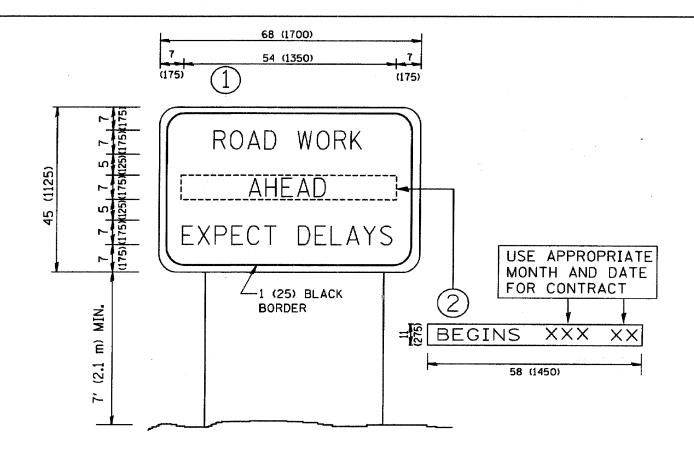
NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPM (60 km/h) OR LESS AS SHOWN ON THE DRAWBING AND AS DIRECTED BY THE ENGINEERS
- of one moad commitmication annual sign 36 x 36 (900x900) with a flasher and flag mounted on it approximately 200' (60 m) in advance of the main route.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSE SECTION OF THE CLOSED REPTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- c) ONE ROAD CONSTRUCTION AMEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500 (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE WAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW IM6-17 SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW IM6-41.

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150), STD. 701606 OR THE APPROPRIATE STANDARD), THE SPACING OF SIGNS AND BARRICAGES 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 LAME 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 DRIVERAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS TC-10 DETAIL

All dimensions are in millimeters (inches



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 () 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.

ARTERIAL ROAD INFORMATION SIGN TC-22 DETAIL



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PLOT DATE = DATE - 7-31-09 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Information Sign Details

N.I.S. SHEET NO. 15 OF 15 SHEETS STA. TO STA.