

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
				ROADWAY	
CODE NO.	ITEM	UNIT		80% ICC 40% LOCAL + FED J000-5B	100% LOCAL + FED J000-2A
8880100	PEDESTRIAN PUSH-BUTTON	EACH	2	0	2
8910040	ILLUMINATED SIGN, LED	EACH	4	0	4
89502380	REMOVE EXISTING HANDHOLE	EACH	2	0	2
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5	0	5
Z0018900	DRILL AND GROUT DOWEL BARS	EACH	40	40	0
Z0036200	PAINT CURB	FOOT	488	0	488
Z0048400	RAILROAD CROSSING REMOVAL	EACH	1	0	1
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0	1
LR420033	PORTLAND CEMENT CONCRETE PAVEMENT 9" (SPECIAL)	SQ YD	14308	8398	5910
LR420037	PORTLAND CEMENT CONCRETE PAVEMENT 10" (SPECIAL)	SQ YD	707	0	707
X0300019	REMOVE AND REINSTALL PARKING BLOCKS	EACH	21	0	21
X0321905	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	62	0	62
X0322050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	2	0	2
X0322208	TEMPORARY STORM SEWER PLUGS	EACH	1	0	1
X0323083	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 24"	FOOT	45	0	45
X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	2895	0	2895
X0323412	REMOVE EXISTING SERVICE INSTALLATION	EACH	1	0	1
X0323437	CONDUIT, FLEXIBLE METALLIC, WEATHERPROOF 2"	EACH	4	4	0
X0323954	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 18"	FOOT	36	0	36
X0324021	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 30"	FOOT	56	0	56
X0696100	PARKING BLOCKS	EACH	5	0	5
X6012610	CONCRETE HEADWALL REMOVAL PARTIAL	EACH	1	1	0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	24	0	24
X7240205	REMOVE SIGN COMPLETE	EACH	2	0	2
X8011010	TELEPHONE SERVICE INSTALLATION	L SUM	1	0	1
X0006983	CLEARING	ACRE	10	2.37	7.63
X0003332	REMOVAL OF EXISTING LIGHT STANDARD	EACH	1	0	1
X0006025	INTERSECTION MONITOR MODULE	EACH	1	0	1
X0006971	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 18"	FOOT	75	0	75
X0006972	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 48"	FOOT	112	0	112
X0006973	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 60"	FOOT	60	0	60
X6020019	INLETS, TYPE B, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	7	5	2
X0006975	INTERSEEDING, CLASS 3 (MODIFIED)	ACRE	1.25	1.25	0
X0006976	INLETS, TYPE A, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	12	6	6
X0006977	INLETS, TYPE B, TYPE 11V FRAME AND GRATE, SPECIAL	EACH	15	15	0
X0006978	RESTRICTED DEPTH MANHOLES, 5-DIAMETER, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	1	0	1
X0006979	RESTRICTED DEPTH MANHOLES, 7-DIAMETER, TYPE 3V FRAME AND GRATE, SPECIAL	EACH	2	0	2
X0006980	MANHOLES, TYPE A, 8-DIAMETER, TYPE I FRAME, OPEN LID	EACH	1	0	1
X0006980	CAP EXISTING SETTLEMENT PLATFORMS	EACH	11	11	0
X0006981	CAP EXISTING INCLINOMETERS	EACH	5	5	0
X0006982	REMOVE EXISTING PIEZOMETER READOUT STATION	L SUM	1	1	0

Revised 6-5-07

STATION	PAVEMENT PATCHING SCHEDULE			
	PAVEMENT PATCHING, 10 INCH (SQ. YD.)			
	TYPE I	TYPE II	TYPE III	TYPE IV
135+30 LT				45
135+69 LT	5			
135+76 RT		8		
135+77 RT		8		
135+97 LT		8		
135+97 LT		8		
135+97 CL		11		
135+97 RT	4			
136+03 LT				25
136+39 LT		8		
136+41 LT		8		
136+64 LT		8		
136+64 LT		8		
136+82 RT		8		
136+82 RT		8		
136+97 RT	4			
137+15 LT		8		
137+94 RT	4			
137+97 LT		9		
138+24 LT		8		
138+46 LT		8		
138+46 LT		8		
138+15 RT				35
138+94 LT		8		
138+94 LT		8		
138+94 RT		9		
139+33 RT		13		
139+39 LT		8		
139+39 LT		8		
139+39 RT				31
139+97 LT		8		
139+97 LT		8		
139+97 RT		7		
140+20 RT		9		
140+27 RT				47
140+97 LT		8		
140+97 LT		8		
140+97 RT		8		
140+97 RT		8		
141+98 RT		8		
141+98 RT		8		
141+98 RT		8		
141+98 LT		8		
141+98 LT		8		
142+03 RT				65
142+66 RT		8		
142+66 RT		7		
142+72 RT			19	
142+85 LT				26
143+00 LT				76
143+00 LT				72
143+00 RT				64
143+00 RT				60
143+39 CL		9		
TOTALS:	17	322	19	546

NOTE: SAW CUTTING FOR PAVEMENT PATCHING AS REQUIRED BY ARTICLE 442.05 (C) SHALL BE INCLUDED IN THE COST OF PAVEMENT PATCHING.

EARTHWORK SCHEDULE					
LOCATION	EARTH EXCAVATION (CUT) (CU. YD.)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE * (CU. YD.)	EMBANKMENT (FILL) (CU. YD.)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU. YD.)	FURNISHED EXCAVATION (CU. YD.)
108+46.17 TO 112+00	524	393	7980	-7587	
112+00 TO 116+00	209	157	10894	-10737	
116+00 TO 120+00	185	139	3438	-3299	
120+00 TO 124+00	136	102	148	-46	
126+40.87 TO 131+00	103	77	193	-115	
131+00 TO 135+00	206	154	196	-42	
Service Road - East Side	0	0	535	-535	
Service Road - West Side	0	0	150	-150	
Morrison Avenue - East Side	208	156	961	-805	
Morrison Avenue - West Side	71	53	1044	-991	
Broadway - South Side	433	324	80	245	
Broadway - North Side	0	0	15	-15	
Total	2074	1555	25634	-24079	24079

* ASSUME SHRINKAGE FACTOR = 25%

REVISIONS

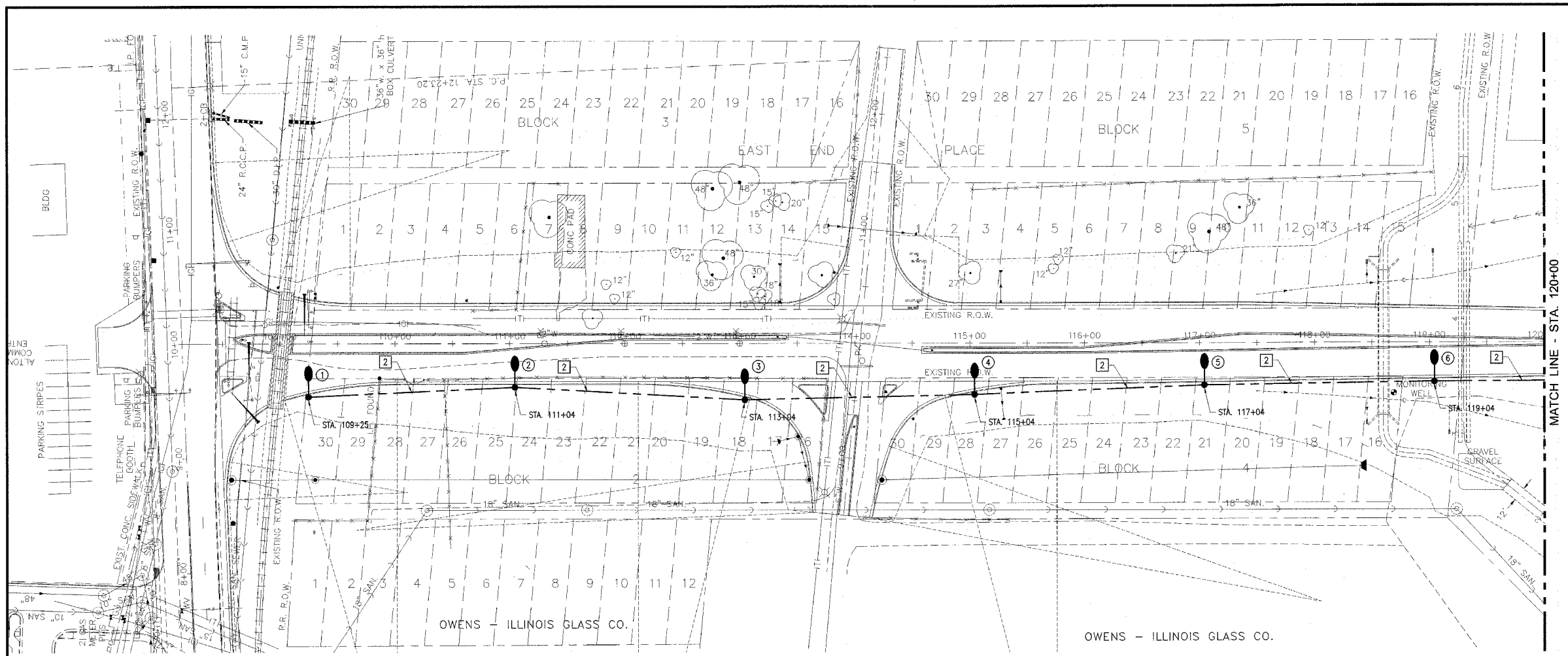
Sheppard Morgan & Schwaab, Inc.
CONSULTING ENGINEERS LAND SURVEYORS
216 Market Street
P.O. BOX 2
Alton, Illinois 62002
618/677-8700



CITY OF ALTON, ILLINOIS
SECTION 06 - 00208 - 02 - RP
CPL. CHRIS BELCHIK MEMORIAL EXPRESSWAY
SUMMARY OF QUANTITIES

DWG. NO.
PH II SUMMARY OF QUANTITIES
REF. BK. INDIANA AV.
JOB NO. 406365.1
DSN. BY: DEG
DWN. BY: CAD
CHK. BY: DEG
DATE: OCTOBER, 2006
SCALE: NO SCALE
SHEET 4 OF 61

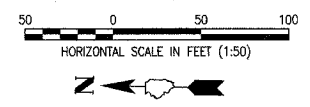
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-8968	06-00208-02-BR	MADISON	61	36
FED. ROAD DIST. NO.	PROJECT			



- ELECTRICAL KEYED NOTES:**
- 1 UNIT DUCT, 2#4 XLP, 1#4G. XLP, 1\"/>

- LIGHTING GENERAL NOTES:**
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND THE LIGHTING CONTROLLER FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
 2. THE CONTRACTOR SHALL NOTE THE REQUIREMENTS FOR THE ELECTRICAL SERVICE FOR THE PROPOSED ROADWAY LIGHTING. IT IS THE CONTRACTOR'S RESPONSIBILITY FOR TIMELY NOTIFICATION AND COORDINATION WITH THE ELECTRIC UTILITY COMPANY.
 3. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF THE "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.

LIGHTING PLAN



LIGHTING LEGEND:

- 50 FT. ALUMINUM POLE WITH 6 FT. DAVIT ARM WITH 400 WATT HPS LUMINAIRE WITH M53 DISTRIBUTION PATTERN
- PROPOSED UNIT DUCT
- CONTROL INSTALLATION
- CONDUIT BORE OR PUSH BELOW ROADWAY
- PROPOSED ELECTRIC SERVICE INSTALLATION WITH 20 FT. CLASS 5 WOOD POLE
- EXISTING SERVICE INSTALLATION
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING TRAFFIC SIGNAL CONTROLLER
- EXISTING TRAFFIC SIGNAL MAST ARM
- EXISTING SIGNAL POST

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	LIN. FT.	75
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	LIN. FT.	50
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 6"	EACH	2
CONCRETE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	LIN. FT.	3054
UNIT DUCT, 2 #6 XLP, 1 #6 XLP GROUND, 1" POLYETHYLENE	LIN. FT.	2355
UNIT DUCT, 2 #4 XLP, 1 #4 XLP GROUND, 1" POLYETHYLENE	LIN. FT.	1049
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	LIN. FT.	843
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400W	EACH	18
LIGHTING CONTROLLER, TYPE CB-RCS, 60 AMP - 480 VOLT	EACH	1
LIGHT POLE, ALUMINUM, 45 FT. M.H., 6 FT. DAVIT ARM	EACH	1
LIGHT POLE, ALUMINUM, 50 FT. M.H., 6 FT. DAVIT ARM	EACH	17
LIGHT POLE FOUNDATION	EACH	17
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	68
CONDUIT, FLEXIBLE METALLIC, WEATHERPROOF, 2"	EACH	4

GIVEN CONDITIONS		
ROADWAY DATA:	PAVEMENT WIDTHS	66 FT
	NUMBER OF LANES	4
	MEDIAN WIDTH	6 FT
	IES SURFACE CLASSIFICATION	R1
	Q-ZERO VALUE	0.10
LIGHT POLE DATA:	MOUNTING HEIGHT	50 FT
	MAST ARM LENGTH	6 FT
	POLE SET-BACK FROM EDGE OF PAVEMENT	1.5 FT
LUMINAIRE DATA:	LAMP TYPE	400W CLEAR HPS
	LAMP LUMENS	51,000
	IES VERTICAL DISTRIBUTION	MEDIUM
	IES CONTROL OF DISTRIBUTION	CUTOFF
	IES LATERAL DISTRIBUTION	TYPE III
	TOTAL LIGHT LOSS FACTOR	0.684
LAYOUT DATA:	SPACING	200 FT
	CONFIGURATION	SINGLE HEAD POLE MOUNT
	LUMINAIRE OVERHANG OVER EDGE OF PAVEMENT LINE	4.5 FT

NOTE: VARIATIONS FROM THE ABOVE SPECIFIED IES DISTRIBUTION PATTERN MAY BE REQUESTED AND ACCEPTANCE OF VARIATIONS WILL BE SUBJECT TO REVIEW BY THE ENGINEER BASED ON HOW WELL THE PERFORMANCE REQUIREMENTS ARE MET.

PERFORMANCE REQUIREMENTS

NOTE: THESE PERFORMANCE REQUIREMENTS SHALL BE THE MINIMUM ACCEPTABLE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED ABOVE.

ILLUMINATION:	AVERAGE HORIZONTAL ILLUMINATION, (EAVE)	0.8 FC
	UNIFORMITY RATIO, (EAVE/EMIN)	3.0
LUMINANCE:	AVERAGE LUMINANCE, (LAVE)	0.8 Cd/m2
	UNIFORMITY RATIOS: (LAVE/LMIN)	3.0
	(LMAX/LMIN)	5.0
	MAXIMUM VEILING LUMINANCE RATIO: (LV/LAVE)	0.3

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

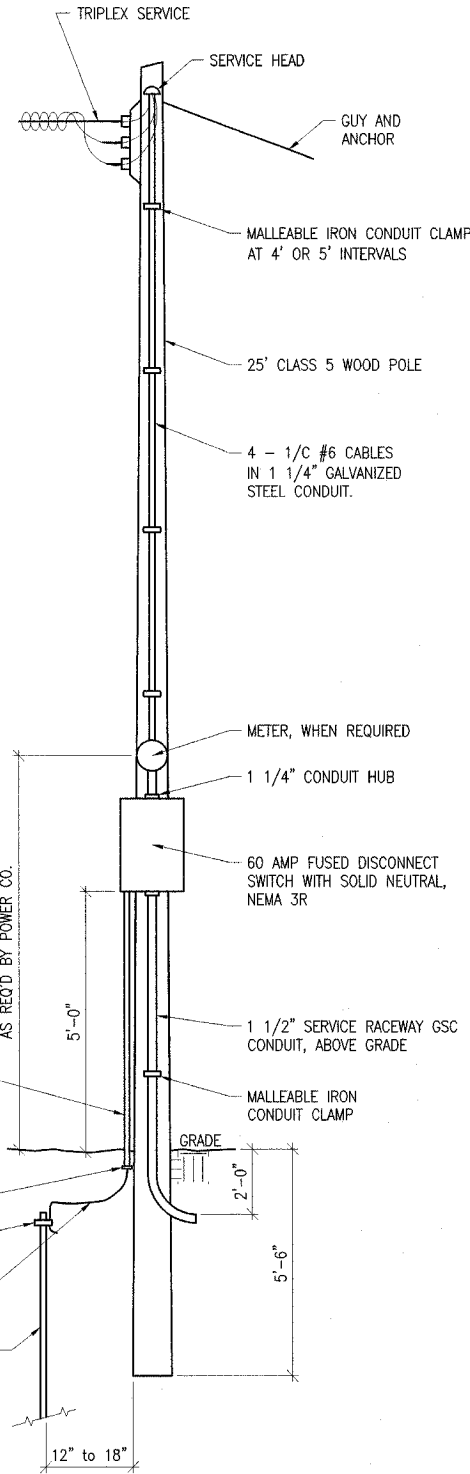
**INDIANA AVENUE EXTENSION
CITY OF ALTON, IL
ROADWAY LIGHTING
PLAN**

LAYOUT	PJT	HANSON Copyright Hanson Professional Services Inc. 2005 Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703-2886 ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084	JOB NO.	95510081
DESIGN	ANC		DATE	08-16-06
REVIEWED	PJT			

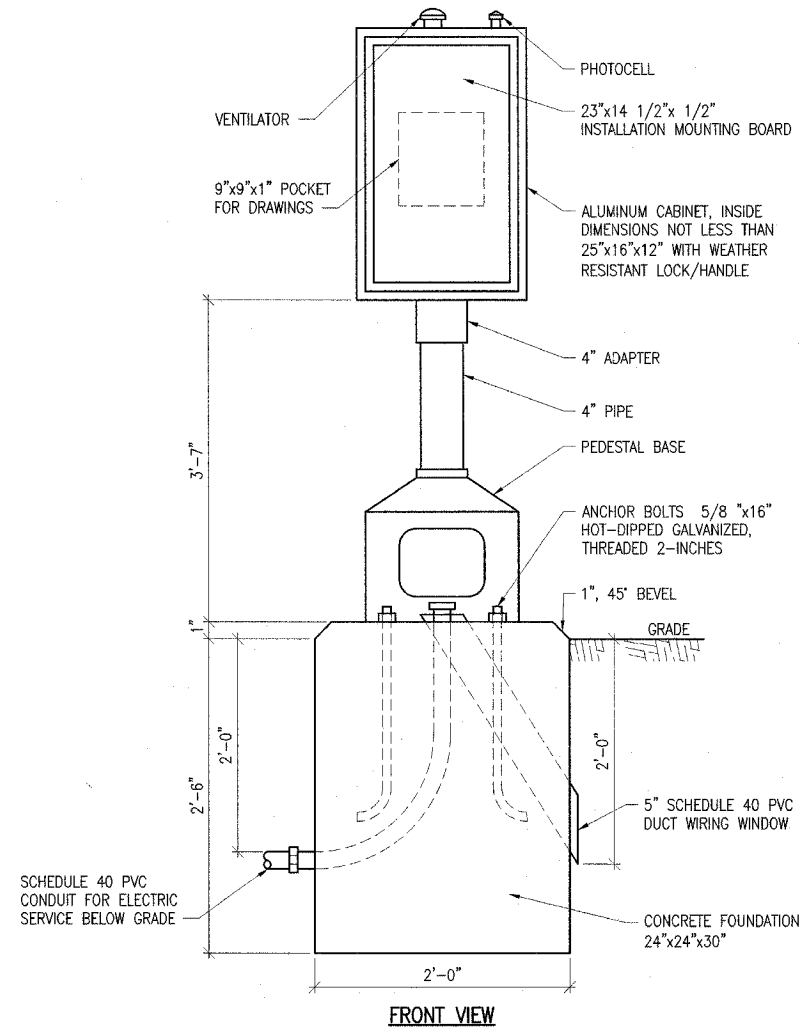
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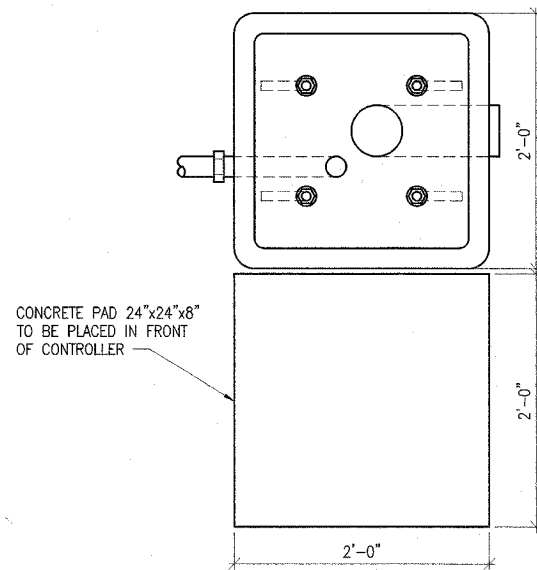
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-0966	06-00208-02-BR	MADISON	61	40
FED. ROAD DIST. NO.	PROJECT			



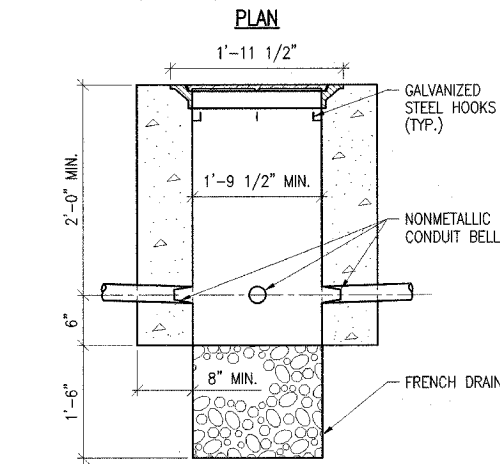
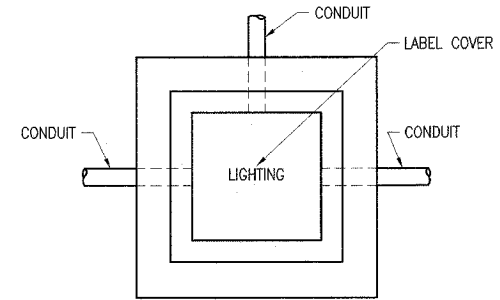
SERVICE POLE DETAIL
SCALE: NONE



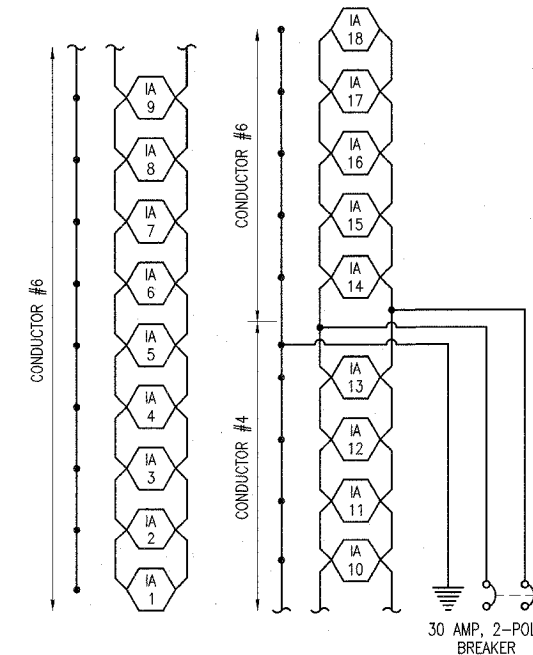
CONTROL INSTALLATION DETAIL
SCALE: NONE



FOUNDATION DETAIL
SCALE: NONE

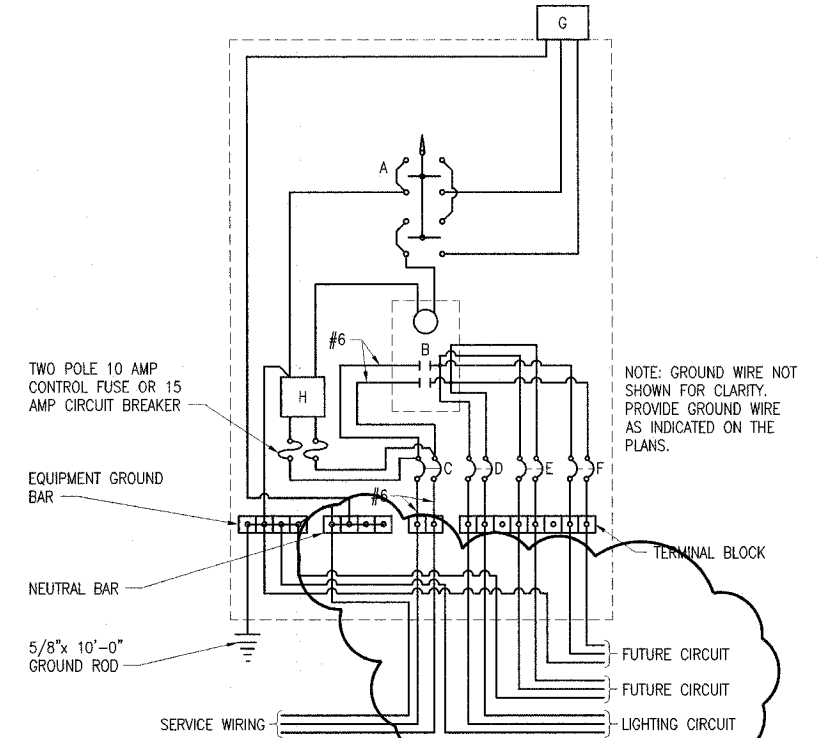


CONCRETE HANDHOLE
SCALE: NONE



CIRCUIT DIAGRAM
SCALE: NONE

- A SELECTOR SWITCH - HAND/OFF/AUTO
- B 2 POLE, 60 AMP CONTACTOR, ELEC. OPER., ELEC. HELD
- C 2 POLE, 60 AMP SERVICE DISCONNECT
- D,E,F 2 POLE, 30 AMP CIRCUIT BREAKERS
- G PHOTOCELL WITH INTEGRAL SURGE ARRESTOR
- H CONTROL TRANSFORMER 480-120V



LOCATE SERVICE POLE AND CONTROL INSTALLATION ADJACENT TO R.O.W. LINE WITH A MINIMUM DISTANCE OF 30' FROM THE EDGE OF PAVEMENT. EXACT LOCATION SHALL BE ESTABLISHED BY THE ENGINEER.

THE UNDERGROUND SERVICE ENTRANCE WIRING SHALL NOT EXCEED 150'. TOTAL AERIAL AND UNDERGROUND SERVICE BETWEEN THE CONTROL INSTALLATION AND PRIMARY TRANSFORMER SHALL NOT EXCEED 250'.

480V SERVICE WIRING DIAGRAM
SCALE: NONE

INDIANA AVENUE EXTENSION CITY OF ALTON, IL ROADWAY LIGHTING CONTROLLER DETAILS		
LAYOUT: PJT	 <small>Hanson Professional Services Inc. 1525 South Sixth Street Springfield, Illinois 62703-2886 ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084</small>	JOB NO: 95510081
DRAWN: ANC		DATE: 08-16-06
REVIEWED: PJT		
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