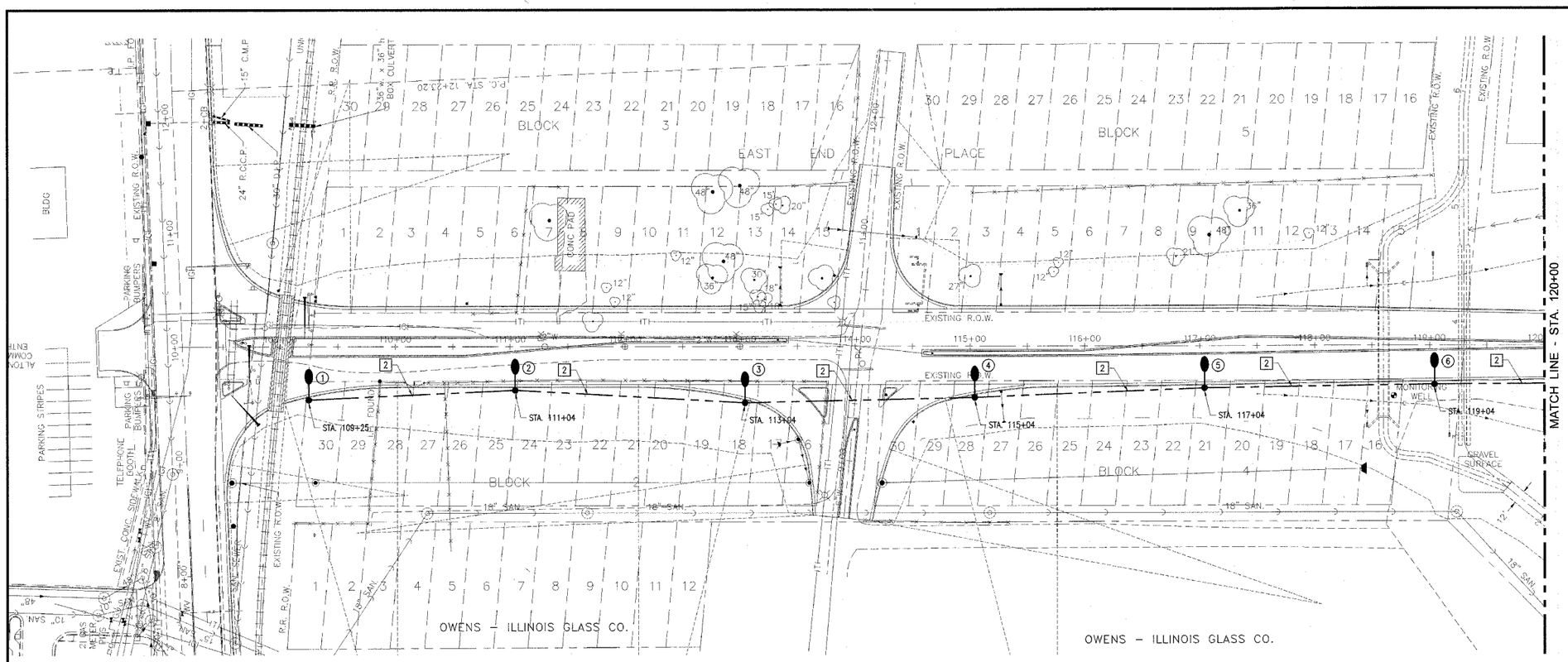
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU-8966	06-00208-02-BR	MADISON	61	36
FED. ROAD DIST. NO.		PROJECT		



LIGHTING PLAN

50 0 50 100

HORIZONTAL SCALE IN FEET (1:50)

ELECTRICAL KEYED NOTES:

1. UNIT DUCT, 2#4 XLP, 1#4G. XLP, 1"C. IN TRENCH.
2. UNIT DUCT, 2#6 XLP, 1#6G. XLP, 1"C. IN TRENCH.
3. NOT USED.
4. EXISTING CONDUIT EMBEDDED IN STRUCTURE, 2"C.
5. 2#4 XLP, 1#4G. XLP, EXISTING CONDUIT

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 LEGEND:

- 50 FT. ALUMINUM POLE WITH 6 FT. DAVIT ARM WITH 400 WATT HPS LUMINAIRE WITH MS3 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

SUMMARY OF QUANTITIES - INDIANA AVENUE EXTENSION		
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

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ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE

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.

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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
DRAWN ANC
REVIEWED PJT

L-1

HANSON

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Hanson Professional Services Inc.
1525 South Sixth Street
Springfield, Illinois 62703-2886
ILLINOIS LICENSED PROFESSIONAL SERVICES CORPORATION #184-001084

JOB NO. 95S10081

DATE 08-16-06

1 REVISED 05-31-07 PJT

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