

LIGHTING NOTES:

1. THIS DRAWING IS FOR PARKING LOT LIGHTING AND INFORMATION ONLY. REFER TO CIVIL DRAWINGS FOR ALL REMAINDER OF THE SITE INFORMATION.
2. LOCATION OF PARKING LOT LIGHTING FIXTURES SHOWN IS APPROXIMATE ONLY. COORDINATE LOCATION WITH "SITE PLAN" TO ENSURE THAT THE POLES ARE NOT IN AISLES OF PARKING SPACES.
3. CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL ITEMS OF SITE WORK BOTH BELOW AND ABOVE GROUND TO ASSURE THAT THERE IS NOT INTERUSION ONTO OR CONFLICT WITH ANY EASEMENTS, PROPERTY LINES OR OVERHEAD OR UNDERGROUND UTILITY LINES. ANY RELOCATION SHALL BE APPROVED BY OWNERS REPRESENTATIVE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING AND BACKFILL FOR MEETING SUBGRADE COMPACTION REQUIREMENTS.

LIGHTING NOTES:

1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES AND 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED.
4. THE LUMINAIRES, LAMPS AND LENSES SHALL BE REGULARLY INSPECTED/MAINTAINED TO INSURE THAT THEY FUNCTION PROPERLY. THIS WORK MAY INCLUDE, BUT IS NOT LIMITED TO, VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS.
5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES. UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT AND/OR LIGHTING CONTRACTOR AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS SHALL BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.
7. ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
8. WHEN A BANK ATM IS INCLUDED IN THE PLAN, THE LIGHTING DESIGN REPRESENTS BOHLER'S UNDERSTANDING AND INTERPRETATION OF THE REGULATORY LIGHTING LEVELS INTENDED BY PUBLISHED STANDARDS.
9. LIGHTING CONTRACTOR TO COORDINATE WITH THE PROJECT ARCHITECT REGARDING POWER SOURCE FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
10. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND GOVERNMENTAL REGULATIONS.

LUMINAIRE SCHEDULE

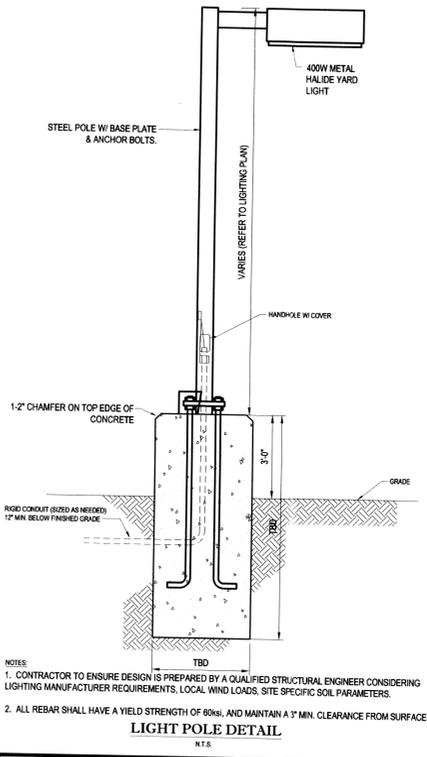
SYMBOL	LABEL	QTY	ARRANGEMENT	LUMENS	LF/F	DESCRIPTION	MAKE/MODEL
442	442	3	BACK-BACK	40000	0.750	CR1-P40H4	CR1-P40H4
WP	WP	3	SINGLE	22500	0.750	WFL3_250M_FT	LITHONIA LIGHTING/STAGGERING STRIP
OE	OE	24	SINGLE	2800	0.810	SNL-232	GOTHAM/HID DOWNLIGHTING
OC	OC	18	GROUP	N/A	N/A	N/A	LITHONIA LIGHTING/TELESCOPING STAGGERING STRIP
OB	OB	2	SINGLE	21500	0.800	AH_250M_10AR	HUBBELL/VERTICAL LAMP FLAT GLASS
4A	4A	8	SINGLE	40000	0.750	2517S_3_32_A12_1_3_ADDE	LITHONIA LIGHTING/GENERAL PURPOSE T8 TROFFER
4ATRIPL	4ATRIPL	10	3 @ 120 DEGREES	40000	0.750	CR1-P40H4	SPALDING LIGHTING/DIE CAST ARCHITECTURAL LUMINAIRE
4A QUAD	4A QUAD	1	4 @ 90 DEGREES	40000	0.750	CR1-P40H4	SPALDING LIGHTING/DIE CAST ARCHITECTURAL LUMINAIRE
4A2ANGLE	4A2ANGLE	7	2 @ 90 DEGREES	40000	0.750	CR1-P40H4	SPALDING LIGHTING/DIE CAST ARCHITECTURAL LUMINAIRE
WALL PACK	WALL PACK	6	SINGLE	40000	1.000	WAG-CAL-400M-HMT-ADVANCE-4E-ZF	COOPER LIGHTING/CAL CONCOURSE WALL MOUNTED LIGHTING

NUMERIC SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVGMIN	MAXMIN
AREA SUMMARY	ILLUMINANCE	FC	9.10	48.3	0.3	30.33	161.00

LIGHTING REQUIREMENTS

2.0 FC MINIMUM FOR PARKING	2.0 FC MINIMUM PROVIDED FOR PARKING AREAS
MAXIMUM 1.0 SPILLOVER	MAX 1.0 SPILLOVER PROVIDED
20' MAXIMUM FIXTURE HEIGHT (CVS)	20' MAXIMUM FIXTURE HEIGHT FOR CVS AND SPEC RETAIL "B" PROVIDED 30' PROPOSED FOR S&S PARKING (+32.0' EXISTING HEIGHT)
SIDEWALKS MAXIMUM 15' LIGHT HEIGHT	N/A
FULL CUTOFF REQUIRED	FULL CUTOFF PROVIDED



THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

1. CONTRACTOR TO ENSURE DESIGN IS PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS, SITE SPECIFIC SOIL PARAMETERS.

2. ALL REBAR SHALL HAVE A YIELD STRENGTH OF 60ksi, AND MAINTAIN A 3" MIN. CLEARANCE FROM SURFACES.

SCALE: 1" = 30'

BOHLER ENGINEERING

CORPORATE OFFICE:
WARREN, NJ

OFFICES:
SOUTHBOROUGH, MA
TOWNSON, MD
ROCKFORD, IL
ROCKAWAY, NJ
CENTER VALLEY, PA

PROJECT MANAGERS:
SURVEYORS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CIVIL & CONSULTING ENGINEERS

REVISIONS

REV	DATE	COMMENT	BY	SUB
1	05/17/11	REVISED PER ZBA COMMENTS	JUL	
2	06/28/11	REVISED PER DPW COMMENTS	DML	
3	08/17/11	PER TRAFFIC COMMENTS	GJS	
4	09/09/11	REVISED PER UTILITY UPDATE	GJS/SJL	
5	10/19/11	REVISED PER DRAINAGE FIELD CHANGE	GJS	
6				
7				
8				
9				

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE:
(MA, ME, NH, RI, VT - 800-344-7233)
(CT - 1-800-922-4450)
(NY - 1-800-962-7362)

PERMIT SET

PROJECT NO.: W081806
DRAWN BY: S.JL
CHECKED BY: JGS/MGM
DATE: 09/01/10
SCALE: AS NOTED
CAD I.D.: W081806s5 no Retail B

SITE DEVELOPMENT PLANS FOR MARK INVESTMENTS

MAP 29, LOTS 1 & 2
1475 NEWMAN AVENUE
TOWN OF SEEKONK
BRISTOL COUNTY
MASSACHUSETTS

BOHLER ENGINEERING

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9000
Fax: (508) 480-9080
www.BohlerEngineering.com

W.D. GOEBEL

PROFESSIONAL ENGINEER
MASSACHUSETTS LICENSE No. 42644
RHODE ISLAND LICENSE No. 7766
CONNECTICUT LICENSE No. 21854
NEW HAMPSHIRE LICENSE No. 10290
MAINE LICENSE No. 8490
NEW YORK LICENSE No. 017314-1

SHEET TITLE:
ELECTRICAL PHOTOMETRIC PLAN

SHEET NUMBER:
12
OF 15

REVISION 5 - 10/19/11

