



By E-mail: gboole@ave31.com

August 16, 2024

Our File Ref.: 200578

Thunder Road Limited Partnership
801-250 City Centre
Ottawa, Ontario, K1R 6R7

Attention: Geoff Boole

Subject: Site Lighting Certification for 6160 Thunder Road and 5328 Boundary road,
Ottawa, Ontario

Dear Mr. Boole,

The following is to confirm that the proposed site lighting design for the above-mentioned project complies with the City of Ottawa standards pertaining to full cut-off classification fixtures and minimal light spillage (maximum 5.38 Lux or 0.5 fc) on adjacent properties.

In the summary of our lighting design simulation, the lighting levels at the property line are as follows:

1. Average lighting level: 0.0 fc
2. Minimum lighting level: 0.0 fc
3. Maximum lighting level: 0.2 fc

The proposed site light fixture and building wall light fixture models are identified in the light simulation document attached. The site light fixtures are mounted on 30' high poles and the building wall mounted fixtures are installed at 9' (Type: W1) and 12' (Type: W2) above ground level.

Yours truly,
LRL Associates Ltd.

Shalin Shah, Electrical Designer



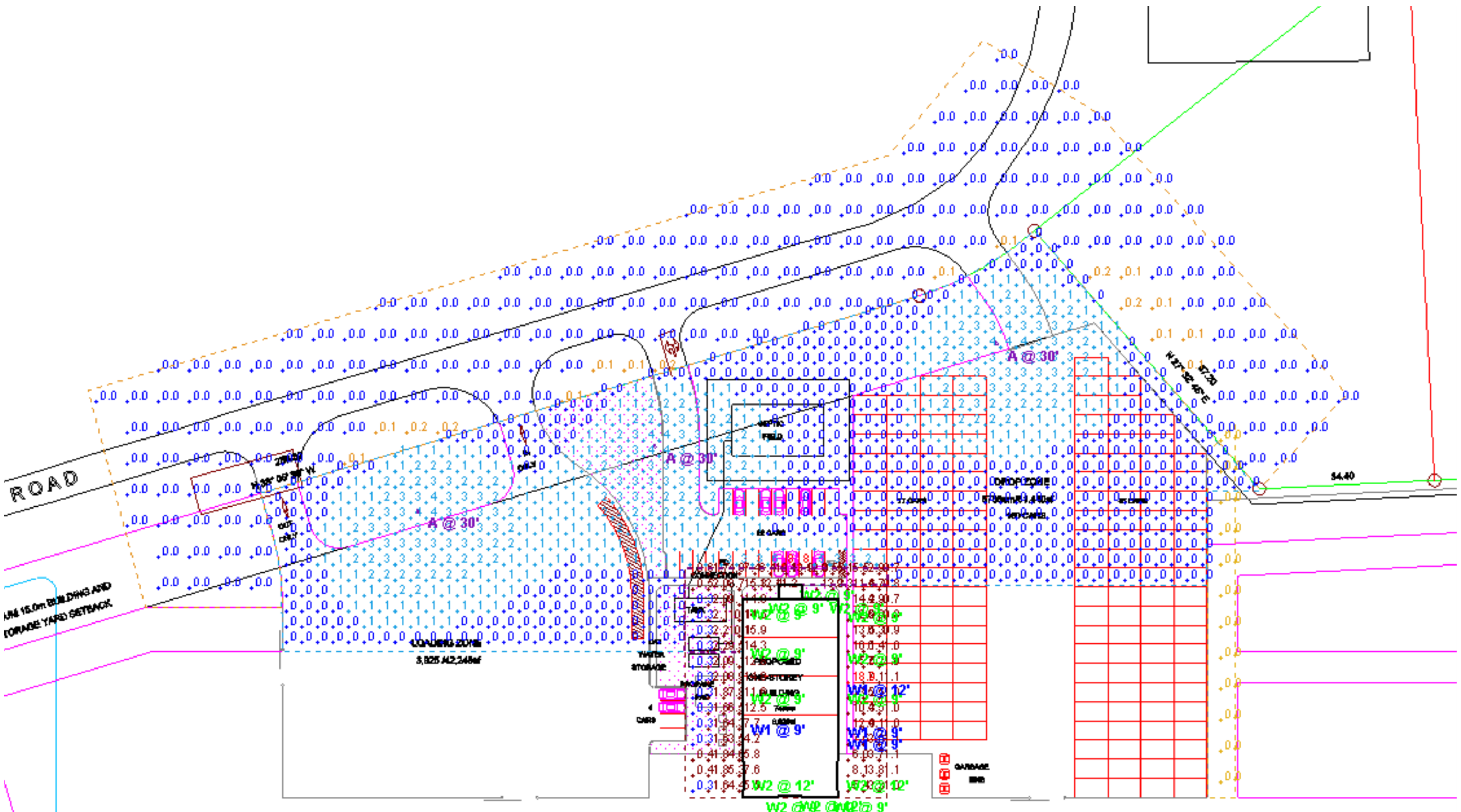
Abhishek Budhiraja, P. Eng





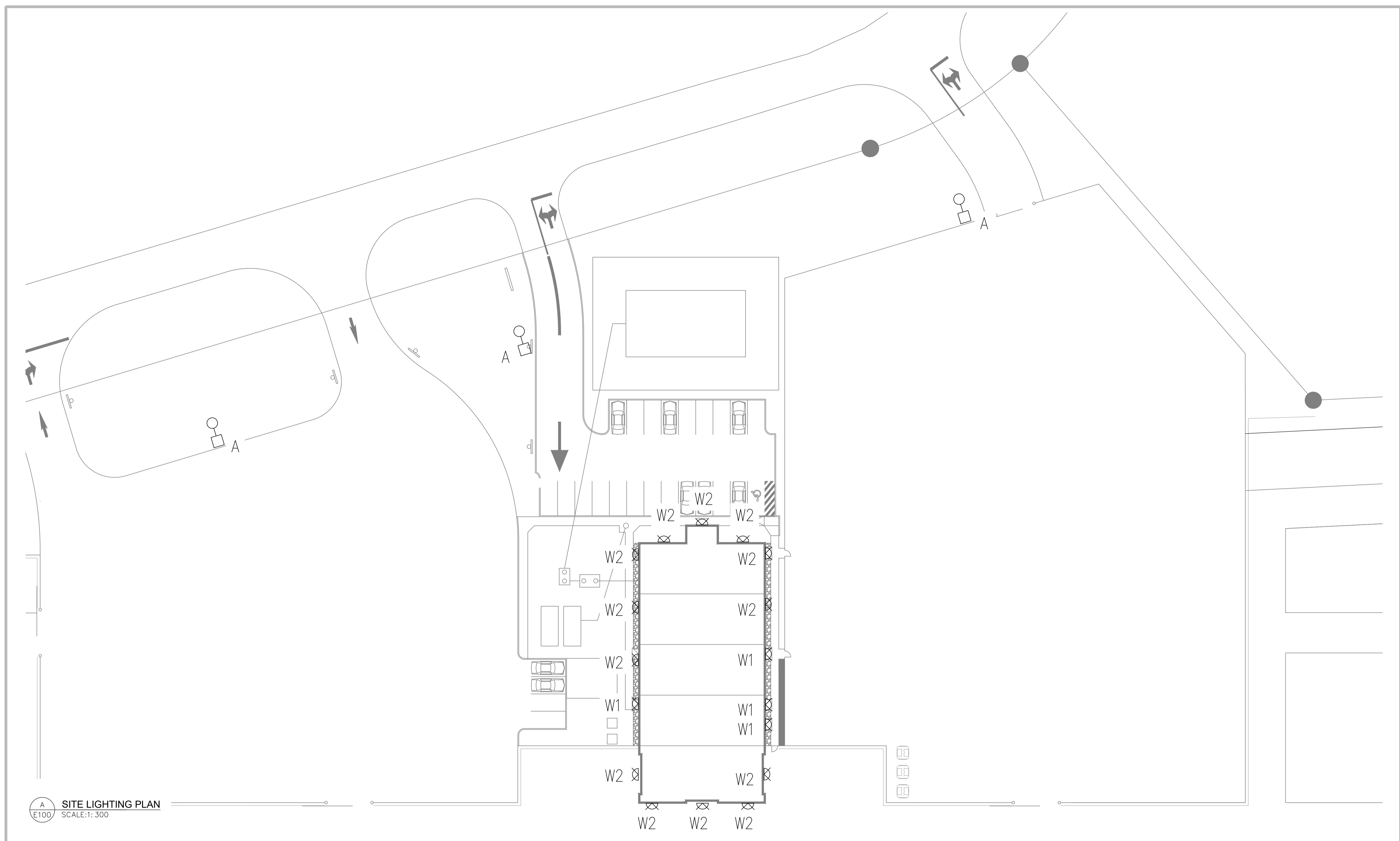
Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A		3	U.S. ARCHITECTURAL LIGHTING	RZR-PLED-IV-80LED-1050mA-40K	CAST BLACK PAINTED FINNED METAL HOUSING.	80	392	0.9	256.4
	W1		4	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	XTOR2B-W	CROSSTOUR 18W WALL MOUNT LED	1	2102	0.9	18.2
	W2		14	COOPER LIGHTING SOLUTIONS - MCGRAW-EDISON (FORMERLY EATON)	GWC-SA1D-740-U-T3	GALLEON WALL LUMINAIRE (1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS	16	518	0.9	67

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Around the building	+	5.8 fc	18.9 fc	0.3 fc	63.0:1	19.3:1
Entrance	+	1 fc	8 fc	0 fc	N/A	N/A
Spillage zone	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
Spill zone 2	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A



6160 Thunder road, Ottawa

Designer JM
 Date 08/09/2024
 Scale Not to Scale
 Drawing No. V.3
 Summary



A
E100
SITE LIGHTING PLAN
SCALE: 1:300

LIGHTING LEGEND	
⊗	WALL SCONCE
○ □	SITE LIGHT

LIGHT FIXTURE SCHEDULE							
TYPE	DESCRIPTION	BRAND	VOLTAGE	COLOR TEMP	LUMENS	WATTAGE	NOTES
'A'	LED SITE LIGHT (RZR-PLD-IV-80LED-700MA-40K-120-1-RA L9005-T)	U.S. ARCHITECTURAL	120V	4000K	295	173.6W	1
'W1'	WALL LED LIGHT (XTOR2B-W)	COOPER LIGHTING	120V	3500K	2102	18.2W	2
'W2'	WALL LED LIGHT (GWC-SA1D-740-U-T3)	COOPER LIGHTING	120V	3500K	8288	67W	3
STREET POLE	30' ROUND TAPERED STEEL POLE (RT-30-11B-0.0)	VALMONT					

NOTES:
 1. MOUNTED AT 30' HIGH POLE.
 2. 9' WALL MOUNTED FIXTURE ON BUILDING EXTERIOR.
 3. 12' WALL MOUNTED FIXTURE ON BUILDING EXTERIOR.

USE AND INTERPRETATION OF DRAWINGS

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND DESCRIBE USE AND INTENT OF THE DRAWING. THE CONTRACT DOCUMENTS INCLUDE NOT ONLY THE DRAWINGS, BUT ALSO THE OWNER-CONTRACTOR AGREEMENTS, CONDITIONS OF THE CONTRACT, THE SPECIFICATIONS, ADDENDA, AND MODIFICATIONS ISSUED AFTER EXECUTION OF THE CONTRACT. THESE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ANY ONE SHALL BE BINDING AS IF REQUIRED BY ALL. WORK NOT COMPLETELY DELINEATED HEREON SHALL BE CONSTRUCTED OF THE SAME MATERIALS AND DETAILED SIMILARLY AS WORK SHOWN MORE COMPLETELY ELSEWHERE IN THE CONTRACT DOCUMENTS.

BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER CONFIRMS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS. THE CONTRACTOR CONFIRMS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS, VERIFIED FIELD DIMENSIONS AND CORRELATED HIS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS, CADD FILES OR OTHER ELECTRONIC MEDIA AND COPIES THEREOF FURNISHED BY THE ENGINEER ARE HIS PROPERTY. THEY ARE TO BE USED ONLY FOR THIS PROJECT AND ARE NOT TO BE USED ON ANY OTHER PROJECT, INCLUDING REPEATS OF THE PROJECT. CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY THE ENGINEER.

UNLESS THE REVISION TITLE IS "ISSUED FOR CONSTRUCTION", THESE DRAWINGS SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A CONSTRUCTION DOCUMENT.

THESE DRAWINGS ILLUSTRATE THE WORK TO BE DONE. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL DETERMINE ALL CONDITIONS AT THE SITE AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS ACKNOWLEDGEMENT OF THE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

UNAUTHORIZED CHANGES:

IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REPORTS, PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRL ASSOCIATES LTD. (LRL) WITHOUT OBTAINING LRL'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRL AND TO RELEASE LRL FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED CHANGES.

IN ADDITION, THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRL FROM ANY DAMAGES, LIABILITIES OR COST, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES.

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

No.	ISSUED FOR SITE PLAN APPLICATION	S.R.S.	DATE
01			AUG. 16, 2024
No.	REVISIONS	BY	DATE



NOT AUTHENTIC UNLESS SIGNED AND DATED



LRL

ENGINEERING | INGENIERIE
 5430 Canotek Road | Ottawa, ON, K1J 9G2
 www.lrl.ca | (613) 842-3434

CLIENT
THUNDER ROAD LTD. PARTNERSHIP

DESIGNED BY: S.R.S. DRAWN BY: S.R.S. APPROVED BY: A.B.

PROJECT
**IAAI MAIN BUILDING
 6160 THUNDER ROAD, OTTAWA**

DRAWING TITLE
SITE LIGHTING PLAN

PROJECT NO.
200578 E100