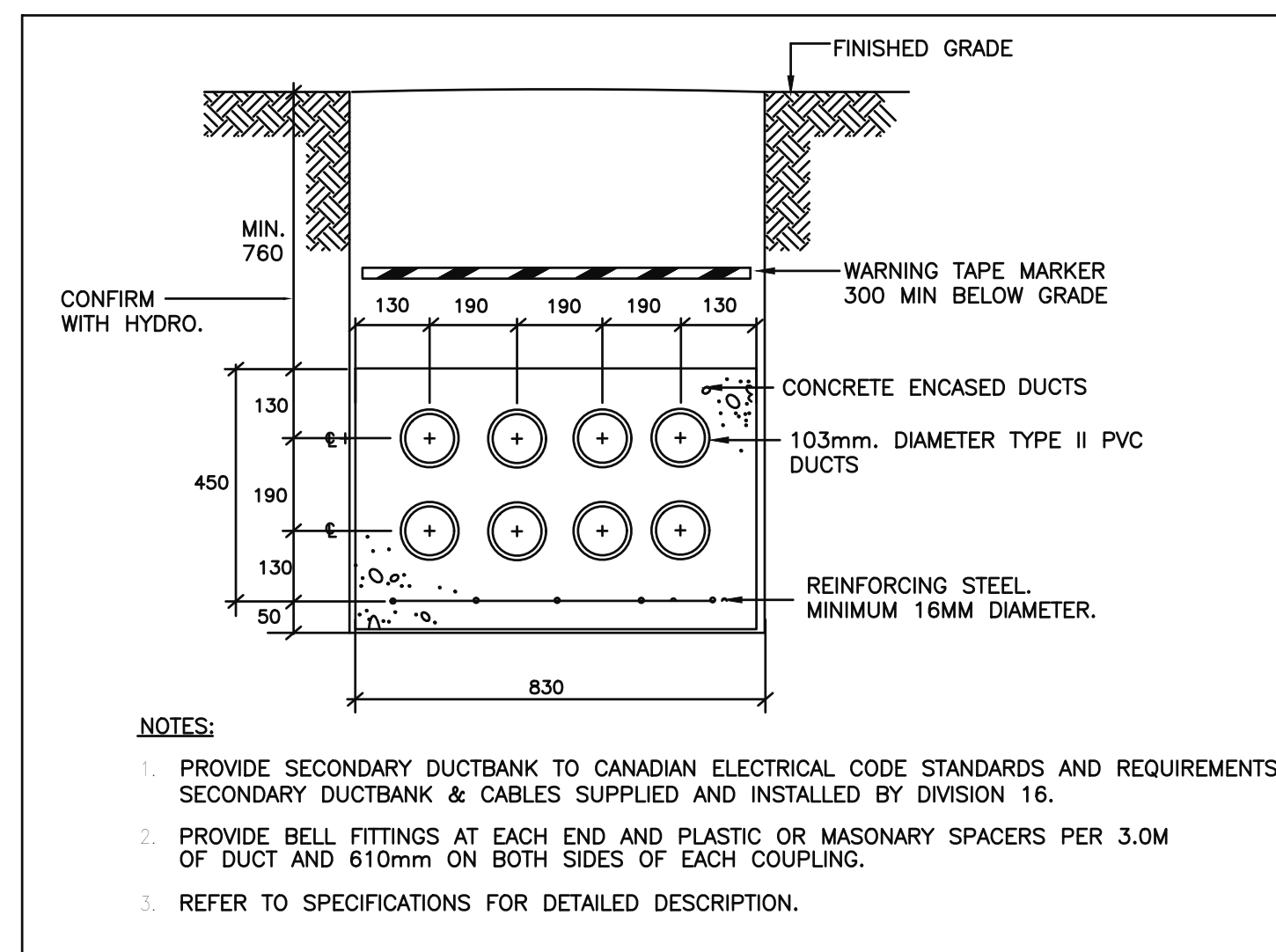
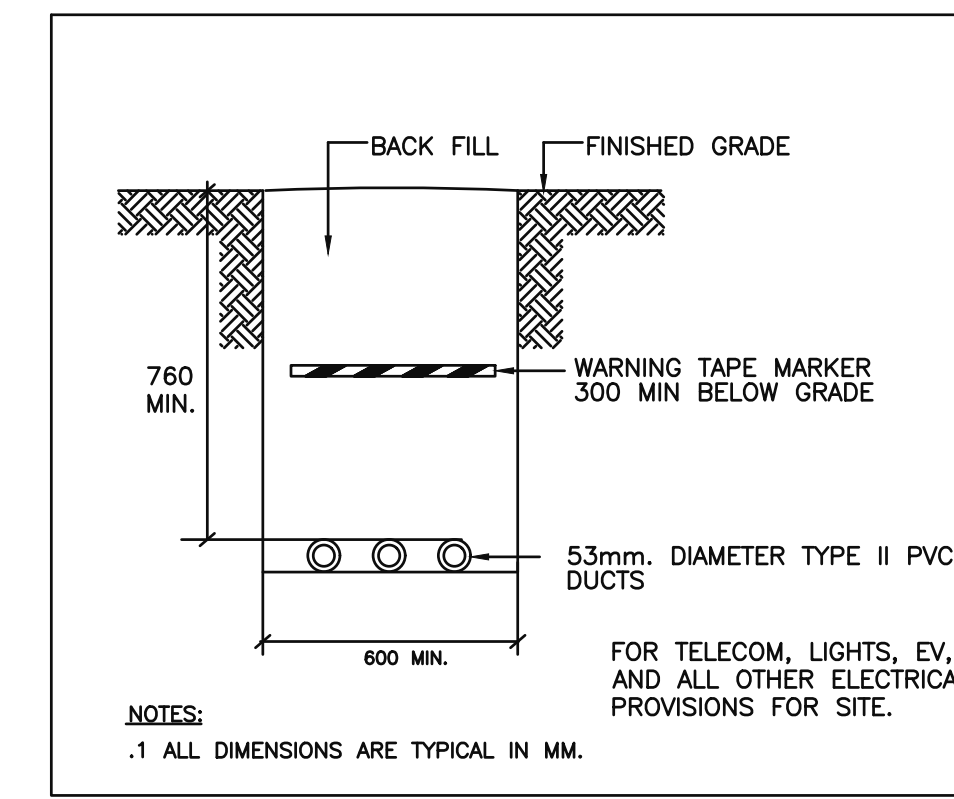


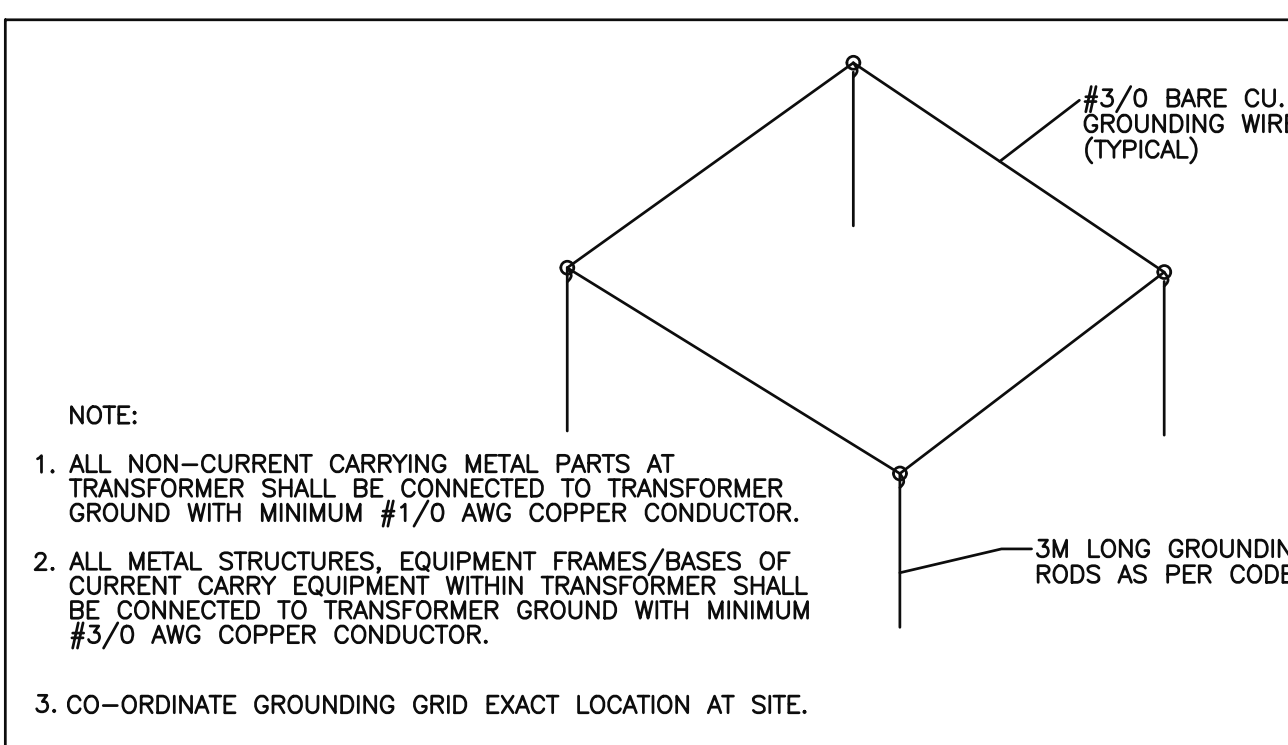
1 SITE PLAN - ELECTRICAL LAYOUT
E101 SCALE: 1:200



2 PRIMARY/SECONDARY DUCTBANK DETAIL
E101 N.T.S.

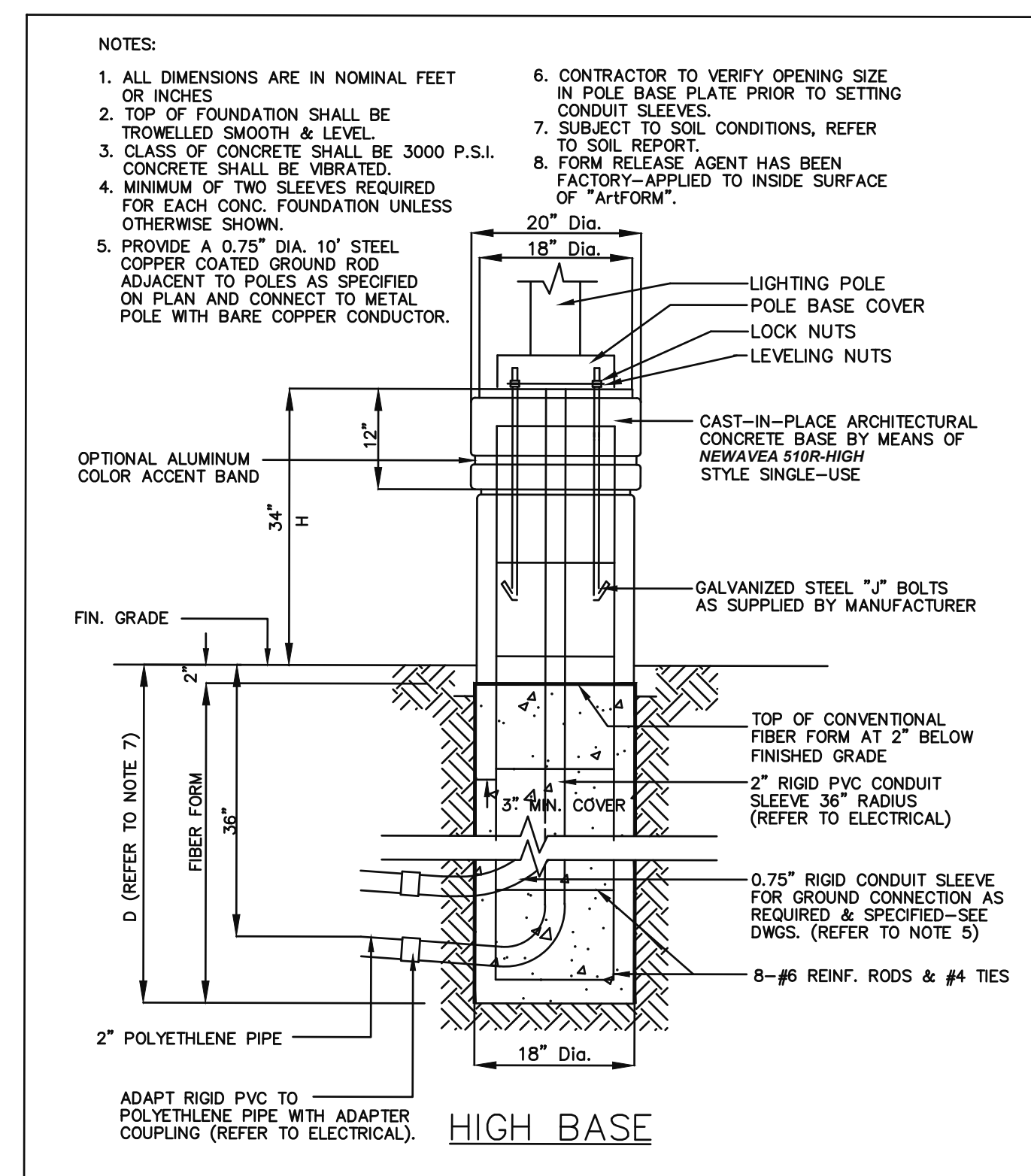


3 DIRECT BURIED CONDUIT DETAIL
E101 N.T.S.



4 TRANSFORMER GROUNDING DETAIL
E101 N.T.S.

- DRAWING NOTES:**
- ◇ RUN MINIMUM #8 AWG WIRING AND TYPE II PVC CONDUITS FOR ALL EXTERIOR LIGHTING POLE, BOLLARDS, WALL PACKS, AND FLAG POLE LIGHTING TO ENSURE NO VOLTAGE DROP EXCEEDS 2.5%.
 - ◇ SUN COUNTRY HIGHWAY MODEL EV40. 40A-2P, LEVEL II EV CHARGER FROM SUNCOUNTRY
 - ◇ DETAILS ON THIS DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY. ALL TRANSFORMER INSTALLATIONS, DUCTING, AND PERTAINING DEVICES TO BE INSTALLED AS PER HYDRO STANDARDS AND DETAILS. CONTRACTOR TO COORDINATE CLOSELY WITH HYDRO REPRESENTATIVE THROUGHOUT ALL INSTALLATIONS
 - ◇ RESERVED
 - ◇ PROVIDE 4 (FOUR) PROTECTIVE BOLLARDS FOR TRANSFORMER (TYPICAL FOR ALL).
 - ◇ PADMOUNT TRANSFORMER BY HYDRO. SEE HYDRO REQUIREMENTS AND DETAILS.
 - ◇ FOUNDATION, PAD, BOLLARDS AND GROUNDING BY ELECTRICAL CONTRACTOR PER HYDRO STANDARDS. SEE HYDRO REQUIREMENTS AND DETAILS.
 - ◇ RESERVED
 - ◇ RESERVED
 - ◇ ALL PRIMARY DUCTBANK INSTALLATION TO BE AS PER HYDRO STANDARDS. CABLES SUPPLIED BY HYDRO. INSTALLED BY CONTRACTOR. CONTRACTOR TO BE IN CONSTANT COORDINATION WITH HYDRO REPRESENTATIVE THROUGHOUT ALL INSTALLATIONS. 4 DUCT ARRANGEMENT PER HYDRO STANDARDS IS TO BE INSTALLED.



5 LIGHTING STANDARD BASE DETAIL
E101 N.T.S.

No.	Date:	Issue/Revision
1	2022-12-05	ISSUED FOR SITE PLAN APPLICATION

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ENGINEER STAMP



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Project:

HOLIDAY INN OTTAWA

140 LUSK ST., OTTAWA, ON

Sheet Title:

SITE PLAN - ELECTRICAL LAYOUT

Design By: N.P.	Drawn By: N.P.	Approved By: G.S.
Scale: AS SHOWN	Date:	Project No.: 138-22

Drawing No:

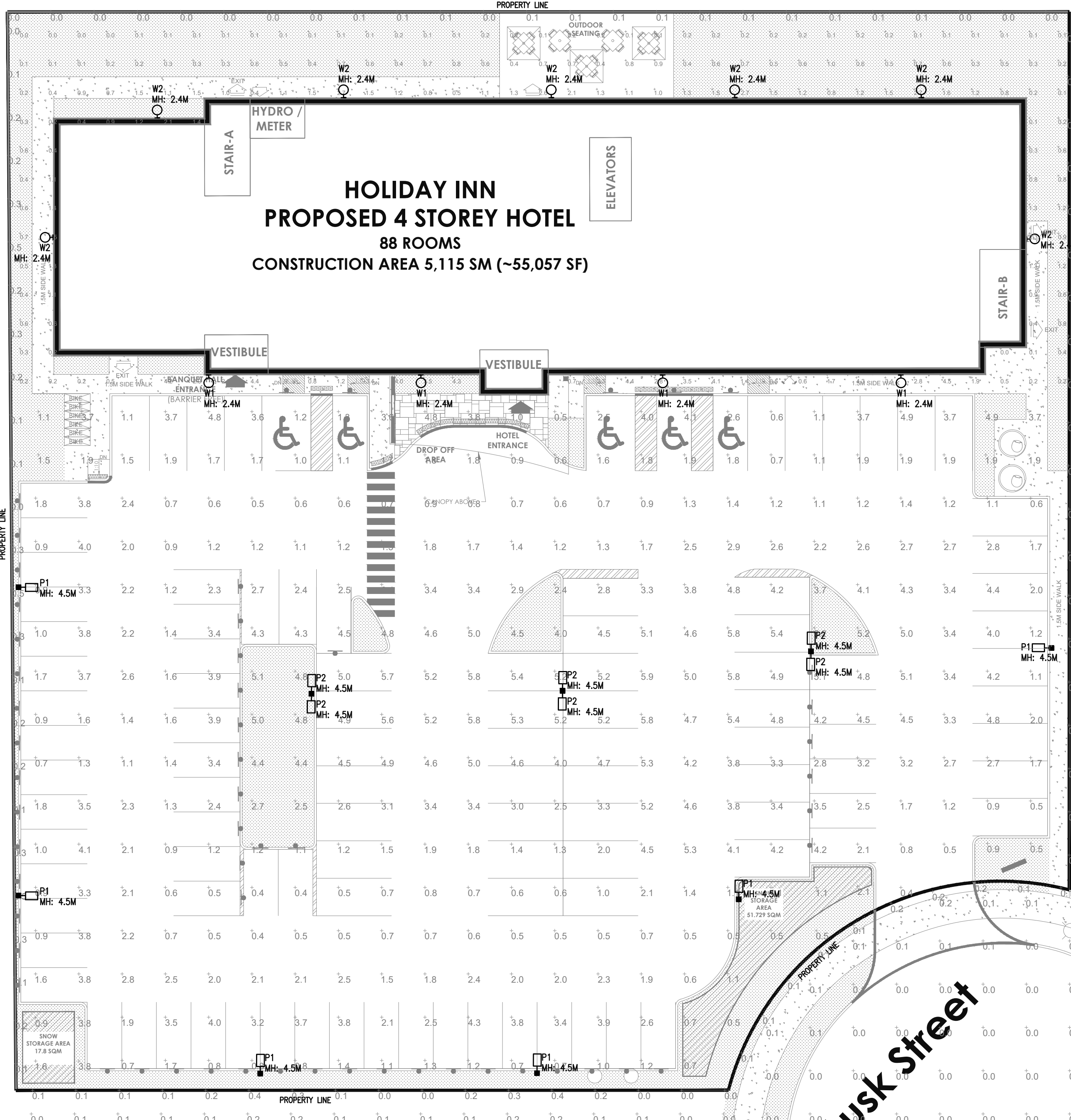
E101 of:

Drawing Series:

ELECTRICAL

O'Keefe Ct

TYPES P1 & P2



**HOLIDAY INN
PROPOSED 4 STOREY HOTEL**
88 ROOMS
CONSTRUCTION AREA 5,115 SM (~55,057 SF)

1 SITE PLAN - PHOTOMETRICS
E102 SCALE: 1:200

Symbol	Qty	Label	Arrangement	Description	LLF	BUG Rating	Luminaire Lumens	Luminaire Watts
W2	7	W2	Single	LNC-5LU-3K-2	0.850	B0-U0-G1	884	12.9
P2	3	P2	Back-Back	VP-1-160L-75-4K7-4W	0.850	B2-U0-G2	10267	72.1
W1	4	W1	Single	RWL-1-48L-25-3K7-4W-U	0.850	B1-U0-G1	3538	28
P1	6	P1	Single	VP-1-160L-75-3K7-4W-BC	0.850	B0-U0-G1	5215	72.1

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BLDG PERIMETER	Illuminance	Fc	0.95	4.5	0.0	N.A.	N.A.
PARKING	Illuminance	Fc	2.58	5.9	0.4	6.45	14.75
PROPERTY LINE	Illuminance	Fc	0.15	0.6	0.0	N.A.	N.A.
SPILL LIGHT Planar	Illuminance	Fc	0.00	0.2	0.0	N.A.	N.A.

TYPE W1

TYPE W2

HUBELL Outdoor Lighting

RATIO Wall
RWL1RW2 LED WALLPACK

FEATURES

- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mounting
- Featuring Micro Strike Optics which maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, wISCAPE and 7 Pin with networked controls
- Battery Backup options available for emergency code compliance
- Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canexis
- Stock versions available in 3500K and 5500K configurations at 4000K

CONTROL TECHNOLOGY

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating.

OPTICS

- Entire optical aperture luminaire to create a large luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 48 or 60 mipspower LEDs
- 3000K, 4000K or 5000K (70 CR80 CRI CCT)
- LED optics provide IES type II, III and IV distributions. Type I only available in RW2 configurations.
- Designed for direct /box mount.
- Integral back box standard with Dual Driver, Dual Power Feed, NX, WISCAPE and Battery versions (Battery versions for RW1 only)

ELECTRICAL

- 120V/277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option at all wattages above 35W

KEY DATA

Lumen Range	1300-8300
Wattage Range	10-155
Efficacy Range (LPW)	119-148
Fixture Depth (inches)	170-600
Weight lbs. (kg)	6.5/1.5 (2.9/0.7)

INSTALLATION (CONTINUED)

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (7" square junction box)
- Designed for direct /box mount.
- Integral back box standard with Dual Driver, Dual Power Feed, NX, WISCAPE and Battery versions (Battery versions for RW1 only)

CONTROL TECHNOLOGY

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
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- 48 or 60 mipspower LEDs
- 3000K, 4000K or 5000K (70 CR80 CRI CCT)
- LED optics provide IES type II, III and IV distributions. Type I only available in RW2 configurations.
- Designed for direct /box mount.
- Integral back box standard with Dual Driver, Dual Power Feed, NX, WISCAPE and Battery versions (Battery versions for RW1 only)

ELECTRICAL

- 120V/277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option at all wattages above 35W

HUBELL Outdoor Lighting

LNC SERIES

SPECIFICATIONS

Intended Use: LNC is designed for emergency-illuminance for safety, security and identify. Typical mounting height is up to 12 feet with 400 lumens per foot (without acrylic diffuser) and 30X spacing with acrylic diffuser installed. Precontrol option is available to provide dusk-to-dawn control for additional energy savings.

Construction: Die-cast aluminum housing and door. Powder design provides internal convection and provides excellent thermal management for long life - up to 100,000 hours minimum LED life at UL 816 rating per IESNA TM-21-11. Powder paint finishes provide lasting appearance in outdoor environments.

Optics/Electrical: Drivers are 120-277V, 50/60Hz Type II and Type IV lenses provide wide lateral spread. 0-10V dimming 120-277V only.

- LNC2L - 5 LEDs, 12.5W, 11 amp max, 980 lumens, Type II or IV
- LNC2L - 7 LEDs, 16.8W, 14 amp max, 1441 lumens, Type II or IV
- LNC2L - 9 LEDs, 20W, 18 amp max, 1806 lumens, Type II or IV
- 3000K, 4000K, 4000K - 70 CRI, and 5000K - 87 CRI, CCT optional
- Minimum operating temperature is -40°F/-40°C
- Drivers have greater than 90% power factor and less than 20% Total Harmonic Distortion

CERTIFICATIONS/LISTINGS

- UL Listed
- ETL Listed
- LED Lighting Facts
- DLC Qualified
- ES Progress Award Winner - 2012

ORDERING INFORMATION

ORDERING EXAMPLE: LNC-18L-9K-3-1-P1

SERIES	NUMBER OF LEADS/SOURCE/VOLTAGE	CCT	IES DISTRIBUTION	FINISH	OPTIONS
LNC 18L	9 LEDs, Universal voltage 120-277V	3K 3000K nominal	2 Type II	1 Brass	PCOY: Battery photocell, remote 5' with voltage sensitivity 110V-2-200V, 5-20V-4-277V
LNC 18L	7 LEDs, Universal voltage 120-277V	4K 4000K nominal	3 Type II	2 Gray	
LNC 18L	9 LEDs, Universal voltage 120-277V	5K 5000K nominal	4 Type IV	4 White	

KEY DATA

Lumen Range	1300-8300
Wattage Range	10-155
Efficacy Range (LPW)	119-148
Fixture Depth (inches)	170-600
Weight lbs. (kg)	6.5/1.5 (2.9/0.7)

KEY DATA

Lumen Range	5,000-80,000
Wattage Range	35-600
Efficacy Range (LPW)	92-155
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)

INSTALLATION (CONTINUED)

- Knuckle arm fixture option available for 3-3/8" OD lenon
- For products with EDA less than 100mm to a pole greater than 20k, a vibration damper is recommended

ELECTRICAL

- Universal 120-277V AC or 347-480VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20KA protection meeting ANSI/IEEE C82.41-2 Category C High and Surge Location Category C3. Automatically raises future off-line for protection when device is compromised.
- 7 pin ANSI C136-41-2013 photocell/receptacle option available for wall lock photocells or wireless control modules (control accessories sold separately)

CONTROL TECHNOLOGY

- Photo control, occupancy sensor and wireless available for complete proof and dimming control
- 7 pin ANSI C136-41-2013 photocell/receptacle option available for wall lock photocells or wireless control modules (control accessories sold separately)
- NX Distributed Intelligence™ available with some Premium Qualified configurations. Includes occupancy sensor and wireless control module, features dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup options for operating temperatures -25°C to 40°C. RW1 battery is 12.5W RW2 battery is 5W

CERTIFICATIONS

- Listed to UL598 and CSA22.2J250-24 for wet locations
- IP65 rated housing
- This product qualifies as a "designated country construction material" per IESNA 22.275-11 Buy American Construction Materials for Trade Agreement effective 04/23/2020. See Buy American Solutions

WARRANTY

- 5 year limited warranty
- See IES Standard Warranty for additional information

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Project:
HOLIDAY INN OTTAWA

140 LUSK ST., OTTAWA, ON

Sheet Title:
SITE PLAN - PHOTOMETRICS

Design By: N.P. Drawn By: N.P. Approved By: G.S.

Scale: AS SHOWN Date: Project No.: 138-22

Drawing No.: **E102** OF:

Drawing Series: **ELECTRICAL**