Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
01 Parking	Illuminance	Lux	9.26	19.1	2.1	N/A	9.10
02 Pathway 1	Illuminance	Lux	4.13	24.3	0.8	5.16	N/A
02 Pathway 2	Illuminance	Lux	5.24	15.4	2.2	2.38	N/A
02 Pathway 3	Illuminance	Lux	3.00	10.5	0.3	10.00	N/A
02 Pathway 4	Illuminance	Lux	9.23	16	0	N.A.	N.A.
02 Pathway 5	Illuminance	Lux	5.43	16.0	0.4	13.58	N/A
03 UG Parking Ramp	Illuminance	Lux	8.19	26.5	1.4	5.85	18.93
04 Outdoor Patio	Illuminance	Lux	8.10	24.5	1.3	6.23	18.85
09 Property Line East	Illuminance	Lux	0.00	0	0	N.A.	N.A.
09 Property Line North	Illuminance	Lux	0.00	0	0	N.A.	N.A.
09 Property Line West	Illuminance	Lux	0.00	0	0	N.A.	N.A.
10 Property Line Hwy 26	Illuminance	Lux	1.87	8	0	N.A.	N.A.

1 E-1 ILLUMINANCE CALCULATION SUMMARY
NTS

ANSI/IES RP-8-21 RECOMMENDED PRACTICE: LIGHTING PARKING FACILITIES
TABLE 17-2. RECOMMENDED MAINTAINED ILLUMINANCE VALUES FOR PARKING LOTS

HORIZONTAL ILLUMINANCE	2.0 LUX	MINIMUM
UNIFORMITY RATIO	20:1	MAX:MIN

ANSI/IES RP-8-21 RECOMMENDED PRACTICE: LIGHTING PATHWAYS
TABLE 11-2. RECOMMENDED DESIGN CRITERIA FOR WALKWAYS

PEDESTRIAN ACTIVITY	LOW	
HORIZONTAL ILLUMINANCE	2.0 LUX	AVERAGE
UNIFORMITY RATIO	10:1	AVG:MIN

2 E-1 ILLUMINATION TARGET VALUES (ANSI/IES RP8-21)
NTS

W1 – WALL PACK

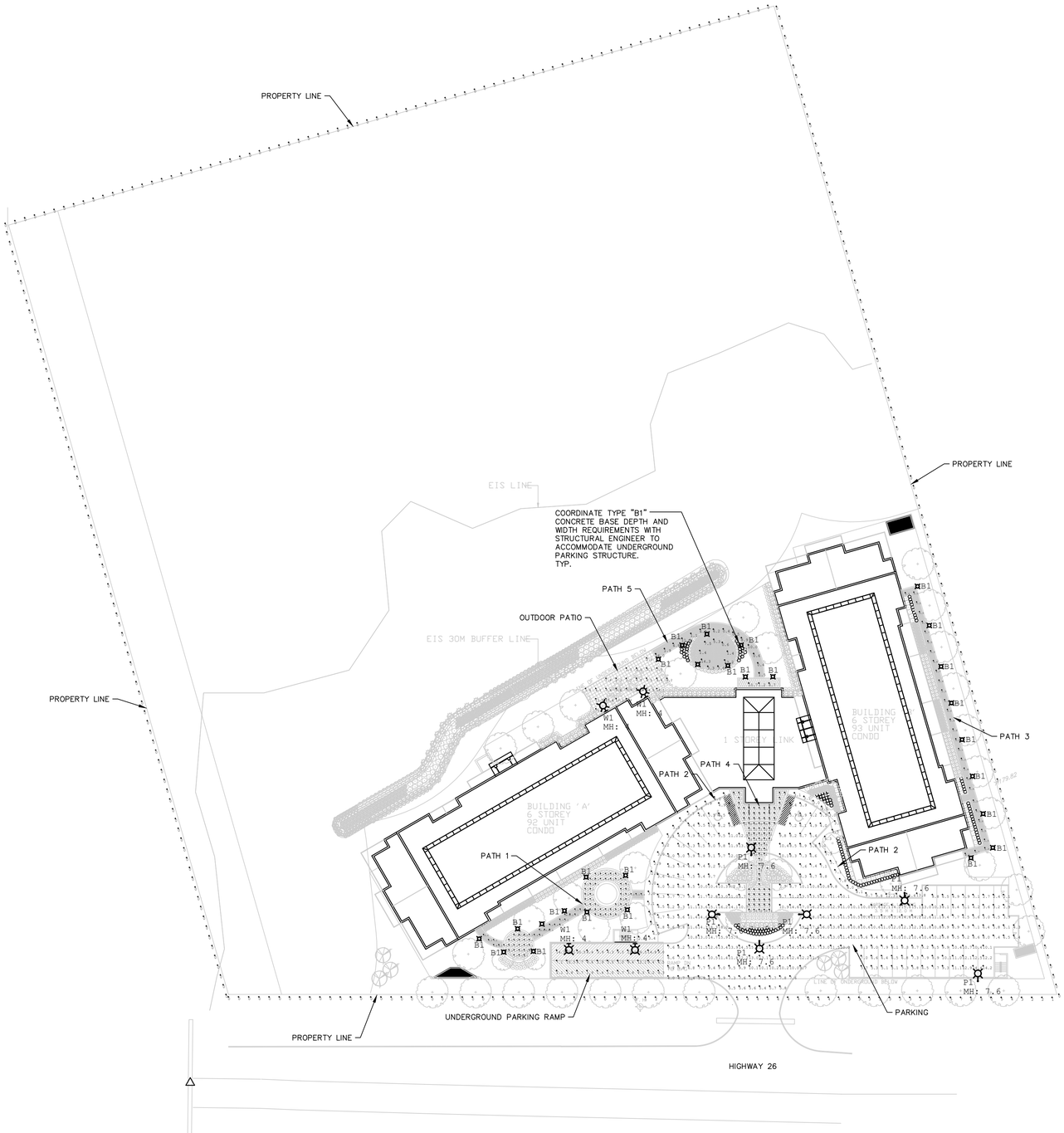
P1 – POLE ASSEMBLY

B1 – BOLLARD

3 E-1 LEGEND
NTS

BUILDING ENGINEER TO PROVIDE TIMER CONTROL TO ENSURE NON-SECURITY LIGHTING IS TURNED OFF AT A PRESET TIME.

4 E-1 OUTDOOR LIGHTING TIMER CONTROL
NTS



4 E-1 ELECTRICAL PHOTOMETRIC LAYOUT (ILLUMINATION SHOWN IN LUX)
SCALE: 1:500

ACCEPTED FOR CONSTRUCTION
TOWN OF COLLINGWOOD
PER _____
DATE: _____

DISCLAIMER AND COPYRIGHT

CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

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BENCHMARKS

NOTES

No.	REVISION DESCRIPTION	DATE
1.	1st Submission	MAR.14/23

ENGINEER STAMP

LICENSED PROFESSIONAL ENGINEER — S. R. S. TAYLOR — 100518503 — 14MAR'23 — PROVINCE OF ONTARIO

CERTIFIED TECHNICIAN — DACETT — ONTARIO — P. PFAFF — Nº 57085

INITEGRICON

SITE PHOTOMETRICS

TATHAM ENGINEERING

DESIGN: PP	FILE: 120232	DWG: E-1
DRAWN: PP	DATE: MAR 2023	
CHECK: SRT	SCALE: AS NOTED	

HCI LIGHTING
Heritage Casting & Ironworks

P1

Heritage Casting & Ironworks, Ltd.
www.hcilighting.com
T: 1.905.238.2648 or 1.800.267.3175 | F: 1.905.238.9060
1280 Fewster Drive, Mississauga, ON L4W 1A4 CANADA

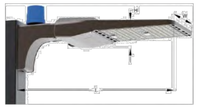
PRODUCT TECHNICAL DATA SHEET IES BUG Rating
Uplight Component = 0
(Dark Sky Compliant)

LED STREET LIGHTING

LUMINAIRES

HD-SL SERIES
5 Year Warranty

Sizes



Sizes	L	W	H
Large	30"	12"	4-1/8"
Medium	24"	12"	3-5/8"
Small	17"	12"	3-1/2"

Specification Features

- LED Wattage up to 500W
- Color Temperature 3000K/4000K/5000K
- Lumen Efficacy: 140 Lm/W
- CRI > 80
- Die-Cast aluminum housing
- Quick disconnect driver system mounted on removable plate
- 1-10V dimmable optional
- Twist lock photocell optional
- Suitable for wet locations, IP66
- IES II, III, IV and V
- Warranty: 50,000 hrs
- Working Temperature: -40°C ~ + 55°C
- Bronze powder coated finish (RAL 8019)
- Variety of Mountings
- House Side Shield Option

Product Ordering Number

cULus LISTED DLC

HD-SL SERIES							
Product #	LED WATTAGE	LUMEN OUTPUT	COLOR TEMPERATURE	VOLTAGE	OPTICS	OPTIONS	COLOR
HD-SL-L	500W 400W	68000 Lm 56000 Lm	3000K 4000K 5000K	120V ~ 277V or 240V ~ 480V	IES Type II, III, IV and V	PEC- Twist Lock Photocell Optional	RAL 9011 Black HSS House Side Shield
HD-SL-M	300W 240W	41400 Lm 28800 Lm					
HD-SL-S	185W 150W 100W 80W 40W	25160 Lm 21000 Lm 14000 Lm 11200 Lm 5600 Lm					

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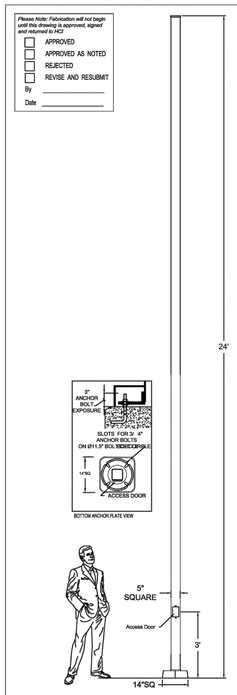
Please Note: Fabrication will not begin until this drawing is approved, signed and returned to HCI

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ REJECTED
- ☐ REVISE AND RESUBMIT

By _____

Date _____



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POLE ASSEMBLY TYPE "P1"

Pole: 5" square x 0.250" wall aluminum tube with round corners welded to the base plate with reinforced ribs .

Base Cover: Square two piece cast aluminum attached to pole with stainless steel screws.

Anchor Bolts: 4 galvanized 19mm (3/4") x 910mm (36") long. Anchor bolts and template are supplied by HCI.
Bolt Circle: Ø11.5"

Finish: Electrostatically applied, thermoset polyester powder-coat finish.

Colour: Bronze RAL8019

Sales: KH Designer: RL
Date: AUG.10.2021 Drawing No: 13159
Model:P422-SQ-5SQC-24-RAL8019-BRONZE

Project: Integricon Collingwood
Rep: INFLUX LIGHTING
Please Note: Fabrication will not begin until this drawing is approved, signed and returned to HCI

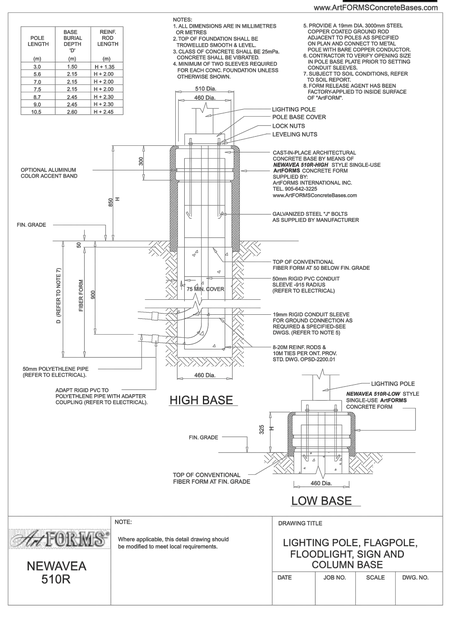
HCI Heritage Casting & Ironworks
1280 Fewster Drive, Mississauga, Ontario, Canada L4W 1A4
Tel: (905) 238-2648 Fax: (905) 238-9060
Toll Free Canada & USA 1-800-267-3175
E: sales@hcilighting.com WEB: www.hcilighting.com

P1 BASE

www.ArtFORMSConcreteBases.com

POLE LENGTH (m)	BASE BURIAL DEPTH 'D' (m)	REINF. ROD LENGTH (m)
3.0	1.50	H + 1.35
5.6	2.15	H + 2.00
7.0	2.15	H + 2.00
7.5	2.15	H + 2.00
8.7	2.45	H + 2.30
9.0	2.45	H + 2.30
10.5	2.80	H + 2.45

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES OR METRES
2. TOP OF FOUNDATION SHALL BE TROWELLED SMOOTH & LEVEL.
3. CLASS OF CONCRETE SHALL BE 25mPa. CONCRETE SHALL BE VIBRATED.
4. MINIMUM OF TWO SLEEVES REQUIRED FOR EACH CONC. FOUNDATION UNLESS OTHERWISE SHOWN.
5. PROVIDE A 19mm DIA. 3000mm STEEL COPPER COATED GROUND ROD ADJACENT TO POLES AS SPECIFIED ON PLAN AND CONNECT TO METAL POLE WITH BARE COPPER CONDUCTOR.
6. CONTRACTOR TO VERIFY OPENING SIZE IN POLE BASE PLATE PRIOR TO SETTING CONDUIT SLEEVES.
7. FOR SOIL CONDITIONS, REFER TO SOIL REPORT.
8. FORM RELEASE AGENT HAS BEEN FACTORY-APPLIED TO INSIDE SURFACE OF "ArtFORM".



ArtFORMS®
NEWAVEA 510R

NOTE:
Where applicable, this detail drawing should be modified to meet local requirements.

DRAWING TITLE
LIGHTING POLE, FLAGPOLE, FLOODLIGHT, SIGN AND COLUMN BASE

DATE	JOB NO.	SCALE	DWG. NO.

PLOT @ 3/32"=1"

LUMINAIRE SCHEDULE

"P1"	HD-SL-40W-5600LM-3000K-12V-IES IV-BRONZE
"B1"	AR-6-B-21LED-3K-D-180HSS-UNV-42-BRONZE
"W1"	SWP-2L-U-30-BRONZE-10YR-SP2-IDA

NOTE: FINAL LUMINAIRE AND POLE COLOURS TO BE COORDINATED WITH OWNER.

CCT 3000K
FULL CUT-OFF
DARK SKY COMPLIANT

2 E-2 LUMINAIRE SCHEDULE
NTS

Project Name:	Part Number:	Type:

VS VALUE SERIES **SLIM WALL PACK**
LED ADJUSTABLE WALL PACK

W1

ILP
407-478-3759
www.ilp-inc.com

FEATURES
- Low profile die-cast aluminum housing
- Bronze polyester powder coat finish (std.)
- Custom and factory select colors available[1]
- Isolated optical compartment with tempered glass lens and silicone gaskets
- 90° adjustable Type IV distribution or Optional IDA fixed model[2]
- Quick mount bracket standard for easy surface mount installation
- Three ½" coin plugs on sides for conduit or electronic photocell
- 120-277V Universal Voltage or 347V-480V High Voltage[3]
- Achieve code compliance with a fixed down PIR sensor with fully adjustable distribution aiming
- 0-10V Dimmable Driver (std.)
- Deep box 10W CEC Title 20 compliant battery backup & cold weather battery[1]
- Optional Field Adjustable Output device (FAO) allows individual luminaire lumen output control
- 3000K, 4000K & 5000K CCT Selectable via Integral selector
- >70 Color Rendering Index (CRI)
- Calculated L70 >100,000 hrs @ 25°C per TM-21-11
- IP65 Rated Luminaire
- 5 Year Warranty (std); 10 Year Warranty Optional
- ETL Listed for Wet Locations
- DesignLights Consortium® Premium Qualified Luminaire

Small Housing 2L - 3L

Large Housing 5L-10L
Shown with Sensor Box

[1]Contact factory for pricing and availability [2]Fixed 3000K CCT model only
[3]347-480V available in 5L, 8L, 10L Lumen Packages Only

SUITABLE APPLICATIONS
- Pedestrian Walkways
- Building Entrances
- Multi-use Facilities
- Industrial Facilities
- Parking Lots
- Storage Facilities
- Institutions
- Schools
- Loading Docks

ORDERING GUIDE:

SERIES	LUMENS	DRIVER	CCT	FINISH	WARRANTY
☐ SWP Slim Wall Pack	☐ 2L ☐ 3L ☐ 5L ☐ 8L ☐ 10L	☐ U 120-277V ☐ HV[3] 347-480V	☐ CCTS Selectable CCT (5000K, 4000K, 3000K) ☐ 30[1]	☐ BRZ Bronze ☐ BLK[1] Black ☐ WHT[1] White ☐ SLV[1] Silver	☐ BLANK 5 Year ☐ 10YR[1] 10 Year

OPTIONS	
Factory Installed	**Ship with Accessories**
☐ SP1[2,5] 10kA Max Univolt Surge Protection	☐ SWP-FAO10V Field Adjustable Output via 0-10V Wires
☐ SP2[2,5] 20kA Max 120-277V Surge Protector	☐ SWP-ARM3-xxx Pole Mount Arm Kit, 3" long (xxx=BRZ, BLK, WHT, SLV)
☐ IDA[2] Dark Sky IDA Fixture Seal of Approval	☐ SWP-BPS-xxx 18x9 Beauty Plate Kit, Small (xxx=BRZ, BLK, WHT, SLV)
☐ LEDBB[1,2] 10W UNIV Battery Backup (32°- 100°F)	☐ SWP-BPL-xxx 18x9 Beauty Plate Kit, Large (xxx=BRZ, BLK, WHT, SLV)
☐ LEDBBCT[1,2] 20W UNIV CT Battery Backup (-4°- 122°F)	
☐ FAO Field Adjustable Output via 0-10V Wires	
Controls	
☐ PCU[6] Electronic UNIV Photocell (120-277V)	
☐ USBDILx[4,5] Bluetooth User Select Bi-Level Dim Occ. Sensor; (x= Mounting height; 2=8', 3=20')	

[1]5L, 8L, 10L Lumen Packages Only
[2]Not available with HV option
[3]Fixed to 3000K CCT and no angle adjustability for IDA Compliance. Must choose 30 CCT and IDA option to qualify
[4]Contact Factory for pricing and availability
[5]Does not qualify for DLC
[6]SP1/SP2 specified in combination with battery backups, separate surge protectors are required per electrical line
[7]Contact Factory for more details
[8]Requires additional surge protection (SP1,SP2, SP480V2).
For additional details see general terms and conditions
[9]Requires bluetooth enabled device for programming (provided by others)

QUICK SHIP ITEMS:

SERIES	LUMENS	DRIVER	COLOR	FINISH
☐ SWP Slim Wall Pack	☐ 2L ☐ 3L ☐ 5L ☐ 8L ☐ 10L	☐ U 120-277V	☐ CCTS Selectable CCT (5000K, 4000K, 3000K)	☐ BRZ Bronze

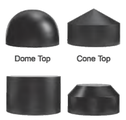
SWPSPEC0622

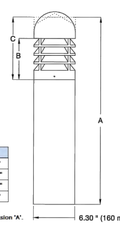
Fixture Type: _____
Model Number: _____
Project Name: _____

B1 intrigue lighting

ALLURE
louvered full cutoff LED bollard

ida DARK SKY APPROVED


Dome Top Cone Top Flat Top Beveled Top



TOP STYLE	A	B	C
Beveled	40.5"	6.3"	9.5"
Cone	41.1"		10.1"
Dome	41.3"		10.3"
Flat	40.5"		9.5"

Note: standard 42" model dimensions.
For 30" models, subtract 12" from dimension 'A'.

General: The cast louvers on the Dark Sky Approved Allure series bollard provide excellent downward light control for low-level walkway installations. Cast louvers shield the light source, reducing glare.

Exterior: Sand cast, marine-grade aluminum top, head, and mounting base. Extruded aluminum bollard tube. Bollard tube can be cut to custom length; consult factory. Stainless steel hardware and fasteners.

Wattage: Available wattages: 15 watt, and 21 watt.
Available color temperatures: 3000K, 4000K, and amber (590nm). CRI>70.

Driver: Constant current; maximum wattage = 40 watts; universal input voltage 120v-277v (50/60Hz); THD<20%. Power Factor >0.90. 0-10V dimming standard for a dim range of 100% down to 10%.

Heat Sink: Finned aluminum heat sink with black electrocoating securing heat sink to LED module.

Finish: Textured polyester powder coat finish. Black, bronze, gray, white, silver, and verde green available. Consult factory for custom finishes.

Gaskets: EPDM gaskets are standard.

Dimensions: 6.30" diameter standard with overall height (OAH) options of 30" and 42".
For custom height options, consult factory.

Tops: Four top styles available: beveled (-B), cone (-C), dome (-D), and flat (-F).

Mounting: Mount bollard using the provided cast mounting base, template, and (4) ¾" anchor bolts.

Options: Recessed outlet box/cover (-GFI)
PIR Motion Sensor (-PIR)
Houseside Shields (-180HSS and -270HSS)

Certifications: ANSI/UL 1598, 8750
Operating temperature: -40°C to +50°C
Florida Fish & Wildlife Conservation Commission approval 2017-007
IDA Dark Sky Approved *(3000K or Amber LED)*

content of specification sheet is subject to change.

N60 W14592 Kaul Avenue P 877 965 0005
Menomonee Falls, WI 53051 *intrigueled.com*

Aug-21

Fixture Type: _____
Model Number: _____
Project Name: _____

B1 intrigue lighting

SERIES	DIAMETER	MOUNTING	WATTAGE	COLOR (K)	TOP STYLE	OPTIONS	VOLTAGE	HEIGHT	FINISH
AR	6	B	_____	_____	_____	_____	UNV	_____	_____

MODEL NUMBER DETAIL

SERIES	☐	AR	Allure Louvered Cutoff LED Bollard
DIAMETER	☐	6	6.30" Outer Diameter
MOUNTING	☐	B	Bollard Mount
WATTAGE	☐	15LED	15-watt LED Module (@700mA)
	☐	21LED	21-watt LED Module (@1050mA)
COLOR (K)	☐	3K	3000K *(IDA Dark Sky Approved)*
	☐	4K	4000K
	☐	AML	590nm Amber *(IDA Dark Sky Approved)*
TOP STYLE	☐	B	Beveled Top
	☐	C	Cone Top
	☐	D	Dome Top
	☐	F	Flat Top
OPTIONS	☐	GFI	Receptacle Box with Cover for GFCI Outlet *(outlet by others)*
	☐	PIR	Passive Infrared Motion Sensor (120v-277v only)
	☐	180HSS	180° Housesides Shield
	☐	270HSS	270° Housesides Shield
VOLTAGE	☐	UNV	Universal Voltage (120v-277v) (50/60Hz); constant current dimmable driver
HEIGHT	☐	30	30" Overall Height
	☐	42	42" Overall Height
	☐	CH	Custom Height - Consult Factory
FINISH	☐	BLK	Black
	☐	BRZ	Bronze
	☐	GRY	Grey
	☐	SIL	Silver
	☐	VGN	Verde Green
	☐	WHT	White
	☐	CC	Custom Color - Consult Factory

Allure bollard is IDA Dark Sky Approved when utilized with either 3000K LED module or 590nm Amber LED module

content of specification sheet is subject to change.

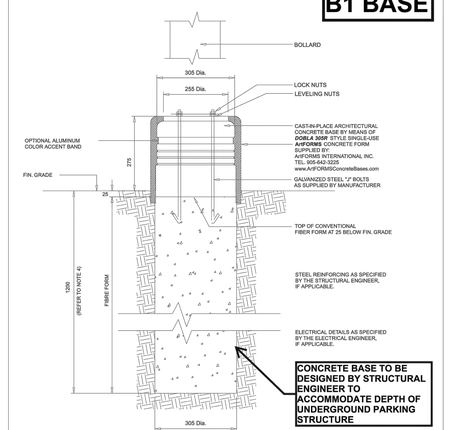
N60 W14592 Kaul Avenue P 877 965 0005
Menomonee Falls, WI 53051 *intrigueled.com*

Aug-21

www.ArtFORMSConcreteBases.com

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES OR METRES
2. TOP OF FOUNDATION SHALL BE TROWELLED SMOOTH & LEVEL.
3. CLASS OF CONCRETE SHALL BE 25mPa. CONCRETE SHALL BE VIBRATED.
4. SUBJECT TO SOIL CONDITIONS, REFER TO SOIL REPORT.
5. FORM RELEASE AGENT HAS BEEN FACTORY-APPLIED TO INSIDE SURFACE OF "ArtFORM".

B1 BASE



ArtFORMS®
DOBLA 305R

NOTE:
Where applicable, this detail drawing should be modified to meet local requirements.

DRAWING TITLE
BOLLARD, FLOODLIGHT, SIGN & FENCE POST BASE

DATE	JOB NO.	SCALE	DWG. NO.

PLOT @ 3/32"=1"

ACCEPTED FOR CONSTRUCTION
TOWN OF COLLINGWOOD
PER _____
DATE: _____

1 E-2 LIGHTING EQUIPMENT SPECIFICATION SHEETS
NTS

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BENCHMARKS

NOTES

No.	REVISION DESCRIPTION	DATE
1.	1st Submission	MAR.14/23

ENGINEER STAMP

LICENSED PROFESSIONAL ENGINEER
S. R. S. TAYLOR
100518503
14MAR'23
PROVINCE OF ONTARIO

CERTIFIED TECHNICIAN
OACETT
ONTARIO
P. PFAFF
Nº 57085

INITEGRICON

TATHAM ENGINEERING

SITE LIGHTING DETAILS

DESIGN: PP	FILE: 120232	DWG: E-2
DRAWN: PP	DATE: MAR 2023	
CHECK: SRT	SCALE: AS NOTED	