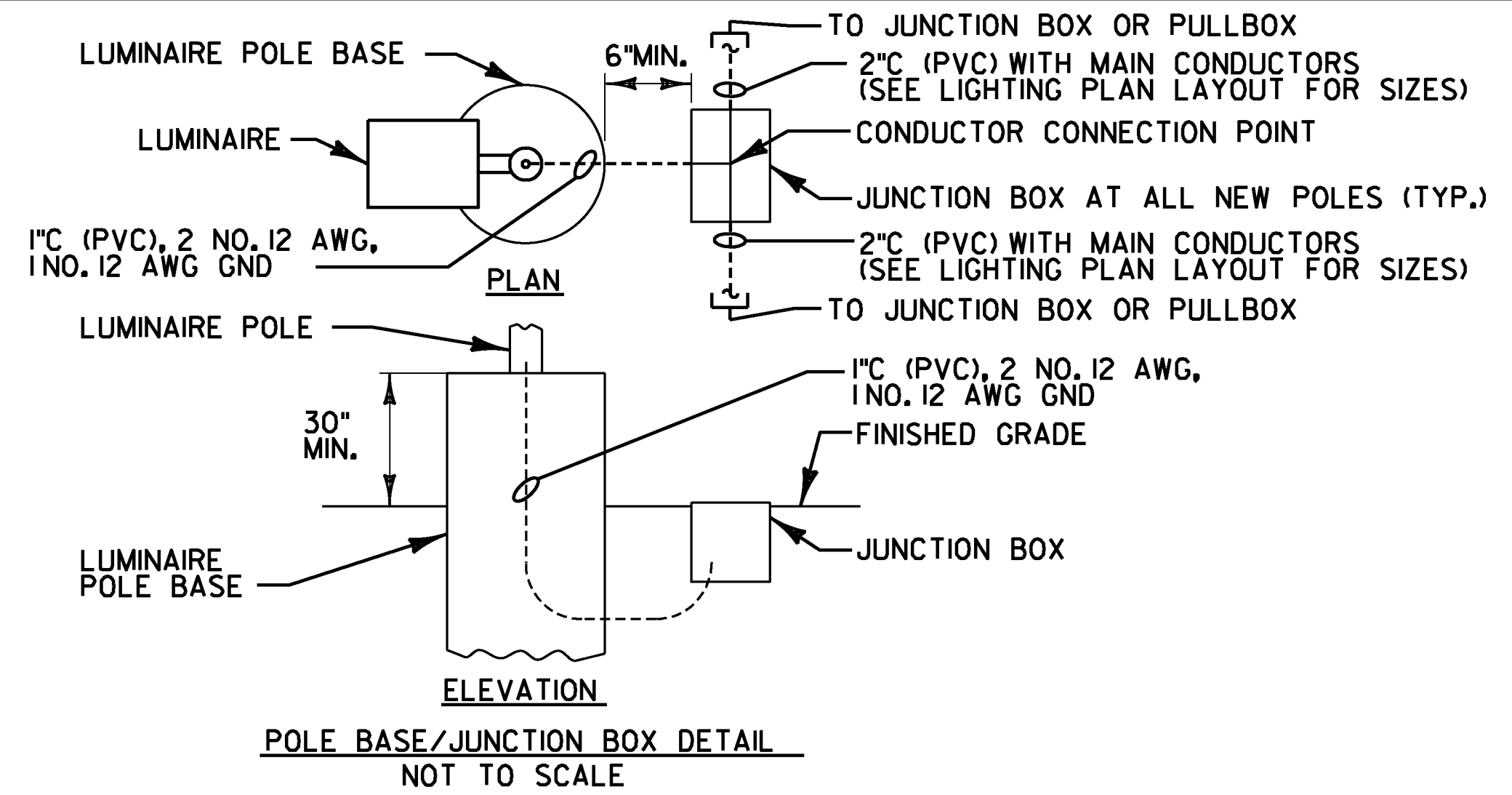


LUMINAIRE SCHEDULE						
LUMINAIRE TYPE	MTG	LAMP NO.	LAMP WATTS	VOLTAGE	MANUFACTURER AND BASE MODEL NUMBER	REMARKS AND COMMENTS
L-1	16FT POLE	LED	107W	240V	VISIONAIRE LIGHTING: EL2-1-T3-96L-3-55K-UNV-BOA-BZ-PC240 (REQUIRED BUG RATING OF 2-0-2)	WITH BUTTON TYPE PHOTOCELL
POLE					LITHONIA: 3RTA-16-5C-DM19-FBC-VD-TP-DDB	PROVIDE ROUND POLE ADAPTER FOR SIZE OF POLE INSTALLED

**NOTES:**

- THE LIGHTING FIXTURE SELECTED IS USED AS A BASIS FOR THIS DESIGN (VISIONAIRE LIGHTING). OR EQUAL LIGHTING FIXTURES COULD BE USED IF REQUIRED. HOWEVER A REVISED LIGHTING CALCULATION WILL BE REQUIRED TO CONFIRM COMPLIANCE WITH THE PROJECT DESIGN REQUIREMENTS. OR EQUAL LIGHTING FIXTURES SHALL HAVE A BUG RATING OF 2-0-2 OR BETTER.
- BIRD SPIKES SHALL BE INCLUDED ON ALL LUMINAIRES.



**Element LED**

The Element is a modularly-designed area luminaire that maximizes the latest in LED technology. It is available in four sizes, offering from 25 to 400 nominal watts of LED lighting. The Element masters the art of efficient heat dissipation, electronic driver protection, maximization of optics control, and features a wide array of energy and security options for optimal efficiency and safety.

The range of housing sizes is accomplished by utilizing a heavy-duty, extruded aluminum body, with heat radiating fins for cutting edge thermal management.

Removable die-cast aluminum end caps for easy driver access, and a shielded, perforated top cover, beneath a protective debris guard, complete the construction of this innovative, long-life LED luminaire.

Project Name: \_\_\_\_\_ Type: \_\_\_\_\_

Catalog Number: \_\_\_\_\_

**Dimensional Drawings**

Fixture	A	B	C	D	Max. LEDs	Lbs
EL2-S	13 3/4"	14 1/2"	4"	21 1/2"	72	30
EL2-1	17 3/4"	14 1/2"	4"	21 1/2"	96	34
EL2-2	23 3/4"	14 1/2"	4"	21 1/2"	144	38
EL2-3	28 3/4"	14 1/2"	4"	21 1/2"	192	41

The standard finish on the Element is a thermoset polyester powder coat painted finish in standard and custom colors.

The Element utilizes a high-performance LED light engine; and the highest lumen output VisionBar™ LEDs; with built-in optical control; to provide IES Types I, II, III, IV and V distribution patterns. It qualifies as an IES full cutoff fixture and is Dark-Sky certified to restrict light trespass, glare and light pollution for neighborhood-friendly lighting.

The Element boasts an excellent thermal management rating that results in increased lumen output and an LED minimum life estimated from 50,000 to 200,000 hours. Control systems may extend the life of all the Element and further reduce maintenance costs. See LED Data Chart for more information.

Model	Optics	Source	Current	Kelvin	Voltage	Mounting	Finish	Options
EL2-S	Type I (T1)	24 (24L)	350 530 700	4000K (4K)	120-277 (Universal Voltage) (UNV)	Bolt-On Arm (BOA)	White (WH)	Button Type Photocell (Specific voltage) (PC120) (PC208) (PC240) (PC277)
	Type II (T2)	48 (48L)	350 530	5500K (55K)	480 (5)	Wall Mount (Includes Cast Wall Plate) (WM)	Bronze (BZ)	Dual Circuit (DC)
	Type III (T3)	72 (72L)	350 530 700	347 (8)	Knuckle Mount (KM)	Black (BK)	Cutoff Louver System (CLS)	
	Type IV (T4)	96 (96L)	350 530 700		Mast Arm Fitter (MAF)	Forest Green (FG)	Motion Sensor (MS)	
	Type V (T5)	120 (120L)	350 530 700			Grey (GY)	Round Pole Plate Adaptor For 4\"/>	

Model	Optics	Source	Current	Kelvin	Voltage	Mounting	Finish	Options
EL2-1	Type III (T3)	24 (24L)	350 530 700					Cutoff Louver System (CLS)
	Type IV (T4)	48 (48L)	350 530 700					Motion Sensor (MS)
	Type V (T5)	72 (72L)	350 530 700					Round Pole Plate Adaptor For 4\"/>

Model	Optics	Source	Current	Kelvin	Voltage	Mounting	Finish	Options
EL2-2	Type III (T3)	120 (120L)	350 530 700					Custom Color (CC)
	Type IV (T4)	144 (144L)	350 530 700					Element Conduit Box (ECB)
	Type V (T5)	188 (188L)	350 530 700					Round Pole Plate Adaptors (RPP) are to be ordered separately

Model	Optics	Source	Current	Kelvin	Voltage	Mounting	Finish	Options
EL2-3	Type III (T3)	168 (168L)	350 530 700					Round Pole Plate Adaptors (RPP) are to be ordered separately
	Type IV (T4)	192 (192L)	350 530 700					Round Pole Plate Adaptors (RPP) are to be ordered separately
	Type V (T5)	244 (244L)	350 530 700					Round Pole Plate Adaptors (RPP) are to be ordered separately

**Housing**

- The fixture housing is heavy-duty, extruded aluminum, with heat radiating fins. A perforated aluminum top cover protects the heat radiating fins from contaminants and directs constant air flow over them for maximum cooling.
- The fixture end caps are die-cast aluminum and easily removable with captive fasteners for easy access to the LED drivers which are housed within the end-caps for cool operation.
- Silicone gasketing is utilized throughout the fixture for weathertight operation.

**Thermal Management**

- The Element provides excellent overall thermal management by maximizing the fixture's heat sink efficiency. This enables the Element to withstand higher ambient temperatures and drive currents without degrading LED life. The Element has a low thermal resistance rating. The heat radiating fins and perforated fixture components (see Thermal Convection Heat Management System cutaway below) create superior thermal management results.
- The L<sub>70</sub> test determines the point in an LEDs life when it reaches 70 percent of its initial output. The Element series LEDs have been determined to last 200,000+ hours in 40 °C environments when driven at 350 mA. See LED Data Chart for additional test results.

**Optical System**

- The highest lumen output LEDs available are utilized in the Element series. IES distribution Types I, II, III, IV and V are available. The LED VisionBar™ light assemblies come in multiples of 24 (minimum 24 to maximum 192 LEDs) and are field replaceable. The optical system qualifies as IES full cutoff; and is Dark-Sky certified to restrict light trespass, glare and light pollution.
- CRI values are 67 for 4000K and 72 for 5500K.

**Quali-Guard® Finish**

- A Quali-Guard® thermoset polyester powder coat painted finish is available in white and custom colors.

**Element LED**

**Mounting**

- The Element is provided with a pre-mounted, cast aluminum bolt-on arm (BOA) and Quick Mount pole adaptor that is shipped installed on a Visionaire pole. Installation is as simple as hooking the bolt-on arm onto the pole adaptor and tightening two set screws. A Round Pole Plate adaptor (RPP) is required for mounting to 4\"/>

**Electrical Assembly**

- The Element is supplied with a choice of 350, 530 or 700 mA high-performance LED drivers that accept 120v thru 480v, 50 Hz to 60 Hz, input. Power factor of 90%. Rated for -40 °C operations.

**Warranty**

- Five (5) year Limited Warranty on entire system, including finish. For full warranty information, please visit VisionaireLighting.com.

**Options**

- Button type photocell
- Dual circuit
- Cutoff louver system
- Motion sensor
- Round pole plate adaptor
- Controls
- Element conduit box

Please consult factory for custom options and available upgrades.

**Lists**

- Element is listed, suitable for wet locations.
- LM79 and LM80.
- Dark-Sky Friendly®, full cutoff certified by the International Dark-Sky Association.
- Meets ANSI 2GC136.31-2001 Vibration Standards when ordered with the MAF mounting option.
- IP65 Pending.
- Powder Coated Tough™

**EPA Data**

**LED Data Chart for 5500K\***

Fixture with Arm	# Bars	# LEDs	Output per sq ft	Nominal Watts	Initial Lumens T1	Initial Lumens T2	Initial Lumens T3	Initial Lumens T4	Initial Lumens T5	System Lumens 120-277	Hour @ 40° C
EL2-S	24	36	25	2,021	2,109	1,774	2,020	2,356	28	200,000	
		530	35	2,520	2,841	2,439	2,684	3,030	39	120,000	
EL2-1	48	700	80	2,995	3,377	2,962	3,332	3,675	56	70,000	
		350	56	1,543	1,767	1,531	1,661	1,812	26	295,000	
EL2-2	96	530	70	5,342	5,963	4,540	5,368	6,067	75	120,000	
		700	100	5,980	6,837	5,057	6,102	7,348	110	70,000	
EL2-3	144	530	75	6,083	6,827	5,185	6,060	7,038	84	200,000	
		700	100	7,563	8,524	6,328	6,952	8,128	117	120,000	
EL2-4	188	700	150	8,885	9,799	6,957	8,161	11,024	165	70,000	
		350	100	2,789	3,435	2,616	3,083	3,583	41	298,000	
EL2-5	244	530	140	9,523	11,305	8,911	10,735	12,174	156	120,000	
		700	125	10,107	10,544	8,175	10,100	11,455	130	200,000	
EL2-6	350	530	175	12,405	14,207	10,637	12,420	15,216	199	80,000	
		700	250	14,974	16,331	12,457	15,252	18,375	268	60,000	
EL2-7	480	530	210	14,685	17,048	12,681	14,528	16,287	217	60,000	
		700	300	17,909	19,997	14,782	16,812	19,061	278	40,000	
EL2-8	600	530	175	14,151	14,761	11,444	14,140	16,037	182	200,000	
		700	245	17,367	19,890	14,716	18,788	19,416	274	80,000	
EL2-9	750	530	350	20,864	22,864	17,005	21,352	25,725	365	60,000	
		700	500	25,172	28,838	19,073	24,160	28,208	400	200,000	
EL2-10	900	530	280	19,847	22,781	16,752	21,472	22,161	312	140,000	
		700	450	23,392	26,120	19,167	24,402	29,461	415	80,000	

Scale: 1 Square = 28 ft  
Initial Light Loss Factor = 1.00  
Total Lumens Per Luminaire = 18,328  
Mounting Height = 28 ft  
Arrangement: Twin (back-to-back)

**Photometric Toolbox**

VISIONAIRE LIGHTING, LLC  
EL2-1 T3-96L-350MA-4000K  
14-1/2" L X 17-5/8" W X 4" H LED LUMINAIRE  
LED BARS, EACH BAR HAS 24 TYPE III COOL WHITE  
LEDS

Horizontal Footcandles  
Scale: 1 Inch = 25 Ft.  
Light Loss Factor = 1.00  
Lumens Per Lamp = N.A. (absolute photometry)  
Luminaire Lumens = 8300  
Mounting Height = 19.00 Ft  
Maximum Calculated Value = 5.04 Fc  
Arrangement: Single

PROJECT NAME:	RICHMOND
PROJECT NUMBER:	CMG PARK (31)
FILE NAME:	z97c186e105.dgn
PROJECT LEADER:	YASSER RIZK
DESIGNED BY:	M. STEWART
LIGHTING DETAILS SHEET	
PLOT DATE:	5/28/2013
DRAWN BY:	M. STEWART
CHECKED BY:	Y. RIZK
SHEET	115 OF 133